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SUBJECT: **Proposal for Helton Road Bridge Replacement – Blount County, TN**
GeoStabilization International - Vendor ID: 0000160610
TDOT Contract Number: 00000000000000000000066906
Title: SWC 191 - Slope Stabilization Services

Mr. Chico Messer:

GeoStabilization International® (GSI®) is pleased to offer this proposal to provide installation of bridge abutments, side walls, and bridge deck along Helton Road in Blount County, TN for the Blount County Highway Department (BCHD). The project is located at the GPS coordinates: 35.765758, -83.888750.

PROJECT OVERVIEW

This proposal addresses replacing the existing bridge to include abutments, wing walls, and bridge deck. The abutments and wing walls will consist of an integrated Geosynthetically Confined Soil (GCS) system supported on a micropile supported grade beam foundation.

Figure 1 – Approximate project location

Figure 2 – Bridge conditions as of 9/21/23

SCOPE OF WORK

GSI's scope of work consists of the design and installation of the micropile grade beam foundation, open graded backfill (supplied by BCHD), geotextile fabric, and Concrete Masonry Units (CMU) blocks for the GCS abutments and wing walls.

1. Prior to GSI mobilization, BCHD shall establish traffic control by shutting down the road.
2. BCHD to demo and remove the existing bridge and abutments under GSI observation.
3. GSI will then layout and install the micropiles and grade beam foundation.
4. GSI will layout and install the abutments and wing walls per the approved shop drawings.
5. GSI will contract with Henry Pate, PE with Neel-Schaffer (Phone: 615-308-1168) to design the concrete bridge deck panels.
6. GSI will contract Blalock Construction to cast the panels and deliver them to the site.
7. BCHD to provide crane to install new bridge deck panels. GSI will help guide the setting of the panels.

