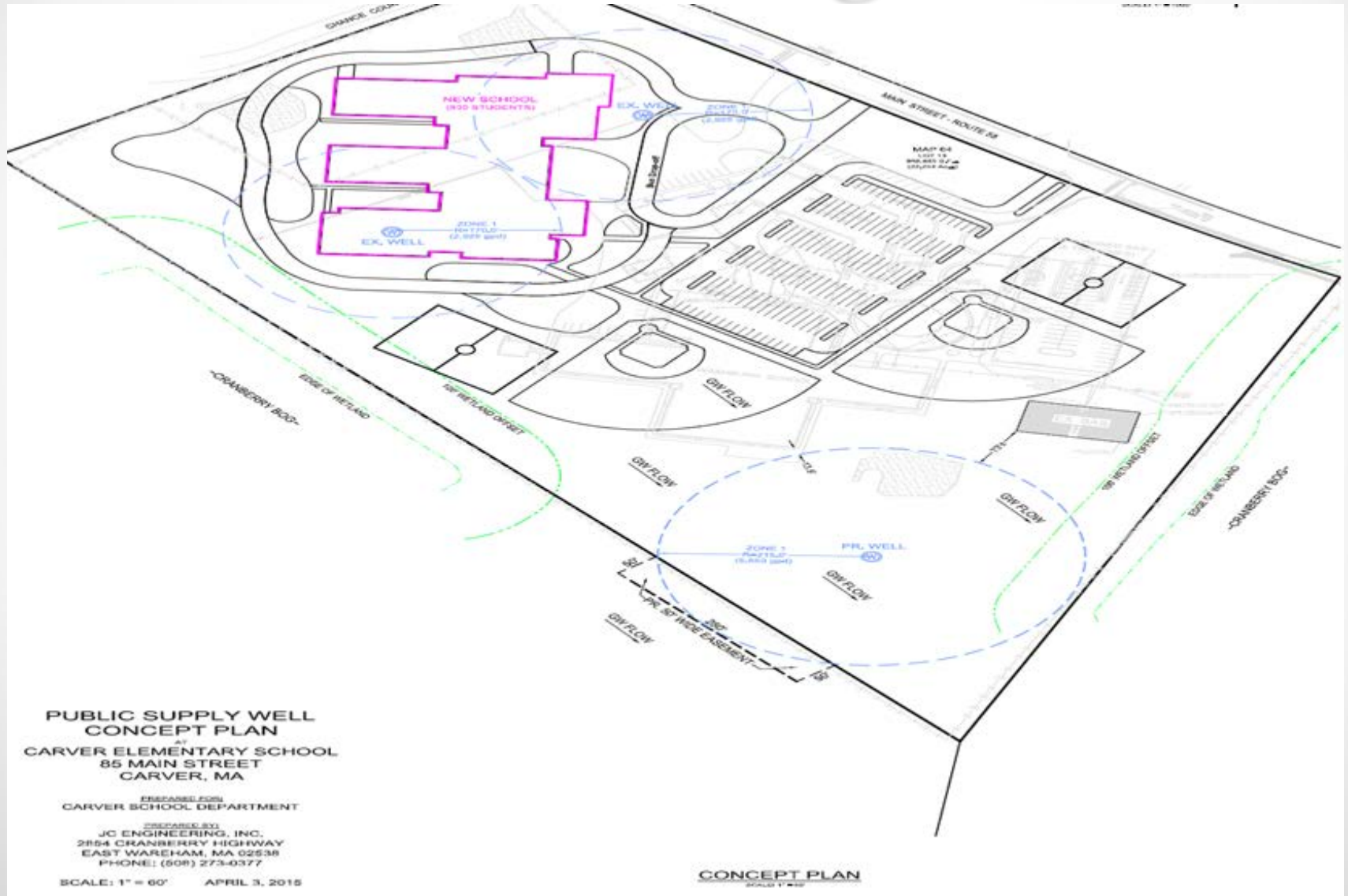


Carver Elementary School



Carver School Building Committee Meeting
April 9th, 2015

Well Investigation



**PUBLIC SUPPLY WELL
CONCEPT PLAN**
AT
CARVER ELEMENTARY SCHOOL
85 MAIN STREET
CARVER, MA

PREPARED FOR:
CARVER SCHOOL DEPARTMENT

PREPARED BY:
JC ENGINEERING, INC.

