



### Hennepin County Government Center Courts Relocation from Family Justice Center C20-C23, No. 1007211 District Court Self Help and Admin A20-21, No. 1010894

Schematic Design Report April 18, 2024



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### **TABLE OF CONTENTS**

A.	Project Team	2-3
	User Groups	
	Owner Representative	
	Architects	
	Programming and Operational Planning	
	Mechanical / Electrical Engineers	
	Cost Estimator	
B.	Project Overviews	4-15
	1. Introduction	
	2. Project Descriptions	
	3. Purpose & Justifications	
	4. Existing Plan Narrative	
	5. Existing Floor Plan	
	6. Project Objectives and Design Criteria	14
	7. Space Program	
C.	Proposed Plan	
	1. Proposed Plan Narrative	
	2. Proposed Plan Drawings	17-22
D.	Architectural Design Narrative	23-27
	1. Design Process	23
	2. Design Solution Overview	23
	3. Interior Systems & Finishes	24-27
E.	Mechanical Systems	28-29
	1. Objectives	28
	2. Codes and Standards	
	3. HVAC System	
	4. Plumbing System	29
	5. Fire Protection System	29
	6. Building Automation System	29
F.	Electrical Systems	30-32
	1. Objectives	30
	2. Codes and Standards	
	3. Power Systems	30-31
	4. Lighting Systems	31
	5. Communication Systems	32
G.	AV Systems	33-34
	1. Family Courts Relocation AV Systems	33
	2. Court/Hearing Room System	33-34
	3. Multi-purpose Room System	
	4. Conference Room System	
Η.	Project Summary	
	1. Project Budgets and Schedule	35

### **SCHEMATIC DESIGN** - Project Team

### A. Project Team



#### **User Groups**

Minnesota 4th District Court

Judge Kerry Meyer Judge Patrick Robben Judge Theresa Couri Jessica Wiens Nicolas Pritchard Shannon Cooper

#### **Owner Representative**

Hennepin County Property Services A-2208 Government Center Minneapolis, Minnesota 55487 (612) 348-5252

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#### **A-Tower Design Architect**

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Court Administrative Manager Senior Administrative Manager

Chief Judge, Fourth Judicial District

Judge, Fourth Judicial District

Judge, Fourth Judicial District

Senior Manager

Senior Facilities Operations Manager Facilities Operations Manger Project Manager - Design and Construction Project Manager - Interiors Senior Facility Planner Facility Engineer

Principal in Charge Project Manager Architectural Staff Audio-Visual Designer

### A. Project Team

### Programming and Operational Planning

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Courts Planning Consultant Court Technology Planning Consultant Courts Planning Consultant Courts Planning Consultant

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Karl Bohnsack Tim Meyer Jake Strum Andrew Bartlett Nick Cierzan

**Cost Estimator** 

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Talon DeWitz Jonathan Murray Senior Electrical Designer Senior Systems Designer Mechanical Manager Engineer Engineer

Lead Estimator Estimator

### **B. Project Summary**

### **1. INTRODUCTION**

The purpose of this project is to renovate existing office space on the upper floors of the Government Center's (HCGC) Courts Tower into court space to accommodate relocated programs from the Family Justice Center based on guidance from a Downtown Campus Master Plan and a District Court Facility Master Planning Study. Due to the Covid-19 pandemic, this project was put on-hold. During this time, the county updated the previously developed master plan and revised future workplace strategies to better align with current service delivery efficiencies.

Based on the recommendations of the updated Downtown Campus Master Plan, approx. 81,390 SF on Floors C-19 through C-23 Family Court/ General Court courtrooms/chambers and A20-21 will be renovated for or a consolidated Self-Help Center for Pro Se litigants and the Family Court Division Administrative staff, respectively. Current occupants of these floors, the County Attorney and Community Corrections will be relocated to other floors in the Government Center's Administrative Tower as part of HCGC Office Remodeling project for A20-A21 (1007210).

### **SCHEMATIC DESIGN - Project Overview**

2. PROJECT DESCRIPTION District Court Self Help and Family Admin A20-21, FJC Relocation C20-23



The State of Minnesota has 10 Judicial Districts, with specific counties belonging to each District. The 4th Judicial District serves only Hennepin County, and is the state's largest court district. The 4th Judicial District occupies space in 5 downtown Minneapolis facilities as well as 2 suburban courts facilities.

Preliminary plans indicate the scope of work for this project to include:

1. Major remodeling of four floors of the C-Tower currently occupied by the County Attorney to create fourteen new courtrooms and 15 new judicial chamber suites while retaining the existing Grand Jury Room on C20. All new courtrooms are being designed for flexible use by any division of courts to support potential reduction in family court filings or increased civil or criminal case filings. New audio/visual systems in courtrooms and new judicial clerks and court reporters office furniture. Addition of conference rooms along public corridor.

2. Major remodeling of two floors in the A-Tower. A20 will house a Pro-Se Litigant (Self Represented) Help Center which consolidates the services provided at the Family Justice Center Self-Help Center and the Self-Help Center in the Government Center on the skyway level. A21 will house the Family Court Division Administrative staff as well as one Child Support Hearing room. Zoom Room/Magistrate Offices will provide options for remote court operations.

3. PURPOSE & JUSTIFICATION District Court Self Help and Family Admin A20-21, FJC Relocation C20-23



In 2018, the county acquired the Thrivent Building (625 Building) which is located one block to the east of the Government Center and is connected via the downtown skyway system. This strategic acquisition serves to meet identified space needs of the County, provides for the consolidation and service efficiencies of court functions in the Government Center by relocating Family Court functions from the 66-yearold Family Justice Center (FJC). This would allow FJC to be vacated and declared surplus.

A 20-year District Court Master Plan was completed in the summer of 2019. This master plan focused on identifying caseload trends and population projections along with operational, staffing and facility needs. Key to this master plan was the identification of critical, functional adjacencies required for the Family Courts to be relocated from the Family Justice Center to the Government Center. These functional adjacencies and short-term needs were then incorporated into the updated Downtown Campus Master Plan recommendations.

The purpose of this project is to renovate existing office space on the upper floors of the Government Center's (HCGC) Courts Tower into court space to accommodate relocated programs from the Family Justice Center based on guidance from a Downtown Campus Master Plan and a District Court Facility Master Planning Study. Due to the Covid-19 pandemic, this project was put on-hold. During this time, the county has been updating the previously developed master plan and revising future workplace strategies to better align with service delivery efficiencies realized during pandemic's remote work of most county functions.

