

Division of Construction Services

Full Day Kindergarten

January 10, 2012

DRAFT

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Loudoun County Public Schools

Full Day Kindergarten

Executive Summary

Loudoun County Public Schools' endeavor to implement Full Day Kindergarten throughout the County's fifty-two existing elementary schools began with a comprehensive feasibility study of the existing infrastructure which identified opportunities to absorb the required educational space as well as obligations to expand certain facilities. The study encompassed numerous considerations in terms of projected enrollment, current available space, and necessary facility improvement projects. The effort was led by The Department of Instruction and the Department of Planning Legislative Services which identified programmed space capacity within each of the elementary school facilities. Regular classroom spaces were considered in conjunction with special and regional programming requirements with respect to the projections for additional student enrollment.

Subsequently, the Division of Construction Services performed a classroom and core analysis of the existing facilities as well as a desktop reconnaissance of the sites in terms of spatial, zoning and environmental constraints. The costs of Full Day Kindergarten are significant due to the magnitude of the program and therefore, solutions to the spatial needs have been expressed in costs for modular spaces exterior to the building as well as conventional construction of additional classrooms. Additional staffing and costs for furniture and equipment for each new classroom have also been considered as part of the implementation of each phase.

The data gathered in the feasibility period indicates that fifty-three additional spaces are needed on thirty-eight of the existing campuses. It is anticipated that the implementation of the Full Day Kindergarten program requires a phased approach from a design and construction perspective due to the site development and approval process. This report and the following supporting documentation are based upon project funding via the November 2012 General Obligation Bond vote related to the Fiscal Year 2013 Capital Improvements Plan (CIP). The phasing indicated herein is based upon a geographical spread of projects throughout the county for each of the proposed implementation periods.

It should also be noted that numerous assumptions have been made in an effort to plan the implementation and logistics of this programmatic change. It is anticipated that changes to enrollment, boundaries, phasing or scope will affect the costs and implementation of the program as presented. Specifically, the assumptions include but are not limited to the following:

- Average Kindergarten class size of 25 with a maximum of 29
- Average Grade 1 through 5 class size of 24 (changes herein also affect the kindergarten capacity)
- Implementation of the program as presented and phased (interruption or delay may cause additional costs or alterations in phasing)
- Construction costs are based upon current market conditions

Modular Option

<u>Phase</u>	<u>No. of Facilities</u>	<u>No. of Classrooms</u>	<u>Modular Costs</u>	<u>Staffing (Teacher and Aide)</u>	<u>Year Available</u>
1	12	0	0	** \$1,144,670	2012
				\$150,000	2012 Furniture and Equipment
2	11	17	\$3,540,000	\$1,700,000	2013
3	16	23	\$5,130,000	\$2,300,000	2014
4	<u>13</u>	<u>13</u>	<u>\$3,230,000</u>	<u>\$1,300,000</u>	2015
	52	53	\$11,900,000	\$6,594,670	
Total Project costs			\$18,494,670		

Conventional Construction Option

<u>Phase</u>	<u>No. of Facilities</u>	<u>No. of Classrooms</u>	<u>Conventional Costs</u>	<u>Staffing (Teacher and Aide)</u>	<u>Year Available</u>
1	12	0	0	** \$1,144,670	2012
				\$150,000	2012 Furniture and Equipment
2	11	17	\$11,502,200	\$1,700,000	2013
3	16	23	\$15,561,800	\$2,300,000	2014
4	<u>13</u>	<u>13</u>	<u>\$8,795,800</u>	<u>\$1,300,000</u>	2015
	52	53	\$35,859,800	\$6,594,670	
Total Project costs			\$42,454,470		

** Staffing cost for Phase 1 includes teachers and/aides for: Round Hill, Kenneth W. Culbert, Sully, Aldie, Ashburn, Banneker, Hamilton, Hillsboro, Lincoln, Lucketts, Middleburg, Waterford



LOUDOUN COUNTY PUBLIC SCHOOLS

Construction Department

21000 Education Court

Ashburn, Virginia 20148

TO: Kevin L. Lewis, PE, Director of Construction Services

FROM: Gregory A. Miller, Site/Building Plan Reviewer

DATE: January 3, 2012 (revised)

SUBJECT: LCPS Full Day Kindergarten – Feasibility Report

With the decision to provide full day kindergarten at all Loudoun County Public Schools' Elementary facilities, each facility required a Full Day kindergarten needs assesment. The Department of Planning and Legislative Services and the Department of Instruction tabulated the classroom analysis which reveals the need for fifty-three additional classrooms at thirty-eight existing Elementary school sites.

The Division of Construction Services performed a zoning and costs analysis which concluded that all thirty-eight school sites will require a site plan amendment for the construction of the additional classroom(s). Six of the thirty-eight sites will also require a legislative approval prior to or concurrent with the site plan amendment approval.

Due to legislative approvals and site plan review approval process for the number of plans required, along with construction timelines the additional classrooms are being proposed for implementation in four phases. **Phase One** involves staffing consideration only, in terms of costs, for facilities that need no new spaces. **Phase Two** will include eleven facilities with seventeen new classrooms opening in 2013. **Phase Three** will include sixteen school facilities with twenty-three new classrooms opening in 2014. **Phase Four** will include thirteen facilities with thirteen new classrooms opening in 2015.

The additional classrooms will be provided as an 800 square foot modular classroom unit(s) or a prototypical Elementary classroom building addition to the existing facility. The Division of Construction Services has developed specifications for the modular classroom unit(s) that include floor plans and general description of classroom amenities matching the LCPS Elementary School prototype classroom.

Professional cost estimates have been developed by Downey & Scott LLC for the classroom building additions. Modular classroom unit costs estimates have also been developed and are included in this report. The costs per unit have been adjusted for site considerations as well as inflation of 4.5% annually depending on the proposed implementation phase and opening date.

FULL DAY KINDERGARTEN PHASING and COST ANALYSIS- PHASE 2 OPENING FY 2013-2014

FACILITY NAME	CLASSROOMS REQUIRED	APPLICATION TYPE	BUILDING ADDITION COST	SITE CONSIDERATIONS FOR BLDG ADDITIONS	MODULAR CLASSROOM COST	SITE CONSIDERATIONS FOR MODULARS
ARCOLA	1	SPAM	\$676,600	IMPACTS ASPHALT PLAY AREA AND SIDEWALK, RELOCATE ROOF DRAINS	\$214,000	NONE
CREIGHTON'S CORNER ELEM.	2	SPAM	\$1,353,200	RELOCATE UTILITIES AND FIRE LANE	\$392,000	RELOCATE SIDEWALK
CATOCTIN	1	SPEX, TOL	\$676,600	RELOCATE SIDEWALK	\$214,000	GRADING ISSUES
FRANCES HAZEL REID ELEM.	2	SPAM	\$1,353,200	RELOCATE UTILITIES AND SIDEWALK	\$392,000	SIGNIFICANT GRADING
LITTLE RIVER ELEM.	2	SPAM	\$1,353,200	IMPACTS ASPHALT PLAY AREAS	\$392,000	RELOCATE STORM SEWER, SIGNIFICANT GRADING
LOVETTSVILLE ELEM.	1	SPAM IF IN COUNTY, CUP AND SITE PLAN IF IN TOWN	\$676,600	RELOCATE STORM SEWER	\$214,000	NONE
LOWES ISLAND ELEM.	1	SPAM	\$676,600	RELOCATE STORM SEWER	\$214,000	MODULAR ON PART OF THE ASPHALT PLAY AREA
ROLLING RIDGE ELEM.	1	SPAM	\$676,600	RELOCATE UTILITIES & SIDEWALK	\$214,000	NONE
SANDERS CORNER ELEM.	2	SPAM	\$1,353,200	RELOCATE UTILITIES AND SIDEWALK	\$392,000	NONE
SELDENS LANDING ELEM.	2	SPAM	\$1,353,200	RELOCATE UTILITIES AND FIRE LANE	\$392,000	NONE
STEUART W. WELLER ELEM.	2	SPAM	\$1,353,200	REDUCE WIDTH OF SIDEWALK	\$214,000	NONE
Total	17	Total Phase 2	\$11,502,200	Total Phase 2	\$3,244,000	
		Additional site considerations	Included in Professional Estimate			\$3,390,000
		Inflation-bid 4.5%	Included in Professional Estimate			\$3,540,000

- CUP** - Conditional Use Permit
- SPAM** - Site Plan Amendment
- SPEX** - Special Exception
- TOL** - Town of Leesburg
- ZCPA** - Zoning Concept Plan Amendment
- ZMOD** - Zoning Modification

