CITY OF RIVERSIDE
WORK SESSION AGENDA
RIVERSIDE COUNCIL CHAMBERS
60 GREENE ST
RIVERSIDE, IOWA 52327

Monday, May 12th, 2025 @ 6:00 PM

1. Riverside Wellness Center
    a. Review Narratives, Elevations, Layouts, etc.
    b. Financing
        i. Discussion on Scheduling Bonding Presentation with Financial Advisor and Bond Counsel
    c. Committee
        i. Fundraising Launch
            1. Donation Processing
                a. Convenience vs Cost
                b. Receipting for Tax Purposes
            2. Donor Recognition
        ii. Public Information Launch
            1. Information
                a. Project Overview (Amenities, Layouts, Renderings, Projected Cost & Financing)
                b. Frequently Asked Questions
                c. How to get involved
            2. Locations
                a. Website
                b. Flyers
                c. Physical Signs on Location and Around City
                d. Social Media
        iii. Discussion on Involvement by Non-Committee Volunteers

OPN
ARCHITECTS


RIVERSIDE
Wellness Center


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Sports/Art
Sports/Art
Sports/Art
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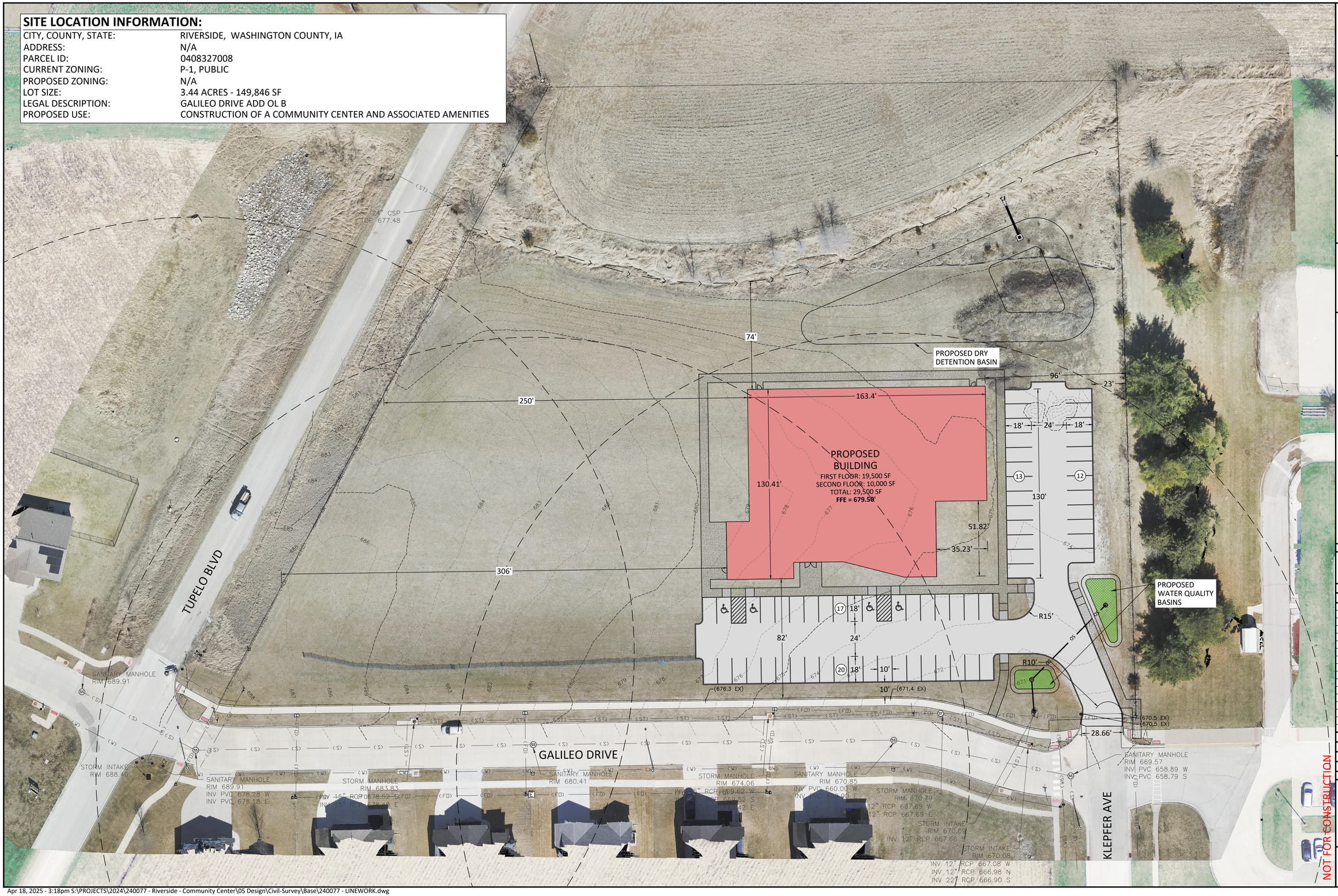
SITE LOCATION INFORMATION:

CITY, COUNTY, STATE:	RIVERSIDE, WASHINGTON COUNTY, IA
ADDRESS:	N/A
PARCEL ID:	0408327008
CURRENT ZONING:	P-1, PUBLIC
PROPOSED ZONING:	N/A
LOT SIZE:	3.44 ACRES - 149,846 SF
LEGAL DESCRIPTION:	GALILEO DRIVE ADD OL B
PROPOSED USE:	CONSTRUCTION OF A COMMUNITY CENTER AND ASSOCIATED AMENITIES



AXIOM CONSULTANTS
A RUEKERT & MIELKE COMPANY

0 15 30

COMMUNITY CENTER

RIVERSIDE, IA
CITY OF RIVERSIDE

ISSUED FOR
SCHEMATIC DESIGN

DATE	04-18-2025

DESCRIPTION	DATE

DESIGNED BY	JDK
DETAILED BY	JDK
CHECKED BY	BAB
PROJECT NO.	240077

SHEET NAME
LINEWORK CONCEPT

1 OF 1

NOT FOR CONSTRUCTION

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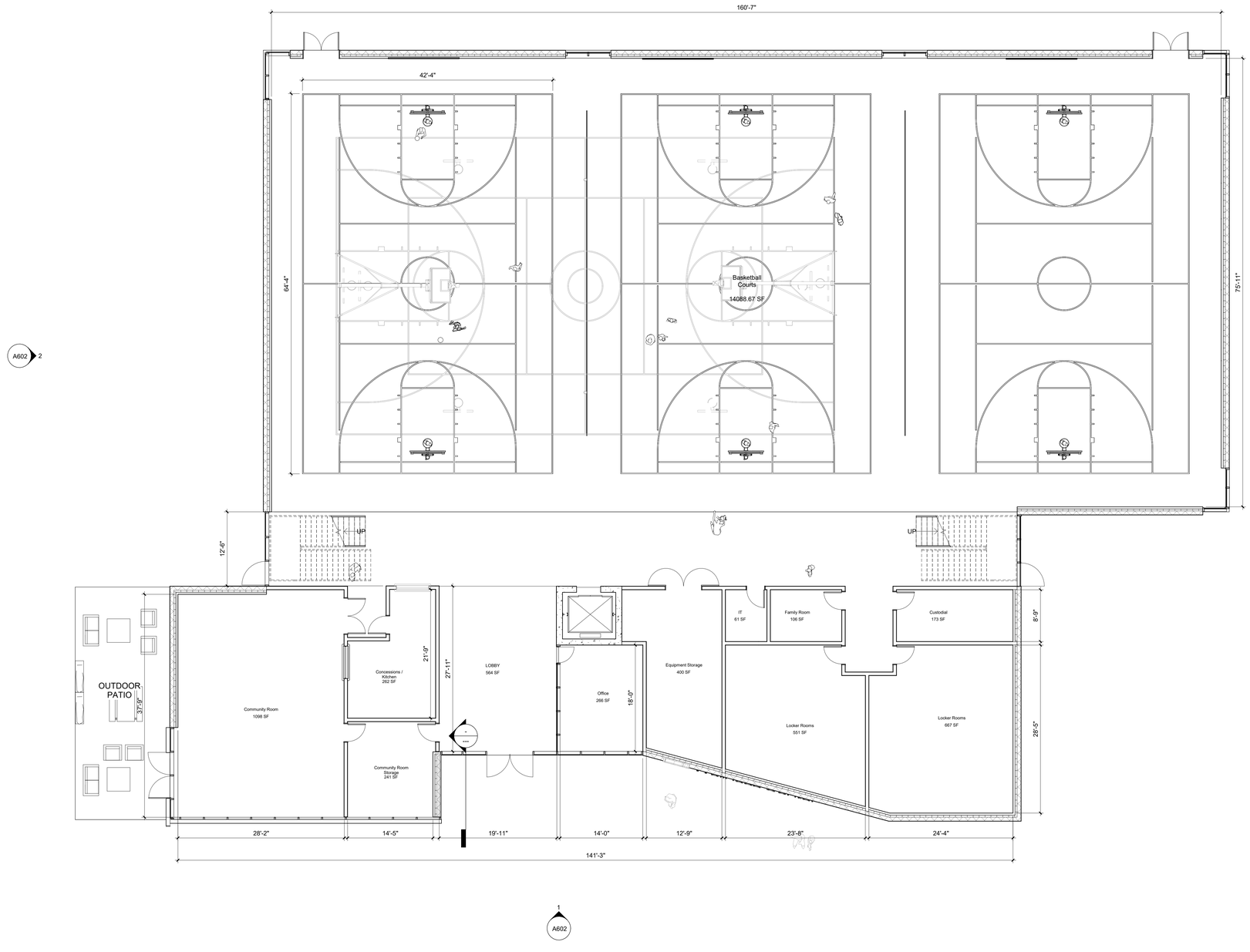
A602
3