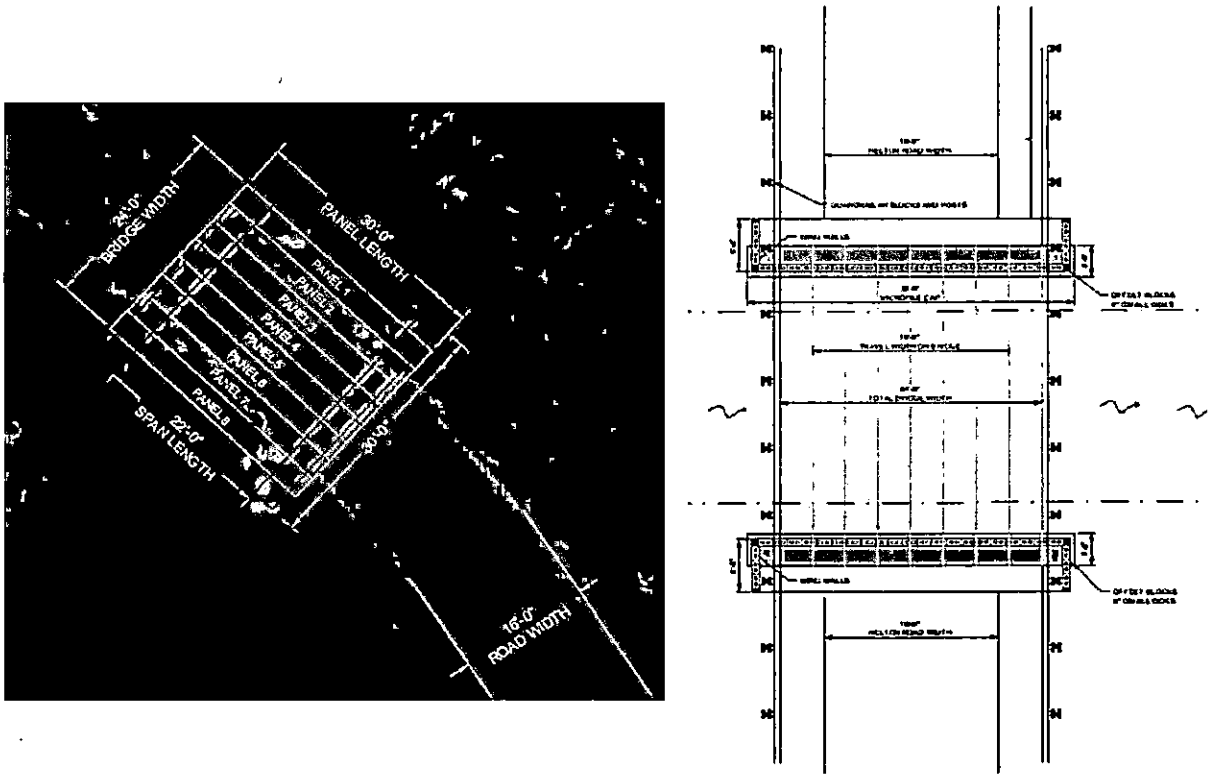

Figure 3 – Plan View of Proposed Bridge Replacement

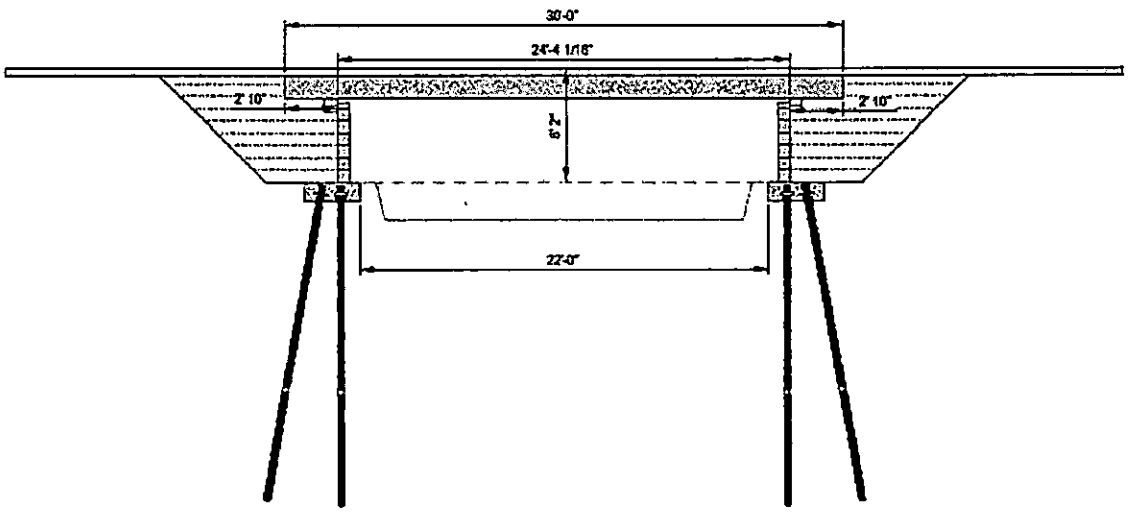

Figure 4 – Proposed Elevation View

COST TABLE FOR HELTON ROAD BRIDGE REPLACEMENT

Line #	Description	~ Qty	Unit	Unit Price	Total
17	Primary Mobilization-Soil Nailing (mobilization to initial site)	1	EA	$11,580.00	$11,580.00
1	Nails, Self-Drilling, up to 20 ft (Vertical/Micropiles)	60	EA	$722.00	$43,320.00
20	Shotcrete, Nominal 12-in thickness (std weather) per Sq Ft	120	SF	$50.80	$6,096.00
37	Retaining Wall Facing Elements	400	SF	$48.00	$19,200.00
38	Geosynthetic Reinforcement Fabric	3840	SY	$2.00	$7,680.00
52	Approved Parts, Materials, Supplies and Equipment with Markup				
	Precast Bridge Deck Panels	720	SF	$95.00	$68,400.00
	Panel Delivery	1	LS	$1,500.00	$1,500.00
	Bridge Panel Engineering - Neel-Schaffer	1	LS	$10,000.00	$10,000.00
	Manlift - United Rentals (Month Rental)	1	MO	$1,930.00	$1,930.00
	Ancillary Labor for Bridge Construction	1	LS	$5,000.00	$5,000.00
	Cost +15% Per SWC 191	1	LS	$0.15	$13,024.50
	Total				**$187,730.50**

BCHD will need to provide the items listed below in the yellow highlighted area under Resources. The excavation for the bridge abutments will be performed by BCHD from the road platform under GSI guidance. BCHD will need to shut down the entire road to implement the proposed repair.

RESOURCES

Items to be Provided By BCHD:

- Right-of-way space where available to receive and unload materials shipped by GSI, and an area to park our equipment.
- Installation/Removal of Guardrail if required.
- Removal of existing concrete bridge deck and installation of new concrete bridge deck, with support from GSI.
  - BCHD to provide crane.
- Erosion Control, Vegetation / Tree Removal, Clearing, Grubbing, Excavation, Benching, Temporary Access Construction Roads, & haul off along Work Area as directed by GSI.
  - An approximate 3-foot-wide excavation bucket is ideal for the micropile cap excavation.
- A supply of water suitable for construction use.
- Backfill material behind deck panels (approaches).
- The resulting disturbed soil areas should be stabilized with rip-rap or other shoulder / inlet and outlet protection by BCHD or others.
- BCHD should assess milling, pavement resurfacing, and first phase and permanent striping in the repair area.
- Traffic Control and Traffic Control Barriers/Signage.
- Bridge deck form work.

SCHEDULE

Barring unforeseen delays, the project duration is estimated at approximately 1.5 - 2 weeks. The schedule is based on GSI working 5 day work weeks during daylight hours Monday – Friday. Saturday work can be arranged upon request.

OTHER

Our price also includes design and we will supply a Tennessee P.E. stamped typical section. Our work also carries a ***seven-year warranty*** commencing after GSI project completion for permanent installations. This warranty is void absent GSI receiving mutually agreed project payment. If at any point within the warranty period the repaired section becomes unstable, GSI will, in a timely manner, remedy the situation with a design/construction solution at no cost to the owner. This warranty does not cover work completed by others or shallow surface erosion problems that may develop in the future. Exceptions to the warranty include catastrophic seismic, weather, or other events outside reasonable accounting in design (including earthquakes and weather events exceeding expectation for the region) or further construction by third parties that destabilizes the repair (including utility trenches dug into or through any soil nails, deep excavations in the area, etc). Extreme storm water volumes may cause erosion which could undermine the repaired area which may void this warranty. After such an event this area should be checked for erosion.

GeoStabilization International

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