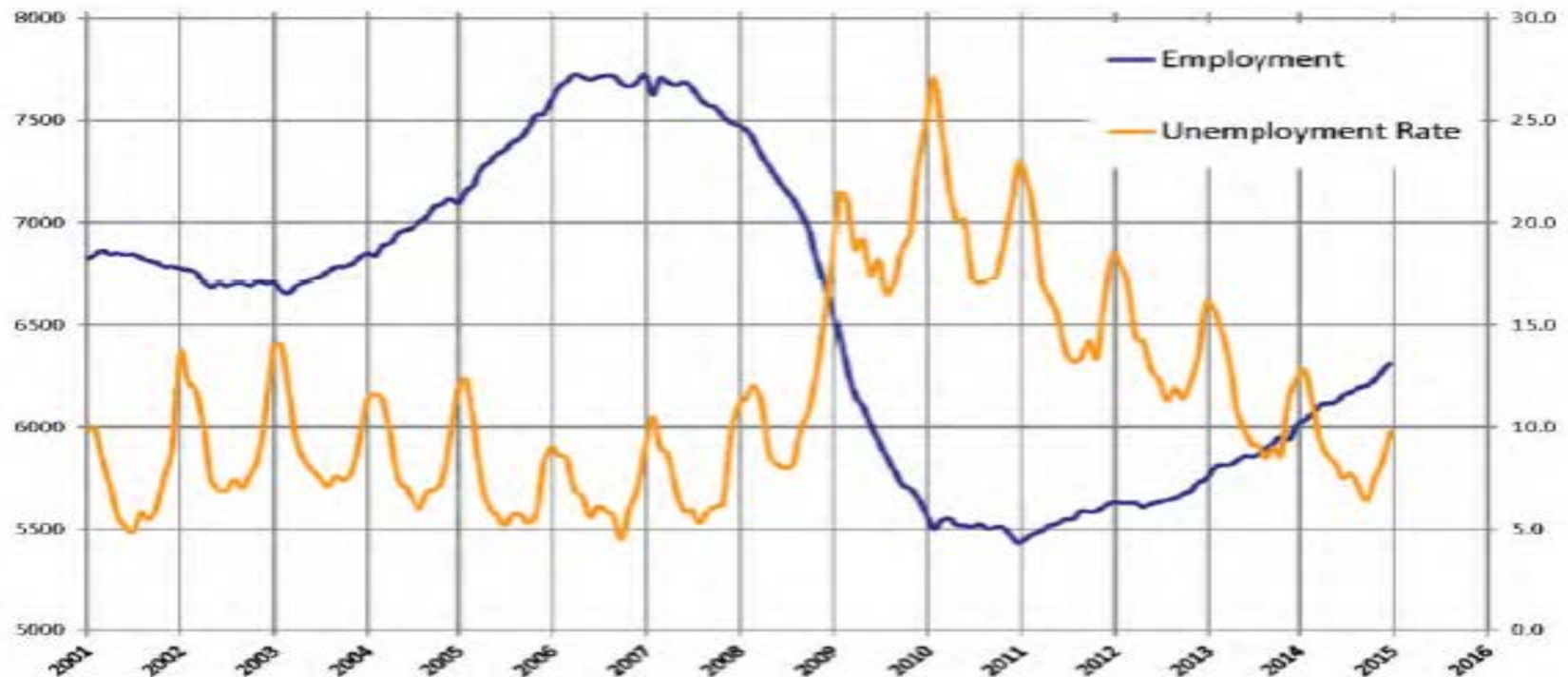
PREPARED BY:
JC ENGINEERING, INC.
2854 CRANBERRY HIGHWAY
EAST WAREHAM, MA 02538
PHONE: (508) 273-0377

Construction Reports

Construction Unemployment Rate Close To Long-Term Average

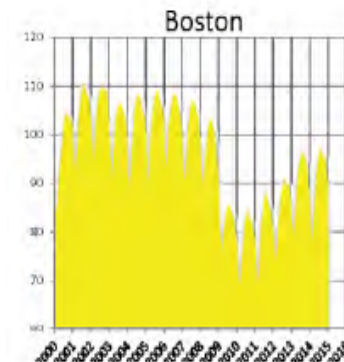
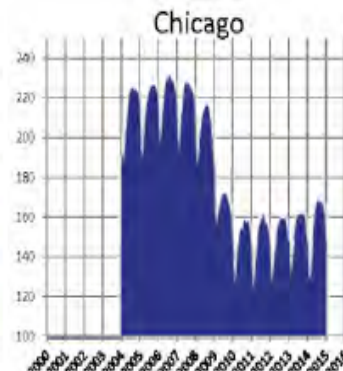
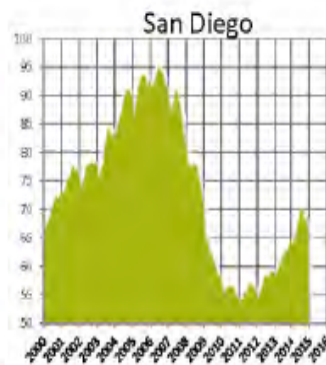
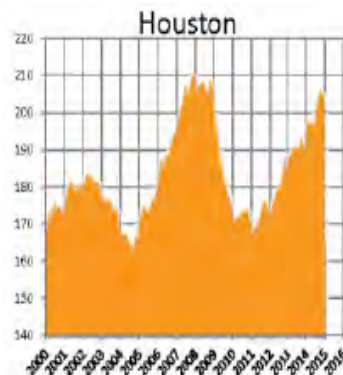
- Unemployment seasonally fluctuating between 5% - 12% will tend to put upward pressure on labor costs similar to 2004-2007.

THE CONSTRUCTION UNEMPLOYMENT RATE in the US has been cycling downward and appears to be stabilizing near the 10% rate, which is similar to the benchmark established in the mid 2000's. A range of 5-12% is considered stable. However, the increase in employment indicates that this rate reduction is mostly due to attrition in the labor force as well as new jobs. Unemployment seasonally fluctuating between 5% - 12% will tend to put upward pressure on labor costs similar to 2004-2007.