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4 A602

1
A602

1 LEVEL 1 FLOOR PLAN
1/8" = 1'-0"

GENERAL NOTES

1. DIMENSIONS ARE MEASURED FACE-OF-FINISH TO FACE-OF-FINISH OR ROUGH MASONRY OPENING UNLESS NOTED OTHERWISE - TYPICAL FOR ALL DRAWINGS.
2. FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS - TYPICAL FOR ALL DRAWINGS.
3. IN THE EVENT OF A DISCREPANCY BETWEEN ARCHITECTURAL AND CONSULTANT DRAWINGS, NOTIFY ARCHITECT IMMEDIATELY PRIOR TO COMMENCING WORK - TYPICAL FOR ALL DRAWINGS.
4. ALL PENETRATIONS IN FIRE RATED FLOORS AND WALLS MUST BE SEALED WITH APPROPRIATE FIRESTOPPING SYSTEM.
5. PATCH AND REPAIR EXISTING FLOOR SLABS AND WALL SURFACES DAMAGED FROM DEMOLITION.

KEYNOTE LEGEND

ACCESSORIES LEGEND

OPN ARCHITECTS

200 5th Ave. SE, Suite 201
Cedar Rapids, IA 52401
P: 319-363-6018
www.opnarchitects.com

Owner

Project

RIVERSIDE COMMUNITY WELLNESS CENTER

General Contractor

Contractor Name
XXX 1ST STREET
DES MOINES, IA 50309
P. 515-309-XXXX

Civil Engineer

Contractor Name
XXX 1ST STREET
DES MOINES, IA 50309
P. 515-309-XXXX

Structural Engineer

Contractor Name
XXX 1ST STREET
DES MOINES, IA 50309
P. 515-309-XXXX

Mechanical Engineer

Contractor Name
XXX 1ST STREET
DES MOINES, IA 50309
P. 515-309-XXXX

Electrical Engineer

Contractor Name
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DES MOINES, IA 50309
P. 515-309-XXXX

Key Plan

Revison	Description	Date

OPN Project No.

Sheet Issue Date
05/05/20

Sheet Name
LEVEL 1 FLOOR PLAN

Sheet Number
A101

PRELIMINARY. NOT FOR CONSTRUCTION.

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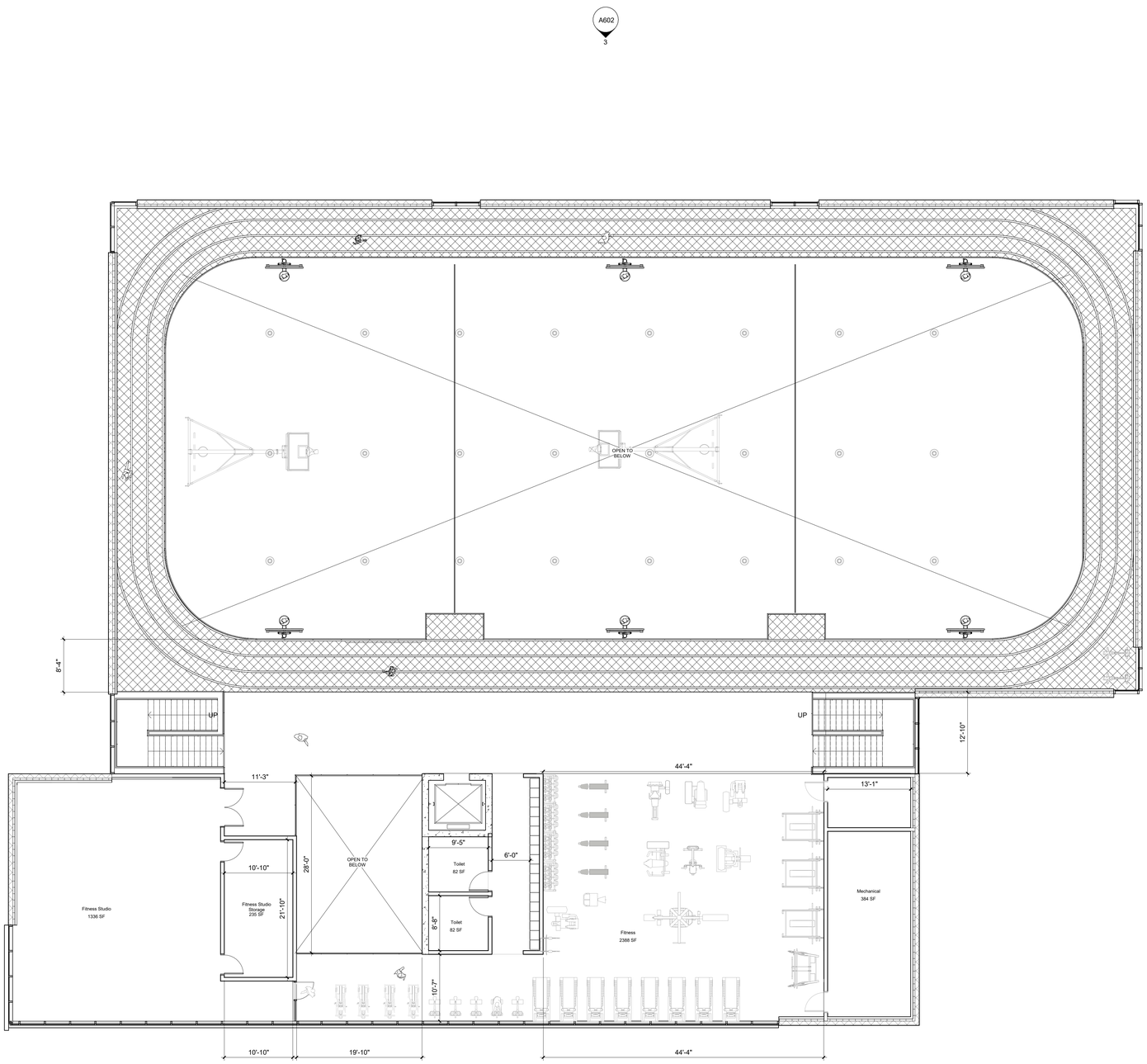

1 LEVEL 2 FLOOR PLAN
1/8" = 1'-0"

GENERAL NOTES

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Mechanical Engineer

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Electrical Engineer

Contractor Name
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DES MOINES, IA 50309
P. 515-309-XXXX

Key Plan

Revision Description Date

OPN Project No.

