

## **EXHIBIT B – Scope of Work**

### **Intent:**

In general, this Bid Package is comprehensive to specific CSI Division Work and related Work as referenced, indicated on, or implied by the Project Drawings, Specifications and Project Manual. Subcontractor acknowledges that the following Scope of Work detail is provided as a courtesy and must be used in conjunction with **all** Project Documents. Scope of Work detail listed is not intended to describe a complete and final work scope. It is provided as a summary overview only.

### **Document Inclusions:**

- Sample subcontract agreement with special provisions and exhibits
- Owner contract
- Exhibit B - this scope of work
- Schedule
- Logistics plan
- Soils Report dated 2/5/19 revision 2
- March 29, 2019 75% CD drawings and specifications

### **Scope of Work Summary:**

Furnish all **Landscaping, Irrigation, and Pavers** submittals and shop drawings, fabrication, materials, safety, quality control, labor, equipment and tools, competent supervision, hoisting, scaffolding, campus traffic control measures, and transportation required for a complete installation of all **Landscaping, Irrigation, and Pavers** as outlined in the contract documents.

- ✓ **Landscaping**
- ✓ **Irrigation**
- ✓ **Site Furnishings**
- ✓ **Pavers (alternate #4)**

### **Trade Specific Scope of Work Items:**

The following is a general outline of items specifically included, but not limited to, under this agreement:

1. Provide cleaning of all exposed surfaces furnished under this package prior to final turnover.
2. Subcontractor shall obtain and pay for any required permits, bonds, or fees as required to complete scope of work under this agreement including any required re-inspection fees / costs are responsibility of Subcontractor. It is the responsibility of this Subcontractor to anticipate inspection delays in the installation durations and sequence such work ahead of others as not to impose delays in the schedule.
3. Subcontractor understands that multiple areas will be occurring simultaneously and said Subcontractor shall provide required supervision and manpower to maintain multiple work areas. Schedule is not constrained which allows the Drywall and Concrete trades to proceed ahead of schedule, or work floors than anticipated in the schedule. Subcontractor agrees to adjust manpower and supervision requirements to meet acceleration potential of the building structure at

no additional cost to Contractor (i.e. electrical rough-ins shall not be constraint on masonry, concrete, installations).

4. Subcontractor understands the schedule and has included multiple crews in order to achieve the required dates.
5. All testing, certification tests, etc. under direction of Owner, Engineer, Inspectors, and governmental authority(s) having jurisdiction. This includes but is not limited to all seismic qualification certifications and/or calculations as required in various elevator specification sections. Certifications/calculations shall be signed and sealed by a qualified professional engineer.
6. This Subcontractor shall make deliveries by trailer truck. Storage space at the jobsite is extremely limited and will only be available as allowed by the CM. Include all necessary equipment, etc. to unload all deliveries.
7. Any welding machines shall be gas/diesel type and no electrical power will be made available for this operation on site.
8. Subcontractor shall include 2% of the total contract value for participation in composite clean-up crew. Balfour Beatty will be responsible for managing this crew.
9. Cleaning of streets if soiled by this subcontractor is included immediately upon occurrence before Owner contracts BBC.
10. Protection of all installed hardscape is included from damage by this scope of work
11. Flaggers at site entrance are included for your scope of work entering and existing site
12. CMAR is responsible for material and quality control testing. Any re-testing or reinspections of failed items will be responsibility of this subcontractor to pay.
13. Subcontractor is responsible for all dewatering as required to complete this scope of work
14. Subcontractor is responsible for total coordination of all underground utilities and for providing a complete utilities system. There will be no cost or time considerations given for adjustments of structures or pipe runs due to conflicts arising from lack of coordination with adjacent utilities, structures, or other Subcontractors. First installed does not constitute grounds for a change order for installation of uncoordinated work. BBC and UNCW dig permits are required to be accurate and completed for all excavations. All existing utilities shall be located by pot holing and exposed by hand for length of required exposed before any machine excavation occurs. BBC must visually see the exposed utility before machine excavation occurs. All supporting of existing utilities including beams, cables, adding restraints etc. is include to protect the utility during excavation and backfilling operations.
15. Subcontractor is hereby advised that site investigation reports have been provided by the Owner for review and information purposes. The report has been issued to this Subcontractor.

