



**RETURN BIDS TO:**

**RETOURNER LES SOUMISSIONS À:**

Bid Receiving Public Works and Government  
Services Canada/Réception des soumissions Travaux  
publics et Services gouvernementaux Canada  
800 Burrard Street, Room 219  
800, rue Burrard, pièce 219  
Vancouver  
British Columbia  
V6Z 0B9  
Bid Fax: (604) 775-9381

**SOLICITATION AMENDMENT  
MODIFICATION DE L'INVITATION**

The referenced document is hereby revised; unless otherwise  
indicated, all other terms and conditions of the Solicitation  
remain the same.

Ce document est par la présente révisé; sauf indication contraire,  
les modalités de l'invitation demeurent les mêmes.

**Comments - Commentaires**

**Vendor/Firm Name and Address  
Raison sociale et adresse du  
fournisseur/de l'entrepreneur**

**Issuing Office - Bureau de distribution**  
Public Works and Government Services Canada - Pacific  
Region  
800 Burrard Street, Room 219  
800, rue Burrard, pièce 219  
Vancouver  
British C  
V6Z 0B9

<b>Title - Sujet</b> ATP Integration Facility	
<b>Solicitation No. - N° de l'invitation</b> EZ899-192962/A	<b>Amendment No. - N° modif.</b> 010
<b>Client Reference No. - N° de référence du client</b>	<b>Date</b> 2019-05-27
<b>GETS Reference No. - N° de référence de SEAG</b> PW-\$PWY-022-8592	
<b>File No. - N° de dossier</b> PWY-8-41284 (022)	<b>CCC No./N° CCC - FMS No./N° VME</b>
<b>Solicitation Closes - L'invitation prend fin</b> <b>at - à 02:00 PM</b> <b>on - le 2019-05-31</b>	
<b>F.O.B. - F.A.B.</b> <b>Plant-Usine:</b> <input type="checkbox"/> <b>Destination:</b> <input checked="" type="checkbox"/> <b>Other-Autre:</b> <input type="checkbox"/>	
<b>Address Enquiries to: - Adresser toutes questions à:</b> Lam (PWY), Tian	<b>Buyer Id - Id de l'acheteur</b> pwy022
<b>Telephone No. - N° de téléphone</b> (604) 363-7968 ( )	<b>FAX No. - N° de FAX</b> (604) 775-6633
<b>Destination - of Goods, Services, and Construction:</b> <b>Destination - des biens, services et construction:</b> NRC - Herzberg Astronomy & Astrophysics ATP Integration Facility - Victoria, BC	

**Instructions: See Herein**

**Instructions: Voir aux présentes**

<b>Delivery Required - Livraison exigée</b>	<b>Delivery Offered - Livraison proposée</b>
<b>Vendor/Firm Name and Address</b> <b>Raison sociale et adresse du fournisseur/de l'entrepreneur</b>	
<b>Telephone No. - N° de téléphone</b> <b>Facsimile No. - N° de télécopieur</b>	
<b>Name and title of person authorized to sign on behalf of Vendor/Firm</b> <b>(type or print)</b> <b>Nom et titre de la personne autorisée à signer au nom du fournisseur/ de l'entrepreneur (taper ou écrire en caractères d'imprimerie)</b>	
<b>Signature</b>	<b>Date</b>

Solicitation No. - N° de l'invitation  
EZ899-192962/A

Amd. No. - N° de la modif.  
010

Buyer ID - Id de l'acheteur  
pwy028

Client Ref. No. - N° de réf. du client

File No. - N° du dossier CCC No./N°

CCC - FMS No./N° VME

---

Les documents français seront disponibles sur demande.

The Solicitation Amendment 010 is raised to issue Addendum 007.

Please see Addendum 007 herein.

Les autres conditions ne changent pas.