Sheet Issue Date
05/05/20

Sheet Name
LEVEL 2 FLOOR PLAN

Sheet Number
A102

PRELIMINARY. NOT FOR CONSTRUCTION.

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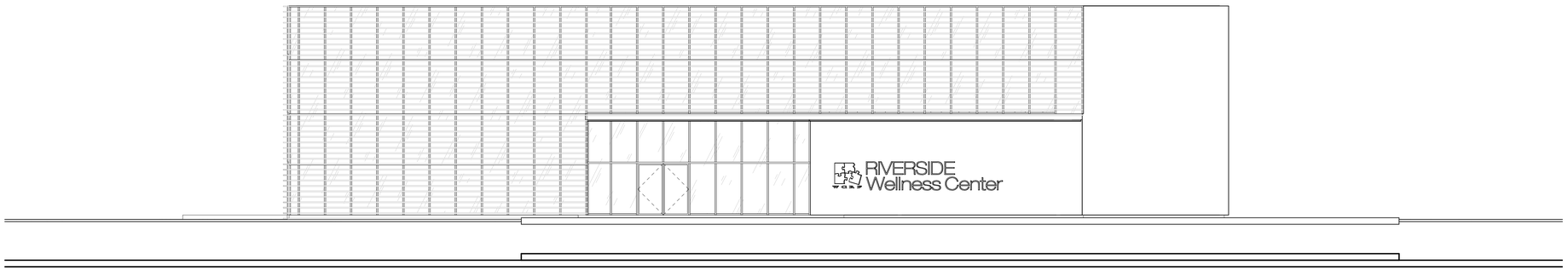
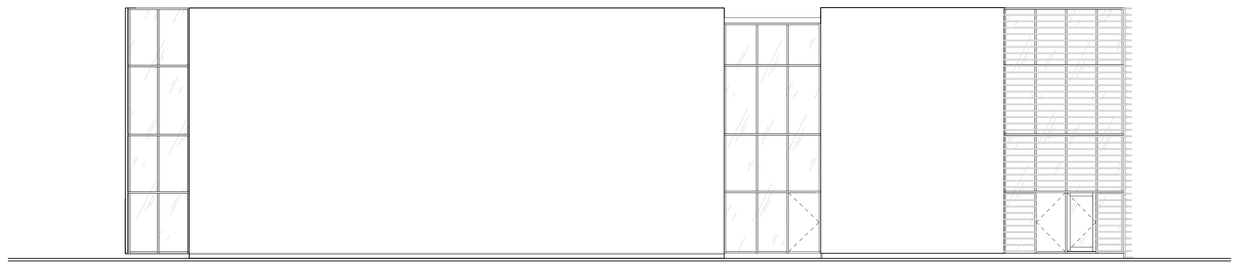
KEYNOTE LEGEND

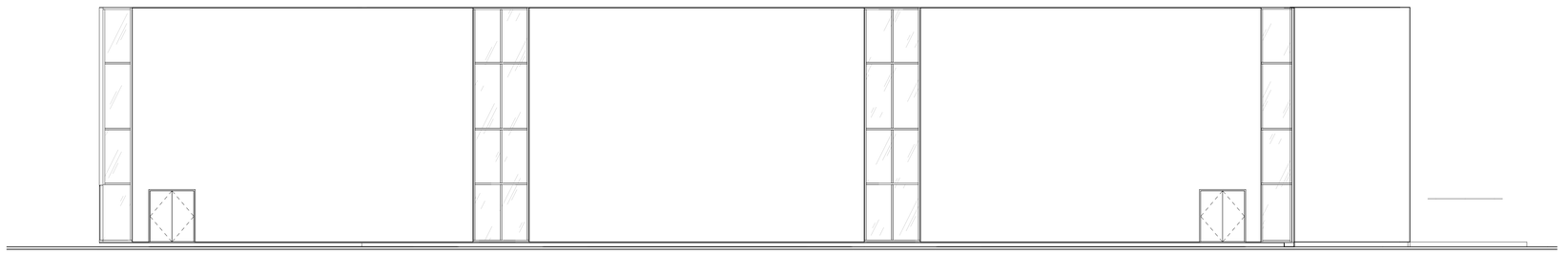
ACCESSORIES LEGEND



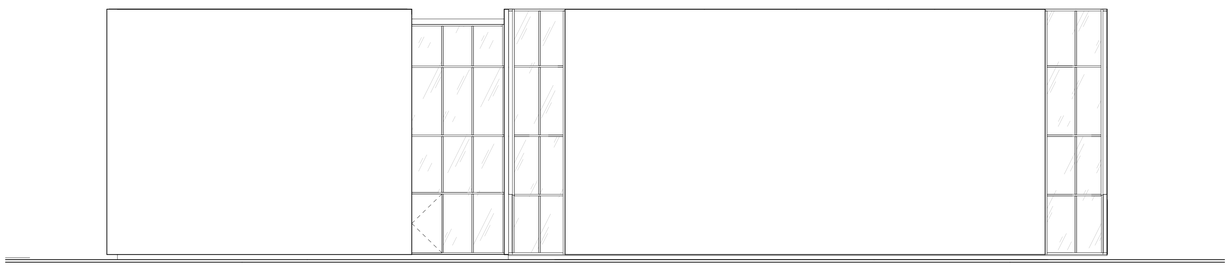
1 SOUTH ELEVATION
1/8" = 1'-0"



2 WEST ELEVATION
1/8" = 1'-0"



3 NORTH ELEVATION
1/8" = 1'-0"



4 EAST ELEVATION
1/8" = 1'-0"

PRELIMINARY. NOT FOR CONSTRUCTION.

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Owner

Project

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DES MOINES, IA 50309
P. 515-309-XXXX

Civil Engineer

Contractor Name
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DES MOINES, IA 50309
P. 515-309-XXXX

Structural Engineer

Contractor Name
XXX 1ST STREET
DES MOINES, IA 50309
P. 515-309-XXXX

Mechanical Engineer

Contractor Name
XXX 1ST STREET
DES MOINES, IA 50309
P. 515-309-XXXX

Electrical Engineer

Contractor Name
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DES MOINES, IA 50309
P. 515-309-XXXX

Key Plan

Revision Description Date

OPN Project No.

