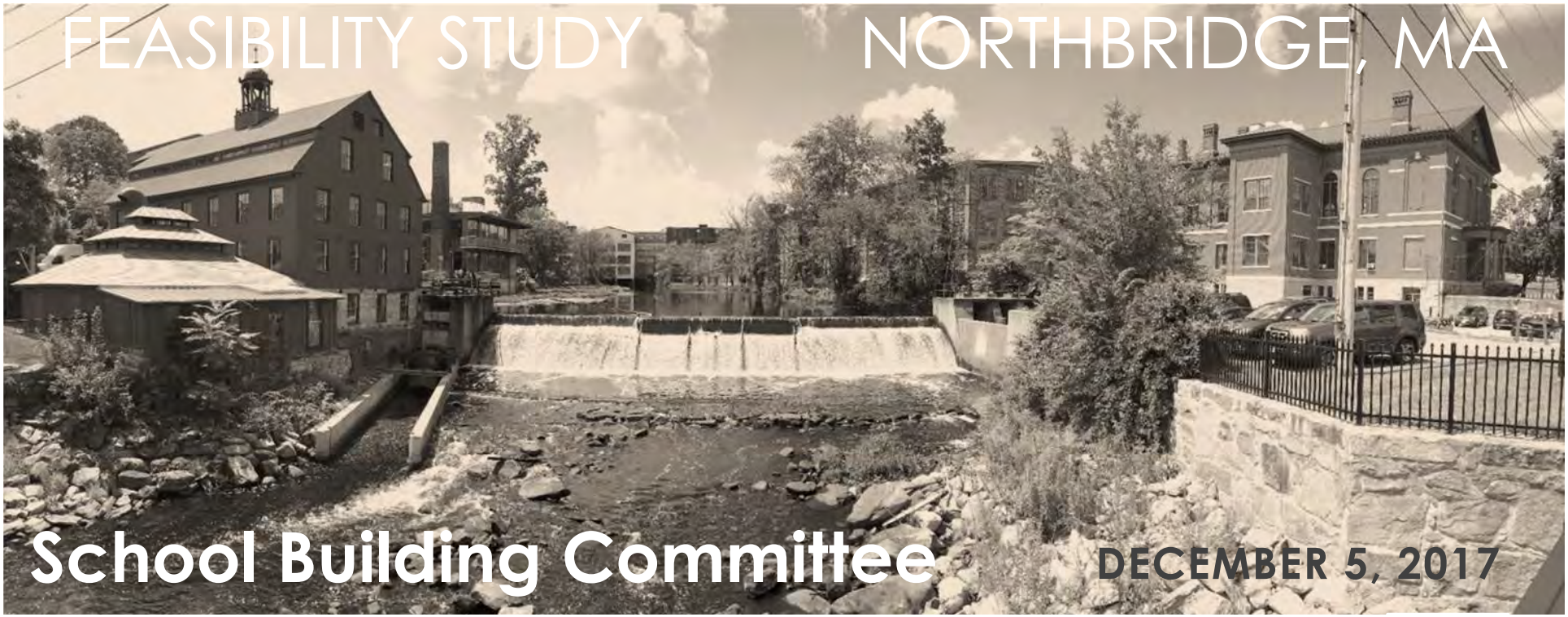
W. EDWARD BALMER SCHOOL

FEASIBILITY STUDY NORTHBRIDGE, MA



School Building Committee

DECEMBER 5, 2017

SMMA
Project Management

NORTHBRIDGE
PUBLIC SCHOOLS

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

D&W
DORE & WHITTIER
ARCHITECTS, INC.

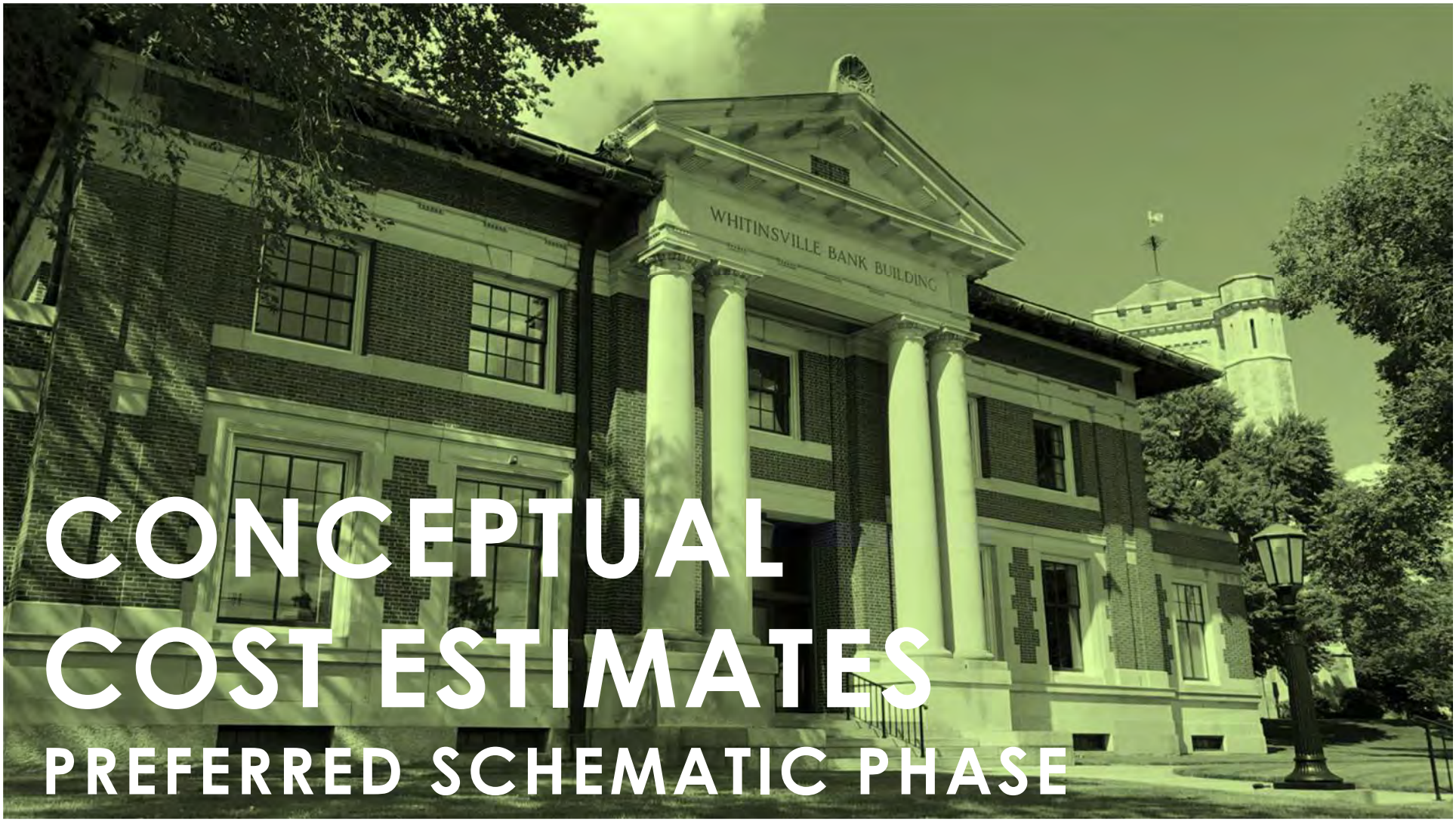
agenda

1. Schematic Design Phase - Proposed Schedule
2. Design Alternatives Cost Models
3. Review of Design Alternatives
4. Options Selection Matrix – The Preferred Option
5. Questions, Comments, Feedback

