



SUNY Cortland

LOCATION
Cortland, NY

COMPLETION
2014

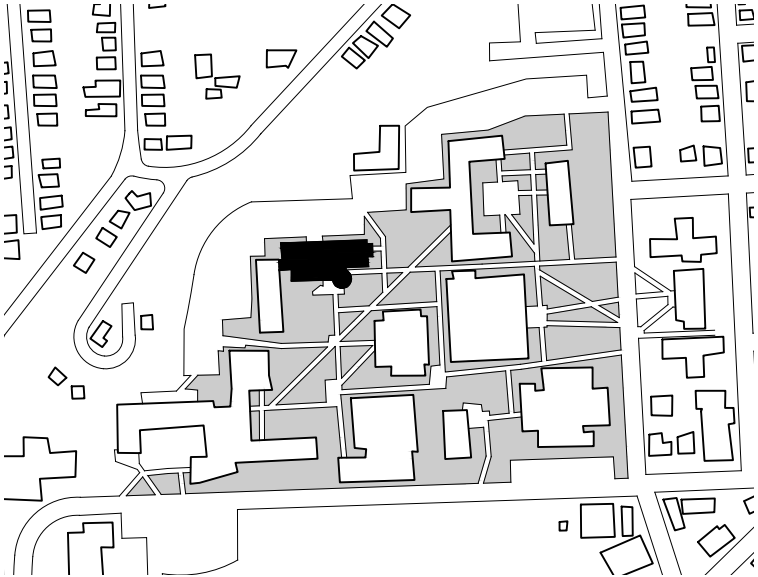
AREA
75,000 GSF Renovation
25,000 GSF New

COST
32.3 Million

OWNER/DEVELOPER
State University of New York

DESIGN TEAM
ZGF Architects
Leslie E Robertson Associates
BR+A Consulting Engineers
Clark Engineering
Starr Whitehouse Landscape Architects
Shen Milsom & Wilke
Domingo Gonzalez Associates
SST Planners

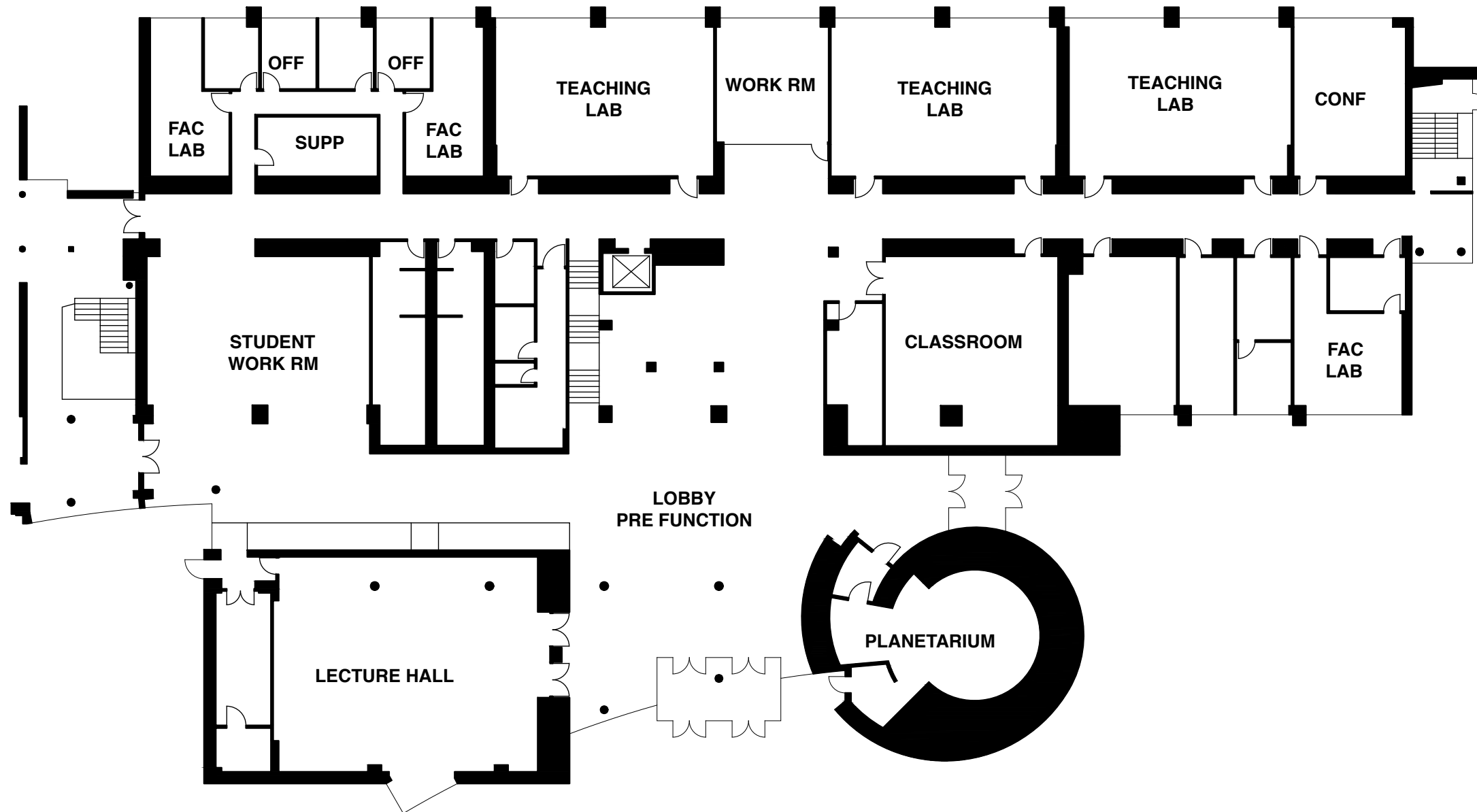
CONSTRUCTION MANAGER
Barr & Barr Builders



