





#### **PMA Construction Services**

Owner's Project Manager

### **HANOVER HIGH SCHOOL PROJECT**

October 2010 - Monthly Status Report

**Project:** Hanover High School **Building Size:** 157.000 **Ph1 Substantial Completion:** June 2011 **Current Phase:** Construction **Enrollment Projection:** 800 Students **Ph2 Substantial Completion:** May 2012 **Construction Type: NEW Facility Type:** High School **Project Total Duration:** 32-months **Construction Start Date:** 28Sep09 **Reimbursement Rate:** 48.21% Day 398 of 611 to Ph1 Substantial: 65.1%

#### **Project Safety Report**

Safety Incidents this Month • [0] Past Lost Time Incidents • [1] Past Minor Reportable Incidents • [2]

#### **Open Scope / Potential Issues**

- Getting building 100% weathertight
- Temp heat / winter conditions preparedness
- Metal panel delivery date delayed
- Window delivery date delayed by filed sub bidder's manufacturer
- Curtainwall delivery and installation
- NGRID permanent power date
- Terrazzo contract procurement & schedule integration
- Telephone and security vendor coordination
- Building façade completion
- Completion of maintenance and concession building punchlist activities for potential early turnover
- Mechanical commissioning coordination and kick-off
- FF&E selection, procurement and coordination
- Preparation for move to new building & vacate existing
- Community Issues none at this time.

#### **Budget Status**

**Total Project Budget:** \$50,678,683 as of 10/31/10

**Actual Incurred to Date:** \$28,022,177 as of 10/31/10 (55.3%)

**Contingency Remaining:** \$1,614,595 (61.5%)

\*\*Subject to Final Revised PFA Agreement

<b>Construction Cost Summary:</b>						
Award Value (Callahan):	\$38,652,255.00					
Previously Executed CO's (Net)	\$311,738.21					
Previous Contract Value:	\$38,963,993.21					
CO's Executed this Month:	\$508,074.96					
Current Contract Value:	\$39,472,068.17					
Construction Payment Summary:						
Previous Gross Amount:	\$20,558,514.38					
This Month's Gross Amount:	\$2,792,290.00					
Gross Amount to-Date:	\$23,350,804.38					
Retainage To-Date @ 5%:	\$1,167,540.22					
Retainage Released	\$0.00					
Current Retainage	\$1,167,540.22					
Total Net Payable To-Date:	\$22,183,264.16					

#### **Project Status**

#### October 2010 Progress

- PMA Performed OPM Duties (i.e. contract document compliance verification, project controls, real-time issues ID and resolution)
- Designer Continued Construction Administration (i.e. submittals, RFIs, weekly site visits, QA/QC, etc)
- Main Bldg Rough MEP Approximately 90% Complete
- 99% of Bldg Slab on Grade Complete
- Approx 60% Phase 1 Trees & Shrubs Planted

- 2<sup>nd</sup> & 3<sup>rd</sup> Floor Wallboard 90% Complete, 1<sup>st</sup> Floor Underway
- Brick Veneer Installation Continued, Approx 85% Complete
- Maintenance & Concession Bldg Interior Finishes Complete
- Metal Roofing Installation Continued
- Completed Installation of Athletic Field Turf
- Building Envelope Commissioning Continued

Remaining Balance to Finish (gross):

Move Coordination Meeting Held with HS Faculty

#### **November 2010 Forecasted Items**

- Complete Classroom Wing Rough MEPs / Obtain Final Inspections
- Complete Sheetrock on 2<sup>nd</sup> and 3<sup>rd</sup> Floors, Continue 1<sup>st</sup> Floor
- Complete Slab on Grade Work List
- Complete Phase 1A Punchlist and Prep for Turnover
- Terrazzo Flooring Schedule Integration
- Begin Main Building Interior Finishes

- Continue Brick Façade Installation
- Continue Window Installation @ Main Building
- Get Building Weathertight and Begin Temp Heat
- Deliver Metal Panels and Begin Installation
- Permanent Power Online
- HVAC Unit Startup / Testing / Commissioning