DATE	AGENDA
Schematic Design Phase (SD)	
January 9, 2018	CM PREQUALIFICATION SUBCOMMITTEE MEETING
	Approve RFQ
January 16, 2018	CM INFORMATIONAL MEETING
January 16, 2018	SCHOOL BUILDING COMMITTEE MEETING
	Review Schematic Design Phase Schedule and Deliverables
	Prepare for MSBA FAS Meeting
January 30, 2018	SCHOOL BUILDING COMMITTEE MEETING
	Review Updated Site and Floor Plans
	Review Preliminary Exterior Imagery
	Prepare for MSBA Board Meeting
February 6, 2018	CM PREQUALIFICATION SUBCOMMITTEE MEETING
	Prequalify CM Firms to Receive RFP
February 27, 2018	CM SELECTION SUBCOMMITTEE
	Review CM Proposals
February 14, 2018	*MSBA BOARD MEETING*
March 6, 2018	SCHOOL BUILDING COMMITTEE MEETING
	Review MSBA Board Meeting
	Review Updated Site Plan and Floor Plans
	Review Updated Exterior Imagery
	Review Preliminary Mechanical and Electrical Systems
	Review Updated Sustainable Design Features
	Review Preliminary Building Sections
	Prepare for Community Forum No. 6
March 7, 2018	CM SELECTION SUBCOMMITTEE
	CM Interviews
March 13, 2018	SCHOOL BUILDING COMMITTEE MEETING @ 5:30 PM
	Prequalification Committee to Recommend CM Firm
March 13, 2018	COMMUNITY FORUM NO. 6 - 6:00 to 8:00 PM - NORTHBRIDGE ELEMENTARY SCHOOL CAFETERIA

DATE	AGENDA
March 20, 2018	SCHOOL BUILDING COMMITTEE MEETING
	CM Introduction
	Review Progress Site Plan and Floor Plans
	Review Updated Exterior Elevations
	Review Preliminary Structural Systems
	Review Preliminary Technology Systems
	Review Preliminary FFE Layout
April 3, 2018	SCHOOL BUILDING COMMITTEE MEETING
	Review Progress Site Plan and Floor Plans
	Review Updated Exterior Elevations
	Review Final Mechanical and Electrical Systems
	Review Final Sustainable Design Features
April 17, 2018	SCHOOL BUILDING COMMITTEE MEETING
	Final Site Plan, Floor Plans and Elevations
	Final Project Cost
	Final Project Schedule
	Vote to submit Schematic Design Cost Estimate to MSBA
April 24, 2018	COMMUNITY FORUM NO. 7 - 6:00 to 8:00 PM - W. EDWARD BALMER ELEMENTARY SCHOOL CAFETERIA
April 25, 2018	*SUBMIT SCHEMATIC DESIGN COST ESTIMATE TO MSBA*
May 1, 2018	SCHOOL BUILDING COMMITTEE MEETING - 7:00 PM
	Vote to submit Schematic Design Package to MSBA
May 9, 2018	*SUBMIT SCHEMATIC DESIGN PACKAGE TO MSBA*
	ADDITIONAL MEETINGS TO BE SCHEDULED

SCHEMATIC DESIGN PHASE PROPOSED SCHEDULE



CONCEPTUAL COST ESTIMATES

PREFERRED SCHEMATIC PHASE

A SERIES (RENO ONLY)

A1
2 - 4
Balmer ES
$32.7M

A2
PK-1st
NES
$20.3M

- RENOVATIONS TO EXISTING BUILDINGS
- CODE AND DEFERRED MAINTENANCE UPGRADES
- NO EDUCATIONAL IMPROVEMENTS

$ 53.0M total

NON-MSBA-Reimbursed Project(s)

B SERIES (GRADE 2-4)

B2
NEW/
REAR
$66.9M

MSBA-Reimbursed Project

C SERIES (GRADE PK-5)

C2
RENO/ADD
KEEP EXISTG.
$108.7M

C3.1a
NEW/
REAR
$107.4M

C3.1b
NEW/
REAR
$105.2M

C3.2
NEW/
SIDE
$105.6M

C3.3
NEW/
SIDE
$110.1M

C5
NEW/
FRONT
$102.6M

MSBA-Reimbursed Project

preferred schematic

CONCEPTUAL PROJECT COST ESTIMATES

Estimated costs are preliminary and subject to change as the project is refined.

A SERIES (RENO ONLY)

A1
2 - 4
Balmer ES
0

- RENOVATIONS TO EXISTING BUILDINGS
- CODE AND DEFERRED MAINTENANCE UPGRADES
- NO EDUCATIONAL IMPROVEMENTS

A2
PK-1st
NES
0

0

NON-MSBA-Reimbursed Project(s)

B SERIES (GRADE 2-4)

B2
NEW/
REAR
61.11%

MSBA- Reimbursed Project (of eligible costs)

C SERIES (GRADE PK-5)

C2
RENO/ADD
KEEP EXISTG.
63.2%

C3.1a
NEW/
REAR
61.11%

C3.1b
NEW/
REAR
61.11%

C3.2
NEW/
SIDE
61.11%

C3.3
NEW/
SIDE
61.11%

C5
NEW/
FRONT
61.11%

MSBA- Reimbursed Project (of eligible costs)

preferred schematic

PRELIMINARY REIMBURSEMENT RATES

Estimated costs are preliminary and subject to change as the project is refined.

A SERIES (RENO ONLY)

A1
2 - 4
Balmer ES
$32.7M

- RENOVATIONS TO EXISTING BUILDINGS
- CODE AND DEFERRED MAINTENANCE UPGRADES
- NO EDUCATIONAL IMPROVEMENTS

A2
PK-1st
NES
$20.3M

$ 53.0M total

NON-MSBA-Reimbursed Project(s)

B SERIES (GRADE 2-4)

B2
NEW/
REAR
$40.5M

AFTER MSBA REIMBURSEMENT

C SERIES (GRADE PK-5)

C2
RENO/ADD
KEEP EXISTG.
$60.0M

C3.1a
NEW/
REAR
$59.9M

C3.1b
NEW/
REAR
$58.0M

C3.2
NEW/
SIDE
$58.5M

C3.3
NEW/
SIDE
$62.5

C5
NEW/
FRONT
$55.7M

AFTER MSBA REIMBURSEMENT

preferred schematic

APPROXIMATE COST TO TOWN

Estimated costs are preliminary and subject to change as the project is refined.

A SERIES (RENO ONLY)

A1
2 - 4
$458.22
$1.61
Balmer

← 20-YR AVERAGE ANNUAL TAX IMPACT, AVERAGE HOME*

A2
PK-1st
$283.61
$.998
NES

← AVERAGE ANNUAL TAX INCREASE PER $1000 VALUATION

B SERIES (GRADE 2-4)

B2
NEW/REAR
$566.09
$1.99

C SERIES (GRADE PK-5)

