

January 7, 2016

Mr. Robert Ells  
Superintendent of Engineering  
City of Lake Forest  
800 N. Field Drive  
Lake Forest, IL 60045

RE: Telegraph Road Station, Pedestrian Underpass Estimate Report  
Transmitted via email

Dear Mr. Ells:

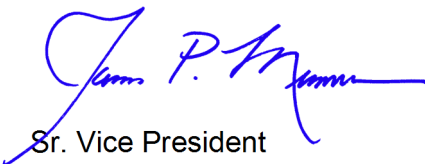
Hanson Professional Services Inc. (Hanson) subconsultant CCS International, Inc. has completed their work on the estimate for the plans developed by HDR Inc. Their report is attached.

Please make note of the Clarifications and Qualifications in the first two pages of their report. We have reviewed the estimate with CCS and feel that it is a fair representation of the work depicted on the drawings. However CCS is not a contractor and so their estimate is an opinion of the costs based on their knowledge of the marketplace.

If you have questions regarding the report, please don't hesitate to give me a call at (630) 368-2064.

Sincerely,

James P. Messmore, P.E.



Sr. Vice President  
Hanson Professional Services Inc.

Updated Design Development Estimate  
Telegraph Road Pedestrian Underpass



Submitted To:  
Hanson Professional Services, Inc.  
815 Commerce Drive; Suite 200  
Oak Brook, IL 60523

Owner:  
City of Lake Forest

1/4/2016

CCS Project #15.138

1815 South Meyers Road  
Suite 200  
Oakbrook Terrace, IL 60181

630.678.0808  
[www.CCSdifference.com](http://www.CCSdifference.com)



## Clarifications and Qualifications

### 00 - Notes Regarding This Estimate

- 1 This Design Development estimate is based on drawings and specifications, prepared by the office of HDR Engineering, Inc. dated 1/14/15 and received 11/23/15, together with discussions with their staff.
- 2 This estimate assumes a normal market condition.
- 3 This estimate assumes five or more qualified Contractors competitively bidding on this project.
- 4 This estimate assumes one contract awarded to one General Contractor.
- 5 Those cost estimates provided by the Architect and/or Consultants are identified in the body of the estimate.
- 6 After six months, this estimate should be updated for current market conditions.
- 7 Escalation is included assuming 3/01/16 as the start of construction and 11/01/16 as the substantial completion of construction.

#### **THIS ESTIMATE EXCLUDES:**

- a Professional fees, testing, moving expense, etc. for Owner's account,
- b Furnishings and equipment other than those shown in the body of the estimate,
- c Premium costs for work done in phases, out of sequence, out of hours,
- d Mechanical installation and work of associated contractors,
- e Electrical installation and work of associated contractors,
- f Hazardous material removal and abatement,
- g Construction Contingencies,
- h Building Permits,
- i Builder's Risk Insurance.

This estimate is based on information available at this time. The scope of this estimate should be reviewed to insure our interpretation of the drawings and other information is correct. This estimate should be updated as the design evolves and is completed.

This cost estimate represents our opinion of probable construction cost for this project. We have exercised due professional diligence in the preparation of this estimate. Since we have no control over final material selection, bidding strategies and market conditions, no guarantee is given or implied with this estimate.

## Clarifications and Qualifications

### 08 - Mechanical

- 1 Site utilities (Storm sewer system) estimate has been prepared based on Pre-Final "Not For Construction" drawings dated 1-14-2015 provided by HDR

### 09 - Electrical

- 1 Electrical is based on DD Drawings and Specifications dated 1/14/15 prepared by AAA Engineering.
- 2 Site demo works are included per the demo drawings.

