

Sample Scope of Services for Shoreline Golf Links
GOLF COURSE DESIGN SERVICE

“Owner” – City of Mountain View

“Designer” - Robert Trent Jones II

Phase I – Golf Design Master Plan Development

1. Study topographical material, site photographs, soil and water reports, sensitive environmental areas, existing site vegetation and other site data to acquire a feel for the property.
2. Prepare Initial Golf Course Design Master Plan Concept(s) to examine the various conceptual golf hole routings and the advantages and disadvantages of each to determine the best utilization of the land in accordance with the objectives of Owner.
3. Presentation to and assistance to the Owner in evaluation by Owner of Initial Golf Course Design Master Plan Concepts.
4. Refinement of Initial Golf Course Design Master Plan(s) for the overall Golf Course Design as well as on an individual hole basis, all in accordance with Owner’s guidelines.
5. Re-evaluation with Owner of the modified Golf Course Design Master Plan and confirm golf hole routing on-site.

Phase II – Recommended Final Route Plan & Preliminary Project Grading

A. Prepare Recommended Final Golf Course Design Route Plan (***“Final Recommended Golf Course Route Plan”***), including any final site inspection and presentation of a colored rendering of the Final Recommended Golf Course Route Plan. The Final Recommended Golf Course Route Plan shall be subject to subsequent adjustments as may be imposed in the approval process or by desires of Owner and/or Owner’s Consultant with Designer’s concurrence. The Final Recommended Golf Course Route Plan shall designate the recommended location or corridors for the preferred routing of the golf holes. The Final Recommended Golf Course Route Plan shall identify location and layout of Golf Course components in relation to one another and the existing adjacent project elements, identifying the approximate location of the following items: Tee locations, green locations, fairway areas, rough areas, bunker locations, golf cart path locations, and waterway edges, and bridge locations. Included in the Final Recommended Golf Course Route Plan shall be a scorecard in *meters* for all teeing areas. Also included in the Final Recommended Golf Course Route Plan shall be the practice facility location, existing clubhouse location; maintenance facilities

locations; other existing ancillary buildings and any other integrated project components as determined by the project scope.

2. Develop Preliminary Earthwork Grading Plan at a scale of 1:1000 at .5-meter contour interval for review and comments by Owner and Owner's Engineers.
3. Develop preliminary earthwork calculations using .5meter contour intervals.
4. Develop preliminary golf course construction investment analysis for the Golf Course construction process.
5. Finalize the Preliminary Grading Plan, suitable for securing permits if necessary, at a scale of 1:1000 incorporating comments and information from Owner and Owner's Engineers and prepare corresponding Preliminary Construction Specifications.

Note: Before work can begin on the Working Drawings, the Preliminary Grading Plan shall be finalized and mutually approved by Designer and Owner. The Grading Plan is the foundation plan for all the Working Drawings. Owner's approval is critical to the progress of the project.

Phase III - Working Drawings and Specifications

A. Preparation of a full set of Working Drawings for the approved Golf Course Design configurations produced at a scale of 1:1000. Sheet size shall be determined by the final layout of the golf course unless Owner requires a specific sheet size. The development of all Working Drawings, Construction Specifications and the Menu of Quantities shall be developed during this phase. The Working Drawings shall typically include, as necessary, the following:

1. Clearing and Staking Plan

1. Identifying locations of the center of each rear tee, the turn point locations within each fairway (two turn point locations on Par 5 holes) and the center of each green, and giving coordinates (on the basis of the information provided in the base mapping supplied by Owner);
2. Showing each golf hole centerline with labeling provided at 20-meter intervals and offset dimensions at these 20-meter stations for the golf hole edge of adjacent lakes where applicable; and
3. Identifying areas of specific clearing and existing locations of existing vegetation and native areas to remain.

Note: Additional detailed information regarding clearing and staking shall be clearly defined in the Construction Specifications.

2. Earthwork Grading Plan

1. Identifying all proposed changes to the existing terrain within the boundary of the Golf Course area;
2. Showing proposed contour lines at a .5-meter interval; and

3. Indicating existing terrain, proposed terrain revisions, low points, catch basins and spot elevations for center points of tees, turn points in fairways and greens.

Note: The grading shown on the Earthwork Grading Plan shall be subject to revision in the field during construction per the discretion of the Designer and DFS personnel.

