

Fire Sprinkler Rehabilitation

Gulf of Georgia Cannery, Steveston, B.C.

The following changes in the tender documents are effective immediately. This addendum will form part of the contract documents.

1.0 **SPECIFICATIONS**

- 2.1 Section 01 11 55 – General Instructions: add part 1.3.5.17 -
(*new:*) Contractor shall only have access to and undertake work in the gift shop when a Commissionaire is present. During Commissionaires absence doors from shop to museum will be locked with chain and padlock and door from shop to mezzanine will be locked, Contractor access to Mezzanine above shop to be from main scaffolding.

2.0 **REFER TO:**

- 2.1 Mechanical Addendum No. 1 dated 2018-08-02 (6 pages).
2.2 Electrical Addendum No. 1 dated 2018-08-07 (1 page).

END OF ADDENDUM 01

**FIRE SPRINKLER REHABILITATION
GULF OF GEORGIA CANNERY, STEVESTON, B.C.
PROJECT NO. R.089515.001
MECHANICAL ADDENDUM NO. M1**

**FILE: 1640.00
August 2, 2018**

To: RATIO
Attention: Hazen Sise, Architect

By E-mail

- Design Meeting Minutes
- Design Correspondence
- Addenda
- Approvals
- Shop Drawings
- Change Notices
- Change Orders
- Change Directives
- Supplemental Instructions
- Construction Meeting Minutes
- Construction Correspondence
- Progress Claims
- Construction Review Reports
- Temporary

From: Raul Valderama.

Total no. of pages: 6

THIS ADDENDUM FORMS PART OF THE CONTRACT DOCUMENTS AND IS TO BE READ, INTERPRETED AND COORDINATED WITH ALL OTHER PARTS. INCLUDE COST OF ALL WORK CONTAINED HEREIN IN THE CONTRACT PRICE. THE FOLLOWING REVISIONS SUPERSEDE INFORMATION CONTAINED IN THE ORIGINAL DRAWINGS AND SPECIFICATIONS ISSUED OF THE ABOVE NAMED PROJECT TO THE EXTENT REFERENCED AND BECOME PART THEREOF. PLEASE ACKNOWLEDGE RECEIPT OF THIS ADDENDUM ON THE FORM OF TENDER.

Please issue an Addendum with the following wording:

REFER TO MECHANICAL TENDER DRAWINGS AND SPECIFICATIONS AND ATTACHED REVISED DRAWINGS F-1, F-2, F-4 AND F-5:

1. Delete stainless steel pipe, valves, fittings and pipe hangers for the substructure sprinkler systems.

Provide hot-dipped galvanized steel pipe, valves, fittings and pipe hangers for the substructure sprinkler systems.

2. Delete dry pipe valve station for substructure sprinkler Zone 1 located in the Mezzanine Remote Sprinkler Valve Room.

Provide dry pipe valve stations for substructure sprinkler Zone 1A and Zone 1B in the Mezzanine Remote Sprinkler Valve Room. Refer to revised sprinkler system layout, pipe routing and piping of zones. Install 2@ 200mm pipe risers to substructure sprinkler Zone 1A and Zone 1B in Temporary Exhibit along the North wall, grid line C and 10.

3. Delete system low point drain and piping for sprinkler Zone 1.

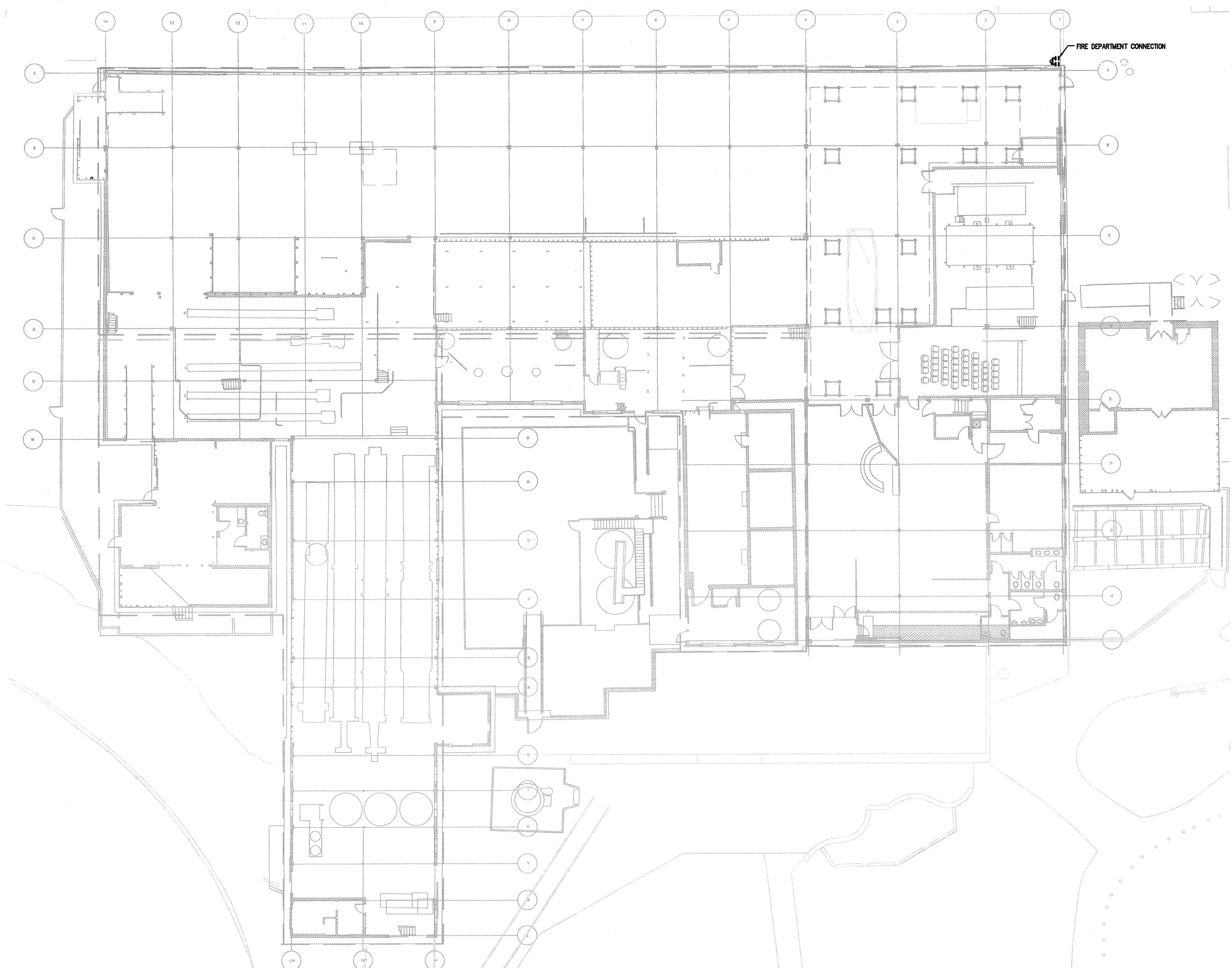
Provide system low point drain and piping for sprinkler Zone 1A and Zone 1B. Connect 2@ 50mm drains to sprinkler drainage system in the substructure.

4. Delete stainless steel sprinkler drainage system in the substructure.

Provide hot dipped galvanized steel sprinkler drainage system in the substructure.

