



**Town of Hanover, Massachusetts**  
Hanover High School



**PMA Construction Services**  
Owner's Project Manager

## **HANOVER HIGH SCHOOL PROJECT** *May 2010 – Monthly Status Report*

<b>Project:</b>	Hanover High School	<b>Building Size:</b>	157,000	<b>Ph1 Substantial Completion:</b>	June 2011
<b>Current Phase:</b>	Construction	<b>Enrollment Projection:</b>	800 Students	<b>Ph2 Substantial Completion:</b>	May 2012
<b>Construction Type:</b>	NEW	<b>Facility Type:</b>	High School	<b>Project Total Duration:</b>	32-months
<b>Construction Start Date:</b>	28Sep09	<b>Reimbursement Rate:</b>	48.21%	<b>Day 246 of 611 to Ph1 Substantial:</b>	40.3%

### **Project Safety Report**

Safety Incidents this Month • [0]  
Past Major Incidents • [0]  
Past Minor Reportable Incidents • [2]

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

- Kitchen equipment layout / Underslab utilities
- Town decision on outbuilding's façade (Brick or CMU)
- Building façade mockup construction
- Irrigation well boring, sampling & flow tests
- Science room layout modifications
- Potential roof drain relocation
- Exposed Densdeck @ roof (awaiting letter from manufacturer)
- Terrazzo contract procurement & schedule integration
- Replacement of existing asbestos containing water main under future driveway
- Completion of electrical ductbank
- Construction of athletic field drainage system
- Procurement of athletic field turf

### **Budget Status**

**Total Project Budget:** \$50,076,069\* as of 5/31/10  
**Actual Incurred to Date:** \$12,678,733 as of 5/31/10 (25.3%)  
**Contingency Remaining:** \$2,361,520 (90%)  
*\*Subject to Final Revised PFA Agreement*

#### **Construction Cost Summary:**

Award Value (Callahan):	\$38,652,255.00
Previously Executed CO's (Net)	\$125,754.57
Previous Contract Value:	\$38,778,009.57
CO's Executed this Month:	\$0.00
<b>Current Contract Value:</b>	<b>\$38,778,009.57</b>

#### **Construction Payment Summary:**

Previous Gross Amount:	\$8,674,009.69
This Month's Gross Amount:	\$2,262,480.68*
Gross Amount to-Date:	\$10,936,490.38*
Retainage To-Date @ 5%:	\$546,824.52*
Retainage Released	\$0.00
Current Retainage	\$546,824.52*
<b>Total Net Payable To-Date:</b>	<b>\$10,389,665.86*</b>

**Remaining Balance to Finish (gross):** **\$27,841,519.19\***

\*Note: April Requisition Value is Approximate

### **Project Status**

#### **May 2010 Progress**

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>• Site Drainage System Installation Progressing</li> <li>• Continued Utility Ductbank Installation</li> <li>• Completed Slab on Deck Concrete Placement</li> <li>• Gymnasium Slab on Grade Poured</li> <li>• Continued Prepping Bldg Footprint for Slab on Grade Placement</li> <li>• UG Electric Conduit in Bldg Approximately 95% Installed</li> <li>• UG Plumbing Approximately 95% Complete &amp; Backfilled</li> </ul> | <ul style="list-style-type: none"> <li>• Concession &amp; Maintenance Bldg Shells Completed</li> <li>• Interior Framing Currently 30% Complete</li> <li>• Newton Roofing Approximately 50% Complete</li> <li>• Exterior Wall Framing 60% Complete &amp; Sheathed</li> <li>• Spray Applied Fireproofing Approximately 35% Complete</li> <li>• Mechanical Ductwork Approximately 15% Complete</li> <li>• Interior Plumbing Underway</li> </ul> |
|--|--|