C2
RENO/ADD
$839.68
$2.96

C3.1a
NEW/REAR
$838.36
$2.95

C3.1b
NEW/REAR
$811.79
$2.85

C3.2
NEW/SIDE
$818.06
$2.88

C3.3
NEW/SIDE
$875.24
$3.08

C5
NEW/FRONT
$779.04
$2.74

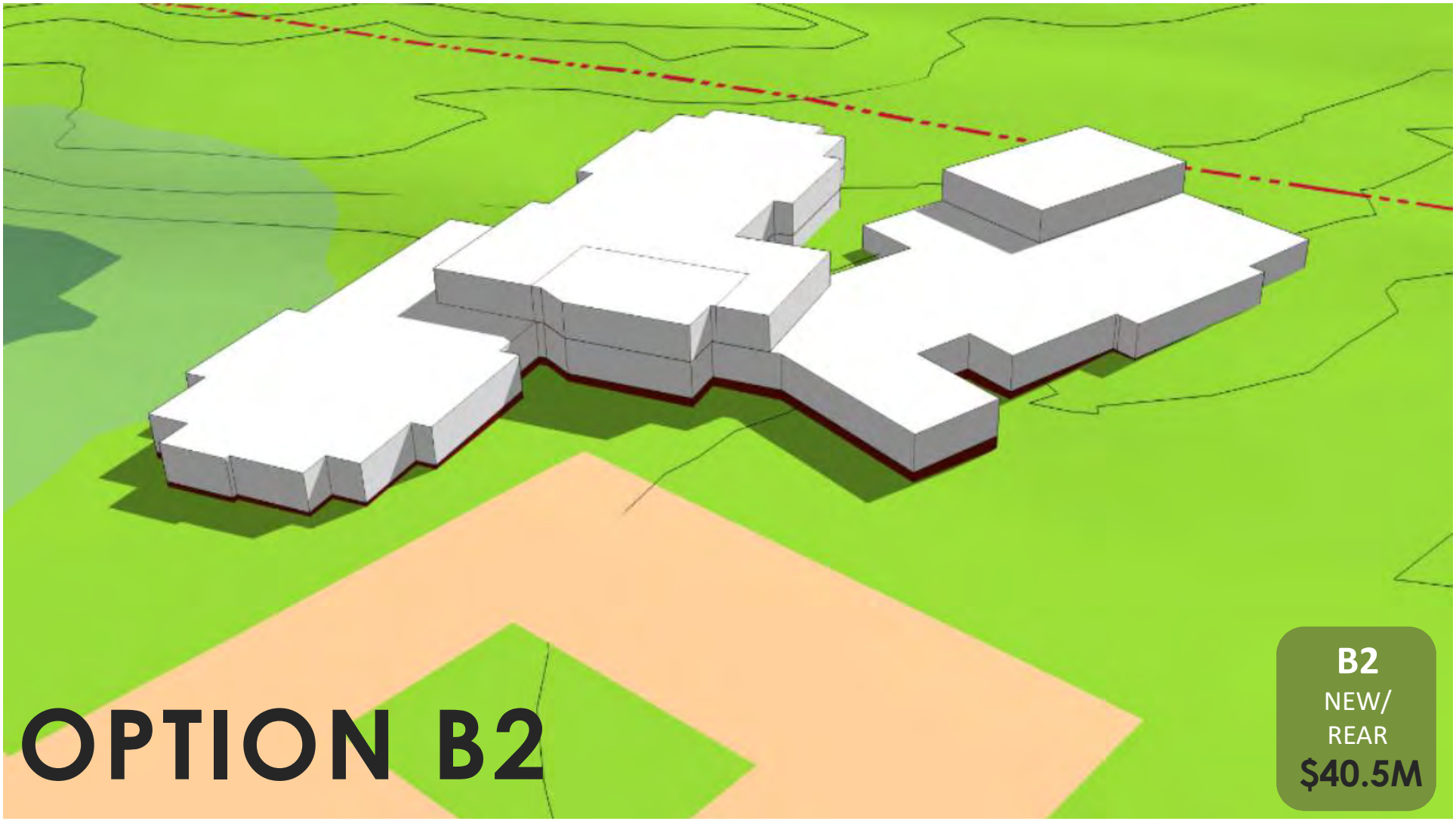
preferred schematic

APPROXIMATE TAX IMPACTS

* AVERAGE HOMESTEAD VALUE = $284,000, FY 2017 VALUATION
ASSUMPTIONS: BOND RATE 5% TERM 20 YEARS
Estimated costs are preliminary and subject to change as the project is refined


QUESTIONS?
D&W
DORE & WHITTIER
ARCHITECTS, INC.

SELECTED DESIGN ALTERNATIVES AND COSTS


OPTION B2
B2
NEW/
REAR
$40.5M

OPTION B2

- GRADES 2-4 (510)
- NEW BUILD
- 2 STORIES
- REAR/EAST EDGE OF SITE
- 2 YEAR DURATION

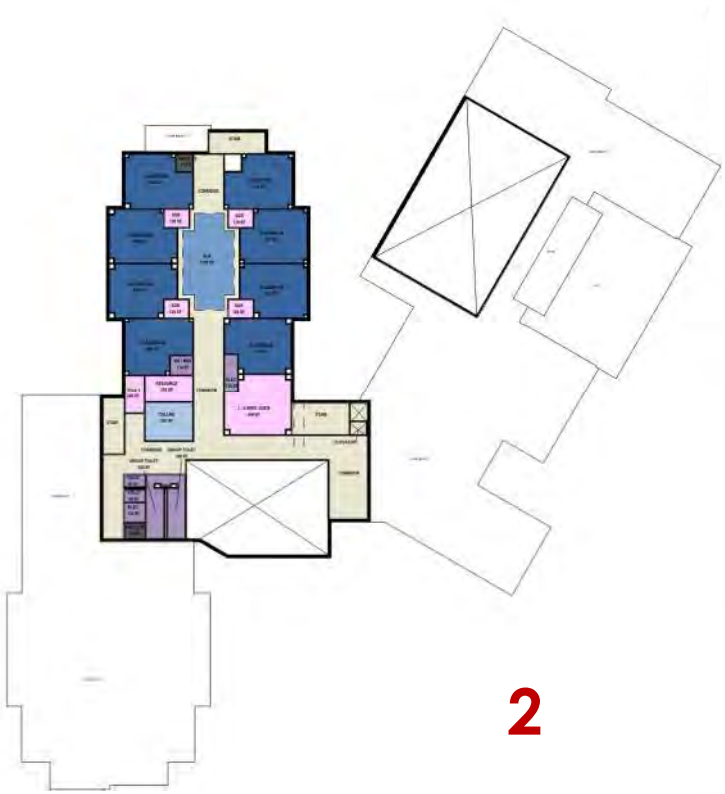
SITE PROGRAM

	PROGRAM	DESIGN
PARKING	100	116
BUSSES, 30'	3	3
BUSSES, 40'	7	7
VANS	4	USE BUS LOOP
PK-K PARK/DROP	0	0
CAR QUEUE	50	72
FIELDS & SITE AMENITIES		
BASEBALL	1	1
SOFTBALL	1	1
U-10 SOCCER	1	1
U-8 SOCCER	3	6
U-6 SOCCER	1	2
PK- 2 PLAYGROUND	0	0
3-5 PLAYGROUND	1	1
PAVED PLAY AREA	1	1
OUTDOOR LEARNING	2	3

3,000 SF – 100' WETLAND SETBACK ZONE IMPACT

preliminary design

B2
NEW/
REAR
$40.5M



2

1

OPTION B2

- 2-4 (510)

preliminary design

B2
NEW/
REAR
$40.5M

OPTION B2

PROS

- Good solar orientation
- Good program fit, satisfies program requirements
- Clean replacement project - no swing space needed
- Good drop-off design for busses and cars, and queue length
- Extra play fields
- Safety: Admin has commanding view of site
- Shorter project duration, minimal impact on existing operation

CONS

- Does not provide benefit to most number of students
- Does not fix NES issues
- Grades 2-3 paired but 4 on its own
- Intensive cut/fill site work
- Paired with a future NES project, will be more money overall in long run

ALL C-SERIES OPTIONS HAVE...

