

## Bond Program Status Report

Through March 2017



2014 Bond Projects as Approved by Voters	Cost Estimate (\$M)
Modernization: Replacement Projects	
Arts and Communication Magnet Academy (ACMA)	\$28.3
Hazeldale K-5	\$24.6
Vose K-5	\$24.8
William Walker K-5	\$24.6
Modernization: Renovation Projects	
Capital Center Improvements	\$5.0
Critical Equipment Purchases	\$24.0
Five Oaks Middle School Remodel and Expansion	\$21.1
Maintenance Facility Improvements	\$10.0
Physical Facility Improvements (District-wide Facility Repairs)	\$98.0
Raleigh Hills K-8 Remodel & Expansion	\$9.7
School Kitchen Improvements	\$0.8
Springville K-8 Improvements	\$2.0
Modernization: Regulatory Compliance	
Districtwide ADA Compliance	\$2.0
Domestic and Fire Protection Separation	\$0.8
Green Energy Technology	\$5.0
High School Title IX Compliance; SHS and AHS	\$4.0
McKay ADA Upgrades	\$0.4
Security Upgrades	\$10.0
Seismic Upgrades	\$4.2
New Capacity	
New Elementary School Site, Land Acquisition - South Cooper Mtn.	\$3.0
New High School – South Cooper Mtn.	\$109.0
New K-5 in North Bethany	\$25.0
New Middle School on Timberland Site	\$51.6
Technology	
HVAC Control System Upgrade	\$0.8
IT Data Center at Capital Center	\$2.9
Learning Technology: Classroom Systems	\$56.0
Unified Communication System	\$7.2
Program Implementation Requirements	<b></b>
Pre-bond Planning Reimbursement	\$1.0
Program Contingency @ 10% of Total Project Value	\$45.4
Cost Inflation @ 3.0%/ year of Total Project Value	\$52.8
Bond Implementation/Management Costs @ \$2.5 million/year	\$20.0
Bond Issuance Services @ 1% of Bond Value	\$6.0
Grand Total	\$680.0



Project	2014	2015	2016	2017	2018	2019	2020	2021	2022
New High School			_						
New Middle School									
New K5 North Bethany									
Replace Vose K-5									
Replace Hazeldale K-5									
Replace William Walker K-5									
Replace ACMA									
Maintenance Facility Improvements									
Five Oaks Renovation									
Raleigh Hills K-8 Renovation									
Playground Drainage Improvements									
McKay ADA Upgrades		· · · · · · · · · · · · · · · · · · ·							
AHS Title IX									
Conestoga Plumbing & Water Intrusion									
Capital Center Improvements Phase III				-					
SHS Title IX Bldg Addition				-					
WHS Roof Replacement				I					
Security Upgrades - All Schools				_					
Cedar/Meadow Park HVAC Replacement									
New Elementary School Land Acquisition									
Highland Park Plumbing									
BHS HVAC									
Facility Repairs									

#### Legend



Planning & Design

Construction

Design and Construction Overlapping



#### BEAVERTON SCHOOL DISTRICT RESILIENCE PLANNING FOR HIGH SCHOOL AT SOUTH COOPER MOUNTAIN AND MIDDLE SCHOOL AT TIMBERLAND

#### **BEAVERTON, OREGON**

July 10th, 2015 SEFT Project Number: B14030.00



New High School at South Cooper Mountain



New Middle School at Timberland

#### Foreword

At the behest of the State Legislature, the Oregon Seismic Safety Policy Advisory Commission completed *The Oregon Resilience Plan* in February 2013. This Plan outlines the risks and challenges facing Oregonians from the next Cascadia Subduction Zone mega-earthquake, which seismologists say is inevitable. The Plan provides very sobering predictions about the impacts from this earthquake, including durations for restoring the critical service lifelines of electricity, water, and highways ranging from months to a year or more in the Willamette Valley. *The Oregon Resilience Plan* is a call to action for all Oregonians, especially for those of us in public service.

Schools are different from most public facilities. Not only do they shelter thousands of our children, they are distributed in neighborhoods and walkable from homes nearby. With enlightened forward planning, they could be significant resources in helping their communities recover in the aftermath of the earthquake...if we plan.

Beaverton School District has a special opportunity—perhaps even a responsibility. Our community approved a very large capital construction bond program in 2014 that includes building three brand new school buildings and replacing four more. In order to better support our community during an emergency, our District has determined that we should build these seven schools to exceed building code requirements in certain critical aspects in order to respond to *The Oregon Resilience Plan*. Operating within a very compressed timeframe to keep our projects on schedule and within constrained budgets, we launched an effort to translate the concepts of the Plan for our first two schools into design criteria for our architects and engineers.

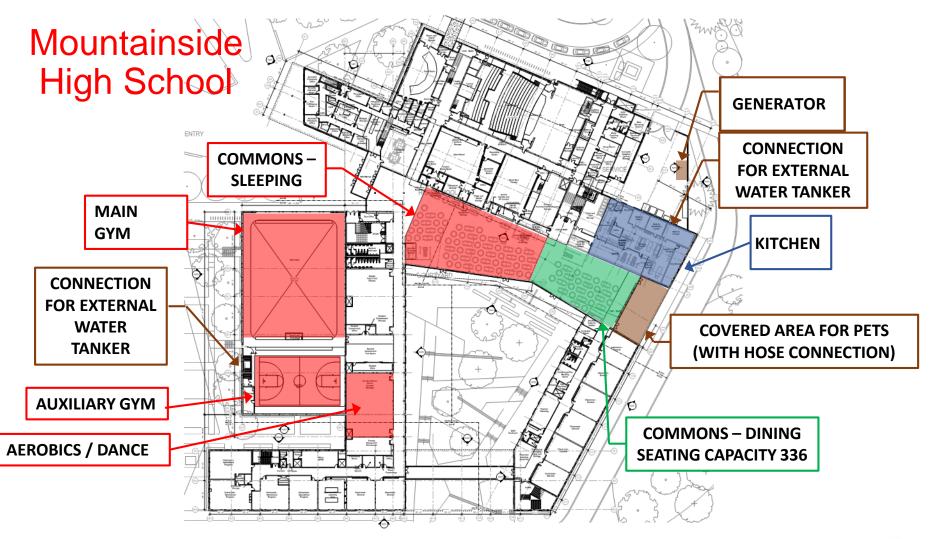
This report summarizes that effort and provides the conclusions we reached. It is imperfect, and will only affect seven of our 50 schools and only seven of the 1,200 public schools in Oregon. But we must start somewhere, with the hope that Oregon has decades to build many new schools and other public buildings before the mega-earthquake strikes. Beaverton School District hopes that publishing this report and sharing our work with other school districts will provide a beginning framework for creating a new standard for resilient school buildings.

