COMPARISON OF ROOFING SYSTEMS

MODIFIED BITUMEN SYSTEM - \$1,376,850 multi-ply system installed over insulated lightweight concrete roof deck. Roof slope – minimum ½" per foot

PROS:

- Positive Drainage
- Less Cost
- Warranty (Materials & Labor NDL)
- No Gutters
- No Downspouts
- •Any repair can be made more easily
- Less difficult to flash roof penetrations
- •More easily re-roofed (insulated lightweight concrete deck)
- Greater competition from roofing manufacturers

CONS:

- •Roof cannot be utilized as an architectural feature
- Some odor during application
- •Can be more susceptible to weather conditions during installation
- Can be more susceptible to damage during construction

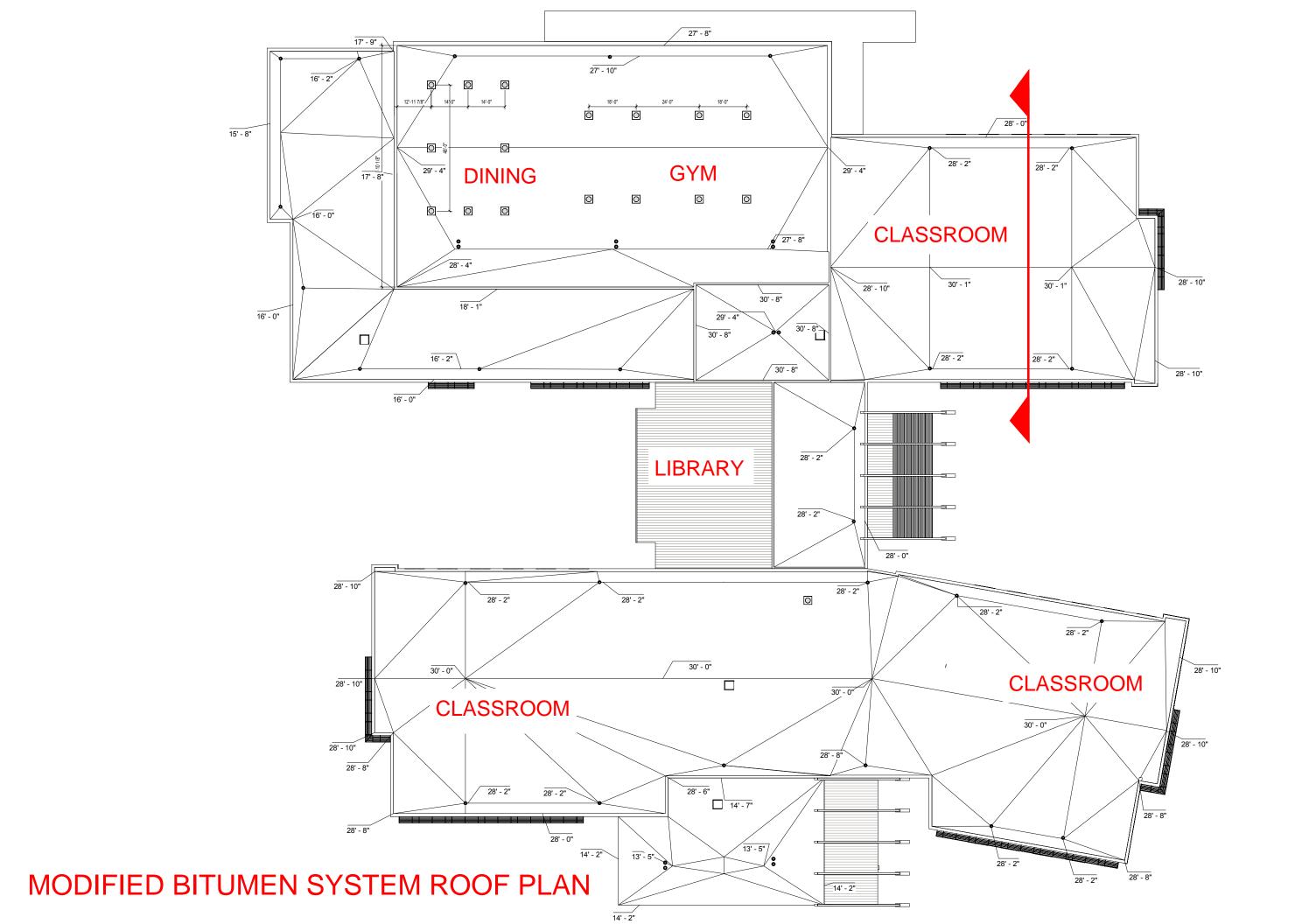
STANDING SEAM METAL SYSTEM - \$1,574,135 metal roof panel installed over water shield membrane on rigid insulation over metal decking. Roof slope – minimum 2" per foot.