5. Delete nitrogen Purge Valve (PV-1) for sprinkler Zone 1.
Provide nitrogen Purge Valves PV-1A and PV-1B and piping for sprinkler Zones 1A and 1B. Locate valves in corridor and mount on the North wall near the office and washroom in the Ice House main floor.
6. Delete stainless steel Fire Department Connection and piping.
Provide hot-dipped galvanized Fire Department Connection and piping.
7. Delete stainless steel escutcheon plates.
8. Delete piping protection from high tide for piping in the substructure.

End of Mechanical Addendum #1



SITE PLAN
SCALE: 1:200

FIRE PROTECTION DESIGN NOTES

FIRE SUPPRESSION SPRINKLER SYSTEM DESIGNED TO NFPA 13 (2016 EDITION) AND NFPA 307 (2016 EDITION)
PORTABLE FIRE EXTINGUISHER SYSTEM DESIGNED TO NFPA 10 (2018 EDITION)
IN CONJUNCTION WITH THE NATIONAL BUILDING CODE OF CANADA (2015 EDITION) AND
THE CODE EQUIVALENCY REPORT PREPARED BY G&L CONSULTANTS LTD, DATED OCT. 14, 2018.

- DESIGN CRITERIA:
- NFPA 13, SECTIONS 11 - 13
 - DRY SYSTEM - WHOLE BUILDING PROTECTION EXCEPT AS NOTED BELOW
OCCUPANCY: ORDINARY HAZARD GROUP 2
DENSITY: 8.140 LPM/90 M OVER 228.91 90 M
HOSE STREAM DEMAND: 846.25 LPM
 - DRY SYSTEM - RETAIL AREA, AREA UNDER MEZZANINE AND AREA ABOVE MEZZANINE NOT PROTECTED FROM ROOF.
OCCUPANCY: ORDINARY HAZARD GROUP 2
DENSITY: 8.140 LPM/90 M OVER 181.16 90 M
HOSE STREAM DEMAND: 846.25 LPM
 - DRY SYSTEM - WEST EXTERIOR BUILDING FACE PROTECTION
MAXIMUM 2.44M SPACING SIDEWALL SPRINKLER HEAD PER NFPA 13.
DENSITY: 16.28 LPM PER SPRINKLER HEADS OVER 7 HEADS
HOSE STREAM DEMAND: 846.25 LPM
 - NFPA 307, SECTION 4.3.3.1.3
 - DRY SYSTEM - SUBSTRUCTURE
OCCUPANCY: ORDINARY HAZARD GROUP 2
DENSITY: 8.140 LPM/90 M OVER 485 90 M
HOSE STREAM DEMAND: 846.25 LPM

WATER SUPPLY INFORMATION: CITY OF RICHMOND
STATIC PRESSURE: 5.38 BAR
RESIDUAL PRESSURE: 4.27 BAR @ 8800 LPM

FIRE PROTECTION PLANS: DIMENSIONS SHOWN ARE APPROXIMATE AND SHOULD BE CONFIRMED ON SITE BY THE OWNER'S RESPONSIBILITY TO ENSURE THAT TEMPERATURES ABOVE 40°F (4°C) MUST BE MAINTAINED IN ALL AREAS SERVED BY WET SPRINKLER COMPONENTS.

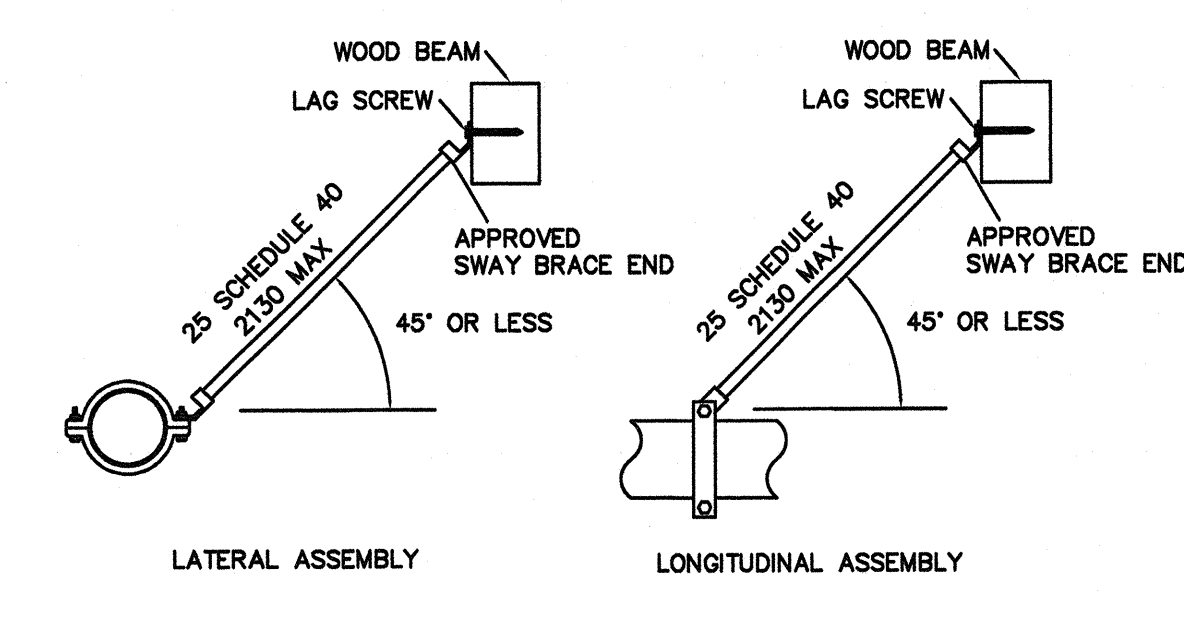
OBSTRUCTIONS BELOW SPRINKLER HEADS: LIGHTS, DUCTS, PIPE WORK, ETC. ALL CONTINUOUS OBSTRUCTIONS MUST BE INSTALLED A MINIMUM OF 18 INCHES FROM THE SPRINKLER HEAD DEFLECTOR TO ENSURE A PROPER SPRINKLER DISCHARGE PATTERN DEVELOPMENT.

TESTING AND MAINTENANCE: TO MEET NFPA 25 STANDARDS ENSURE PERIODIC INSPECTIONS TAKE PLACE WHILE INSTALLATION IS IN PROGRESS MAINTENANCE MANUALS ARE REQUIRED AT COMPLETION OF THE PROJECT

SYSTEM COMPONENTS: ALL MATERIALS USED MUST MEET ALL NFPA 13. ALL COMPONENTS MUST BE ULG LISTED AND MEET ALL ACTIVITIES REQUIREMENTS