- Required site elements replaced/reconstituted
- Separate bus and car loops
- PK-K park and drop lot
- Public/private separation: core versus academic wings
- Grade pairings aligned by floor level: PK-K; 1-2; 3-4-5
- Grade pairings not separated by core
- All space summary program elements present
- Extended learning areas
- Outdoor learning areas
- Shared program centrally located
- Special education integrated


OPTION C2
C2
RENO/ADD
KEEP EXISTG.
$60.0M

OPTION C2

- GRADES PK-5 (1,030)
- ADD/RENO
- 2 STORY ADDITIONS
- EXISTING SITE
- 4 YEAR DURATION

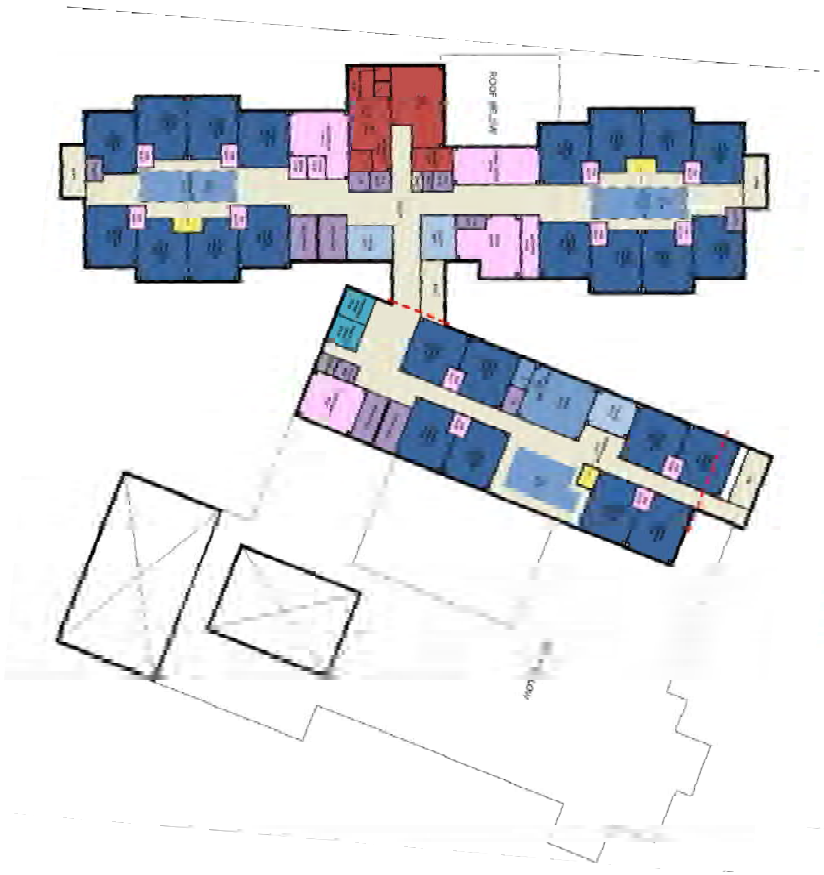
SITE PROGRAM

	PROGRAM	DESIGN
PARKING	205	248
BUSSES, 30'	3	3
BUSSES, 40'	7	7
VANS	4	USE BUS LOOP
PK-K PARK/DROP	15	12
CAR QUEUE	50	26
FIELDS & SITE AMENITIES		
BASEBALL	1	1
SOFTBALL	1	1
U-10 SOCCER	1	1
U-8 SOCCER	3	4
U-6 SOCCER	1	1
PK- 2 PLAYGROUND	1	1
3-5 PLAYGROUND	1	1
PAVED PLAY AREA	1	USE PK-K DROP
OUTDOOR LEARNING	2	4

14,000 SF – 100' WETLAND SETBACK ZONE IMPACT – FIELDS/ DRIVE

preliminary design

C2
RENO/ADD
KEEP EXISTG.
$60.0M



OPTION C2

2

1

- PK-5 (1,030)

preliminary design

C2
RENO/ADD
KEEP EXISTG.
$60.0M

OPTION C2

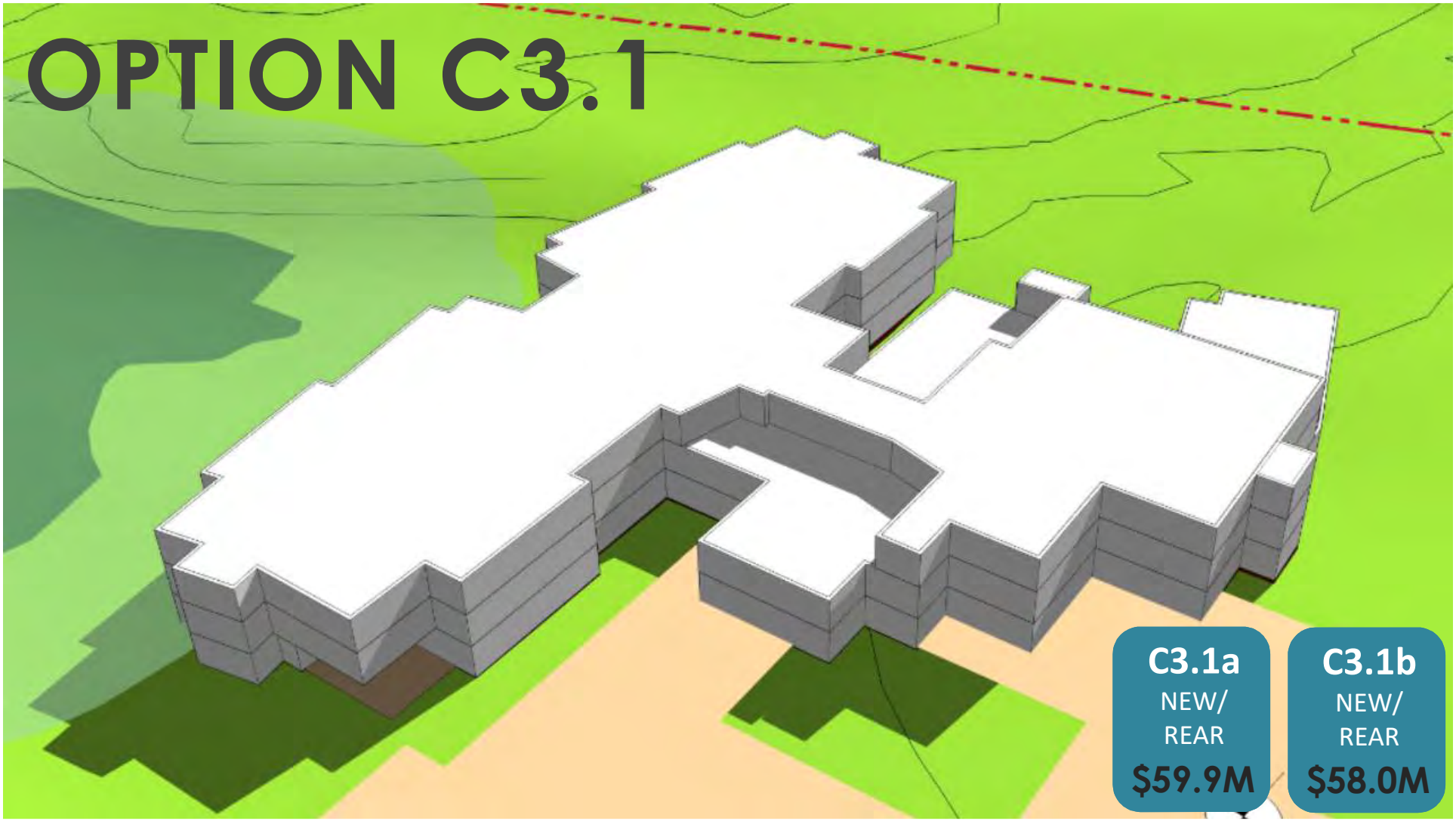
PROS

- Reused existing building
- Phased to avoid need for leased modular swing space
- Additions define interesting exterior landscape spaces
- Additions avoid wetlands and topography

