

PROJECT MINUTES

Project:	New W. Edward Balmer Elementary School	Project No.:	17020
Prepared by:	Joel Seeley	Meeting Date:	5/8/19
Re:	School Building Committee Meeting	Meeting No:	43
Location:	High School Media Center	Time:	6:30pm
Distribution:	School Building Committee Members, Attendees (MF)		

Attendees:

PRESENT	NAME	AFFILIATION	VOTING MEMBER
✓	Joseph Strazzulla	Chairman, School Building Committee	Voting Member
✓	Melissa Walker	School Business Manager	Voting Member
✓	Alicia Cannon	Representative of the Board of Selectmen	Voting Member
✓	Michael LeBrasseur	Chairman, School Committee	Voting Member
✓	Paul Bedigian	Representative of the Building, Planning, Construction Committee	Voting Member
✓	Steven Gogolinski	Representative of the Finance Committee	Voting Member
✓	Jeffrey Tubbs	Community Member with building design and/or construction experience	Voting Member
✓	Peter L'Hommedieu	Community Member with building design and/or construction experience	Voting Member
✓	Jeff Lundquist	Community Member with building design and/or construction experience	Voting Member
✓	Andrew Chagnon	Community Member with building design and/or construction experience	Voting Member
	Spencer Pollock	Parent Representative	Voting Member
	Adam Gaudette	Town Manager	Non-Voting Member
✓	Amy McKinstry	Interim Superintendent of Schools	Non-Voting Member
	Richard Maglione	Director of Facilities	Non-Voting Member
✓	Karlene Ross	Principal, W. Edward Balmer Elementary School	Non-Voting Member
✓	Jill Healy	Principal, Northbridge Elementary School	Non-Voting Member
✓	Gregory Rosenthal	Director of Pupil Personnel Services	Non-Voting Member
	Lee Dore	D & W, Architect	
✓	Thomas Hengelsberg	D & W, Architect	
	David Fontaine	Fontaine Bros, CM	
✓	David Fontaine, Jr	Fontaine Bros, CM	
	David Barksdale	Fontaine Bros, CM	
	Jim Mauer	Fontaine Bros, CM	
✓	Joel Kent	Fontaine Bros, CM	
✓	Joel Seeley	SMMA, OPM	

Item #	Action	Discussion
43.1	Record	Call to Order, 6:40 PM, meeting opened.
43.2	Record	J. Strazzulla announced the meeting will be video and audio recorded with live broadcast and future re-broadcast.
43.3	Record	A motion was made by P. Bedigian and seconded by M. LeBrasseur to approve the 4/24/19 School Building Committee meeting minutes. Motion passed unanimous by those attending.
43.4	Record	J. Seeley distributed and reviewed the Budget Tracking Form thru 4/30/19, attached, for the Total Project Budget.
43.5	Record	Warrant No. 25 was reviewed. A motion was made by P. Bedigian and seconded by M. LeBrasseur to approve Warrant No. 25. No discussion, motion passed unanimous.
43.6	Committee	J. Seeley distributed and reviewed the draft 90% Construction Documents Meetings and Agenda Schedule, attached. Committee to provide J. Seeley feedback on the listed meeting dates.
43.7	T. Hengelsberg	T. Hengelsberg to provide existing top soil characterization for gradient and nutrient enhancements for Committee review.
43.8	J. Seeley	J. Seeley to coordinate with K. Ross, T. Hengelsberg and J. Mauer to schedule meetings with the Surrounding Neighborhood, to review the traffic and site conditions during construction once the site permitting is completed. K. Ross indicated the traffic and site conditions will be reviewed with new parents at a meeting on 6/4/19.
43.9	R. Maglione	R. Maglione will provide direction on the final list of Proprietary Specifications.
43.10	L. Dore	L. Dore to review fence or netting options for the left field line of the baseball field parallel to Crescent Street.
43.11	Record	J. Seeley distributed and reviewed the fully Executed Project Funding Agreement, PFA, with MSBA, attached.
43.12	T. Hengelsberg J. Seeley	J. Seeley distributed and reviewed the MSBA Design Development Submission Comments. T. Hengelsberg and J. Seeley to submit the response document to MSBA by 5/10/19.
43.13	T. Hengelsberg	T. Hengelsberg presented an alternate route for the 36" storm line, attached. T. Hengelsberg will review options for placement of an internal manhole to the original 36" pipe location.
43.14	T. Hengelsberg	T. Hengelsberg presented a revised equipment layout for the Boiler Room, attached. T. Hengelsberg to confirm appropriate working clearances for the boiler room equipment.
43.15	Record	T. Hengelsberg reviewed the findings of the Acoustical Consultant review of the Design Development documents. The comments were minor in nature, with one cost related comment, adding a layer of drywall to the classroom partition.
43.16	T. Hengelsberg	T. Hengelsberg to obtain feedback from other D&W school projects regarding their experience with the "Won-Door" horizontal sliding fire door, expected service life, and approximate annual maintenance and testing costs as a follow-up to the VE Pricing.

Item #	Action	Discussion
43.17	Record	J. Kent distributed and reviewed the 3/19/19 and 4/30/19 Construction Logistics Meeting Minutes.
43.18	J. Kent	<p>J. Kent distributed and reviewed the Site Logistics Plans.</p> <p>Committee Discussion:</p> <ol style="list-style-type: none"> 1. J. Kent to develop the NFPA 241 plan. 2. J. Kent to review the Site Logistics Plans with the Police and Fire Departments. 3. J. Strazzulla asked if the construction fence along the S.E. corner of the property can remain during Phases 2 and 3? <i>J. Kent indicated yes and will modify the plan.</i> 4. J. Kent will review the cost impact of providing sod in lieu of seed for the two U-6 playfields and the two U-8 playfields. 5. P. L'Hommedieu suggested keeping the option of sodding the Vail Fields, if funding allows, in the future. 6. M. LeBrasseur asked if a simpler version of the Site Logistics Plans can be developed for distribution to the public, parents, neighbors and teachers? <i>J. Kent indicated yes and will develop for Committee review.</i> 7. M. Walker indicated that parent vehicles may not all fit on the site loop road for parent drop-off/pick-up as the queue line length will not be at its complete length between August 2021 and Late Fall 2021.
43.19	Record	<p>D. Fontaine distributed and reviewed the proposed List of Non-Trade Contractors for the Early Site Package. J. Lundquist indicated the Non-Trade Contractor Review Committee has reviewed the list and recommends approval.</p> <p>A motion was made by J. Lundquist and seconded by J. Tubbs to approve the proposed List of Non-Trade Contractors for the Early Site Package. No discussion, motion passed unanimous.</p>
43.20	J. Seeley	<p>J. Seeley provided an overview of the Trade Contractor Prequalification process for the Early Concrete and Steel Package and Final Package.</p> <p>A motion was made by A. Cannon and seconded by J. Tubbs to appoint A. Chagnon, J. Lundquist and M. LeBrasseur to the Trade Contractor Prequalification Committee. No discussion, motion passed unanimous.</p> <p>J. Seeley to coordinate a meeting with the Trade Contractor Prequalification Committee.</p>
43.21	Record	<p>Site Permitting - J. Seeley provided an overview of the site permitting as follows:</p> <p>Conservation Commission</p> <ol style="list-style-type: none"> 1. NOI Hearing scheduled for 5/15/19 will be continued to 6/5/19 to allow the Town's peer engineering firm and the Civil Engineer to resolve the comments. <p>Planning Board</p> <ol style="list-style-type: none"> 1. Site Plan Approval Hearing scheduled for 5/14/19 will be continued to 6/11/19 to allow the Town's peer engineering firm and the Civil Engineer to resolve the comments.

Item #	Action	Discussion
		<ol style="list-style-type: none"> J. Seeley distributed and reviewed the Sanitary Sewer Capacity Analysis meeting minutes, held on 5/1/19, attached. The DPW will install a flow meter to measure the existing infiltration and inflow (I/I) from the existing Blamer School on-site sanitary sewer distribution system. The flow will be measured for approximately eight weeks and a follow-up meeting will be scheduled. The Zoning Analysis is under review for determination on a waiver or variance process.
43.22	J. Strazzulla A. Cannon	<p>The Ground Breaking Ceremony was discussed.</p> <p>A motion was made by A. Cannon and seconded by J. Tubbs to appoint A. Cannon and J. Strazzulla to the Ground Breaking Ceremony Committee. No discussion, motion passed unanimous.</p>
43.23	J. Seeley	<p>J. Seeley indicated the MSBA has requested a Design Status Review meeting, to be held at the D&W offices in Newburyport. The preferred date for D&W is 6/12/19 at 1:30pm.</p> <p>J. Seeley to send out a meeting notice to the Committee and request feedback on who can attend.</p>
43.24	Record	Committee Questions - none
43.25	Record	<p>Old or New Business</p> <ol style="list-style-type: none"> P. Bedigian asked if the design will include a grass infield for the 60 foot baseball diamond? <i>J. Strazzulla indicated yes, the grass infield is included.</i> J. Strazzulla indicated that there may be time capsules buried at the school site. No action needed, just for information.
43.26	Record	Next SBC Meeting: 5/22/19 at 6:30 pm at the High School Media Center. The anticipated agenda items are reviewing design refinements, LEED Scorecard, construction logistics and site permitting update.
43.27	Record	A Motion was made by A. Cannon and seconded by J. Tubbs to adjourn the meeting. No discussion, motion passed unanimous.

Attachments: Agenda, Budget Tracking Form, Warrant No. 25, draft 90% Construction Documents Meetings and Agenda Schedule, Executed Project Funding Agreement, MSBA Design Development Submission Comments, 3/19/19 and 4/30/19 Construction Logistics Meeting Minutes, Site Logistics Plans, proposed List of Non-Trade Contractors for the Early Site Package, Sanitary Sewer Capacity Analysis meeting minutes, held on 5/1/19, Powerpoint

The information herein reflects the understanding reached. Please contact the author if you have any questions or are not in agreement with these Project Minutes

PROJECT MEETING SIGN-IN SHEET

Project: New W. Edward Balmer Elementary School
 Prepared by: Joel Seeley
 Re: School Building Committee Meeting
 Location: High School Media Center
 427 Linwood Avenue, Whitinsville, MA
 Distribution: Attendees, (MF)

Project No.: 17020
 Meeting Date: 5/8/2019
 Meeting No: 43
 Time: 6:30pm

SIGNATURE	ATTENDEES	EMAIL	AFFILIATION
	Joseph Strazzulla	jstrazzulla@nps.org	Chairman, School Building Committee
	Melissa Walker	mwalker@nps.org	School Business Manager, MCPPO
	Alicia Cannon	cannonhome0927@gmail.com	Member, Board of Selectmen, CEO
	Michael LeBrasseur	mlebrasseur@nps.org	Chairman, School Committee
	Paul Bedigian	bedigianps@cdmsmith.com	Representative of the Building, Planning, Construction Committee
	Steven Gogolinski	steve@gogolinskicpa.com	Representative of the Finance Committee
	Jeffrey Tubbs	jtubbs@charter.net	Member of community with architecture, engineering and/or construction experience
	Peter L'Hommedieu	plhommedieu@shawmut.com	Member of community with architecture, engineering and/or construction experience
	Jeff Lundquist	jlundquist@therichmondgroup.com	Member of community with architecture, engineering and/or construction experience
	Andrew Chagnon	achagnon@vertexeng.com	Member of community with architecture, engineering and/or construction experience
	Spencer Pollock	spencerpollock22@gmail.com	Parent Representative
	Adam Gaudette	agaudette@northbridgemass.org	Town Manager
	Amy McKinstry	amckinstry@nps.org	Interim Superintendent
	Richard Maglione	rmaglione@nps.org	Building Maintenance Local Official
	Karlene Ross	kross@nps.org	Principal, W. Edward Balmer Elementary School
	Jill Healy	jhealy@nps.org	Principal, Northbridge Elementary School
	Gregory Rosenthal	grosenthal@nps.org	Director of Pupil Personnel Services
	Lee P. Dore	lpdore@DoreandWhittier.com	Dore & Whittier Architects
	Thomas Hengelsberg	thengelsberg@DoreandWhittier.com	Dore & Whittier Architects
	David Fontaine, Jr.	djf@fontainebros.com	Fontaine Bros., Inc.
	David Barksdale	dbarksdale@fontainebros.com	Fontaine Bros., Inc.
	Jim Mauer	jmauer@fontainebros.com	Fontaine Bros., Inc.
	Joel Kent	jkent@fontainebros.com	Fontaine Bros., Inc.
	Joel Seeley	jseeley@smma.com	SMMA

Agenda

Project:	W. Edward Balmer Elementary School Feasibility Study	Project No.:	17020
Re:	School Building Committee Meeting	Meeting Date:	5/8/2019
Meeting Location:	High School Media Center	Meeting Time:	6:30 PM
	427 Linwood Avenue, Whitinsville, MA	Meeting No.	43
Prepared by:	Joel G. Seeley		
Distribution:	Committee Members (MF)		

1. Call to Order
2. Public Comments
3. Approval of Minutes
4. Approval of Invoices and Commitments
5. Review MSBA Comments on Design Development Submission
6. Review Design Refinements
7. Follow-up to VE Pricing
8. Proprietary Materials Update
9. Construction Logistics Plan Update
10. Vote to Approve Non-Trade Bidders for Early Site Contract
11. Approval of Contractor Prequalification Committee
12. Site Permitting Update
 - Conservation Commission
 - Planning Board
13. Discuss Groundbreaking Ceremony
14. MSBA Design Status Meeting
15. New or Old Business
16. Committee Questions
17. Next Meeting: May 22, 2019
18. Adjourn

Symmes Maini & McKee Associates, Inc. (SMMA) Northbridge School District Northbridge W. Edward Balmer Elementary School BUDGET SUMMARY										
BUDGET TRACKING FORM as of: 4/30/2019			Original PS&B Budget 6/20/2018	Budget Revisions	Current Budget	Contract Amount	Expended	(B - C) Remaining Contract Amount	Additional Projected Amount	(A - B - E) Budget Balance
	Propay code #	Name			A	B	C	D	E	
		<u>Feasibility Study Agreement</u>								
1	0001-0000	<u>OPM Feasibility Study</u>	105,000.00		105,000.00	105,000.00	105,000.00	-	-	-
2	0002-0000	<u>A&E Feasibility Study</u>	425,000.00		425,000.00	425,000.00	425,000.00	-	-	-
3	0003-0000	<u>Environmental and Site</u>	150,000.00		150,000.00	146,753.50	145,543.50	1,210.00	-	3,246.50
4	0004-0000	<u>Other</u>	95,000.00		95,000.00	51,759.59	51,759.59	-	-	43,240.41
Feasibility Study Agreement Subtotal			\$ 775,000.00	\$ -	\$ 775,000.00	\$ 728,513.09	\$ 727,303.09	\$ 1,210.00	\$ -	\$ 46,486.91
		<u>Administration</u>								
6	0101-0000	<u>Legal Fees</u>	80,000.00		80,000.00	-	-	-	-	80,000.00
		<u>Owner's Project Manager</u>								
7	0102-0400	<u>> Design Development</u>	180,250.00		180,250.00	180,250.00	171,237.50	9,012.50	-	-
8	0102-0500	<u>> Construction Contract Documents</u>	250,025.00		250,025.00	250,025.00	-	250,025.00	-	-
9	0102-0600	<u>> Bidding</u>	95,050.00		95,050.00	95,050.00	-	95,050.00	-	-
10	0102-0700	<u>> Construction Contract Administration</u>	1,912,599.00		1,912,599.00	1,912,599.00	-	1,912,599.00	-	-
11	0102-0800	<u>> Closeout</u>	120,080.00		120,080.00	120,080.00	-	120,080.00	-	-
12	0102-0900	<u>> Extra Services</u>	100,000.00		100,000.00	-	-	-	-	100,000.00
13	0102-1000	<u>> Reimbursable & Other Services</u>	40,000.00		40,000.00	-	-	-	-	40,000.00
14	0102-1100	<u>> Cost Estimates</u>	-		-	-	-	-	-	-
15	0103-0000	<u>Advertising</u>	20,000.00		20,000.00	-	-	-	-	20,000.00
16	0104-0000	<u>Permitting</u>	50,000.00		50,000.00	-	-	-	-	50,000.00
17	0105-0000	<u>Owner's Insurance</u>	80,000.00		80,000.00	-	-	-	-	80,000.00
18	0199-0000	<u>Other Administrative Costs</u>	60,000.00		60,000.00	100.00	100.00	-	-	59,900.00
Administration Subtotal			\$ 2,988,004.00	\$ -	\$ 2,988,004.00	\$ 2,558,104.00	\$ 171,337.50	\$ 2,386,766.50	\$ -	\$ 429,900.00
		<u>Architecture and Engineering</u>								
		<u>Basic Services</u>								
21	0201-0400	<u>> Design Development</u>	1,944,609.00		1,944,609.00	1,944,609.00	1,944,609.00	-	-	-
22	0201-0500	<u>> Construction Contract Documents</u>	2,657,249.00		2,657,249.00	2,657,249.00	-	2,657,249.00	-	-
23	0201-0600	<u>> Bidding</u>	227,830.00		227,830.00	227,830.00	-	227,830.00	-	-
24	0201-0700	<u>> Construction Contract Administration</u>	2,252,218.00		2,252,218.00	2,252,218.00	-	2,252,218.00	-	-
25	0201-0800	<u>> Closeout</u>	164,136.00		164,136.00	164,136.00	-	164,136.00	-	-
26	0201-9900	<u>> Other Basic Services</u>	-		-	-	-	-	-	-
27		BASIC SERVICES SUBTOTAL	\$ 7,246,042.00	\$ -	\$ 7,246,042.00	\$ 7,246,042.00	\$ 1,944,609.00	\$ 5,301,433.00	\$ -	\$ -
		<u>Reimbursable Services</u>								
28	0203-0100	<u>> Construction Testing</u>	30,000.00		30,000.00	-	-	-	-	30,000.00
29	0203-0200	<u>> Printing (over minimum)</u>	20,000.00		20,000.00	-	-	-	-	20,000.00
30	0203-9900	<u>> Other Reimbursable Costs</u>	100,000.00		100,000.00	9,903.84	1,200.00	8,703.84	-	90,096.16
31	0204-0200	<u>> Hazardous Materials</u>	100,000.00		100,000.00	-	-	-	-	100,000.00
32	0204-0300	<u>> Geotech & Geo-Env.</u>	85,000.00		85,000.00	9,570.00	4,290.00	5,280.00	-	75,430.00
33	0204-0400	<u>> Site Survey</u>	40,000.00		40,000.00	-	-	-	-	40,000.00
34	0204-0500	<u>> Wetlands</u>	40,000.00		40,000.00	-	-	-	-	40,000.00
35	0204-1200	<u>> Traffic Studies</u>	35,000.00		35,000.00	-	-	-	-	35,000.00
Architectural and Engineering Subtotal			\$ 7,696,042.00	\$ -	\$ 7,696,042.00	\$ 7,265,515.84	\$ 1,950,099.00	\$ 5,315,416.84	\$ -	\$ 430,526.16

Symmes Maini & McKee Associates, Inc. (SMMA) Northbridge School District Northbridge W. Edward Balmer Elementary School BUDGET SUMMARY			Original PS&B Budget 6/20/2018	Budget Revisions	Current Budget	Contract Amount	Expended	(B - C) Remaining Contract Amount	Additional Projected Amount	(A - B - E) Budget Balance
BUDGET TRACKING FORM as of: 4/30/2019										
CM @ Risk Preconstruction Services										
36	0501-0000	Pre-Construction Services	\$ 250,000.00		\$ 250,000.00	\$ 210,000.00	\$ 80,770.00	\$ 129,230.00	\$ -	\$ 40,000.00
	0502-0001	Construction Budget	\$ 79,492,662.00		\$ 79,492,662.00	\$ -	\$ -	\$ -	\$ -	\$ 79,492,662.00
89	CSI Code	CSI Description								
89	0502-0100	Division 1 - General Requirements			-	-	-	-	-	-
89	0502-0200	Division 2 - Existing Conditions			-	-	-	-	-	-
89	0502-0300	Division 3 - Concrete			-	-	-	-	-	-
89	0502-0400	Division 4 - Masonry			-	-	-	-	-	-
89	0502-0500	Division 5 - Metals			-	-	-	-	-	-
89	0502-0600	Division 6 - Wood, Plastics and Composites			-	-	-	-	-	-
89	0502-0700	Division 7 - Thermal & Moisture Protection			-	-	-	-	-	-
89	0502-0800	Division 8 - Openings			-	-	-	-	-	-
89	0502-0900	Division 9 - Finishes			-	-	-	-	-	-
89	0502-1000	Division 10 - Specialties			-	-	-	-	-	-
89	0502-1100	Division 11 - Equipment			-	-	-	-	-	-
89	0502-1200	Division 12 - Furnishings			-	-	-	-	-	-
89	0502-1400	Division 14 - Conveying Systems			-	-	-	-	-	-
89	0502-2100	Division 21 - Fire Suppression			-	-	-	-	-	-
89	0502-2200	Division 22 - Plumbing			-	-	-	-	-	-
89	0502-2300	Division 23 - HVAC			-	-	-	-	-	-
89	0502-2600	Division 26 - Electrical			-	-	-	-	-	-
89	0502-3100	Division 31 - Earthwork			-	-	-	-	-	-
89	0502-3200	Division 32 - Exterior Improvements			-	-	-	-	-	-
89	0502-3300	Division 33 - Utilities			-	-	-	-	-	-
89	0502-9900	Retainage			-	-	-	-	-	-
89	0508-0000	Change Orders		\$ -	-	-	-	-	-	-
89	Construction Budget Subtotal		\$ 79,492,662.00	\$ -	\$ 79,492,662.00	\$ -	\$ -	\$ -	\$ -	\$ 79,492,662.00
		Alternates								
90	0506-0000	Ineligible Work (Maint Bldg, Press Box, Concession and Restrooms)	-		-	-	-	-	-	-
90	0506-0000	Retainage for Alternates/Ineligible Work			-	-	-	-		
	Alternates Subtotal		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	0600-0000	Miscellaneous Project Costs								
94	0601-0000	Utility Company Fees	200,000.00		200,000.00	-	-	-	-	200,000.00
95	0602-0000	Testing Services	300,000.00		300,000.00	-	-	-	-	300,000.00
96	0603-0000	Swing Space / Modulares	-		-	-	-	-	-	-
97	0699-0000	Other Project Costs (Mailing & Moving)	200,000.00		200,000.00	-	-	-	-	200,000.00
	0600-0000	Miscellaneous Project Costs Subtotal	\$ 700,000.00	\$ -	\$ 700,000.00	\$ -	\$ -	\$ -	\$ -	\$ 700,000.00
	0700-0000	Furnishings and Equipment								
99	0701-0000	Furnishings	1,648,000.00		1,648,000.00	-	-	-	-	1,648,000.00
	0702-0000	Equipment								
101	0703-0000	Computer Equipment	1,854,000.00		1,854,000.00	-	-	-	-	1,854,000.00
	Furnishings and Equipment Subtotal		\$ 3,502,000.00	\$ -	\$ 3,502,000.00	\$ -	\$ -	\$ -	\$ -	\$ 3,502,000.00
103	0507-0000	Owner's Construction Contingency	3,974,633.00	-	3,974,633.00	-	-	-	-	3,974,633.00
104	0801-0000	Owners' (soft cost) Contingency	1,589,853.00		1,589,853.00	-	-	-	-	1,589,853.00
	Contingency Subtotal		\$ 5,564,486.00	\$ -	\$ 5,564,486.00	\$ -	\$ -	\$ -	\$ -	\$ 5,564,486.00
	Total Project Budget		\$ 100,968,194.00	\$ -	\$ 100,968,194.00	\$ 10,762,132.93	\$ 2,929,509.59	\$ 7,832,623.34	\$ -	\$ 90,206,061.07

W.E. BALMER ELEMENTARY SCHOOL
DESIGN DEVELOPMENT VALUE ENGINEERING WORKSHEET

UPDATED 4/30/2019

"ILO" = In Lieu Of

No.	ITEM	Fontaine Bros Value (\$)	SBC-ACCEPTED VE Items 4/2/19 & 4/24/19	SBC-DIRECTED ACTION - 4/2/19 & 4/24/19
	Alternates (not yet in order of preference)			
1	Add - SecureShades on all relevant exterior windows and interior borrowed lites (NET Value)	\$764,160		
2	Add - SecureShades on all relevant 1st Level exterior windows and all interior borrowed lites (NET Value)	\$534,160		
	Site / Civil			
C01	Delete west edge gravel wetlands, mono-pitch west entry drive to swale, change catch basin type	(\$285,450)	(\$285,450)	ACCEPTED
L#33	At north side of north access loop change Cape Cod Berm to sloped granite (+ADD)	\$36,006	\$36,006	ACCEPTED
	Landscape			
L01	Provide 4" sloped granite curbing ILO 5" vertical granite at non-sidewalk locations - 5,056 LF	(\$39,009)	(\$39,009)	ACCEPTED
L02	Provide Bituminous side walks ILO concrete at areas not within inner curb line - Vail Field walks	(\$56,736)	(\$56,736)	ACCEPTED
L03	Delete northwest corner segment of fence and retain (repair as needed) existing 8ft fence along west property line	(\$40,463)	(\$40,463)	ACCEPTED
	Structural - no items at this time			
	Architectural, Exterior Items:			
A01	Provide Utility sized brick ILO standard Modular sized brick on entire building.	(\$90,585)	(\$90,585)	ACCEPTED
A02	Optimize mechanical screen sizes - reduce LF by 20% (9,520 sf, 1,190 lf to 7,616 sf = 1,904 sf)	(\$104,720)	(\$104,720)	ACCEPTED
A03	South Elevation A-B Wings: Change cladding from HPL Panel to Brick - 1,123 SF \$29.84 SF	(\$33,507)	(\$33,507)	ACCEPTED
A04	North Elevation A-B Wings: Change CW glazing to HPL Panel system - 168 SF \$30.25 SF	(\$5,082)	(\$5,082)	ACCEPTED
A05	East & West Elevations A-B Wings: Change SF glazing to Brick cladding - 103 SF \$28.25 SF	(\$2,910)	(\$2,910)	ACCEPTED
A06	Provide Split Face CMU in lieu of Cast Stone Base, all elevations.	(\$76,500)		REJECTED
A07	ADD - Provide small, portable Roof Hoist at roof hatch curb			CONSIDER IN FUTURE FF&E BUDGET
A08	Delete specified exterior mock-ups and go with in-place ILO	(\$41,000)		REJECTED
	Architectural, Interior Items:			
A09	Provide swinging full-height fire doors [(2) pairs @ 4' w x 9' tall] ILO "Won-Door" sliding fire door (3 levels)	(\$66,932)		DW TO PROVIDE MAINTENANCE INFO
A11	Delete blackout shades from exterior windows - provide light-filtering fabric shades only	(\$22,100)		REJECTED
A12	ADD - Provide Hard Divider partition ILO fabric/mesh curtain as specified.sensor edge, STC 49	\$60,844		REJECTED
A13	Stair 5 - Reduce amount of fire-rated glazing/ economize design.	(\$56,635)		REJECTED
	Kitchen - no items at this time			
	Plumbing			
P01	Delete drinking fountains in PK ELA #1203A, Kinder ELA #1223A	(\$7,020)	(\$7,020)	ACCEPTED
	Mechanical - no items at this time			
	Electrical			
	Technology - no items at this time			
	Totals	(\$899,576)	(\$629,476)	



FONTAINE BROS., INC.

CONSTRUCTION MANAGERS
GENERAL CONTRACTORS

May 3, 2019

Sent via email

Care of Joel G. Seeley, SMMA, OPM
jseeley@smma.com

*For The Northbridge Building Committee,
W. Edward Balmer Elementary School
Northbridge Town Hall
7 Main Street
Whitinsville, MA 01588*

Early Release Package No.1: Sitework
Proposed Subcontractor List

Pursuant to Appendix C to the General Conditions, Article II, 'Other Subcontracts' of the Contract between Fontaine Bros., Inc. and the Town of Northbridge, Fontaine Bros, Inc. hereby requests approval of the following subcontractors (non-filed trade contractors) to provide bids through Fontaine Bros., Inc. on the following scope packages:

No.	Subcontractor / Vendor	Scope of Early Release Package No.1	MBE/WBE
1.	AF Amorello & Sons, Inc.	Sitework	
2.	Ernest Guigli & Sons, Inc.	Sitework	
3.	Gagliarducci Construction, Inc.	Sitework	
4.	Marois Bros. Inc.	Sitework	
5.	T&M Equipment	Sitework	WBE
6.	W.L. French Excavating Corporation	Sitework	
7.	AJ Welch – The Welch Corp	Sitework	
8.	J. Derenzo Company	Sitework	
9.	James W. Flett Co.	Sitework	
10.	DiGregorio, Inc.	Sitework	

November 26, 2018
Updated: April 2, 2019

New W. Edward Balmer Elementary School
Project Schedule

PROJECT MANAGEMENT

SMMA

ID	Task Name	Duration	Start	Finish	2014
1	MSBA PREREQUISITES	431 days	3/9/2015	11/9/2016	
4	RETAIN OPM	45 days	1/30/2017	4/3/2017	
10	RETAIN DESIGNER	80 days	3/8/2017	6/27/2017	
20	FEASIBILITY STUDY (FS)	161 days	6/27/2017	2/14/2018	
35	SCHEMATIC DESIGN (SD)	86 days	2/14/2018	6/13/2018	
42	PROJECT SCOPE AND BUDGET	139 days	5/23/2018	12/6/2018	
50	DESIGN DEVELOPMENT	119 days	11/8/2018	4/26/2019	
59	SITE PERMITTING	170 days	11/7/2018	7/8/2019	
89	BUILDING PERMITTING	102 days	6/18/2019	11/8/2019	
94	CONSTRUCTION DOCUMENTS	160 days	3/8/2019	10/21/2019	
95	Incorporate MSBA DD Comments	11 days	4/29/2019	5/13/2019	
96	Develop 60% Contract Documents to Estimator	30 days	4/8/2019	5/17/2019	
97	Early Site Enabling, and Preparation Package No. 1	51 days	3/8/2019	5/17/2019	
98	OPM and Cx Review	13 days	5/17/2019	6/4/2019	
99	60% Construction Documents Cost Estimate	13 days	5/17/2019	6/4/2019	
100	60% Construction Documents Submission to MSBA	0 days	6/18/2019	6/18/2019	6/18/2019
101	MSBA Review of 60% CD Submission	16 days	6/19/2019	7/11/2019	
102	Incorporate MSBA 60% CD Comments	11 days	7/10/2019	7/24/2019	
103	Develop 90% Contract Documents to Estimator	30 days	6/18/2019	7/30/2019	
104	Early Foundation and Structural Package No. 2	30 days	6/18/2019	7/30/2019	
105	Structural Peer Review of Early Foundation and Structural Package	16 days	7/30/2019	8/20/2019	
106	90% Construction Documents Cost Estimate	16 days	7/30/2019	8/20/2019	
107	90% Construction Documents Submission to MSBA	0 days	9/4/2019	9/4/2019	9/4/2019
108	MSBA Review of 90% CD Submission	16 days	9/4/2019	9/25/2019	
109	Incorporate MSBA 90% CD Comments	11 days	9/25/2019	10/9/2019	
110	Construction Documents Complete Package No. 3	0 days	10/9/2019	10/9/2019	10/9/2019
111	LEED-S Design Submission	9 days	10/9/2019	10/21/2019	
112	PROCUREMENT	514 days	12/6/2017	12/9/2019	
113	CM Selection	73 days	12/6/2017	3/21/2018	
120	Prequalification - Package No. 2 Trade Contractors	53 days	4/22/2019	7/3/2019	
121	Develop Draft RFQs	22 days	4/22/2019	5/21/2019	
122	Submit Advertisement to Central Register and Local Newspaper	0 days	5/21/2019	5/21/2019	5/21/2019
123	Notice in Central Register	0 days	5/29/2019	5/29/2019	5/29/2019
124	Submit SOQs	0 days	6/12/2019	6/12/2019	6/12/2019
125	Review SOQs	15 days	6/12/2019	7/2/2019	
126	Recommend Prequalified Trade Contractors to SBC	0 days	7/2/2019	7/2/2019	7/2/2019
127	Issue Notification Letters to Prequalified Trade Contractors	0 days	7/3/2019	7/3/2019	7/3/2019
128	Prequalification - Package No. 3 Trade Contractors	61 days	6/24/2019	9/18/2019	
129	Develop Draft RFQs	21 days	6/24/2019	7/23/2019	
130	Submit Advertisement to Central Register and Local Newspaper	0 days	7/23/2019	7/23/2019	7/23/2019
131	Notice in Central Register	0 days	7/31/2019	7/31/2019	7/31/2019
132	Submit SOQs	0 days	8/21/2019	8/21/2019	8/21/2019
133	Review SOQs	19 days	8/21/2019	9/17/2019	
134	Recommend Prequalified Trade Contractors to SBC	0 days	9/17/2019	9/17/2019	9/17/2019
135	Issue Notification Letters to Prequalified Trade Contractors	0 days	9/18/2019	9/18/2019	9/18/2019
136	Construction Documents Package No. 3	49 days	10/1/2019	12/9/2019	
137	Submit Advertisement to Central Register and Newspaper	0 days	10/1/2019	10/1/2019	10/1/2019
138	Notice in Central Register	0 days	10/9/2019	10/9/2019	10/9/2019
139	Bid Package Issued	23 days	10/9/2019	11/8/2019	
140	Pre-Bid Meeting	0 days	10/18/2019	10/18/2019	10/18/2019
141	Trade Contractor Bids Due	0 days	11/8/2019	11/8/2019	11/8/2019
142	CM Develop GMP	21 days	11/8/2019	12/9/2019	
143	GMP Approval	0 days	12/9/2019	12/9/2019	12/9/2019
144	EARLY PACKAGES PROCUREMENT	72 days	5/17/2019	8/28/2019	
153	CONSTRUCTION	736 days	6/11/2019	4/21/2022	

**SCHOOL BUILDING COMMITTEE
W. EDWARD BALMER ELEMENTARY SCHOOL**

Page 22 of 22

All meetings held at the
High School Media Center at 6:30 PM
unless otherwise noted

MEETINGS SCHEDULE AND AGENDAS

May 6, 2019

DATE	AGENDA
90% Construction Documents Phase	
July 2, 2019	BUILDING COMMITTEE MEETING
	Review Overall Construction Document Phase Schedule
	Review 90% Construction Document Schedule
	Review Design Refinements
	Approve Package 2 Trade Contractors
July 16, 2019	BUILDING COMMITTEE MEETING
	Review Design Refinements
	Review MSBA 60% Construction Documents Submission Comments
August 6, 2019	BUILDING COMMITTEE MEETING
	Review Design Refinements
August 27, 2019	BUILDING COMMITTEE MEETING
	Award Early Concrete and Steel
	Review Reconciled 90% Construction Documents Cost Estimate
	Decide Value Engineering Items
	Vote to Submit 90% Construction Documents Package to MSBA
September 4, 2019	SUBMIT 90% CONSTRUCTION DOCUMENTS PACKAGE TO MSBA
	ADDITIONAL MEETINGS TO BE SCHEDULED



Massachusetts School Building Authority

Deborah B. Goldberg
Chairman, State Treasurer

James A. MacDonald
Chief Executive Officer

John K. McCarthy
Executive Director / Deputy CEO

April 26, 2019

Ms. Alicia Cannon
Northbridge Board of Selectmen
Northbridge Town Hall
7 Main Street
Wittinsville, MA 01588

Re: Town of Northbridge, W. Edward Balmer Elementary School

Dear Ms. Cannon:

The Town of Northbridge (the "Town") provided the Massachusetts School Building Authority (the "MSBA") with a Design Development submission for the W. Edward Balmer Elementary School Project (the "Project") on April 5, 2019. In response, the MSBA is providing the Town with its review comments. It is the MSBA's understanding that the Town has proceeded into the Design Development phase for the Project despite the MSBA and the Town not executing a Project Funding Agreement (a "PFA"). In doing so, please be advised that the Town is proceeding at its own risk; without a PFA, the MSBA will not be able to reimburse the Town for otherwise eligible costs that it may incur in the Design Development phase or any later phases.