FULL DAY KINDERGARTEN PHASING and COST ANALYSIS- PHASE 3 OPENING FY 2014-2015

FACILITY NAME	CLASSROOMS REQUIRED	APPLICATION TYPE	BUILDING ADDITION COST	SITE CONSIDERATIONS FOR BLDG ADDITIONS	MODULAR CLASSROOM COST	SITE CONSIDERATIONS FOR MODULARS
FOREST GROVE ELEM.	1	SPAM	\$676,600	RELOCATE UTILITIES AND FIRE LANE	\$224,000	NONE
CEDAR LANE ELEM.	1	SPAM	\$676,600	RELOCATE ROOF DRAINS AND STORM SEWER	\$224,000	RELOCATE UTILITIES
EMERICK ELEM.	1	COMMISSION PERMIT AND SITE PLAN	\$676,600	RELOCATE SIDEWALK AND UTILITIES	\$224,000	NONE
GUILFORD ELEM.	1	SPAM	\$676,600	RELOCATE UTILITIES AND SIDEWALK	\$224,000	RELOCATE UTILITIES
HORIZON ELEM.	2	SPAM	\$1,353,200	RELOCATE UTILITIES AND SIDEWALK	\$410,000	NONE
HUTCHISON FARM ELEM.	2	SPAM	\$1,353,200	RELOCATE UTILITIES AND SIDEWALK	\$410,000	RELOCATE UTILITIES AND FIRE LANE
LEESBURG ELEM.	2	SPEX, SPAM, TOL	\$1,353,200	RELOCATE SIDEWALKS, UTILITIES	\$224,000	RELOCATE UTILITIES, GRADING ISSUES
LEGACY ELEM.	2	SPAM	\$1,353,200	RELOCATE UTILITIES AND FIRE LANE	\$410,000	NONE
LIBERTY ELEM.	2	SPAM	\$1,353,200	RELOCATE UTILITIES AND SIDEWALK	\$410,000	NONE
MEADOWLAND ELEM.	1	SPAM	\$676,600	RELOCATE SIDEWALKS, UTILITIES UNKNOWN	\$224,000	UTILITY IMPACTS UNKNOWN
MILL RUN ELEM.	2	SPAM	\$1,353,200	RELOCATE UTILITIES AND SIDEWALK	\$410,000	GRADING ISSUES
MOUNTAINVIEW ELEM.	1	SPECIAL USE PERMIT AND SITE PLAN	\$676,600	RELOCATE STORM SEWER	\$224,000	NONE
NEWTON-LEE ELEM.	1	SPAM	\$676,600	NONE	\$224,000	NONE
ROSA LEE CARTER ELEM.	2	SPEX, SPAM	\$1,353,200	RELOCATE ROOF DRAINS AND SIDEWALK	\$410,000	NONE
SUGARLAND ELEM.	1	SPAM	\$676,600	RELOCATE UTILITIES AND FIRE LANE	\$224,000	NONE
SYCOLIN CREEK ELEM.	1	ZCPA, ZMOD, SPEX, SPAM	\$676,600	NONE	\$224,000	NONE
Total	23	Total Phase 3	\$15,561,800	Total Phase 3	\$4,700,000	
		Additional site considerations	Professional Estimate		\$4,912,000	
		Inflation-bid 4.5%			\$5,130,000	

CUP - Conditional Use Permit
SPAM - Site Plan Amendment
SPEX - Special Exception
TOL - Town of Leesburg
ZCPA - Zoning concept Plan Amendment
ZMOD - Zoning Modification

FULL DAY KINDERGARTEN PHASING and COST ANALYSIS - PHASE 4 OPENING FY 2015-2016

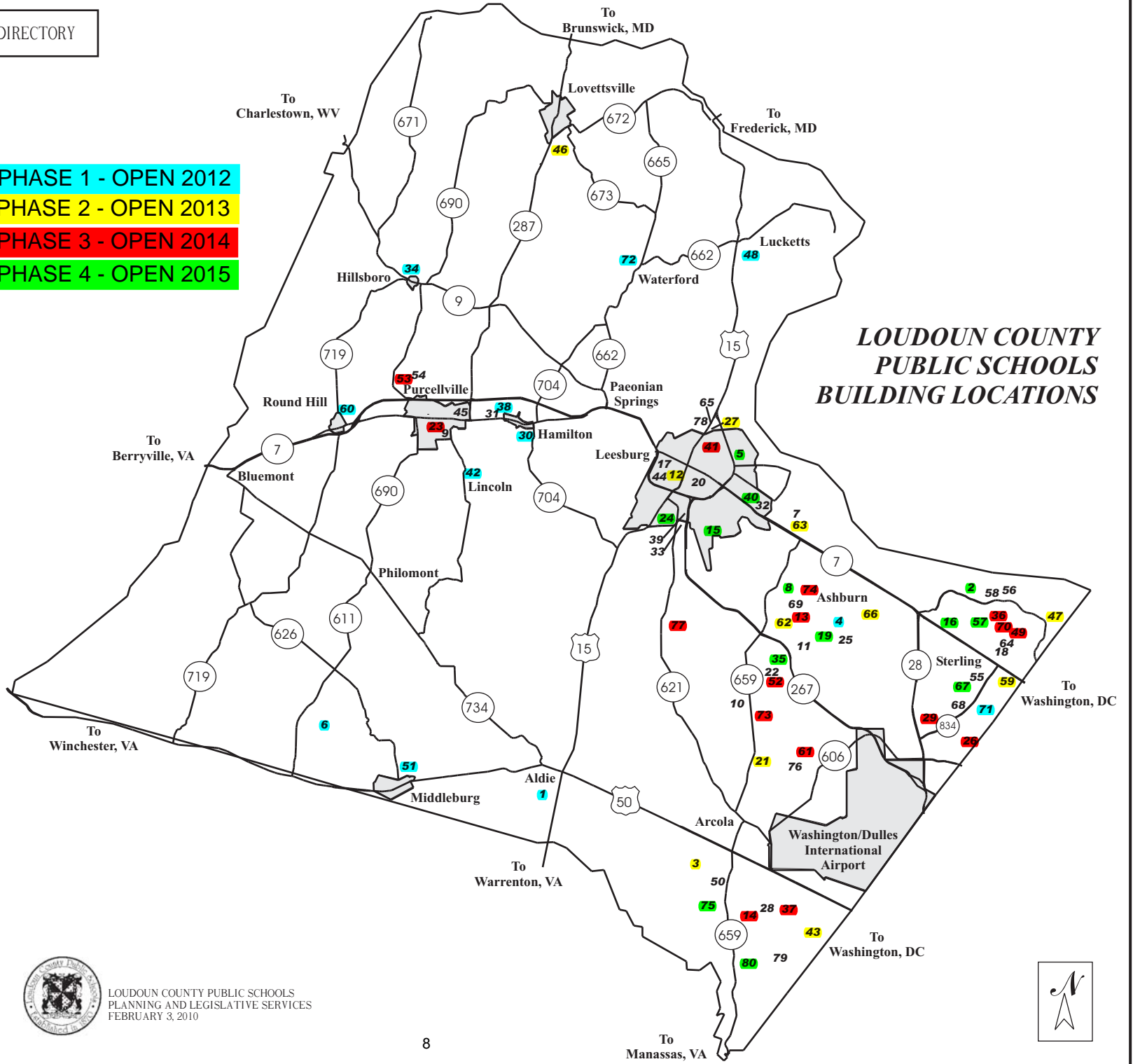
FACILITY NAME	CLASSROOMS REQUIRED	APPLICATION TYPE	BUILDING ADDITION COST	SITE CONSIDERATIONS FOR BLDG ADDITIONS	MODULAR CLASSROOM COST	SITE CONSIDERATIONS FOR MODULARS
BELMONT STATION ELEM.	0	N/A	0	N/A	0	N/A
BUFFALO TRAIL ELEM.	0	N/A	0	N/A	0	N/A
ALGONKIAN ELEM.	1	SPAM	\$676,600	RELOCATE SIDEWALK	\$234,000	NONE
BALLS BLUFF ELEM.	1	SPAM IF SCHOOL WAS ON ORIGINAL CONCEPT DEV. PLAN	\$676,600	IMPACTS BALL FIELDS AND ASPHALT PLAY AREAS	\$234,000	NONE
COOL SPRING ELEM.	1	SPAM IF SCHOOL WAS ON ORIGINAL CONCEPT DEV. PLAN	\$676,600	RELOCATE UTILITIES AND SIDEWALK	\$234,000	NONE
COUNTRYSIDE ELEM.	1	SPAM	\$676,600	RELOCATE FIRE LANE, UTILITIES, ELIMINATE SOCCER AND BASEBALL FIELDS	\$234,000	RELOCATE ROOF DRAIN
DOMINION TRAIL ELEM.	2	SPAM	\$1,353,200	RELOCATE UTILITIES AND SIDEWALK	\$428,000	RELOCATE UTILITIES
EVERGREEN MILL ELEM.	1	SPAM	\$676,600	RELOCATE UTILITIES AND FIRE LANE	\$234,000	NONE
HILLSIDE ELEM.	1	SPAM	\$676,600	RELOCATE SIDEWALK & UTILITIES	\$234,000	NONE
PINEBROOK ELEM.	2	SPAM	\$1,353,200	RELOCATE UTILITIES AND FIRE LANE	\$428,000	NONE
POTOWMACK ELEM.	1	SPAM	\$676,600	RELOCATE UTILITIES, BUS LOOP	\$234,000	GRADING ISSUES
STERLING ELEM.	1	SPAM	\$676,600	RELOCATE UTILITIES	\$234,000	NONE
J. W. TOLBERT ELEM.	1	TOL, SPAM	\$676,600	NONE	\$234,000	NONE
Total	13	Total Phase 4	\$8,795,800	Total Phase 4	\$2,962,000	
		Additional site considerations	Included in Professional Estimate		\$3,095,000	
		Inflation-bid 4.50%	Included in Professional Estimate		\$3,230,000	