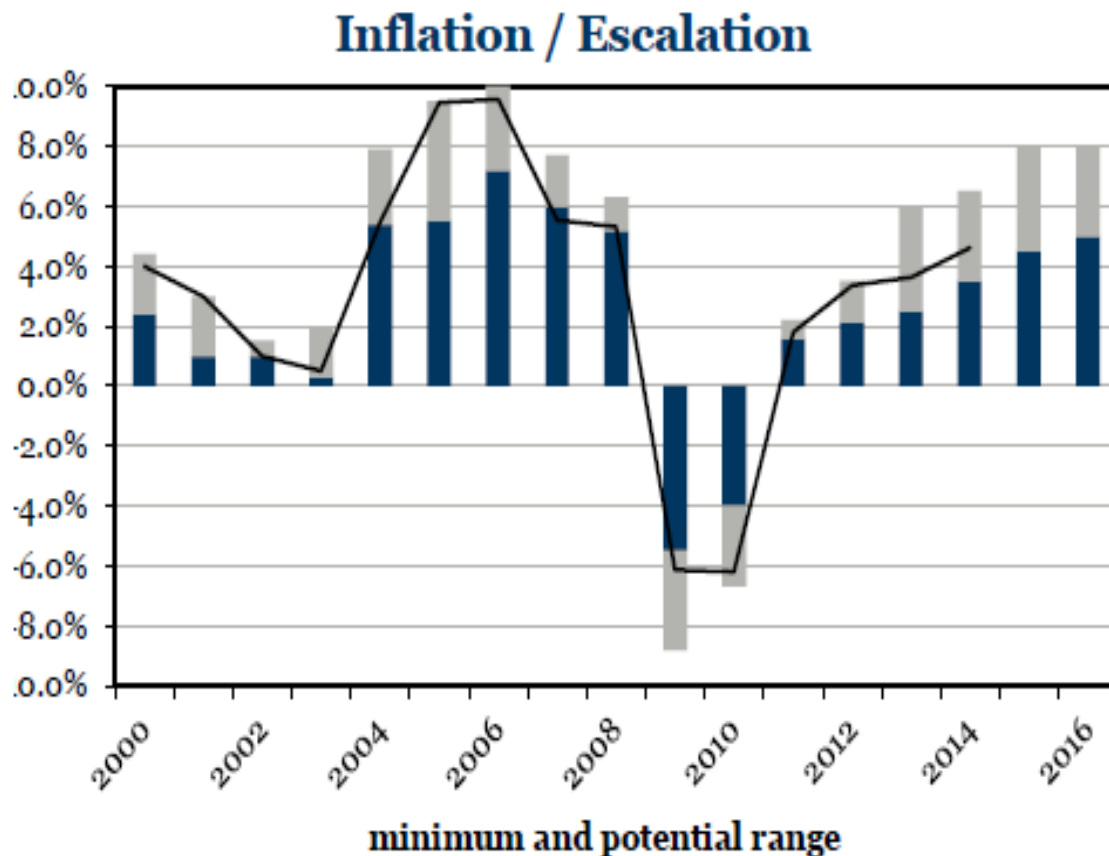


Construction Reports

CAPACITY UTILIZATION RATE is calculated by taking the ratio of current construction employment to the peak construction employment, and allowing for a sustainable rate of growth. A utilization rate of greater than 85% will begin to put upward pressure on construction labor costs. At present 50% of the states have warmed to either a yellow or orange Labor Utilization Rate. As seen by the top 20 US Cities (by GDP) 55% have already warmed to either a yellow or orange labor utilization rate.



Construction Reports



Prior to economic expansion and then downturn, long-term escalation averaged 3.5% for 20 years. I do not see any scenario which has us return to escalation as low as that long-term average at least for several years beyond the above noted predictions.

Potential inflationary periods, declining productivity and even slight continued margin growth for several years lead me to recommend a minimum long-term escalation beyond 2016 of no less than 4%.

