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| 1.1 Codes | .1 | Perform work to CURRENT Codes, Construction Standards and Bylaws, including Amendments up to the TENDER closing date. |
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| 1.2 Description of Work | .1 | <p>Work under this Contract is located at:</p> <ul style="list-style-type: none"> .1 Stanley Glacier Bridge. The site is located km 65 on Hwy 93 Kootenay National Park, British Columbia. Km 0 is at the junction of Hwy 93 and the Trans Canada Highway. The bridge is located 0.1 km from the trailhead and highway. .2 Paint Pots Bridge. The site is located km 71 on Hwy 93 Kootenay National Park, British Columbia. Km 0 is at the junction of Hwy 93 and the Trans Canada Highway. The bridge is located 0.25 km from the trailhead and highway. |
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| | .2 | <p>Work performed under this Contract includes, but is not limited to, the following items covered further in the Contract documents:</p> <ul style="list-style-type: none"> .1 Stanley Glacier Bridge <ul style="list-style-type: none"> .1 Demolition and removal of timber guardrails, timber deck, 2 steel girders, east concrete abutment, and timber retaining walls on east and west approaches. .2 Excavation for abutments and rip-rap placement. .3 Installation of micro-piles for east abutment. .4 Construction of 2 concrete abutments. .5 Construction of bridge super-structure and stairs. .6 Placement of rip-rap. .2 Paint Pots Bridge <ul style="list-style-type: none"> .1 Removal of rip-rap at south abutment. .2 Excavation for abutments and rip-rap placement. .3 Installation of micro-piles for both abutments. .4 Construction of 2 concrete abutments. .5 Construction of bridge super-structure and stairs. .6 Placement of rip-rap. |
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| | .3 | <p>"Green" requirements:</p> <ul style="list-style-type: none"> .1 Use only environmentally responsible green materials/ products with no VOC emissions or minimum VOC emissions of indoor off-gassing contaminants for |
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- improved indoor air quality - subject of Departmental Representative's approval of submitted MSDS Product Data.
- .2 Use materials/products containing highest percentage of recycled and recovered materials practicable - consistent with maintaining cost effective satisfactory levels of competition.
 - .3 Adhere to waste reduction requirement for reuse or recycling of waste materials, thus diverting materials from landfill.
- 1.3 Contract Documents**
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- .1 The Contract documents, drawings and specifications are intended to complement each other, and to provide for and include everything necessary for the completion of the work.
 - .2 Drawings are, in general, diagrammatic and are intended to indicate the scope and general arrangement of the work.
- 1.4 Division of Specifications**
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- .1 The specifications are subdivided in accordance with the current 6-digit National Master Specifications System.
 - .2 A division may consist of the work of more than 1 subcontractor. Prime Contractor has Responsibility for determining which subcontractor provides the labour, material, equipment and services required to complete the work rests solely with the Contractor.
 - .3 In the event of discrepancies or conflicts when interpreting the drawings and specifications, the specifications govern.
- 1.5 Time of Completion**
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- .1 Work to be substantially complete by August 31, 2014.
- 1.6 Hours of Work**
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- .1 Restrictive as follows:
 - .1 Schedule deconstruction, removal and construction work after normal working hours and during the day on weekends and/or holidays. Normal weekday working hours are 0700 to 1700 hours.
 - .2 Notify Departmental Representative of all after hours work, including weekends and holidays.
- 1.7 Work Schedule**
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- .1 Carry on work as per indicated "PHASES" and as follows:
 - .1 Within 10 working days after Contract award, provide a "phasing bar chart" and a schedule showing anticipated progress stages and final completion of the work within the time period required by the Contract documents. Indicate the following:
 - .1 Submission of shop drawings, product data, MSDS sheets and samples.
 - .2 Commencement and completion of work of each

		section of the specifications or trade for each phase as outlined.
	.3	Final completion date within the time period required by the Contract documents.
	.2	Do not change approved Schedule - without notifying Departmental Representative.
	.3	Interim reviews of work progress based on work schedule will be conducted as decided by Departmental Representative and schedule updated by Contractor in conjunction with and to approval of Departmental Representative.
1.8	Cost Breakdown	.1 Before submitting the first progress claim, submit a breakdown of the Contract lump sum prices in detail as directed by the Departmental Representative and aggregating Contract price.
1.9	Codes, Bylaws, Standards	.1 Perform work in accordance with the Canadian Highway Bridge Design Code (CAN/CSA-S6-06), and other indicated Codes, Construction Standards and/or any other Code or Bylaw of local application.
		.2 Comply with applicable local bylaws, rules and regulations enforced at the location concerned.
		.3 Meet or exceed requirements of Contract documents, specified standards, codes and referenced documents.
		.4 In any case of conflict or discrepancy, the most stringent requirements shall apply.
1.10	Documents Required	.1 Maintain 1 copy each of the following at the job site:
		.1 Contract drawings.
		.2 Contract specifications.
		.3 Addenda to Contract documents.
		.4 Copy of approved work schedule.
		.5 Reviewed/approved shop drawings.
		.6 Change orders.
		.7 Other modifications to Contract.
		.8 Field test reports.
		.9 Reviewed/approved samples.
		.10 Manufacturers' installation and application instructions.
		.11 One set of record drawings and specifications for "as-built" purposes.
		.12 Current construction standards of workmanship listed in technical Sections.
		.13 Building Safety Plan and other related documents.

1.11 Regulatory Requirements	.1	Obtain and pay for - Building Permit, Certificates, Licenses and other permits required by regulatory municipal, provincial or federal authorities to complete the work.
	.2	Provide inspection authorities with plans and information required for issue of acceptance certificates.
	.3	Furnish inspection certificates in evidence that the work installed conforms with the requirements of the authority having jurisdiction.
1.12 Contractor's Use of Site	.1	Use of site: <div data-bbox="722 674 1476 905"> .1 Exclusive and complete for execution of work. .2 Assume responsibility for assigned premises for performance of this work. .3 Prime Contractor is responsible for coordination of all work activities on site. .4 Refer to Section 01 14 00 - Work Restrictions. </div>
	.2	Perform work in accordance with Contract documents. Ensure work is carried out in accordance with indicated phasing.
	.3	Do not unreasonably encumber site with material or equipment.
1.13 Examination	.1	Examine site and be familiar and conversant with existing conditions likely to affect work.
	.2	Provide photographs of surrounding properties, objects and structures liable to be damaged or be the subject of subsequent claims.
1.14 Setting Out of Work	.1	Assume full responsibility for and execute complete layout of work to locations, lines and elevations indicated.
	.2	Provide devices needed to lay out and construct work.
	.3	Supply such devices as templates required to facilitate Departmental Representative's inspection of work.
1.15 Acceptance of Substrates	.1	Each trade shall examine surfaces prepared by others and job conditions which may affect his work, and shall report defects to the Departmental Representative. Commencement of work shall imply acceptance of prepared work or substrate surfaces.
1.16 Quality of Work	.1	Ensure that quality workmanship is performed through use of skilled tradesmen, under supervision of qualified journeyman.
	.2	The workmanship, erection methods and procedures to meet minimum standards set out in the Canadian Highway Bridge Design Code (CAN/CSA-S6-06) and other indicated Construction Standards.
	.3	In cases of dispute, decisions as to standard or quality of work rest

solely with the Departmental Representative, whose decision is final.

**1.17 Works
Coordination**

- .1 Coordinate work of subtrades:
 - .1 Designate one person to be responsible for review of contract documents and shop drawings and managing coordination of Work.
- .2 Convene meetings between subcontractors whose work interfaces and ensure awareness of areas and extent of interface required.
 - .1 Provide each subcontractor with complete plans and specifications for Contract, to assist them in planning and carrying out their respective work.
 - .2 Develop coordination drawings when required, illustrating potential interference between work of various trades and distribute to affected parties.
 - .3 Facilitate meeting and review coordination drawings. Ensure subcontractors agree and sign off on drawings.
 - .4 Publish minutes of each meeting.
 - .5 Plan and coordinate work in such a way to minimize quantity of service line offsets.
 - .6 Submit copy of coordination drawings and meeting minutes to Departmental Representative for information purposes.
- .3 Submit shop drawings and order of prefabricated equipment or rebuilt components only after coordination meeting for such items has taken place.
- .4 Work cooperation:
 - .1 Ensure cooperation between trades in order to facilitate general progress of Work and avoid situations of spatial interference.
 - .2 Ensure that each trade provides all other trades reasonable opportunity for completion of Work and in such a way as to prevent unnecessary delays, cutting, patching and removal or replacement of completed work.
 - .3 Ensure disputes between subcontractors are resolved.
- .5 Departmental Representative is not responsible for, or accountable for extra costs incurred as a result of Contractor's failure to coordinate Work.
- .6 Maintain efficient and continuous supervision.

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| 1.18 Approval of Shop Drawings, Product Data and Samples | .1 | In accordance with Section 01 33 01, submit the requested shop drawings, product data, MSDS sheets and samples indicated in each of the technical Sections. |
| | .2 | Allow sufficient time for the following: <ul style="list-style-type: none"> .1 Review of product data. .2 Review of shop drawings. .3 Review of re-submission. .4 Ordering of approved material and/or products - refer to Sections of Divisions 2 to 32. |
| 1.19 Relics and Antiquities | .1 | Relics and antiquities and items of historical or scientific interest shall remain property of Department. Protect such articles and request directives from Departmental Representative. |
| | .2 | Give immediate notice to Departmental Representative if evidence of archeological finds are encountered during excavation/construction, and await Departmental Representative's written instructions before proceeding with work in this area. |
| 1.20 Security Clearances | .1 | Contractor shall be fully responsible for securing the premises and its contents throughout the construction period. |
| 1.21 Project Meetings | .1 | Departmental Representative will arrange project meetings and assume responsibility for setting times and recording and distributing minutes. |
| 1.22 Testing and Inspections | .1 | Particular requirements for inspection and testing to be carried out by testing service or laboratory approved by the Departmental Representative are specified in Sections 01 45 00 – Quality Control, 03 30 00.01 – Cast-in-Place Concrete, 05 12 00 – Structural Steel for Bridges, 31 00 00.01 – Earthwork, 316813 – Soil Anchors, and 32 15 40 – Crushed Stone Surfacing. |
| | .2 | Contractor is responsible for retaining and paying for the services of a professional Geotechnical Engineer registered in the province of British Columbia for the environmental mat use on Fire Road access, micro-pile design, foundation bearing, and review of trail subgrade conditions. |
| | .3 | The Contractor will appoint and pay for the services of testing agency or testing laboratory as specified, and where required for the following: <ul style="list-style-type: none"> .1 Inspection and testing required by laws, ordinances, rules, regulations or orders of public authorities. .2 Inspection and testing performed exclusively for Contractor's convenience. |
| | .4 | Where tests or inspections by designated testing laboratory reveal work is not in accordance with the Contract requirements, Contractor shall pay costs for additional tests or inspections as the Departmental |
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		Representative may require to verify acceptability of corrected work.
	.5	Contractor shall furnish labour and facilities to: <ul style="list-style-type: none"> .1 Notify Departmental Representative in advance of planned testing.
	.6	Where materials are specified to be tested, deliver representative samples in required quantity to testing laboratory.
	.7	Pay costs for uncovering and making good work that is covered before required inspection or testing is completed and approved by Departmental Representative.
	.8	The Departmental Representative may require, and pay for, additional inspection and testing services not included in Paragraph 1.22.1.
	.9	Provide Departmental Representative with 2 copies of testing laboratory reports as soon as they are available.
1.23 As-Built Documents	.1	The Departmental Representative will provide 2 sets of drawings, 2 sets of specifications, and 2 copies of the original AutoCAD files for "as-built" purposes.
	.2	As work progresses, maintain accurate records to show all deviations from the Contract documents. Note on as-built specifications, drawings and shop drawings as changes occur.
	.3	Refer to Section 01 78 30 – Closeout Submittals.
1.24 Cleaning	.1	Daily conduct cleaning and disposal operations. Comply with local ordinances and anti-pollution laws.
	.2	Ensure cleanup of the work areas each day after completion of work.
	.3	Clean areas when ready to receive finish painting and continue cleaning on an as-needed basis until work is sufficiently completed.
	.4	In preparation for interim and final inspections: <ul style="list-style-type: none"> .1 Examine all sight-exposed exterior surfaced and concealed spaces. .2 Remove grease, dust, dirt, stains, labels, fingerprints, and other foreign materials from sight-exposed exterior finished surfaces.
	.5	Use cleaning materials and methods in accordance with instructions of the manufacturer of the surface to be cleaned.
1.25 Dust Control	.1	Provide temporary dust tight screens or partitions to localize dust generating activities, and for protection of workers, finished areas of work and public.

