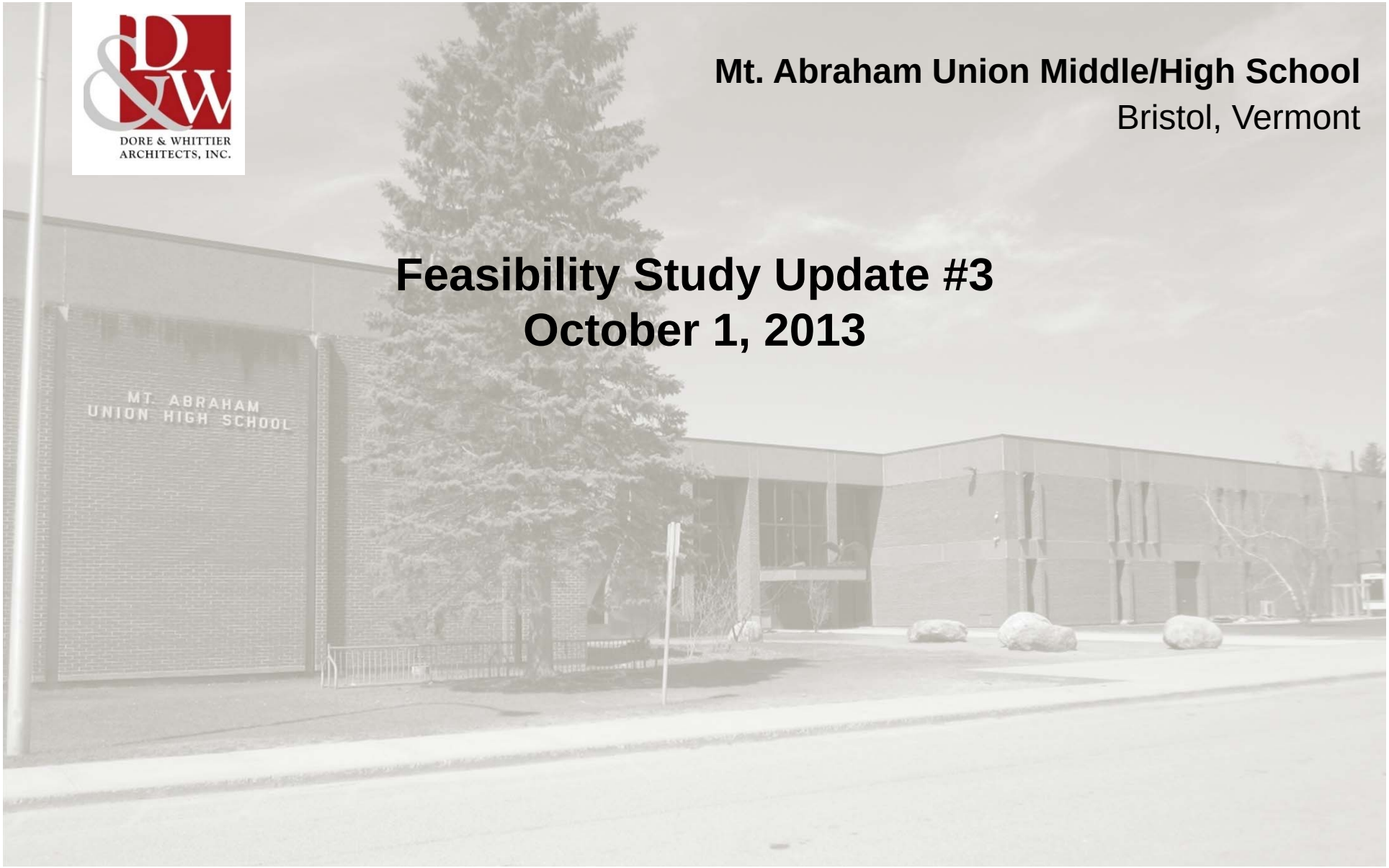
DORE & WHITTIER ARCHITECTS, INC.

