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1. LOCATION AND CONTEXT
2. ROCKEFELLER WING SLOPED GLAZING REPLACEMENT DESIGN
SCOPE OF WORK SUMMARY

DESIGN PACKAGE 1 (SBB MECHANICAL ROOM UPGRADES):
- No change to use, occupancy, or floor area
- Additional info.
- Provide (7) 48" x 2" openings in existing GWB partitions between 19th century paintings and SBB mechanical room.
- See mech dr.
- Waterproofing of existing concrete beam at base of sloped glazing and tie in to existing installation of anchor points in existing steel plate gutters.
- Flashing opening in west wall and roof penetration with flashed curb at roof r.
- Installation of access hatch at roof r.
- Installation of roof r.
- Installation of aluminum.
- Demolition of roof r.
- Demolition of existing fin tube radiators, associated piping, and aluminum enclosures at interior.
- Demolition of existing aluminum.
- Miscellaneous electrical and fire alarm work as required to support mechanical work.
- Waterproofing of existing floor.
- Modification of existing floor drains.
- Demo and replacement of mechanical units and associated piping and ductwork.
- Service building 8 air handling unit replacement (design package 1)

DESIGN PACKAGE 2 (SLOPED GLAZING REPLACEMENT):
- All down to structural deck
- Glazed sloped glazing system, and associated insulated aluminum flashing and copings
- Special exhibitions gallery
- Drawing and prints
- 6 to accommodate mechanical ductwork.
- Location of design package 1 and 2 in
- Note: see aerial photo on
- SBB freight elevator extension
- Scope of work overview
- Keyplan
- Drawings and sections
- Not for construction, regulatory disclosure. Unauthorized use or distribution is prohibited.
- Arts of Africa, Oceania, and the Americas - interior fit out work by others (design package 3)
MET MUSEUM EXISTING SOUTH ELEVATION
1970 MASTER PLAN: ARCHITECTURAL MODEL OF ROCKEFELLER WING SHOWING INTENT FOR MORE OPAQUE GLAZING AT UPPER PORTION FOR SOLAR PROTECTION AT SOUTHERN EXPOSURE (ROCHE DINKELOO)

PHOTO OF ORIGINAL CONDITION, 1980’S

ROCKEFELLER WING SLOPED GLAZING - PRESENTATION TO LPC

ROCKEFELLER WING SOUTH ELEVATION DRAWING (1975) SHOWING LOWER GLASS (FOR VISION) AND UPPER GLASS (MORE TRANSLUCENT TO CUT SOLAR HEAT GAIN AND LIGHT LEVELS).
ROCKEFELLER WING AAOA (ARTS OF AFRICA, OCEANIA, AND THE AMERICAS) GALLERIES
ORIGINAL CONDITION 1982 - SOUTH EXPOSURE

ROCKEFELLER WING AAOA GALLERIES EXISTING CONDITIONS
AFTER 2005 MODIFICATIONS
Existing condition: exterior with deteriorating tinted plastic film on glass

Exterior detail: deteriorating plastic film and corroding curtain wall framing

Interior detail of with deteriorating plastic film

Interior: deteriorated film visible through mesh roller shades.
Existing Condition View from South of Rockefeller Sloped Glazing

Sloped glazing is 200 feet long, 60 feet high and at a 70 degree slope with a surface area of approximately 12,000 square feet.
PROPOSED SLOPED GLAZING SYSTEM IMPROVEMENTS:

• State of the art sloped glazing assembly, which has been custom designed to meet the needs of the Met Museum’s collection and environment.

• Greater resistance to condensation, which is critical for humidified museum conditions. The current system is not sufficient and condensation is an on-going issue for the curators.

• Four-sided structurally glazed cassettes which eliminate thermal bridges between interior and exterior improving energy efficiency.

• Improved glass with solar and thermal control layers including low-E and solar control coatings, triple glazing, and argon fill.