1.26 Environmental Protection	.1	Prevent extraneous materials from contaminating environment beyond construction area, by providing temporary enclosures during work.
	.2	Do not dispose of waste or volatile materials into water courses, storm or sanitary sewers.
	.3	Ensure proper disposal procedures in accordance with all applicable territorial regulations
1.27 Maintenance Materials, Special Tools and Spare Parts	.1	Specific requirements for maintenance materials, tools and spare parts are specified in individual technical sections of Divisions 02 to 32.
1.28 Additional Drawings	.1	The Departmental Representative may furnish additional drawings for clarification. These additional drawings have the same meaning and intent as if they were included with plans referred to in the Contract documents.
	.2	Upon request, Departmental Representative may furnish up to a maximum of 10 sets of Contract documents for use by the Contractor at no additional cost. Should more than 10 sets of documents be required the Departmental Representative will provide them at additional cost.
1.29 System of Measurement	.1	The metric system of measurement (SI) will be employed on this Contract.
1.30 Familiarization with Site	.1	Before submitting tender, visit site - as indicated in tender documents and become familiar with all conditions likely to affect the cost of the work.
1.31 Submission of Tender	.1	Submission of a tender is deemed to be confirmation of the fact that the Tenderer has analyzed the Contract documents and inspected the site, and is fully conversant with all conditions.

END OF SECTION

Part 1 General

1.1 Related Requirements	.1	Section 01 56 00 - Temporary Barriers and Enclosures.
	.2	Section 01 35 43 – Environmental Procedures.
1.2 Access And Egress	.1	Design, construct and maintain temporary "access to" and "egress from" work areas, including stairs, runways, ramps or ladders and scaffolding, independent of finished surfaces and in accordance with relevant municipal, provincial and other regulations.
1.3 Use Of Site And Facilities	.1	Execute work with least possible interference or disturbance to normal use of premises. Make arrangements with Departmental Representative to facilitate work as stated.
1.4 Existing Services	.1	Notify Departmental Representative and utility companies of intended interruption of services and obtain required permission.
	.2	Confirm underground or overhead utilities present at the project site.
	.3	Construct barriers in accordance with Section 01 56 00 - Temporary Barriers and Enclosures.
1.5 Special Requirements	.1	Submit schedule in accordance with Section 01 32 16.07 - Construction Progress Schedule - Bar (GANTT) Chart.
	.2	Ensure Contractor's personnel employed on site become familiar with and obey regulations including safety, fire, traffic and security regulations.
	.3	Contractor to keep site free of garbage and dispose of garbage in bear proof containers or remove daily.
	.4	Keep within limits of work and avenues of ingress and egress.
	.5	Contractor shall not damage surrounding vegetation.
	.6	Maximum width of construction equipment shall not exceed 1500 mm wide on main trails and 1200mm on handicap trails to prevent damage to surrounding vegetation.
	.1	At Stanley Glacier site, with prior approval from Departmental representative, equipment wider than 1500mm is permitted on a limited basis. Contractor may temporarily widen trail to permit temporary access.

- .2 At Paint Pots site Contractor is not permitted to widen trails. Handrail located at trailhead can be removed and reinstated if required.
- .3 At Paint Pots site Contractor access is permitted on Fire Road. Contractor must use environmental mats to protect existing road surface as recommended by Contractor's Geotechnical Engineer and in consultation with Departmental Representative.
- .7 Trail and surrounding area shall be restored to as is or better condition and any damage must be restored at the Contractor's cost and to the satisfaction of the Departmental Representative.
- .8 Work shall adhere to the Fisheries and Oceans Canada's timing window of June 1 to August 30.
- .9 Stream Crossing Restrictions:
 - .1 Single stream return crossing per equipment may occur between May 15 and August 30.
 - .2 No in-stream work/activities will be permitted. Only single stream return crossing per equipment will be permitted.
 - .3 At Stanley Glacier site, Contractor to provide bank protection on east bank for equipment fording.
 - .4 At Stanley Glacier site, Contractor is not permitted to ford or access creek downstream of bridge on the east bank.
 - .5 At Paint Pots site, Contractor to provide bank protection on north bank for equipment fording.
 - .6 Provide a work plan for transporting personnel, equipment, and material across the river.
 - .7 Stream crossing to meet the requirements of Fisheries and Oceans Canada document – Temporary Ford Stream Crossing.
- .10 The contractor shall provide containment for all construction operations to prevent deleterious material from entering the creek channel.
- .11 Submit construction procedures, to confirm compliance with clauses 1.5.3 to 1.5.9, to the Departmental Representative for review and approval, 2 weeks prior to intended construction start date.
- .12 The contractor shall also submit an Erosion and Sediment Control Plan for review and approval, 2 weeks prior to intended construction start date.
- .13 Submit environmental protection plan as per Section 01 35 43 Environmental Procedures for review and approval, 2 weeks prior to intended construction start date.
- .14 Work not to commence without approval of Erosion and Sediment Control Plan and Environmental Protection Plan.

- .15 Contractor and Subcontractor(s) shall obtain a business license to work in **each** National Parks from applicable Parks Canada administration office, prior to commencement of contract.
- Business licenses can be purchased for \$100 from:
- Banff National Park
Development Office
Lake Louise Visitor Centre
Lake Louise, AB
(403) 522-1204 or
(403) 522-1207
- .16 All Contractor's and Subcontractor's business vehicles are required to obtain a vehicle pass from Parks Canada Administration Office and is available at no cost.
- .17 Limited cellular phone reception is available on site. Contractor to arrange for alternate means of contacting emergency services.
- .18 Refer to the Basic Environmental Impact Analysis report in Appendix A for additional work restrictions and the Environmental Effects and Mitigation Measures tables in Appendix B for mitigation measures.

Part 2 Products

2.1 Not Used	.1 Not Used.
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Part 3 Execution

3.1 Not Used	.1 Not Used.
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END OF SECTION

<u>1. Section Includes</u>	.1	The Work for this Project will be paid based on the actual quantities measured on Site and the unit prices stated in the Bid and Acceptance Form.
<u>2. Related Sections</u>	.1	Section 01 11 55 - General Instructions
	.2	Section 01 78 30 – Closeout Submittals
	.3	Section 02 41 16 – Structure Demolition
	.4	Section 03 10 00 - Concrete Forming and Accessories
	.5	Section 03 20 00 - Concrete Reinforcing
	.6	Section 03 30 00.1 - Cast-in-place Concrete
	.7	Section 05 12 00 – Structural Steel for Bridges
	.8	Section 06 10 00 – Rough Carpentry
	.9	Section 06 05 73 – Wood Treatment
	.11	Section 31 00 00.01 - Earthwork – Short Form
	.12	Section 31 37 00 – Rip-rap
	.13	Section 31 68 13 – Soil Anchors
	.14	Section 32 15 40 – Crushed Stone Surfacing
	.15	Section 01 78 30 Closeout Submittals
<u>3. Measurement, General</u>	.1	Methods of measurement and computation to determine quantities of materials furnished and Work performed under the Contract will be as described herein unless otherwise specified in the relevant individual sections.
	.1	When a complete structure or structural unit or piece of equipment is specified as the unit of measurement, the unit shall include all necessary fittings and accessories.
	.2	No measurement will be made for:
	.1	Work performed or materials placed outside of the lines indicated on the Drawings or established by the Departmental Representative.
	.2	Materials wasted, used, or disposed of in a manner not called for under the Contract.
	.3	Materials rejected after installation that are found not to conform to the provisions of the Contract.
	.4	Hauling and disposing of rejected materials.

.5 Materials remaining on hand after completion of the Work.

4. Payment, General .1

Payment for unit price Work acceptably completed under the Contract will be made in accordance with the provisions of the Contract.

.2 Payment for Lump Sum Work acceptably completed under the Contract will be made in accordance with the provisions of the Contract.

.3 Any Work called for in the Specifications or indicated on the Drawings, or which is necessary for the completion of the Work, and which is not specifically listed as a separate item in the Contract, shall be deemed incidental to the Work and no separate payment will be made for such Work.

5. Length, Area, and Volume Measurements .1

Unless otherwise specified, length measurements will be made per lineal meter, area and volume measurements will be made horizontally and/or vertically. Volume measurements to be supported by a volumetric survey where specified in payment item description. Measurements will be to the neat lines indicated on the Drawings or as altered by the Departmental Representative to suit field conditions or in accordance with approved Change Orders.

6. Unit Tables

.1 Stanley Glacier Bridge:

PRICE TABLE					
Item	Description of Work	Estimated Quantity	Unit	Unit Price	Estimated Total Price
1	Mobilization & Demobilization	1	L.S.		
2	Existing Bridge Demolition	1	L.S.		
3	Bridge Complete With Guardrail and Stair Assemblies	1	L.S.		
4	Bridge Abutments (East and West)	1	L.S.		
5	Micro Piles	32	L.M.		
6	Rip Rap Placement (new)	70	m ²		
7	Trail re-Alignment (1.5m width)	12	L.M.		
8	Stair Approach Grading	1	L.S.		

PRICE TABLE					
Item	Description of Work	Estimated Quantity	Unit	Unit Price	Estimated Total Price
9	Trail Decommissioning and Re-Vegetation	1	L.S.		
Total Estimated Price (Exclusive of GST)					
Goods and Service Sales Tax (GST)					
Total Estimated Price (Including GST)					

.2 Paint Pots Bridge:

PRICE TABLE					
Item	Description of Work	Estimated Quantity	Unit	Unit Price	Estimated Total Price
10	Mobilization & Demobilization	1	L.S.		
11	Old Fire Road Access Protection	329	L.M.		
12	Bridge complete with Guardrails and Stair Assemblies	1	L.S.		
13	Bridge Abutments (North & South)	1	L.S.		
14	Micro Piles	170	L.M.		
15	Rip-Rap Removal (existing)	90	m ³		
16	Rip Rap Placement (new)	180	m ²		
17	Stair approach grading	1	L.S.		
18	Vegetated Geogrid	1	L.S.		
Total Estimated Price (Exclusive of GST)					
Goods and Service Sales Tax (GST)					
Total Estimated Price (Including GST)					

7. Unit Table Notes .1

All lump sum and unit rates are assumed to include all costs of the work including compliance with all applicable regulations, for all aspects of

- the work including personnel safety, traffic control, Contractor quality control, and all environmental protection controls.
- .2 Standby time is not associated with testing or inspection carried out by Departmental Representative and/or attending project meetings. Standby time is also not associated with any and all time required for Departmental Representative to review and approve requests for change orders. All standby time must be preauthorized by the Departmental Representative and must be beyond the control of the Contractor (ie. Extreme weather, significant changes to project requested by Departmental Representative, etc.).
- .4 Except for Lump Sum prices, all unit price quantities shown above are estimated only. All payments will be made on the basis of actual quantities.
- .5 The intent of the unit table and clause 8 “Description of Items in Unit Table” is to clarify the main components included in each item for payment and not to provide a comprehensive list of all Work required to complete the item in accordance with the Drawings and Specifications.

8. **Description of Items
in Unit Table**

- .1 **Stanley Glacier Item 1- Mobilization & Demobilization:**
This item shall include mobilizing all equipment and provision of all construction facilities and controls required for the work. Item shall include demobilizing and removal of all construction equipment, facilities and cleaning up the site of all Contractors’ debris to the satisfaction of the Departmental Representative. Payment shall be lump sum.
- .2 **Stanley Glacier Item 2 - Existing Bridge Demolition:**
This item shall include removal and disposal outside of park boundary of existing bridge abutment structures, bridge and appurtenances necessary for the installation of the new bridge. Payment shall be lump sum.
- .3 **Stanley Glacier Item 3 - Bridge complete with Guardrails and Stair Assemblies & Timber Decking:**
This item shall include the supply, installation, finishing, and completion of the bridge, guardrails, stair assemblies and timber decking. Full compensation for furnishing all labour, materials, tools, equipment, and incidentals involved in this item of work shall be considered as included under this payment item. Payment shall be lump sum.