CUP - Conditional Use Permit
SPAM - Site Plan Amendment
SPEX - Special Exception
TOL - Town of Leesburg
ZCPA - Zoning concept Plan Amendment
ZMOD - Zoning Modification

1. ALDIE ES
2. ALGONKIAN ES
3. ARCOLA ES
4. ASHBURN ES
5. BALLS BLUFF ES
6. BANNEKER ES
7. BELMONT RIDGE MS
8. BELMONT STATION ES
9. BLUE RIDGE MS
10. BRIAR WOODS HS
11. BROAD RUN HS
12. CATOCTIN ES
13. CEDAR LANE ES
14. LIBERTY ES
15. COOL SPRING ES
16. COUNTRYSIDE ES
17. CS MONROE TECHNOLOGY CENTER
18. DOMINION HS and Academy of Science
19. DOMINION TRAILS ES
20. FUTURE FREDERICK DOUGLASS ELEMENTARY
21. CREIGHTONS CORNER ES
22. EAGLE RIDGE MS
23. EMERICK ES
24. EVERGREEN MILLS ES
25. FARMWELL STATION MS
26. FOREST GROVE ES
27. FRANCES HAZEL REID ES
28. FREEDOM HS
29. GULFORD ES
30. HAMILTON ES
31. HARMONY MIDDLE SCHOOL
32. HARPER PARK MS
33. HERITAGE HS
34. HILLSBORO ES
35. HILLSIDE ES
36. HORIZON ES
37. HUTCHISON FARMES ES
38. KENNETH W. CULBERT ES
39. J. LUPTON SIMPSON MS
40. JOHN W. TOLBERT, JR. ES
41. LEESBURG ES
42. LINCOLN ES
43. LITTLE RIVER ES
44. LOUDOUN COUNTY HS
45. LOUDOUN VALLEY HS
46. LOVETTSVILLE ES
47. LOWES ISLAND ES
48. LUCKETTS ES
49. MEADOWLANDS ES
50. MERCER MS
51. MIDDLEBURG ES
52. MILL RUN ES
53. MOUNTAIN VIEW ES
54. WOODGROVE HS
55. PARK VIEW HS
56. POTOMAC FALLS HS
57. POTOMACK ES
58. RIVER BEND MS
59. ROLLING RIDGE ES
60. ROUND HILL ES
61. ROSA LEE CARTER ES
62. SANDERS CORNER ES
63. SELDENS LANDING ES
64. SENECA RIDGE MS
65. SMARTS MILL MS
66. STEUART W. WELLER ES
67. STERLING ES
68. STERLING MS
69. STONE BRIDGE HS
70. SUGARLANDS ES
71. SULLY ES
72. WATERFORD ES
73. LEGACY ES
74. NEWTON LEE ES
75. PINEBROOK ES
76. STONE HILL MS
77. SYCOLIN CREEK ES
78. TUSCARORA HS
79. J. MICHAEL LUNSFORD MS
80. BUFFALO TRAILS ES

