

# LAND DEVELOPMENT SCOPE OF WORK EXHIBIT "E"

**Project:** The Village at Cedar Creek  
**Jurisdiction:** Shenandoah County, Virginia  
**Engineer:** **Jon Erickson**  
**MORRIS & RITCHIE ASSOCIATES, INC.**  
**604 SOUTH KING STREET , SUITE 200**  
**LEESBURG, VA**

**RFP Date:** January 8, 2019

This LAND DEVELOPMENT SCOPE OF WORK ("Scope") is included as part of the Request for Proposal ("RFP") and is between Richmond American Homes of Virginia, Inc. ("Contractor") and \_\_\_\_\_ ("Subcontractor"). The terms "Contractor" and "Subcontractor" are used in order to comply with the same terms used in the Master Subcontractor Agreement ("Agreement") that will need to be current. In order for the Agreement to be considered current, the terms of the original agreement shall not have expired and the subcontractor shall have performed work under said agreement within the past year or will have executed said Agreement prior to entering the project to begin work.

The following scope is meant to generally define the Contractor's expectations. The scope does not supersede any regulations, standards, and specifications of the governing jurisdiction. In addition, this Scope does not govern over the Agreement or the Construction Plans and Profiles included with the RFP.

## **1. General**

- 1.1 Subcontractor bids are expected no later than Friday, February 1, 2019 by 3:00 pm. The due date for the bids is requested to allow Richmond American Homes of Virginia, Inc. adequate time to evaluate proposals against our budget and to meet our reporting obligations to our corporate office and seller. A detailed schedule from the subcontractor shall be provided with the proposals and will be considered during the review of the price proposals
- 1.2 Mobilization to begin land development shall commence on or about Monday, April 1, 2019. However, certain tasks may be requested to begin prior to this date as agreed to between the Contractor and Subcontractor.
- 1.3 Award of the contract is anticipated no later than Thursday, March 7, 2019
- 1.4 Bids are based on the following documents;
  - 1.4.1 Plans prepared by Dice Engineering dated April 13, 2018
  - 1.4.2 Hold Down plan by Morris & Ritchie Associates – To be provided separately by January 17, 2019.
  - 1.4.3 Geotechnical Engineering Report prepared by ECS
  - 1.4.4 This Request for Proposal and its terms
  - 1.4.5 Ability to reach agreement on Contractor's terms and conditions in the "Master Sub-contractor's Agreement" and related documents

## **2. Asbestos Abatement**

- 2.1 Not applicable

## **3. Demolition**

3.1 Not Applicable

#### **4. Clearing**

- 4.1 Subcontractor shall clear and grub to the limits shown on the site plans in accordance with phasing requirements. All cleared material is the property of the Subcontractor and is to be removed from the site.
- 4.2 Subcontractor shall first install all tree protection measures and erosion controls per Phase I E & S plan and maintain measures throughout the life of the Subcontractor's work, or until commencement of house construction in a particular area.
- 4.3 Easement clearing to allow for the installation of utilities, outfalls, and/or trails shall be included. Restoration of such easements promptly upon completion is also included.
- 4.4 Any trees on edge of save areas that are a potential hazard or eyesore, as designated by owner with a painted "X", and trees damaged by Subcontractor's operations shall be cut down within six (6) inches of grade and removed. The determination of hazardous and damaged trees shall occur prior to withdrawal of clearing crew.
- 4.5 When Subcontractor is clearing near or on a perimeter property care shall be taken to ensure vegetation is not disturbed on the offsite property. In the event the Subcontractor identifies an issue with disturbance of the root zone of an offsite "specimen" tree it shall be brought to the attention of the Contractor for consideration prior to demobilization of the clearing crew.