Neither the MSBA's receipt of the Design Development submission nor the MSBA's transmittal of review comments to the Town shall be construed as an approval or endorsement of the Town's decision to proceed into the Design Development phase without a PFA. The MSBA's comments solely reflect the MSBA's review of the Design Development documents submitted by the Town. The same shall apply to any additional documents submitted to the MSBA and to any comments provided by the MSBA without a PFA.

Responses to the attached comments shall be forwarded to Brian Lynch (Brian.Lynch@MassSchoolBuildings.org) through the Owner's Project Manager. Please review and return responses within 14 days of receipt of this letter.

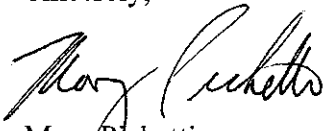
If you have any questions or comments, please do not hesitate to contact Kevin Sullivan (Kevin.Sullivan@MassSchoolBuildings.org).

Page 2

April 26, 2019

Northbridge Design Development Submission Review Comments

Sincerely,

A handwritten signature in black ink, appearing to read "Mary Pichetti". The signature is fluid and cursive, with the first name "Mary" written in a larger, more prominent script than the last name "Pichetti".

Mary Pichetti

Director of Capital Planning

Attachment: Design Development Submission Review Comments

Cc: Legislative Delegation

Adam Gaudette, Northbridge Town Manager

Michael LeBrasseur, Chair, Northbridge School Committee

Amy McKinstry, Interim Superintendent, Northbridge Public Schools

Melissa Walker, Director of Business and Finance, Northbridge Public Schools

Josepha Strazzula, Chair, Northbridge School Building Committee

Joel G. Seeley, Owner's Project Manager, Symmes Maini & McKee Associates, Inc.

Lee P. Dore, Designer, Dore & Whitter Architects, Inc.

File: 10.2 Letters (Region 2)

APPENDIX 6A MODULE 6 – DESIGN DEVELOPMENT REVIEW COMMENTS

District: Town of Northbridge

School: W. Edward Balmer Elementary School

Owner's Project Manager: SMMA Project Management

Designer Firm: Dore & Whittier Architects, Inc.

Submittal Received Date: April 5, 2019

Review Date: April 24, 2019

Reviewed by: Gienapp Design, C. Forde, K. Sullivan, R. Hudson

MSBA REVIEW COMMENTS

The following comments¹ on the Design Development submittal are issued pursuant to a review of the project submittal document for the new construction of the proposed project and presented as a Design Development submission in accordance with the MSBA Module 6 Guidelines.

6A.1 Summary Comments:

- Basic Project Information:
 - *Enrollment: Grades K-5 with an enrollment of 1,030 students, plus Pre-K (90 students).*
 - *PFA GSF: 167,352*
 - *Project Type: New construction*
 - *Construction Delivery Method: Construction Manager at Risk (Fontaine Brothers, Inc.)*
- Comments here:
 - *The total project budget per the PFA is \$100,968,194, and the information provided confirms it is still on budget.*
 - *The construction cost estimates are \$81,754,942 (CMR's estimate by Fontaine Bros., Inc.) and \$77,467,908 (Designer's estimate by PM&C).*
 - *The construction budget per the PFA is \$79,492,663, and the information provided confirms that the reconciled construction cost of \$79,480,442 is still within budget.*

¹ The written comments provided by the MSBA are solely for purposes of determining whether the submittal documents, analysis process, proposed planning concept and any other design documents submitted for MSBA review appear consistent with the MSBA's guidelines and requirements, and are not for the purpose of determining whether the proposed design and its process may meet any legal requirements imposed by federal, state or local law, including, but not limited to, zoning ordinances and by-laws, environmental regulations, building codes, sanitary codes, safety codes and public procurement laws or for the purpose of determining whether the proposed design and process meet any applicable professional standard of care or any other standard of care. Project designers are obligated to implement detailed planning and technical review procedures to effect coordination of design criteria, buildability, and technical adequacy of project concepts. Each city, town and regional school district shall be solely responsible for ensuring that its project development concepts comply with all applicable provisions of federal, state, and local law. The MSBA recommends that each city, town and regional school district have its legal counsel review its development process and subsequent bid documents to ensure that it is in compliance with all provisions of federal, state and local law, prior to bidding. The MSBA shall not be responsible for any legal fees or costs of any kind that may be incurred by a city, town or regional school district in relation to MSBA requirements or the preparation and review of the project's planning process or plans and specifications.

6A.2 OPM Deliverables: *Unless specifically stated otherwise, the OPM deliverables are included in the submission with no response from MSBA required.*

6A.2.1 Submittal Review & Coordination:

- Review designer submissions; make recommendations to Owner. Address each of the following items individually, and describe how each was evaluated.
- Coordinate design; include written recommendations to the Owner.
 - Technical accuracy, coordination & clarity. *The OPM comments on the technical accuracy and somewhat on coordination,*
 - *but does not appear to comment on the clarity of the design. With the response to these comments, indicate if this has been coordinated.*
 - Efficiency & cost effectiveness.
 - Operability.
 - Constructability.
 - Phasing.
 - Bid-ability.
 - Site access during construction.
- Coordinate the commissioning consultant's (Cx) review.
 - Include Cx review & District response. *The information provided includes the Cx review, however, the District's response is not provided. In response to these comments, provide the District's response to the Cx review.*
 - Incorporate Cx recommendations. *Please confirm the Cx recommendations will be incorporated in future submissions in response to these comments.*
- Coordinate the District response to MSBA comments of previous submittal.
 - Include MSBA review & District response.

6A.2.2 Project Schedule: All schedules should be presented in calendar days.

Update project schedule: As a minimum, the schedule update should provide the same level of detail as was included in Exhibit C of the Project Funding Agreement, expanded and updated to include milestones for Design Development, Bidding, Construction, and Closeout. The updated schedule should include proposed critical path and construction milestone information. In addition to the construction milestones, the schedule must also include the following information as listed in MSBA Module 7, Schedule Activities:

- Punch list start and end dates.
- Date of Project Registration with the US Green Building Council ("USGBC") or Collaboration for High Performance Schools ("CHPS").
- Provisional/Design package submittal date to USGBC or CHPS.
- Submittal date of 50% DCAMM Notification and 100% DCAMM Notification.
- General Contractor/Construction Manager request for final payment

- Commissioning Consultant inspection (substantial completion plus approximately 10 months).
- Submittal date of Final Commissioning Report to MSBA.
- Submittal date of Final Construction package including but not limited to Final Commissioning Report to USGBC or CHPS.
- Anticipated issuance date of final Green School Program Certification letter from USGBC or CHPS.
- Submittal date to MSBA of Commissioning Certificate of Completion.
- Submittal date to MSBA of final reimbursement request.
- Indicate submission dates for the following approvals. In addition, provide dates for any other state or federal approval not listed below (the following list is not a comprehensive itemization of required state approvals; other requirements may apply, and some of the items listed below may not be applicable to this project). **Indicate “Not Applicable”** where appropriate:
 - DESE – Special Education approval by Department of Elementary and Secondary Education.
 - MHC – Project Notification Form and approvals by MA Historical Commission.
 - OIG – Construction Manager at Risk approval by the Office of Inspector General.
 - Executive Office of Energy and Environmental Affairs / EEA:
 - MEPA – MA Environmental Policy Act by Energy & Environmental Affairs:
 - ENF – Environmental Notification Form. *The information provided indicates an ENF is not applicable for this project. Please confirm in response to these review comments.*
 - EIR – Environmental Impact Report. *The information provided indicates an EIR is not applicable for this project. Please confirm in response to these review comments.*
 - Article 97 Land Disposition Policy approval by Energy & Environmental Affairs. *The information provided indicates an Article 97 Land Disposition Policy approval by Energy & Environmental Affairs is not applicable for this project. Please confirm in response to these review comments.*
 - MA DEP – Massachusetts Department of Environmental Protection. *The information provided indicates MA DEP approval is not applicable for this project. Please confirm in response to these review comments.*
 - MA DOT – Massachusetts Department of Transportation. *The information provided indicates MA DOT approval is not applicable for this project. Please confirm in response to these review comments.*

- MA DPH – Massachusetts Department of Public Health. *The information provided indicates MA DPH approval is not applicable for this project. Please confirm in response to these review comments.*
- EPA – NPDES National Pollutant Discharge Elimination System Notice of Intent approval by the US Environmental Protection Agency. *The information provided indicates EPA – NPDES approval will be performed at the commencement of construction. Please confirm in response to these review comments, and indicate the responsible party for obtaining this approval.*
- MAAB – Accessibility variances by MA Architectural Access Board. *The information provided indicates accessibility variances by MAAB are not applicable for this project. Please confirm in response to these review comments.*
- Indicate all required state reviews or permits on the milestone schedule including actual or planned dates of approval which are required in order to maintain the planned bidding and construction schedule and milestones indicated therein. For required state reviews or permits which have not been obtained on schedule, provide a separate (subnetwork) schedule depicting recovery actions to obtain required approvals in order to maintain the bidding and construction schedule.
- The schedule is to be updated and submitted to MSBA with each OPM monthly report and as often as is required to reflect any changes, including any changes to milestone dates, but must be submitted with each design submittal (DD, 60% CD, 90% CD). The schedule shall reflect any variances in the updated schedule relative to the baseline project schedule included with the Project Scope and Budget Agreement.
- Indicate the date for submission to MSBA of the Design Development, and proposed dates for submission of the 60% and 90% Construction Documents submittals. The schedule is to incorporate 21 calendar day required duration for MSBA review of each submission, and a minimum of 14 calendar days for project team incorporation of MSBA review comments as well as all others into the project documents prior to the due date of the next submission or finalizing project documents for bidding. 35 calendar days for each submission is the minimum acceptable duration; if the project team believes additional time is required for any or all of the submissions the durations for these activities are to be increased accordingly.

6A.2.3 Scope and Budget

- Develop project scope and budget:
 - Reconciled construction cost estimate including Designer/OPM comparison chart:
 - Prepare independent construction cost estimates pursuant to Section 8.1.2.2 of the Contract for Project Management Services, with escalation to the mid-point of construction, for

comparison with the Designer's cost estimate, based upon design development progress documents. *An independent construction cost estimate by the CMR, Fontaine Bros., Inc., is included in the submission for comparison with the Designer's estimate.*

- CMR (if applicable).
 - If Owner has not yet contracted with a Construction Manager (CM), the OPM must develop a construction cost estimate for comparison with **the Designer's cost estimate**.
 - If the Owner has given the CM a Notice to Proceed, the OPM must review cost estimates provided by the Designer and CM and provide a detailed line by line reconciliation of the **Designer's and CM's** construction cost estimates. *Also refer to other comments under 6A.1 above.*
- Updated project budget in the total project budget format, based on the reconciled construction cost estimate. If the reconciled estimate is not used for the updated project budget, provide an explanation. *In future submissions, use the MSBA's Total Project Budget form and the reconciled construction estimate. Please acknowledge and confirm as part of the response to these review comments.*
- Value Engineering recommendations.
 - For any Value Engineering recommendations which have been accepted, provide a copy of the Committee vote. *In response to these comments, include an updated list of Value Engineering items along with a copy of the Committee vote associated with any Value Engineering recommendations that have been accepted.*

6A.3 Designer Deliverable: *Unless specifically stated otherwise, the Designer deliverables are included in the submission with no response from MSBA required.*

6A.3.1 General Requirements

- Submit updated work plan. *In response to these comments, please confirm that the work plan and overall project schedule have been coordinated.*
- Basis of Design narrative description for all disciplines.
- Building code analysis.
- 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. *The information provided indicates that the proprietary items will be voted on in April 2019. Provide a certified copy of the vote in the next submission. Please acknowledge and confirm as part of the response to these review comments.*

- An interior color theory statement describing proposed paint and material selections and colors for typical and special spaces, why they have been selected and how these selections relate to exterior materials and colors. Confirm that color and material selections have been presented to and approved by the District.
- Confirmation of project registration with CHPS or USGBC.
- Structural narrative including methods of lateral bracing and how requirements of earthquake code will be met.
- Structural calculations and required floor loads.
- Energy calculations.
- Life Cycle cost analysis for energy and water consuming devices.
- Heat gain and loss calculations for Heating, Ventilating and Air Conditioning systems.
- Calculations showing total electrical load.
- Security and visual access requirements:
 - Confirmation that the persons responsible for implementation of the **District's emergency procedures**, and responding emergency medical, fire protection, and police agency representatives have been consulted in the planning process and any associated requirements have been included in the project.
 - Identification of any other security related items particular to the District and/or the proposed project.
 - Verification that the following safety and security related issues have been reviewed and are in accordance with the **District's procedures** as noted above:
 - Main entrance design – describe District protocol for visitor entry and check-in related to the current design for visitors to remain in the vestibule versus a side sub-vestibule.
 - Classroom lockset hardware - confirm hardware functions are compatible with the **District's** protocols related to lockdown.
 - Classroom / Instructional spaces visibility - confirm that the inclusion of sidelights at entrance locations is compatible with the **District's current standards related** to visibility from corridors and whether any related vision control option measures are to be incorporated.
 - Alternative entry locations - confirm project includes site and **building signage, as may be required by District's** emergency procedures, to identify locations where first responders may more directly reach a person needing medical attention; Knox Boxes; and provisions for building plans to be delivered to local fire and response agencies.

- Quality Control documents demonstrating:
 - Ceiling clearances.
 - Mechanical room and shaft sizes.
 - Coordinate specifications and drawings.
 - Filed sub-bid work.
 - Scheduling.
 - Equipment and power.
 - Existing and new construction. *Not provided. Please include as part of the next submission.*
 - Phasing. *Not provided. Please include as part of the next submission.*

6A.3.2 Space Summary

- Updated space summary and signed certification that reflects the current design. *Based on the space summary provided, the MSBA notes the following:*

<u>Spaces</u>	<u>PFA Space Summary</u>	<u>DD Space Summary</u>	<u>60% CD Space Summary</u>	<u>90% CD Space Summary</u>	<u>Difference to PFA</u>	<u>Comments</u>
Core Academic Spaces	62,850	62,850			-	This category has not changed since the PFA.
Special Education	13,530	13,530			-	This category has not changed since the PFA.
Art and Music	5,150	5,150			-	This category has not changed since the PFA.
Health & Physical Education	6,298	6,298			-	This category has not changed since the PFA.
Media Center	5,305	5,305			-	This category has not changed since the PFA.
Dining and Food Service	11,955	11,955			-	This category has not changed since the PFA.
Medical	810	810			-	This category has not changed since the PFA.
Administration & Guidance	3,040	3,040			-	This category has not changed since the PFA.
Custodial & Maintenance	2,630	2,630			-	This category has not changed since the PFA.
Total Building Net	111,568	111,568			-	This category has not changed since the PFA.
Non-Programmed Spaces						
IT Office/Repair	150	150			-	This category has not changed since the PFA.
Unoccupied MEP/FP Spaces	2,125	2,008			(117)	This category has decreased by 117 nsf since the PFA.
Unoccupied Closets, Supply Rooms & Storage Rooms	641	646			5	This category has increased by 5 nsf since the PFA.
Toilet Rooms	3,955	3,937			(18)	This category has decreased by 18 nsf

						since the PFA.
Circulation (corridors, stairs, ramps, & elevators)	29,396	31,893			2,497	This category has increased by 2,497 nsf since the PFA.
Remaining	19,517	17,150			(2,367)	This category has decreased by 2,367 nsf since the PFA.
Total Building Gross	167,352	167,352			-	This category has not changed since the PFA.
Grossing Factor	1.50	1.50			-	This category has not changed since the PFA.

- Comparison of the current design with the final educational program, and confirmation that there are no variations. If there are variations, the written summary must address the following:
 - Explanation of deviations within the space summary from the Project Funding Agreement.
 - *The submission does not note any deviation other than to the Non-Programmed spaces (see 6A.3.2 above). MSBA accepts this variation to the approved project with no further action required.*
 - The MSBA considers that deviations include changes in the size of a specific space, the total nsf of a program area (e.g. general classrooms, voc tech, dining etc.), the location of a space, the surrounding adjacencies of a space and or the intended purpose of the room.
 - The submittal must clearly call out deviations to location and surrounding adjacencies through the use of redlines or “clouding.”
 - The explanation should clearly identify the basis of the change identifying both architectural and/or programmatic reasons.
 - If the basis of the change is programmatic, the submittal should include a red-lined version of the educational plan included in the Project Funding Agreement.
 - Regarding DESE approved SPED spaces; *The submission indicates there are no variations in the Special Education areas.*
 - If the District wishes to submit a change to its DESE approved submittal, it must a) confirm that all changes to SPED spaces are final; b) provide a new submittal utilizing the format of the original submittal requirements and clearly noting any changes through use of clouded floor plans and red-lined narratives and tables; and c) indicate how the project schedule can accommodate a potential resubmittal and approval by DESE. Please provide a separate package for changes to DESE approved SPED spaces. *See comment above.*
 - If the District chooses not to change from the DESE approved submittal it should confirm that the spaces are the same or explain when and how the spaces will be returned to the

approved size, configuration and location. *See comment above.*

- Regarding DESE approved Public Day Education spaces;
 - If the District wishes to submit a change to its DESE approved submittal, it must a) confirm that all changes to Public Day Education spaces are final; b) provide a new submittal utilizing the format of the original submittal requirements and clearly noting any changes through use of clouded floor plans and red-lined narratives and tables; and c) indicate how the project schedule can accommodate a potential resubmittal and approval by DESE. Please provide a separate package for changes to Public Day Education Spaces. *Not applicable.*
 - If the District chooses not to change from the DESE approved submittal it should confirm that the spaces are the same or explain when and how the spaces will be returned to the approved size, configuration and location. *Not applicable.*
- Regarding DESE pre-approved Chapter 74 Program spaces;
 - If the District wishes to submit a change to its DESE approved submittal, it must a) confirm that all changes to Chapter 74 Program spaces are final; b) provide a new submittal utilizing the format of the original submittal requirements and clearly noting any changes through use of clouded floor plans and red-lined narratives and tables; and c) indicate how the project schedule can accommodate a potential resubmittal and approval by DESE. Please provide a separate package for changes to the Chapter 74 Programming. *Not applicable.*
 - If the District chooses not to change from the DESE approved submittal it should confirm that the spaces are the same or explain when and how the spaces will be returned to the approved size, configuration and location. *Not applicable.*

6A.3.3 Project Approvals

- Describe the status of the following approvals. In addition, provide the status of any other state or federal approval not listed below (the following list is not a comprehensive itemization of required state approvals; other requirements may apply, and some of the items listed below may not be applicable to this project). Provide a copy of the appropriate application forms and/or approval letters where applicable. **Indicate "Not Applicable"** where appropriate. For each agency approval required for this project, indicate the date when approval was received. All required approvals should have an associated approval date indicated as part of the 90% CD submission and prior to advertising for bids.
 - DESE - Special Education approval by Department of Elementary and Secondary Education.
 - MHC – Project Notification Form and approvals by MA Historical Commission. *Approval letter from MHC received prior to Design Development submittal.*

- OIG - Construction Manager at Risk approval by the Office of Inspector General.
- Executive Office of Energy and Environmental Affairs / EEA:
 - MEPA - MA Environmental Policy Act by Energy & Environmental Affairs:
 - ENF - Environmental Notification Form. *The submission indicates this is not applicable. Please confirm as part of the response to these review comments.*
 - EIR - Environmental Impact Report. *The submission indicates this is not applicable. Please confirm as part of the response to these review comments.*
 - Article 97 Land Disposition Policy approval by Energy & Environmental Affairs. *The submission indicates this is not applicable. Please confirm as part of the response to these review comments.*
- MA DEP - Massachusetts Department of Environmental Protection. *The submission indicates this is not applicable. Please confirm as part of the response to these review comments.*
- MA DOT - Massachusetts Department of Transportation. *The submission indicates this is not applicable. Please confirm as part of the response to these review comments.*
- MA DPH - Massachusetts Department of Public Health. *The submission indicates this is not applicable. Please confirm as part of the response to these review comments.*
- EPA –NPDES National Pollutant Discharge Elimination System Notice of Intent approval by the US Environmental Protection Agency.
- MAAB - Accessibility variances by MA Architectural Access Board. *The submission indicates this is not applicable. Please confirm as part of the response to these review comments.*
- Confirmation that the Project has undergone review and obtained all necessary approvals by any departments or agencies of the Commonwealth required by law to review the Project, including but not limited to the approvals listed above. Attach such letter of documentation evidencing such reviews and approvals. In accordance with Section 4.12 of the Project **Funding Agreement (the "PFA"), the District must obtain such** reviews or approvals prior to the solicitation of construction bids.
- For any required state reviews or permits for which approval has not been obtained as of the Design Development submission date, provide a status update including actions taken to date and actions planned to obtain the required state reviews and permit approval(s) in order to comply with PFA Section 4.12 and maintain the projected schedule milestones listed in OPM Deliverables.
- List and target dates for all local zoning approvals, testing and permits.
- Provide a certification that all applicable utility officials have been contacted by the designer regarding each basic design, and utility connections. *The*

information provided indicates that gas and electric utilities have been contacted. In response to these review comments, please provide a narrative that indicates if and what other utilities have been contacted.

6A.3.4 Cost Estimates

- Construction cost estimate using the Uniformat II Classification to Level 3, Showing unit rates and quantities; projected to mid-point of construction AND:
- Construction cost estimate using the CSI MasterFormat 6-digit format to Level 3 and MGL c.149 s 44F (filed sub-bid) format. Showing unit rates and quantities; projected to mid-point of construction. *In response to these comments, please indicate if the Designer's cost estimate is escalated to the mid-point of construction. The information provided indicates the Designer's cost estimate is based on documents dated February 22, 2019. However, the documents included with this submission are dated April 5, 2019. Please indicate if there are any changes between the two sets in response to these comments. Also refer to other comments regarding the costs estimates under 6A.2.3 above.*

6A.3.5 Drawings (developed to Design Development progress level)

- Cover sheet showing a list of all drawings, symbols, abbreviations, notes, locations map (the project title should be visible when the drawings are rolled). *In future submissions include a cover sheet showing a list of all drawings, symbols, abbreviations, notes, locations map. Please acknowledge and confirm as part of the response to these review comments.*
- Site and utility drawings showing the following:
 - Existing and proposed contours and locations of the proposed building or addition(s). Show entry level elevations and key exterior grades at perimeter showing drainage away from the building. Indicate all retaining walls. Include benchmarks of site if survey is available. *No floor elevations are included. Please include them in the next submission.*
 - All utilities existing and proposed, indicating location, elevation, composition and size e.g., gas and electric utility providers.
 - Roads, laid out parking areas, walks, recreation areas, terraces and other site improvements.
 - Building locations fixed and referenced from main survey baseline, if available.
 - Plant materials with preliminary schedule.
- Architectural drawings showing the following:
 - Demolition drawings and temporary work required. *No architectural demolition drawings are included in the architectural drawings, and should be included in the next submission.*
 - Floor plans (minimum 1/8" = 1'0").
 - Key plans / overall plans where required.
 - Building perimeter with exterior wall thicknesses and overall dimensions.

- Structural grid.
- Plan requirements of mechanical and electrical systems.
- Building core; elevators, stairs, shafts, public toilets, with dimensions.
- Internal partitions; appropriate thicknesses and dimensions to fix basic organizations; indicate fire rated partitions and smoke partitions.
- Door swings.
- Finish floor elevations coordinated with exterior grade elevations at all interior exterior transitions. *No floor elevations are included in the architectural plans. Please include them in the next submission.*
- Built-in furniture and equipment.
- Furniture layout concept drawings.
- Modular **4", 8", or 1' unit modular dimensions** on Masonry.
- Large scale plans showing key areas e.g. lobby, special spaces. Indicate floor surface materials. (minimum scale 1/4" = 1'0").
- Roof plans showing the following:
 - Proposed systems type.
 - Pitch and drainage pattern.
 - Roof drain, gutters and scuppers.
 - Skylights, stair halls through roof, penthouses, major equipment, chimneys.
- Building sections - One transverse and one longitudinal section. Indicate floor to ceiling heights and floor-to-floor heights. Label all spaces.
- Building sections updated and coordinated with plans and elevations.
- Building elevations showing the following:
 - Full height elevations including roof structures, e.g., mechanical equipment, chimneys, and penthouses.
 - Floor elevations, floor-to-floor height, and overall height related to benchmarks on site plans.
 - Windows, storefront & curtain wall systems.
 - All columns located on a centerline and coordinated with the structural drawings.
 - Materials indicating major control and expansion joints, and divisions of materials where required. *Control and expansion joints are not shown on the elevations. Please include them in the next submission.*
 - Louver locations coordinated between building elevations, floor plans, mechanical equipment, project manual etc. *There are no louvers on the outside wall of the boiler room. Please verify that air supply to the boiler room is addressed in the next submission.*
 - Exterior grades and topographical features in context. *Exterior grades are not included in the elevations. Please include them in the next submission.*
- Full height wall sections for main elevations and at special conditions. Show foundation and perimeter treatment, wall construction including insulation and supporting structure, fenestration and mechanical penetrations, and floor construction.

- Interior elevations: Show at all spaces, e.g. library, lobby, and all typical spaces, e.g. classroom.
- Reflected ceiling plans: Show prototypical structural, fire protection, mechanical and electrical information for classrooms and major spaces, including lighting layouts with ceiling height and material changes.
- Schedules:
 - Finish schedule by room types.
 - Door schedule by room types.
 - Window schedule.
 - Equipment schedules; e.g., food service, instructional media.
- Structural Concepts:
 - Framing plans; typical floor framing, roof framing, special framing, show framing at major openings and sizes of members.
 - Foundation plan showing sizes and locations of typical components.
 - All columns and beams are identified and listed in the column and beam schedule.
 - Preliminary details including floor and roof deck.
 - Details for special and/or incidental structural features; e.g. tunnels, connecting bridges and unique architectural features.
 - Connection to existing buildings at foundation and at key points at existing structure if applicable.
 - All construction joint and expansion joint locations coordinated with structural drawings. *No construction or expansion joints are included in the structural plans. Please include them in the next submission.*
- Fire protection; floor plans indicating wet or dry type systems, hose racks, or cabinets and fire department tie-ins. Indicate a fire pump where required. Show typical sprinkler head layout.
- Plumbing and sanitary systems; floor plans indicating locations of all plumbing fixtures and special features, and approximate location and size of all piping systems and principal items of equipment.
- Heating, Ventilating and Air Conditioning Systems:
 - Show locations and approximate sizes of piping systems, air handling systems and principal items of equipment such as compressors or cooling towers.
 - Indicate space requirements of major equipments and their location in mechanical rooms and fan rooms. Indicate shaft requirements.
 - Adequate ceiling heights exist at worst-case duct intersection.
 - Ceiling diffusers/registers match mechanical drawings, including all soffit and vent locations.
- Electrical Systems:
 - All services including those for special purposes shall be located and indicated.
 - Light fixtures on electrical drawings match reflected ceiling plans.
 - Switchgear and emergency generator.

- Electrical equipment locations are coordinated with site paving and grading. *The generator pad does not appear to be coordinated. Please include in the next submission.*
- All motorized equipment is coordinated with electrical drawings.
- All power equipment has electrical connections.
- Fire alarm system drawings showing all initiation and signaling devices, control panels, annunciator panels, etc.
- Security system drawings.
- Communications drawings showing chases, major equipment locations and any special distribution requirements.

