

# Jackson County Downtown Courthouse Facility Condition Assessment & Space Needs Assessment



Public Works Committee Meeting

Jackson County

August 16, 2021





## Staff + County Leaders + Project Stakeholders

### SFS Architecture PRIME ARCHITECT

#### Core Leadership

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Project Engineer

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Fire/Life Safety Engineer

BHC RHODES  
Exterior Imagery

TIMOTHY EASLEY  
Environmental Technician

MARK MAURER  
Security Engineer

AMBERLEE O'BRIEN  
Environmental Technician

# Project Goals



- Conduct comprehensive facility condition assessment to document deferred maintenance.
- Input data into CMMS software.
- Establish long-term strategy for care of courthouse, so building modernization is respectful of its historical significance.

*The building is associated with Harry S. Truman and was designed by the prominent Kansas City firm of Wight and Wight. While it's not listed on the National Register of Historic Places, it is a significant Art Deco Kansas City icon that retains a considerable amount of historically significant spaces and features that should be preserved.*

# Scope of Work / Deliverables

- As-built floor plans
- Drone photography
- Video inspection of underground site storm and sewer piping
- Code analysis
- Hazardous materials assessment
- Energy audit
- Civil, structural, architectural, MEP/FP systems assessment
- CMMS database entry
- Space needs assessment



## Facility Conditions Assessment

# Overall Asset Condition

System	FCI Rating	Prime Priority Rating
OVERALL BUILDING	0.21*	n/a
Site	0.00	3
Structural	0.00	3-4
Architectural	0.08	5
Mechanical, Electrical, Plumbing	0.63	1
Fire Protection, Fire Alarm	1.09	1

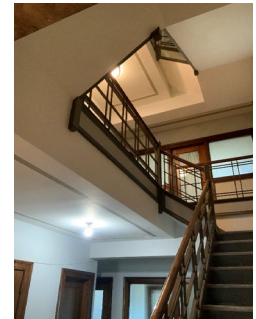
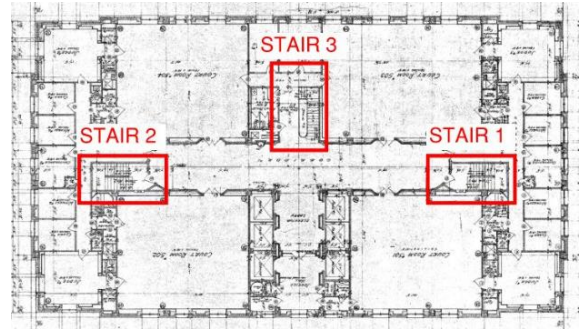
\*FCI ratings over 0.15 are considered poor.

- Priority Ratings:
- *Priority 1 – Currently critical - requiring immediate action.*
- *Priority 2 – Potentially critical – if not corrected soon, will become critical.*
- *Priority 3 – Necessary but not critical requiring appropriate attention to preclude deterioration.*
- *Priority 4 – Recommended.*
- *Priority 5 – Appearance.*
- *Priority 6 – Does not meet current codes/standards (grandfathered).*



# Noncompliant Code Issues

- **Fire Protection Systems:**
  - Not protected throughout with sprinkler system.
  - Fire alarm system has limited function.
  - Non-compliant operations on 3M, 14, 15.
  - No fire command center.
  - Secondary power (generator) not sufficient.
- **Stairways**
  - Stair 3 is not enclosed.
  - Stair 1 does not extend past 9<sup>th</sup> floor.
- **Egress**
  - Emergency lighting poor or non-existent.
  - Exit signs not provided or not bright enough.
- **Fire-resistance Ratings**
  - Penetrations through floors not protected
  - Rated separations not provided.
- **Accessibility**
  - 1 of 3 entrances are accessible (60% required).
  - Restrooms and several courtrooms not accessible.