• Natural daylight and visual connection to Central Park from within the AAOA collections to complement the contemporary exhibition design being developed in parallel to this project by wHY architects. The existing glazing system is not able to mitigate the daylighting coming in to the south-facing glass, and as a result the shades are always deployed.

• Provides the quality and quantity of daylight desired by curators for visitor experience and optimal appreciation of the art. The existing glazing system does not meet the conservators requirements for daylighting.

• Provides bird safe glass with visual frit pattern to avoid bird collisions.

• Also address other problematic areas of the exterior envelope: gutters, flashing, and connection to adjacent masonry walls.

• The mechanical system adjacent to the sloped glazing will also be updated in order to provide additional protection against condensation.
ROCKEFELLER WING SOUTH ELEVATION: SELECTIVE REMOVALS INDICATED IN RED

SECTION AT SLOPED GLAZING: SELECTIVE REMOVALS INDICATED IN RED

EXISTING SKYLIGHTS TO REMAIN

REMOVE EXISTING SLOPED GLAZING AND FRAMING

EXISTING ADJACENT MASONRY CLAD CONSTRUCTION TO REMAIN

ROCKEFELLER WING SLOPED GLAZING - PRESENTATION TO LPC

AAOA GALLERIES

REMOVE EXISTING SLOPED GLAZING

19TH CENTURY PAINTINGS

EXISTING SKYLIGHTS TO REMAIN

EXISTING SKYLIGHTS TO REMAIN

EXISTING SKYLIGHTS TO REMAIN

EXISTING SKYLIGHTS TO REMAIN

EXISTING SKYLIGHTS TO REMAIN

SECTION AT SLOPED GLAZING: SELECTIVE REMOVALS INDICATED IN RED

ROCKEFELLER WING SLOPED GLAZING - PRESENTATION TO LPC

AAOA GALLERIES

REMOVE EXISTING SLOPED GLAZING

19TH CENTURY PAINTINGS

EXISTING SKYLIGHTS TO REMAIN

EXISTING SKYLIGHTS TO REMAIN

EXISTING SKYLIGHTS TO REMAIN

EXISTING SKYLIGHTS TO REMAIN

EXISTING SKYLIGHTS TO REMAIN

SECTION AT SLOPED GLAZING: SELECTIVE REMOVALS INDICATED IN RED

ROCKEFELLER WING SLOPED GLAZING - PRESENTATION TO LPC
Rockefeller Wing Proposed Elevation

16 ROCKEFELLER WING SLOPED GLAZING  • PRESENTATION TO LPC
PROPOSED DAYLIGHTING DESIGN

SECTION DIAGRAM OF SOUTH GALLERY LOOKING WEST

NOTE: VLT (Visible Light Transmittance) is subject to refinement as the glass build-up is finalized.
INTERIOR ELEVATION OF SOUTH GALLERY LOOKING SOUTH

GLASS ASSEMBLY SOLAR CONTROL LAYERS

INNER LAMINATED LITE
ROW 1: VISION GLASS WITH CLEAR INTERLAYER
ROWS 2-8: GLASS WITH TRANSLUCENT INTER-LAYER

NEUTRAL BODY TINT
LIGHT REDUCTION

LOW-E COATING
THERMAL PERFORMANCE AND LIGHT REDUCTION

GRAY FRIT AT EXTERIOR FOR BIRD SAFETY AND LIGHT REDUCTION WITH VARYING PERCENTAGE COVERAGE

EXTERIOR

ROW 2 AND UP
TRANSLUCENT GLASS WITH GLOW COMING IN AND SENSE OF SKY (BRIGHT OR CLOUDY)

ROW 1
FULL VIEW OUT

DIAGRAM OF TRIPLE-PANE GLAZING UNIT
EXISTING CONDITION VIEW FROM FIRST FLOOR INTERIOR OF AAOA GALLERIES

PROPOSED VIEW FROM FIRST FLOOR INTERIOR OF AAOA GALLERIES

ROW 2 AND UP
TRANSLUCENT GLASS
WITH GLOW COMING IN AND SENSE OF SKY (BRIGHT OR CLOUDY)