BUILDING DIRECTORY

- PHASE 1 - OPEN 2012
- PHASE 2 - OPEN 2013
- PHASE 3 - OPEN 2014
- PHASE 4 - OPEN 2015

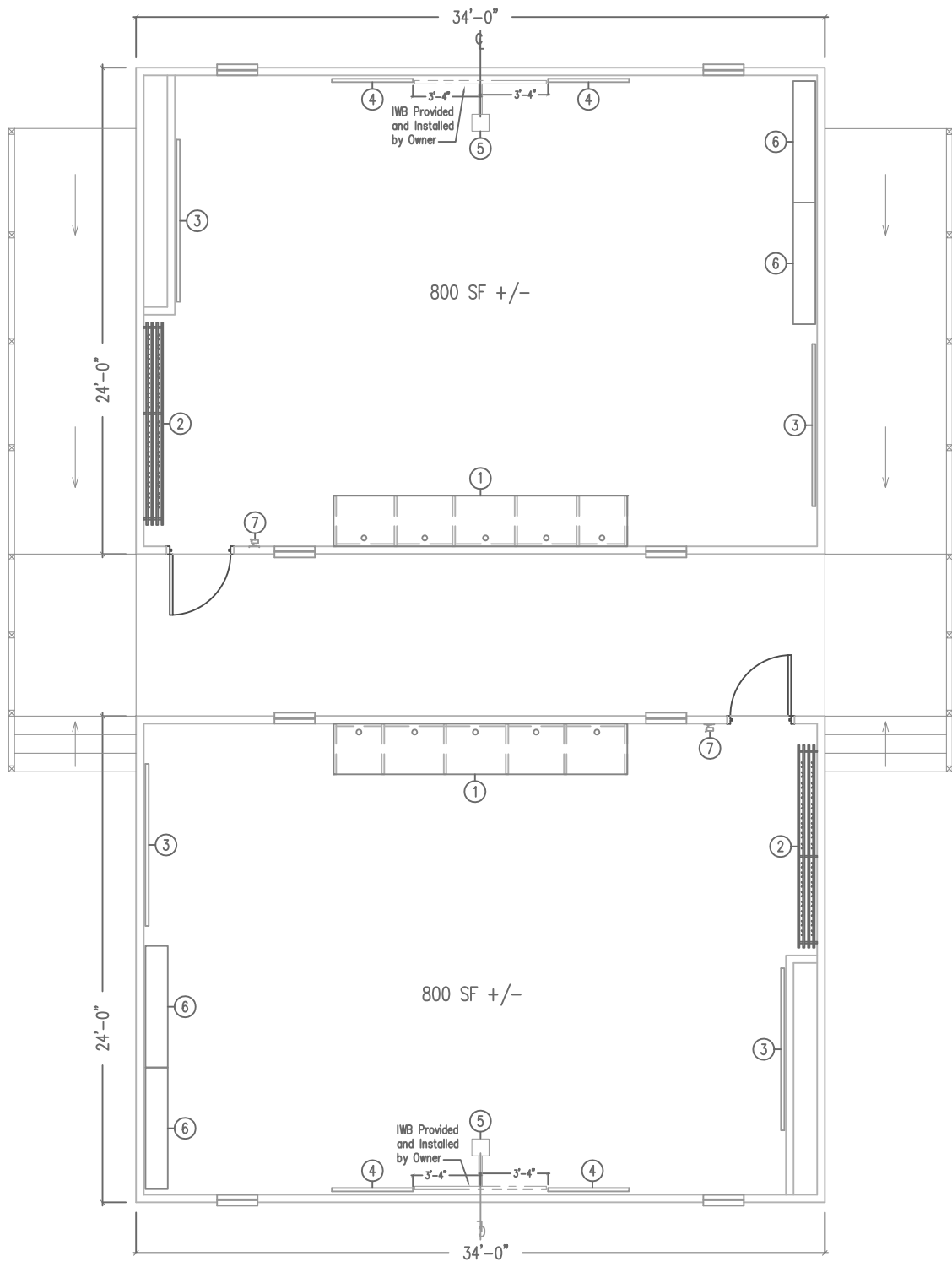


**LOUDOUN COUNTY
PUBLIC SCHOOLS
BUILDING LOCATIONS**



LOUDOUN COUNTY PUBLIC SCHOOLS
PLANNING AND LEGISLATIVE SERVICES
FEBRUARY 3, 2010

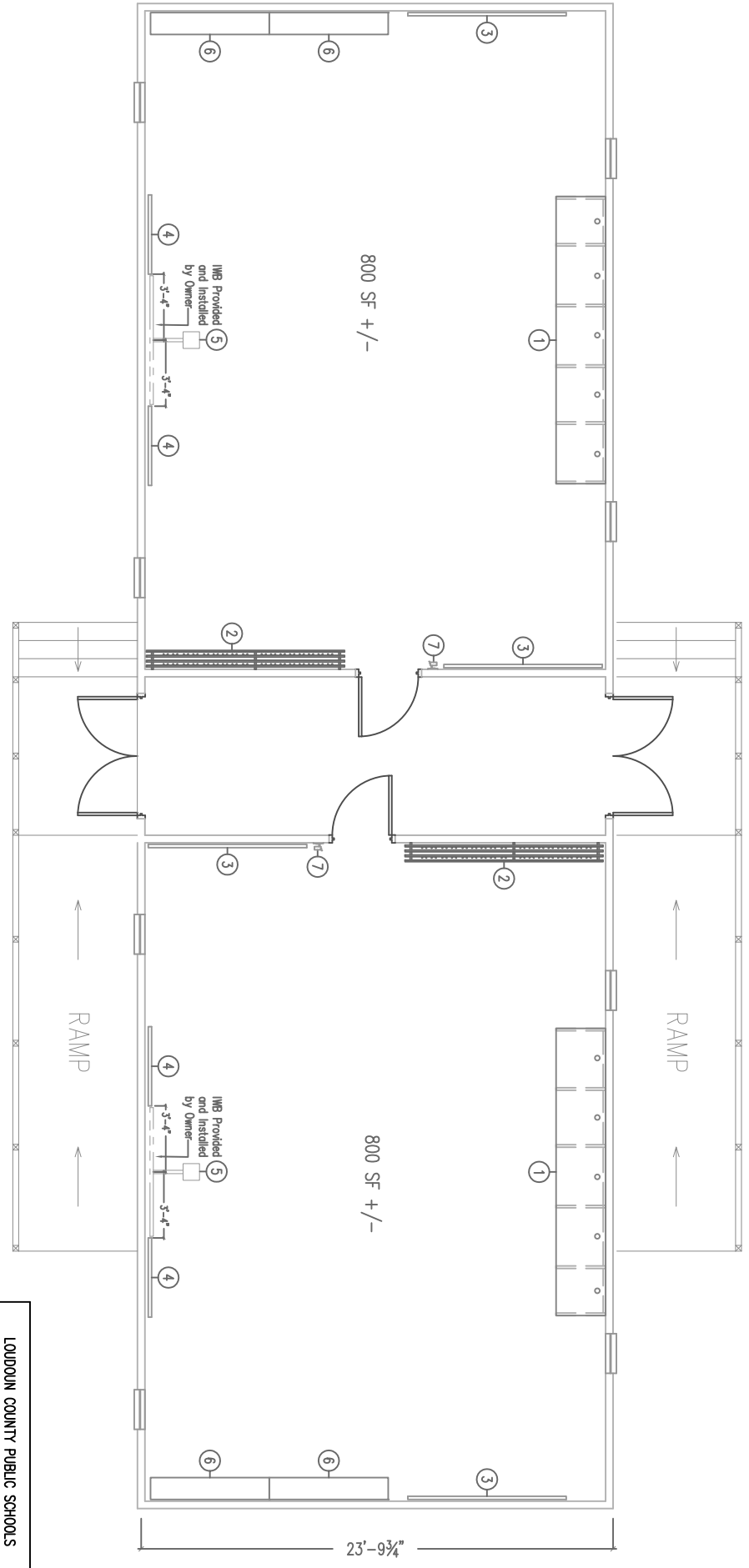




TAG	EQUIPMENT
①	12' COMPUTER COUNTER; 5 EQ. WORK STATIONNS
②	COAT RACK W/ SHELF
③	8' X 4' TACKBOARD
④	4' X 4' MARKER BOARD
⑤	INTERACTIVE WHITE BOARD
⑥	3'h X 6'w BOOKCASE W/ COUNTERTOP
⑦	PENCIL SHARPENER

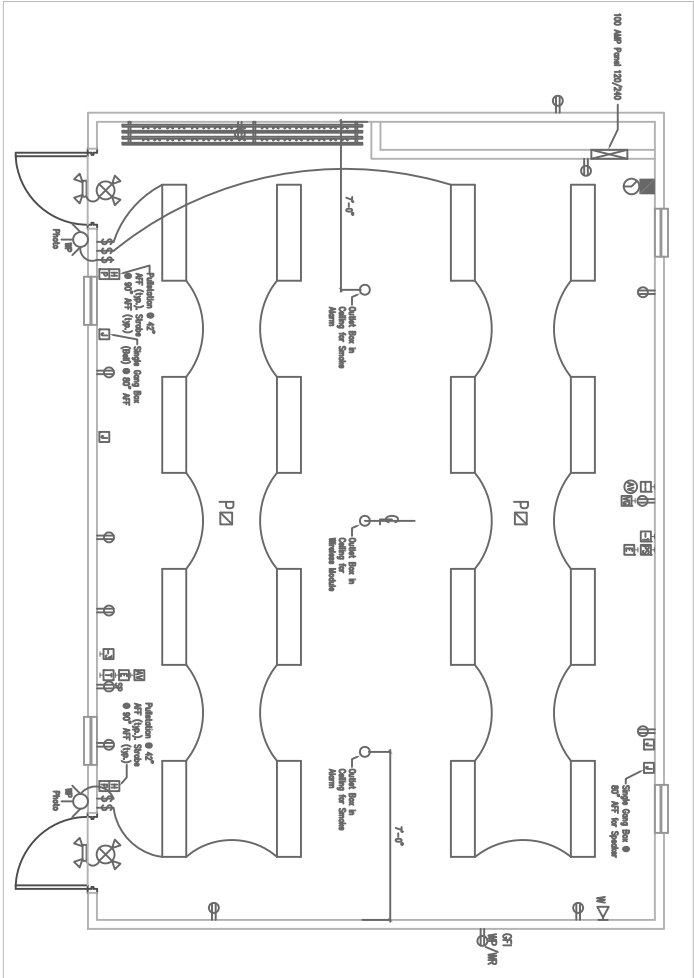
LOUDOUN COUNTY PUBLIC SCHOOLS	
MODULAR CLASSROOM	
11-10-11	A2

TAG	EQUIPMENT
①	12' COMPUTER COUNTER; 5 EQ. WORK STATIONS
②	COAT RACK W/ SHELF
③	8' X 4' TACKBOARD
④	4' X 4' MARKER BOARD
⑤	INTERACTIVE WHITE BOARD
⑥	3h X 6'w BOOKCASE W/ COUNTERTOP
⑦	PENCIL SHARPENER



