Appendix 'A' – Fire Alarm Record Drawings & Photos

OLD COURTHOUSE - DAWSON CITY, YUKON
FIRE PROTECTION DESIGN

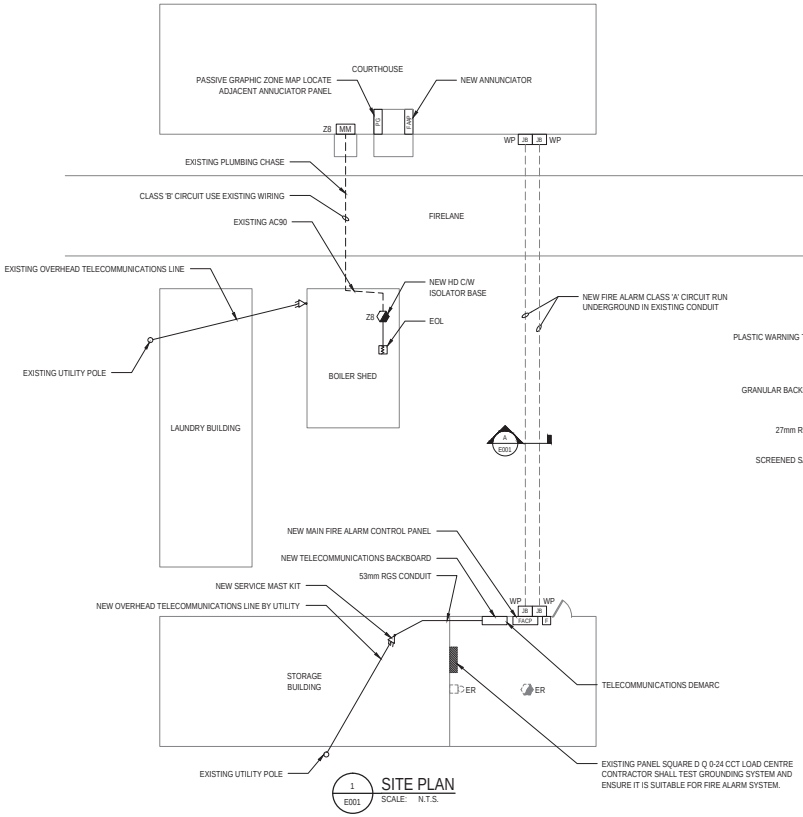
DRAWING LIST	
Sheet Number	Sheet Title
E001	LEGEND AND DRAWING LIST
E100	EXISTING FIRE ALARM LAYOUTS - BASEMENT AND GROUND FLOOR
E101	EXISTING FIRE ALARM LAYOUTS - 2nd FLOOR AND ATTIC
E110	NEW FIRE ALARM LAYOUTS - BASEMENT AND GROUND FLOOR
E111	NEW FIRE ALARM LAYOUTS - 2nd FLOOR AND ATTIC
E200	FIRE ALARM RISER DIAGRAM
E300	ELECTRICAL SPECIFICATIONS (1 of 2)
E301	ELECTRICAL SPECIFICATIONS (2 of 2)

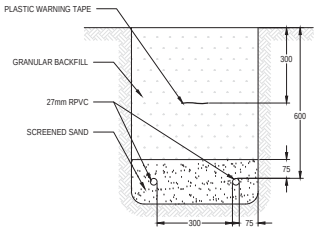
FIRE ALARM SYSTEM SYMBOL SCHEDULE

	PULL STATION
FT,RR	HEAT DETECTOR DUAL TYPE (FT=FIXED TEMPERATURE, RR=RATE OF RISE)
	SMOKE DETECTOR
SA/CO	SMOKE ALARM (CO=CO DETECTOR COMBINATION SMOKE ALARM)
	FIRE ALARM BELL
	FIRE ALARM HORN
	FIRE ALARM SPEAKER
	FIRE ALARM STROBE
	FIRE ALARM HORN AND STROBE
	FIRE ALARM SPEAKER AND STROBE
	FIRE ALARM REMOTE LED INDICATOR
FS	FIRE ALARM FLOW SWITCH CONNECTION
PS	FIRE ALARM PRESSURE SWITCH CONNECTION
TS	FIRE ALARM TAMPER DEVICE CONNECTION
	FIRE ALARM END-OF-LINE (EOL)
MM	FIRE ALARM MONITORING MODULE
CM	FIRE ALARM CONTROL MODULE
IM	FIRE ALARM ISOLATION MODULE
R	FIRE ALARM RELAY
FACP	FIRE ALARM CONTROL PANEL
FANP	FIRE ALARM ANNUNCIATOR PANEL
PG	FIRE ALARM PASSIVE GRAPHIC DISPLAY
HO	FIRE ALARM DOOR HOLD OPEN DEVICE (F=FLOOR MOUNTED)
DC	FIRE ALARM DOOR CLOSER DEVICE
	FIRE ALARM EMERGENCY TELEPHONE
	OVERHEAD UTILITY SERVICE MAST
	EXISTING POWER PANEL

ANNOTATIONS

BND	BOND WIRE (AS PER SPECIFICATIONS)
GND	GROUND WIRE (#6)
C/W	COMPLETE WITH
DISC	DISCONNECT
RR	REMOVE
EX	EXISTING TO REMAIN
ER	EXISTING TO BE RELOCATED
RE	REPLACE EXISTING WITH NEW DEVICE IN SAME LOCATION
RL	EXISTING DEVICE IN RELOCATED LOCATION
F/A	FIRE ALARM
GFI	GROUND FAULT INTERRUPTOR
SPD	SURGE PROTECTION DEVICE
TR	TAMPER RESISTANT
WP	WEATHERPROOF
WT	WATER TIGHT
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
A / XXX	MECHANICAL EQUIPMENT TAG
3	REFERENCE NOTE (1 DENOTES SEE NOTE 1)
1	KITCHEN EQUIPMENT TAG
1	OWNER SUPPLIED EQUIPMENT TAG
1	CONDUIT TAG
1	REVISION IDENTIFICATION TAG
A	PANEL IDENTIFICATION TAG
	NEW EQUIPMENT
	EXISTING EQUIPMENT TO REMAIN
	EXISTING EQUIPMENT TO BE REMOVED





PERMIT TO PRACTICE
WSP CANADA INC.
SIGNATURE
Date 5 December 2014
PERMIT NUMBER PP150
Association of Professional Engineers of Yukon

PROFESSIONAL ENGINEER YUKON TERRITORY
05/12/14

Revision/ Revision	Description/Description	Date/Date
5		
4		
3		
2		
1	ISSUED FOR TENDER	2014/12/05
0	ISSUED FOR SCHEMATIC DESIGN	2014/10/22

Client/client

PARKS CANADA

DAWSON CITY, YUKON

Project title/Titre du projet

DAWSON CITY, YUKON
OLD COURTHOUSE

FIRE PROTECTION DESIGN

Consultant Signature Only
CONSULTANT_SIGNATURE_ONLY

Designed by/Concept par
TD

Drawn by/Dessiné par
PP

PWGSC Project Manager/Administrateur de Projets TPSGC
HUGH

Regional Manager, Architectural and Engineering Services Gestionnaire régional, Services d'architecture et de génie, TPSGC
PWGSC-REGIONAL_MANAGER

Drawing title/Titre du dessin

LEGEND AND DRAWING LIST

Project No./No. du projet	Sheet/Feuille	Revision no./ La Révision no.
141-22313-00	E001 OF 08	1

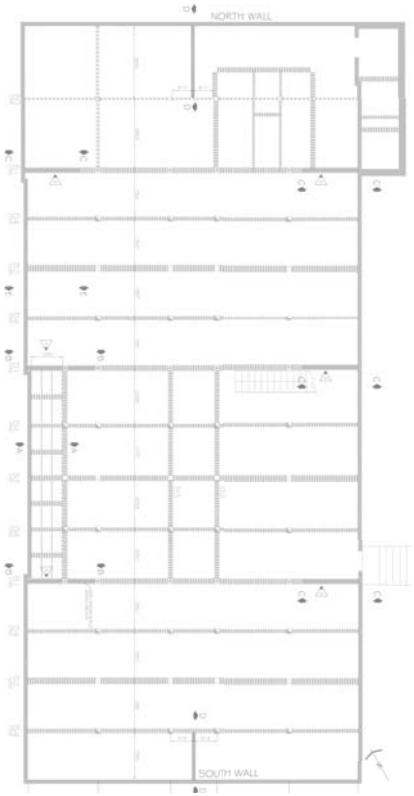
PWGSC – A1 – 841X594

0 10 20 30 40 50 60 70 80 90 100mm

DM5XXXXXX

GENERAL NOTES:

1. NO FIRE RATED EXISTING SHAFTS.
2. EXISTING CONDUIT IS PERMITTED FOR RE-USE.
3. ALL EXISTING DEVICES TO BE REMOVED.



1 / E100 EXISTING FIRE ALARM LAYOUT - BASEMENT
SCALE: 1:100

2 / E100 EXISTING FIRE ALARM LAYOUT - GROUND FLOOR
SCALE: 1:100

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EXISTING FIRE ALARM LAYOUTS - BASEMENT AND GROUND FLOOR

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PWGSC – A1 – 841X594

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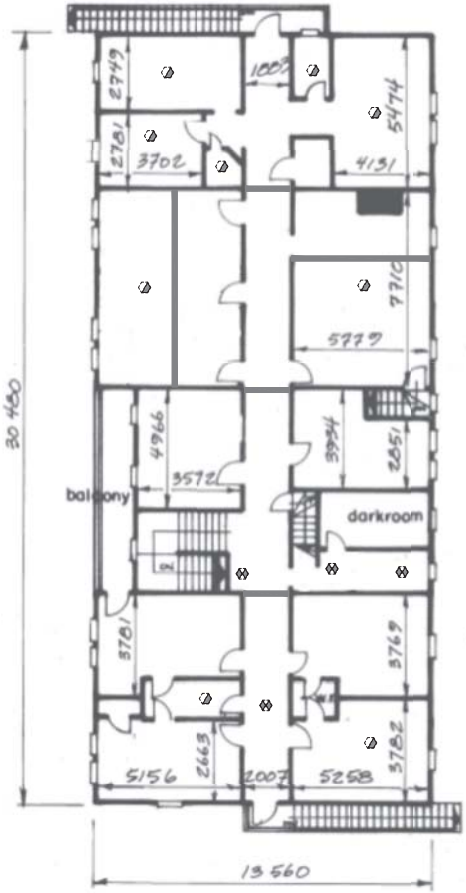
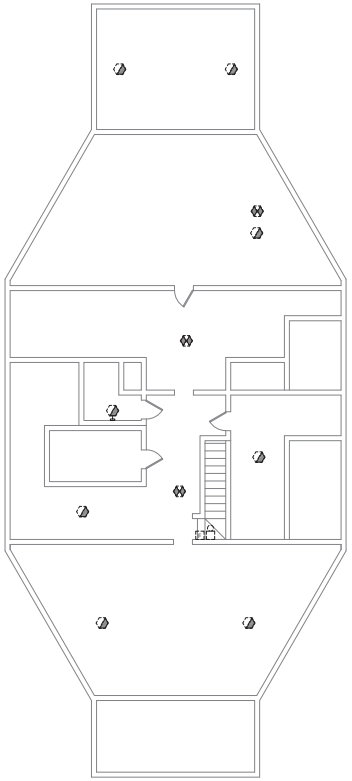
3. ALL EXISTING DEVICES TO BE REMOVED



1 E101 EXISTING FIRE ALARM LAYOUT - SECOND FLOOR
SCALE: 1:100



2 E101 EXISTING FIRE ALARM LAYOUT - ATTIC
SCALE: 1:100

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EXISTING FIRE ALARM LAYOUTS - 2nd FLOOR AND ATTIC

Project No./No. du projet	Sheet/Feuille	Revision no./ La Révision no.
141-22313-00	E101 OF 08	1

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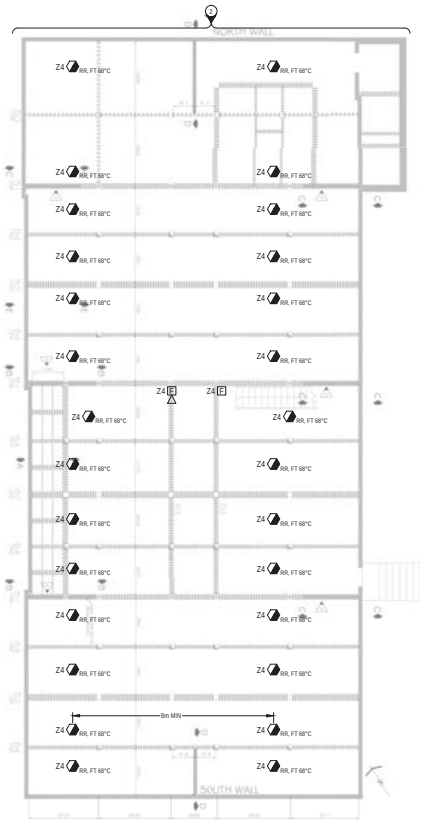

1 E110 NEW FIRE ALARM LAYOUT - BASEMENT - ZONE 4
SCALE: 1:100

2 E110 NEW FIRE ALARM LAYOUT - GROUND FLOOR - ZONE 1
SCALE: 1:100

GENERAL NOTES:

1. NO FIRE RATED EXISTING SHAFTS.
2. ALL HEAT DETECTORS SHALL BE DUAL TYPE RATE OF RISE AND FT 68°C.

KEYNOTES:

1. MOUNT AT PEAK.
2. NOT ALL DEVICES SHOWN. MOUNT DEVICES TO UNDERSIDE OF WOODEN JOISTS RUNNING NORTH TO SOUTH. LOCATE MINIMUM TWO DETECTOR SPACED 8m APART IN EACH BEAM POCKET RUNNING EAST TO WEST.

0 2 4 6 8m
1:100

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NEW FIRE ALARM LAYOUTS - BASEMENT AND GROUND FLOOR

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PWGSC – A1 – 841X594

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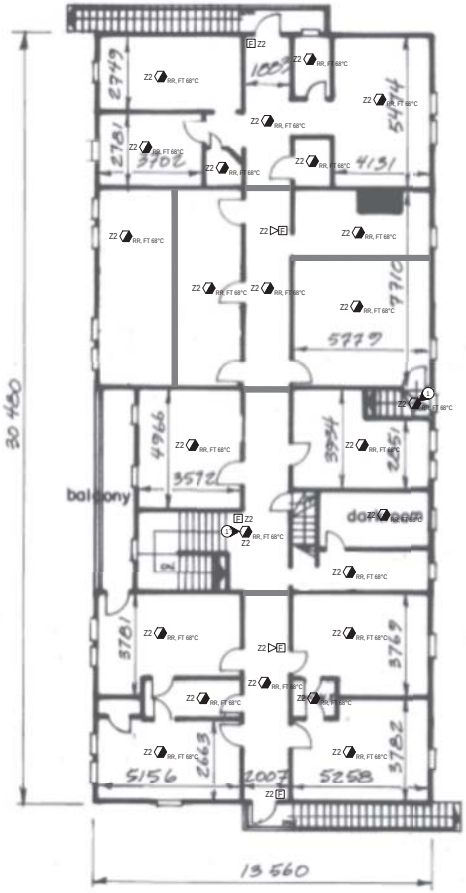
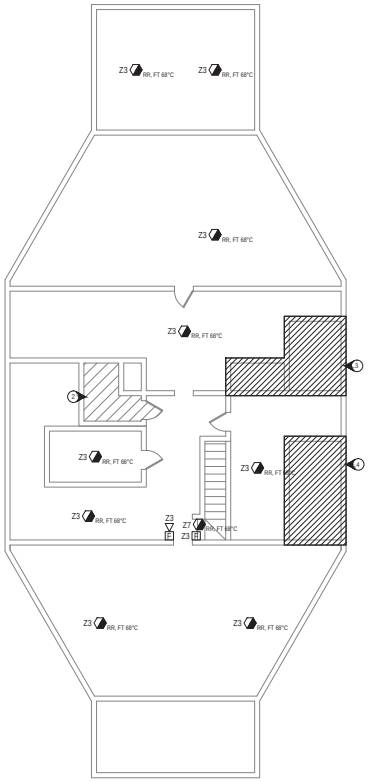


1 E111 NEW ELECTRICAL LAYOUT - SECOND FLOOR - ZONE 2
SCALE: 1:100



2 E111 NEW ELECTRICAL LAYOUT - ATTIC - ZONE 3
SCALE: 1:100

GENERAL NOTES:

1. NO FIRE RATED EXISTING SHAFTS.
2. AT -9°C DETECTORS WILL FAIL TO OPERATE.
3. ALL HEAT DETECTORS SHALL BE DUAL TYPE RATE OF RISE AND FT 68°C.

KEYNOTES:

1. MOUNT AT PEAK.
2. AREA NOT PROTECTED DUE TO HIGH CEILING.
3. VOID SPACES.

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NEW FIRE ALARM LAYOUTS - 2nd FLOOR AND ATTIC

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PWGSC – A1 – 841X594

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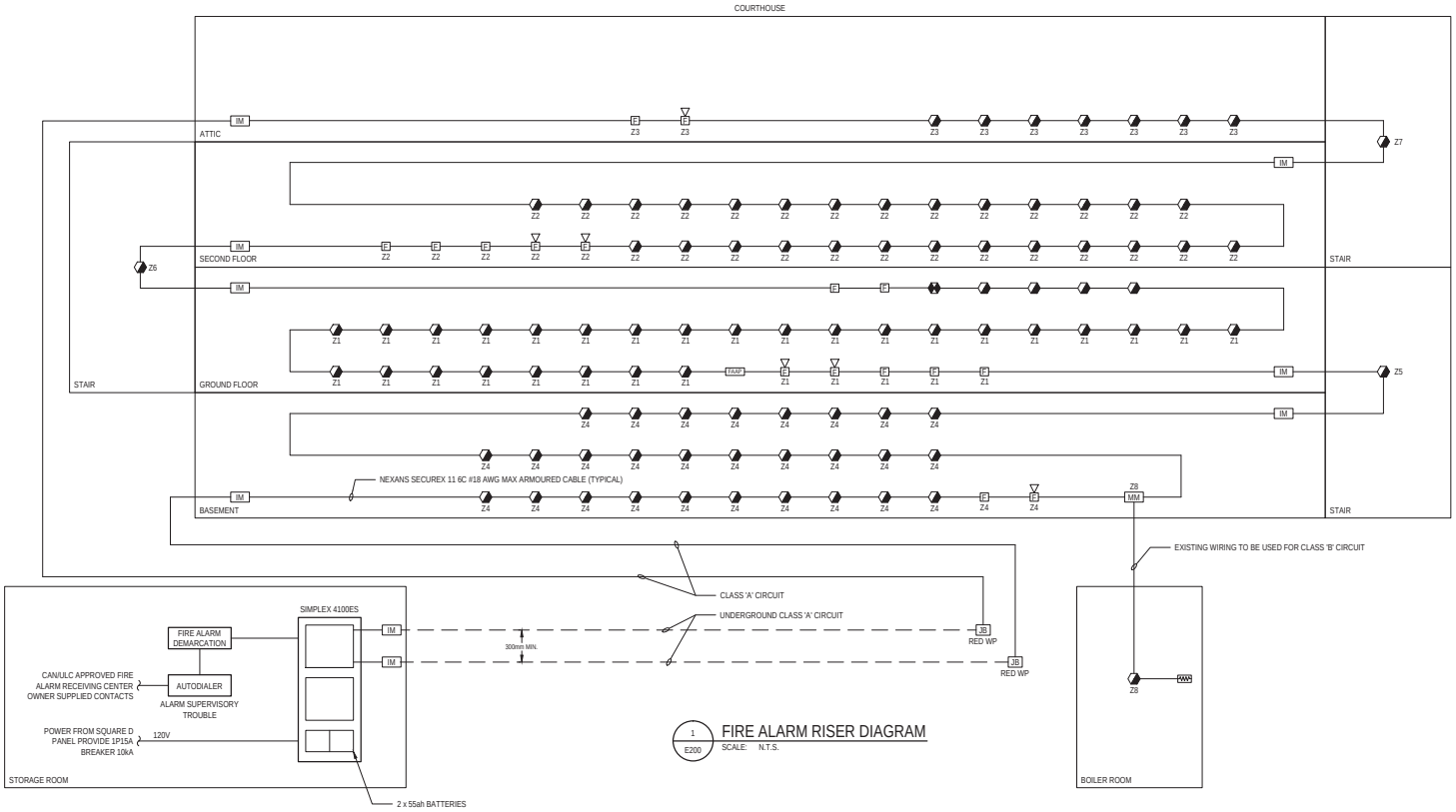
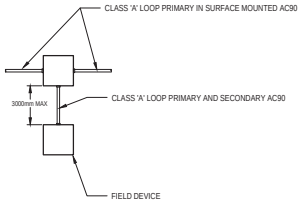


1 E200 FIRE ALARM RISER DIAGRAM
SCALE: N.T.S.

ZONE SCHEDULE		
ZONE	DESCRITION	ALARM TYPE
1	GROUND FLOOR	ALARM
2	SECOND FLOOR	ALARM
3	ATTIC	ALARM
4	BASEMENT	ALARM
5	BASEMENT STAIR	ALARM
6	CENTRAL STAIR	ALARM
7	ATTIC STAIR	ALARM
8	BOILER ROOM	ALARM



2 E200 TYPICAL FIRE ALARM DEVICE WIRING DETAIL
SCALE: N.T.S.

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PWGSC-REGIONAL_MANAGER

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FIRE ALARM RISER DIAGRAM

Project No./No. du projet	Sheet/Feuille	Revision no./ La Révision no.
141-22313-00	E200 OF 08	1

PWGSC – A1 – 841X594

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1 GENERAL PROJECT REQUIREMENTS

.1 THE GENERAL REQUIREMENTS, INSTRUCTIONS TO BIDDERS, THIS SPECIFICATION AND ANY ADDENDA HERETO FORM PART OF THE CONTRACT DOCUMENTS AND SHALL BE READ IN CONJUNCTION WITH THEM. WORK SHALL INCLUDE THE FURNISHING OF ALL LABOUR AND MATERIALS UNLESS SPECIFICALLY NOTED OTHERWISE TO COMPLETE AND PUT INTO OPERATING CONDITION ALL ELECTRICAL SYSTEMS AS INDICATED ON THE DRAWINGS AND SPECIFIED HEREIN.

.2 RESPONSIBILITY AS TO WHICH TRADE PROVIDES REQUIRED ARTICLES OR MATERIALS RESTS SOLELY WITH THE GENERAL CONTRACT TRADE. EXTRAS WILL NOT BE CONSIDERED BASED ON GROUNDS OF DIFFERENCE IN INTERPRETATION OF SPECIFICATIONS AS TO WHICH TRADE INVOLVED SHALL PROVIDE CERTAIN SPECIALTIES OR MATERIALS.

.3 PROVIDE TEMPORARY CONSTRUCTION LIGHTING AND POWER THROUGHOUT THE PROJECT AND INCLUDE ALL UTILITY COSTS IN SCOPE OF WORK. REMOVE ALL TEMPORARY LIGHTING AND POWER AFTER PROJECT IS COMPLETE.

2 STANDARDS OF MATERIAL AND WORKMANSHIP

.1 ALL MATERIALS SHALL BE NEW, OF THE QUALITY SPECIFIED AND SHALL CONFORM TO THE STANDARDS OF THE CANADIAN STANDARDS ASSOCIATION. WHERE EQUIPMENT OR MATERIALS ARE SPECIFIED BY TECHNICAL DESCRIPTION ONLY, THEY SHALL BE OF THE BEST COMMERCIAL QUALITY OBTAINABLE FOR THE PURPOSE.

.2 ALL WORK SHALL BE EXECUTED IN A NEAT AND WORKMANLIKE MANNER BY QUALIFIED TRADESPERSONS. ELECTRICAL CONTRACTOR SHALL KEEP A COMPETENT FOREMAN AND NECESSARY ASSISTANTS ALL SATISFACTORY TO THE ENGINEER ON THE JOB DURING THE PROGRESS OF THE WORK.

.3 WORK DONE IN RENOVATIONS AND ADDITIONS SHALL, AT A MINIMUM, MEET THE STANDARD OF WORK AND MATERIAL OF THE EXISTING PORTIONS OF THE BUILDING.

3 CODES, PERMITS AND INSPECTIONS

.1 COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND CODES OF ALL AUTHORITIES HAVING JURISDICTION RELATIVE TO THIS PROJECT.

.2 COMPLETE INSTALLATION IS TO COMPLY WITH THE CANADIAN ELECTRICAL CODE (2012) AND THE NATIONAL BUILDING CODE (2010) INCLUDING THE LATEST AMENDMENTS AND LOCAL MUNICIPAL CODES AND RELATED CSA ELECTRICAL BULLETINS.

.3 SUBMIT TO THE ELECTRICAL INSPECTION AUTHORITY HAVING JURISDICTION THE NECESSARY NUMBER OF DRAWINGS AND SPECIFICATIONS FOR REVIEW AND APPROVAL PRIOR TO COMMENCEMENT OF THE PROJECT.

.4 PAY ALL ASSOCIATED FEES AND OBTAIN ALL PERMITS, LICENSES ETC. TO COMPLETE THE PROJECT.

.5 OBTAIN A CERTIFICATE OF ACCEPTANCE FROM THE INSPECTION AUTHORITY HAVING JURISDICTION UPON COMPLETION OF THE PROJECT AND INCLUDE IN THE O&M MANUAL.

4 DRAWINGS AND SPECIFICATIONS

.1 THE DRAWINGS AND SPECIFICATIONS ARE COMPLEMENTARY EACH TO THE OTHER AND WHAT IS CALLED FOR BY ONE SHALL BE BINDING AS IF CALLED FOR BY BOTH.

.2 SHOULD ANY DISCREPANCY APPEAR BETWEEN THE DRAWINGS AND SPECIFICATIONS WHICH LEAVES THE ELECTRICAL CONTRACTOR IN DOUBT AS TO THE TRUE INTENT AND MEANING OF THE PLANS AND SPECIFICATIONS, A RULING SHALL BE OBTAINED FROM THE ENGINEER OR ARCHITECT IN WRITING BEFORE SUBMITTING TENDER. IF THIS IS NOT DONE, IT WILL BE ASSUMED THAT THE MORE EXPENSIVE ALTERNATE WILL BE REQUIRED.

5 EXAMINATION OF OTHER DRAWINGS

.1 THIS CONTRACTOR SHALL EXAMINE CAREFULLY THE STRUCTURAL, ARCHITECTURAL AND MECHANICAL DRAWINGS AND WORK OF OTHER TRADES TO THEIR SATISFACTION THAT THE WORK UNDER THIS CONTRACT CAN BE ACCEPTABLY CARRIED OUT AS SHOWN ON THE PLANS. SHOULD AN ISSUE ARISE SHOWING CONFLICT WITH, OR REQUIRING ADDITIONAL WORK BEYOND THE WORK OF THESE DRAWINGS, THE CONTRACTOR SHALL BRING THIS MATTER TO THE ATTENTION OF THE ARCHITECT OR ENGINEER PRIOR TO SUBMITTING HIS TENDER.

6 EXAMINATION OF THE SITE

.1 PRIOR TO SUBMITTING HIS TENDER, THE ELECTRICAL CONTRACTOR SHALL CAREFULLY EXAMINE THE SITE AND ASCERTAIN ALL CONDITIONS THAT SHALL AFFECT HIS CONTRACT. NO EXTRAS WILL BE ALLOWED FOR WORK RESULTING FROM CONDITIONS THAT WOULD HAVE BEEN EVIDENT UPON A THOROUGH EXAMINATION OF SITE.

.2 QUESTIONS OR APPARENT CONFLICTS NEED TO BE SUBMITTED BY THE CONTRACTOR FOR CLARIFICATION BY THE CONSULTANT PRIOR TO SUBMITTAL OF TENDER. IN CASES WHERE CLARIFICATION IS NOT SUBMITTED TO THE CONSULTANT THE MORE EXPENSIVE SOLUTION SHALL BE CONSIDERED CORRECT.

7 SHOP DRAWINGS

.1 ELECTRICAL CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR REVIEW OF ELECTRICAL COMPONENTS FOR ALL SYSTEMS.

.2 ALL DRAWINGS SHALL BE SUBMITTED IN PDF VERSION VIA THE GENERAL CONTRACTOR FOR REVIEW.

.3 THE ENGINEER'S REVIEW OF SHOP DRAWINGS SHALL BE FOR GENERAL DESIGN ONLY AND SHALL NOT RELIEVE THE ELECTRICAL CONTRACTOR OR SUPPLIERS FROM THEIR RESPONSIBILITY FOR ERRORS, PROPER FITTING, AND CONSTRUCTION OF THE WORK AND FURNISHING OF MATERIALS. THE REVIEW SHALL NOT BE CONSTRUED AS APPROVING DEPARTURES FROM THE CONTRACT DOCUMENT REQUIREMENTS IF SUCH DEPARTURES ARE NOT SPECIFICALLY NOTED IN A COVERING LETTER ACCOMPANYING SUCH DRAWINGS. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL DIMENSIONS.

.4 SHOP DRAWINGS TO INDICATE ALL INFORMATION REQUIRED TO DISCERN WHETHER THE EQUIPMENT MEETS THE REQUIREMENTS OF THIS SPECIFICATION AND THE DRAWINGS. WIRING DIAGRAMS, SCHEMATICS, RISERS AND RELEVANT DETAILS, WHERE REQUIRED, SHALL BE UNIQUE TO THE PROJECT AND NOT GENERIC IN FORM. MANUFACTURER'S SALES LITERATURE WILL NOT BE ACCEPTABLE.

8 UNIFORMITY OF EQUIPMENT

.1 UNLESS OTHERWISE SPECIFICALLY CALLED FOR IN THE SPECIFICATIONS, UNIFORMITY OF MANUFACTURE SHALL BE MAINTAINED FOR ANY PARTICULAR ITEM THROUGHOUT THE BUILDING.