Preliminary Site/Build Options Cost Variables

**** DRAFT/PRELIMINARY - ESTIMATED "CONSTRUCTION COSTS" AND "SOFT COSTS" - DRAFT/PRELIMINARY**

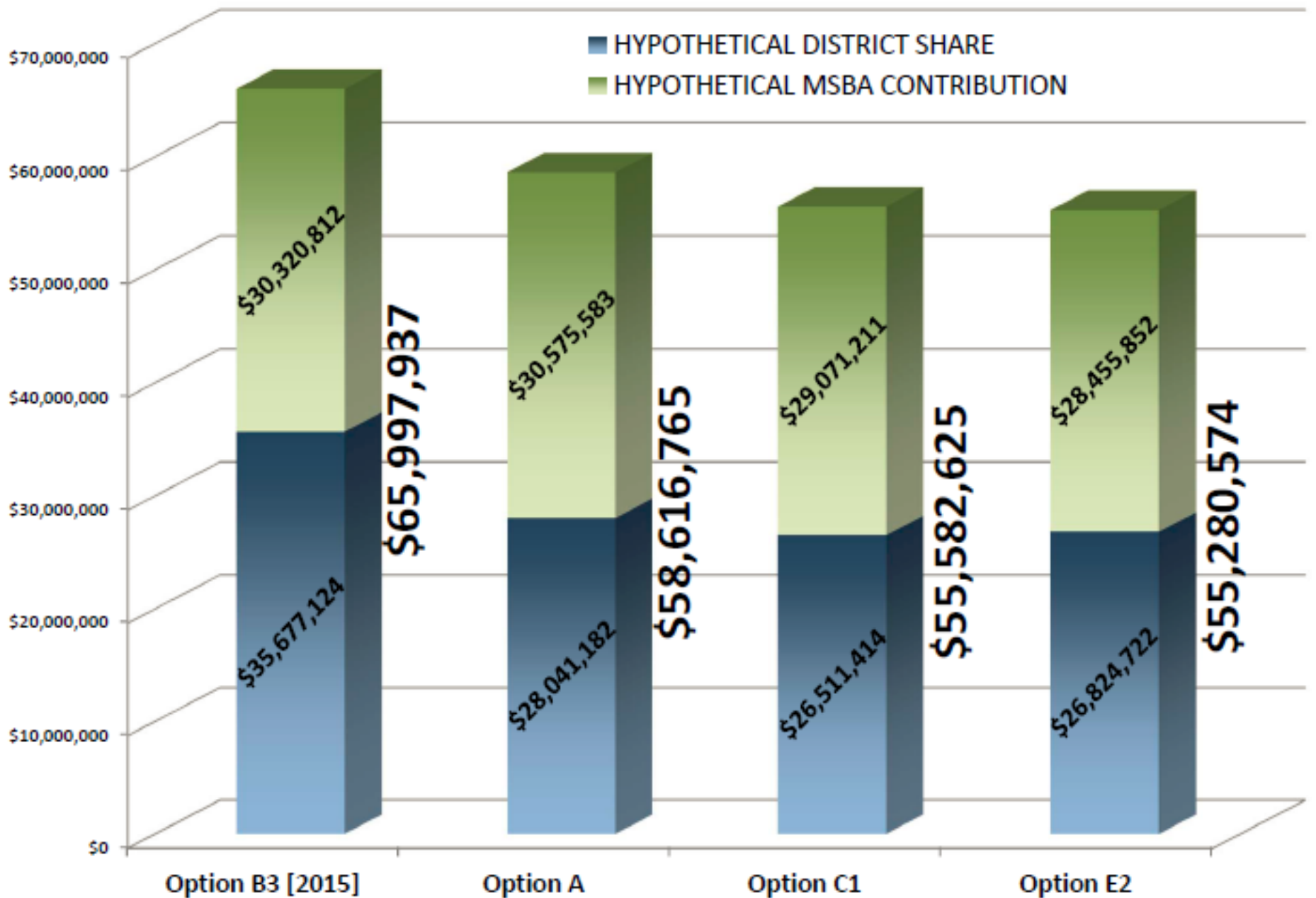
Carver Elementary School Project

| | Option B3 [in 2011 dollars] | Option B3 [escalated 4 years] 125.0% | 2015 CONCEPTS | | |
|--|--|--|--|--|--|
| 2015 DATA IS ROUGH ORDER MAGNITUDE ESTIMATE OF CONCEPTS | Option B3 [2011] Add/Reno 2011 Schematic Design Architect's Reconciled Estimate 139,900SF | Option B3 [2015] Add/Reno 2011 Schematic Design Architect's Reconciled Estimate (ESCALATED) 139,900SF | Option A Add/Reno 2015 Option 118,051SF | Option C1 New Construction 2 Story, West Side New Well 112,350SF | Option E2 New Construction 3 Story, West Side New Well 115,200SF |
| New Elementary School (PreK-5) | | | | \$27,887,401 | \$27,741,344 |
| Gut Reno to Carver Building (34,614 sqft) ((34% RENO OF EXISTING = +1.75 MSBA PTS)) | \$25,651,199 | \$32,063,999 | \$8,454,313 | - | - |
| New Elementary School Addition | Incl in Reno Value Above | Incl in Reno Value Above | \$20,780,139 | - | - |
| Remove Hazardous Materials | Incl in Demo Value Below | Incl in Demo Value Below | \$475,000 | \$475,000 | \$475,000 |
| Demolish Carver Building (34,614 sqft) | Incl in Demo Value Below | Incl in Demo Value Below | - | \$293,912 | \$293,912 |
| Demolish Washburn Building (64,392 sqft) | \$1,766,145 | \$2,207,681 | \$468,928 | \$468,928 | \$468,928 |
| Relocate Storage Shed | \$0 | \$0 | \$62,080 | \$62,080 | \$62,080 |
| Sitework | \$2,368,991 | \$2,961,239 | \$3,629,503 | \$3,699,862 | \$3,659,838 |
| Sub-Total | \$29,786,335 | \$37,232,919 | \$33,869,963 | \$32,887,183 | \$32,701,102 |
| General Conditions (14% in 2011, 7% in 2015) | \$4,202,581 | \$5,253,226 | \$2,370,897 | \$2,302,103 | \$2,289,077 |
| Phasing Premium (2% in 2015 Estimate) | Carried above? | Carried above? | \$677,399 | - | - |
| Escalation (6.5% in 2011 Estimate, 5% for New and 6% for Reno in 2015 Estimate, Due to Longer Construction Duration) | \$2,255,674 | \$2,819,593 | \$2,032,198 | \$1,644,359 | \$1,635,055 |
| Sub-Total Incl. Contin/Escal | \$36,244,590 | \$45,305,738 | \$38,950,457 | \$36,833,645 | \$36,625,234 |
| General Requirements (2%) | Incl in GCs | Incl in GCs | Incl in GC/OH | Incl in GC/OH | Incl in GC/OH |
| Sub-Total | \$36,244,590 | \$45,305,738 | \$38,950,457 | \$36,833,645 | \$36,625,234 |
| Bonds (0.8%) | Incl in GCs | Incl in GCs | \$253,178 | \$239,419 | \$238,064 |
| Insurance (1.2%) | Incl in GCs | Incl in GCs | \$486,881 | \$460,421 | \$457,815 |
| Permit | - | - | - | - | - |
| Sub-Total | \$36,244,590 | \$45,305,738 | \$39,690,516 | \$37,533,484 | \$37,321,114 |
| GMP Contingency (3% in 2011) | \$1,108,751 | \$1,385,939 | | | |
| CMAA Fee (2.1% in 2011) | \$713,767 | \$892,209 | | | |
| Overhead and Fee (3% in 2015 Estimate) | | \$0 | \$1,016,099 | \$986,615 | \$981,033 |
| Design and Pricing Contingency (8% Total in 2011 Estimate, 12% in 2015 Estimate) | \$3,067,544 | \$3,834,430 | \$4,762,862 | \$4,504,018 | \$4,478,534 |
| Total Construction Cost (HMFH/PM&C Estimate) | \$41,134,652 | \$51,418,315 | \$45,469,477 | \$43,024,118 | \$42,780,680 |

