



Crabtree, Rohrbaugh & Associates

**PEQUEA VALLEY
SCHOOL DISTRICT
BOARD MEETING**
MAY 13TH, 2021

- **EXISTING HIGH SCHOOL AUDITORIUM**
- **NEW HS/IS BUILDING MASSING**

Summer 2024 Open Design Timeline

IS/HS New Construction | Existing IS & HS Renovations

TASK

Board Committee Meeting
School Board Meeting

[illegible]

NEW IS / HS
COMPLETION
SUMMER 2024

MILESTONES

- PROGRAMMING
 - JANUARY 2021
- SCHEMATIC DESIGN
 - FEBRUARY 2021
- DESIGN DEVELOPMENT
 - JUNE / JULY 2021
- CONSTRUCTION DOC'S
 - NOVEMBER 2021
- BIDDING
 - JANUARY 2022
- PHASE 1 CONSTRUCTION
 - SUMMER 2024
- PHASE 2 CONSTRUCTION
 - SUMMER 2025

MEETING UPDATES

- SINCE LAST BOARD COMMITTEE MEETING:
 - 4/21/2021 EDUCATOR MEETING – UPDATES BASED ON INPUT
 - AGRICULTURAL
 - SCIENCE
 - CORE
 - STEM
 - ART
 - 4/28/2021 CAMPUS FACILITY AND MAINTENANCE NEEDS
 - 5/12/2021 STEERING COMMITTEE
 - KITCHEN DESIGN KICKOFF
 - KITCHEN SURVEY OF EXISTING IS AND HS
 - MECHANICAL DESIGN KICKOFF

EXISTING H.S. AUDITORIUM

SCOPE OF RENO.

- **MAINTAIN THE FOLLOWING**
 - SEATING WHERE POSSIBLE
 - ACOUSTIC TREATMENT
 - CEILING SYSTEM
 - BAND ROOM WITH ASSOCIATED STORAGE (LIGHT RENO.)
 - AUDIO SYSTEM
- **CODE UPGRADES**
 - RIGGING W/ ANNUAL INSPECTIONS
 - UPGRADES FOR ADA ACCESS: STAGE
 - RESTROOM REPLACEMENT
- **INFRASTRUCTURE**
 - NEW MECHANICAL SYSTEM SERVING AUDITORIUM
 - NEW ELECTRICAL SYSTEM SERVING AUDITORIUM
 - NEW LIGHTING AND LIGHTING CONTROLS
 - LOW VOLTAGE SYSTEMS – FIRE ALARM, INTERCOM, SECURITY
- **NOT ADDRESSED**
 - NO SIDE STAGE
 - LOBBY INSUFFICIENT
 - FLY SPACE
 - SPRINKLING



SITE IMPACTS

- **MULTI PURPOSE FIELD**
 - REORIENT TO AVOID CONFLICT WITH AUDITORIUM
- **SITE CIRCULATION**
 - MODIFY MAIN SITE ROAD
 - MODIFY SOME PARKING
 - MODIFY ACCESS AROUND RENOVATED HIGH SCHOOL



EXISTING H.S. AUDITORIUM

ESTIMATE OF PROBABLE COST

- AREA OF HEAVY RENOVATION

- 11,150 SF
- AUDITORIUM
- MECHANICAL
- RESTROOM

- AREA OF LIGHT RENOVATION

- 3,300 SF
- BAND
- CORRIDORS

- CREDIT FOR DEMOLITION / ROOF REPLACEMENT

- 15,670 SF
- CREDIT AND COST OF ROOF OFFSET EACH OTHER

- TOTAL PROBABLE COST

- LOW - \$2.14 MILLION
- HIGH - \$2.35 MILLION

ESTIMATE DEVELOPED USING CONSTRUCTION DATA GATHERED FROM PAST PROJECTS AND COMPARED WITH RECENT BIDDING INFORMATION.

MECHANICAL, PLUMBING AND ELECTRICAL ESTIMATES WERE PROVIDED BY MOORE ENGINEERING BASED ON SIMILAR DATA SETS.