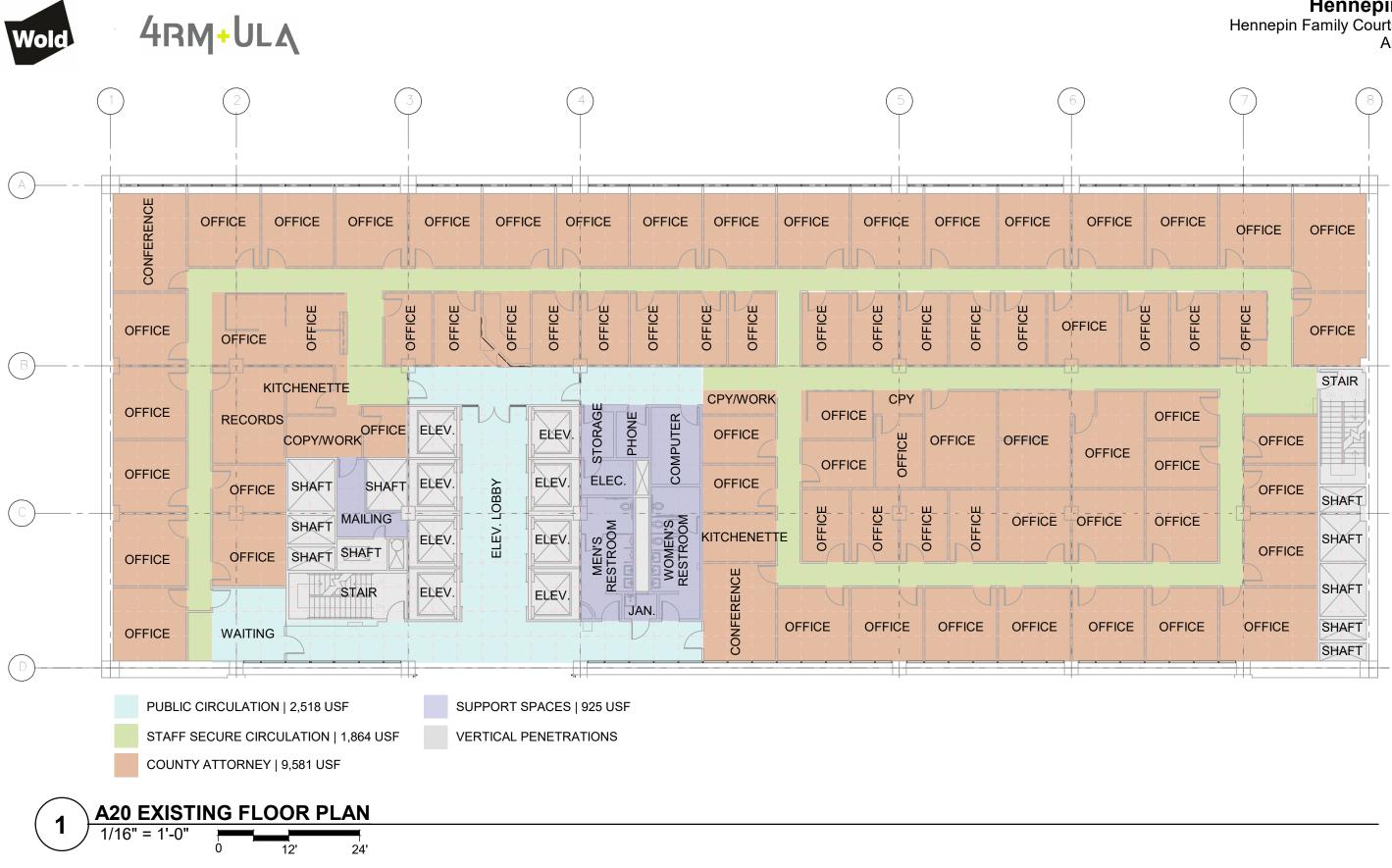
In association with the 625 Building acquisition, the development of a Downtown Campus provides an opportunity to invest smarter, end leases, renovate and maintain fewer buildings, align adjacent government services between the City of Minneapolis, District Court and Hennepin County, bringing downtown services closer together for residents and connect downtown staff. Based on the recommendations of the updated Downtown Campus Master Plan, approx. 81,390 SF on Floors C-19 through C-23 and A20-21 will be renovated for Family Court/General Court courtrooms/chambers. Current occupants of these floors, the County Attorney and Community Corrections will be relocated to other floors in the Government Center's Administrative Tower as part of another capital project.

The Family Justice Center building currently houses all of Family Court functions with District Court, County Attorney, Sheriff's Holding Areas and Human Services staff/space. The Family Justice Center Relocation Project renovates space in the Government Center Building on floors A20 and A21, and C20 through C23 to allow all Family Court functions to move to the Government Center. This work is critical to the closing of the FJC building.