- 3. Earthwork Cut and Fill Plan**

1. Identifying where earthwork cut and fill material is to be generated and placed within the boundary of the Golf Course; and
2. Identifying individual areas of cut and fill and with approximate quantity of material, shown in cubic meters.

4. **Final Golf Course Route Plan** as outlined in Phase I of this Addendum in conjunction with the Earthwork Grading Plan.

- 5. Conceptual Drainage Plan**

1. Conceptual Drainage Plans indicating the approximate location of catch basins, lake edges and waterway boundaries, and subsurface pipe within the boundary of the Golf Course;
2. Analyzing storm water catchments, basic designs and provisions of water for future irrigation; and
3. Indicating pipe locations for the connection of the catch basins to outfall locations (lakes, low points, etc.).

Note: The final sizing of catch basin structures and pipes are the responsibility of Owner's engineer. All final Design of lakes (including but not limited to final edge treatment, lining, overflow structures, spillways, interconnection pipes, fill pipes, etc.), irrigation holding tanks, bridges, detentions structures, culverts, headwalls, bridges, rock retaining walls, catch basins, underground pipe and storm drains are also the responsibility of Owner's engineer and/or lake design Owner.

- 6. Conceptual Cart-Path Plan**

1. Indicating approximate location of Design of the golf cart path system within the boundary of the Golf Course; and
- 2 Identifying areas of Designed cart path of differing widths as well as pull out locations and locations of curbing placement.

Note: Approximate quantities for these specific items shall be provided in the Conceptual Cart-Path Plans. Typical construction practices shall be provided in the Construction Specification. However, final specifications and Design for the cart path are the responsibility of the Owner's engineer.

- 7. Sand Seedbed Placement Plan**

Identifying playable areas within the Golf Course boundary where irrigated turf is to be re-planted that require the placement of recommended seedbed or sand cap material.

- 8. Grass Development Plan**

Indicating quantity and re-placement of specific varieties of turf grass as well as the specific manner of installation (sprigs, sod, etc.) to be planted within the irrigated turf limits of the Golf Course.

9. Conceptual Landscape Plan

1. Identifying, within the boundary of the Golf Course, areas of differing re-landscaping planting requirements for the basis of the Golf Course play perspective; and
2. Indicating areas where certain category of landscape materials should be utilized based on heights, colors, scale, density, etc.

Note: Final delineation of the landscaping areas shall occur during construction once the actual final limits of irrigated turf for the Golf Course have been defined. Final Design of the landscape areas (defined as not areas of irrigated turf) within the Golf Course boundary, both hard-scape and soft-scape, is the responsibility of the Owner's landscape architect, with final review provided by Designer. The Designer's conceptual landscape plan should be used as a guide for the Owner's landscape architect detailing exact sizes, quantities, species and placement.

10. Typical Construction Details Sheet

1. Showing typical construction of golf course features, including tee construction, green construction, bunker construction, cart path construction, catch basin re-installation, and the re-installation of supplemental drainage.
2. Construction and Specifications.
3. Liaison with Owner's technical staff in preparation of drawings, specifications and other tender documents.

Note: Designer will assist Owner with the re-development of the existing and proposed lake areas to help ensure proper aeration, definitive lake edge treatments and other matters pertaining to the landscaped focal point of the project.

Phase IV - Field Design and Construction Coordination

1. Periodic on-site inspections of construction by key Designer design personnel and other periodic on-site inspections by other key personnel specializing in earthworks, irrigation and landscape, to provide consultation to Owner.
2. Design of features and green Designs as construction proceeds in the form of hand drawn sketches.
3. Inspection of general shaping, all artworks (defined as shaping of the features of the golf course, i.e., the greens, tees, fairway bunkers, fairway contouring, feature tie-in and lake edge shaping) and irrigation installations.

Phase V – Rendering

1. Preparation of final construction as-built drawings in CAD format to reflect the final Design and actual layout of the ground utilizing as-built topography mapping to be provided by contractor.
2. Upon completion of construction, prepare a colored rendering of the Golf Course that is suitable for framing. Rendering shall be titled and show pertinent score card information, including par and distances of each hole in meters, show wooded areas, structures, and other amenities within the general boundary of the Golf Course.