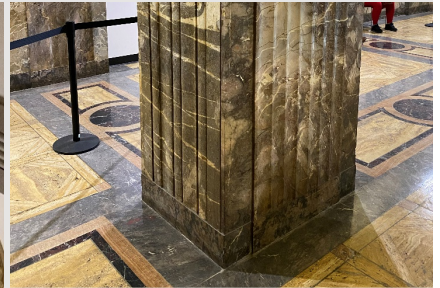


## Site and Structural Systems





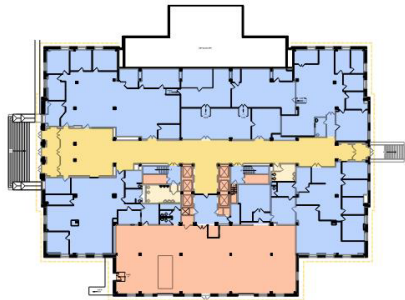
# Architectural Systems





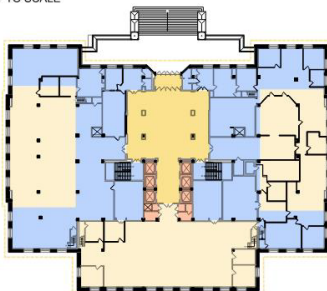
## Facility Condition Assessment – Conditions and Recommendations

# Architectural Systems – Significant Spaces & Features



GROUND FLOOR

NOT TO SCALE



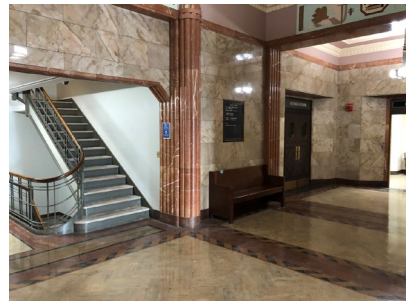
FIRST FLOOR

NOT TO SCALE



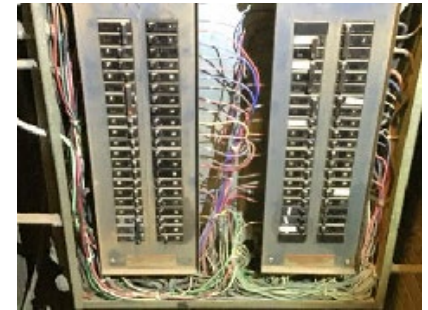
### LEGEND

	LEVEL I - RESTORATION ZONE
	LEVEL II - RESTORATION ZONE
	LEVEL III - REHABILITATION ZONE
	LEVEL IV - FREE ZONE



## Facility Conditions Assessment – Conditions and Recommendations

### Mechanical, Electrical, Plumbing and Fire Protection Systems



# Security Systems

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## Security Systems:

- Access Control
- Door Intercom Systems
- Video Surveillance
- Duress



## Space Needs Assessment

# Existing Area Use

### Courts Departments:

- Courts Administration
- Courts – HR
- Courts – IT (1305 Locust)
- Courts – Fiscal
- Courts Services & Purchasing
- Probate Records
- Criminal Records (1315 Locust)
- Civil Records
- Civil Process (1315 Locust)
- Jury Services
- Public Administrator
- Public Defender (324 E. 11<sup>th</sup> Street)
- Prosecutor includes COMBAT
- Sheriff

### County Departments:

- Assessor
- Auditor
- Board of Equalization
- Collections
- Communications
- County Clerk
- County Counselor
- Executive
- Finance
- HR includes Ethics
- IT
- Legislature
- Public Works
- Purchasing
- Recorder of Deeds

### Shared Building:

- Infrastructure
- Vacant (Jail Floors 12, 13, 14)
- Vacant

**NSF Subtotal: 124,277**

**NSF Subtotal: 64,060**

**NSF Subtotal: 121,033**

**Total Net Area**

**309,370**



## Space Needs Assessment

# Future Area Use

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### Courts Departments:

- Courts
- Courts Administration
- Courts – HR
- Courts – IT
- Courts – Fiscal
- Courts Services & Purchasing
- Probate Records
- Criminal Records
- Civil Records
- Civil Process
- Jury Services
- Public Administrator
- Public Defender
- Prosecutor includes COMBAT
- Sheriff

### Shared Building:

- Building - Shared
- Shared Meeting and Break Space
- Infrastructure
- Vacant (Jail Floors 12, 13, 14)
- Expansion