ROW 1
FULL VIEW OUT
ROCKEFELLER WING SLOPED GLAZING - 100% DD REDESIGN REPORT

** SECTION VIEW SHOWING ROLLER SHADE **

- **SLOPED GLAZING SYSTEM**
- **DOTTED LINE INDICATES POTENTIAL OFF-HOURS EXTENSION**
- **ROLLER DRUM AND MOTOR INTEGRATED INTO BASE ENCLOSURE**
- **ALUMINUM BASE ENCLOSURE**

**INTERIOR ROLLER SHADES**

**PROPOSED VIEW FROM FIRST FLOOR INTERIOR OF AAOA GALLERIES - WITH SHADE DEPLOYED**
ROCKEFELLER WING SLOPED GLAZING - PRESENTATION TO LPC

ROW 2 AND UP
TRANSLUCENT GLASS
GLOW COMING IN
WITH SENSE OF SKY
(BRIGHT OR CLOUDY)

ROW 1
WITH ROLLER SHADE
GLOW COMING IN
TO MATCH SENSE OF
ROWS ABOVE

ROLLER SHADES DEPLOYED UP TO THE SECOND ROW OF GLASS ACROSS ALL BAYS WHEN MUSEUM IS CLOSED - REDUCES CUMULATIVE LIGHT EXPOSURE

ROLLER SHADES DEPLOYED UP TO THE FIRST ROW OF GLASS AT OCEANIA WHEN THE DAYLIGHT QUANTITY IS HIGH. ARTWORK IN AMERICAS ARE MORE DURABLE, AND DO NOT REQUIRE THE SHADE TO BE DEPLOYED WHEN THE MUSEUM IS OPEN

AAOA GALLERY PLAN SHOWING AREAS WHERE SHADES ARE NEEDED

INTERIOR ROLLER SHADES
AAOA GALLERIES EXISTING CONDITIONS

ARCHITECTURAL CONCEPT INTENT RENDERING AT SOUTH GALLERY, VIEW EAST
COMPARATIVE GLAZING DETAILS: EXISTING AND PROPOSED

EXISTING DETAILS: HORIZONTAL MULLION AND VERTICAL MULLION
CONVENTIONAL INSULATED GLASS UNITS WITH PRESSURE CAPS

PROPOSED DETAILS: HORIZONTAL MULLION AND VERTICAL MULLION
TRIPLE GLAZING, LAMINATED GLASS, AND STRUCTURAL SILICON GLASS ATTACHMENT FOR
IMPROVED THERMAL AND SOLAR PERFORMANCE, WEATHER TIGHTNESS, AND LONGEVITY

COMPARATIVE GLAZING DETAILS: EXISTING AND PROPOSED
LOW-E COATING - THERMAL PERFORMANCE AND LIGHT REDUCTION (SURFACE #4 OF OUTER LAMINATE)

GRAY FRIT AT EXTERIOR - BIRD SAFETY AND LIGHT REDUCTION WITH VARYING PERCENTAGE COVERAGE

NEUTRAL BODY TINT - LIGHT REDUCTION

TRANSLUCENT INTERLAYER - SUN PROTECTION AND LIGHT REDUCTION

TRANSLUCENT GLASS PANEL ASSEMBLY
GLASS SAMPLE
VIEW OF EXTERIOR FACE: ROW 1

NOTE: FRITS ARE REQUIRED AS PART OF NYC BUILDING CODE NEW REQUIREMENTS FOR BIRD FRIENDLY GLASS MATERIALS, EFFECTIVE IN 2021