COST RANGE				
	Unit Cost	Area / Cost	Unit Cost	Costs
Construction Cost				
Renovations - Heavy @ Auditorium		7,850 sf		
Subtotal	\$ 156.00	\$1,224,600	\$ 168.00	\$1,318,800
Renovations - Heavy @ Mechanical and Restrooms		3,300 sf		
Subtotal	\$ 156.00	\$514,800	\$ 168.00	\$554,400
Renovations - Light @ Band Room and Corridors		4,520 sf		
Subtotal	\$ 115.00	\$519,800	\$ 130.00	\$587,600
Subtotal New Construction & Renovation		\$1,744,400		\$1,906,400
Additional Related Construction Costs				
Construction Contingency	3%	\$52,332		\$57,192
Estimating/Design Contingency	2%	\$34,888		\$38,128
Escalation	1.5%	\$26,166		\$28,596
Construction Testing & Inspection	2%	\$34,888		\$38,128
Regulatory Agency Fees	0.50%	\$8,722		\$9,532
		\$156,996		\$171,576
Subtotal Construction and Related Costs		\$1,901,396		\$2,077,976
Soft Costs				
Professional Design Services				
Consulting Services, Moveable Equipment				
Printing & Financing				
Subtotal	11%	\$209,154	11%	\$228,577
Construction Manager Fees	1.75%	\$33,274	2%	\$41,560
Estimated Total Project Costs		\$2,143,824		\$2,348,113

MINIMIZE IMPACT ON AUDITORIUM

- AREA OF HEAVY RENOVATION

- 11,150 SF
 - BUILDING REPAIRS ASSOCIATED WITH MECHANICAL, ELECTRICAL, AND PLUMBING
 - BUILDING SEPARATION / CODE COMPLIANCE
 - RIGGING REPLACEMENT
 - REDUCTION OF \$25 / SF

- TOTAL PROBABLE COST

- LOW - \$1.81 MILLION
- HIGH - \$2.01 MILLION

- MAJORITY OF RENOVATION COST IS MECHANICAL, ELECTRICAL, AND PLUMBING RELATED

COST RANGE				
	Unit Cost	Area / Cost	Unit Cost	Costs
Construction Cost				
Renovations - Heavy @ Auditorium		7,850 sf		
Subtotal	\$ 121.00	\$949,850	\$ 133.00	\$1,044,050
Renovations - Heavy @ Mechanical and Restrooms		3,300 sf		
Subtotal	\$ 156.00	\$514,800	\$ 168.00	\$554,400
Renovations - Light @ Band Room and Corridors		4,520 sf		
Subtotal	\$ 115.00	\$519,800	\$ 130.00	\$587,600
Subtotal New Construction & Renovation		\$1,469,650		\$1,631,650
Additional Related Construction Costs				
Construction Contingency	3%	\$44,090		\$48,950
Estimating/Design Contingency	2%	\$29,393		\$32,633
Escalation	1.5%	\$22,045		\$24,475
Construction Testing & Inspection	2%	\$29,393		\$32,633
Regulatory Agency Fees	0.50%	\$7,348		\$8,158
		\$132,269		\$146,849
Subtotal Construction and Related Costs		\$1,601,919		\$1,778,499
Soft Costs				
Professional Design Services				
Consulting Services, Moveable Equipment				
Printing & Financing				
Subtotal	11%	\$176,211	11%	\$195,635
Construction Manager Fees	1.75%	\$28,034	2%	\$35,570
Estimated Total Project Costs		\$1,806,163		\$2,009,703

EXISTING H.S. AUDITORIUM

Academic and Extracurricular Conferences (ex. TSA, FBLA, etc.)

- Auditorium typically used for large group sessions only (convocation, closing ceremony, etc.)
- Conference sessions then held in classrooms for breakout activities/seminars
- Conference requires need for proximity to a cafeteria

Musical Festivals

- Held in current auditorium during Mr. Williams' tenure – size and seating became an issue – they stated we would not be able to host again with current auditorium
- If interested in hosting, we would need 900-1,000 seats in the new auditorium at a minimum
- Event rotates – could be held at PV every 8-10 years if we are able to accommodate

