



CONCEPTUAL COST ESTIMATE  
BOSTON POST ROAD AT CHURCH STREET

This estimate is based on conceptual design plans prepared by VHB, Inc., dated June, 2013.  
Prices were determined from the MassDOT Weighted Average Bid Prices web site.

This estimate does not consider any Right of Way acquisitions or utility pole relocations.

Assumptions

This estimate assumes the following:

**Pavement**

Assume Full Depth Pavement and removal of existing cobble median island along southbound approach to intersection.  
Assume Mill & Overlay at all other paved locations within limits.

**Sidewalk**

Assume existing sidewalk retained.  
Assume one existing crosswalk and wheelchair ramp removed and new crossing constructed.

**Vertical Granite Curb**

Assume new granite curb Type VB along north west corner of intersection.

**Driveways**

Assume no impacts to driveways.

**Loam & Seed**

Assume removal of existing pavement and 4" of loam & seed at north west corner of intersection.

**Drainage Modifications**

Assume no drainage modifications required.

Prepared by: DGallant  
Checked by: NCrevier  
Date: 8/29/2014



*Vanasse Hangen Brustlin, Inc.*

**Transportation  
Land Development  
Environmental  
Services**

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CONCEPTUAL COST ESTIMATE  
SUMMARY  
BOSTON POST ROAD AT CHURCH STREET

<u>Description</u>	<u>Unit Price</u>	<u>Quantity</u>	<u>Total Cost</u>
Full Depth Pavement	\$85.00 /SY	140 SY	\$11,900.00
Mill & Overlay	\$15.00 /SY	5,000 SY	\$75,000.00
Crosswalk Relocation	\$38,845.00 /LS	1 LS	\$38,845.00
Loam and Seed	\$18.00 /SY	600 SY	\$10,800.00
Granite Curbing (Item 50G)	\$35.00 /FT	265 FT	\$9,275.00
Relocation of Horse Trough	\$2,000.00 /LS	1 LS	\$2,000.00
SUBTOTAL:			\$145,820.00
Construction Staking (3%)			\$4,374.60
Police Detail (3%)			\$4,374.60
Mobilisation (3%)			\$4,374.60
Construction Traffic Management (5%)			\$7,291.00
Contingencies (20%)			\$29,164.00
SUBTOTAL:			\$195,398.80
Design and Permitting (15%)			\$29,309.82
Survey (5%)			\$9,769.94
TOTAL:			\$234,478.56
<b>SAY:</b>			<b>\$235,000.00</b>

This estimate does not consider any Right of Way acquisitions, environmental impact mitigation or utility pole relocations.



**UNIT COSTS**

**Full Depth Pavement**

	<u>Depth (in)</u>	<u>Conversion</u>	<u>Unit Cost</u>	
HMA Top Course (Item 460)	2.0	0.0560 Ton/SY*in	\$110.00 /Ton	\$12.32
HMA Binder Course (Item 460)	2.0	0.0560 Ton/SY*in	\$110.00 /Ton	\$12.32
HMA Base Course (Item 420)	4.0	0.0560 Ton/SY*in	\$110.00 /Ton	\$24.64
Dense Graded Crushed Stone (Item 402)	4.0	0.0278 Yd/in	\$55.00 /CY	\$6.12
Gravel Borrow (Item 151)	8.0	0.0278 Yd/in	\$35.00 /CY	\$7.78
Unclassified Excavation (Item 120.1)	20.0	0.0278 Yd/in	\$30.00 /CY	\$16.68
Fine Grading and Compacting (Item 170)	N/A	N/A	\$4.00 /SY	\$4.00
			per SY Total=	<u>\$83.86</u>

**Full Depth Pavement COST PER SY= \$85.00**

**Mill & Overlay**

	<u>Depth (in)</u>	<u>Conversion</u>	<u>Unit Cost</u>	
Pavement Milling (Item 129)	4.0	0.0278 Yd/in	\$18.00 /CY	\$2.00
HMA Top Course (Item 460)	2.0	0.0560 Ton/SY*in	\$110.00 /Ton	\$12.32
			per SY Total=	<u>\$14.32</u>

**Mill & Overlay COST PER SY= \$15.00**

**Loam Borrow and Seed (Assume Low Reveal indicates 8" of existing pavement)**

	<u>Depth (in)</u>	<u>Conversion</u>	<u>Unit Cost</u>	
Loam Borrow (Item 751)	4.0	0.0278 Yd/in	\$45.00 /CY	\$5.00
Seed (Item 765)			\$2.00 /SY	\$2.00
Ordinary Borrow (Item 150)	4.0	0.0278 Yd/in	\$25.00 /CY	\$2.78
Unclassified Excavation (Item 120.1)	8.0	0.0278 Yd/in	\$30.00 /CY	\$6.67
			per SY Total=	<u>\$16.46</u>

**Loam Borrow and Seed COST PER SY= \$18.00**



**UNIT COSTS**

**HMA Walk**

	<u>Depth (in)</u>	<u>Conversion</u>	<u>Unit Cost</u>	
HMA Top Course (Item 702)	2.5	0.0560 Ton/SY*in	\$180.00 /Ton	\$25.20
Gravel Borrow (Item 151)	8.0	0.0278 Yd/in	\$35.00 /CY	\$7.78
Unclassified Excavation (Item 120.1)	10.5	0.0278 Yd/in	\$30.00 /CY	\$8.76
Fine Grading and Compacting (Item 170)	N/A	N/A	\$4.00 /SY	\$4.00
			per SY Total=	\$45.74

**HMA Walk COST PER SY= \$46.00**

**Cem Conc WCR**

	<u>Depth (in)</u>	<u>Conversion</u>	<u>Unit Cost</u>	
Cem Conc WCR (Item 701.2)	6.0	N/A	\$75.00 /SY	\$75.00
Gravel Borrow (Item 151)	8.0	0.0278 Yd/in	\$35.00 /CY	\$7.78
Unclassified Excavation (Item 120.1)	14.0	0.0278 Yd/in	\$30.00 /CY	\$11.68
Fine Grading and Compacting (Item 170)	N/A	N/A	\$4.00 /SY	\$4.00
			per SY Total=	\$98.46

**Cem Conc WCR COST PER SY= \$100.00**



UNIT COSTS

**WCR Relocation**

HMA Walk	\$46.00 /SY	15 SY	\$690.00
Cem Conc WCR	\$100.00 /SY	310 SY	\$31,000.00
Gran Curb Type VB (Item 506)	\$35.00 /FT	25 FT	\$875.00
Gran Transition Curb for WCR (Item 509)	\$40.00 /FT	40 FT	\$1,600.00
Loam & Seed Restoration	\$18.00 /SY	260 SY	\$4,680.00

**Total WCR Relocation = \$38,845.00**