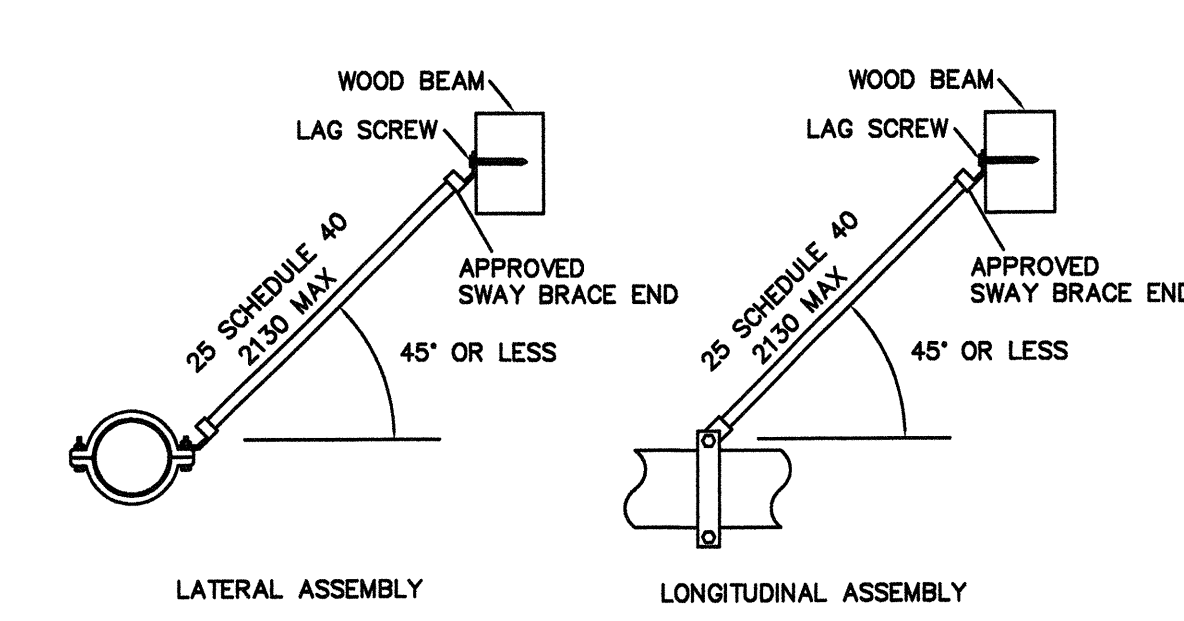
PIPING INSIDE OF BUILDING: HOT-DIPPED GALVANIZED STEEL SCHEDULE 40, THREADED JOINT AND FITTINGS.

PIPING UNDER SUBSTRUCTURE: 316/316L SCHEDULE 40 STAINLESS STEEL, SCREW JOINTS AND FITTINGS.



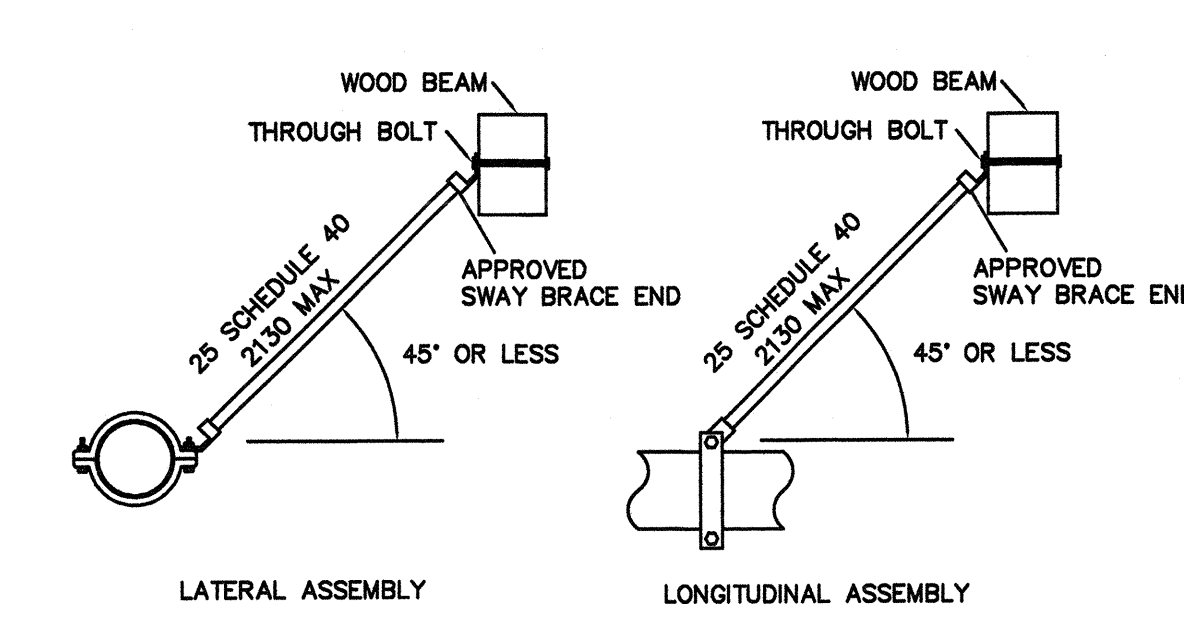
SWAY BRACE DETAILS FOR 100# MAIN N.T.S.

- NOTES:
- LATERAL SWAY BRACING SPACED AT A MAXIMUM OF 8.144M ON CENTER.
 - LONGITUDINAL SWAY BRACING SPACED AT A MAXIMUM OF 8.144M ON CENTER.
 - LATERAL SWAY BRACING AND LONGITUDINAL SWAY BRACING START POINT NO MORE THAN 3M FROM END OF PIPE.



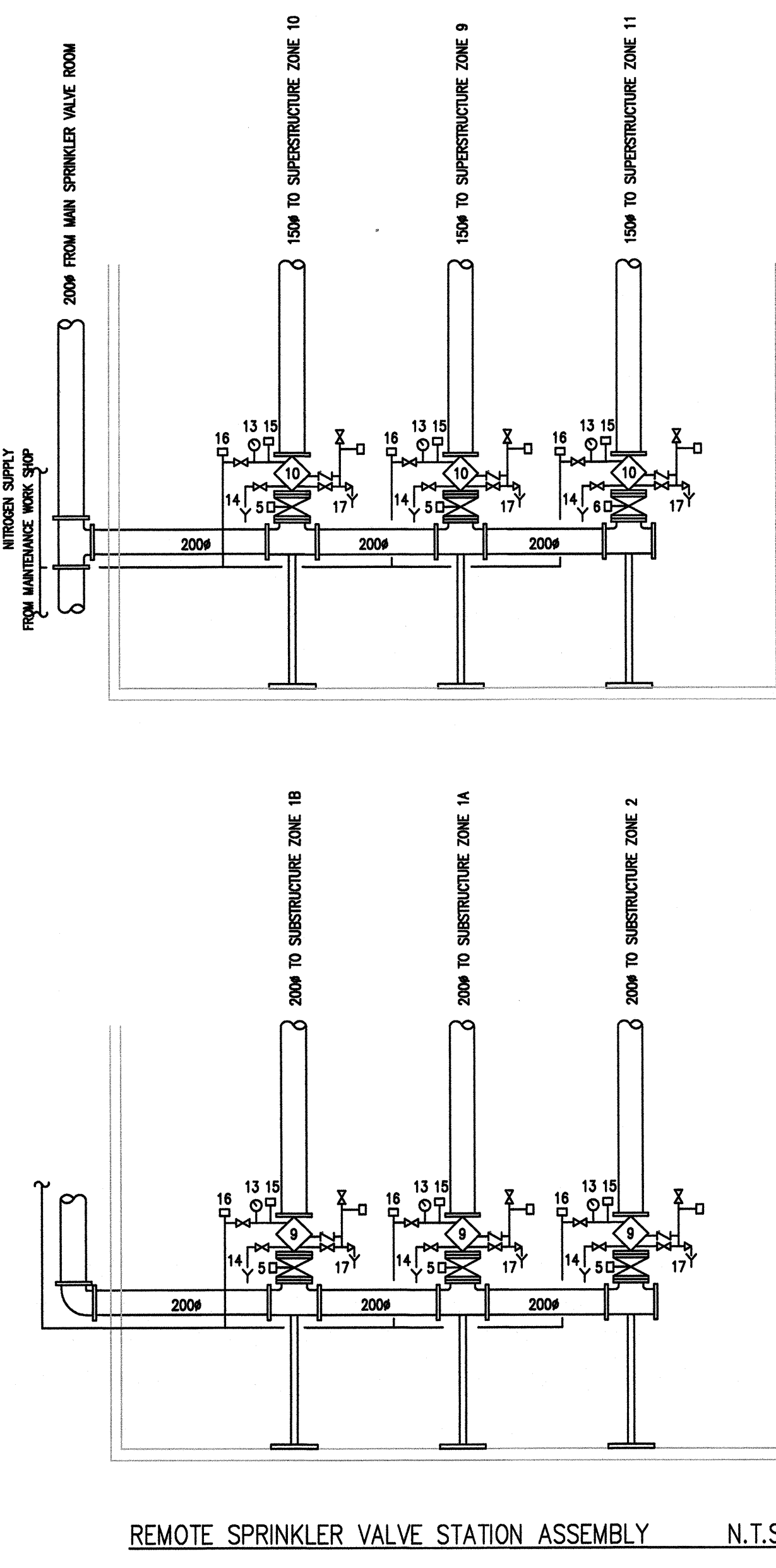
SWAY BRACE DETAILS FOR 150# MAIN N.T.S.