THE FOLLOWING ADDENDUM SUPERCEDES INFORMATION CONTAINED IN DRAWINGS AND SPECIFICATIONS ISSUED FOR THE PROJECT TO THE EXTENT REFERENCED. THIS ADDENDUM FORMS PART OF THE TENDER DOCUMENTS AND IS SUBJECT TO ALL OF THE CONDITIONS SET OUT IN THE CONTRACT CONDITIONS.

**1. SPECIFICATION**

1. Add Section 32 31 13 Chain Link Fence (4pages).

**2. DRAWING**

1. Refer to attached drawing detail 3/A07 under steel package drawing SA-07 (1page).

**3. MECHANICAL ADDENDUM**

1. Refer mechanical addendum dated May 27, 2019 (3pages).

**4. QUESTIONS AND ANSWERS**

Q1. Please see below from my sprinkler sub. Can you ask the consultant team to provide the code report referenced? We need this for pricing. Also please confirm perimeter drain work is by mechanical and not civil.

**A1. There is no code report. The Service Building is an office occupancy (Group D) with subsidiary storage (Group F2). Sprinkler system to be designed according to NFPA 13. Perimeter drainage work is by mechanical, not civil.**

Q2. I can't seem to locate the specifications for the chain link fence compound. Other than the "1700mm high chain link fence, typical" on the drawing. The measurements are on the drawing too but no post sizes / weight, etc. I can submit based on typical commercial weight vs Schd40 weight but clarification would be preferred. Also, if there is bottom wire vs bottom rail. Please confirm only locations AHU#3 and inside Site Services building.

**A2. Refer chainlink fence specification in this addendum.**

Q3. Is there high voltage? 01 91 13 1.3.2 references HV.

**A3. There is no High Voltage in this project.**

Q4. Please confirm that there has to be a third party agent.

**A4. Commissioning Agent needs to be a third party agent.**

Q5. In sec 01 91 31 it reads to me that we only need to provide a mech Cx agent. Is Cx required for all aspects?

**A5. Commissioning Authority for all disciplines will be provided by Owner. Mechanical Commissioning Agent is to be included part of contract. Commissioning and verification of different aspects will be provided by individual Trades according to the individual specification requirement.**

Q6. I have the following question regarding Amendment #9. The answer for question #11 mentions that the site services building is to get a new footing. There is no mention of this work in the project documents, also there is no structural info regarding the existing footing for the building and the new footing that is to take its place. Please clarify that installing a new footing for the site services building is to be covered in this contract, and if so, please provide the following information:

- The structural drawings and the as-builts for the site services building
- Structural details for the new footing to be install

**A6. There is no new footing for the site services building.**

Q7. Addendum #9 indicates that new footings are required for the existing service building. Please confirm if this is correct. The question is if new perimeter drains are required. Please confirm if new perimeter drains are required.

**A7. Footing drain is deleted from the scope of contract. Refer to Mechanical Addendum as attached.**

END OF ADDENDUM NO. 7

1.0 GENERAL

1.1 DOCUMENTS

- .1 This section of the specification forms part of the Contract Documents and is to be read, interpreted and coordinated with all other parts.

1.2 SECTION INCLUDES

- .1 Furnish all labour, materials, equipment and service necessary for the complete installation of fencing as indicated on the drawings and as hereinafter specified.
- .2 The work of this section shall include the supply and installation of the following:
- .1 Wire wall steel fencing, posts and gates.
  - .2 Concrete footings for fencing line posts and terminal posts.

1.3 SUBMITTALS

- .1 Provide shop drawings of fencing a minimum of one week prior to installation to the Consultant for approval- Drawings shall show the general arrangement with proper details of all components necessary to complete installation.
- .2 Provide samples of proposed galvanized steel chain link fence components for approval prior to installation.
- .3 Provide data sheet and full color sample of PVC slat for selection.