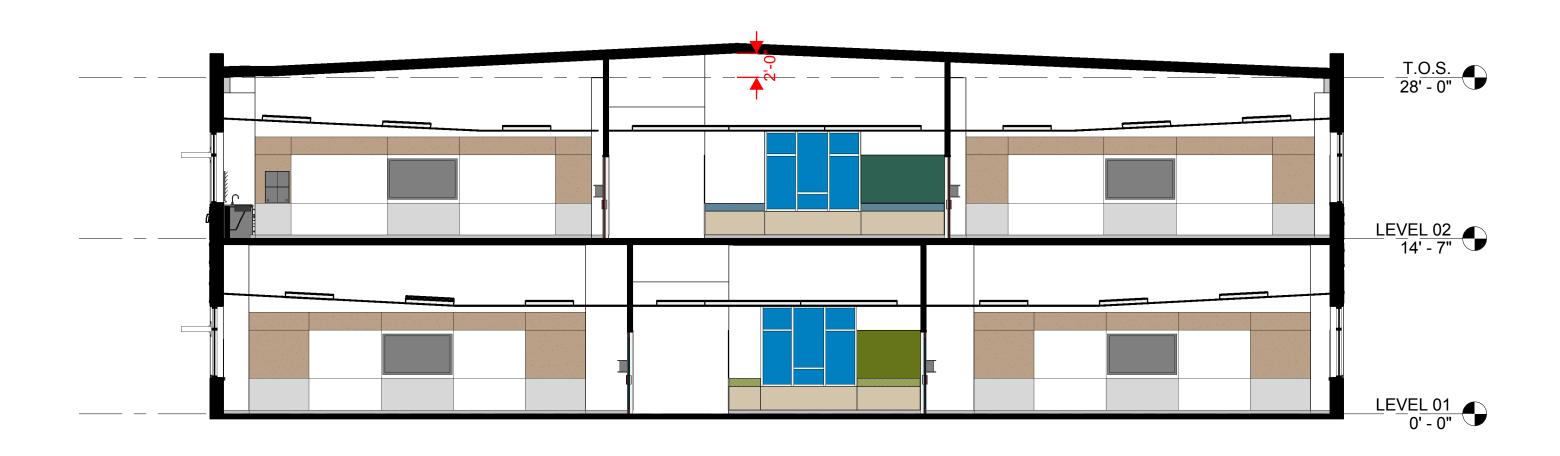
PROS:

- Positive Drainage
- Can be utilized as an architectural feature
- Roof drainage at perimeter (gutters & downspouts)