Richard L. Steinbrugge, P.E. Executive Administrator for Facilities



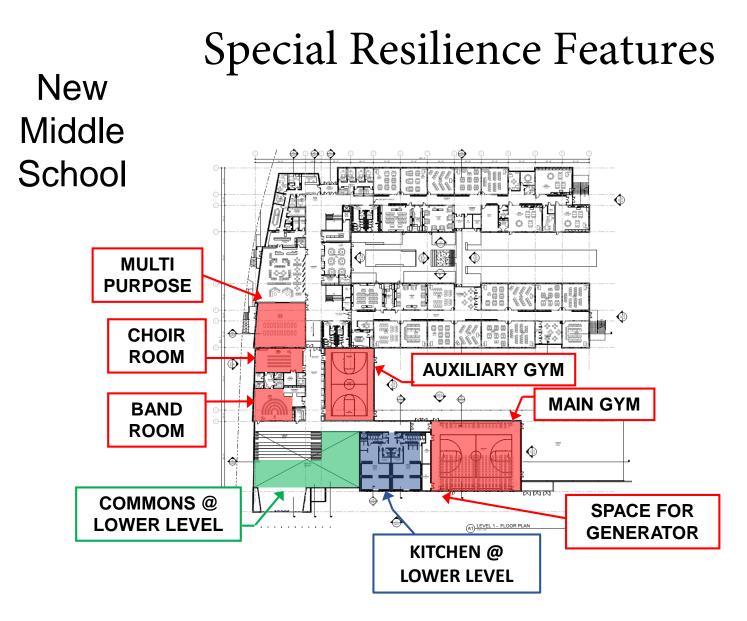


## Special Resilience Features













## Special Resilience Features

Middle School Building

Typical Structural Braced Frame







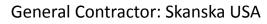
# SCHOOL DISTRICT Cons

## New Middle School Construction Completed

#### Information from the Beaverton School District

#### July 2016

- North parking lot paving underway
- Netting in covered play area complete
- Pouring cement sidewalk along NW Stone Mountain
- Partitions and mirrors in the restrooms nearly complete
- Appliance installation underway
- Casework in commons area underway
- South parking lot complete
- South parking lot bus loop nearly complete
- Mirror installation in multi-purpose room
- Auxiliary and main gym floor installation continues
- Athletic field work begins
- Cement pour of ADA ramp at south entry complete
- South plaza grading and paving underway
- Light fixture installation continues
- Cabinet installation in media center continues
- Crosswalks at NW Holly and 118<sup>th</sup> underway





Site view aerial - looking northeast



Media Center/Hallway



Multi-purpose room



Lockers in the classroom wing



Kitchen/Food Prep

# SCHOOL DISTRICT

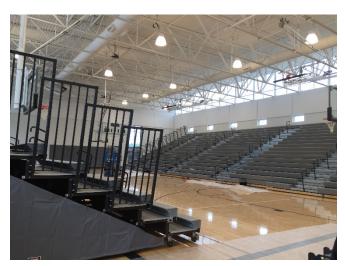
## New Middle School Energy Efficient Design

#### Information from the Beaverton School District

#### September 2016

The new Middle School has design Energy Use Index (EUI) of 38 kBtu/SF/Yr. This is well below the Oregon Department of Energy and ASHRAE 90.1 *Energy Standard for Buildings* target EUI of 47 kBtu/SF/Yr. The most significant energy efficient building systems that contribute to the low EUI include:

- High Efficiency Condensing Boilers save, 8000 Therms of energy annually which equates to about \$8,000/year.
- High Efficiency Condensing Hot Water Heaters save, 700 Therms and \$700/year.
- Heat Recovery in the locker rooms saves, 2000 Therms and \$2,000/year.
- LED Lighting vs. Code Lighting saves, 17,000 kWh and \$10,000/year.



Gym LED Lighting



Music Room LED Lighting



One of Two Condensing Boilers



**Condensing Hot Water Heaters** 



### Mountainside High School Construction Update

#### Information from the Beaverton School District

#### March 2017

## Watch our progress on the time-lapse web cam: <a href="http://dwpwebcams.com/scmhs/">http://dwpwebcams.com/scmhs/</a>

#### Work Completed:

- Courtyard brick
- · Scoreboards installed

#### Work Underway:

- Final roof detailing
- Main electrical panels
- Painting, drywall, taping, ceiling grid, flooring, kitchen and bathroom tile
- · Grading for courtyard design
- Skylights in Commons
- Exterior brick
- Steel installation in Auditorium
- Turf on Baseball Field
- Stadium Press Box
- Landscaping
- · Grading for tennis court installation



#### Anticipated completion date: August 2017



Aerial looking west



Athletic fields



Auditorium





Football stadium

Kitchen



## Vose Elementary Construction Update

#### Information from the Beaverton School District

#### March 2017

#### Watch our progress on the time-lapse web cam: http://dwpwebcams.com/vose

#### Work Completed:

- Gas meter installation
- Kindergarten classrooms concrete slab
- Stud framing in North classroom wing
- Windows on North side of building