Subcontractor shall waive all rights to any claims against the Construction Manager for conditions as designated in the report. See unit prices for any conditions deemed by the 3<sup>rd</sup> party inspector to not comply with the Contract Documents.

16. Subcontractor is responsible for notifying Construction Manager, Owner, Architect, and governing agencies of all inspection requests.
17. Subcontractor is responsible for notifying Construction Manager, Owner, Architect, and Governing agencies of all existing utility locates.
  - a. Subcontractor shall verify locations of all existing Utilities within the Construction Areas prior to commencing Work.
  - b. Any damage to existing in-service Utilities during Construction will be repaired at the expense of the Subcontractor that caused the damage.
  - c. Subcontractor is responsible for notifying the Construction Manager, Owner, Architect, and Governing agencies of all tie-ins and shut downs of existing utility systems, inspection requests, and existing utility locates.
18. Subcontractor is responsible for the repairs or relocations required of site perimeter fencing and gates if damaged or if required to perform work under this agreement.
19. Videotaping of all existing conditions prior to start of work under this agreement is included for all clearing operations and any operations working around existing utilities or other structures. Video Taping of all utilities installed under this scope of work is also included.
20. Subcontractor is required to participate in the BIM Coordination Drawing process with other project Subcontractors as detailed in the Subcontract Special Provisions - Project Provisions to assist in producing fully coordinated CAD coordination drawings.
21. The following is a general outline of items included, but not limited to, under this Agreement for **Landscaping and Irrigation** Work per specifications:
  - a. Scope of work includes
    - i. Main parking deck site new work
    - ii. East pond vegetative plantings
    - iii. Repairs to existing landscaping conditions at conclusion of project at following locations:

1. West main entry area into Belk Hall on north side of main walk
  2. Project Road frontage right of way area including both entries
  3. Offsite Temporary precast access drive landscaping replacement (see logistics plan for locations)
    1. West end shrubs and mulch
    2. Middle access road seeding
    3. East end mulching
  4. West parking lot islands on east end
- b. All surveying and layout of all work under this Agreement is included in this Subcontractor's Scope of Work. Monument elevation and horizontal control shall be provided on-site by others.
  - c. Protection of asphalt paving and concrete curbs/walks is included. Any and all required traffic control is included.
  - d. Cleaning of surrounding roads, sidewalks, storm inlets and structures, and parking areas are included if soiled by this Subcontractor with work under this Agreement.
  - e. Subcontractor shall deliver and complete work under this Agreement in phased areas as approved by CM. Bulk deliveries and extended storage of materials on-site is prohibited.
  - f. Subcontractor shall provide all specified maintenance and warranties. Replacement of any/all noncompliance work under this Agreement at end of the warranty and maintenance period, in order to receive final acceptance of work from Owner, shall be provided at no additional cost to CM and/or the Owner.
  - g. Included are multiple mobilizations, multiple crews, and equipment to complete this Scope of work since sequence of work will be installed by area.
  - h. The following is a general outline of items included, but not limited to, under this agreement for **Landscaping** per specification sections:
    - i. Furnishing and installing all planting, ground cover, shrubs, mulching, trees, etc. per Planting Schedule, and per quantities indicated on Drawings. Subcontractor has included all planting types and quantities indicated on the Planting Schedule as well as confirming quantities required on Drawings.