3. EXISTING CONDITIONS District Court Self Help and Family Admin A20-21, FJC Relocation C20-23

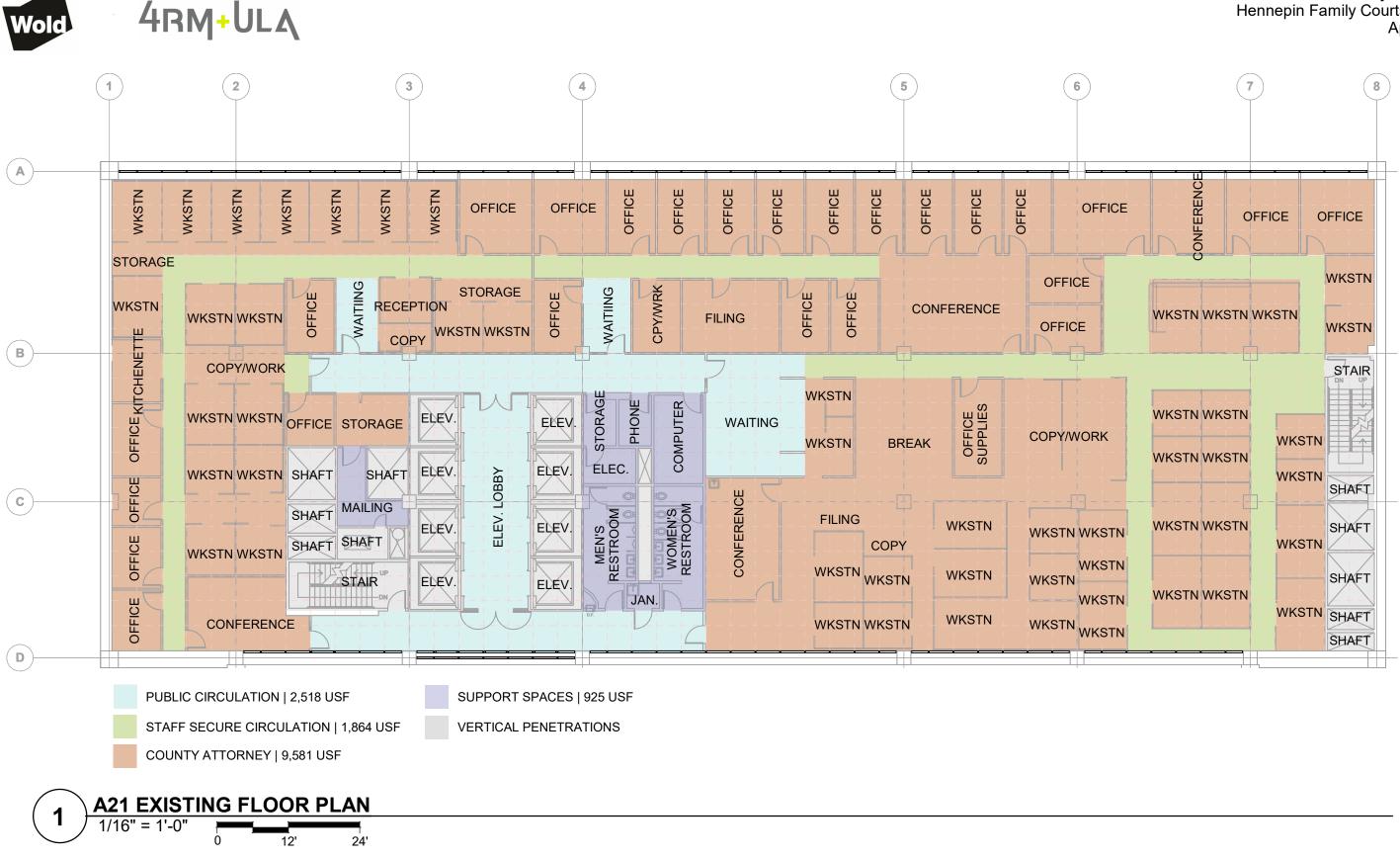


The following plans are existing conditions of each floor this project intends to renovate. Current occupants of these spaces include the Hennepin County Attorney and the Hennepin County Department of Community Corrections and Rehabilitation as noted. Relocation of these departments is already underway as part of separate Hennepin County projects.



### **Hennepin County** Hennepin Family Courts Relocation April 18, 2024

A20 EXISTING **FLOOR PLAN** 



### **Hennepin County**





### Hennepin County

Hennepin Family Courts Relocation April 18, 2024

C20 EXISTING FLOOR PLAN





### Hennepin County

Hennepin Family Courts Relocation April 18, 2024

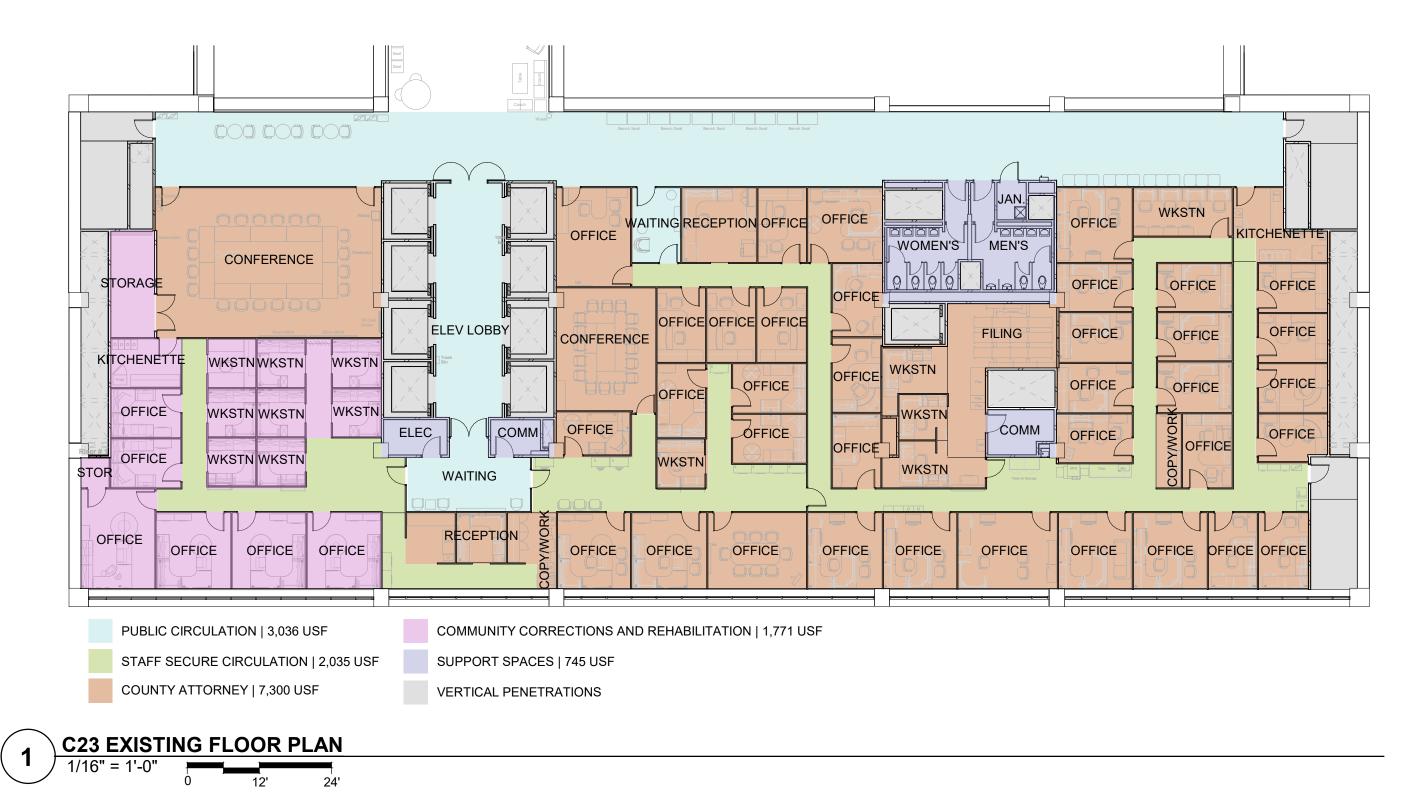
C21 EXISTING FLOOR PLAN





### Hennepin County





### Hennepin County

#### 5. PROJECT OBJECTIVES AND DESIGN CRITERIA

### Courtrooms

- Flexible courtrooms through layout, technology, and calendaring
- Trauma-informed design priciples
- Safety and security for all participants
- High-Profile courtroom on non-bridge floor
- Magistrate Hearing room and a few small virtual hearing rooms
- Secure staff circulation for access to chamber suites

#### Monitored Waiting Rooms

• Two separate spaces to allow separation of parties and increase security

Self-Help Center

- Flexible seating arrangements
- Flexible workspace options
- Zoom rooms
- Trauma-informed design priciples
- Staff spaces separate from public spaces to increase security

Family Court Administration

- Flexible work areas including hoteling workstations
- Trauma-informed design priciples
- Staff space to provide space for department growth

Toilet Rooms and Work Lounge (Sinks)