Elementary Events

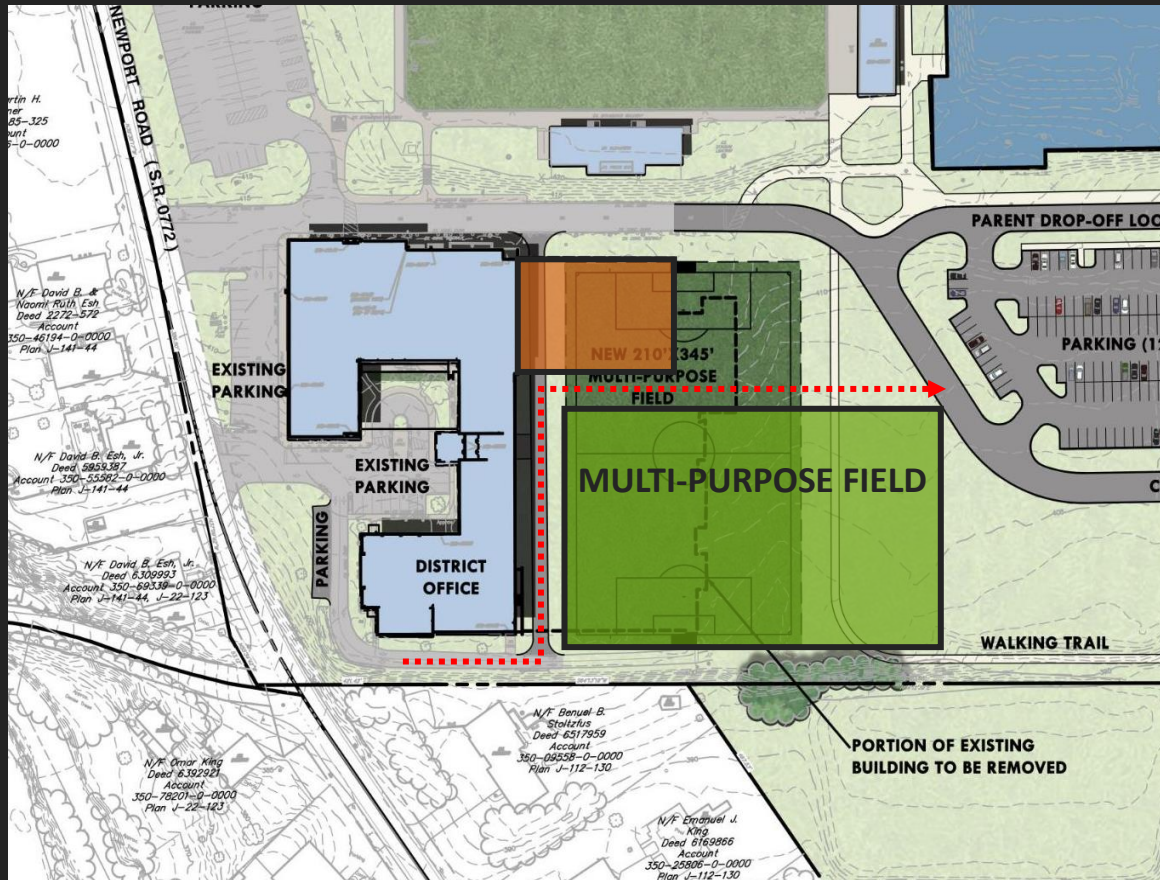
- Could be held in the current auditorium – however, concerns were expressed by elementary level about proximity for practices and busing. If only being used for performances, concerns expressed regarding that age group performing in a new environment they had not practiced in

Community Meetings

- Could be held in the current auditorium and/or new auditorium depending on need
- We currently receive 1-5 requests per year, typically for a dance recital or retirement home function

Community Theater Group

- The closest existing theater group is Cavod in New Holland – they currently already have a facility they use for performances
- Issue with lack of fly space in current auditorium, as well as stage space
- Current auditorium could be used if a group is created locally and is willing to use the space with which we currently operate