.2 WHERE THE PROJECT ENCOMPASSES RENOVATIONS OR ADDITIONS TO AN EXISTING BUILDING THE MANUFACTURER SHALL MATCH THE EXISTING UNLESS NOTED OTHERWISE. ALL NEW MANUFACTURERS' EQUIPMENT THAT VARIES FROM THE EXISTING MUST BE FULLY COMPATIBLE WITH THE EXISTING.

9 EQUIVALENT PRODUCTS

.1 ALL TENDERS SHALL BE BASED ON THE PRODUCT SPECIFIED OR EQUIVALENT PRODUCTS, WHICH HAVE BEEN GIVEN WRITTEN APPROVAL PRIOR TO TENDER BY THE ENGINEER. THE ENGINEER'S DECISION AS TO THE EQUIVALENCY OF PRODUCTS SHALL BE FINAL.

.2 ELECTRICAL CONTRACTOR AND/OR SUPPLIERS WISHING TO SUBMIT EQUIVALENT PRODUCTS SHALL DO SO IN PDF FORMAT VIA AN EMAIL TO THE ENGINEER. IF THE PRODUCT IS APPROVED AS AN EQUIVALENT, AN EMAIL OF CONFIRMATION SHALL BE SENT FROM THE ENGINEER. IT SHALL BE THE ELECTRICAL CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ANY SUPPLIERS QUOTING TO THE ELECTRICAL CONTRACTOR HAVE OBTAINED THE WRITTEN APPROVAL OF THE ENGINEER.

.3 ALL REQUESTS FOR EQUIVALENT MATERIAL APPROVAL MUST BE EMAILED NOT LESS THAN SEVEN (7) DAYS PRIOR TO CLOSING OF TENDER. NO EQUIVALENT REQUESTS WILL BE CONSIDERED AFTER THIS TIME.

.4 THE APPROVAL OF EQUIVALENT PRODUCTS WILL BE GRANTED ON THE BASIS OF GENERAL DESIGN ONLY. SUCH APPROVALS WILL NOT RELIEVE THE ELECTRICAL CONTRACTOR FROM PROVIDING ALL NECESSARY COMPONENTS AND FUNCTIONS REQUIRED IN THE SPECIFICATIONS OR ON THE DRAWINGS.

.5 ALTERNATE SERVICE RATED EQUIPMENT SHALL MEET THE UTILITIES' REQUIREMENTS.

.6 ANY CHANGE IN THE FOOTPRINT SIZE DUE TO ALTERNATE EQUIPMENT SHALL NOT RESULT IN A REDESIGN. ANY COST TO REVISE THE DESIGN DUE TO AN ALTERNATE MANUFACTURERS' REQUIREMENT SHALL BE BORNE BY THE ELECTRICAL CONTRACTOR.

10 SETTING OUT OF THE WORK

.1 THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTING ALL WORK COMPLETED CONTRARY TO THE INTENT OF DRAWINGS AND SPECIFICATIONS AND SHALL BEAR ALL COST FOR SAME. WHERE INTENT OF DRAWINGS AND SPECIFICATIONS IS NOT CLEAR, HE SHALL OBTAIN CLARIFICATION OF THE ARCHITECT BEFORE PROCEEDING WITH WORK.

.2 THE ELECTRICAL CONTRACTOR SHALL GIVE THE WORK PERSONAL SUPERVISION, LAY OUT THEIR OWN WORK, DO ALL NECESSARY LEVELING AND MEASURING OR EMPLOY A COMPETENT ENGINEER TO DO SO. FIGURES, FULL SIZE AND DETAIL DRAWINGS SHALL TAKE PRECEDENCE OVER SCALE MEASUREMENTS.

.3 WHERE EQUIPMENT SUPPLIED BY THE ELECTRICAL CONTRACTOR MUST BE BUILT IN WITH THE WORK OF OTHER TRADES, THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE SUPPLYING OF THE EQUIPMENT TO BE BUILT IN OR MEASUREMENTS TO ALLOW NECESSARY OPENINGS TO BE LEFT SO AS NOT TO HOLD UP THE WORK.

.4 ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE CAUSED THE OWNER OR ANY OF THE OTHER TRADES BY IMPROPER LOCATION OR CARRYING OUT OF HIS WORK.

.5 THE ELECTRICAL CONTRACTOR, IN SETTING OUT OF HIS WORK, SHALL MAKE REFERENCE TO ARCHITECTURAL, STRUCTURAL AND MECHANICAL DRAWINGS. THE ELECTRICAL CONTRACTOR SHALL CONSULT WITH THE RESPECTIVE TRADES IN SETTING OUT LOCATIONS FOR CONDUIT RUNS, LUMINAIRES, PANEL ASSEMBLIES, ETC., SO THAT CONFLICTS ARE AVOIDED AND SYMMETRICAL EVEN SPACING IS MAINTAINED.

.6 SWITCH MOUNTING HEIGHTS SHALL BE COORDINATED WITH ARCHITECTURAL DETAILS AND SHALL BE ADJUSTED, IF REQUIRED, TO COORDINATE WITH MILLWORK, MILLWORK PANELING, MASONRY COURSE LINES, ETC.

.7 WHERE OUTLETS OCCUR IN EXTERIOR WALLS, THE ELECTRICAL CONTRACTOR SHALL ENSURE THAT THERE IS INSULATION BEHIND THE OUTLET BOXES TO PREVENT CONDENSATION THROUGH THE BOXES.

11 CUTTING AND PATCHING

.1 THE GENERAL CONTRACTOR WILL BE RESPONSIBLE FOR ALL CUTTING AND PATCHING REQUIRED FOR THE ELECTRICAL INSTALLATION. STRUCTURAL MEMBERS SHALL NOT BE CUT WITHOUT THE CONSENT OF THE ARCHITECT.

.2 WHERE WORK BY THE ELECTRICAL CONTRACTOR DAMAGES WORK OF OTHER TRADES, THE ELECTRICAL CONTRACTOR SHALL REPAIR AND MAKE GOOD SUCH DAMAGE TO THE SATISFACTION OF THE TRADE CONCERNED AND THE ARCHITECT.

12 PAINTING AND FINISHES

.1 ALL ELECTRICAL FITTINGS, SUPPORTS, HANGER RODS, PULLBOXES, CHANNEL FRAMES, CONDUIT RACKS, OUTLET BOXES, BRACKETS, CLAMPS, ETC., SHALL HAVE GALVANIZED FINISH OR PAINT FINISH OVER CORROSION-RESISTANT PRIMER.

.2 PULLBOXES, JUNCTION BOXES, TERMINAL PANELS, ETC. SHALL BE FINISHED IN RED FOR THE FIRE ALARM SYSTEM.

13 PROJECT CLEAN-UP

.1 THE ELECTRICAL CONTRACTOR AND HIS SUB-TRADES SHALL AT ALL TIMES DURING CONSTRUCTION, KEEP THE SITE FREE OF ALL DEBRIS, BOXES, PACKING, ETC., RESULTING FROM WORK OF THIS TRADE.

.2 AT THE COMPLETION OF THE WORK, THE ELECTRICAL INSTALLATION SHALL BE LEFT IN A CLEAN FINISHED CONDITION TO THE SATISFACTION OF THE ARCHITECT.

14 SITE REVIEWS AND CONSTRUCTION DOCUMENTS

.1 CONTRACTOR SHALL CONTACT THE CONSULTANT FOR A MINIMUM OF ROUGH-IN AND FINAL REVIEWS. ADDITIONAL REVIEWS WILL BE COMPLETED AS REQUIRED; CONTRACTOR IS TO MAKE CONSULTANT AWARE REGARDING ANY CONDITIONS THAT WARRANT SPECIAL REVIEWS. CONTRACTOR SHALL ENSURE THAT ALL REQUIRED WORK IS COMPLETED PRIOR TO CALLING FOR REVIEW. ADDITIONAL CHARGES MAY BE LEVIED SHOULD ADDITIONAL REVIEWS BE REQUIRED DUE TO LACK OF COMPLETION OF WORK TO BE REVIEWED.

.2 PROGRESS CLAIMS SUBMITTED SHALL BE BROKEN DOWN FOR EACH SYSTEM AND INCLUDE A MATERIALS AND LABOR PORTION FOR REVIEW. PROGRESS CLAIMS SUBMITTED WITHOUT PROPER BREAKDOWN WILL NOT BE REVIEWED.

.3 ALL REVISIONS RESULTING IN COSTS TO THE OWNER SHALL BE SUBMITTED WITH A FULL BREAKDOWN OF MATERIALS AND LABOR FOR EACH PORTION OF THE WORK.

.4 REQUESTS FOR INFORMATION (RFIS) SHALL BE SUBMITTED FOR ONSITE QUESTIONS ONLY AFTER THE ISSUE HAS BEEN REVIEWED AND DISCUSSED WITHOUT RESOLUTION ON SITE WITH THE APPROPRIATE TRADES. MINOR ISSUES SHOULD BE DEALT WITH THROUGH PHONE OR EMAIL.

15 ELECTRICAL SYSTEMS TESTS

.1 ALL PORTIONS OF THE ELECTRICAL WORK SHALL BE TESTED AND CHECKED FOR SATISFACTORY OPERATION.

.2 BEFORE ENERGIZING ANY PORTION OF THE ELECTRICAL SYSTEM, PERFORM MEGOHMETER TESTS ON ALL FEEDERS AND BRANCH CIRCUITS. RESULTS OF SUCH TESTS SHALL CONFORM TO THE REQUIREMENTS OF THE CANADIAN ELECTRICAL CODE AND SHALL BE TO THE SATISFACTION OF THE AUTHORIZED INSPECTION AGENCY AND THE ENGINEER.

.3 UPON COMPLETION OF THE CONTRACT AND IMMEDIATELY PRIOR TO SUBSTANTIAL REVIEW AND TAKEOVER, CHECK THE LOAD BALANCE ON ALL FEEDERS AND AT DISTRIBUTION CENTERS, PANELS, ETC. THE TESTS SHALL BE CARRIED OUT BY TURNING ON ALL POSSIBLE LOADS IN THE CONTACT AREA AND CHECKING LOAD CURRENT BALANCE. IF LOAD UNBALANCE EXCEEDS 15%, RECONNECT CIRCUITS TO BALANCE THE LOAD.

16 RECORD DRAWINGS

.1 THE GENERAL CONTRACTOR SHALL FURNISH TO THE ELECTRICAL CONTRACTOR ONE FULL SIZED SET OF DRAWINGS TO BE USED FOR RECORDING WORK AS ACTUALLY INSTALLED. THE ELECTRICAL CONTRACTOR SHALL ACCURATELY RECORD ON THIS SET OF DRAWINGS, DAY BY DAY, ALL OUTLETS, CONDUIT, FIXTURES AND EQUIPMENT AS ACTUALLY INSTALLED ON THE JOB. ANY DISCREPANCIES NOTED BY THE ELECTRICAL CONTRACTOR BETWEEN THE DESIGN DRAWINGS AND THE EXISTING INSTALLATION SHALL BE NOTED ON THE RECORD DRAWINGS.

.2 UPON COMPLETION OF THE PROJECT AND BEFORE FINAL PAYMENT THE ELECTRICAL CONTRACTOR SHALL OBTAIN THE SERVICES OF AN ENGINEERING FIRM TO UPDATE ALL INFORMATION FROM THE RECORD PRINTS TO AUTOCAD FORMAT FILES, INCLUDING ALL CHANGES TO THE ORIGINAL TENDER DRAWINGS COVERED BY ADDENDA, CHANGE ORDERS, FIELD CHANGES, JOB CONDITIONS, ETC. THE RECORD DRAWINGS SHALL BE TURNED OVER TO THE ENGINEER FOR APPROVAL AND UPDATING IN AUTOCAD. THE ELECTRICAL CONTRACTOR SHALL INCLUDE ALL COSTS FOR RECORD DRAWINGS IN THE BID.

.3 ALL REVISIONS ARE TO BE DONE IN THE SAME AUTOCAD VERSION AS THE ORIGINALS AND DRAWING IS TO MATCH EXISTING DRAWING QUALITY AND STYLE. THE DRAWINGS SHALL CLEARLY INDICATE, ON EVERY PAGE THAT THEY ARE RECORD DOCUMENTS AS SUPPLIED BY THE ELECTRICAL CONTRACTOR. THE ELECTRICAL CONTRACTOR'S COMPANY NAME, ADDRESS AND CONTACT INDIVIDUALS ARE TO BE INCLUDED ON EVERY DRAWING. THE DRAWINGS WILL CLEARLY BE IDENTIFIED AS "RECORD DOCUMENTS." THE COMPLETED ELECTRONIC AUTOCAD DRAWINGS ON A CD AND ONE FULL SIZED COPY OF THE DRAWINGS SHALL BE TURNED OVER TO THE OWNER UPON COMPLETION.

17 GUARANTEE/WARRANTIES

.1 FURNISH A WRITTEN GUARANTEE/WARRANTY COUNTERSIGNED AND GUARANTEED BY THE GENERAL CONTRACT TRADE STATING:

.1 THAT ALL WORK EXECUTED UNDER THIS CONTRACT WILL BE FREE FROM DEFECTS OF MATERIAL AND WORKMANSHIP FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE OF THIS WORK.

.2 THE ABOVE PARTIES FURTHER AGREE TO, AT THEIR OWN EXPENSE, REPAIR AND REPLACE ALL SUCH DEFECTIVE WORK AND OTHER WORK DAMAGED THEREBY WHICH FAILS OR IS OTHERWISE DEFECTIVE DURING THE TERM OF THE GUARANTEE/WARRANTY PROVIDED THAT SUCH FAILURE IS NOT DUE TO IMPROPER USAGE.

.3 THE PERIOD OF THE GUARANTEE SPECIFIED SHALL IN NO WAY SUPPLANT ANY OTHER GUARANTEE OF A LONGER PERIOD BUT SHALL BE BINDING ON WORK NOT OTHERWISE COVERED.

.2 PROVIDE ADDITIONAL WARRANTIES FOR MANUFACTURER'S SYSTEMS AS REQUIRED BY OTHER SECTIONS OF THIS SPECIFICATION.

18 OPERATION AND MAINTENANCE MANUAL

.1 PROVIDE TWO COPIES OF THE MAINTENANCE MANUALS TO THE CONSULTANT FOR REVIEW. RETURNED COPIES SHALL HAVE THE REVISIONS MADE AND SENT TO THE OWNER AT THE END OF THE PROJECT.

.2 EACH MANUAL SHALL HAVE A LIST OF SECTIONS, CONTACT INFORMATION FOR THE GENERAL CONTRACTOR, ELECTRICAL CONTRACTOR AND ALL SUB-CONTRACTORS, ELECTRICAL ENGINEERING FIRM AND ALL SYSTEMS MANUFACTURERS, ALL WARRANTIES, GUARANTEES AND CERTIFICATES, COPIES OF APPROVED SHOP DRAWINGS, SINGLE LINE DIAGRAMS AND SCHEMATICS FOR ALL SYSTEMS, TEST AND VERIFICATION RESULTS AND CLEANING AND MAINTENANCE PROCEDURES.

19 SUBSTANTIAL COMPLETION

.1 BEFORE CALLING FOR SUBSTANTIAL COMPLETION REVIEW THE CONTRACTOR SHALL PROVIDE THE FOLLOWING RELEVANT DOCUMENTS TO THE CONSULTANT:

.1 FIRE ALARM VERIFICATION AND CERTIFICATION REPORTS.

.2 CONNECTION TO MONITORING COMPANY FOR THE FIRE ALARM SYSTEM.

.3 LETTER OF INSPECTION FROM THE AUTHORITY HAVING JURISDICTION.

.4 OPERATION AND MAINTENANCE MANUALS HAVE BEEN SUBMITTED FOR REVIEW.

.5 ALL JUNCTION OUTLET BOXES COVERED.

.6 RECORD DRAWINGS SUBMITTED FOR UPDATING.

.2 SHOULD A SUBSTANTIAL COMPLETION REVIEW BE CALLED FOR AND THE CONSULTANT FINDS THE PROJECT IS NOT COMPLIANT WITH THE ABOVE AN ADDITIONAL REVIEW MAY BE REQUIRED. SUCH ADDITIONAL REVIEWS MAY BE CHARGED TO THE ELECTRICAL CONTRACTOR.

20 SEISMIC RESTRAINTS

.1 RETAIN THE SERVICES OF A QUALIFIED SEISMIC ENGINEER TO PROVIDE SEISMIC RESTRAINT REQUIREMENTS, INSTALLATION DETAILS, SITE REVIEWS AND LETTER OF ASSURANCE FOR THE PROJECT. EXACT SCOPE OF SEISMIC WORK SHALL BE DETERMINED BY THE SEISMIC ENGINEER. ALL SEISMIC DETAILS SHALL BE SUBMITTED AS SHOP DRAWINGS TO THE CONSULTANT AND INCLUDED IN THE MAINTENANCE MANUAL.

.2 PROVIDE LETTERS OF ASSURANCE FROM THE SEISMIC ENGINEER TO THE ELECTRICAL ENGINEER AFTER FIELD REVIEWS BY THE SEISMIC ENGINEER AT SUBSTANTIAL COMPLETION.

21 FIRE STOPPING

.1 THE CONTRACTOR SHALL SEAL ALL OPENINGS IN THE FLOOR OR FIRE RATED WALLS WITH A FIRE BARRIER MATERIAL EQUAL TO THE RATING OF THE FLOOR OR WALL BEING PENETRATED.

.2 ALL COMMUNICATION AND LOW VOLTAGE CABLING, WHEN GROUPED AND PENETRATING A FIRE SEPARATION SHALL BE SEALED VIA AN EZ PATH DEVICE BY STI OR AN EQUIVALENT PRODUCT. EQUIVALENT PRODUCTS MUST BE APPROVED BY THE ENGINEER.

.3 ALL VARIATIONS OF FIRE STOPPING SYSTEMS TO BE UTILIZED SHALL BE SUBMITTED TO THE CONSULTANT IN THE SHOP DRAWING PHASE AND SHALL BE INCLUDED IN THE MAINTENANCE MANUAL. EACH TYPE OF FIRE STOPPING SHALL BE NOTED BY THE APPROPRIATE ULC LISTED DETAIL.

.4 THE CONTRACTOR IS TO INCLUDE IN THEIR TENDER A VISUAL MANUFACTURER WALK-THROUGH DURING CONSTRUCTION TO VERIFY INSTALLATION SYSTEMS, METHODS AND MATERIALS ARE CORRECTLY INSTALLED; MANUFACTURER IS TO PROVIDE DOCUMENTATION OF THIS WALK-THROUGH TO THE ENGINEER.

.5 THE ELECTRICAL ENGINEER RESERVES THE RIGHT TO 'SPOT' TEST COMPLETED FIRE STOPPING INSTALLATIONS UP TO 10%. SUCH TESTS SHALL BE REPAIRED AT NO ADDITIONAL COST.

22 DEMOLITION

.1 EXAMINE THE SITE PRIOR TO SUBMITTAL OF TENDER. MAKE THE CONSULTANT AWARE OF ANY ISSUES POSING A POTENTIAL PROBLEM OR THAT HAS NOT BEEN INCLUDED IN THE CURRENT SCOPE OF WORK.

.2 REMOVE ALL UNUSED CONDUIT CABLING AND WIRING, ETC. BACK TO SOURCE.

.3 PROVIDE TEMPORARY SERVICES FOR FIRE ALARM, SECURITY, POWER, LIGHTING, EXIT AND EMERGENCY LIGHTING SYSTEMS REQUIRED TO MAINTAIN TEMPORARY SYSTEMS REQUIRED FOR THE OCCUPANTS DURING CONSTRUCTION.

.4 ALL SYSTEMS IN OCCUPIED SPACES TO REMAIN OPERATIONAL DURING CONSTRUCTION. REPAIR ANY SYSTEMS AFFECTED BY CONSTRUCTION AS REQUIRED.

.5 ALL EQUIPMENT TO REMAIN TO BE CLEANED PRIOR TO TURN OVER. ALL LIGHTING TO REMAIN TO BE RE-LAMPED AND RE-BALLASTED; REPLACE ALL LENSES THAT HAVE YELLOWED OR ARE BROKEN.

.6 EXISTING DATA CLOSETS IN AREAS OF CONSTRUCTION TO BE THOROUGHLY CLEANED INCLUDING AIR BLASTING OF ELECTRONIC EQUIPMENT. DURING CONSTRUCTION PROVIDE DUST PROTECTION FOR ALL ELECTRONIC EQUIPMENT.

.7 ALL ELECTRICAL EQUIPMENT REMOVED FROM THE SITE SHALL BECOME PROPERTY OF THE OWNER AND SHALL BE TURNED OVER TO THE OWNER. ANY EQUIPMENT THE OWNER REFUSES SHALL BECOME PROPERTY OF THE CONTRACTOR.

23 RACEWAYS AND FITTINGS

.1 ELECTRICAL METALLIC CONDUIT (EMT) SHALL BE INSTALLED FOR ALL BUILDING WIRING UNLESS NOTED OTHERWISE. CONDUITS TO BE INSTALLED IN CONFORMANCE WITH THE CANADIAN ELECTRICAL CODE. COLOR CODE CONDUIT AND JUNCTION BOX COVERS AS NOTED IN OTHER SECTIONS OF THIS SPECIFICATION. SIZE CONDUITS TO THE CANADIAN ELECTRICAL CODE REQUIREMENTS.

.2 IN-GROUND CONDUIT SHALL BE PVC CONDUIT. LABEL BOTH ENDS OF STUB-UP LOCATIONS WITH FELT MARKER INDICATING USE OF CONDUIT. ENSURE CONDUIT IS SEALED DURING CONSTRUCTION AND FREE OF DEBRIS PRIOR TO INSTALLING WIRE IN CONDUIT.

.3 ALL CONDUITS TO HAVE A GREEN BONDING CONDUCTOR; DO NOT USE THE CONDUIT AS A BOND TO ELECTRICAL BOXES AND EQUIPMENT.

.4 CONDUITS TO BE FREE FROM BURRS AND KINKS; BENDS SHALL BE KEPT TO A MAXIMUM 45 DEGREE ANGLE FOR OFFSETS AND SADDLES WHEREVER POSSIBLE. PROVIDE A PULL BOX OR JUNCTION BOX FOR EACH 360 DEGREE BEND IN THE CONDUIT RUN. IN EXPOSED AREAS THE INSTALL OF CONDUITS SHALL BE UNIFORM IN APPEARANCE AND INSTALLED IN PARALLEL OR RIGHT ANGELS WITH THE BUILDING STRUCTURE.

.5 WHEN POSSIBLE, LARGE GROUPS OF CONDUITS SHALL BE INSTALLED TOGETHER ON CONDUIT RACKS UTILIZING REDI-ROD AND UNI-STRUTS.

.6 PROVIDE BUSHING ON ALL CONNECTORS ON CONDUITS 27MM IN SIZE AND LARGER. ALL CONNECTORS AND COUPLINGS SHALL BE STEEL; ALUMINUM OR DIE-CAST ZINC IS NOT ACCEPTABLE.

.7 WHERE A RUN OF CONDUIT IS NOT CONTINUOUS AND IS GREATER THAN 3M IN LENGTH, A BONDING BUSHING SHALL BE USED TO BOND THE CONDUIT TO THE CABLE TRAY OR BONDED CONDUIT SYSTEM.

.8 CONDUITS MAY NOT BE SUPPORTED FROM T-BAR OR T-BAR HANGER SYSTEM.

.9 FLEXIBLE CONDUIT (FLEX) MAY BE USED FOR CONNECTIONS TO DEVICES SUCH AS SPEAKERS, FIRE ALARM DEVICES, MOTORS ETC. INCLUDE A GREEN BONDING CONDUCTOR FROM THE DEVICE OUTLET BOX TO THE EMT OR CABLE TRAY FOR BONDING CONTINUITY. UTILIZE LIQUID TIGHT FLEXIBLE CONDUIT WHERE REQUIRED.

.10 CONDUITS AND CABLES TERMINATING IN THE TOP OF EQUIPMENT IN SPRINKLERED AREAS SHALL TERMINATE WITH WATER-TIGHT CONNECTORS.

CONTINUED ON E301

Public Works and Government Services Canada / Travaux publics et Services gouvernementaux Canada

PERMIT TO PRACTICE
WSP CANADA INC.
SIGNATURE: Ken Ashcroft
Date: 5 December 2014
PERMIT NUMBER PP150
Association of Professional Engineers of Yukon

PROFESSIONAL ENGINEER YUKON TERRITORY

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Client/client

PARKS CANADA

DAWSON CITY, YUKON

Project title/Titre du projet

DAWSON CITY, YUKON
OLD COURTHOUSE

FIRE PROTECTION DESIGN

Consultant Signature Only
CONSULTANT_SIGNATURE_ONLY

Designed by/Concept par
TD

Drawn by/Dessiné par
PP

PWGSC Project Manager/Administrateur de Projets TPSGC
HUGH

Regional Manager, Architectural and Engineering Services Gestionnaire régional, Services d'architecture et de génie, TPSGC
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ELECTRICAL SPECIFICATIONS (1 of 2)

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24 PULLBOXES AND OUTLET BOXES

.1 SUPPLY AND INSTALL PULLBOXES AND JUNCTION BOXES AS SHOWN ON THE DRAWINGS AND AS REQUIRED TO SUIT JOB CONDITIONS. PULLBOXES SHALL CONFORM TO CANADIAN ELECTRICAL CODE REQUIREMENTS AND SHALL BE FINISHED IN ENAMEL OVER CORROSION RESISTANT PRIMER WITH SCREW-ON OR HINGED COVER. UTILIZE TABLE 23 OF THE CEC FOR DETERMINING SIZES OF BOXES.

.2 IN REMOVABLE CEILING AREAS, PULLBOXES ARE TO BE INSTALLED ABOVE THE CEILING. PULLBOXES IN FINISHED WALLS AND PLASTER OR NON-REMOVABLE CEILINGS SHALL HAVE OVERLAPPING TYPE TRIMS WITH COVERS PRIME COATED AND PAINTED ON JOB TO MATCH WALL OR CEILING. COLOR PULL BOX COVERS AS NOTED IN OTHER SECTIONS OF THIS SPECIFICATION.

.3 DEVICE OUTLET BOXES SHALL BE 4X4 WITH SINGLE OR DOUBLE GANG PLASTER RING, DEPTH TO BE AS REQUIRED; COORDINATE WITH GENERAL CONTRACTOR FOR DEPTH OF WALL FINISHING. OUTLET BOXES SHALL BE SUPPORTED ON TWO SIDES. HANDY BOXES SHALL NOT BE USED.

.4 WHEN INSTALLED IN CONCRETE UTILIZE APPROPRIATE MASONRY BOXES INTENDED FOR SUCH APPLICATIONS.

.5 WHEN INSTALLED IN WOOD WALLS, PLASTIC OUTLET BOXES SHALL ONLY BE USED WITH PERMISSION OF THE CONSULTANT.

.6 WHERE INDICATED, UTILIZE MULTI-SERVICE BOXES FOR OFFICE OUTLETS, EQUAL TO SPYDER TECHNOLOGY MULTI-GANG BOXES.

.7 MOUNTING HEIGHTS FOR DEVICE OUTLETS SHALL BE AS FOLLOWS:

.1 EMERGENCY BATTERY PACK - 2440MM OR 300MM DOWN FROM CEILING

.2 EXIT LIGHTS - CEILING MOUNTED, 300MM DOWN FROM THE CEILING OR 450MM ABOVE THE DOOR.

.3 PULL STATIONS - 1200MM

.4 HORN-STROBE/BELLS - 2440MM OR 300MM DOWN FROM CEILING

.8 WHERE DEVICES ARE INSTALLED IN AN ACCESSIBLE LOCATION, HEIGHTS OF DEVICES SHALL MEET THE REQUIREMENTS OF THE NBC BUILDING CODE.

25 ACCESS DOORS

.1 THE ELECTRICAL CONTRACTOR SHALL SUPPLY AND INSTALL ACCESS DOORS REQUIRED FOR PROPER SERVICING OF ALL ELECTRICAL WORK. ACCESS DOORS SHALL BE COMPLETE WITH NECESSARY FRAMES AND HINGED DOORS HELD CLOSED WITH CAPTIVE STUDS. ACCESS PANEL SHALL BE OF NOT LESS THAN 3 MM STEEL, PRIME COAT FINISHED AND PAINTED ON THE JOB TO MATCH THE WALL OR CEILING FINISH.

.2 NUMBER OF ACCESS DOORS TO BE KEPT TO AN ABSOLUTE MINIMUM AND TO BE USED ONLY WITH THE PERMISSION OF THE ARCHITECT.

.3 ACCESS DOORS TO BE FIRE RATED WHERE REQUIRED.

26 BUILDING WIRING

.1 ALL WIRING SHALL BE COPPER WITH RW75 X-LINK OR R75 NYLON 600 V INSULATION INSTALLED IN EMT CONDUIT. NO WIRE SMALLER THAN NO.12 AWG SHALL BE USED FOR BRANCH CIRCUIT WIRING. WIRING SHALL BE COLOR CODED TO THE CANADIAN ELECTRICAL CODE REQUIREMENTS. RIGID THREADED GALVANIZED STEEL CONDUIT SHALL BE USED WHERE REQUIRED BY CODE. 90 DEGREE WIRING MAY BE USED BUT SHALL BE DE-RATED TO 75 DEGREE WIRING WHERE CONNECTED TO 75 DEGREE RATED EQUIPMENT.

.1 WIRING LARGER THAN 2/0 MAY BE PARALLELED AS PERMITTED BY CODE.

.2 CABLING MAY BE ALUMINUM WHEN SIZED 1/0 OR LARGER.

.3 CABLING SHALL BE FIRE RATED WHERE APPLICABLE BY CODE.

.4 ARMOURED CABLING MAY BE USED WHERE PERMISSIBLE BY THE CONSULTANT; RISERTEK 90 CABLE OR EQUAL SHALL BE USED FOR VERTICAL RUNS.