#### **5. Storm Water, Sediment, Dust and Erosion Control**

- 5.1 Subcontractor shall acknowledge the existence of a Storm Water Pollution Prevention Plan ("SWPPP"), Storm Water Management Plan ("SWMP") or their equivalent, along with Best Management Practices ("BMPs") on the Construction Site. BMPs may address one or more of the following by way of illustration and not exclusion, erosion and sediment controls, vehicle and personnel controls, access and egress controls, dust controls, leakage and spillage controls, material and storage controls, and waste and disposal controls. Not all BMPs are exclusively related to any SWPPP/SWMP. Subcontractor agrees to strictly adhere to the requirements of the SWPPP/SWMP and BMPs but only to the extent as they apply to the Subcontractor's work.
- 5.2 Contractor will provide and/or post copies of the SWPPP/SWMP at each field office and/or other location designated by Contractor for Subcontractor's review. Subcontractor must review and become familiar with the SWPPP/SWMP and BMPs prior to Subcontractor commencing the Work on the Construction Site. Contractor may require any one or more superintendent, foreman, crew chief or employee of the Subcontractor to acknowledge their review and comprehension of the entire SWPPP/SWMP and BMPs prior to commencing any Work or providing any Materials on each Construction Site.
- 5.3 Subcontractor shall inspect BMP's constructed to serve the project or constructed to protect adjacent properties in or near which any Work is to be performed prior to commencing any Work. Subcontractor shall enter into and exit from designated ingress and egress areas only. Onsite washout and clean up shall be completed per the SWPPP/SWMP at the designated washout area only.
- 5.4 Damage or injury to BMP's constructed to serve the project or constructed to protect adjacent properties or damage or injury to the work, materials or property arising out of, resulting from or in any way connected with any damage or injury to said BMP's shall be remedied by the applicable Subcontractor at their sole cost and expense, and in compliance with all applicable Laws. Subcontractor shall immediately notify Contractor in writing of any damage or injury to any BMP.
- 5.5 Subcontractor understands and acknowledges that non-compliance with the Project SWPPP/SWMP and BMPs in whole or in part, will result in fines and penalties commensurate to but not inclusive of those imposed

by or could be imposed by the EPA or any other Government Agency. Contractor may impose fines and penalties separate and apart from those imposed by or could be imposed by the EPA or any other Government Agency. Contractor may also terminate Subcontractor or Supplier's Agreement or suspend the performance of any Work or the providing of any Materials at any Construction Site at its sole discretion.

- 5.6 Subcontractor shall install all tree protection and Phase 1 erosion and sediment controls per the plans and specifications as the first phase of development.
- 5.7 Subcontractor shall be responsible for maintenance of all erosion controls for the duration that Subcontractor is mobilized on-site. Should house construction commence on the Project and the required erosion controls overlap, Subcontractor shall be relieved of maintenance responsibilities for that particular portion of the Project where the erosion controls overlap.
- 5.8 All street cleaning required as a result of Subcontractor's work shall be performed by Subcontractor at no additional charge. Subcontractor shall require its employees, suppliers and/or Sub-subcontractors to clean their vehicles/equipment prior to leaving the site in order to prevent soiling of any existing streets, parking lots or driveways.
- 5.9 Subcontractor shall install all Phase 2 sediment controls per plans. Price shall include any necessary removal of sediment traps, diversion dikes, or silt fence etc. as may be required to complete the work.
- 5.10 Subcontractor shall re-spread topsoil to a minimum depth of 4 inches and promptly stabilize all finished perimeter and common areas (i.e. landscape berms, pond, slopes) with a permanent mixture of fertilizer, perennial seed, mulch and tack one time only, not to include watering. Stabilization is not guaranteed during the non-growing season.
- 5.11 Subcontractor shall seed all lot areas with a VESCH approved temporary seed mixture, mulch and tack promptly after acceptance of overlot grading by Owner one time only, not to include watering.
- 5.12 Additional silt controls not shown on the plans, but installed at Owner's request, will be paid for at the established unit price.
- 5.13 Temporary seed mixture rate=100 lbs annual rye and 100 lbs Kentucky – 31 and 400 lbs 18-18-18 fertilizer and 2,000 lbs straw per acre, unless otherwise agreed.
- 5.14 Permanent seed mixture rate=100 lbs perennial rye and 150 lbs K-31 and 800 lbs 18-18-18 fertilizer and 2,000 lbs straw per acre, unless otherwise agreed.
- 5.15 After base paving and before leaving the site, Subcontractor shall repair all silt fences, perimeter berms, sediment traps/weirs and inlet protection devices to their full functionality, unless damaged by Contractor. All traps shall be cleaned prior to acceptance of work by Contractor except in those areas already accepted by Contractor where house construction has begun.
- 5.16 Subcontractor shall provide for positive drainage into curb inlet structures by means of omitting inlet throat and gutter at low points in roadway until final topping of roadway. Removal of base asphalt and installation of throat and gutter will be done as an extra to the contract before final topping.

