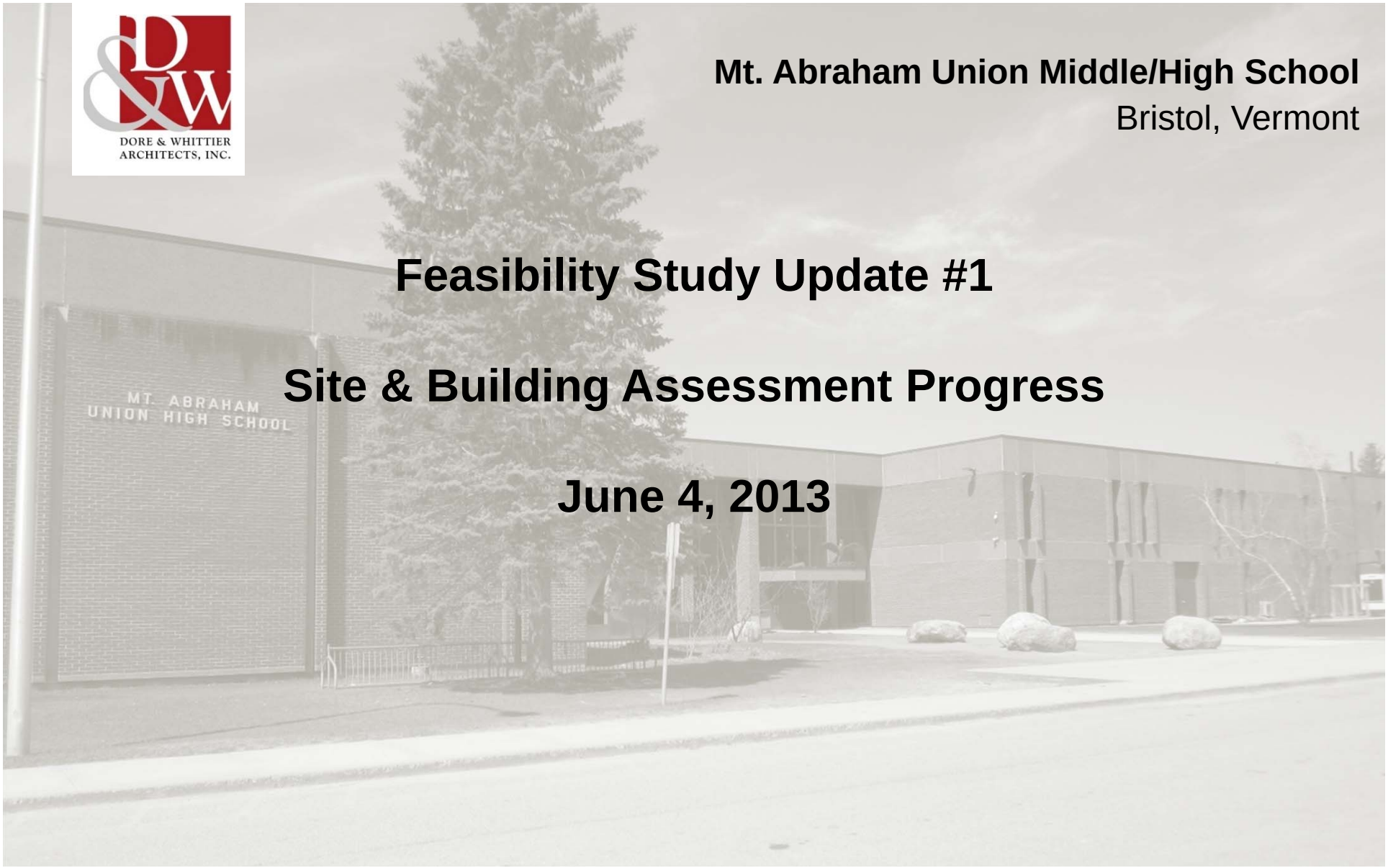


DORE & WHITTIER
ARCHITECTS, INC.