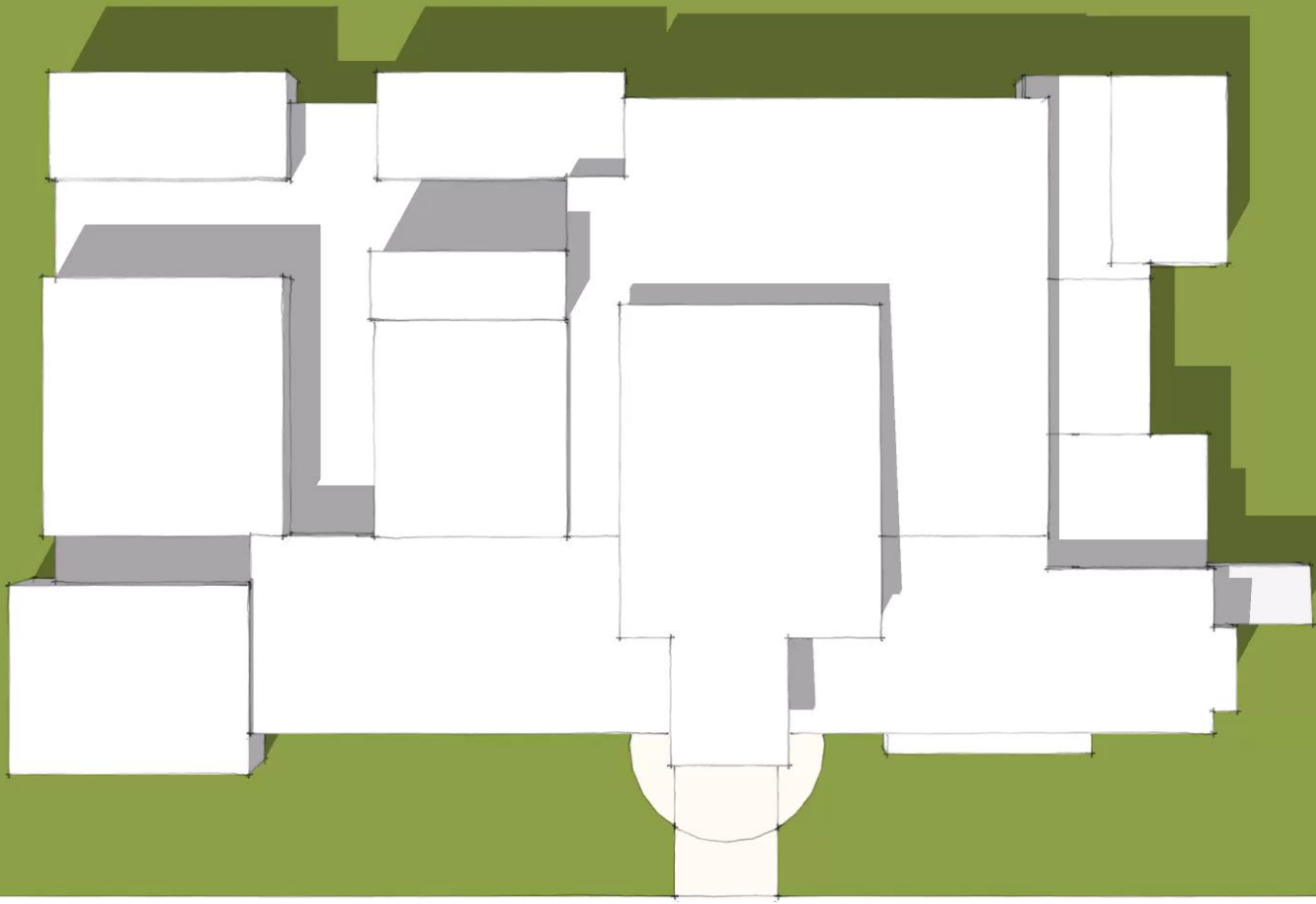


WHAT IS BUILDING MASSING?