- ii. Included is all fertilizers, edging, V-cut edging, soil amendments, antidesiccants, maintenance, staking, pruning, tree wrapping, tilling subsoil, weed control barriers, etc.
- iii. Furnishing and installing all seeding and sodding per quantities associated with the contract documents, required seeding and sodding dates, mulching, watering, rolling, erosion control, fertilizing, lime, soil amendments, seedbed preparation, etc. Provide lawn maintenance including mowing, watering, fertilizing, weeding, etc. Subcontractor shall be responsible for ensuring a "full stand of grass" in areas as required on or before Final completion.
- iv. Subcontractor shall adhere to specifications for planting and maintenance requirements. MAINTENANCE SHALL BE FOR 1 YEAR FROM STATE CONSTRUCTION FINAL INSPECTION.
- v. Subcontractor shall provide all soil testing under this agreement Project Specifications. All soil amendments work and materials for soil compliance is included in this Agreement and shall proceed in accordance with test results and Architect's recommendations.
- vi. Subcontractor shall receive topsoil subgrade at elevation tolerance indicated in project grading specifications and within +/- 0.1 foot of finish grade with balancing of materials on-site and topsoil. All disking, raking, watering, erosion control materials, scarifying, fine grading, and balancing of subgrade with on-site top soil materials to receive specified landscaping materials is included in this Agreement.
- vii. Subcontractor is responsible for raking installed topsoil at lawn, sod, and planting areas, for debris. Earthwork Subcontractor is only responsible for preparing existing topsoil as defined in specification. This Subcontractor is responsible for removing all other debris from topsoil including removal of all stones and debris gathered during this operation from the jobsite. On-site screened topsoil shall be provided by others, for use by this Subcontractor in coordination with the Grading Subcontractor.
- viii. Staking of trees and as specified are included. Removal of staking is included at Owner and Architect's direction.
- ix. All watering of seeding and planting is included. Subcontractor shall provide all hoses, temporary backflow preventers, spray devices, etc. required for this Work. Subcontractor shall also provide manpower and supervision of watering process to provide timely relocation of devices in order to provide equal distribution of

the watering in all areas. Overnight or unsupervised temporary watering is prohibited.

- x. All plants and trees shall be free from disease and insects. Provide certifications as specified. All sod shall also be furnished free of debris, disease, insects, weeds, manure, mold and mildew, etc.
  - xi. Subcontractor is responsible for repairs to any areas of this Scope of Work, including but not limited to, all “washouts” and reconditioning of seeding and sodding areas.
  - xii. Subcontractor shall layout and pre-stake all work under this Agreement for Architect’s approval. Subcontractor shall contact Landscape Architect for a pre-installation conference prior to placing planting to confirm layout, spacing, configurations, etc.
  - xiii. Included are multiple mobilizations for seeding, sodding, planting, and mulching activities. Subcontractor shall mobilize to each area as they become available to Subcontractor. Subcontractor shall be responsible for all regrading, soil replacement, erosion control measures, etc. if this Subcontractor fails to mobilize to the site per CM’s request and due to not installing permanent planting, and sodding/seeding products in a timely manner as outlined under this Agreement.
- i. The following is a general outline of items included, but not limited to, under this agreement for **Irrigation** per specification sections:
- i. Subcontractor is required to provide an engineered design build (**delegated design**) of irrigation system from UNCW main irrigation line located on **south**west side of Belk Hall. Coordinate design with UNCW and Landscape Architect. Submit for designer approval 30 days from award of contract.
    - 1. **Verify onsite pressure with UNCW prior to starting design**
    - 2. **Provide all hardware and devices per UNCW standards with no substitutions allowed.**
  - ii. Furnish and install all required sleeves
  - iii. All controllers, rain gauges, wiring, control boxes, etc. for operating system
  - iv. All piping from 3” main shown on civil installed by site subcontractor. However, this subcontractor is responsible for flushing the 3” line after all work is complete herein.

- v. Adjust all existing irrigation control boxes handholds "top elevations" to new grades
  - vi. Rework any control valves and wiring on existing system within site where being reworked on north side of Belk Hall
  - vii. Provide asbuilts, Owner training, and O&M manuals
22. Subcontractor shall furnish and provide full installation of **Site Furnishings** per Architectural and Landscape drawings per the following:
- a. ~~Bike Racks~~
  - b. ~~Benches~~
  - c. Site trash receptacles (FF-13 per detail 6/CS501)
23. Subcontractor shall furnish and provide full installation of **Pavers** per Architectural and Landscape drawings including subgrade compactions, fabrics, stone base, sands, edging, and pavers:
- a. ~~At raised cross walks~~
  - b. Alternate Bid #4 for edge of sidewalks
24. Project award includes erection times **(fill in durations)**:
- Shop Drawing Time: \_\_\_\_\_ weeks
- Fabrication Time: \_\_\_\_\_ weeks
- Erection start date: \_\_\_\_\_
- Estimated duration of erection: \_\_\_\_\_ weeks

**EXCLUSIONS:**

- 1. Topsoil installation (by site subcontractor)
- 2. Concrete sidewalks (by site subcontractor)
- 3. Irrigation 3" main including backflow, hot box, and meter shown on drawing CG100 (by site subcontractor)

**ALTERNATES:**

None