.5 CORLINE FLEXIBLE CONDUIT MAY BE USED IN SLABS WHERE PERMISSIBLE BY THE STRUCTURAL ENGINEER.

.2 AC90 (BX) CABLE SHALL BE COMPLETE WITH ANTI-SHORT BUSHINGS. LENGTH OF AC90 CABLE SHALL NOT TO EXCEED 3 METERS. AC90 CABLE MAY BE USED FOR FIXTURE DROPS AND IN WALLS ONLY. INSTALL EMT CONDUIT IN CEILING SPACE TO WITHIN 1 METER OF WALL FOR CONNECTION TO AC90 CABLE. AC90 CABLE MAY NOT BE USED IN ELECTRICAL ROOMS.

.3 NON-METALLIC SHEATHED CABLE (LUMEX) SHALL BE USED WHERE APPLICABLE BY THE CANADIAN ELECTRICAL CODE AND ONLY WITH APPROVAL FROM THE CONSULTANT.

.4 PROVIDE DEDICATED NEUTRAL CONDUCTORS FOR ALL CIRCUITS FEEDING ELECTRONIC EQUIPMENT. (NO SHARING OF NEUTRALS).

.5 CONDUCTORS TO BE SIZED SO AS TO LIMIT VOLTAGE DROP TO THE LIMITS OUTLINED IN THE CANADIAN ELECTRICAL CODE.

.6 ALUMINUM WIRING SHALL NOT BE USED FOR CONNECTIONS TO VIBRATING EQUIPMENT SUCH AS MOTORS, ROOF TOP UNITS ETC.

27 GROUNDING AND BONDING

.1 SUPPLY AND INSTALL COMPLETE GROUNDING AND BONDING SYSTEM AS INDICATED AND AS REQUIRED BY CANADIAN ELECTRICAL CODE, THE LOCAL ELECTRICAL INSPECTION DEPARTMENT AND AS DEFINED IN OTHER SECTIONS OF THIS SPECIFICATION.

.2 ALL COMPONENTS SHALL BE SECURELY AND ADEQUATELY BONDED TO GROUND AND WHERE REQUIRED TO ACCOMPLISH THIS, BONDING JUMPERS, BONDING STUDS AND BUSHINGS SHALL BE USED. ENSURE THAT ALL RACEWAYS, DISTRIBUTION EQUIPMENT, TERMINAL PANELS AND EQUIPMENT FOR LOW VOLTAGE SYSTEMS, FIRE ALARM, SOUND, ETC. ARE SECURELY AND ADEQUATELY BONDED.

28 IDENTIFICATION AND LABELLING

.1 ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL IDENTIFYING LABELS FOR ALL ELECTRICAL EQUIPMENT AND DEVICES.

.2 ALL DISTRIBUTION EQUIPMENT INCLUDING TRANSFORMER, CDPS, MAIN SWITCHGEAR, PANELS, MCCS ETC SHALL HAVE LAMICOID LABELS.

.3 ALL DEVICES SHALL HAVE ADHESIVE LABELS FROM A BROTHER P-TOUCH DEVICE OR EQUIVALENT.

29 FIRE ALARM SYSTEM

.1 PROVIDE, INSTALL AND VERIFY A COMPLETE FIRE ALARM SYSTEM IN ACCORDANCE WITH THE DRAWINGS AND CURRENT APPLICABLE CODES.

.2 THE FIRE ALARM SYSTEM SHALL BE INSTALLED IN COMPLIANCE WITH THE NATIONAL FIRE CODE OF CANADA, BC BUILDING CODE, THE STANDARD FOR INSTALLATION OF FIRE ALARM SYSTEMS CAN/ULC S524-06 AND THE STANDARD FOR VERIFICATION OF FIRE ALARM SYSTEM INSTALLATIONS CAN/ULC-S537-04.

.3 THE SYSTEM SHALL BE A SINGLE STAGE, FULLY ADDRESSABLE, ZONED, NON-CODED SYSTEM.

.4 ALL FIRE ALARM SYSTEM WIRING SHALL BE INSTALLED IN CLASS A CONFIGURATION; IN CONDUIT OR SHEATH AND ALL CONDUCTORS SHALL MINIMUM BE #18 AWG WIRE. PROVIDE 2 HOUR RATED CABLING WHERE REQUIRED BY CODE. HYBRID CLASS 'A' SYSTEMS SHALL ONLY BE ACCEPTABLE UPON APPROVAL OF CONSULTANT. PAINT ALL JUNCTION BOXES RED.

.5 OVERCURRENT DEVICE SUPPLYING POWER TO THE PANEL SHALL BE LOCATED AS CLOSE AS POSSIBLE TO THE MAIN OVERCURRENT DEVICE, LOCKABLE AND PAINTED RED.

.6 PROVIDE A FIRE ALARM CONTROL PANEL EQUAL TO SIMPLEX 4100ES SERIES CONTROL PANEL COMPLETE WITH LED INDICATORS, ALARM SILENCE AND ACKNOWLEDGE FEATURES, RESET BUTTONS, LCD DISPLAY, NUMERIC KEYPAD, BARCODE SCANNER, PRIORITY ACCESS KEY SWITCH, DIALER, AND INTEGRAL 2x55Ah BATTERIES. PANEL TO INCLUDE ALL NECESSARY MODULES, RELAY CARDS, CONTROLLERS AND OTHER ELECTRONIC COMPONENTS FOR A FULLY FUNCTIONAL SYSTEM.

.7 PROVIDE A FIRE ALARM ANNUNCIATOR AT THE FIRE FIGHTERS ENTRANCE (AND AS LOCATED ON THE DRAWINGS) EQUAL TO SIMPLEX 4603 LCD SERIES IN A REMOTE CABINET COMPLETE WITH LCD DISPLAY, LED ZONE INDICATORS, SILENCE AND ACKNOWLEDGE FEATURES. PROVIDE FLUSH MOUNTING WHERE POSSIBLE. ANNUNCIATORS TO BE CONNECTED TO A POWER SUPPLY CARD IN THE MAIN FIRE ALARM PANEL.

.8 WIRE TO AND CONNECT ALL DAMPERS, FAN CONTROLS, FIRE SUPPRESSION SYSTEMS, SPRINKLER FLOW AND TAMPER DEVICES, DOOR HOLD-OPEN DEVICES, ACCESS CONTROLLED DOORS, GENERATOR TRANSFER SWITCHES AND MONITORING COMPANY AS INDICATED ON THE DRAWINGS AND MONITOR DEVICES AS REQUIRED BY CAN/ULC S524-06.

.9 PROVIDE GRAPHIC DISPLAY AT THE FIREFIGHTER'S ENTRANCE INDICATING FIRE ALARM ZONES, FIRE ALARM PANEL LOCATION AND SPRINKLER TREE LOCATION. TO BE DISPLAY IT SOLUTIONS OR APPROVED EQUAL.

.10 PROVIDE ADDRESSABLE SMOKE AND HEAT SENSORS EQUAL TO SIMPLEX TRUEALARM SERIES. INCLUDE RELAY, AUDIBLE AND ISOLATOR BASES WHERE REQUIRED. PROVIDE REMOTE LED WALL OR CEILING MOUNTED DEVICES WHERE DEVICE IS INSTALLED IN NON-VISIBLE AREAS. WHEN DEVICES ARE INSTALLED IN SERVICE AREAS OR OTHER AREAS WHERE SUSCEPTIBLE TO DAMAGE PROVIDE SIMPLEX TRUEALARM SENSOR GUARDS.

.11 PROVIDE ADDRESSABLE SINGLE STAGE MANUAL PULL STATIONS EQUAL TO SIMPLEX IAM IDNET ADDRESSABLE MANUAL STATIONS. PROVIDE WIRE GUARD WHERE INDICATED ON THE DRAWINGS.

.12 PROVIDE SINGLE AND DUAL INPUT MODULES EQUAL TO SIMPLEX IDNET IAM RELAYS. WHERE INPUT MODULES ARE UTILIZED FOR FLOW DEVICES, THE MODULES SHALL BE LATCHING. ENSURE WIRING FOR MICRO-SWITCH WILL NOT HINDER MONITORING OF FLOW SWITCH. CONNECTIONS AT ALL SPRINKLER TREES TO BE WATER TIGHT INCLUDING FLEXIBLE CONDUIT.

.13 PROVIDE CONTROL RELAY MODULES EQUAL TO SIMPLEX RELAY IDNET IAM SERIES. INSTALL WHERE REQUIRED AND AS SHOWN ON THE DRAWINGS. INSTALL IN VISIBLE AND ACCESSIBLE LOCATION.

.14 PROVIDE ISOLATION MODULES EQUAL TO SIMPLEX ADDRESSABLE IDNET ISOLATOR SERIES. ISOLATORS MAY ALSO BE INSTALLED IN SMOKE/HEAT DETECTORS AS ISOLATOR BASES. INSTALL WHERE REQUIRED AND AS SHOWN ON THE DRAWINGS.

.15 PROVIDE ADDRESSABLE HORN DEVICES EQUAL TO SIMPLEX TRUEALERT 49MT SERIES . FIELD CONFIGURE DEVICES SUCH THAT MINIMUM DB LEVELS ARE ACHIEVED. INCLUDE DB READINGS IN VERIFICATION REPORT. ALL HORNS SHALL BE SYNCHRONIZED. PROVIDE TRIM PLATES WITH EACH WALL MOUNTED DEVICE.

.16 TEMPORAL PATTERN SHALL BE USED AS PER THE NATIONAL BUILDING CODE.

.17 SINGLE STAGE SEQUENCE OF OPERATIONS:

.1 ANY INITIATING DEVICE ACTIVATED WILL RESULT IN A TEMPORAL AUDIBLE AND VISUAL ALARM SIGNAL THROUGHOUT THE BUILDING, THE ALARM INDICATOR AND INITIATING DEVICES' ZONE SHALL BE DISPLAYED ON THE FIRE ALARM PANEL AND ANNUNCIATOR, THE DIALER SHALL SEND A SIGNAL TO THE MONITORING COMPANY.

.18 PERFORMANCE VERIFICATION:

.1 THE MANUFACTURER'S TECHNICIAN WILL DIRECT THE PERFORMANCE VERIFICATION OF FIRE ALARM SYSTEM IN ACCORDANCE WITH CAN/ULC-S537-04, STANDARD FOR VERIFICATION OF FIRE ALARM SYSTEM INSTALLATIONS.

.2 PRIOR TO REQUESTING PERFORMANCE VERIFICATION BY THE TECHNICIAN, ENSURE THAT THE FIRE ALARM SYSTEM IS FULLY OPERABLE AND THAT SUBSEQUENT WORK TO BE PERFORMED ON SYSTEM WILL NOT INVALIDATE EXAMINATIONS AND TESTS PERFORMED DURING VERIFICATION PROCEDURE.

.3 ELECTRICAL SUBCONTRACTOR AND FIRE ALARM SYSTEM MANUFACTURER'S REPRESENTATIVE SHALL BE PRESENT AT ALL TIMES DURING THE VERIFICATION PROCEDURE AND SHALL ENSURE THE VERIFICATION IS COMPLETE AS FOLLOWS:

.1 PROVIDE ALL REQUIRED TESTING EQUIPMENT AND TOOLS.

.2 DISASSEMBLE AND RE-ASSEMBLE SYSTEM COMPONENTS.

.3 DISCONNECT AND RECONNECT WIRING.

.4 PERFORM REQUIRED FIELD ADJUSTMENTS.

.5 REPLACE DEFECTIVE COMPONENTS.

.6 PERFORM ALL OTHER WORK ON THE SYSTEM REQUIRED BY THE VERIFICATION PROCEDURE.

.19 THE ELECTRICAL CONTRACTOR TO INCLUDE IN THE TENDER ALL COSTS FOR FIRE ALARM SYSTEM VERIFICATION AND ANY ADDITIONAL COSTS TO CHANGE OR ALTER OPERATION OR INSTALLATION TO MEET INTENT OF THE SPECIFICATION OR REGULATORY CODE REQUIREMENTS.

.20 PREAPPROVED ALTERNATE SYSTEMS ARE SIEMENS, NOTIFIER AND EDWARDS.

END OF SPECIFICATION

Revision/ Revision	Description/Description	Date/Date
5		
4		
3		
2		
1	ISSUED FOR TENDER	2014/12/05
0	ISSUED FOR SCHEMATIC DESIGN	2014/10/22

Client/client

PARKS CANADA

DAWSON CITY, YUKON

Project title/Titre du projet

DAWSON CITY, YUKON
OLD COURTHOUSE

FIRE PROTECTION DESIGN

Consultant Signature Only
CONSULTANT_SIGNATURE_ONLY

Designed by/Concept par
TD

Drawn by/Dessine par
PP

PWGSC Project Manager/Administrateur de Projets TPSGC
HUGH

Regional Manager, Architectural and Engineering Services Gestionnaire régional, Services d'architecture et de génie, TPSGC
PWGSC-REGIONAL_MANAGER

Drawing title/Titre du dessin

ELECTRICAL SPECIFICATIONS
(2 of 2)

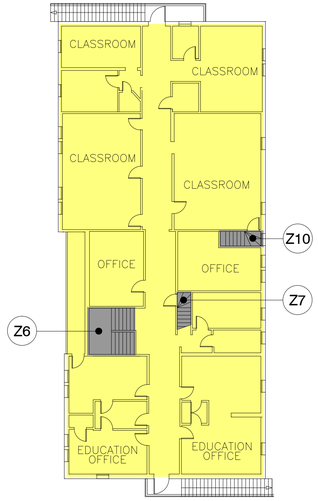
Project No./No. du projet	Sheet/Feuille	Revision no./ La Révision no.
141-22313-00	E301 OF 08	1

16.0000

20.0000

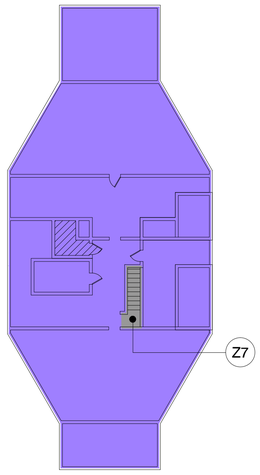
OLD COURTHOUSE DAWSON CITY

FIRE ALARM ZONE MAP



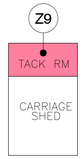
SECOND FLOOR

Z2



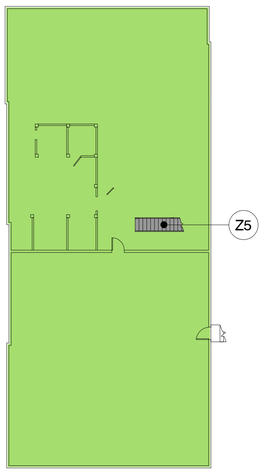
ATTIC

Z3



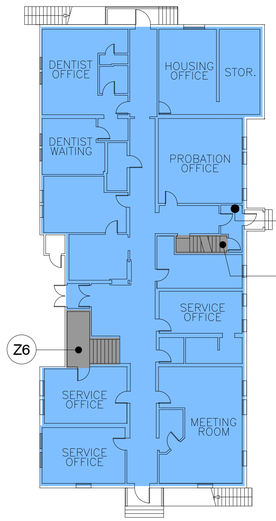
CARRIAGE SHED

FIRE ALARM ZONES	
Z1	GROUND FLOOR - MANUAL / AUTOMATIC
Z2	SECOND FLOOR - MANUAL / AUTOMATIC
Z3	ATTIC - MANUAL / AUTOMATIC
Z4	BASEMENT - MANUAL / AUTOMATIC
Z5	BASEMENT STAIRS - AUTOMATIC
Z6	CENTRAL STAIRS - AUTOMATIC
Z7	ATTIC STAIRS - AUTOMATIC
Z8	BOILER SHED - AUTOMATIC
Z9	TACK RM OF CARRIAGE SHED - MANUAL / AUTO
Z10	SECOND FLOOR STAIRS - AUTOMATIC



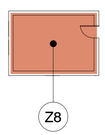
BASEMENT

Z4



GROUND FLOOR

Z1



BOILER SHED

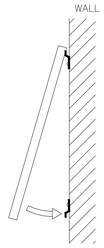
tyco Integrated Fire & Security

Manufactured by ADS-Displays

PASSIVE DISPLAY

(SERIES – IDZ1620)

NOTE: ANODIZED BRUSHED ALUMINUM FRAME & SECURITY HANGERS



TYPICAL MOUNTING SECURITY HANGERS

General Notes

MODEL IDZ–1620 (16"X20")INDOOR PASSIVE DISPLAY, ANODIZED FRAME & SECURITY HANGERS.
ZONE MAP LOCATED ADJACENT TO FIRE PANEL.

APPROVAL STATUS

PARTIES INVOLVED AS LISTED BELOW WITH THIS PROJECT ARE RESPONSIBLE TO PROVIDE ACCEPTANCE OF THIS DRAWING. ADS–DISPLAY WILL PRODUCE THIS DISPLAY AS NOTED ON THIS DRAWING WITHOUT ANY EXEMPTIONS OR ALLOWANCES FOR CHANGE. ANY CHANGES MADE AFTER ACCEPTANCE AND PRIOR TO MANUFACTURING ARE SUBJECTED TO ADDITIONAL COST AS REQUIRED.ADS–DISPLAY RESERVES THE RIGHT FOR OUR CUSTOMERS TO PROVIDE OVERALL APPROVAL TO PROCEED ON ANY PROJECT AS OUTLINED WITHIN THIS STATEMENT.

ACCEPTED
MARK THE BOX WITH A (X)

- ☐ TYCO Integrated Fire & Security — CUSTOMER
- ☐ BEN'S ELECT — CONTRACTOR
- ☐ WSP GROUP — ENGINEER

No.	Revision/Issue	Date
02	UPDATE 04/23/15	04/23/15
01	UPDATE 04/22/15	04/22/15

Custom Graphic Displays

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Analog-Digital Systems Inc.

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E–Mail ads@telus.net

Project Name and Address
DAWSON CITY OLD COURTHOUSE
FIRE ALARM PASSIVE GRAPHIC DISPLAY

Project	215–028
Date	04/08/15
Scale	1:1
DRAWN BY	S.Q–G
Sheet	1 OF 1

Figure 1 – Typical initiating device and surface mount wiring

Figure 2 – Typical Courtroom initiating devices and surface mount wiring

Figure 3 – Main fire alarm panel and alarm communicator located in Carriage Shed

Figure 4 – Typical device installation

Appendix 'B' – Tetra Tech Geotechnical Report

TETRA TECH

May 8, 2018

ISSUED FOR USE
FILE: ENG.WARC03404-01
Via Email: Hzn@thinkratio.com

RATIO Architecture, Interior Design & Planning Inc
Suite 410
1444 Alberni Street
Vancouver, BC

Attention: Hazen J Sise, Senior Architect

Subject: Desktop Geotechnical Evaluation – New Service Building and Heritage Courthouse
Dawson City, YT

1.0 INTRODUCTION

1.1 Project Details

Tetra Tech Canada Inc. (Tetra Tech) was retained by RATIO Architecture, Interior Design & Planning Inc. (RATIO) to provide a desktop geotechnical study for the Service Building and Heritage Courthouse Building located in Dawson City, YT. This work was authorized by Hazen Sise of RATIO by way of a signed Services Agreement dated April 13, 2018.

Through discussion with RATIO and Stantec Consulting Ltd. (Stantec), Tetra Tech understands that the existing structure on the property is to be removed and a new one storey Service Building constructed. Additionally, rehabilitation of the existing 2-1/2 storey Courthouse interior is planned to coincide with the new construction.

This desktop geotechnical evaluation will provide general preliminary geotechnical information and recommendations for the project site. A thorough geotechnical evaluation, including a site investigation, has neither been completed nor is planned at this time, therefore it is important that Tetra Tech be contacted during construction to verify assumptions stated herein. For additional conditions regarding the use of this report, please refer to Tetra Tech's Limitations on the Use of this Document included in Appendix A.

1.2 Scope of Services

Based on information provided by RATIO, Tetra Tech's scope of services for this work included:

- Completion of a desktop study based on historical subsurface investigations near the subject site;
- Preparation and submission of a geotechnical report to address:
  - Recommended Ultimate and Serviceability Limit State (ULS and SLS) bearing pressures based on foundation information provided for each of the buildings and findings of desktop study;
  - Subgrade, backfill, foundation preparation and concrete exposure classification recommendations;
  - Seismic Site Classifications based on NBCC 2015;
  - Effects of a heated basement on the existing subgrade at the Courthouse;

Tetra Tech Canada Inc.
61 Wasson Place
Whitehorse, YT Y1A 0H7 CANADA
Tel 867.668.3068 Fax 867.668.4349

- Confirmation of lateral load on basement wall.

2.0 METHOD OF STUDY

A review of available information was conducted in preparing this report. Information such as aerial photographs and previous geotechnical reports were used to interpret the anticipated subsurface conditions and prepare general recommendations for foundation design and construction.

For this specific project, Tetra Tech has neither advanced exploratory boreholes at this site, nor inspected the proposed site. All descriptions and recommendations presented herein are based solely upon the "desktop" study and Tetra Tech's previous experience with working in the vicinity of Turner Street between Front Street and 5th Avenue. Figure 1 shows the locations of Tetra Tech's historical testholes in this area.

3.0 HISTORICAL GEOTECHNICAL DATA

Tetra Tech reviewed relevant geotechnical data from historical projects completed at the near the subject site. Projects included (in chronological order):

- June 1977: Dawson City Geotechnical Program – One borehole advanced in site vicinity;
- June 2001: Hydrocarbon Spill Assessment – Four shallow testpits excavated;
- November 2002 Secondary Sewage Plant Geotechnical – One borehole advanced in site vicinity;
- May 2008: Nurse's Residence Evaluation – Two testpits excavated;
- September 2009: Proposed Multi-Storey Apartment Building Evaluation - Six testpits excavated; and,
- January 2017: Water Treatment Plant Evaluation – T`wo boreholes advanced.

Geotechnical conditions described in these reports have been used for the development of the recommendations in this report. Historical testpit logs from these projects are included in Appendix B.

4.0 SITE DESCRIPTION

4.1 Location

The Heritage Courthouse and proposed new Service Building are located on the corner of Front Street and Turner Street in Dawson City, Yukon.

4.2 Anticipated Surface Conditions

The site has been previously developed and is lower than Front Street, but there are no surface features that would affect the proposed site construction.

4.3 Anticipated Subsurface Conditions

As noted above, a site-specific geotechnical investigation was not carried out for this project, therefore anticipated subsurface conditions at the project site are described only in general terms here. Based on Tetra Tech's review of

past site investigations near the project site, the subsurface conditions are expected to consist mainly of the following:

- 0.3 – 1.0 m of granular FILL, underlain by;
- 0.0 – 1.5 m of PEAT and ORGANICS (not observed consistently), underlain by;
- 1.5 – 3.5 m of SILT, underlain by;
- GRAVEL to an undetermined depth.

The gravel layer at depth is anticipated to range roughly from 3.0 – 4.0 m below ground surface in the general area of the subject site. However, it is not known what kind of foundation was constructed below the existing structure, for example, whether or not this gravel layer was exposed and then backfilled to foundation grade with granular fill.

4.4 Groundwater Conditions

Depth to ground water at the site will vary with water levels in the Klondike and Yukon Rivers. It has been previously noted at depths as shallow as 3.0 m and may fluctuate to 4.5 m below ground surface.

4.5 Permafrost and Seasonal Frost Penetration

Based on the most recent historical logs and general experience in the area, permafrost is not typically anticipated to be encountered in the vicinity of the project site. However, permafrost was encountered during the 1977 drilling program along the north-east quadrant of the site at a depth of approximately 1.4 m and extending into the gravels at depth. While it is likely that this permafrost has since thawed, without a detailed geotechnical investigation the presence of permafrost cannot be confidently ruled out.

Based on the anticipated soil conditions at the project site, and regional climate data, the maximum depth of seasonal frost penetration under snow-free conditions is assumed to be about 3.0 m.

4.6 Bedrock

Bedrock was not encountered in any of the historical testholes that were reviewed.

5.0 RECOMMENDATIONS

Based on information provided by RATIO and Stantec, Tetra Tech understands the preliminary intent is to use a thickened monolithic slab on grade, and a spread footing system for the Service Building and Courthouse basement, respectively. The following sections outline recommendations for foundation design and construction for each of the structures.

5.1 New Service Building

5.1.1 Site Preparation

Site preparation for the new service building should be completed in accordance with the following recommendations:

- The existing ground surface should be excavated to the underlying gravel layer (approximately 3.0 – 4.0 m). The excavation should be completed such that there is minimal disturbance to the soils encountered at the excavation base. Tetra Tech recommends that excavation sidewalls be sloped no steeper than 1H:1V. Shoring methods should be used if steeper sidewall slopes are desired;
- The base of the excavation must be level so that an engineered fill pad of uniform thickness is created to support the building foundation;
- Upon completion of the excavation, the exposed subgrade should be inspected by a qualified geotechnical engineer to confirm that suitable ground conditions have been encountered and to provide additional recommendations if necessary;
- The approved subgrade should be backfilled with 80 mm pit run gravel placed in maximum 300 mm lifts, moisture conditioned, and compacted to at least 98% Standard Proctor Maximum Dry Density (SPMDD);
- A minimum 150 mm thick layer of 20 mm crushed gravel basecourse should be placed immediately below the underside of the slab on grade foundation system. The basecourse should be moisture conditioned and compacted to at least 98% SPMDD. This will provide a smooth, level bearing-surface on which to cast the concrete strip and spread footing foundations. The recommended gradations of both 80 mm pit run gravel and 20 mm crushed basecourse are provided below in Table 1;
- The final elevation of the pad for the new building footprint should be high enough to maintain positive drainage away from the foundation;
- The excavation must be protected from the inflow of surface water at all times; and
- Foundation elements should not be cast directly onto or over seasonally frozen soils.

Table 1: Recommended Gradation for Granular Fill Materials

80 mm Pit Run Gravel		20 mm Crushed Basecourse	
Particle Size (mm)	**% Passing (by weight)**	**Particle Size (mm)**	**% Passing (by weight)**
80	100	-	-
25	55 – 100	20	100
12.5	42 – 84	12.5	64 – 100
5.00	26 – 65	5.00	36 – 72
1.25	11 – 47	1.25	12 – 42
0.315	3 – 30	0.315	4 – 22
0.080	0 – 8	0.080	3 – 6

5.1.2 Foundation Design and Construction

5.1.2.1 Limit States Design

The 2015 edition of the National Building Code of Canada (NBCC 2015) stipulates that foundation design must be carried out using Limit State Design (LSD) methods. Under LSD, a minimum of two loading cases must be considered by geotechnical and structural designers; the Ultimate Limit State (ULS) and the Serviceability Limit State (SLS). The ULS and SLS bearing resistances are calculated differently. The ULS bearing resistance is the maximum pressure that can be applied to the soil without causing bearing failure. The SLS bearing pressure is the maximum allowable pressure required to limit the settlement to a tolerable amount. Both the ULS and SLS bearing

resistances are highly dependent on soil properties and footing geometry, including the footing size, shape, and burial depth.

Resistance factors are applied to the calculated (unfactored) resistances to determine the maximum allowable factored design load. Geotechnical resistance factors for design of shallow foundations against vertical bearing failure (ULS), horizontal displacement (sliding under lateral loading), and overturning, per the NBCC 2015, are provided in Table 2.

Table 2: Geotechnical Resistance Factors - Shallow Foundations

Item	Resistance Factor
Vertical Bearing Resistance (ULS)	0.5
Sliding (ULS)	0.8
Overturning (ULS)	0.5

5.1.2.2 Foundation Recommendations

As noted above, a thickened monolithic slab on grade foundation is considered to be an acceptable foundation system for the new Service Building based on this preliminary desktop evaluation. As such, design and construction of the foundation should be undertaken in accordance with the following recommendations:

- For the purpose of determining preliminary geotechnical bearing resistances, Tetra Tech has assumed a thickened perimeter footing thickness of 0.6 m and a minimum depth of cover of 0.6 m from finished grade to the underside of footing, as well as a case consisting of 0.4 m and a minimum depth of cover of 0.6 m from finished grade to the underside of footing;
- Unfactored bearing resistances are provided based on the dimensions shown. If other dimensions are to be used, Tetra Tech should be notified to review and adjust the calculated bearing resistances; and
- Preliminary unfactored ULS and SLS bearing resistances for the Service Building are provided below on Table 3. SLS bearing resistances have been calculated based on 16 mm of tolerable elastic settlement.

Table 3: Unfactored Bearing Pressures

Limit State	Thickened Monolithic Slab on Grade, Perimeter Footings 0.6 m in Width	Thickened Monolithic Slab on Grade, Perimeter Footings 0.4 m in Width
ULS	455 kPa	440 kPa
SLS	380 kPa	610 kPa

5.1.3 Seasonal Frost Protection

Seasonal ground frost-related movement is common in cold climates and occurs when three conditions are satisfied: the ground temperature is below freezing, frost-susceptible fine-grained soils are present, and the soil pore space is near 100% saturation. At the site of the new Service Building, the organic and silt layers are anticipated to be frost-susceptible, but as noted above in Section 5.1.1 this soil will be or has been excavated and removed from the site. Therefore, perimeter insulation will not be required -- this must be confirmed during construction.

5.1.4 Site Grading

As noted above in Section 5.1.1, the final grade of the footprint of the new Service Building should be elevated above the surrounding grade to maintain positive drainage away from the building foundations. Ponding and/or infiltration of water adjacent to the building should be prevented as this could have detrimental effects on the performance of the building foundations. Roof runoff should be directed onto splash pads away from the building. This is particularly important in late fall just prior to freeze-up.

5.1.5 Concrete

Concrete should be cast onto a clean, level, compacted, granular bearing surface. It is important that no loose and/or disturbed material be allowed to remain on the bearing surface. As noted above, foundation bearing surfaces should consist of 20 mm crushed basecourse, moisture conditioned and compacted to at least 98% SPMDD.