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- .4 **Stanley Glacier Item - 4 Bridge Abutments (East and West):**
This item shall include the supply, installation, finishing, and completion of all reinforced concrete required for the bridge abutments as per the details shown on the Drawings. Full compensation for furnishing all labour, materials, tools, equipment, testing and incidentals involved in this item of work shall be considered as included under this payment item. Payment shall be lump sum.
- .5 **Stanley Glacier Item 5 - Micro Piles:**
This item shall include all necessary work for installation of micro piles. Item includes excavation to design elevations and disposal of material outside of park boundary. Full compensation for furnishing all design and field review, labour, materials, tools, equipment, testing, certification and incidentals involved in this item of work shall be considered as included under this payment item. Payment shall be made per lineal meter (L.M.) of pile installed.
- .6 **Stanley Glacier Item 6 - Rip-Rap Placement (new):**
This item shall include excavation, removal and disposal outside Park Boundaries of all existing material necessary for installation of rip-rap to depth shown on drawings. Item includes installation of rip-rap to extent and depth shown on drawings. Payment shall be made per square meter (m²) of materials placed. Volume for payment shall be estimated from survey done by contractor's survey. Contractor to submit sketch and calculations to Departmental Representative as soon as available or at following Project Meeting
- .7 **Stanley Glacier Item 7 - Trail re-Alignment (1.5m width):**
This item shall include all necessary work for re-alignment of pedestrian trail as per the details shown on the Drawings. Full compensation for furnishing all labour, materials, tools, equipment, and incidentals involved in this item of work shall be considered as included under this payment item. Payment shall be per lineal meter (L.M.) with design width of 1.5m.
- .8 **Stanley Glacier Item 8 - Stair Approach Grading:**
This item shall include all necessary work for grading of pedestrian trail approach to bridge as per the details shown on the Drawings. Full compensation for furnishing all labour, materials, tools, equipment, and incidentals involved in this item of work shall be considered as included under this payment item. Payment shall be Lump Sum (L.S.).

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- .9 **Stanley Glacier Item 9 - Trail Decommissioning and Re-Vegetation:**
This item shall include all necessary work for decommissioning and re-vegetation of existing trail. Area to be confirmed with Departmental Representative on-site prior to work commencing. Full compensation for furnishing all labour, materials, tools, equipment, and incidentals involved in this item of work shall be considered as included under this payment item. Payment shall be Lump Sum (L.S.).
- .10 **Paint Pot – Item 10 - Mobilization & Demobilization:**
This item shall include mobilizing all equipment and provision of all construction facilities and controls required for the work. Item shall include demobilizing and removal of all construction equipment, facilities and cleaning up the site of all Contractors' debris to the satisfaction of the Departmental Representative. Payment shall be lump sum.
- .11 **Paint Pot Item 11 - Old Fire Road Access Protection:**
This item shall include supply, installation and removal of Environmental mats on the Old Fire Access Road. Full compensation for furnishing all labour, materials, tools, equipment, and incidentals involved in this item of work shall be considered as included under this payment item. Payment shall be per Lineal Meter (L.S.) per week.
- .12 **Paint Pot Item 12 - Bridge complete with Guardrails and Stair Assemblies:**
This item shall include the supply, installation, finishing, and completion of the bridge, guardrails and stair assemblies. Full compensation for furnishing all labour, materials, tools, equipment, and incidentals involved in this item of work shall be considered as included under this payment item. Payment shall be lump sum.
- . 13 **Paint Pot Item 13 - Bridge Abutments (North and South):**
This item shall include the supply, installation, finishing, and completion of all reinforced concrete required for the bridge abutments as per the details shown on the Drawings. Full compensation for furnishing all labour, materials, tools, equipment, testing and incidentals involved in this item of work shall be considered as included under this payment item. Payment shall be lump sum.
- . 14 **Paint Pot Item 14 Micro Piles:**
This item shall include all necessary work for installation of micro piles. Item includes excavation to design elevations and disposal of material outside of park boundary. Full compensation for furnishing all design and field review, labour, materials, tools, equipment, testing, certification and incidentals involved in this item of work shall be considered as

included under this payment item. Payment shall be made per lineal meter (L.M.) of pile installed.

. 15 Paint Pot Item 15 - Rip-Rap Removal (existing):

This item shall include all necessary work for the removal & disposal outside of Park boundary of rip-rap upstream and downstream of existing abutments to the extent shown on the drawings. Full compensation for furnishing all labour, materials, tools, equipment, and incidentals involved in this item of work shall be considered as included under this payment item. Volume for payment shall be estimated from volumetric survey done by contractor's survey. Contractor to submit volumetric sketch and calculations to Departmental Representative as soon as available or at following Project Meeting. Payment shall be made per cubic meter (m³) of removed rip-rap.

.16 Paint Pot Item 16 - Rip-Rap Placement (new):

This item shall include excavation, removal and disposal outside Park Boundaries of all existing material necessary for installation of rip-rap to depth shown on drawings. Item includes installation of rip-rap to extent and depth shown on drawings. Payment shall be made per square meter (m²) of materials placed. Volume for payment shall be estimated from survey done by contractor's survey. Contractor to submit sketch and calculations to Departmental Representative as soon as available or at following Project Meeting.

.17 Paint Pot Item 17 - Stair Approach Grading:

This item shall include all necessary work for grading of pedestrian trail approach to bridge as per the details shown on the Drawings. Full compensation for furnishing all labour, materials, tools, equipment, and incidentals involved in this item of work shall be considered as included under this payment item. Payment shall be Lump Sum (L.S.)

.18 Paint Pot Item 18 – Vegetated Geogrid

This item shall include excavation, removal and disposal outside Park Boundaries of all existing material necessary for installation of vegetated geogrid to depth shown on drawings. Item includes installation of vegetated geogrid to extent and depth shown on drawings. Payment shall be made per square meter (m²) of materials placed. Volume for payment shall be estimated from survey done by contractor's survey. Contractor to submit sketch and calculations to Departmental Representative as soon as available or at following Project Meeting.

END OF SECTION

Part 1 General

**1.1 Related
Requirements**

- .1 Section 01 78 30 – Closeout Submittals.
- .2 Section 01 32 16.07 – Construction Progress Schedule – Bar (GANTT) Chart.
- .3 Section 01 33 01 – Shop Drawings, Product Data, and Samples.
- .4 Section 01 51 00 – Temporary Facilities.
- .5 Section 01 56 00 – Temporary Barriers and Enclosures.

1.2 Administrative

- .1 Schedule and administer project meetings throughout the progress of the work at the call of Departmental Representative.
- .2 Prepare agenda for meetings.
- .3 Distribute written notice of each meeting four days in advance of meeting date to Departmental Representative.
- .4 Provide physical space and make arrangements for meetings.
- .5 Preside at meetings.
- .6 Representative of Contractor, Subcontractor and suppliers attending meetings will be qualified and authorized to act on behalf of party each represents.

**1.3 Preconstruction
Meeting**

- .1 Within 15 days after award of Contract, request a meeting of parties in contract to discuss and resolve administrative procedures and responsibilities.
- .2 Departmental Representative, Contractor, major Subcontractors, field inspectors and supervisors will be in attendance.
- .3 Establish time and location of meeting and notify parties concerned minimum 5 days before meeting.
- .4 Incorporate mutually agreed variations to Contract Documents into Agreement, prior to signing.
- .5 Agenda to include:
 - .1 Appointment of official representative of participants in the Work.
 - .2 Schedule of Work: in accordance with Section 01 32 16.07 - Construction Progress Schedules - Bar (GANTT) Chart.
 - .3 Schedule of submission of shop drawings, samples, colour

- chips. Submit submittals in accordance with Section 01 33 01 – Shop Drawings, Product Data, and Samples.
- .4 Requirements for temporary facilities, site sign, offices, storage sheds, utilities, fences in accordance with Section 01 51 00 - Temporary Facilities.
- .5 Delivery schedule of specified products.
- .6 Site security in accordance with Section 01 56 00 - Temporary Barriers and Enclosures.
- .7 Proposed changes, change orders, procedures, approvals required, mark-up percentages permitted, time extensions, overtime, administrative requirements.
- .8 Owner provided products.
- .9 Record drawings in accordance with Section 01 33 01 –Shop Drawings, Product Data, and Samples.
- .10 Maintenance manuals in accordance with Section 01 78 30 - Closeout Submittals.
- .11 Take-over procedures, acceptance, warranties in accordance with Section 01 78 30 - Closeout Submittals.
- .12 Monthly progress claims, administrative procedures, photographs, hold backs.
- .13 Appointment of inspection and testing agencies or firms.
- .14 Insurances, transcript of policies.

1.4 Progress Meetings

- .1 During course of Work, schedule progress meetings monthly.
- .2 Contractor, major Subcontractors involved in Work Departmental Representative are to be in attendance.
- .3 Notify parties minimum 5 days prior to meetings.
- .4 Agenda to include the following:
 - .1 Review, approval of minutes of previous meeting.
 - .2 Review of Work progress since previous meeting.
 - .3 Field observations, problems, conflicts.
 - .4 Problems which impede construction schedule.
 - .5 Review of off-site fabrication delivery schedules.
 - .6 Corrective measures and procedures to regain projected schedule.
 - .7 Revision to construction schedule.
 - .8 Progress schedule, during succeeding work period.
 - .9 Review submittal schedules: expedite as required.

- .10 Maintenance of quality standards.
- .11 Review proposed changes for affect on construction schedule and on completion date.
- .12 Other business.

Part 2 Products

2.1 Not Used .1 Not Used.

Part 3 Execution

3.1 Not Used .1 Not Used.

END OF SECTION

Part 1 General**1.1 Definitions**

- .1 Activity: element of Work performed during course of Project. Activity normally has expected duration, and expected cost and expected resource requirements. Activities can be subdivided into tasks.
- .2 Bar Chart (GANTT Chart): graphic display of schedule-related information. In typical bar chart, activities or other Project elements are listed down left side of chart, dates are shown across top, and activity durations are shown as date-placed horizontal bars. Generally Bar Chart should be derived from commercially available computerized project management system.
- .3 Baseline: original approved plan (for project, work package, or activity), plus or minus approved scope changes.
- .4 Construction Work Week: Monday to Friday, inclusive, will provide five day work week and define schedule calendar working days as part of Bar (GANTT) Chart submission.
- .5 Duration: number of work periods (not including holidays or other nonworking periods) required to complete activity or other project element. Usually expressed as workdays or workweeks.
- .6 Master Plan: summary-level schedule that identifies major activities and key milestones.
- .7 Milestone: significant event in project, usually completion of major deliverable.
- .8 Project Schedule: planned dates for performing activities and the planned dates for meeting milestones. Dynamic, detailed record of tasks or activities that must be accomplished to satisfy Project objectives. Monitoring and control process involves using Project Schedule in executing and controlling activities and is used as basis for decision making throughout project life cycle.
- .9 Project Planning, Monitoring and Control System: overall system operated by Departmental Representative to enable monitoring of project work in relation to established milestones.

1.2 Requirements	<ul style="list-style-type: none"> .1 Ensure Master Plan and Detail Schedules are practical and remain within specified Contract duration. .2 Plan to complete Work in accordance with prescribed milestones and time frame. .3 Limit activity durations to maximum of approximately 10 working days, to allow for progress reporting. .4 Ensure that it is understood that Award of Contract or time of beginning, rate of progress, Interim Certificate and Final Certificate as defined times of completion are of essence of this contract.
1.3 Action And Informational Submittals	<ul style="list-style-type: none"> .1 Provide submittals in accordance with Section 01 33 01 - Submittal Procedures. .2 Submit to Departmental Representative within 10 working days of Award of Contract Bar (GANTT) Chart as Master Plan for planning, monitoring and reporting of project progress. .3 Submit Project Schedule to Departmental Representative within 5 working days of receipt of acceptance of Master Plan.
1.4 Master Plan	<ul style="list-style-type: none"> .1 Structure schedule to allow orderly planning, organizing and execution of Work as Bar Chart (GANTT). .2 Departmental Representative will review and return revised schedules within 5 working days. .3 Revise impractical schedule and resubmit within 5 working days. .4 Accepted revised schedule will become Master Plan and be used as baseline for updates.
1.5 Project Schedule	<ul style="list-style-type: none"> .1 Develop detailed Project Schedule derived from Master Plan. .2 Ensure detailed Project Schedule for each site includes as minimum milestone and activity types as follows: <ul style="list-style-type: none"> .1 Award. .2 Shop Drawings, Samples. .3 Permits. .4 Mobilization. .5 Demolition. .6 Excavation. .7 Backfill. .8 Foundations. .9 Structural Steel.

		.10	Timber Decking and Stair Assembly.
		.11	Completion Date.
		.12	Close-out Submittals.
1.6	Project Schedule Reporting	.1	Update Project Schedule on weekly basis reflecting activity changes and completions, as well as activities in progress.
		.2	Include as part of Project Schedule, narrative report identifying Work status to date, comparing current progress to baseline, presenting current forecasts, defining problem areas, anticipated delays and impact with possible mitigation.
1.7	Project Meetings	.1	Discuss Project Schedule at regular site meetings, identify activities that are behind schedule and provide measures to regain slippage. Activities considered behind schedule are those with projected start or completion dates later than current approved dates shown on baseline schedule.
		.2	Weather related delays with their remedial measures will be discussed and negotiated.
Part 2	Products		
2.1	Not Used	.1	Not used.
Part 3	Execution		
3.1	Not Used	.1	Not used.