1.4 PRODUCT DELIVERY, STORAGE AND HANDLING

- .1 Store packaged material in original containers with manufacturer's seals and labels intact.
- .2 Prevent damage to materials during handling and storage. Keep materials under cover and free from dampness.

2.0 PRODUCTS

2.1 MATERIALS

- .1 All pipe, tie wires, tension wires and bands, connectors, fittings, throw-bolts and hardware shall be hot-dipped galvanized.
- .2 Pipe: to CAN2-138.2 MBO, Table 1 Medium Duty. Schedule 40 (wall thicknesses as shown below), standard continuous weld, modulus of elasticity 30,000.

<u>Pipe Dia.</u>	<u>Sched. 40 Wall Thickness</u>
1-5/8"	0.140" (9/64")
1-7/8"	0.145" (19/128")
2-3/8"	0.154" (5/32")
2-7/8"	0.203" (13/64")
3-1/2"	0.226" (7/32")
4-1/2"	0.237" (15/64")

- .3 Tension Bar: 16 x 5mm (5/8" x 3/16"), length to match entire height of fencing.
- .4 Tie Wire: 3.55mm. (9 gauge) galvanized.
- .5 Bottom Tension Wire (where applicable) 4.88mm (6ga.) fixed to fencing by hog rings.
- .6 Woven fabric: to CAN2-138.1.M80. See 2.1.8. for gauge and mesh size. Top and bottom selvages to have knuckled finish. Wire diameters shall be as follows for the specified wire gauges:

**CHAIN LINK FENCE**

Specified Gauge            Min. Core Wire Diameter

6ga.:	3.60mm (0.142")
9ga.:	2.64mm (0.104")
11ga.:	1.98mm (0.078")

- .7 Concrete Footings: compressive strength 18 MPa at 28 days.
- .8 Table One: Component Size and Description for each Location. Note: pipe sizes shown are outside diameter.

Component                    Fences

Bottom Rail	41mm (1-5/8")
Mid Rail	41mm (1-5/8")
Top Rail	41mm (1-5/8")
Line Posts	60mm (2-3/8")
End Posts	89mm (3-1/2")
Gate Posts	89mm (3-1/2")
Mid Brace	41mm (1-5/8")
Chain Link	50 mm (2")
Fabric	9 ga galvanized mesh. Tie Wire, Hog Rings 300mm. (12") o.c. at all tension bands and frame members

- .9 Touch-up paint: Zinc rich organic ready-mixed coating to CGSB-1-GP-18M.
- .10 Gate Hardware: Bullet hinges and lock pad as per manufacturer's standard.
- .11 Fabric fastening mechanism in accordance with wire wall manufacturer's recommendation.
- .12 PVC Slat
  - .1 Approximately 25mm x 6mm thick lock-top slats, non-winged PVC. Slats slide in vertically between existing chain link diamonds.
  - .2 Include horizontal locking strip installed through a cut slot in each vertical slot and hold vertical slats firmly in place.

3.0 EXECUTION

3.1 POST SPACING

- .1 Maximum post spacing 2.1 metres on centre. Set end posts of straight runs and adjust on centre spacing of line posts equally between.

3.2 FOOTINGS

- .1 All footings shall be set relative to finished surfaces as detailed.
- .2 Minimum footing dimensions, except where detailed otherwise: footing depth 1200 mm, footing diameter 150mm larger than outside post diameter, post depth 75mm from bottom of footing.
- .3 All posts shall be installed in footings for each section of fence before welding in the rails for that section.

3.3 FENCE CONSTRUCTION

- .1 All fences shall be all welded construction. Weld all ends continuously to adjoining member. Grind all welds smooth.
  - .1 Cope all posts to accept top rail
  - .2 Cope all mid braces and bottom rails to fit posts
  - .3 Cut angle iron to fit backstop posts

**CHAIN LINK FENCE**

.2 Cope all Connections. NO crimping or flattening will be permitted. Any connection not meeting this specification will be rejected and replaced with specified construction at the contractors expense.

