

PART 1 - GENERAL

- 1.1 Description of Work .1 This section specifies requirements for demolishing and removing wholly or in part various items designated to be removed or partially removed.
- .2 Demolition and removal off site of the existing reinforced concrete fishway baffles, beams, baffle footings, and portion of fishway exit walls (Cell / Pool #18). Fishway guide walls and diversion / training wall are to remain in place and be repaired, as indicated on the Drawings. Trash rack to be removed and reinstalled.
- .3 Demolition and removal of existing attraction water pipeline and concrete cradles, and grating in Cell / Pool #1 Floor. Openings to be filled with concrete as indicated on Drawings.
- .4 Removal and salvage of the existing grating and provision of secure storage until time of reinstatement, with the exception of the damaged grating located in Cell #10, which is to be removed off site. New grating to be reinstated in Cell / Pool #10, as indicated on Drawings.
- 1.2 Related Work .1 Refer to other specification sections for related information.
- .2 Refer to **Section 01 33 00** for Shop Drawing/Submission requirements.
- 1.3 Submissions .1 Methodology:
- .1 When requested provide methodology for carrying out the work
- .2 Provide submission in accordance with **Section 01 33 00**.
- 1.4 Schedule .1 Demolition shall be carried out in incremental stages only sufficiently to

allow uninterrupted progress for the reconstruction of the reinforced concrete fishway baffles and baffle footings, etc. It is not permitted to advance the demolition work beyond reasonable limits without the agreement of the *Departmental Representative*. It is critical that the work be completed and that the Contractor be fully demobilized with all temporary works removed, including in-stream cofferdams. Additionally, the fishway shall be cleaned of all debris and construction materials and be fully operational and satisfactory for the fish run by March 31, 2017.

- 1.4 Protection .1 Protect existing objects designated to remain. In the event of damage, immediately replace or make repairs to approval of *Departmental Representative* and at no additional cost to Canada.
- .2 Do not allow materials to fall into the stream. Promptly remove material which does enter stream.

- 1.5 Measurement for Payment .1 Sitework, demolition and removals will not be measured but will be paid for in accordance with **Section 01 29 00**.

PART 2 - PRODUCTS Not applicable.

PART 3 - EXECUTION

- 3.1 Preparation .1 Inspect site and verify with *Departmental Representative* items designated for removal and items to be preserved.
- .2 Locate and protect utility lines. Preserve in operating condition active utilities traversing site.
- 3.2 Removal .1 Remove in their entirety all materials and objects specified for removal.

- .2 Do not disturb adjacent work designated to remain in place.
- .3 At end of each day's work, leave work in safe condition so no part is in danger of toppling or falling.

3.3 Disposal of Material

- .1 Disposal of materials not designated for salvage or re-use in work, will be the contractor's responsibility, and must be disposed of off-site.
- .2 The material to be disposed is to be transported and disposed of in an environmentally acceptable manner to the satisfaction of the *Departmental Representative*, and in accordance with any local, Municipal, Provincial and Federal restrictions and regulations.

3.4 Restoration

- .1 Upon completion of work, remove debris, trim surfaces and leave contractor staging area and work site clean.
- .2 Reinstate areas and existing works outside areas of demolition to conditions that existed prior to commencement of work. Match condition of adjacent, undisturbed areas.

EXCAVATING AND BACKFILLING

PART 1 - GENERAL

- 1.1 Related Work .1 Refer to other Specification Sections for related information.
- 1.2 Definitions .1 Rock excavation: excavation of material from solid masses of igneous, sedimentary or metamorphic rock which, prior to its removal, was integral with its parent mass, and boulders or rock fragments having individual volume in excess of 1.5 m³.
- .2 Common excavation: excavation of materials of whatever nature, which are not included under definitions of rock excavation.
- 1.3 Protection of Existing Features .1 Existing buried utilities and structures:
- .1 Prior to commencing any excavation work, notify applicable owner or authorities, establish location and state of use of buried utilities and structures. Clearly mark such locations to prevent disturbance during work.
- .2 Existing buildings and surface features:
- .1 Protect existing buildings and surface features which may be affected by work from damage while work is in progress and repair damage resulting from work.
- 1.4 Shoring and Bracing .1 Comply with applicable local regulations to protect existing features.
- 1.5 Measurement for Payment .1 Excavation and backfill will not be measured for payment and will be incidental to work.

PART 2 - PRODUCTS

- 2.1 Materials .1 Backfill material: suitable material from on-site excavation or other source approved by *Departmental Representative*.

PART 3 - EXECUTION

- 3.1 Site Preparation .1 Remove obstructions, ice and snow, from surfaces to be excavated within limits indicated.
- 3.2 Stockpiling .1 There shall be no stockpiling of excavated materials on site. Stockpile fill materials in contractor's staging area as agreed with the *Departmental Representative*.
- 3.3 Dewatering .1 Keep excavations free of water while work is in progress.
- .2 Protect open excavations against flooding and damage due to surface run-off.
- .3 Dispose of water in a manner not detrimental to public and private property, or any portion of work completed or under construction.
- 3.4 Excavation .1 Excavate to lines, grades, elevations and dimensions indicated.
- .2 Dispose of surplus and unsuitable excavated material off site.
- .3 Do not obstruct flow of surface drainage.
- .4 Stockpile suitable excavated materials required for backfill in approved location.
- 3.5 Backfilling .1 Do not proceed with backfilling operations until *Departmental Representative* has inspected and approved installations.
- .2 Areas to be backfilled to be free from trees, topsoil, organics, unsuitable materials, debris, snow, ice, water and frozen ground.
- .3 Do not use backfill material which is frozen or contains ice, snow or debris.
- .4 Place backfill material in uniform layers not exceeding 150 mm in thickness up to

EXCAVATING AND BACKFILLING

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grades indicated. Compact each layer before placing succeeding layer.

.6 Compact common backfill materials:

.1 In non-pavement areas, to a density at least equal to density of adjacent, undisturbed soil.

.8 Compact using approved mechanical tamping devices, or by hand tamping to achieve specified compaction.

3.8 Clearing

.1 Do not clear any areas or remove any trees, beyond the minimum limits required to accommodate the work. Obtain approval of the *Departmental Representative* for any clearing required.

.2 In areas of clearing, reinstatement to be carried out following completion of the work to leave it in clean and natural state, free of any dead or cut organic debris.

3.8 Restoration

.1 Upon completion of work, remove surplus materials and debris and correct defects noted by *Departmental Representative*.

.2 Clean and reinstate areas affected by work as directed by *Departmental Representative*.

.3 Restore site to its normal state prior to excavation.