#### **June 2010 Forecasted Items**

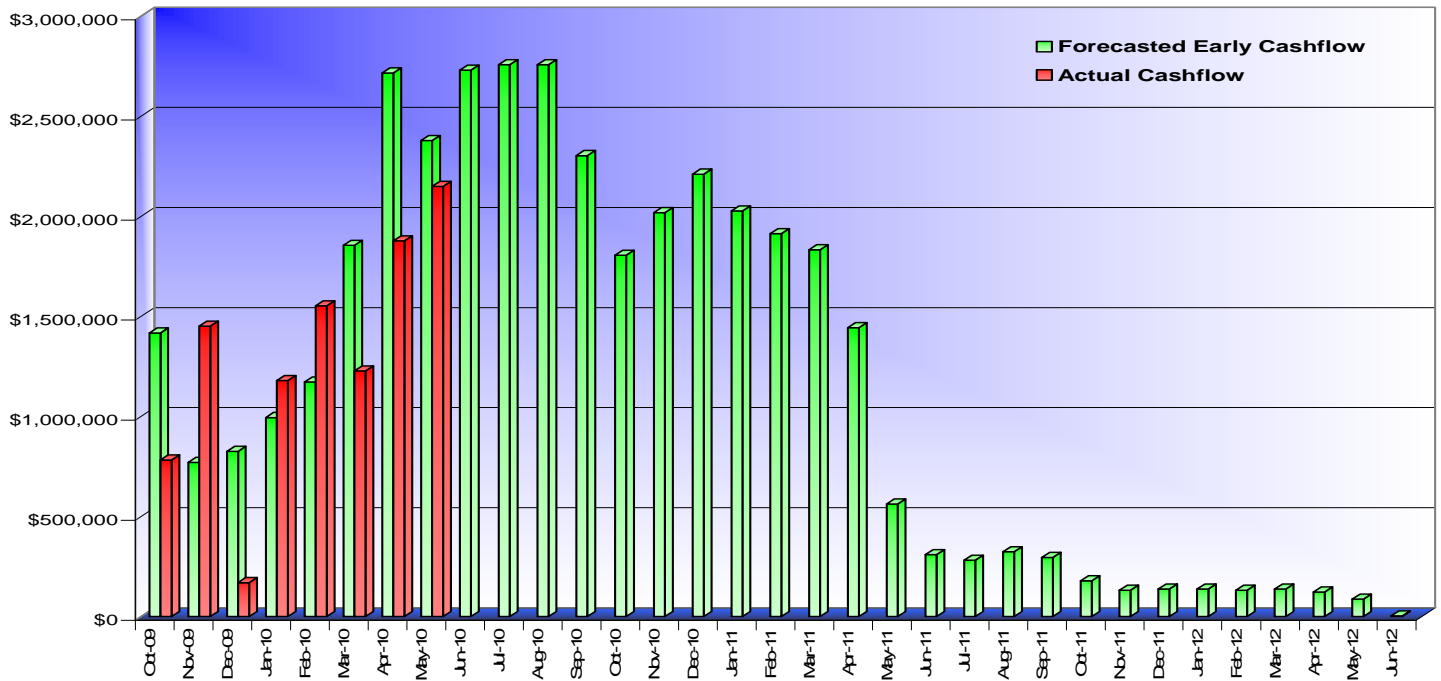
- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>• Continue Slab on Grade Placement</li> <li>• Continue In-wall Plumbing &amp; Begin Interior Electric</li> <li>• Continue Mechanical Ductwork</li> <li>• Continue Installation of Underground Electric</li> <li>• Continue Installation of Site Drainage</li> </ul> | <ul style="list-style-type: none"> <li>• Construct Outbuilding Façade (owner decision needed)</li> <li>• Continue Athletic Field Construction</li> <li>• Complete Roof Installation</li> <li>• Continue Spray Fireproofing</li> <li>• Submit/Approve Critical Path Product Submittals</li> </ul> |
|--|--|