LOUDOUN COUNTY PUBLIC SCHOOLS	
MODULAR CLASSROOM	
11-10-11	A4

4'-0"	SP	SECTION 27 51 23.50 SELECTOR SWITCH WITH VOLUME CONTROL. WALL, COMPLETE WITH TWO (2) MOMENTARY PUSHBUTTONS FOR INPUT SELECTION CONTROL, EACH WITH STATUS LED (GREEN). ONE (1) MASTER ROTARY VOLUME CONTROL, AND ONE (1) R445 FEMALE OUTPUT JACK. UNIT SHALL BE CRESTRON #M-WCS-1-S CONTROL PANEL COMPLETE WITH CONDUIT AND SPECIFIED CATEGORY 6 WIRING AS INDICATED ON SHEET E5.3. REFER TO SECTION 27 10 00 FOR INSTALLATION AND CABLE REQUIREMENTS.
1'-8"	I	SECTION 27 41 33 CATV OUTLET, SINGLE GANG, WALL, FOR CATV TAP CABLE DROP FROM MAIN CAVY TRUNK. PROVIDE ONE (1) 1" CONDUIT TO THE ACCESSIBLE CEILING VOID, BUSHED AND GROUNDED. REFER TO SECTION 27 10 00 FOR CABLE, JACK AND INSTALLATION INSTRUCTIONS.
	AV	SECTION 27 40 00 TYPE "AV" OUTLET, WALL, FOR VIDEO AND STEREO AUDIO INPUTS FROM COMPUTER AND MEDIA DEVICES. PROVIDE ONE (1) CRESTRON #M-WCS-1-S WALL PLATE COMPUTER CENTER WITH VIDEO COMPLETE WITH ONE (1) R88 VIDEO INPUT, ONE (1) 3.5mm TRS MINI PHONE JACK, ONE (1) R45 FEMALE COMPOSITE VIDEO INPUT, TWO (2) RCA FEMALE AUDIO INPUTS AND ONE (1) R445 FEMALE OUTPUT JACK MOUNTED IN A DOUBLE-GANG 2-8" DEEP OUTLET BOX. OUTLET SHALL BE COMPLETE WITH INTER-CONNECTING CATEGORY 6 CABLE AS INDICATED IN ELEVATION ON SHEET E5.3. REFER TO SECTION 27 40 00 FOR INSTALLATION AND CABLE REQUIREMENTS.
AS INDICATED IN DETAILS	E	TEACHER'S COMPUTER TO INTERACTIVE WHITEBOARD. PROVIDE ONE (1) R445 FEMALE OUTPUT JACK MOUNTED IN A DOUBLE-GANG 2-8" DEEP OUTLET BOX. OUTLET SHALL BE COMPLETE WITH INTER-CONNECTING CATEGORY 6 CABLE AS INDICATED IN ELEVATION ON SHEET E5.3. REFER TO SECTION 27 10 00 FOR INSTALLATION AND CABLE REQUIREMENTS.
	P	PROJECTOR SPEAKER OUTLET, 1" X 2" CEILING MOUNTED, WITH SPECIFIED WIRING TO LOCAL MEDIA RECEIVER. REFER TO SECTION 27 40 00 FOR CABLING AND INSTALLATION REQUIREMENTS.
1'-8" OR BY DETAILS	W	SECTION 27 10 00 TYPE -- OUTLET, SINGLE OR DOUBLE GANG. PROVIDE TWO (2) 1-1/4" CONDUITS TO ACCESSIBLE CEILING VOID, BUSHED AND GROUNDED. REFER TO SECTION 27 10 00 FOR CABLE, JACK AND INSTALLATION REQUIREMENTS. PROVIDE THE PROPER NUMBER AND TYPE OF VOICE MODULES, PHONES AND DATA MODULES. SEE TABLE BELOW FOR NUMBER LEGEND. PROVIDE ADDITIONAL CONDUITS AS REQUIRED BY DETAILS. W SUBSCRIPT INDICATES WALL MOUNT STUDS FOR MOUNTING PHONE AT 4-48" PROVIDE RECESSED WALL OUTLET BOX (5765732) WITH ADAPTOR RINGS TO SUIT THE RESPECTIVE FACEPLATES AND WALL TYPES.
FLOOR	W	
CEILING	W	
		<p>1ST DIRT - PHONE OUTLETS (TYPE) 2ND DIRT - DATA OUTLETS (OXY)</p> <p>-- EMPTY -- EMPTY</p> <p>1 = ONE VOICE OVER IP OUTLET 1 = ONE DATA OUTLET</p> <p>2 = TWO VOICE OVER IP OUTLETS 2 = TWO DATA OUTLETS</p> <p>3 = THREE VOICE OVER IP OUTLETS 3 = THREE DATA OUTLETS</p> <p>4 = FOUR VOICE OVER IP OUTLETS 4 = FOUR DATA OUTLETS</p> <p>* WHERE BOTH PHONE AND DATA OUTLETS ARE EMPTY (NO CABLING/NO MODULES), PROVIDE BLANK COVER PLATE.</p> <p>** EACH INTERCOM PHONE OUTLET SHALL RECEIVE A SPECIFIED INSTRUMENT.</p> <p>129L 3M 20A 2P 1A DUPLEX RECEPTACLE, WALL</p> <p>SECTION 27 10 00 TELEPHONE OUTLET, WALL, PROVIDE ONE (1) 1" CONDUIT TO ACCESSIBLE CEILING VOID, BUSHED & GROUNDED. REFER TO SECTION 27 10 00 FOR CABLE, JACK AND INSTALLATION REQUIREMENTS. PROVIDE ONE (1) VOICE MODULE. SECTION 27 10 00 SHALL PROVIDE SPECIFIED ONE DESK/WALL TELEPHONE INSTRUMENT. WALL VERSIONS (W) HAVE MOUNTING STUDS ON PLATE.</p> <p>SECTION 27 40 00 MEDIA OUTLET, ABOVE CEILING IN SPECIFIED ENCLOSURE, COMPLETE WITH ONE (1) CRESTRON #M-RXV5 MEDIA RECEIVER WITH VIDEO, ONE (1) CRESTRON #M-1830RU POWER SUPPLY, AND ONE (1) SINGLE RECEPTACLE MOUNTED IN SPECIFIED ENCLOSURE.</p> <p>SECTION 27 40 00 TYPE "VC" OUTLET, WALL, PROVIDE ONE (1) 1-8" CONDUIT TO ACCESSIBLE CEILING VOID, BUSHED AND GROUNDED. PROVIDE ONE (1) R88 CABLE IN LENGTHS AS REQUIRED, TO EXTEND FROM THE ABOVE CEILING MEDIA RECEIVER TO THE AWI MOUNTED PROJECTOR. OUTLET SHALL BE COMPLETE WITH 1-8" GROUSET HOLE IN FACEPLATE. OUTLET BOX SHALL BE R4NDI 5 SQUARE BOX. PROVIDE A 1-8" KNOCK-OUT HOLE IN BOX FOR CONDUIT.</p> <p>SECTION 27 10 00 TYPE "PS" OUTLET, WALL, FOR VIDEO AND STEREO AUDIO INPUTS FROM COMPUTER. PROVIDE ONE (1) CRESTRON #M-WCS WALL PLATE COMPUTER CENTER AND ONE (1) R445 FEMALE OUTPUT JACK MOUNTED IN A DOUBLE-GANG 2-8" DEEP OUTLET BOX. OUTLET SHALL BE COMPLETE WITH INTER-CONNECTING CATEGORY 6 CABLE AS INDICATED IN ELEVATION ON SHEET E5.3. REFER TO SECTION 27 10 00 FOR INSTALLATION AND CABLE REQUIREMENTS.</p>



XXX
SCALE 1/8" = 1'-0"