- NOTES:
- LATERAL SWAY BRACING SPACED AT A MAXIMUM OF 8.096M ON CENTER.
 - LONGITUDINAL SWAY BRACING SPACED AT A MAXIMUM OF 8.096M ON CENTER.
 - LATERAL SWAY BRACING AND LONGITUDINAL SWAY BRACING START POINT NO MORE THAN 3M FROM END OF PIPE.

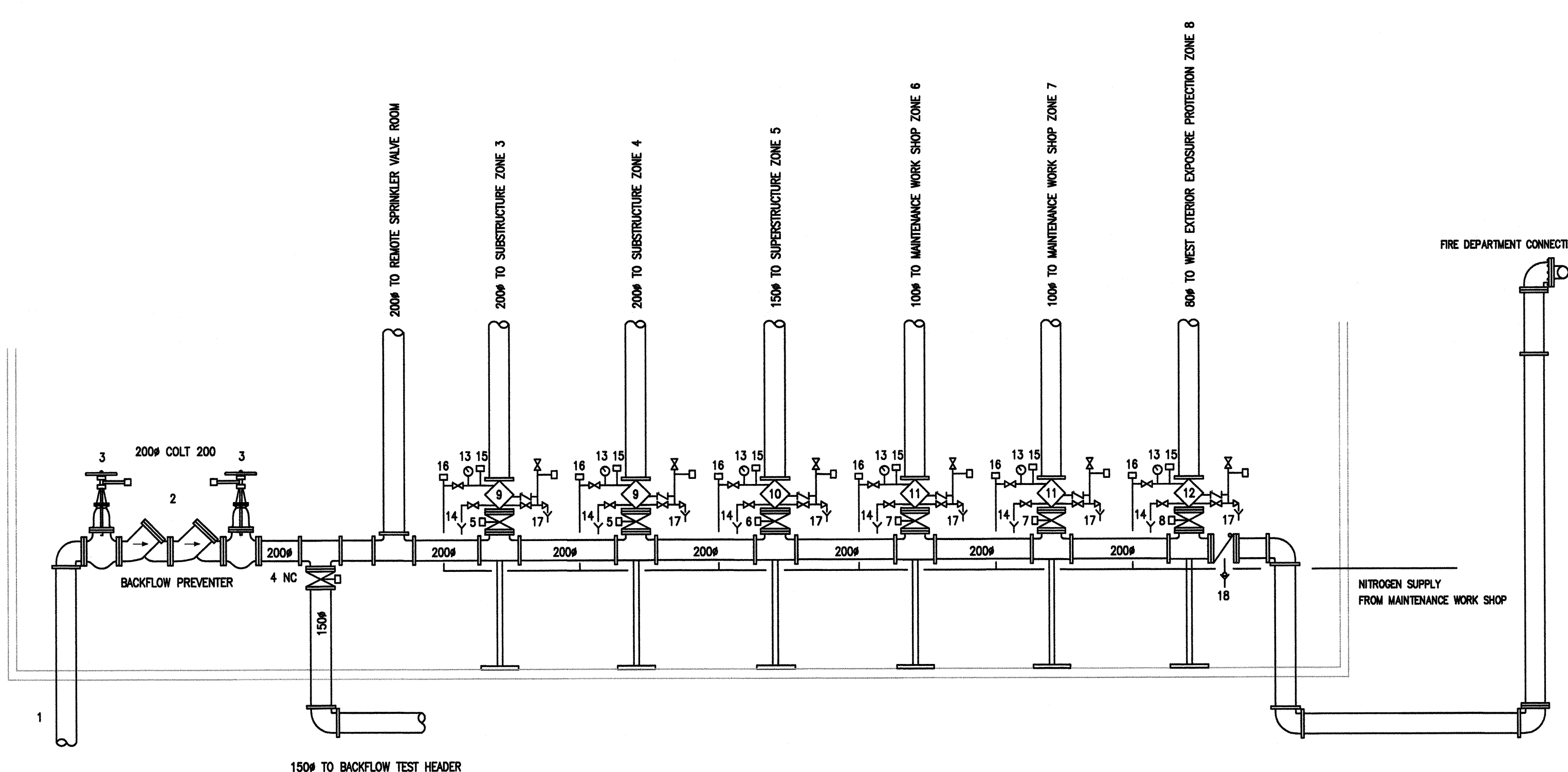


SWAY BRACE DETAILS FOR 200# MAIN N.T.S.

- NOTES:
- LATERAL SWAY BRACING SPACED AT A MAXIMUM OF 8.096M ON CENTER AT SUBSTRUCTURE.
 - LATERAL SWAY BRACING SPACED AT A MAXIMUM OF 8.096M ON CENTER AT SUBSTRUCTURE.
 - LONGITUDINAL SWAY BRACING SPACED AT A MAXIMUM OF 8.096M ON CENTER AT SUBSTRUCTURE.
 - LONGITUDINAL SWAY BRACING SPACED AT A MAXIMUM OF 3.048M ON CENTER AT SUBSTRUCTURE.
 - LATERAL SWAY BRACING AND LONGITUDINAL SWAY BRACING START POINT NO MORE THAN 3M FROM END OF PIPE.



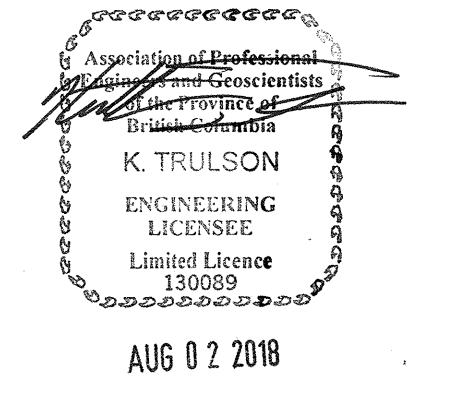
REMOTE SPRINKLER VALVE STATION ASSEMBLY N.T.S.



MAIN SPRINKLER VALVE STATION ASSEMBLY N.T.S.

