Attachment 'A'

SCOPE OF WORK

DESIGN ENGINEERING PHASE

Middle School Gymnasium Crosswalk Improvements

Raymond SAU #33, New Hampshire

November 15, 2017

PROJECT UNDERSTANDING

The Raymond SAU #33 was informed that the crosswalk at the Middle School that extends from the parking lot to the main entrance to the gymnasium does not meet ADA requirements and the SAU would like to modify the crosswalk to bring it into compliance.

On November 7, 2017, a representative from Underwood Engineers (UE) met with the SAU's Facility Director, Todd Ledoux, to view the subject crosswalk. At this meeting, Mr. Ledoux noted that the SAU would like to have a cost proposal for design-phase services to complete the design of either one of the following two options and a second cost proposal to complete the design of both options.

Option #1 – Install a Raised Crosswalk: This option would include raising the elevation of the crosswalk 6-8". Modifications to the parking lot end of the crosswalk (southern end) would have to be made to reduce the slope leading to the crosswalk. Modifications to the gymnasium side of the crosswalk (northern end) would be needed to remove the existing ramps. This option would also require the following drainage modifications. First, there is a catch basin on the road at the edge of the crosswalk. In order to make this catch basin functional, it would have to be converted to a manhole and a new catch basin installed at the end of the ramp. Second, a new catch basin would probably (would be confirmed after the survey) have to be installed on the opposite side of the crosswalk because the raised crosswalk would create a barrier that the water could not pass by. Third, the rim of the catch basin at the edge of the parking lot would have to be lowered. This will most likely require that the 8" frame be changed to a 4" frame.

Option #2 – Ramp: This option would include constructing a ramp in the existing grass area on the western side of the crosswalk. In order to construct this ramp, the following modifications would have to be made:

- The existing ramp (from the parking lot to crosswalk) would have to be modified to create a flat "landing area".
- A tree would have to be removed.
- The handicap parking spaces would have to be moved and some striping would have to be modified accordingly.

It is our recommendation that UE administer construction on a design which UE has completed so that we can, at a minimum, review shop drawings for conformance with the design and provide interpretations of the design intent Our understanding, however, is that the SAU has requested that the completed design drawings be turned over to the SAU who will solicit bids and sign a contract with the desired contractor using the SAU's standard contract (contract documents will not be provided by UE), and the SAU will oversee the construction of the improvements. If this is the case, for our professional liability coverage to be valid our insurance carrier requires us to have a release form signed by the SAU, indicating that the SAU assumes responsibility for interpretation of the contract documents and construction observation and waives any claims against the design professional.

DESIGN-PHASE ENGINEERING TASKS

Task 1 –Design

Survey: UE will work with a staff member of the SAU to survey the subject area to create a workplan as follows:

- The vertical datum will be assumed.
- A temporary benchmark will be established.
- The scale of the drawing will be 1"=10'.
- All drawings will be on 11"x17" paper.
- Work to be completed with no snow on the ground.

Design: UE will complete a design drawing of the work area. Adequate details will be provided to inform the contractor of the needed work. Material specifications will be noted on the drawings; therefore, a specification book will not be provided.

Deliverables:

1. UE will submit one copy of the 100% design drawings for review and a revised copy if changes are desired by the SAU.

Schedule:

UE Proposes the following schedule:

Sign Design-Phase Contract	December 2017
Complete Survey	April 2018
Submit 100% Design Drawings	May 15, 2018

Engineering Fees

The survey work to do one or two options is virtually the same; therefore, the variable cost is the design. UE proposes the following fees:

Design One Option	$5,100
Design Two Options	$7,600

Engineering fees will be billed at standard hourly rates for personnel assigned plus reimbursable expenses. Billings for services will be monthly and will be due to Underwood Engineers, Inc. within thirty (30) days of the billing date.

Budgets:

Suggested budgets, as used herein, are best estimates by Underwood Engineers. The budgets are based on available information and prior to a detailed research on the Project. Budgets are not intended to be fixed prices but are reasonable estimates of average costs to complete projects of similar size. Engineer will not exceed the budget without written authorization.

Work Not Included:

1. Subsurface investigation.
2. Electrical design (if needed for pole lighting).
3. Stormwater analysis.
4. Providing a specification book.
5. Bidding and construction services.