

# Beal Elementary School

SCHOOL COMMITTEE MEETING



**PMA Consultants**



**LPA|A**



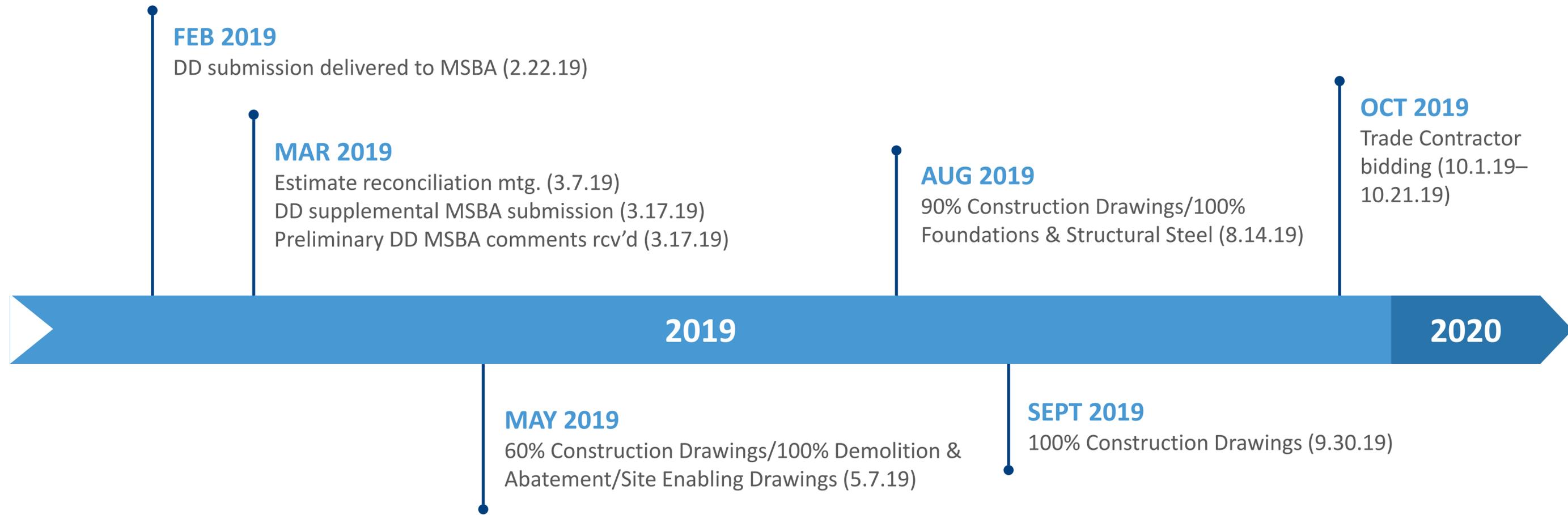
**FONTAINE BROS., INC.**

September 18, 2019

# MSBA PROCESS OVERVIEW



# GENERAL PROJECT UPDATE



# CONSTRUCTION DRAWINGS OVERVIEW

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## PACKAGE 1

60% Construction Drawings/100%  
Demolition & Abatement/Site  
Enabling Drawings 5.7.19 (Target)

Early Packages for  
Demo/Abatement/Site Enabling  
School Building

Committee/Board of Selectmen  
Approved Closing Lake St. For This  
Scope (~3 Months of Work)

## PACKAGE 2

90% Construction Drawings/100%  
Foundations & Structural Steel  
8.14.19 (Target)

Early Packages for  
Foundations/Structural Steel

## PACKAGE 3

100% Construction Drawings 9.30.19  
(Target)

Trade Contractor Bidding October  
2019

# MGL DEFINITION OF PROPRIETARY ITEMS

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M.G.L. c.30, §39M(b) requires that proprietary specifications for public construction projects, including buildings,<sup>2</sup> shall only be used “... ***for sound reasons in the public interest stated in writing in the public records of the awarding authority*** ... such writing to be prepared after reasonable investigation.” A governmental body must document the reasons and provide them in writing to anyone making a written request for the information.

The governmental body therefore has the responsibility for ensuring that a reasonable investigation is conducted before proprietary specifications can be used in an invitation for bids (IFB) for a public construction project. For example, a reasonable investigation of roofing materials might involve researching commercially available roofing products, including costs, the expected useful life of the installed materials, available warranties, and results experienced by other owners who had purchased and installed various types of roofs. If, after obtaining this information, a governmental body determines that it cannot obtain the desired quality through open, competitive specifications, the decision to use the proprietary specifications is based on full information.