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PROGRAM

Teaching Labs
Faculty Research Labs
Faculty Offices.
Classrooms
130 Seat Lecture Hall
55 Seat Planetarium
Pre-function Entrance Lobby
Student Work Rooms
Lab Support Space





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PROJECT DESCRIPTION

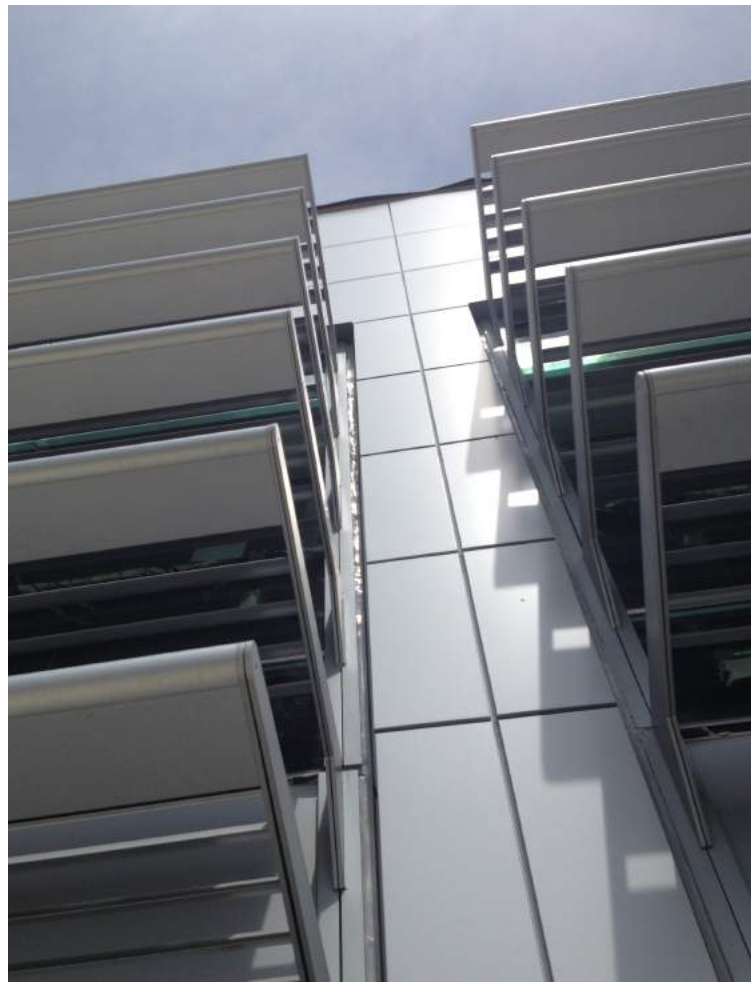
Bowers Science Building at SUNY Cortland is part of a phased rehabilitation and addition to an existing facility. The original four story, 75,600sf Bowers Science building was built in 1960. In 1965 the campus built an addition, almost doubling the floor area to 142,000sf as an attached wing to the east. ZGF was awarded a full design services contract to renovate and expand the original 1960 building.

After a program verification phase that included the entire Bowers Science complex, the design team settled on a scheme that added a three story, 20,300sf addition for program spaces and an additional 5,250sf basement level mechanical equipment room. The original 1960 building was demolished, leaving only the foundations, concrete and steel superstructure and portions of the brick veneer exterior wall assembly.

All interior partitions, finishes and MEP systems were demolished and hazardous materials and asbestos containing materials were remediated and abated. The new addition includes teaching labs, instructional space, a 55 seat digital projection dome planetarium, entrance lobby/pre-function, student work rooms, a multilevel connection between the two original buildings, stair tower, 130 seat lecture hall and future shell space for natural science exhibitions.