.3 Mid braces shall be installed at all end sections and all sections adjacent to gates and comers, for all fences. All fences 2.4m high or higher shall have horizontal mid rails installed continuous in all sections.

**3.4 TACK WELDING**

.1 Tack weld ALL 6 gauge galv. wire mesh in lieu of tie wires as described in item Table One above. Spacing for tack welds shall match specified tie wire spacing and as detailed.

**3.5 TENSION BANDS**

.1 Install tension bands where fabric terminates at all terminal, comer and gate posts.

**3.6 FINISH**

.1 Clean all welds and other breaks in the galvanized surface. Touch up with zinc rich paint. All link fence and posts to be galvanized finish.

**3.7 CLEANUP**

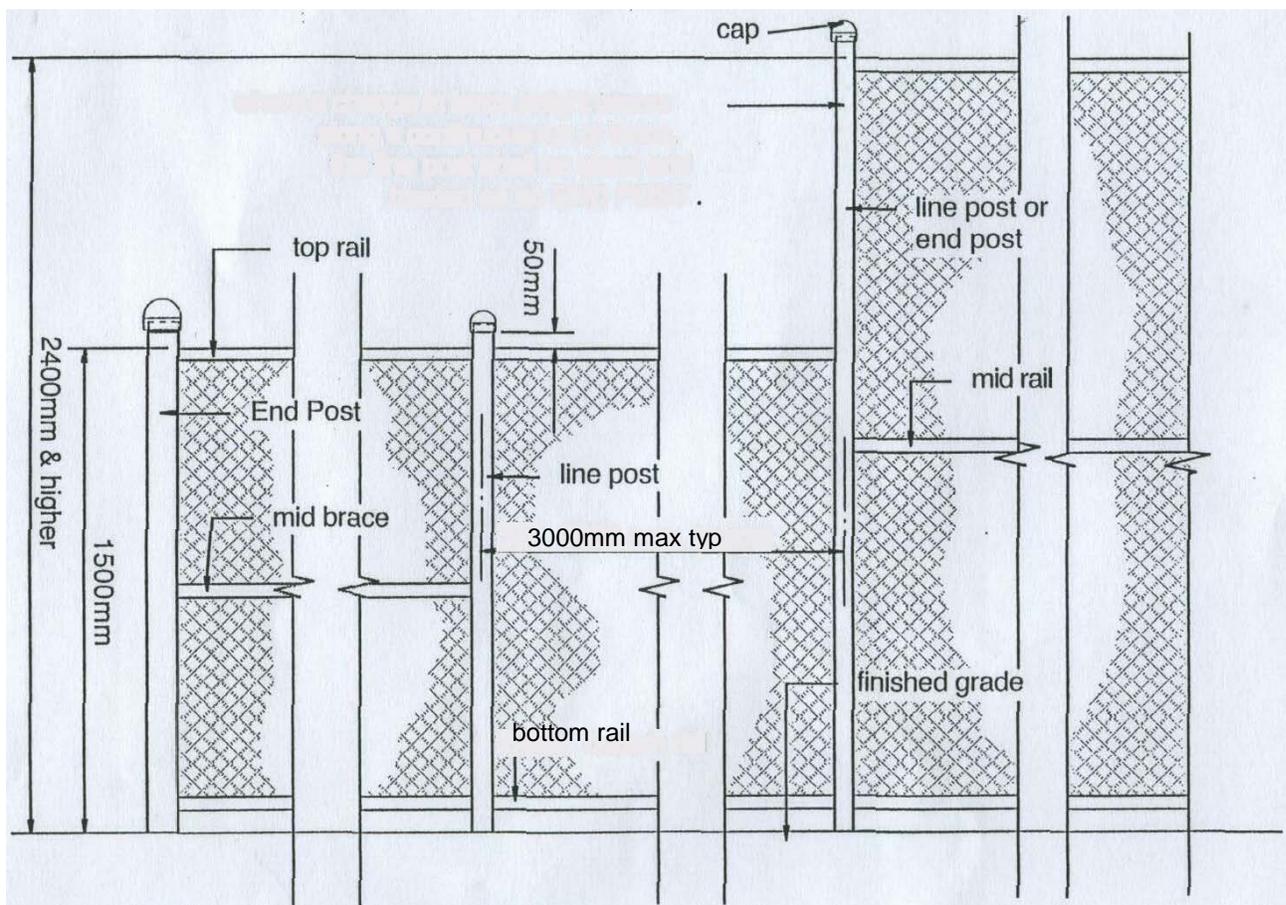
.1 Clean up all excess and waste material and remove from the site.