- HIGH LEVEL DISCUSSION
- BUILDING VOLUMES
- 3D ADJACENCIES
- SHAPE OF THE ENVELOPE

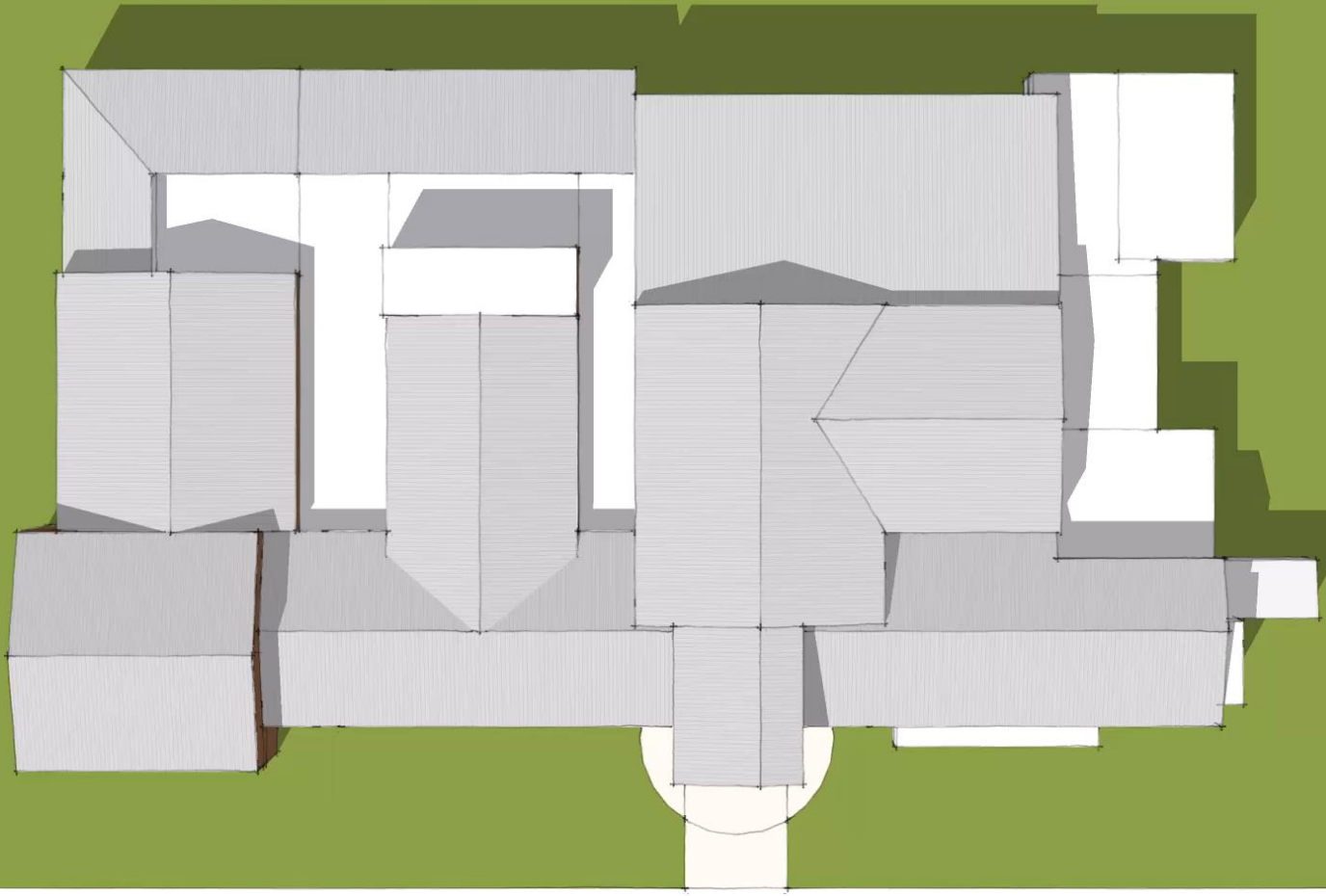
WHAT IS NOT BUILDING MASSING?

- MATERIALS/
COLOR
- FENESTRATIONS
(ALTHOUGH
SOMETIMES
CONSIDERED)



GABLED ROOF

- PEAKS IN THE MIDDLE
- INCREASES SOME BUILDING HEIGHTS TO MAKE EAVES ALIGN
- OVER-FRAMING IS AN ADDITIONAL EXPENSE
- JOINTS AT THE INTERSECTION OF EACH ROOF