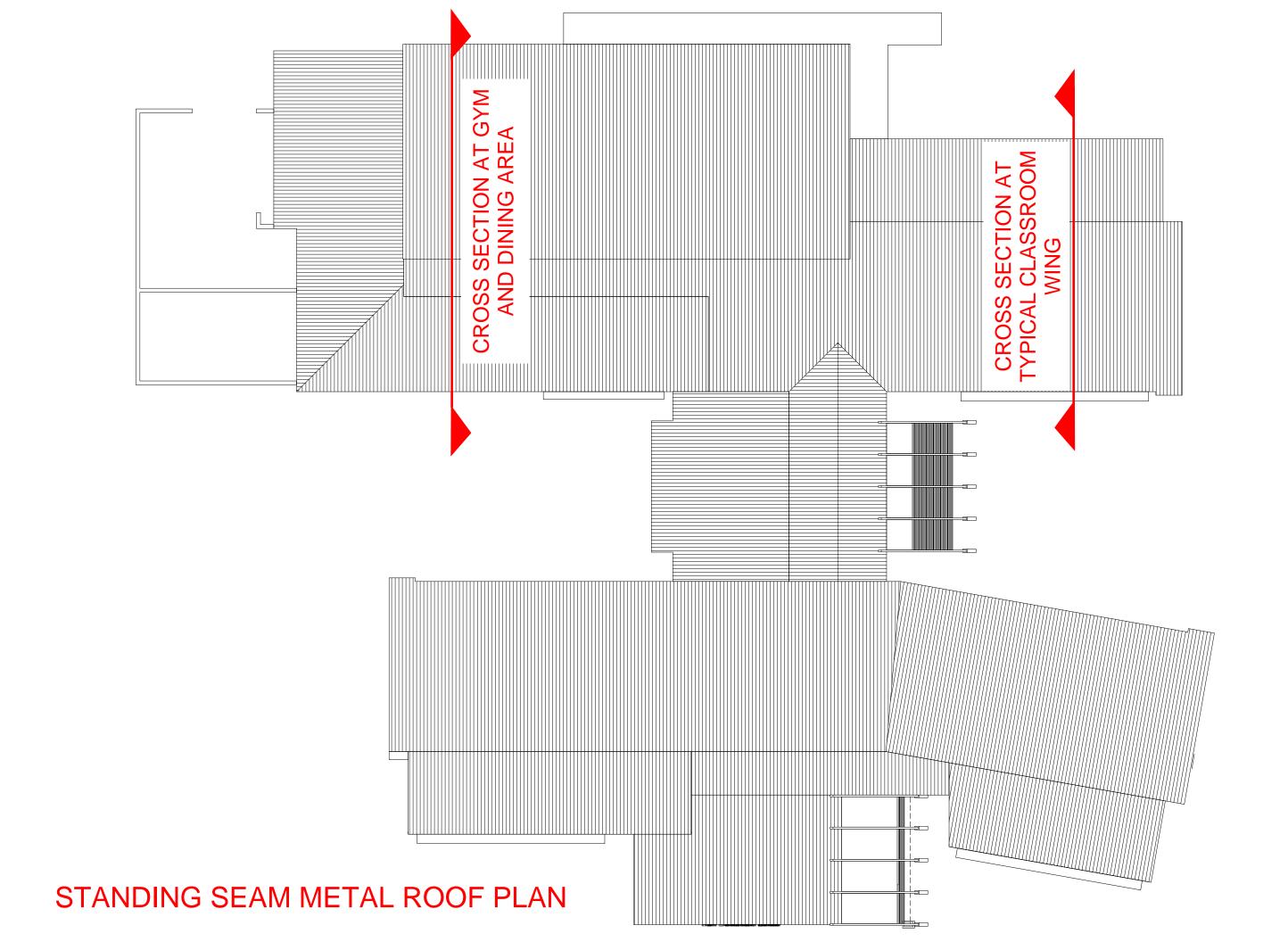
CONS:

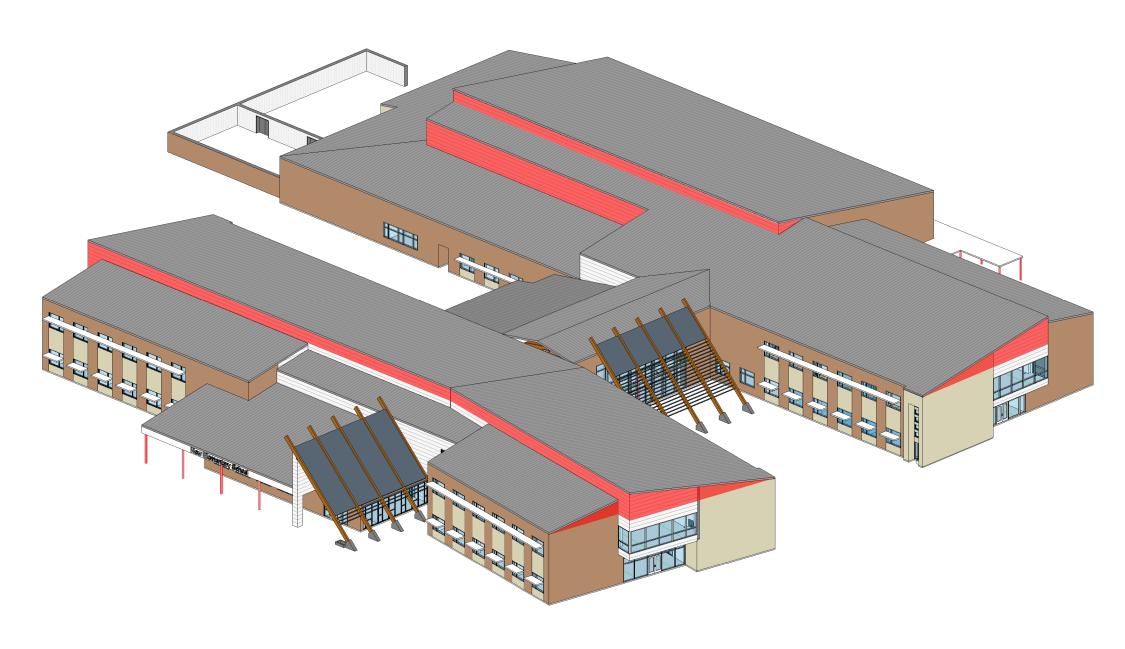
- Higher Cost (Increase of \$197,285)
- Higher Warranty Cost (Materials & Labor)
- Increased Building Volume
- •Gutters & downspouts more susceptible to collect debris in areas with trees
- Susceptible to Movement (expansion and contraction)
- •Any repair is more difficult
- More difficult to flash roof penetrations
- More difficult to re-roof (rigid insulation)
- Limitations to roof configuration (keep it simple)
- •Roof leaks can be more difficult to locate