Mt. Abraham Union Middle/High School
Bristol, Vermont

Feasibility Study Update #1

Site & Building Assessment Progress

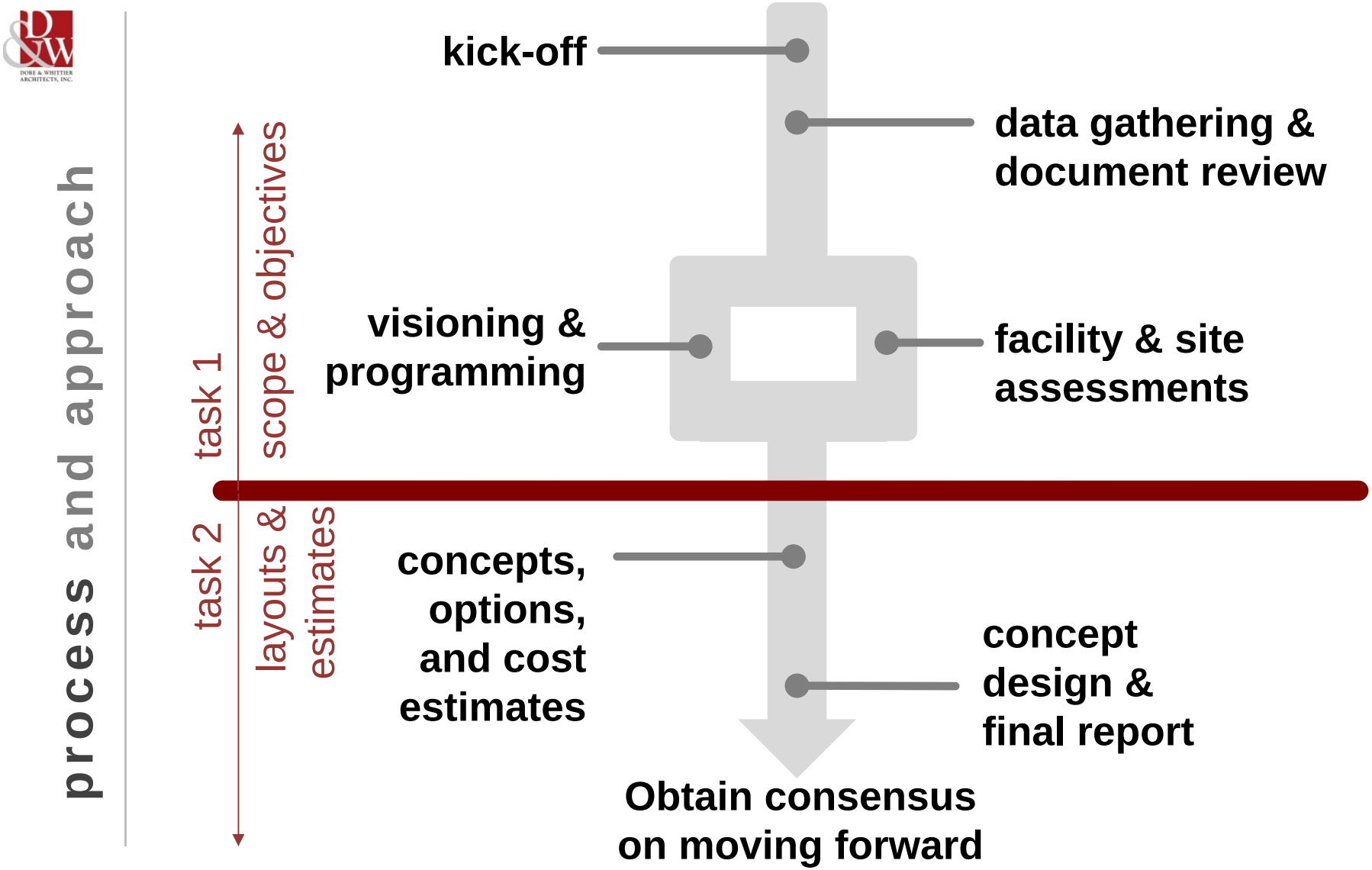
June 4, 2013

agenda

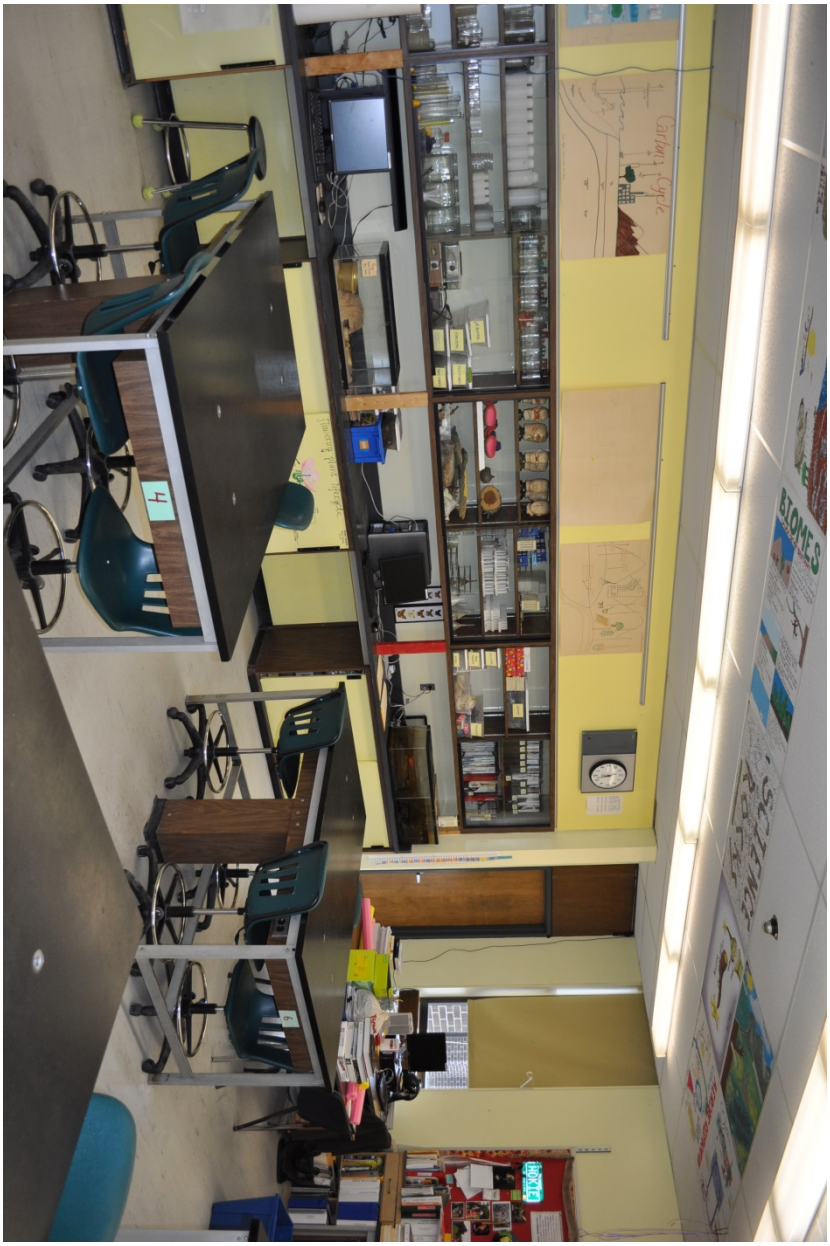
- Process and Approach
- Existing Conditions Summary
- Educational Programming Update
- Questions

process and approach

process and approach



existing conditions



existing conditions

A comprehensive Feasibility Study was initiated to assess the existing site and building conditions. The following categories were reviewed:

- **Site/Civil/Landscape Conditions**
- **Architectural Assessment**
- **Structural Assessment**
- **Mechanical Systems**
- **Electrical Systems/ Technology**
- **Plumbing System**
- **Hazardous Materials**

existing conditions

Site/Civil/Landscape Assessment:

- Site Pavement is in good condition
- Paint pavement stop-bars at intersection of Airport Drive and Vermont Route. 17
- Replace the entrance gate
- Consider pedestrian/vehicle separation from bus loading area
- Add signage to delineate traffic patterns and segregated parking areas
- Replace wood bollards
- Consider screening fences and dumpster pad
- Construct additional sidewalks along direct walking routes
- General grading and re-vegetation
- Fields are well maintained – track edging boards need replacement; wood structures need maintenance

existing conditions

Site/Civil/Landscape Assessment:

- Commission a comprehensive survey
- Subsurface soil samples should be performed
- Site is relatively flat
- Surface erosion at the escarpment – stone addresses top, not lower portion
- Determine if current water supply will support sprinkler system
- Replace septic tanks and dosing pump (not vented) – preventative measure
- Drywells appear to be adequately functioning; no standing water observed
- Appropriately size storm drainage pipe around building for water from roof
- Construct a conveyance channel for stormwater during large storms

existing conditions

Architectural Assessment:

Thermal Envelop:

- Brick masonry walls are in good condition. Some efflorescence noted. Limited areas exhibit cracking at precast panels and should be re-caulked.
- A few of the original windows have lost the seal and should be replaced.
- Heavily used exterior doors show wear and should be replaced.
- EPDM roofing system installed in 2004 appears to be in good condition.

existing conditions

Architectural Assessment:

Interior:

- Overall Aesthetics (tired finishes)
- Flooring: VAT, Carpet, VCT, Quarry Tile, Ceramic Tile, Wood floor, Raised rubber tile, Sheet flooring; all in various conditions. Wood floor in gym is worn, has dead spots and warrants replacement. Vinyl base should be replaced in most locations.
- Walls: Vinyl-faced wall board is peeling in most locations; Painted CMU or GWB, ceramic tile and brick; some cracking noted.
- Doors and low window sills are worn and warrant replacement
- Ceilings: Wood slats and mostly suspended ACT, some stained.

existing conditions

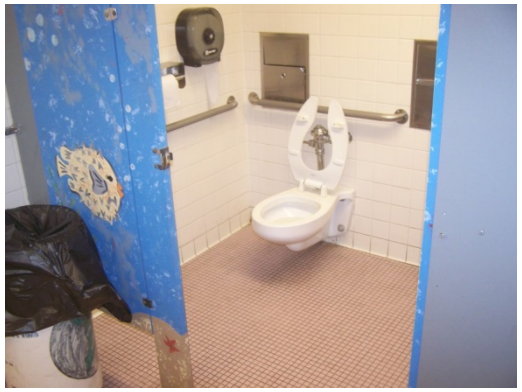
Architectural Assessment:

Security:

- Line of site between main office and entrance
- Open campus concept

ADA Accessibility:

- Barrier free access
- Room Signage
- Auditorium: Accessible route to stage from within auditorium, slope of ramps, companion seats
- Elevator is undersized
- Some toilet room fixtures do not comply with regulations
- Fire Alarm notification devices (speakers and strobes) do not meet current requirements in all areas



existing conditions

Architectural Assessment:

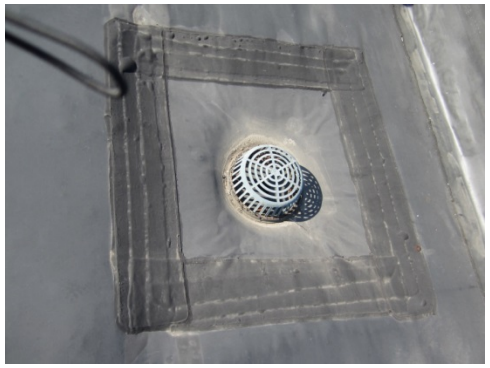
Code /Life Safety

- No fire suppression sprinkler system (except boiler room)
- Smoke detectors should be installed in all egress areas, hallways and classrooms; fire detection devices are required in all areas.
- A new, addressable fire alarm system is recommended.
- Electrical panels/equipment should have a 36”-42” clear space in front of them.
- All exit doors should have emergency lighting with battery back-up and exterior fixtures with adequate egress lighting.
- Provide emergency lighting at egress paths.
- Receptacles for ceiling mounted projectors should be flush with ceiling tiles.
- Curtain at stage should be fire-rated.

existing conditions

Structural Systems:

- Generally the structural system (moment frames) is performing adequately
- Some localized masonry cracking at corners due to thermal movement
- Efflorescence at pool area should be cleaned; repoint mortar joints
- 2004 addition can support an additional floor
- Roof should have a secondary drainage system added if redone
- Replace portable CR foundations, ramps/stairs and handrails.
- Seismic Code Compliance



existing conditions

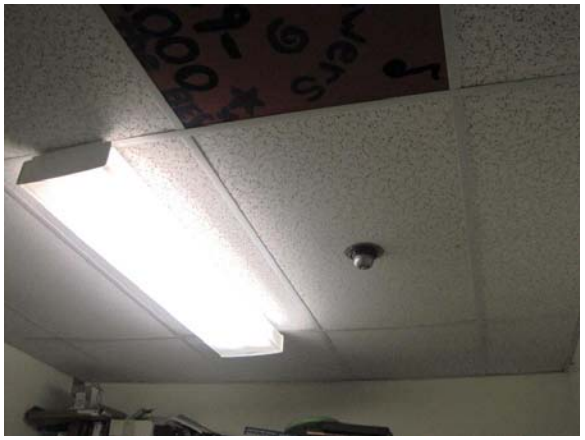
Mechanical Systems:

- Energy / efficiency improvements: Add occupancy/ CO2 sensors
- Boilers installed in 1988; Bio-mass heating system installed in 2007
- Test, balance and/or service mechanical/ heating systems
- Add ventilation at corridors/toilets
- Kitchen – install makeup air unit; replace exhaust system; add Ansul system and shut-off valve
- Replace AHU with energy RU at auditorium and gym
- Some pneumatic controls remain and should be replaced with DDC
- Replace remaining UVs and consider more efficient system
- Duct systems require cleaning
- Relocate dust collector outside

existing conditions

Electrical Systems:

- Electrical distribution system is in good working order.
- Consider replacing original 1968 equipment
- Consider upgrading Sound and Stage Lighting in Auditorium
- Wraparound light fixtures should be replaced with direct/indirect fixtures.
- Occupancy sensors should be added to all spaces.
- Interconnect the phone and data systems.
- Install a new data system though out that can handle an integrated security and phone system. Install wireless access points in each classroom.
- Relocate slop sinks from electrical rooms.



existing conditions

Plumbing Systems:

- Domestic hot water system should have a tempering valve added to it.
- Fixtures are not as efficient as current low flow fixtures – replacement would have a significant reduction of water consumption
- Many fixtures are not ADA compliant
- Install check valves on hot and cold water at janitor's sink

existing conditions

Hazardous Materials:

- At the time of original construction some suspect hazardous materials may have been utilized
- These materials are typically benign unless disturbed by maintenance or renovations
- AHERA report update scheduled for Summer 2013; testing of any suspect materials and abatement will be required prior the start of any proposed construction.

Common suspect materials:

- Pipe insulation
- Flooring mastic
- VAT/ACT floor tiles
- Window Caulking
- Through-wall flashing
- Joint compounds

existing conditions

Capital Improvements Cost Summary:

Site/Civil/Landscape Conditions	**$ 830,553**
Architectural Assessment	**$5,878,976**
Structural Assessment	**$ 104,544**
Mechanical/Plumbing Systems	**$1,215,406**
Electrical Systems/ Technology	**$1,436,925**
Hazardous Materials	**TBD**

***Items do not include temporary phasing and potential code upgrades that may be required based on scope of work selected.**

educational programming

educational programming

Educational Programming:

Work Completed to Date:

- Conducted a staff wide survey
- Met with Administrative Team and Department Heads to discuss program needs
- In the process of developing Educational Specifications
  - Meet needs of MS and HS educational program
  - Declining enrollment
  - Interior classrooms/no natural light
  - Tandem classrooms – disruptive
  - Adjacencies

DORE & WHITTIER ARCHITECTS, INC.

next steps

Next Steps:

June 2013 – July 2013

- **Develop Educational Specifications**
- **Review Educational Specifications with Facilities Committee**
- **Seek consensus on program size**

July 2013 – September 2013

- **Develop conceptual plans for each option**
- **Cost estimate options**
- **Seek public input**
- **Seek consensus on moving forward**

next steps

Questions

Questions…