6A.3.5.1 Project Coordination

- The structural, mechanical, or other disciplines, do not conflict with architectural plans or specifications.
- Structural dimensions match Architectural drawings.
- Column orientation matches Architectural drawings.
- Column grid lines match Architectural drawings.
- Column and bearing wall locations match Architectural drawings.
- Column locations coordinated with all other disciplines.
- Seismic detailing coordinates with Architectural drawings. *On sheet S4.01 Brace frame elevation BF-6 there is a conflict between the steel bracing and vertical ducts in a shaft. On sheet S4.02 Brace frame elevations BF-2, BF-3, and BF-7 there are missing doors that may conflict with the brace framing. On sheet S4.03 Brace frame elevations BF-7, BF-8, BF-9, and BF-10 are not coordinated with the architectural plans. There may be other steel coordination issues; please review all locations and address in the next submission.*
- Beams and columns protruding horizontally and vertically into stairwells, and other interior spaces. *None found. Please continue to review all locations for conflicts and coordinate structural and architectural in the next submission.*
- The finish grade elevations coordinated between all disciplines. *The finish grades are not coordinated with the other disciplines. The floor grades are not coordinated with the finish grades. Please coordinate them in the next submission.*
- Mechanical equipment power requirements and physical locations, including special information as to who mounts, connects, tests, etc.
- Verification of potential spatial conflicts in mechanical equipment.
- Room wall/floor/ceiling construction coordinated with the finish schedule.
- Civil earthwork grading and excavation plans are coordinated with architectural and landscape plans. *There are no floor elevations in the architectural or the landscape plans. Please include them in the next submission.*
- All room numbers are coordinated between all disciplines.
- Equipment plan coordinates with architectural plans.

- All kitchen equipment connected to utility systems. *The connections to water, sanitary and gas are not shown on the plumbing plans. Please include them in the next submission.*

6A.3.6 Project Manual (developed to Design Development progress level)

- Geotechnical report, including locations and dates of test boring holes and results of soil investigation, including water levels, allowable solid bearing pressure and bottom grades of footing and slabs.
- Outline Specifications in the current version of CSI Master spec divisions including: *The submitted specification is a 3-part CSI specification rather than an outline specification as required, refer to section 7.6.6 of the Designer agreement. Consequently, some of the comments below are related to the full specification, as presented, and may address a level of detail beyond what is normally considered design development topics. Consequently, the presentation of information does not correlate to the outline below.*
 - Site work: clearing, drives, walks, parking areas, fences, excavation, backfill, planting, footings on earth, rock, piles, caissons, proposed bearing pressures, boring logs.
 - Foundation walls; type of concrete, reinforcing, type and extent of waterproofing.
 - Footing drains; type, disposal of drainage.
 - Exterior walls: superstructure, type, materials, brick type, alternate cladding, back-up materials, damp proofing material and extent, special features. *Section 04 20 00 Unit Masonry, there are brick types or colors that are listed as "to be determined." This information should be updated for the next submission.*
 - Roofs; type, vapor barrier, insulation, flashings, all materials.
 - Flashings; general types, all materials, weights, where each type is to be used.
 - Sheet metal; gutters, leaders, others uses, except flashing.
 - Windows; general types, materials, sub-frames, finish, glazing, screens. *It is not clear if all window types shown on the drawings are included in the specifications. For example, as drawn, type W6 looks like it is a double hung window, but no double hung window is included in the specification. Review and coordinate this information in future submissions. Please acknowledge and confirm as part of the response to these review comments.*
 - Rough openings for all doors and windows coordinated. *Rough openings for windows are not included in the project manual. Also, rough openings for doors are not included in the project manual and states "refer to door and frame schedule on the drawings"; however, the door schedule on the drawings does not specify rough openings. Consider including and coordinating this information in the next submission.*
 - Doors, exterior and interior; types and thicknesses and fire rating identified if applicable.
 - Steps, exterior; including platforms and landings' materials.

- Stairs, interior; including platforms, landings, walls, materials and finishes.
- Framing; wood, concrete or metal systems in accordance with general design. *Metal stud gauge is not specified in the project manual, which states, "Utilized stud sizes indicated in Drawings whenever possible and adjust gage [sic] to meet loading requirements." However, the submission does not include information regarding gauge and loading requirement. Please include more information for clarity and to ensure sufficient gauges in the next submission.*
- Partitions; materials, thicknesses, finishes. *Partition thicknesses are not specified in the project manual; however, it can be calculated based on the information on the drawings. Please include overall partition thickness for clarity in the next submission.*
- Cabinet and casework; types and materials.
- Food Service Equipment; list of equipment to be provided.
- Furring; lathing, plastering, materials and locations.
- Insulation thermal; types, thicknesses, methods of application and locations.
- Acoustical treatments; types, thicknesses, methods of application and locations.
- Interior finishes; materials for floors, walls, bases, wainscots, trim, ceilings, ceiling heights.
- Fire protection; standpipe systems, sprinkler systems, fire pumps and accessories. *It is not clear if a fire pump is needed, and one is not included in Part 2 of the Plumbing Section of the Project Manual. However, one is listed both under "shop drawing checklist" and "coordination drawings list" of the Plumbing Section of the Project Manual, and there is a reference to a fire pump on the Electrical Site Details sheet (E0.05). This should be reviewed and corrected as appropriate in the next submission. In response to these comments, confirm if a fire pump is required as part of this project.*
- Water supply; source; location of main to which connection will be made; type of pipe for service main; load requirements; load factors and pressures.
- Sanitary sewers; sewage disposal system, pipe and other materials.
- Storm sewers; storm drainage disposal system (institution or local facility), pipe and other materials.
- Gas main; material, size, location. Interface with utility company.
- Plumbing; systems such as wastes, vents, hot water, cold water, gas, air, oxygen, vacuum, main source of supply, materials for each, water heaters, pumps, thermal insulation fixture quality, all special features.
- Heating, ventilating and air conditioning; type of heating and refrigeration plants, type and capacity of boilers and cooling equipment, fuel, type of burners, fuel storage, heaters, feed water pumps and heaters, thermal insulation, type of heating medium, supply and return piping, radiation, unit heaters, radiant heating, principal air conditioning equipment types, special features, supply, return and exhaust ductwork.

- Electric work; service connection, location, institution or public utility, overhead or underground, transformers including type and location, types of conduit and wiring, types of fixtures, location of main switchboard, radio, fire alarm, telephone, public address, emergency lighting and wiring, emergency or other generators, special features, including Master TV, information retrieval and/or data processing system. *Electric service connection is indicated on drawings; however it is not included in the Project Manual. Please include in updated Project Manual in the next submission.*
- Elevators, dumbwaiters and platform lifts; capacities, speed, travel in feet, landings, operation, controls, platform sizes, machine type and location, car and entrance finishes, signals.
- Other built-in equipment, types and materials.
- **All "Work by others"** specifications coordinated. *Not all "work by others" appears to be coordinated. For example, Section 04 20 00 Unit Masonry states that Section 05 50 00 will furnish the following – "elevator hoistway safety beam"; however, Section 05 50 00 does not comment on this. All "Work by others" throughout the project manual should be reviewed, coordinated, and included in the next submission. Please acknowledge.*
- The sub-contractor identified for the installation of all equipment supports and anchors for walls, floor and ceilings.
- Special features.

Massachusetts School Building Authority

Deborah B. Goldberg
Chairman, State Treasurer

James A. MacDonald
Chief Executive Officer

John K. McCarthy
Executive Director / Deputy CEO

April 30, 2019

Ms. Alicia Cannon
Northbridge Board of Selectmen
Northbridge Town Hall
7 Main Street
Wittinsville, MA 01588

Re: Town of Northbridge, W. Edward Balmer Elementary School

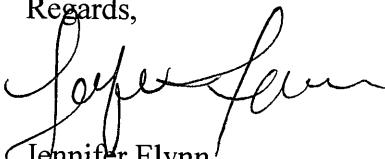
Dear Ms. Cannon:

Enclosed for your records, please find an original, fully-executed Project Funding Agreement for the W. Edward Balmer Elementary School Project in the Town of Northbridge (the "District").

Also attached for your convenience, please find instructions for entering project budgets in the Massachusetts School Building Authority (the "MSBA") ProPay System, the Project Funding Agreement Budget Revision Request Form and a Total Project Budget form with cost codes included. Please note the MSBA will not process reimbursement requests until the District has entered the budget and the budget has been accepted by the MSBA.

Please feel free to contact me if you have any questions.

Regards,


Jennifer Flynn
Project Coordinator

Cc: Legislative Delegation
Adam Gaudette, Northbridge Town Manager
Michael LeBrasseur, Chair, Northbridge School Committee
Amy McKinstry, Interim Superintendent, Northbridge Public Schools
Melissa Walker, Director of Business and Finance, Northbridge Public Schools
Joseph Strazzula, Chair, Northbridge School Building Committee
Joel G. Seeley, Owner's Project Manager, Symmes Maini & McKee Associates, Inc.
Lee P. Dore, Designer, Dore & Whitter Architects, Inc.
File: 10.2 Letters (Region 2)

District Name: Town of Northbridge
School Name: W. Edward Balmer Elementary School
Project ID Number: 201502140001

PROJECT FUNDING AGREEMENT

This PROJECT FUNDING AGREEMENT, (the "Project Funding Agreement"), dated as of April 29, 2019 (the "Effective Date") is entered into by and between the Massachusetts School Building Authority, an independent public authority of the Commonwealth of Massachusetts (the "Authority"), and the Town of Northbridge together with its successors and assigns (the "District" or "Owner") (Authority and District or Owner collectively referred to herein as the "Parties").

RECITALS

WHEREAS, the provisions of General Laws Chapter 70B, as amended ("Chapter 70B"), Chapters 208 and 210 of the Acts of 2004, and 963 CMR 2.00 *et seq.* authorize the Authority to provide a Total Facilities Grant (as defined in Section 1 below) to Eligible Applicants for approved school building construction, renovation, and repair projects; and

WHEREAS, the District has applied for and desires to receive a Total Facilities Grant from the Authority pursuant to the provisions of Chapter 70B, Chapters 208 and 210 of the Acts of 2004, and 963 CMR 2.00 *et seq.* for a Project (as defined in Section 1 below) consisting of the replacement of the existing W. Edward Balmer and the Northbridge Elementary Schools with a new facility that serves grades PK-5 on the existing site of the W. Edward Balmer Elementary School as it is more particularly described elsewhere in this Agreement; and

WHEREAS, the Authority has determined that the District's Project is eligible for the receipt of a Total Facilities Grant, and the District has agreed to receive a Total Facilities Grant, pursuant to a schedule determined by the Authority and subject to all of the terms and conditions of this Project Funding Agreement; and

WHEREAS, the Project is in the best interests of the Commonwealth and the District with respect to its site, type of construction, sufficiency of accommodations, open space preservation, urban development, urban sprawl, and energy efficiency; and

WHEREAS, the District has confirmed that the Project is necessary to meet educational standards of the curriculum frameworks established by the board of education pursuant to M.G.L. c. 69, § 1E for anticipated enrollment levels; and

WHEREAS, the Project has a value over its useful life commensurate with the lifecycle cost of building, operating, and maintaining the school facility; and

WHEREAS, the Project is not at a school that has been the site of an approved school project pursuant to Chapter 70B or Chapter 645 of the Acts of 1948, as amended, within the 10 years prior to the Project Application date, or the Project is unrelated to such previously approved project in the same school; and

WHEREAS, the Project is within the capacity of the Authority to finance within revenues projected to be available to the Authority; and

District Name: Town of Northbridge
 School Name: W. Edward Balmer Elementary School
 Project ID Number: 201502140001

WHEREAS, the District has confirmed that the commissioner of education has certified that adequate provisions have been made in the Project for children with disabilities, as defined in M.G.L. c. 71B, § 1; and

WHEREAS, the District has procured an Owner's Project Manager, as defined in Section 1 of this Agreement, using a qualifications-based selection process and such Owner's Project Manager has been approved by the Authority; and

WHEREAS, the District has procured a Designer for the Project in accordance with the provisions of M.G.L. c. 7, s. 38A ½ through 38O, M.G.L. c. 7C, s. 44 through 58, 963 CMR 2.10(8), 963 CMR 2.12 and any other applicable laws and regulations and said Designer has been approved by the Authority's Designer Selection Panel; and

WHEREAS, the Board of the Authority has voted to authorize the Executive Director to enter into a Project Funding Agreement with the District for the Project; and

WHEREAS, the District has taken all necessary votes authorizing the Project and has authorized and appropriated the Total Project Budget, in formats prescribed by or otherwise acceptable to the Authority;

NOW, THEREFORE, in consideration of the promises and the mutual covenants contained in this Project Funding Agreement, and other good and valuable consideration, the receipt and legal sufficiency of which are hereby acknowledged, the Authority and the District, intending to be legally bound, hereby agree as follows:

The Authority agrees to provide a Total Facilities Grant to the District, subject to all of the following terms and conditions:

SECTION 1 DEFINITIONS

Capitalized terms that are not defined in this Section 1 shall have the meanings ascribed to them in Chapter 70B or 963 CMR 2.00 *et seq.* For purposes of this Project Funding Agreement, the following words shall have the following meanings:

"Assisted Facility" means the school facility that is eligible for and will receive either a Total Facilities Grant or partial payment of a Total Facilities Grant pursuant to this Project Funding Agreement.

"Construction Contract Documents" means all agreements, contracts, and other documents, including, but not limited to, the Owner-Contractor or Owner-CM at Risk Contracts and attachments thereto, Advertisements, Instructions to Bidders, Bidding Documents, Contract Forms, Conditions of the Contracts, Specifications, Drawings, Schedule of Values in a format acceptable to the Authority, all addenda issued prior to execution of the Contracts, and other documents listed in the Owner-Contractor or Owner-CM at Risk contracts and any amendments or modifications issued after execution of said contracts, executed by and between the District and the Contractors or any other parties that set forth the terms, conditions, requirements, and specifications for the design and

District Name: Town of Northbridge
 School Name: W. Edward Balmer Elementary School
 Project ID Number: 201502140001

construction of the Project. For purposes of this Project Funding Agreement, the Construction Contract Documents shall also at all times include a current construction schedule, a current Total Project Budget, and a current cash flow projection.

“CM at Risk” or “Construction Manager at Risk” means a sole proprietorship, partnership, corporation, or other legal entity that provides construction management at risk services as defined in G.L. c. 149A, § 2 and is the person or entity procured as such by the District in accordance with G.L. c. 149A, *et seq.*, and who is primarily responsible for the performance and execution of the construction work on the Project.

“Contractor” means the person or entity identified as such throughout the Construction Contract Documents and who is primarily responsible for the performance and execution of the construction work on the Project.

“Designer” means the individual, corporation, partnership, sole proprietorship, joint stock company, joint venture, or other entity engaged in the practice of architecture, landscape architecture, or engineering that meets the requirements of M.G.L. c. 7C, § 44 and has been procured and contracted by the District to perform professional design services.

“Educational Program” means a numerical and verbal description of a specific educational program for a specified number of students over a specified period of time, together with spaces needed to support the program, complete to the degree that a Designer may use it as the basic document from which to create the design of the Assisted Facility. A copy of the Educational Program for the Project is attached hereto as **Exhibit “H”** and is incorporated by reference herein.

“Effective Date” means the date stated in the first paragraph of this Project Funding Agreement which shall be the date on which this Project Funding Agreement shall take effect.

“Excusable Delay” means a delay of the Project that either (a) is solely because of a natural event, such as flood, storms, or lightning, that is not preventable by any human agency, or (b) is reasonably determined by the Authority to be excusable.

“Final Request and Certificate for Reimbursement” means the certificate in the form prescribed by the Authority, submitted by the District to the Authority upon final completion of the Project, that is (1) signed by the Owner’s Project Manager stating that, to the best of the Owner’s Project Manager’s knowledge and belief, the Project has been completed and constructed in accordance with all Construction Contract Documents; (2) signed by the Designer stating that, to the best of the Designer’s knowledge and belief, the Project has been completed and constructed in accordance with the Construction Contract Documents and all applicable building and safety codes in effect at the time of construction, and that the Project was constructed in accordance with the applicable MSBA sustainability requirements; and (3) signed by a duly authorized representative of the District stating, to the best of his/her knowledge and belief, that all of the terms and conditions of this Project Funding Agreement, all other agreements between the District and the Authority and all applicable regulations and guidelines of the Authority have been satisfied.

“Furnishings and Equipment Schedule” means, where applicable, the complete listing of furniture, fixtures, and equipment, as attached hereto as **Exhibit “F”**.

District Name: Town of Northbridge
 School Name: W. Edward Balmer Elementary School
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“Guaranteed Maximum Price” or “GMP” means the agreed total dollar amount for the Construction Manager at Risk services, including the cost of the work, the general conditions, the GMP contingency, and the fee charged by the Construction Manager at Risk firm.

“Monthly” means once each calendar month.

“Notice to Proceed” means the written communication issued by the District to the Contractor or CM at Risk authorizing him to proceed with the Owner-Contractor or Owner-CM at Risk contract and establishing the date for commencement of the contract time.

“Owner’s Project Manager” means the individual, corporation, partnership, sole proprietorship, joint stock company, joint venture, or other entity under contract with, designated by, or assigned by the District and approved by the Authority, to fully and completely manage and coordinate administration of the Project to completion. The Owner’s Project Manager must meet the qualifications set forth in M.G.L. c. 149, § 44A ½, 963 CMR 2.00 *et seq.*, and all applicable policies and guidelines of the Authority.

“Project” refers to the replacement of the existing W. Edward Balmer and the Northbridge Elementary Schools with a new facility that serves grades PK-5 on the existing site of the W. Edward Balmer Elementary School, as it is more particularly described elsewhere in this Agreement, which is a (1) Capital Construction Project, (2) Major Reconstruction Project, or (3) School Project, each as defined in Chapter 70B, §2.

“Project Cash Flow” means a detailed accounting of the projected amount of funding being received and expended by the District during the course of the Project on a monthly basis, which is attached hereto as **Exhibit “D”**.

“Project Permits” means all permits, approvals, consents, and licenses issued or granted by governmental authorities, necessary or appropriate to the construction, completion, and occupancy of the Project.

“Project Schedule” means the schedule for the Project, including a detailed estimated timeline as described in 963 CMR 2.10(10), which is attached hereto as **Exhibit “C”**.

“Project Scope” means the scope of the Proposed Project that has been mutually agreed to by the Authority and the District and as is attached hereto as **Exhibit “B”**.

“Project Scope and Budget Agreement” means the agreement described in 963 CMR 2.00, *et seq.* that has been executed by the Parties and is incorporated by reference herein.

“Project Scope and Budget Conference” means the conference described in 963 CMR 2.10(9).

“Project Site” means the specific location of the Project as more fully described in **Exhibit “E”** attached hereto.

District Name: Town of Northbridge
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“Schematic Drawings and Plans” means, where applicable to the Project, preliminary floor plans identifying programmatic and other spaces, elevations, site plans, plot plans, topographical plans, plans showing the location of the Project in relationship to other schools in the district, engineering studies, and any other plans deemed necessary by the Authority.

“Subcontractor” means a person or entity that has a direct contract with the Contractor or CM at Risk to perform a portion of the work on the Project.

“Total Facilities Grant” means the Authority’s final, approved, total financial contribution to an Approved Project, which is calculated by the Authority pursuant to the provisions of Chapter 70B, Chapter 208 of the Acts of 2004, and 963 CMR 2.00 *et seq.*, and paid to the District pursuant to a schedule established by the Authority and subject to the terms and conditions of this Project Funding Agreement.

“Estimated Maximum Total Facilities Grant” shall mean the estimated Total Facilities Grant amount, as set forth in the Total Project Budget (“Exhibit A”), which amount does not include reimbursement amounts for any potentially eligible costs within the owner’s contingency and construction contingency line items in the Total Project Budget (“Exhibit A”). The actual Total Facilities Grant for the Project may be an amount less than the Estimated Maximum Total Facilities Grant pursuant to the Authority’s regulations, policies, and guidelines and the provisions of this Agreement.

“Maximum Total Facilities Grant” shall mean the maximum Total Facilities Grant amount, as set forth in the Total Project Budget (“Exhibit A”), that shall not be exceeded under any circumstances. The Maximum Total Facilities Grant amount includes reimbursement amounts for any potentially eligible costs that may be expended from the owner’s contingency and the construction contingency line items in the Total Project Budget (“Exhibit A”) in accordance with the Authority’s regulations, policies and guidelines and the provisions of this Agreement. The eligibility of any such costs for reimbursement shall be determined by the Authority within its sole discretion provided that the total amount of Project costs eligible for reimbursement, including any eligible costs expended from the owner’s contingency and construction contingency line items, shall not exceed the Maximum Total Facilities Grant amount under any circumstances. The actual Total Facilities Grant for the Project may be an amount less than the Maximum Total Facilities Grant pursuant to the Authority’s regulations, policies, and guidelines and the provisions of this Agreement.

“Total Project Budget” means a complete and full enumeration of all costs, including both hard costs and soft costs, so-called, that the District reasonably estimates, to the best of its knowledge and belief, has been or will be incurred in connection with the planning, design, construction, development, the mobilization of the operation, and the completion of the Project, approved by the Authority, which may be updated from time to time by mutual agreement of the Parties and which is attached hereto as **Exhibit “A”**.

“Vendor” means any person, entity, business, or service provider under contract or agreement with the District to provide goods or services to the District in connection with the Project.

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SECTION 2 THE PROJECT AND THE TOTAL FACILITIES GRANT

2.1 As of the Effective Date and subject to the satisfaction of or compliance with, as reasonably determined by the Authority, (a) all of the terms and conditions of this Project Funding Agreement, (b) the applicable provisions of Chapter 70B, Chapters 208 and 210 of the Acts of 2004, and 963 CMR 2.00 *et seq.*, and (c) any other rule, regulation, policy, guideline, approval, or directive of the Authority, the Authority hereby approves the following Estimated Maximum Total Facilities Grant for the Project: an amount that, except as specifically provided in this Section 2.1, shall under no circumstances exceed the lesser of (i) 63.78% of the final approved, total eligible Project costs, as determined by the Authority, ("Reimbursement Rate") or (ii) \$46,043,257.00 ("Estimated Total Facilities Grant"). Notwithstanding the foregoing, the Authority may determine, in its sole discretion, and subject to the limitations set forth in Section 2.3 of this Agreement, that expenditures from the owner's contingency and construction contingency line items of the Total Project Budget, so-called, are eligible for reimbursement, and in the event of any such determination, the Authority may adjust the above-stated Estimated Maximum Total Facilities Grant amount to account for the eligible, approved owner's and construction contingency expenditures up to a Maximum Total Facilities Grant of \$47,564,270.00. In no event shall the final, Maximum Total Facilities Grant, including any eligible owner's and construction contingency amounts, exceed \$47,564,270.00. The Parties hereby acknowledge and agree that the Estimated Maximum Total Facilities Grant and Maximum Total Facilities Grant amounts set forth in this Section 2.1, are maximum amounts of funding that the District may receive from the Authority for the Project, and that the final amount of the Total Facilities Grant may equal an amount less than either of the aforesaid amounts, as determined by an audit conducted by the Authority. Any costs and expenditures that are determined by the Authority to be either in excess of the above-stated Total Facilities Grant or ineligible for payment by the Authority shall be the sole responsibility of the District. The Reimbursement Rate set forth above, and as more fully described in the reimbursement rate summary, attached hereto as **Exhibit "I"**, includes incentive reimbursement points pursuant to G.L. c. 70B, § 10(a)(C). Any incentive reimbursement points for green/energy efficiency and CM at Risk that may be included in this Agreement have been provisionally assigned and are subject to a final determination by the Authority as to the District's eligibility to receive such incentive reimbursement points. The Reimbursement Rate set forth above and the Total Facilities Grant shall be subject to a decrease, as provided in Section 2.4 of this Agreement, if the Authority determines, in its sole discretion, that the District is ineligible to receive any portion of the incentive reimbursement points that have been provisionally assigned, as described herein, or such other incentive reimbursement points that may be assigned by the Authority.

2.2 In the event that the Authority determines that the Project is not in accordance or compliance with the Project Scope, the Project Schedule, the Total Project Budget, the Furnishings and Equipment Schedule, the Construction Contract Documents, the Schematic Drawings and Plans, all of the covenants in Section 3 of this Project Funding Agreement, all other terms and conditions of this Project Funding Agreement, the provisions of Chapter 70B, Chapters 208 and 210 of the Acts of 2004, 963 CMR 2.00 *et seq.*, and any other applicable rule, regulation, policy, guideline, approval, or directive of the Authority, or is delayed (other than an Excusable Delay), then the Authority may temporarily and/or permanently withhold payments to the District for the Project, provided that the Authority shall not unreasonably withhold any such payments. In the event that the Authority either temporarily or permanently withholds payment for the Project, the District hereby agrees and

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acknowledges that the Authority shall have no liability for any such withholding of payment or any loss that may occur as a result of any such withholding of payment.

2.3 The Parties hereby acknowledge and agree that, in the event that the lowest, responsible bid or the Guaranteed Maximum Price accepted by the District for the construction of the Project is lower than the corresponding amount set forth in the Total Project Budget, the Authority shall reduce the Total Facilities Grant amount set forth in Section 2.1 of this Agreement accordingly. The Parties hereby further acknowledge and agree that, in the event that the lowest, responsible bid or Guaranteed Maximum Price accepted by the District for the construction of the Project exceeds the corresponding amount set forth in the Total Project Budget, the Authority shall not make any adjustments to its Total Facilities Grant on account of the bid, and the increased costs shall be the sole responsibility of the District. The Parties hereby further acknowledge and agree that, in the event that the lowest, responsible bid or Guaranteed Maximum Price accepted by the District for construction of the Project exceeds the corresponding amount set forth in the Total Project Budget, the District may use a reasonable amount of the owner's and/or construction contingency to fund the cost of any such budget overrun; provided, however, that expenditures of owner's and/or construction contingency funds for the purpose of funding such budget overruns shall not be eligible for reimbursement by the Authority and shall be the sole responsibility of the District.

2.4 The Reimbursement Rate for the Project is calculated as set forth in the reimbursement rate summary, attached hereto as **Exhibit "I"**, and shall be subject to the provisions of M.G.L. c. 70B, 963 CMR 2.00 *et seq.*, and the policies and guidelines of the Authority. Any incentive reimbursement points that may be included in the calculation of the Reimbursement Rate, as it may be amended from time to time by the written agreement of the Authority, must be earned, as determined by the Authority in its sole discretion, and shall be subject to audit by the Authority. If the Authority determines, in its sole discretion, that the District is ineligible to receive any portion of the incentive reimbursement points that may be included in the calculation of the Reimbursement Rate, as it may be amended from time to time by the written agreement of the Authority, the Authority may, in its sole discretion, decrease the Reimbursement Rate and the Total Facilities Grant accordingly. Any such decrease in the Reimbursement Rate, and corresponding decrease in the Total Facilities Grant, shall be applied retroactively to all payments made to the District by the Authority under the terms of this Agreement and to all requests for reimbursement of eligible Project costs made by the District to the Authority under the terms of this Agreement. If the Authority determines that, as a result of a decrease in the Reimbursement Rate, or a corresponding decrease in the Total Facilities Grant, it has made overpayments to the District, the Authority may recover the amount of such overpayments from the District by whatever remedies are available to it under this Agreement or under applicable law, including, but not limited to, set off against any future payments owed to the District for reimbursement of eligible Project costs, as determined by the Authority. Upon written demand by the Authority, the District shall promptly return to the Authority the amount of any such overpayments unless otherwise agreed to in writing by the Authority.

2.5 The Basis of Total Facilities Grant set forth in Exhibit A to this Agreement includes all budgeted costs for the Feasibility Study authorized by the Authority for the Project ("Feasibility Study Budget") and supersedes and replaces any other Feasibility Study budget that may have been authorized by the Authority and set forth in any Feasibility Study Agreement between the Authority and the District. The Total Facilities Grant set forth in Section 2.1 of this Agreement is calculated by applying the Reimbursement Rate set forth in Exhibit I of this Agreement to the Basis of Total

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Facilities Grant, which includes the Feasibility Study Budget for the Project. Notwithstanding the provisions of any Feasibility Study Agreement between the Authority and the District, the approved, eligible costs of a Feasibility Study authorized by the Authority for the Project will be reimbursed, retroactively and prospectively, based upon the Reimbursement Rate set forth in Section 2.1 and Exhibit I to this Agreement. Because the Feasibility Study Budget included within the Total Project Budget in this Agreement does not take into account any payments that may already have been made to the District by the Authority for the costs of a Feasibility Study under a Feasibility Study Agreement between the Authority and the District, if any, the Authority shall deduct from the Total Facilities Grant set forth in this Agreement the amount of any payments already made to the District by the Authority for the costs of a Feasibility Study pursuant to the provisions of any Feasibility Study Agreement. Nothing stated in this section of this Agreement shall impair the right of the Authority to make adjustments to the Reimbursement Rate and the Total Facilities Grant or to audit and determine ineligible costs as provided elsewhere in this Agreement and in the Authority's statutes, regulations, policies, guidelines and standards.

SECTION 3 COVENANTS

The District covenants and agrees that as long as this Project Funding Agreement is in effect, the District shall and shall cause its employees, agents, and representatives to perform and comply with the following covenants:

3.1 The District acknowledges and agrees that the Authority's grant program, established pursuant to Chapter 70B, Chapters 208 and 210 of the Acts of 2004, 963 CMR 2.00 *et seq.*, and any other applicable rule, regulation, policy or guideline of the Authority, is a non-entitlement, discretionary program based on need and the District shall not be entitled to any funds from the Authority except as provided in this Project Funding Agreement.

3.2 The District shall and shall cause its employees to comply with all provisions of this Project Funding Agreement; all other agreements related to the Project that have been referenced herein or otherwise approved in writing by the Authority; and all provisions of law that are applicable to the Project and this Project Funding Agreement and the District shall take all action necessary to fulfill its obligations under this Project Funding Agreement and under all other agreements related to the Project that have been referenced herein or otherwise approved by the Authority.

3.3 The District hereby agrees that it shall submit all Project information, including but not limited to, Total Project Budget information, plans, specifications, Project Schedules, and Project progress reports, and any additional information that may be requested by the Authority, to the Authority in a timely manner in a form satisfactory to the Authority.

3.4 The District hereby agrees that it shall use its best efforts and resources to diligently satisfy and complete each of the terms and conditions of this Project Funding Agreement as promptly as possible.

3.5 The District hereby acknowledges and agrees that all costs related to the Project, including the costs identified in the Total Project Budget and costs of the items appearing in the Project Scope, shall be subject to review and audit by the Authority, and the Authority shall determine,

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in its sole discretion, whether such costs are eligible for reimbursement pursuant to this Agreement and the Authority's regulations, policies, and guidelines. There may be Project costs, in addition to the items specifically identified as ineligible in the Total Project Budget, the Project Scope, the Furnishings and Equipment Schedule, and/or other parts of this Agreement that are ineligible for reimbursement according to such regulations, policies, and guidelines. The District hereby further acknowledges and agrees that certain costs incurred by the District in connection with the Project shall not be eligible for reimbursement by the Authority, pursuant to 963 CMR 2.10 & 2.16(5) and other rules, regulations, policies, and guidelines of the Authority, including, but not limited to, the following:

- (a.) Financing and Interest Costs. The District hereby acknowledges and agrees that any financing costs incurred by the District, including, but not limited to, interest, principal, costs of issuance and any other cost related to short or long term bonds, notes or other certificates of indebtedness, refunding notes or bonds, temporary loans, or any other form of indebtedness issued by the District in relation to an Approved Project and all costs associated with credit rating services, legal services related to the issuance of any indebtedness and financial consulting services shall not be eligible for reimbursement by the Authority.
- (b.) Legal Fees and Costs. The District hereby acknowledges and agrees that the cost of legal services, including, but not limited to, bond counsel fees, attorney's fees, arbitration or mediation fees, filing fees, and any other legal fees, costs, or expenses incurred by the District in connection with the Project shall not be eligible for reimbursement by the Authority.
- (c.) Site Costs. The District hereby acknowledges and agrees that the Authority shall not reimburse the District for any costs associated with site work that exceed eight percent (8%) of the approved building costs of the Project, as determined by the Authority, or are otherwise ineligible for reimbursement pursuant to the Authority's regulations, policies, or guidelines, including, without limitation, the Authority's Site Cost Allowance Guidance.
- (d.) Furniture, Fixtures, and Equipment Costs; Technology Costs. The District hereby acknowledges and agrees that the Authority shall only reimburse the District for costs associated with Furniture, Fixtures, and Equipment that are: (a) set forth on Exhibit F; (b) eligible for reimbursement pursuant to the Authority's regulations, policies, and guidelines; (c) do not exceed a total of \$1,200 per student, according to the enrollment agreed to in writing by the Authority and the District; and (d) within the Total Facilities Grant amount set forth in Section 2 of this Agreement. The District hereby further acknowledges and agrees that the Authority shall only reimburse the District for costs associated with technology that are: (a) set forth in this Agreement; (b) eligible for reimbursement pursuant to the Authority's regulations, policies, and guidelines; (c) do not exceed a total of \$1,200 per student, according to the enrollment agreed to by the Authority; and (d) within the Total Facilities Grant amount set forth in Section 2 of this Agreement.
- (e.) All other costs identified in 963 CMR 2.16(5).