END OF SECTION

1. Administrative

- .1 Submit to Departmental Representative submittals listed for review. Submit promptly and in orderly sequence to not cause delay in Work. Failure to submit in ample time is not considered sufficient reason for extension of Contract Time and no claim for extension by reason of such default will be allowed.
- .2 Do not proceed with Work affected by submittal until review is complete.
- .3 Present information in SI Metric units.
- .4 Where items or information are not produced in SI Metric units, converted values are acceptable.
- .5 Review submittals prior to submission to Departmental Representative. This review represents that necessary requirements have been determined and verified, or will be, and that each submittal has been checked and co-ordinated with requirements of Work and Contract Documents. Submittals not stamped, signed, dated and identified as to specific project will be returned without being examined and will be considered rejected.
- .6 Notify Departmental Representative, in writing at time of submission, identifying deviations from requirements of Contract Documents stating reasons for deviations.
- .7 Contractor's responsibility for errors and omissions in submission is not relieved by Departmental Representative's review of submittals.
- .8 Contractor's responsibility for deviations in submission from requirements of Contract Documents is not relieved by Departmental Representative's review.
- .9 Keep one reviewed copy of each submission on site.

2. Manifests

- .1 A copy of all manifests and/or truck weigh scale documents for material brought onto, transported onto or removed from the site are to be provided to the Departmental Representative.
- .2 Manifest and /or weigh scale documents are to be completed in accordance with applicable federal and provincial regulations.

3. Certificates and Transcripts

- .1 Immediately after award of Contract, submit WorkSafe BC status.
- .2 Submit transcription of insurance immediately after award of Contract.

**4. Progress
Photographs and
Final Photographs**

- .1 Provide digital photos in “Joint Photographic Experts Group” (.jpg) format for Progress Photographs and Final Photographs
- .2 Digital photographs to have a minimum of 2,592 x 1,944 pixel (5 Megapixel) resolution.
- .3 Progress and Final Photographs to be submitted on a compact disc (CD).
- .4 Quantity-Provide sufficient number of photographs to adequately describe the work activities carried out during the reporting period. A minimum of two photographs taken from two viewpoints are to be provided for each clean-up/construction activity.
- .5 Submit progress photographs monthly with last weekly report or as directed by Departmental Representative.
- .6 Submit final photographs prior to final progress payment request.

5. Submittal Schedule

- .1 Submittal schedule to include but is not limited to:

CONTRACTOR SUBMITTAL SCHEDULE		
Specification	Description	Submission
	Mobilization and Demobilization Plan	Prior to Mobilization
01 32 16.07	Master Project Schedule	Prior to Mobilization
01 35 33	Site Specific Health and Safety Plan	Prior to Mobilization
01 35 33	Notice of Project Form	Prior to Mobilization
01 32 16.07	Detailed Project Schedule	Prior to Initiation of Work
01 35 43	Environmental Protection Plan	Prior to Initiation of Work
01 35 33	Emergency Response Plan	Prior to Initiation of Work
01 35 33	Material Safety Data Sheets (MSDS)	Prior to Initiation of Work
01 74 19	Waste Audit	Prior to Initiation of Work
01 74 19	Waste Reduction Work Plan	Prior to Initiation of Work
01 74 19	Materials Source Separation Plan	Prior to Initiation of Work
03 30 00.01	Concrete Test Results	Prior to Initiation of Work
03 20 00	Concrete Reinforcing	Refer to referenced Specification Section and Clauses for all Technical Submittals.
03 30 00.01	Cast-in-Place Concrete	
05 12 00	Structural Steel for Bridges	
06 08 73	Wood Treatment	
06 10 00	Rough Carpentry	
31 00 00.01	Earthwork – Short Form	
31 68 13	Soil Anchors	

32 15 40	Crushed Stone Surfacing	
01 33 00	Progress Photographs	Monthly with progress statement
01 78 30	Certificate of Completed Work	Project Completion
01 78 30	As-built Drawings including As-Built AutoCAD drawing files	Project Completion
01 11 55	Survey Documentation	Project Completion
01 31 00	Completion Certificate	Project Completion

END OF SECTION

Part 1 General

1.1 Review

- .1 Review of shop drawings and samples: refer to Section 011155, Clause 1.18.

1.2 General

- .1 This Section specifies general requirements and procedures for the Contractor's submissions of shop drawings, product data, samples and other requested submittals to Departmental Representative for review. Additional specific requirements for submissions are specified in individual technical sections.
- .2 Present shop drawings, product data and samples in SI Metric units.
- .3 Where items or information is not produced in SI Metric units, converted values are acceptable.
- .4 Contractor's responsibility for errors and omissions in submission is not relieved by Departmental Representative's review of submissions.
- .5 Notify Departmental Representative in writing at time of submission, identifying deviations from requirements of Contract documents and stating reasons for deviations.
- .6 Contractor's responsibility for deviations in submission from requirements of Contract documents is not relieved by Departmental Representative's review of submission unless Departmental Representative gives written acceptance of specific deviations.
- .7 Make any changes in submissions which Departmental Representative may require consistent with Contract documents and resubmit as directed by Departmental Representative.
- .8 Notify Departmental Representative in writing, when resubmitting, of any revisions other than those requested by Departmental Representative.
- .9 Do not proceed with work until relevant submissions are reviewed and approved by the Departmental Representative.

1.3 Submission Requirements

- .1 Coordinate each submission with the requirements of the work and the Contract documents. Individual submissions will not be reviewed until all related information is available.
- .2 Allow (14) fourteen days for Departmental Representative's review of each submission, unless noted otherwise.
- .3 Accompany submissions with transmittal letter, in duplicate, containing:
- .1 Date.

SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

- .2 Project title and number.
- .3 Contractor's name and address.
- .4 Identification and quantity of each shop drawings, product data and sample.
- .5 Other pertinent data.
- .4 Submissions shall include:
 - .1 Date and revision dates.
 - .2 Project title and number.
 - .3 Name and address of:
 - .1 Subcontractor
 - .2 Supplier
 - .3 Manufacturer
 - .4 Contractor's stamp, signed by Contractor's authorized representative, certifying review of submissions, verification of field measurements and compliance with Contract documents.
 - .5 Details of appropriate portions of work as applicable:
 - .1 Fabrication.
 - .2 Layout, showing dimensions (including identified field dimensions) and clearances.
 - .3 Setting of erection details
 - .4 Capacities
 - .5 Performance characteristics
 - .6 Standards
 - .7 Relationship to adjacent work.
- .5 After Departmental Representative's review, distribute copies.

1.4 Shop Drawings

- .1 Shop drawings: original drawings or modified standard drawings provided by Contractor to illustrate details of portions of work which are specific to project requirements.
- .2 Maximum sheet size: 850 x 1050 mm.
- .3 Submit 6 prints of shop drawings for each requirement requested in the specification sections and/or as requested by the Departmental Representative.
- .4 Cross-reference shop drawing information to applicable portions of the Contract documents.

1.5 Shop Drawings Review

- .1 Review of shop drawings by Public Works and Government Services Canada is for the sole purpose of ascertaining conformance with the general concept.
- .2 This review shall not mean that Public Works and Government

Services Canada approves the detail design inherent in the shop drawings, responsibility for which shall remain with Contractor submitting same.

- .3 This review shall not relieve the Contractor of responsibility for errors or omissions in the shop drawings or of responsibility for meeting all requirements of the construction and Contract documents.
- .4 Without restricting the generality of the foregoing, the Contractor is responsible for:
 - .1 Dimensions to be confirmed and correlated at the job site.
 - .2 Information that pertains solely to fabrication processes or to techniques of construction and installation.
 - .3 Coordination of the work of all sub-trades.

1.6 Product Data

- .1 Product data: manufacturers' catalogue sheets, MSDS sheets, brochures, literature, performance charts and diagrams, used to illustrate standard manufactured products or any other specified information.
- .2 Delete information not applicable to project.
- .3 Supplement standard information to provide details applicable to project.
- .4 Cross-reference product data information to applicable portions of Contract documents.
- .5 Submit 6 copies of product data.

1.7 Samples

- .1 Samples: examples of materials, equipment, quality, finishes and workmanship.
- .2 Where colour, pattern or texture is a criterion, submit a full range of samples.
- .3 Reviewed and accepted samples will become the standard of workmanship and material against which installed work will be verified.

1.8 Progress Schedule

- .1 Submit work schedule and cost breakdown as required in Section 011155.

1.9 Test Results and Inspection Reports

- .1 Submit in duplicate test results and inspection reports required by Section 011155 – Testing & Inspection, clause 1.22

END OF SECTION

1.1 References

- .1 Government of Canada:
 - .1 Canada Labour Code – Part II
 - .2 Canada Occupational Health and Safety Regulations.
- .2 National Building Code of Canada (NBC):
 - .1 Part 8, Safety Measures at Construction and Demolition Sites.
- .3 Canadian Standards Association (CSA): as amended:
 - .1 CSA Z797-2009 Code of Practice for Access Scaffold.
 - .2 CSA S269.1-1975 (R2003) Falsework for Construction Purposes.
 - .3 CSA-S350-M1980 (R2003), Code of Practice for Safety in Demolition of Structures.
- .4 Fire Protection Engineering Services, HRSDC:
 - .1 FCC No. 301, Standard for Construction Operations.
 - .2 FCC No. 302, Standard for Welding and Cutting.
- .5 American National Standards Institute (ANSI):
 - .1 ANSI A10.3, Operations – Safety Requirements for Powder-Actuated Fastening Systems.
- .6 Province of British Columbia:
 - .1 Workers Compensation Act Part 3 - Occupational Health and Safety.
 - .2 Occupational Health and Safety Regulation.

1.2 Related Sections

- .1 Refer to the following current NMS sections as required:
 - .1 Shop Drawings, Product Data, and Samples: Section 01 33 01
 - .2 Temporary Facilities: Section 01 51 00
 - .3 Temporary barriers and enclosures: Section 01 56 00
 - .4 Structure demolition: Section 02 41 16

1.3 Workers' Compensation Board Coverage

- .1 Comply fully with the Workers' Compensation Act, regulations and orders made pursuant thereto, and any amendments up to the completion of the work.
- .2 Maintain Workers' Compensation Board coverage during the term of the Contract, until and including the date that the Certificate of Final Completion is issued.

1.4 Compliance with Regulations

- .1 PWGSC may terminate the Contract without liability to PWGSC where the Contractor, in the opinion of PWGSC, refuses to comply with a requirement of the Workers' Compensation Act or the Occupational Health and Safety Regulations.
- .2 It is the Contractor's responsibility to ensure that all workers are qualified, competent and certified to perform the work as required by the Workers' Compensation Act or the Occupational Health and Safety Regulations.

1.5 Submittals

- .1 Submit to Departmental Representative submittals listed for review in accordance with Section 013300.
- .2 Work effected by submittal shall not proceed until review is complete.
- .3 Submit the following:
 - .1 Health and Safety Plan.
 - .2 Copies of reports or directions issued by Federal and Provincial health and safety inspectors.
 - .3 Copies of incident and accident reports.
 - .4 Complete set of Material Safety Data Sheets (MSDS), and all other documentation required by Workplace Hazardous Materials Information System (WHMIS) requirements.
 - .5 Emergency Procedures.
- .4 The Departmental Representative will review the Contractor's site-specific project Health and Safety Plan and emergency procedures, and provide comments to the Contractor within 5 days after receipt of the plan. Revise the plan as appropriate and resubmit to Departmental Representative.
- .5 Medical surveillance: where prescribed by legislation, regulation or safety program, submit certification of medical surveillance for site personnel prior to commencement of work, and submit additional certifications for any new site personnel to Departmental Representative.
- .6 Submission of the Health and Safety Plan, and any revised version, to the Departmental Representative is for information and reference purposes only. It shall not:
 - .1 Be construed to imply approval by the Departmental Representative.
 - .2 Be interpreted as a warranty of being complete, accurate and legislatively compliant.
 - .3 Relieve the Contractor of his legal obligations for the provision of health and safety on the project.