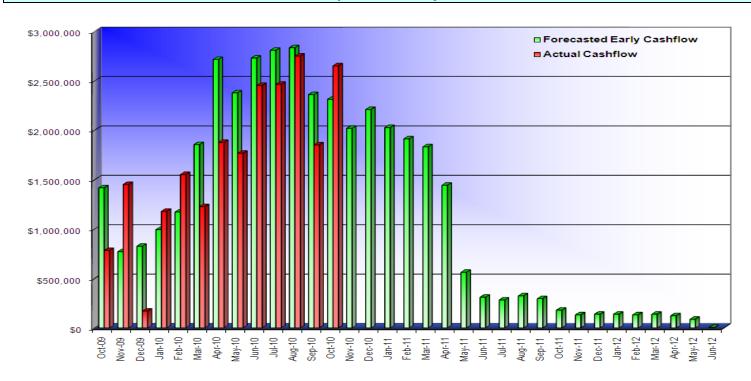


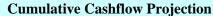


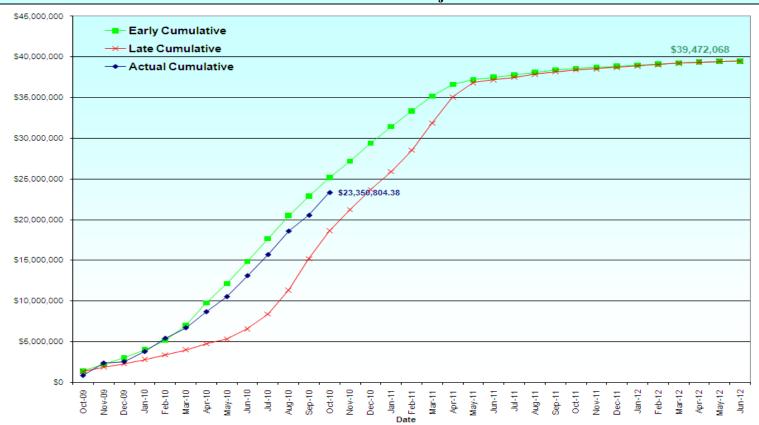
#### **PMA Construction Services**

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#### **Monthly Cashflow Projection**







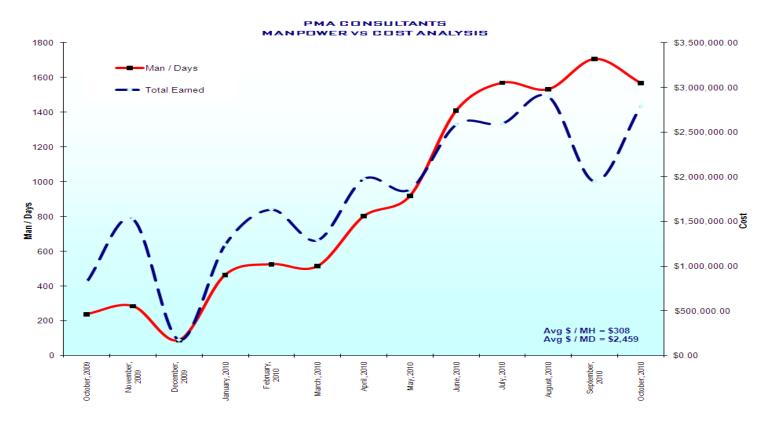




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#### **Manpower vs Cost Analysis**



Milestone Dates						
Milestone Dates	Baseline	Forecast	Actual	Status	Schedule Notes	
Construction Start - NTP	01Oct09		28Sep09	√	On Schedule	
OH MEP Work Start Milestone	20Apr10		12Apr10	√	On Schedule	
Building Envelope Start Milestone	28Apr10		26Apr10	√	On Schedule	
Begin Electrical Cut-In	17Aug10		16Aug10	√	On Schedule	
Complete Window Installation	06Oct10	26Nov10			Critical Path Impact Mitigated by Temp Protection	
Ph1A Substantial Completion	01Sep10	01Dec10			No Critical Path Impact – Float Utilized	
Begin Startup Checkout HVAC Systems	26Nov10	01Feb11			No Critical Path Impact – Float Utilized	
Permanent Power Online	18Jan11	26Nov10			On Schedule	
Phase 1 Substantial Completion	01Jun11	01June11			On Schedule	

#### **HS11 Schedule Submission**

Contract Milestone Analysis								
Phase	Contract	HS10	HS11	Float				
Ph1 Substantial	01Jun11	28Jun11	01Jun11	0				
Ph1A Substantial	01Jun11	09Nov10	01Dec10	140				
Ph2 Substantial	01May12	18May12	23Apr12	6				

- The primary critical path to Phase 1 substantial completion in the HS11 schedule submission flows through the main building interior rough MEPs, drywall, interior finishes (incl. paint, floors, ceilings, doors, millwork/casework, MEP finishes, etc) and continues on to punchlist, HVAC testing/balancing, commissioning, & final inspections. This path currently contains 0 days of total float.
- The longest path to the Phase 2 Substantial Completion contract milestone flows through Phase 1 completion, building abatement/demolition, site prep, construction of athletic fields, and final site improvements.