#### Work Underway:

- Interior and exterior stud framing
- Exterior sheathing, waterproofing and window flashing
- · Mechanical, plumbing and electrical rough-in
- Exterior window installation
- Roof installation
- Interior sheet rock and wall insulation
- Steel structure welding and roof decking
- Storm water piping

#### **General Contractor: Triplett Wellman**

#### Anticipated completion date: August 2017



Aerial looking south



2nd floor classroom concrete pour



Classroom insulation and backing



Windows at entry



Roofing



## Sato Elementary Construction Update

#### Information from the Beaverton School District

March 2017

Watch our progress on the time-lapse web cam: http://oxblue.com/open/beavertonschooldistrict/kaiser

#### Work Completed:

- · Paving of west parking lot
- · Installation of freezer/cooler and range hoods

#### Work Underway:

- Metal siding
- · Concrete sidewalks
- Roofing
- · Mechanical, electrical and plumbing
- · Window installation
- · Courtyard flat work
- Painting

#### General Contractor: Skanska USA

#### Anticipated completion date: July 2017



Aerial looking north



Parent drop off



Exterior metal paneling





Gym windows

Roofing above kitchen



### New Hazeldale Elementary School Rendering



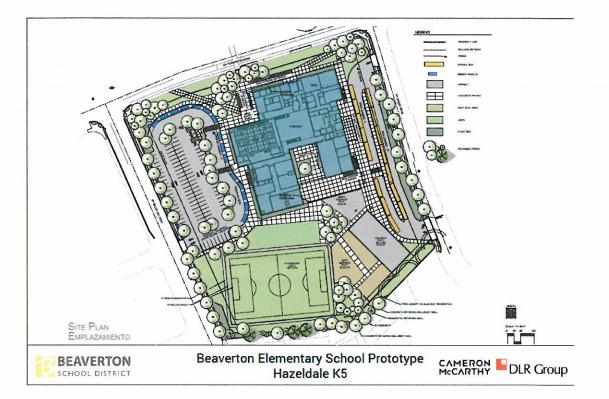


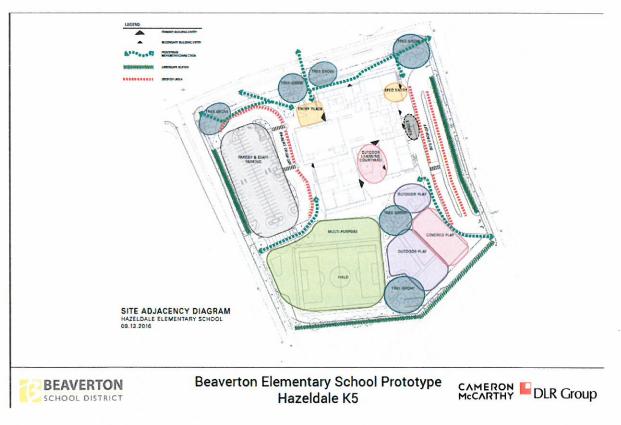
Beaverton Elementary School Prototype Hazeldale K5