EAST/WEST SECTION



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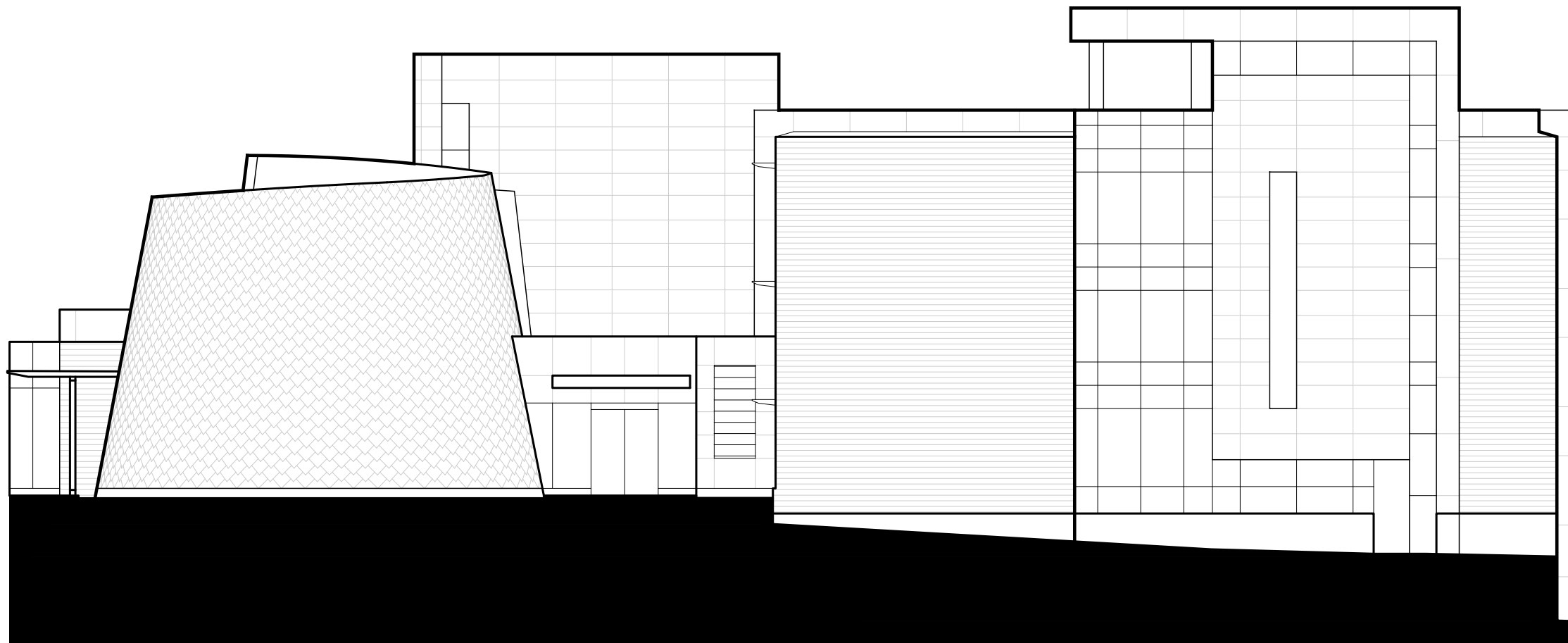
INVOLVEMENT

SD, DD, CA

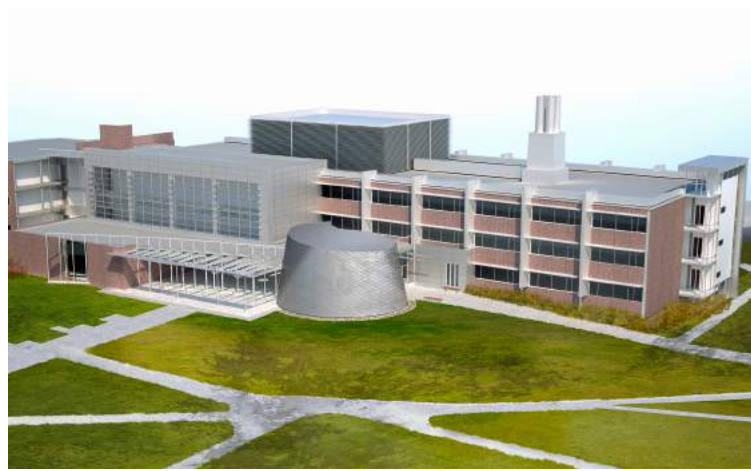
Project Architect (30 months)

- Produced and Completed Documents
- Monitored extent of Program Areas and Document Progress
- Developed Systems & Construction Details
- Organized and Document Material Selections
- Prepared Drawing Lists and Cartoon Sets
- Incorporated Zoning & Code Requirements
- Reviewed Specifications and Unit Costs
- Ensured Use of Office Standards
- Coordination of primary and secondary consultant work
- Monitored Consultant coordination with architectural requirements
- Prepared memoranda and minutes of meetings related document development

- Contract Administration OAC Representation
- Document Control
- Review of Submittals
- Coordination of A/E Additional Services
- Production of ASI/Sketch and Specification revisions
- RFI Responses
- Field Reports
- Non-conforming work memoranda
- Monthly Contractor payment requisition and COR review
- Punch listing and substantial completion notifications