**** DRAFT/PRELIMINARY - ESTIMATED "CONSTRUCTION COSTS" AND "SOFT COSTS" - DRAFT/PRELIMINARY**

Carver Elementary School Project

| | Option B3 [in 2011 dollars] | Option B3 [escalated 4 years] 125.0% | 2015 CONCEPTS | | |
|---|--|--|--|--|--|
| 2015 DATA IS ROUGH ORDER MAGNITUDE ESTIMATE OF CONCEPTS | Option B3 [2011] Add/Reno 2011 Schematic Design Architect's Reconciled Estimate 139,900SF | Option B3 [2015] Add/Reno 2011 Schematic Design Architect's Reconciled Estimate (ESCALATED) 139,900SF | Option A Add/Reno 2015 Option 118,051SF | Option C1 New Construction 2 Story, West Side New Well 112,350SF | Option E2 New Construction 3 Story, West Side New Well 115,200SF |
| PROJECT SOFT COST DATA IS BASED UPON PERCENTAGE OF CONSTRUCTION COSTS FOR BOTH 2011 AND 2015 OPTIONS | | | | | |
| PROJECT SOFT COSTS (ROUGH ORDER MAGNITUDE PROJECT BY PMA) | \$8,912,218 | \$10,609,024 | \$9,627,464 | \$9,223,979 | \$9,183,812 |
| Design & Engineering & Supplemental Costs (Est. 11%) | \$4,524,812 | \$5,656,015 | \$5,001,642 | \$4,732,653 | \$4,705,875 |
| OPM Costs (Est 3.5%) | \$1,439,713 | \$1,799,641 | \$1,591,432 | \$1,505,844 | \$1,497,324 |
| Legal Fees - Approximate | \$40,000 | \$40,001 | \$40,000 | \$40,000 | \$40,000 |
| Owner Subconsultants & Testing Costs (Est 2%) | \$822,693 | \$1,028,366 | \$909,390 | \$860,482 | \$855,614 |
| Utilities Allowance (Est) | \$100,000 | \$100,000 | \$100,000 | \$100,000 | \$100,000 |
| Movers Allowance (Est) | \$100,000 | \$100,000 | \$100,000 | \$100,000 | \$100,000 |
| FF&E Design, Specification & Punchlist | \$75,000 | \$75,000 | \$75,000 | \$75,000 | \$75,000 |
| FF&E (MSBA Allowance @ \$1200/Student X 750) | \$900,000 | \$900,000 | \$900,000 | \$900,000 | \$900,000 |
| Technology/AV (MSBA Allowance @ \$1200/Student X 750) | \$900,000 | \$900,000 | \$900,000 | \$900,000 | \$900,000 |
| LEED/MACHPS Fee Allowance (Est) | \$10,000 | \$10,001 | \$10,000 | \$10,000 | \$10,000 |
| Total Project Cost | \$50,046,870 | \$62,027,339 | \$55,096,941 | \$52,248,097 | \$51,964,493 |
| Owner Construction Contingency (Est. 7%) | \$2,879,426 | \$3,599,282 | \$3,182,863 | \$3,011,688 | \$2,994,648 |
| Owner Soft Cost Contingency (Est. 3.5%) | \$311,928 | \$371,316 | \$336,961 | \$322,839 | \$321,433 |
| Total Project Budget | \$53,238,223 | \$65,997,937 | \$58,616,765 | \$55,582,625 | \$55,280,574 |
| "WHAT-IF SCENARIO" - TYPICAL INELIGIBLE COSTS PER MSBA REGS | | | | | |
| GMP Contingency Reimbursement - assume 33% of budget eligible | \$731,775.66 | \$914,719.58 | \$0.00 | \$0.00 | \$0.00 |
| Owner Contingency Reimbursement - assume 33% of budget eligible | \$2,106,293.15 | \$2,620,594.61 | \$2,323,084.25 | \$2,200,788.17 | \$2,188,613.50 |
| Sitework Costs exceeding 8% of Direct Building Cost | \$316,895.08 | \$396,118.85 | \$1,290,746.84 | \$1,468,869.92 | \$1,440,530.48 |
| Legal Fees - Approximate | \$40,000.00 | \$40,001.00 | \$40,000.00 | \$40,000.00 | \$40,000.00 |
| Moving Costs | \$100,000.00 | \$100,000.00 | \$100,000.00 | \$100,000.00 | \$100,000.00 |
| Ineligible Abatement Costs - Approximate Value | \$100,000.00 | \$100,000.00 | \$100,000.00 | \$100,000.00 | \$100,000.00 |
| Ineligible SF Costs Due to Inefficiencies of Design - Assume 7% on Reno Options, 3% on 3-Story Option | \$1,795,583.93 | \$2,244,479.91 | \$2,046,411.64 | N/A | \$832,240.32 |
| Forecast Overrun Due To Discrepancy Between Architect Reconciled Estimate and Form 3011 Budget | \$5,843,808.00 | \$7,304,760.00 | N/A | N/A | N/A |
| TOTAL POTENTIAL INELIGIBLE COSTS | \$11,034,355.82 | \$13,720,673.94 | \$5,900,242.73 | \$3,909,658.09 | \$4,701,384.30 |
| POTENTIAL ELIGIBLE COSTS (PRORATED FOR INELIGIBLE SITE & OTHER COSTS) | \$42,203,867 | \$52,277,263 | \$52,716,523 | \$51,672,967 | \$50,579,189 |
| POTENTIAL REIMBURSEMENT FROM MSBA @ Base Rate of 56.26% of ELIGIBLE COSTS (58% on Reno) | \$24,478,243 | \$30,320,812 | \$30,575,583 | \$29,071,211 | \$28,455,852 |
| POTENTIAL TOWN SHARE OF TOTAL PROJECT BUDGET | \$28,759,980 8.48% | \$35,677,124 34.57% | \$28,041,182 5.77% | \$26,511,414 --BASELINE-- | \$26,824,722 1.18% |



2015 DATA IS ROUGH ORDER MAGNITUDE ESTIMATE OF CONCEPTS

MSBA - KEY DATES

- 3/10/15 – SBC Meeting - SBC Selection of Preferred Schematic Option
- 3/25/15 – SBC Approve Preferred Option
- 4/1/15 – Preferred Option Estimate to MSBA
- 4/09/15 – SBC Approve Preferred Schematic Report for Submission to MSBA
- 4/29/15 or 5/13/15 Facilities Assessment Subcommittee
- 6/3/15 – MSBA Board Approval to Proceed into Schematic Design
- 9/28/15 – Schematic Design Submittal to MSBA
- 11/18/15 – MSBA Board Approval of Schematic Design
- 12/2/15 – Carver Town Meeting/Vote on Project Funding

Workplan Update

Carver Elementary School FS Phase Work Plan: 4/16 Submission
HMFH Architects 2/23/15