• To be stacked to maximize floor space and reduce load on existing building

### **SCHEMATIC DESIGN - Project Overview**

### 6. SPACE PROGRAM A20-21 and C20-23

Functional Program	SD: C-Tower	SD: A-Tower
COURTROOMS	19,575 USF	0 USF
JURY DELIBERATION	1,281 USF	0 USF
MAGISTRATE HEARING	0 USF	544 USF
MAGISTRATE ZOOM	0 USF	300 USF
CHAMBER SUITES	8,834 USF	0 USF
COURTROOM CONFERENCE ROOMS	2,642 USF	405 USF
ADMIN CONFERENCE ROOMS	0 USF	4,879 USF
COUNTER SERVICE	0 USF	500 USF
MONITORED WAITING	319 USF	610 USF
ADMIN. STAFF	0 USF	5,791 USF
SUPPORT SPACES (Public Waiting, Vestibules, Multipurpose Rooms, Work Lounges, Copy Rooms, A/V & Data Closets, Toilet Rooms)	4,586 USF	4,934 USF
STAFF SECURE CIRCULATION	4,908 USF	4,717 USF
PUBLIC CIRCULATION	9,150 USF	4,023 USF
FUTURE FLEX	0 USF	955 USF
PROPOSED TOTAL:	51,295 USF	27,628 USF
OVERALL TOTAL:	65,163 USF	33,316 USF

### **SCHEMATIC DESIGN**

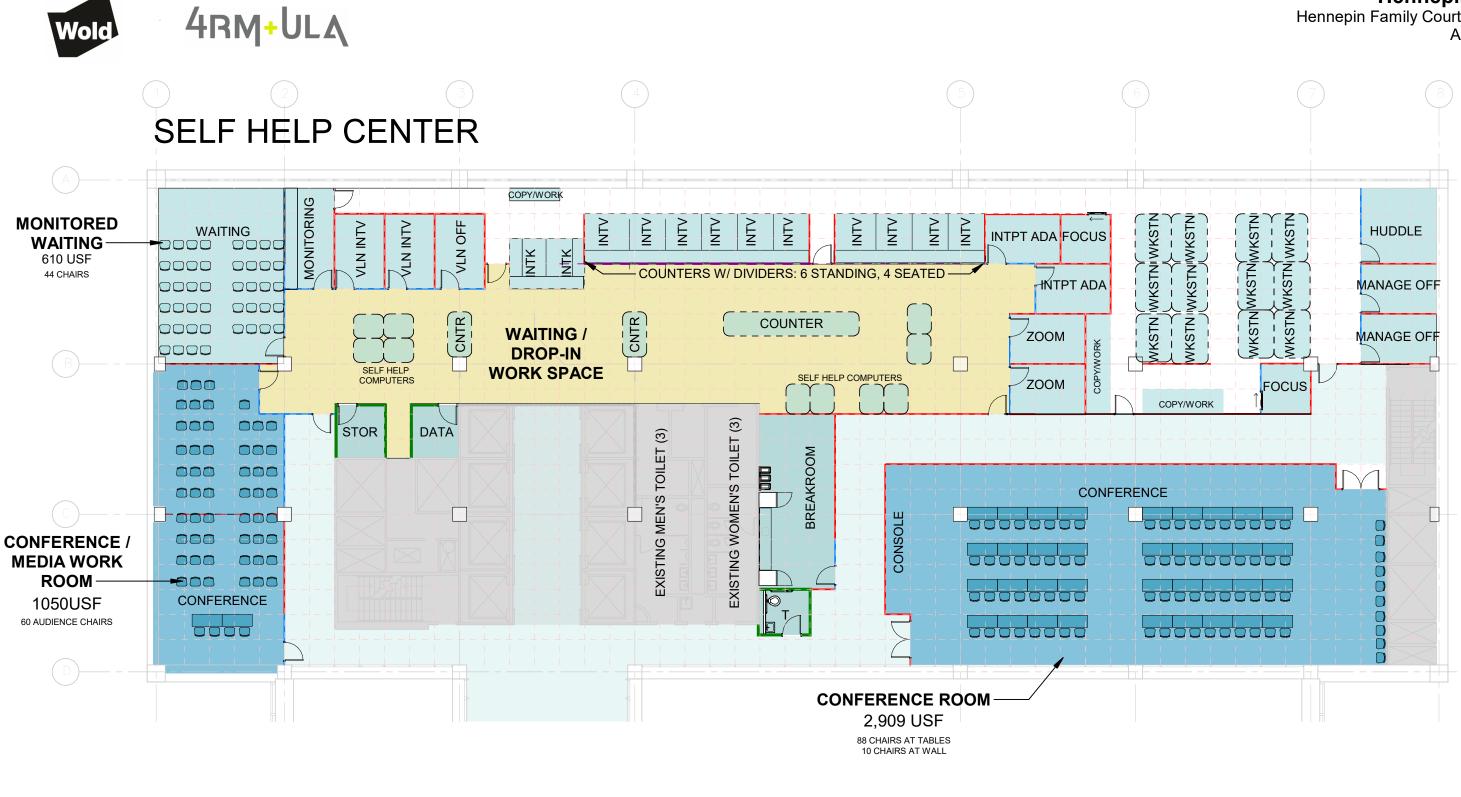
3. PROPOSED PLANS District Court Self Help and Family Admin A20-21, FJC Relocation C20-23

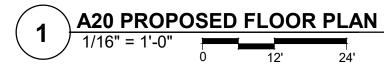


The following plans are proposed layouts for both A-tower and C-tower. These plans represent a culmination of design and planning meetings with the intended occupants of these spaces under the guidance of Hennepin County project managers and facility planners. As such, these proposed plans are drawn at the recommendation of the design team with the understanding that additional meetings with the County and District Court will continue through future design phases.