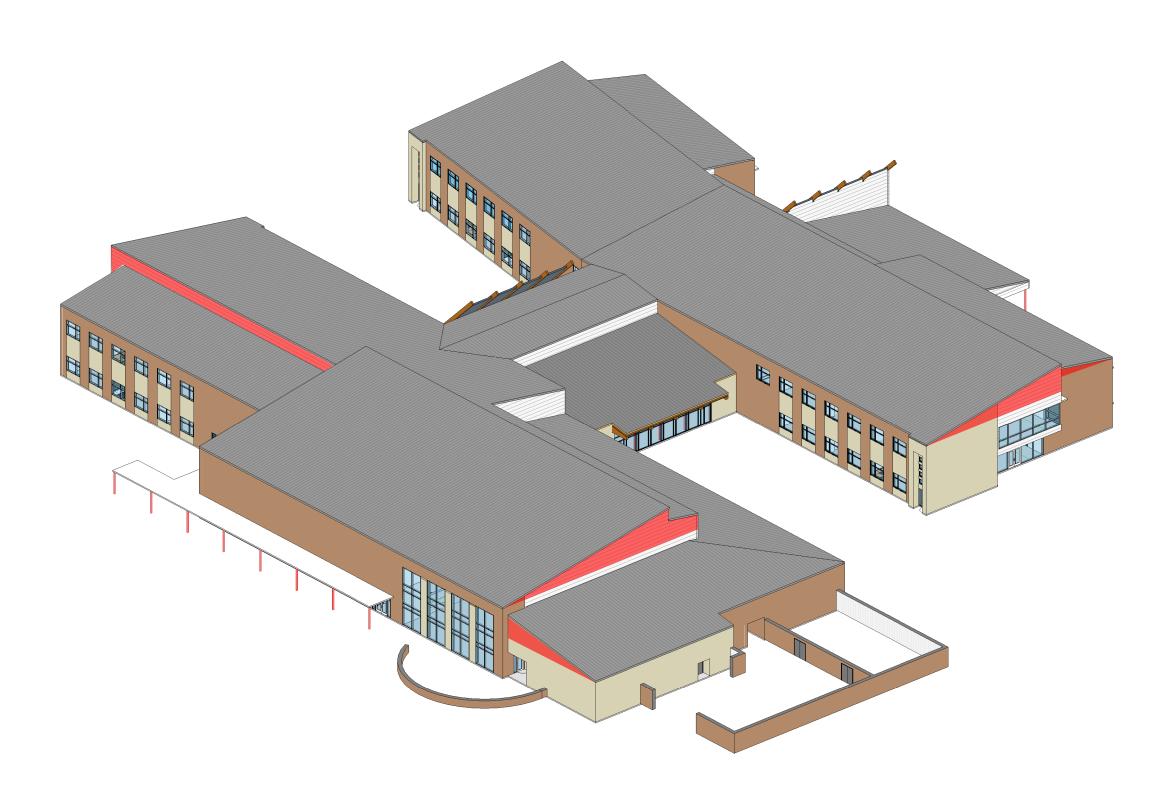


CROSS SECTION AT TYPICAL CLASSROOM WING

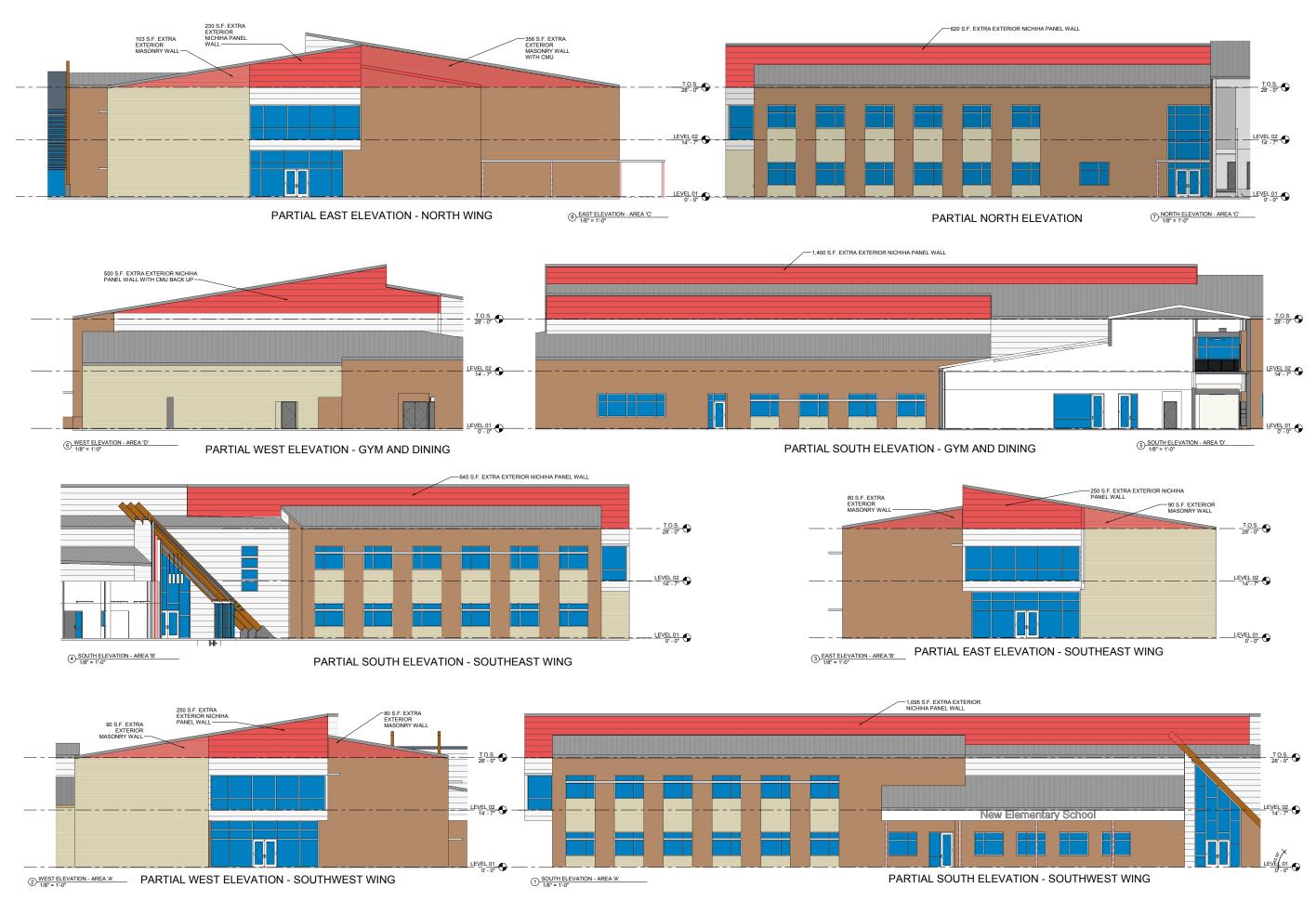




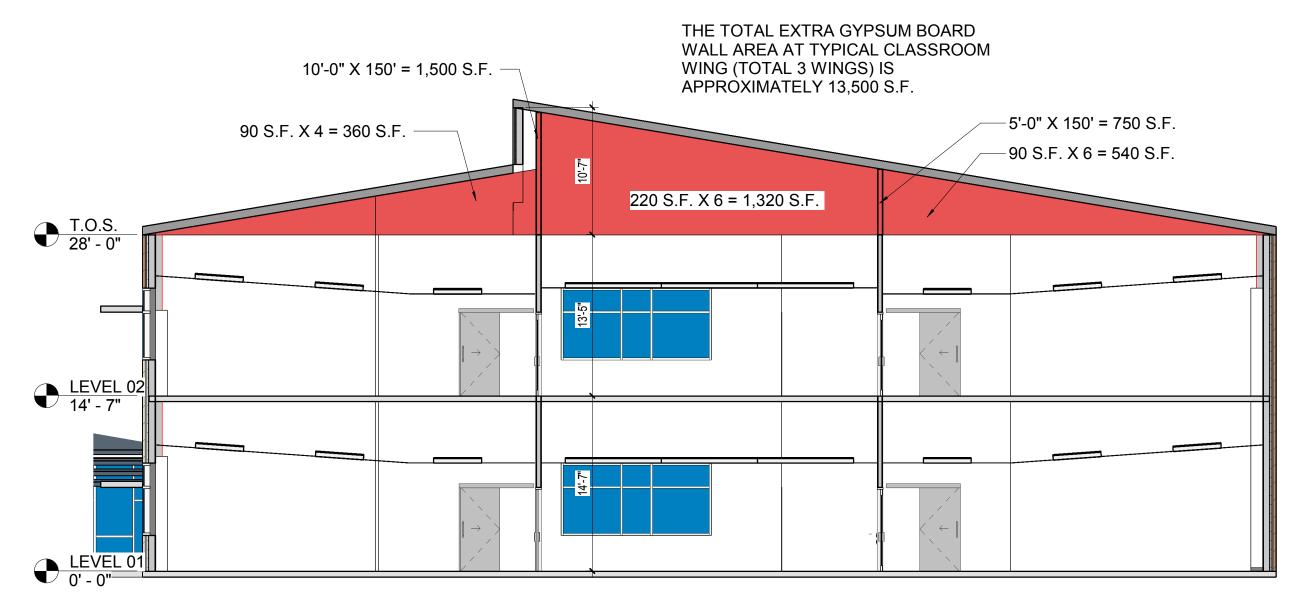