- 200# INCOMING WATER SUPPLY
- 200# DOUBLE CHECK BACKFLOW PREVENTER
- 200# GAST CONTROL VALVE C/W TAMPER SWITCH
- 150# BUTTERFLY VALVE (NORMALLY CLOSED)
- 150# BUTTERFLY VALVE C/W TAMPER SWITCH
- 150# BUTTERFLY VALVE C/W TAMPER SWITCH
- 150# BUTTERFLY VALVE C/W TAMPER SWITCH
- 80# BUTTERFLY VALVE C/W TAMPER SWITCH
- 200# DRY PIPE VALVE ASSEMBLY C/W QUICK-OPENING DEVICE
- 150# DRY PIPE VALVE ASSEMBLY C/W QUICK-OPENING DEVICE
- 150# DRY PIPE VALVE ASSEMBLY
- 150# PRESSURE GAUGE
- 150# MAIN DRAIN
- 150# LOW PRESSURE WARNING SWITCH
- 150# AIR COMPRESSOR AUTOMATIC START SWITCH
- 150# RESTRICTING ORIFICE
- 150# CHECK VALVE C/W BALL DRIP

NOTE: ALL WATER FLOW DEVICES AND TAMPER SWITCHES MUST BE MONITORED TO THE ANNUNCIATOR PANEL BY DIVISION 16.



AUG 02 2019

Revision	Description/Description	Date/Date
7	ISSUED FOR ADDENDUM	18-08-02
6	ISSUED FOR TENDER	18-06-27
5	ISSUED FOR TENDER REVIEW	18-05-30
4	ISSUED FOR PER REVIEW	18-03-15
3	ISSUED FOR BOM REVIEW	18-02-23
2	ISSUED FOR COORDINATION	18-02-08
1	ISSUED FOR PROGRESS	17-12-15

Client/Client: **PARKS CANADA**

Project title/Titre du projet

FIRE SPRINKLER REHABILITATION GULF OF GEORGIA CANNERY

Consultant Approval Box Only

Designed by/Concept par: KT

Drawn by/Dessiné par: HL

PWGC Project Manager/Administrateur de Projets TPSC: TOM DUNPHY

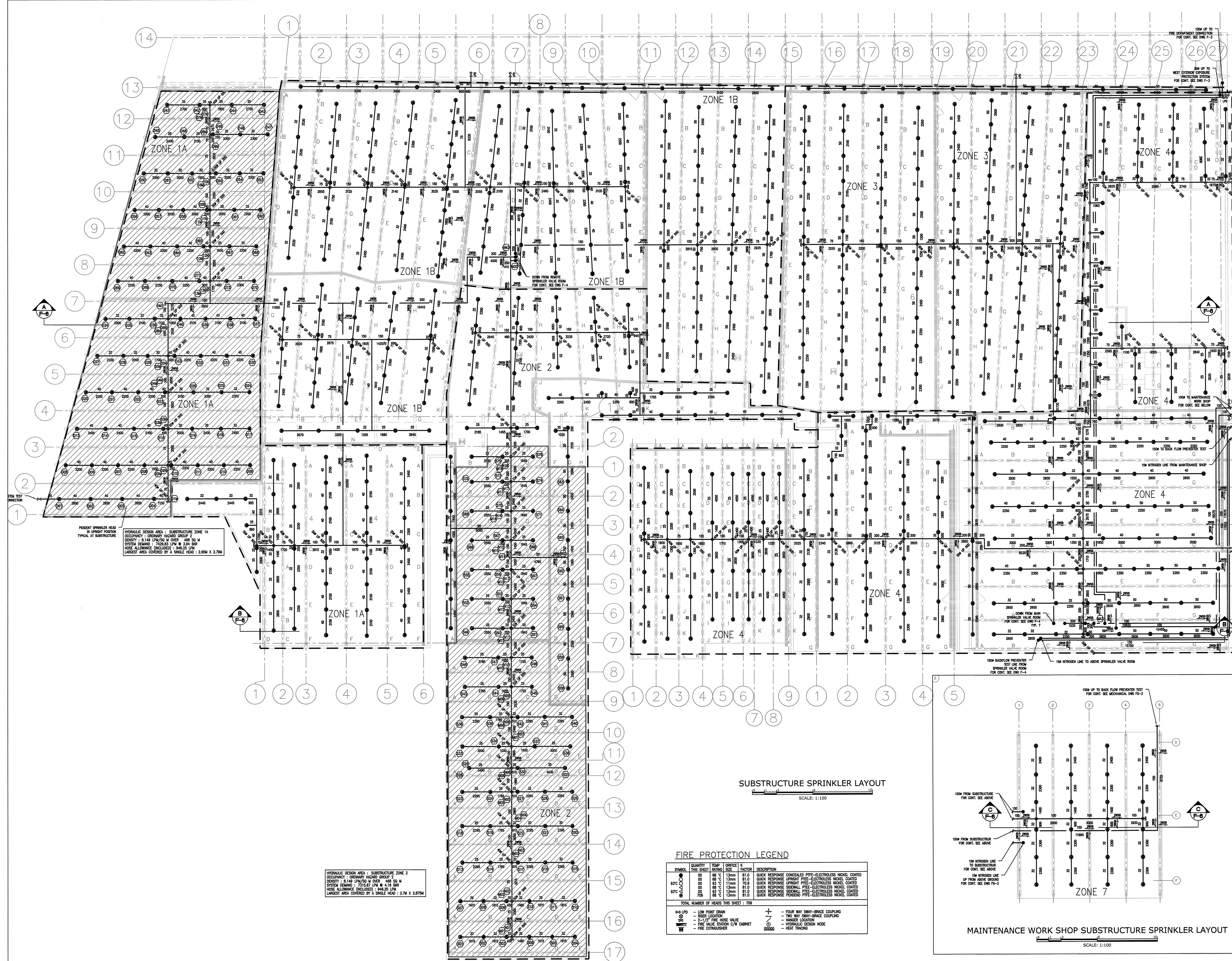
Project Manager/Administrateur et Engineering Services/Contrôleur des travaux, Services d'ingénierie et de génie, TPSC: Frédéric Poirier

Drawing title/Titre du dessin

FIRE PROTECTION SITE PLAN, DRAWING NOTES & DETAILS

Project No./No. du projet	Sheet/Feuille	Revision no./L'Échelle no.
R.089515.001	F-1 OF 8	7

K. TRULSON
ENGINEERING
LICENSÉE
AUG 02 2018



HYDRULIC DESIGN AREA - SUBSTRUCTURE ZONE 1A
OCCUPANCY: ORDINARY HAZARD GROUP 2
DENSITY: 8.140 LPM/50 M OVER 488 SQ M
SYSTEM DEMAND: 713.07 LPM @ 4.18 BAR
HOSE ALLOWANCE (INCLUDED): 844.25 LPM
LARGEST AREA COVERED BY A SINGLE HEAD: 2.65M X 2.77M

HYDRULIC DESIGN AREA - SUBSTRUCTURE ZONE 2
OCCUPANCY: ORDINARY HAZARD GROUP 2
DENSITY: 8.140 LPM/50 M OVER 488 SQ M
SYSTEM DEMAND: 713.07 LPM @ 4.18 BAR
HOSE ALLOWANCE (INCLUDED): 844.25 LPM
LARGEST AREA COVERED BY A SINGLE HEAD: 2.7M X 2.875M