CONS

- Compromises in plan layout and adjacencies
- Complex phased add/reno could disrupt education
- Poor solar orientation
- Many site plan compromises: circulation, car & bus drop-offs tight and far from entry, parking distant & fragmented, small play-grounds, no ring road; car queue line short
- Safety: Admin has no view of parking, bus loop
- 4 year duration longest of options; risk of delays due to complexity

OPTION C3.1



OPTION C3.1a

- GRADES PK-5 (1,030)
- PHASED NEW BUILD
- 3 STORIES
- REAR OF SITE
- 3.5 YEAR DURATION

SITE PROGRAM

	PROGRAM	DESIGN
PARKING	205	221
BUSSES, 30'	3	3
BUSSES, 40'	7	7
VANS	4	USE BUS LOOP
PK-K PARK/DROP	15	15
CAR QUEUE	50	78
FIELDS & SITE AMENITIES		
BASEBALL	1	1
SOFTBALL	1	1
U-10 SOCCER	1	1
U-8 SOCCER	3	3
U-6 SOCCER	1	1
PK- 2 PLAYGROUND	1	1
3-5 PLAYGROUND	1	1
PAVED PLAY AREA	1	1 + PK-K DROP
OUTDOOR LEARNING	2	3

13,330 SF – 100' WETLAND SETBACK ZONE IMPACT – BUILDING/ DRIVE

preliminary design

C3.1a
NEW/
REAR
$59.9M

OPTION C3.1b

- GRADES PK-5 (1,030)
- PHASED NEW BUILD
- 3 STORIES
- REAR OF SITE
- 3 YEAR DURATION

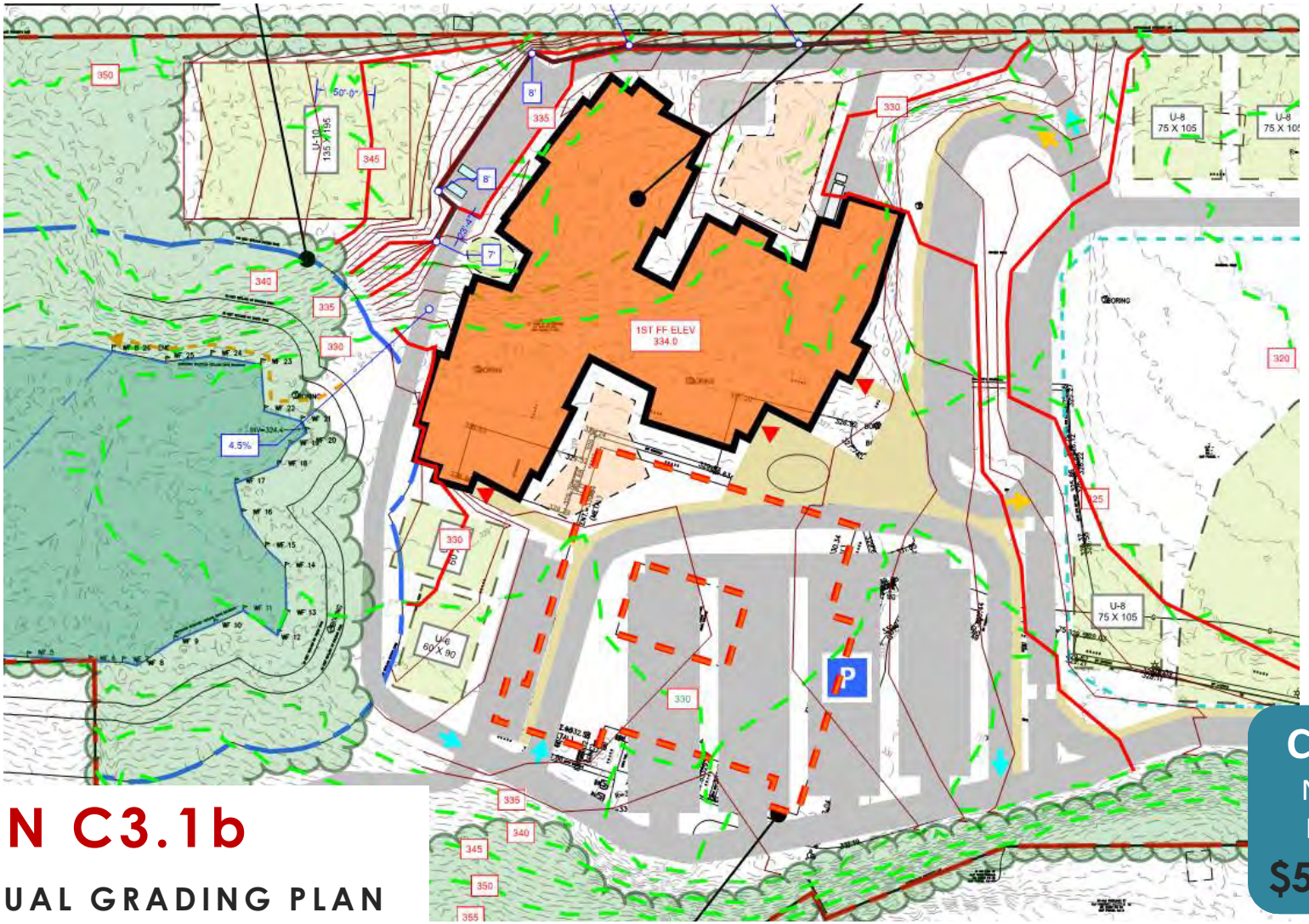
SITE PROGRAM

	PROGRAM	DESIGN
PARKING	205	212
BUSSES, 30'	3	3
BUSSES, 40'	7	7
VANS	4	USE BUS LOOP
PK-K PARK/DROP	15	20
CAR QUEUE	50	83
FIELDS & SITE AMENITIES		
BASEBALL	1	1
SOFTBALL	1	1
U-10 SOCCER	1	1
U-8 SOCCER	3	3
U-6 SOCCER	1	1
PK- 2 PLAYGROUND	1	1
3-5 PLAYGROUND	1	1
PAVED PLAY AREA	1	USE PK-K DROP
OUTDOOR LEARNING	2	3

13,330 SF – 100' WETLAND SETBACK ZONE IMPACT – BUILDING/ DRIVE

preliminary design

C3.1b
NEW/
REAR
$58.0M



OPTION C3.1b

CONCEPTUAL GRADING PLAN

preliminary design

C3.1b
NEW/
REAR
$58.0M

C3.1a
NEW/
REAR
$59.9M

C3.1b
NEW/
REAR
$58.0M

3

2

1

OPTION C3.1

- PK-5 (1030)

preliminary design

OPTION C3.1A

PROS

- Compact, logical plan with good adjacencies
- Dynamic extended learning spaces touch nearly all classrooms
- Excellent solar orientation
- Phased project means no leased swing space
- Good design for bus and car drop-off, car queue good
- Outdoor learning opps good
- Safety: Admin has good view of site

CONS

- Phased takedown project increases duration, impacts on school operations
- Car queue line could be clearer, needs more design
- New construction close to existing building
- Upper playground distant from building
- Intensive site work, grading

