



BLUEGRASS CONTRACTING CORPORATION

P.O. Box 11638 Lexington, Kentucky 40576-1638 Ph: (859) 231-0069 Fax: (859) 281-6457

May 31st, 2016

Element Design
ATTN: Ramona Fry, Project Manager
400 Old Vine Street, Suite 206
Lexington, KY 40507

RE: Construction Services for Idle Hour Park Improvements
LFUCG Bid No. 103-2015

Dear Ms. Fry,

Below is our pricing to perform the undercut of unsuitable material for the roadway and retaining wall as detailed in the CSI reports dated May 24th and May 25th, 2016. I have adjusted the quantities based on CSI recommendation to undercut five (5) feet outside the edge of the roadway and include undercut under the retaining wall.

813 CY Unsuitable Soil Removal @ \$26 CY = \$21,138.00
1,057 TN #2 Stone @ \$28/TN = \$29,596.00
1,220 SY BX1200 @ \$3/SY = \$3,660.00

Total: \$54,394.00

These quantities are based on CSI site observation and recommendations in their report. We are also requesting an additional ten (10) calendar days be added to our contract for the additional time required to remove and replace the unsuitable material. Any delays in receiving a Notice to Proceed with this additional work could result in additional contract time being requested.

If you have any questions please feel free to call me at our office at (859) 231-0069. Thank you.

Sincerely,

Dave Luttrell, P.E.
Vice President
BLUEGRASS CONTRACTING CORP.



Consulting Services Incorporated

*Lexington 859.309.6021 | Cincinnati 513.252.2059 | Louisville 502.532.8269
Geotechnical & Materials Engineering | IBC Special Inspection | Material Testing*

PROJECT:	Idle Hour Park	JOB NUMBER:	LX160075
CLIENT:	Bluegrass Contracting	WEATHER:	Clear, Low 80's
CSI PROFESSIONAL:	Shawn Ferrell - NICET II, SI	DATE:	Tuesday, May 24, 2016

Material Testing - Summary of Observations

A CSI representative arrived on-site as requested by Bluegrass Contracting to perform Material Testing Services for Soil Construction. While on site, the CSI representative met with Dave Luttrell and David Sleet with Bluegrass Contracting.

Bluegrass Contracting continued construction of the roadway and parking areas. The area of construction was performed between approximately 53 feet east from the west end of the existing retaining wall, extending west towards the proposed cul-de-sac.

CSI observed a proof roll conducted by the contractor utilizing a fully loaded tai-axle for the soil sub-grade beginning at approximately 53 feet east from the west end of the retaining wall to 153 linear feet west. The proof-roll consisted of the loaded truck routing over the sub-grade in a forward and backward motion, then moving laterally one tire width and repeating the motion until the exposed sub-grade had been rolled.

The proof roll revealed soft pumping material throughout the roadway. The pumping was evident throughout the full width of the proposed roadway. The soft pumping area measured to be 53 feet by 32 feet and 100 feet by 20 feet. We would recommend to extend the roadway undercut 5 feet beyond the roadway to maintain stability for a total of 363 cubic yards measured to be undercut and replaced.

Based on our reconnaissance of the site and our understanding of the project we believe the soft soils encountered will not support the proposed construction and will need to be stabilized to facilitate the construction above the subgrade. Such stabilization can be achieved by undercutting the soft materials down two feet, lining the soft area with a reinforced geotextile fabric and backfilling with a #2 stone like aggregate back up to the designed subgrade elevation. Once the stabilization has occurred the area should be evaluated by proof rolling to verify stability prior to placement of the pavement section.

Observations were reported to Dave Luttrell and David Sleet with Bluegrass Contracting.

Project Photos



Photo 1: View Of Roadway Being Cut To Grade



Photo 2: View Of Area Along The Retaining Wall

Project Photos



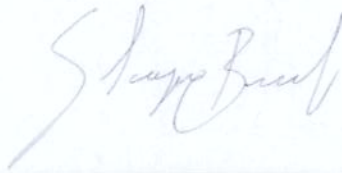
Photo 3: View Of Roadway Being Cut To Grade



Photo 4: View Of Loaded Truck Performing Proof Roll For The Subgrade

A final report is an instrument of professional service. Any conclusions drawn from this report should be discussed with and evaluated by the professional involved. CSI professionals are represented on site solely to observe materials, installation, fabrication, erection or placement of components and connections to ensure compliance with approved construction documents and referenced standards. The presence and activities of our field representatives do not relieve any contractor from their obligation to meet contractual requirements.