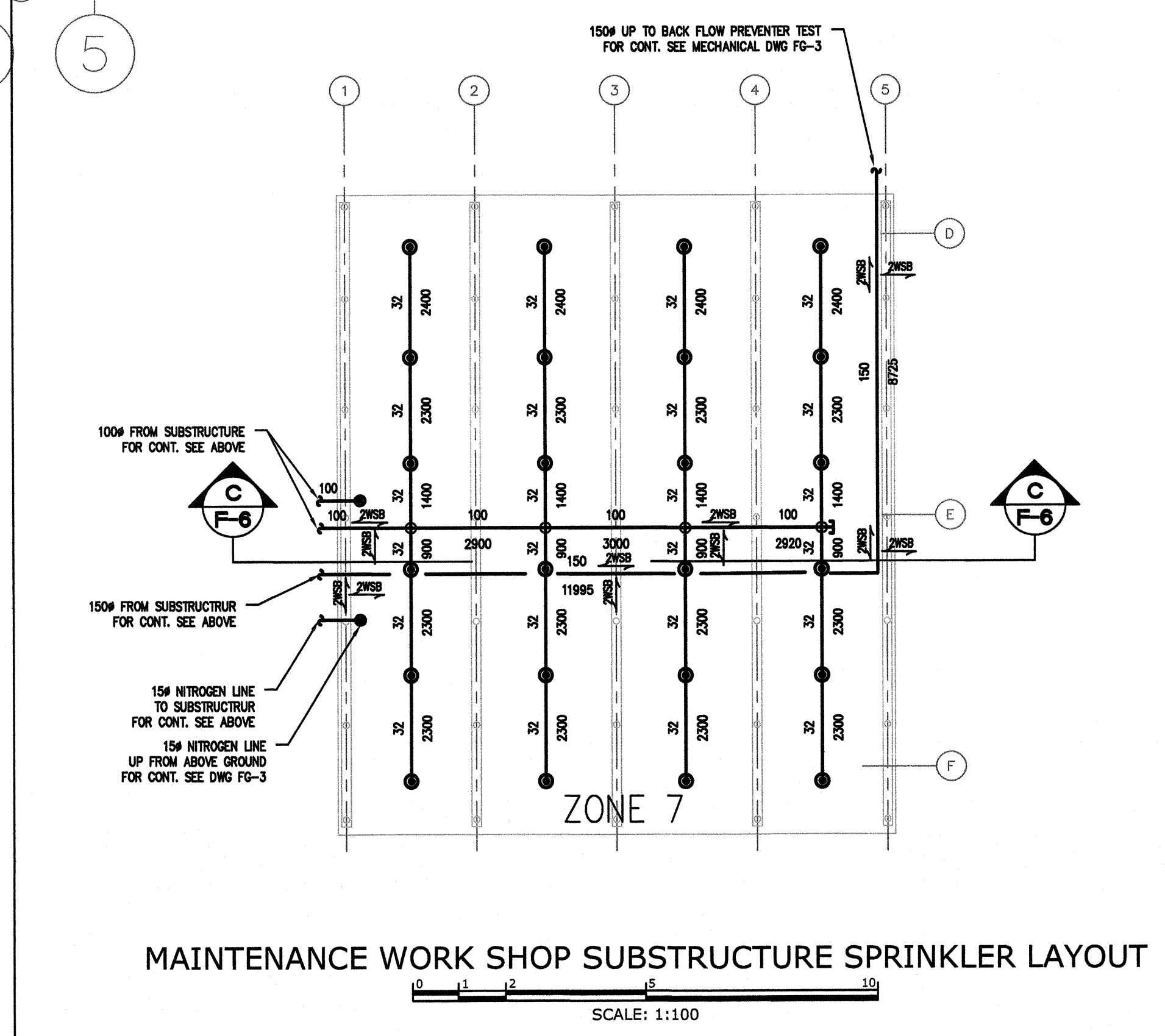
SUBSTRUCTURE SPRINKLER LAYOUT
SCALE: 1:100

FIRE PROTECTION LEGEND

SYMBOL	QUANTITY THIS SHEET	TEMP RATING	ORIFICE SIZE	K FACTOR	DESCRIPTION
●	00	68 °C	13mm	81.0	QUICK RESPONSE CONCEALED PTFE-ELECTROLESS NICKEL COATED
○	00	68 °C	13mm	81.0	QUICK RESPONSE UPRIGHT PTFE-ELECTROLESS NICKEL COATED
○	00	68 °C	11mm	70.8	QUICK RESPONSE UPRIGHT PTFE-ELECTROLESS NICKEL COATED
○	00	68 °C	13mm	81.0	QUICK RESPONSE SEWNALL PTFE-ELECTROLESS NICKEL COATED
○	00	68 °C	13mm	81.0	QUICK RESPONSE SEWNALL PTFE-ELECTROLESS NICKEL COATED
○	00	68 °C	13mm	81.0	QUICK RESPONSE PENDING PTFE-ELECTROLESS NICKEL COATED

TOTAL NUMBER OF HEADS THIS SHEET: 709

○-6 LFD	LOW POINT DRAIN	+	FOUR WAY SWAY-BRACE COUPLING
○	RISER LOCATION	+	TWO WAY SWAY-BRACE COUPLING
○	7-7 FIRE HOSE VALVE	+	HYDRAULIC DESIGN NODE
○	FIRE VALVE STATION C/W CABINET	+	HEAT TRACING
○	FIRE EXTINGUISHER	+	



MAINTENANCE WORK SHOP SUBSTRUCTURE SPRINKLER LAYOUT
SCALE: 1:100

Rev/No.	Description/Description	Date/Date
7	ISSUED FOR ADDENDUM	18-08-02
6	ISSUED FOR TENDER	18-08-27
5	ISSUED FOR TENDER REVIEW	18-05-30
4	ISSUED FOR 90% REVIEW	18-03-15
3	ISSUED FOR 30% REVIEW	18-02-23
2	ISSUED FOR COORDINATION	18-02-08
1	ISSUED FOR PROGRESS	17-12-15

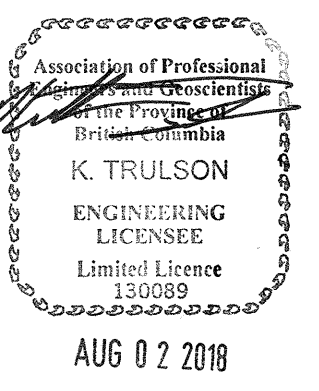
Client/Client: PARKS CANADA

Project Title/Titre du projet:

FIRE SPRINKLER REHABILITATION GULF OF GEORGIA CANNERY

Consultant Approval Box Only
Designed by/Concept par: KT
Drawn by/Dessiné par: HL
PWSC Project Manager/Administrateur de Projets: TOM DUNPHY

SUBSTRUCTURE SPRINKLER LAYOUT



Rev.	Description	Date
7	ISSUED FOR ADDENDUM	16-09-02
6	ISSUED FOR TENDER	16-09-27
5	ISSUED FOR TENDER REVIEW	16-10-30
4	ISSUED FOR 90% REVIEW	16-03-15
3	ISSUED FOR 80% REVIEW	16-02-23
2	ISSUED FOR COORDINATION	16-02-08
1	ISSUED FOR PROGRESS	17-12-15
	Description/Description	Date/Date

Client/Client: PARKS CANADA

Project Title/Titre du projet: FIRE SPRINKLER REHABILITATION GULF OF GEORGIA CANNERY