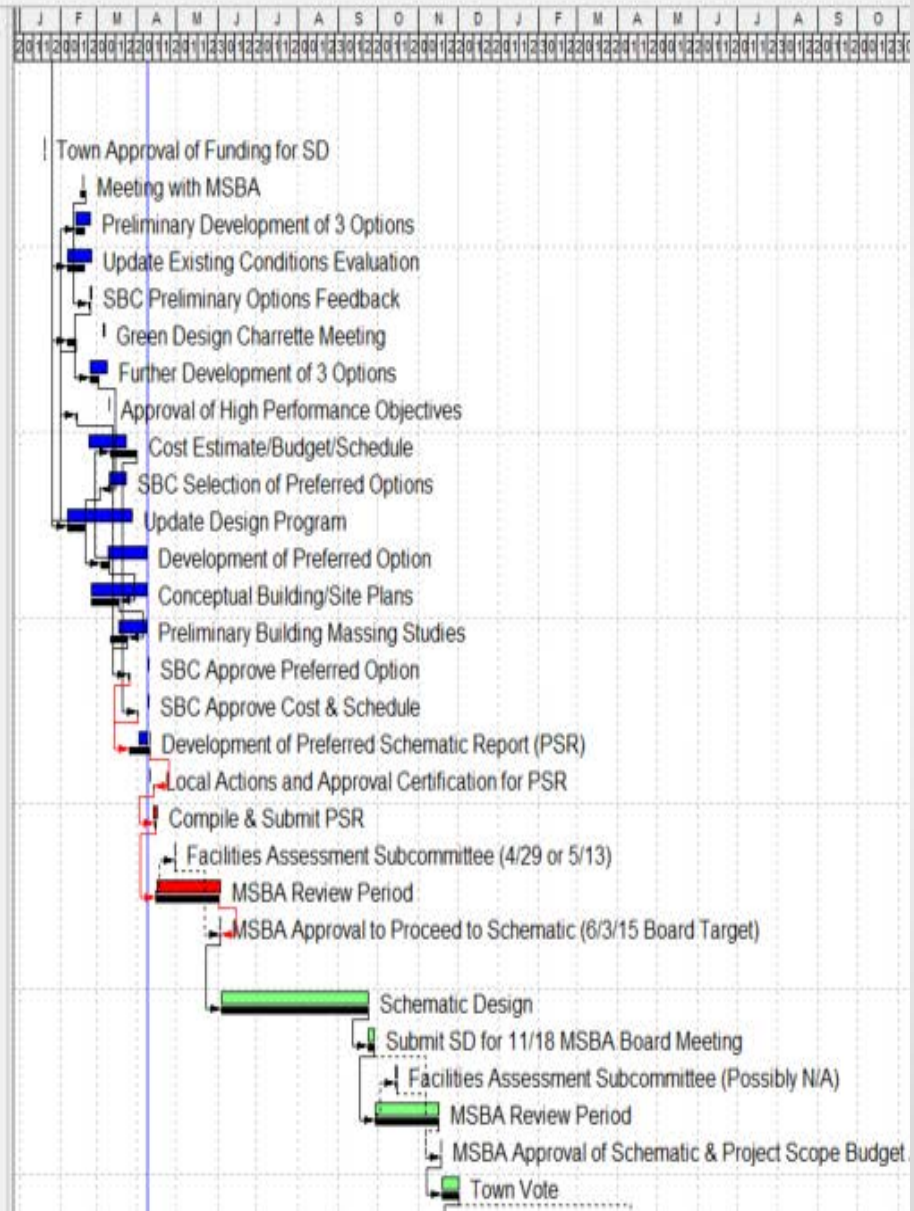
| | | | 2015 | | | | | | | | | | | |
|--|--|--|---------|----------|-----|-------|-------|-----|------|---|---|---|---|--|
| | | | Dec | Jan | Feb | March | April | May | June | | | | | |
| SBC Meetings | | | | • | • | • | • | • | • | | | | | |
| Regulatory Agency Meetings | | | | | • | | • | • | • | | | | | |
| Preliminary Design Program (PDP) | | | 2/5/15 | 5 weeks | | | | | | | | | | |
| Educational Program | | | | | | | | | | | | | | |
| Review/Revise Existing Ed Program | | | | | | | | | | | | | | |
| Meetings with Staff and Teachers (as needed) | | | | | | | | | | | | | | |
| Finalize Ed Program | | | | | | | | | | | | | | |
| Revise Space Summary | | | | | | | | | | | | | | |
| SBC Approve Ed Program & Space Summary | | | | ★ | | | | | | | | | | |
| Evaluation of Existing Conditions | | | | | | | | | | | | | | |
| Site Development Requirements Review | | | | | | | | | | | | | | |
| Meeting w/ Town Departments | | | 1/21/15 | | ★ | | | | | | | | | |
| Preliminary Evaluation of Alternatives | | | | | | | | | | | | | | |
| Review/Update Potential Alternatives | | | | | | | | | | | | | | |
| Identify Preliminary Sites Locations | | | | | | | | | | | | | | |
| SBC Approve Site Selections & Alternatives | | | | | ★ | | | | | | | | | |
| Analysis of Sites for Feasibility | | | | | | | | | | | | | | |
| Preliminary Plan and Site Diagrams | | | | | | | | | | | | | | |
| SBC Approve Planning Diagrams | | | | | | ★ | | | | | | | | |
| Cost Evaluation of Alternatives | | | | | | | | | | | | | | |
| Compile PDP Report | | | | | | | | | | | | | | |
| SBC Approve Cost & PDP Submission | | | | | | ★ | | | | | | | | |
| MSBA Review Period | | | | | | | | | | | | | | |
| Preferred Schematic Report | | | 4/16/15 | 10 weeks | | | | | | | | | | |
| Meeting with MSBA | | | 2/12/15 | | | | | | | | | | | |
| Update Design Program | | | | | | | | | | | | | | |
| Update Existing Conditions Evaluation | | | | | | | | | | | | | | |
| Preliminary Development of Options | | | | | | | | | | | | | | |
| SBC Preliminary Options Feedback | | | | | | | ★ | | | | | | | |
| Further development of options | | | | | | | | | | | | | | |
| Team Respond to MSBA PDP Review Comments | | | | | | | | | | | | | | |
| Meeting w/ DEP re Wells | | | tbd | | | | | | | | | | | |
| Additional Wells Investigations (as needed) | | | | | | | | | | | | | | |
| Green Charrette | | | 3/6/15 | | | | | | | | | | | |
| SBC Further Options Feedback | | | | | | | ★ | | | | | | | |
| SBC Approval of High Performance Objectives | | | | | | | ★ | | | | | | | |
| Development of Preferred Option | | | | | | | | | | | | | | |
| Conceptual Site Plans | | | | | | | | | | | | | | |
| Preliminary Building Massing Studies | | | | | | | | | | | | | | |
| SBC Finalize Selection of Preferred Option | | | | | | | | ★ | | | | | | |
| Cost Estimate/Budget/Schedule | | | | | | | | | | | | | | |
| SBC Approve Costs & Schedule | | | | | | | | | ★ | | | | | |
| Development of Preferred Schematic Report | | | | | | | | | | | | | | |
| SBC Approve PSR Submission | | | | | | | | | | ★ | | | | |
| Submit PSR to MSBA | | | 4/16/15 | | | | | | | | ★ | | | |
| Town Approval of Funding for SD | | | | | | | | | | | | ★ | | |
| MSBA Review Period | | | | | | | | | | | | | | |
| MSBA Approval to Proceed to Schematics | | | 6/3/15 | 7 weeks | | | | | | | | | ★ | |