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All project costs and Project Scope items are subject to review and audit by the Authority, and whether a project cost is eligible for reimbursement shall be determined by the Authority, in its sole discretion, during the Authority's audit of the Project.

3.6 The District hereby acknowledges and agrees that the Authority's Total Facilities Grant is subject to the District's adherence to and maintenance of the Project Scope, Project Schedule, Total Project Budget, and, where applicable, the Furnishings and Equipment Schedule, and the District shall not make any changes, additions, or reductions to the Project Scope, Project Schedule, Total Project Budget, or the Furnishings and Equipment Schedule without the prior written approval of the Authority. Any increases to the Total Project Budget as set forth in Exhibit A as of the Effective Date, shall not result in any changes to the amount of the Total Facilities Grant set forth in Section 2.1 of this Project Funding Agreement.

3.7 The District hereby acknowledges and agrees that the Authority shall not provide any funding for the Project in excess of the amount of the Total Facilities Grant set forth in Section 2 of this Agreement.

3.8 The District hereby acknowledges and agrees that the Authority shall not be required or obligated to make any payment of the Total Facilities Grant for eligible Project costs while an Event of Default, as defined in Section 22, shall have occurred.

3.9 The District hereby acknowledges and agrees that it shall provide the Authority with an updated Total Project Budget on a Monthly basis that shall include, but not necessarily be limited to, the following: (a) the projected total Project costs, (b) actual expenditures to date, (c) estimated remaining expenditures for the Project, (d) a detailed explanation of all variances from Total Project Budgets previously submitted to the Authority, (e) all sources and amounts of funding, and (f) an updated Project Schedule.

3.10 The District hereby agrees that, in order to demonstrate that adequate funding for the Project is available, it shall provide the Authority in a format prescribed by or otherwise acceptable to the Authority, with (a) an updated Capital Budget Statement; (b) an updated Project Cash Flow projection on a Monthly basis; and (c) an updated Sources and Use Form that sets forth the sources of all of the funding the District will apply to the project, equal to the Total Project Budget. The District hereby further agrees that, upon the request of the Authority, it shall provide the Authority with copies of its financial statements and other details relating to the financial condition of the District.

3.11 The District hereby acknowledges and agrees that, in the event that it receives, has received, or is eligible to receive any insurance proceeds, damages, awards, payments, rebates, grants, or donations from any third party or funding source, other than the Authority, for or in connection with the Project, all such amounts shall be disclosed to the Authority in writing and shall be deducted from the total amount of eligible project costs (also known as Basis of Total Facilities Grant), as determined by the Authority, and the remaining amount of eligible costs shall be apportioned according to the District's reimbursement rate to calculate the maximum Total Facilities Grant.

3.12 The District shall use the Authority's Contract for Project Management Services, Contract for Designer Services, and any other standard contracts, contract provisions, guidelines, procurement

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documents, requests for services, and forms prescribed by, or otherwise acceptable to, the Authority to procure and hire any Owner's Project Manager, Designer, Contractor,, CM at Risk, professionals, or Consultants in connection with the Project.

3.13 During the course of the Project, the District shall investigate and review, and shall require the Owner's Project Manager, if required for the Project, and the Designer to investigate and review the progress and quality and construction of the Project. The District shall undertake all reasonable efforts designed to ensure that the Contractor or CM at Risk, Subcontractors, and all Vendors expeditiously and diligently construct, equip, and complete the Project in a good and workmanlike manner.

3.14 The District hereby acknowledges and agrees that it shall keep all records related to the Project including, but not limited to, those records described in 963 CMR 2.16(4), for as long as the Assisted Facility is in service as a public school or remains under the ownership or control of the District or for such period of time as is prescribed by applicable law relating to the retention of public records, whichever is longer. The District shall and shall cause its employees, agents, representatives, and its Owner's Project Manager, Designer, Contractor or CM at Risk, and Vendors to keep adequate records of the Project and shall make all Project records and the Project site available to the Authority, representatives of the Authority, and the Authority's Commissioning Consultant.

3.15 The District shall neither change nor permit a change of the Designer or any of its key personnel or sub-consultants without the prior written approval of the Authority in accordance with the provisions of 963 CMR 2.12. If there is any change or proposed change in the Designer or any of its key personnel or subconsultants, the District shall give a written notice to the Authority that shall include a statement of reasons for the change or proposed change and an explanation of the impact of the change or proposed change on the Project. The District shall not contract with a new Designer without first obtaining the Authority's written approval of the new Designer. The District shall comply with all applicable provisions of law in the procurement of a new Designer.

3.16 The District shall not change the Contractor or CM at Risk without first giving prior written notice to the Authority of the District's intent to make such a change in accordance with the provisions of 963 CMR 2.12. As part of its written notice to the Authority, the District shall provide a statement of reasons for the proposed change and an explanation of the impact of the change on the Project. The District shall comply with all applicable provisions of law in selecting or otherwise allowing a new Contractor to take over the Project and the District shall provide written notice to the Authority identifying the new Contractor or CM at Risk and describing the process by which the new Contractor or CM at Risk was selected for or otherwise took over the Project.

3.17 By no later than ten (10) days after the Effective Date, the District shall certify to the Authority in writing that it has delivered this Project Funding Agreement to any Designer, Owner's Project Manager, and Contractor or CM at Risk hired, or otherwise assigned to the Project, by the District and shall provide the Authority with copies of the transmittal letters and any documents evidencing such delivery. In the event that the Owner's Project Manager, Designer, Contractor or CM at Risk is hired or assigned by the District after the Effective Date, the District shall deliver this Project Funding Agreement to said Owner's Project Manager, Designer, Contractor or CM at Risk within ten (10) days after the effective date of hire or assignment.

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3.18 With respect to all actions taken in relation to the Project, the District and all of its officers, agents and employees shall observe and obey, and shall include language in all of its contracts with the Owner's Project Manager, Designer, Contractor or CM at Risk, and all Vendors requiring them to observe and obey, all federal, state and local laws, regulations, ordinances, codes, statutes, orders and directives and any other applicable provisions of law.

3.19 The District shall require the Contractor or CM at Risk to indemnify the Authority and comply with the indemnification requirements set forth in Section 16 of this Project Funding Agreement. Within sixty (60) days after the Effective Date, the District shall provide the Authority with written documentation evidencing such indemnification of the Authority, unless otherwise agreed in writing by the Authority. In the event that the Contractor or CM at Risk is hired or assigned by the District after the Effective Date, the District shall provide such written documentation evidencing such indemnification within ten (10) days after the effective date of hire or assignment. In the event that the District does not obtain indemnification of the Authority from the Contractor or CM at Risk within these deadlines, the Authority may terminate this Project Funding Agreement.

3.20 The District shall furnish to the Authority such further affidavits, certificates, opinions of counsel, surveys and other documents and instruments as may be required by the Authority to ensure that the terms of this Project Funding Agreement are being observed and performed in all respects, and that the Project is progressing satisfactorily as planned in strict compliance with all applicable federal, state and local laws, regulations, ordinances, codes, statutes, orders and directives and any other applicable provisions of law.

3.21 During the course of the Project, the District shall submit to the Authority a list of all proposed changes (in the form of a Potential Change Order log, so-called) and all actual changes, amendments, addenda to the Construction Contract Documents, the Owner-Designer contract and the Owner-OPM contract. The District shall submit all executed change orders, extra work orders, or modifications to the Project to the Authority for the Authority to consider whether the costs associated with such change orders, extra work orders, or modifications are eligible for reimbursement by the Authority pursuant to this Project Funding Agreement. The District hereby acknowledges and agrees that the Authority's review of the proposed change orders, change orders, and amendments shall be limited to whether the change order or amendment may be eligible for reimbursement pursuant to this Agreement and the Authority's regulations, policies, and guidelines. The District must independently determine whether the proposed change order or amendment is reasonable and necessary for the Project. Nothing stated herein shall relieve the District of its obligation to comply with all applicable law related to the processing of change orders and amendments by the District.

3.22 The District shall undertake all reasonable efforts to ensure that the Contractor or CM at Risk and Subcontractors obtain all Project Permits and shall certify to the Authority in writing that the Contractor or CM at Risk and Subcontractors have obtained such Project Permits within fifteen (15) days after the Project Permits have been obtained. With respect to any of the Project Permits that are required by law to be recorded or filed with any government office, the same shall be duly recorded and filed in accordance with all applicable requirements. The Authority shall have the right to

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request copies of Project Permits at any time, and the District shall make available any Project Permits requested by the Authority.

3.23 Prior to receiving final payment from the Authority, the District shall have obtained all required inspections and approvals of the Project that are required by law or otherwise required by the Authority.

3.24 The District hereby acknowledges and agrees that the Authority shall engage an independent party, not affiliated or associated with the Owner's Project Manager, Designer, Contractor or CM at Risk, to provide commissioning services with the intent of achieving, verifying and documenting the performance of building systems in accordance with the design intent and the functional and operational needs of the District (hereinafter "Commissioning Consultant"). The District agrees that it shall fully cooperate with and accommodate the commissioning efforts undertaken by the Authority and the Commissioning Consultant and shall require the Owner's Project Manager, Designer, and the Contractor or CM at Risk to provide the same level of cooperation and accommodation. The District further agrees to allow adequate time within its Project Schedule to allow the Authority's Commissioning Consultant to perform its work, and the Authority shall not be responsible for any delays that may result from the Commissioning Consultant's work.

3.25 Within ninety (90) days after the District approves final payment to the Contractor or CM at Risk for the Project, or provides such other appropriate documentation, as reasonably determined by the Authority, indicating that the construction of the Project is one hundred percent (100%) complete, the District shall submit to the Authority a Final Request and Certificate for Reimbursement and an accounting of the total final Project costs in a form prescribed by or otherwise acceptable to the Authority.

3.26 The District hereby agrees that, upon completion of the Project, the Assisted Facility shall have an anticipated useful life of at least 50 years as a public school or that the Project will materially extend the useful life of the School and preserve an asset that otherwise is capable of supporting the required Educational Program.

3.27 The District hereby acknowledges and agrees that neither the District nor any of its employees, officials, or agents shall submit any false or intentionally misleading information or documentation to the Authority in connection with this Project Funding Agreement, and further acknowledges and agrees that the submission of any such information or documentation shall be a material breach of this Project Funding Agreement and shall be cause for the Authority to revoke any and all payments otherwise due to the District, to recover any previous payments made to the District, and/or make the District ineligible for any further funding from the Authority. The District hereby further agrees that it shall have a continuing obligation to update and notify the Authority in writing when it knows or has any reason to know that any information or documentation submitted to the Authority contains false, misleading or incorrect information.

3.28 The District hereby acknowledges and agrees that the Authority shall bear no responsibility, cost or liability for the results of any study, environmental assessment, geotechnical site testing, including but not limited to, site remediation, clean-up, or other site remediation services.

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3.29 The District hereby acknowledges and agrees that the requirements set forth in the Agreement are intended solely for the benefit and protection of the Authority as the grantor of Project funding. Nothing herein shall be construed as advice to, nor create a duty to provide advice to, the District regarding legal or contractual requirements or best practices for the Project. It is solely the obligation of the District to determine and comply with all legal requirements applicable to the Project and to determine and enforce any necessary contractual requirements and obligations of its Designer, Owner's Project Manager, and Contractor or CM at Risk.

3.30 The District shall not issue the Notice to Proceed prior to the Effective Date unless otherwise agreed to in writing by the Authority.

3.31 The District shall use its best efforts to monitor the performance of the Owner's Project Manager, Designer, Contractor or CM at Risk, and Vendors and shall use its best efforts to enforce the provisions of the District's contracts with each of them.

3.32 The District shall not combine, consolidate, or conjoin in any way the procurement, pre-qualification or selection of an Owner's Project Manager, Designer, Contractor, CM at Risk at Risk, Subcontractor, consultant or vendor for the Project with the procurement, pre-qualification or selection of an Owner's Project Manager, Designer, Contractor, CM at Risk at Risk, Subcontractor, consultant or vendor for any other construction, repair or renovation project without the express prior written approval of a duly authorized representative of the Authority. Any costs incurred by the District that relate to, or arise out of, the use of a combined, consolidated or conjoined procurement, pre-qualification or selection process as proscribed above, including, but not limited to, the preparation of bid documents, requests for services, and requests for qualifications, without the express prior written approval of a duly authorized representative of the Authority shall not be eligible for reimbursement.

3.33 Specifications for Construction Contract Documents shall comply with, among other things, the provisions of G.L. c. 30, § 39M(b). If the District intends to include specifications that are written for less than full competition for one or more items of material furnished under the Construction Contract Documents (so-called "proprietary specifications") as described in G.L. c. 30, § 39M(b), the District shall provide to the Designer for inclusion with the Designer's Construction Documents submittals to the Authority the supporting documentation required by G.L. c. 30, § 39M(b). Upon request by the Authority, the District shall submit to the Authority, all documentation required by G.L. c. 30, § 39M(b) and any additional documentation or certifications that the Authority may require. If the District fails to comply with the provisions of G.L. c. 30, § 39M(b) or this paragraph, the Authority may deem ineligible some or all of the costs related to such proprietary specifications.

SECTION 4 REPRESENTATIONS AND WARRANTIES

The District and the undersigned, for themselves and for the District, hereby warrant and represent that each of the following statements is true, correct and complete:

4.1 The District is validly organized and existing under and by virtue of the laws of the Commonwealth, has full power and authority to own its properties and carry on its business as now

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conducted, and has full power and authority to execute, deliver and perform its obligations under this Project Funding Agreement.

4.2 The District is duly authorized and has taken all necessary steps to authorize the execution and delivery of this Project Funding Agreement and to perform and consummate all transactions contemplated by this Project Funding Agreement. The undersigned have been duly authorized in accordance with law to execute and deliver this Project Funding Agreement on behalf of the District. This Project Funding Agreement and its execution by the undersigned does not and will not, to any material extent, conflict with or result in the violation of any charter, by-law, ordinance, order, rule, regulation, statute or any other applicable provision of law or any order, rule, regulation or judgment of any court or other agency of government.

4.3 The District has all requisite legal power and authority to own, or to control in accordance with the provisions of 963 CMR 2.05(1), and to operate the Assisted Facility and Project Site for the useful life of the Assisted Facility.

4.4 The District holds fee simple title, or, in the alternative, a lease in accordance with the provisions of 963 CMR 2.05(1), to the Assisted Facility and the Project Site and any easements and rights-of-way, necessary to ensure the undisturbed use and possession of the Assisted Facility and Project Site.

4.5 No information furnished by or on behalf of the District to the Authority in this Project Funding Agreement, including all Exhibits attached hereto, the Project Scope and Budget Agreement, the Feasibility Study Agreement, the Initial Compliance Certification, or any other document, certificate or written statement furnished to the Authority in connection with the Statement of Interest or Project contains any untrue statement of a material fact or omits any material fact necessary to make the statements contained in this Agreement or in the aforementioned documents not misleading in light of the circumstances in which the same were made.

4.6 The District has duly obtained all necessary votes, resolutions, appropriations, and local approvals for the Project, in accordance with formats prescribed by or otherwise acceptable to the Authority, and has taken all actions necessary or required by law to enable it to enter into this Project Funding Agreement and to fund and perform its obligations hereunder in accordance with the Authority's policies and standards. This Project Funding Agreement constitutes a valid and binding obligation of the District, enforceable in accordance with its terms, except as such enforceability may be limited by bankruptcy, insolvency, moratorium, reorganization or other laws heretofore or hereafter enacted and general equity principles.

4.7 The District has read and fully understands, and shall remain in compliance with Chapter 70B; Chapter 208 and 210 of the Acts of 2004; 963 CMR 2.00 *et seq.*, and all other applicable rules, regulations, policies, guidelines, approvals, directives, and procedures of the Authority.

4.9 The District has read and fully understands the provisions of 963 CMR 2.04 and warrants and represents that the Project has been designed and constructed in accordance with the requirements and standards set forth in 963 CMR 2.04.

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4.10 The District has read and fully understands the provisions of 963 CMR 2.16 and understands that certain costs and expenses incurred by the District in connection with the Project shall not be eligible for reimbursement by the Authority, including, but not limited to, those items listed in 963 CMR 2.16 and/or identified in this Agreement.

4.11 The District has read and fully understands the provisions of 963 CMR 2.16(4) and has a record keeping system in place to file, track, and retain all records related to the Project for as long as the Assisted Facility is in service as a public school or remains under the ownership of the District or for such period of time as is prescribed by applicable law relating to the retention of public records, whichever is longer..

4.12 The Project has successfully undergone review and obtained all necessary approvals, or shall have successfully undergone review and obtained all necessary approvals prior to the solicitation of construction bids, by any departments or agencies of the Commonwealth required by law to review such projects, including, but not limited to, the Massachusetts Historical Commission, the Massachusetts Commission Against Discrimination, the Secretary of Environmental Affairs, and the Architectural Access Board in accordance with all applicable laws and regulations and the District has provided, or shall have provided prior to the solicitation of construction bids, any written documentation evidencing such reviews and/or approvals to the Authority.

4.13 No litigation before or by any court, public board or body is pending against either the District or the Authority seeking to restrain or enjoin the execution and delivery of this Project Funding Agreement or the construction or operation of the Project, or contesting or affecting the validity of this Project Funding Agreement or the power of the District to pay its share of the Project.

4.14 The District has read and fully understands the provisions of the Massachusetts Conflict of Interest law, M.G.L. c. 268A, and has implemented policies and procedures to ensure that all District employees, agents, consultants, and representatives and the Owner's Project Manager, Designer, Contractor, and Vendors working on or for the Project are in compliance with M.G.L. c. 268A to the extent that it is applicable.

4.15 The District meets all of the applicable requirements of M.G.L. c. 7, § 38A ½; c. 30 (sections 39F, 39J, 39K, 39N, 39O, 39P and 39R); c. 70B; c. 149; chapter 193 of the Acts of 2004; 963 CMR 2.00 *et seq.*; and all other applicable provisions of federal, state, and local law, and has implemented policies and procedures to ensure that all District employees, agents, consultants, and representatives and the Owner's Project Manager, Designer, Contractor, and Vendors working on or for the Project are in compliance with the applicable requirements of M.G.L. c. 7, § 38A ½; c. 30 (sections 39F, 39J, 39K, 39N, 39O, 39P and 39R); c. 70B; c. 149; chapter 193 of the Acts of 2004; 963 CMR 2.00 *et seq.*; and all other applicable provisions of federal, state, and local law.

4.16 The District has implemented policies and procedures to prevent and eliminate fraud, waste, and abuse of public funds in connection with the Project.

4.17 The District has submitted all audit materials requested by the Authority in connection with any project for which the District has received or anticipates receiving funding from the Authority.

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4.18 The District has submitted to the Authority a completed electronic payments form, as prescribed by the Authority and attached hereto as in accordance with the instructions stated on the form.

4.19 In each fiscal year since fiscal year 1999, the District has spent at least 50% of the sum of the District's calculated foundation budget amounts for the purposes of foundation utility and ordinary maintenance expenses and extraordinary maintenance allotment as defined in M.G.L. c. 70 for those purposes.

4.20 All meetings of all public bodies in the District that relate in any way to the Project, including, but not limited to, the meetings of the District's school building committee, have been conducted, and shall be conducted, in compliance with the provisions of G.L. c. 30A, §§ 18 – 25, 940 CMR 29.00 *et seq.*, and all other applicable law.

SECTION 5

DISBURSEMENT OF TOTAL FACILITIES GRANT

Subject to the terms and conditions of this Project Funding Agreement, the Authority shall disburse Total Facilities Grant funds to the District in accordance with and subject to the following:

5.1 (a.) Using the Authority's Pro-Pay system, the District shall submit requests for reimbursement to the Authority on a Monthly basis in a format and manner prescribed by the Authority. Each Monthly request for reimbursement shall be approved locally by a duly authorized representative of the District, shall be in a form prescribed by or otherwise acceptable to the Authority, and shall include, in reasonable detail: (1) the amount of reimbursement requested, (2) the nature of the materials, property, or services received, (3) the total value of the work performed and materials furnished by each of the Designer, Contractor, Owner's Project Manager, and each Vendor to date, (4) the value of the work completed during the reimbursement period, and (5) the percentage of completion to date for each line item of work.

(b.) Each request for reimbursement submitted by the District shall be accompanied by (1) the invoices for each of the amounts requisitioned, (2) proof of payment by the District, and (3) any other supporting documentation and information substantiating the District's request for reimbursement, as the Authority may request, in a form satisfactory to the Authority.

(c.) Each request for reimbursement shall include a written certification signed by a duly authorized representative of the District stating that: (1) such request for reimbursement is solely for costs incurred by the District in connection with the Project, (2) the obligations itemized in the request for reimbursement have not been the basis for a prior request for reimbursement submitted by the District that has been paid or rejected by the Authority, unless otherwise directed by the Authority, (3) the request for reimbursement is for work actually and properly performed or for materials or property properly identified in the request for reimbursement as not incorporated in the work but delivered and suitably stored at the Project Site, (4) the request for reimbursement properly identifies materials or property approved for payment by the District as stored off the Project Site, with all costs of storage, insurance, perpetual inventory, monthly inspection and any maintenance requirement borne by the Contractor, and that the District has received the necessary proof of insurance and titles to the materials or property prior to payment to the Contractor, (5) the District

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has not received and is not expecting to receive any rebates, monetary settlements, grants, monetary donations, surety bond payments, insurance proceeds, or any other funding from a third party, other than the Authority, in connection with the Project that is the subject of the request for reimbursement, (6) the request for reimbursement is for costs that already have been duly paid by the District, and (7) the request for reimbursement is within the Total Project Budget approved by the Authority.

(d.) After receipt from the District of a timely and properly submitted request for reimbursement, the Authority shall make a reasonable effort to reimburse the District for the Authority's share of eligible Project costs, subject to the terms and conditions of this Project Funding Agreement, within 15 days of receiving such request for reimbursement. The District hereby acknowledges and agrees that the amount of eligible Project costs reimbursed by the Authority may be subject to change depending on the results of an audit conducted by the Authority pursuant to Sections 5 and 6 of this Project Funding Agreement.

5.2 The Authority may review and perform a preliminary audit on each request for reimbursement submitted pursuant to this Section 5 to ensure that only eligible, approved costs of the Project are reimbursed by the Authority. In the event that the Authority determines that an item contained in a request for reimbursement submitted by the District is not eligible for reimbursement by the Authority, the Authority shall adjust a pending or a subsequent reimbursement to the District to account for the ineligible costs. The District hereby acknowledges and agrees that each audit conducted pursuant to this Section 5 is preliminary, and the Authority may further adjust and alter the results of a preliminary audit after conducting subsequent audits or the final project cost audit of the Project pursuant to Section 6 of this Project Funding Agreement.

5.3 Notwithstanding any other provisions of this Project Funding Agreement to the contrary, in no event shall disbursements of the Total Facilities Grant by the Authority exceed, in the aggregate, ninety-five percent (95%) of the Total Facilities Grant described in Section 2 of this Project Funding Agreement, unless the District has filed a Final Request and Certificate for Reimbursement and the Authority has completed a final project cost audit of the Project pursuant to Section 6 of this Project Funding Agreement.

SECTION 6 FINAL PROJECT COST AUDIT

6.1 Upon the filing of a Final Request and Certificate for Reimbursement with the Authority or at a time determined by the Authority, the Authority shall conduct a final, close-out project cost audit of the Project, including a review of all requests for reimbursement and other documentation submitted to the Authority during the course of the Project, any other documents or materials that the Authority may request, and an inspection of the Project, to determine the final Total Facilities Grant. The District hereby agrees and acknowledges that the Contractor's, Owner's Project Manager's and Designer's records shall be subject to audit by the Authority and such records shall include, but not be limited to, to the extent applicable, accounting records, written policies and procedures, Subcontractor files (including proposals of successful and unsuccessful bidders, bid tabulations, etc.), original estimates, estimating work sheets, correspondence, change order files (including documentation covering negotiated settlements), backcharge logs and supporting documentation, general ledger entries detailing cash and trade discounts earned, insurance rebates and dividends, and any other Contractor records which may have a bearing on matters of interest to the Authority in

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connection with the Contractor's work for the District. All of the foregoing shall be open to inspection and subject to audit and/or reproduction by the Authority and/or its agent and/or its authorized representative to the extent necessary to adequately permit evaluation and verification of (a) Contractor compliance with all requirements of the Construction Contract Documents, and (b) compliance with provisions for pricing change orders, invoices or claims submitted by the Contractor or any of his payees.

6.2 Other specific records subject to audit by the Authority shall include all information, materials and data of every kind and character such as documents, subscriptions, recordings, computerized information, agreements, purchase orders, leases, contracts, commitments, arrangements, correspondence, electronic mail, invoices, notes, daily diaries, photographs, videos, meeting minutes, field reports, superintendent reports, drawings, receipts, vouchers and memoranda, and any and all other agreements, sources of information that may in the Authority's judgment have any bearing on or pertain to any matters, rights, duties or obligations under or covered by any District documents, Designer documents, Owner's Project Manager documents, Vendor documents or Construction Contract Documents. Such records subject to audit shall also include those records necessary to evaluate and verify direct and indirect costs, (including overhead allocations) as they may apply to costs associated with the Project. In those situations where said records have been generated from computerized data (whether mainframe, mini-computer, PC based or other computer systems), the District agrees to provide the Authority with extracts of data files in computer readable format on data disks or suitable alternative computer data exchange formats.

6.3 Upon satisfactory completion of the final project cost audit, as reasonably determined by the Authority, the Authority shall send an audit report and acceptance form and release to the District and, subject to the execution of the acceptance form and release by the District and final approval by the Authority's Board of Directors, make a final payment of the Total Facilities Grant to the District, less all adjustments for ineligible Project costs and any other adjustments that the Authority reasonably determines as necessary.

6.4 Notwithstanding any provisions in this Project Funding Agreement to the contrary, the ninetieth (90th) day after the District approves final payment to the Contractor for the Project or the ninetieth (90th) day after the District provides sufficient documentation, as reasonably determined by the Authority, indicating that the construction of the Project is approximately one-hundred percent (100%) complete or such other time, as the Authority may determine in its sole discretion, shall be the final cut-off date for incurring Project costs that may be eligible for reimbursement by the Authority.

SECTION 7 OWNER'S PROJECT MANAGER

7.1 The District shall neither change nor permit a change of the Owner's Project Manager or any of its key personnel or subconsultants without the prior written approval of the Authority. If there is any change or proposed change in the Owner's Project Manager or any of its key personnel or subconsultants, the District shall give a written notice to the Authority that shall include a statement of reasons for the change or proposed change and an explanation of the impact of the change or proposed change on the Project. The District shall not contract with or otherwise assign a new Owner's Project Manager without first obtaining the Authority's written approval of the new

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Owner's Project Manager. The District shall comply with all applicable provisions of law in the procurement or assignment of a new Owner's Project Manager.

7.2 The District shall make all reasonable efforts to ensure that the Owner's Project Manager complies with all provisions of any contract between the District and the Owner's Project Manager, and the Authority's regulations, guidelines and policies, and shall use its best efforts to enforce its rights thereunder. If the Owner's Project Manager is an existing employee of the District, the District shall exercise such supervision, control and direction over its employee-Owner's Project Manager as is necessary to enforce and perform its obligations under any agreement with the Authority; the Authority's regulations, policies and guidelines; any certification filed with the Authority, and any terms and conditions imposed by the Authority. The District shall also ensure that any consultant who is directly hired by the District to perform any portion of the project management services for the Project shall comply with the provisions of any contract between the District and said consultant.

7.3 If the Authority determines (1) that the Owner's Project Manager is not performing its obligations in accordance with the provisions of the Owner-Owner's Project Manager contract, Chapter 70B, Chapters 208 and 210 of the Acts of 2004, 963 CMR 2.00 *et seq.* and any policies, approvals, directives, and guidelines of the Authority, or (2) that the District, knowing or having reason to know that the Owner's Project Manager is not performing its obligations in accordance with the provisions of the Owner-Owner's Project Manager contract, Chapter 70B, Chapters 208 and 210 of the Acts of 2004, 963 CMR 2.00 *et seq.*, and any policies, approvals, directives, and guidelines of the Authority, has failed to use its best efforts to enforce its rights under the Owner-Owner's Project Manager Contract, or (3) if the District fails to perform its obligations under any provisions of this Project Funding Agreement that relate to services of the Owner's Project Manager, the Authority reserves the right to withhold payments to the District, to recoup payments already made to the District, and/or to set off against payments due to the District, any otherwise eligible costs, as determined by the Authority, that relate to reimbursement to the District for Owner's Project Manager services

7.4 The District hereby agrees that the Authority shall have free access to, and open communication with, any Owner's Project Manager hired by and/or assigned to the Project by the District and that the Authority shall have full and complete access to all information and documentation relating to the Project to the same extent that the District has such access. The District agrees that it shall require any such Owner's Project Manager to fully cooperate with the Authority in all matters related to the Project; to promptly communicate, transmit, and/or make available for inspection and copying any and all information and documentation requested by the Authority; to fully, accurately and promptly complete all forms and writings requested by the Authority; and to give complete, accurate, and prompt responses to any and all questions, inquiries and requests for information posed by the Authority. The District agrees that it shall not in any way, directly or indirectly, limit, obstruct, censor, hinder or otherwise interfere with the free flow of communication and information between the Owner's Project Manager and the Authority in all matters related to the Project and as provided herein; that it shall not suffer the same to occur by the act or omission of any other person or entity; and that it shall not retaliate against the Owner's Project Manager for communicating information to the Authority as provided herein. The District agrees to execute, deliver and/or communicate to the Owner's Project Manager any and all authorizations, approvals, waivers, agreements, directives, and actions that are necessary to fulfill its

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obligations under this paragraph. The District further agrees that the Authority shall bear no liability whatsoever arising out of the Authority's knowledge or receipt of information communicated to the Authority by the Owner's Project Manager and that the District shall remain responsible for the management and completion of the Project.

SECTION 8 DUTY TO BUILD, MAINTAIN AND OPERATE

8.1 The District hereby acknowledges and agrees that, in the event that the District does not complete the Project or otherwise fails to operate and maintain the Assisted Facility as a public school in substantial compliance with the Educational Program filed with the Authority as part of its Application and in accordance with the provisions of this Project Funding Agreement, Chapter 70B, Chapter 208 and 210 of the Acts of 2004, 963 CMR 2.00 *et seq.* and any rules, regulations, policies, and guidelines of the Authority, the District shall reimburse the Authority the full amount of any and all funds received from the Authority in connection with the Project.