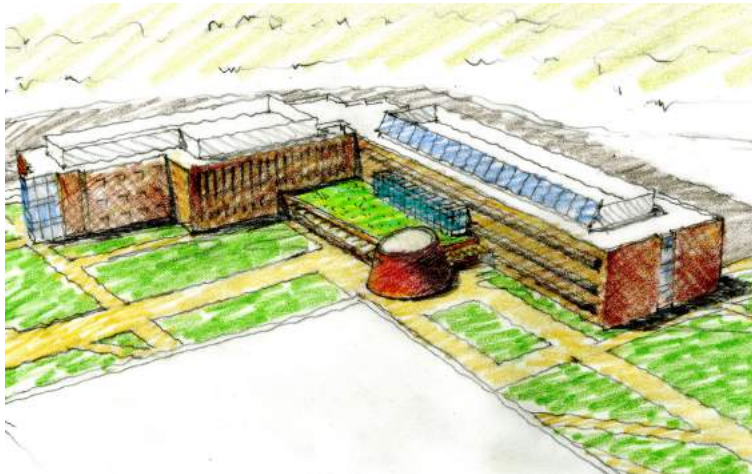
EAST ELEVATION



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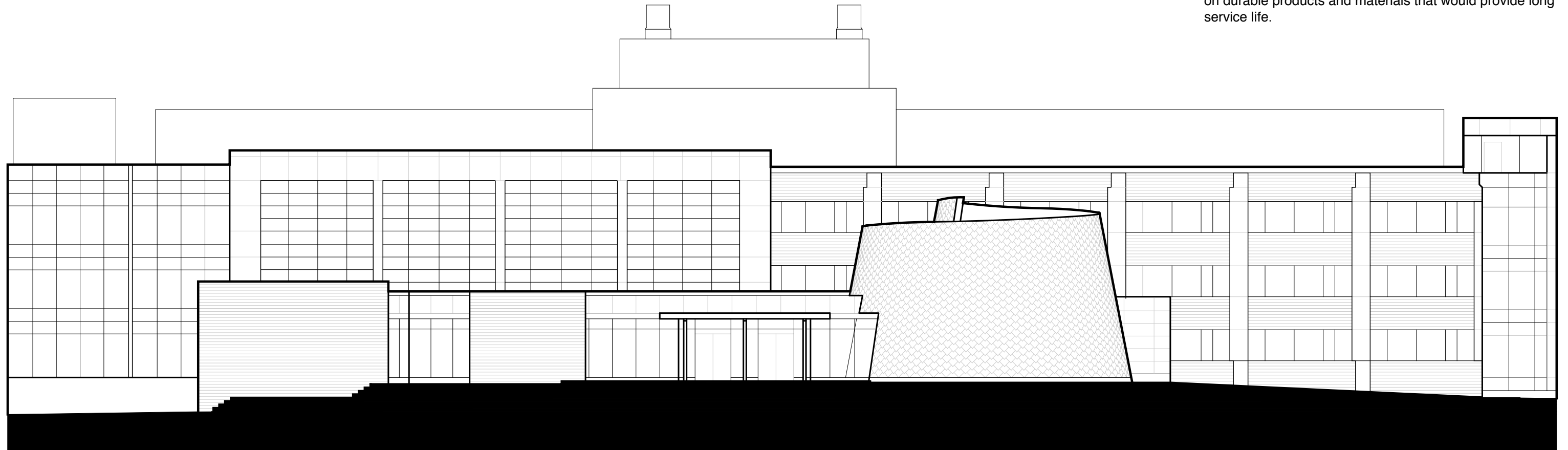
BUILDING FORM

The existing science building is located at the perimeter of the campus and aligns with both a north/south and east/west pedestrian axis through a south facing quadrangle. It was important to the campus master planning to continue this relationship while creating a new focus and identity for the sciences related departments. The additions to the existing building would happen to the south side to make best use of the exposure to the rest of the campus and to further enhance the site circulation and organization.

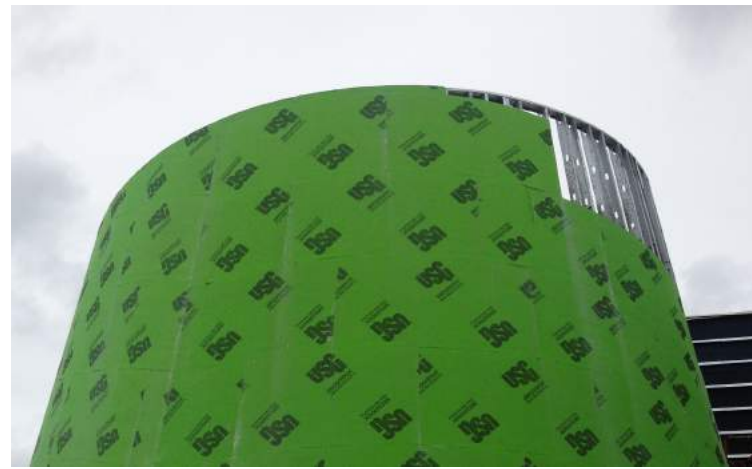


The massing of the addition can be seen as four distinct volumetric blocks; an extension of the teaching lab bar, the nautilus form enclosing the planetarium, the lecture hall box and the glass and aluminum stair towers to east and west. Views through and along the campus pedestrian walkways are framed within the new building circulation at the lobby and stairways. Entrances to Bowers are aligned with these pedestrian routes. The solar aspect allows for daylighting in what would normally be a deep and low entrance lobby.

The existing building floors at 11 feet required aligning new work to this datum. Low floors also presented structural and MEP challenges in a building type that usually sees floors at 15 feet or higher. New work incorporated a concrete structural frame and heating and cooling was achieved with induction units (chilled beams) to mitigate the floor height limitations. The campus requirements for sustainability goals were achieved with LEED prescriptive measures and a focus on durable products and materials that would provide long service life.