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**NSF Subtotal: 196,730**

**NSF Subtotal: 106,587**

	<b>Total Net Area</b>	
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		<b>371,807</b>
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# Future Area Use – Goals for Restacking

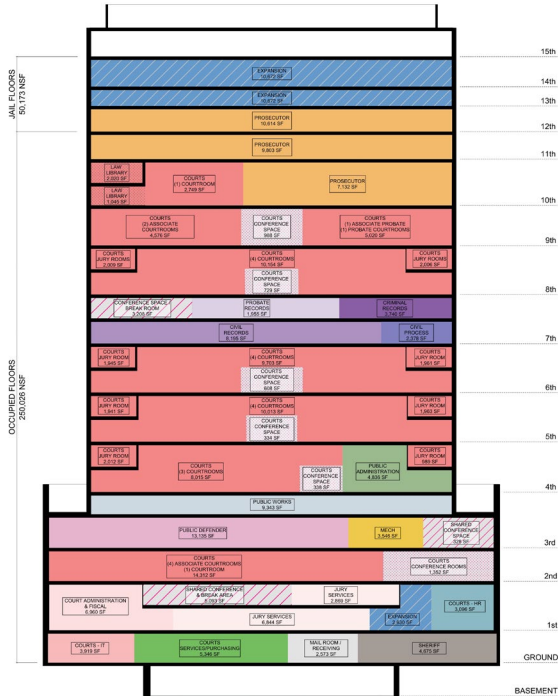
## Goals for Restacking:

- Consolidate departments.
- Locate departments with public interface on the lower levels to better serve the public.
- Reduce or eliminate the use of leased space for courts-related departments.
- Improve security for staff, judges, and visitors. Site and building security improvements are needed to meet courthouse best practices while within the constraints of an existing building.
- Resolve inefficient workflow.
- Locate departments adjacent to other departments they interface with for efficiency.
- Update building to meet ADA requirements.
- Incorporate new mechanical, plumbing, electrical systems, and fire protection systems throughout the building as recommended by the FCA report. Improve energy efficiency.
- Incorporate life safety upgrades.
- Floor-to-floor heights vary throughout the building. Locate courtrooms on floors with adequate ceiling height.



## Space Needs Assessment

# Future Area Use



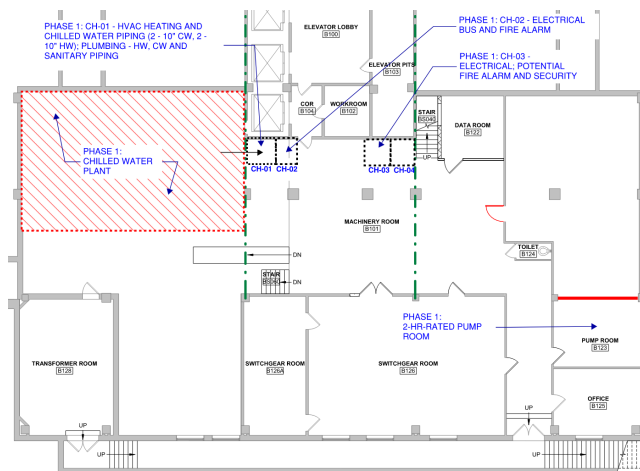
## • Recommendations

- Locate departments with high volume of visitors and public interface to lower floors.
  - + Civil Courtrooms
  - + Public Defenders
  - + Jury Room
  - + Court Administration
  - + Court HR
- Consolidate departments.
  - + Courtroom Floors
  - + Prosecutor
  - + Records
- Phased building renovation.

# Phasing Recommendations – Phase I

**Phase I** - Install new MEP/FP base equipment and vertical infrastructure:

- Demolition and environmental abatement.
- Repair of structure as required for new work.
- Fire-rated enclosure of fire pump room in basement and boiler room at fifteenth floor.
- Architectural finishes and rated partition walls to support installation of MEPFT.
- Cooling towers.
- Generator.
- Chilled water plant.
- Chilled water vertical piping with tees to AHU floors.
- Hot water plant / domestic hot water plant.
- Hot water vertical piping w/ tees.
- Domestic cold water, domestic hot water mains + tees.
- New sanitary mains in common riser.
- Electrical vertical busduct infrastructure.
- Fire sprinkler main in east stair.