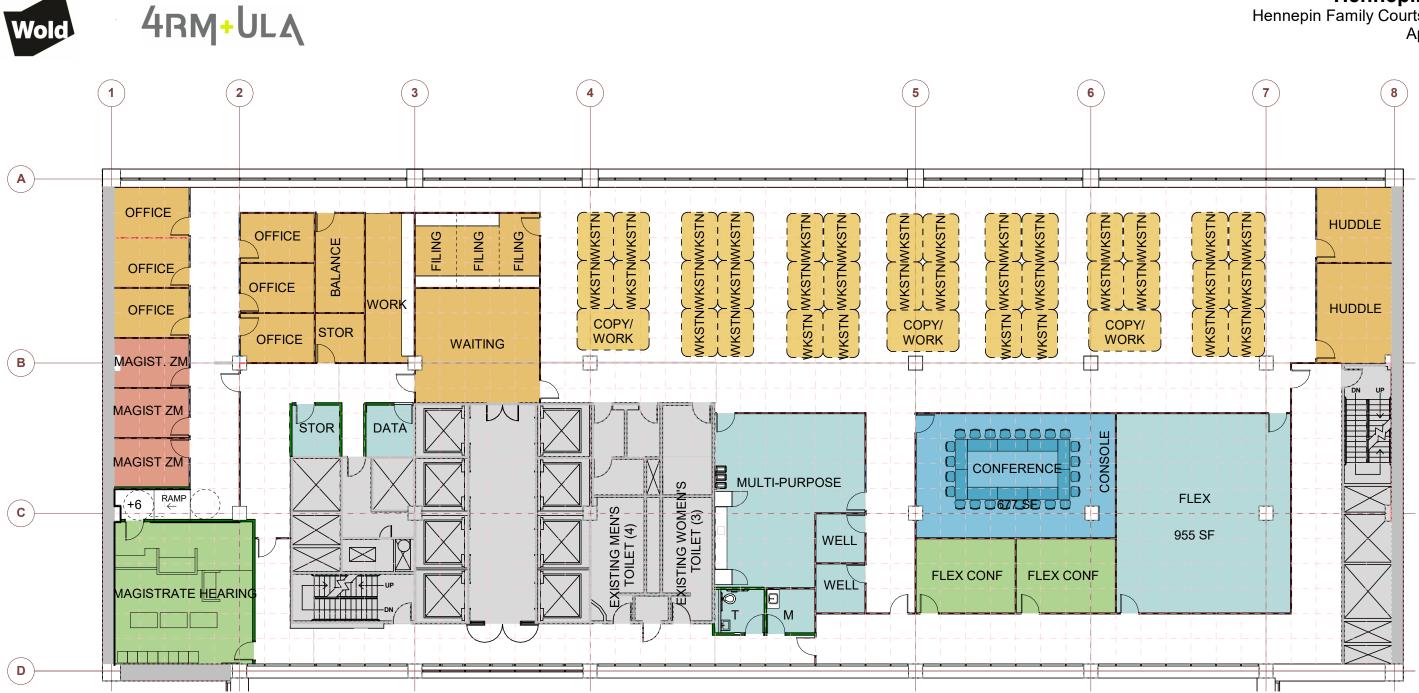
The A-tower shall be utilized by District Court Self Help and Family Administration departments and shall include typical staff spaces as well as public-facing self-help counters and a magistrate hearing room as drawn.

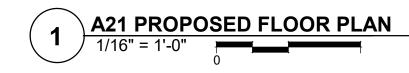
The C-tower shall be utilized by District Court to relocate and renovate courtrooms, chambers, jury deliberation suites, and other typical conference and staff spaces as drawn.





### **Hennepin County**





### **Hennepin County**





### Hennepin County





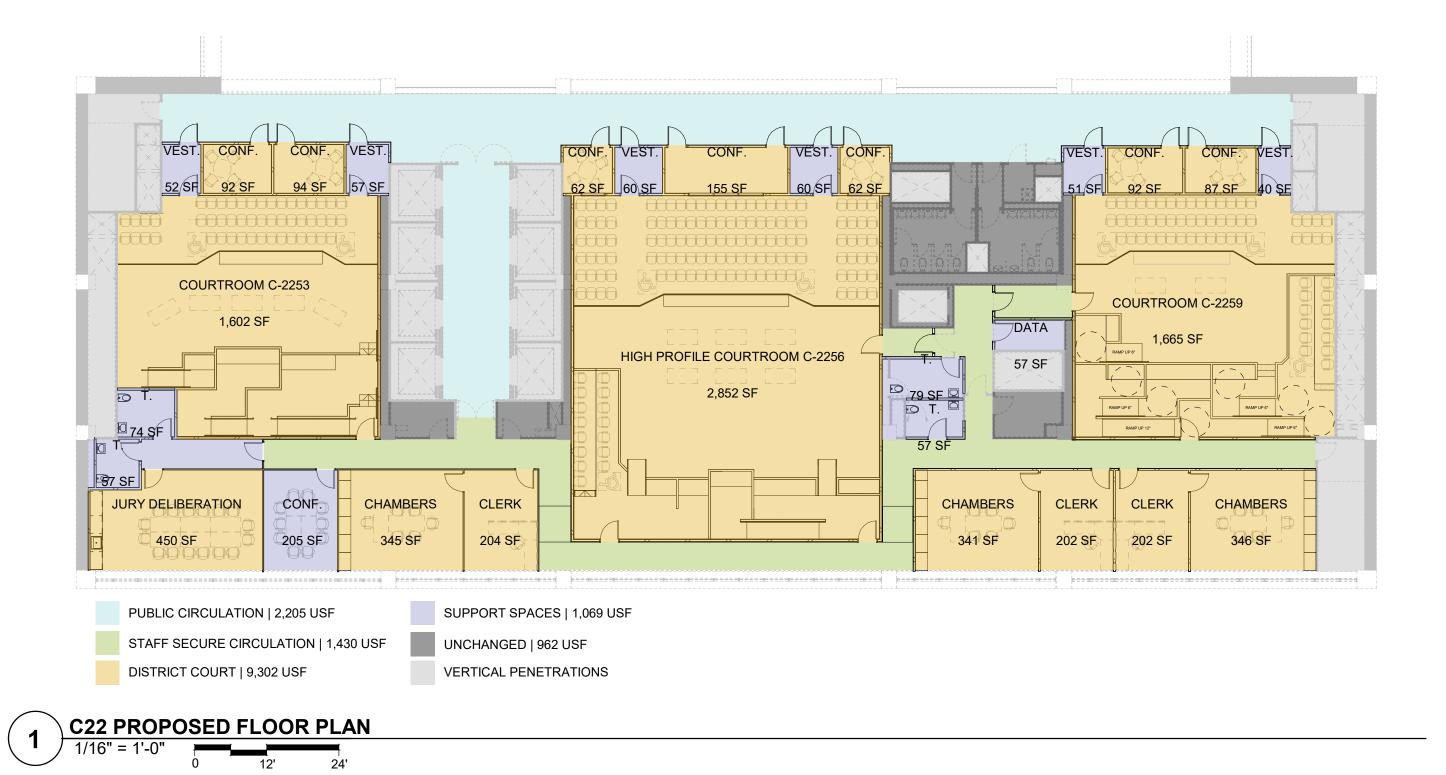
### Hennepin County

Hennepin Family Courts Relocation April 18, 2024

C21 PROPOSED FLOOR PLAN

Comm No: 232237





### Hennepin County





### Hennepin County

### **D. Architectural Design Narrative**

# **1. DESIGN PROCESS** The planning for Family Court Relocation in both A and C towers began in October 2023. During this time, representatives from District Court and the 4th Judicial District began developing a concept for the overall floor plan based on past projects and projected needs including implementation of new technology.

The plan moved into schematic design in January 2024 and was guided by a core group of members who met several times in January through February. Through discussions, the plan developed based on the needs of each of the three main users of the floor as well as approved standards.

