Annette Strauss Square

<u>Project: Replace Stage House Roof and Drainage</u> <u>Improvements:</u>

Roof Replacement and Drainage Improvements to include, but not limited to, the following items:

- Tear off the existing roof, insulation & metal trim, down to the metal deck.
- Install Steel Davits, welded to the bar joists for fall protection tie downs.
- Install Full Tapered Insulation across the roof to slope towards the 2 main drains.
- Install 60 Mil TPO, fully adhered to the ISO insulation.
- Install pipe flashings on pipes & new davits.
- Install 24 ga. Pre-finished Metal Edge trim around perimeter.
- Includes complete supervision
- Install new roof hatch & safety rail.
- Includes (2) year workmanship warranty & (20) year manufacturers' warranty
- Includes using fall cart, safety flags and all fall protection

Replace HVAC in Strauss Stage House tech vault:

HVAC replacement to include, but not limited to, the following items:

- Remove and Replace 2 @ 7-ton Aeon units with matching Liebert condensers
- Remove refrigerant from existing system and validate new refrigerant type for new unit
- Install HVAC controls for tie in to building automation system for alarms and energy management
- Remove and dispose of old original equipment that was undersized originally
- Test and balance new units
- Evaluate duct work and add new as required
- Evaluate current insulation in the attic

Replace HVAC for Strauss restroom block:

HVAC replacement to include, but not limited to, the following items:

- Remove and Replace 1 @ 3.5-ton Aeon units with matching condenser.
- Remove refrigerant from existing system and validate new refrigerant type for new unit.
- Install HVAC controls for tie in to building automation system for alarms and energy management
- Remove and dispose of old original equipment that was undersized originally.
- Test and balance new unit
- Evaluate duct work and add new as required
- Evaluate current insulation in the attic

AT&T Performing Arts Center Campus

Project: Update three (3) hydraulic passenger elevators in Lexus Red and Silver Garages 4 escalators in Lexus Red Garage:

QTY	Equipment	Notes
3	Passenger elevators	Hydraulic elevators Red Lexus Garage and Silver Lexus Garages.

Elevator upgrades to include, but not limited to, the following items:

- Hoist machine including brake, armature, fields, permanent magnets
- · Bearings, hoist motor sheave, and deflector sheaves
- Geared hoist machines include brakes, armature, fields, brushes,
- brush rigging, gear case, gears, all bearings hoist motor, and
- deflector sheaves
- Hoist and governor ropes
- Governor
- Governor pit sheave
- Controllers, selectors, starters, dispatchers and relay panels
- All bearings
- All rotating elements
- Contacts, relays and timers
- Resistors and transformers
- Solid-state devices
- In-car emergency lighting & battery
- Traveling cables
- Firefighter's service equipment
- Automatic power door operators
- Landing and car door hangers
- Landing and car door contacts
- Door protective devices
- Hoistway door Interlocks
- Bottom door guides
- Interlocks and door closures
- Car buffers
- Car exhaust fan
- Car top inspection station
- Limit and slowdown switches

- Door protective devices and alarm bells
- Car and corridor operating pushbuttons
- Load weighing equipment
- Hall lanterns
- Car position and hall position indicators
- Lobby control panels
- Car operating panels
- · All other signal and accessory facilities furnished and installed as a
- part of the whole equipment
- Car and counterweight roller guides
- Elevator management system

	QTY	Notes
Schindler Escalators	4	Lexus Red Garage

Escalator upgrades to include, but not limited to, the following items:

- Controller
- Gear box Check gear and associated parts
- · Drive motor Check bearings for wear
- Brake(s)
- Auxiliary brake(s)
- Intermediate gear box
- Main drive chain
- Step/pallet
- Step/pallet
- Conveyor belt
- Drive belt
- Combs plate
- Handrails
- Track system
- Safety devices
- Deflector devices
- Lighting:
 - 1. Comb
 - 2. Handrail
 - 3. Skirting
 - 4. Under step
- Display
- Signs/pictograms Check condition
- Balustrade

Margot and Bill Winspear Opera House

Project: Replacement of Fire Curtain:

Fire Curtin replacement to include, but not limited to, the following items:

- Inspect overall fire curtain system: Advise on necessary work beyond scope
- Investigate and mitigate all unnecessary rubbing of fire curtain and building walls
- Replace fire curtain fabric (some small holes currently)
- Replace Bottom Soffit fabric and padding of fire curtain
- Inspect all fire curtain emergency release mechanisms: Advise on necessary work beyond scope
- Verify all aspects of work completed, operate as required

EquipmentQTYNotesFire Curtain154' X 38'Emergency Release210' L& R of Proscenium

Project: Replace original Edwards Fire Alarm Panel:

Fire Panel replacement to include, but not limited to, the following items:

Replace the existing EST3 Fire Panel and (1) annunciator with an EST4 Fire Panel and new annunciator. A separate NAPCO Cellular Communicator will need to be added for communication per NPFA 72 when upgrading the fire panel. This will eliminate the existing (2) phone lines currently being used.