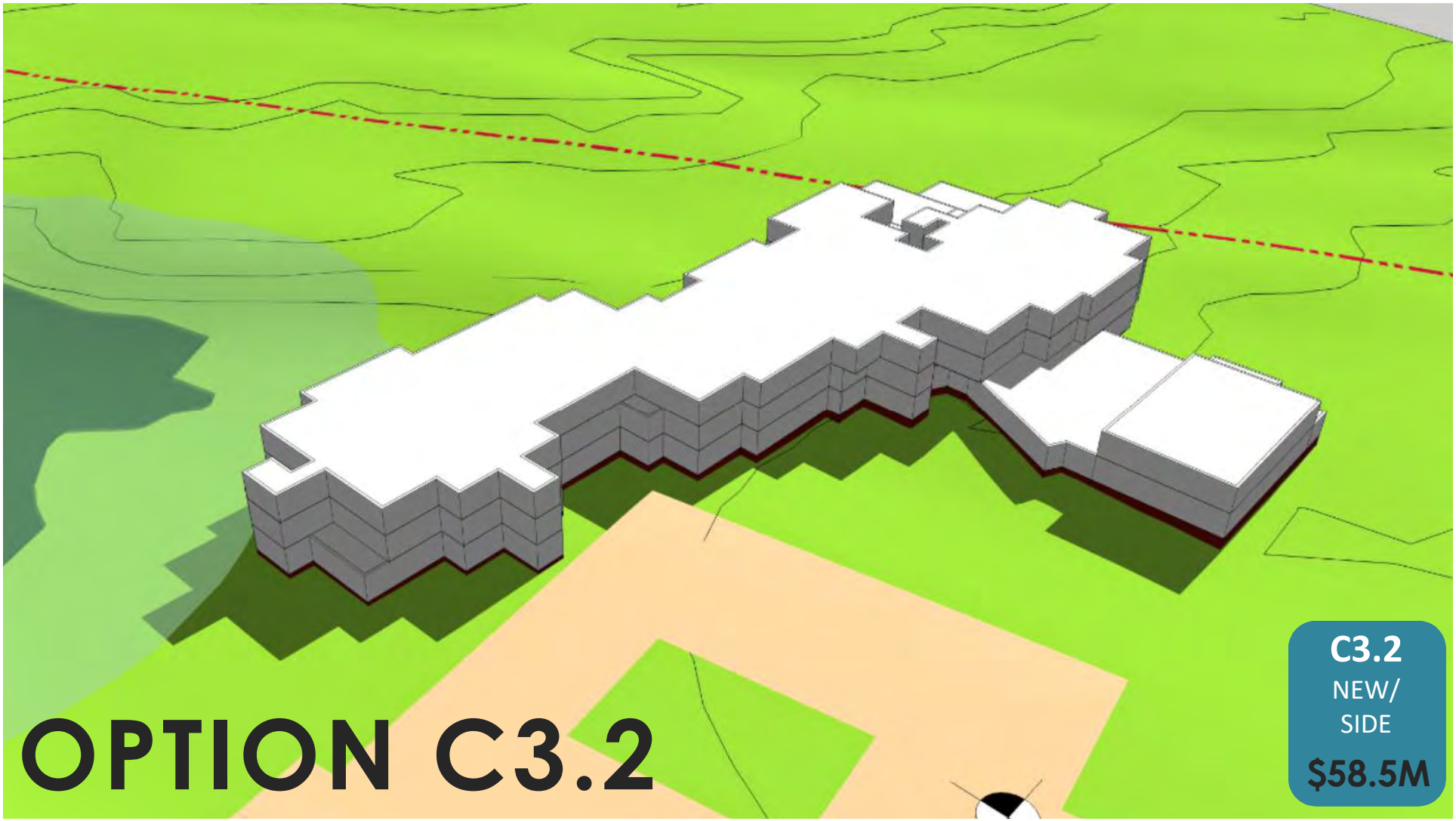
OPTION C3.1B

PROS

- Compact, logical plan with good adjacencies
- Dynamic extended learning spaces touch nearly all classrooms
- Excellent solar orientation
- Clean new construction means no leased space
- Good design for bus and car drop-off, car queue good
- Outdoor learning opps good
- Safety: Admin has good view of site

CONS

- New construction close to existing building
- Car queue line could be clearer, needs more design
- Some play fields distant from building
- Intensive site work, cut/ fill, grading


OPTION C3.2
C3.2
NEW/
SIDE
$58.5M

OPTION C3.2

- GRADES PK-5 (1,030)
- NEW BUILD
- 3 STORIES
- REAR OF SITE
- 3 YEAR DURATION

SITE PROGRAM

	PROGRAM	DESIGN
PARKING	205	211
BUSSES, 30'	3	3
BUSSES, 40'	7	7
VANS	4	USE BUS LOOP
PK-K PARK/DROP	15	18
CAR QUEUE	50	86
FIELDS & SITE AMENITIES		
BASEBALL	1	1
SOFTBALL	1	1
U-10 SOCCER	1	1
U-8 SOCCER	3	5
U-6 SOCCER	1	1
PK- 2 PLAYGROUND	1	1
3-5 PLAYGROUND	1	1
PAVED PLAY AREA	1	1 + PK-K DROP
OUTDOOR LEARNING	2	3

14,200 SF – 100' WETLAND SETBACK ZONE IMPACT – BUILDING/ DRIVE

preliminary design

C3.2
NEW/
SIDE
$58.5M

3

2

1

OPTION C3.2

- PK-5 (1030)

preliminary design

C3.2
NEW/
SIDE
$58.5M

OPTION C3.2

PROS

- Good neighborhood feel
- Large mass broken into smaller pods, mediates scale
- Excellent solar orientation
- Clean project means no leased swing space, minimal impact to students
- Logical design for bus and car drop-off, car queue good
- Playgrounds in forecourt
- Safety: Admin has good view of site

CONS

- Elongated plan means longer travel times
- Cafeteria in back, gym in front of building
- Playfield locations fragmented
- Not the best outdoor learning spaces
- New construction close to existing building
- Intensive site work, grading


C3.3
NEW/
SIDE
$62.5
OPTION C3.3

OPTION C3.3

- GRADES PK-5 (1,030)
- NEW BUILD
- 3 STORIES, STEPPED
- REAR/EAST EDGE OF SITE
- 3 YEAR DURATION

SITE PROGRAM

	PROGRAM	DESIGN
PARKING	205	212
BUSSES, 30'	3	3
BUSSES, 40'	7	7
VANS	4	USE BUS LOOP
PK-K PARK/DROP	15	20
CAR QUEUE	50	88
FIELDS & SITE AMENITIES		
BASEBALL	1	1
SOFTBALL	1	1
U-10 SOCCER	1	1
U-8 SOCCER	3	3
U-6 SOCCER	1	1
PK- 2 PLAYGROUND	1	1
3-5 PLAYGROUND	1	1
PAVED PLAY AREA	1	USE PK-K DROP
OUTDOOR LEARNING	2	3