© 2016 Beaverton School District



### New Hazeldale Site Plan





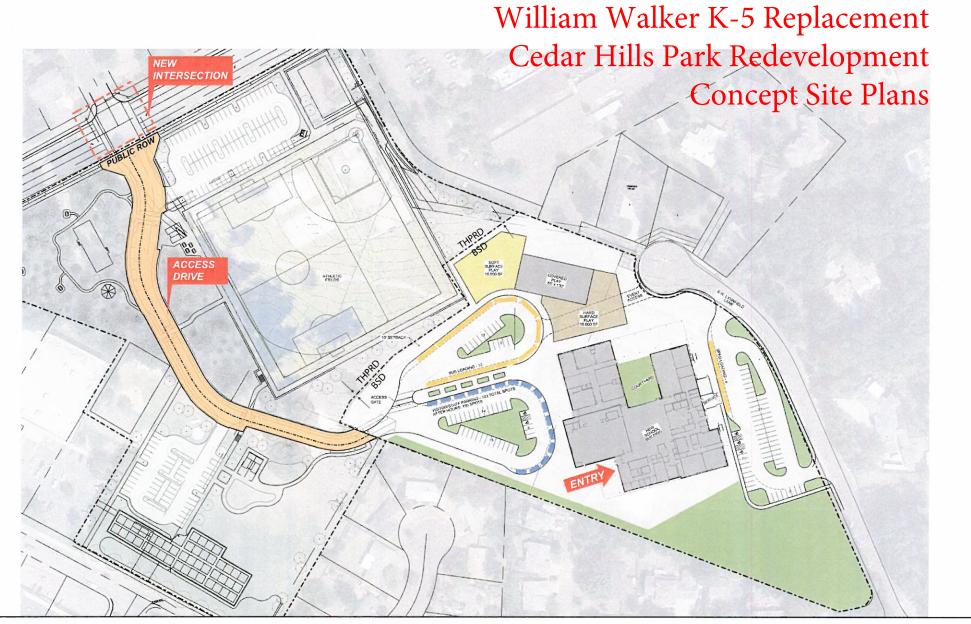


## Construction Begins: June 2018 Completion Schedule: July 2019





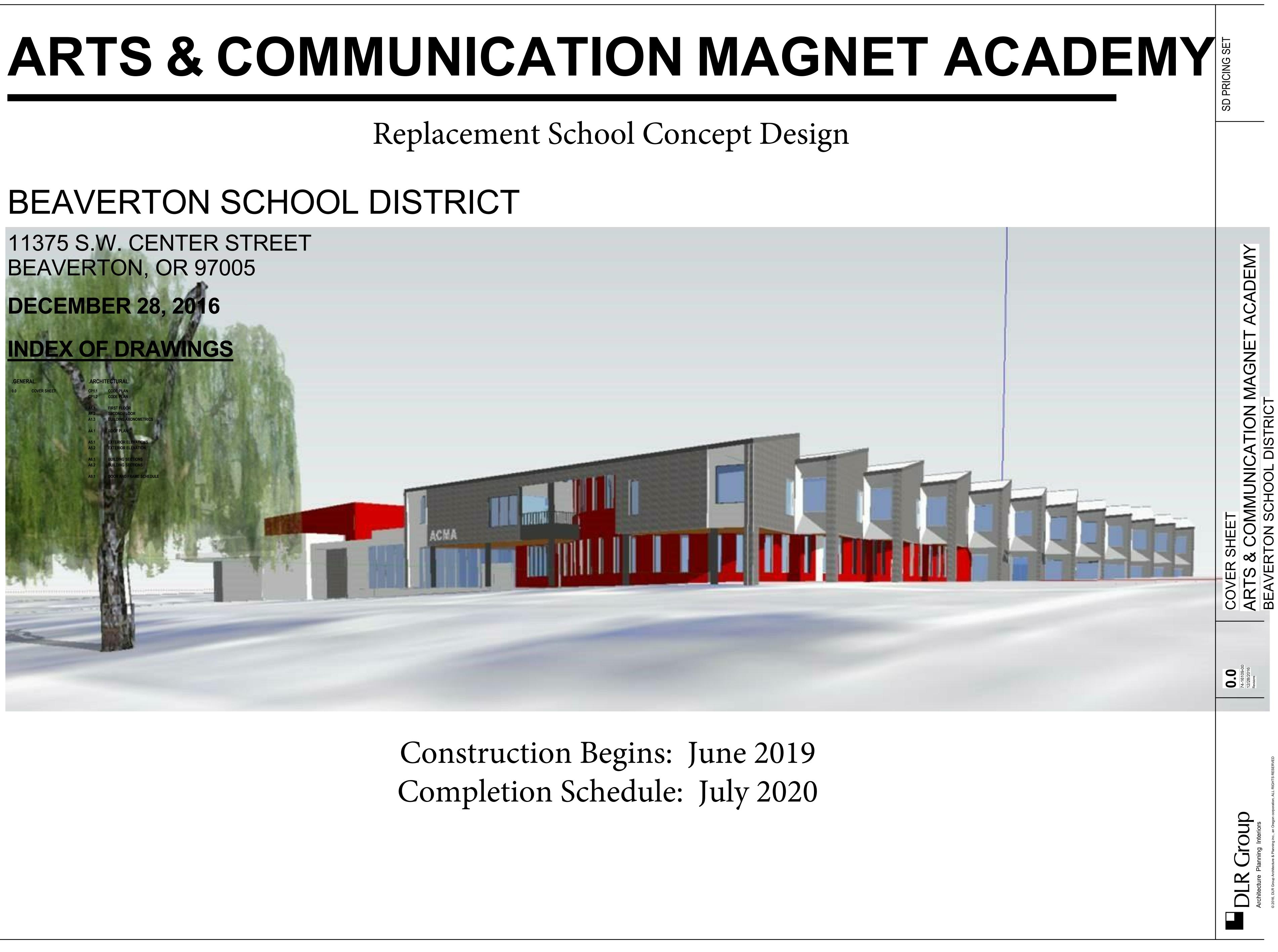
© 2016 Beaverton School District

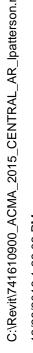




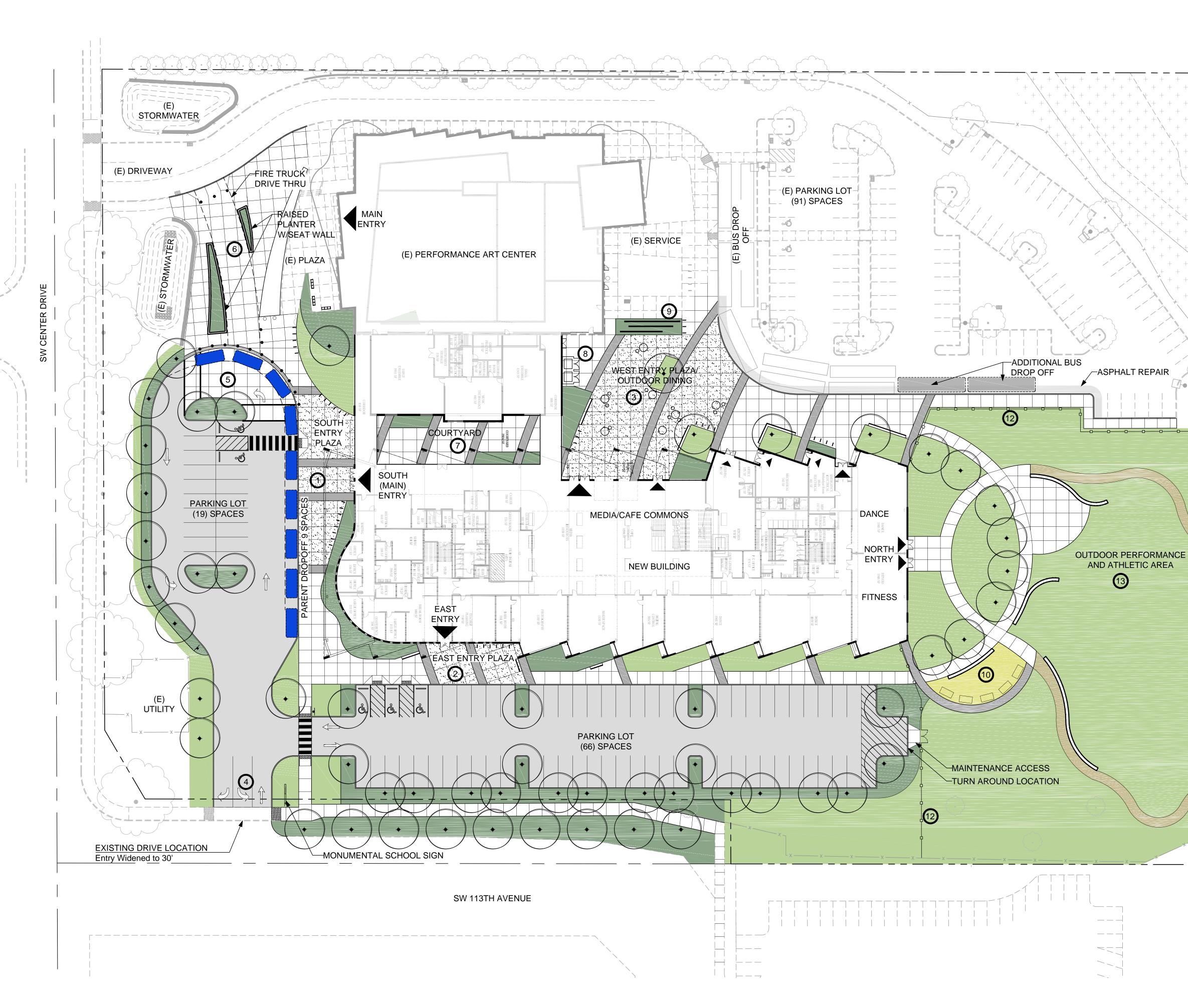
William Walker Elementary School Combined Plan