**CHAIN LINK FENCE**

**FENCE CONSTRUCTION**

Definition of Terms

- see tables in this section for sizes and gauges of components
- mid braces shall occur for a minimum one full panel, each side of a corner or bend
- where a change in fence height occurs along a continuous run of fence, the line post shall be sized and treated as an end post
- top rails, bottom rails and mid rails shall be continuous between line posts
- install a continuous mid rail on all fences equal to or greater than 2400mm high
- Post to be a maximum 2.1m spacing to suit maximum width of wire wall. Diagram below is only generic.



END OF SECTION 32 31 13



*The following addendum supersedes information contained in drawings and specifications issued for the project to the extent referenced. This Addendum forms part of the Tender Documents and is subject to all of the conditions set out in the contract conditions.*

---

**1. DRAWINGS – MECHANICAL**

**1.1 Drawing No.: SM07& WM07**

.1 Delete:

- .1 Delete 150mm Ø footing drain from site services building scope of work. See attached sketches for details

**END OF MECHANICAL ADDENDUM NO. 2**

NO. 1	NO. 2	NO. 3	NO. 4	NO. 5	NO. 6	NO. 7	NO. 8	NO. 9	NO. 10	NO. 11	NO. 12	NO. 13	NO. 14	NO. 15	NO. 16	NO. 17	NO. 18	NO. 19	NO. 20	NO. 21	NO. 22	NO. 23	NO. 24	NO. 25	NO. 26	NO. 27	NO. 28	NO. 29	NO. 30	NO. 31	NO. 32	NO. 33	NO. 34	NO. 35	NO. 36	NO. 37	NO. 38	NO. 39	NO. 40	NO. 41	NO. 42	NO. 43	NO. 44	NO. 45	NO. 46	NO. 47	NO. 48	NO. 49	NO. 50	NO. 51	NO. 52	NO. 53	NO. 54	NO. 55	NO. 56	NO. 57	NO. 58	NO. 59	NO. 60	NO. 61	NO. 62	NO. 63	NO. 64	NO. 65	NO. 66	NO. 67	NO. 68	NO. 69	NO. 70	NO. 71	NO. 72	NO. 73	NO. 74	NO. 75	NO. 76	NO. 77	NO. 78	NO. 79	NO. 80	NO. 81	NO. 82	NO. 83	NO. 84	NO. 85	NO. 86	NO. 87	NO. 88	NO. 89	NO. 90	NO. 91	NO. 92	NO. 93	NO. 94	NO. 95	NO. 96	NO. 97	NO. 98	NO. 99	NO. 100
-------	-------	-------	-------	-------	-------	-------	-------	-------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	---------