12,500 SF – 100' WETLAND SETBACK ZONE IMPACT – FIELDS ONLY

preliminary design

C3.3
NEW/
SIDE
$62.5

3

2

1

OPTION C3.3

- PK-5 (1,030)

preliminary design

C3.3
NEW/
SIDE
$62.5

OPTION C3.3

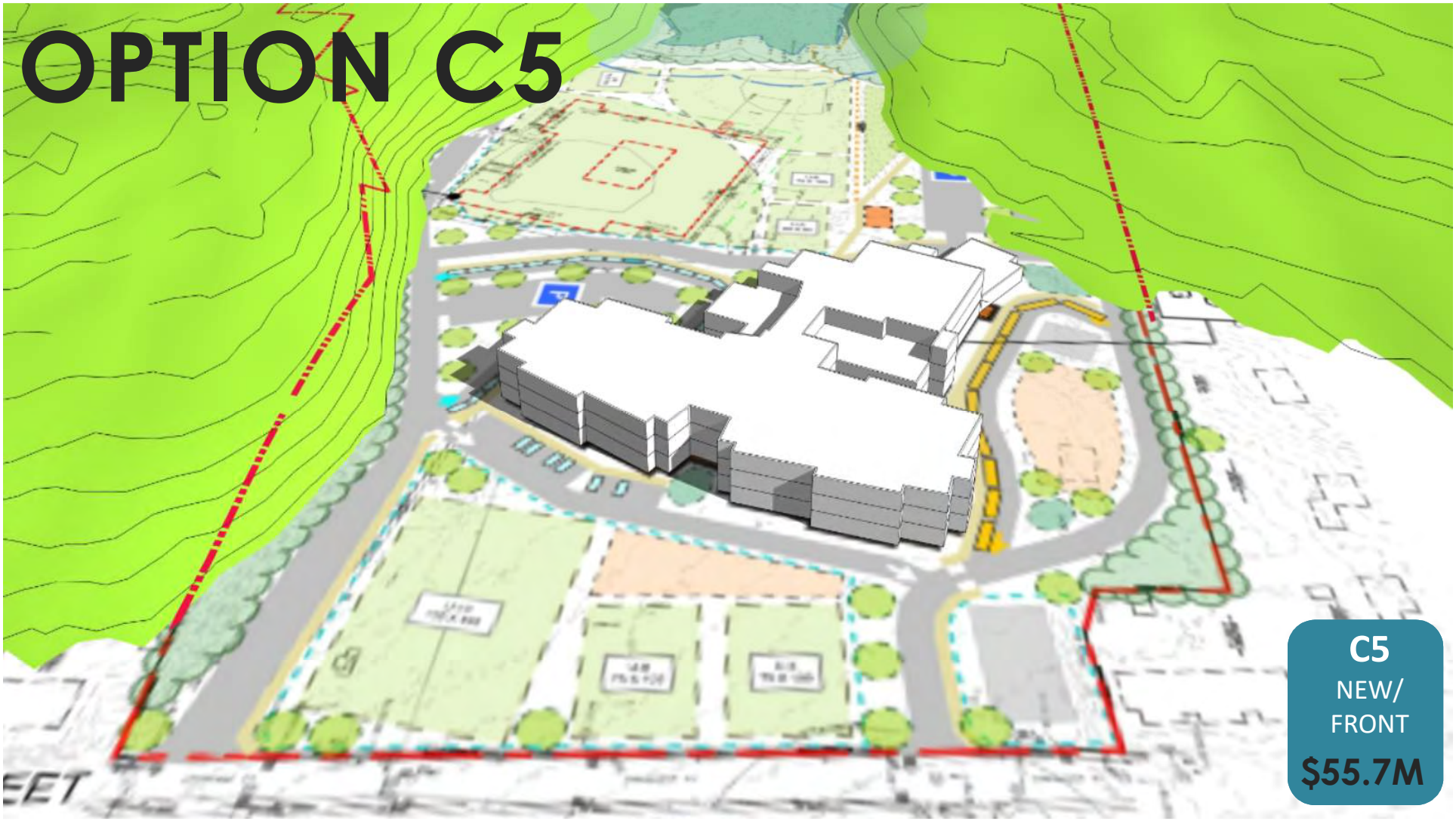
PROS

- Clean replacement project allows Balmer to function
- Built into hillside to save earthwork
- Logical drop-off design for busses and cars, queue good
- Media center central, 2nd floor
- Dynamic, central outdoor learning space
- Arts plaza
- Good relationships to playgrounds & most fields

CONS

- 5th grade somewhat isolated
- Extended learning area (ELA) shapes not practical
- Some classrooms do not have “frontage” on ELAs
- Solar orientation mixed
- Admin has view of parking and car drop, but not rest of site
- Intensive sitework, cut/fill
- More complex foundations

OPTION C5



C5
NEW/
FRONT
$55.7M

OPTION C5

- GRADES PK-5 (1,030)
- NEW BUILD
- 3 STORIES
- FRONT OF SITE
- 3 YEAR DURATION

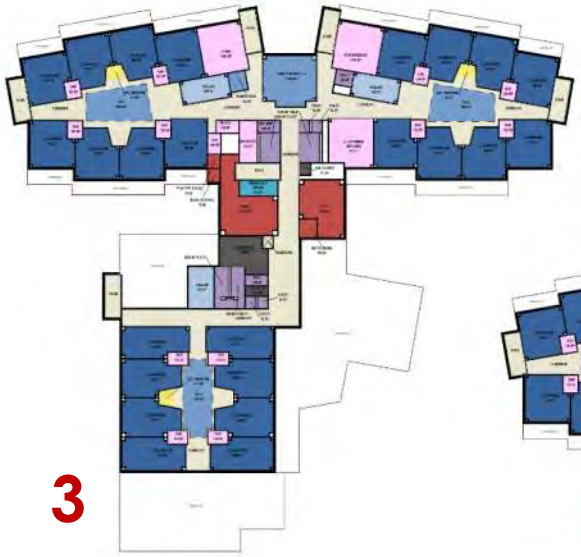
SITE PROGRAM

	PROGRAM	DESIGN
PARKING	205	209
BUSSES, 30'	3	3
BUSSES, 40'	7	7
VANS	4	USE BUS LOOP
PK-K PARK/DROP	15	18
CAR QUEUE	50	74
FIELDS & SITE AMENITIES		
BASEBALL	1	1
SOFTBALL	1	1
U-10 SOCCER	1	1
U-8 SOCCER	3	4
U-6 SOCCER	1	1
PK- 2 PLAYGROUND	1	1
3-5 PLAYGROUND	1	1
PAVED PLAY AREA	1	2 + PK-K DROP
OUTDOOR LEARNING	2	4

11,100 SF – 100’ WETLAND SETBACK ZONE IMPACT – FIELDS ONLY

preliminary design

C5
NEW/
FRONT
$55.7M



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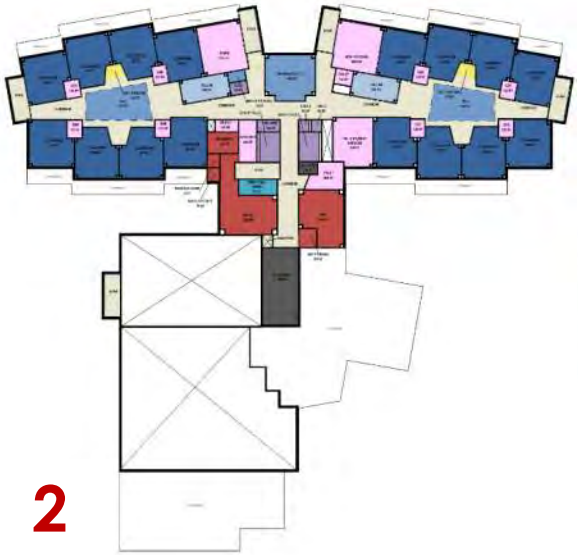

2

1

OPTION C5

- PK-5 (1030)

preliminary design

C5
NEW/
FRONT
$55.7M

OPTION C5

PROS

- Compact, logical plan with good adjacencies
- Dynamic extended learning spaces
- The best solar orientation
- Clean new construction well away from existing building
- Least amount of grading & site work
- Playfields make green space in front of building
- Least amount of disruption during construction

CONS

- Building at front of site could be a scale issue for some
- Design for bus and car drop-off, car queue not ideal
- Some parking remote from building entrance
- Outdoor learning spaces not ideal, distant from woods
- Safety: Admin has no view of site entrance or bulk of parking