Upon approval of the Schematic Design by the County Board, the team will continue to develop the details of the design including finishes and the new Judge's benches designs to keep the project on schedule.

#### 2. DESIGN SOLUTION OVERVIEW

The primary goal for the design of A and C towers is to relocate Family Court staff, the Self-Help center, judicial chambers, and courtrooms from the Family Justice Center while creating room for growth, additional security, and spatial relationships that are functional for staff and public visitors alike. The design plan was developed to meet accessibility requirements while maximizing flexibility to meet the functional needs of District Court.

Demolition of the existing A 20-21 and C 20-23 floors shall provide a clean and clear, open space free of existing construction, finishes, and debirs for new construction and finishes where indicated. Modifications to mechanical, electrical, and fire/life safety shall be completed as required for new tenant buildout as well as removal of any unused ductwork, piping and cabling. See associated narratives for additional information. All ceiling grid is to remain, unless noted otherwise. Existing light fixtures included in demolition scope are to be salvaged and returned to the building owner. Selective removal of grid: paint and reinstall in place for MEP work.

### 3. INTERIOR SYSTEMS & FINISHES

#### **Floor Systems**

The current existing floor system is a composite metal and concrete deck. There will be a need for power and data within the courtrooms that will require new floor boxes.

#### **Floor Finishes**

Floor finishes are selected for performance, durability, appearance and cost effectiveness. Carpet tile is proposed for flexibility in spot replacement and access to the accessible floor spaces. Other flooring includes resilient floor and biobased tile. All proposed finishes will match current HCGC standards.

#### **Floor Finish Schedule**

Chambers	Broadloom Carpet
Break Room/Multipurpose Room	Resilient Floor
Storage	. Resilient Floor
Magistrate Hearing, Magistrate Zoom	. Carpet Tile, Rubber Base
Data Room	. Static Dissipative VCT
Toilets	. Ceramic Tile
Core Space not scheduled for remodel (Public toilets, vertical circulation & building support spaces)	. Existing (To Remain)
All other spaces	Carpet Tile

### 3. INTERIOR SYSTEMS & FINISHES

#### **Interior Partitions**

Courtrooms and adjoining flex conference rooms shall be constructed of insulated metal stud and gypsum board demising walls. Courtrooms shall have a double layer of gypsum board. Where Courtrooms touch each other, a double layer of offset studs shall bound the spaces. Flex conference rooms adjacent to courtrooms shall be a single layer of gyp bd on insulated 3 5/8" metal studs.

The south bank of office space comprised of Chamber, Law Clerk, Work Lounge, Jury Deliberation, Copy/Drop-In, and other not-courtroom spaces (monitored waiting and flex conf on C20), shall be constructed of the County's typical demountable wall system. Storage, offices, copy/print, balance, and zoom rooms to receive 4" rubber base.

Data closets, toilet rooms, and mothers rooms shall be a single layer of gyp bd on insulated 3 5/8" metal studs.

Zoom rooms, offices, waiting rooms, multipurpose rooms, huddle rooms, conference rooms, and other staff spaces in the A-tower shall be constructed of the County's typical demountable wall system. Multipurpose rooms to be finished with standard vinyl wall covering, backsplash to receive solid surface, and backsplash to extend up to top of cabinets.

Modular wall systems used on the A-Tower side are not inlcuded in this section as they are supplied by a Hennepin County vendor.

### **SCHEMATIC DESIGN - Architectural Design Narrative**

### 3. INTERIOR SYSTEMS & FINISHES CONTINUED

### **Wall Finishes**

Courtrooms	Wood paneling (white oak, rift cut, slip matched) on walls within the well, around and behind the Judge's bench. The spectator area shall have acoustical wall panels.
Toilets	Ceramic Tile
All other spaces	Vinyl wall covering

#### **Ceilings Finishes**

Ceilings are selected for acoustic performance and aesthetic needs in each individual program area. For both A-tower and C-tower, replace existing acoustic ceiling tile, paint existing ceiling grid.

Courtrooms	Gyp bd coffered soffits with coved lighting around the perimeter and over the Judge's bench and 4x4 ACT over the well. Spectator area to be a combination of gyp bd and 4x4 ACT.
Flex conference rooms adjacent to courtrooms	··2x4 ACT with standard 9/16" grid.
Toilets	Hard lid gyp with gyp walls to ceiling
All other spaces	2x4 ACT with wide track grid to accommodate demountable walls.

### **SCHEMATIC DESIGN - Architectural Design Narrative**

### 3. INTERIOR SYSTEMS & FINISHES CONTINUED

#### **Doors and Frames**

Salvage and reuse doors from levels A-20 and A-21.

Existing wood doors to receive filler, be prepped for finish, and be refinished; kick plates and hardware to match.

9' wood (white oak), rift cut with stain to match wood wall paneling.

HM door frame, provide a strike box at all door strikes.

Partial glass door with wood frame, lever style hardware.

Full glass door, lever style hardware.

#### **Special Construction**

Ramps and elevated platforms at Judges bench to be constructed of Non-com wood framing filled with sound batt and topped with a sandwich layer of plywood and gyp bd.

Judges bench to be constructed of wood framing, ballistic panels and wood paneling.

Granite caps at all partial height walls.

Spectator Rail to be constructed of steel posts and wood framing between. Wood panel cladding and granite top.

Spectator seating by owner.

Reception desks to include bullet resistant fiberglass panels.

Intake desk to include bulletproof glass and overhead security grill.

#### **Furnishings**

Furnishings are identified by type in the following narrative in generic terms. In later phases the furnishings will be detailed. All millwork to be per county standard.

*Courtrooms & Spectator Seating:* Attorney tables and task chairs, new Judge's bench with adjustable height work surfaces, fixed chairs for spectator seating.

*Court Administration:* 6' x 8' Office workstations and task chairs, file cabinets.

Conference Rooms: Conference table and chairs.

*Circulation:* Corridor seating that matches seating provided on C-4, but which will fit between the conference room doors into the atrium corridor, will be provided.

### **SCHEMATIC DESIGN - Mechanical Systems**

### **E. Mechanical Systems**

- **1. OBJECTIVES** The existing HVAC duct distribution and existing plumbing distribution only within the remodeled floors will be reconfigured to meet the needs of the new floor plans and programmatic functions and to provide the required airflow for ventilation and comfort.
- 2. CODES AND STANDARDS Code Requirements

The following are a list of applicable codes for this project:

- 1. 2020 Minnesota State Building Code
- 2. 2020 Minnesota Mechanical Code
- 3. 2020 Minnesota Fuel Gas Code
- 4. 2024 Minnesota Energy Code
- 5. ASHRAE 90.1-2019 Energy Standard for Buildings
- 6. ASHRAE 62.1-2016 Ventilation for Acceptable Indoor Air Quality
- 7. NFPA 13-2022 Installation of Fire Sprinklers
- 8. 2020 Minnesota State Fire Code
- 9. 2020 Minnesota Plumbing Code
- 10. Local Authorities Having Jurisdiction

#### **Indoor Design Criteria**

- 1. Summer: 74 deg F dry bulb +/-3. Humidity not actively controlled.
- 2. Winter: 70 deg F dry bulb +/-3. Humidity not controlled.