GLASS SAMPLE
VIEW OF EXTERIOR FACE: ROW 4
PRECEDENT: EXAMPLE OF FRITTED BIRD FRIENDLY GLASS AND ITS VISIBILITY FROM A DISTANCE: RENOVATION OF JACOB JAVITS CONVENTION CENTER
ROCKEFELLER WING PROPOSED SLOPED GLAZING REPLACEMENT - RENDERING
ROCKEFELLER WING - EXISTING CONDITION PHOTOS
CONTEXT PHOTOS IN CENTRAL PARK
CONTEXT PHOTO: VIEW OF ROCKEFELLER WING SLOPED GLAZING FROM FIFTH AVENUE
CONTEXT PHOTOS AT SOUTHWEST CORNER OF MUSEUM - VISIBILITY OF ROCKEFELLER WING WITH LILA ACHESON WALLACE WING AND PETRIE COURT
EXISTING CONDITION PHOTO: VIEW OF MET SOUTHWEST WING AND ROCKEFELLER WING
PROPOSED RENDERING: VIEW OF MET SOUTHWEST WING AND ROCKEFELLER WING
METROPOLITAN MUSEUM PRECEDENT:
WINGS A, B AND C SKYLIGHT REPLACEMENT OVER EUROPEAN PAINTINGS GALLERIES AS APPROVED BY LPC AT STAFF LEVEL IN 2017. THE NEW GLAZING SYSTEM IS SIMILAR TO THAT PROPOSED FOR THE ROCKEFELLER WING.
KEVIN ROCHE JOHN DINKELOO ASSOCIATES:
MODEL AND SECTION OF THE ROCKEFELLER WING, 1970 MASTER PLAN

THE 1970 MODELS SHOW SHEER PLANES OF GLASS WITHOUT THE MULLION
GRIDS THAT WERE INCORPORATED INTO THE BUILT PROJECTS USING THE
GLASS TECHNOLOGY AVAILABLE IN THE 1970’S AND EARLY 1980’S.
APPENDIX 3A: DESIGN OF POTENTIAL FUTURE TEMPLE OF DENDUR SLOPED GLAZING REPLACEMENT
ROCKEFELLER WING FACES SOUTH

ORIENTATION PLAN

TEMPLE OF DENDUR WING FACES NORTH

1978 TEMPLE OF DENDUR

1982 ROCKEFELLER WING

ROCKEFELLER WING FACES SOUTH

TEMPLE OF DENDUR WING FACES NORTH
TEMPLE OF DENDUR WING EXTERIOR AND INTERIOR PHOTOS - EXISTING CONDITIONS
APPENDIX 3B: ROCKEFELLER AND TEMPLE OF DENDUR SKYLIGHTS: DESIGN OF POTENTIAL FUTURE SKYLIGHT ROOF REPLACEMENT
TEMPLE OF DENDUR WING SKYLIGHTS EXISTING CONDITIONS
Renovate existing skylights

Sun conditions sampled on June 21, 2013 (Summer Solstice) at 12:00 p.m.

ROCKEFELLER AND TEMPLE OF DENDUR EXISTING SKYLIGHTS SECTION

EXISTING SKYLIGHT DETAIL

POTENTIAL FUTURE SKYLIGHT DETAIL

POTENTIAL FUTURE GUTTER DETAIL
APPENDIX 3C: PRECEDENT:
WINGS ABC SKYLIGHT REPLACEMENT LPC STAFF LEVEL APPROVAL (2017-2022)
AERIAL VIEW OF WINGS ABC: SKYLIGHT REPLACEMENT OVER EUROPEAN PAINTINGS GALLERIES AS APPROVED BY LANDMARKS COMMISSION
1. CUTAWAY VIEW OF WEST FACADE, EXISTING CONDITION

2. CUTAWAY VIEW OF WEST FACADE, APPROVED SKYLIGHT REPLACEMENT
Note pointing to skylight detail:
"Note - This section is intended as a standard of quality - contractors shall use this type or another equally good to be approved by the architects."
**COMPARATIVE SKYLIGHT SYSTEMS: HISTORIC AND APPROVED REPLACEMENT**

**1907 - 1939**
Flat wire glass skylights

**1939-PRESENT**
Corrugated wire glass skylights

**APPROVED REPLACEMENT:**
Laminated insulated glass units with thermally-broken aluminum framing with pressure equalization (interior drainage channels).
Structural silicon glazing with toggled cassette.