1.6 Responsibility	<p>.1 Assume responsibility as Prime Contractor under this Contract.</p> <p>.2 Be responsible for health and safety of persons on site, safety of property on site and for protection of persons adjacent to site and environment to extent that they may be affected by conduct of Work.</p> <p>.3 Comply with and enforce compliance by employees with safety requirements of Contract documents, applicable federal, provincial, territorial and local statutes, regulations, and ordinances, and with site-specific Health and Safety Plan.</p>
1.7 General Conditions	<p>.1 Provide safety barricades and lights around work site as required to provide a safe working environment for workers and protection for pedestrian and vehicular traffic.</p> <p>.2 Ensure that non-authorized persons are not allowed to circulate in designated construction areas of the work site.</p> <p>.1 Provide appropriate means by use of barricades, fences, warning signs, traffic control personnel, and temporary lighting as required.</p> <p>.2 Secure site at night time or provide security guard as deemed necessary to protect site against entry.</p>
1.8 Project/Site Conditions	<p>.1 Work at site will involve:</p> <p>.1 Remote sites with limited cellular phone service and extended emergency response times.</p> <p>.2 Demolish existing bridge at Stanley Glacier.</p> <p>.3 Stream crossings of personnel, equipment, and materials.</p> <p>.4 Excavation for foundations, rip-rap, and vegetated geogrid.</p> <p>.5 Micro piles installation and testing.</p> <p>.6 Construction of new concrete abutments.</p> <p>.7 Construction of bridge super-structures and stairs.</p> <p>.8 Placement of rip-rap and vegetated geogrid.</p> <p>.9 Trail realignment at Stanley Glacier.</p>
1.9 Regulatory Requirements	<p>.1 Comply with specified codes, acts, bylaws, standards and regulations to ensure safe operations at site.</p> <p>.2 In event of conflict between any provision of the above authorities, the most stringent provision will apply. Should a dispute arise in determining the most stringent requirement, the Departmental Representative will advise on the course of action to be followed.</p>

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- 1.10 Work Permits** .1 Obtain specialty permits related to project before start of work.
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- 1.11 Filing of Notice** .1 The General Contractor is to complete and submit a Notice of Project as required by provincial authorities at least two weeks prior to commencing work.
- .2 Provide copies of all notices to the Departmental Representative.
-
- 1.12 Health and Safety Plan** .1 Conduct a site-specific hazard assessment based on review of Contract documents, required work, and project site. Identify any known and potential health risks and safety hazards.
- .2 Prepare and comply with a site-specific project Health and Safety Plan based on hazard assessment, including, but not limited to, the following:
- .1 Primary requirements:
- .1 Contractor's safety policy.
- .2 Identification of applicable compliance obligations.
- .3 Definition of responsibilities for project safety/organization chart for project.
- .4 General safety rules for project.
- .5 Job-specific safe work, procedures.
- .6 Inspection policy and procedures.
- .7 Incident reporting and investigation policy and procedures.
- .8 Occupational Health and Safety Committee/Representative procedures.
- .9 Occupational Health and Safety meetings.
- .10 Occupational Health and Safety communications and record keeping procedures.
- .2 Summary of health risks and safety hazards resulting from analysis of hazard assessment, with respect to site tasks and operations which must be performed as part of the work.
- .3 List hazardous materials to be brought on site as required by work.
- .4 Indicate engineering and administrative control measures to be implemented at the site for managing identified risks and hazards.
- .5 Identify personal protective equipment (PPE) to be used by workers.
- .6 Identify personnel and alternates responsible for site safety and health.

1.13 Emergency Procedures

- .7 Identify personnel training requirements and training plan, including site orientation for new workers.
- .3 Develop the plan in collaboration with all subcontractors. Ensure that work/activities of subcontractors are included in the hazard assessment and are reflected in the plan.
- .4 Revise and update Health and Safety Plan as required, and re-submit to the Departmental Representative.
- .5 Departmental Representative's review: the review of Health and Safety Plan by Public Works and Government Services Canada (PWGSC) shall not relieve the Contractor of responsibility for errors or omissions in final Health and Safety Plan or of responsibility for meeting all requirements of construction and Contract documents.
- .1 List standard operating procedures and measures to be taken in emergency situations. Include an evacuation plan and emergency contacts (i.e. names/telephone numbers) of:
 - .1 Designated personnel from own company.
 - .2 Regulatory agencies applicable to work and as per legislated regulations.
 - .3 Local emergency resources.
 - .4 Departmental Representative.
- .2 Include the following provisions in the emergency procedures:
 - .1 Notify workers and the first-aid attendant, of the nature and location of the emergency.
 - .2 Evacuate all workers safely.
 - .3 Check and confirm the safe evacuation of all workers.
 - .4 Notify the fire department or other emergency responders.
 - .5 Notify adjacent workplaces or residences which may be affected if the risk extends beyond the workplace.
 - .6 Notify Departmental Representative.
- .3 Provide written rescue/evacuation procedures as required for, but not limited to:
 - .1 Work at high angles.
 - .2 Work in confined spaces or where there is a risk of entrapment.
 - .3 Work with hazardous substances.
 - .4 Underground work.
 - .5 Work on, over, under and adjacent to water.
 - .6 Workplaces where there are persons who require physical assistance to be moved.

	.4	Design and mark emergency exit routes to provide quick and unimpeded exit.
	.5	Revise and update emergency procedures as required, and re-submit to the Departmental Representative.
1.14 Hazardous Products	.1	Comply with requirements of Workplace Hazardous Materials Information System (WHMIS) regarding use, handling, storage and disposal of hazardous materials, and regarding labelling and provision of Material Safety Data Sheets (MSDS) acceptable to the Departmental Representative and in accordance with the Canada Labour Code.
	.2	Where use of hazardous and toxic products cannot be avoided: .1 Advise Departmental Representative beforehand of the product(s) intended for use. Submit applicable MSDS and WHMIS documents as per Section 013300.
1.15 Falsework	.1	Design and construct falsework in accordance with CSA S269.1- 1975 (R2003).
1.16 Scaffolding	.1	Design, construct and maintain scaffolding in a rigid, secure and safe manner, in accordance with CSA Z797-2009 and B.C. Occupational Health and Safety Regulations
1.17 Powder-Actuated Devices	.1	Use powder-actuated devices in accordance with ANSI A10.3 only after receipt of written permission from the Departmental Representative
1.18 Fire Safety and Hot Work	.1	Obtain Departmental Representative's authorization before any welding, cutting or any other hot work operations can be carried out on site.
	.2	Hot work includes cutting/melting with use of torch, flame heating roofing kettles, or other open flame devices and grinding with equipment which produces sparks.
1.19 Fire Safety Requirements	.1	Store oily/paint-soaked rags, waste products, empty containers and materials subject to spontaneous combustion in ULC approved, sealed containers and remove from site on a daily basis.
	.2	Handle, store, use and dispose of flammable and combustible materials in accordance with the National Fire Code of Canada.
1.20 Unforeseen Hazards	.1	Should any unforeseen or peculiar safety-related factor, hazard or condition become evident during performance of the work, immediately stop work and advise the Departmental Representative verbally and in writing.

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|--|----------|---|
| 1.21 Posted Documents | 1 | Post legible versions of the following documents on site: |
| | .1 | Health and Safety Plan. |
| | .2 | Sequence of work. |
| | .3 | Emergency procedures. |
| | .4 | Site drawing showing project layout, locations of the first-aid station, evacuation route and marshalling station, and the emergency transportation provisions. |
| | .5 | Notice of Project. |
| | .6 | site plans. |
| | .7 | Notice as to where a copy of the Workers' Compensation Act and Regulations are available on the work site for review by employees and workers. |
| | .8 | Workplace Hazardous Materials Information System (WHMIS) documents. |
| | .9 | Material Safety Data Sheets (MSDS). |
| | .10 | List of names of Joint Health and Safety Committee members, or Health and Safety Representative, as applicable. |
| | .2 | Postings should be protected from the weather, and visible from the street or the exterior of the principal construction site shelter provided for workers and equipment, or as approved by the Departmental Representative. |
|
 | | |
| 1.22 Meetings | 1 | Attend health and safety pre-construction meeting and all subsequent meetings called by the Departmental Representative. |
|
 | | |
| 1.23 Correction of Non-Compliance | 1 | Immediately address health and safety non-compliance issues identified by the Departmental Representative. |
| | .2 | Provide Departmental Representative with written report of action taken to correct non-compliance with health and safety issues identified. |
| | .3 | The Departmental Representative may issue a "stop work order" if non-compliance of health and safety regulations is not corrected immediately or within posted time. The General Contractor/subcontractors will be responsible for any costs arising from such a "stop work order". |

END OF SECTION

Part 1 General

1.1 Related Requirements

- .1 Section 01 74 11 – Cleaning.
- .2 Section 01 74 19 – Waste Management and Disposal.
- .3 Section 01 33 01 – Shop Drawings, Product Data, and Samples.
- .4 Section 01 35 33 – Health and Safety Requirements.

1.2 References

- .1 Definitions:
 - .1 Environmental Pollution and Damage: presence of chemical, physical, biological elements or agents which adversely affect human health and welfare; unfavourably alter ecological balances of importance to human life; affect other species of importance to humans; or degrade environment aesthetically, culturally and/or historically.
 - .2 Environmental Protection: prevention/control of pollution and habitat or environment disruption during construction. Control of environmental pollution and damage requires consideration of land, water, and air; biological and cultural resources; and includes management of visual aesthetics; noise; solid, chemical, gaseous, and liquid waste; radiant energy and radioactive material as well as other pollutants.

1.3 Action and Informational Submittals

- .1 Submit in accordance with Section 01 33 01 – Shop Drawings, Product Data, and Samples.
- .2 Product Data:
 - .1 Submit manufacturer's instructions, printed product literature and data sheets for Enviro mats and include product characteristics, performance criteria, physical size, finish and limitations.
 - .2 Submit 2 copies of WHMIS MSDS in accordance with Section 01 35 43 - Health and Safety Requirements.
- .3 Before commencing construction activities or delivery of materials to site, submit Environmental Protection Plan for review and approval by the Departmental Representative.
- .4 Environmental Protection Plan must include comprehensive overview of known or potential environmental issues to be addressed during construction. Refer to Basic Environmental Impact Analysis report in Appendix A.
- .5 Address topics at level of detail commensurate with environmental issue and required construction tasks.

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- .6 Include in Environmental Protection Plan:
 - .1 Names of persons responsible for ensuring adherence to Environmental Protection Plan.
 - .2 Names and qualifications of persons responsible for manifesting hazardous waste to be removed from site.
 - .3 Names and qualifications of persons responsible for training site personnel.
 - .4 Descriptions of environmental protection personnel training program.
 - .5 Erosion and sediment control plan identifying type and location of erosion and sediment controls to be provided including monitoring and reporting requirements to assure that control measures are in compliance with erosion and sediment control plan, Federal, Provincial, and Municipal laws and regulations.
 - .6 Drawings indicating locations of proposed temporary excavations or embankments for haul roads, stream crossings, material storage areas, structures, sanitary facilities, and stockpiles of excess or spoil materials including methods to control runoff and to contain materials on site.
 - .7 Traffic Control Plans including measures to reduce erosion of temporary roadbeds by construction traffic, especially during wet weather.
 - .1 Plans to include measures to minimize amount of material transported onto paved public roads by vehicles or runoff.
 - .8 Work area plan showing proposed activity in each portion of area and identifying areas of limited use or non-use.
 - .1 Plan to include measures for marking limits of use areas and methods for protection of features to be preserved within authorized work areas.
 - .9 Spill Control Plan to include procedures, instructions, and reports to be used in event of unforeseen spill of regulated substance.
 - .10 Non-Hazardous solid waste disposal plan identifying methods and locations for solid waste disposal including clearing debris.
 - .11 Air pollution control plan detailing provisions to assure that dust, debris, materials, and trash, are contained on project site.
 - .12 Contaminant Prevention Plan identifying potentially hazardous substances to be used on job site; intended actions to prevent introduction of such materials into air, water, or ground; and detailing provisions for compliance with Federal, Provincial, and Municipal laws and regulations for storage and handling of these materials.
 - .13 Waste Water Management Plan identifying methods and procedures for management and/or discharge of waste waters

		which are directly derived from construction activities, such as concrete curing water, clean-up water, dewatering of ground water, disinfection water, hydrostatic test water, and water used in flushing of lines.
	.14	Historical, archaeological, cultural resources biological resources and wetlands plan that defines procedures for identifying and protecting historical, archaeological, cultural resources, biological resources and wetlands.
	.15	Pesticide treatment plan to be included and updated, as required.
1.4	Fires	
	.1	Fires and burning of rubbish on site is not permitted.
1.5	National Parks Act	
	.1	Contractor shall ensure that all work is performed in accordance with ordinances, laws, rules and regulations set out in the National Parks Act.
1.6	Canadian Environmental Assessment Act	
	.1	Execution of the work is subject to the provisions within Canadian Environmental Assessment Act (CEAA) Guidelines Order of January 19, 1995 and subsequent amendments.
	.2	Western Regional Directive 33 provides direction specific to the application of CEAA to Parks Canada Western Region projects and in particular to the execution and implementation of environmental protection measures and requirements which the Contractor and Departmental Representative must observe.
	.3	A Basic Environmental Impact Analysis report is attached in Appendix A.
	.4	Failure to comply with or observe environmental protection measures as identified in these specifications may result in the work being suspended pending rectification of the problem.
1.7	Disposal of Wastes	
	.1	All wastes must be stored and handled in accordance with the National Park Garbage Regulations.
	.2	Do not bury rubbish and waste materials on site or within the boundaries of National Park.
	.3	Do not dispose of waste or volatile materials, such as mineral spirits, oil or paint thinner into waterways, storm or sanitary sewers.
	.4	Remove all required demolition, construction and trade waste from the site and dispose of at provincial approved landfill(s), outside of National Park on a regular basis.
	.5	Dispose of all hazardous wastes such as asbestos; transformers, ballasts and capacitors containing PCBs; and other listed materials in conformance with the Environmental contaminants Act and applicable provincial regulations while observing the Code of Good Practice for