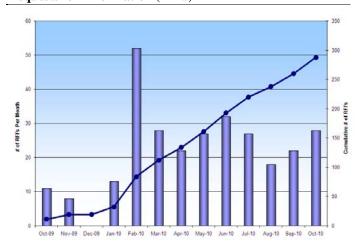


#### **PMA Construction Services**

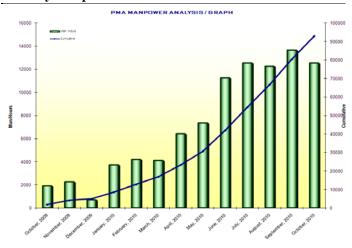
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#### **Graphs & Data**

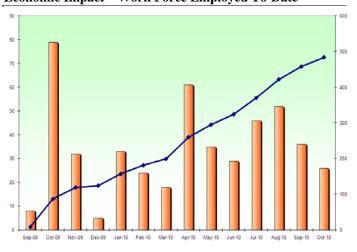
#### Requests for Information (RFIs)



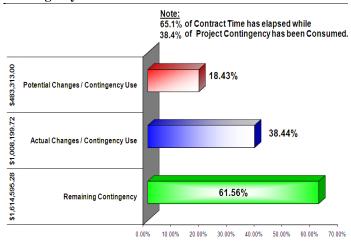
#### **Monthly Manpower**



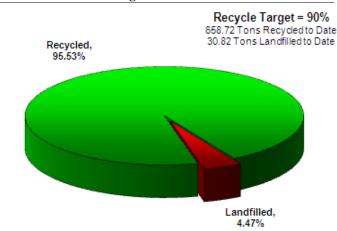
#### **Economic Impact – Work Force Employed To-Date**



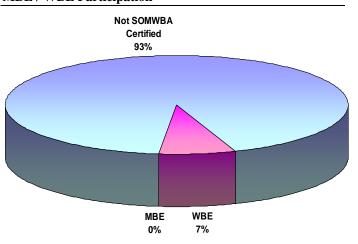
#### **Contingency Utilization**



#### **MA-CHPS Waste Management**



#### MBE / WBE Participation







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### **PMA Change Management**