SOUTH ELEVATION



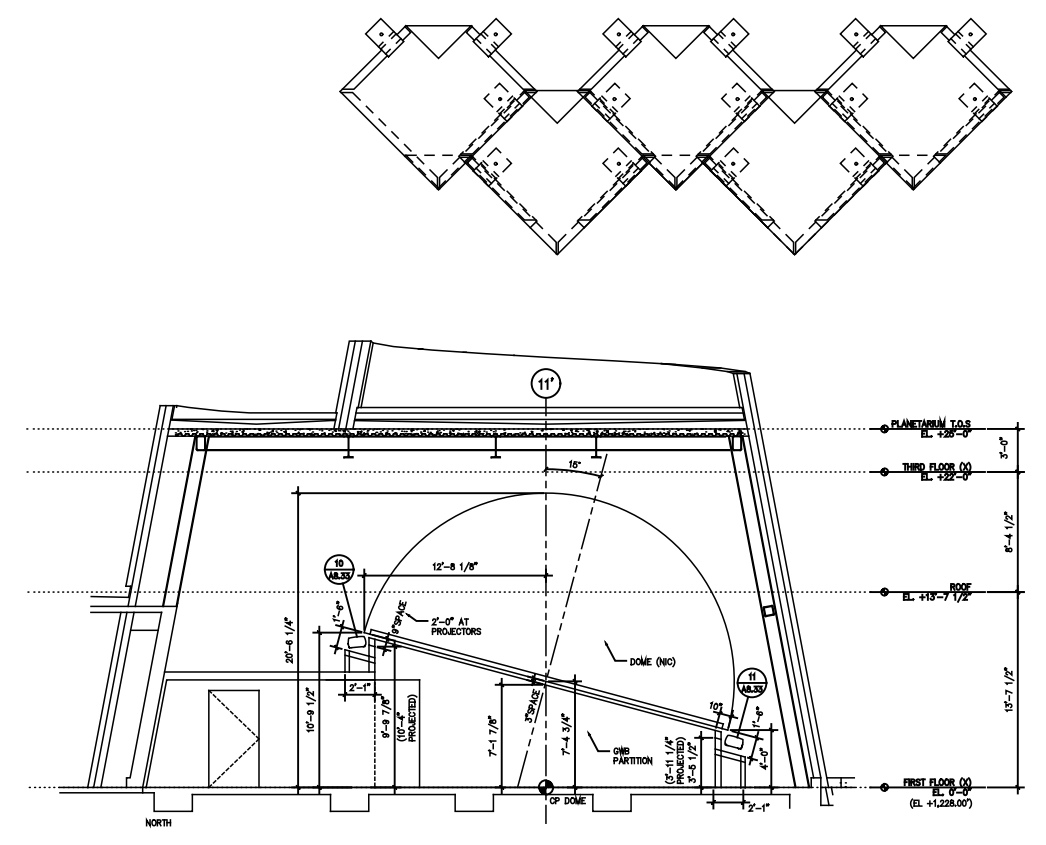
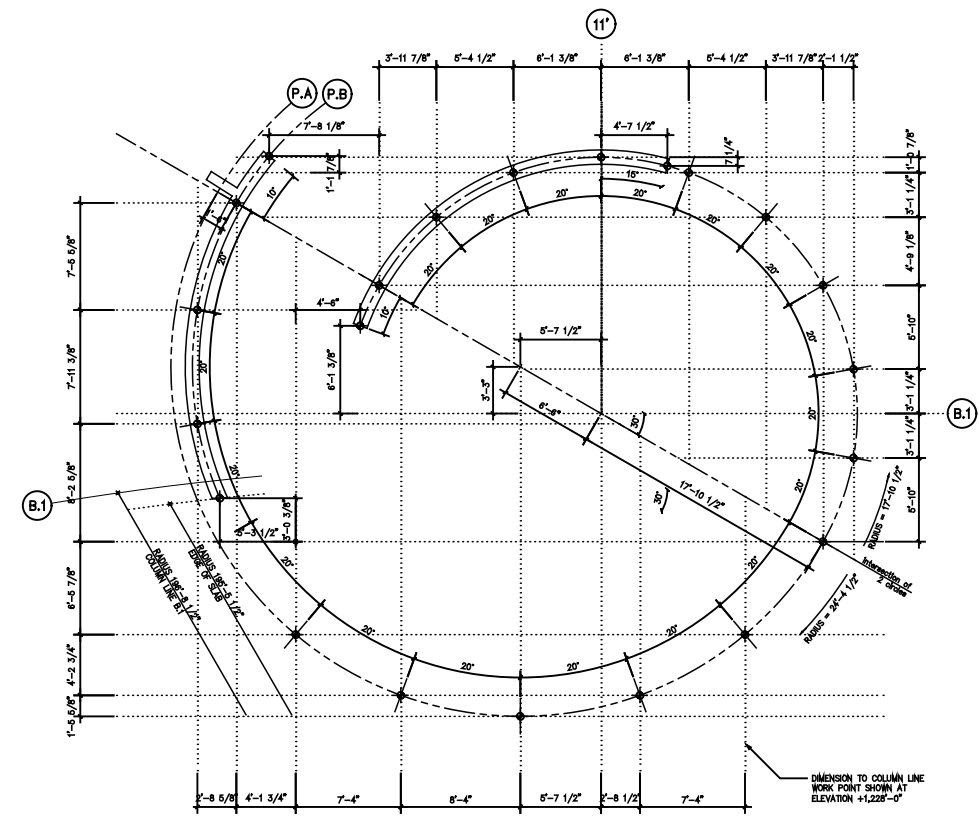
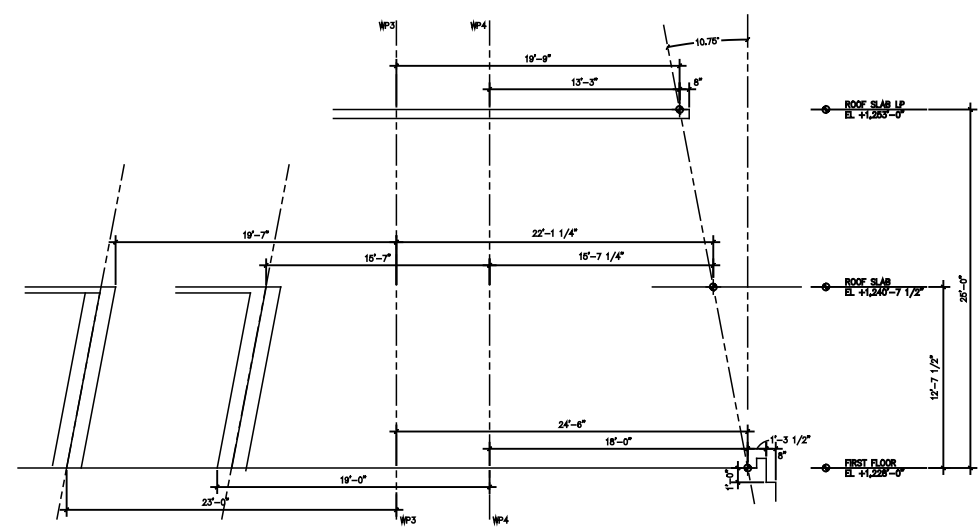
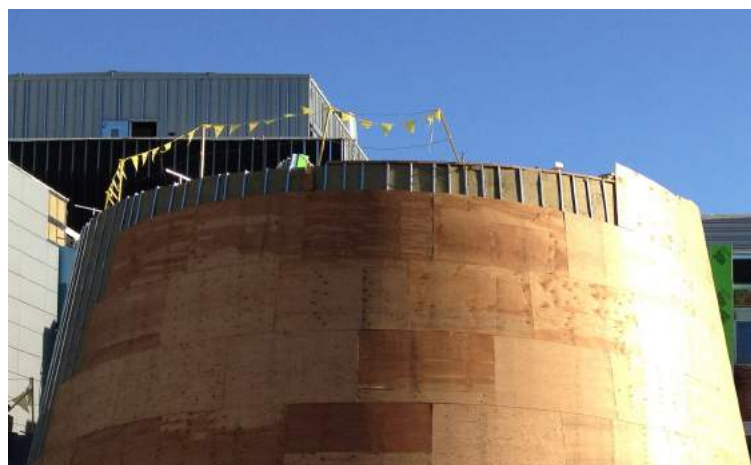
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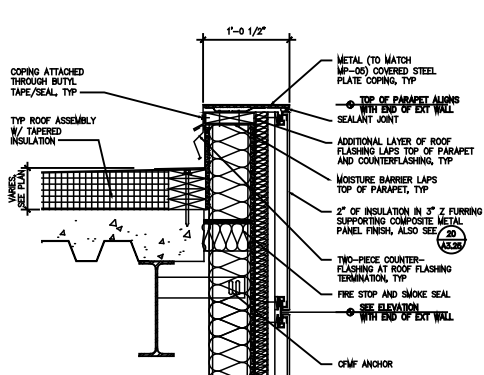
EXTERIOR WALL