8.2 The District shall maintain the Assisted Facility as a public school in substantial compliance with the Educational Program and in accordance with the provisions of this Project Funding Agreement, Chapter 70B, and 963 CMR 2.00 *et seq.*, Chapter 208 and 210 of the Acts of 2004, 963 CMR 2.00 *et seq.* and any rules, regulations, policies, and guidelines of the Authority, unless otherwise agreed to in writing by the Authority. In the event that the District knows or has reason to know that the Assisted Facility is no longer operated and maintained as a public school in substantial compliance with the Educational Program and in accordance with the provisions of this Project Funding Agreement, Chapter 70B, and 963 CMR 2.00 *et seq.*, Chapter 208 and 210 of the Acts of 2004, 963 CMR 2.00 *et seq.* and any rules, regulations, policies, and guidelines of the Authority, the District shall give written notice thereof to the Authority.

8.3 The District shall maintain the Assisted Facility in a good, safe and habitable condition in all respects and in full compliance with all applicable laws, by-laws, ordinances, codes, covenants and rules and regulations set forth by any government authority with jurisdiction over matters concerning the condition and the use of the Assisted Facility.

SECTION 9 INSURANCE

9.1 The District shall obtain and maintain all insurance required by law and such other insurance in such types and in such amounts as the Authority may require from time to time.

9.1.1 During the course of the Project, the District shall purchase and maintain, or shall cause the Contractor or CM at Risk to purchase and maintain, at their own expense, coverage against loss or damage to the Project in an amount equivalent to the Total Project Budget at the sole expense of the District, Contractor or CM at Risk, as the case may be. Such coverage shall be written on an "all risks" basis or equivalent form and shall include, without limitation, insurance against the perils of fire (with extended coverage) and theft, vandalism, malicious mischief, terrorism, collapse, earthquake, flood (if the Project is not in an "A" or "V" flood zone), windstorm, falsework, testing and startup, and debris removal including demolition occasioned

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by enforcement of any applicable legal requirements. The limits for earthquake and flood shall be the lesser of the Total Project Budget or \$10,000,000. The policy shall include transportation and coverage for delivered and/or stored materials designated to be incorporated into the Project. The policy shall include the Authority as a loss payee as its interests may appear. Coverage shall be maintained until final acceptance of the Project by the District and final payment has been made. The District (or Contractor or CM at Risk, if coverage is purchased by Contractor or CM at Risk) is responsible for the payment of any and all deductibles, self-insured retentions or any portion thereof under the policy.

- 9.1.2 Following completion of the Project, the District shall, at its sole expense, purchase and maintain coverage against loss or damage to the Assisted Facility in an amount equivalent to the estimated full replacement cost of the Assisted Facility. Such coverage shall be written on an "all risks" basis or equivalent form and shall include, without limitation, insurance against the perils of fire (with extended coverage) and theft, vandalism, malicious mischief, terrorism, collapse, earthquake, flood (if the Project is not in an "A" or "V" flood zone), windstorm, falsework, mechanical and electrical breakdown, and boiler and machinery accidents, and debris removal including demolition occasioned by enforcement of any applicable legal requirements. The limits for earthquake and flood shall be the lesser of the estimated full replacement cost of the Assisted Facility or \$10,000,000. The policy shall include the Authority as a loss payee as its interests may appear. The District is responsible for the payment of any and all deductibles, self-insured retentions or any portion thereof under the policy.
- 9.1.3 The District shall include the Authority as an additional insured in any commercial general liability policy held by the District for liability arising out of the Project.
- 9.1.4 The Authority shall not be responsible for the payment of deductibles, self-insured retentions, or any portion thereof.
- 9.1.5 Upon request by the Authority, the District shall obtain and provide to the Authority originals of certificates of insurance evidencing the insurance coverage required by this section of the Project Funding Agreement.

9.2 The District shall require by contractual obligation, and shall also ensure by the exercise of due diligence, that each of any Owner's Project Manager, Designer, Contractor or CM at Risk, or Vendor hired by the District in connection with the Project obtain and maintain all insurance coverage required by law and such other insurance coverage in such types and amounts as the Authority may require from time to time, including the insurance coverage required by this Project Funding Agreement and by any standard contracts that are prescribed by the Authority and executed by the District, including, but not limited to, the Authority's standard contract for Owner's Project Manager services and standard contract for designer services. The insurance required by this Section shall be provided at the sole expense of the Owner's Project Manager, Designer, Contractor or CM at Risk, and Vendors, as the case may be, and shall be in full force and effect for the full term of any contract between the District and said Owner's Project Manager, Designer, Contractor or CM at Risk, and Vendors or for such longer period as the Authority may require, including any such longer

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period that may be required by this Project Funding Agreement or the standard contracts prescribed by the Authority and executed by the District.

9.3 The District shall include in the contract between the Owner and the Contractor or CM at Risk at Risk, as the case may be, the standard language contained in **Exhibit G** regarding minimum insurance requirements for Contractors or CMs at Risk. The District may impose additional insurance requirements for either construction delivery method provided that any such additional requirements shall not be inconsistent with the requirements imposed by the standard language set forth herein and further provided that the District shall give the Authority a written notice that clearly describes any such additional requirements. It shall be the sole responsibility of the District to determine whether additional insurance requirements are desirable or necessary and should be included in the contract between the Owner and the Contractor or CM at Risk at Risk.

9.4 The District shall obtain originals of certificates of insurance evidencing the insurance coverage that may be required by the Authority from time to time, including the insurance coverage required by this Project Funding Agreement, any standard contracts that are prescribed by the Authority and executed by the District, including, but not limited to, the Authority's standard contract for Owner's Project Manager services and standard contract for Designer services, and any other contract between the District and the Owner's Project Manager, Designer, Contractor or CM at Risk, or Vendors, simultaneously with the execution of said contracts or, in the event that said contracts have been executed prior to the date of this Project Funding Agreement, as soon as possible thereafter. Upon request of the Authority, the District shall submit such certificates of insurance to the Authority, showing each type of insurance, insurance company, policy number, amount of insurance, deductibles/self-insured retentions, and policy effective and expiration dates. The District shall require each of the Owner's Project Manager, Designer, Contractor or CM at Risk, and Vendors to submit updated insurance certificates to the District prior to the expiration of any of the insurance policies or coverage referenced in this Section so that the District shall at all times possess certificates indicating current coverage.

9.5 The failure of the District to ensure that each of the Owner's Project Manager, Designer, Contractor or CM at Risk, and Vendors obtain and maintain the insurance required by the Authority, this Project Funding Agreement, any standard contract prescribed by the Authority and executed by the District or any other contract between the District and the Owner's Project Manager, Designer, Contractor or CM at Risk, or Vendors, or to provide the insurance certificates required by this Project Funding Agreement shall constitute a material breach of this Project Funding Agreement and shall be just cause for termination of this Project Funding Agreement.

9.6 The District shall, and shall require, as the case may be, its insurers and each of the Owner's Project Manager, Designer, Contractor or CM at Risk, Vendors and their insurers to, give written notice to the Authority at least thirty days prior to the effective date of any termination, cancellation, or material modification of any insurance required by this Project Funding Agreement, any standard contracts that are prescribed by the Authority and executed by the District, including, but not limited to, the Authority's standard contract for Owner's Project Manager services and standard contract for Designer services, and any other contract between the District and the Owner's Project Manager, Designer, Contractor or CM at Risk, or Vendors.

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9.7 With respect to all policies of insurance required of the Owner's Project Manager, Designer, Contractor or CM at Risk, and Vendors by this Project Funding Agreement, any standard contracts that are prescribed by the Authority and executed by the District, including, but not limited to, the Authority's standard contract for Owner's Project Manager and standard design contract, and any other contract between the District and the Owner's Project Manager, Designer, Contractor or CM at Risk, and Vendors, the District shall ensure that neither the District nor the Authority shall be responsible for the payment of deductibles, self-insured retentions or any portion thereof.

9.8 Insufficient insurance shall not release the Owner's Project Manager, Designer, Contractor or CM at Risk, or Vendors from any liability for breach of their obligations under an agreement between the District and any of them.

9.9 All insurance policies required by this Project Funding Agreement, any standard contract prescribed by the Authority and executed by the District and any other contract between the District and the Owner's Project Manager, Designer, Contractor or CM at Risk, or Vendors shall be issued by companies lawfully authorized to write that type of insurance under the laws of the Commonwealth of Massachusetts with a financial strength rating of "A-" or better as assigned by A.M. Best Company, or an equivalent rating assigned by a similar rating agency acceptable to the District and the Authority.

9.10 The District shall take all reasonable steps designed to ensure that the Owner's Project Manager, Contractor or CM at Risk, Designer, and Vendors each agree that they and their Subcontractors shall do no act, nor suffer any act to be done, which will vacate, void or impair the coverage of any insurance policies required under this Project Funding Agreement, any standard contract prescribed by the Authority and executed by the District or any other contract between the District and the Owner's Project Manager, Designer, Contractor or CM at Risk, or Vendors.

9.11 The District shall, upon request by the Authority, produce copies of all policies of insurance maintained by the District, its Contractor or CM at Risk, Owner's Project Manager, Designer and Vendors related to the Project, to the Authority.

SECTION 10

COMPLIANCE WITH CONSTRUCTION CONTRACT DOCUMENTS, PROJECT PERMITS and OTHER APPLICABLE LAW

10.1 The District shall be solely responsible to the Authority for the implementation and completion of the Project in accordance with the Construction Contract Documents and Project Permits, and for the economical and efficient operation and administration of the Project. In addition, notwithstanding any right of approval, review, or inspection held by the Authority in connection with this Project Funding Agreement, the District shall be fully and solely responsible for taking all reasonable actions designed to ensure that the Project complies with all applicable building codes, laws, rules and regulations.

10.2 The District shall be responsible for enforcing the provisions of the Construction Contract Documents and shall use its best efforts to ensure that the Contractor or CM at Risk performs all of its contractual obligations thereunder in a satisfactory manner.

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SECTION 11 DEFECTS

11.1 The District shall use its best efforts to require the Contractor or the CM at Risk, at the Contractor's or CM at Risk's own cost and expense, to repair any defect in materials or workmanship in the Project or any portion of the Project that may develop during the applicable warranty period and the District shall, to the extent permitted by law, indemnify, defend and hold the Authority harmless from and against any loss, cost, liability or expense paid or incurred by the Authority (including all attorney's fees and other costs incurred by the Authority in the defense of any such action) with respect to any claim asserted against the Authority by any party with respect to any such defect, actual or alleged.

SECTION 12 ACCESS

12.1 The District shall permit the Authority to have unrestricted access to the Project Site and the Assisted Facility at all reasonable times and shall allow the Authority to examine, inspect and copy all agreements, Construction Contract Documents, books, records, communications, and all other documents, materials and information related to the Project, for the purposes of, without limitation, determining compliance with this Project Funding Agreement, compliance with all other agreements related to the Project, and for assessing the progress of the Project.

12.2 The District shall promptly make available to the Authority any other documents or materials related to the Project, as the Authority may request from time to time.

SECTION 13 PRESENCE ON THE PREMISES OF THE ASSISTED FACILITY

13.1 The District shall require each of the Owner's Project Manager, Designer, Contractor or CM at Risk and Vendors, as the case may be, to agree that that all persons whose duties bring them upon the Project Site shall comply with the reasonable directions of the authorized officers and/or representatives of the District and the Owner's Project Manager.

13.2 In the event of a material accident of any kind related to the Project, the District shall immediately notify the Authority in writing. For purposes of this section, material accident shall mean an accident resulting in death, serious injury or a serious breach in the physical plant.

SECTION 14 RESTRICTION ON SALE, LEASE, or REMOVAL FROM SERVICE

14.1 As a condition of the Authority providing a Total Facilities Grant to the District, the District agrees to maintain and operate the Assisted Facility as a public school facility consistent with its Educational Program and in accordance with the provisions of this Project Funding Agreement, Chapter 70B, Chapter 208 and 210 of the Acts of 2004, 963 CMR 2.00 *et seq.*, and any rules, regulations, policies and guidelines of the Authority. In the event that the District wishes to sell, rent, lease, license, mortgage, donate, transfer control of, declare as surplus or otherwise dispose of an Assisted Facility, or any portion of an Assisted Facility, or convey or terminate any interest therein,

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other than renting, licensing, leasing or otherwise allowing for a temporary or periodic community use of the Assisted Facility that does not interfere with or result in changes to the Educational Program, the District shall provide the Authority with a written notice of its intent to sell, rent, lease, license, mortgage, donate, transfer control of, declare as surplus, or otherwise dispose of the Assisted Facility, or any portion of an Assisted Facility, or convey or terminate any interest therein, at least sixty (60) days prior to the effective date of any such proposed action, in accordance with the notice provisions of Section 17 of this Project Funding Agreement. The notice of intent to take any of the aforementioned actions shall include the current appraised value of the Assisted Facility and the maximum resale price on the basis of highest and best use of the facility. If the Authority disagrees with the current appraised value of the Assisted Facility, the Authority may obtain a second appraisal at its own expense, and the current appraised value shall be equal to the greater of the two appraisal amounts on the basis of highest and best use of the facility.

14.2 The provisions of Chapter 70B, § 15(a)-(c) shall apply to any sale, rental, lease or removal from service of the Assisted Facility, except for a rental or lease that is for a temporary or periodic community use. In the event that the District sells, rents, or leases the Assisted Facility, other than renting or leasing the Facility for a temporary or periodic community use, the Authority shall receive no less than its share, in proportion to its investment in the total Project cost, of the fair market value of the Assisted Facility, as determined by an appraisal conducted pursuant to Section 14.1 above.

SECTION 15 NOTICE OF CLAIMS

15.1 The District shall notify the Authority promptly in writing at the address and in the manner required by Section 17 of this Project Funding Agreement of any material claim or action brought against the District, Designer, Owner's Project Manager, Contractor or CM at Risk, Vendors and/or any and all Sub-Contractors arising out of this Project Funding Agreement or the Project.

15.2 Neither the District nor any person or entity claiming by through or under it, shall file a civil action arising out of the provisions of this Project Funding Agreement against the Authority without first serving the Authority with a written notice stating the factual basis of its claims, the applicable provisions of the Project Funding Agreement that the claim is based upon, and the remedy that the District is seeking. No civil action arising out of the provisions of this Project Funding Agreement shall be filed by the District against the Authority until the expiration of sixty (60) days after the Authority has received the notice of claim required by this section.

SECTION 16 INDEMNIFICATION

16.1 To the fullest extent permitted by law, the District shall indemnify, defend, and hold harmless the Authority and its officers, agents and employees from and against any and all claims, actions, damages, awards, judgments, liabilities, injuries, costs, fees, expenses, or losses, including, without limitation, reasonable attorneys fees and costs of investigation and litigation whatsoever which may be incurred by or for which liability may be asserted against the Authority, its officers, agents or employees arising out of any activities undertaken by, for, or on behalf of the District in the implementation of this Project Funding Agreement or any activities, acts or omissions in relation to the Project, including, but not limited to, the performance of any contract or obligation directly or

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indirectly related to the Project. This Section shall not be construed to negate or abridge any other obligation of indemnification running to the Authority which would otherwise exist.

16.2 To the fullest extent permitted by law, and unless otherwise agreed to in writing by the Authority, the District shall require the Contractor or CM at Risk, as the case may be, to indemnify, defend, and hold harmless the Authority and its officers and employees as set forth below:

To the fullest extent permitted by law, the Contractor [CM at Risk] hereby agrees to indemnify, defend and hold harmless the Authority and its officers and employees from and against all claims, damages, liabilities, injuries, costs, fees, expenses, or losses, including, without limitation, reasonable attorney's fees and costs of investigation and litigation, whatsoever which may be incurred by the Authority arising out of or resulting from the performance or non-performance of the work performed by the Contractor [CM at Risk] and subcontractors, provided that such claims, damages, liabilities, injuries, costs, fees, expenses, or losses are alleged to be caused in whole, or in part, by an act or omission of any of the Contractor[or CM at Risk], any subcontractors, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder.

SECTION 17 NOTICE

17.1 Any notices required or permitted to be given by either of the Parties hereunder shall be given in writing and shall be delivered to the addressee (a) in-hand (b) by certified mail, postage prepaid, return receipt requested; (c) by facsimile; or (d) by a commercial overnight courier that guarantees next day delivery and provides a receipt, and such notices shall be addressed as follows:

If to the Authority:

Massachusetts School Building Authority
40 Broad Street, Suite 500
Boston, MA 02109
Attention: Director of Capital Planning
Facsimile: 617-720-5260

If to the District:

Catherine Stickney, Superintendent
Northbridge Public Schools
87 Linwood Avenue
Whitinsville, MA 01588
Email: cstickney@nps.org
Phone: 508-234-8156

District Name: Town of Northbridge
 School Name: W. Edward Balmer Elementary School
 Project ID Number: 201502140001

or to such other address or addressee as the District and the Authority may from time to time specify in writing. Any notice shall be effective only upon receipt, which for any notice given by facsimile shall mean notice that has been received by the party to whom it is sent as evidenced by a confirmation slip that bears the time and date of receipt.

SECTION 18 AMENDMENTS

18.1 This Project Funding Agreement may be amended only through a written amendment signed by duly authorized representatives of the District and the Authority.

SECTION 19 ADDITIONAL PROVISIONS

19.1 All certifications, filings, and submissions to the Authority required by this Project Funding Agreement shall contain a statement, signed by a duly authorized representative of the District, that such certification, filing, or submission is true, complete, and accurate, to the best of the District's knowledge.

19.2 No member or employee of the Authority shall be held personally or contractually liable by or to the District under any provision of this Project Funding Agreement, because of any breach of this Project Funding Agreement, or because of its execution or attempted execution.

19.3 The District shall neither assign any interest, in whole or in part, in this Project Funding Agreement, nor transfer any interest in same, whether by assignment or novation, without the prior written approval of the Authority.

19.4 Nothing in this Project Funding Agreement shall be construed as creating a duty or obligation on the part of the Authority to oversee or monitor the performance of the Designer, Contractor or CM at Risk, Owner's Project Manager, or other Project participants. The Authority shall not be responsible for, among other things, the design of the Project, architectural plans, construction means, methods, techniques, sequences or procedures, quality control or construction safety, or compliance with the Construction Contract Documents, Project Permits or any applicable provisions of law, which shall be and remain the sole responsibility of the District and its Designer, Contractor or CM at Risk, Owner's Project Manager and Vendors, as the case may be.

SECTION 20 GOVERNING LAW, VENUE, AMENDMENT and SEVERABILITY

20.1 This Project Funding Agreement shall be governed by and interpreted in accordance with the laws of the Commonwealth of Massachusetts. In case any provision(s) hereof shall be determined invalid or unenforceable under the applicable law, such provision(s) shall, insofar as possible, be construed or applied in such manner as will permit the enforcement of this Project Funding Agreement; otherwise, this Project Funding Agreement shall be construed as though such provision(s) had never been made a part hereof.

District Name: Town of Northbridge
 School Name: W. Edward Balmer Elementary School
 Project ID Number: 201502140001

20.2 Any civil action brought against the Authority by the District, or any person or entity claiming by through or under it, that arises out of the provisions of this Project Funding Agreement, shall only be brought in a court of competent jurisdiction in Suffolk County, Massachusetts. The District, for itself and for any person or entity claiming by through or under it, hereby waives any defenses that it may have as to the venue to which it has agreed herein, including, but not limited to, any claim that this venue is improper or that the forum is inconvenient. The District for itself and for any person or entity claiming by through or under it, hereby waives all rights, if any, to a jury trial in any civil action against the Authority that may arise out of the provisions of this Project Funding Agreement.

20.3 This Project Funding Agreement and any amendments hereto shall be deemed null and void and of no further force or effect unless it is executed by a duly authorized representative of the District and a duly authorized representative of the Authority. The undersigned, who are signing on behalf of the District, hereby warrant and represent that they possess the full legal authority to execute this Project Funding Agreement on behalf of the District and to bind the District to its terms and conditions. In the event that the Authority determines that the undersigned are not duly authorized to execute this Project Funding Agreement and to bind the District, the Authority may, in its sole discretion, take whatever action it deems necessary to terminate this Project Funding Agreement, to suspend or terminate payments to the District and to recover any funds disbursed to the District. Any rights and remedies available to the Authority under the provisions of this Project Funding Agreement shall be in addition to any other rights and remedies provided by law.

SECTION 21 WAIVERS

21.1 The terms, conditions, covenants, duties and obligations contained in this Project Funding Agreement may be waived only by written agreement executed by duly authorized representatives of the District and the Authority. No waiver by either party of any term, condition, covenant, duty or obligation shall be construed as a waiver of any other term, condition, covenant, duty or obligation nor shall a waiver of any breach be deemed to constitute a waiver of any subsequent breach, whether of the same or a different section, subsection, paragraph, clause, phrase, or other provision of this Project Funding Agreement. Forbearance or indulgence in any form or manner by either Party to this Project Funding Agreement shall not be construed as a waiver, nor in any way limit the remedies available to that party.

21.2 The Authority's payment(s) to the District under this Project Funding Agreement or its review, approval or acceptance of any actions by the District under this Project Funding Agreement shall not operate as a waiver of any rights or remedies available to the Authority under this Project Funding Agreement or as otherwise provided by law and the District shall remain liable to the Authority for all damages incurred by the Authority arising out of the District's failure to perform in accordance with the terms and conditions of this Project Funding Agreement.

SECTION 22 DEFAULTS AND REMEDIES

22.1 The occurrence of any of the following events shall constitute, and is herein defined to be, an Event of Default under this Project Funding Agreement:

District Name: Town of Northbridge
School Name: W. Edward Balmer Elementary School
Project ID Number: 201502140001

(a.) If the District shall fail to perform or observe any covenant, agreement, term or condition on its part provided in this Project Funding Agreement and such failure shall continue for a period of thirty (30) days after written notice thereof shall be given to the District by the Authority; provided that, if such failure cannot be remedied within such thirty (30) day period, it shall not constitute an Event of Default hereunder if corrective action satisfactory to the Authority, as determined by the Authority, in writing, is instituted by the District within such period and diligently pursued until the failure is remedied;

(b.) If any representation or warranty made by the District in this Project Funding Agreement shall prove to have been incorrect, false, or to be misleading in any material respect;

22.2 If any Event of Default hereunder shall occur and be continuing, the Authority may proceed to protect its rights under this Project Funding Agreement, and may: (a) terminate this Project Funding Agreement, (b) permanently withhold or temporarily suspend payment of the Total Facilities Grant to the District, (c) recover any payments of the Total Facilities Grant previously made to the District, and/or (d) exercise any other right or remedy upon such default as may be granted to the Authority under this Project Funding Agreement or under any other applicable provision of law.

22.3 No delay or omission to exercise any right, remedy or power accruing upon any Event of Default shall impair any such right, remedy or power or shall be construed to be a waiver thereof, but any such right, remedy or power may be exercised from time to time and as often as may be deemed expedient.

22.4 The rights and remedies conferred upon or reserved to the Authority under this Project Funding Agreement are not intended to be exclusive and every such right or remedy shall be cumulative and shall be in addition to any other rights or remedies provided by law. The Authority may assert a right to recover damages by any appropriate means, including, but not limited to, set-off, lawsuit, withholding, recoupment, counterclaim, or crossclaim, either during or after performance of this Project Funding Agreement.

SECTION 23 TERMINATION

23.1 This Project Funding Agreement may be terminated by the Authority if an Event of Default shall have occurred as provided in Section 22. Notice of such termination shall be in writing and shall be effective immediately upon service of the notice in the manner provided in Section 17. Upon five (5) days written notice, this Project Funding Agreement may be terminated by the Authority in the event of any action constituting fraud, malfeasance, or illegal activity committed in connection with the Project by the District or any of the District's employees, or, where the District knew or should have known, by the Architect, Owner's Project Manager, CM at Risk, Contractors or Vendors.

23.2 This Agreement may be terminated by mutual written agreement of the Parties.

District Name: Town of Northbridge
 School Name: W. Edward Balmer Elementary School
 Project ID Number: 201502140001

SECTION 24 PUBLIC RECOGNITION OF THE AUTHORITY'S PARTICIPATION

24.1 The District shall erect a project identification sign on the construction site during the period of construction of the Project in accordance with the provisions of 963 CMR 2.04(1)(g). If the District erects a permanent plaque or other memorial recognizing the names of Project participants, the District shall include the name of the Massachusetts School Building Authority.

SECTION 25 OWNERSHIP OF DOCUMENTS

25.1 The District acknowledges and agrees that, unless otherwise provided by law or by the provisions of Section 25.2 of this Agreement, all information, data, reports, studies, designs, drawings, plans, sketches, specifications, materials, computer programs, documents, models, inventions, equipment, and any other documentation, product or tangible materials to the extent authored or prepared, in whole or in part, by the Designer for this Project (collectively, the "Materials"), other than the Designer's administrative communications, records, and files relating to this Project, shall be the property of, and shall vest in, both the District and the Authority, severally and not jointly, as "works made for hire" or otherwise, provided that the District complies with its payment obligations under its Contract with the Designer for the Project. Except as otherwise provided in Section 25.2, both the District and the Authority, severally and not jointly, will own the exclusive rights, worldwide and royalty-free, to and in all Materials prepared and produced by the Designer pursuant to its Contract with the District for the Project, including, but not limited to, United States and International patents, copyrights, trade secrets, know-how and any other intellectual property rights, and both the District and the Authority, severally and not jointly, shall have the exclusive, unlimited and unrestricted right, worldwide and royalty-free, to publish, reproduce, distribute, transmit and publicly display all Materials prepared by the Designer, which shall include, but not be limited to, the Authority's exercise of the aforesaid right in furtherance of the Programs described in Section 25.2.

The District further acknowledges and agrees that the Designer shall have a non-exclusive license to publish and publicly display all Materials prepared by the Designer in its normal marketing and related professional and academic activities and that the Designer shall have a non-exclusive license to use the typical or standard details and all other replicable elements of the Materials for this Project on other future projects. At the completion or termination of the Designer's services required pursuant to the Contract between the District and the Designer for the Project, the District shall ensure that the Designer promptly turns over to the Authority copies of all original Materials but only to the extent that such Materials have not already been provided to the Authority.

25.2 Notwithstanding any other language to the contrary in this Agreement or in any Contract between the District and the Designer for the Project, the District acknowledges and agrees that the Designer shall have a non-exclusive license to publish, reproduce, distribute, transmit, and publicly display all Materials prepared by the Designer for the purpose of participating in the Authority's so-called Model School Program, as it may be amended from time to time, or any other program implemented by the Authority to develop, acquire,

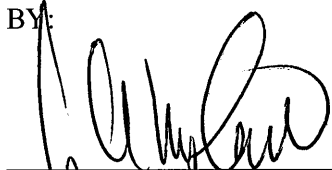
District Name: Town of Northbridge
 School Name: W. Edward Balmer Elementary School
 Project ID Number: 201502140001

modify, use, re-use, and reproduce prototypical designs and model school designs, and details and elements thereof (collectively "Programs"), including, but not limited to, submitting proposals and applications to the Authority and public school districts in the Commonwealth of Massachusetts for the qualification and selection of the Designer and the School design, or elements and details thereof, in such Programs and using, modifying, and reproducing the Materials for the purpose of designing, constructing, reconstructing, renovating and repairing public school facilities pursuant to such Programs, as approved by the Authority. The District further agrees to provide the Designer, the Authority, and representatives of other public school districts with reasonable cooperation and reasonable access to the completed School facility at mutually agreeable times for purposes of said Programs.

IN WITNESS WHEREOF, the Authority and the District have caused this Project Funding Agreement to be executed by their duly authorized representatives this 29 day of April in the year 2014.


THE MASSACHUSETTS SCHOOL BUILDING AUTHORITY

BY:


 John K. McCarthy
 Executive Director

TOWN OF NORTHBRIDGE

BY:


 Alicia Cannon
 Name (Type/Print)

BOARD OF SELECTMEN
 Title/Office (Type/Print)

Instructions for Updating Project Budgets in the MSBA ProPay System

The User Guide for the ProPay System, **“ProPay User Guide V3 7/10”** is available on the MSBA website www.massschoolbuildings.org. To access the user guide place your cursor over “About MSBA”, click on “View All Downloads”, then “User Guides”.

In order to initiate the reimbursement process for eligible incurred costs beyond those associated with the Feasibility Study Agreement, Districts are required to enter project budgets associated with Project Funding Agreement (“PFA”) into the Pro Pay System. The process is similar to that used to enter the Feasibility Study Agreement Budgets, only there are more budget line items to enter. The individual line item budgets are included in the attached Total Project Budget Template for PFA Budget Entry”, which reflects the District’s Total Project Budget contained in “Exhibit A” of the PFA. These values are what must be submitted through ProPay System at this time.

Please note the following:

- MSBA will not be reimbursing for eligible incurred costs that exceed the budget for each line item within Exhibit A of the executed Project Funding Agreement (“PFA”).
- If an individual budget line item needs to be adjusted during the course of the project, the District must complete and submit a “Project Funding Agreement Budget Revision Request Form”, which is also available on the MSBA website www.massschoolbuildings.org. Place cursor over “Building With Us”, click on “Project Advisories”, then “Project Advisories, 5-8, June 2010”, then scroll down to “Advisory 8” to access a word version of the form.
- Monitoring of project costs and timely requests for budget revisions are critical to ensure that the MSBA review of the budget revision request does not delay the processing of reimbursement requests submitted to the MSBA.
- The MSBA will review the District’s documentation explaining the need for transfers from one budget line item to another. All budget revisions will need to be reviewed and accepted by the MSBA in order to authorize a revision to the District’s ProPay budget. Going forward MSBA authorization is required to reimburse for applicable incurred eligible costs that exceed the budget for each line item in ProPay.

TO: Director of Capital Planning

FROM: Superintendent Name

District Name

School Name

MSBA Project ID Number:

DATE: Month XX, 2017

RE: Project Funding Agreement Budget Revision Request, NUMBER: X

Pursuant to Section 3.6 of the Project Funding Agreement between the [CITY/TOWN/RSD] of XXXXXXXX (the "District") and the MASSACHUSETTS SCHOOL BUILDING AUTHORITY (the "Authority"), the District hereby requests a revision to the Total Project Budget, Exhibit A, dated _____, for the _____ Project. As required, the District has provided the information outlined in the table below to indicate the Total Project Budget categories (line items) affected, the amounts needed and the reasons for the proposed revision.

The District acknowledges and agrees that it will not seek reimbursement from the Authority for any costs that exceed the already approved line item limits set forth in Exhibit A until after the Authority has accepted this Total Project Budget Revision Request, and the Authority's ProPay system has been adjusted accordingly.

The District further acknowledges and agrees that in accordance with Sections 3.6 and 3.7 of the Project Funding Agreement, any revisions to the Total Project Budget will not result in an increase to the Total Facilities Grant amount set forth in Section 2.1 of the Project Funding Agreement.

The District further acknowledges and agrees that the need for these revisions to the Total Project Budget [have not/have] been identified in the OPM monthly report as required pursuant to the Contract for Owner's Project Management Services between the District and the OPM.

The District further acknowledges and agrees that all of the information contained in this Total Project Budget Revision Request has been reviewed and approved by the [CITY/TOWN/RSD] of XXXX's School Building Committee, and it further certifies and acknowledges that the funds to pay for the costs associated with these proposed revisions are available as indicated by the signatures noted below.