Sheet Issue Date

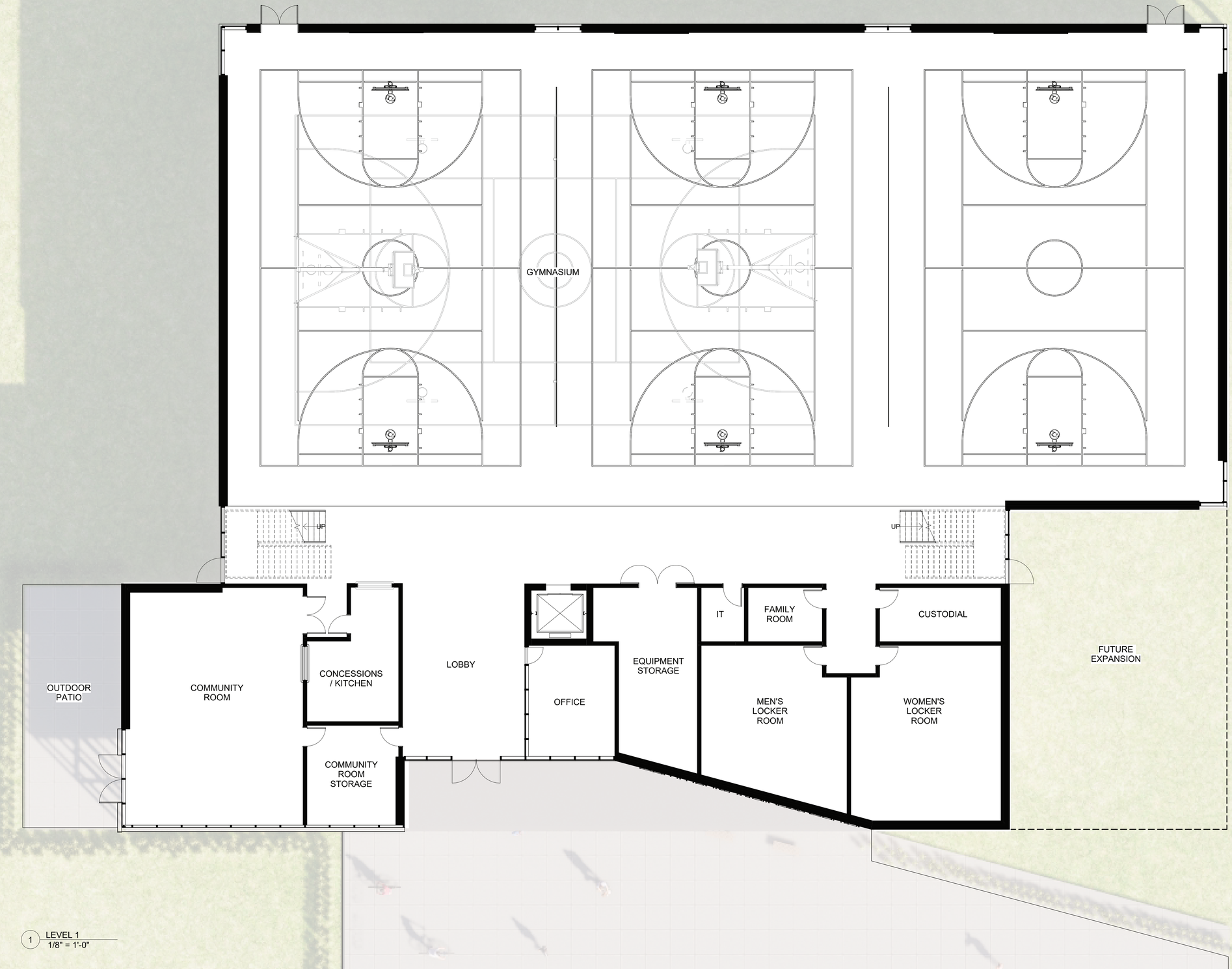
12/30/20

Sheet Name

EXTERIOR ELEVATIONS

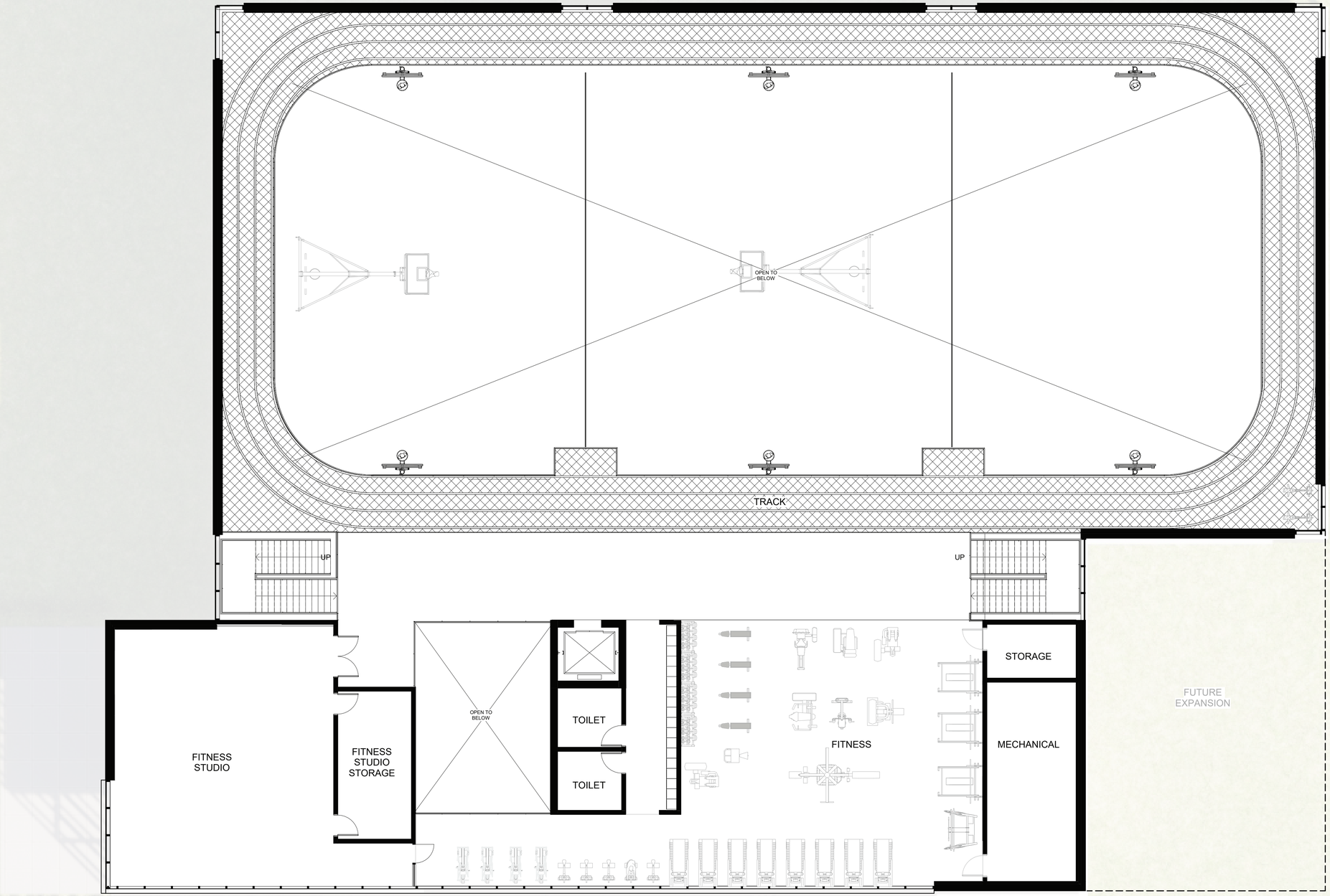
Sheet Number

A602



1 LEVEL 1
1/8" = 1'-0"

OPN ARCHITECTS



1 LEVEL 2
1/8" = 1'-0"

OPN ARCHITECTS

Executive Summary

After more than a decade of visioning and persistence, the City of Riverside, Iowa is one step closer to realizing its long-envisioned Community Wellness Center. In partnership with Axiom Consultants and OPN Architects, the City Manager and Council developed a conceptual design study to bring form to a facility that will serve as a cornerstone for health, connection, and community.
The proposed Riverside Community Wellness Center is designed to be an inclusive and welcoming destination for residents of all ages—supporting physical activity, gathering, and holistic well-being. Throughout the schematic design process, the design team collaborated closely with the City Manager and City Council, reviewing program requirements and refining goals. A benchmarking visit to the Mount Vernon Wellness Center provided valuable insights into effective programming and operational strategies, informing the design of Riverside's facility.
The resulting design includes:

- **Gymnasium**: Accommodates three middle school basketball courts and one full-size competition court, with additional markings for flexible athletic use.
- **Walking Track**: A three-lane track on the second level promotes year-round accessibility to low-impact fitness.
- **Multipurpose Room**: Adaptable for community events, classes, and programming.
- **Exercise & Yoga Room** and **Cardio/Weightlifting Area**: Dedicated spaces for a range of wellness and fitness activities.
- **Locker Rooms**, **Administrative Offices**, and **Support Spaces**: Designed for functionality and efficiency.
- **Future Expansion**: The building footprint is planned to allow expansion to the east and west, enabling the center to evolve alongside community needs.

The current design proposes a total area of approximately **30,286 gross square feet**, carefully organized to balance programmatic requirements with budget and long-term adaptability. This facility is poised to become a community hub—uniting the people of Riverside in a shared pursuit of wellness and connection.