This is the Final Field Report Reviewed By:



5/24/16

Shayne Brashear

Date

END OF REPORT



Consulting Services Incorporated

*Lexington 859.309.6021 | Cincinnati 513.252.2059 | Louisville 502.532.8269
Geotechnical & Materials Engineering | IBC Special Inspection | Material Testing*

PROJECT:	Idle Hour Park	JOB NUMBER:	LX160075
CLIENT:	Bluegrass Contracting	WEATHER:	Clear, Low 80's
CSI PROFESSIONAL:	Shawn Ferrell - NICET II, SI	DATE:	Wednesday, May 25, 2016

Material Testing - Summary of Observations

A CSI representative arrived on-site as requested by Bluegrass Contracting to perform Material Testing Services for Soil Construction. While on site, the CSI representative met with Dave Luttrell and David Sleet with Bluegrass Contracting.

Bluegrass Contracting was cutting the roadway to the top of subgrade. One dozer was cutting the area to grade and pushing the cut material to a track hoe which was loading tri-axle dump trucks to haul off the site. The area of grade work was approximately 35 feet east and the cul-de-sac.

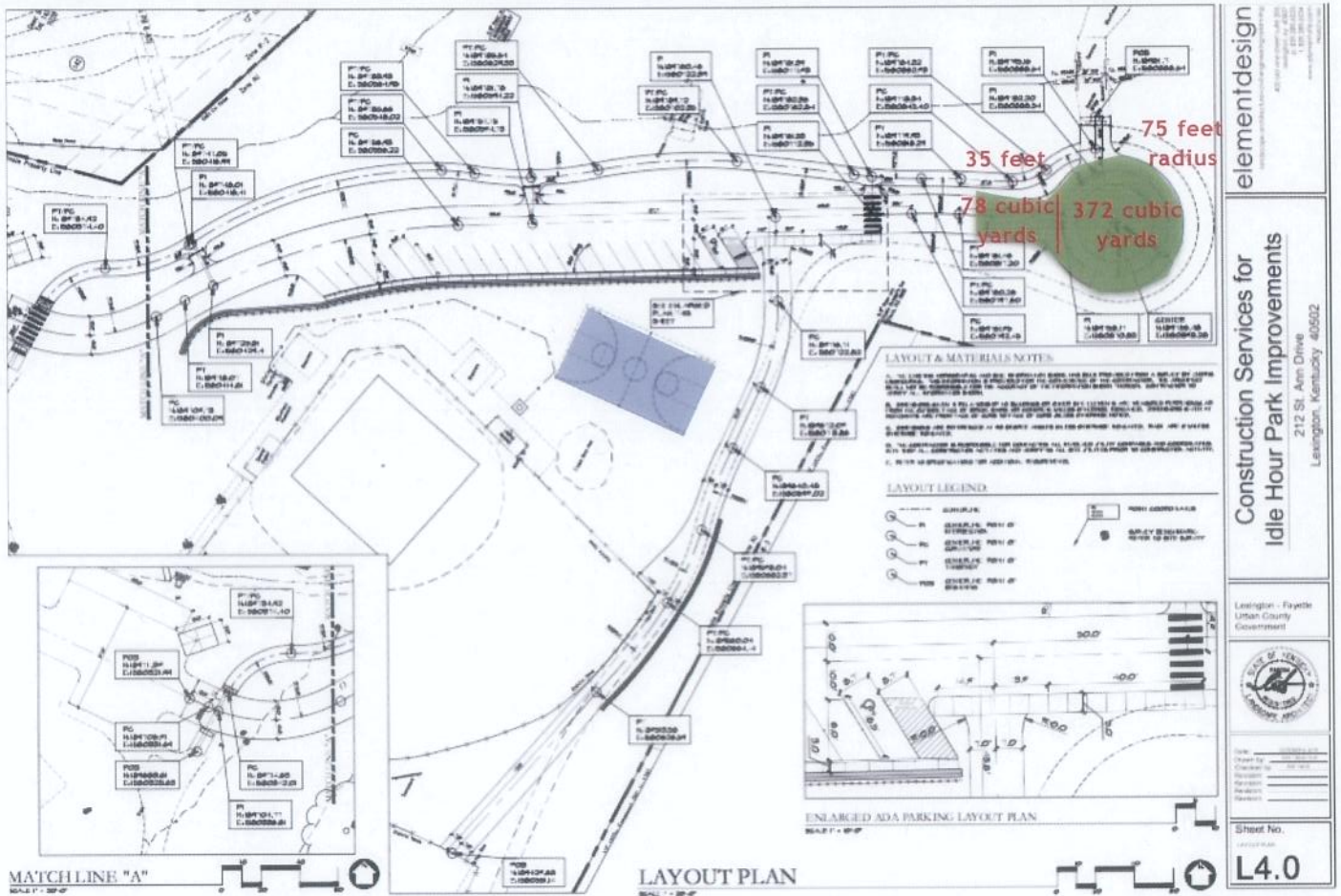
CSI observed a proof roll conducted by the contractor for the soil sub-grade approximately 35 feet of the roadway and the cul-de-sac utilizing a loaded tri-axle dump truck. The proof-roll consisted of the loaded truck routing over the sub-grade in a forward and backward motion, then moving laterally one tire width and repeating the motion until the exposed sub-grade had been rolled. The proof roll revealed soft pumping material throughout the roadway and the cul-de-sac. The pumping was evident throughout the full width of the proposed roadway. The soft pumping area measured to be 35 feet by 20 feet for the roadway and 75 feet radius of the cul-de-sac. We would recommend to extend the roadway undercut 5 feet beyond the roadway to maintain stability for a total of 450 cubic yards measured to be undercut and replaced.