**Project: Updated Design Development Estimate**

Date: 1/4/2016



**PROJECT RECAP & SUMMARY**

Description	Unit Price Ext
A01 - Base Estimate **** 02 - Sitework **** 02200 - Site Preparation	\$71,337.43
A01 - Base Estimate **** 02 - Sitework **** 02220 - Site Demolition	\$107,571.11
A01 - Base Estimate **** 02 - Sitework **** 02225 - Selective Demolition	\$4,491.46
A01 - Base Estimate **** 02 - Sitework **** 02300 - Earthwork	\$454,004.00
A01 - Base Estimate **** 02 - Sitework **** 02400 - Tunneling, Boring, and Jacking	\$1,392,987.50
A01 - Base Estimate **** 02 - Sitework **** 02600 - Drainage and Containment	\$342,938.30
A01 - Base Estimate **** 02 - Sitework **** 02700 - Bases, Ballasts, Pavements, and Appurtenances	\$474,272.01
A01 - Base Estimate **** 02 - Sitework **** 02800 - Site Improvements and Amenities	\$125,564.21
A01 - Base Estimate **** 02 - Sitework **** 03300 - Cast-in-Place Concrete	\$6,313,573.14
A01 - Base Estimate **** 02 - Sitework **** 05100 - Structural Metal Framing	\$862,010.50
A01 - Base Estimate **** 02 - Sitework **** 05700 - Ornamental Metal	\$182,925.00
A01 - Base Estimate **** 02 - Sitework **** 16520 - Site Lighting	\$186,387.51
<b>A01 - Base Estimate **** 02 - Sitework - SUBTOTAL</b>	<b>\$10,518,062.17</b>
<b>A01 - Base Estimate - SUBTOTAL</b>	<b>\$10,518,062.17</b>
<b>**** REPORT TOTAL ****</b>	<b>\$10,518,063.00</b>
<b>===== SUMMARY =====</b>	
<b>SUMMARY MARKUPS</b>	
General Conditions OH & P *** 15.00% of Total	\$1,577,709.50
Design Contingency *** 10.00% of Total	\$1,209,577.25
Escalation *** 1.00% of Total	\$133,053.50
<b>MARKUP TOTAL</b>	<b>\$2,920,340.00</b>
<b>ESTIMATE TOTAL</b>	<b>\$13,438,403.00</b>

**Project: Updated Design Development Estimate**

Date: 1/4/2016



Description	Quantity	U/M	Unit Price	Unit Price Ext
<b>A01 - Base Estimate **** 02 - Sitework **** 02200 - Site Preparation</b>				
Erosion Control - Plastic Silt Fence with Stakes - Install & Remove	300	LNFT	\$5.00	\$1,500.00
Temp Fence - Tree Pruning	7	EACH	\$100.00	\$700.00
Construction Signage	41	EACH	\$276.55	\$11,338.55
Temporary Sign Post, Rental - During Construction	18	EACH	\$209.33	\$3,767.94
Type 3 Barricade	16	LNFT	\$50.19	\$803.04
PR Temp Easement	319	LNFT	\$24.10	\$7,687.90
Temp Fence (Special)	2,530	LNFT	\$18.00	\$45,540.00
				<u>\$71,337.43</u>
<b>A01 - Base Estimate **** 02 - Sitework **** 02220 - Site Demolition</b>				
Site Demo - Concrete Curb & Gutter	1,320	LNFT	\$18.00	\$23,760.00
Site Demo - Pavement Removal	3,196	SQYD	\$12.33	\$39,410.79
Site Demo - HMA Surface Removal (up to 3" thick)	2,855	SQYD	\$7.53	\$21,498.15
Site Demo - Sidewalk Removal	320	SQYD	\$5.97	\$1,910.40
Site Demo - Remove Brick Paver	831	SQYD	\$5.75	\$4,780.17
Site Demo - Masonry Wall Removal	80	CUFT	\$5.77	\$461.60
Site Demo - Tactile Removal	600	SQFT	\$2.50	\$1,500.00
Site Demo - Median Removal	120	SQFT	\$10.00	\$1,200.00
Site Demo - Tree Removal	12	EACH	\$175.00	\$2,100.00
Site Demo - Remove Tree Grate	4	EACH	\$75.00	\$300.00
Remove Existing Irrigation System - Allowance	1	LSUM	\$3,000.00	\$3,000.00
Site Demo - Signage	2	EACH	\$75.00	\$150.00
Site Demo - Existing Timber Material - Allowance	1	LSUM	\$7,500.00	\$7,500.00
				<u>\$107,571.11</u>
<b>A01 - Base Estimate **** 02 - Sitework **** 02225 - Selective Demolition</b>				
Storm Sewer Removal, 12" Dia.	118	LNFT	\$14.67	\$1,731.06
Removal of Existing Manholes	2	EACH	\$487.50	\$975.00
Frames and Lids to be Adjusted (Special)	5	EACH	\$357.08	\$1,785.40
				<u>\$4,491.46</u>
<b>A01 - Base Estimate **** 02 - Sitework **** 02300 - Earthwork</b>				
Temp Soil Retention System	7,500	SQFT	\$29.98	\$224,850.00
Granular Backfill for Structure	679	CUYD	\$40.00	\$27,160.00
Structure Excavation (Special)	65	CUYD	\$48.00	\$3,120.00
Earth Excavation	2,600	CUYD	\$24.00	\$62,400.00
Special Waste Disposal & Hauling	330	CUYD	\$135.00	\$44,550.00
Non - Special Waste Disposal & Hauling	125	CUYD	\$60.00	\$7,500.00
Topsoil Excavation and Placement	38	CUYD	\$18.00	\$684.00
Topsoil Furnish and Place - 24"	1,495	SQYD	\$15.00	\$22,425.00
Subbase Granular Material, Type B	1,275	TON	\$25.00	\$31,875.00
Leveling Binder (Machine Method), N50	368	TON	\$80.00	\$29,440.00