		Management of Hazardous and Toxic Wastes at Federal Establishments.
	.6	Obtain bear proof garbage containers on-site for domestic garbage generated on-site by Contractor's personnel.
	.7	Maintain the site in a tidy condition, free from the accumulation of waste products, debris and litter.
1.8	Drainage	
	.1	Develop and submit erosion and Sediment Control Plan (ESC) identifying type and location of erosion and sediment controls provided. Plan to include monitoring and reporting requirements to assure that control measures are in compliance with erosion and sediment control plan, Federal, Provincial, and Municipal laws and regulations.
	.2	Storm Water Pollution Prevention Plan (SWPPP) to be substituted for erosion and sediment control plan.
	.3	Provide temporary drainage and pumping required to keep excavations and site free from water.
	.4	Ensure pumped water into waterways, sewer or drainage systems is free of suspended materials.
	.5	Identify specific area(s) that will be receiving water from trenches/excavated site and subject to approval of the Departmental Representative. In no cases will the water from the site be allowed to enter wastewater (sewerage) system, standing ponds, watercourse, creek, river, wetlands, riparian zone of the water channel, and any other natural habitat area.
	.6	Control disposal or runoff of water containing suspended materials or other harmful substances in accordance with Parks Canada requirements and in conformance with the Environmental Contaminants Act and applicable provincial regulations while observing the Code of Good Practice for Management of Hazardous and Toxic Wastes at Federal Establishments.
1.9	Site Clearing and Plant Protection	
	.1	Protect trees and plants on site and adjacent properties as indicated or as directed by the Departmental Representative.
	.2	When working adjacent to existing trees and shrubs, the Contractor shall exercise all possible care to avoid injury to vegetation. Where roots or limbs over 25 mm in diameter and bark are damaged during operations, trim damaged portion. Departmental Representative will inspect all trimmed areas and approve them.
	.3	Tree removal shall be limited to trees identified for removal by Departmental Representative and as directed by Departmental Representative.
	.4	Protect roots of designated trees to dripline during excavation and site grading to prevent disturbance or damage.
	.1	Avoid unnecessary traffic, dumping and storage of materials over root zones.

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| .5 | Minimize stripping of topsoil and vegetation. |
| .6 | Restrict tree removal to areas indicated or designated by the Departmental Representative. |
| 1.10 Contractor's Employee Briefing | |
| <hr/> | |
| .1 | Departmental Representative will conduct briefing sessions for all employees and subcontractor employees highlighting the requirements of this specification section, and other requirements of the Departmental Representative including operations or equipment strictly within confines of the site; harassment or attraction of wildlife; pollution and garbage management; vehicle access and parking; and care of the environment in the work area. |
| .2 | An initial site meeting with Contractor, Departmental Representative, Park Project Manager, and Parks Surveillance Officer will take place prior to construction commencing, so that all Park's environmental and construction concerns are met. |
| .3 | The contract documents have been developed in accordance with Canadian Environmental Assessment Act screening requirements. Construction methods which are directly affected by CEAA screening will be reviewed at the initial site meeting. The Contractor will be expected to comply with and ensure his construction practice meets the CEAA Standards. Failure to comply may lead to cessation of work. |
| 1.11 Contractor's Operations | |
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| .1 | Confine all operations to the work limits as staked or designated by the Departmental Representative. No activities of any kind may be carried out beyond these work limits without written permission of the Departmental Representative. |
| .2 | Do not store or stockpile construction materials in the trees bordering or being preserved on-site. Do not unreasonable encumber the site with products. |
| .3 | Storage locations to be approved by Departmental Representative. |
| .4 | Storage locations shall be completely cleaned up and returned to original condition prior to Contractor de-mobilization in the spring, in the fall and finishing the project. |
| .5 | Maintenance of equipment shall be carried out in designated areas or as approved by the Departmental Representative, maintenance of equipment such as oil changes and other servicing will not be permitted in Parks. The designated area for equipment maintenance is outside national Parks. |
| .1 | Inspect machinery frequently for weak hydraulic lines and leaky gaskets before working on site. |
| .6 | Used oil, filter and grease cartridges, lubrication containers and other products of equipment maintenance shall be collected and disposed of at the recycling depot and the solid waste transfer stations outside of |

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- National Parks.
- .7 Provide sufficient sanitary facilities for workers and maintain in clean condition.
 - .8 On site fuel storage may be permitted, subject to approval of the Departmental Representative. If required, on site fuel storage shall be a slip tank mounted in Contractor's vehicle.
 - .1 Refuelling shall not be done within 200 m from waterways, watercourse, or as directed by Departmental Representative.
 - .9 Contractor to have on all service and supervisory vehicles with emergency Spill Kit DOT-E-10102 or equivalent. Ensure all employees are properly trained to use the Spill Kit and shall be noted in the safety tool box meeting(s).
 - .10 Conduct operations at all times in such a manner as to preserve the natural features and vegetation in the area. Cut and fill slopes shall be blended with adjoining topography. Material from fill slopes will not be permitted to sluff or roll into surrounding tree cover or to bury any plant material designated to be retained.
 - .11 When in the opinion of the Departmental Representative and Parks Surveillance Officer, negligence on the part of the Contractor results in damage or destruction of vegetation, or other environmental or aesthetic feature beyond the staked or designated work area, the Contractor shall be responsible, at his expense, for complete restoration including the replacement of trees, shrubs, topsoil, grass, etc. to the satisfaction of the Departmental Representative.
 - .12 Prevent erosion from rain, runoff using acceptable erosion control methods such as silt fencing, water bars, sandbags, settling ponds, rock check dams or other methods and subject to approval by the Departmental Representative.
 - .13 Power wash all equipment outside of Parks to ensure non-native plant species are not introduced into Parks.
 - .14 All equipment that requires an on-site wash down such as concrete delivery vehicle, concrete mixer and other related tools shall be confined in a designated area to ensure all its materials do not escape its designated area. Methods include:
 - .1 Identify specific area(s) that will be receiving wash down and subject to approval of the Departmental Representative.
 - .2 In no cases will the materials from the wash down be allowed to enter storm collection system, wastewater (sewerage) system, standing ponds, watercourse, creek, river, wetlands, riparian zone of the water channel, and any other natural habitat area.
 - .15 Provide sufficient sanitary facilities and maintain in clean condition. Sanitary facilities shall be located at least 100 meters from the creek.

1.12 Work Adjacent To Waterways	.1	Construction equipment to be operated on land only.
	.2	Do not use waterway beds for borrow material.
	.3	Waterways to be kept free of excavated fill, waste material and debris.
	.4	Design and construct temporary crossings to minimize erosion to waterways.
	.5	Do not skid logs or construction materials across waterways.
	.6	Avoid indicated spawning beds when constructing temporary crossings of waterways.
1.13 Pollution Control	.1	Maintain temporary erosion and pollution control features installed under this Contract.
	.2	Control emissions from equipment and plant.
	.3	Prevent sandblasting and other extraneous materials from contaminating air and waterways beyond application area by providing temporary enclosures.
	.4	Cover or wet down dry materials and rubbish to prevent blowing dust and debris. Provide dust control for temporary roads.
1.14 Historical/archaeological Control	.1	Provide historical, archaeological, cultural resources, biological resources, and wetlands plan that defines procedures for identifying and protecting historical, archaeological, cultural resources, biological resources and wetlands known to be on project site: and identifies procedures to be followed if historical archaeological, cultural resources, biological resources and wetlands not previously known to be onsite or in area are discovered during construction.
	.2	Plan: include methods to assure protection of known or discovered resources and identify lines of communication between Contractor personnel and Departmental Representative.
1.15 Notification	.1	Departmental Representative will notify Contractor in writing of observed noncompliance with Federal, Provincial or Municipal environmental laws or regulations, permits, and other elements of Contractor's Environmental Protection plan.
	.2	Contractor: after receipt of such notice, inform Departmental Representative of proposed corrective action and take such action for approval by Departmental Representative.
	.1	Take action only after receipt of written approval by Departmental Representative.
	.3	Departmental Representative will issue stop order of work until satisfactory corrective action has been taken.

	.4	No time extensions granted or equitable adjustments allowed to Contractor for such suspensions.
1.16 Wildlife	.1	Avoid or terminate activities on site that attract or harass wildlife.
	.2	Notify Departmental Representative of bear activity or encounters on or around the site. Other wildlife encounters should be reported within 24 hours.
Part 2 Products		
2.1 Not Used	.1	Not Used.
Part 3 Execution		
3.1 Cleaning	.1	Progress Cleaning: clean in accordance with Section 01 74 11 - Cleaning.
	.1	Leave Work area clean at end of each day.
	.2	Ensure public waterways, storm and sanitary sewers remain free of waste and volatile materials disposal.
	.3	Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment in accordance with Section 01 74 11 - Cleaning.
	.4	Waste Management: separate waste materials for reuse and recycling in accordance with Section 01 74 19 - Waste Management and Disposal.
	.1	Remove recycling containers and bins from site and dispose of materials at appropriate facility.

END OF SECTION

Part 1 General

**1.1 Related
Requirements**

- .1 Section 01 33 01 – Shop Drawings, Product Data, and Samples.
- .2 Section 03 30 00.01 – Cast-in-Place Concrete Short Form.
- .3 Section 05 12 00 – Structural Steel for Bridges.
- .4 Section 06 05 73 – Wood Treatment
- .5 Section 06 10 00 – Rough Carpentry
- .6 Section 31 00 00.01 – Earthworks – Short Form
- .7 Section 31 37 00 – Rip-rap
- .8 Section 31 68 13 – Soil Anchors
- .9 Section 32 15 40 – Crushed Stone Surfacing

1.2 Inspection

- .1 Allow Departmental Representative access to Work. If part of Work is in preparation at locations other than Place of Work, allow access to such Work whenever it is in progress.
- .2 Give timely notice requesting inspection if Work is designated for special tests, inspections or approvals by Departmental Representative, instructions, or law of Place of Work.
- .3 If Contractor covers or permits to be covered Work that has been designated for special tests, inspections or approvals before such is made, uncover such Work, have inspections or tests satisfactorily completed and make good such Work.
- .4 Departmental Representative will order part of Work to be examined if Work is suspected to be not in accordance with Contract Documents. If, upon examination such work is found not in accordance with Contract Documents, correct such Work and pay cost of examination and correction. If such Work is found in accordance with Contract Documents, Departmental Representative shall pay cost of examination and replacement.

**1.3 Independent
Inspection Agencies**

- .1 Independent Inspection/Testing Agencies will be engaged by Contractor for purpose of inspecting and/or testing portions of Work. Cost of such services will be borne by Contractor.
- .2 Provide equipment required for executing inspection and testing by appointed agencies.
- .3 Employment of inspection/testing agencies does not relax responsibility to perform Work in accordance with Contract Documents.
- .4 If defects are revealed during inspection and/or testing, appointed

agency will request additional inspection and/or testing to ascertain full degree of defect. Correct defect and irregularities as advised by Departmental Representative at no cost to Departmental Representative. Contractor to pay costs for retesting and re-inspection. If Engineer of Record is required to carry out re-inspection services, cost to Contractor will be assessed at minimum \$4000.00 per visit. This includes foundation excavation, rebar and bridge welding inspection trips. Other re-inspection services will be assessed at cost.

1.4 Access To Work

- .1 Allow inspection/testing agencies access to Work, off site manufacturing and fabrication plants.
- .2 Co-operate to provide reasonable facilities for such access.