Based on our reconnaissance of the site and our understanding of the project we believe the soft soils encountered will not support the proposed construction and will need to be stabilized to facilitate the construction above the subgrade. Such stabilization can be achieved by undercutting the soft materials down two feet, lining the soft area with a reinforced geotextile fabric and backfilling with a #2 stone like aggregate back up to the designed subgrade elevation. Once the stabilization has occurred the area should be evaluated by proof rolling to verify stability prior to placement of the pavement section.

Bluegrass Contracting cut the proposed basketball court to sub grade elevation. After the area had been cut, it was observed and appeared to have mixture of some clay and topsoil at this elevation.

Observations were reported to Dave Luttrell and David Sleet with Bluegrass Contracting.

Figure 1: Approximate Area of Observations



Legend

Approximate Area of Pumping and Rutting-Undercut Required	
Approximate Area of Basketball Court	

Project Photos



Photo 1: View Of Roadway Being Cut To Grade



Photo 2: View Of Cul-De-Sac Area Being Cut To Grade

Project Photos



Photo 3: View Of Loaded Truck Performing A Proof Roll To The Sub-Grade



Photo 4: View Of Truck Rutting During The Proof Roll

Project Photos



Photo 5: View Of Ruts In The Cul-De-Sac Area



Photo 6: View Of Ruts On Section Of Roadway

Project Photos



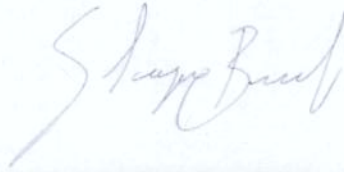
Photo 7: View Of Basketball Court Cut To Grade With Mixture Of Top Soil And Clay



Photo 8: View Of Basketball Court Cut To Grade With Mixture Of Top Soil And Clay

A final report is an instrument of professional service. Any conclusions drawn from this report should be discussed with and evaluated by the professional involved. CSI professionals are represented on site solely to observe materials, installation, fabrication, erection or placement of components and connections to ensure compliance with approved construction documents and referenced standards. The presence and activities of our field representatives do not relieve any contractor from their obligation to meet contractual requirements.

This is the Final Field Report Reviewed By:



5/25/16

Shayne Brashear

Date

END OF REPORT