**Project: Updated Design Development Estimate**

Date: 1/4/2016



Description	Quantity	U/M	Unit Price	Unit Price Ext
				\$454,004.00
<b>A01 - Base Estimate **** 02 - Sitework **** 02400 - Tunneling, Boring, and Jacking</b>				
Grout Stabilization - Allowance	1	LSUM	\$120,000.00	\$120,000.00
Jacking and Receiving Pits - Allowance	1	LSUM	\$60,000.00	\$60,000.00
Steel Tunnel Casing Pipe - Installed - Allowance	1	LSUM	\$1,210,000.00	\$1,210,000.00
Painted Steel Liner	2,390	SQFT	\$1.25	\$2,987.50
				<u>\$1,392,987.50</u>
<b>A01 - Base Estimate **** 02 - Sitework **** 02600 - Drainage and Containment</b>				
Storm Sewers, Class A, Type 5 12"	135	LNFT	\$77.00	\$10,395.00
Pipe Drains 6" (Special)	676	LNFT	\$56.05	\$37,889.80
Pipe Drains 8" (Special)	676	LNFT	\$85.15	\$57,561.40
Force Main, 8"	106	LNFT	\$95.00	\$10,070.00
Proposed Storm Sewer Connection To Existing Mh	3	EACH	\$1,234.00	\$3,702.00
Catch Basins, Type A, 4'-Diameter, Type 1 Frame, Closed Lid	1	EACH	\$2,750.00	\$2,750.00
Manholes, Type A, 4'-Diameter, Type 1 Frame, Closed Lid	3	EACH	\$4,100.00	\$12,300.00
Manholes, Type A, 4'-Diameter, Type 8 Grate	1	EACH	\$2,250.00	\$2,250.00
Trench Drain, 6" Wide	241	LNFT	\$70.00	\$16,870.00
Pumping Station (Wet Well/Valve Vault/ Duplex Submersible Pumps/Valves/Piping)	1	EACH	\$159,559.00	\$159,559.00
Pipe Underdrains, Fabric Lined Trench 4"	1,617	LNFT	\$18.30	\$29,591.10
				<u>\$342,938.30</u>
<b>A01 - Base Estimate **** 02 - Sitework **** 02700 - Bases, Ballasts, Pavements, and Appurtenances</b>				
Concrete Curb	101	LNFT	\$15.79	\$1,594.79
Concrete Curb & Gutter	776	LNFT	\$20.40	\$15,830.40
Asphalt Paving - Base Course - 4" Thick	4,449	SQYD	\$32.11	\$142,850.26
Paver Brick Sidewalk	9,007	SQFT	\$19.86	\$178,879.02
Detectable Warning	1,248	SQFT	\$15.00	\$18,720.00
Concrete Sidewalk - 3000 PSI - WWF - Broom Finish - 5" Thick w/ Pump	13,197	SQFT	\$8.82	\$116,397.54
				<u>\$474,272.01</u>
<b>A01 - Base Estimate **** 02 - Sitework **** 02800 - Site Improvements and Amenities</b>				
**** SITE FURNITURE ****				
Standard Bollard	4	EACH	\$295.00	\$1,180.00
Benches - Custom	5	EACH	\$929.20	\$4,646.00
Trash Receptacle - Custom	7	EACH	\$990.09	\$6,930.63
**** PARKING LOT ****				
Parking Stall Handicapped Striping Including Signage and Steel Post	4	EACH	\$368.70	\$1,474.80
Pavement Striping with Layout in Parking Lots - Painted - 4" Wide	2,141	LNFT	\$0.62	\$1,327.42
Pavement Striping with Layout in Parking Lots - Painted - 6" Wide	593	LNFT	\$0.80	\$474.40
Pavement Striping with Layout - No Parking with Cross Lines	600	SQFT	\$8.53	\$5,118.00
Pavement Striping with Layout - Standard Parking Stall - Painted	110	EACH	\$18.15	\$1,996.50
Pavement Striping with Layout - Handicap Parking Stall - Painted	4	EACH	\$42.78	\$171.12