Mt. Abraham Union Middle/High School

Bristol, Vermont

Feasibility Study Update #3
October 1, 2013

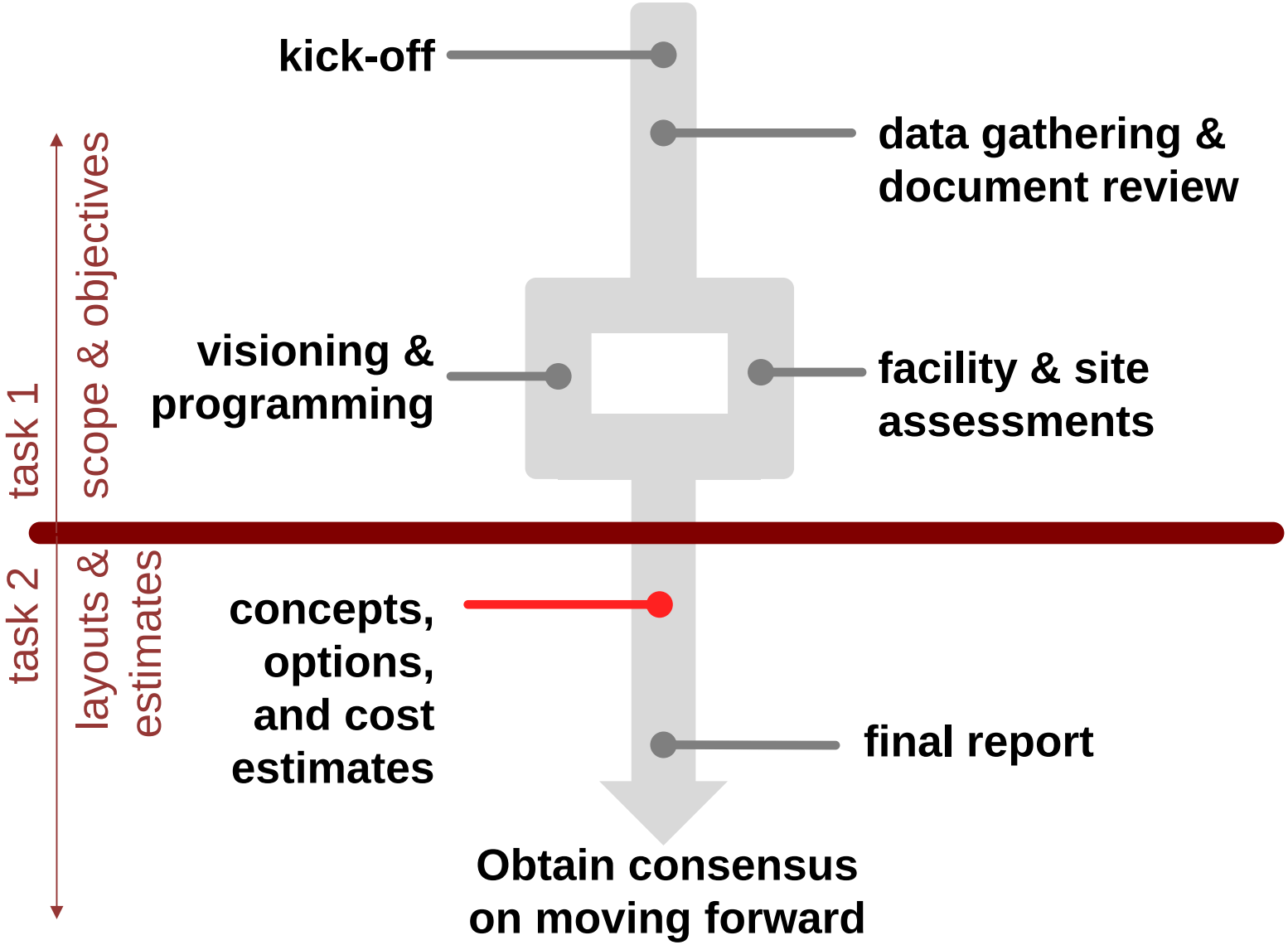


agenda

- Process and Approach Overview
- Educational Programming Overview
- Summary of Options
- Cost Estimate Review
- Next Steps
- Comments and Questions

process and approach

process and approach



educational programming

educational programming

Established Project Objectives:

Educational Goals:

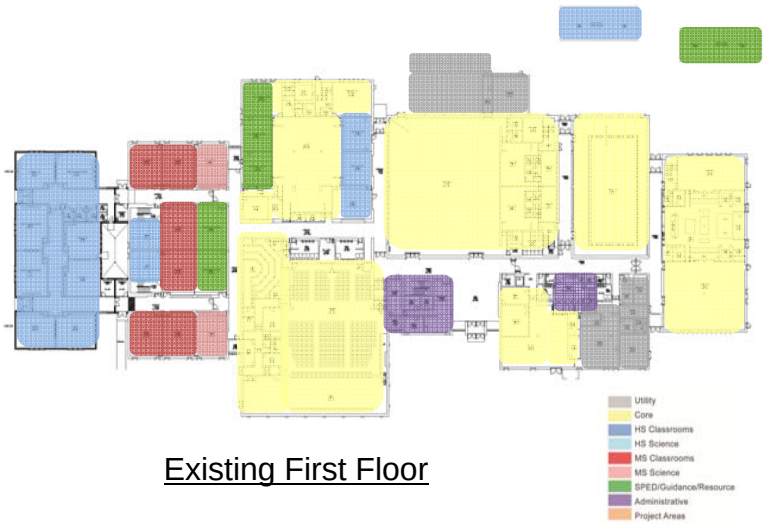
- Meet needs of MS and HS educational program
- 21st Century Educational spaces
- Provide appropriate adjacencies
- Natural light to all classrooms; eliminate tandem classrooms
- Consolidate campus

Site and Building Goals:

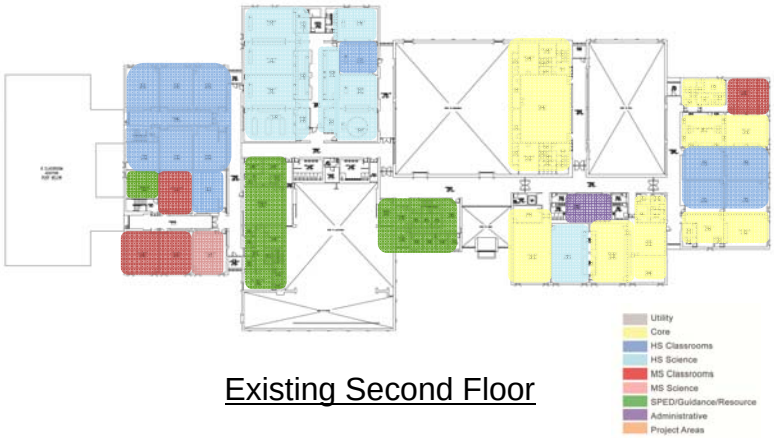
- Code, Life Safety and ADA improvements
- Update building infrastructure (M/E/P/FP) and improve energy efficiency (occ. sensors, low flow fixtures)
- Improve quality of spaces with natural light, updated finishes, adequate ventilation and address deferred maintenance

educational programming

Adjacency and Schedule Analysis:



Existing First Floor



Existing Second Floor

Current Room Utilization ranges between 72% at HS and 41% at MS.