Tetra Tech recommends that all concrete be designed, mixed, placed, and tested in accordance with the most recent edition of the Canadian Standards Association (CSA) Standard CAN/CSA-A23.1 and A23.2. According to these standards, concrete should be designed to at least satisfy the minimum durability requirements as defined by the exposure class.

The exposure class of the concrete is dependent on the presence or lack of chlorides, sulphates, freezing and thawing conditions, and the soil saturation. Based on these conditions, the governing exposure class for the foundation system will be “F-2” for foundation elements and “C-2” for surface slabs. If the concrete will be exposed to any specialized chemicals it is recommended that Tetra Tech be given the opportunity to review the concrete class recommendation.

If winter construction is considered, Tetra Tech should be contacted and given the opportunity to review the contractor’s winter concrete placement procedures.

5.1.6 Seismic Site Classification

NBCC 2015 requires that a seismic site classification be established for proposed buildings. Tetra Tech does not have any historical data related to soil consistency within the project site, as such, Tetra Tech’s preliminary recommendation is that the new Service Building be considered Site Classification D, per Table 4.1.8.4.A in NBCC 2015.

5.2 Existing Heritage Courthouse

It is understood that new pad footings will be constructed within the interior of the existing structure, through the wooden basement floor. There has apparently been no reports of foundation distress to date, so the existing foundation area is considered acceptable to support new footings.

5.2.1 Foundation Preparation

Once the subgrade is exposed at the new footing locations, Tetra Tech must be advised to complete a verification of acceptable bearing soils.

5.2.2 Foundation Design and Construction

5.2.2.1 Limit States Design

The 2015 edition of the National Building Code of Canada (NBCC 2015) stipulates that foundation design must be carried out using Limit State Design (LSD) methods. Under LSD, a minimum of two loading cases must be considered by geotechnical and structural designers; the Ultimate Limit State (ULS) and the Serviceability Limit State (SLS). The ULS and SLS bearing resistances are calculated differently. The ULS bearing resistance is the maximum pressure that can be applied to the soil without causing bearing failure. The SLS bearing pressure is the maximum allowable pressure required to limit the settlement to a tolerable amount. Both the ULS and SLS bearing resistances are highly dependent on soil properties and footing geometry, including the footing size, shape, and burial depth.

Resistance factors are applied to the calculated (unfactored) resistances to determine the maximum allowable factored design load. Geotechnical resistance factors for design of shallow foundations against vertical bearing failure (ULS), horizontal displacement (sliding under lateral loading), and overturning, per the NBCC 2015, are provided in Table 2.

Table 4: Geotechnical Resistance Factors - Shallow Foundations

Item	Resistance Factor
Vertical Bearing Resistance (ULS)	0.5
Sliding (ULS)	0.8
Overturning (ULS)	0.5

5.2.2.2 Foundation Recommendations

Design and construction of the Heritage Courthouse foundation should be undertaken in accordance with the following recommendations:

- Unfactored bearing resistances are provided based on an assumed 1.5 m square spread footing. If these dimensions change, Tetra Tech should be notified to review and adjust the calculated bearing resistances;
- ULS and SLS bearing resistances for the new pad footings are provided below on Table 5. SLS bearing resistances have been calculated based on 16 mm of tolerable elastic settlement.

Table 5: Unfactored Bearing Pressures

Limit State	1.5 m Square Spread Footing
ULS	200 kPa
SLS	200 kPa

5.2.3 Seasonal Frost Protection

At the site of the Heritage Courthouse, frost-susceptible soil may be within the frost penetration depth, but as construction will be completed from the interior and the space will be heated it is not anticipated that additional frost protection will be required. To minimize the potential for future frost related movements, it is recommended that the building remain marginally heated (i.e. just above zero-degrees C) all year around.

5.2.4 Concrete

Tetra Tech understands that at this time concrete footings are not planned as Stantec is intending on using a timber and beam spread footing system. If concrete is used, the recommendations in Section 5.1.5 should be adhered to.

5.2.5 Seismic Site Classification

NBCC 2015 requires that a seismic site classification be established for proposed buildings. Tetra Tech does not have any historical data related to soil consistency within the project site, as such, Tetra Tech's preliminary recommendation is that the Heritage Courthouse be considered Site Classification D, per Table 4.1.8.4.A in NBCC 2015.

5.2.6 Effects of a Heated Basement on the Existing Subgrade

Our opinion is that if there was permafrost at this location at some time in the past, it has now thawed, and there will be no detrimental effects of a heated basement on the foundation of this structure.

5.2.7 Lateral Load on Basement Wall

As previously provided to RATIO and Stantec, Tetra Tech recommends a equivalent fluid pressure of 1120 kg/m^3 under dry conditions, and 1620 kg/m^3 under fully saturated conditions.

6.0 LIMITATIONS OF REPORT

This report and its contents are intended for the sole use of RATIO Architecture, Interior Design & Planning Inc. and their agents. Tetra Tech Canada Inc. does not accept any responsibility for the accuracy of any of the data, the analysis, or the recommendations contained or referenced in the report when the report is used or relied upon by any Party other than RATIO Architecture, Interior Design & Planning Inc., or for any Project other than the proposed development at the subject site. Any such unauthorized use of this report is at the sole risk of the user. Use of this document is subject to the Limitations on the Use of this Document attached in the Appendix or Contractual Terms and Conditions executed by both parties.

7.0 CLOSURE

We trust this document meets your present requirements. If you have any questions or comments, please contact the undersigned.

Respectfully submitted,
Tetra Tech Canada Inc.

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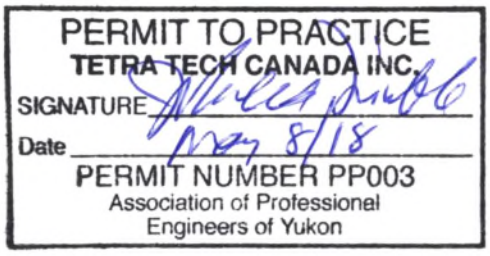

FIGURES

LEGEND

- APPROXIMATE PROJECT EXTENTS
- BOREHOLE LOCATION
- TESTPIT LOCATION

0 50m

Scale: 1:1,500 @ 8.5"x11"

CLIENT

RATIO ARCHITECTURE
INTERIOR DESIGN & PLANNING INC.

TETRA TECH

NEW SERVICE BUILDING & HERITAGE COURTHOUSE DAWSON CITY, YUKON

SITE PLAN SHOWING HISTORICAL TESTHOLE LOCATIONS

PROJECT NO.	DWN	CKD	REV
ENG.WARC03404-01	CB	IM	0

OFFICE	DATE
EBA-WHSE	April 24, 2018

Figure 1

Q:\Whitehorse\Data\0201drawings\Dawson City Area\ENG.WARC03404-01 SOG Service Building & Courthouse Desktop Study\ENGWARC03404-01 Fig.1-R0.dwg [FIGURE 1] May 08, 2018 - 8:24:03 am (BY: BUCHAN, CAMERON)

APPENDIX A

TETRA TECH'S LIMITATIONS ON THE USE OF THIS DOCUMENT

LIMITATIONS ON USE OF THIS DOCUMENT

GEOTECHNICAL

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1.4 DISCLOSURE OF INFORMATION BY CLIENT

The Client acknowledges that it has fully cooperated with TETRA TECH with respect to the provision of all available information on the past, present, and proposed conditions on the site, including historical information respecting the use of the site. The Client further acknowledges that in order for TETRA TECH to properly provide the services contracted for in the Contract, TETRA TECH has relied upon the Client with respect to both the full disclosure and accuracy of any such information.

1.5 INFORMATION PROVIDED TO TETRA TECH BY OTHERS

During the performance of the work and the preparation of this Professional Document, TETRA TECH may have relied on information provided by third parties other than the Client.

While TETRA TECH endeavours to verify the accuracy of such information, TETRA TECH accepts no responsibility for the accuracy or the reliability of such information even where inaccurate or unreliable information impacts any recommendations, design or other deliverables and causes the Client or an Authorized Party loss or damage.

1.6 GENERAL LIMITATIONS OF DOCUMENT

This Professional Document is based solely on the conditions presented and the data available to TETRA TECH at the time the data were collected in the field or gathered from available databases.

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TETRA TECH is neither qualified to, nor is it making, any recommendations with respect to the purchase, sale, investment or development of the property, the decisions on which are the sole responsibility of the Client.

1.7 ENVIRONMENTAL AND REGULATORY ISSUES

Unless stipulated in the report, TETRA TECH has not been retained to explore, address or consider and has not explored, addressed or considered any environmental or regulatory issues associated with development on the subject site.

1.8 NATURE AND EXACTNESS OF SOIL AND ROCK DESCRIPTIONS

Classification and identification of soils and rocks are based upon commonly accepted systems, methods and standards employed in professional geotechnical practice. This report contains descriptions of the systems and methods used. Where deviations from the system or method prevail, they are specifically mentioned.

Classification and identification of geological units are judgmental in nature as to both type and condition. TETRA TECH does not warrant conditions represented herein as exact, but infers accuracy only to the extent that is common in practice.

Where subsurface conditions encountered during development are different from those described in this report, qualified geotechnical personnel should revisit the site and review recommendations in light of the actual conditions encountered.

1.9 LOGS OF TESTHOLES

The testhole logs are a compilation of conditions and classification of soils and rocks as obtained from field observations and laboratory testing of selected samples. Soil and rock zones have been interpreted. Change from one geological zone to the other, indicated on the logs as a distinct line, can be, in fact, transitional. The extent of transition is interpretive. Any circumstance which requires precise definition of soil or rock zone transition elevations may require further investigation and review.

1.10 STRATIGRAPHIC AND GEOLOGICAL INFORMATION

The stratigraphic and geological information indicated on drawings contained in this report are inferred from logs of test holes and/or soil/rock exposures. Stratigraphy is known only at the locations of the test hole or exposure. Actual geology and stratigraphy between test holes and/or exposures may vary from that shown on these drawings. Natural variations in geological conditions are inherent and are a function of the historical environment. TETRA TECH does not represent the conditions illustrated as exact but recognizes that variations will exist. Where knowledge of more precise locations of geological units is necessary, additional exploration and review may be necessary.

1.11 PROTECTION OF EXPOSED GROUND

Excavation and construction operations expose geological materials to climatic elements (freeze/thaw, wet/dry) and/or mechanical disturbance which can cause severe deterioration. Unless otherwise specifically indicated in this report, the walls and floors of excavations must be protected from the elements, particularly moisture, desiccation, frost action and construction traffic.

1.12 SUPPORT OF ADJACENT GROUND AND STRUCTURES

Unless otherwise specifically advised, support of ground and structures adjacent to the anticipated construction and preservation of adjacent ground and structures from the adverse impact of construction activity is required.

1.13 INFLUENCE OF CONSTRUCTION ACTIVITY

Construction activity can impact structural performance of adjacent buildings and other installations. The influence of all anticipated construction activities should be considered by the contractor, owner, architect and prime engineer in consultation with a geotechnical engineer when the final design and construction techniques, and construction sequence are known.

1.14 OBSERVATIONS DURING CONSTRUCTION

Because of the nature of geological deposits, the judgmental nature of geotechnical engineering, and the potential of adverse circumstances arising from construction activity, observations during site preparation, excavation and construction should be carried out by a geotechnical engineer. These observations may then serve as the basis for confirmation and/or alteration of geotechnical recommendations or design guidelines presented herein.

1.15 DRAINAGE SYSTEMS

Where temporary or permanent drainage systems are installed within or around a structure, the systems which will be installed must protect the structure from loss of ground due to internal erosion and must be designed so as to assure continued satisfactory performance of the drains. Specific design detail of such systems should be developed or reviewed by the geotechnical engineer. Unless otherwise specified, it is a condition of this report that effective temporary and permanent drainage systems are required and that they must be considered in relation to project purpose and function.

1.16 DESIGN PARAMETERS

Bearing capacities for Limit States or Allowable Stress Design, strength/stiffness properties and similar geotechnical design parameters quoted in this report relate to a specific soil or rock type and condition. Construction activity and environmental circumstances can materially change the condition of soil or rock. The elevation at which a soil or rock type occurs is variable. It is a requirement of this report that structural elements be founded in and/or upon geological materials of the type and in the condition used in this report. Sufficient observations should be made by qualified geotechnical personnel during construction to assure that the soil and/or rock conditions considered in this report in fact exist at the site.

1.17 SAMPLES

TETRA TECH will retain all soil and rock samples for 30 days after this report is issued. Further storage or transfer of samples can be made at the Client's expense upon written request, otherwise samples will be discarded.

1.18 APPLICABLE CODES, STANDARDS, GUIDELINES & BEST PRACTICE

This document has been prepared based on the applicable codes, standards, guidelines or best practice as identified in the report. Some mandated codes, standards and guidelines (such as ASTM, AASHTO Bridge Design/Construction Codes, Canadian Highway Bridge Design Code, National/Provincial Building Codes) are routinely updated and corrections made. TETRA TECH cannot predict nor be held liable for any such future changes, amendments, errors or omissions in these documents that may have a bearing on the assessment, design or analyses included in this report.

APPENDIX B

HISTORICAL TESTHOLE LOGS

TERMS USED ON BOREHOLE LOGS

TERMS DESCRIBING CONSISTENCY OR CONDITION

COARSE GRAINED SOILS (major portion retained on 0.075mm sieve): Includes (1) clean gravels and sands, and (2) silty or clayey gravels and sands. Condition is rated according to relative density, as inferred from laboratory or in situ tests.

DESCRIPTIVE TERM	RELATIVE DENSITY	N (blows per 0.3m)
Very Loose	0 TO 20%	0 to 4
Loose	20 TO 40%	4 to 10
Compact	40 TO 75%	10 to 30
Dense	75 TO 90%	30 to 50
Very Dense	90 TO 100%	greater than 50

The number of blows, N, on a 51mm O.D. split spoon sampler of a 63.5kg weight falling 0.76m, required to drive the sampler a distance of 0.3m from 0.15m to 0.45m.

FINE GRAINED SOILS (major portion passing 0.075mm sieve): Includes (1) inorganic and organic silts and clays, (2) gravelly, sandy, or silty clays, and (3) clayey silts. Consistency is rated according to shearing strength, as estimated from laboratory or in situ tests.

DESCRIPTIVE TERM	UNCONFINED COMPRESSIVE STRENGTH (KPA)
Very Soft	Less than 25
Soft	25 to 50
Firm	50 to 100
Stiff	100 to 200
Very Stiff	200 to 400
Hard	Greater than 400

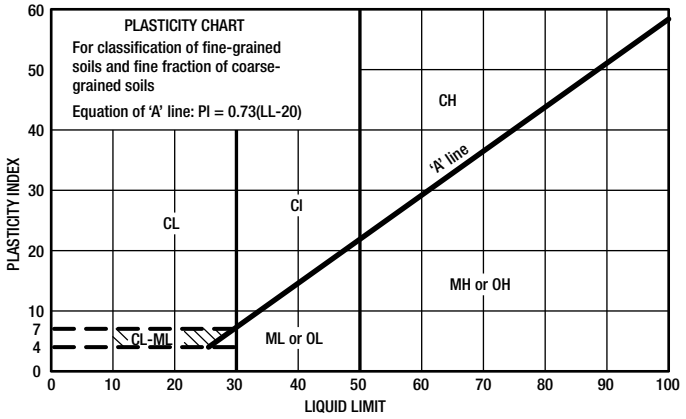
NOTE: Slickensided and fissured clays may have lower unconfined compressive strengths than shown above, because of planes of weakness or cracks in the soil.

GENERAL DESCRIPTIVE TERMS

Slickensided - having inclined planes of weakness that are slick and glossy in appearance.
Fissured - containing shrinkage cracks, frequently filled with fine sand or silt; usually more or less vertical.
Laminated - composed of thin layers of varying colour and texture.
Interbedded - composed of alternate layers of different soil types.
Calcareous - containing appreciable quantities of calcium carbonate.;
Well graded - having wide range in grain sizes and substantial amounts of intermediate particle sizes.
Poorly graded - predominantly of one grain size, or having a range of sizes with some intermediate size missing.

MODIFIED UNIFIED SOIL CLASSIFICATION

MAJOR DIVISION			GROUP SYMBOL	TYPICAL DESCRIPTION	LABORATORY CLASSIFICATION CRITERIA	
COARSE - GRAINED SOILS More than 50% retained on No. 75 µm sieve*	GRAVELS 50% or more of coarse fraction retained on No. 4 sieve	CLEAN GRAVELS	GW	Well-graded gravels and gravel-sand mixtures, little or no fines	Classification on basis of percentage of fines GW, GP, SW, SP GM, GC, SM, SC Borderline classification requiring use of dual symbols Less than 5% pass 75 µm sieve More than 12% pass 75 µm sieve 5% to 12% pass 75 µm sieve	$C_U = D_{60} / D_{10}$ Greater than 4 $C_C = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ Between 1 and 3
			GP	Poorly-graded gravels and gravel-sand mixtures, little or no fines		Not meeting both criteria for GW
		GRAVELS WITH FINES	GM	Silty gravels, gravel-sand-silt mixtures		Atterberg limits plot below 'A' line or plasticity index less than 4 — Atterberg limits plotting in hatched area are borderline classifications requiring use of dual symbols
			GC	Clayey gravels, gravel-sand-clay mixtures		Atterberg limits plot above 'A' line and plasticity index greater than 7
	SANDS More than 50% of coarse fraction passes No. 4 sieve	CLEAN SANDS	SW	Well-graded sands and gravelly sands, little or no fines		$C_U = D_{60} / D_{10}$ Greater than 6 $C_C = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ Between 1 and 3
			SP	Poorly-graded sands and gravelly sands, little or no fines		Not meeting both criteria for SW
		SANDS WITH FINES	SM	Silty sands, sand-silt mixtures		Atterberg limits plot above 'A' line and plasticity index less than 4 — Atterberg limits plotting in hatched area are borderline classifications requiring use of dual symbols
			SC	Clayey sands, sand-clay mixtures		Atterberg limits plot above 'A' line and plasticity index greater than 7
FINE-GRAINED SOILS (by behavior) 50% or more passes 75 µm sieve*	SILTS Liquid limit <50		ML	Inorganic silts, very fine sands, rock flour, silty or clayey fine sands of slight plasticity		
	SILTS Liquid limit >50		MH	Inorganic silts, micaceous or diatomaceous fine sands or silts, elastic silts		
	CLAYS Above "A" line on plasticity chart negligible organic content Liquid limit <30		CL	Inorganic clays of low plasticity, gravelly clays, sandy clays, silty clays, lean clays		
	CLAYS Above "A" line on plasticity chart negligible organic content Liquid limit 30-50		CI	Inorganic clay of medium plasticity, silty clays		
	CLAYS Above "A" line on plasticity chart negligible organic content Liquid limit >50		CH	Inorganic clay of high plasticity, fat clays		
	ORGANIC SILTS AND CLAYS Liquid limit <50		OL	Organic silts and organic silty clays of low plasticity		
	ORGANIC SILTS AND CLAYS Liquid limit >50		OH	Organic clays of medium to high plasticity		
HIGHLY ORGANIC SOILS			PT	Peat, muck and other highly organic soils		



* Based on the material passing the 75 mm sieve

† ASTM Designation D 2487, for identification procedure see D 2488 USC as modified by PFRA

GROUND ICE DESCRIPTION

ICE NOT VISIBLE

GROUP SYMBOL	SYMBOL	SUBGROUP DESCRIPTION	
N	Nf	Poorly-bonded or friable	
	Nbn	No excess ice, well-bonded	
	Nbe	Excess ice, well-bonded	

VISIBLE ICE LESS THAN 50% BY VOLUME

GROUP SYMBOL	SYMBOL	SUBGROUP DESCRIPTION	
V	Vx	Individual ice crystals or inclusions	
	Vc	Ice coatings on particles	
	Vr	Random or irregularly oriented ice formations	
	Vs	Stratified or distinctly oriented ice formations	

VISIBLE ICE GREATER THAN 50% BY VOLUME

ICE	ICE + Soil Type	Ice with soil inclusions	
	ICE	Ice without soil inclusions (greater than 25 mm thick	

NOTES:

1. Dual symbols are used to indicate borderline or mixed ice classifications.
2. Visual estimates of ice contents indicated on borehole logs ± 5%
3. This system of ground ice description has been modified from NRC Technical Memo 79, Guide to the Field Description of Permafrost for Engineering Purposes.

LEGEND: Soil ☐ Ice ■

TETRA TECH

BOREHOLE LOG
PERMAFROST REGION

DEPTH (feet)	SOIL DESCRIPTION	SAMPLE	GROUND ICE CONDITION
1	GRAVEL AND SAND (FILL) - med. brown - very silty		UNFROZEN
2	▽		
0.9m — 3	PEAT - wet		
4			
1.4m — 5	- dark brown - fibrous - some silt		FROZEN Vr 30-40%
6			
	- more silt		
7			
2.3m — 8	SILT AND ORGANICS		Vr 5-10%
	ICE - 2" vertical wedge		T = 31.0°F
9	SILT - med. lt. grey - some organics - γ_f = 89 pcf		Vs 15-25% Vs 10% Vs 25-35% T = 30.6°F Vs 5-15%
10			
11			
12	SILT AND SAND - med. grey brown - sand is very fine, uniform grained		
3.9m — 13	GRAVEL		
	END OF HOLE		

MOISTURE CONTENT % ●
SPT RESISTANCE ▲
10 20 30 40 50 60 70

272%
300%

eba	PROJECT DAWSON CITY	DATE June 8, 1977 LOGGED BY DK ELEVATION 1050.4 ft DEPTH 12.9 ft	HOLE NO. BH 77-12 SHEET 1 of 1

Hydrocarbon Spill Assessment	Government of Canada – Parks Canada	BOREHOLE NO: 15155-TP01
Klondike National Historic Sites	Backhoe – rubber tired	PROJECT NO: 0201-01-15155
Dawson City, YT	UTM ZONE: – N – E –	ELEVATION:

SAMPLE TYPE ■ GRAB SAMPLE ⊘ NO RECOVERY ⊠ STANDARD PEN. ▤ 75 mm SPOON ▥ CRREL BARREL

Depth(m)	SAMPLE TYPE	RUN NO	SPT(N)	USC	SOIL SYMBOL	SOIL DESCRIPTION
0.0						Sandy GRAVEL (fill) gravel to 20 mm, rounded, damp
						SILT – some sand, inter bedded organic layers – 10 mm, moist, silt light brown, tree branches through interbedded layers
1.0						Frozen END OF HOLE @ 1.0 m
2.0						
3.0						
4.0						

■ STANDARD PENETRATION ■ 10 20 30 40

PLASTIC M.C. LIQUID 10 20 30 40

■ PERCENT GRAVEL ■ 20 40 60 80

● PERCENT SAND ● 20 40 60 80

▲ PERCENT SILT OR FINES ▲ 20 40 60 80

◆ PERCENT CLAY ◆ 20 40 60 80

ELEVATION(ft): 0.0, -2.0, -4.0, -6.0, -8.0, -10.0, -12.0, -14.0

EBA Engineering Consultants Ltd.
Whitehorse, Yukon

LOGGED BY: DJW
REVIEWED BY: JRT

COMPLETION DEPTH: 1 m
COMPLETE: 16/06/01

01/06/21 04:03PM (YUKON-4)

Hydrocarbon Spill Assessment	Government of Canada – Parks Canada	BOREHOLE NO: 15155-TP02
Klondike National Historic Sites	Backhoe – rubber tired	PROJECT NO: 0201-01-15155
Dawson City, YT	UTM ZONE: – N – E –	ELEVATION:

SAMPLE TYPE ■ GRAB SAMPLE ⊘ NO RECOVERY ⊠ STANDARD PEN. ▤ 75 mm SPOON ▥ CRREL BARREL

Depth(m)	SAMPLE TYPE	RUN NO	SPT(N)	USC	SOIL SYMBOL	SOIL DESCRIPTION	ELEVATION(ft)
0.0						Sandy GRAVEL (fill) gravel to 20 mm, damp	0.0
						SILT – dense, light brown, interbedded, organic layers, 10 mm, damp	
1.0						Frozen.	-2.0
						END OF HOLE @ 1.1 m	-4.0
2.0							-6.0
							-8.0
3.0							-10.0
							-12.0
4.0							-14.0

■ STANDARD PENETRATION ■ 10 20 30 40

PLASTIC M.C. LIQUID 10 20 30 40

■ PERCENT GRAVEL ■ 20 40 60 80

● PERCENT SAND ● 20 40 60 80

▲ PERCENT SILT OR FINES ▲ 20 40 60 80

◆ PERCENT CLAY ◆ 20 40 60 80

EBA Engineering Consultants Ltd.
Whitehorse, Yukon

LOGGED BY: DJW	COMPLETION DEPTH: 1.1 m
REVIEWED BY: JRT	COMPLETE: 16/06/01
	Page 1 of 1

01/06/21 01:05PM (YUKON-4)

Hydrocarbon Spill Assessment	Government of Canada – Parks Canada	BOREHOLE NO: 15155-TP03
Klondike National Historic Sites	Backhoe – rubber tired	PROJECT NO: 0201-01-15155
Dawson City, YT	UTM ZONE: – N – E –	ELEVATION:

SAMPLE TYPE ■ GRAB SAMPLE ⊘ NO RECOVERY ⊠ STANDARD PEN. ▤ 75 mm SPOON ▥ CRREL BARREL

Depth(m)	SAMPLE TYPE	RUN NO	SPT(N)	USC	SOIL SYMBOL	SOIL DESCRIPTION
0.0						Sandy GRAVEL (fill) gravel to 20 mm, damp
						SILT, some sand, organic layers 10 mm, interbedded, compact, silt, light brown, damp to moist
1.0						Frozen. END OF HOLE @ 1.1 m
2.0						
3.0						
4.0						

■ STANDARD PENETRATION ■ 10 20 30 40

PLASTIC M.C. LIQUID 10 20 30 40

■ PERCENT GRAVEL ■ 20 40 60 80

● PERCENT SAND ● 20 40 60 80

▲ PERCENT SILT OR FINES ▲ 20 40 60 80

◆ PERCENT CLAY ◆ 20 40 60 80

ELEVATION(ft): 0.0, -2.0, -4.0, -6.0, -8.0, -10.0, -12.0, -14.0

EBA Engineering Consultants Ltd.
Whitehorse, Yukon

LOGGED BY: DJW
REVIEWED BY: JRT

COMPLETION DEPTH: 1 m
COMPLETE: 16/06/01

01/06/21 04:10PM (YUKON-4)

Hydrocarbon Spill Assessment	Government of Canada – Parks Canada	BOREHOLE NO: 15155-TP04
Klondike National Historic Sites	Backhoe – rubber tired	PROJECT NO: 0201-01-15155
Dawson City, YT	UTM ZONE: – N – E –	ELEVATION:

SAMPLE TYPE ■ GRAB SAMPLE ⊘ NO RECOVERY ⊠ STANDARD PEN. ▤ 75 mm SPOON ▥ CRREL BARREL

Depth(m)	SAMPLE TYPE	RUN NO	SPT(N)	USC	SOIL SYMBOL	SOIL DESCRIPTION
0.0						Sandy GRAVEL (fill) gravel to 20 mm, rounded, damp
						SILT, some sand, interbedded, organic layers – 10 mm, moist, light brown
1.0						Frozen. END OF HOLE @ 1.1 m
2.0						
3.0						
4.0						

■ STANDARD PENETRATION ■ 10 20 30 40

PLASTIC M.C. LIQUID 10 20 30 40

■ PERCENT GRAVEL ■ 20 40 60 80

● PERCENT SAND ● 20 40 60 80

▲ PERCENT SILT OR FINES ▲ 20 40 60 80

◆ PERCENT CLAY ◆ 20 40 60 80

ELEVATION(ft): 0.0, -2.0, -4.0, -6.0, -8.0, 10.0, 12.0, 14.0

EBA Engineering Consultants Ltd. Whitehorse, Yukon	LOGGED BY: DJW	COMPLETION DEPTH: 1.1 m
	REVIEWED BY: JRT	COMPLETE: 16/06/01
		Page 1 of 1

01/06/21 04:12PM (YUKON-4)

New Secondary Sewage Treatment Plant	CLIENT: City of Dawson	BOREHOLE NO: 1200023-MW02
5th Avenue Site	DRILL: Solid Shaft Auger	PROJECT NO: 0201-1200023
Dawson City, YT	UTM ZONE: 7 N7104490 E576380	ELEVATION:

SAMPLE TYPE: GRAB SAMPLE | NO RECOVERY | STANDARD PEN. | 75 mm SPLIT SP. | CRREL BARREL | NW CORE

BACKFILL TYPE: BENTONITE | PEA GRAVEL | SLOUGH | GROUT | DRILL CUTTINGS | SAND

■ STANDARD PENETRATION ■ 10 20 30 40

◆ VAPOUR EMMISSIONS ◆ 120 240 360 480

PLASTIC M.C. LIQUID 10 20 30 40

▲ PERCENT CLAY ▲ 20 40 60 80

◆ PERCENT SILT OR FINES ◆ 20 40 60 80

● PERCENT SAND ● 20 40 60 80

■ PERCENT GRAVEL ■ 20 40 60 80

Depth(m)	SAMPLE TYPE	RUN NO	SOIL SYMBOL	SOIL DESCRIPTION
0.0				FILL – crushed gravel over white channel gravel
1.0				SILT – sandy, trace of organics
2.0				
3.0				GRAVEL – sandy, some cobbles
4.0				
5.0				
6.0				– cobbles and boulders below 6.0 m
7.0				
8.0				
9.0				END OF BOREHOLE @ 8.8 m Note: 50 mm steel pipe, with holes cut in bottom 3 m, installed to 8.8 m – 0.57 m stickup
10.0				

ELEVATION(m): 0.0, -2.0, -4.0, -6.0, -8.0, -10.0

EBA Engineering Consultants Ltd. Whitehorse, Yukon	LOGGED BY: DJW	COMPLETION DEPTH: 3.2 m
	REVIEWED BY: JRT	COMPLETE: 30/11/02
		Page 1 of 1