Current Code Information

Primary Occupancy: Assembly, A-3
Fully Sprinkled
Allowable Height: 75', 3 Stories (Actual: 33', 2 Stories)
Allowable Area: 38,000sf without adjustments (Actual: 30,256gsf)
Construction Type: IIB
Occupant Load: 1221 Occupants

Plumbing Counts			
	1221 Total Occupants	Required	Estimated Provided
Male	1 per 125 Occupants (611 Occ.)	5	7
Female	1 per 65 Occupants (611 Occ.)	10	11
Lavatories	1 per 200 Occupants	6	9
Drinking Fountains	1 per 500 Occupants	3	4
Service Sinks	1	1	1
Showers	No requirement	0	7

Exterior Building Construction

The exterior wall construction consists of three basic systems:

Brick
Insulated Precast Panels
Aluminum Curtain wall/ Storefront

Brick

Brick will be used at the south two-story building section to provide a durable cost effective material. The basis of design Brick is a white of buff color – Size: utility; Bond: 1/3 running bond
The wall assembly (from interior to exterior) is anticipated to be as follows:
5/8" Type X GWB
8" CMU
Water Barrier Membrane
3" Rigid Insulation
1 3/8" Air Space
Face Brick

Insulated Precast Panels

Insulated precast panels are used around the gymnasium on the east, north, and west elevations. The assumed standard panel widths at 28' tall and 10" thick. The R Value will be 13.89. Panel to be cast face down with hard troweled finish on interior face. Standard gray of buff concrete mix to be used with painted interior.

Glazing Systems

The exterior glazing consists of the following:
A curtain wall system in all glazed locations.
In areas shown on the elevations and renderings, an external solar control louver system resembling wood, will be applied to the curtain wall system. The louver system will consist of horizontal fins attached back into the window mullions. Between the fins will be a series of airfoil shaped aluminum louver blades. At this stage the exact number, depth, and angle of the louvers is not known.

Roofing System

The roofing system is a fully adhered EPDM membrane over a cover board/rigid polyisocyanurate insulation assembly that is mechanically fastened to the metal roof deck below. Roof structure will be sloped to allow for a constant 5" thickness of insulation to provide a minimum LTTR value of not less than R-24. All major roofing slopes will be a minimum ¼"slope with crickets at minimum ½" slope used as needed to provide positive drainage to the internal primary and overflow roof drains.

Assumed Finishes by Space

Space	Assumed Finishes
Community Room	Carpet, Paint, ACP Ceilings
Comm. Room Storage	Carpet, Paint, ACP Ceilings

Concessions/ Kitchen	Polished Concrete, Paint, ACP Ceilings
Lobby	Polished Concrete, Paint, ACP Ceilings
Office	
Equipment Storage	Sealed Concrete, Paint, Open Ceiling
IT Room	Sealed Concrete, Paint, Open Ceiling
Family Restroom	Floor and wall Tile, ACP Ceiling
Men's Locker Room	Floor and wall Tile, ACP Ceiling
Women's Locker Room	Floor and wall Tile, ACP Ceiling
Custodial	Sealed Concreate, Paint, Open Ceiling
Gymnasium	Wood Court Flooring, Paint, Open Ceiling, Wall Pads
Fitness Studio	Wood Fitness Flooring, Paint, Open Ceiling
Fitness Studio Storage	Sealed Concrete, Paint, Open Ceiling
Unisex Toilet	Floor and wall Tile, ACP Ceiling
Unisex Toilet	Floor and wall Tile, ACP Ceiling
Fitness Area	Rubber Sports Flooring, Paint, Open Ceiling
Mechanical Room	Sealed Concreate, Paint, Open Ceiling
Outdoor Patio	Pavers
Walking Track	Rubber Sports Flooring

Special Construction

Bleachers Basis of Design: Draper Tip and Roll Bleachers 15' or 21' long. Seats provided per unit at 30 and 42, respectively.

Retractable Curtains Basis of Design: Draper Fold-Up Gym Divider Curtain.

Elevator Basis of Design: Schumacher Holeless Machineroomless Hydraulic Elevator.

Program

The following program was developed originally as part of past studies by the City as well as subsequent meetings with the design team and the City Council:

Space	Area	Level	Notes
Community Room	1,098 sf	Ground	
Comm. Room Storage	241sf	Ground	
Concessions/ Kitchen	262sf	Ground	
Lobby	564sf	Ground	
Office	266sf	Ground	
Equipment Storage	400sf	Ground	
IT Room	61sf	Ground	
Family Restroom	106sf	Ground	
Men's Locker Room	551sf	Ground	
Women's Locker Room	667sf	Ground	
Custodial	173sf	Ground	

Gymnasium	14,095sf	Ground	
Fitness Studio	1336sf	Upper	
Fitness Studio Storage	235sf	Upper	
Unisex Toilet	82sf	Upper	
Unisex Toilet	82sf	Upper	
Fitness Area	2,347sf	Upper	
Mechanical Room	534sf	Upper	
Walking Track	3,792sf	Upper	
Outdoor Patio			Adjacent to Community Room

Riverside Community Center
ENGINEERING NARRATIVE
Fire Protection | Plumbing | HVAC | Electrical | Lighting | Data / Technology

The following Narrative for the new construction of a community center in Riverside, Iowa, provides a verbal schematic description of the MEPT systems for the purposes of procuring contractor pricing.
The addition is new construction, all equipment and systems listed shall be new, unless otherwise noted.

GENERAL INFORMATION
The facility is in Washington County, IA. Washington County is in Climate Zone 5A.

State of Iowa and City of Riverside current adopted building codes are as follows, with amendments:

- State of Iowa Energy Code (International Energy Conservation Code (IECC) 2015)
- Iowa State Mechanical Code
- Iowa State Plumbing Code
- International Fire Code (IFC) 2015
- Iowa State Electrical Code
- International Building Code (IBC) 2015
- ASHRAE 62.1, latest edition
- ASHRAE 90.1, 2016
- NFPA 13 Standard for the Installation of Sprinkler Systems
- NFPA 24 Standard for the Installation of Private Fire Service Mains and Their Appurtenances
- NFPA 90A Standard for the Installation of Air-Conditioning and Ventilation Systems
- NFPA 101 Life Safety Code
- Sheet Metal and Air Conditioning Contractors' National Association, Inc. SMACNA

The facility addition is approximately 31,000 sq. ft.

CONTENTS

DIVISION 21 FIRE PROTECTION SYSTEM (FP)

FIRE PROTECTION SYSTEM OVERVIEW

Fire protection system shall be in accordance with the following adopted edition of codes:

- International Fire Code (IFC) 2015
- International Building Code (IBC) 2015
- NFPA 13 Standard for the Installation of Sprinkler Systems
- NFPA 24 Standard for the Installation of Private Fire Service Mains and Their Appurtenances

The entirety of the facility shall be provided with a complete coverage wet-type automatic fire protection sprinkler system.

FIRE PROTECTION SYSTEM DESCRIPTION AND SPECIFICATIONS

A new fire main service shall be provided, with the following components:

- Fire Service Size = 6”ø
- Fire Protection Riser
  - Double check backflow preventer
  - Flow switch
  - Tamper switch alarm
  - Fire Department Connection (FDC) with horn and strobe; check valve
    - FDC shall meet requirements of the City of Riverside Fire Department
  - Automatic drip valve
  - High/Low Supervisory switch
  - Indicating butterfly valves
  - Inspector’s test and drain valve at remote areas of the building. Terminate on exterior at splash block.
  - OS&Y supervisory switch
  - Waterflow pressure switch
- Sprinkler Types
  - Upright sprinkler heads in areas without ceilings. Provide wire guards on all upright exposed sprinkler heads.
  - Fully recessed sprinklers in all spaces with ceilings.
- Sprinkler head clarifications:
  - Provide sprinkler protection on all sides of obstructions per NFPA 13.
  - Provide sprinkler protection above and below ductwork & equipment per NFPA13.
  - Provide sprinkler protection under stair landings per NFPA 13.
  - Provide sprinkler protection in the elevator shaft per NFPA 13.
- Sprinkler piping
  - Steel pipe, ASTM A 53; Schedule 40 seamless carbon steel.
  - Schedule 10 pipe shall be allowed for pipe sizes larger than 2” diameter when roll grooved mechanical couplings are used.
  - Installed above ceilings and concealed within chases where applicable.
  - Fittings shall be grooved mechanical fittings: ANSI A21.10 ductile iron; ASTM A47 grade malleable iron. Couplings shall be ASTM A 536 ductile iron or malleable iron housing, EPDM gasket with nuts, bolts, locking pin, locking toggle or lugs to secure roll grooved pipe and fittings.