Table 1: Owner's Contingency Budget Revision

Use Table 1 below for identification of expenditures against the Owner's contingency. The Total Owner's Contingency in the Current Total Project Budget, Exhibit A of the PFA dated XX-XX-XXXX is \$XXXX. (Please attach all supporting documentation, e.g., executed contracts, amendments and/or supporting invoices for reimbursable expenses)

MSBA USE ONLY						
From Classification Code	From Classification Name	To Classification Code	To Classification Name	Budget Revision Amount	Reason for transfer	Amount Remaining in Owner's Contingency

Table 2: Construction Contingency Budget Revision

Use Table 2 below for identification of expenditures against the Construction Contingency. The Total Construction Contingency in the Current Total Project Budget, Exhibit A of the PFA dated XX-XX-XXXX is \$XXXXX. (Please attach all supporting documentation, e.g., executed contracts, amendments and/or supporting invoices for reimbursable expenses)

[illegible]

Table 3: Budget Revisions not originally from Owner's or Construction Contingency

Use Table 3 below for identification of expenditures not originally from Owner's or Construction Contingency. The Current Total Project Budget, Exhibit A of the PFA dated XX-XX-XXXX is \$XXXXX. (Please attach all supporting documentation, e.g., executed contracts, amendments and/or supporting invoices for reimbursable expenses)

						MSBA USE ONLY		
From Classification Code	From Classification Name	To Classification Code	To Classification Name	Budget Revision Amount	Reason for transfer	Amount Remaining in Revised Budget Line	Ineligible/Cost/Scope Items excluded from the Total Facilities Grant	
							New Scope Exclusion	Transfer Scope Exclusion
								Note if any

Notes (applicable where marked in corresponding rows of tables above)

- 1.) This budget transfer has already been incorporated into the ProPay budget as accepted in PFA Bid Amendment. All items noted as N/A in exclusion columns; **no** budget revision request to be entered into ProPay.
- 2.) The exclusions noted in this BRR are not new exclusions, but rather maintain the overall amount of excluded costs in the Total Project Budget without increase. An exclusion amount equal to the amount of the buyout savings entered in GMP contingency will be reduced in the divisions of the construction budget, offsetting the buyout savings amount, in order that the total excluded amount does not increase as a result of the transfer of buyout savings.
- 3.) The exclusions noted in this BRR are not new exclusions, but rather maintain the overall amount of excluded costs in the Total Project Budget without increase. An exclusion amount equal to the amount of the exclusions shown in this BRR will be reduced from the Construction Contingency line item, offsetting the amount being added to the Construction Change Order line item shown in this BRR, in order that the total excluded amount does not increase as a result of the budget transfers included in this BRR. Therefore the 1% or 2% potentially eligible Construction Contingency amount, whichever is applicable to this project, will not be reduced by this BRR.

By signing this Total Project Budget Revision Request, I hereby certify that I have read and understand the terms of this Request and further certify that the information supplied by the District in the tables is true, accurate and complete.

By signing this Total Project Budget Revision Request, I hereby certify that I have read and understand the terms of this Request and further certify that the information supplied by the District in the tables is true, accurate and complete.

By (Please Print):	By (Please Print):	By (Please Print):
Title: Chief Executive Officer	Title: Superintendent of Schools	Title: Chair of the School Committee
Date:	Date:	Date:

MASSACHUSETTS SCHOOL BUILDING AUTHORITY

By (Please Print):	Date:	Date:
	Title: Director of	

**Total Project Budget
for PFA Budget Entry**

**Northbridge
W. Edward Balmer Elementar School**

29-Apr-19

6/20/2018

Classification Code	Classification Name	Total Project Budget
	Totals	\$100,968,194
0000-0000	Feasibility Study Agreement	\$775,000
0001-0000	OPM - Feasibility Study	\$105,000
0002-0000	A&E - Feasibility Study	\$425,000
0003-0000	Environmental & Site	\$150,000
0004-0000	Other	\$95,000
0100-0000	Administration	\$2,988,004
0101-0000	<i>Legal Fees</i>	\$80,000
0102-0400	OPM - Design Development	\$180,250
0102-0500	OPM - Construction Contract Documents	\$250,025
0102-0600	OPM - Bidding	\$95,050
0102-0700	OPM - Construction Contract Administration	\$1,912,599
0102-0800	OPM - Closeout	\$120,080
0102-0900	OPM - Extra Services	\$100,000
0102-1000	OPM - Reimbursable & Other Services	\$40,000
0102-1100	OPM - Cost Estimates	\$0
0103-0000	Advertising	\$20,000
0104-0000	Permitting	\$50,000
0105-0000	Owner's Insurance	\$80,000
0199-0000	Other Administrative Costs	\$60,000
0200-0000	Architecture and Engineering	\$7,696,042
0201-0400	<i>A&E - Design Development</i>	\$1,944,609
0201-0500	<i>A&E - Construction Contract Documents</i>	\$2,657,249
0201-0600	<i>A&E - Bidding</i>	\$227,830
0201-0700	<i>A&E - Construction Contract Administration</i>	\$2,252,218
0201-0800	<i>A&E - Closeout</i>	\$164,136
0201-9900	<i>A&E - Other Basic Services</i>	\$0
0203-0100	<i>A&E - Construction testing</i>	\$30,000
0203-0200	<i>A&E - Printing (over minimum)</i>	\$20,000
0203-9900	<i>A&E - Other Reimbursable Costs</i>	\$100,000
0204-0200	<i>A&E - Hazardous Materials</i>	\$100,000
0204-0300	<i>A&E - Geotech & Geo-Env.</i>	\$85,000
0204-0400	<i>A&E - Site Survey</i>	\$40,000
0204-0500	<i>A&E - Wetlands</i>	\$40,000
0204-1200	<i>A&E - Traffic Studies</i>	\$35,000
0300-0000	Site Acquisition	\$0
0301-0000	Land/Building Purchase	\$0
0302-0000	Appraisal Fees	\$0
0303-0000	Recording fees	\$0
0500-0000	Construction Contract	\$83,717,295
0501-0000	Pre-Construction Services	\$250,000
0502-0001	Construction Budget	\$79,492,662
0506-0000	Alternates	\$0
0507-0000	Construction Contingency	\$3,974,633
0600-0000	Miscellaneous Project Costs	\$700,000
0601-0000	<i>Utility company Fees</i>	\$200,000
0602-0000	<i>Testing Services</i>	\$300,000
0603-0000	<i>Swing Space / Modulares</i>	\$0

Total Project Budget for PFA Budget Entry

**Northbridge
W. Edward Balmer Elementar School**

29-Apr-19

6/20/2018

Classification Code	Classification Name	Total Project Budget
0699-0000	<i>Other Project Costs (Mailing & Moving)</i>	\$200,000
0700-0000	Furnishings and Equipment	\$3,502,000
0701-0000	<i>Furniture, Fixtures and Equipment</i>	\$1,648,000
0702-0000	<i>Equipment</i>	
0703-0000	<i>Technology</i>	\$1,854,000
0800-0000	Owner's Contingency	\$1,589,853
0801-0000	Owner's Contingency	\$1,589,853

*NOTE: This document was prepared by the MSBA to assist District's with the entering of their project budget into the MSBA's ProPay System and is based on a preliminary review of information and estimates provided by the Town of Northbridge for the W. Edward Balmer Elementary School project. Refer to Exhibit A of the Project Funding Agreement for the Total Project Budget which includes a list of certain budget, cost and scope items have been determined to be ineligible for reimbursement. The MSBA staff will enter Scope Exclusions/Ineligible Costs once budget entry is complete.



CONSERVATION COMMISSION

7 MAIN STREET
WHITINSVILLE, MASSACHUSETTS 01588
Telephone: (508) 234-0817
FAX: (508) 234-0814

Agenda for
Wednesday, May 01, 2019
at 14 Hill Street

REVISED 04/29/2019

- 7:00PM Citizen's Forum
- 7:05PM Continued Public Hearing – NOI – (248-665) Main and Arcade Streets (Lovey's Garden Marketplace) (Map 6, Parcel 30). Proposed construction of shed and brush clearing on an existing gravel parking lot in preparation of a retail operation selling nursery supplies such as flowers and other plantings. The applicant is Gary Vecchione represented by Guerriere & Halnon, Inc., 1029 Providence Road, Whitinsville, MA 01588.
- 7:15PM Continued Public Hearing – NOI – (248-) Balmer School (21 Crescent Street) (Map 7, Parcels 138 & 141). Proposed replacement of the existing Balmer School with a new elementary school. The applicant is Town of Northbridge represented by Nitsch Engineering, 2 Central Plaza, Boston, MA 02108.
- 7:25PM Public Hearing – Amend NOI – (248-538) Carpenter Estates (Hannah Drive) (Map 10, Parcel 4). Proposed amendment to include revised work within the subdivision. The applicant is Pasture Development Group represented by Andrews Survey & Engineering, Inc., 104 Mendon Street, Uxbridge, MA 01569.

Old / New Business

(248-589) Church Street Extension (Osterman's) – Request to Extend Order of Conditions

Enforcement Actions

Minutes

Executive Session

(Please note this Conservation Commission Agenda may be subject to change). The next meeting of the Conservation Commission is scheduled for Wednesday, May 15, 2019.



TOWN OF NORTHBRIDGE
PLANNING BOARD
7 MAIN STREET
WHITINSVILLE, MASSACHUSETTS 01588

PHONE: (508) 234-2447

FAX: (508) 234-0821

April 24, 2019

Doreen A. Cedrone, Town Clerk
Northbridge Town Hall
7 Main Street, Whitinsville, MA 01588

RE: W. EDWARD BALMER ELEMENTARY SCHOOL – CONT. PUBLIC MEETING
Site Plan Review

Dear Ms. Cedrone:

Please be advised, at its meeting of Tuesday, April 23, 2019, the Planning Board upon motion duly made (H. Berkowitz) and seconded (J. Berkowitz) voted (5-0) to CONTINUE the above noted site plan review to Tuesday, May 14, 2019 at 7:05 PM to allow additional time for review and public comment.

Should you require additional information concerning this matter, please contact the Planning office.

Sincerely,,

R. Gary Bechtholdt II
Northbridge Town Planner

Cc: Applicant/Engineer
School Building Committee
BLDG INSP
/File

PROJECT MINUTES

Project:	New W. Edward Balmer Elementary School	Project No.:	17020
Prepared by:	Joel Seeley	Meeting Date:	5/1/19
Re:	Sanitary Sewer Capacity Analysis Meeting	Meeting No:	1
Location:	Town Hall	Time:	1:00pm
Distribution:	School Building Committee, Attendees, D&W (MF)		

Attendees:

PRESENT	NAME	AFFILIATION
✓	Adam Gaudette	Town Manager
✓	Richard Maglione	School Director of Facilities
✓	James Shuris	Director of Public Works & Town Engineer
✓	Mark Kuras	Sewer Superintendent
✓	Chad Kershaw	CDW Smith
✓	Brendan Ennis	CDW Smith
✓	Sandy Brock	Nitsch Engineering
✓	Jim Mauer	Fontaine Bros, CM
✓	Joel Seeley	SMMA, OPM

Item #	Action	Discussion
1.1	Record	All introduced themselves and their relationship to the project.
1.2	Record	C. Kershaw provided an overview of the draft Sanitary Sewer Capacity Analysis, attached.
1.3	Record	DPW will install a flow meter to measure the existing infiltration and inflow (I/I) from the existing Blamer School on-site sanitary sewer distribution system. The flow will be measured for approximately eight weeks.
1.4	Record	A follow-up meeting will be scheduled after the flow meter findings are analyzed.

Attachments: Agenda, draft Sanitary Sewer Capacity Analysis

The information herein reflects the understanding reached. Please contact the author if you have any questions or are not in agreement with these Project Minutes

NORTHBRIDGE - BRIDGE

5/1/19

SEWER REPORT REVIEW

Attendees

NAME	COMPANY	EMAIL
Sandy Brock	HISTCH	sbrock@ad.com
Jim Mauer	Fontaine Bros	jmauer@fontainebros.com
CHAD KERSHAW	CDM SMITH	KERSHAWCT@CDMSMITH.COM
Mark Kuras	DPW Sewer	mKuras@northbridge.mass.gov
BRENNAN ENNIS	CDM SMITH	ennisb@cdmsmith.com
ADAM GAUDETTE	NORTHBRIDGE	AGADETTE@NORTHBRIDGE.MASS.GOV
RICHARD MAGLIONE	NPS	rmaglione@nps.org
JIM SHURIS	DPW	jshuris@northbridge.mass.gov
LEE STOUT	SHURIS	



Memorandum

*To: Jim Shuris, Director of Public Works
Mark Kuras, Sewer Superintendent*

From: Chad J. Kershaw, P.E., CDM Smith

Date: April 18, 2019

*Subject: Northbridge, MA
Balmer School Sewer Capacity Analysis DRAFT*

The Town of Northbridge, MA (Town) is proposing to discharge an additional 7,730 gallons per day (gpd) of sewer flow to the Town's sewer collection system as part of the W. Edward Balmer Elementary School (Balmer School) building upgrade project. The proposed Balmer School will be replacing the existing Balmer School, located at 21 Crescent Street. The existing Balmer School currently conveys all sewer flow to the existing sewer main in Crescent Street. The Balmer School sewer flow, along with other sewer flow from the Town, is then conveyed via existing 10- to 24-inch gravity sewer mains to the Town's wastewater treatment plant (WWTP) located at 644 Providence Road. The proposed Balmer School will discharge to the Town's sewer collection system at the same point as the current school.

The purpose of this evaluation was to determine how the Town's existing sewer infrastructure handles existing average day and peak sewer flows and average day and peak sewer flows after the new Balmer School is constructed and occupied. For the purpose of this study, the sewer mains downstream of the Balmer School from Crescent Street to Douglas Road were analyzed. These sewer mains are located in Lake Street, Main Street, Water Street and a cross-country easement behind the mills off Main Street. See **Figure 1** for a map highlighting the location of these sewer mains. Note that the sewer mains from Douglas Road to the WWTP were not analyzed, as they were sized and installed in the 2000s to convey future flow to the WWTP.

Sewer Flow Analysis

Existing Flows

Flow metering data from the spring 2014 flow metering program was used to determine existing average daily flows and peak flows during a high groundwater season. The flow metering program included installation of a flow meter in SMH-84 (most upstream manhole) and a flow meter in SMH-483 (most downstream manhole), which captured all sanitary flow (including sanitary flow from the existing Balmer School) and any infiltration and inflow (I/I) during the metering period (April 2 to May 28, 2014). The average daily flows were calculated by averaging all 15-minute interval flow

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data during the entire metering period. The resulting average daily flow was approximately 177,000 gpd for the most upstream sewer manhole (SMH-84) and approximately 306,000 gpd for the most downstream sewer manhole (SMH-483).

The Massachusetts Department of Environmental Protection (MassDEP) “Guidelines for Performing I/I Analyses and Sewer System Evaluation Surveys” was used for this analysis. The MassDEP guidelines state that a sewer system capacity evaluation shall be completed to assess the risk for sanitary sewer overflows for the 5-year, 24-hour storm event. During the spring 2014 flow metering program, the largest rainfall event occurred on March 29-31, 2014, producing 4.0 inches of rain, including a 24-hour peak rainfall intensity of 3.13 inches.

Using the National Oceanic and Atmospheric Administration (NOAA) Hydrometeorological Design Studies Center Precipitation Frequency Data Server (PFDS) (https://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html), a 24-hour rainfall event with 3.13 inches equates to approximately a 2-year, 24-hour rainfall event for the Northbridge, Massachusetts region. However, multiple preceding rainfall events in late February/early March, coupled with snow melt, created a high groundwater condition. As a result, the flows captured during this rainfall event may be more representative of a 5-year, 24-hour rainfall event. The peak flow was calculated by taking the highest 15-minute flow reading during the peak 24-hour intensity of the March 29-31, 2014 rainfall event, which resulted in a peak flow of approximately 458,000 gpd for the most upstream sewer manhole (SMH-84) and approximately 728,000 gpd for the most downstream sewer manhole (SMH-483).

Also, the Town provided water use data for all buildings tributary to the analyzed sewer mains. Using this data, the existing average daily and peak flows could be allocated at key locations along the analyzed sewer mains based on system configuration (i.e. where other sideline sewers discharge to the analyzed sewer mains). See **Table 1** for a summary of existing average day and peak flows for the sewer mains from Crescent Street to Douglas Road.

Table 1 – Summary of Existing Sewer Flows

Upstream SMH	Downstream SMH	Location	Average Daily Flow (mgd)	Peak Flow (mgd)
SMH-84	SMH-583	Crescent Street at Lake Street	0.177	0.458
SMH-583	SMH-584	Lake Street	0.177	0.458
SMH-584	SMH-585	Lake Street	0.177	0.458
SMH-585	SMH-1026	Lake Street	0.177	0.458
SMH-1026	SMH-586	Lake Street	0.182	0.468
SMH-586	SMH-587	Lake Street	0.182	0.468
SMH-587	SMH-588	Lake Street	0.182	0.468
SMH-588	SMH-589	Easement off Lake Street	0.185	0.474
SMH-589	SMH-568	Easement off Lake Street	0.185	0.474

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Upstream SMH	Downstream SMH	Location	Average Daily Flow (mgd)	Peak Flow (mgd)
SMH-568	SMH-557	Main Street	0.218	0.543
SMH-557	SMH-560	Water Street	0.296	0.707
SMH-560	SMH-561	Water Street	0.296	0.707
SMH-561	SMH-558	Water Street	0.298	0.711
SMH-558	SMH-650	Easement off Water Street	0.306	0.728
SMH-650	SMH-651	Easement Behind Mills	0.306	0.728
SMH-651	SMH-652	Easement Behind Mills	0.306	0.728
SMH-652	SMH-653	Easement Behind Mills	0.306	0.728
SMH-653	SMH-656	Easement Behind Mills	0.306	0.728
SMH-656	SMH-657	Easement Behind Mills	0.306	0.728
SMH-657	SMH-658	Easement Behind Mills	0.306	0.728
SMH-658	SMH-659	Easement Behind Mills	0.306	0.728
SMH-659	SMH-660	Easement Behind Mills	0.306	0.728
SMH-660	SMH-662	Easement Behind Mills	0.306	0.728
SMH-662	SMH-661	Easement Behind Mills	0.306	0.728
SMH-661	SMH-663	Easement Behind Mills	0.306	0.728
SMH-663	SMH-664	Easement Behind Mills	0.306	0.728
SMH-664	SMH-24	Easement Behind Mills	0.306	0.728
SMH-24	SMH-25	Easement Behind Mills	0.306	0.728
SMH-25	SMH-26	Easement Behind Mills	0.306	0.728
SMH-26	SMH-27	Easement Behind Mills	0.306	0.728
SMH-27	SMH-1547	Easement Behind Mills	0.306	0.728
SMH-1547	SMH-483	Easement Behind Mills at Douglas Road	0.306	0.728

Proposed Flows

The sanitary sewer design flows for the proposed Balmer School were provided in a letter dated February 12, 2019 by Nitsch Engineering (see **Attachment A**). The letter states that the existing Balmer School has a sanitary flow of 5,980 gpd and the proposed Balmer School will have a sanitary flow of 13,710 gpd, resulting in an additional sanitary flow of 7,730 gpd. These sanitary sewer flows are based on Title 5 flow rates (Massachusetts State Environmental Code 310 CMR 15.203). The Title 5 flow rates represent a maximum day sanitary flow, or a peaking factor of 2.0 from average daily sanitary flows. As a result, the proposed additional average day sanitary flow is 3,865 gpd. Using the industry standard curve for average daily to peak flow ratios, a peaking factor of 5.5 is a conservative ratio. Therefore, the proposed additional peak flow from the new Balmer School is 21,257.5 gpd.

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Also, infiltration for the new Balmer School sewer mains from the proposed building(s) to the existing Crescent Street sewer needs to be considered. Using the industry standard for infiltration rate for new sewer mains of 100 gpd per inch-mile and an assumed 0.5 miles of new 8-inch diameter sewer mains on the Balmer School property, the expected I/I from the new sewer mains would be approximately 400 gpd.

Table 2 summarizes the proposed additional sewer flows from the new Balmer School. Also, **Table 3** provides a summary of existing average day flows plus Balmer School proposed peak flow and existing peak flows plus Balmer School proposed peak flow for the sewer mains from Crescent Street to Douglas Road. The existing average daily flow plus Balmer School proposed peak flow and existing peak flow plus Balmer School proposed peak flow for the most upstream sewer manhole (SMH-84) is 0.199 mgd and 0.480 mgd, respectively, and for the most downstream sewer manhole (SMH-483) is 0.328 mgd and 0.750 md, respectively.

Table 2 – Proposed Additional Flows from New Balmer School

Type	Average Daily Flow (gpd)	Maximum Daily Flow (gpd)	Peak Flow (gpd)
Sanitary Flow	3,865	7,730	21,257.5
Infiltration	400	400	400
Total Sewer Flow	4,265	8,130	21,657.5

Note: The proposed additional sanitary flows are based on Title 5 flow rates (310 CMR 15.203). The Merrimac curves were used to determine peaking factors (average daily flow = 1.0, maximum daily flow = 2.0, peak flow = 5.5)

Table 3 – Summary of Existing and Proposed Sewer Flows

Upstream SMH	Downstream SMH	Location	Existing Average Daily Flow + Proposed Peak Flow (mgd)	Existing Peak Flow + Proposed Peak Flow (mgd)
SMH-84	SMH-583	Lake Street	0.199	0.480
SMH-583	SMH-584	Lake Street	0.199	0.480
SMH-584	SMH-585	Lake Street	0.199	0.480
SMH-585	SMH-1026	Lake Street	0.199	0.480
SMH-1026	SMH-586	Lake Street	0.204	0.490
SMH-586	SMH-587	Lake Street	0.204	0.490
SMH-587	SMH-588	Lake Street	0.204	0.490
SMH-588	SMH-589	Easement off Lake Street	0.207	0.496
SMH-589	SMH-568	Easement off Lake Street	0.207	0.496
SMH-568	SMH-557	Main Street	0.239	0.564
SMH-557	SMH-560	Water Street	0.317	0.728
SMH-560	SMH-561	Water Street	0.317	0.728
SMH-561	SMH-558	Water Street	0.320	0.733
SMH-558	SMH-650	Easement off Water Street	0.328	0.750

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Upstream SMH	Downstream SMH	Location	Existing Average Daily Flow + Proposed Peak Flow (mgd)	Existing Peak Flow + Proposed Peak Flow (mgd)
SMH-650	SMH-651	Easement Behind Mills	0.328	0.750
SMH-651	SMH-652	Easement Behind Mills	0.328	0.750
SMH-652	SMH-653	Easement Behind Mills	0.328	0.750
SMH-653	SMH-656	Easement Behind Mills	0.328	0.750
SMH-656	SMH-657	Easement Behind Mills	0.328	0.750
SMH-657	SMH-658	Easement Behind Mills	0.328	0.750
SMH-658	SMH-659	Easement Behind Mills	0.328	0.750
SMH-659	SMH-660	Easement Behind Mills	0.328	0.750
SMH-660	SMH-662	Easement Behind Mills	0.328	0.750
SMH-662	SMH-661	Easement Behind Mills	0.328	0.750
SMH-661	SMH-663	Easement Behind Mills	0.328	0.750
SMH-663	SMH-664	Easement Behind Mills	0.328	0.750
SMH-664	SMH-24	Easement Behind Mills	0.328	0.750
SMH-24	SMH-25	Easement Behind Mills	0.328	0.750
SMH-25	SMH-26	Easement Behind Mills	0.328	0.750
SMH-26	SMH-27	Easement Behind Mills	0.328	0.750
SMH-27	SMH-1547	Easement Behind Mills	0.328	0.750
SMH-1547	SMH-483	Easement Behind Mills	0.328	0.750

Sewer Capacity Analysis

The design drawings for the majority of the analyzed sewer mains were available and used for this analysis. The design drawings, completed by McClintock & Woodfall Consulting and Civil Engineers, show that these sewer mains were installed in the late 1910's or early 1920's and consist of 10- to 12-inch diameter cast iron (CI) pipe. See **Figure 1** for a map showing the location of the analyzed sewer mains.

The ground cover (invert to ground surface) varies from approximately 2.8 feet at SMH-557 to 14.3 feet at SMH-661. SMH-557 is located in Main Street at Water Street and SMH-661 is located in the cross-country easement behind the mills. On average, the ground cover at all analyzed sewer mains is 5.7 feet. Note that design drawings for the sewer mains between SMH-664 to SMH-483 (six sewer reaches in the cross-country easement behind the mills) were not available. As a result, the known invert elevations at SMH-664 and SMH-483 were used and the six sewer reaches were assumed to have a common, constant slope. Also, on the record drawings there was a vertical elevation discrepancy at SMH-568 of 0.77 feet. This discrepancy was confirmed in the field not to represent actual conditions and was adjusted in the model accordingly. All information was compiled into a

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spreadsheet model which calculated the capacity of each pipeline between each manhole using Manning's Equation.

Capacity Analysis

Based on a Manning's roughness coefficient, "n", value of 0.014 for CI pipe, the theoretical pipe capacity of the analyzed sewer mains ranges from 0.41 MGD to 2.54 MGD. Using the flow scenarios calculated in **Table 1** and **Table 3**, a capacity analysis of the sewer mains was completed for each scenario. Based on the analysis, the sewer mains have adequate capacity to convey the existing average daily flow and existing average daily flow plus Balmer School proposed peak flow scenarios. However, the sewer mains do not have adequate capacity to convey the existing peak flow and existing peak flow plus Balmer School proposed peak flow scenarios. However, no sanitary sewer overflows (SSOs) are predicted under any scenario.

Existing Average Daily Flow Scenario

As shown in **Table 4**, all sewer mains have sufficient capacity to convey the existing average daily flow. For sewer pipes 10 to 12 inches in diameter, the industry standard sewer design flow ratio (actual sewer flow/full pipe flow) is 0.5. Under this scenario, all sewer segments but two (SMH-557 to SMH-560 and SMH-561 to SMH-558) operate within the industry standard acceptable range for percent flow of up to 0.5. SMH-557 to SMH-560 and SMH-561 to SMH-558 have flow ratios of 0.56, and 0.60, respectively.

Existing Peak Flow Scenario

As shown in **Table 5**, three sewer reaches do not have adequate capacity to convey the existing peak flow scenario. These three sewer reaches are SMH-557 to SMH-560, SMH-560 to SMH-561, and SMH-561 to SMH-558. These three reaches are all 10-inch diameter, are relatively flat, and convey additional flow from all sewers tributary to Main Street. Also, these three reaches are the most downstream 10-inch diameter sewer mains before the sewers upsize to 12-inch, starting at the Water Street easement.

As a result, eight sewer manholes (SMH-586, -587, -588, -589, -568, -557, -560, and -561) are predicted to experience surcharging conditions. The largest calculated surcharge height over the crown of the pipe is 0.68 feet at SMH-557, resulting in a freeboard (hydraulic grade line elevation to ground surface) of 2.11 feet. However, no SSOs are predicted.

Existing Average Daily Flow + Balmer School Proposed Peak Flow

As shown in **Table 6**, all sewer mains can convey the existing average daily flow plus Balmer School proposed peak flow scenario. Under this scenario, all sewer segments but two (SMH-557 to SMH-560 and SMH-561 to SMH-558) operate within the industry standard acceptable range for percent flow of up to 0.50. SMH-557 to SMH-560 and SMH-561 to SMH-558 have flow ratios of 0.60, and 0.65, respectively.

TABLE 4
EXISTING AVERAGE DAILY FLOW SCENARIO

Upstream MH Number	Upstream MH Location	Pipe Diameter (in)	Slope ft/ft	Surcharge Over Crown (ft.)	Upstream Freeboard (ft)	Pipe Capacity Q _c (mgd)	Flow Demand Q _d (mgd)	Delta Q _c -Q _d	Capacity Ratio Q _d /Q _c
SMH-84	Lake Street at Crescent Street	10	0.0018	N/A	3.54	0.46	0.15	0.31	0.32
SMH-583	Lake Street	10	0.0018	N/A	3.62	0.47	0.15	0.32	0.31
SMH-584	Lake Street	10	0.0018	N/A	3.81	0.47	0.15	0.32	0.32
SMH-585	Lake Street	10	0.0018	N/A	3.57	0.46	0.15	0.32	0.32
SMH-1026	Lake Street at Conservation Drive	10	0.0018	N/A	3.94	0.47	0.15	0.32	0.32
SMH-586	Lake Street	10	0.0018	N/A	4.53	0.46	0.15	0.31	0.33
SMH-587	Lake Street	10	0.0018	N/A	4.66	0.47	0.15	0.32	0.32
SMH-588	Easement off Lake Street	10	0.0020	N/A	4.53	0.49	0.15	0.33	0.32
SMH-589	Easement off Lake Street	10	0.0021	N/A	3.65	0.50	0.15	0.34	0.31
SMH-568	Main Street	10	0.0028	N/A	4.15	0.58	0.18	0.40	0.31
SMH-557	Main Street at Water Street	10	0.0016	N/A	2.97	0.44	0.25	0.20	0.56
SMH-560	Water Street	10	0.0026	N/A	4.00	0.56	0.25	0.31	0.44
SMH-561	Water Street	10	0.0014	N/A	4.77	0.41	0.25	0.16	0.60
SMH-558	Water Street	12	0.0021	N/A	6.39	0.81	0.25	0.55	0.31
SMH-650	Easement off Water Street	12	0.0020	N/A	5.59	0.79	0.25	0.54	0.32
SMH-651	Easement Behind Mills	12	0.0020	N/A	6.59	0.79	0.25	0.54	0.32
SMH-652	Easement Behind Mills	12	0.0020	N/A	7.02	0.80	0.25	0.55	0.32
SMH-653	Easement Behind Mills	12	0.0020	N/A	7.70	0.79	0.25	0.53	0.32
SMH-656	Easement Behind Mills	12	0.0012	N/A	7.51	0.62	0.25	0.37	0.41
SMH-657	Easement Behind Mills	12	0.0040	N/A	8.37	1.12	0.25	0.87	0.23
SMH-658	Easement Behind Mills	12	0.0020	N/A	9.03	0.80	0.25	0.55	0.32
SMH-659	Easement Behind Mills	12	0.0021	N/A	12.22	0.83	0.25	0.57	0.31
SMH-660	Easement Behind Mills	12	0.0018	N/A	12.28	0.75	0.25	0.50	0.34
SMH-662	Easement Behind Mills	12	0.0020	N/A	12.36	0.80	0.25	0.55	0.32
SMH-661	Easement Behind Mills	12	0.0203	N/A	17.25	2.54	0.25	2.28	0.10
SMH-663	Easement Behind Mills	12	0.0146	N/A	7.04	2.15	0.25	1.89	0.12
SMH-664	Easement Behind Mills	10	0.0045	N/A	5.12	0.74	0.25	0.48	0.35
SMH-24	Easement Behind Mills	10	0.0045	N/A	5.02	0.74	0.25	0.48	0.35
SMH-25	Easement Behind Mills	10	0.0045	N/A	4.79	0.74	0.25	0.48	0.35
SMH-26	Easement Behind Mills	10	0.0045	N/A	5.16	0.74	0.25	0.48	0.35
SMH-27	Easement Behind Mills	10	0.0045	N/A	5.62	0.74	0.25	0.48	0.35
SMH-1547	Easement Behind Mills	10	0.0045	N/A	4.27	0.74	0.25	0.48	0.35