## **6. Earthwork** – Earthwork is to be UNCLASSIFIED

- 6.1 Subcontractor shall strip to fill and/or dispose of topsoil. Topsoil utilization is the responsibility of the Subcontractor. Topsoil may be used for fill in non-structural areas except as needed for re-spread on common areas, berms, etc.
- 6.2 Subcontractor shall provide a building pad suitable for construction of the development. For the purposes of this proposal the Subcontractor shall assume the pad will be left 36 inches above the proposed slab elevation of the basement for "in-ground conditions" and 36 inches above the slab elevation 5 feet off the front of the house and at basement slab 5 feet off the back of the house for walk out conditions. The intent is to provide a balanced pad upon construction of the units.

- 6.3 On single family detached fill pads, Subcontractor shall place controlled fill to basement floor elevation and a minimum 18" of material suitable for back fill above basement floor elevation. Remainder of overburden may be topsoil suitable for yard grading.
- 6.4 Subcontractor shall make site cut to fills to the required elevations specified on the site plans and building pad grading plans. Subcontractor shall grade common areas to +/- 0.2' tolerance.
- 6.5 Subcontractor shall perform any necessary re-grading as a result of disturbance from the Subcontractor's other development efforts.
- 6.6 Subcontractor shall include excavation and backfill of all curb and gutter with suitable structural fill. All backfill of curb and gutter shall be free of loose stone, broken or blasted stone or debris and mechanically compacted against the back of curb to an elevation slightly exceeding curb height and providing positive drainage over the curb.
- 6.7 Common landscape areas shall be fine graded and "tracked in" to prevent settlement and/or washouts until permanently stabilized.
- 6.8 Upon completion of the building pad grading (after curb backfill is complete or prior to building construction start on individual lots) Contractor shall conduct an inspection to verify pad grading and the provision of positive drainage.
- 6.9 Subcontractor may bury rock and boulders on site (in common areas) so long as said boulders are "chinked-in" with compacted soils. Subcontractor shall bury all large boulders (1' dia. or greater) a minimum of 4' below ultimate finished grade to allow for installation of dry utilities.
- 6.10 During periods of potential adverse weather conditions Subcontractor shall roll the controlled fills with a smooth-drum roller at the end of each day to "seal off" fills.
- 6.11 Subcontractor shall perform all site grading, control fills and trench backfilling in accordance with the geotechnical report, VDOT minimum standards and specifications and municipal design Standards.
- 6.12 Subcontractor shall remove all excess material, if any, from the site to a location determined by the Subcontractor. In the event the Contractor has the need for material on another project, notice shall be given prior to the removal by the Subcontractor. In the event the Contractor identifies a location for the material, the Contractor and Subcontractor shall work together to identify and execute a change order to the contract if required to haul the material to the said project.