1.5 Procedures

- .1 Notify appropriate agency and Departmental Representative in advance of requirement for tests, in order that attendance arrangements can be made.
- .2 Submit samples and/or materials required for testing, as specifically requested in specifications. Submit with reasonable promptness and in orderly sequence to not cause delays in Work.
- .3 Provide labour and facilities to obtain and handle samples and materials on site. Provide sufficient space to store and cure test samples.

1.6 Rejected Work

- .1 Remove defective Work, whether result of poor workmanship, use of defective products or damage and whether incorporated in Work or not, which has been rejected by Departmental Representative as failing to conform to Contract Documents. Replace or re-execute in accordance with Contract Documents.
- .2 Make good other Contractor's work damaged by such removals or replacements promptly.
- .3 If in opinion of Departmental Representative it is not expedient to correct defective Work or Work not performed in accordance with Contract Documents, Owner will deduct from Contract Price difference in value between Work performed and that called for by Contract Documents, amount of which will be determined by Departmental Representative.

1.7 Reports

- .1 Submit 3 copies of inspection and test reports to Departmental Representative.
- .2 Provide copies to subcontractor of work being inspected or tested.

1.8 Tests And Mix Designs	.1	Furnish test results and mix designs as requested.
	.2	Cost of tests and mix designs beyond those called for in Contract Documents or beyond those required by law of Place of Work will be appraised by Departmental Representative and may be authorized as recoverable.

1.9 Mill Tests	.1	Submit mill test certificates as required of specification Sections.
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Part 2 Products

2.1 Not Used	.1	Not Used.
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Part 3 Execution

3.1 Not Used	.1	Not Used.
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END OF SECTION

1.1 Access and Delivery	.1	Only the designated entrance may be used for access to the site.
	.1	Maintain for duration of Contract.
	.2	Make good damage resulting from Contractor's use.
1.2 Storage Facilities	.1	Storage space will be limited to the area of construction.
1.3 Power	.1	There is no electrical power and lighting at sites.
1.4 Water Supply	.1	Water supply is not available at sites.
1.5 Sanitary Facilities	.1	Contractor to provide own washroom facilities on sites.
1.6 Scaffolding	.1	Construct and maintain scaffolding in rigid, secure and safe manner.
	.2	Erect scaffolding independent of walls. Remove promptly when no longer required.
1.7 Removal of Temporary Facilities	.1	Remove temporary facilities from site when directed by the Departmental Representative.
1.8 Signs and Notices	.1	Signs and notices for safety and instruction shall be in both official languages or graphic symbols conforming to CAN/CSA-Z321.
	.2	Maintain approved signs and notices in good condition for duration of project, and dispose of off-site on completion of project or when directed by Departmental Representative.
	.3	Park closure signs will be provided by Departmental Representative. Contractor is responsible for pickup of signage from Parks Canada office located in Lake Louise. Contractor is responsible for installation of Park Closure signs at locations designated by Departmental Representative prior to construction activity commencing and removal and disposal of off-site at project completion.

END OF SECTION

Part 1 General

1.1 Related Requirements	.1	Section 01 74 19 – Waste Management and Disposal.
1.2 References	.1	Canadian General Standards Board (CGSB)
	.1	CGSB 1.59-97, Alkyd Exterior Gloss Enamel.
	.2	CAN/CGSB 1.189-00, Exterior Alkyd Primer for Wood.
	.2	Canadian Standards Association (CSA International)
	.1	CSA-O121-M1978 (R2003), Douglas Fir Plywood.
	.3	Public Works Government Services Canada (PWGSC) Standard Acquisition Clauses and Conditions (SACC)-ID: R0202D, Title: General Conditions 'C', In Effect as Of: May 14, 2004.
1.3 Installation and Removal	.1	Provide temporary controls in order to execute Work expeditiously.
	.2	Remove from site all such work after use.
1.4 Hoarding	.1	Erect temporary site enclosure using new 1.8 m high snow fence wired to rolled steel "T" bar fence posts spaced at 2.4 m on centre. Provide one lockable truck gate. Maintain fence in good repair.
	.2	Provide barriers around trees and plants designated to remain. Protect from damage by equipment and construction procedures.
1.5 Guard Rails And Barricades	.1	Provide secure, rigid guard rails and barricades around deep excavations and staging areas.
1.6 Dust Tight Screens	.1	Provide dust tight screens to localize dust generating activities, and for protection of workers, finished areas of Work and public.
	.2	Maintain and relocate protection until such work is complete.
1.7 Access To Site	.1	Provide and maintain access to washroom facilities at trail head in parking lot of sites.
1.8 Public Traffic Flow	.1	Provide and maintain competent signal flag operators, traffic signals, barricades and flares, lights, or lanterns as required to perform Work and protect public.

1.9	Fire Routes	.1	Maintain access to property including overhead clearances for use by emergency response vehicles.
1.10	Protection For Off-site And Public Property	.1	Protect surrounding private and public property from damage during performance of Work.
		.2	Be responsible for damage incurred.
1.11	Temporary Accommodation or Camp	.1	Contractor, subcontractors, his workers and his suppliers are not permitted to set up a camp, travel trailer, recreation vehicle, tent, trailer, and any temporary mobile accommodation within National Parks.
		.2	Parks Canada regulations prohibits anyone working within the Park from using the public campground facility.
1.12	Waste Management and Disposal	.1	Separate waste materials for reuse and recycling in accordance with Section 01 74 19 - Waste Management and Disposal.
Part 2	Products		
2.1	Not Used	.1	Not Used.
Part 3	Execution		
3.1	Not Used	.1	Not Used.

END OF SECTION

**1.1 Products/
Material and Equipment**

- .1 Use NEW products/material and equipment unless otherwise specified. The term "products" is referred to throughout the specifications.
- .2 Use products of 1 manufacturer for material and equipment of the same type or classification unless otherwise specified.
- .3 Unless otherwise specified, comply with manufacturer's latest printed instructions for materials and installation methods.
- .4 Notify Departmental Representative in writing of any conflict between these specifications and manufacturer's instructions. Departmental Representative will designate which document is to be followed.
- .5 Provide metal fastenings and accessories in the same texture, colour and finish as base metal in which they occur.
 - .1 Prevent electrolytic action between dissimilar metals.
 - .2 Use non-corrosive fasteners, anchors and spacers for securing exterior work.
- .6 Fastenings which cause spalling or cracking are not acceptable.
- .7 Use fastenings of standard commercial sizes and patterns with material and finish suitable for service.
- .8 Use heavy hexagon heads, semi-finished unless otherwise specified.
- .9 Bolts may not project more than 1 diameter beyond nuts.
- .10 Types of washers as follows:
 - .1 Plain type washers: use on equipment and sheet metal.
 - .2 Soft gasket lock type washers: use where vibrations occur.
 - .3 Resilient washers: use with stainless steel.
- .11 Deliver, store and maintain packaged material and equipment with manufacturer's seals and labels intact.
- .12 Prevent damage, adulteration and soiling of products during delivery, handling and storage. Immediately remove rejected products from site.
- .13 Store products in accordance with suppliers' instructions.
- .14 Touch up damaged factory finished surfaces to Departmental Representative's satisfaction.
 - .1 Use primer or enamel to match original.

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- .2 Do not paint over nameplates.
- 1.2 Quality of Products**
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- .1 Products, materials and equipment (referred to as products) incorporated into work shall be new, not damaged or defective, and of the best quality (compatible with the specifications) for the purpose intended. If requested, furnish evidence as to type, source and quality of the products provided.
- .2 Defective products will be rejected regardless of previous inspections.
- .1 Inspection does not relieve responsibility, but is precaution against oversight or error.
- .2 Remove and replace defective products at own expense and be responsible for delays and expenses caused by rejection.
- .3 Retain purchase orders, invoices and other documents to prove that all products utilized in this Contract meet the requirements of the specifications. Produce documents when requested by the Departmental Representative.
- .4 Should any dispute arise as to quality or fitness of products, the decision rests strictly with the Departmental Representative based upon the requirements of the Contract documents.
- .5 Unless otherwise indicated in the specifications, maintain uniformity of manufacture for any particular or like item throughout the building.
- .6 Permanent labels, trademarks and nameplates on products are not acceptable in prominent locations, except where required for operating instructions, or when located in mechanical or electrical rooms.
- 1.3 Availability of Products**
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- .1 Immediately upon signing the Contract, review product delivery requirements and anticipate foreseeable supply delays for any items.
- .2 If delays in supply of products are foreseeable, notify Departmental Representative of such in order that substitutions or other remedial action may be authorized in ample time to prevent delay in performance of the work.
- .3 In event of failure to notify Departmental Representative at the start of work and should it subsequently appear that the work may be delayed for such reason, the Departmental Representative reserves the right to substitute more readily available products of similar character, at no increase in either the Contract price or the Contract time.

- .1 Unless otherwise indicated in the specifications, install or erect products in accordance with the manufacturer's instructions.
 - .1 Do not rely on labels or enclosures provided with products.
 - .2 Obtain written instructions directly from the manufacturer.
- .2 Notify Departmental Representative in writing of conflicts between the specifications and the manufacturer's instructions so that the Departmental Representative may establish the course of action.
- .3 Improper installation or erection of products, due to failure in complying with these requirements, authorizes the Departmental Representative to require removal and re-installation at no increase in either the Contract price or the Contract time.

- .1 Products are specified by **"Prescriptive" specifications**: select any product meeting or exceeding specifications.
- .2 Products specified by performance and referenced standard: select any product meeting or exceeding the referenced standard.
- .3 Products specified to meet particular design requirements or to match existing materials: use only material specified Approved Product. Alternative products may be considered provided full technical data is received in writing by Departmental Representative in accordance with "Special Instructions to Tenderers".
- .4 When products are specified by a referenced standard or by or Performance specifications, upon request of Departmental Representative obtain from manufacturer an independent laboratory report showing that the product meets or exceeds the specified requirements.

- .1 No substitutions are permitted without prior written approval of the Departmental Representative.
- .2 **Proposals for substitution may only be submitted after Contract award.** Such request must include statements of respective costs of items originally specified and the proposed substitution.
- .3 Proposals will be considered by the Departmental Representative if:
 - .1 products selected by tenderer from those specified are not available;
 - .2 delivery date of products selected from those specified would unduly delay completion of Contract, or
 - .3 alternative product to that specified, which is brought to the attention of and considered by Departmental Representative

as equivalent to the product specified, and will result in a credit to the Contract amount.

- .4 Should the proposed substitution be accepted either in part or in whole, assume full responsibility and costs when substitution affects other work on the project. Pay for design or drawing changes required as result of substitution.
- .5 Amounts of all credits arising from approval of the substitutions will be determined by the Departmental Representative, and the Contract price will be reduced accordingly.

END OF SECTION

Part 1 General

1.1 Related Requirements	.1	Section 01 33 01 – Shop Drawings, Product Data, and Samples.
	.2	Section 01 74 19 –Waste Management and Disposal.
1.2 Action And Informational Submittals	.1	Submittals: in accordance with Section 01 33 01 – Shop Drawings, Product Data, and Samples.
	.2	Submit written request in advance of cutting or alteration which affects:
	.1	Structural integrity of elements of project.
	.2	Integrity of weather-exposed or moisture-resistant elements.
	.3	Efficiency, maintenance, or safety of operational elements.
	.4	Visual qualities of sight-exposed elements.
	.5	Work of Owner or separate contractor.
	.3	Include in request:
	.1	Identification of project.
	.2	Location and description of affected Work.
	.3	Statement on necessity for cutting or alteration.
	.4	Description of proposed Work, and products to be used.
1.3 Materials	.1	Required for original installation.
	.2	Change in Materials: Submit request for substitution in accordance with Section 01 33 01 – Shop Drawings, Product Data, and Samples.
1.4 Preparation	.1	Inspect existing conditions, including elements subject to damage or movement during cutting and patching.
	.2	After uncovering, inspect conditions affecting performance of Work.
	.3	Beginning of cutting or patching means acceptance of existing conditions.
	.4	Provide supports to assure structural integrity of surroundings; provide devices and methods to protect other portions of project from damage.
	.5	Provide protection from elements for areas which are to be exposed by uncovering work; maintain excavations free of water.

1.5	Execution		
		.1	Execute cutting, fitting, and patching including excavation and fill, to complete Work.
		.2	Fit several parts together, to integrate with other Work.
		.3	Uncover Work to install ill-timed Work.
		.4	Remove and replace defective and non-conforming Work.
		.5	Execute Work by methods to avoid damage to other Work, and which will provide proper surfaces to receive patching and finishing.
		.6	Employ original installer to perform cutting and patching for weather-exposed and moisture-resistant elements, and sight-exposed surfaces.
		.7	Restore work with new products in accordance with requirements of Contract Documents.
		.8	Refinish surfaces to match adjacent finishes: Refinish continuous surfaces to nearest intersection. Refinish assemblies by refinishing entire unit.