Thus, a governmental body must be able to document the basis for a decision to specify a proprietary product or a restrictive technical requirement. This documentation should be kept on file and made available promptly upon request.

If after a reasonable investigation, the governmental body determines that the project requires use of proprietary specifications, the specifications must include an “or equal” clause. An “or equal” clause is a provision allowing bidders to furnish items that are equal to the specified items. Under the law, an item is considered equal if it:

- » Is at least equal in quality, durability, appearance, strength, and design;
- » Will perform the intended function at least equally; and
- » Conforms substantially, even with deviations, to the detailed requirements contained in the specifications.<sup>3</sup>

The governmental body, through its designer, determines whether a bid item is equal to the item specified.

*1 American Society for Testing and Materials (ASTM) is a non-profit private organization that sets testing standards for thousands of commercially available products.*

*2 M.G.L. c.30, §39M(b) expressly applies to construction contracts procured under M.G.L. c.149, §§44A-M as well as to construction contracts procured under M.G.L. c. 30, §39M.*

*3 M.G.L. c.30, §39M(b).*

# MSBA REQUIRED PROPRIETARY INFORMATION

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Provide a list identifying all proposed proprietary items (if any) with an affidavit which shall indicate an elected body of the district (*school committee*, city or town council, or selectmen, - but not an ad-hoc building committee) has been presented with proposals for proprietary requirements approval action, has had an opportunity to investigate, or to require staff or consultant investigation upon each item so proposed, and has majority voted in an open public session that is in the public interest to do so. Provide MSBA with a certified copy of the vote of the elected body.

# PROPRIETARY ITEMS LIST

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## **RECOMMENDED PROPRIETARY SPECIFICATION ITEMS:**

Recommendations for the below items have been reviewed and discussed with the Town of Shrewsbury Public Works, Representatives from the School Department (Administrators, Teachers, etc...), Shrewsbury Life Safety/First Responders (SFD, SPD) who feel that for sound reasons in the public interest, the items presented here benefit the Town of Shrewsbury and should be procured as a proprietary specification.

Attached to your packet you will find a recommendation letter from the Designer's Consultants, written on behalf of the above representation from the district, for each of the items identified as beneficial proprietary item for the Beal ES and the Town of Shrewsbury.

## **NEWLY RECOMMENDED PROPRIETARY SPECIFICATION ITEMS:**

Johnson Controls FX Line – HVAC System Controls  
Axis Video Surveillance Cameras - Cameras

