PART 1 - GENERAL

1.1 Related Work

.1	Environmental Protection	Section 01560

.2 Topsoil Stripping and Placement Section 02260

1.2 Site Conditions

.1 Confirm all surface and buried utility lines and structures with Contract Administrator, and obtain authorization to cross utility corridors, as required.

1.3 Protection

- .1 Prevent damage to fencing, trees, landscaping, natural features, bench marks, existing buildings, existing pavement, surface or underground utility lines which are to remain. Make good any damage. Refer to section 01560 Environmental Protection.
- .2 Prevent damage to all areas within the project site designated to remain undisturbed.

1.4 Inspection & Supervision

- .1 The Contract Administrator will provide the Contractor with initial staking of all earthworks, and will advise and stake any modifications required while the works are in progress, in addition to establishing initial grades and perimeter staking for all golf course features.
- .2 The Contract Administrator or designated representative will be on-site as the majority of excavation and filling operations are being undertaken and will provide direction to the Contractor.
- .3 The Contractor will be required to shape fill as necessary to achieve earth forms suitable for each intended purpose (i.e., bunker subgrades).
- .4 Should the Contractor be unable to progress with the shaping work at a rate acceptable to the Contract Administrator, excluding delays created by weather conditions and other site works, the Contract Administrator will be obligated to make alternate arrangements to complete the work in a prompt and satisfactory manner.

PART 2 - MATERIALS

2.1 Materials

- .1 Fill: Utilize native material from excavation, grading, or designated off-site borrow sources, approved by the Contract Administrator for use intended, unfrozen and free from rocks larger than 50 mm (2"), cinders, ashes, sods, refuse or other deleterious materials. Refer to Renovation Plans (L1 & L2) for location and estimated volumes of fill material.
- .2 Topsoil: Off-site soil material approved by the Contract Administrator for use as topsoil.
- .3 Protect approved material from contamination and erosion.

PART 3 - EXECUTION

3.1 Grading

- .1 Rough grade to grades and contours indicated by the Contract Administrator allowing for positive surface drainage <u>at all times</u> and intended surface treatment as indicated on the Bunker Construction Detail (1/L4).
- .2 The process for staking and undertaking grading operations will be as follows:
 - .1 Extent of fill areas will be staked and elevations for cut or fill marked by the Contract Administrator.
 - .2 Contractor or designated site representative shall review the proposed works to confirm required material quantities and consistency with existing site elevations and proposed extent of work as shown on the Grading Plan.
 - .3 In order to ensure the overall quantities called for in the contract remain constant, the Contract Administrator must be notified immediately of all material discrepancies. Any added costs resulting from failure to notify the Contract Administrator of discrepancies, which materially affect the total quantity of material moved to achieve the proposed elevations shown on the drawings, will be the responsibility of the Contractor.
 - .4 Following the review of staking and grading, the Contractor will excavate, place and compact fill to locations and to within 150 mm (6") +/- finish subgrade elevations.
 - .5 The Contract Administrator will review and direct or/advise the Contractor on final shaping of subgrade contours to achieve proposed grades.
 - .6 Obtain the Contract Administrator's approval prior to spreading of topsoil.

- .3 Prior to placing fill over existing ground, scarify surface to depth of 150 mm (6"). Maintain fill and existing surface at approximately same moisture content to facilitate bonding.
- .4 Place and compact fill material in lifts not exceeding 300 mm (12") when compacted.
- .5 Repair all settlement damage resulting from inadequate compaction.

3.2 Spreading of Topsoil

- .1 Spread stockpiled topsoil on all re-graded bunker and tee surrounds areas to a minimum depth of 100 mm (4") or as otherwise directed by the Contract Administrator.
- .2 Spreading of topsoil at all bunkers is to be carried out following final shaping of golf course features, and installation of irrigation and drainage materials.

3.3 Surplus Material

- .1 Surplus fill material is to be hauled to onsite storage area as directed by the Contract Administrator.
- .2 Remove material unsuitable for fill, grading or landscaping to onsite disposal area.