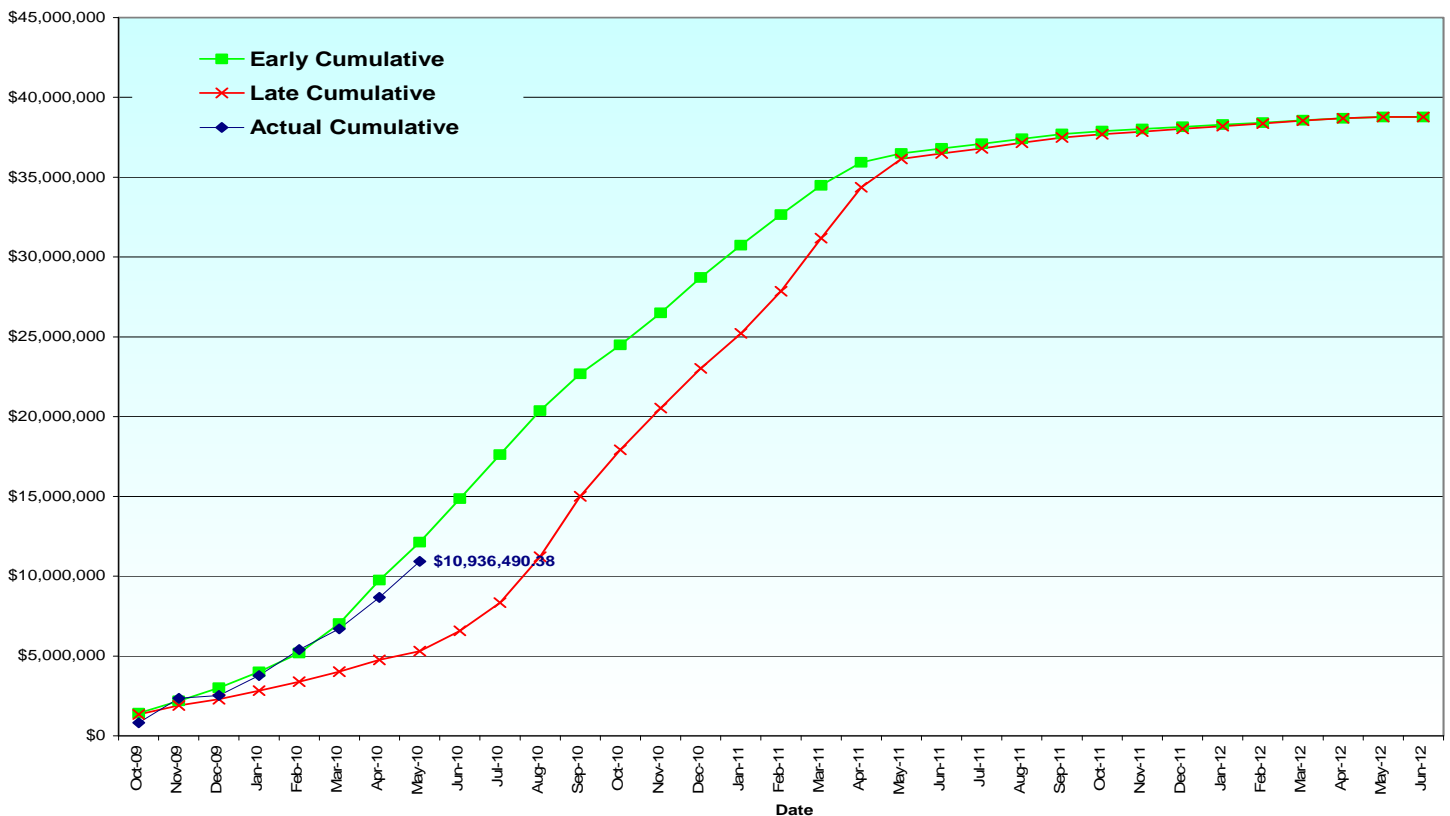
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### Monthly Cashflow Projection