**Project: Updated Design Development Estimate**

Date: 1/4/2016



Description	Quantity	U/M	Unit Price	Unit Price Ext
<b>**** LANDSCAPE ****</b>				
Shrubs - Deciduous	430	EACH	\$86.37	\$37,139.10
Shrubs - Evergreen	181	EACH	\$73.14	\$13,238.34
Perennials	3,096	SQFT	\$6.20	\$19,195.20
Ornamental Grass	940	EACH	\$16.43	\$15,444.20
Turf	550	SQFT	\$1.19	\$654.50
Mulch, Method 4	11,468	SQFT	\$0.50	\$5,734.00
Masonry Wall	80	SQFT	\$18.00	\$1,440.00
Timber Retaining Wall	470	SQFT	\$20.00	\$9,400.00
				<u>\$125,564.21</u>
<b>A01 - Base Estimate **** 02 - Sitework **** 03300 - Cast-in-Place Concrete</b>				
Porous Granular Embankment	1,359	CUYD	\$40.00	\$54,360.00
Structure Excavation	9,525	CUYD	\$25.00	\$238,125.00
Concrete Structure	1,274	CUYD	\$725.00	\$923,468.75
Form Liner Textured Surface	7,873	SQFT	\$18.00	\$141,705.36
Protective Coat	3,307	SQYD	\$1.10	\$3,637.59
Reinforcement Bars Epoxy Coated	152,324	LBS	\$1.78	\$271,135.94
Furnishing Steel Piles HP 12 x 53	455	LNFT	\$40.00	\$18,200.00
Driving Piles	455	LNFT	\$1.00	\$455.00
Test Pile Steel HP 12 x 53	3	EACH	\$5,000.00	\$15,000.00
Geocomposite Wall Drain	965	SQYD	\$22.00	\$21,230.00
Pipe Underdrains for Structure - 4"	1,539	LNFT	\$22.50	\$34,627.50
Sandblasting Concrete	1,111	SQFT	\$3.00	\$3,333.00
Anti - Graffiti Protection System	17,940	SQFT	\$2.50	\$44,850.00
Reinforcement Bars	1,183,680	LBS	\$1.25	\$1,479,600.00
Drilled Shaft in Soil	2,732	CUYD	\$1,000.00	\$2,732,000.00
Mechanical Splicers	720	DAYS	\$120.00	\$86,400.00
Untreated Timber Lagging	2,327	SQFT	\$30.00	\$69,810.00
Concrete Stair, CIP	521	SQFT	\$35.00	\$18,235.00
Masonry Columns	15	EACH	\$800.00	\$12,000.00
Concrete Foundation, Type E - 30" Dia	480	LNFT	\$208.00	\$99,840.00
Archi Precast Conc. Archway	124	SQFT	\$300.00	\$37,200.00
Archi Precast Conc. Infill	16	CUYD	\$220.00	\$3,520.00
Archi Precast Conc. Pilaster	1	CUYD	\$220.00	\$220.00
Underpass Floor	22	CUYD	\$210.00	\$4,620.00
				<u>\$6,313,573.14</u>