#### **Outdoor Design Criteria**

1. Summer: 88 deg F dry bulb/ 72 degree F wet bulb 2. Winter: -16 deg F

#### **Ventilation and Exhaust**

Ventilation and exhaust rates will be determined by the "Ventilation Rate Procedure" as defined in Section 403 of the 2020 Minnesota Mechanical Code.

#### 3. HVAC SYSTEM

The distribution ductwork served by the existing dual duct and/or VAV boxes will be modified as required only to serve each remodeled floor plan layout. Ductwork mains and mixing boxes will be re-used where the new floor plan allows. The existing central building HVAC, heating and cooling systems, which include all duct and piping risers shall remain unaltered. New dual duct and/or VAV boxes will be provided with direct replacements where required for new space zoning and where boxes are removed during abatement.

Heating and cooling loads will be calculated based on current and future usage of the space and the heating and cooling airflows will be balanced accordingly. Light troffer HVAC diffusers will be used in all areas except the courtrooms for both supply and return. Linear slot diffusers, standard 2' x 2' supply diffusers and return grilles will be used in courtrooms. Existing perimeter ventilation under windows will remain.

### SCHEMATIC DESIGN - Mechanical Systems

4. PLUMBING SYSTEMS	Existing toilet rooms will be reconfigured to match new space layouts. New toilet rooms will be added. A new kitchenette with a sink will be added.
	A. Plumbing Fixtures: Low flow fixtures will be provided. Flush valves and lavatory sinks shall be automatic, hard wired, sensor operated valves. Flow rates will be as follows:
	1. Water Closets: 1.28 GPF 2. Urinals: 0.5 GPF 3. Lavatories: 0.5 GPM
	B. Reconnect to existing hot water, cold water and waste and modify as required.
5. FIRE PROTECTION	The existing wet fire protection system will be modified as necessary for the new floor plan layout, new ceilings, and changes in the mechanical system.
6. BUILDING AUTOMATION System	New dual duct mixing and/or VAV boxes will tie into the existing Building Automation System (Automated Logic). New DDC thermostats will be provided.

### **SCHEMATIC DESIGN - Electrical Systems**

### **F. Electrical Systems**

1.	OBJECTIVES	The work shall include all materials, labor, equipment, and services to furnish and install complete and fully functioning electrical power distribution, lighting and rough-in for communication systems.
2.	CODES AND STANDARDS	<b>Code Requirements</b> The following codes and standards will be used in the design of the electrical systems for the building:
		<ul> <li>State and Local Building Codes</li> <li>State and Local Fire Codes</li> <li>National Electric Code</li> <li>State and Local Electric Codes</li> <li>OSHA Regulations</li> <li>State Elevator Code</li> <li>Americans with Disabilities Act (ADA) Guidelines</li> </ul>
3.	POWER DISTRIBUTION	<b>Basic Electrical Requirements</b> All materials shall be new, U.L. listed and approved for their intended use.
		Materials shall be installed in compliance with all applicable codes, standards and the manufacturer's recommendations. Electrical penetrations through fire rated walls, floors and ceilings shall be sealed to maintain fire rating.
		<b>Raceways</b> Flexible metal conduit (FMC) shall be used for light fixture connections above lay-in ceilings, and connections to vibrating equipment such as motors, etc.
		Electrical metal conduit (EMT) shall be used in interior spaces unless specifically noted otherwise.

Wire and Cables: All power wiring will be rated for 600 volts with THW or THWN/ THHN insulation. All branch circuit and feeder wiring shall be color coded.

#### **Wire and Cables**

All power wiring will be rated for 600 volts with THW or THWN/THHN insulation.

All branch circuit and feeder wiring shall be color coded.

### **SCHEMATIC DESIGN - Electrical Systems**

#### 3. POWER SYSTEMS CONTINUED

#### **Wiring Devices**

Switches shall be 120/277 volt, 20 Amp rated and be gray in color.

General use convenience receptacles shall be 120 volt, 20 amp rated; NEMA 5-20R listed, be gray in color, with (430 grade) stainless steel device plates.

Transient Voltage Surge Suppression (TVSS) protected receptacles will be provided at sensitive equipment.

Ground Fault Circuit Interrupter (GFCI) receptacles will be provided in wet areas.

#### **Electrical Distribution Equipment**

The electrical contractor shall provide a connection to existing panelboards located on this floor. If new panelboards are required, they shall be wall mounted, 120/208 volt, three phase, four wire and be provided with copper bussing and bolt-on circuit breakers.

#### **Equipment and Motors**

Refer to mechanical narrative for an overview of the new mechanical equipment being provided. Electrical connections shall include connections to all equipment and to/from VFD's as applicable for the unit.

#### 4. LIGHTING SYSTEMS

#### Lighting

General Areas: Lighting will utilize existing owner furnished 1x4 light fixtures. New light fixtures will be installed where 1x4's are not appropriate and shall be provided with volumetric LED troffers (4100K color temperature).

Modification of existing owner fixtures may be required (lamps/ballasts). Unfinished rooms such as Mechanical Rooms and Storage Rooms shall be provided with LED industrial type light fixtures.

Existing lighting controls systems will be utilized and modified as required for the new plan.

Occupancy sensors shall be provided to increase efficient in Courtrooms and conference rooms.

Holding Areas: Lighting will be modified to be controlled by the Sheriff's control room in lieu of being on 24/7. Lighting levels in rooms shall be as recommended by the Illuminating Engineering Society (IES) and as required by MN Energy Code,

Life Safety Lighting: Selected general (building interior) light fixtures and all exit signs shall be connected to the building's existing emergency generator panels to provide emergency egress lighting.

### **SCHEMATIC DESIGN - Electrical Systems**

### 5. COMMUNICATION SYSTEMS

#### **Fire Alarm**

The existing addressable fire alarm system will be expanded to monitor all areas and provide notification to personnel in all areas.

### Voice/Data

New Category 6A cabling will be installed for all required data locations. Cabling will be routed to the existing closets and terminated on new patch panels in the exiting Data closets.

### **Electronic Security**

Access Control: Card access and door monitoring will be an expansion to the existing Genetec system. Card access and door monitoring will be included at doors between public and private spaces as well as internal private spaces with different access requirements such as data closets, suite entrances and counting rooms. New access control panels will be added to support the number of new card access and monitored doors.