### Cumulative Cashflow Projection





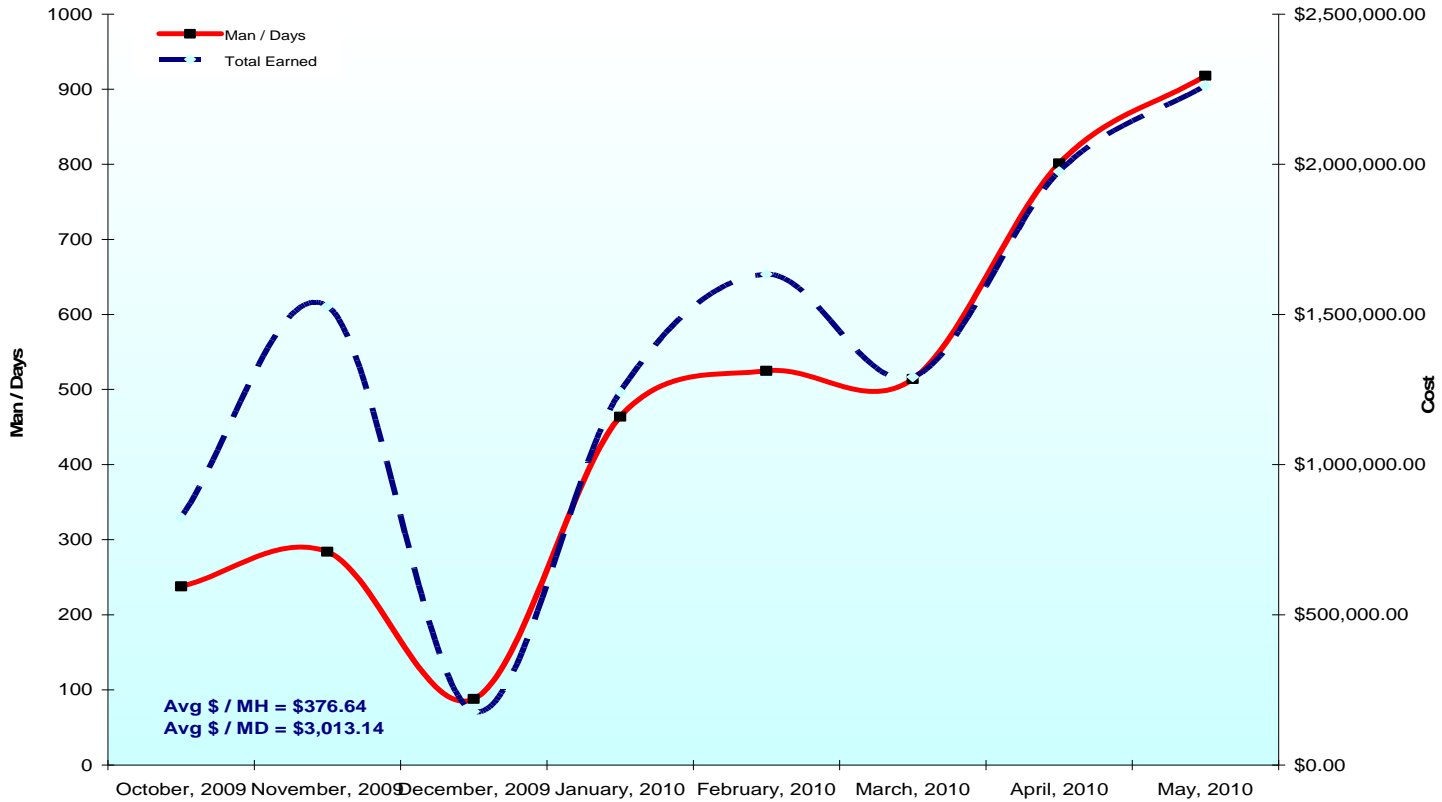
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### Manpower vs Cost Analysis

#### PMA CONSULTANTS MANPOWER VS COST ANALYSIS



### PMA Change Management

Potential Change Orders									
	Issued By / For	Scope	Proposed Cost (A)	PMA Analysis (B)	Approved Cost (C)	DELTA (A - C)	Pending Costs	PMA Notes	Proposed Time Extension (Days)
		<b>TOTALS:</b>	<b>\$235,060.42</b>	<b>\$178,450.90</b>	<b>\$202,754.97</b>	<b>\$32,305.45</b>	<b>\$77,000.00</b>		
PCO #6	Lopes / Sitework	Waterline Replacement Option #1 (Lopes)	\$84,507.51	\$52,708.90	\$77,000.00	\$7,507.51	\$77,000.00	Option #1 Under Review - Lopes recommended route - Cost appears high and assumes 8 days to install. PMA believes installation can be done in ~4 days. PCO does not include Callahan costs to repair fence & other incidentals. Update 5/20: WILL PROCEED on T&M basis NTE \$77k, cost to be finalized in CO.	0
PCO #7	Lopes / Sitework	Force Main Repair	TBD	TBD		TBD	TBD	PCO not yet rec'd	0
PCO #8	Lopes / Sitework	Add MH & Wider Ductbank for NGR/D	TBD	TBD		TBD	TBD	PCO not yet rec'd	0