TABLE 5
EXISTING PEAK FLOW SCENARIO

Upstream MH Number	Upstream MH Location	Pipe Diameter (in)	Slope ft/ft	Surcharge Over Crown (ft.)	Upstream Freeboard (ft)	Pipe Capacity Q _c (mgd)	Flow Demand Q _d (mgd)	Delta Q _c -Q _d	Capacity Ratio Q _d /Q _c
SMH-84	Lake Street at Crescent Street	10	0.0018	N/A	3.31	0.46	0.38	0.08	0.83
SMH-583	Lake Street	10	0.0018	N/A	3.33	0.47	0.38	0.09	0.81
SMH-584	Lake Street	10	0.0018	N/A	3.52	0.47	0.38	0.09	0.82
SMH-585	Lake Street	10	0.0018	N/A	3.46	0.46	0.38	0.08	0.82
SMH-1026	Lake Street at Conservation Drive	10	0.0018	N/A	3.73	0.47	0.39	0.08	0.83
SMH-586	Lake Street	10	0.0018	0.02	4.06	0.46	0.39	0.07	0.85
SMH-587	Lake Street	10	0.0018	0.16	4.14	0.47	0.39	0.08	0.83
SMH-588	Easement off Lake Street	10	0.0020	0.28	3.89	0.49	0.39	0.09	0.81
SMH-589	Easement off Lake Street	10	0.0021	0.42	2.88	0.50	0.39	0.10	0.80
SMH-568	Main Street	10	0.0028	0.56	3.31	0.58	0.45	0.13	0.78
SMH-557	Main Street at Water Street	10	0.0016	0.68	2.11	0.44	0.59	-0.15	1.33
SMH-560	Water Street	10	0.0026	0.48	3.19	0.56	0.59	-0.03	1.06
SMH-561	Water Street	10	0.0014	0.43	4.08	0.41	0.59	-0.18	1.44
SMH-558	Water Street	12	0.0021	N/A	6.16	0.81	0.61	0.20	0.75
SMH-650	Easement off Water Street	12	0.0020	N/A	5.27	0.79	0.61	0.18	0.77
SMH-651	Easement Behind Mills	12	0.0020	N/A	6.38	0.79	0.61	0.19	0.76
SMH-652	Easement Behind Mills	12	0.0020	N/A	6.84	0.80	0.61	0.20	0.76
SMH-653	Easement Behind Mills	12	0.0020	N/A	7.56	0.79	0.61	0.18	0.77
SMH-656	Easement Behind Mills	12	0.0012	N/A	7.41	0.62	0.61	0.01	0.98
SMH-657	Easement Behind Mills	12	0.0040	N/A	8.32	1.12	0.61	0.51	0.54
SMH-658	Easement Behind Mills	12	0.0020	N/A	8.81	0.80	0.61	0.20	0.75
SMH-659	Easement Behind Mills	12	0.0021	N/A	12.15	0.83	0.61	0.22	0.74
SMH-660	Easement Behind Mills	12	0.0018	N/A	12.23	0.75	0.61	0.15	0.80
SMH-662	Easement Behind Mills	12	0.0020	N/A	12.28	0.80	0.61	0.20	0.76
SMH-661	Easement Behind Mills	12	0.0203	N/A	17.11	2.54	0.61	1.93	0.24
SMH-663	Easement Behind Mills	12	0.0146	N/A	6.83	2.15	0.61	1.54	0.28
SMH-664	Easement Behind Mills	10	0.0045	N/A	4.85	0.74	0.61	0.13	0.82
SMH-24	Easement Behind Mills	10	0.0045	N/A	4.74	0.74	0.61	0.13	0.82
SMH-25	Easement Behind Mills	10	0.0045	N/A	4.59	0.74	0.61	0.13	0.82
SMH-26	Easement Behind Mills	10	0.0045	N/A	4.67	0.74	0.61	0.13	0.82
SMH-27	Easement Behind Mills	10	0.0045	N/A	4.72	0.74	0.61	0.13	0.82
SMH-1547	Easement Behind Mills	10	0.0045	N/A	4.01	0.74	0.61	0.13	0.82

TABLE 6
EXISTING AVERAGE DAILY FLOW + BALMER SCHOOL PROPOSED PEAK FLOW SCENARIO

Upstream MH Number	Upstream MH Location	Pipe Diameter (in)	Slope ft/ft	Surcharge Over Crown (ft.)	Upstream Freeboard (ft)	Pipe Capacity Q _c (mgd)	Flow Demand Q _d (mgd)	Delta Q _c -Q _d	Capacity Ratio Q _d /Q _c
SMH-84	Lake Street at Crescent Street	10	0.0018	N/A	3.53	0.46	0.17	0.30	0.36
SMH-583	Lake Street	10	0.0018	N/A	3.61	0.47	0.17	0.30	0.35
SMH-584	Lake Street	10	0.0018	N/A	3.80	0.47	0.17	0.30	0.35
SMH-585	Lake Street	10	0.0018	N/A	3.56	0.46	0.17	0.30	0.36
SMH-1026	Lake Street at Conservation Drive	10	0.0018	N/A	3.93	0.47	0.17	0.30	0.36
SMH-586	Lake Street	10	0.0018	N/A	4.52	0.46	0.17	0.29	0.37
SMH-587	Lake Street	10	0.0018	N/A	4.65	0.47	0.17	0.30	0.36
SMH-588	Easement off Lake Street	10	0.0020	N/A	4.52	0.49	0.17	0.32	0.35
SMH-589	Easement off Lake Street	10	0.0021	N/A	3.64	0.50	0.17	0.32	0.35
SMH-568	Main Street	10	0.0028	N/A	4.14	0.58	0.20	0.38	0.34
SMH-557	Main Street at Water Street	10	0.0016	N/A	2.95	0.44	0.26	0.18	0.60
SMH-560	Water Street	10	0.0026	N/A	3.99	0.56	0.26	0.29	0.48
SMH-561	Water Street	10	0.0014	N/A	4.74	0.41	0.27	0.15	0.65
SMH-558	Water Street	12	0.0021	N/A	6.38	0.81	0.27	0.54	0.34
SMH-650	Easement off Water Street	12	0.0020	N/A	5.58	0.79	0.27	0.52	0.34
SMH-651	Easement Behind Mills	12	0.0020	N/A	6.59	0.79	0.27	0.52	0.34
SMH-652	Easement Behind Mills	12	0.0020	N/A	7.02	0.80	0.27	0.53	0.34
SMH-653	Easement Behind Mills	12	0.0020	N/A	7.70	0.79	0.27	0.52	0.35
SMH-656	Easement Behind Mills	12	0.0012	N/A	7.50	0.62	0.27	0.35	0.44
SMH-657	Easement Behind Mills	12	0.0040	N/A	8.37	1.12	0.27	0.85	0.24
SMH-658	Easement Behind Mills	12	0.0020	N/A	9.02	0.80	0.27	0.53	0.34
SMH-659	Easement Behind Mills	12	0.0021	N/A	12.21	0.83	0.27	0.55	0.33
SMH-660	Easement Behind Mills	12	0.0018	N/A	12.28	0.75	0.27	0.48	0.36
SMH-662	Easement Behind Mills	12	0.0020	N/A	12.36	0.80	0.27	0.53	0.34
SMH-661	Easement Behind Mills	12	0.0203	N/A	17.25	2.54	0.27	2.27	0.11
SMH-663	Easement Behind Mills	12	0.0146	N/A	7.04	2.15	0.27	1.87	0.13
SMH-664	Easement Behind Mills	10	0.0045	N/A	5.12	0.74	0.27	0.46	0.37
SMH-24	Easement Behind Mills	10	0.0045	N/A	5.01	0.74	0.27	0.46	0.37
SMH-25	Easement Behind Mills	10	0.0045	N/A	4.78	0.74	0.27	0.46	0.37
SMH-26	Easement Behind Mills	10	0.0045	N/A	5.15	0.74	0.27	0.46	0.37
SMH-27	Easement Behind Mills	10	0.0045	N/A	5.60	0.74	0.27	0.46	0.37
SMH-1547	Easement Behind Mills	10	0.0045	N/A	4.26	0.74	0.27	0.46	0.37

TABLE 7

EXISTING PEAK FLOW + BALMER SCHOOL PROPOSED PEAK FLOW SCENARIO

Upstream MH Number	Upstream MH Location	Pipe Diameter (in)	Slope ft/ft	Surcharge Over Crown (ft.)	Upstream Freeboard (ft)	Pipe Capacity Q _c (mgd)	Flow Demand Q _d (mgd)	Delta Q _c -Q _d	Capacity Ratio Q _d /Q _c
SMH-84	Lake Street at Crescent Street	10	0.0018	N/A	3.28	0.46	0.40	0.06	0.87
SMH-583	Lake Street	10	0.0018	N/A	3.29	0.47	0.40	0.07	0.85
SMH-584	Lake Street	10	0.0018	N/A	3.36	0.47	0.40	0.07	0.85
SMH-585	Lake Street	10	0.0018	0.12	3.27	0.46	0.40	0.06	0.86
SMH-1026	Lake Street at Conservation Drive	10	0.0018	0.17	3.47	0.47	0.41	0.06	0.87
SMH-586	Lake Street	10	0.0018	0.25	3.83	0.46	0.41	0.05	0.89
SMH-587	Lake Street	10	0.0018	0.36	3.95	0.47	0.41	0.06	0.87
SMH-588	Easement off Lake Street	10	0.0020	0.45	3.72	0.49	0.41	0.08	0.85
SMH-589	Easement off Lake Street	10	0.0021	0.57	2.73	0.50	0.41	0.08	0.83
SMH-568	Main Street	10	0.0028	0.69	3.18	0.58	0.47	0.11	0.81
SMH-557	Main Street at Water Street	10	0.0016	0.79	2.00	0.44	0.61	-0.16	1.37
SMH-560	Water Street	10	0.0026	0.56	3.11	0.56	0.61	-0.05	1.09
SMH-561	Water Street	10	0.0014	0.48	4.03	0.41	0.61	-0.20	1.48
SMH-558	Water Street	12	0.0021	N/A	6.14	0.81	0.62	0.19	0.77
SMH-650	Easement off Water Street	12	0.0020	N/A	5.25	0.79	0.62	0.17	0.79
SMH-651	Easement Behind Mills	12	0.0020	N/A	6.37	0.79	0.62	0.17	0.79
SMH-652	Easement Behind Mills	12	0.0020	N/A	6.83	0.80	0.62	0.18	0.78
SMH-653	Easement Behind Mills	12	0.0020	N/A	7.55	0.79	0.62	0.16	0.79
SMH-656	Easement Behind Mills	12	0.0012	N/A	7.40	0.62	0.62	0.00	1.01
SMH-657	Easement Behind Mills	12	0.0040	N/A	8.32	1.12	0.62	0.50	0.56
SMH-658	Easement Behind Mills	12	0.0020	N/A	8.79	0.80	0.62	0.18	0.78
SMH-659	Easement Behind Mills	12	0.0021	N/A	12.15	0.83	0.62	0.20	0.76
SMH-660	Easement Behind Mills	12	0.0018	N/A	12.23	0.75	0.62	0.13	0.83
SMH-662	Easement Behind Mills	12	0.0020	N/A	12.27	0.80	0.62	0.18	0.78
SMH-661	Easement Behind Mills	12	0.0203	N/A	17.10	2.54	0.62	1.91	0.25
SMH-663	Easement Behind Mills	12	0.0146	N/A	6.81	2.15	0.62	1.52	0.29
SMH-664	Easement Behind Mills	10	0.0045	N/A	4.83	0.74	0.62	0.11	0.85
SMH-24	Easement Behind Mills	10	0.0045	N/A	4.72	0.74	0.62	0.11	0.85
SMH-25	Easement Behind Mills	10	0.0045	N/A	4.57	0.74	0.62	0.11	0.85
SMH-26	Easement Behind Mills	10	0.0045	N/A	4.64	0.74	0.62	0.11	0.85
SMH-27	Easement Behind Mills	10	0.0045	N/A	4.66	0.74	0.62	0.11	0.85
SMH-1547	Easement Behind Mills	10	0.0045	N/A	3.99	0.74	0.62	0.11	0.85

Jim Shuris, Mark Kuras
April 18, 2019
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Existing Peak Flow + Balmer School Proposed Peak Flow

As shown in **Table 7**, four sewer reaches do not have adequate capacity to convey the existing peak flow plus Balmer School proposed peak flow scenario. The additional sewer reach over capacity from the existing peak flow scenario is SMH-656 to SMH-657. This sewer reach is 12-inch diameter and is very flat (slope of 0.0012 ft/ft).

As a result, 10 sewer manholes are predicted to experience surcharging conditions. The two additional sewer manholes predicted to experience surcharging conditions from existing peak flow scenario are SMH-585, and SMH-1026. The largest calculated surcharge height over the crown of the pipe is 0.80 feet at SMH-557, resulting in a freeboard (hydraulic grade line elevation to ground surface) of 1.99 feet. However, no SSOs are predicted.

Additional Findings and Suggested Follow-Up Activities

The desktop analysis identified potential capacity issues within the sewer mains downstream of the proposed Balmer School under the existing peak flow scenario and existing peak flow plus Balmer School proposed peak flow scenario. The desktop model is conservative in nature, as it assumes the starting hydraulic grade line is the crown of the pipe. Even with this conservative approach, under all existing and future flow scenarios, sanitary sewer overflows are not anticipated. If the Town wishes to address the minimal surcharging in the identified sewer mains, CDM Smith recommends the following additional investigations/alternatives:

Manhole Inspections

The Town should inspect the sewer manholes identified as surcharging under peak flow conditions and visually observe and document the flow level in the manhole during or immediately following a significant rainfall event (i.e., greater than 3-inches). Also, the Town should look for evidence of historical surcharging. Typically, in surcharged manholes, non-flushables, floatables, and trash are found on the manhole shelf or wrapped around manhole rungs. Visual observations of flow within these manholes under high flow conditions will provide additional confirmation of the predicted modeling results.

I/I Remediation

As part of the Town's ongoing I/I remediation program, certain sewer sub-areas were identified as having excessive infiltration and/or inflow and were recommended for follow-up investigations. Sub-areas 6 and 7 are the only two sub-areas tributary to the analyzed sewer mains. Of these two sub-areas, only sub-area 7 was found to have excessive inflow and neither were identified as having excessive infiltration.

As a result, the Town should consider smoke testing sub-area 7 to identify direct sources of inflow such as roof drains, driveway drains, and yard drains tied to the sewer collection system. Also, the Town could re-prioritize these two sub-areas and complete additional infiltration investigations such as flow isolation and closed-circuit television (CCTV) inspections in both sub-areas and inflow investigations (i.e. smoke testing and dye testing) in sub-area 6. From these investigations, sources

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of I/I can be located and quantified. Rehabilitation techniques to remove I/I include cured-in-place pipe (CIPP) lining, manhole lining, open-cut replacement, testing and sealing of pipe joints and private inflow removal via coordination with homeowners and business owners. The Town may consider requiring owners of proposed developments in this sub-area to either fund or perform a portion of this rehabilitation work to remove I/I and restore system capacity for sanitary flows. Identification and removal of sources of I/I through investigations/rehabilitation is likely a far more cost-effective approach to gaining sewer capacity than upsizing the existing sewer mains.

cc: Adam Gaudette, Town Manager, Northbridge
Brendan Ennis, P.E., CDM Smith

DRAFT

**ATTACHMENT A
NITSCH ENGINEERING SANITARY SEWER
PROJECTIONS, DATED FEBRUARY 12, 2019**

February 13, 2019

Mr. Mark Kuras
Superintendent, Department of Public Works
644 Providence Road
Whitinsville, MA 01588



Project: W. Edward Balmer Elementary School, 21 Crescent Street, Whitinsville

Subject: Sanitary Sewer Protections

Dear Mark,

On January 23, 2019 we discussed the proposed Balmer Elementary School project in a Technical Review meeting. This letter is to follow up on a few points where further clarification was desired on planned sewer protection devices designed as part of the plumbing system.

Kitchen: The kitchen will have two grease interceptors: a 35-gallon interior unit within the floor with a recommended weekly cleaning schedule; and a 5,000 gallon exterior unit with a more periodic cleaning schedule (O&M to be determined). According to school staff, the kitchen does not now, and does not plan do a lot of grease-intensive cooking in the new building; mostly what they are doing is re-heating prepared foods. It is our opinion that given these factors, the sanitary sewer will be well protected from undue grease pollution.

Art Rooms: Art room deep sinks are protected with a clay trap under each sink with a periodic cleaning schedule (O&M to be determined).

Science Labs: As this is an elementary school, there are no science labs, and thus no chemical discharges into the sewer are expected.

Please contact me if you should have any further questions.

Sincerely,

DORE & WHITTIER ARCHITECTS, INC.

Architects • Project Managers

Thomas E. Hengelsberg, AIA, NCARB, LEED-AP, MCPPO
Project Manager

cc. Technical Review committee attendees
Project Team distribution
file

ARCHITECTS
PROJECT MANAGERS

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February 12, 2019

Mr. Thomas Hengelsberg, AIA, LEED AP, MCARB, MCPPO
 Project Manager
 Dore & Whittier
 212 Battery Street
 Burlington, VT 05401

RE: Nitsch Proposal #12260.3P
 Balmer Elementary School
 Civil Engineering Services
 Sanitary Flows
 Northbridge, MA

Dear Tom,

Nitsch Engineering has reviewed the existing and proposed occupancy for the Balmer School and has developed sanitary sewer design flows for the existing and proposed conditions as indicated in Table 1 based on Title 5 flow rates (Massachusetts State Environmental Code 310 CMR 15.203).

Table 1: Estimated Design Flows

Existing School	Occupants	Design Flows per Occupant Gallons per Day per Person	Total Flow (Gallons per Day)
Students	505	10	5050
Teachers/Admin/Staff	80	10	800
Volunteers – Visitors Allowance (FTE)	13	10	130
<u>Existing School Totals</u>			5,980
Proposed School	Occupants	Design Flows per Occupant	Total Flow
Students	1214	10	12,140
Teachers/Admin/Staff	133	10	1,330
Volunteers – Visitors Allowance (FTE)	3	10	240
<u>Proposed School Totals</u>			13,710
Change			<u>+7,730</u>

Source: Occupancy from Balmer Elementary School

The proposed sanitary sewer service is being designed based on the Title 5 flows rates. See Attachment A for additional design information.

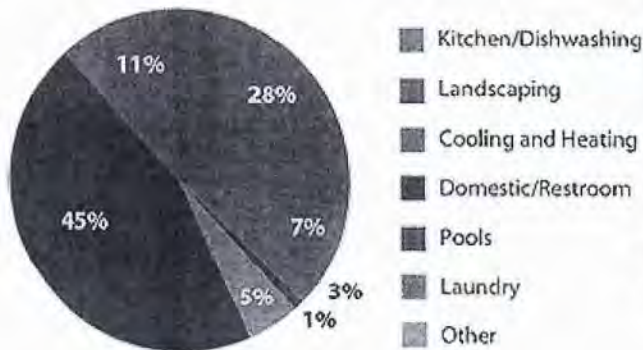
It should be noted that Title 5 flows are based on flows from the 1970s, the same time period that the school was constructed. Title 5 flow rates does not take into account the use of low flow fixtures.

The new Balmer Elementary School will be USGBC LEED certified and low flow fixtures will be used for toilets, faucets, kitchen fixtures and dishwashers, etc. Low flow fixtures are not reflected in Title 5 flow rates.

Mr. Thomas Hengelsberg, AIA, LEED AP, MCARB, MCPPO: Nitsch Proposal #12260.3P
 February 12, 2019
 Page 2 of 2

Toilets from the 1970s had flush volumes of 3.5 to 7.0 gallons per flush. Current low flow fixtures have flush volume of 1.28 gallons per flush (gpf) (EPA WaterSense Label). Reducing flush volume (3.5 to 1.28 gpf) by 63 percent for each flush.

End Uses of Water in Schools



Source: EPA WaterSense

If toilet flushing is approximately 62 percent of sanitary flows at schools without landscape uses (irrigation), then a school with just low flow toilets will result in a 39% reduction of water usage over schools with fixture that are pre-1980s. The amount of water usage approximates the amount of sanitary sewer flows.

The estimated sanitary design flow of 13,710 gallons per day is a more realistically 7,730 gallons per day (or an increase of 2,330 over the existing design flow of 5,980 gallons per day) even with the occupancy more than doubling.

As previously stated, the sanitary infrastructure (pipes sizes, slopes, velocities, peaking factor, etc.) is being design based on the Title 5 flow rates, TR-16 and current engineering standards.

The analysis for the more realistic average daily flow prediction is based on the use of low flow toilets that is not included in the current Title 5 flow rates and provides a more realistic impact from the new school even with the increase in occupancy on the municipal sanitary sewer lines.

If you have any questions, please call.

Very truly yours,

Nitsch Engineering, Inc.

Sandra A. Brock, PE, CFM, LEED AP BD+C
 Vice President, Chief Engineer

SAB/mma



Balmer Elementary School
Project #12260

Balmer Elementary School
21 Crescent Street
Northbridge, MA
(Estimated Maximum Daily Sewage Flows)

1/31/2018 (revised 2/11/2019)
Prepared by: SAB
Checked by:

MAXIMUM¹ DAILY SANITARY SEWER FLOWS SUMMARY TABLE

Flow Calculations based on staffing received from School

Calculation based on MAXIMUM OCCUPANTS - GALLONS PER DAY (GPD)

OCCUPANT	Existing Occupants	Design Flows	Totals	Proposed Occupants	DESIGN FLOW ¹	ESTIMATED SEWER FLOWS	CHANGE
Students	505	10 GPD/person ¹	5050	1214	10 GPD/person ¹	12,140	7,090
Teachers and Assistants (full time)	80	10 GPD/person ¹	800	133	10 GPD/person ¹	1,330	530
Volunteers (FTE) - Visitors Allowance	13	10 GPD/person ²	130	24	5 GPD/person ²	240	110
TOTAL		EXISTING	5,980		PROPOSED	13,710	7,730
						USE	13,710

NOTES:

1. Project's sewage generation rates were estimated using the Massachusetts State Environmental Code ((Title 5) 310 CMR 15.203) and TR-16.
2. The School anticipates volunteers and visitors that will be on site from a short visit to the entire school day (this is an allowance for these occupants).
3. Peak Rates based on TR-16 and xxx to determine peaking factor.

MAXIMUM³ DAILY PEAK RATE OF SANITARY SEWER FLOW

Discription	Gallons Per Day (GPD)	Cubic Feet Per Second (cfs)	Peaking Factor	Peak Flow	Pipe size and Slope (most restrictive run)	Capacity
Total Sanitary Sewer Flow	13,710	0.021	5	0.106		

FLOW IN PIPE VARIABLES FOR SANITARY SEWER FLOW

Discription	Flow - Cubic Feet Per Second (cfs)	Pipe size and Slope (most restrictive run)	Mannings roughness	velocity	Note	
Pipe Flowing Full - Main Line	1.55	8" PVC S=0.16	0.013	4.45	Flowing Full	
Peak Rate of Flow - Main Line	0.11	8" PVC S=0.16	0.013	2.14	Peak Rate	(min velocity 2 ft/s)

Balmer Elem School

Construction Logistics / Safety Meeting

	<i>Topic</i>	<i>Required By</i>	<i>Responsible</i>	<i>Description</i>
<i>1.1</i>	Parking		ALL	<p>Added Parking to replace lost on East of building</p> <ul style="list-style-type: none"> -Can't use the parking on left of entry drive during school day used for bus traffic - Looking to replace East Side to be taken by Construction <ul style="list-style-type: none"> <i>1/22/19 – Looking for 20+ Total on at West side Extg</i> -West Side – Loading Area -Custodian - Karlene — Kitchen - Misc staff park here - not so much teachers <ul style="list-style-type: none"> -Can't block the docks -Dumpster / Compactor - need to be accommodated -Temp Lighting on left side of building (and Rear ?) -Use of left side of bldg need entry other than Dock / Cafeteria (Add sidewalk to FRONT of Bldg) -Loss of spaces when snow - piles at light poles – <i>1/22/19 – Recent Snow – piled along West property line</i> <i>1/22/19 – Determined want to keep the NEW Added parking on West side of Extg building – Don't want spaces at Entry Road from Crescent</i> -<i>1/22/19 – Discussed possible to Add striping at the Parent Drop Off area for use for parent parking at after hour Events – Review with Karlene R.</i> -<i>2/6/19 – After review with team – decided NOT to add striping at Parent Drop Off Lot –</i> • <i>3/19/19 -Remove the two added spots at NW end of lot closest to school – too close to the West Property, concern for Winter months with snow piles. - Include 8 Spaces along E ends of rows (1 per row) along drive in- works now so we can stripe it.</i>
<i>1.2</i>	Playgrounds	Closed	FBI / DWA	<ul style="list-style-type: none"> -Don't use the Rear green space - Wet -Add Green space from Extg to the outfield adjacent - Fence in area -Gate at fence from Playground to new grassed area and another facing road for E Egress -<i>1/22/19 – Want added playground space to be GRASS – FBI may alter shape slightly to allow keeping more space at South for construction and build extended playground to the West</i>
<i>1.3</i>	Egress	Closed	ALL	<ul style="list-style-type: none"> -Rear Right (East) Closest to New building is existing HP Egress – Add HP Egress at opposite other end of rear (West) -When exit from E. classrooms Go to either the Drop Off parking area or the REAR – -Muster point at Rear in the far corner – Surfacing? <i>1/22/19 – Drainage is concern in rear – gravel / stone is Ok with BES – need consideration of water coming off hill and where it will go</i> -Lights / Cameras at Side / Rear -<i>1/22/19 Reuse lights / New Cameras</i> -Between New and Existing- fence off from building - xx' ? Need to maintain egress <i>1/22/19 – probably 5-6' path for egress – confirm with AHJ.</i> - <i>2/6/19 – Per Tom H. this will be reviewed in future meeting with Town Departments to determine required egress / access.</i> -N Grid - easement - paths are overgrown- can we clear ? - N Grid will they do it ? - (Fire Exit)- <i>1/22/19 – Town to approach N Grid</i> -Coordination with Fire Department –

Balmer Elem School

Construction Logistics / Safety Meeting

				- 2/6/19 – Karlene asked that the North Exit Door at West Corridor be set up with Electronic Lock / Fob – similar to Main Entry Door – will allow access by Staff parking in the new lot on West side of building
1.5	Access . Fencing to Site	Closed	FBI	<p>-Trucks enter off Crescent opposite Lake</p> <p>-Fabric on all fencing</p> <p>-Upper floors - they will draw the shades to avoid distraction -</p> <p>Concerns (valid) about noise / Dust- these are also concerns that FBI deals with -</p> <p>-Possible need to Add AC where next to the new building - noise / dust don't want open windows (Sept mainly)</p> <p>-1/22/19 – Discussed Blackout times for deliveries – Approx. 7:45 – 8:45 and 2:15 – 2:45 – to be Confirmed.</p> <p>2/6/19 – Adjust start of afternoon blackout to 2:00 – others are Ok</p>
2.1	Site Signage	Closed	FBI / DWA	<p>Discussion of ADDED site signing –</p> <ul style="list-style-type: none"> • STAFF PARKING ONLY - at entry to West Parking • Traffic Direction arrows on the parking log • Confirm Crosswalks will be striped at Crescent Street • 2/6/19 – Signage / Striping Notes: • Designate the 2nd Row from building as Visitor —. Painting on Paving - No signs on posts • Buses don't stop in proper location at the drop off area. - add some line change / signage here - • Add sign approx 20' from road on entry for Buses only in Right lane - Blackout hours • Add Arrows on paving to direct cars in / out by row • Add stop line in drop off area- with STOP • RESTRIPE existing lots • Allowance for minor patching - potholes there now unlikely to be repaired • STAFF ONLY sign for West Side Parking • 3/19/19 - EMPHASIS on No Parking Zone at Loading Dock
2.2	Ext Entry- Widen?	Closed	DWA	<p>BES asked if possible to Widen the existing radius of driveway at Exit to Crescent on East side of entry - DWA will need to review.</p> <p>2/6/19 – Tom H. suggested that we widen the West Side of Entry drive to create a 3rd traffic lane – leave East radius as is- acceptable to everyone.</p>
3.1	Meetings		All	<p>Suggested that some informational meetings be scheduled prior to start of new school year – especially for New parents. Another meeting for neighbors prior to start of school. BES to begin assembly of FAQ's to post and use in the meetings.</p> <ul style="list-style-type: none"> • 3/19/19 – Discussion: <p>Meetings</p> <p>Parents</p> <p>Staff</p> <p>Neighbors</p> <p>Parents</p> <p>Probably - Prior to June 12th -st grade going to 2nd Grade Graphics same used previous —DWA / FBI</p> <p>Another Graphic for Evacuation and Fire Drills</p> <p>2nd meeting for 3 & 4 parents</p> <p>Karlene will confirm dates</p>

Balmer Elem School

Construction Logistics / Safety Meeting

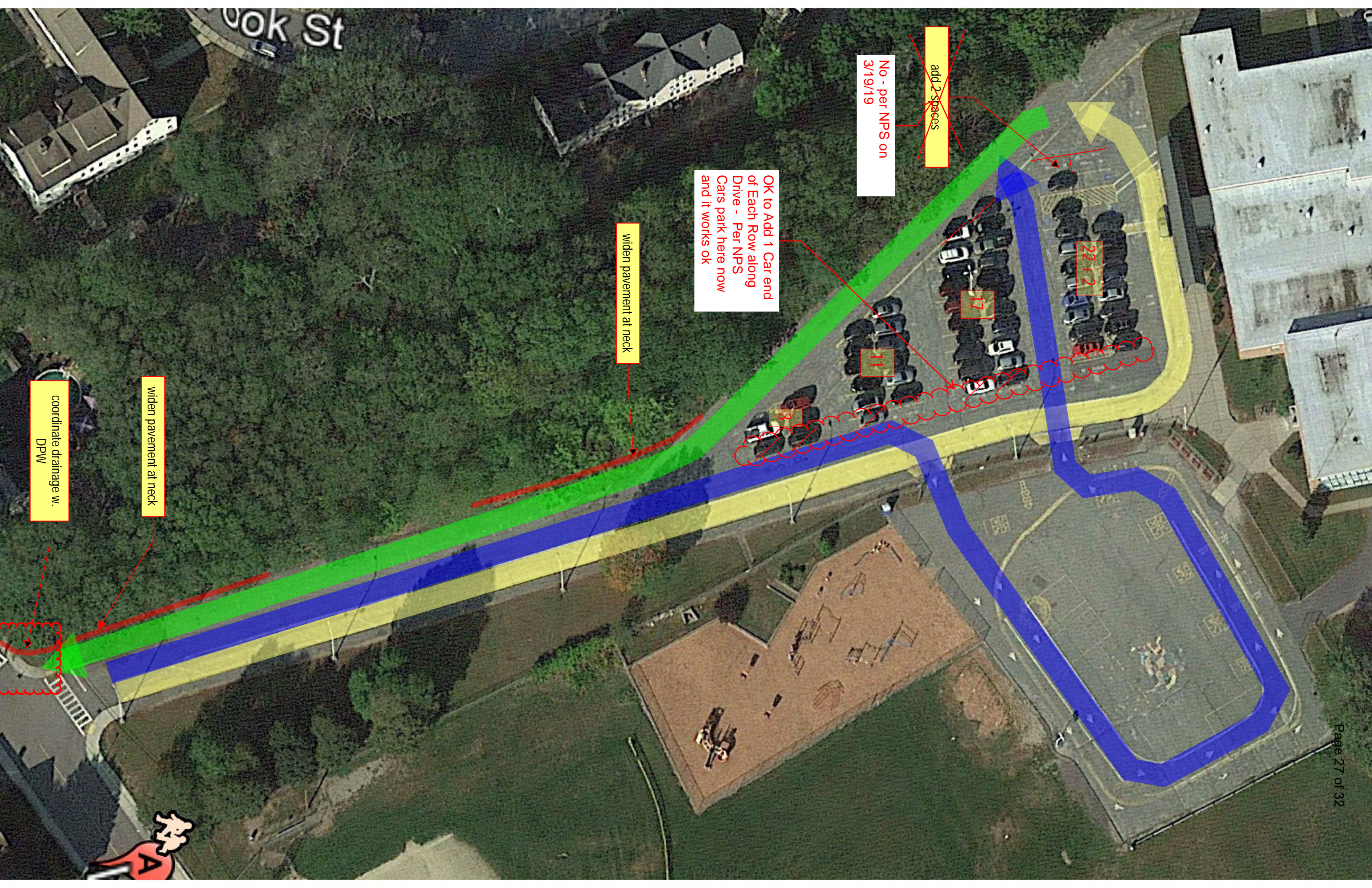


				<p>Staff</p> <p>June 4th Staff Meeting</p> <p>Same stuff as the Students meetings. Assembly areas, etc.</p> <p>Parking, Summer Access —. What will site look like - Playground - Ventilation - Fencing, Blasting ?</p> <p>Neighbors</p> <p>Same as last summer meetings -</p> <p>Plan around the Early Bid Packages - Late June — July</p> <p>(Probably already have established property lines, tree cutting by then ?)</p>
3.2	Storage Shed	Closed	All	<p>Noted that there is Existing Storage shed in the East Parking area. This can be removed when we demo that parking lot and no need to replace. BES to confirm there is nothing in shed that they want to keep.</p> <p><i>3/19/19 – Staff volunteered to review contents of shed to be sure there is nothing of value.</i></p>
3.3	Helicopter Evac		NPS	<p>Discussion about the use of Parent Drop off area as “ Evacuation Helicopter Landing Zone” – There is possible impact to this use by construction. Cathy S. to review and advise.</p>
3.4	Summer Daycare		BES / FBI	<p>Noted by Karlene use of school for Summer Daycare. Full Days – Tues thru Friday – begins approx. July 5th – Karlene to distribute details on use / dates / times –</p> <p><i>3/19/19 – Don't do much Outside - Discussion on limited use – MAY either cancel or move the Summer Program.</i></p>
4.1	Room Placement		NPS / FBI	<ul style="list-style-type: none"> Following regular meeting had smaller group discussion regarding some classroom relocations from the “ construction side “ of building to lessen impact on some more sensitive student population. Plan formulated – NPS to implement. FBI to bring sample of circulation fan for use in classrooms that may be useful.