02/12/16 09:35:44 (WELL10)

SETTLEMENT EVALUATION–NURSE'S RESIDENCE	CLIENT: STANLEY ASSOCIATES ENG. LTD.	BOREHOLE No. 10323–01
FIFTH AVENUE AND TURNER STREET	BACKHOE: BANTAM C–366	Project No: 0201–10323
DAWSON CITY, YUKON	UTM ZONE: 8 N7103850.00 E576300.00	ELEVATION 0.00 (m)

SAMPLE TYPE ■ GRAB SAMPLE ⊘ NO RECOVERY ⊠ STANDARD PEN. ▤ 75 mm SPOON ▯ 75 mm CRREL ▮ 100 mm CRREL

DEPTH (m)	SAMPLE TYPE	SAMPLE NO	USC	SOIL DESCRIPTION	DEPTH (ft)
0.0				TOPSOIL over white channel gravel FILL	0.0
				FILL–organic silt, pieces of timber, car parts, diesel and paint odour	2.0
1.0				– timber mud sill at 1.2 m	4.0
				SILT–sandy, trace of gravel, black organic laminations, moist to wet, olive brown	6.0
2.0		1		– unfrozen	8.0
				SAND AND SILT–black organics throughout	
3.0				– light brown sand layer	10.0
				– Temperature = +2.1 degrees C.	
				– wet below 3.5 m	12.0
		2		– dark grey silt and sand, organic	
4.0				– just touching gravel at 4.2 m	14.0
				END OF BOREHOLE AT 4.2 m	
5.0					16.0

STANDARD PENETRATION 20 40 60 80

PLASTIC M.C. LIQUID 20 40 60 80

PERCENT GRAVEL ■ 20 40 60 80

PERCENT SAND ● 20 40 60 80

PERCENT FINES ▲ 20 40 60 80

PERCENT CLAY ◆ 20 40 60 80

EBA Engineering Consultants Ltd. Whitehorse, Yukon	COMPLETION DEPTH 4.2 m	COMPLETE 90/05/08
	LOGGED BY JRT	DWG NO.
		Page 1 of 1

SETTLEMENT EVALUATION–NURSE'S RESIDENCE	CLIENT: STANLEY ASSOCIATES ENG. LTD.	BOREHOLE No. 10323–02
FIFTH AND TURNER STREET	BACKHOE: BANTAM C–366	Project No: 0201–10323
DAWSON CITY, YUKON	UTM ZONE: 8 N7103850.00 E576300.00	ELEVATION 0.00 (m)

SAMPLE TYPE ■ GRAB SAMPLE ⊘ NO RECOVERY ⊠ STANDARD PEN. ▤ 75 mm SPOON ▥ 75 mm CRREL ▮ 100 mm CRREL

DEPTH (m)	SAMPLE TYPE	SAMPLE NO	USC	SOIL DESCRIPTION
0.0				TOPSOIL over white channel gravel
				– seasonal frost from 0.8 – 1.7 m
				– dark brown organic silt FILL, with pieces of wood from 0.8 – 1.2 m
1.0				
				SILT–sandy, interbedded with organic silt, some rootlets throughout, moist to wet, dark grey
				– unfrozen
2.0				
3.0				
				SAND AND SILT–uniform in appearance, dry to damp, grey brown
				– unfrozen
				END OF TEST PIT AT 3.8 m
				NOTE: –No sample taken––probe hole only.
4.0				
5.0				

■ STANDARD PENETRATION ■ 20 40 60 80

PLASTIC M.C. LIQUID 20 40 60 80

■ PERCENT GRAVEL ■ 20 40 60 80

● PERCENT SAND ● 20 40 60 80

▲ PERCENT FINES ▲ 20 40 60 80

◆ PERCENT CLAY ◆ 20 40 60 80

DEPTH (ft): 0.0, 2.0, 4.0, 6.0, 8.0, 10.0, 12.0, 14.0, 16.0

EBA Engineering Consultants Ltd. Whitehorse, Yukon	COMPLETION DEPTH 3.8 m	COMPLETE 90/05/08
	LOGGED BY JRT	DWG NO.
		Page 1 of 1

Geotechnical Evaluation	CLIENT: Yukon Housing Corp.	PROJECT NO. - TESTPIT NO.
Proposed Multi-Storey Apartment Building	EXCAVATOR: CAT 416B Rubber Tire	W14101343-TP01
Dawson City, YT	7104191N; 576201E; Zone 7	

SAMPLE TYPE: DISTURBED | NO RECOVERY | SPT | A-CASING | SHELBY TUBE | CORE

BACKFILL TYPE: BENTONITE | PEA GRAVEL | SLOUGH | GROUT | DRILL CUTTINGS | SAND

Depth (m)	SOIL DESCRIPTION	SAMPLE TYPE	MOISTURE CONTENT	PLASTIC M.C. LIQUID (20 40 60 80)	STANDARD PENETRATION (N) (20 40 60 80); UNCONFINED (kPa) (50 100 150 200); POCKET PEN. (kPa) (100 200 300 400)	Depth (ft)
0	GRAVEL (FILL) - sandy, trace to some silt, well graded subrounded gravel, medium to coarse grained sand, compact, damp, greyish white					0
	- trace silt below 0.2 m		7.7			
1	- gravel becomes white channel		5.4			5
	- wood debris					
2	SILT - some clay, some sand, rootlets and organics, fine grained, dense, moist, dark grey		11.3			
			25			10
3						
			34.7			
4						
	GRAVEL AND SAND - trace of silt, well graded subrounded gravel, medium to coarse sand, compact, moist, mottled brown		4.5			15
	END OF TESTPIT 4.5 m					
5						16

EBA Engineering Consultants Ltd.

LOGGED BY: JSB	COMPLETION DEPTH: 4.5m
REVIEWED BY: CJD	COMPLETE: 10/9/2009
DRAWING NO:	Page 1 of 1

Geotechnical Evaluation	CLIENT: Yukon Housing Corp.	PROJECT NO. - TESTPIT NO.
Proposed Multi-Storey Apartment Building	EXCAVATOR: CAT 416B Rubber Tire	W14101343-TP02
Dawson City, YT	7104164N; 576181E; Zone 7	

SAMPLE TYPE: DISTURBED | NO RECOVERY | SPT | A-CASING | SHELBY TUBE | CORE

BACKFILL TYPE: BENTONITE | PEA GRAVEL | SLOUGH | GROUT | DRILL CUTTINGS | SAND

Depth (m)	SOIL DESCRIPTION	SAMPLE TYPE	MOISTURE CONTENT	PLASTIC M.C. LIQUID (20 40 60 80)	STANDARD PENETRATION (N) (20 40 60 80) / UNCONFINED (kPa) (50 100 150 200) / POCKET PEN. (kPa) (100 200 300 400)	Depth (ft)
0	GRAVEL (FILL WHITE CHANNEL) - sandy, trace silt, well graded sub-rounded gravel, medium to coarse grained sand, compact, moist, greyish gravel					0
	- thin organic layer					
	SILT - some clay, some sand, fine grained, dense, moist, brown		37.9			
1						5
	- becomes fine to medium grained sand, trace silt around 1.6 m					
2			25.1			
3			11.8			10
	END OF TESTPIT 3.5 m					
4						15
5						16

EBA Engineering Consultants Ltd.

LOGGED BY: JSB	COMPLETION DEPTH: 3.5m
REVIEWED BY: CJD	COMPLETE: 10/9/2009
DRAWING NO:	Page 1 of 1

Geotechnical Evaluation	CLIENT: Yukon Housing Corp.	PROJECT NO. - TESTPIT NO.
Proposed Multi-Storey Apartment Building	EXCAVATOR: CAT 416B Rubber Tire	W14101343-TP03
Dawson City, YT	7104167N; 576215E; Zone 7	

SAMPLE TYPE: DISTURBED | NO RECOVERY | SPT | A-CASING | SHELBY TUBE | CORE

BACKFILL TYPE: BENTONITE | PEA GRAVEL | SLOUGH | GROUT | DRILL CUTTINGS | SAND

Depth (m)	SOIL DESCRIPTION	SAMPLE TYPE	MOISTURE CONTENT	PLASTIC M.C. LIQUID (20 40 60 80)	STANDARD PENETRATION (N) (20 40 60 80) / UNCONFINED (kPa) (50 100 150 200) / POCKET PEN. (kPa) (100 200 300 400)	Depth (ft)
0	ORGANIC COVER - grass					0
	GRAVEL (FILL WHITE CHANNEL) - sandy, trace of silt, well graded sub-rounded gravel, medium to coarse sand, loose to compact, damp, greyish white					
	ORGANIC ROOT MAT					
	SILT AND SAND - fine grained, dense, moist, olive brown		43.4			
1						5
	- becomes fine to medium grained sand - becomes silty around 1.8 m		16			
2						
	- interbedded layers of silt and sand, 75 mm to 100 mm thick silt, 25 mm to 50 mm thick sand					10
3	END OF TESTPIT 2.9 m		27.4			
4						15
5						16

EBA Engineering Consultants Ltd.

LOGGED BY: JSB	COMPLETION DEPTH: 2.8m
REVIEWED BY: CJD	COMPLETE: 10/9/2009
DRAWING NO:	Page 1 of 1

Geotechnical Evaluation	CLIENT: Yukon Housing Corp.	PROJECT NO. - TESTPIT NO.
Proposed Multi-Storey Apartment Building	EXCAVATOR: CAT 416B Rubber Tire	W14101343-TP04
Dawson City, YT	7104144N; 576204E; Zone 7	

SAMPLE TYPE: DISTURBED | NO RECOVERY | SPT | A-CASING | SHELBY TUBE | CORE

BACKFILL TYPE: BENTONITE | PEA GRAVEL | SLOUGH | GROUT | DRILL CUTTINGS | SAND

Depth (m)	SOIL DESCRIPTION	SAMPLE TYPE	MOISTURE CONTENT	PLASTIC / M.C. / LIQUID (20 40 60 80)	STANDARD PENETRATION (N) (20 40 60 80) / UNCONFINED (kPa) (50 100 150 200) / POCKET PEN. (kPa) (100 200 300 400)	Depth (ft)
0	GRAVEL (FILL WHITE CHANNEL) - sandy, trace silt, well graded sub-rounded gravel, medium to coarse grained gravel, medium to coarse grained sand, compact, damp, greyish white					0
	ORGANIC ROOT MAT					
	SILT - some sand, trace clay, fine grained, dense, moist, olive brown					
			18.3	●		
1						
			22.5	●		5
2	- becomes fine to medium grained sand around 2.0 m - trace to some silt below 2.0 m		8.5	●		
	- sand become coarser grained around 2.6 m					
3			3.3	●		10
	GRAVEL - sandy, trace silt, well graded rounded gravel, medium to coarse sand, compact, damp, brown		3.4	●		
4	END OF TESTPIT 3.7 m					15
5						16

EBA Engineering Consultants Ltd.

LOGGED BY: JSB	COMPLETION DEPTH: 3.7m
REVIEWED BY: CJD	COMPLETE: 10/9/2009
DRAWING NO:	Page 1 of 1

Geotechnical Evaluation	CLIENT: Yukon Housing Corp.	PROJECT NO. - TESTPIT NO.
Proposed Multi-Storey Apartment Building	EXCAVATOR: CAT 416B Rubber Tire	W14101343-TP05
Dawson City, YT	7104158N; 576236E; Zone 7	

SAMPLE TYPE: DISTURBED | NO RECOVERY | SPT | A-CASING | SHELBY TUBE | CORE

BACKFILL TYPE: BENTONITE | PEA GRAVEL | SLOUGH | GROUT | DRILL CUTTINGS | SAND

Depth (m)	SOIL DESCRIPTION	SAMPLE TYPE	MOISTURE CONTENT	PLASTIC / M.C. / LIQUID (20 40 60 80)	STANDARD PENETRATION (N) (20 40 60 80); UNCONFINED (kPa) (50 100 150 200); POCKET PEN. (kPa) (100 200 300 400)	Depth (ft)
0	ORGANIC ROOT MAT					0
	SILT - some sand, trace clay, fine grained, soft, damp, brown		15.3	●		
	- becomes sand, fine to medium grained around 0.5 m - trace to some silt below 0.5 m					
1			6	●		5
	- rootlets to 1.2 m					
2			4.1	●		
	GRAVEL - sandy, trace silt, well graded rounded gravel, medium to coarse sand, compact, dry		2.1	●		
	END OF TESTPIT 2.7 m					
3						10
4						15
5						16

EBA Engineering Consultants Ltd.

LOGGED BY: JSB	COMPLETION DEPTH: 2.7m
REVIEWED BY: CJD	COMPLETE: 10/9/2009
DRAWING NO:	Page 1 of 1

Geotechnical Evaluation	CLIENT: Yukon Housing Corp.	PROJECT NO. - TESTPIT NO.
Proposed Multi-Storey Apartment Building	EXCAVATOR: CAT 416B Rubber Tire	W14101343-TP06
Dawson City, YT	7104144N; 576232E; Zone 7	

SAMPLE TYPE: DISTURBED | NO RECOVERY | SPT | A-CASING | SHELBY TUBE | CORE

BACKFILL TYPE: BENTONITE | PEA GRAVEL | SLOUGH | GROUT | DRILL CUTTINGS | SAND

Depth (m)	SOIL DESCRIPTION	SAMPLE TYPE	MOISTURE CONTENT	PLASTIC M.C. LIQUID (20 40 60 80)	STANDARD PENETRATION (N) (20 40 60 80) / UNCONFINED (kPa) (50 100 150 200) / POCKET PEN. (kPa) (100 200 300 400)	Depth (ft)
0	GRAVEL (FILL WHITE CHANNEL) - sandy, trace silt, well graded sub-rounded gravel, medium to coarse sand, compact, damp, whitish grey					0
1	- concrete debris encountered around 1.5 to 2.0 m					5
2	SILT - sandy, fine grained, damp, dense, olive brown		33.1			
3	END OF TESTPIT 2.8 m - major sloughing throughout gravel layer					10
4						15
5						16

EBA Engineering Consultants Ltd.

LOGGED BY: JSB	COMPLETION DEPTH: 2.8m
REVIEWED BY: CJD	COMPLETE: 10/9/2009
DRAWING NO:	Page 1 of 1

Yukon Government

Borehole No: BH17-01

Project: Dawson City Water Treatment Plant	Project No: W14103567-25
Location: Fifth Ave. and Turner St. - Lots 13-14	
Dawson City, YT	UTM: 576243 E; 7104080 N; Z 7 NAD83

Depth (m)	Method	Soil Description	Ground Ice Description	Sample Type	Sample Number	Moisture Content (%)	Plastic Limit / Moisture Content / Liquid Limit (20 40 60 80)	Depth (ft)
0								0
0	Solid stem auger	SAND and GRAVEL (FILL) - trace silt, well graded, frozen, light brown	Seasonally Frozen		SA01	6.3		1
1		PEAT - silty, frozen, fibrous, dark brown						2
								3
		ORGANIC SILT - some sand, some clay, frozen, dark brown, some fibrous organic inclusions			SA02	30.2		4
		- moist, soft	Unfrozen					5
2								6
		SILT - some sand, some clay, moist, soft, dark brown			SA03	28		7
								8
								9
3								10
								11
								12
4		GRAVEL - sandy, possible cobbles, poorly graded, moist, loose, brownish grey			SA04	8.5		13
								14
19/01/2017		- very wet						15 19/01/2017
5					SA05	11.5		16
								17
								18
								19
6								20
		END of BOREHOLE at 6.1 m (Target Depth).						21
								22
								23
7								24
								25
								26
8								27
								28
								29
9								30
								31
10								32

TETRA TECH

Contractor: Donjeck Drilling	Completion Depth: 6.1 m
Drilling Rig Type: Truck Mounted CME75	Start Date: 19 January 2017
Logged By: TM	Completion Date: 19 January 2017
Reviewed By: JTP	Page 1 of 1

Yukon Government

Borehole No: BH17-02

Project: Dawson City Water Treatment Plant	Project No: W14103567-25
Location: Fifth Ave. and Turner St. - Lots 13-14	
Dawson City, YT	UTM: 576237 E; 7104099 N; Z 7 NAD83

Depth (m)	Method	Soil Description	Ground Ice Description	Sample Type	Sample Number	SPT (N)	Moisture Content (%)	SPT (N) 20 40 60 80 / Plastic Limit – Moisture Content – Liquid Limit 20 40 60 80	Depth (ft)
0									0
1	Solid stem auger	SAND and GRAVEL (FILL) - trace silt, well graded, frozen, light brown	Seasonally Frozen						1
		PEAT - silty, frozen, fibrous, dark brown							2
2					SA06	13	41.1	■ ●	5
	Hollow stem auger	SILT - some sand, some clay, moist, soft, dark brown, trace amorphous organic inclusions	Unfrozen						6
		SAND - some silt, trace gravel, well graded, damp, compact, brownish grey							9
3					SA07	10	10.7	■	10
4		GRAVEL - sandy, possible cobbles, poorly graded, moist, loose, brownish grey							13
		- very wet			SA08	40			14
19/01/2017		END of BOREHOLE at 4.6 m (Target Depth).				75mm			19/01/2017 15
5									16
6									19
7									23
8									26
9									29
10									32

TETRA TECH

Contractor: Donjeck Drilling	Completion Depth: 4.6 m
Drilling Rig Type: Truck Mounted CME75	Start Date: 19 January 2017
Logged By: TM	Completion Date: 19 January 2017
Reviewed By: JTP	Page 1 of 1

Appendix 'C' – Preliminary Hazard Assessment Form

Public Works and Government Services Canada | Travaux publics et Services gouvernementaux Canada

Dawson City Courthouse Phase 2 - PRELIMINARY HAZARD ASSESSMENT FORM

Project Number:	Pro 842
Location:	Dawson City, YT
Date:	March 24, 2020
Name of Departmental Representative:	
Name of Client Department:	Parks Canada
Name of Client or Sr. Project Manager	

Site Specific Orientation Provided at Project Location ☐ **Yes**

Notice of Project Required ☐ **Yes**

NOTE:
PWGSC REQUIRES A Notice of Project FOR ALL CONSTRUCTION WORK RELATED ACTIVITIES

NOTE:
OHS law is made up of many municipal, provincial, and federal acts, regulations, bylaws and codes. There are also many other pieces of legislation in British Columbia that impose OHS obligations.

Important Notice: This hazard assessment has been prepared by PSPC for its own project planning process, and to inform the service provider of actual and potential hazards that may be encountered in performance of the work. PSPC does not warrant the completeness or adequacy of this hazard assessment for the project and the paramount responsibility for project hazard assessment rests with the service provider.

TYPES OF HAZARDS TO CONSIDER	Potential Risk for:				COMMENTS
Examples: Chemical, Biological, Natural, Physical, and Ergonomic Listed below are common construction related hazards. Your project may include pre-existing hazards that are not listed. Contact the Regional Construction Safety Coordinator for assistance should this issue arise.	**PWGSC, OGD's, or tenants**		**General Public or other contractors**		Note: When thinking about this pre-construction hazard assessment, remember a **hazard** is anything that may cause harm, such as chemicals, electricity, working from heights, etc; the **risk** is the chance, high or low, that somebody could be harmed by these and other hazards, together with an indication of how serious the harm could be.
	Yes	**No**	**Yes**	**No**	

Typical Construction Hazards					
Concealed/Buried Services (electrical, gas, water, sewer etc)	yes				
Slip Hazards or Unsound Footing	yes				
Working at Heights	yes				
Working Over or Around Water		no			
Heavy overhead lifting operations, mobile cranes etc.	TBD				

Canada

Marine and/or Vehicular Traffic (site vehicles, public vehicles, etc.	yes				Street traffic
Fire and Explosion Hazards	yes				
High Noise Levels	yes				
Excavations		no			
Blasting		no			
Construction Equipment	yes				
Pedestrian Traffic (site personnel, tenants, visitors, public)	yes				
Multiple Employer Worksite	yes				Constructor Roles and Responsibilities Form will be required.

Electrical Hazards					**Comments**
Contact With Overhead Wires		no			
Live Electrical Systems or Equipment	yes				
Other:					
Physical Hazards					
Equipment Slippage Due To Slopes/Ground Conditions		no			
Earthquake	yes				
Tsunami		no			
Avalanche		no			
Forest Fires		no			
Fire and Explosion Hazards	yes				
Working in Isolation	yes				
Working Alone	yes				
Violence in the Workplace	yes				
High Noise Levels	yes				
Inclement weather	yes				
High Pressure Systems		no			
Other:					
Hazardous Work Environments					
Confined Spaces / Restricted Spaces PSPC employees do not enter confined space.	yes				If available, provide the contractor with the existing confined space assessment(s) for information only. Contractor must perform their own confined space assessment as per territorial regulations.
Suspended / Mobile Work Platforms		TBD			
Other:					
Biological Hazards					
Mould Proliferations		no			
Accumulation of Bird or Bat Guano		no			
Bacteria / Legionella in Cooling Towers / Process Water		no			
Rodent / Insect Infestation		no			
Poisonous Plants		no			
Sharp or Potentially Infectious Objects in Wastes	yes				

Wildlife	yes				
Chemical Hazards					
Asbestos Materials on Site	yes				If "yes" a pre-project asbestos survey report is required. Provide Contractor with ELF Form 16 "Contractor Notification and Acknowledgement"
Designated Substance Present	yes				If "yes" a pre-project designated substance survey report is required.
Chemicals Used in work		no			
Lead in paint	TBD				If "yes" a pre-project lead survey report is required.
Mercury in Thermostats or Switches		TBD			If "yes" a pre-project mercury survey report is required.
Application of Chemicals or Pesticides		no			
PCB Liquids in Electrical Equipment		no			
Radioactive Materials in Equipment		no			
Other:					
Contaminated Sites Hazards					
Hazardous Waste		no			
Hydrocarbons		no			
Metals		no			
Other:					

Security Hazards					**Comments**
Risk of Assault	yes				
Other:					
Other Hazards					
Silica and particulate matter from the demolition process.	yes				Silica and dust exposure control plan will be required.

Other Compliance and Permit Requirements[1]	**YES**	**NO**	**Notes / Comments[2]**
Is a Building Permit required?			
Is an Electrical permit required?			
Is a Plumbing Permit required?			
Is a Sewage Permit required?			
Is a Dumping Permit required?			
Is a Hot Work Permit required?			
Is a Permit to Work required?			Mandatory for ALL AFD managed work sites.
Is a Confined Space Entry Permit required?			Mandatory
Is a Confined Space Entry Log required			Mandatory for all Confined Spaces
Discharge Approval for treated water required			

Notes:

(1) Does not relieve Service Provider from complying with all applicable federal, provincial, and municipal laws and regulations.

(2) TBD means To Be Determined by Service Provider.

Service Provider Acknowledgement: We confirm receipt and review of this Pre-Project Hazard Assessment and acknowledge our responsibility for conducting our own assessment of project hazards, and taking all necessary protective measures (which may exceed those cited herein) for performance of the work.			
Service Provider Name			
Signatory for Service Provider		**Date Signed**	
RETURN EXECUTED DOCUMENT TO PSPC DEPARTMENTAL REPRESENTATIVE PRIOR TO ANY WORK COMMENCING			

Appendix 'D' – Statement of Significance and Heritage Character Statement

Dawson, Yukon
Former Courthouse
Front Street

HERITAGE CHARACTER STATEMENT

The Courthouse was built during 1900-1901 by the federal government to designs by Thomas W. Fuller. It served as the territorial courthouse until 1910. At that time it was taken over by the Royal Northwest mounted police and converted to offices and barracks. It was used as a hospital, operated by the Sisters of Charity, from 1954 to 1967. During this period, an addition was constructed at the north end. The building is a designated National Historic Site. It was acquired by Parks Canada in 1967 and has been used to house the administrative offices of Klondike National Historic Sites since then. The Canadian Parks Service, Environment Canada is custodian of the building. See FHBRO Building Report 87-63.

Reasons for Designation

The former Courthouse was designated Classified because of it's important historic associations, its architecture, the high standards of craftsmanship exhibited in its construction, and its importance as a Dawson landmark.

Historically, it is associated with the establishment of a federal presence in the Northwest and the exercise of Canadian sovereignty. It is one of the two remaining examples of early territorial courts in western Canada.

The former Courthouse is an excellent and rare example of a turn-of-the-century courthouse executed in wood. A modest but imposing classical design, the building's exterior shows careful attention to composition and proportion.

Character Defining Elements

The heritage character of the former Courthouse resides in its formal, classically inspired design and detailing.

The design is proportioned and detailed as the more substantial masonry courthouses of southern Canada. The pedimented projecting bays flanking the centrally placed main entrance are the principal components of the composition; a large cupola reinforces the building's symmetry. The north addition, while it creates an imbalance in the façade, is compatible and discrete. The secondary elements and details – column capitals, mouldings, paired windows, and turned railings – contribute to the overall formality and strength of the design.

The building has undergone interior alterations as its use changed, however, these appear to have been minor. The former Courthouse appears to retain the main elements of its plan and original interior finishes of varnished fir, although concealed behind more recent finishes. The building would benefit from investigation to identify original features for possible inclusion in future alterations of the building. The stair to the second floor is of particular note.

1990.03.08

Appendix 'E' – Heritage Conservation Services Site Visit Report Photographs

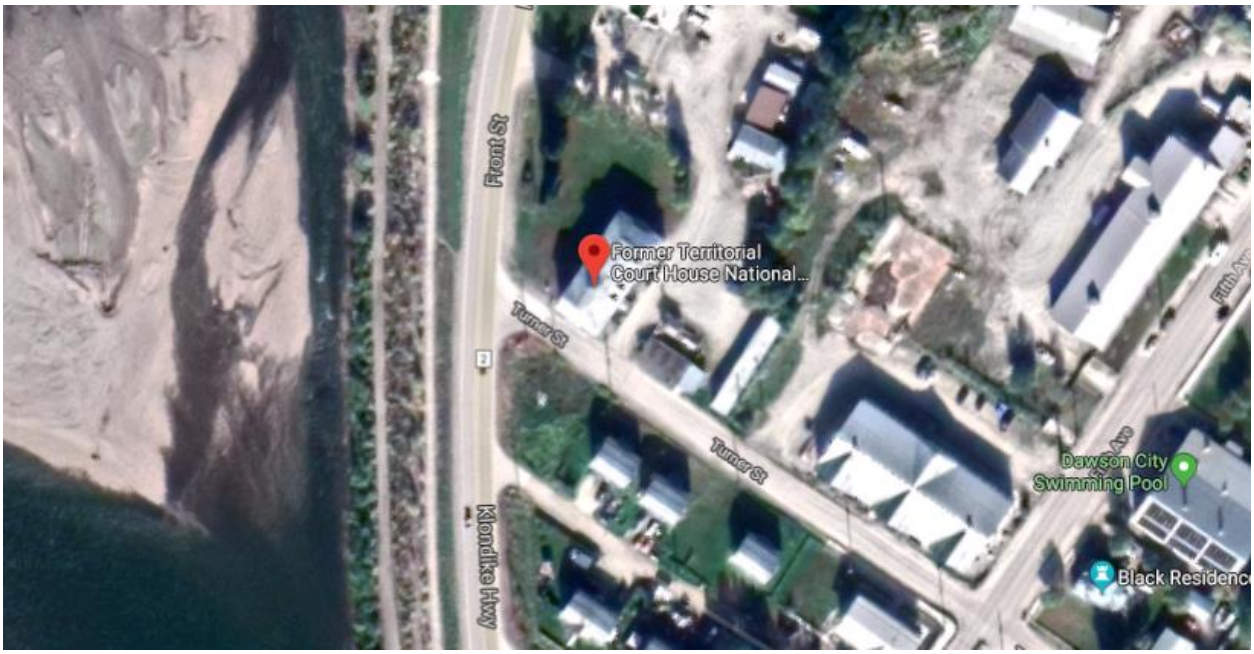
6 PHOTOGRAPHIC RECORD

6.1 Location of Site

The images below offer general and detailed views of the Territorial Courthouse and its location.

GOOGLE MAP IMAGE (2018) SHOWING LOCATION OF SITE.

GOOGLE SATELLITE IMAGE (2018) SHOWING LOCATION OF SITE.



GOOGLE SATELLITE IMAGE (2018) SHOWING DETAILED LOCATION OF SITE.