## **7. Rock**

- 7.1 Subcontractor shall perform all pre-blast surveys for existing surrounding houses and buildings required by Shenandoah County.
- 7.2 Subcontractor shall include all mass and trench rock blasting and subsequent excavation, (except excavation of pre-blasted laterals).
- 7.3 Subcontractor shall remove rock to 2 ft. below basement floor elevations and replace and re-compact to sub-grade with suitable fill and compaction testing per recommendations of the Geotechnical Engineer.
- 7.4 Subcontractor shall, wherever possible, use rock spoils in non-structural areas, with compactive efforts that will preclude post settlement possibilities (as previously described in Section 3.9).
- 7.5 Subcontractor shall pre-blast sanitary laterals from the end of lateral as shown on plans to the center point in the house pad, not to include excavation of the rock.
- 7.6 Subcontractor shall include all hoe ramming necessary to connect to or avoid existing utilities to the extent the utilities are shown on the plans. Prior to mobilization, the Subcontractor shall be responsible for requesting a

work ticket to have Miss Utility mark all known utilities. Subcontractor shall notify the Contractor of conflicts associated with utilities marked by Miss Utility that could not have been identified prior to submission of a proposal

- 7.7 Subcontractor shall over-blast as needed for future utilities or improvements to the extent that they are shown on the plans.

## **8. Sanitary Sewer**

- 8.1 Subcontractor shall install all sewer mains, laterals, and risers in accordance with the plans and specifications and any municipal design standards.
- 8.2 Final manhole adjustments to finished grade are to be performed by the Subcontractor prior to base paving.
- 8.3 Sanitary installation and testing shall be performed in accordance with governmental requirements.
- 8.4 Subcontractor shall install a 4x4 post or better, painted green, as markers at the ends of all laterals.
- 8.6 Subcontractor shall install 45 degree bends and lateral risers on all laterals to the extent shown on the lateral table.
- 8.7 Subcontractor shall promptly and with due diligence obtain field and TV approval allowing builder's unit tie-ins, and notify Richmond American Homes in writing of approvals.

## **9. Storm Sewer**

- 9.1 Subcontractor shall install all storm sewer and structures shown on the site plan.
- 9.2 Subcontractor shall be responsible for adjusting all storm structures prior to curbing. Inlet throats are to be installed prior to completion of site grading.
- 9.3 Subcontractor shall be responsible for the installation of all rip rap and geotextile fabric shown on the approved plans. Contractor shall protect all riprap from siltation during the duration the Subcontractor is mobilized on-site. In the event of a failure, caused by Subcontractor's negligence, Subcontractor shall re-install riprap as necessary. Rip Rap outfalls can not be higher than outflow or otherwise block flow from pipes.
- 9.4 Installation of storm sewer shall be in accordance with local government and VDOT requirements.

## **10. Water**

- 10.1 Subcontractor shall install all water mains, services, SCADA system and pressure reducing valve per approved plans and municipal standards.
- 10.2 Pressure testing and chlorinating tests shall be performed promptly.
- 10.3 Water valve adjustments to be performed by the Subcontractor prior to base paving.

## **11. Conduits**

- 11.1 Contractor to provide conduit plans and Subcontractor to install conduit crossings at a cost agreed upon on a per linear foot of trench basis and be paid for as an add to the contract, if requested. Price is based on a 24" trench, up to 36" deep, without consideration for number of conduits per trench with all conduit and fittings supplied by the Contractor. If the conduit and fittings are supplied by the Subcontractor the material amount plus mark-up will be included in the add to the contract

## **12. Concrete**

- 12.1 Subcontractor shall install all curb and gutter in accordance with the approved plans and specifications, including under drains per plans.
- 12.2 All curb and gutter will be backfilled in accordance with Earthwork section 3.6.
- 12.3 Curb cuts for house driveways shall be installed and provided per approved plan and in accordance with all applicable standards and specifications. Curb depressions for handicap ramps are to be provided per VDOT specifications.

## **13. Stone and Paving**

- 13.1 Subcontractor shall fine grade subgrade in accordance with the plans and specifications, with the exception that the paving design minimum sub base requirement shall be eight (8) inches. If the pavement design changes as a result of actual CBR values, a change order to the contract shall be considered
- 13.2 Pricing of asphalt paving using alternate method shall be based on two (2) base paving mobilizations and one final paving mobilization.
- 13.3 Subcontractor shall be responsible for ensuring that base and final pavement is placed in such a manner to preclude any of the following: rutting, segregation, roller-marks, excess curb reveal and false swales.
- 13.4 All edge milling and utility patching required in existing streets will be performed in accordance with VDOT specifications.
- 13.5 Subcontractor shall provide a date in the proposal that guarantees asphalt paving prices presented. A change order shall be allowed for asphalt increases beyond said date based on current liquid asphalt prices.