Consultant Approval Box Only

Designed by/Concepteur par: KT

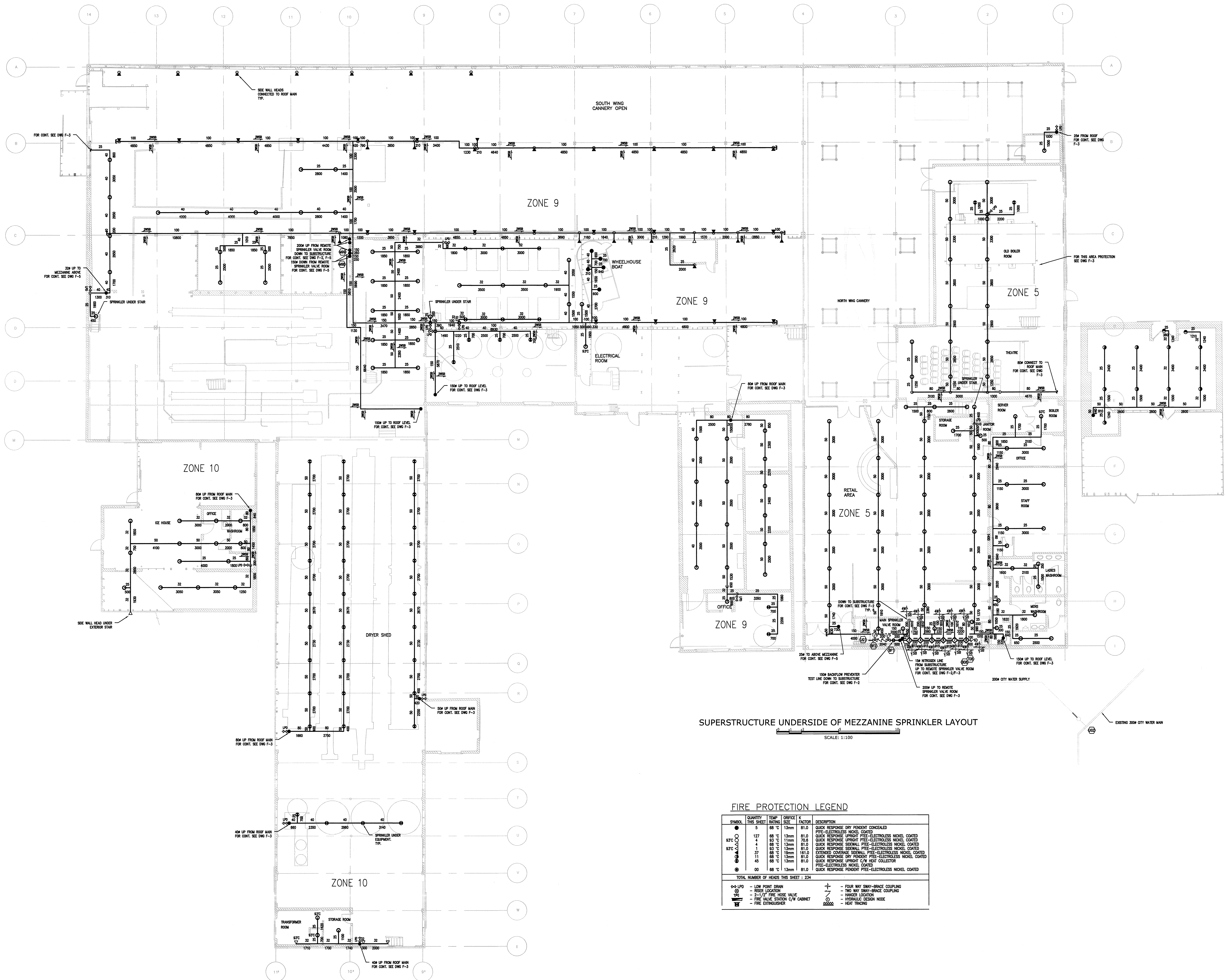
Drawn by/Dessiné par: HL

PWOSC Project Manager/Administrateur de Projets: TOM DUNPHY

Project Manager/Ingénieur et Ingénierie Services/Lead Architect/Architecte en chef: [Signature]

Drawing Title/Titre du dessin: SUPERSTRUCTURE UNDERSIDE OF MEZZANINE SPRINKLER LAYOUT

Project No./No. du projet	Sheet/Feuille	Revision no./No. de Révision
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SUPERSTRUCTURE UNDERSIDE OF MEZZANINE SPRINKLER LAYOUT

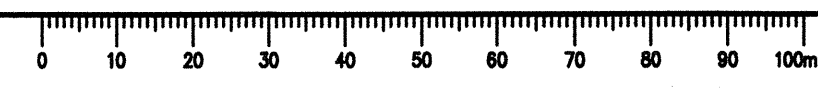
SCALE: 1:100

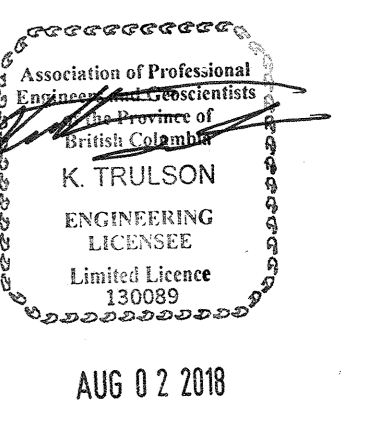
FIRE PROTECTION LEGEND

SYMBOL	QUANTITY THIS SHEET	TEMP. RATING	ORIFICE SIZE	K FACTOR	DESCRIPTION
●	5	68 °C	13mm	81.0	QUICK RESPONSE DRY PENDENT CONCEALED
○	127	68 °C	13mm	81.0	PTEE-ELECTROLESS NICKEL COATED
○	4	93 °C	11mm	70.6	QUICK RESPONSE UPRIGHT PTEE-ELECTROLESS NICKEL COATED
○	4	68 °C	13mm	81.0	QUICK RESPONSE SIDEWALL PTEE-ELECTROLESS NICKEL COATED
○	1	93 °C	13mm	81.0	QUICK RESPONSE SIDEWALL PTEE-ELECTROLESS NICKEL COATED
○	37	68 °C	13mm	81.0	EXTENDED COVERAGE SIDEWALL PTEE-ELECTROLESS NICKEL COATED
○	11	68 °C	13mm	81.0	QUICK RESPONSE DRY PENDENT PTEE-ELECTROLESS NICKEL COATED
○	42	68 °C	13mm	81.0	QUICK RESPONSE UPRIGHT C/W HEAT COLLECTOR
○	00	68 °C	13mm	81.0	PTEE-ELECTROLESS NICKEL COATED

TOTAL NUMBER OF HEADS THIS SHEET = 234

○-○-LPO	- LOW POINT DRAIN	+	- FOUR WAY SWAY-BRACE COUPLING
○	- RISER LOCATION	+	- TWO WAY SWAY-BRACE COUPLING
○	- 2-1/2" FIRE HOSE VALVE	+	- HANGER LOCATION
○	- FIRE VALVE STATION C/W CABINET	○	- HYDRULIC DESIGN NODE
○	- FIRE EXTINGUISHER	○	- HEAT TRACING





Revision/Description	Date/Date
7	ISSUED FOR ADDENDUM 18-08-02
6	ISSUED FOR TENDER 18-08-27
5	ISSUED FOR TENDER REVIEW 18-05-30
4	ISSUED FOR 90% REVIEW 18-03-15
3	ISSUED FOR 80% REVIEW 18-02-23
2	ISSUED FOR COORDINATION 18-02-08
1	ISSUED FOR PROGRESS 17-12-15

Client/Client: **PARKS CANADA**

Project title/Titre du projet: **FIRE SPRINKLER REHABILITATION GULF OF GEORGIA CANNERY**