1.6	Waste Management And Disposal		
		.1	Separate waste materials for reuse and recycling in accordance with Section 01 74 19 - Waste Management And Disposal.

Part 2 **Products**

2.1	Not Used	.1	Not Used.
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Part 3 **Execution**

3.1	Not Used	.1	Not Used.
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END OF SECTION

Part 1 General

**1.1 Related
Requirements**

- .1 Section 01 74 19 – Waste Management and Disposal.

**1.2 Project
Cleanliness**

- .1 Maintain Work in tidy condition, free from accumulation of waste products and debris, including that caused by Owner or other Contractors.
- .2 Remove waste materials from site at daily regularly scheduled times or dispose of as directed by Departmental Representative. Do not burn waste materials on site.
- .3 Make arrangements with and obtain permits from authorities having jurisdiction for disposal of waste and debris.
- .4 Provide on-site waste containers for collection of waste materials and debris.
- .5 Provide and use marked separate bins for recycling. Refer to Section 01 74 19 - Waste Management and Disposal.
- .6 Dispose of waste materials and debris at Provincial approved landfill outside of National Park boundaries.
- .7 Store volatile waste in covered metal containers, and remove from premises at end of each working day.
- .8 Schedule cleaning operations so that resulting dust, debris and other contaminants will not fall on wet, newly painted surfaces nor contaminate building systems.

1.3 Final Cleaning

- .1 When Work is Substantially Performed remove surplus products, tools, construction machinery and equipment not required for performance of remaining Work.
- .2 Remove waste products and debris other than that caused by others, and leave Work clean and suitable for occupancy.
- .3 Prior to final review remove surplus products, tools, construction machinery and equipment.
- .4 Remove waste products and debris other than that caused by Owner or other Contractors.
- .5 Remove waste materials from site at regularly scheduled times. Do not burn waste materials on site.
- .6 Make arrangements with and obtain permits from authorities having jurisdiction for disposal of waste and debris.
- .7 Remove stains, spots, marks and dirt from completed work.

- .8 Inspect finishes, fitments and equipment and ensure specified workmanship and operation.
- .9 Broom clean exterior walks, steps and surfaces; rake clean other surfaces of grounds.
- .10 Remove dirt and other disfiguration from exterior surfaces.
- .11 Sweep clean paved areas.

**1.4 Waste
Management And
Disposal**

- .1 Separate waste materials for reuse and recycling in accordance with Section 01 74 19 - Waste Management And Disposal.

Part 2 Products

2.1 Not Used

- .1 Not Used.

Part 3 Execution

3.1 Not Used

- .1 Not Used.

END OF SECTION

1.1 Related Work	.1	Refer to every technical section for waste management and disposal.
1.2 Definitions	.1	Waste Audit (WA): relates to projected waste generation. Involves controlled separation of waste.
	.2	Waste Reduction Workplan (WRW): a written report which addresses opportunities for reduction, re-use or recycling of materials.
	.3	Materials Source Separation Program (MSSP): consists of a series of ongoing activities to separate re-usable and recyclable waste material into material categories from other types of waste at point of generation
1.3 Materials Source Separation	.1	Before project start-up, prepare Materials Source Separation Program. Provide separate containers for re-usable and/or recyclable materials of the following: <ul style="list-style-type: none"> .1 Gypsum board. .2 Metals. .3 Wood. .4 Plastics. .5 Other materials as indicated in technical sections.
	.2	Implement Materials Source Separation Program for waste generated on project in compliance with approved methods and as approved by Departmental Representative.
	.3	Locate containers in locations, to facilitate deposit of materials without hindering daily operations.
	.4	Locate separated materials in areas which minimize material damage.
1.4 Diversion of Materials	.1	Create a list of materials to be separated from the general waste stream and stockpiled in separate containers, to the approval of the Departmental Representative and consistent with applicable fire regulations. <ul style="list-style-type: none"> .1 Mark containers. .2 Provide instruction on disposal practices.
1.5 Storage, Handling and Application	.1	Do work in compliance with Waste Reduction Workplan.
	.2	Handle waste materials not re-used, salvaged, or recycled in accordance with appropriate regulations and codes.
	.3	Materials in separated condition: collect, handle, store on site, and transport off-site to an approved and authorized recycling facility.

- .4 Materials must be immediately separated into required categories for re-use or recycling.
- .5 Unless specified otherwise, materials for removal become the Contractor's property.
- .6 On-site sale of salvaged/recyclable material is not permitted.
- .7 Provide Departmental Representative with receipts indicating quantity of material delivered to landfill.
- .8 Provide Departmental Representative with receipts indicating quantity and type of materials sent for recycling.

END OF SECTION

Part 1 General

- | | | |
|---|----|---|
| 1.1 Related Requirements | .1 | Section 01 78 30 – Closeout Submittals. |
| | .2 | Section 01 74 10 – Cleaning. |
| | .3 | Section 01 74 19 – Waste Management and Disposal. |
| | | |
| 1.2 Administrative Requirements | .1 | Acceptance of Work Procedures: |
| | .1 | Contractor's Inspection: Contractor: conduct inspection of Work, identify deficiencies and defects, and repair as required to conform to Contract Documents. |
| | .1 | Notify Departmental Representative in writing of satisfactory completion of Contractor's inspection and submit verification that corrections have been made. |
| | .2 | Request Departmental Representative's inspection. |
| | .2 | Departmental Representative's Inspection: |
| | .1 | Departmental Representative and Contractor to inspect Work and identify defects and deficiencies. |
| | .2 | Contractor to correct Work as directed. |
| | .3 | Completion Tasks: submit written certificates in English that tasks have been performed as follows: |
| | .1 | Work: completed and inspected for compliance with Contract Documents. |
| | .2 | Defects: corrected and deficiencies completed. |
| | .3 | Work: complete and ready for final inspection. |
| | .4 | Final Inspection: |
| | .1 | When completion tasks are done, request final inspection of Work by Departmental Representative and Contractor. |
| | .2 | When Work incomplete according to Departmental Representative, complete outstanding items and request re-inspection. |
| | .5 | Declaration of Substantial Performance: when Departmental Representative considers deficiencies and defects corrected and requirements of Contract substantially performed, make application for Certificate of Substantial Performance. |
| | .6 | Commencement of Lien and Warranty Periods: date of Owner's acceptance of submitted declaration of Substantial Performance to be date for commencement for warranty period and commencement of lien period unless required otherwise by lien statute of Place of Work. |
| | .7 | Final Payment: |

- .1 When Departmental Representative considers final deficiencies and defects corrected and requirements of Contract met, make application for final payment.
- .2 When Work deemed incomplete by Departmental Representative, complete outstanding items and request re-inspection.
- .8 Payment of Holdback: after issuance of Certificate of Substantial Performance of Work, submit application for payment of holdback amount in accordance with contractual agreement.

1.3 Final Cleaning

- .1 Clean in accordance with Section 01 74 11 - Cleaning.
 - .1 Remove surplus materials, excess materials, rubbish, tools and equipment.
 - .2 Waste Management: separate waste materials for reuse and recycling in accordance with Section 01 74 19 - Waste Management and Disposal.

Part 2 Products

2.1 Not Used

- .1 Not Used.

Part 3 Execution

3.1 Not Used

- .1 Not Used.

END OF SECTION

1.1 Submission

- .1 Prepare instructions and data by personnel experienced in maintenance and operation of described products.
- .2 Revise content of documents as required before final submittal.
- .3 Phasing of submission:
 - .1 2 weeks before substantial performance of the work for Phase 1 construction, submit to Departmental Representative 4 final copies of operation and maintenance manuals.
 - .2 2 weeks before substantial performance of the work for Phase 2 construction, submit to Departmental Representative 4 final copies of Phase 2 supplements to operation and maintenance manuals.
- .4 Ensure spare parts, maintenance materials and special tools provided are new, neither damaged nor defective, and of same quality and manufacture as products provided in work.
- .5 If requested, furnish evidence as to type, source and quality of products provided.
- .6 Defective products will be rejected, regardless of previous inspections. Replace products at own expense.

1.2 Format

- .1 Organize data in the form of an instructional manual.
- .2 Binders: vinyl, hard covered, 3 "D" ring, loose leaf 219 x 279 mm with spine and face pockets.
- .3 Cover: identify each binder with type or printed title "Project Record Documents"; list title of project and identify subject matter of contents.
- .4 Arrange content by systems under section numbers and sequence of Table of Contents.
- .5 Provide tabbed fly leaf for each separate product and system, with typed description of product and major component parts of equipment.
- .6 Text: manufacturer's printed data, or typewritten data.
- .7 Drawings: provide with reinforced punched binder tab. Bind in with text; fold larger drawings to size of text pages.

1.3 Contents, Each Volume

- .1 Table of Contents – provide the following:
 - .1 Title of project.
 - .2 Date of submission.
 - .3 Names, addresses, and telephone numbers of Consultant

and Contractor with name of responsible parties.

- .4 Schedule of products and systems, indexed to content of volume.
- .2 For each product or system, list names, addresses and telephone numbers of subcontractors and suppliers, including local source of supplies and replacement parts.
- .3 Product data: mark each sheet to clearly identify specific products and component parts, and data applicable to installation. Delete inapplicable information.
- .4 Drawings: supplement product data to illustrate relations of component parts of equipment and systems, to show control and flow diagrams.

1.4 As-built Documents

- .1 **Contract drawings** and shop drawings: legibly mark each item to record actual construction, including:
 - .1 Measured locations of internal utilities and appurtenances, referenced to visible and accessible features of construction.
 - .2 Field changes of dimension and detail.
 - .3 Changes made by change orders.
 - .4 Details not on original Contract drawings.
 - .5 References to related shop drawings and modifications.
- .2 **Contract Specifications:** legibly mark each item to record actual "Workmanship of Construction", including:
 - .1 Manufacturer, trade name, and catalogue number of each "Product/Material" actually installed, particularly optional items and substitute items.
 - .2 Changes made by addenda and change orders.
- .3 As-built information:
 - .1 Record changes in red ink.
 - .2 Mark on 1 set of drawings, specifications and shop drawings at completion of project and, before final inspection, neatly transfer notations to second set.
 - .3 Provide 1 set of CD's in AutoCAD 14 file format with all as-built information on the CD's.
- .4 Submit all sets to the Departmental Representative.

1.5 Spare Parts

- .1 Provide spare parts in quantities specified in individual specification Sections.

	.2	Provide items of same manufacture and quality as items in work.
	.3	Deliver to on-site location as directed; place and store.
	.4	Receive and catalogue all items. Submit inventory listing to the Departmental Representative. Include approved listings in maintenance manual.
	.5	Obtain receipt for delivered products and submit to Departmental Representative.
1.6 Maintenance Materials		
	.1	Provide maintenance and extra materials in quantities specified in individual specification sections.
	.2	Provide items of same manufacture and quality as items in work.
	.3	Deliver to on-site location as directed; place and store.
	.4	Receive and catalogue all items. Submit inventory listing to the Departmental Representative. Include approved listings in maintenance manual.
	.5	Obtain receipt for delivered products and submit to Departmental Representative.
1.7 Special Tools		
	.1	Provide special tools in quantities specified in individual specification Sections.
	.2	Provide items with tags identifying their associated function and equipment.
	.3	Deliver to location as directed; place and store.
	.4	Receive and catalogue all items.
	.5	Submit inventory listing to the Departmental Representative.
	.6	Include approved listings in maintenance manual.
1.8 Warranties, Bonds, Test Reports, Inspection Reports		
	.1	Separate each Document with index tab sheets keyed to Table of Contents listing.
	.2	List subcontractor, supplier and manufacturer with name, address, and telephone number of responsible principal.
	.3	Obtain Warranties, Bonds, Test Results, Inspection Reports executed in duplicate by subcontractors, suppliers, manufacturers, and inspection agencies within 10 days after completion of the applicable item of work.
	.4	Except for items put into use with the Departmental

Representative's permission, leave date of beginning of time of warranty until the date of substantial performance is determined.

- .5 Verify that documents are in proper form, contain full information, and are notarized.
- .6 Co-execute submittals when required.
- .7 Retain warranties and bonds until time specified for submittal.

1.9 Completion

- .1 Submit a written certificate that the following have been performed:
 - .1 Work has been completed and inspected for compliance with the Contract documents.
 - .2 Defects have been corrected and deficiencies have been completed.
- .2 Work is complete and ready for final inspection.

END OF SECTION