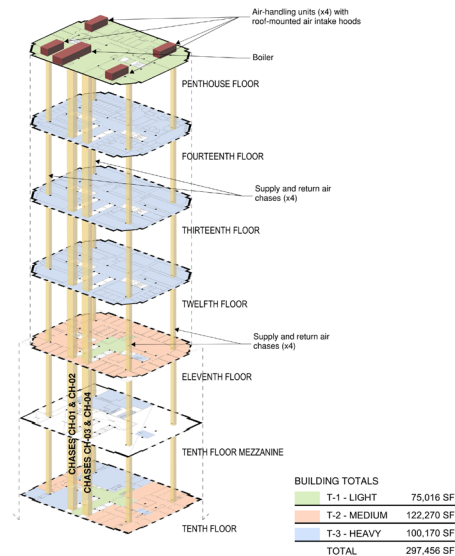




# Phasing Recommendations – Phases II & III

**Phase II** - Repair and alter building interior using a multi-phase approach working top down. Restore areas of exterior envelope associated with interior phases:

- Demolition and environmental abatement.
- Repair of structure as required for new work.
- Repair of existing architectural finishes and features.
- Alteration of space to accommodate building re-stacking.
- Address code deficiencies.
- Historically sensitive / restored LED light fixtures and standardized LED light fixtures, and low-voltage distributed control systems with occupancy sensors.
- Zone level mechanical (updated diffusers, medium and low pressure VAV ductwork, heating hot water piping to new VAV boxes, DDC controls).
- Overhead sprinkler system.
- Voice fire alarm system.
- Technology – racks to jacks, new boxes, new infrastructure.
- Audio/visual.
- Intercom.
- Security systems.
- Branch circuiting and electrical devices.
- Updated plumbing fixtures, wet wall domestic cold water and hot water in chase plumbing and tie-ins to sanitary mains.
- Roof replacement and restoration of exterior materials such as masonry, windows, grilles and louvers.

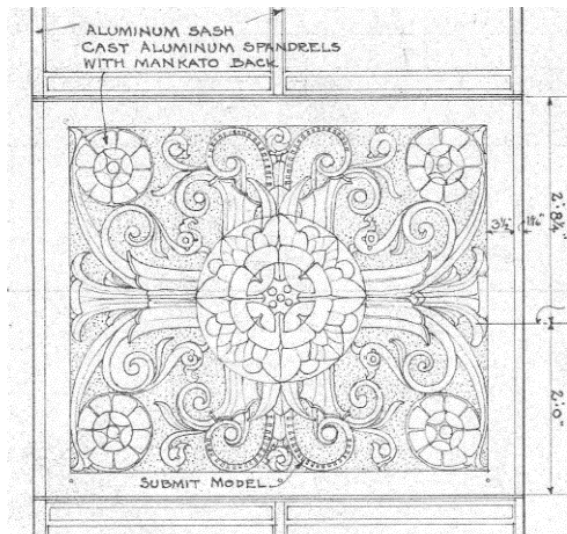


CONSTRUCTION ZONES - AXON PHASE 11A  
JACKSON COUNTY COURTHOUSE FCA | 06/521

sfsarchitecture

**Phase III** - Repair and alter site infrastructure.

# Cost Estimate and Proposed Schedule



## Years 2022-2024 (3 Years)

Phase I – MEPFT Infrastructure (Vertical)	\$78,564.528
Phase IIA – (Tenth Floor – Fifteenth floor)	\$40,861,729
<b>Sub-Total</b>	<b>\$129,426,257</b>

## Years 2025-2028 (4 Years)

Phase IIB – (Sixth Floor – Ninth Floor)	\$42,282,549
Phase IIC – (Second Floor - Fifth Floor Mezz)	\$50,924,829
Phase IID – (Basement – First Floor Mezz)	\$31,086,037

## Year 2029 (1 Year)

Phase III – Site	\$1,714,175
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**TOTAL** **\$255,433,847**

# Thank you!