LOUDOUN COUNTY PUBLIC SCHOOLS
MODULAR CLASSROOM
11-10-11
E1

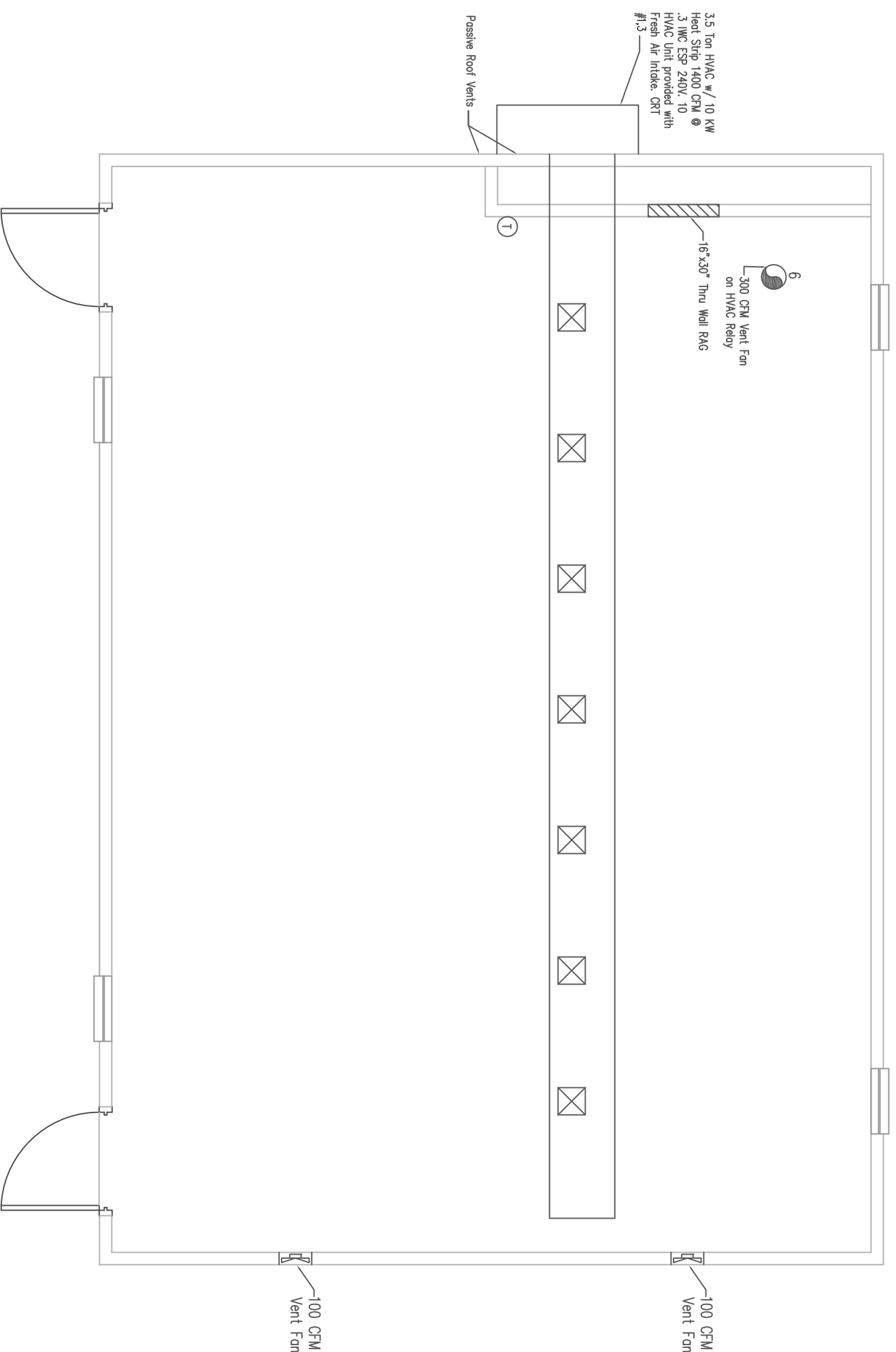
4

3

2

1

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED



PLAN VIEW
SCALE: 1/4" = 1'-0"

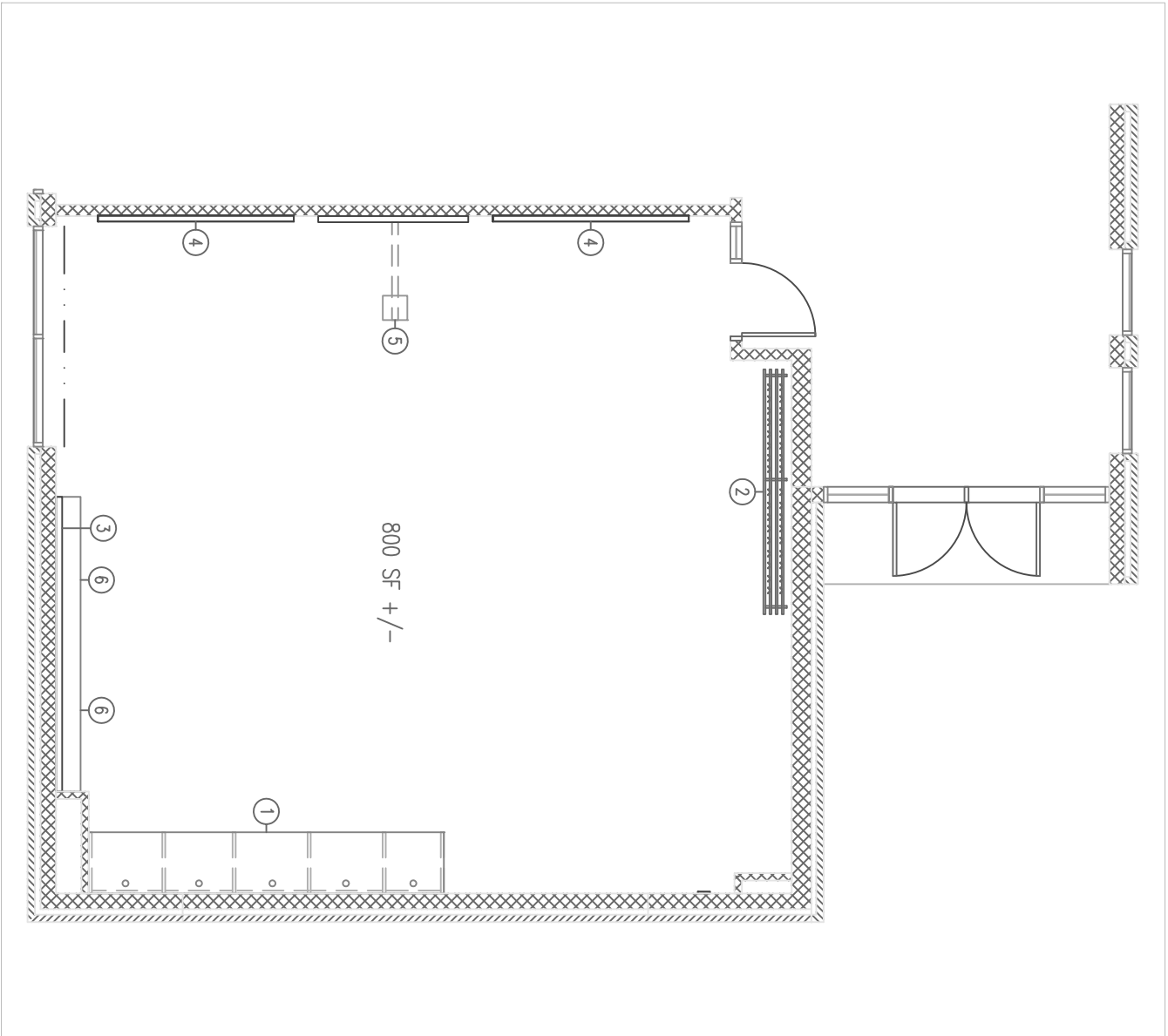
4

3

2

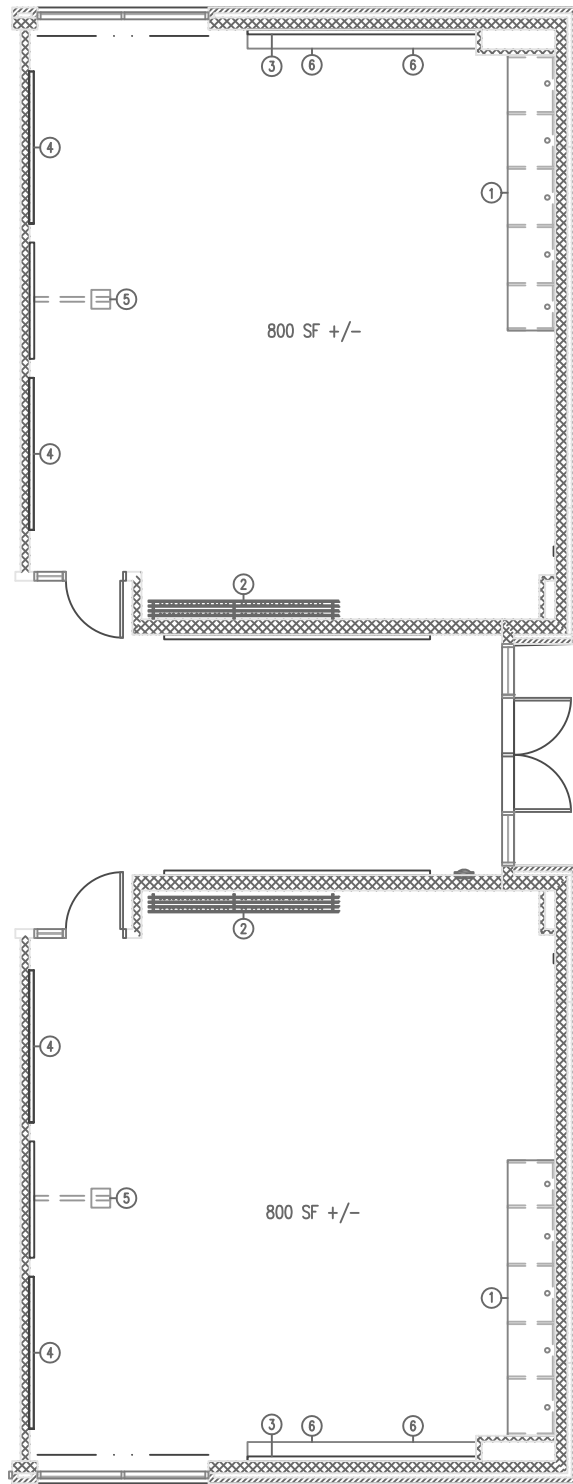
1

M1		LOUDOUN COUNTY PUBLIC SCHOOLS	
MODULAR CLASSROOM		REV	
SIZE	FSCM NO.	DWG NO.	REV
SCALE	1/4" = 1'-0"	SHEET	



TAG	EQUIPMENT
①	12' COMPUTER COUNTER: 5 EQ. WORK STATIONS
②	COAT RACK W/ SHELF
③	8' X 4' TACKBOARD
④	4' X 4' MARKER BOARD
⑤	INTERACTIVE WHITE BOARD
⑥	3h X 6" W BOOKCASE W/ COUNTERTOP
⑦	PENCIL SHARPENER