Site Information Requirements from Owner to be provided to Designer for the Design Development of Golf Course

Water and Protected Areas:

- Information on Ground Water Levels at 3 locations Requested by Designer
Average ground water level High ground water level Low ground water level
- Detailed information regarding protected species, both animal and plant, and delineated locations of these items and limitations created by their presence.
- Detailed information regarding any limitations and regulations regarding impacting existing seasonal and permanent wetlands or water bodies.
Any flood levels, which correlate to storm conditions in lower portions of the property and along existing lakes.
Historical site storm flood events (10, 25, 50, 100-year events).

Topographic Mapping:

A complete and accurate topography base map at 0.5-meter contour interval level, complete with numerical values on the topographic lines in AutoCAD .dwg file format. Mapping should be current with existing information including topographic features, vegetation, rock outcroppings, waterways, property boundaries, fences, trails, restrictions, easements, boundaries, contours of building site, existing utilities (sewer, water, gas, electricity, etc.), pipelines, power lines, roads, buildings and other structures, water bodies, and if possible, drainage patterns.

Weather Data (For the last 10-year period, if available):

Daily and monthly totals of precipitation records.
Daily and monthly totals of temperature records.
Wind velocity and prevailing directions including seasonal fluctuation. Number of sunny/cloudy days.

Information on Water Supply:

Sources such as lakes, wells, rivers, aquifers, treatment facilities etc. Source Quality.
Quantity- Litres per Minute.
Potential effluent or tertiary water source and timing of its availability

Information on Environmental Regulations:

Detailed information of any limitations and regulations governing the treatment of the various vegetation delineations. Accurate and up to date delineation of these areas shall be provided in AutoCAD format (DWG).

- Detailed information regarding limitations on methods of controlling surface water through runoff.
- Statutory or mandatory local, regional, and federal governmental regulations relating to design or environmental controls.

Soil Structure Analysis taken from 3 Test Bores and/or Pit locations on the Site as requested by Designer:

Locations of any existing borings and/or pits, if any. Soil profiles/depth to rock or ground water table. Chemical composition of on-site soil material.
Any chemical, mechanical or other tests.

Information on Power Supply:

Location of power supply to the project and any proposed sub-station locations for the Golf Course development.

Information on Development:

Proposed platform levels of areas adjacent to the Golf Course.
Current master plan of all components of the Golf Club Facilities development. Other pertinent development components to be included in the Golf Course master planning.

Item 10: Information on Property:

- Current property boundary information shall be provided in digital format, specifically AutoCAD .DWG file.

Details of information of locations of all existing structures to remain on site including utility easements, roadways, structures, etc.

Shoreline Golf Course

Additional Scope Description Agronomy and Irrigation Design

Agronomy

Robert Trent Jones II will subcontract Agronomic Services from Turfgrass Ltd. Given that Shoreline currently has agronomic support through Touchstone, agronomic services will be limited to grass specifications and inspections of the updated nine holes and will require an estimated 3 visits:

The first visit will be to visit the site and collect soil and ground water samples for testing (it is expected that if any excavation is required the on-site staff can provide this). This will result in grass recommendations as well as any needed amendments to the soil profile.

The second visit will be to inspect the seeding / sodding of the course and make sure that specifications are being followed by the contractor. A report will be provided to the owner.

The third visit will be to inspect practices during the grow in of the course to make sure that specifications are being followed by the contractor and if concerns arise be available to assist the ownership with further recommendations.

The scope of Agronomic services is limited as It is understood that the staff at Shoreline will supervise grow in and does not need project coordination, mechanical, or shop review / specs. The above services are consulting services and the success of the grow in is the responsibility of the contractor who is directly responsible for the grow in.

Irrigation Design

Robert Trent Jones II will subcontract Irrigation Design Services from Bryant Taylor Gordon.

DESIGN SERVICES

- Design Development – Preliminary Design
- Final Design
- Bid and Construction Documents

Note: All documents will be provided electronically.

CONSTRUCTION SUPPORT SERVICES

- Staking and Construction Observation
- GPS Mapping
- Record Drawings
- Yardage Plans:
 - Center only
 - Front/Center/Back
- Control System Programming and Electronic Map

Note: Programming fees assume that there is an existing program that is complete and correct and that we would only need to enter data for the new 9 holes.

Anticipated Site Visits:

Pre-Bid: 1 visit

Field staking: 3 visits

GPS Mapping: 1 visits

Travel expenses will include mileage/airfare, rental car, hotel, and meals.