Project: Update five (5) traction passenger elevators, update one (1) hydraulic freight elevator and one (1) hydraulic service elevator to kitchen:

	QTY	Notes
Update 5 traction elevators	5	Winspear Opera House
Update one Hydraulic freight elevator	1	Winspear Opera House
Update on Hydraulic Service elevator to kitchen.	1	Winspear Opera House

Elevator upgrades to include, but not limited to, the following items:

Hydraulic pumps and associated accessible plumbing

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- Hydraulic cylinder that is above ground, plunger, packing and packing head
- Hydraulic fluid and piping, unless the piping is underground
- Seismic Valve and pit shut off valve
- Hydraulic oil line couplings
- All exposed hydraulic oil lines, brackets and stands
- Controllers, starters, selectors and relay panels
- Pump motors
- All bearings
- All rotating elements
- Contacts, relays and timers
- Resistors and transformers
- Solid-state devices
- In-car emergency lighting
- Firefighter's service equipment
- Automatic power door operators
- Landing and car door hangers
- Landing and car door contacts
- Door protective devices

<u>Project: Refurbish Air Handler Units (AHUs) and Variable</u> Frequency Drives (VFDs):

Refurbishing of AHUs and VFDs to include, but not limited to, the following items: Service repair and replace with new major parts for 22 AHUs and related pumping in the Wyly Facility to include:

- New motors as needed
- New actuators valves as needed
- New drive sheaves as needed
- New heating and Airconditioning coils as needed
- New VFDs as needed for each Air handler and related pumping
- Service Repair and replace Sheetmetal and drain and related insulation

<u>Project: Energy Management Control System – HVAC:</u>

Energy Management Control System – HVAC upgrades to include, but not limited to, the following items:

Replace the existing Energy Management system DESIGO in Winspear facility with a matching Honeywell system in our Wyly Theatre.

<u>Project: Replacement of Motors, Sheaves, Mechanical Components of Chandelier:</u>

Chandelier upgrades to include, but not limited to, the following items:

- Design upgrades/modernization plans for the Chandelier system
- Replace/ upgrade all Variable Speed Inverter Drives to VFD Drives as advised
- Replace/refurbish all hoist motors + Cable Spool Drums/spring loaded rollers as advised
- Replace/ upgrade all connectors, wiring/cables both in general infrastructure and electrical cabinets as advised
- Replace/upgrade all data/network and control cabling
- Replace/ upgrade all rod rigging and power cabling
- Service and refurbish or replace Rigging faceplates diverters
- Service/ refurbish or replace all safety E-stops within system
- Service/ refurbish or replace all Limit switches
- Re-rig all lighting rods + Re-align all pulleys
- Removal and disposal of any and all removed items and equipment
- Exclude All Control software + Control consoles from this project
- Verify all aspects of work completed, operate as required

Dee and Charles Wyly Theatre

Project: Modernize Four Elevators:

Elevator upgrades to include, but not limited to, the following items:

Modernize Three (3) traction passenger elevators and One (1) Freight Elevator to include, but limited to the following items:

- Hoist machine including brake, armature, fields, permanent magnets
- Bearings, hoist motor sheave, and deflector sheaves
- Geared hoist machines include brake, armature, fields, brushes,
- brush rigging, gear case, gears, all bearings hoist motor, and
- deflector sheaves
- Hoist and governor ropes
- Governor
- Governor pit sheave
- Controllers, selectors, starters, dispatchers, and relay panels
- All bearings
- All rotating elements
- · Contacts, relays and timers
- Resistors and transformers
- Solid-state devices
- In-car emergency lighting & battery
- Traveling cables
- Firefighter's service equipment
- Automatic power door operators
- Landing and car door hangers
- Landing and car door contacts
- Door protective devices
- Hoist-way door Interlocks
- Bottom door guides
- Interlocks and door closures
- Car buffers
- Car exhaust fan
- Car top inspection station
- Limit and slowdown switches
- Door protective devices and alarm bells
- Car and corridor operating pushbuttons
- Load weighing equipment
- Hall lanterns
- Car position and hall position indicators
- Lobby control panels

- Car operating panels
- All other signal and accessory facilities furnished and installed as a
- part of the whole equipment
- Car and counterweight roller guides
- Elevator management system.