The planetarium is a structural steel frame with concrete and metal deck roof. The exterior wall assembly supports zinc diamond shaped cladding applied in a fish-scale pattern.

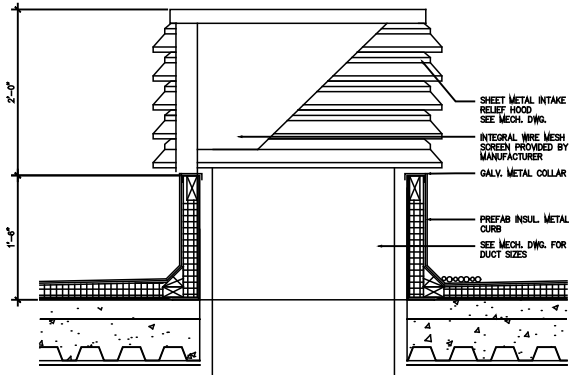
Zinc Tile Exterior Wall Assembly

- 1/2" GWB Sheathing
- 6" CFMF with Mineral-Wool Blanket Insulation
- 1/2" EXT GWB Sheathing
- 4" 'Z' Framing with Semirigid MW Insulation
- (2) 3/8" FR Plywood
- Self Adhering High Temp Air/Moisture Barrier
- Pre-weathered Zinc Tile Mechanically Fastened

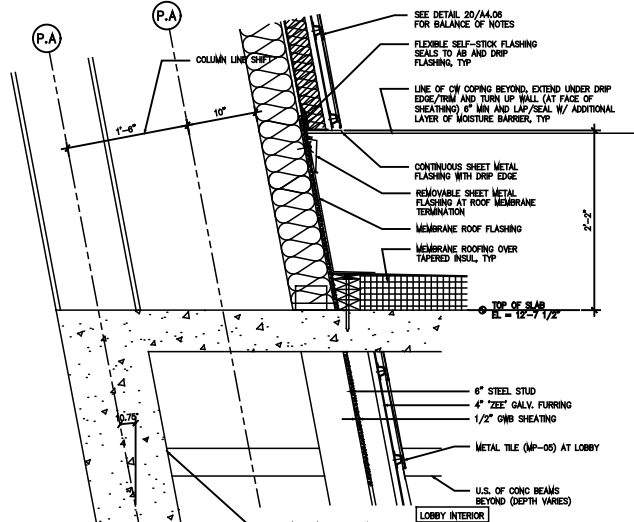




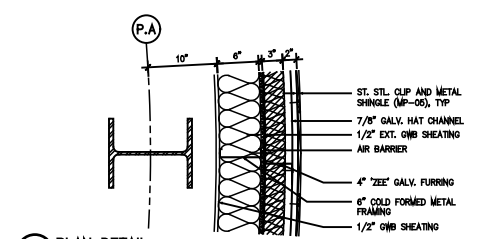
43 SECTION - PLANETARIUM PARAPET
SCALE 1-1/2" = 1'-0"