Consultant Approval Box Only

Designed by/Concept par: **KT**

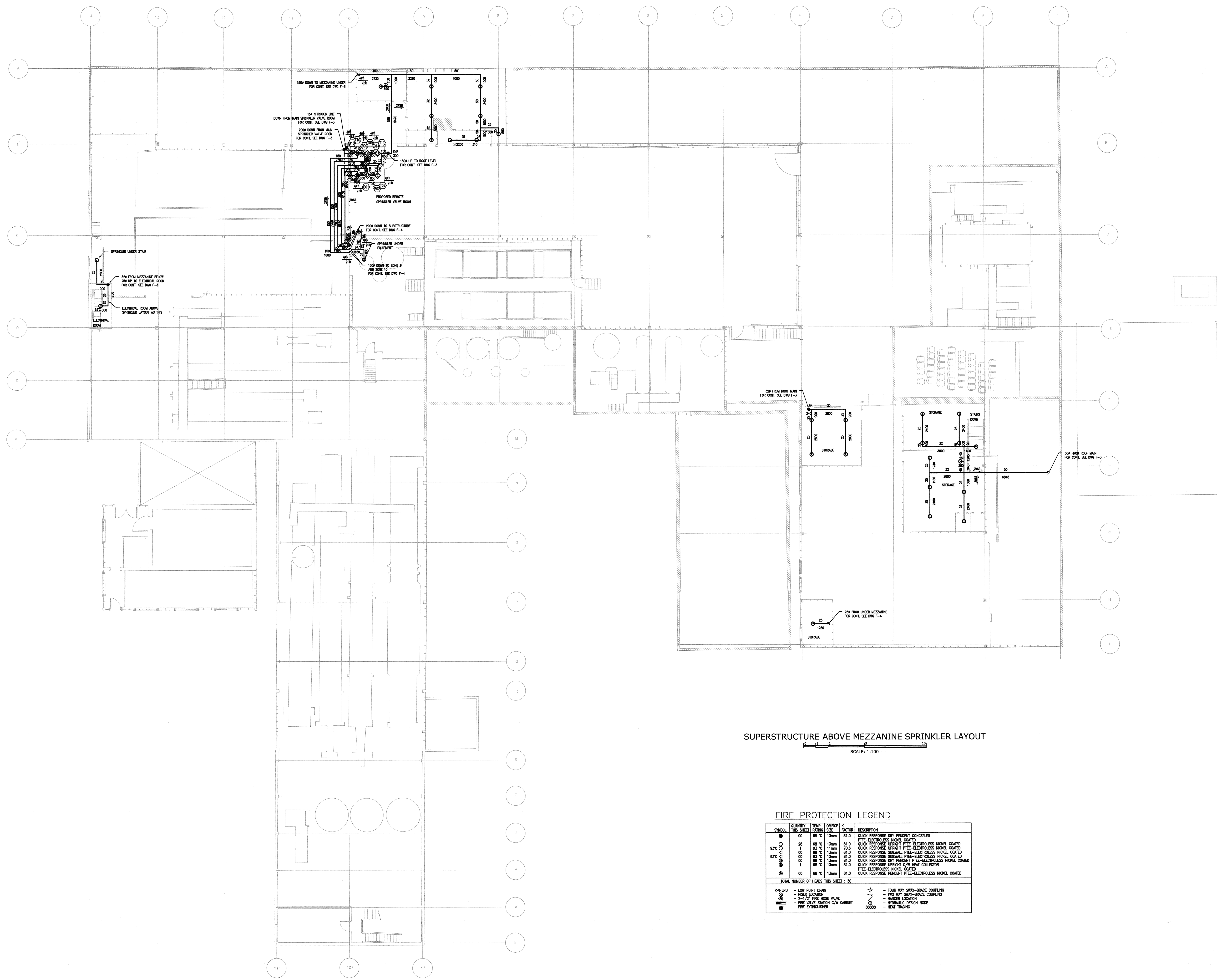
Drawn by/Dessiné par: **HL**

PWOSC Project Manager/Administrateur de Projets TPSCG: **TOM DUNPHY**

PWOSC, Regional Manager, Architectural and Engineering Services / Directeur Régional, Services Architecturaux et de génie, TPSCG: **Pratipati Paul**

Drawing title/Titre de dessin: **SUPERSTRUCTURE ABOVE MEZZANINE SPRINKLER LAYOUT**

Project No./No. du projet	Sheet/Feuille	Revision no./La Révision
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SUPERSTRUCTURE ABOVE MEZZANINE SPRINKLER LAYOUT
SCALE: 1:100

FIRE PROTECTION LEGEND

SYMBOL	QUANTITY THIS SHEET	TEMP. RATING	ORifice SIZE	K FACTOR	DESCRIPTION
●	00	68 °C	13mm	81.0	QUICK RESPONSE DRY PENDENT CONCEALED PTFE-ELECTROLESS NICKEL COATED
○	00	68 °C	13mm	81.0	QUICK RESPONSE UPRIGHT PTFE-ELECTROLESS NICKEL COATED
○	00	68 °C	13mm	81.0	QUICK RESPONSE SIDEWALL PTFE-ELECTROLESS NICKEL COATED
○	00	68 °C	13mm	81.0	QUICK RESPONSE UPRIGHT C/W HEAT COLLECTOR PTFE-ELECTROLESS NICKEL COATED
○	00	68 °C	13mm	81.0	QUICK RESPONSE PONDENT PTFE-ELECTROLESS NICKEL COATED

TOTAL NUMBER OF HEADS THIS SHEET : 30

○-○-UPD	- LOW POINT DRAIN	+	- FOUR WAY SWAY-BRACE COUPLING
○	- RISER LOCATION	+	- TWO WAY SWAY-BRACE COUPLING
○	- 2 1/2" FIRE HOSE VALVE	+	- HANGER LOCATION
○	- FIRE VALVE, STATOR C/W CABINET	+	- HYDRANT DESIGN NODE
○	- FIRE EXTINGUISHER	○	- HEAT TRACING

ELECTRICAL ADDENDUM NO. 1

PROJECT: Parks Canada. Fire Sprinkler Rehabilitation Gulf
Of Georgia Cannery

PREPARED BY: L.P. Gander & Associates Ltd.
106 - 3855 Henning Drive
Burnaby, B.C.
V5C 6N3

DATE: August 7, 2018

The following items shall be clarification, revisions and/or additions to the project documentation and shall become part of the contract.

DRAWINGS:

1. Reference Dwg E1 of 4
 - a. At NPV-1 in the icehouse add a second NPV unit and receptacle. Relabel NPV-1 as NPV-1A and the added NPV unit as NPV-1B. Wire both units into the NPV low voltage wiring network.
2. Reference Dwg E2 of 4
 - a. At the remote sprinkler valve room, valve # 1 will be replaced with two valves #1A and 1B. Connect added flow, tamper and pressure switches to fire alarm panel.
 - b. In the table with hexagon A1 add in the comments column a note indicating the pressure switches associated with the sprinkler valves are to be connected to the fire alarm panel.
3. Reference Dwg E3 of 4
 - a. In the listing of fire alarm zones for sprinklers, change the reference for valve 1 to valve 1A. Add three connections for valve 1B, those being flow tamper and low N2 pressure.
4. Electricity Costs.

The General Contractor shall be responsible for their electrical energy usage charges during construction. The cost payable by the contractor shall for the life of the contract, be the difference month by month between what the Cannery paid to BC Hydro in the same month of the previous year and the required current monthly payment.

End of Electrical Addendum #1