THE RED HATCHED AREA INDICATES THE EXTRA EXTERIOR WALL



THE RED HATCHED AREA INDICATES THE EXTRA EXTERIOR WALL

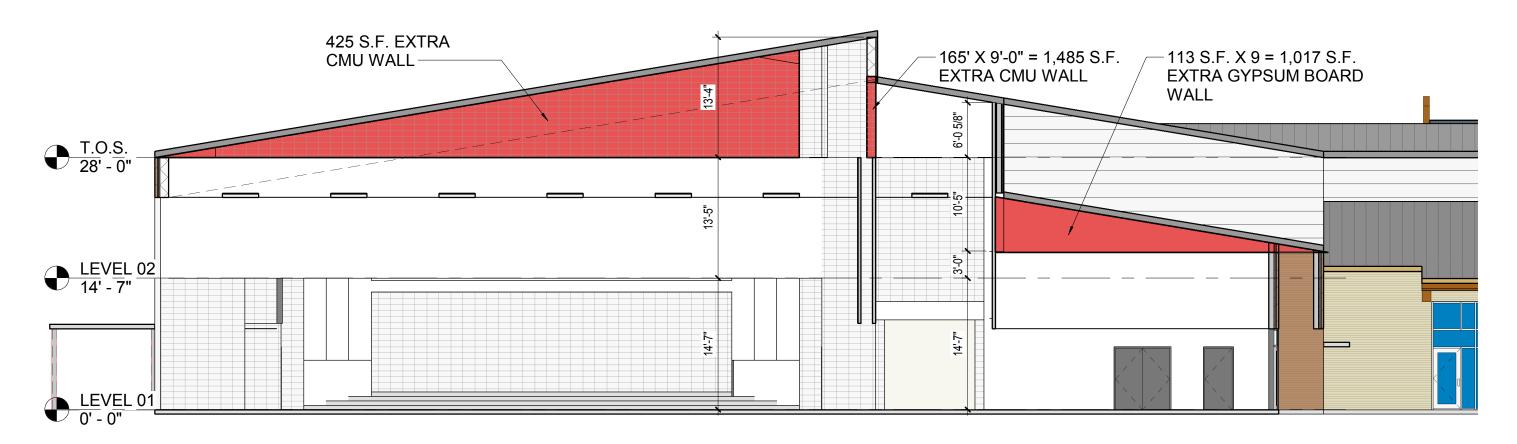


THE RED HATCHED AREA INDICATES THE EXTRA EXTERIOR WALL



TYPICAL CLASSROOM WING SECTION

THE RED HATCHED AREA INDICATES THE EXTRA INTERIOR WALL



CROSS SECTION AT GYM AND DINING AREA

THE RED HATCHED AREA INDICATES THE EXTRA INTERIOR WALL