# 9/4/2019 ESTIMATE RECONCILIATION

Beal ES Project - SD Estimate Reconciliation					AVERAGE RECONCILED ESTIMATES
Division #	Description of Work	RECONCILED			AVERAGE RECONCILED ESTIMATES
		Fontaine SD Estimate	AMF SD Estimate	Estimate VAR	
<b>A</b>	<b>Substructure</b>				
	Foundations	\$ 5,606,945	\$ 5,614,147	-0.13%	\$ 5,610,546.00
	Basement Construction			#DIV/0!	\$ -
<b>B</b>	<b>Shell</b>				
B10	Superstructure	\$ 5,334,397	\$ 5,257,449	1.44%	\$ 5,295,923.00
B20	Exterior Enclosure			#DIV/0!	\$ -
B2010	Exterior Walls	\$ 5,572,914	\$ 5,319,222	4.55%	\$ 5,446,068.00
B2020	Exterior Windows	\$ 1,671,565	\$ 1,611,047	3.62%	\$ 1,641,306.00
B2030	Exterior Doors	\$ 133,825	\$ 120,389	10.04%	\$ 127,107.00
B30	Roofing	\$ 2,655,065	\$ 2,484,099	6.44%	\$ 2,569,582.00
<b>C</b>	<b>Interiors</b>				
C10	Interior Construction	\$ 5,589,570	\$ 5,330,065	4.64%	\$ 5,459,817.50
C20	Stairs	\$ 285,663	\$ 256,034	10.37%	\$ 270,848.50
C30	Interior Finishes	\$ 4,928,298	\$ 4,929,271	-0.02%	\$ 4,928,784.50
<b>D</b>	<b>Services</b>				
D10	Conveying (Elevator)	\$ 120,150	\$ 115,037	4.26%	\$ 117,593.50
D20	Plumbing	\$ 2,315,252	\$ 2,362,504	-2.04%	\$ 2,338,878.00
D30	HVAC	\$ 6,484,812	\$ 6,482,858	0.03%	\$ 6,483,835.00
D40	Fire Protection	\$ 681,100	\$ 649,370	4.66%	\$ 665,235.00
D50	Electrical	\$ 6,173,976	\$ 6,321,775	-2.39%	\$ 6,247,875.50
<b>E</b>	<b>Furnishings &amp; Fixed Equipment</b>				
	Commercial Equipment	\$ 1,295,815	\$ 1,355,687	-4.62%	\$ 1,325,751.00
	Fixed Furnishings	\$ 1,748,797	\$ 1,654,023	5.42%	\$ 1,701,410.00
	<b>Building Subtotal</b>	<b>\$ 50,598,144</b>	<b>\$ 49,862,977</b>	<b>1.47%</b>	<b>\$ 50,230,560.50</b>
<b>F</b>	<b>Special Construction &amp; Demo</b>				
	Special Construction			#DIV/0!	\$ -
	Existing Building Demolition	\$ 725,000	\$ 725,000	0.00%	\$ 725,000.00
	In-Bldg Hazmat Abatement	\$ 1,221,100	\$ 1,221,100	0.00%	\$ 1,221,100.00
	ACM Flooring Abatement			#DIV/0!	\$ -
	Other Hazmat Abatement			#DIV/0!	\$ -
<b>G</b>	<b>Building Sitework</b>				
G10	Site Preparation	\$ 2,497,149	\$ 2,856,275	-14.38%	\$ 2,676,712.00
G20	Site Improvements	\$ 6,281,203	\$ 5,628,816	10.39%	\$ 5,955,009.50
G30	Site Civil/Mechanical	\$ 2,067,275	\$ 2,191,245	-6.00%	\$ 2,129,260.00
G40	Site Electrical Utilities	\$ 379,570	\$ 399,479	-5.25%	\$ 389,524.50
	Other Site Construction			#DIV/0!	\$ -
	<b>Direct Costs Subtotal</b>	<b>\$ 63,769,441</b>	<b>\$ 62,884,892</b>	<b>1.41%</b>	<b>\$ 63,327,166.50</b>
<b>Z</b>	<b>Mark-Ups</b>				
	Contingencies (Design and Pricing)	\$ 1,744,976	\$ 1,610,746	7.69%	\$ 1,677,861.00
	D/B/B Sub-Contractor Bonds	\$ 499,933	\$ 500,000	-0.01%	\$ 499,966.50
	D/B/B Insurance	\$ 766,321	\$ 766,321	0.00%	\$ 766,321.00
	D/B/B General Conditions	\$ 4,321,225	\$ 4,321,225	0.00%	\$ 4,321,225.00
	D/B/B Overhead & Profit	\$ 1,423,168	\$ 1,373,024	3.52%	\$ 1,398,096.00
	Escalation to Mid-Point of Construction	\$ 364,915	\$ 328,282	10.04%	\$ 346,598.50
	<b>Construction Subtotal</b>	<b>\$ 72,889,979</b>	<b>\$ 71,784,490</b>	<b>1.54%</b>	<b>\$ 72,337,234.50</b>
	SBC Approved Scope Adjustments			#DIV/0!	\$ -
	<b>Total Construction Cost</b>	<b>\$ 72,889,979</b>	<b>\$ 71,784,490</b>	<b>1.54%</b>	<b>\$ 72,337,234.50</b>

- Voter Approved Total Project Budget: \$92,809,274 (Inclusive of soft costs & contingencies)
- Voter Approved Construction Cost: \$74,111,830 (Construction Only)
- A.M Fogarty Construction Cost at 90% Drawings: \$71,784,490
- Fontaine Brothers Construction Cost at 90% Drawings: \$72,889,979
- Variance of 90% Estimates: 1.54%



# ENTRANCE SIGN



- Two-sided sign
- Fieldstone wall core
- Laser cut powder coated metal
- Backlit with LED lights
- Ground surface lighting