# SITE PLAN



# ACMA Replacement School Site Plan



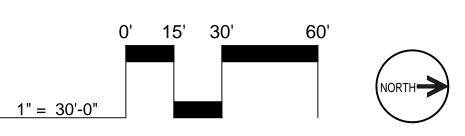
- (1)SOUTH (MAIN) ENTRY PLAZA: DECORATIVE CONCRETE PAVING WITH SPECIALTY FINISH, COLORED CONCRETE PAVING BANDS, BIKE PARKING, BENCHES DECORATIVE BOLLARDS, FINISH LAWN AND LANDSCAPE.
- 2 EAST ENTRY PLAZA: STANDARD CONCRETE PAVING WITH SPECIALTY FINISH, COLORED CONCRETE PAVING BANDS, CONCRETE SEAT WALLS, BIKE PARKING, AND LANDSCAPE.
- 3 WEST ENTRY PLAZA/OUTDOOR DINING: DECORATIVE CONCRETE PAVING WITH SPECIALTY FINISH, COLORED CONCRETE PAVING BANDS, CONCRETE SEAT WALLS, CUSTOM PRECAST CONCRETE TABLE AND SEATING ELEMENTS, BIKE PARKING, FINISH LAWN AND LANDSCAPE.
- 4 PARENT, VISITOR AND STUDENT ENTRY DRIVE: EXPANDED EXISTING DRIVEWAY LOCATION.
- RAISED CROSSING: RAISED REINFORCED VEHICLUAR CONCRETE PAVING. 5 6 PERFORMANCE ART CENTER PLAZA: AT-GRADE REINFORCED VEHICULAR CONCRETE-PAVED FIRE TRUCK ACCESS, STANDARD CONCRETE PAVING,
- CONCRETE DRIVE APRON, REMOVABLE DECORATIVE BOLLARDS, STANDARD DECORATIVE BOLLARDS, RAISED LANDSCAPE PLANTER, LANDSCAPE
- COURTYARD/"MAKER SPACE:" CONCRETE PAVING, COLORED CONCRETE PAVING BANDS, AND LANDSCAPE.  $\overline{7}$
- TRASH/RECYCLING/DISPOSAL AREA: ENCLOSED BY SITE OBSCURING CHAINLINK FENCE AND GATES. 8
- 9 SCREEN WALLS: PERFORATED, PAINTED STEEL SHEETS WITH CONCRETE FOOTINGS, AND LANDSCAPE.
- 10 SCHOOL GARDEN BEDS: CONCRETE SEAT WALL, RAISED WOODEN GARDENS BEDS, QUARRY SAND, COLORED CONCRETE PAVING BAND EDGE.
- (1)FITNESS PATH: 6-FT WIDE BARK PATH ON AGGREGATE BASE.
- (12) CHAINLINK FENCING: 6-FT TALL BLACK VINYL-COATED.

13 OUTDOOR PERFORMANCE AND ATHLETIC AREA: CONCRETE PAVING PERFORMANCE AREA, CONCRETE WALK WAYS, UNDULATING CONCRETE RETAINING WALLS (2-FT WIDE BY MAX OF 3-FT HEIGHT), FITNESS PATH, EARTHEN BERM CONTOURING, AND FINISH LAWN.

## LEGEND



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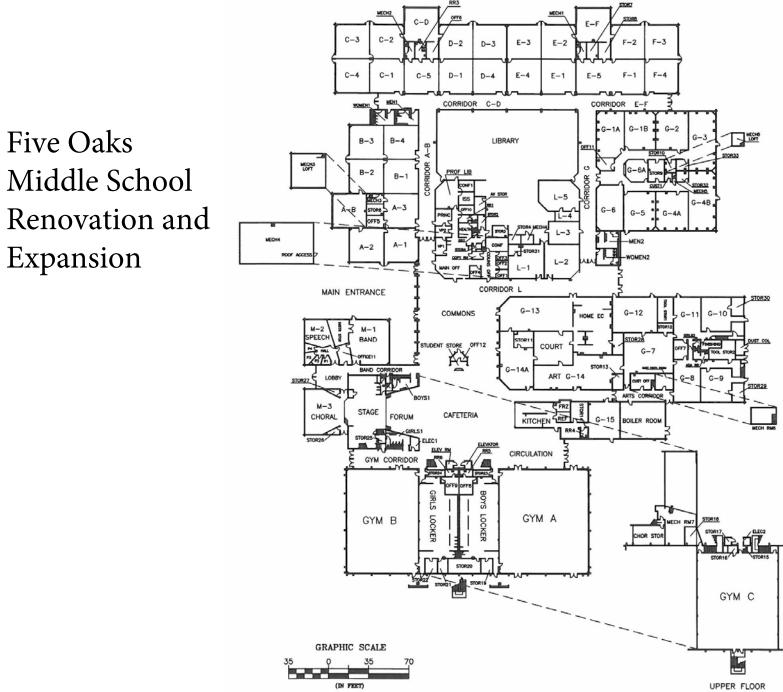