Detailed Schedule

Layout: Carver Elementary Master Schedule

Filter: All Activities

| Activity ID | Activity Name | Original Duration | Start | Finish |
|---|---|-------------------|-------------|-------------|
| Preferred Schematic Report | | 97 | 20-Jan-15 A | 03-Jun-15 |
| PSR Submission | | 97 | 20-Jan-15 A | 03-Jun-15 |
| A1710 | Town Approval of Funding for SD | 1 | 20-Jan-15 A | 20-Jan-15 A |
| A1560 | Meeting with MSBA | 1 | 18-Feb-15 A | 18-Feb-15 A |
| A1590 | Preliminary Development of 3 Options | 5 | 13-Feb-15 A | 24-Feb-15 A |
| A1580 | Update Existing Conditions Evaluation | 10 | 06-Feb-15 A | 24-Feb-15 A |
| A1600 | SBC Preliminary Options Feedback | 1 | 24-Feb-15 A | 24-Feb-15 A |
| A1540 | Green Design Charrette Meeting | 1 | 06-Mar-15 A | 06-Mar-15 A |
| A1610 | Further Development of 3 Options | 5 | 24-Feb-15 A | 09-Mar-15 A |
| A1550 | Approval of High Performance Objectives | 1 | 10-Mar-15 A | 10-Mar-15 A |
| A1670 | Cost Estimate/Budget/Schedule | 11 | 23-Feb-15 A | 23-Mar-15 A |
| A1620 | SBC Selection of Preferred Options | 1 | 10-Mar-15 A | 23-Mar-15 A |
| A1570 | Update Design Program | 10 | 06-Feb-15 A | 27-Mar-15 A |
| A1630 | Development of Preferred Option | 10 | 10-Mar-15 A | 08-Apr-15 A |
| A1640 | Conceptual Building/Site Plans | 15 | 25-Feb-15 A | 08-Apr-15 A |
| A1650 | Preliminary Building Massing Studies | 10 | 18-Mar-15 A | 08-Apr-15 A |
| A1660 | SBC Approve Preferred Option | 1 | 09-Apr-15 | 09-Apr-15 |
| A1680 | SBC Approve Cost & Schedule | 1 | 09-Apr-15 | 09-Apr-15 |
| A1690 | Development of Preferred Schematic Report (PSR) | 5 | 02-Apr-15 A | 10-Apr-15 |
| A1700 | Local Actions and Approval Certification for PSR | 1 | 10-Apr-15 | 10-Apr-15 |
| A1705 | Compile & Submit PSR | 3 | 13-Apr-15 | 15-Apr-15 |
| A1740 | Facilities Assessment Subcommittee (4/29 or 5/13) | 1 | 29-Apr-15* | 29-Apr-15 |
| A1720 | MSBA Review Period | 35 | 16-Apr-15 | 03-Jun-15 |
| A1730 | MSBA Approval to Proceed to Schematic (6/3/15 Board Target) | 1 | 03-Jun-15 | 03-Jun-15* |
| Schematic Design (MSBA Module 4) | | 130 | 04-Jun-15 | 02-Dec-15 |
| A1750 | Schematic Design | 80 | 04-Jun-15 | 23-Sep-15 |
| A1760 | Submit SD for 11/18 MSBA Board Meeting | 3 | 24-Sep-15 | 28-Sep-15 |
| A1766 | Facilities Assessment Subcommittee (Possibly N/A) | 1 | 15-Oct-15* | 15-Oct-15 |
| A1765 | MSBA Review Period | 35 | 29-Sep-15 | 16-Nov-15 |
| A1770 | MSBA Approval of Schematic & Project Scope Budget Ag | 1 | 18-Nov-15* | 18-Nov-15 |
| A1780 | Town Vote | 10 | 19-Nov-15 | 02-Dec-15 |