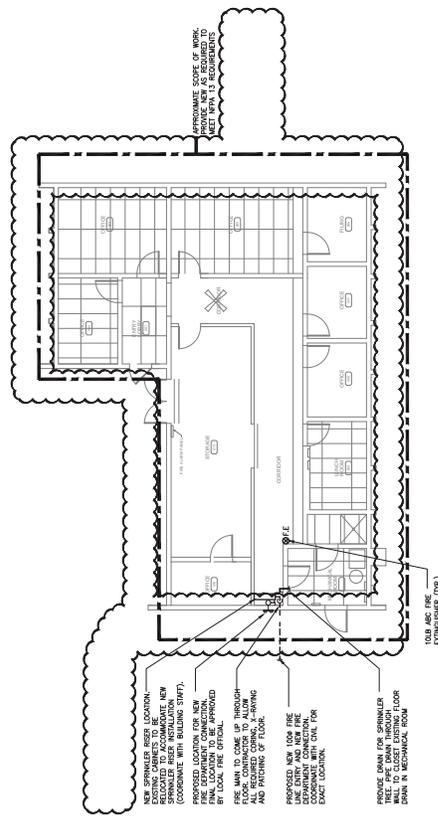
Project Title: **5071 WEST SAANICH ROAD  
 VICTORIA, BC, CANADA**  
**NRC HERZBERG  
 ASTRONOMY AND ASTROPHYSICS  
 ATP INTEGRATION FACILITY**

Contracted By/Owner: **A.O.**  
 Owner: **5071 West Saanich Road  
 Victoria, BC V8S 1G4**  
 Architect: **PATRICK TROING  
 2000 Douglas Street, Suite 200  
 Victoria, BC V8T 2M6**  
 Designer: **PHILIPPA PAUL  
 1000 Douglas Street, Suite 200  
 Victoria, BC V8T 2M6**

**SITE SERVICES BUILDING FIRE  
 PROTECTION PLAN**

Project No./No. de  
**R.0177596.001**  
 Sheet No./Feuille  
**SM07**  
 of 11  
**3**

- FIRE PROTECTION NOTES**
1. FIRE SUPPRESSION SYSTEM INFORMATION SHOWN ON THESE PLANS ARE FOR GENERAL SCOPE OF WORK. A DESIGN-BUILD CONTRACT AS OUTLINED ABOVE AND WORK TO BE IN ACCORDANCE WITH W99-113.
  2. THE DESIGN-BUILD CONTRACTOR SHALL RETURN ON BEHALF OF THE OWNER A REGISTERED PROFESSIONAL ENGINEER'S REPORT AND A REGISTERED PROFESSIONAL ENGINEER'S REPORT FOR THE COMPLETE DESIGN IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONTRACTOR'S ENGINEER SHALL BE THE "RESTRICTED SUPPRESSION SYSTEMS" (PART 5 OF THE LETTERS OF ASSURANCE).
  3. THE FIRE SUPPRESSION SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF THE FIRE SUPPRESSION SYSTEMS AS SPECIFIED IN THE DRAWINGS AND THE REQUIREMENTS OF THE REGISTERED PROFESSIONAL ENGINEER'S REPORT.
  4. SPRINKLER HEADS ARE TO BE COORDINATED WITH LIGHTING.
  5. ALL MANUFACTURERS' PROCESSING MATERIALS REQUIRED TO MEET NFPA STANDARDS, EXPOSED TO THE ELEMENTS OF WEATHER, SHALL BE AS SPECIFIED IN THE DRAWINGS AND THE REQUIREMENTS OF THE REGISTERED PROFESSIONAL ENGINEER'S REPORT.
  6. LOCATION OF FIRE EXTINGUISHERS TO BE INSTALLED SHALL BE AS SPECIFIED IN THE DRAWINGS AND THE REQUIREMENTS OF THE REGISTERED PROFESSIONAL ENGINEER'S REPORT.
  7. CONTRACTOR TO PROVIDE FIRE EXTINGUISHERS TO BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF THE REGISTERED PROFESSIONAL ENGINEER'S REPORT.
  8. SPRINKLER LINES TO BE INSTALLED EXPOSED IN SPRAWLER HEADS AND ABOVE 1-BAR IN T-BAR CEILING AREAS (Pendant Type Sprinkler Head).