PLAN 



**ENTRY SIGN ALT A - PERSPECTIVE LOOKING SOUTH**



**ENTRY SIGN ALT A - PERSPECTIVE LOOKING NORTH**

- Admin./Nurse
- Cafetorium
- Gymnasium
- Media Center
- Music
- Art
- Classroom
- Special Ed./Support
- Circulation



# FLOOR PLANS

- Admin./Nurse
- Cafetorium
- Gymnasium
- Media Center
- Music
- Art
- Classroom
- Special Ed./Support
- Circulation



- **Precast Concrete Base throughout**
- **Brick Masonry @ Academic Wings & Administration**
- **Profiled Metal Panel @ Gymnasium, Cafeteria, & Accents**
- **Aluminum Composite Panel @ Lobby, Stairs, Media, & Art**
- **Aluminum Windows & Curtain Wall**
- **Translucent Panel Canopies**



MAIN ENTRANCE



MAIN ENTRANCE





COURTYARD

PAVED PLAY AREA



# MAIN LOBBY



CAFETERIA



# MEDIA CENTER



LOWER LOBBY



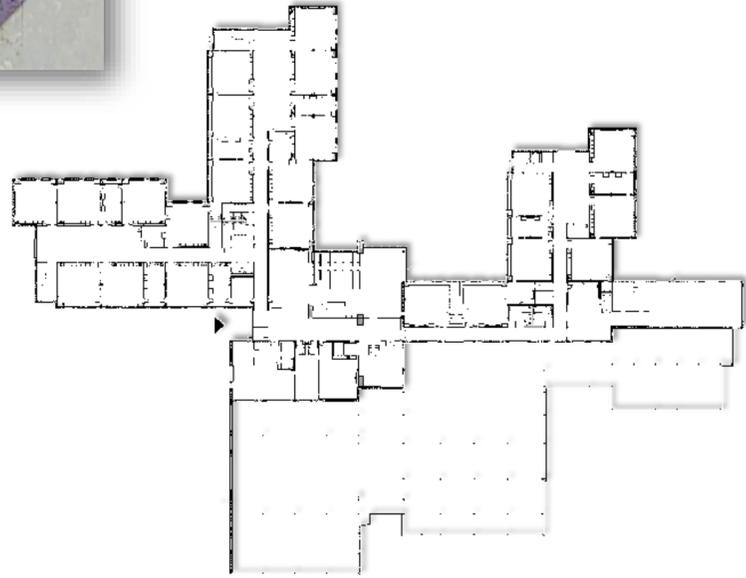
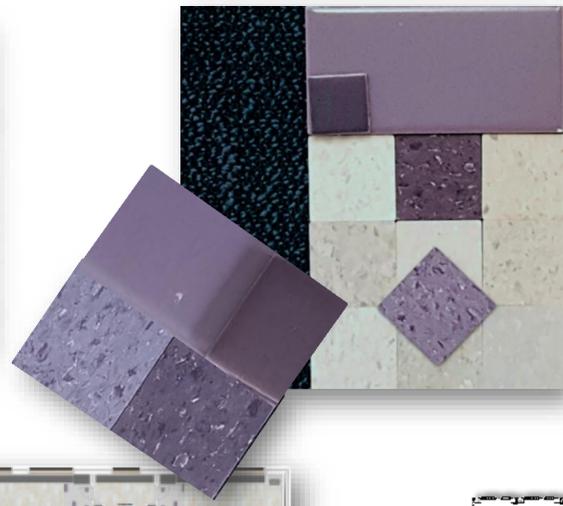
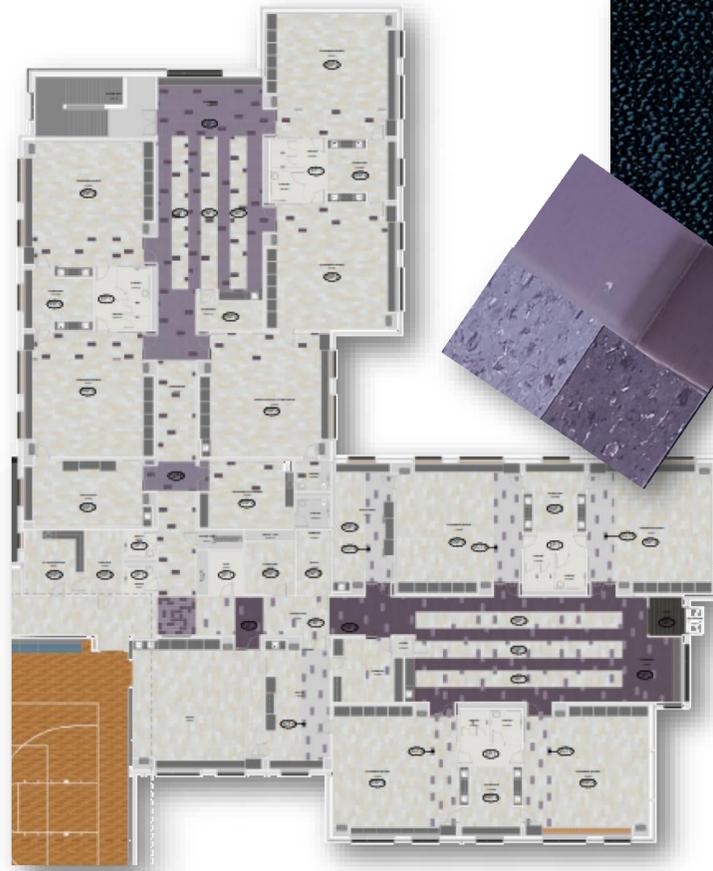
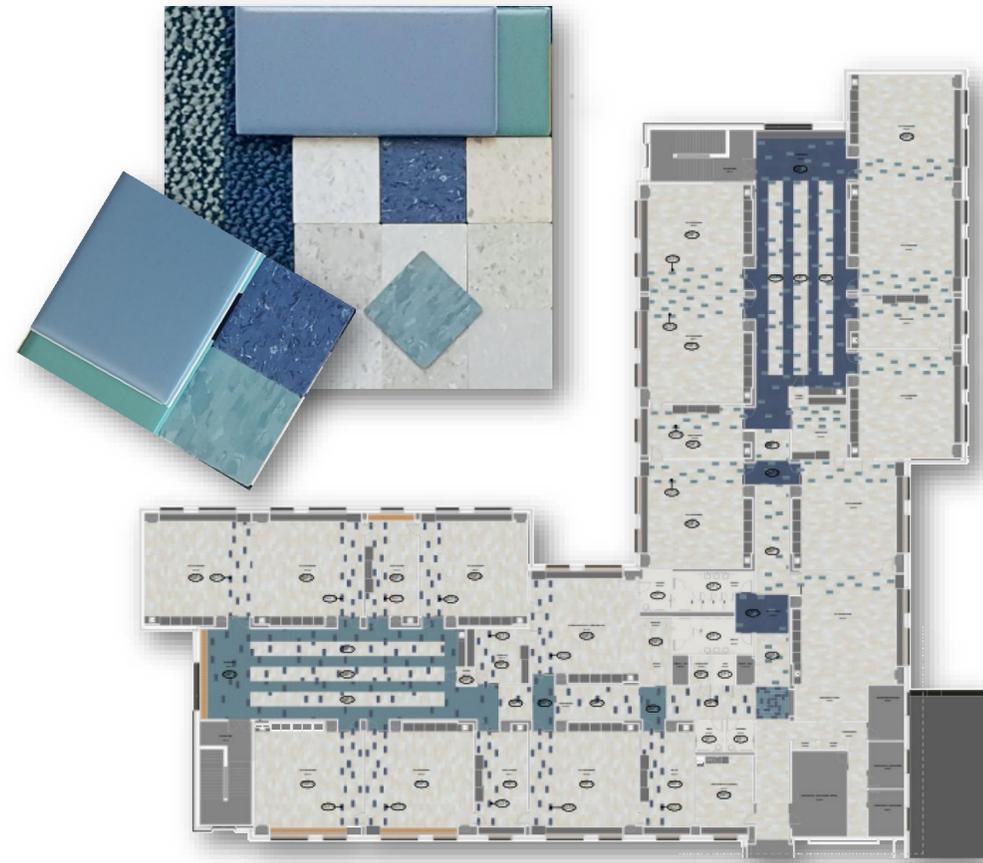
LOWER LOBBY WALL



# CLASSROOM



# FINISHES





GROUND BREAKING



[lpaa.com/beal](http://lpaa.com/beal)



Major Howard W. Beal School  
Construction video taken 9/07/2019 at 1430



# Questions?

Thank you!



**PMA Consultants**



**LPA|A**



**FONTAINE BROS., INC.**

September 4, 2019