6.2 Floor Plans

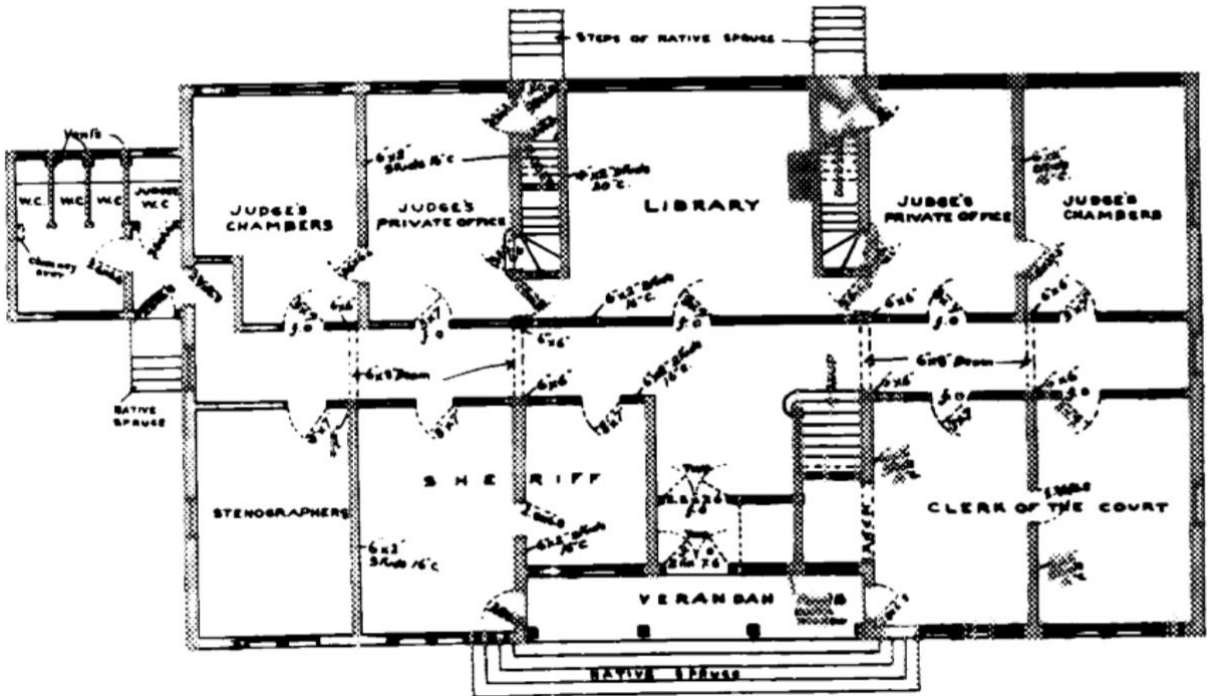


Figure 1: Original Ground Floor Plan [DPW, c1900]

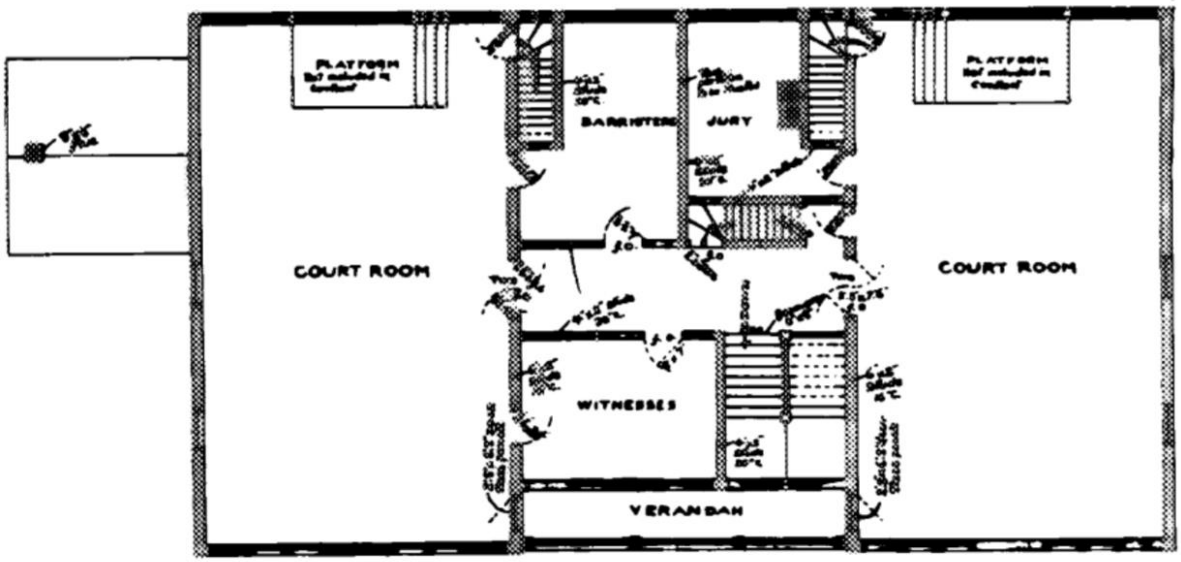


Figure 2: Original Second Floor Plan [DPW, c 1900)

6.3 Digital Record Photography

The following pages contain the numbered digital images which correspond to the Photo Key Plan(s) in section 2.3. Images were taken of the Overall Exterior and Interior with various details.

6.3.1 Exterior Photography

Exterior – Balcony

Exterior – Chimney

Exterior – Covering 1

Exterior – Covering 2

Exterior – Dormer

Exterior – Entrance Steps

Exterior – North and West Facades 1

Exterior – North and West Facades 2

Exterior – Roof

Exterior – Siding and Downspout

Exterior – South and West Facades 1

Exterior – South and West Facades 2

Exterior – Vestibule

Exterior – West Façade – Pediment

Exterior – West Façade Close Up

Exterior – West Façade

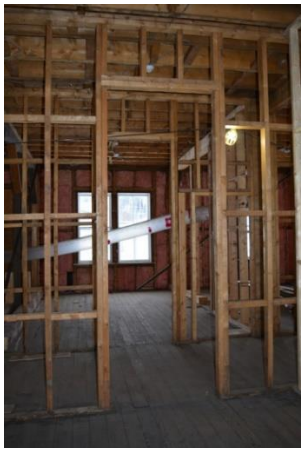
6.3.2 Interior – First Floor

1st Floor – Clerk of the Court – North Half – Ceiling – East

1st Floor – Clerk of the Court – North Half – Ceiling – West

1st Floor – Clerk of the Court – North Half – Floor – East

1st Floor – Clerk of the Court – North Half – Floor – West



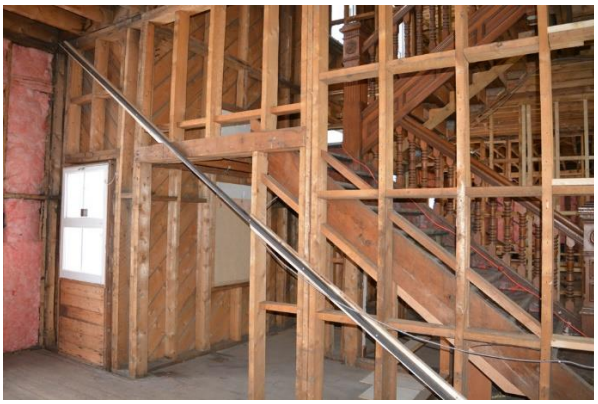
1st Floor – Clerk of the Court – North Half – Openings – East Door

1st Floor – Clerk of the Court – North Half – Openings – North Door Window

1st Floor – Clerk of the Court – North Half – Openings – West Window

1st Floor – Clerk of the Court – North Half – Overall – East

1st Floor – Clerk of the Court – North Half – Overall – North 1



1st Floor – Clerk of the Court – North Half – Overall – North 2

1st Floor – Clerk of the Court – North Half – Overall – South

1st Floor – Clerk of the Court – North Half – Overall – West

1st Floor – Clerk of the Court – South Half – Ceiling – East

1st Floor – Clerk of the Court – South Half – Ceiling – West

1st Floor – Clerk of the Court – South Half – Details – Air Exchange Caps 1

1st Floor – Clerk of the Court – South Half – Details – Air Exchange Caps 2

1st Floor – Clerk of the Court – South Half – Details – Air Exchange Caps 3

1st Floor – Clerk of the Court – South Half – Floor – East

1st Floor – Clerk of the Court – South Half – Floor – West

1st Floor – Clerk of the Court – South Half – Openings – East Door

1st Floor – Clerk of the Court – South Half – Openings – Floor Detail East

1st Floor – Clerk of the Court – South Half – Openings – Floor Detail West

1st Floor – Clerk of the Court – South Half – Openings – South Window

1st Floor – Clerk of the Court – South Half – Openings – West Window

1st Floor – Clerk of the Court – South Half – Overall – East

1st Floor – Clerk of the Court – South Half – Overall – West 1

1st Floor – Clerk of the Court – South Half – Overall – West 2

1st Floor – Clerk of the Court – South Half – Overall North

1st Floor – Clerk of the Court – South Half – Overall South 1

1st Floor – Clerk of the Court – South Half – Overall South 2

1st Floor – Hallway – Ceiling – East

1st Floor – Hallway – Ceiling – North

1st Floor – Hallway – Ceiling – South

1st Floor – Hallway – Ceiling – West

1st Floor – Hallway – Floor – East

1st Floor – Hallway – Floor – West

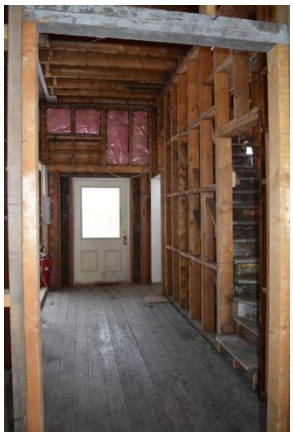
1st Floor – Hallway – Openings – Door to Basement

1st Floor – Hallway – Openings – Door to Hallway 1

1st Floor – Hallway – Openings – Door to Hallway 2

1st Floor – Hallway – Openings – Door to Stairs

1st Floor – Hallway – Openings – East Door



1st Floor – Hallway – Overall – East

1st Floor – Hallway – Overall – North 1

1st Floor – Hallway – Overall – North 2

1st Floor – Hallway – Overall – North

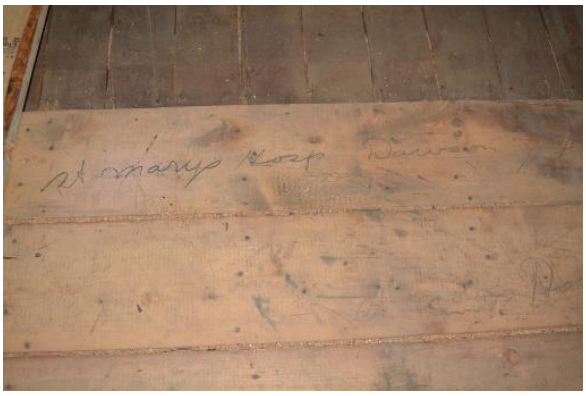
1st Floor – Hallway – Overall – South 1

1st Floor – Hallway – Overall – South 2

1st Floor – Hallway – Overall – South

1st Floor – Hallway – Overall – West

1st Floor – Hospital Addition – Floor – Dawson Writing 1



1st Floor – Hospital Addition – Floor – Dawson Writing 2

1st Floor – Hospital Addition – Floor - East

1st Floor – Hospital Addition – Floor - West

1st Floor – Hospital Addition – Openings – Door to Hallway

1st Floor – Hospital Addition – Openings – Door to Judges Chambers

1st Floor – Hospital Addition – Openings – Door to Stenographers

1st Floor Hospital Addition – Openings – Exit Door

1st Floor – Hospital Addition – Openings – NE Wall Counter

1st Floor – Hospital Addition – Openings –North Window

1st Floor – Hospital Addition – Openings – West Window

1st Floor – Hospital Addition – Overall – East

1st Floor – Hospital Addition – Overall – North 1

1st Floor – Hospital Addition – Overall – North 2

1st Floor – Hospital Addition – Overall – South 1

1st Floor – Hospital Addition – Overall – West

1st Floor – Judges Chamber – Ceiling – East

1st Floor – Judges Chamber – Ceiling – West

1st Floor – Judges Chamber – Floor – East

1st Floor- Judges Chamber – Floor – Original Wallboards

1st Floor – Judges Chamber – Floor – West

1st Floor – Judges Chamber – Openings – East Window

1st Floor – Judges Chamber – Openings – South Door

1st Floor – Judges Chamber – Openings – South Window

1st Floor – Judges Chamber – Openings – West Door

1st Floor – Judges Chamber – Overall – East

1st Floor – Judges Chamber – Overall – North

1st Floor – Judges Chamber – Overall – South

1st Floor – Judges Chamber – Overall - West

1st Floor – Judges Office – Ceiling – East

1st Floor – Judges Office – Ceiling – West

1st Floor – Judges Office – Floor – East

1st Floor – Judges Office – Floor – West

1st Floor – Judges Office – Openings – East Window

1st Floor – Judges Office – Openings – South Door

1st Floor – Judges Office – Openings – West Door

1st Floor – Judges Office – Openings – West Main Door

1st Floor – Judges Office – Overall – East

1st Floor – Judges Office – Overall – North

1st Floor – Judges Office – Overall – South

1st Floor – Judges Office – Overall – West

1st Floor – Judges Offices – Ceiling - Dumbwaiter

1st Floor – Judges Offices – Ceiling – East

1st Floor – Judges Offices – Ceiling – West

1st Floor – Judges Offices – Floor – Dumbwaiter

1st Floor – Judges Offices – Floor – East

1st Floor – Judges Offices – Floor – West

1st Floor – Judges Offices – Openings – NE Window

1st Floor – Judges Offices – Openings – Original Floor Plan Detail 1

1st Floor – Judges Offices – Openings – Original Floor Plan Detail 2

1st Floor – Judges Offices – Openings – Original Hallway Door

1st Floor – Judges Offices – Openings – Original Office Door

1st Floor – Judges Offices – Openings – Original Wall Footprint Detail

1st Floor – Judges Offices – Openings – SE Window

1st Floor – Judges Offices – Openings – WE Corner Counter Detail

1st Floor – Judges Offices – Overall – East

1st Floor – Judges Offices – Overall – North

1st Floor – Judges Offices – Overall – South

1st Floor – Judges Offices – Overall – West

1st Floor – Judges Stairs – Openings – Original Door 1

1st Floor – Judges Stairs – Openings – Original Door 2

1st Floor – Judges Stairs – Openings – Original Door 3

1st Floor – Judges Stairs – Overall 1

1st Floor – Judges Stairs – Overall 2

1st Floor – Library – Ceiling – Detail of Old Stairway

1st Floor – Library – Ceiling – East 1

1st Floor – Library – Ceiling – East 2

1st Floor – Library – Ceiling – West 1

1st Floor – Library – Ceiling – West 2

1st Floor – Library – Details – McLennan and McFeely Stamp 1

1st Floor – Library – Details – McLennan and McFeely Stamp 2

1st Floor – Library – Floor – Detail

1st Floor – Library – Floor – East

1st Floor – Library – Floor – West

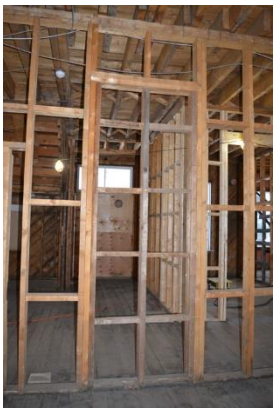
1st Floor – Library – Openings – Judges Private Door

1st Floor – Library – Openings – NE Window

1st Floor – Library – Openings – North Door

1st Floor – Library – Openings – North Window

1st Floor – Library – Openings – NW Door



1st Floor – Library – Openings – Original Library Door

1st Floor – Library – Openings – South Window

1st Floor – Library – Openings – SW Door

1st Floor – Library – Openings – West Door

1st Floor – Library – Overall – East

1st Floor – Library – Overall – North

1st Floor – Library – Overall – South

1st Floor – Library – Overall – West

1st Floor – Main Lobby – Openings – Door

1st Floor – Main Lobby – Openings – Window 1

1st Floor – Main Lobby – Openings – Window 2

1st Floor – Main Stairway – Back Detail 1

1st Floor – Main Stairway – Back Detail 2

1st Floor – Main Stairway – Back Detail 3

1st Floor – Main Stairway – Back Detail 4

1st Floor – Main Stairway – Openings – Landing

1st Floor – Main Stairway – Overall – Ballustrade

1st Floor – Main Stairway – Overall 1

1st Floor - Main Stairway – Overall 2

1st Floor – Main Stairway – Overall 3

1st Floor – Main Stairway – Step Detail 1

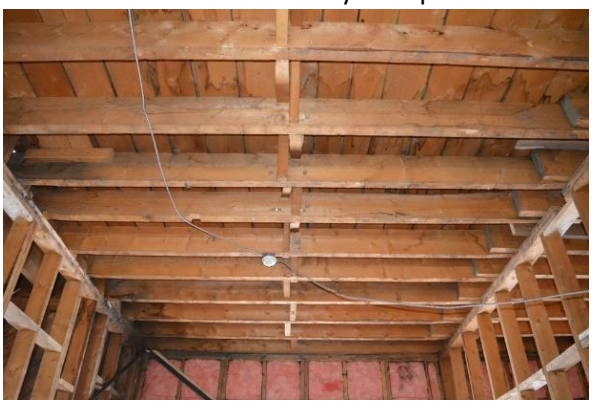
1st Floor – Main Stairway – Step Detail 2

1st Floor – Main Stairway – Step Detail 3

1st Floor – Main Stairway – Step Detail 4

1st Floor – Main Stairway – Step Detail 5

1st Floor – Sheriff – North Half – Ceiling – East



1st Floor – Sheriff – North Half – Ceiling – West

1st Floor – Sheriff – North Half – Floor – East

1st Floor – Sheriff – North Half – Floor – Vent Detail 1

1st Floor – Sheriff – North Half – Floor – Vent Detail 2

1st Floor – Sheriff – North Half – Floor – West

1st Floor – North Half – Openings – East Door

1st Floor – Sheriff – North Half – Openings – Exterior Door

1st Floor – Sheriff – North Half – Openings – South Door

1st Floor – Sheriff – North Half – Openings – West Window

1st Floor – Sheriff – North Half – Overall – East

1st Floor – Sheriff – North Half – Overall – North 1

1st Floor – Sheriff – North Half – overall – North 2

1st Floor – Sheriff – North Half – Overall – South

1st Floor – Sheriff – North Halff – Overall – West

1st Floor – Sheriff – South Half – Ceiling – East

1st Floor – Sheriff – South Half – Ceiling – West

1st Floor – Sheriff – South Half – Floor – East

1st Floor – Sheriff – South Half – Floor – West

1st Floor – Sheriff – South Half – Openings – East Door

1st Floor – Sheriff – South Half – Openings – North Door

1st Floor – Sheriff – South Half – Openings – West Window

1st Floor – Sheriff – South Half – Overall – East

1st Floor – Sheriff – South Half – Overall – North 1

1st Floor – Sheriff – South Half – Overall – North 2

1st Floor – Sheriff – South Half – Overall – South 1

1st Floor – Sheriff – South Half – Overall – South 2

1st Floor – Sheriff – South Half – Overall – West

1st Floor – Stenographers – Ceiling – East

1st Floor – Stenographers – Ceiling – West

1st Floor – Stenographers – Floor – East

1st Floor – Stenographers – Floor – Vent Detail 1

1st Floor – Stenographers – Floor – Vent Detail 2

1st Floor – Stenographers – Floor – West

1st Floor – Stenographers – Openings – East Door

1st Floor – Stenographers – Openings – West Window

1st Floor – Stenographers – Overall – East

1st Floor – Stenographers – Overall – North

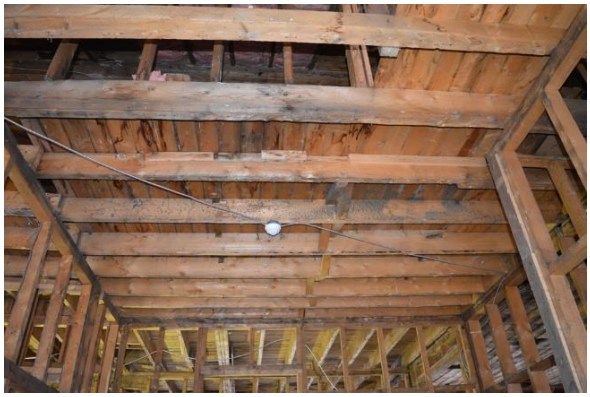
1st Floor – Stenographers – Overall – South 1

1st Floor – Stenographers – Overall – South 2

1st Floor – Stenographers – Overall West

6.3.3 Interior – Second Floor

2nd Floor – Barristers Room – Ceiling – East



2nd Floor – Barristers Room – Ceiling – West

2nd Floor – Barristers Room – Floor – Centre Detail 1

2nd Floor – Barristers Room – Floor – Centre Detail 2

2nd Floor – Barristers Room – Floor – East

2nd Floor – Barristers Room – Floor – West

2nd Floor – Barristers Room – Openings – East Window

2nd Floor – Barristers Room – Openings – North Door

2nd Floor – Barristers Room – Openings – Possible Counter

2nd Floor – Barristers Room – Openings – Stairwell Window

2nd Floor – Barristers Room – Openings – West Door

2nd Floor – Barristers Room – Overall – East

2nd Floor – Barristers Room – Overall – North 1

2nd Floor – Barristers Room – Overall – North 2

2nd Floor – Barristers Room – Overall – South 1

2nd Floor – Barristers Room – Overall – South 2

2nd Floor – Barristers Room – Overall – West 1

2nd Floor – Barristers Room – Overall – West 2

2nd Floor – Barristers Room – Stairs – North Wall

2nd Floor – Hallway – Ceiling – North

2nd Floor – Hallway – Ceiling – South

2nd Floor – Hallway – Ceiling – Stairway

2nd Floor – Hallway – Openings – Stairway Window

2nd Floor – Hallway – Overall – North

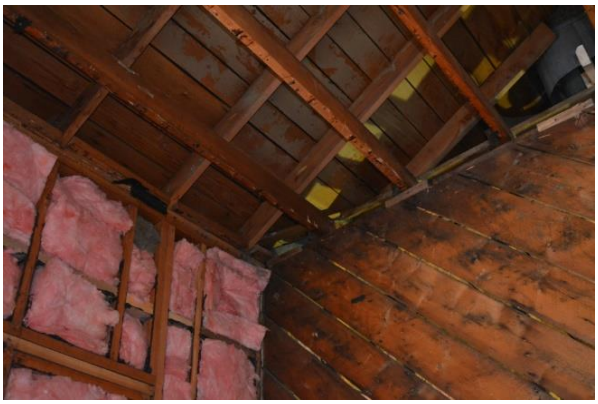
2nd Floor – Hallway – Overall – South

2nd Floor – Hallway – Stairway – East

2nd Floor – Hospital Addition – Ceiling – East

2nd Floor – Hospital Addition – Ceiling – NE Corner

2nd Floor – Hospital Addition – Ceiling – NW Corner



2nd Floor – Hospital Addition – Ceiling – SE Corner

2nd Floor – Hospital Addition – Ceiling – SW Corner

2nd Floor – Hospital Addition – Ceiling – West

2nd Floor – Hospital Addition – Floor – East

2nd Floor – Hospital Addition – Floor – West

2nd Floor – Hospital Addition – Openings – North Emergency Exit Door

2nd Floor – Hospital Addition – Openings – North Window

2nd Floor – Hospital Addition – Openings – NW Window

2nd Floor – Hospital Addition – Openings – Original South Window

2nd Floor – Hospital Addition – Openings – SE Door

2nd Floor – Hospital Addition – Openings – South Main Door

2nd Floor – Hospital Addition – Overall – East

2nd Floor – Hospital Addition – Overall – North 1

2nd Floor – Hospital Addition – Overall – North 2

2nd Floor – Hospital Addition – Overall – South 1

2nd Floor – Hospital Addition – Overall – South 2

2nd Floor – Hospital Addition – Overall – West

2nd Floor – Hospital Addition – Openings – East Window

2nd Floor – Hospital Addition – Openings – SW Window

2nd Floor – Jury Room – Ceiling – Dumb Waiter

2nd Floor – Jury Room – Ceiling – East

2nd Floor – Jury Room – Ceiling – West

2nd Floor – Jury Room – Floor – Dumb Waiter

2nd Floor – Jury Room – Floor – East

2nd Floor – Jury Room – Floor – West

2nd Floor – Jury Room – Openings – Centre Courtroom Door

2nd Floor – Jury Room – Openings – Judge Door

2nd Floor – Jury Room – Openings – NE Window

2nd Floor – Jury Room – Openings – SE Window

2nd Floor – Jury Room – Openings – West Door

2nd Floor – Jury Room – Openings – West Wall Floor

2nd Floor – Jury Room – Overall – East

2nd Floor – Jury Room – Overall – North

2nd Floor – Jury Room – Overall – South

2nd Floor – Jury Room – Overall – West

2nd Floor – Main Stairway – Overall 1

2nd Floor – Main Stairway – Overall 2

2nd Floor – Main Stairway – Overall 3

2nd Floor – North Court Room – Ceiling – East

2nd Floor – North Court Room – Ceiling – NE Corner

2nd Floor – North Court Room – Ceiling – NW Corner

2nd Floor – North Court Room – Ceiling – SE Corner

2nd Floor – North Court Room – Ceiling – SW Corner

2nd Floor – North Court Room – Ceiling – West

2nd Floor – North Court Room – Floor – Detail 1

2nd Floor – North Court Room – Floor – Detail 2

2nd Floor – North Court Room – Floor – East

2nd Floor – North Court Room – Floor – North Wall Vent 1

2nd Floor – North Court Room – Floor – North Wall Vent 2

2nd Floor – North Court Room – Floor – North Wall Vent 3

2nd Floor – North Court Room – Floor – South Wall Vent 1

2nd Floor – North Court Room – Floor – South Wall Vent 2

2nd Floor – North Court Room – Floor – South Wall Vent 3

2nd Floor – North Court Room – Floor – South Wall Vent 4

2nd Floor – North Court Room – Floor – South Wall Vent 5

2nd Floor – North Court Room – Floor – West

2nd Floor – North Court Room – Openings – Addition East Door

2nd Floor – North Court Room – Openings – Addition Main Door

2nd Floor – North Court Room – Openings – Addition West Door

2nd Floor – North Court Room – Openings – Barristers Room Door

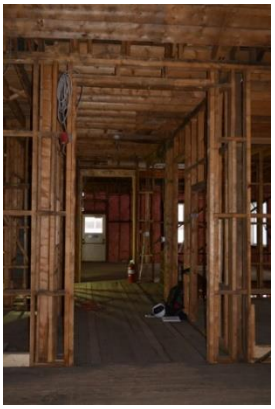
2nd Floor – North Court Room – Openings – NE Window 1

2nd Floor – North Court Room – Openings – NE Window 2

2nd Floor – North Court Room – Openings – NW Window 1

2nd Floor – North Court Room – Openings – SE Judges Door

2nd Floor – North Court Room – Openings – SE Window



2nd Floor – North Court Room – Openings – South Main Door

2nd Floor – North Court Room – Openings – SW Window

2nd Floor – North Court Room – Openings – Verandah Door

2nd Floor – North Court Room – Openings – Witnesses Room Door

2nd Floor – North Court Room – Overall – East

2nd Floor – North Court Room – Overall – North

2nd Floor – North Court Room – Overall – South 1

2nd Floor – North Court Room – Overall – South 2

2nd Floor – North Court Room – Overall – West

2nd Floor –South Court Room – Ceiling – Central Vent 1

2nd Floor – South Court Room – Ceiling – Central Vent 2

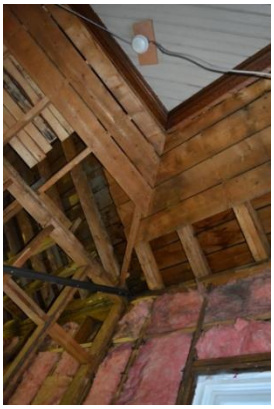
2nd Floor – South Court Room – Ceiling – East Vent 1

2nd Floor – South Court Room – Ceiling – East Vent 2

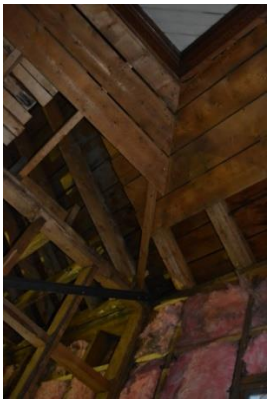
2nd Floor – South Court Room – Ceiling – East

2nd Floor – South Court Room – Ceiling – West Vent

2nd Floor – South Court Room – Ceiling – West



2nd Floor – South Court Room – Ceiling – NE Corner 1



2nd Floor – South Court Room – Ceiling – NE Corner 2

2nd Floor – South Court Room – Ceiling – NW Corner 1

2nd Floor – South Court Room – Ceiling – NW Corner 2

2nd Floor –South Court Room – Ceiling – SE Corner 1

2nd Floor – South Court Room – Ceiling – SE Corner 2

2nd Floor – South Court Room – Ceiling – SW Corner

2nd Floor – South Court Room – Floor – Centre – East

2nd Floor – South Court Room – Floor – Centre – West 1

2nd Floor – South Court Room – Floor – Centre – West 2

2nd Floor – South Court Room – Floor – Close Up

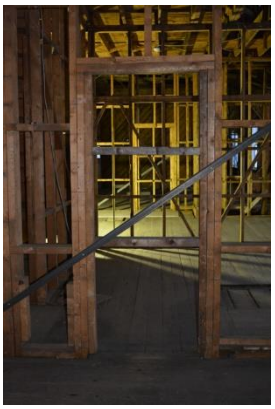
2nd Floor – South Court Room – Floor – East

2nd Floor – South Court Room – Floor – West

2nd Floor – South Court Room – Openings – Balcony Door 1

2nd Floor – South Court Room – Openings – Balcony Door 2

2nd Floor – South Court Room – Openings – NE Window



2nd Floor – South Court Room – Openings – North Door

2nd Floor – South Court Room – Openings – North Main Door

2nd Floor – South Court Room – Openings – NW Window

2nd Floor – South Court Room – Openings – SE Window 1

2nd Floor – South Court Room – Openings – SE Window 2

2nd Floor – South Court Room – Openings – South Door

2nd Floor – South Court Room – Openings – South Window

2nd Floor – South Court Room – Openings – SW Window

2nd Floor – South Court Room – Overall – Centre – North 1

2nd Floor – South Court Room – Overall – Centre – North 2

2nd Floor – South Court Room – Overall – Centre – South 1

2nd Floor – South Court Room – Overall – Centre – South 2

2nd Floor – South Court Room – Overall – East

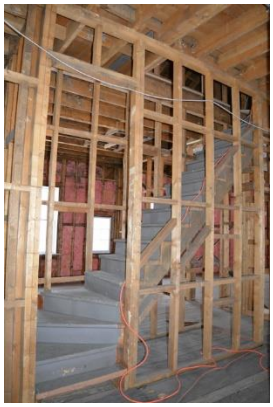
2nd Floor – South Court Room – Overall – North 1