DIVISION 22 PLUMBING SYSTEMS

PLUMBING SYSTEMS OVERVIEW

Plumbing systems shall be in accordance with the following adopted edition of codes:

- Iowa State Plumbing Code
- International Building Code (IBC) 2015
- State of Iowa Energy Code (International Energy Conservation Code (IECC) 2015)
- All State of Iowa and City of Riverside amendments

SANITARY WASTE AND VENT SYSTEM DESCRIPTION AND SPECIFICATIONS

Provide a new sanitary sewer service.

- 4" service – assumed 95.0 DFU
- Provide floor drains in the following areas:
  - Mechanical rooms
  - Restrooms
  - Locker Rooms
  - Janitor / water rooms
- Provide a floor sink in the water room
  - Provide trap primer for floor sink
- Provide cleanouts on sanitary sewer piping to meet the following:
  - Upper terminal of each branch
  - Each run of piping more than 100-feet of developed length
  - Each run of piping with aggregate horizontal change in direction exceeding 135 degrees
- Provide trapped waste connection to each fixture
- Provide vent connection to each sanitary connection
- Provide vent through roof (VTR)
- Sanitary waste and vent piping
  - Schedule 40 PVC and/or hubless cast iron with standard torque clamps, conforming to CISPI 301 for above ground piping and hub and spigot cast iron conforming to ASTM A 74 for piping installed below the floor slab. Waste, and vent piping shall be concealed within chases and walls where possible. Waste services shall exit the building below slab at multiple locations to be coordinated with the site engineer.
- Provide bi-directional cleanout where sanitary main exits the building.

DOMESTIC PLUMBING SYSTEM DESCRIPTION AND SPECIFICATIONS

- Domestic riser assembly
  - 2" CW service – assumed 210 WSFU (90 gpm)
  - Water meter
  - Reduced pressure zone (RPZ) backflow preventer with discharge drain
  - Shut-off valves
  - Flushometer water closet and urinals
- Domestic piping and insulation
  - Domestic cold water, domestic hot water, and domestic hot water recirculation piping shall be Type L copper conforming to ASTM B 88. Domestic water piping shall be insulated with rigid molded, noncombustible glass fiber insulation conforming to ASTM C335. Domestic water piping throughout the building shall be installed above ceilings and concealed within walls. PVC jacketing shall be provided on piping in exposed areas.
  - PEX piping is an acceptable alternative. PEX piping shall be sized and installed as required by all codes.

HOT WATER GENERATING SYSTEM

Hot water generator system shall be the following:

- Locker Rooms, Concessions/Kitchen, Restrooms, Community Room
- Peak Demand = 303 US Gallon per Hour (USGPH)
- Two (2) 60-gallon, gas-fired, ultra-high efficiency water heater/storage tank by Rheem, Bradford White or equivalent.
- Recovery rate = 442 USGPH @ 90 deg. F rise
- Approx 1st Hour Delivery = 526 USG
- 199 MBH input (each), 398 MBH total.
- Expansion tank on CW inlet header
- Drain pan under each WH
- Combustion air intake and exhaust vent piping for each WH

HOT WATER and RECIRCULATING SYSTEM – Provide on HOT WATER GENERATING SYSTEM

- Hot water recirculation systems shall be installed to maintain the appropriate temperatures in the domestic hot water system throughout the building. The pump shall be controlled by an aquastat and a timeclock to meet the State of Iowa Energy Code requirements. Hot water recirculation piping shall be installed at the most remote fixture locations to provide adequate hot water within 15 seconds of faucet activation. Balancing valves (circuit setters) shall be provided to ensure proper system flow.
- Point of use thermostatic mixing valves shall be installed on all public Lavatories.

NATURAL GAS SYSTEM DESCRIPTION AND SPECIFICATIONS

A new natural gas service shall be provided and comprised of the following:

- 1,000 btuh per 1 cubic foot per hour (cfh)
- Total gas load = 2,650,000 btuh → 2,650 cfh
- Service shall be 1-1/2" at 2-psi (Table 1215.2(4) UPC-2021)
- Utility shall provide the meter assembly which shall consist of shut-off valves, pressure regulator and meter.
- Gas piping shall be:
    - ASTM A53 schedule 40 black steel. Gas piping shall serve HVAC and water heater systems.
    - Piping to mechanical and other large equipment shall be 2-psi and will reduce at the equipment with a pressure regulator. Interior regulator vents shall terminate above the roof elevation.
- Pipe accessories
    - Dirt leg on each equipment connection
    - Manual shutoff valves for each piece of equipment
    - Pressure regulators to deliver required operating pressure for gas-fired appliances

DIVISION 23 HEATING, VENTILATION AND AIR-CONDITIONING (HVAC) SYSTEMS

HVAC SYSTEMS OVERVIEW

HVAC systems shall be in accordance with the following adopted edition of codes:

- State of Iowa Energy Code (International Energy Conservation Code (IECC) 2015)
- Iowa State Mechanical Code
- International Building Code (IBC) 2015
- ASHRAE 62.1, latest edition
- ASHRAE 90.1 2016
- NFPA 90A Standard for the Installation of Air-Conditioning and Ventilation Systems

The HVAC systems shall be separated into the following zones:

- Basketball Courts & Track
- Level 1 Spaces: Front Lobby, Community Room, Office, & Locker Rooms
- Fitness Area
- Fitness Studio

DESIGN CONDITIONS

- Outside Air Conditions Heating
  - -10 deg F.
- OA Conditions Cooling
  - 95/77 DB/WB deg F.

Basketball Courts & Track – ZONE 1

HVAC shall be provided by natural gas-fired, high-efficiency rooftop units (RTU).

- ZONE 1 shall be served by three (3) equivalent sized RTUs
  - One (1) RTU serving each basketball court
  - Reduces equipment capacities & ductwork sizing
  - Provides basic zoning
  - Splitting zone into (3) RTUs removes the requirement for energy recovery per State of IA Energy Code
  - Provides redundancy
- RTU single zone VAV - Design Basis RTU model: Trane Precedent, Model YHK210A3S0H**K2
  - Quantity – 3, Values represented below are per RTU.
  - 6,200 cfm supply / 1,500 cfm ventilation (24.2% OA)
  - Cooling Load – Total = 16.8-ton (201.5 MBH), sensible = 10-ton (120 MBH), latent = 6.8-ton (81.7 MBH)
  - Heating Load – 321.4 MBH
  - Min. 10.8 EER / 12.2 IEER

Level 1 Front Lobby & Spaces – ZONE 2

HVAC shall be provided by multi-zone VAV, natural gas-fired, high-efficiency rooftop unit (RTU).
Multi-zone RTU shall have VAV boxes with electric heat coils and sound attenuators on the discharge.

- RTU multi-zone VAV - Design Basis RTU model: Trane Precedent, Model YHK210A3S0H **K4
  - 6,200 cfm supply / 1,400 cfm ventilation (22.6% OA)
  - Cooling Load – Total = 15.6-ton (186.9 MBH), sensible = 10.9-ton (130.6 MBH), latent = 4.7-ton (56.3 MBH)
  - Heating Load – 301.3 MBH
  - Min. 10.8 EER / 12.2 IEER
- VAV Box layout shall be as follows – a total of six (6) VAV zones are anticipated:
  - Lobby shall be provided with a VAV box and thermostat.
  - Each Locker Room (qty. 2) shall be provided wit ha VAV box and thermostat.