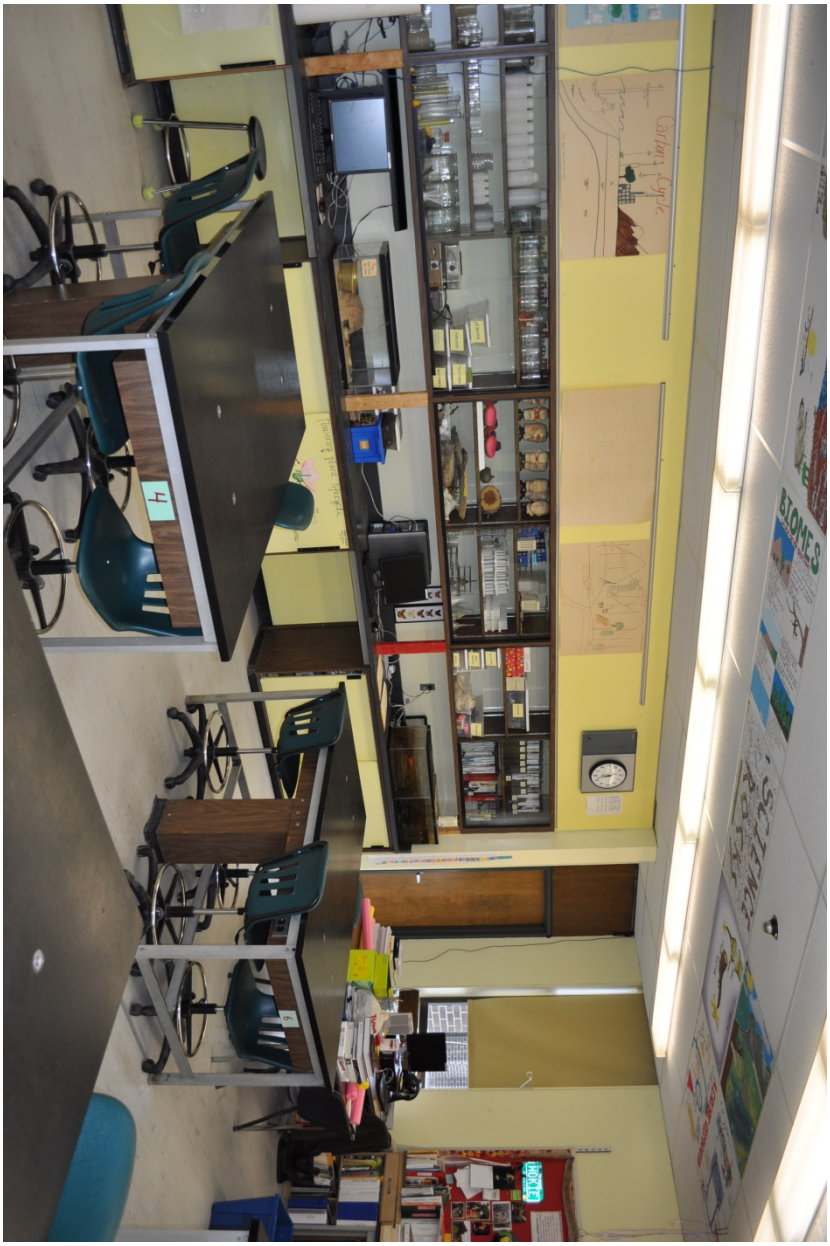
For greater efficiency (staffing, energy use, etc.), 85% room utilization rate is recommended.

educational programming

Space Summary:

	Existing Classroom Counts:	Proposed Classroom Counts:
General Classrooms – HS	25 (avg. @ 690 SF each)	18 (@ 750 SF each)
General Classrooms – MS	10 (avg. @ 764 SF each)	9 (@ 750 SF each)
Science Labs - HS	8 (avg. @ 792 SF each)	5 (@ 1,200 SF each)
Science Labs – MS	3 (avg. @ 753 SF each)	2 (@ 1,000 SF each)
Technical/Vocational	8 (Includes Wood shop, Metal Shop, 2 Comp. labs, Tech Ed rooms) Total: 10,871 SF	5 (Includes wood shop, metal shop, Tech Ed., 2-1500 SF project labs) Total: 7,800 SF
Art	4 Total: 2,964 SF	2 Total: 2,700 SF

options summary



existing conditions

Deficiencies Summary:

1. Site/Civil: traffic patterns; surface erosion at the escarpment; confirm water supply for a sprinkler system
2. Thermal Envelop: efflorescence at brick; seals at windows; wear at exterior doors
3. Overall Aesthetics (tired finishes); Vinyl-faced wall board is peeling; Gym floor is worn and has dead spots
4. Security: line of site between main office and entrance; open campus
5. ADA Accessibility improvements needed throughout
6. Code/Life Safety: fire detection devices required; addressable fire alarm system recommended; emergency lighting with battery back-up at exterior doors

existing conditions

Deficiencies Summary:

7. Energy / efficiency improvements; improve ventilation; convert to DDC
8. Test, balance, service mechanical and heating systems
9. Kitchen – replace exhaust system; add Ansul system & shut-off valve
10. Upgrading Auditorium sound/ stage lighting
11. Provide direct/indirect light fixtures.
12. Integrate occ./CO2 sensors to all spaces.
13. Interconnect the phone and data systems.
14. Switch to low flow plumbing fixtures

achieving project goals

"Do Nothing" Option :

Site and Building Goals:

- Code, Life Safety and ADA improvements
- Update building infrastructure (M/E/P/FP) and improve energy efficiency (occ. sensors, low flow fixtures)
- Provide adequate ventilation and address deferred maintenance

→ YES

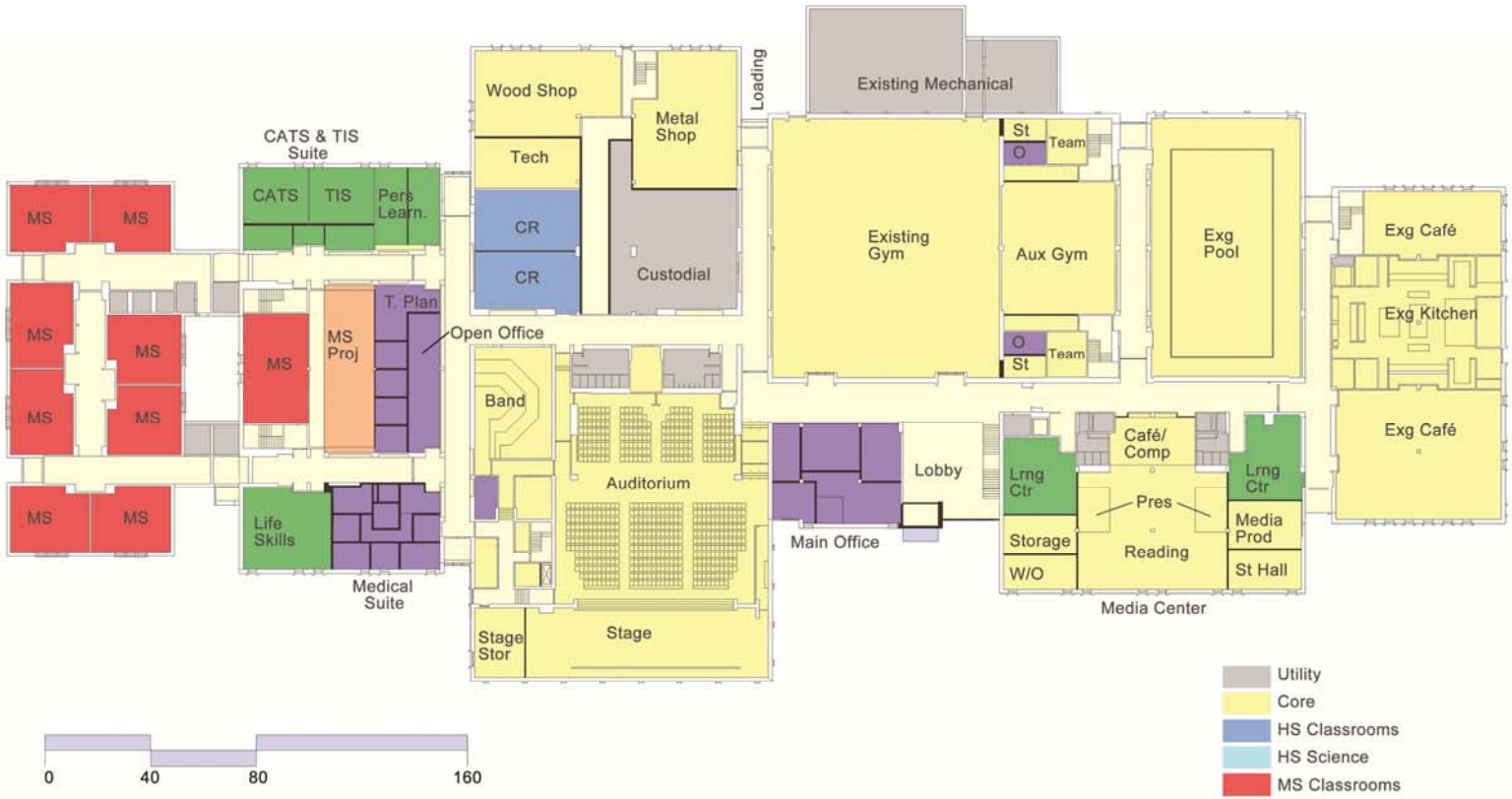
Site and Building Goals:

- Improve quality of spaces with natural light, updated finishes

Educational Goals:

- Meet needs of MS and HS educational program
- 21st Century Educational spaces
- Provide appropriate adjacencies
- Natural light to all classrooms; eliminate tandem classrooms
- Consolidate campus

→ NO



Concept 1

MT ABRAHAM UNION HIGH SCHOOL

First Floor

September 5, 2013

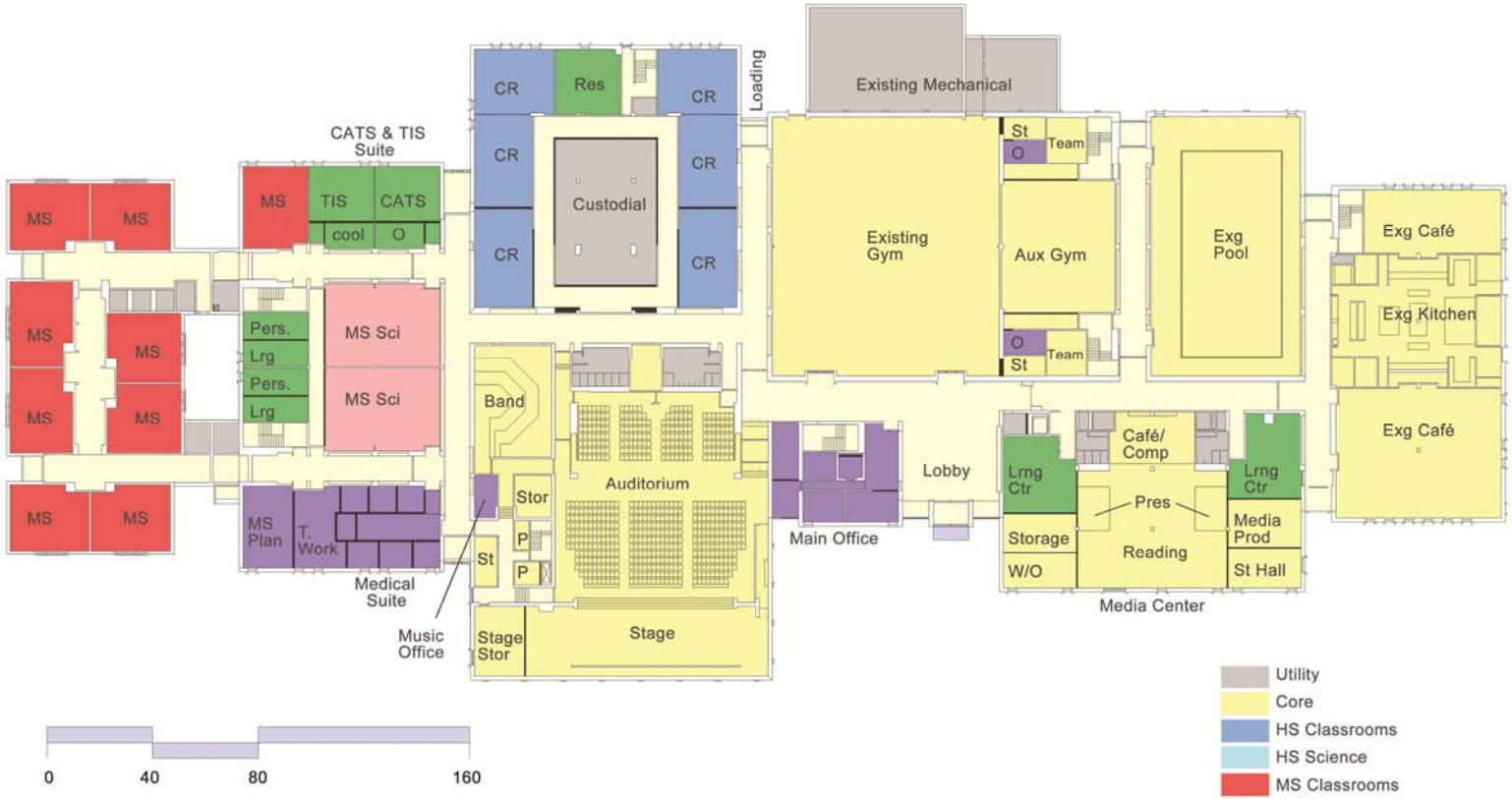
Utility
Core
HS Classrooms
HS Science
MS Classrooms
MS Science
SPED/Guidance/Resource
Administrative
Project Areas

Concept 1

MT ABRAHAM UNION HIGH SCHOOL

Second Floor

September 5, 2013



Concept 2

MT ABRAHAM UNION HIGH SCHOOL

First Floor

September 11, 2013

Utility
Core
HS Classrooms
HS Science
MS Classrooms
MS Science
SPED/Guidance/Resource
Administrative
Project Areas

Concept 2

MT ABRAHAM UNION HIGH SCHOOL

Second Floor

September 11, 2013

project objectives

Options Comparison Matrix:

	"Do Nothing"	Option 1	Option 2
Objective: Address Site and Building Deficiencies	PARTIAL	YES	YES
Objective: Address Educational Deficiencies	NO	YES	PARTIAL

cost summary

Options Cost Summary:

	"Do Nothing"	Option 1	Option 2
Construction Cost	$ 7.1 M	$ 17.8 M	$ 16.2 M
Soft Costs (25%)	$ 2.4 M	$ 5.1 M	$ 4.7 M
Sprinkler System	$ 1 M	$ 1 M	$ 1 M
Phasing Allowance	$ 1,200,000	$ 1,200,000	$ 1,200,000
Haz Mat Allowance	$ 442,500	$ 442,500	$ 442,500
Total Project Cost Range	**$11.6 M - $12.8 M**	**$24.3 M – $26.9 M**	**$22.4 M - $24.7 M**

Notes:

1. **Estimate does not include work on embankment, only subsurface soil exploration and analysis to determine embankment scope.**
2. **Soft Costs include FF&E, Technology, Owner's Contingency, Insurance, A/E Fees, Legal fees, Clerk fees.**

next steps

Next Steps:

October 2013

- **ESCO Option**
- **Discussion**

next steps

Questions

Questions, Comments, Feedback…