LOUDOUN COUNTY PUBLIC SCHOOLS	
CLASSROOM ADDITION	
11-10-11	A5



TAG	EQUIPMENT
①	12' COMPUTER COUNTER; 5 EQ. WORK STATIONNS
②	COAT RACK W/ SHELF
③	8' X 4' TACKBOARD
④	4' X 4' MARKER BOARD
⑤	INTERACTIVE WHITE BOARD
⑥	3'h X 6'w BOOKCASE W/ COUNTERTOP
⑦	PENCIL SHARPENER

LOUDOUN COUNTY PUBLIC SCHOOLS	
CLASSROOM ADDITION	
11-10-11	A6

Report:	Feasibility Study Const Cost Estimate	Prepared by: Downey & Scott, LLC	Status:	Concept Design	PM: bd/cm
Project:	Loudoun County Kindergarten Feasibility Study	6799 Kennedy Road, Suite F	Client:	LCPS	Chckd by: bd/sm
Location:	Loudoun County Public Schools	Warrenton, Virginia 20187	Submissn:	October 7, 2011	Job no: 11092
Documents Dated:	October 7, 2011	Ph 540.347.5001 Fax 540.347.5021	Run Date:	See footer	
		www.downeyscott.com			

LOC REF	SYS #	UNIFORMAT SYSTEM	SPECIFICATION	QUANTITY	U/M	UNIT COST	EXTENSION
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PROJECT HARD CONSTRUCTION COST SUMMARY

Loudoun County Public Schools - Elementary School Addition

1,160.00 Gross Square Feet

Estimated Const duration = 8 months

HARD CONSTRUCTION COSTS

BASE BID IN CURRENT MARKET DOLLARS

BUILDING ADDITION		1,160 GSF	Cost per SF <u>\$348.51</u>	404,276
SUBTOTAL	SUBTOTAL			404,276
ESCALATION TO BID	REFER TO MAIN SUMMARY	4.50%		18,192
SUBTOTAL	SUBTOTAL			422,468
DESIGN CONTINGENCY	CONTINGENCY			0
SINGLE KINDERGARTEN ADDITION TOTAL	<u>ADDITION TOTAL</u>			<u>\$ 422,468</u>

Cost per SF
\$364.20

SINGLE CLASSROOM OF 800 SF PLUS CIRCULATION SPACE OF 360 SF	
TOTAL GSF OF ADDED BUILDING PROGRAM PER CLASSROOM ADDED	1,160 GSF

Report: Feasibility Study Const Cost Estimate
 Project: Loudoun County Kindergarten Feasibility Study
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LOC REF	SYS #	UNIFORMAT SYSTEM	SPECIFICATION	QUANTITY	U/M	UNIT COST	EXTENSION
ADDITION	00.00		SINGLE CLASSROOM ADDITION				
ADDITION	00.50	SELECT BLDG. DEMO & SITEWORK	Tie into existing building allowance	1.00	LS	2,500.00	2,500.00
ADDITION			Misc demolition	1,160.00	GSF	0.60	696.00
ADDITION			Site preparation and allowance for site	1.00	LS	15,000.00	15,000.00
ADDITION			Remove exist. Mechanical system			Costs are Excluded	
ADDITION			Remove exist. lighting/electrical			Costs are Excluded	
ADDITION			Hazmat abatement - asbestos			Costs are Excluded	
ADDITION			Hazmat abatement - lead			Costs are Excluded	
ADDITION	01.00	FOUNDATIONS	Foundations - standard code spread footings	1,160.00		9.00	10,440.00
ADDITION			Special Foundations			Costs are Excluded	
ADDITION	02.00	SUBSTRUCTURE	Slab on grade	1,160.00	SF	6.85	7,946.00
ADDITION	03.00	SUPERSTRUCTURE	Roof framing	1,160.00	SF	18.00	20,880.00
ADDITION			Misc metals	1.00	LS	5,000.00	5,000.00
ADDITION			Misc Wood Blocking	1.00	LS	1,200.00	1,200.00
ADDITION			Tie into existing structure	1.00	LS	7,500.00	7,500.00
ADDITION	04.00	EXTERIOR CLOSURE	Exterior masonry wall assembly	1,440.00	SF	35.00	50,400.00
ADDITION			Windows	216.00	SF	50.00	10,800.00
ADDITION			Doors, allowance	2.00	OPNGs	1,600.00	3,200.00
ADDITION			Exterior wall modifications			Existing to remain	
ADDITION			Exterior rake trims and fascia modifications			Existing to remain	
ADDITION			Excavate perimeter of existing building			None included	
ADDITION			Waterproof existing foundation			Existing to remain	
ADDITION			Building perimeter drains in gravel bed			Existing to remain	
ADDITION	05.00	ROOFING	Low slope roof system with 6" insulation	1,160.00	LS	14.00	16,240.00
ADDITION	06.00	INTERIOR CONST	Interior Finishes	1,160.00	SF	45.00	52,200.00
ADDITION			Misc cut and patching	1.00	LS	1,000.00	1,000.00
ADDITION	07.00	SPECIAL EQUIPMENT	Misc specialties/fire extinguishers/jan shelving	1,160.00	GSF	1.00	1,160.00
ADDITION			Reg toilet partitions	15.00	EA	950.00	14,250.00
ADDITION			Visual display white boards	120.00	SF	7.60	912.00
ADDITION			Smart boards	LS 1.00		7,500.00	7,500.00
ADDITION			Door signage	2.00	EA	115.00	230.00
ADDITION			Student desks and work stations			Refer to FF&E	
ADDITION			Office furnishings, sofas and chairs			Refer to FF&E	

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LOC REF	SYS #	UNIFORMAT SYSTEM	SPECIFICATION	QUANTITY	U/M	UNIT COST	EXTENSION
ADDITION	08.00	CONVEYING	Elevators			None included	
ADDITION			Elevator machine, chasis and cab platform			None included	
ADDITION			Stairwells and railings			None included	
ADDITION	09.00	MECHANICAL HVAC	HVAC System	1,160.00	GSF	34.00	39,440.00
ADDITION			Air & Water Balance	1,160.00	GSF	0.32	371.20
ADDITION			Commissioning	1,160.00	GSF	2.20	2,552.00
ADDITION			HVAC Demolition	1,160.00	GSF	0.97	1,125.20
ADDITION	9.20	PLUMBING	Roof drains and misc plumbing	1,160.00	GSF	6.00	6,960.00
ADDITION	9.30	FIRE SPRINKLER	Sprinkler	1,160.00	GSF	3.20	3,712.00
ADDITION			Misc Demolition	1.00	LS	350.00	350.00
ADDITION			Fire Pump			None included	
ADDITION	10.00	ELECTRICAL	Switchboards, Panels, Power and lighting	1,160.00	GSF	30.00	34,800.00
ADDITION			Clock System	1,160.00	GSF	0.45	522.00
ADDITION			Phone/Data System-empty conduits & pull string	1,160.00	GSF	0.55	638.00
ADDITION			Security System-empty conduits & pull string	1,160.00	GSF	0.49	568.40
ADDITION			A.V. Systems - empty conduits & pull string	1,160.00	GSF	0.55	638.00
ADDITION			TV System - empty conduits & pull string	1,160.00	GSF	0.21	243.60
ADDITION			Fire Alarm	1,160.00	GSF	1.75	2,030.00
ADDITION			Demolition	1,160.00	GSF	0.94	1,090.40
ADDITION	11.00	MARK-UPS	Subtotal				324,094.80
ADDITION			General Conditions	12.00%			38,891.38
ADDITION			Subtotal				362,986.18
ADDITION			GC OH @ 5% plus Profit @ 5%	10.00%			36,298.62
ADDITION			Subtotal				399,284.79
ADDITION			Bonds & insurance	1.25%			4,991.06
ADDITION			Subtotal	1,160.00	GSF	\$348.51	404,275.85