- Office shall be provided with a VAV box and thermostat.
- Community Room, Community Storage Room, and Concessions shall be provided with a VAV box and thermostat.
- Common Areas (corridor, equipment storage, Family Room, Custodial) shall be provided with a VAV box and thermostat.

Fitness – ZONE 3

HVAC shall be provided by natural gas-fired, high-efficiency rooftop unit (RTU).

- RTU single zone VAV - Design Basis RTU model: Trane Precedent, Model YHK150A3S0H**K2
  - 4,500 cfm supply / 800 cfm ventilation (17.8% OA)
  - Cooling Load – Total = 12.4-ton (148.6 MBH), sensible = 8.8-ton (104.7 MBH), latent = 3.7-ton (43.9 MBH)
  - Heating Load – 209.0 MBH
  - Min. 10.8 EER / 12.2 IEER

Fitness Studio – ZONE 4

HVAC shall be provided by natural gas-fired, high-efficiency rooftop unit (RTU).

- RTU single zone VAV - Design Basis RTU model: Trane Precedent, Model YHK180A3S0H**K2
  - 5,200 cfm supply / 1,200 cfm ventilation (23.1% OA)
  - Cooling Load – Total = 12.4-ton (148.8 MBH), sensible = 7.6-ton (90.3 MBH), latent = 4.9-ton (58.5 MBH)
  - Heating Load – 280.8 MBH
  - Min. 10.8 EER / 12.2 IEER

All RTUs shall have the following accessories / options:

- Variable speed supply fan
  - Gym (qty 3) – Single Zone VAV
  - Level 1 Lobby and Spaces – Multi-Zone VAV
  - Fitness – Single Zone VAV
  - Fitness Studio – Single Zone VAV
- Gas-fired heat
- Hot gas reheat
- Economizer – dry bulb control
- Powered exhaust – building pressurization
- Bird screen OA intake
- MERV13 filtration + clogged filter switch
- 115V convenience receptacle
- Roof curb – min 18” tall above highest portion of roof, including insulation.
- Stainless Steel heat exchanger
- Disconnect Switch
- Smoke detectors in return & supply air for units ≥ 4,000 cfm; return air only for units <4,000 cfm
- Thermostat installed in most critical area, or thermostat in each individual space with VAV box

HVAC ACCESSORIES DESCRIPTION AND SPECIFICATIONS

Sheet metal ductwork shall be the following:

- Galvanized steel, unless noted otherwise. Fabricated and installed per SMACNA standards.
- Duct sealing, fittings and seams shall meet min. Class C & +2” w.g. pressure class.
- Duct shall be reinforced per SMACNA standards.
- Basketball Courts & Track (Zone 1) shall be fabric duct with internal skeleton/structure as not to deflate/inflate.
- Fitness (Zone 3) shall be exposed spiral ductwork, internally lined, primed for field painting.
- Fitness Studio (Zone 4) shall be exposed spiral ductwork, internally lined, primed for field painting.

Ductwork accessories:

- Provide 45 deg boot takeoff for each branch
- Provide manual volume dampers (MVD) at all supply, return and exhaust air branch connections to mains.
  - Exception: Systems with VAV boxes shall not have MVD upstream of VAV boxes. If VAV box serves multiple outlets, a MVD shall be installed as close to the takeoff branch as possible, maintaining access to the MVD.
- VAV boxes shall have sound attenuators installed on outlet
- Support all ductwork from structure meeting SMACNA and IMC requirements.
- Flexible ductwork not to exceed 5' length when attaching to outlets.
- All ductwork above ceilings shall be insulated to meet State of Iowa energy code requirements.

HVAC Controls:

- Single Zone VAV – Standalone thermostat in the most critical area of each zone.
- Multi Zone VAV – Manufacturer controls system to operate multizone VAV system.
- Rooftop Unit Manufacturer shall provide a control system to tie in all systems – RTUs and VAVs – for staff to monitor and control remotely.

Testing, Adjusting and Balancing: TAB shall be performed for all air and water systems in accordance with Associated Air Balance Council (AABC) and Natural Environmental Balancing Bureau (NEBB).

MISCELLANEOUS HVAC EQUIPMENT

Single Restrooms

- Single roof mount exhaust fan.
- Operate via associated light occupancy sensor

Men's Locker Rooms

- Single roof mount exhaust fan.
- Operate via associated light occupancy sensor

Women's Locker Rooms

- Single roof mount exhaust fan.
- Operate via associated light occupancy sensor

DIVISION 26 ELECTRICAL SYSTEMS

General

- Work shall include furnishing of all systems, equipment and material as specified in this narrative. This includes supervision, installation and start-up test for equipment provided as part of this work.
- All work shall be performed in a neat, workmanlike manner.
- Contractor shall comply with the rules and regulations of the local utility companies.
- Contractor shall lay out his own work and shall be responsible for determining the exact locations for equipment and rough-ins and the exact routing of conduits and raceways so as to best fit the layout of the work.

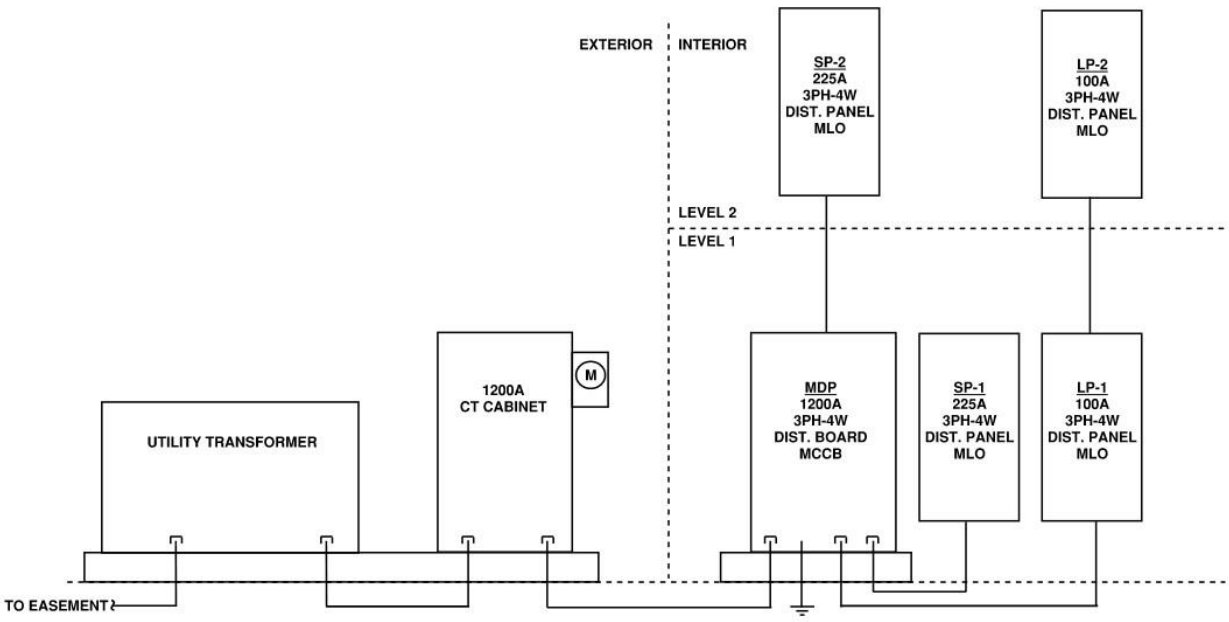
Utility Services

- Power
  - One utility-provided pad-mounted transformer to be located outside on a side of the building not facing a street. All primary cable installation shall be by the electrical utility company. Primary and secondary conduits by Electrical Contractor (EC), secondary conductors by EC. The secondary voltage of the transformer shall be 208/120V. EC shall coordinate with the local Electrical Utility for size and location of service transformer. EC shall be responsible for electrical service application and associated fees.
  - Provide 1200 Amp CT cabinet and meter socket meeting MidAmerican requirements. Provide service lateral to connect the utility transformer secondary to CT cabinet through underground PVC Sch 40 conduit.
  - Provide 1200 Amp Service Entrance Rated Distribution Board with 1200 Amp main breaker to serve the facility.
  - Service feeders shall be aluminum, 600V, SER type.
- Communications
  - Provide two (2) two inch (2") conduits from easement to IT room for utility fiber.