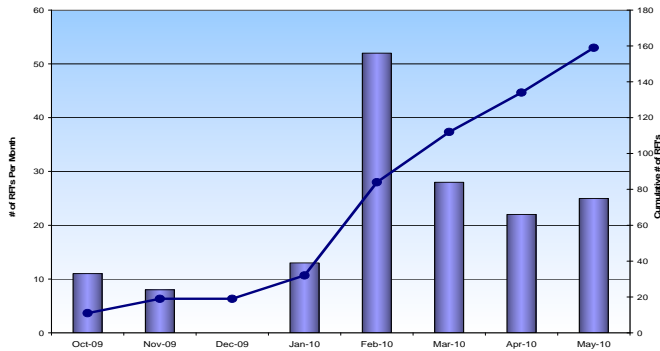
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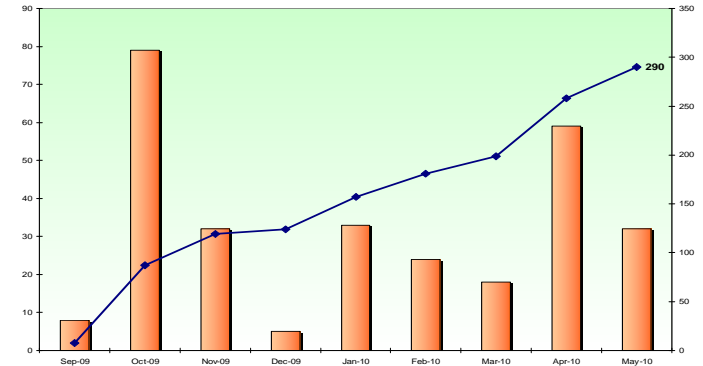
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## Graphs & Data

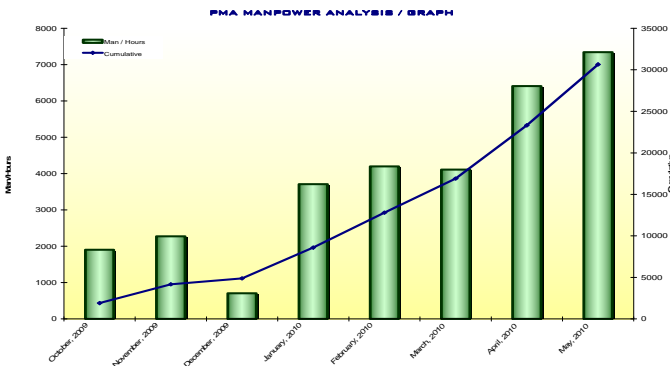
### Requests for Information (RFIs)



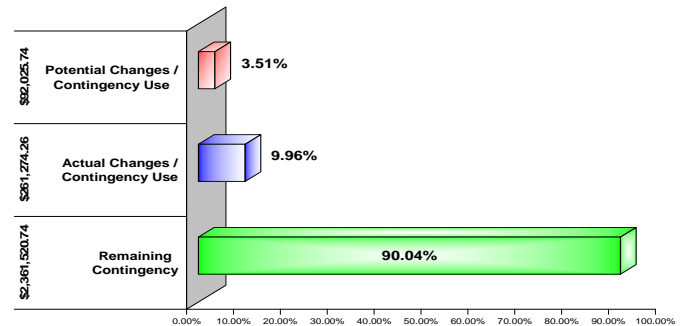
### Economic Impact – Work Force Employed To-Date



### Monthly Manpower



### Contingency Utilization



### 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 Slab on Grade Placement	05Feb10		27May10	✓	No Critical Path Impact – Float Utilized
Weather Tight - Class Room Wing	27Jul10	09Jul10		✓	On Schedule
Weather Tight - Cafetorium	31Aug10	12Jul10		✓	On Schedule
Weather Tight - Gymnasium	27Aug10	19Aug10		✓	On Schedule
Weather Tight - Auditorium	31Aug10	23Aug10		✓	On Schedule
Ph1A Substantial Completion	15Oct10	31Aug10		✓	On Schedule
Ph1 Substantial Completion	01Jun11	01Jun11	10600	✓	On Schedule

### HS06 Schedule Submission

#### Contract Milestone Analysis

Phase	Contract	HS05	HS06	Float
Ph1 Substantial	01Jun11	07Jul11	01Jun11	0
Ph1A Substantial	01Jun11	04Jan11	31Aug10	193
Ph2 Substantial	01May12	06Jun12	01May12	0

- The primary critical path to Ph1 Substantial Completion currently runs through the Kitchen Equipment submittal & approval process and is showing 0 days of Total Float. This path continues to completion of UG plumbing/electrical, placement of slab-on-grade, interior layout/framing, in-wall electrical/plumbing, interior finishes, equipment start-up, and testing/inspections.
- The secondary path to Ph1 Substantial Completion displays 3 days of total float and currently flows through Auditorium exterior framing/sheathing/AVB activities to the Auditorium Weather-Tight milestone. This path continues on to auditorium interior finishes and testing/inspections.





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**Progress Photos**

**Roof Insulation Installation**



**Elevator CMU Shaft @ Roof Level**



**Gymnasium Slab on Grade Placement**



**Mechanical Duct Installation**



**Spray Applied Fireproofing**



**Concession Building Core & Shell**