Cost Estimates

NOTE SIZE INCL CIRC SPACE
AVG SIZE PER CLASSROOM

1,160 GSF

Hard Costs	\$22,990,500
Difficult Site Allowance	\$500,000
Soft Costs	\$9,478,700
FF & E	\$1,590,000
Total Cost	\$34,559,200

	Present KG Rooms	Needed FDK Rooms	Additional FDK Rooms Needed	Cost per classroom / Per phase	Adjustment factor	Cost per School- Hard Cost Only	Modular Classroom Total Costs	
Algonkian	2	4	1	Phase 3	\$ 460,000	100.00%	\$ 460,000	\$234,000
Ball's Bluff	3	7	1	Phase 1	\$ 422,000	100.00%	\$ 422,000	\$224,000
Arcola		1	1	Phase 2	\$ 440,000	100.00%	\$ 440,000	\$224,000
Catoctin		1	1	Phase 3	\$ 460,000	100.00%	\$ 460,000	\$234,000
Creighton's Corner	3	8	2	Phase 1	\$ 422,000	97.50%	\$ 822,900	\$392,000
Cedar Lane	3	5	1	Phase 2	\$ 440,000	100.00%	\$ 440,000	\$224,000
Cool Spring	3	7	1	Phase 3	\$ 460,000	100.00%	\$ 460,000	\$224,000
Countryside	3	5	1	Phase 3	\$ 460,000	100.00%	\$ 460,000	\$234,000
Dominion Trail	2	5	2	Phase 3	\$ 460,000	97.50%	\$ 897,000	\$428,000
Emerick	2	3	1	Phase 2	\$ 440,000	100.00%	\$ 440,000	\$224,000
Evergreen Mill	3	5	1	Phase 3	\$ 460,000	100.00%	\$ 460,000	\$234,000
Frances Hazel Reid	2	5	2	Phase 1	\$ 422,000	97.50%	\$ 822,900	\$392,000
Forest Grove	2	4	1	Phase 1	\$ 422,000	100.00%	\$ 422,000	\$214,000
Guilford	2	4	1	Phase 2	\$ 440,000	100.00%	\$ 440,000	\$224,000
Hillside	3	5	1	Phase 3	\$ 460,000	100.00%	\$ 460,000	\$234,000
Horizon	2	4	2	Phase 2	\$ 440,000	97.50%	\$ 858,000	\$410,000
Hutchison Farm	3	5	2	Phase 2	\$ 440,000	97.50%	\$ 858,000	\$410,000
Kenneth W. Culbert	2	3	0			100.00%	\$ -	
Leesburg	2	5	2	Phase 2	\$ 440,000	100.00%	\$ 880,000	\$392,000
Legacy	3	8	2	Phase 2	\$ 440,000	97.50%	\$ 858,000	\$410,000
Liberty	3	8	2	Phase 2	\$ 440,000	97.50%	\$ 858,000	\$410,000
Little River	3	5	2	Phase 1	\$ 422,000	97.50%	\$ 822,900	\$392,000
Lovettsville	2	3	1	Phase 1	\$ 422,000	100.00%	\$ 422,000	\$214,000
Lowes Island	2	3	1	Phase 1	\$ 422,000	100.00%	\$ 422,000	\$214,000
						100.00%	\$ -	
Meadowland	2	3	1	Phase 2	\$ 440,000	100.00%	\$ 440,000	\$224,000
Mill Run	3	7	2	Phase 2	\$ 440,000	97.50%	\$ 858,000	\$410,000
Mountain View	2	4	1	Phase 2	\$ 440,000	100.00%	\$ 440,000	\$224,000
Newton-Lee	4	6	1	Phase 2	\$ 440,000	100.00%	\$ 440,000	\$224,000
Potowmack	2	3	1	Phase 3	\$ 460,000	100.00%	\$ 460,000	\$234,000
Pinebrook	3	8	2	Phase 3	\$ 460,000	97.50%	\$ 897,000	\$428,000
Rosa Lee Carter	3	5	2	Phase 2	\$ 440,000	97.50%	\$ 858,000	\$410,000
Rolling Ridge	2	4	1	Phase 1	\$ 422,000	100.00%	\$ 422,000	\$214,000
Sanders Corner	2	5	2	Phase 1	\$ 422,000	97.50%	\$ 822,900	\$392,000
Seldens Landing	3	7	2	Phase 1	\$ 422,000	97.50%	\$ 822,900	\$392,000
Sterling	2	4	1	Phase 3	\$ 460,000	100.00%	\$ 460,000	\$234,000
Steuart W. Weller	3	5	2	Phase 1	\$ 422,000	100.00%	\$ 844,000	\$392,000
Sugarland	3	5	1	Phase 2	\$ 440,000	100.00%	\$ 440,000	\$224,000
Sycolin Creek	3	5	1	Phase 2	\$ 440,000	100.00%	\$ 440,000	\$224,000
John W. Tolbert, Jr.	3	8	1	Phase 3	\$ 460,000	100.00%	\$ 460,000	\$224,000
							\$ 22,990,500	\$11,242,000

53

1,160 sf per classroom =64,960 sf \$ 385,922/sf

20

AVG.

\$ 432,000

Avg costs \$212,000

FULL DAY KINGERGARTEN- Modular Option

53 Classrooms

		Percent of Total
Hard Costs	\$ 6,492,500	57%
Soft Costs	\$ 3,300,000	29%
FF&E	\$ 1,650,000	14%
Nov 2012 (Current Market Value)	\$ 11,440,000	
Inflation-bid April 2012	\$ 11,900,000	104.50%
Nov-12 FY-13	11,900,000	100.00%
Nov-13 FY-14	12,436,000	
Nov-14 FY-15	12,996,000	
Nov-15 FY-16	13,581,000	
Nov-16 FY-17	14,192,000	
Nov-17 FY-18	14,831,000	
Nov-18 FY-19	15,498,000	

Notes

Includes 4.5% inflation per year

Does not include:

Bathroom facilities in Modular Classroom units.

Acceleration for shortened construction period.

Hard Costs Worksheet \$ **6,492,500**

Current bid price

Current estimate (professional) \$

Classrooms 53 122,500 6,492,500

Difficult site

Well and septic

Soft Costs Worksheet \$ **3,300,000**

Architectural Fees \$ 600,000

*Civil Eng Fees \$ 1,000,000

DCS Staff \$ 750,000

Geotech investigation \$ 0

Geotech Inspection \$ 150,000

Special Inspection \$ 0

Construction testing \$ 0

Commissioning Services \$ 0

Site Design Contingency \$ 0

Construction Contingency \$ 560,000

Utilities \$ 240,000

* Civil Fees include Geotechnical investigation

FULL DAY KINGERGARTEN- Building Additions Option

53 Classrooms

			Percent of Total
Hard Costs	\$ 24,350,000		68%
Soft Costs	\$ 9,861,500		27%
FF&E	\$ 1,650,000		5%
Nov 2012 (Current Market Value)	\$ 35,861,500		
Inflation-bid April 2012	\$ 35,861,500	100.00%	
Nov-12 FY-13	35,861,000	100.00%	
Nov-13 FY-14	37,475,000	104.50%	
Nov-14 FY-15	39,161,000		
Nov-15 FY-16	40,923,000		
Nov-16 FY-17	42,765,000		
Nov-17 FY-18	44,689,000		
Nov-18 FY-19	46,700,000		

Notes

Includes 4.5% inflation per year

Does not include

Acceleration for shortened construction period

Hard Costs Worksheet \$ 24,350,000

Current bid price
Current estimate (professional)

# Classrooms	53	450,000	23,850,000
Difficult site			500,000
Well and septic			

Soft Costs Worksheet \$ 9,861,500

Architectural Fees	0.1	\$ 2,435,000
Civil Eng Fees *	0.14	\$ 3,409,000
DCS Staff		\$ 1,000,000
Geotech investigation		\$ 0
Geotech Inspection		\$ 300,000
Special Inspection		\$ 200,000
Construction testing		\$ 300,000
Commissioning Services		\$ 0
Site Design Contingency	0.025	\$ 608,750
Construction Contingency	0.025	\$ 608,750
Utilities		\$ 1,000,000

* Civil Fees includes Geotechnical investigation