These minutes reflect Fontaine Bros., Inc. interpretation of the discussions that took place. Any discrepancies or omissions should be brought to the author's attention immediately. These minutes shall be included as part of the Project record.

Prepared By: Jim Mauer

Date: April 27, 2019



ook St

~~add 2 spaces~~

No - per NPS on
3/19/19

OK to Add 1 Car end
of Each Row along
Drive - Per NPS
Cars park here now
and it works ok

widen pavement at neck

widen pavement at neck

coordinate drainage w.
DPW

22 + 2

17

11

3



Balmer Elem School

Construction Logistics / Safety Meeting

Meeting Date: April 30, 2019

Issue Date: May 6, 2019

Meeting #: 05

Next Meeting: May 14 - 3:00 p.m.

Prepared By: Jim Mauer – Sr Project Manager, FBI

Attending	Name	Company	Phone Number	Email
<input type="checkbox"/>	Jim Mauer	Fontaine Bros Inc	413-478-2798	jmauer@Fontainebros.com
<input checked="" type="checkbox"/>	Renee Underwood	Balmer School		runderwood@nps.org
<input checked="" type="checkbox"/>	Karlene Ross	Balmer School	508-234-8161	kross@mps.org
<input type="checkbox"/>	Mike Cavanaugh	Fontaine Bros Inc	413-246-4007	Mcavanaugh@fontainebros.com
<input checked="" type="checkbox"/>	Joel Kent	Fontaine Bros Inc	781-291-9625	jkent@fontainebros.com
<input checked="" type="checkbox"/>	Sharyn Tritone	Balmer Parent		jandstritone@yahoo.com
<input checked="" type="checkbox"/>	Stephanie Dec	Balmer School		sdec@nps.org
<input checked="" type="checkbox"/>	Laurie Miller	Balmer School		lmiller@nps.org
<input checked="" type="checkbox"/>	Joan Thorne	Balmer School		jthorne@nps.org
<input type="checkbox"/>	David Fontaine Jr	Fontaine Bros Inc		djr@fontainebros.com
<input type="checkbox"/>	Sharon Poitras	Balmer School		spoitras@nps.org
<input type="checkbox"/>	Tom Hengelsberg	Dore & Whittier		thengelsberg@doreandwhittier.com
<input checked="" type="checkbox"/>	Richard Maglione	Northbridge Public Schools		rmaglione@nps.org
<input checked="" type="checkbox"/>	Theresa Gould	Balmer School		tgould@nps.org
<input type="checkbox"/>	Amy McKinstry	Northbridge Public Schools		amckinstry@nps.org
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Balmer Elem School

Construction Logistics / Safety Meeting

	<i>Topic</i>	<i>Required By</i>	<i>Responsible</i>	<i>Description</i>
<i>1.1</i>	Parking		ALL	<p>Added Parking to replace lost on East of building</p> <ul style="list-style-type: none"> -Can't use the parking on left of entry drive during school day used for bus traffic - Looking to replace East Side to be taken by Construction <ul style="list-style-type: none"> 1/22/19 – Looking for 20+ Total on at West side Extg -West Side – Loading Area -Custodian - Karlene — Kitchen - Misc staff park here - not so much teachers <ul style="list-style-type: none"> -Can't block the docks -Dumpster / Compactor - need to be accommodated -Temp Lighting on left side of building (and Rear ?) -Use of left side of bldg need entry other than Dock / Cafeteria (Add sidewalk to FRONT of Bldg) -Loss of spaces when snow - piles at light poles – 1/22/19 – Recent Snow – piled along West property line 1/22/19 – Determined want to keep the NEW Added parking on West side of Extg building – Don't want spaces at Entry Road from Crescent -1/22/19 – Discussed possible to Add striping at the Parent Drop Off area for use for parent parking at after hour Events – Review with Karlene R. -2/6/19 – After review with team – decided NOT to add striping at Parent Drop Off Lot – <ul style="list-style-type: none"> • 3/19/19 -Remove the two added spots at NW end of lot closest to school – too close to the West Property, concern for Winter months with snow piles. - Include 8 Spaces along E ends of rows (1 per row) along drive in- works now so we can stripe it.
<i>1.2</i>	Playgrounds	Closed	FBI / DWA	<ul style="list-style-type: none"> -Don't use the Rear green space - Wet -Add Green space from Extg to the outfield adjacent - Fence in area -Gate at fence from Playground to new grassed area and another facing road for E Egress -1/22/19 – Want added playground space to be GRASS – FBI may alter shape slightly to allow keeping more space at South for construction and build extended playground to the West - 4/30/19 – Any motivation to salvage existing playground equipment at Balmer ES at conclusion of construction? Unclear if school department or parks department owns, and it is not that new. Will continue to investigate if somewhere in town that would benefit from.
<i>1.3</i>	Egress	Closed	ALL	<ul style="list-style-type: none"> -Rear Right (East) Closest to New building is existing HP Egress – Add HP Egress at opposite other end of rear (West) -When exit from E. classrooms Go to either the Drop Off parking area or the REAR – -Muster point at Rear in the far corner – Surfacing? 1/22/19 – Drainage is concern in rear – gravel / stone is Ok with BES – need consideration of water coming off hill and where it will go -Lights / Cameras at Side / Rear -1/22/19 Reuse lights / New Cameras -Between New and Existing- fence off from building - xx' ? Need to maintain egress 1/22/19 – probably 5-6' path for egress – confirm with AHJ. - 2/6/19 – Per Tom H. this will be reviewed in future meeting with Town Departments to determine required egress / access.

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				<p>-N Grid - easement - paths are overgrown- can we clear ? - N Grid will they do it ? - (Fire Exit)- 1/22/19 – Town to approach N Grid</p> <p>-Coordination with Fire Department –</p> <p>- 2/6/19 – Karlene asked that the North Exit Door at West Corridor be set up with Electronic Lock / Fob – similar to Main Entry Door – will allow access by Staff parking in the new lot on West side of building</p> <p>- 4/30/19 - <i>Enhanced lockdown during construction is being planned now. Site logistics graphics will be helpful in demonstrating what area is available. Easement area brush needs to be cleared out by August 20 per Karlene. Richard notes that school facilities can take care of. FBI to reach out to Richard for contacts at access control and electrical subcontractors district uses.</i></p>
1.5	Access . Fencing to Site	Closed	FBI	<p>-Trucks enter off Crescent opposite Lake</p> <p>-Fabric on all fencing</p> <p>-Upper floors - they will draw the shades to avoid distraction - Concerns (valid) about noise / Dust- these are also concerns that FBI deals with -</p> <p>-Possible need to Add AC where next to the new building - noise / dust don't want open windows (Sept mainly)</p> <p>-1/22/19 – Discussed Blackout times for deliveries – Approx. 7:45 – 8:45 and 2:15 – 2:45 – to be Confirmed.</p> <p>2/6/19 – Adjust start of afternoon blackout to 2:00 – others are Ok</p>
2.1	Site Signage	Closed	FBI / DWA	<p>Discussion of ADDED site signing –</p> <ul style="list-style-type: none"> • STAFF PARKING ONLY - at entry to West Parking • Traffic Direction arrows on the parking log • Confirm Crosswalks will be striped at Crescent Street • 2/6/19 – Signage / Striping Notes: • Designate the 2nd Row from building as Visitor —. Painting on Paving - No signs on posts • Buses don't stop in proper location at the drop off area. - add some line change / signage here - • Add sign approx 20' from road on entry for Buses only in Right lane - Blackout hours • Add Arrows on paving to direct cars in / out by row • Add stop line in drop off area- with STOP • RESTRIPE existing lots • Allowance for minor patching - potholes there now unlikely to be repaired • STAFF ONLY sign for West Side Parking • 3/19/19 - EMPHASIS on No Parking Zone at Loading Dock
2.2	Ext Entry- Widen?	Closed	DWA	<p>BES asked if possible to Widen the existing radius of driveway at Exit to Crescent on East side of entry - DWA will need to review.</p> <p>2/6/19 – Tom H. suggested that we widen the West Side of Entry drive to create a 3rd traffic lane – leave East radius as is- acceptable to everyone.</p>
3.1	Meetings		All	<p>Suggested that some informational meetings be scheduled prior to start of new school year – especially for New parents. Another meeting for neighbors prior to start of school. BES to begin assembly of FAQ's to post and use in the meetings.</p> <ul style="list-style-type: none"> • 3/19/19 – Discussion: <p>Meetings Parents</p>

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				<p>Staff Neighbors Parents</p> <p>Probably - Prior to June 12th -st grade going to 2nd Grade Graphics same used previous —DWA / FBI Another Graphic for Evacuation and Fire Drills 2nd meeting for 3 & 4 parents Karlene will confirm dates</p> <p>Staff</p> <p>June 4th Staff Meeting Same stuff as the Students meetings. Assembly areas, etc. Parking, Summer Access —. What will site look like - Playground - Ventilation - Fencing, Blasting ?</p> <p>Neighbors</p> <p>Same as last summer meetings - Plan around the Early Bid Packages - Late June — July (Probably already have established property lines, tree cutting by then ?)</p> <p>• 4/30/19 – Discussion:</p> <p><i>Staff Meeting</i></p> <ul style="list-style-type: none"> - Staff meeting will be June 4th at 2:50PM - Staff has many questions about what new building and classrooms will look like. Can D&W do an update meeting focused on latest with design? - Important items to bring up to staff: <ul style="list-style-type: none"> (A) CORI checks through the district / workers will not be in existing school / separate entrance, etc. (B) Graphics/ visuals noting fence locations at different phases (C) Locations of new access controls at existing Balmer (D) Bring large graphics of site utilization plan to leave in teacher's lounge (E) Any times to avoid the site over the summer? Blasting, etc. (F) General schedule (G) What it will feel like in classrooms (H) Noise level (I) Not going to interfere w/ recess <p><i>Parent Meeting</i></p> <ul style="list-style-type: none"> - Parent meeting will be same day as staff, June 4th but at night, 6:00PM. - Should record parent meeting so it can be posted for any parents that can't make it <p><i>Neighbor Meeting</i></p> <ul style="list-style-type: none"> - FBI to work with SMMA regarding best time to schedule neighbor meeting
3.2	Storage Shed	Closed	All	<p>Noted that there is Existing Storage shed in the East Parking area. This can be removed when we demo that parking lot and no need to replace. BES to confirm there is nothing in shed that they want to keep.</p> <p>3/19/19 – Staff volunteered to review contents of shed to be sure there is nothing of value.</p>



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3.3	Helicopter Evac		NPS	Discussion about the use of Parent Drop off area as “ Evacuation Helicopter Landing Zone” – There is possible impact to this use by construction. Cathy S. to review and advise. <i>4/30/19 – Richard to review w/ public safety committee / notify that change of location will be required.</i>
3.4	Summer Daycare		BES / FBI	Noted by Karlene use of school for Summer Daycare. Full Days – Tues thru Friday – begins approx. July 5 th – Karlene to distribute details on use / dates / times – 3/19/19 – Don’t do much Outside - Discussion on limited use – MAY either cancel or move the Summer Program. <i>4/30/19 – Program will be run at Balmer this summer. FBI suggests a meeting w/ program leader to review summer schedule and potential impacts.</i>
4.1	Room Placement		NPS / FBI	<ul style="list-style-type: none"> Following regular meeting had smaller group discussion regarding some classroom relocations from the “ construction side “ of building to lessen impact on some more sensitive student population. Plan formulated – NPS to implement. FBI to bring sample of circulation fan for use in classrooms that may be useful. <i>4/30/19 – Pair of sample fans turned over. Planning for internal shifts is in progress. Richard notes that some AC units that would be effective for classrooms have become available in town. As which room individual classes is going to be in is finalized, AC’s may be added to some.</i>

These minutes reflect Fontaine Bros., Inc. interpretation of the discussions that took place. Any discrepancies or omissions should be brought to the author’s attention immediately. These minutes shall be included as part of the Project record.

Prepared By: Jim Maur

Date: April 27, 2019

Town of Northbridge Northbridge Elementary School Phase 1: Summer 2019 - Spring 2021

LEGEND

- 1 - Main construction entrance gate w. knoxbox
- 2 - 8' Construction fence w. scrim
- 3 - Contractor temp. parking
- 4 - Contractor lay-down / office trailers / storage
- 5 - Soil stockpile location
- 6 - 6' Construction fence w. scrim on top of jersey barriers ~ 9' total height
- 7 - Green space connected to existing playground with new vinyl fence
- 8 - Owner & CM trailer
- 9 - Pedestrian gate for school team access to Owner/CM trailers
- 10 - Min. 5' emergency egress maintained around existing school
- 11 - Egress passage with overhead protection
- 12 - Temp. asphalt sidewalk
- 13 - Add and relocate ramps as required - complete Summer 2019
- 14 - School temp. parking
- 15 - School muster point
- 16 - Secondary / emergency access gate
- 17 - Connection pathway for electrical and tel/com

PHASE NOTES

- 1 - **GENERAL NOTE:** Refer to Fontaine Brothers Site Utilization Plan for further instructions relating to phasing and logistics. Applicable to all pages
- 2 - All construction traffic to enter/exit site via Lake Street.
- 3 - Detention systems to install and be protected under temp. parking locations where applicable
- 4 - Muster area and all temp. parking to be crushed stone. This work to complete over Summer 2019.
- 5 - Existing School traffic pattern will not be impacted. FBI will perform the widening of the existing school entrance to provide relief to the pre-existing traffic congestion issues. This will complete over summer 2019 as well.



Town of Northbridge Northbridge Elementary School Phase 2A: Early Summer 2021

LEGEND

- 1 - Main construction entrance gate w. knoxbox
- 2 - Construction fence
- 3 - School temp. parking until west lot completes. FBI to work with school for temp. parking access and identification signage
- 4 - Soil stockpile location maintained (TBD if Phase 1 cut soils will be used in Phase 2 under parking lots and loop road)
- 5 - East portion of south parking lot will be turned over during partial occupancy period. Western portion of south parking will be accelerated to turnover ASAP Summer 2021
- 6 - East portion of new loop road completed with Phase 1
- 7 - Owner / CM trailer relocation
- 8 - Temp. subcontractor parking
- 9 - New canopy proximity to demolition
- 10 - Existing school abatement / demo
- 11 - Secondary / emergency access gate
- 12 - Ingress / egress points for temp. occupancy

PHASE NOTES

- 1 - Fence is relocated and western site is taken over for construction
- 2 - School will be under partial occupancy for support staff / owner FF&E. While existing school is under active demolition, egress from west side of new building will be prohibited. As soon as building comes down - Phase 2B layout will be implemented providing egress from Stair #s 2&3.
- 3 - Existing school building demolition must complete before new loop road can complete
- 4 - Sidewalk south of Pre-K to be accelerated and turned over before end of summer with new school.
- 5 - Contractor Parking may be limited during Phase 2A
- 6 - U-10 soccer field turnover w. Phase 2A
- 7 - FBI targeting two U6 soccer fields to be planted in time for spring planting season



**Town of Northbridge
Northbridge Elementary School
Phase 2B: School Opening - Fall 2021**

LEGEND

- 1 - Main construction entrance gate w. knoxbox
- 2 - Construction fence
- 3 - School temp. parking until west lot completes
- 4 - West side of south parking lot complete
- 5 - Canopy outline (heightened sensitivity to proximity)
- 6 - Existing school building is demolished
- 7 - New loop road is complete
- 8 - All ingress / egress points are fully accessible

PHASE NOTES

- 1 - TBD: Southwest Entry will have one lane shared with construction traffic. If this is not accepted, a temporary road will have to be provided through southern fields.
- 2 - West side playgrounds targeted for accelerated completion. If they are able to be turned over in advance of the parking lot, the site fence would be brought in accordingly.
- 3 - Work progressing / accelerating at southern fields for fall planting / seeding season
- 4 - School will have access to full loop road
- 5 - U6 soccer fields will turn over with school opening, however they will need one more grow season.



**Town of Northbridge
Northbridge Elementary School
(TBD)Phase 2C: Fall 2021 (Final Setup)**

LEGEND

- 1 - Main construction entrance gate w. knoxbox
- 2 - Construction fence - minimized for final completion logistics.
- 3 - School temp. parking until west lot completes
- 4 - West side of south parking lot complete
- 5 - West parking lot underway

PHASE NOTES

- 1 - TBD: If shared road not accepted this logistics Phase 2C would be deleted and the balance of Phase 2 scope would operating within confines represented in Phase 2B logistics. Note: this logistics planning would allow for earlier turn over of the southern fields. If we need to maintain an access road through fields to access west parking lot, south fields would turn over later in time.
- 2 - South fields have completed and seeded for grow seasons. Permanent new fence will serve as barrier for protection around fields with signage stating no access until field acceptance by school.
- 3 - Only area under active construction is west parking lot and playgrounds



**Town of Northbridge
Northbridge Elementary School
Mini Phase 3: Small U8 Fields at Former
Temp. Parking
Fall 2021 / Spring 2022**

LEGEND

- 1 - Main Construction Entrance
- 2 - Construction fence around U8 fields

PHASE NOTES

- 1 - Construction traffic will share new western campus entrance
- 2 - Fields will be final graded and all site finishes installed in 2021
- 3 - Seeding will not be able to take place until spring 2022, as the temporary lot must remain until new west lot completes. FBI does not believe the west lot will be complete in time to get these fields seeded in time for the fall 2022 grow season.



THE NEW W. EDWARD BALMER SCHOOL

NORTHBRIDGE, MASSACHUSETTS



SCHOOL BUILDING COMMITTEE MEETING

MAY 8, 2019



Massachusetts School Building Authority
Funding Affordable, Sustainable, and Efficient Schools in Partnership with Local Communities



AGENDA

- CD Progress Report
- Design Refinements
- Follow up to Value Engineering Items
- Proprietary Items



CD PROGRESS REPORT

- 4/23 Planning Board meeting
- 4/25 Safety Committee meeting
- 5/1 Sewer Capacity Analysis Meeting w/ CDM
- 5/3 Non-Trade Contractors Review conf. call.
- 5/3 Consultants submitted 60% CD Pricing Drawings & Specs
- 5/7 Acoustical Conference Call
- 5/8 Technology Meeting
- 5/8 Working Group Meeting

Ongoing: Internal coordination, consultant coordination, phone calls & conference calls. Drawing & Specification progress.

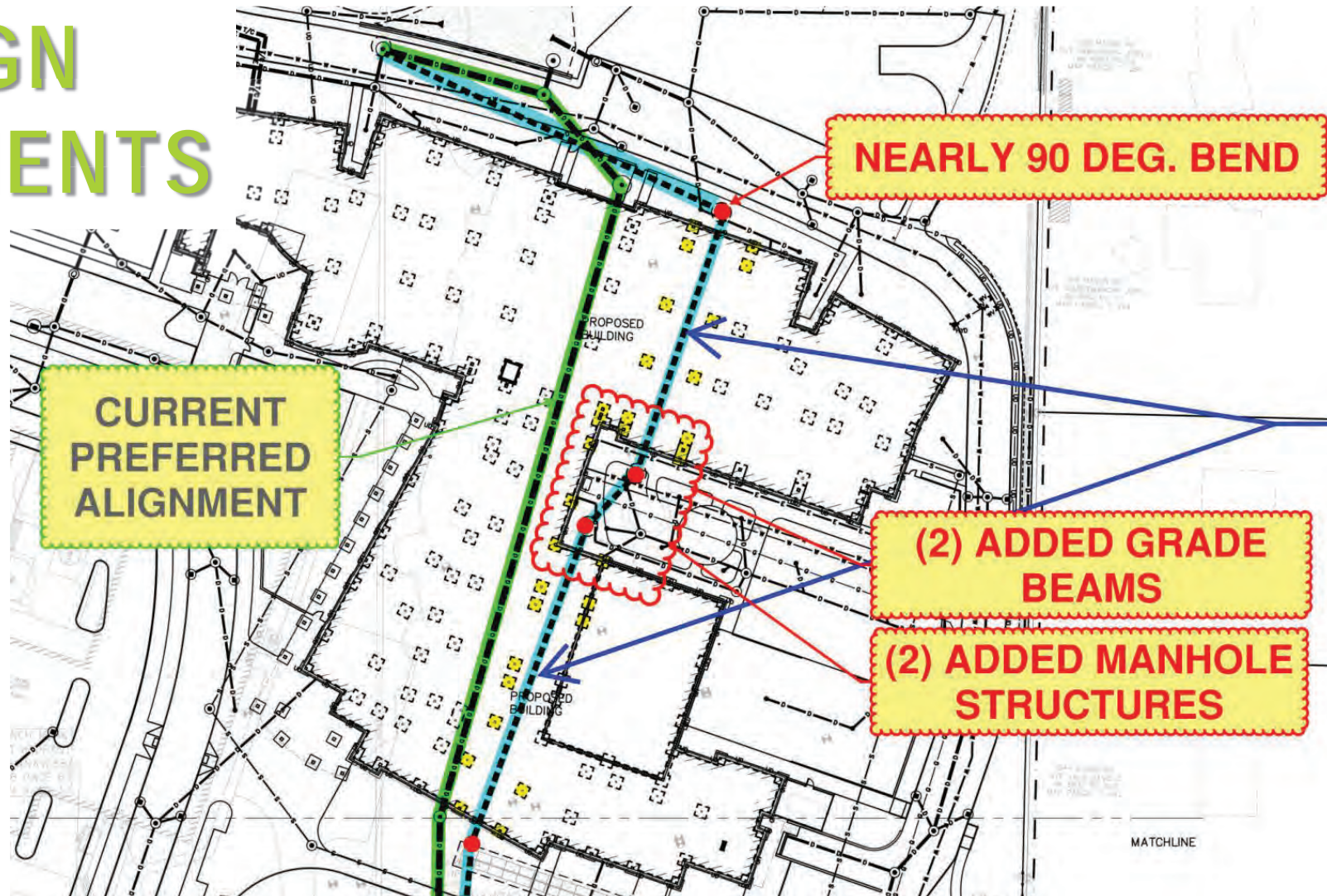
Next Deadline: 5/17/19 – Issue 60% CD Pricing Set to Estimators/
Fontaine issues ERP #1 to Site Subs for bidding



DESIGN REFINEMENTS

Not adopting Peer Reviewer proposed alternate alignment of 36" drain pipe under the building.

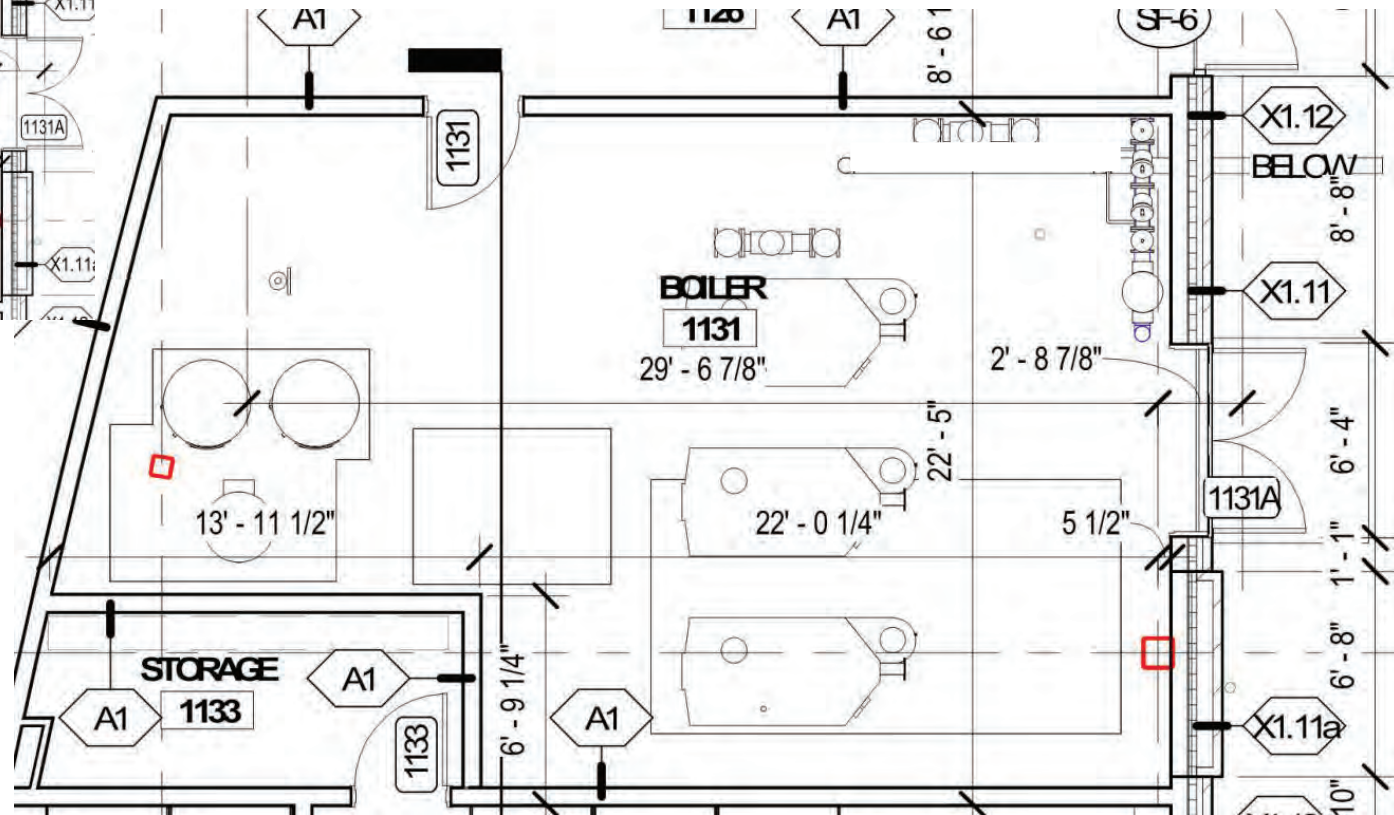
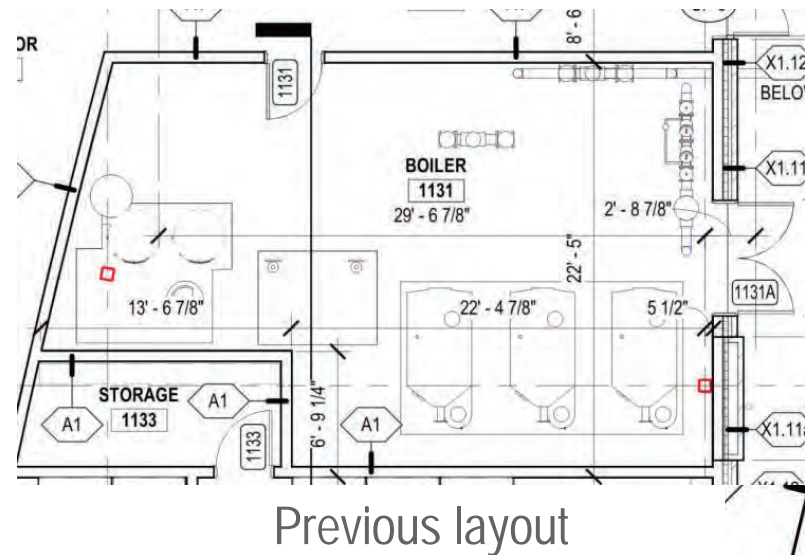
Researching structural capacity of ductile iron pipe & soil pressure with Geotech Engineer.



[illegible]

Reviewing FBI recommendation to shift under-slab plumbing to middle of building to avoid phasing difficulties.

DESIGN REFINEMENTS



Rearranged Boiler Room to create better working clearances, clear egress doors

DESIGN REFINEMENTS

- Coordinating roof drainage to match revised infiltration requirements
- Ongoing Structural coordination with Architecture, M-E-P-FP
- Incorporating review comments from DD set:
 - Acoustical Consultant
 - Commissioning Agent (CxA)
 - OPM
 - MSBA
 - Owner (SBC)
- In-house, ongoing redlines and QA/QC Manager Review



FOLLOW UP ON VALUE ENGINEERING ITEMS

	Site / Civil		
C01	Delete west edge gravel wetlands, mono-pitch west entry drive to swale, change catch basin type	(\$285,450)	ACCEPTED
L#33	At north side of north access loop change Cape Cod Berm to sloped granite (+ADD)	\$36,006	ACCEPTED
	Landscape		
L01	Provide 4" sloped granite curbing ILO 5" vertical granite at non-sidewalk locations - 5,056 LF	(\$39,009)	ACCEPTED
L02	Provide Bituminous side walks ILO concrete at areas not within inner curb line - Vail Field walks	(\$56,736)	ACCEPTED
L03	Delete northwest corner segment of new fence and retain (repair as needed) existing 8ft fence along west property line	(\$40,463)	ACCEPTED

FOLLOW UP ON VALUE ENGINEERING ITEMS

	Architectural, Exterior Items:		
A01	Provide Utility sized brick ILO standard Modular sized brick on entire building.	(\$90,585)	ACCEPTED
A02	Optimize mechanical screen sizes - reduce LF by 20%	(\$104,720)	ACCEPTED
A03	South Elevation A-B Wings: Change cladding from HPL Panel to Brick - 1,123 SF \$29.84 SF	(\$33,507)	ACCEPTED
A04	North Elevation A-B Wings: Change CW glazing to HPL Panel system - 168 SF \$30.25 SF	(\$5,082)	ACCEPTED
A05	East & West Elevations A-B Wings: Change SF glazing to Brick cladding - 103 SF \$28.25 SF	(\$2,910)	ACCEPTED
A06	Provide Split Face CMU in lieu of Cast Stone Base, all elevations.	(\$76,500)	REJECTED
A07	ADD - Provide small, portable Roof Hoist at roof hatch curb		CONSIDER IN FUTURE FF&E BUDGET
A08	Delete specified exterior mock-ups and go with in-place ILO	(\$41,000)	REJECTED

FOLLOW UP ON VALUE ENGINEERING ITEMS

	Architectural, Interior Items:		
A09	Provide swinging full-height fire doors [(2) pairs @ 4' w x 9' tall] ILO "Won-Door" sliding fire door (3 levels)	(\$66,932)	DW TO PROVIDE MAINTENANCE INFO
A11	Delete blackout shades from exterior windows - provide light-filtering fabric shades only	(\$22,100)	REJECTED
A12	ADD - Provide Hard Divider partition ILO fabric/mesh curtain as specified.sensor edge, STC 49	\$60,844	REJECTED
A13	Stair 5 - Reduce amount of fire-rated glazing/ economize design.	(\$56,635)	REJECTED
	Plumbing:		
P01	Delete drinking fountains in PK ELA #1203A, Kinder ELA #1223A	(\$7,020)	ACCEPTED

PROPRIETARY ITEMS

No new updates.





Thank You!