



Belmont Middle And High School  
 Belmont - West of Harris Design Development Drawing  
 221 Concord Ave, Belmont, MA 02478  
 Design Development

January 25, 2022

Project Cost Summary			
Description	Project Area	Total Cost	Cost/SF
Total Site Cost	156,690 sf	\$4,726,074	\$30.16
1.35% Subcontractor Default Insurance (SDI)		\$36,337	\$0.23
Total Direct Cost	<b>\$2,270,000</b>	<b>\$4,762,411</b>	\$30.39
<u>Contingencies</u>			
3.0% Design/ Estimating Contingency		\$74,740	\$0.48
3.0% Construction Contingency		\$74,740	\$0.48
3.5% Escalation Contingency		<b>\$87,196</b>	\$0.56
Total Contingencies:		\$236,675	\$1.51
<u>Insurance &amp; Bonds</u>			
Builders Risk Insurance		\$13,640	\$0.09
2.70% C.C.I.P.		\$144,189	\$0.92
0.73% Skanska Bonding		\$38,984	\$0.25
Total Insurance & Bonds:		\$196,813	\$1.26
<u>Construction Management Services</u>			
General Requirements/ Conditions		Incl'd In Direct Cost	
5.0% Construction Management Fee		\$144,424	\$0.92
Total Construction Management Services:		\$144,424	\$0.92
<u>Building Permit</u>		By Owner	\$0.00
<b>Total Project Cost:</b>		<b>\$5,340,323</b>	<b>\$34.08</b>

Note: Indirect costs are applied to the West of Harris direct cost premium that is above and beyond the original budget.

Potential VE Ideas	Potential Savings
Reduce 47' Sports Fencing amount and/or height	(\$1,087,300)
Remove allowance for reinforced footing design for 47' high fencing	(\$200,000)
Remove bottle filling station and water connection	(\$15,000)
Delete Irrigation system and well at fields	(\$257,485)
Remove Freestanding Masonry Wall 16" Tall With Concrete Footings, Brick Veneer Both Sides, And Precast Cap	(\$71,500)
<b>Total Potential VE Cost Savings</b>	<b>(\$1,631,285)</b>



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Variance Report				
Description	Belmont Allowance Carried from 2018 DD	Belmont HS WOH 2022 DD Est. Update	Variance	Comments
<b>Site Preparations</b>	<b>\$785,137</b>	<b>\$889,026</b>	<b>\$103,889</b>	
Site Preparation/ Shrub & Tree Removal/ Trimming	\$115,030	\$437,374		Allowance did not carry the development of required general condition items - site labor, temporary roadways, MBTA allowance, police detail
Stripping & Stockpiling	\$141,345	\$80,256		Allowance included disposal of excess stripping materials, Updated DD assumed all materials can be reused on site.
Site Demolitions and Relocations/ Site Elements Demolition	\$189,936	\$70,744		Allowance included demo White Field House, demo small building adjacent to rink, updated DD didn't include these demolitions. White Field House deduct provided separate from this estimate.
Site Earthwork	\$224,753	\$205,453		
Slope Protection & Erosion Control	\$114,074	\$95,199		Allowance included \$50,000 for misc. erosion control items, Updated DD broke out items per plans.
<b>Site Improvements</b>	<b>\$1,127,651</b>	<b>\$3,169,068</b>	<b>\$2,041,417</b>	
Parking Lots/ Pedestrian Paving	\$222,932	\$165,087		Allowance included an adjacent parking lot, Updated DD did not include this.
Site Development		\$71,500		Updated DD included a freestanding masonry wall backstop that was not included in the Allowance.
Fencing & Gates	\$106,988	\$1,674,675		276 lf of 47' heigh sports netting at \$188/ lf was included in Allowance (\$51,888), updated DD has 614 lf of 47' high sports netting at +/- \$2,000/ lf (\$1,249,300). An allowance of \$250,000 is included in updated DD to increase the size of the sport net footings.
Athletic & Recreational Surfaces	\$574,963	\$843,451		Subcontractor unit prices increased from Allowance to DD, i.e. 5" engineered infield mix \$5.50/ sf in 2018, \$12/ sf for updated DD.
Athletic & Recreational Equipment	\$54,000	\$50,000		
Site & Street Furnishings	\$5,850	\$26,700		Allowance did not include bottle filling station.
Retaining Walls		\$73,500		Concrete retaining wall included on the north side of updated DD was not included in the Allowance.
Irrigation System		\$126,485		Irrigation was not included in the Allowance.
Lawns & Grasses	\$130,178	\$95,786		Seeding quantity from Allowance to DD was reduced, which reduced screened topsoil.
Trees, Planting & Ground Covers	\$32,740	\$41,884		
<b>Site Civil/ Mechanical Utilities</b>	<b>\$308,149</b>	<b>\$415,610</b>	<b>\$107,461</b>	
Water Supply		\$131,000		An irrigation well has been included in DD, it was not included in the Allowance.
Storm Sewer	\$308,149	\$284,610		The 4" underdrain is included in the Allowance under storm drainage, it is included under athletic & recreational surfaces under updated DD. (Reallocation of cost within estimate)
<b>Site Electrical Utilities</b>	<b>\$51,986</b>	<b>\$252,370</b>	<b>\$200,384</b>	<b>Updated DD includes concrete encasement with conduit, a vault for the transformer, not included in the Allowance.</b>
<b>Total Direct Cost Variance</b>	<b>\$2,272,923</b>	<b>\$4,726,074</b>	<b>\$2,453,151</b>	