**Project: Updated Design Development Estimate**

Date: 1/4/2016



Description	Quantity	U/M	Unit Price	Unit Price Ext
<b>A01 - Base Estimate **** 02 - Sitework **** 05100 - Structural Metal Framing</b>				
Tierod Support	20,461	LBS	\$1.75	\$35,806.75
Tierods, 1 - 3/4" Dia w/ Burn Buckles	20,695	LBS	\$1.25	\$25,868.75
Permanent Steel Sheet Piling	7,742	SQFT	\$100.00	\$774,200.00
Prefinished Curved Linear Metal Ceiling Panel	566	SQFT	\$35.00	\$19,810.00
Smooth Curved Metal Ceiling Band	53	SQFT	\$25.00	\$1,325.00
Sign Support - Allowance	1	LSUM	\$5,000.00	\$5,000.00
				<u>\$862,010.50</u>
<b>A01 - Base Estimate **** 02 - Sitework **** 05700 - Ornamental Metal</b>				
Steel Ornamental Guardrail	1,141	LNFT	\$150.00	\$171,150.00
Stair Handrails	157	LNFT	\$75.00	\$11,775.00
				<u>\$182,925.00</u>
<b>A01 - Base Estimate **** 02 - Sitework **** 16520 - Site Lighting</b>				
Site Lighting - F1 - Candy Cane Style Alum Pole LED Luminaire	7	EACH	\$5,467.37	\$38,271.59
Site Lighting - F1A - Candy Cane Style Alum Pole LED Luminaire	3	EACH	\$5,467.37	\$16,402.11
Site Lighting - F3 - Step Light Recessed in Wall (Kim #LLF30) 26W CFL	6	EACH	\$1,219.63	\$7,317.78
Site Lighting - F4 - Step Light Recessed in Wall (Kim #LLF20) 26W CFL	6	EACH	\$1,219.63	\$7,317.78
Site Lighting - F5 - Step Light Recessed in Wall (Kim #LLF10) 26W CFL	17	EACH	\$1,123.01	\$19,091.17
Tunnel Lighting - F2 - Tunnel Recessed Can LED Light 8'dia Lensed Wallwash	5	EACH	\$1,271.40	\$6,357.00
Lighting Rough In Box	34	EACH	\$97.01	\$3,298.34
#2 - Remove (E) Parking Lot Light Pole, Turn Over to City	6	EACH	\$847.56	\$5,085.36
#3 - Remove (E) Platform Light Pole & Reinstall	10	EACH	\$1,346.41	\$13,464.10
#5 - Remove (E) HH, Receptacle & Cable Back to Nearest HH	9	EACH	\$873.00	\$7,857.00
#7 - Remove (E) VOM Speaker along with Light Pole	5	EACH	\$187.07	\$935.35
#15 - Protect (E) U/G FO Cable in Conduit during Construction	1	EACH	\$315.61	\$315.61
#10 - New HH - Allow 17" x 30" x 24"	3	EACH	\$1,081.24	\$3,243.72
#8 - Intercept (E) Ltg Conduit. Remove (E) Wire, Provide (N) Wire & Conduit	4	EACH	\$580.33	\$2,321.32
#16 - Intercept (E) VOM Speaker Cable in (E) HH, Extend (N) Wire/Conduit	2	EACH	\$514.15	\$1,028.30
#17 - Route Conduit from U/G, Up the Outside of Wall, to (E) Control Panel	1	EACH	\$642.69	\$642.69
#5 - Re-install (E) Metra VOM Speaker, Provide (N) Conduit/Wire to (E) VOM Speaker	9	EACH	\$447.97	\$4,031.73
#15 - Intercept (E) Platform Ltg Ckts in (E) HH & Extend (N) Conduit/Cable	1	EACH	\$705.04	\$705.04
#4 - Provide Expansion/Deflection Fitting	3	EACH	\$712.69	\$2,138.07
1" GRS with 4#8, 1#8G - Tunnel Ramp Access Lighting Circuit	326	LNFT	\$23.21	\$7,566.46
1" GRS with 3#8, 1#8G - Tunnel Lighting Circuit	106	LNFT	\$21.23	\$2,250.38
1" GRS in Trench with 3#8 + 1#8G - Site Lighting Circuit	947	LNFT	\$26.78	\$25,360.66
Tunnel Lighting Control Panel, 100A MLO 208/120V (in Existing Electrical Rm)	1	EACH	\$1,460.97	\$1,460.97
2" GRS with - 4#2, 1#2G - Tunnel Control Panel to (E) MDP	50	LNFT	\$54.45	\$2,722.50
Motor / Equipment Connection - 120/208V - 60A/3P - 10HP - N3R - Duplex Pump	2	EACH	\$536.26	\$1,072.52
2" GRS in Trench with 4#6+1#6 - Duplex Pump Feeders	138	LNFT	\$44.42	\$6,129.96
				<u>\$186,387.51</u>

**Project: Updated Design Development Estimate**

Date: 1/4/2016



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Description	Quantity	U/M	Unit Price	Unit Price Ext
<b>A01 - Base Estimate **** 02 - Sitework - SUBTOTAL</b>				<b>\$10,518,062.17</b>
<b>A01 - Base Estimate - SUBTOTAL</b>				<b>\$10,518,062.17</b>
<b>**** REPORT TOTAL ****</b>				<b>\$10,518,063.00</b>

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