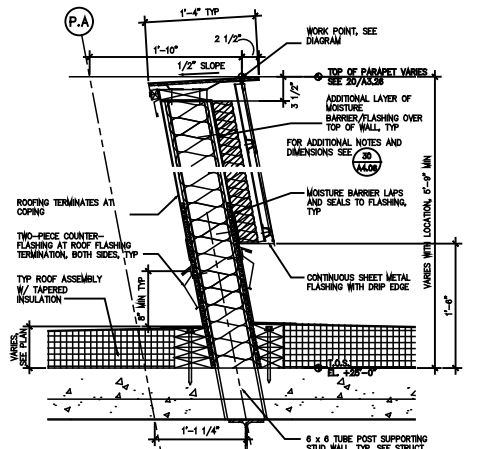
42 DETAIL - DUCT - INTAKE OR RELIEF DUCT - ROOF
SCALE 1-1/2" = 1'-0"



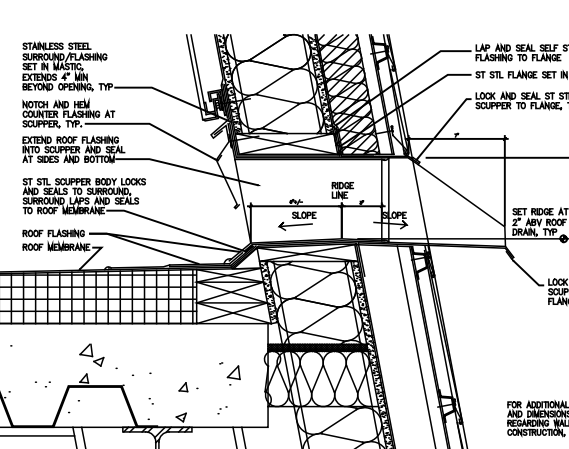
41 SECTION DETAIL
SCALE 1-1/2" = 1'-0"



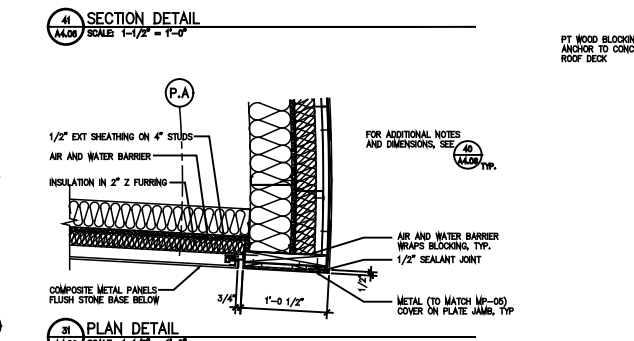
40 PLAN DETAIL
SCALE 1-1/2" = 1'-0"



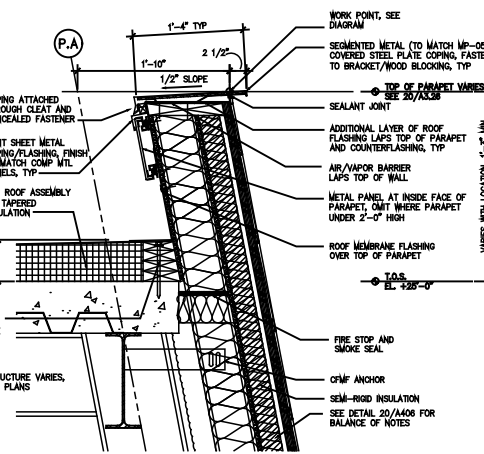
44 SECTION - PLANETARIUM PARAPET
SCALE 1-1/2" = 1'-0"



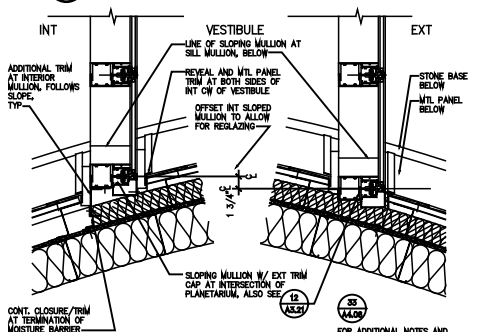
33 SECTION - ROOF OVERFLOW SCUPPER AT PLANETARIUM WALL
SCALE 3" = 1'-0"



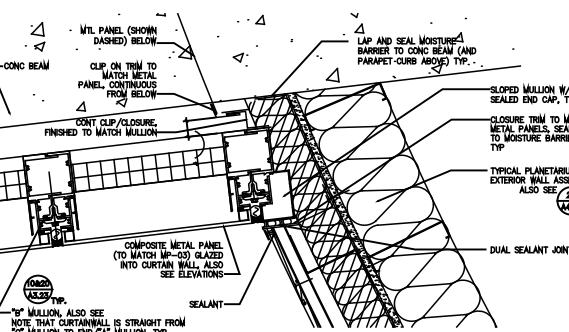
31 PLAN DETAIL
SCALE 1-1/2" = 1'-0"



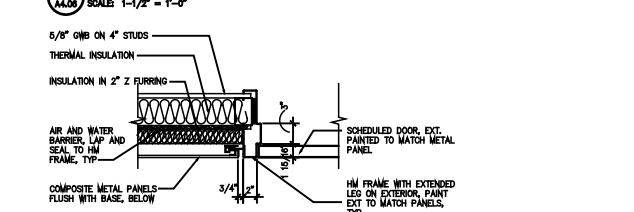
30 SECTION - PLANETARIUM PARAPET
SCALE 1-1/2" = 1'-0"



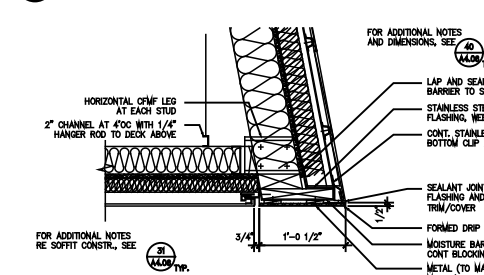
23 PLAN - EAST VESTIBULE CW AT PLANETARIUM
SCALE 1-1/2" = 1'-0"