2nd Floor – South Court Room – Overall – North 2

2nd Floor – South Court Room – Overall – South 1

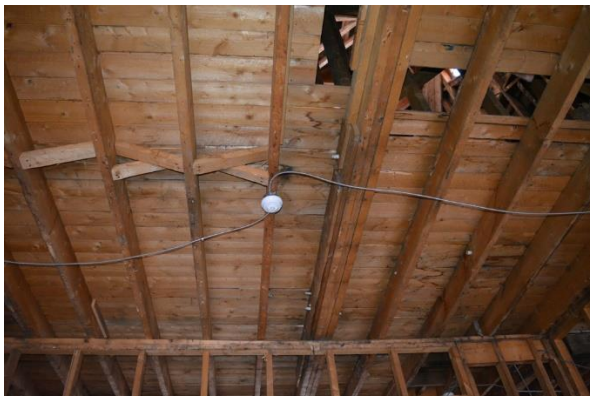
2nd Floor – South Court Room – Overall – South 2

2nd Floor – South Court Room – Overall – West



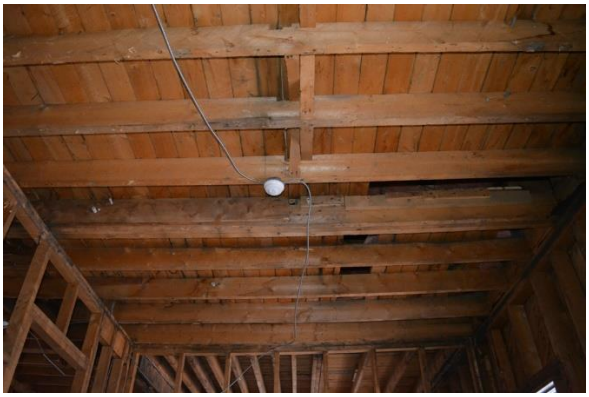
2nd Floor – Stairway – Overall – East

2nd Floor – Stairway – Overall – South



2nd Floor – Witnesses Room – Ceiling – East

2nd Floor – Witnesses Room – Ceiling – North



2nd Floor – Witnesses Room – Ceiling – South

2nd Floor – Witnesses Room – Ceiling – West

2nd Floor – Witnesses Room – Floor – NE Corner Detail

2nd Floor – Witnesses Room – Floor – North

2nd Floor – Witnesses Room – Floor – SE Corner Detailing

2nd Floor – Witnesses Room – Floor – South

2nd Floor – Witnesses Room – Floor – West Detail 1

2nd Floor – Witnesses Room – Floor – West Detail 2

2nd Floor – Witnesses Room – Openings – NE Door

2nd Floor – Witnesses Room – Openings – North Door

2nd Floor – Witnesses Room – Openings – NW Window 1

2nd Floor – Witnesses Room – Openings – NW Window 2

2nd Floor – Witnesses Room – Openings – SE Door

2nd Floor – Witnesses Room – SW Window 1

2nd Floor – Witnesses Room – Openings – SW Window 2

2nd Floor – Witnesses Room – Overall – East 1

2nd Floor – Witnesses Room – Overall – East 2

2nd Floor – Witnesses Room – Overall – East 3

2nd Floor – Witnesses Room – Overall – North

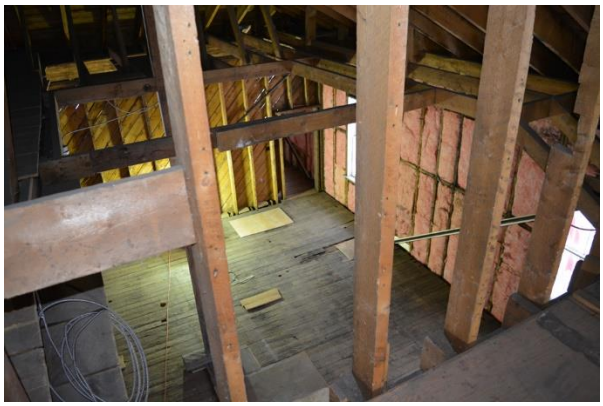
2nd Floor – Witnesses Room – Overall – South

2nd Floor – Witnesses Room – Overall – West 1

2nd Floor – Witnesses Room – Overall – West 2

2nd Floor – Witnesses Room – Overall – West 3

6.3.4 Interior - Third Floor



3rd Floor – Main Space – Details – Space Above N Court Room

3rd Floor – Main Space – Details – Space Above S Court Room

3rd Floor – Main Space – Details – Supporting Structure

3rd Floor – Main Space – Floor – East 1

3rd Floor – Main Space – Floor – East 2

3rd Floor – Main Space – Floor – East 3

3rd Floor – Main Space – Floor – NE

3rd Floor – Main Space – Floor – North

3rd Floor – Main Space – Floor – NW

3rd Floor – Main Space – Floor – SW

3rd Floor – Main Space – Floor – West

3rd Floor – Main Space – Openings – Hole Above Catwalk

3rd Floor – Main Space – Overall – East 1

3rd Floor – Main Space – Overall – East 2

3rd Floor – Main Space – Overall – North 1

3rd Floor – Main Space – Overall – North 2

3rd Floor – Main Space – Overall – North 3

3rd Floor – Main Space – Overall – North 4

3rd Floor – Main Space – Overall – South 1

3rd Floor – Main Space – Overall – South 2

3rd Floor – Main Space – Overall – West 1

3rd Floor – Main Space – Overall – West 2

3rd Floor – Main Space – Overall – West 3

3rd Floor – Main Stairway – Balustrade – Wall Board Detail 1

3rd Floor – Main Stairway – Balustrade – Wall Board Detail 2

3rd Floor – Main Stairway – Balustrade – Wall Board Detail 3

3rd Floor – Main Stairway – Balustrade – Wall Board Detail 4

3rd Floor – Main Stairway – Overall – Balustrade

3rd Floor – Turret – Ceiling – Centre 1

3rd Floor – Turret – Ceiling – Centre 2

3rd Floor – Turret – Ceiling – NW

3rd Floor – Turret – Ceiling – SE 1

3rd Floor – Turret – Ceiling – SE 2

3rd Floor – Turret – Floor

3rd Floor – Turret – Overall – East 1

3rd Floor – Turret – Overall – East 2

3rd Floor – Turret – Overall – North 1

3rd Floor – Turret – Overall – South 1

3rd Floor – Turret – Overall – South 2

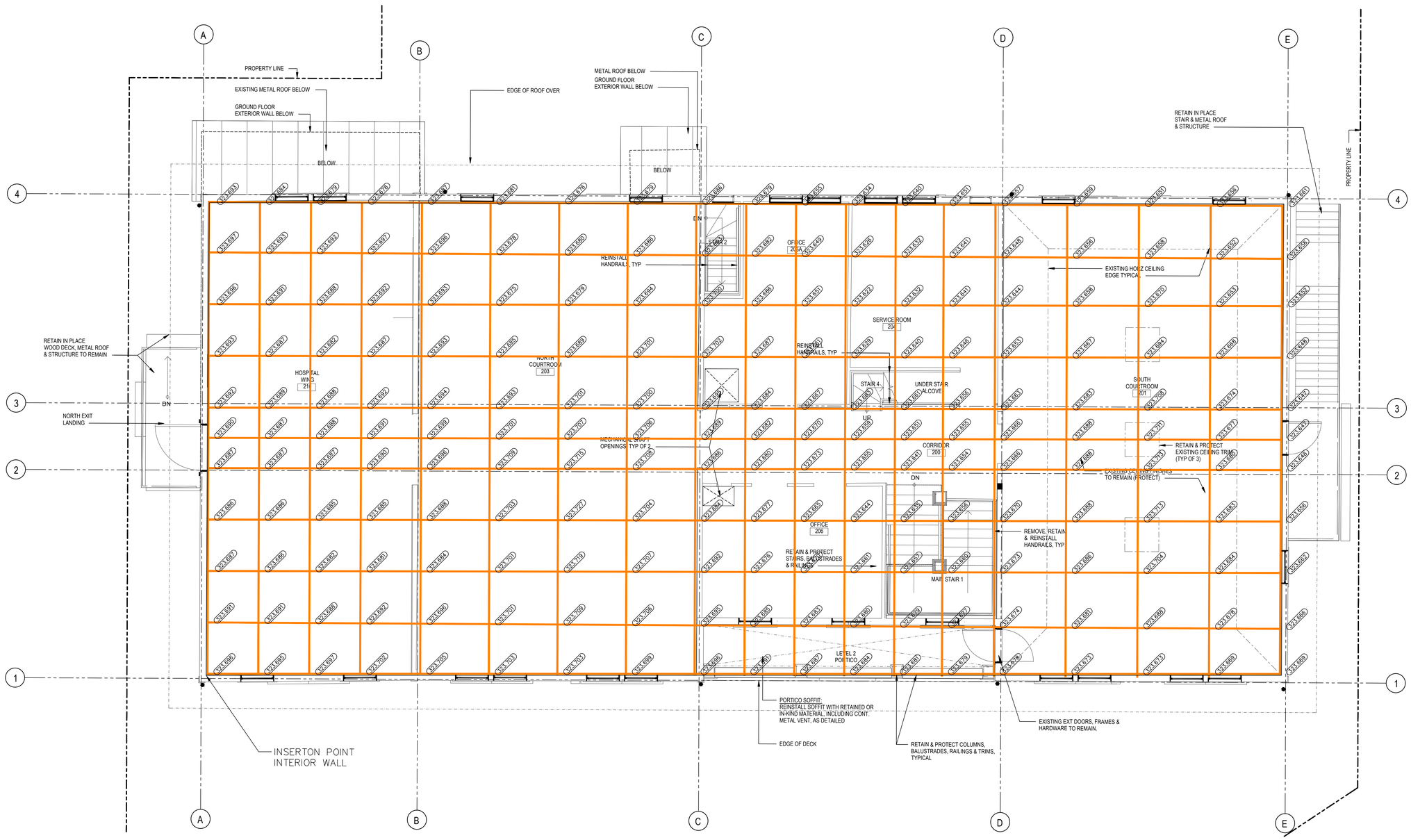
3rd Floor – Turret – Overall – West 1

3rd Floor – Turret – Overall – West 2

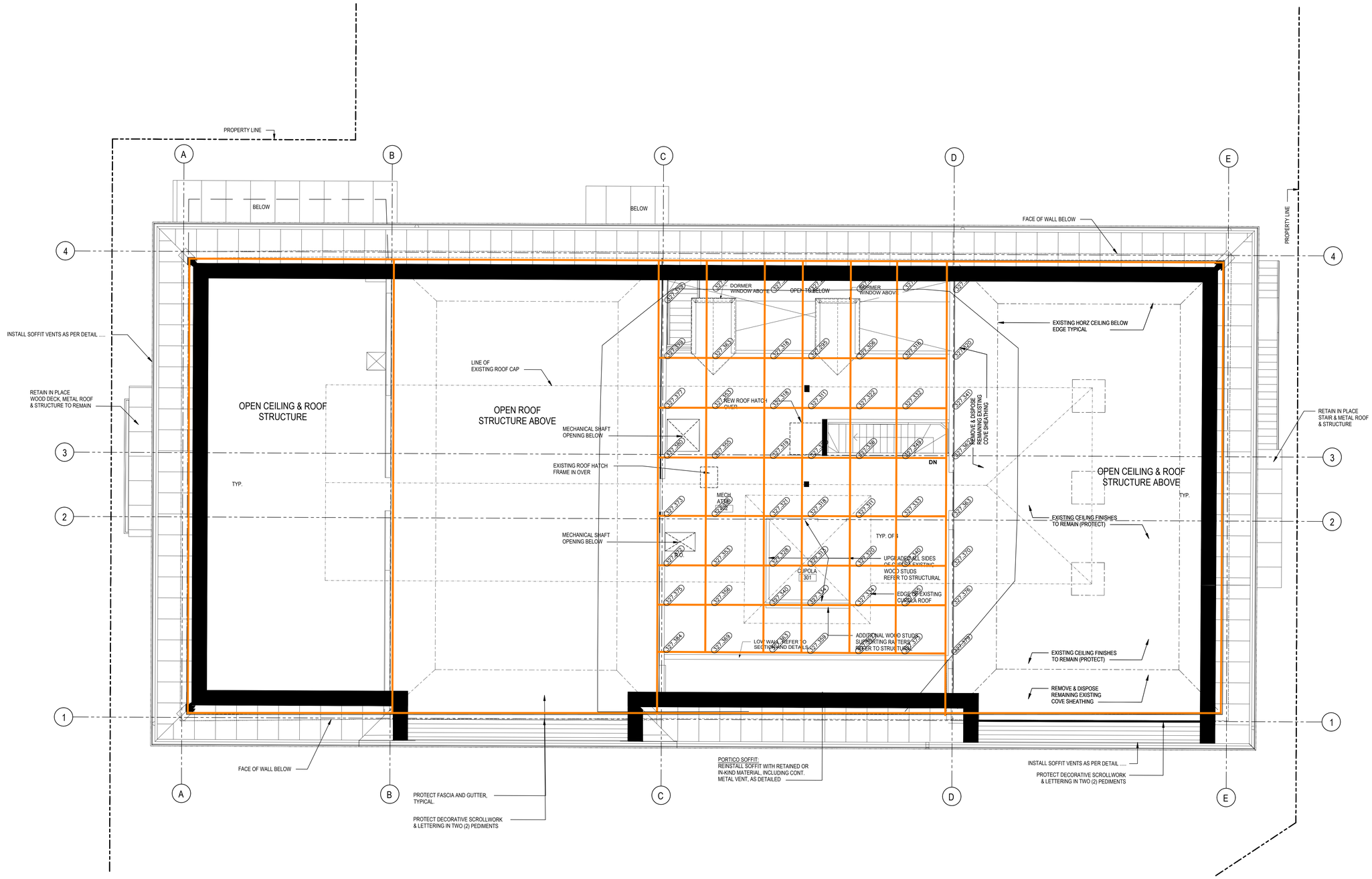
Appendix ‘F’ – Building Floor & Eaves Elevations Surveys and Point Data


A
B
C
D
E
1
2
3
4
PROPERTY LINE
EXISTING ROOF EDGE
MECHANICAL
117
REINSTALL / REBUILD
WOOD STAIRS TO MATCH
ROOF EDGE
REINSTALL WINDBREAK WALLS, STAIRS &
ROOFS AFTER STRUCTURAL
UPGRADE WORK @ FOUNDATIONS
DN
100000
EXISTING ROOF
TO REMAIN
RETAIN IN PLACE
STAIR & METAL ROOF
& STRUCTURE
EXISTING DOWNSPOUT
TO REMAIN, TYP
PROPERTY LINE
STAIR 2
113A
DN
REINSTALL
WOODEN
HANDRAILS
RENTAL
SPACE
10
RENTAL
SPACE
09
OFFICE
114
RETAIN IN PLACE
WOOD DECK, METAL ROOF
& STRUCTURE TO REMAIN
CIRCULATION
112
NEW UPGRADE STUD WALLS
TO MATCH EXISTING
NORTH
EXIT
LANDING
N/A
HOSPITALITY
LOUNGE
113
FOURTH
FLOOR
CORRIDOR
115
CORRIDOR WALL
ABOVE
MECHANICAL SHAFT
OPENINGS, TYP OF 2
RETAIN & PROTECT
STAIRS, BALUSTRADES
& RAILINGS
UP
CORRIDOR
101
RENTAL
SPACE
04
OFFICE
123
OFFICE
124
VESTIBULE
100
STORAGE
102
MEETING
122
TYP.
LEVEL 1
PORTICO
EXISTING
RAMP
PORTICO SOFFIT:
REINSTALL SOFFIT WITH RETAINED OR
IN-KIND MATERIAL, INCLUDING CONT.
METAL VENT, AS DETAILED
EDGE OF DECK
INSERTION POINT
(INTERIOR WALL)
TYP
SIM
TYP

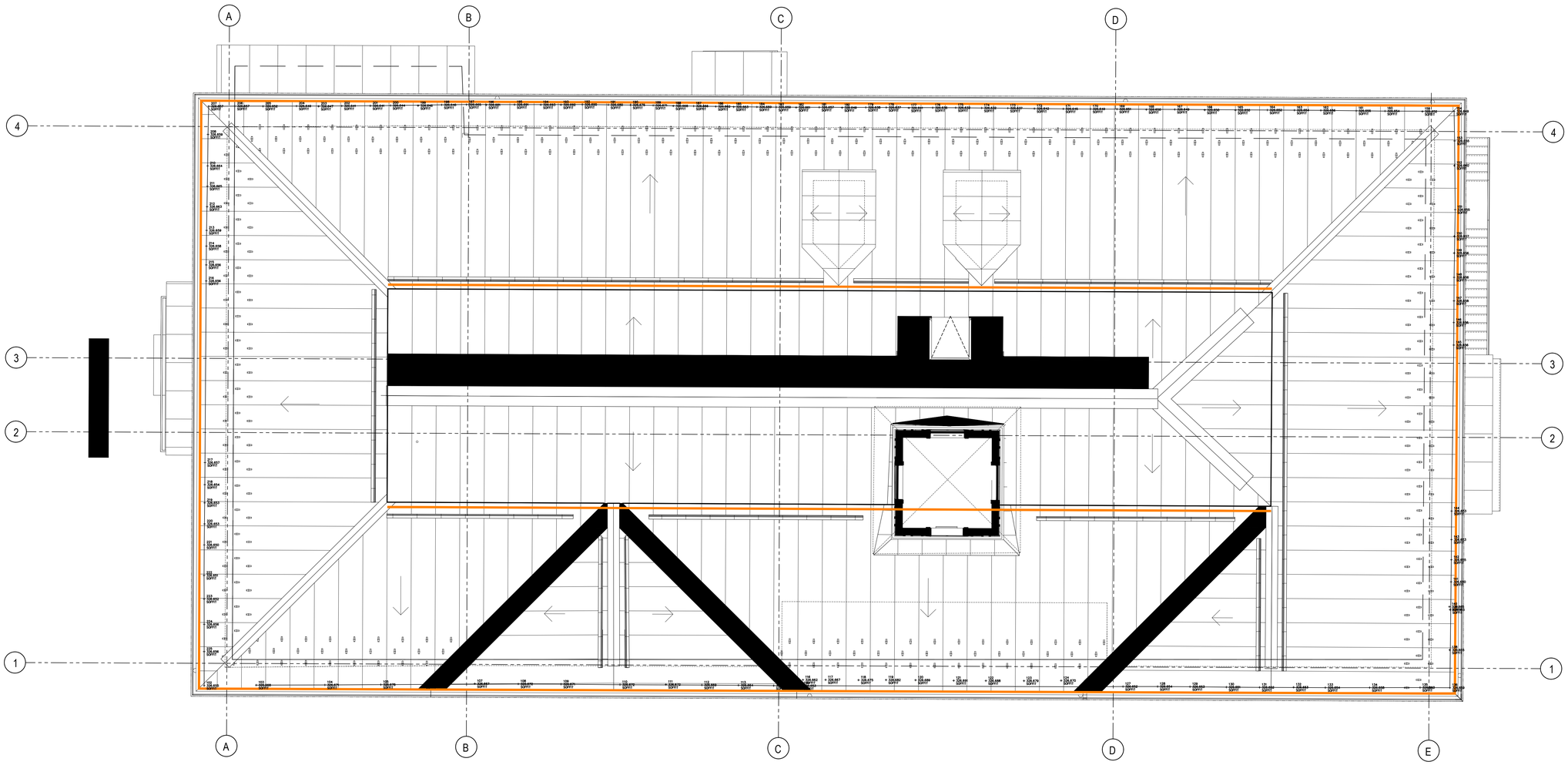
LEVEL 1


A
B
C
D
E
1
2
3
4
PROPERTY LINE
EXISTING METAL ROOF BELOW
GROUND FLOOR EXTERIOR WALL BELOW
EDGE OF ROOF OVER
METAL ROOF BELOW
GROUND FLOOR EXTERIOR WALL BELOW
BELOW
BELOW
RETAIN IN PLACE STAIR & METAL ROOF & STRUCTURE
PROPERTY LINE
DN
STAIR 2
REINSTALL HANDRAILS, TYP
OFFICE 204A
EXISTING HORIZ CEILING EDGE TYPICAL
SERVICE ROOM 20
RETAIN IN PLACE WOOD DECK, METAL ROOF & STRUCTURE TO REMAIN
HOSPITAL WING 21
NORTH COURTROOM 203
REINSTALL HANDRAILS, TYP
STAIR 4
UNDER STAIR ALCOVE
SOUTH COURTROOM 201
DN
NORTH EXIT LANDING
UP
MECHANICAL SHAFT OPENINGS, TYP OF 2
CORRIDOR 200
RETAIN & PROTECT EXISTING CEILING TRIMS (TYP OF 3)
DN
EXISTING DOORS/FRAMES TO REMAIN (PROTECT)
OFFICE 206
REMOVE, RETAIN & REINSTALL HANDRAILS, TYP
RETAIN & PROTECT STAIRS, BALUSTRADES & RAILINGS
MAIN STAIR 1
LEVEL 2 PORTICO
INSERTON POINT INTERIOR WALL
PORTICO SOFFIT: REINSTALL SOFFIT WITH RETAINED OR IN-KIND MATERIAL, INCLUDING CONT. METAL VENT, AS DETAILED
EDGE OF DECK
RETAIN & PROTECT COLUMNS, BALUSTRADES, RAILINGS & TRIMS, TYPICAL
EXISTING EXT DOORS, FRAMES & HARDWARE TO REMAIN.

LEVEL 2



LEVEL 3 ATTIC



UNDERSIDE OF SOFFITS

1st1	50022.86	4996.57	319.878	FLOOR
1st2	50022.82	4998.27	319.861	FLOOR
1st3	50021.06	4998.322	319.87	FLOOR
1st4	50021.21	4996.513	319.889	FLOOR
1st5	50019.84	4998.326	319.873	FLOOR
1st6	50018.34	4998.294	319.875	FLOOR
1st7	50018.55	4996.464	319.894	FLOOR
1st8	50018.74	4994.908	319.919	FLOOR
1st9	50020.11	4996.186	319.895	FLOOR
1st10	50020.34	4994.772	319.918	FLOOR
1st11	50022.87	4994.754	319.888	FLOOR
1st12	50022.84	4992.396	319.868	FLOOR
1st13	50020.86	4992.537	319.901	FLOOR
1st14	50019.21	4992.653	319.9	FLOOR
1st15	50017.41	4992.47	319.9	FLOOR
1st16	50017.41	4994.959	319.893	FLOOR
1st17	50017.41	4990.65	319.87	FLOOR
1st18	50019.1	4990.671	319.87	FLOOR
1st19	50021.16	4990.702	319.886	FLOOR
1st20	50022.87	4990.706	319.846	FLOOR
1st21	50023.01	4989.05	319.883	FLOOR
1st22	50021.43	4988.774	319.886	FLOOR
1st23	50023.03	4987.914	319.887	FLOOR
1st24	50021.45	4987.775	319.886	FLOOR
1st25	50021.49	4985.942	319.888	FLOOR
1st26	50019.51	4984.787	319.893	FLOOR
1st27	50019.44	4986.426	319.935	FLOOR
1st28	50019.39	4988.21	319.922	FLOOR
1st29	50019.34	4989.965	319.892	FLOOR
1st30	50017.17	4989.885	319.884	FLOOR
1st31	50017.72	4987.092	319.881	FLOOR
1st32	50017.44	4984.826	319.88	FLOOR
1st33	50015.51	4984.821	319.869	FLOOR
1st34	50015.13	4986.004	319.878	FLOOR
1st35	50015.12	4987.552	319.888	FLOOR
1st36	50014.82	4997.725	319.88	FLOOR
1st37	50014.77	4995.899	319.895	FLOOR
1st38	50013.09	4995.779	319.895	FLOOR
1st39	50013.14	4995.03	319.895	FLOOR
1st40	50013.07	4996.687	319.891	FLOOR
1st41	50012.81	4998.181	319.877	FLOOR
1st42	50011.15	4998.23	319.871	FLOOR
1st43	50011.14	4996.972	319.884	FLOOR
1st44	50010.89	4995.36	319.883	FLOOR
1st45	50010.74	4994.693	319.88	FLOOR
1st46	50009.97	4994.643	319.867	FLOOR
1st47	50009.98	4996.136	319.872	FLOOR

1st48	50009.91	4997.331	319.87	FLOOR
1st49	50009.88	4998.21	319.864	FLOOR
1st50	50022.96	4998.413	321.614	N WALL
1st51	50022.99	4994.859	321.632	N WALL
1st52	50022.99	4991.112	321.715	N WALL
1st53	50009.77	4997.259	321.804	S WALL
1st54	50009.79	4994.68	321.813	S WALL
1st55	50023.78	4990.272	319.853	FLOOR
1st56	50024.62	4990.333	319.842	FLOOR
1st57	50024.61	4988.877	319.837	FLOOR
1st58	50023.25	4988.672	319.879	FLOOR
1st59	50023.36	4986.923	319.9	FLOOR
1st60	50024.64	4986.909	319.867	FLOOR
1st61	50024.62	4984.831	319.877	FLOOR
1st62	50022.92	4984.849	319.905	FLOOR
1st63	50015.81	4990.277	319.889	FLOOR
1st64	50014.06	4990.345	319.863	FLOOR
1st65	50014.28	4988.551	319.883	FLOOR
1st66	50014.3	4986.656	319.88	FLOOR
1st67	50014.24	4984.818	319.87	FLOOR
1st68	50012.11	4984.778	319.873	FLOOR
1st69	50012.16	4986.638	319.887	FLOOR
1st70	50012.05	4988.292	319.887	FLOOR
1st71	50011.92	4990.287	319.867	FLOOR
1st72	50009.92	4990.229	319.889	FLOOR
1st73	50009.92	4988.737	319.89	FLOOR
1st74	50009.89	4986.986	319.888	FLOOR
1st75	50009.86	4985.567	319.882	FLOOR
1st76	50009.86	4984.756	319.878	FLOOR
1st77	50011.15	4991.751	319.88	FLOOR
1st78	50010.11	4991.965	319.874	FLOOR
1st79	50010.07	4993.704	319.874	FLOOR
1st80	50009.91	4994.263	319.869	FLOOR
1st81	50011.78	4994.196	319.889	FLOOR
1st82	50011.7	4992.963	319.891	FLOOR
1st83	50011.73	4991.638	319.882	FLOOR
1st84	50013.58	4991.452	319.883	FLOOR
1st85	50013.82	4993.532	319.901	FLOOR
1st86	50016.04	4996.945	319.893	FLOOR
1st87	50016.39	4991.925	319.898	FLOOR
1st88	50016.31	4994.201	319.912	FLOOR
1st89	50016.26	4996.672	319.895	FLOOR
1st90	50016.27	4998.918	319.88	FLOOR
1st91	50016.22	5001.348	319.865	FLOOR
1st92	50022.96	4990.493	321.542	N WALL CORNER
1st93	50024.71	4990.427	321.551	N WALL CORNER
1st94	50024.72	4984.705	321.548	N WALL CORNER

1st95	50009.73	4984.641	321.533	S WALL CORNER
1st96	50009.75	4986.497	321.531	S WALL
1st97	50009.77	4989.883	321.536	S WALL
1st98	50014.66	4984.664	321.508	W WALL
1st99	50017.81	4984.674	321.511	W WALL
1st100	50022.28	4984.697	321.412	W WALL
1st101	50009.77	4993.607	320.954	S WALL
1st102	50015.43	5000.437	319.863	FLOOR
1st103	50014.78	4998.885	319.847	FLOOR
1st104	50013.02	4998.805	319.85	FLOOR
1st105	50012.84	4999.967	319.849	FLOOR
1st106	50013.59	5000.507	319.846	FLOOR
1st107	50012.1	5000.763	319.847	FLOOR
1st108	50011.5	5001.784	319.852	FLOOR
1st109	50012.82	5001.907	319.86	FLOOR
1st110	50012.75	5003.286	319.848	FLOOR
1st111	50011.48	5003.395	319.852	FLOOR
1st112	50014.67	5003.35	319.87	FLOOR
1st113	50014.8	5001.833	319.867	FLOOR
1st114	50014.71	5004.843	319.859	FLOOR
1st115	50013.38	5004.846	319.863	FLOOR
1st116	50011.42	5004.946	319.813	FLOOR
1st117	50011.51	5004.136	319.813	FLOOR
1st118	50011.41	5005.543	319.815	FLOOR
1st119	50015.76	5003.325	319.871	FLOOR
1st120	50016.12	5000.918	319.869	FLOOR
1st121	50015.8	5002.14	319.868	FLOOR
1st122	50016.89	5002.43	319.852	FLOOR
1st123	50016.5	5004.019	319.86	FLOOR
1st124	50018.23	5006.211	319.882	FLOOR
1st125	50019.32	5006.459	319.877	FLOOR
1st126	50018.25	5005.149	319.845	FLOOR
1st127	50018.66	5004.068	319.861	FLOOR
1st128	50017.56	5003.5	319.851	FLOOR
1st129	50019.98	5004.905	319.847	FLOOR
1st130	50020.18	5003.143	319.862	FLOOR
1st131	50020.4	5001.699	319.861	FLOOR
1st132	50018.86	5001.686	319.861	FLOOR
1st133	50017.73	5002.043	319.853	FLOOR
1st134	50021.59	5000.308	319.854	FLOOR
1st135	50022.83	4999.729	319.817	FLOOR
1st136	50022.82	5001.086	319.832	FLOOR
1st137	50022.75	5002.479	319.834	FLOOR
1st138	50022.79	5003.785	319.832	FLOOR
1st139	50022.79	5005.867	319.863	FLOOR
1st140	50022.77	5006.513	319.859	FLOOR
1st141	50021.64	5006.466	319.878	FLOOR