<u>Project: Replace ADA East Glass Door and entry and replace pneumatic seals in West Pivot Door:</u>

ADA East Glass Door and entry installation and replacement of pneumatic seals in West Pivot Door seals to include, but not limited to, the following items:

- Automated door controls
- Remove and replace with same type tinted safety glass / door entry and header.
- Rebuild header frame with the same building materials.
- Replace panic bars for exiting
- Install new hydraulic closure Heavy Duty
- Install new bollards in front of door entry for crash protection

Project: Replace Wyly Theatre flat built-up asphalt roof:

Roof replacement to include, but not limited to, the following items:

- Remove and properly dispose of the existing modified bitumen roof system as to expose the existing sloped concrete deck
- Adhere two (2) layers of 2.2" polyisocyanurate insulation board to the new deck with low-rise foam adhesive per manufacturer's warranty requirements
- Adhere½" gypsum coverboard with low-rise foam adhesive per manufacturer's warranty requirements
- Torch apply a smooth surfaced modified bitumen membrane per manufacturer's warranty requirements
- Torch apply a white granule surfaced modified bitumen membrane per manufacturer's warranty requirements
- Install modified bitumen membrane flashings with per manufacturer's warranty requirements
- Fabricate and install new 24ga prefinished steel copings, scuppers, conductor heads and downspouts.
- Install protection mat, pedestals, and TPE paver system
- Furnish Two-Year Contractor's Warranty upon completion
- Furnish Twenty-Year No-Dollar-Limit Warranty from the manufacturer upon completion

Project: Trane Chiller Replacement:

Chiller replacement to include, but not limited to, the following items:

Replace existing McQuay 180-Ton Chiller with a Trane RTWD 180-Ton Chiller unit, Level 0 to match existing one replaced two years ago.

Equipment and material

- 180-Ton Trane Chiller Water Cooled
- 460 VAC/3ph R-513A
- Over/Under Voltage Protection BACnet MS/TP interface
- Infra-Red Flow Switches Grooved pipe connection
- Freight Included Factory Dis-Assembly Included
- New Spring Isolation Factory Warranty Included (5-year compressor, 1-year labor)
- Supply and Return Piping Fiberglass insulation
- Factory Startup Included

Scope of Work

- Isolate CHW valves and drain existing chiller
- Remove insulation from CHWR piping
- Remove piping to existing Butterfly valves
- Disconnect power from existing Chiller-2
- Secure existing Sensors & transmitters & protect for re-use. (Provided by Dyna Ten Controls Division)
- Position Equipment for removal of Chiller, disassemble chiller to transport out of the building
- Disassemble the new chiller and transport to the mechanical room, then reassemble each component
- Re-Connect Condenser and Chilled Water Piping
- Leak Test all welds
- Re-connect Electrical (Factory Disconnect and Single Point connection)
- Insulate new lines with 1-1/2" Fiberglass
- Perform Pre-Startup Routine, Assist with Factory Startup and owner Training
- Log and Report

Project: Replace two (2) HVAC Boilers located at Wyly Theatre 10th floor:

Equipment	QTY	Notes
Replace boilers 10 th floor Wyly Theatre	2	Models 99C-2342C

HVAC Boiler replacement to include, but not limited to, the following items: Product Submittal for Hi Delta®- Type H Heating Boiler

Models 992C-2342C

- 100% Factory fire-tested
- Thermal efficiency: 84%
- Versa IC[®] Controller with LCD display
- Maximum setpoint: 220°F (104°C)
- Maximum outlet temperature: 240°F (116°C)
- Minimum non-condensing inlet temperature: 105°F (41°C)
- Thermal shock proof heat exchanger
- Limited 20-year thermal shock warranty
- Limited 10-year heat exchanger warranty (closed-loop)
- Full safety diagnostics with fault history
- POLYTUF powder-coated cabinet
- No combustible floor shield required
- Fan-assisted
- Patented burner security blanket
- Cascade up to 8 heaters no external sequencer needed
- Cascade in parallel or sequential modulation modes
- SCAQMD Rule 1146.2 certified, Low NOx < 20 ppm (992C-2002C)

<u>Project: Refurbish Air Handler Units (AHUs) and Variable Frequency Drives (VFDs)</u>

Refurbishing of AHUs and VFDs to include, but not limited to, the following items:

- Service repair and replace with new major parts for 20 AHUs in the Wyly Facility to include
- New motors as needed
- New actuators valves as needed
- New drive sheaves as needed
- New heating and Airconditioning coils as needed
- New VFD's as needed for each Air handler and related pumping
- Service Repair and replace Sheetmetal and drain and related insulation

Project: Wyly Theatre Full Lighting Infrastructure

Lighting Infrastructure to include, but not limited to, the following items:

- Inspect overall Lighting Infrastructure-(Critical Building wide) Advise on necessary work beyond scope
- · Includes all office lighting
- Includes all house lighting
- Includes all interior / exterior Safety and Emergency lighting
- Includes all stairwell and hallway lighting in all circulation spaces
- Includes all lighting energy management systems and infrastructure
- Includes Interior/Exterior & Emergency Systems*
- Upgrade/Replace/Refurbish *Includes Interior/Exterior & Emergency Systems*
- All Dimmer Cards/Racks
- All Relay Cards/Racks
- All Button Stations and Fader Stations
- All Contact panels
- All Infrastructure cabling, etc. (as needed/required/advised)
- Reprogram all aspects of System as needed/required/advised
- · Verify all aspects of work completed, operate as required