Group DLR

## EXISTING BUILDING /



Construction June 2018 to August 2019



FIVE OAKS MIDDLE SCHOOL / FEBRUARY 7, 2017

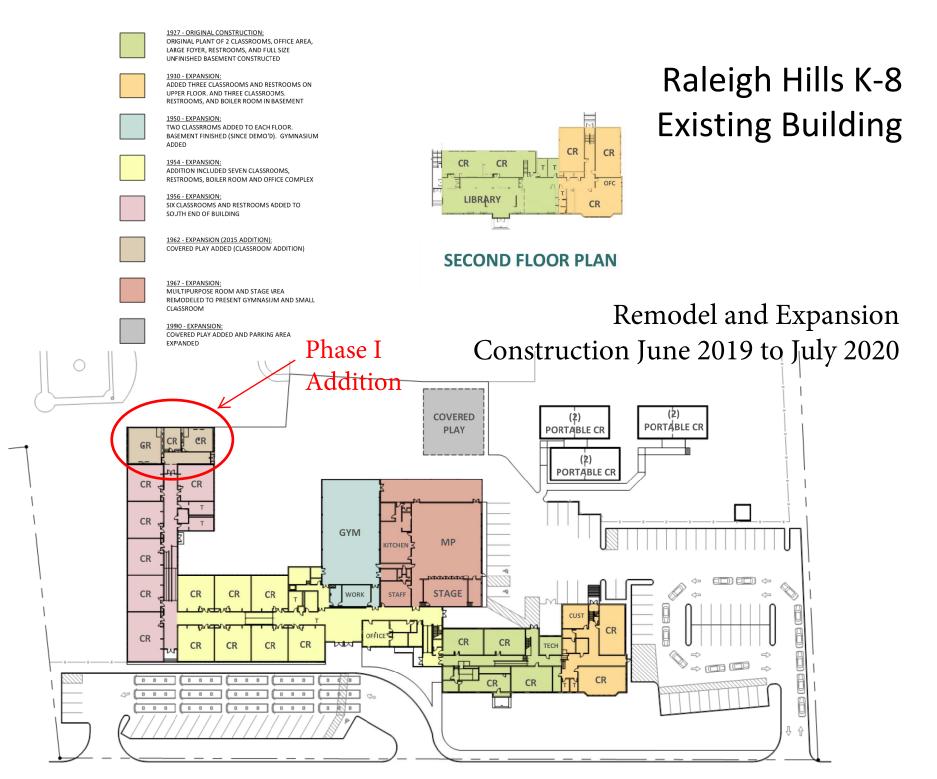
### BASE SCOPE / GROUND FLOOR PLAN

## Five Oaks Middle School Renovation and Expansion





FIVE OAKS MIDDLE SCHOOL / FEBRUARY 7, 2017



**FIRST FLOOR PLAN** 

#### **BEAVERTON** SCHOOL DISTRICT Raleigh Hills Renovation Phase I Completed Aug 2015

#### Information from the Beaverton School District

#### September 2015

#### **Completed work:**

- Addition of two classrooms and planning space under one of the existing covered play areas
- Removal of drop ceiling in the gymnasium
- Improved security with new visitor entrance door into office