Rejected Change Order Open PMA Construction Services

Town of Hanover, Massachusetts

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	PMA Potential Change Order Log										
	Received	Description	Proposed Amount (\$)	Pending Amount (\$)	Approved Amount (\$)	Extension	Current Status				
		Total	\$1,192,444.65	\$108,313.27	\$819.813.17	(Y/N)					
CO #01	2/6/2010	Elevator Substitution Credit	-\$7,500.00		-\$7,500.00	N	CO #1				
CO #02	5/5/2010	Water Main- Add'l Valves	\$4,481.94		\$4,001.65		CO #1				
CO #03	3/17/2010	Unexpected Cold Weather Procedures	<b>\$</b> 145,898.43		\$122,500.00		CO #2				
CO #04	5/5/2010	R&R Unsuitable @ Drain w/ Stone	\$4,146.14		\$3,605.34		CO #1				
CO #05 CO #06	5/5/2010 3/16/2010	R&R Existing DMH in Poor Condition  Waterline Replacement Option #1 (Lopes)	\$3,526.40		\$3,147.98	N N	CO #1 Closed				
CO #07	TBD	Force Main Repair				N	Closed				
CO #08R1	9/30/2010	Add'l MH & Wider Duct bank for NGRID (Without Griffin)	\$8,926.00		\$8,926.00	N	CO #5				
CO #08R2	9/30/2010	NGRID Changes: Griffin	\$39,037.00			N	Closed				
CO #09	6/4/2010	RFI#123-2 Added Soffits for RLs @ B313 and B314	\$1,126.81		\$1,127.00	N	CO #4				
CO #10	5/26/2010	Lopes Swing set Relocation	\$3,628.90		\$3,628.90		CO #3				
CO #13	6/24/2010	ASI#27-10utbuilding Façade	\$56,713.93		\$47,575.25	N	CO #3				
CO #14 CO #15	8/4/2010 7/2/2010	PR #8 Stair #4 Railing PR #9 Science Room Layout Changes	\$29,266.87 \$8,087.72		<b>\$</b> 31,123.00	N N	CO #4 Closed				
CO #15R3	10/6/2010	PR#9 Science Room Revisions (Outlet Move Due to	\$5,710.00		\$5,710.00	N	CO #7				
CO #16	7/30/2010	Additional Pruning Around Track	\$24,732.89		\$24,733.00		CO #4				
CO #17	7/28/2010	ASI#39 Relocate Conduit at Cedar School	\$136,379.44			N	Closed				
CO #18.001	7/30/2010	Cedar St. Grind & Re-pave	\$49,599.93	\$35,554.00		N	Open				
CO #19	10/19/2010	Tennis Court Rehab	\$3,992.00		\$3,778.00	N	CO #7				
CO #20 CO #21	6/30/2010 11/1/2010	RFI #79 & 139 Additional Ductwork and Grills  Cedar School Track Access ASI CSS #003	\$6,195.04 \$8,387.00	\$5,850.00 \$8,387.00		N N	Open				
CO #21	7/31/2010	45 Degree Angles Curb and radiuses Return	\$5,561.18	30,307.00	\$5,561.00	N	Open CO #4				
CO #23	8/6/2010	ASI #32 Metal Wall Panels Credit	-\$20,000.00		-\$20,000.00	N	CO #5				
CO #24	8/10/2010	Concessions Drainage and Fence Revision	\$7,223.45		\$6,500.00		CO #4				
CO #25	8/10/2010	ASI#34 Hand Dryers Added Wire at Concession Stand	l \$56,864.96		\$56,864.96		CO #7				
CO #26	8/25/2010	ASI #49 Bollards at Maint. Bldg	<b>\$</b> 3,547.77		\$3,548.00	N	CO #4				
CO #27	8/25/2010	Additional Shoring of Decks Per SKS CA03-05	\$3,336.00			N	Closed				
CO #28 CO #29(R1)	8/30/2010 8/25/2010	Dual Ring Infiltrometer Test	\$4,109.98 \$1,930.00		\$4,110.00		CO #7 CO #5				
CO #29(K1)	8/25/2010	Misc. Lopes  Blocking for Visual Display Boards	\$5,000.00		\$1,930.00 \$5,000.00	N N	CO #4				
CO #31	8/25/2010	Path to Scoreboard	\$5,934.00	\$5,934.00		N					
CO #32	9/26/2010	Water Main Revisions	\$84,507.51		\$59,894.00	N	CO #5				
CO #34	9/26/2010	Change Water Service to Building to Copper	\$5,306.00		\$5,306.00		CO #5				
CO #35	8/26/2010	Concession Manhole Covers	\$1,131.09		\$1,131.09		CO #5				
CO #36	10/1/2010	Special Waste Tank Elevation Change	\$36,042.00	87.000.07	\$36,042.00	N	CO #7				
CO #37 CO #38	8/27/2010 10/25/2010	Dimming Change and Overhead Coiling Doors  XFMR Planting Changes Per ASI CSS-06	\$7,626.27 \$10,646.00	\$7,626.27	\$10,646.00	Y	Open CO #7				
CO #39	9/17/2010	Acid Waste Vent Relocation	\$12,004.00	\$12,004.00	310,040.00	N	Open				
CO #40	9/27/2010	Landscaping Irrigation Revisions	\$21,576.00		\$21,576.00	N	CO #7				
CO #41(R1)	9/18/2010	Pre-cast Medallion and Brick Change	\$5,045.00	\$5,045.00		N	Open				
CO #42	10/27/2010	Marker and Tackboard Credit	-\$29,105.00		-\$29,105.00		CO #7				
CO #43(R2)	10/7/2010	Athletic Field Repairs Negotiated LS	\$375,000.00		\$375,000.00	N	CO #6				
CO #44 CO #45	11/4/2010 9/28/2010	Enoboard Blocking Relocation  SIB#2 Redesign and Resetting of MH Covers	\$1,350.00 \$5,964.00	\$1,350.00	\$5,964.00	N N	Open CO #7				
CO #46	10/5/2010	Added Electrical Outlets per ASI #57	\$5,535.00		\$5,535.00		CO #7				
CO #47	10/6/2010	Floor Tile Pattern Change	\$5,356.00		\$5,356.00	N	CO#7				
CO #48	10/6/2010	Bi-Fold Door Power (Per RFI 172.1)	\$6,598.00		\$6,598.00		CO #7				
CO #50	10/8/2010	Hardware Change to Intruder Function	<b>\$</b> 5,811.00	\$5,811.00		N	Open				
CO #54	10/29/2010	Wiremold per RF# 174.1	\$6,714.00	\$6,714.00		N	Open				
CO #56	10/29/2010	Existing Generator per RF# 270	\$11,796.00	\$11,796.00		N	Open				
CO #57 CO #58	11/2/2010	Raise Roof Drains per ASI #022  Eyewash Key Switch per RFI #266	\$5,456.00	\$0.00		N M	Open Open				
CO #50	11/4/2010	Eyewasii Ney Switch per RF1#200	\$530.00	\$530.00		N	Open				





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### **Progress Photos**







Athletic Field Rubber Pellet Placement