## **14. Miscellaneous**

- 14.1 If any extra work becomes necessary to complete this Contract, unit prices or lump sum must be agreed upon in writing (with Work Order or signed change order) prior to starting any such work. **No extra payments will be made if this procedure is not followed.**
- 14.2 Contractor MUST be Notified Promptly and afforded the opportunity to field measure and approve any condition that could be billed as an extra to the contract unit price.
- 14.3 Contractor shall provide all engineering and stakeout, per survey contract. Subcontractor to schedule stake-out as needed and cancel promptly to avoid "show-up" charges to Contractor. Unjustified re-stakes are subject to backcharges.
- 14.4 Contractor shall provide geotechnical monitoring and testing. Subcontractor to schedule inspections and cancel, as needed. Unjustified trips to site are subject to backcharges.
- 14.5 Contractor shall pay for and provide permits and inspection fees.
- 14.6 Trees, shrubs and other plant materials by others.
- 14.7 Street lights by others.
- 14.8 All traffic safety measures shall be provided by the Subcontractor.
- 14.9 All government and geotechnical inspection requests shall be made by the Subcontractor. Cancellations must be made if work is halted or rescheduled.

- 14.10 All survey ordering shall be the responsibility of the Subcontractor, unless outside the scope of survey contract .
- 14.11 Subcontractor shall, at all times, keep site clean and free of hazardous and/or dangerous materials, and shall keep its work free from safety and/or environmental hazards. Subcontractor acknowledges that he shall abide by all safety regulations required by Contractor and that it has an active program in full effect.
- 14.12 The Subcontractor's price is to include all items and quantities based on the plans and other bid documents including all incidental items not necessarily shown on the plans but required to provide a complete functioning system.
- 14.13 The Subcontractor is responsible for maintaining the site and adjacent roadways and appurtenances in a clean and organized condition. All work is to be confined within the limits shown on the site plan. Adjacent facilities and completed work will be jointly inspected by the subcontractor and contractor before and after completion of the Subcontractor's work (and prior to release of completed areas to other contractors) to assess any damages and appropriate protective and corrective measures. Should the Subcontractor fail to fulfill his obligations under this section in a timely fashion, as determined by Contractor, Contractor may elect to perform the work and deduct from the Subcontractor's payment the cost of the work plus 15% for administrative expense.
- 14.14 The Subcontractor is responsible for scheduling and coordinating all testing as required by local codes and is responsible for any expense related to re-testing due to faulty workmanship or materials. The Contractor will employ a geotechnical engineering firm to perform compaction and concrete testing.
- 14.15 All invoices will be submitted in a unit price format with subtotals by category of work for the purposes of establishing progress payments and the value of changed work .
- 14.16 In the event of any conflict between the meaning or intent of this Scope and Subcontractor's Proposal, Specifications, or Scope, Richmond American's Scope supersedes Subcontractor's Proposal Specifications.
- 14.17 Subcontractor acknowledges that he understands that Richmond American home-building efforts may commence at some point during Subcontractor's development work as determined by Richmond American. Richmond American and Subcontractor agree to mutually cooperate and support each other's construction and development efforts.
- 14.18 For sites in Virginia, Subcontractor shall comply with all requirements of the current DCR VSMP (VPDES) General Permit for Discharge of Storm Water from Construction Activities. In compliance with the DCR VSMP (VPDES) General Permit, Subcontractor shall sign the contractor certification for the Storm Water Pollution Prevention Plan as required by the DCR VSMP (VPDES) General Permit.

## **15.0 Signature Page**

Subcontractor has read the scope of work and agrees to provide bid documents and pricing according to the terms set forth herein. The scope of work is to be signed and returned with the bid package. The Contractor may choose to reject any incomplete packages at their discretion

Contractor

Subcontractor

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Title

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Title

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Signature

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Signature