#### **Video Surveillance**

New IP cameras will be connected to the Hennepin County network and tied to the existing Genetec system. Expansion of the Genetec system will include camera licenses and video storage capacity. Existing cameras in the areas of construction that are still under warranty will be identified and reused.

#### **Duress Alarms**

Wireless duress alarms will be included at service counters, Law Clerk offices, Judges Chambers and Judges Bench area. Wireless signal receivers will be installed and connected to new Bosch alarm monitoring panels to match the existing alarm monitoring system in the building.

### 1. FAMILY COURTS RELOCATION AV SYSTEMS

#### General

The Family Courts Relocation project comprises several space types. Currently, the County and Courts are reviewing the requirements for each space to determine the cost center, functionality, and delineation of roles and responsibilities associated with the Audiovisual systems. The descriptions of the systems identified below are a high-level understanding of the space needs and will be further refined with the County and Courts in the DD phase of the project.

#### 2. COURT/HEARING ROOM SYSTEM

#### General

The Audiovisual technology associated with the courtrooms will be broken out into three primary categories: Audio Reinforcement System, Video Evidence Presentation System, and Video Conferencing System. An Audio Reinforcement System will be installed in all courtrooms, and the other systems will be planned and roughed in for, but will be added to this system based on the courtroom needs. As additional system types are combined, they will be unified. The Courts have determined that the AV architecture for the systems will use an AV over IP (AVoIP) network system called Q-SYS, which QSC manufactures. Based on our initial conversation, the Magistrate Hearing Room will only have an Audio Reinforcement and Video Conferencing System. All other courtrooms still need to be solidified regarding which systems will be installed. Conference and multi-purpose rooms will be planned and roughed-in for audiovisual systems to be provided by the courts.

### **Audio Reinforcement System**

This system will utilize microphones placed at critical locations throughout the courtroom to capture speech for recording court proceedings and feeding loudspeakers positioned at critical locations throughout the courtroom for voice amplification. The system will transport audio to a Court-provided recording platform using an AVoIP Dante network audio protocol. Control of the system will be through a touch panel that can be shared between the Clerk and Judge, allowing for adjustment of the individual microphones' volume level, muting of microphones, and routing of audio to the court-provided recording platform along with other feature sets identified by the courts as needed.

### **Video Evidence Presentation System**

This system will utilize HDMI input locations strategically placed throughout the courtroom to allow for the presentation of digital evidence. These input locations will be transported using a proprietary AVoIP network video protocol to displays placed at key locations throughout the courtroom. Audio from the digital evidence will be fed to the AVoIP Dante network for recording and in-room amplification. Control of the system will be combined with the touch panel used for the Audio Reinforcement System. The touch panel will allow the courts to control how video evidence is presented in the courtroom, along with which displays will receive content. Additionally, the touch panel will allow for adjusting the content audio within the room.

### **SCHEMATIC DESIGN - Audio Visual Systems**

### **Video Conferencing System**

This system will use a dedicated Video Conferencing Codec that will allow the Courts to have virtual participants appear in the courtrooms at the court's discretion. The system will utilize the Audio Reinforcement System AVoIP Dante network to amplify remote participants using the loudspeakers in the courtroom. The system will also use the in-room microphones to reinforce audio to the remote participants. The video conferencing system will strategically place cameras to capture the judge, witnesses, and council tables, which will be sent to the remote participants. A large format display will be provided to allow the camera content of the remote participant to be viewed within the courtroom. It is unclear if Video Evidence Presentation will be included in this system type. Control of the system will be combined with the touch panel used for the Audio Reinforcement System. The touch panel will allow the courts to join and end video conferencing calls, create ad-hoc meetings, adjust the volume, or mute the remote audio content.

#### General

The MPR will act as a large group gathering space with flexible seating. The system will be designed to accommodate owner-provided laptops' connection into the audiovisual system from multiple locations. The video output of the devices will be routed to projectors located at strategic locations in the room. The projection screens within the room will be sized based on the furthest viewer in the room to ensure they can read 24pt font (e.g. MS Word) at 1920x1080 resolution (HD). The audio from the system will use a distributed loudspeaker system to produce a listening plain at 48" AFF that will not exceed +-3dB of variance across the listening plane. The system will use multiple wireless microphone transmitters to provide voice lift within the space.

#### 4. CONFERENCE ROOM SYSTEM

3. MULTI-PURPOSE ROOM

SYSTEM (MPR)

### General

The executive session room will provide a private meeting space, allowing content to be shared locally or to host a video conferencing call. The room will have a display to view video conferencing calls and locally presented content. The displays will be sized to ensure the furthest viewer in the room can view content at 1920x1080 (HD) resolution with a 24pt font (e.g. MS Word). The display will be installed at the end of the conference table and be mounted 48" above the floor to reduce viewing obstructions. The room will be equipped with an HDMI input at the conference table surface, allowing an owner-furnished laptop to be plugged into the system to present content within the room. The room will have an all-in-one conferencing bar designed for a bring-your-own-device experience using a soft client on the ownerfurnished laptop for video conferencing calls. The all-in-one device will abut the bottom of the wall-mounted display. The all-in-one device will provide a camera. microphone, and speaker over a USB connected to the owner-furnished laptop. The camera will be able to auto-frame the image to better capture the participants within the room. The microphone will use a beam-forming array to capture the local participants in the room and send their voices to the far-end video-conferencing participants. The speaker will provide audio content from the far-end participants. The room will be equipped with a USB connection for video conferencing at the conference table surface, allowing an owner-furnished laptop to be plugged into the system, giving access to the all-in-one conferencing bar for video conferencing calls. When the owner connects to the USB, they will need to update the default camera, microphone, and speaker in their soft client video conferencing software on the owner-furnished device.

### **SCHEMATIC DESIGN - Project Schedule & Budgets**

### **G. Project Summary**

1. PROJECT BUDGET District Court FJC Relocation A20-21 and C20-23



This project will be funded through the County's Capital Improvement Program (CIP) funding source.

Based on the findings from the Schematic Design process, it was determined that the project budget is sufficient to deliver this project. The estimated total project cost at the Schematic Design phase is comprised of the following typical capital project categories:

### **BUDGET CATEGORY**

### SCHEMATIC DESIGN

### **SCHEMATIC DESIGN**

C-Tower Estimate of Probable Cost A-Tower Estimate of Probable Cost

1. Construction Cost Subtotal	\$ 13,990,716	\$ 7,625,705
2. Consulting, combined in C-Tower	\$ 2,600,000	\$ 0
3. Equipment (security and courtroom audio)	\$ 1,750,000	\$ 240,000
4. Furniture	\$ 1,240,900	\$ 1,356,500
TOTAL PROJECT COST	\$19,581,616	\$9,222,205

#### 2. PROPOSED SCHEDULE

May - June 2024
July - September 2024
October - December 2024
January - February 2025
March - December 2025
January - February 2026
March 2026