Covered play before classroom addition



Classrooms under construction



Completed classroom



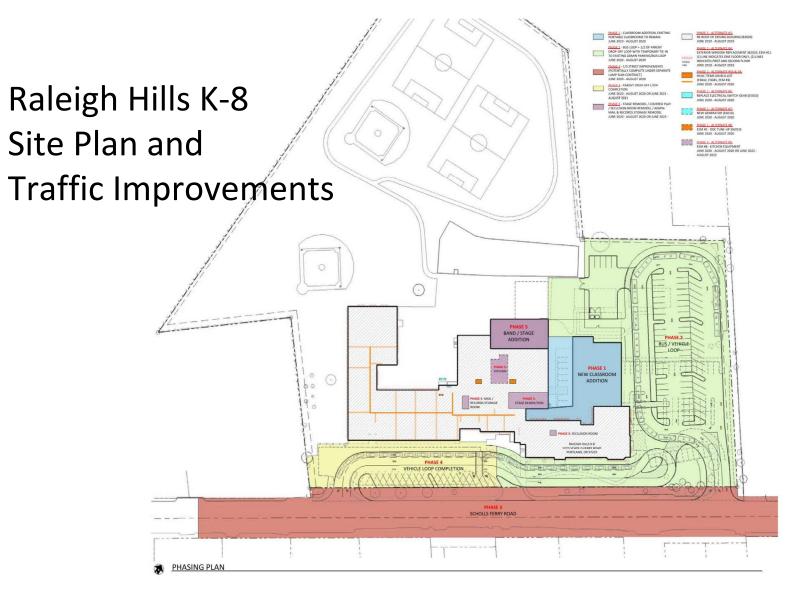
Gymnasium work underway



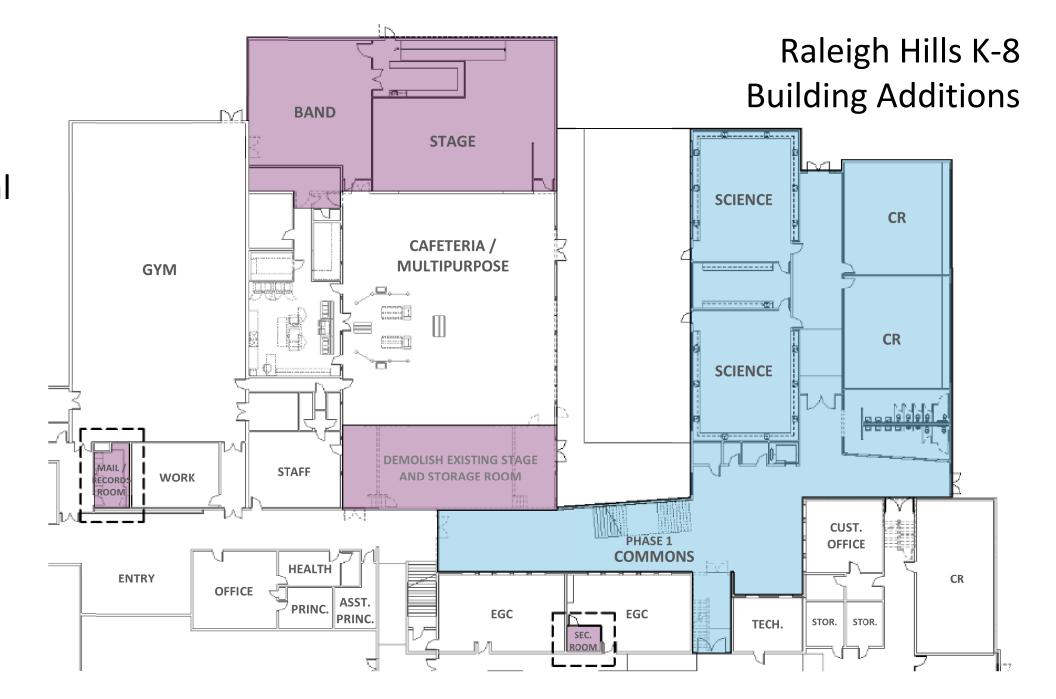
Care taken to match fir wainscot in hallway



Completed gymnasium



RALEIGH HILLS K-8 ADDITION AND RENOVATION Project Scoping Package for Schematic Design Cost Estimate EXEMPTION IBBL Architects



MULTIPURPOSE REMODEL & STAGE / BAND / CHOIR ADDITION: PHASE 5



### 2017 Summer Construction--School Impacts

current as of 3/29/17

	Permitting	Scope of Work - Summary	Impact	Funding	
	Authority		Location	Dates	
High Schools	Ros Rosand				
Aloha	Wash Co	locker room renovation	map provided to site contact	5/1/17-8/8/17	Bond
Aloha	Wash Co	CTE expansion	map provided to site contact		Gen Fund
Aloha	Wash Co	gym floor recoat & bleacher inspection/repairs	all gym spaces	7/3/17-7/30/17	GF/Maint
Aloha	Wash Co	drop ceiling replacement	entire interior	6/2017-9/2017	Bond
Beaverton	City of Beav	HVAC upgrades	map provided to site contact	6/2017-8/2017	Bond
Beaverton	City of Beav	Campus Vision	map provided to site contact		Donor
Beaverton	City of Beav	ceiling replacement	main and balcony gyms	6/2017-9/2017	Bond
Beaverton	City of Beav	JV softball field (Merle Davies field) revision	existing softball field on Farmington & Erickson	6/2017-9/2017	Bond
Beaverton	City of Beav	gym floor recoat & bleacher inspection/repairs	all gym spaces	7/3/17-7/30/17	GF/Maint
Capital Center	City of Hills	parking lot restripe	entire parking lot	TBD	GF/Maint
Cap Center - HS2	City of Hills	tear out carpet in halls and classrooms	school area	6/2017-9/2017	Bond
Mountainside	City of Beav	new construction	entire site		Bond
Southridge	City of Beav	varsity baseball drainage	varsity baseball field	6/2017-8/15/17	Bond
Southridge	City of Beav	refinish gyms	all gym spaces	6/2017-9/2017	GF/Maint
Southridge	City of Beav	bleacher inspections/repairs	all gym spaces	7/3/17-7/30/17	GF/Maint
Southridge	City of Beav	main hall acoustic "magic carpet" replacement	main hall	6/2017-9/2017	Bond
Sunset	City of Beav	paging replacement	whole building	6/2017-9/2017	Bond
Sunset	City of Beav	windows/doors for CTE	F1, F3, F4	6/2017-9/2017	GF/Maint
Sunset	City of Beav	gym floor recoat & bleacher inspection/repairs	all gym spaces	7/3/17-7/30/17	GF/Maint
Westview	Wash Co	roof replacement	map provided to site contact	summer 2017 & summer 2018	Bond
Westview	Wash Co	parking lot restripe	entire parking lot	TBD	GF/Maint
Westview	Wash Co	carpet replacement	portables 1, 2, 3, 4, 5 & 6	6/2017-8/2017	Bond

School	Permitting	Scope of Work - Summary	Impact	Funding	
Authority			Location		Dates
Westview	Wash Co	VCT floor replacement	student center	6/2017-8/2017	Bond
Westview	Wash Co	gym floor recoat & bleacher inspection/repairs	all gym spaces	7/3/17-7/30/17	GF/Maint
Southridge	City of Beav			1	
Sunset	City of Beav	grease trap/interceptor cleaning &		short timelines	
Westview	Wash Co		inside/outside kitchen areas	between	GF/Maint
Capital Center	City of Hills	maintenance		7/2017-8/2017	
ISB	Wash Co				
Middle Schools	- Managar				
Cedar Park	City of Beav	electrical service upgrades	in development, no power at times	in development	Bond
Cedar Park	City of Beav				
Highland Park	City of Beav			July/August 2017	
Meadow Park	Wash Co	gym floor re-coat	all gyms	TBD 2 days work	GF/Maint
Mtn View	Wash Co	gym noor re-coat		with 2 week cure	
Stoller	Wash Co			with 2 week cure	
Whitford	City of Beav				
Conestoga	City of Beav	painting additional lines in gyms	main and auxiliary gyms	7/2017 - 8/ 2017	GF/Maint
Conestoga	City of Beav	classroom partition repair/replacement	A,B,C hall classrooms	6/2017-9/2017	Bond
Conestoga	City of Beav	moisture intrusion repairs	scupper repair, tile work in both locker rooms	6/2017-9/2018	Bond
Conestoga	City of Beav	grease trap/interceptor cleaning & maintenance	outside of kitchen door- exterior	one day July 2017	GF/Maint
Five Oaks	City of Beav	carpet removal/concrete polish	all hallways	7/1-8/15/2017	Bond
Highland Park	City of Beav	water repipe	no potable water	6/2017-8/2017	Bond
Highland Park	City of Beav	fire door replacement	Red & 2-Halls	7/2017-8/2017	GF/Maint
Meadow Park	Wash Co	electrical service upgrades	in development, no power at times, field impacts	in development	GF/Maint
Meadow Park	Wash Co	hallway window tile replacement	main hallways under windows	7/2017-9/2017	GF/Maint
Mtn View	Wash Co	THPRD field enhancement	field	7/2016-8/2017	THPRD
New MS/118th	City of Beav	Hazeldale move, field work	no access, interior or exterior	6/2017-9/2017	Bond
Stoller	Wash Co	place 1 double portable	field/gravel area behind existing portables	6/2017-8/2017	Bond