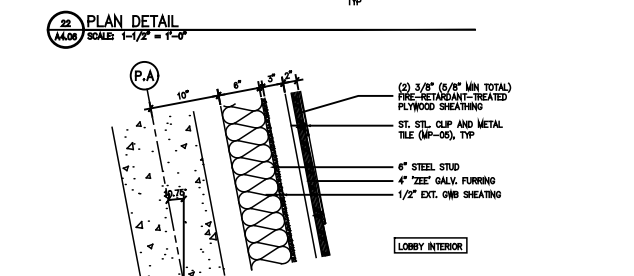
32 PLAN DETAIL - CURTAINWALL AND PLANETARIUM (SOUTH SPANDEL)
SCALE 3" = 1'-0"



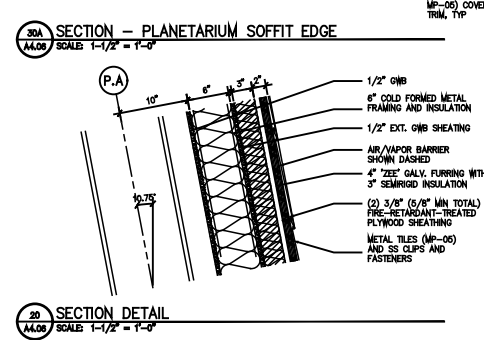
22 SECTION DETAIL
SCALE 1-1/2" = 1'-0"



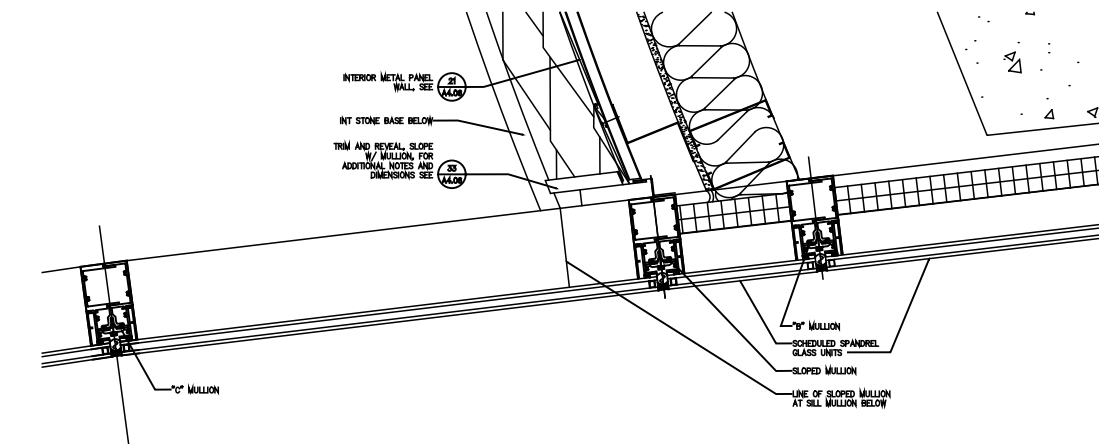
30A SECTION - PLANETARIUM SOFFIT EDGE
SCALE 1-1/2" = 1'-0"



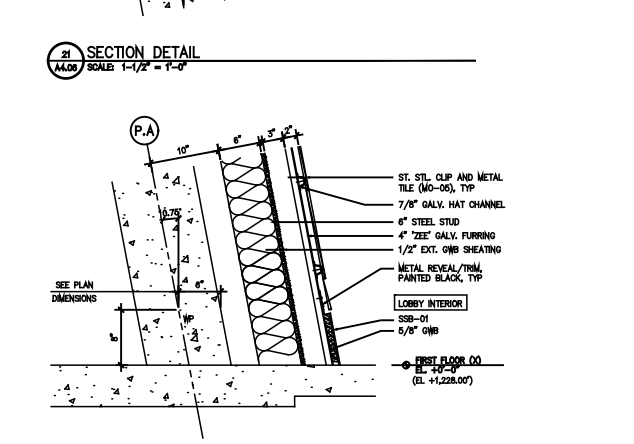
21 SECTION DETAIL
SCALE 1-1/2" = 1'-0"



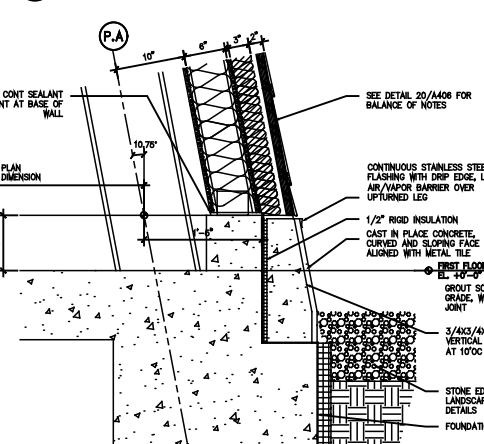
20 SECTION DETAIL
SCALE 1-1/2" = 1'-0"



12 PLAN DETAIL - CURTAINWALL AND PLANETARIUM (LOWER)
SCALE 3" = 1'-0"



11 SECTION DETAIL
SCALE 1-1/2" = 1'-0"



10 SECTION DETAIL
SCALE 1-1/2" = 1'-0"

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TEACHING LABS



SUNY Cortland

WEST STAIR