Preliminary Building/Site Option A – Add/Reno



SITE PLAN

Preliminary Building/Site Option A – Add/Reno



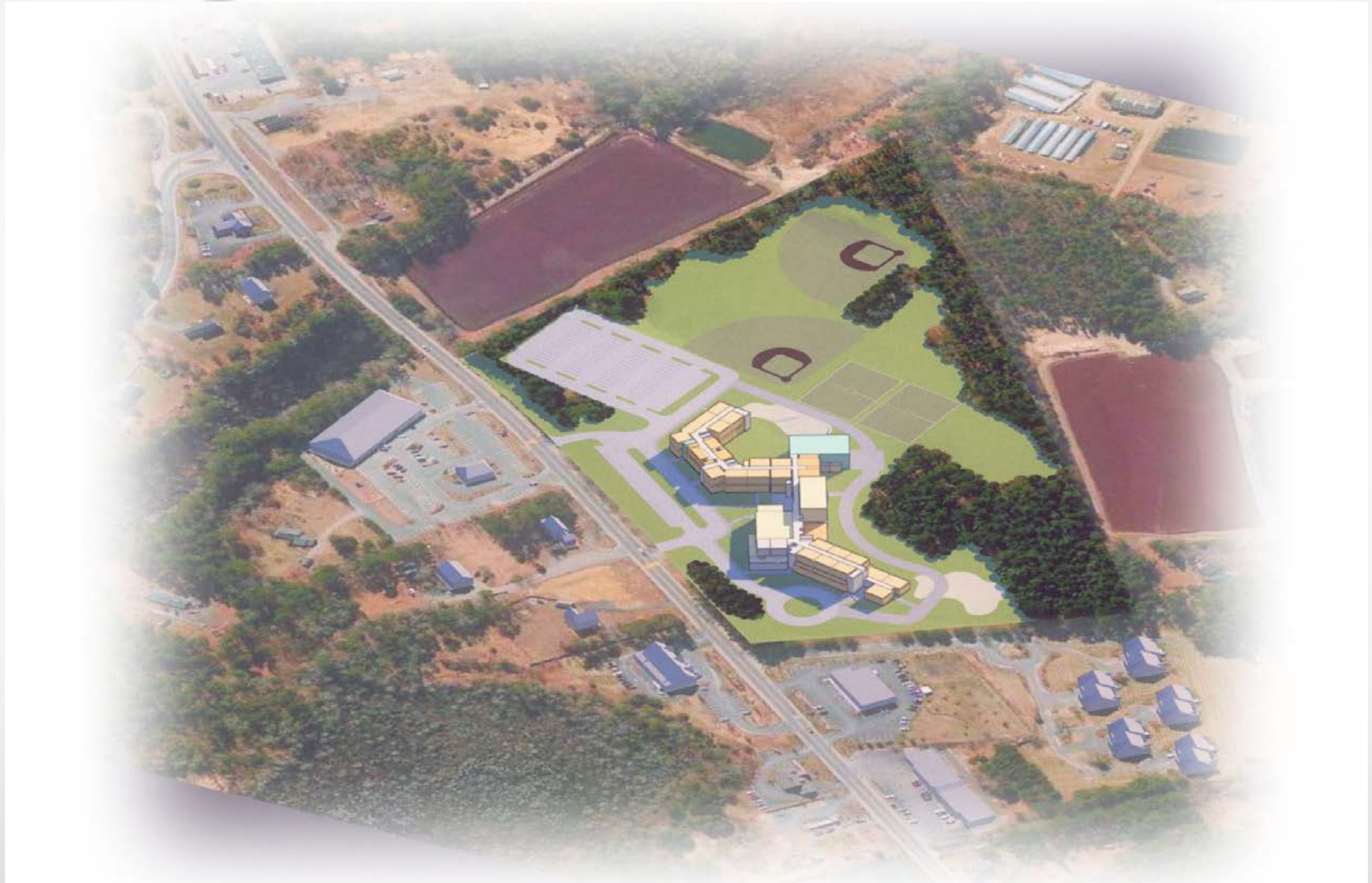
FIRST FLOOR PLAN



SECOND FLOOR PLAN



Preliminary Building/Site Option A – Add/Reno

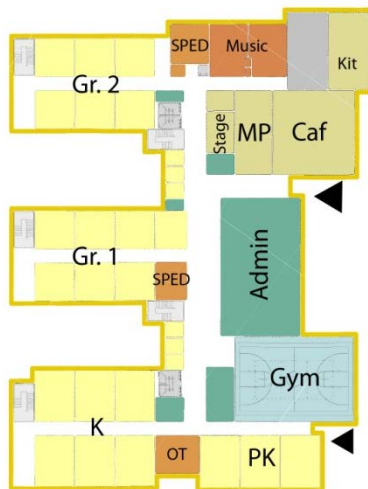


Preliminary Building/Site Option C1 – N.C.

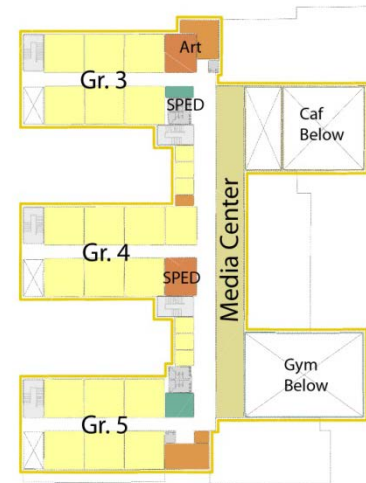


SITE PLAN

Preliminary Building/Site Option C1 – N.C.



FIRST FLOOR PLAN



SECOND FLOOR PLAN



Preliminary Building/Site Option C1 – N.C.

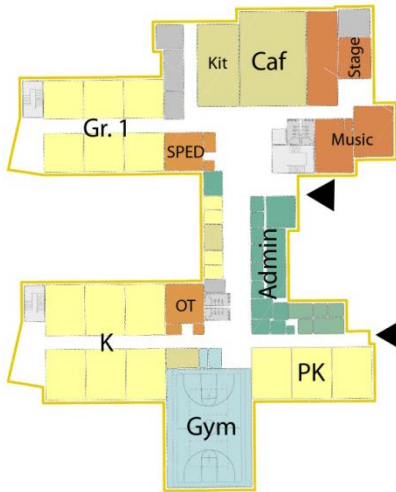


Preliminary Building/Site Option E2 – N.C.

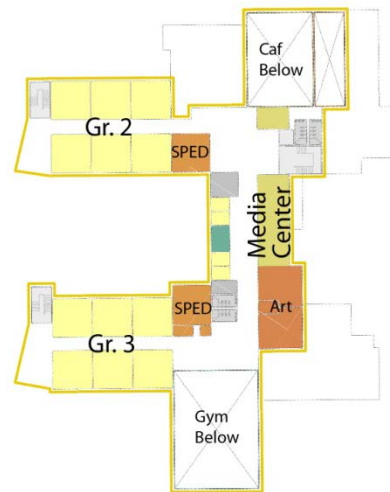


SITE PLAN

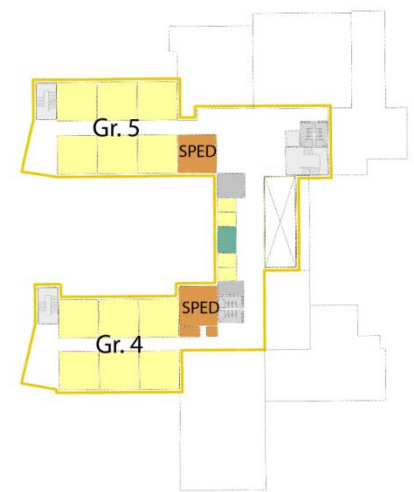
Preliminary Building/Site Option E2 – N.C.



FIRST FLOOR PLAN



SECOND FLOOR PLAN



THIRD FLOOR PLAN



Preliminary Building/Site Option E2 – N.C.



Public Comment Period on Proposed Options

SBC Discussion

- Vote for Selection of Preferred Schematic Option
- Vote to Approve Preferred Schematic Report ("PSR") Submittal

Discussion / Questions?

Carver School Building Committee Meeting
April 9th, 2015