School Permitti		Scope of Work - Summary	Impact	Funding	
	Authority		Location	Dates	-
<b>Elementary Scho</b>	ols				P. R. LAND
Aloha-Huber	Wash Co				
Bethany	Wash Co	]			
Bonny Slope	Wash Co	]	office, entrance, and perimeter doors, but		
Chehalem	City of Beav	security upgrades	should be able to accommodate summer	in development	Bond
Errol Hassell	Wash Co		programs with good early coordination with		
Montclair	City of Beav		project manager		
West T.V.	Wash Co				
Terra Linda	Wash Co				
Terra Linda	Wash Co	running track	entire site	7/1/2017-8/1/2017	FIP
Aloha-Huber	Wash Co				
Bonny Slope	Wash Co				
Kinnaman	Wash Co	grease trap/ interceptor cleaning &	inside/outside kitchen areas	short timelines	
McKinley	City of Beav	maintenance		at some point	GF/Maint
Nancy Ryles	City of Beav			7/2017-9/2017	
Springville	Wash Co				
Wm. Walker	City of Beav				
Barnes	Wash Co	parking lot restripe	entire parking lot	TBD	GF/Maint
Barnes	Wash Co	stage floor replacement	gym & stage	7/1/2017-8/1/2017	GF/Maint
Beaver Acres	Wash Co	carpet replacement	B108	6/2017-7/2017	Bond
Beaver Acres	Wash Co	library staff room floor replacement	library staff room	7/2017-8/2017	GF/Maint
Cedar Mill	Wash Co	parking lot restripe	entire parking lot	TBD	GF/Maint
Cooper Mtn	City of Beav	flooring replacement	unisex restroom near main office	after 8/3/2017	GF/Maint
Elmonica	City of Beav	modular HVAC upgrade	modular only	6/2017-8/2017	Bond
Elmonica	City of Beav	carpet replacement	portables 1 & 2	TBD	GF/Maint
Hazeldale	Wash Co	replace school	entire site	6/20/2017-8/2018	Bond
Hiteon	City of Beav	playground upgrades	playground	6/2017-8/2018	Bond
Kinnaman	Wash Co	modular HVAC upgrade	modular only	6/2017-8/2017	Bond
McKinley	City of Beav	playground equipment	playground	6/2017-8/2017	Bond
McKinley	City of Beav	asphalt path replacement	around portables and to neightborhood	6/2017-8/2017	Bond\GF/Maint
Nancy Ryles	City of Beav	gym floor replacement	gym	7/2/17-7/28/17	GF/Maint
Nancy Ryles	City of Beav	flooring replacement	boys restroom 2	7/6/2017-7/7/2017	GF/Maint
Nancy Ryles	City of Beav	asphalt path installation	from portable to walking track on field	7/2017-8/2017	GF/Maint
New Sato ES	Wash Co	new construction	entire site	5/2016-8/2017	Bond

School	Permitting	Scope of Work - Summary	Impact	Funding		
Authority			Location	Dates		
Oak Hills	Wash Co	cooler/freezer replacement	kitchen/cafeteria	6/2017-9/2017	Bond	
Oak Hills	Wash Co	playground upgrades	playground	6/2017-8/2018	Bond	
Oak Hills	Wash Co	add automatic openers to doors	main & office entrance	TBD	Bond	
Raleigh Hills	City of Beav	gym floor re-coat	gym	7/2017-8/2017 TBD 2 days work with 2 week cure	GF/Maint	
Raleigh Hills	City of Beav	mold remediation & repairs staff restrooms & hallway	kitchen hallway, cafeteria, staff room & staff room restrooms	6/2017-8/2017	GF/Maint	
Raleigh Park	Wash Co	parking lot restripe	entire parking	TBD	GF/Maint	
Raleigh Park	Wash Co	library floor replacement	replace/re-level library floor	6/2017-9/2017	GF/Maint	
Raleigh Park		replace gym floor	gym	7/2017-9/2017	Bond	
Ridgewood	City of Beav	rear bus asphalt	playground/hard play area	6/2017-9/2017	Bond	
Ridgewood	City of Beav	gym floor re-coat	gym	7/2017-8/2017 TBD 2 days work with 2 week cure	GF/Maint	
Ridgewood	City of Beav	cooler/freezer replacement	kitchen/cafeteria	6/2017-9/2017	Bond	
Scholls Hts	City of Beav	mold remediation & repairs in kitchen	kitchen/cafeteria	7/2017-9/2017	GF/Maint	
Springville	Wash Co	parking lot restripe	entire parking lot	TBD	GF/Maint	
Vose	City of Beav	replace School	entire site	6/20/2016-8/2017	Bond	
Key Dates		Last day of school: Last day for teachers: First day for secretaries: First day for teachers: First day of school:	6/23/2017 8/14/2017 8/28/2017			