**1 SITE SERVICES BUILDING FIRE PROTECTION PLAN**  
 SM07 1:300



4	INDEX FOR THUNDER	ENFRAN24
5	INDEX FOR THUNDER	ENFRAN27
6	INDEX FOR W/ CS R/C/TV	ENFRAN24
7	INDEX FOR W/ CS R/C/TV	ENFRAN27

Project Title: NRC HERZBERG  
 5071 WEST SAANICH ROAD  
 VICTORIA, BC, CANADA  
 NRC HERZBERG  
 ASTRONOMY AND ASTROPHYSICS  
 ATP INTEGRATION FACILITY

COMMERCIAL SIGNATURE ONLY  
 Approved By/Contrat par: A.O.  
 Date: 04/06/2014  
 N.Y.  
 PATRICK TROING  
 PHREEMAL PAUL

SITE SERVICES BUILDING FIRE  
 PROTECTION PLAN

Project No./No. de: R/077595.001  
 Sheet/Feuille: WM07  
 3 OF 11

- FIRE PROTECTION NOTES**
1. FIRE SUPPRESSION SYSTEM INFORMATION SHOWN ON THESE PLANS ARE FOR GENERAL SCOPE OF WORK. A DESIGN-BUILD CONTRACT AS OUTLINED ABOVE AND WORK TO BE IN ACCORDANCE WITH W91-13.
  2. THE DESIGN BUILD CONTRACTOR SHALL RETURN ON BEHALF OF THE OWNER A REGISTERED PROFESSIONAL ENGINEER'S SIGNATURE AND STAMP TO THE CONTRACTOR'S ENGINEER SHALL BE THE "RESTRICTED SUPPRESSION SYSTEMS" (PART 5 OF THE LETTERS OF ASSISTANCE).
  3. THE FIRE SUPPRESSION SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE SUPPRESSION SYSTEMS SPECIFIED IN THE DRAWINGS AND SHALL BE COORDINATED WITH THE SUPPLIER'S RECOMMENDATIONS AS ALTERNATE SOLUTIONS.
  4. SPRINKLER HEADS ARE TO BE COORDINATED WITH LIGHTING.
  5. ALL MANUFACTURER'S PARTS AND MATERIALS TO BE USED TO MEET NFPA STANDARDS, EXPOSED TO THE ELEMENTS OF WEATHER AS SPECIFIED IN THE DRAWINGS.
  6. LOCATION OF FIRE EXTINGUISHERS TO BE INSTALLED ON SITE WITH APPROPRIATE MARK TO INDICATE LOCATION.
  7. CONTRACTOR TO PROVIDE FIRE EXTINGUISHERS TO BE INSTALLED ON SITE WITH APPROPRIATE MARK TO INDICATE LOCATION.
  8. SPRINKLER LINES TO BE INSTALLED DROPPED IN SPRINKLER HEADS AND ABOVE 1-8" IN T-BAR CEILING ABOVE (Pendant Type SPRINKLER HEAD).



1 SITE SERVICES BUILDING FIRE PROTECTION PLAN  
 WM07 1:300

APPROXIMATE SCOPE OF WORK  
 (SEE THE W/ CS R/C/TV)

NEW SPRINKLER RISER LOCATION  
 (SEE THE W/ CS R/C/TV)

PROPOSED LOCATION FOR NEW  
 FIRE EXTINGUISHERS TO BE PROVIDED  
 BY LOCAL FIRE OFFICIAL

FIRE MAIN TO COME UP THROUGH  
 ALL REQUIRED CORING, DRIVING  
 AND FINISHING BY OTHER

PROPOSED NEW 100# FIRE  
 EXTINGUISHERS TO BE PROVIDED BY THE  
 DEPARTMENT OF FIRE SERVICES AT  
 EXACT LOCATION

REMOVE DOWN FOR SPRINKLER  
 WALL TO GROUND EXISTING FLOOR  
 OPEN IN RECEPTION AREA