SELECTING THE PREFERRED OPTION

OPTIONS EVALUATION MATRIX

PSR - Evaluation Matrix
Northbridge, MA - Balmer Elementary School MSBA Study
Revised 11-30-17

Preliminary Evaluation of Alternatives - Balmer School

(1 = least successful, 5 = Most Successful)

WEIGHT			Option A CIP Only (Base Repair)	Option B2 510 Students New Construction @ Balmer - REAR OF SITE	Option C2 1030 Students Renovation/ Addition @ Balmer - KEEP & RENO ACADEMIC WING	Option C3.1a 1030 Students New Construction @ Balmer REAR OF SITE	Option C3.1b 1030 Students New Construction @ Balmer REAR OF SITE	Option C3.2 1030 Students New Construction @ Balmer REAR OF SITE	Option C3.3 1030 Students New Construction @ Balmer REAR OF SITE	Option C5 1030 Students New Construction @ Balmer FRONT OF SITE
30	1.	Education								
15	1.1	Provides greatest benefit to most number of students								
6	1.2	Satisfies the Space Program								
6	1.3	Satisfies the Spatial Adjacencies								
3	1.4	Impact to Students During Construction								
3	1.5	Classroom Solar Orientation								
		Weighted Score	0	0	0	0	0	0	0	0

PSR - Evaluation Matrix
Northbridge, MA - Balmer Elementary School MSBA Study

Revised 11-30-17

Preliminary Evaluation of Alternatives - Balmer School

(1 = least successful, 5 = Most Successful)

WEIGHT		Option A CIP Only (Base Repair)	Option B2 510 Students New Construction @ Balmer - REAR OF SITE	Option C2 1030 Students Renovation/ Addition @ Balmer - KEEP & RENO ACADEMIC WING	Option C3.1a 1030 Students New Construction @ Balmer REAR OF SITE	Option C3.1b 1030 Students New Construction @ Balmer REAR OF SITE	Option C3.2 1030 Students New Construction @ Balmer REAR OF SITE	Option C3.3 1030 Students New Construction @ Balmer REAR OF SITE	Option C5 1030 Students New Construction @ Balmer FRONT OF SITE
10	**2. Scale to Neighborhood Context, Swing Space, and Permitting**								
1	2.1 Building Scale to Site								
5	2.2 Swing Space Not Required								
2	2.3 Permitting (time, difficulty)								
	Weighted Score	0	0	0	0	0	0	0	0
10	**3. Site Circulation**								
5	3.1 Separation of Cars, Buses, Vans, and Pedestrians								
3	3.2 Parking								
2	3.4 Provides Sufficient Space for Parent Queue								
	Weighted Score	0	0	0	0	0	0	0	0

PSR - Evaluation Matrix
Northbridge, MA - Balmer Elementary School MSBA Study

Revised 11-30-17

Preliminary Evaluation of Alternatives - Balmer School

(1 = least successful, 5 = Most Successful)

WEIGHT		Option A CIP Only (Base Repair)	Option B2 510 Students New Construction @ Balmer - REAR OF SITE	Option C2 1030 Students Renovation/ Addition @ Balmer - KEEP & RENO ACADEMIC WING	Option C3.1a 1030 Students New Construction @ Balmer REAR OF SITE	Option C3.1b 1030 Students New Construction @ Balmer REAR OF SITE	Option C3.2 1030 Students New Construction @ Balmer REAR OF SITE	Option C3.3 1030 Students New Construction @ Balmer REAR OF SITE	Option C5 1030 Students New Construction @ Balmer FRONT OF SITE
10	**4. Site Features**								
2	4.1 Provides Outdoor Play Fields / Area								
2	4.2 Provides an Opportunity / Location for a Hardscape Play Area								
2	4.3 Provides an opportunity for outdoor learning places								
2	4.4 Provides Area for Age-appropriate Play Structure(s)								
2	4.5 Location of Site Features								
	Weighted Score	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
10	**5. Safety & Security Features**								
	Weighted Score	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

PSR - Evaluation Matrix
Northbridge, MA - Balmer Elementary School MSBA Study

Revised 11-30-17

Preliminary Evaluation of Alternatives - Balmer School

(1 = least successful, 5 = Most Successful)

WEIGHT			Option A CIP Only (Base Repair)	Option B2 510 Students New Construction @ Balmer - REAR OF SITE	Option C2 1030 Students Renovation/ Addition @ Balmer - KEEP & RENO ACADEMIC WING	Option C3.1a 1030 Students New Construction @ Balmer REAR OF SITE	Option C3.1b 1030 Students New Construction @ Balmer REAR OF SITE	Option C3.2 1030 Students New Construction @ Balmer REAR OF SITE	Option C3.3 1030 Students New Construction @ Balmer REAR OF SITE	Option C5 1030 Students New Construction @ Balmer FRONT OF SITE
10	**6. Time to Completion**									
3	6.1	Construction Duration								
4	6.2	Impact on existing school operation during construction								
3	6.3	Risk of schedule delays due to complexity of construction phasing								
		Weighted Score	0	0	0	0	0	0	0	0
	SUB-TOTALS		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

PSR - Evaluation Matrix
Northbridge, MA - Balmer Elementary School MSBA Study

Revised 11-30-17

Preliminary Evaluation of Alternatives - Balmer School

(1 = least successful, 5 = Most Successful)

WEIGHT			Option A CIP Only (Base Repair)	Option B2 510 Students New Construction @ Balmer - REAR OF SITE	Option C2 1030 Students Renovation/ Addition @ Balmer - KEEP & RENO ACADEMIC WING	Option C3.1a 1030 Students New Construction @ Balmer REAR OF SITE	Option C3.1b 1030 Students New Construction @ Balmer REAR OF SITE	Option C3.2 1030 Students New Construction @ Balmer REAR OF SITE	Option C3.3 1030 Students New Construction @ Balmer REAR OF SITE	Option C5 1030 Students New Construction @ Balmer FRONT OF SITE
20	7. Cost									
5	7.1	Total Project Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
		Score								
8	7.2	Total Construction Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
		Score								
2	7.3	Swing Space	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
		Score								
10	7.4	Total Cost to Town	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
		Score								
		Weighted Score	0	0	0	0	0	0	0	0
100	**GRAND TOTALS**		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

FINAL RANKINGS


THANK YOU
D&W
DORE & WHITTIER
ARCHITECTS, INC.

DOLLAR FIGURES IN MILLIONS	OPTIONS											
	A1	B1	B2	B3	C1	C2	C3				C4	C5
PDP Construction Cost Estimate	$41.9	$41.1	$44.9	$44.2	$83.7	$79.1	$81.1				$88.1	$80.5
PDP Project Cost Estimate[1]	$53.0	$53.6	$58.3	$57.5	$107.9	$102.4	$104.7				$113.1	$104.1
	A1		B2			C2	C3.1a	C3.1b	C3.2	C3.3		C5
PSR Construction Cost Estimate	$41.9		$52.1			$84.3	$83.3	$81.4	$81.8	$85.6		$79.3
PSR Project Cost Estimate[1]	$53.0		$66.9			$108.7	$107.4	$105.2	$105.6	$110.1		$102.6
Construction Cost Difference between PDP and PSR	$0.0		$7.2			$5.2	$2.2	$0.3	$0.7	$4.5		($1.2)
Project Cost Difference between PDP and PSR	$0.0		$8.6			$6.3	$2.7	$0.5	$0.9	$5.4		($1.5)

PDP TO PSR COMPARISON OF PROJECT COST ESTIMATES

Estimated costs are preliminary and subject to change as the project is refined.

preferred schematic