1st142	50015.59	5005.095	319.858	FLOOR
1st143	50016.92	5005.491	319.846	FLOOR
1st144	50017.05	5007.074	319.853	FLOOR
1st145	50015.67	5007.275	319.862	FLOOR
1st146	50015.57	5008.811	319.879	FLOOR
1st147	50017.1	5008.833	319.879	FLOOR
1st148	50017.02	5010.626	319.895	FLOOR
1st149	50015.55	5010.841	319.896	FLOOR
1st150	50015.53	5013.386	319.857	FLOOR
1st151	50017.08	5013.603	319.846	FLOOR
1st152	50017.04	5014.534	319.825	FLOOR
1st153	50015.61	5014.441	319.828	FLOOR
1st154	50011.34	4999.378	321.449	S WALL
1st155	50011.37	5003.434	321.438	S WALL
1st156	50011.31	5006.655	320.211	S WALL
1st157	50022.89	5005.833	320.542	N WALL
1st158	50022.93	4999.96	320.616	N WALL
1st159	50014.72	5008.658	319.887	FLOOR
1st160	50013.16	5008.565	319.883	FLOOR
1st161	50013.1	5009.882	319.893	FLOOR
1st162	50014.47	5009.684	319.896	FLOOR
1st163	50015.01	5007.101	319.86	FLOOR
1st164	50013.47	5007.124	319.863	FLOOR
1st165	50011.99	5007.759	319.878	FLOOR
1st166	50011.82	5007.166	319.876	FLOOR
1st167	50011.88	5009.373	319.884	FLOOR
1st168	50011.81	5009.89	319.884	FLOOR
1st169	50009.89	5009.857	319.854	FLOOR
1st170	50009.87	5008.638	319.857	FLOOR
1st171	50009.89	5006.986	319.856	FLOOR
1st172	50010.15	5010.888	319.86	FLOOR
1st173	50009.87	5010.997	319.851	FLOOR
1st174	50011.97	5010.846	319.886	FLOOR
1st175	50013.78	5010.67	319.9	FLOOR
1st176	50022.77	5009.062	319.845	FLOOR
1st177	50022.81	5007.917	319.848	FLOOR
1st178	50022.82	5007.306	319.845	FLOOR
1st179	50022.77	5009.825	319.846	FLOOR
1st180	50022.76	5010.433	319.845	FLOOR
1st181	50021.2	5010.355	319.873	FLOOR
1st182	50021.2	5009.055	319.87	FLOOR
1st183	50021.21	5007.584	319.86	FLOOR
1st184	50017.73	5011.393	319.892	FLOOR
1st185	50017.76	5012.355	319.881	FLOOR
1st186	50017.77	5013.22	319.869	FLOOR
1st187	50017.78	5014.121	319.846	FLOOR
1st188	50019.5	5013.348	319.868	FLOOR

1st189	50019.37	5014.52	319.834	FLOOR
1st190	50019.48	5013.302	319.87	FLOOR
1st191	50019.92	5011.721	319.889	FLOOR
1st192	50021.37	5011.349	319.878	FLOOR
1st193	50022.77	5011.413	319.85	FLOOR
1st194	50022.77	5012.826	319.846	FLOOR
1st195	50021.23	5013.045	319.861	FLOOR
1st196	50021.23	5014.306	319.842	FLOOR
1st197	50022.72	5014.602	319.835	FLOOR
1st198	50014.39	5011.914	319.893	FLOOR
1st199	50013	5011.984	319.893	FLOOR
1st200	50011.65	5011.979	319.884	FLOOR
1st201	50009.85	5011.994	319.857	FLOOR
1st202	50009.86	5013.179	319.853	FLOOR
1st203	50009.85	5014.45	319.846	FLOOR
1st204	50011.57	5013.079	319.873	FLOOR
1st205	50011.52	5013.928	319.857	FLOOR
1st206	50013.07	5014.52	319.841	FLOOR
1st207	50014.26	5014.559	319.836	FLOOR
1st208	50014.93	5013.188	319.872	FLOOR
1st209	50016.98	5014.545	319.832	FLOOR
1st210	50015.8	5014.504	319.833	FLOOR
1st211	50009.77	5012.538	321.113	S WALL
1st212	50009.74	5014.644	321.378	S WALL CORNER
1st213	50013.83	5014.664	321.324	E WALL
1st214	50017.91	5014.703	321.35	E WALL
1st215	50022.88	5014.726	321.176	N WALL CORNER
1st216	50022.9	5011.102	321.193	N WALL
1st217	50019.51	4983.811	319.893	FLOOR
1st218	50017.44	4983.85	319.88	FLOOR
1st219	50015.51	4983.845	319.869	FLOOR
1st220	50024.62	4983.854	319.877	FLOOR
1st221	50022.92	4983.872	319.905	FLOOR
1st222	50014.24	4983.841	319.87	FLOOR
1st223	50012.11	4983.801	319.873	FLOOR
1st224	50009.86	4983.78	319.878	FLOOR
1st225	50008.78	4994.643	319.867	FLOOR
1st226	50008.79	4996.136	319.872	FLOOR
1st227	50008.72	4997.331	319.87	FLOOR
1st228	50008.69	4998.21	319.864	FLOOR
1st229	50008.73	4990.229	319.889	FLOOR
1st230	50008.73	4988.737	319.89	FLOOR
1st231	50008.7	4986.986	319.888	FLOOR
1st232	50008.68	4985.567	319.882	FLOOR
1st233	50008.67	4984.756	319.878	FLOOR
1st234	50008.92	4991.965	319.874	FLOOR
1st235	50008.89	4993.704	319.874	FLOOR

1st236	50008.72	4994.263	319.869	FLOOR
1st237	50008.71	5009.857	319.854	FLOOR
1st238	50008.69	5008.638	319.857	FLOOR
1st239	50008.7	5006.986	319.856	FLOOR
1st240	50008.69	5010.997	319.851	FLOOR
1st241	50008.66	5011.994	319.857	FLOOR
1st242	50008.67	5013.179	319.853	FLOOR
1st243	50008.67	5014.45	319.846	FLOOR
1st244	50017.04	5015.849	319.825	FLOOR
1st245	50015.61	5015.756	319.828	FLOOR
1st246	50019.37	5015.835	319.834	FLOOR
1st247	50021.23	5015.621	319.842	FLOOR
1st248	50022.72	5015.918	319.835	FLOOR
1st249	50009.85	5015.765	319.846	FLOOR
1st250	50013.07	5015.835	319.841	FLOOR
1st251	50014.26	5015.874	319.836	FLOOR
1st252	50016.98	5015.86	319.832	FLOOR
1st253	50015.8	5015.819	319.833	FLOOR
1st254	50025.25	4990.333	319.842	FLOOR
1st255	50025.24	4988.877	319.837	FLOOR
1st256	50025.27	4986.909	319.867	FLOOR
1st257	50025.25	4984.831	319.877	FLOOR
1st258	50023.78	4990.678	319.853	FLOOR
1st259	50024.62	4990.739	319.842	FLOOR
1st260	50023.49	4996.57	319.878	FLOOR
1st261	50023.45	4998.27	319.861	FLOOR
1st262	50023.5	4994.754	319.888	FLOOR
1st263	50023.47	4992.396	319.868	FLOOR
1st264	50023.5	4990.706	319.846	FLOOR
1st265	50023.46	4999.729	319.817	FLOOR
1st266	50023.45	5001.086	319.832	FLOOR
1st267	50023.38	5002.479	319.834	FLOOR
1st268	50023.42	5003.785	319.832	FLOOR
1st269	50023.42	5005.867	319.863	FLOOR
1st270	50023.41	5006.513	319.859	FLOOR
1st271	50023.41	5009.062	319.845	FLOOR
1st272	50023.44	5007.917	319.848	FLOOR
1st273	50023.45	5007.306	319.845	FLOOR
1st274	50023.41	5009.825	319.846	FLOOR
1st275	50023.39	5010.433	319.845	FLOOR
1st276	50023.41	5011.413	319.85	FLOOR
1st277	50023.41	5012.826	319.846	FLOOR
1st278	50023.35	5014.602	319.835	FLOOR

SURVEY POINTS: SECOND FLOOR

2nd1	50016.68	5000.687	323.67	FLOOR
2nd2	50022.87	4990.363	323.688	FLOOR
2nd3	50021.65	4990.352	323.7	FLOOR
2nd4	50021.51	4988.962	323.698	FLOOR
2nd5	50022.88	4988.995	323.678	FLOOR
2nd6	50022.83	4987.274	323.679	FLOOR
2nd7	50021.06	4987.3	323.696	FLOOR
2nd8	50021.02	4985.836	323.697	FLOOR
2nd9	50022.85	4985.921	323.685	FLOOR
2nd10	50022.84	4984.82	323.693	FLOOR
2nd11	50021.09	4984.814	323.699	FLOOR
2nd12	50019.08	4984.789	323.693	FLOOR
2nd13	50019.04	4987.397	323.68	FLOOR
2nd14	50018.93	4989.383	323.688	FLOOR
2nd15	50018.88	4990.346	323.696	FLOOR
2nd16	50017	4990.281	323.699	FLOOR
2nd17	50017.03	4988.464	323.69	FLOOR
2nd18	50017.01	4984.765	323.692	FLOOR
2nd19	50017	4986.369	323.688	FLOOR
2nd20	50014.77	4984.793	323.685	FLOOR
2nd21	50014.81	4986.502	323.687	FLOOR
2nd22	50014.8	4988.218	323.687	FLOOR
2nd23	50014.84	4990.297	323.693	FLOOR
2nd24	50012.94	4990.284	323.681	FLOOR
2nd25	50012.74	4988.217	323.68	FLOOR
2nd26	50012.73	4986.135	323.686	FLOOR
2nd27	50012.63	4984.779	323.687	FLOOR
2nd28	50009.82	4984.766	323.696	FLOOR
2nd29	50009.83	4987.045	323.695	FLOOR
2nd30	50009.86	4988.792	323.701	FLOOR
2nd31	50009.84	4990.28	323.707	FLOOR
2nd32	50022.93	4984.736	325.356	N WALL CORNER
2nd33	50022.98	4990.416	325.36	N WALL
2nd34	50017.37	4984.681	325.278	W WALL
2nd35	50013.57	4984.675	325.29	W WALL
2nd36	50009.76	4984.641	325.016	S WALL CORNER
2nd37	50009.76	4990.331	325.016	S WALL
2nd38	50009.77	4997.836	325.286	S WALL
2nd39	50009.77	4994.192	325.282	S WALL
2nd40	50023.01	4994.349	325.284	N WALL
2nd41	50022.87	4994.173	323.676	FLOOR
2nd42	50022.87	4992.382	323.682	FLOOR
2nd43	50022.88	4996.201	323.678	FLOOR
2nd44	50022.83	4997.825	323.688	FLOOR
2nd45	50020.55	4998.386	323.7	FLOOR
2nd46	50020.5	4997.142	323.693	FLOOR
2nd47	50020.14	4995.345	323.691	FLOOR

2nd48	50019.99	4993.909	323.671	FLOOR
2nd49	50020.08	4991.757	323.677	FLOOR
2nd50	50017.72	4991.753	323.681	FLOOR
2nd51	50015.97	4991.581	323.701	FLOOR
2nd52	50017.79	4993.399	323.692	FLOOR
2nd53	50017.75	4995.663	323.705	FLOOR
2nd54	50015.86	4995.919	323.715	FLOOR
2nd55	50016.08	4998.199	323.687	FLOOR
2nd56	50018.26	4998.288	323.703	FLOOR
2nd57	50013.77	4998.3	323.684	FLOOR
2nd58	50013.85	4996.196	323.706	FLOOR
2nd59	50013.86	4994.168	323.73	FLOOR
2nd60	50013.91	4991.721	323.687	FLOOR
2nd61	50011.47	4991.652	323.695	FLOOR
2nd62	50009.87	4991.601	323.701	FLOOR
2nd63	50009.88	4993.866	323.705	FLOOR
2nd64	50012	4993.752	323.716	FLOOR
2nd65	50012.16	4995.839	323.711	FLOOR
2nd66	50009.88	4995.843	323.698	FLOOR
2nd67	50009.88	4997.899	323.7	FLOOR
2nd68	50012.24	4998.198	323.695	FLOOR
2nd69	50022.93	5001.432	325.28	N WALL
2nd70	50011.32	5001.062	325.049	S WALL
2nd71	50011.44	4999.451	323.684	FLOOR
2nd72	50013.67	4999.417	323.679	FLOOR
2nd73	50013.65	5000.46	323.668	FLOOR
2nd74	50012.61	5000.067	323.671	FLOOR
2nd75	50013.94	5001.252	323.663	FLOOR
2nd76	50012.36	5001.276	323.671	FLOOR
2nd77	50011.37	5001.476	323.681	FLOOR
2nd78	50011.41	5003.408	323.679	FLOOR
2nd79	50013.26	5003.487	323.647	FLOOR
2nd80	50014.11	5003.504	323.627	FLOOR
2nd81	50016.12	5003.615	323.648	FLOOR
2nd82	50017.09	5003.737	323.666	FLOOR
2nd83	50017.12	5001.73	323.665	FLOOR
2nd84	50015.65	5001.32	323.673	FLOOR
2nd85	50016.15	4999.571	323.683	FLOOR
2nd86	50017.95	5001.273	323.663	FLOOR
2nd87	50018.34	5002.47	323.63	FLOOR
2nd88	50018.23	5000.35	323.679	FLOOR
2nd89	50020.11	4999.65	323.688	FLOOR
2nd90	50019.95	5001.306	323.647	FLOOR
2nd91	50020.28	5002.502	323.621	FLOOR
2nd92	50021.99	5002.488	323.628	FLOOR
2nd93	50022.81	5002.512	323.634	FLOOR
2nd94	50021.81	5001.107	323.649	FLOOR

2nd95	50022.87	5001.08	323.656	FLOOR
2nd96	50022.88	4999.821	323.679	FLOOR
2nd97	50021.27	4999.75	323.682	FLOOR
2nd98	50017.01	5003.987	323.661	FLOOR
2nd99	50015.16	5003.794	323.633	FLOOR
2nd100	50014.86	5005.795	323.655	FLOOR
2nd101	50016.92	5005.831	323.658	FLOOR
2nd102	50016.78	5007.464	323.671	FLOOR
2nd103	50018.89	5007.351	323.647	FLOOR
2nd104	50020.58	5007.363	323.646	FLOOR
2nd105	50022.24	5007.364	323.657	FLOOR
2nd106	50022.85	5007.395	323.66	FLOOR
2nd107	50022.82	5009.215	323.658	FLOOR
2nd108	50020.64	5009.176	323.655	FLOOR
2nd109	50018.82	5009.167	323.672	FLOOR
2nd110	50016.87	5009.167	323.693	FLOOR
2nd111	50015.06	5009.149	323.694	FLOOR
2nd112	50015.2	5007.484	323.675	FLOOR
2nd113	50013.36	5007.021	323.679	FLOOR
2nd114	50013.41	5008.849	323.69	FLOOR
2nd115	50011.5	5008.838	323.683	FLOOR
2nd116	50011.65	5006.944	323.672	FLOOR
2nd117	50009.87	5006.974	323.678	FLOOR
2nd118	50009.85	5009.208	323.672	FLOOR
2nd119	50009.87	5010.991	323.673	FLOOR
2nd120	50012.04	5010.971	323.703	FLOOR
2nd121	50013.97	5011.04	323.716	FLOOR
2nd122	50017.95	5010.687	323.706	FLOOR
2nd123	50020.33	5010.836	323.667	FLOOR
2nd124	50022.21	5010.823	323.652	FLOOR
2nd125	50022.85	5010.858	323.65	FLOOR
2nd126	50022.83	5013.161	323.657	FLOOR
2nd127	50022.8	5014.612	323.661	FLOOR
2nd128	50020.55	5014.631	323.653	FLOOR
2nd129	50020.49	5012.433	323.648	FLOOR
2nd130	50018.31	5012.483	323.671	FLOOR
2nd131	50018.18	5014.663	323.647	FLOOR
2nd132	50015.68	5014.587	323.647	FLOOR
2nd133	50015.94	5012.534	323.681	FLOOR
2nd134	50014.57	5010.621	323.717	FLOOR
2nd135	50014.52	5012.338	323.688	FLOOR
2nd136	50014.44	5014.594	323.655	FLOOR
2nd137	50011.99	5014.607	323.664	FLOOR
2nd138	50012.05	5012.464	323.688	FLOOR
2nd139	50009.87	5012.575	323.669	FLOOR
2nd140	50009.85	5014.601	323.669	FLOOR
2nd141	50018.26	5006.465	323.658	FLOOR

2nd142	50019.17	5004.169	323.634	FLOOR
2nd143	50021.54	5003.683	323.631	FLOOR
2nd144	50022.79	5003.253	323.634	FLOOR
2nd145	50020.73	5004.948	323.636	FLOOR
2nd146	50022.26	5005.329	323.645	FLOOR
2nd147	50022.83	5005.527	323.653	FLOOR
2nd148	50022.93	5007.928	325.483	N WALL
2nd149	50022.92	5014.74	325.494	N WALL CORNER
2nd150	50018.41	5014.754	325.42	E WALL
2nd151	50013.39	5014.722	325.424	E WALL
2nd152	50009.76	5014.677	325.088	S WALL CORNER
2nd153	50009.77	5007.938	325.406	S WALL
2nd154	50008.37	4984.766	323.696	FLOOR
2nd155	50008.39	4987.045	323.695	FLOOR
2nd156	50008.42	4988.792	323.701	FLOOR
2nd157	50008.4	4990.28	323.707	FLOOR
2nd158	50008.43	4991.601	323.701	FLOOR
2nd159	50008.43	4993.866	323.705	FLOOR
2nd160	50008.44	4995.843	323.698	FLOOR
2nd161	50008.44	4997.899	323.7	FLOOR
2nd162	50008.43	5006.974	323.678	FLOOR
2nd163	50008.41	5009.208	323.672	FLOOR
2nd164	50008.43	5010.991	323.673	FLOOR
2nd165	50008.43	5012.575	323.669	FLOOR
2nd166	50008.41	5014.601	323.669	FLOOR
2nd167	50022.8	5016.203	323.661	FLOOR
2nd168	50020.55	5016.222	323.653	FLOOR
2nd169	50018.18	5016.254	323.647	FLOOR
2nd170	50015.68	5016.178	323.647	FLOOR
2nd171	50014.44	5016.185	323.655	FLOOR
2nd172	50011.99	5016.198	323.664	FLOOR
2nd173	50009.85	5016.192	323.669	FLOOR
2nd174	50022.84	4983.192	323.693	FLOOR
2nd175	50021.09	4983.186	323.699	FLOOR
2nd176	50019.08	4983.161	323.693	FLOOR
2nd177	50017.01	4983.138	323.692	FLOOR
2nd178	50014.77	4983.165	323.685	FLOOR
2nd179	50012.63	4983.151	323.687	FLOOR
2nd180	50009.82	4983.138	323.696	FLOOR
2nd181	50024.31	4990.363	323.688	FLOOR
2nd182	50024.32	4988.995	323.678	FLOOR
2nd183	50024.27	4987.274	323.679	FLOOR
2nd184	50024.29	4985.921	323.685	FLOOR
2nd185	50024.28	4984.82	323.693	FLOOR
2nd186	50024.32	4994.173	323.676	FLOOR
2nd187	50024.31	4992.382	323.682	FLOOR
2nd188	50024.32	4996.201	323.678	FLOOR

2nd189	50024.27	4997.825	323.688	FLOOR
2nd190	50024.25	5002.512	323.634	FLOOR
2nd191	50024.31	5001.08	323.656	FLOOR
2nd192	50024.32	4999.821	323.679	FLOOR
2nd193	50024.29	5007.395	323.66	FLOOR
2nd194	50024.27	5009.215	323.658	FLOOR
2nd195	50024.29	5010.858	323.65	FLOOR
2nd196	50024.27	5013.161	323.657	FLOOR
2nd197	50024.25	5014.612	323.661	FLOOR
2nd198	50024.23	5003.253	323.634	FLOOR
2nd199	50024.28	5005.527	323.653	FLOOR

3rd1	50011.4	4998.616	327.385	FLOOR
3rd2	50011.45	4999.593	327.37	FLOOR
3rd3	50011.41	5000.95	327.367	FLOOR
3rd4	50013.41	5001.317	327.333	FLOOR
3rd5	50013.35	4999.799	327.351	FLOOR
3rd6	50013.34	4998.649	327.373	FLOOR
3rd7	50015.01	4998.642	327.371	FLOOR
3rd8	50015	5000.085	327.347	FLOOR
3rd9	50015.11	5001.313	327.322	FLOOR
3rd10	50017.12	4998.667	327.38	FLOOR
3rd11	50018.86	4998.699	327.377	FLOOR
3rd12	50018.9	5000.44	327.335	FLOOR
3rd13	50018.9	5001.952	327.308	FLOOR
3rd14	50017.96	5003.055	327.321	FLOOR
3rd15	50019.17	5003.103	327.301	FLOOR
3rd16	50018.53	5004.255	327.329	FLOOR
3rd17	50019.06	5005.619	327.329	FLOOR
3rd18	50020.46	5006.013	327.321	FLOOR
3rd19	50020.4	5006.778	327.316	FLOOR
3rd20	50020.42	5002.262	327.293	FLOOR
3rd21	50020.43	5000.786	327.333	FLOOR
3rd22	50020.45	4999.603	327.369	FLOOR
3rd23	50020.47	4998.751	327.379	FLOOR
3rd24	50017.03	5004.117	327.34	FLOOR
3rd25	50015.65	5004.022	327.311	FLOOR
3rd26	50015.64	5005.586	327.34	FLOOR
3rd27	50015.65	5006.756	327.364	FLOOR
3rd28	50017.16	5006.714	327.363	FLOOR
3rd29	50017.11	5005.235	327.35	FLOOR
3rd30	50013.46	5003.534	327.32	FLOOR
3rd31	50014.31	5002.914	327.306	FLOOR
3rd32	50013.64	5006.679	327.373	FLOOR
3rd33	50014.44	5005.344	327.337	FLOOR
3rd34	50012.47	5004.518	327.348	FLOOR
3rd35	50011.41	5005.483	327.383	FLOOR
3rd36	50013.34	4996.6	327.373	FLOOR
3rd37	50015.01	4996.593	327.371	FLOOR
3rd38	50017.12	4996.618	327.38	FLOOR
3rd39	50018.86	4996.65	327.377	FLOOR
3rd40	50020.47	4996.701	327.379	FLOOR
3rd41	50022.04	5006.778	327.316	FLOOR
3rd42	50022.07	5002.262	327.293	FLOOR
3rd43	50022.07	5000.786	327.333	FLOOR
3rd44	50022.09	4999.603	327.369	FLOOR
3rd45	50022.12	4998.751	327.379	FLOOR
3rd46	50015.65	5008.745	327.364	FLOOR
3rd47	50017.16	5008.702	327.363	FLOOR

3rd48	50013.64	5008.668	327.373	FLOOR
3rd49	50009.84	4998.616	327.385	FLOOR
3rd50	50009.88	4999.593	327.37	FLOOR
3rd51	50009.85	5000.95	327.367	FLOOR
3rd52	50009.85	5005.483	327.383	FLOOR
3rd53	50011.4	4996.566	327.385	FLOOR
3rd54	50022.1	5006.013	327.321	FLOOR
3rd55	50020.4	5008.766	327.316	FLOOR
3rd56	50009.84	4996.566	327.385	FLOOR

100	50009.48	5014.833	319.752	BLDG
101	50009.56	4984.442	319.569	BLDG
102	50009.1	4983.932	326.655	SOFFIT
103	50009.12	4985.244	326.668	SOFFIT
104	50009.12	4986.975	326.671	SOFFIT
105	50009.13	4988.384	326.678	SOFFIT
106	50009.13	4989.466	326.673	SOFFIT
107	50009.15	4990.754	326.667	SOFFIT
108	50009.15	4991.849	326.672	SOFFIT
109	50009.14	4992.927	326.671	SOFFIT
110	50009.13	4994.413	326.672	SOFFIT
111	50009.13	4995.57	326.672	SOFFIT
112	50009.12	4996.477	326.669	SOFFIT
113	50009.11	4997.401	326.664	SOFFIT
114	50009.1	4998.288	326.66	SOFFIT
115	50009.1	4998.986	326.653	SOFFIT
116	50009.25	4999.026	326.662	SOFFIT
117	50009.25	4999.597	326.667	SOFFIT
118	50009.25	5000.428	326.675	SOFFIT
119	50009.25	5001.12	326.682	SOFFIT
120	50009.24	5001.864	326.689	SOFFIT
121	50009.23	5002.826	326.691	SOFFIT
122	50009.23	5003.637	326.688	SOFFIT
123	50009.23	5004.597	326.679	SOFFIT
124	50009.23	5005.535	326.67	SOFFIT
125	50009.23	5006.142	326.66	SOFFIT
126	50009.08	5006.157	326.643	SOFFIT
127	50009.08	5007.092	326.652	SOFFIT
128	50009.08	5007.964	326.654	SOFFIT
129	50009.08	5008.783	326.653	SOFFIT
130	50009.07	5009.699	326.651	SOFFIT
131	50009.06	5010.534	326.652	SOFFIT
132	50009.06	5011.394	326.653	SOFFIT
133	50009.05	5012.194	326.654	SOFFIT
134	50009.05	5013.311	326.658	SOFFIT
135	50009.06	5014.581	326.663	SOFFIT
136	50009.05	5015.333	326.659	SOFFIT
138	50010	5015.328	326.665	SOFFIT
139	50011.02	5015.337	326.665	SOFFIT
140	50011.09	5015.323	326.665	SOFFIT
141	50011.72	5015.364	326.66	SOFFIT
142	50012.27	5015.37	326.655	SOFFIT
143	50012.78	5015.372	326.653	SOFFIT
144	50013.5	5015.377	326.653	SOFFIT
145	50017.69	5015.43	326.656	SOFFIT
146	50018.25	5015.432	326.656	SOFFIT
147	50018.8	5015.438	326.658	SOFFIT

148	50019.39	5015.44	326.656	SOFFIT
149	50020	5015.441	326.656	SOFFIT
150	50020.43	5015.445	326.657	SOFFIT
151	50021.1	5015.466	326.655	SOFFIT
152	50022.21	5015.445	326.66	SOFFIT
153	50022.83	5015.452	326.655	SOFFIT
154	50023.58	5015.44	326.649	SOFFIT
155	50023.07	5014.988	320.663	BLDG
156	50023.22	4990.648	319.847	BLDG
157	50024.93	4990.629	319.959	BLDG
158	50024.97	4984.515	319.792	BLDG
159	50023.57	5014.641	326.652	SOFFIT
160	50023.58	5013.697	326.654	SOFFIT
161	50023.59	5012.973	326.655	SOFFIT
162	50023.6	5012.08	326.656	SOFFIT
163	50023.6	5011.415	326.654	SOFFIT
164	50023.61	5010.733	326.652	SOFFIT
165	50023.6	5009.926	326.65	SOFFIT
166	50023.61	5009.152	326.65	SOFFIT
167	50023.62	5008.397	326.649	SOFFIT
168	50023.62	5007.681	326.65	SOFFIT
169	50023.63	5006.942	326.651	SOFFIT
170	50023.63	5006.273	326.649	SOFFIT
171	50023.64	5005.588	326.645	SOFFIT
172	50023.64	5004.86	326.642	SOFFIT
173	50023.65	5004.19	326.637	SOFFIT
174	50023.66	5003.533	326.632	SOFFIT
175	50023.67	5002.875	326.632	SOFFIT
176	50023.67	5002.297	326.636	SOFFIT
177	50023.66	5001.695	326.641	SOFFIT
178	50023.67	5001.126	326.637	SOFFIT
179	50023.67	5000.608	326.638	SOFFIT
180	50023.67	5000.012	326.649	SOFFIT
181	50023.68	4999.437	326.657	SOFFIT
182	50023.67	4998.854	326.661	SOFFIT
183	50023.68	4998.351	326.659	SOFFIT
184	50023.69	4997.867	326.659	SOFFIT
185	50023.69	4997.28	326.663	SOFFIT
186	50023.7	4996.827	326.662	SOFFIT
187	50023.71	4996.272	326.666	SOFFIT
188	50023.71	4995.758	326.668	SOFFIT
189	50023.73	4995.25	326.671	SOFFIT
190	50023.74	4994.678	326.675	SOFFIT
191	50023.74	4994.118	326.68	SOFFIT
192	50023.75	4993.463	326.69	SOFFIT
193	50023.74	4992.926	326.692	SOFFIT
194	50023.74	4992.417	326.693	SOFFIT

195	50023.74	4991.754	326.691	SOFFIT
196	50023.74	4991.042	326.681	SOFFIT
197	50023.75	4990.545	326.665	SOFFIT
198	50023.74	4989.919	326.646	SOFFIT
199	50023.72	4989.325	326.646	SOFFIT
200	50023.72	4988.627	326.644	SOFFIT
201	50023.71	4988.12	326.641	SOFFIT
202	50023.71	4987.401	326.641	SOFFIT
203	50023.7	4986.817	326.647	SOFFIT
204	50023.71	4986.26	326.649	SOFFIT
205	50023.7	4985.415	326.652	SOFFIT
206	50023.71	4984.704	326.657	SOFFIT
207	50023.7	4984.045	326.657	SOFFIT
208	50022.99	4984.029	326.659	SOFFIT
209	50023.21	4984.511	324.431	BLDG
210	50022.2	4984.02	326.664	SOFFIT
211	50021.69	4984.013	326.665	SOFFIT
212	50021.17	4984.006	326.663	SOFFIT
213	50020.57	4983.994	326.659	SOFFIT
214	50020.18	4983.989	326.658	SOFFIT
215	50019.71	4983.985	326.656	SOFFIT
216	50019.3	4983.983	326.656	SOFFIT
217	50014.72	4983.952	326.657	SOFFIT
218	50014.17	4983.948	326.654	SOFFIT
219	50013.71	4983.944	326.653	SOFFIT
220	50013.18	4983.942	326.653	SOFFIT
221	50012.65	4983.934	326.65	SOFFIT
222	50011.88	4983.929	326.651	SOFFIT
223	50011.29	4983.932	326.652	SOFFIT
224	50010.65	4983.934	326.656	SOFFIT
225	50009.96	4983.931	326.656	SOFFIT