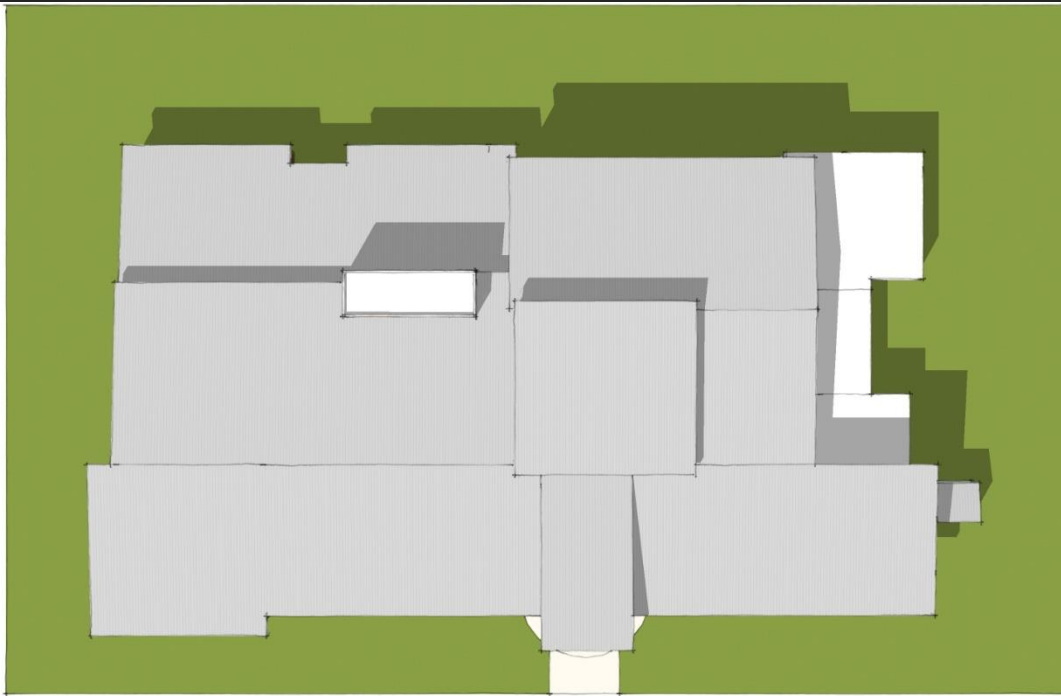
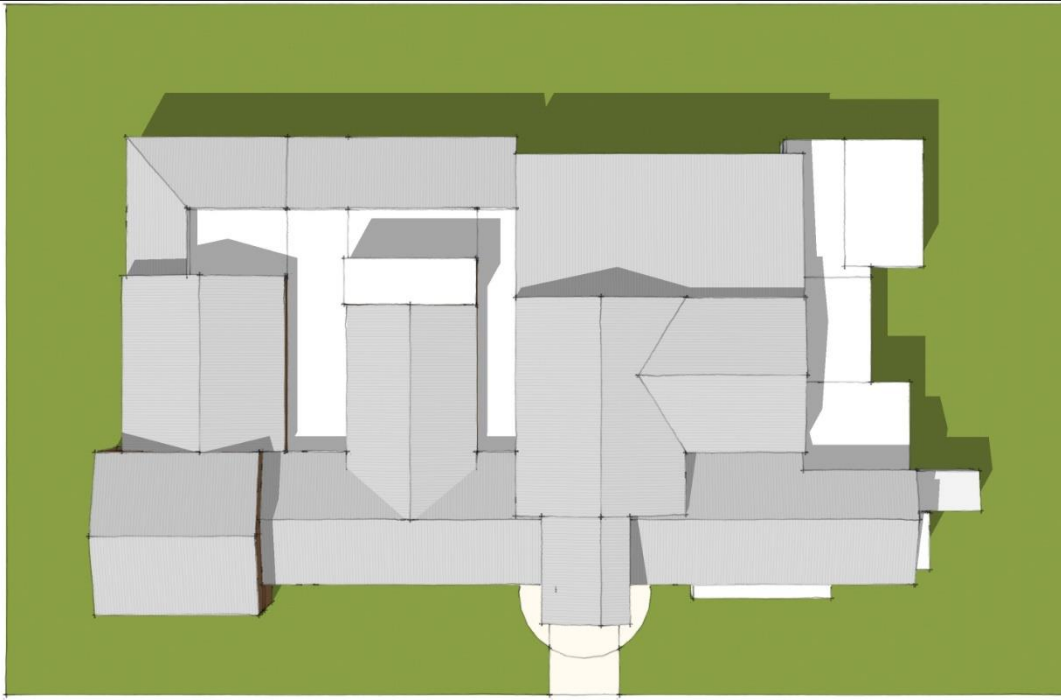
PITCHED ROOF

- SINGLE SLOPE
- MINIMIZE SEAMS / JOINTS / VALLEYS
- MODELED AS A 1:12 SLOPE



BUILDING COORDINATION

- END RESULT WILL BE AFFECTED BY THE BUILDING SYSTEMS
 - MECHANICAL
 - KITCHEN
- FENESTRATIONS AND NATURAL LIGHT
- LOCATION OF BUILDING ELEMENTS
 - PLANETARIUM
 - SOCIAL STAIR
 - MEDIA
- BOTH OPTIONS CAN ACCOMMODATE A VARIETY OF ROOFING MATERIALS
- END RESULT WILL MOST LIKELY BE A HYBRID OF THESE OPTIONS





Pequea Valley School District

Where Each Learner Counts



Crabtree, Rohrbaugh & Associates

www.cra-architects.com