Main Distribution

- Provide one (1) 1200 Amp 208/120V SER Distribution Board installed in elec/mech room.
  - Provide Type II surge protection
  - Provide (1) 225A/3P Breaker | Panel SP-1
  - Provide (1) 225A/3P Breaker | Panel SP-2
  - Provide (1) 100A/3P Breaker | Panel LP-1/LP-2
  - Provide (1) 100A/3P Breaker | RTU-1, 12.5 Tons
  - Provide (1) 110A/3P Breaker | RTU-2, 15 Tons
  - Provide (1) 125A/3P Breaker | RTU-3, 17.5 tons
  - Provide (1) 125A/3P Breaker | RTU-3, 17.5 tons
  - Provide (1) 125A/3P Breaker | RTU-3, 17.5 tons
  - Provide (1) 125A/3P Breaker | RTU-3, 17.5 tons
  - Provide (1) 150A/3P Breaker | Solar Array

- Provide the following distribution equipment that will be fed from the distribution board. Equipment shall be located in the electrical room. Refer to single-line diagram below.
  - (2) 225A, 208/120V, 3PH-4W Distribution Panel– 84 circuit | Panel SP-1/SP-2 (Recpts, Equipment)
    i. Provide all required breakers for loads to be served.
  - (2) 100A, 208/120V, 3PH-4W Panelboard – 42 circuit | LP-1/LP-2 (lighting)
    i. Provide all required breakers for loads to be served.
- Electrical Contractor to coordinate with the Mechanical Contractor and Owner to verify overcurrent protection device ratings based on equipment being provided.



Single-Line Diagram

Emergency/Standby Power

- Provide lighting inverter, see lighting section for additional information.

Surge Protection Devices

- Provide a Surge Protection Device (SPD) for panel TL2
  - Provide 100kA Type 2 Surge Arrester installed in/on panel MDP. Provide overcurrent protection as required dependent on type of surge arrester provided.

Raceways and Boxes for Electrical Systems

- The proposed Construction type is IIB, wiring shall be Type NM and installed in conduit throughout the building as permitted by the NEC. For exterior circuits and wet locations, wiring shall be Type UF and installed in conduit.
- Provide all boxes, fittings, supports, and accessories required for a complete raceway system and to accommodate devices and equipment to be installed. Boxes shall be sized to comply with the NEC, provide grounding terminals withing boxes where equipment grounding conductors terminate.
- Provide floor boxes in the Community Room and Fitness Room. Floor boxes shall sit flush with the finished floor, quantity and type as indicated below.
- Community Room: Quantity of six; dual gang with duplex receptacle and two RJ45 jacks.
- Fitness Room: Quantity of nine; dual gang with duplex receptacle and two RJ45 or Coaxial jacks depending on equipment connections. Receptacles shall be split with two circuits ran to each box.

Identification for Electrical Systems

- Provide Identification for electrical and communications systems as follow:
  - Underground-Type Plastic Line marker for trenched in conduit and underground installations.
  - Cable/Conductor ID Bands – Provide vinyl-cloth self-adhesive cable/conductor markers of wrap-around type.
  - Self-Adhesive Tape – Provide clear self-adhesive or pressure-sensitive, pre-printed, flexible vinyl tape for panel name and circuit number for boxes and installed on the inside of face plates for lighting and receptacle loads.
  - Engraved Plastic-Laminate Signs – Provide engraving stock melamine plastic laminate, engraved with black or white letters. Punched for mechanical fastening except where adhesive mounting is necessary. Install on all panelboards, disconnects and other load isolating equipment.
  - Warning Signs – Provide warning signs to identify electrical hazards for entrances to all rooms and other guarded

locations that contain exposed live parts operating at 600V or less.

Wiring Devices

- Receptacles shall be installed throughout in accordance with the NEC. All wet locations shall utilize GFCI outlets. Electrical Contractor to coordinate locations and mounting heights with Architect and Owner prior to installation. All receptacles, switches and cover plate finishes to be selected by Owner/Architect. Receptacles shall be as follows:
  - General Convenience Receptacles: NEMA 5-20TR
  - Receptacles for power and special purpose outlets shall have NEMA configurations per the drawings.
  - Wet Locations, exterior, water fountains, elevator pit: Ground fault interrupting receptacles (GFI) shall be duplex with test/reset buttons with tamper resistant protection.
  - Provide weather-resistant, GFCI receptacle near each exterior man door with in-use cover.
  - Motorized Basketball Hoops: Quantity of two, L14-20R
- Provide Receptacles for the following as well as general use receptacles spaced throughout:
  - Convenience Receptacles for HVAC
  - Refrigerator
  - Vending Machines
  - Microwave
  - Kitchen Equipment (reach-n coolers, popcorn machine etc.)
  - Water Coolers
  - Show Windows
  - Small Pumps and other HVAC loads
  - TVs, provide recessed type box.
  - Computers, printers, office and IT equipment

Disconnect Switches

- Provide lockable disconnects within line of sight of each motor/appliance over 300VA or 1/8 hp. Switches in outdoor locations shall be rated NEMA 3R. Motor disconnecting means may be any of the following as longs as the horsepower rating is not less than the motor rating:
  - Horsepower-rated attachment plug and receptacle
  - Flanged surface inlet and cord connector
  - Attachment plug and cord connector
  - Toggle Type Disconnect
  - Fused/Non-Fused Disconnect

Adjustable Speed Drives

- Provide motor starters or VFDs for all motors that are not factory shipped with VFD or starter. Provide Toshiba #Q9 or preapproved equivalent by Allen Bradley Powerflex shall be used. All controllers shall be from the same manufacturer. Variable speed motor controllers shall be BACnet MS/TP compatible.

Photovoltaic Systems

- Owner to work with Eagle Point Solar to determine placement and sizing of photovoltaic array. At this point in design the location of the array has not been selected (roof or ground mounted). Contractor to provide two (2) two inch (2") conduits from solar array disconnect to MDP. Provide back-fed breaker sized for solar array, assume max of 150 Amp based on size of MDP busbar.

Specialty Equipment

- Motorized Basketball Hoops | Motorized Curtain Dividers
  - Provide Relay and Control Panel for operation of motorized hoops and curtain dividers. Basis of Design EZ-Pad 3.0 Gym Control System.
  - Provide (2) 30A/1P circuits and one cat6 cable to relay panel.

- Provide L14-20R for each hoop and curtain divider for motorized winch.
- Provide conduit and conductors from relay panel to each winch.

- Scoreboards
  - Quantity of three; 120V,1.5A.
  - Provide junction box behind each scoreboard for hardwired connection.
  - Controller
    - Quantity of one; 120V, 0.5A, plug-in. Provide receptacle for controller.
    - Scoreboards will be daisy-chained via cat6 cable for communications to controller.
- Elevator
  - Provide 100A 208V/3P fused disconnect with the following:
    - Shunt trip w/ 120V or 24V option
    - Fire Safety Interface relay
    - Fire Alarm voltage monitoring
    - Ground Lug
    - Class J fuse mounting and fuses sized per manufacturer requirements
    - mechanically interlocked auxiliary contacts for hydraulic elevators with battery backup
  - Provide 100A 208V/3P fused disconnect, fuse per manufacturer requirements
  - Provide 30A 120V/1P fused disconnect for Cab Lighting
  - Provide Simplex receptacle for sump pump and duplex GFCI receptacle for maintenance.
  - Provide three-way switch at top and bottom of elevator shaft for lighting.
- ADA Door Operators
  - Provide and install wiring to each door operator and pushbutton. Assume only at main entrance.

LIGHTING

General

- LED fixtures shall be installed throughout the interior and Exterior of the Building. Fixtures shall be approved by the Architect/ Owner prior to purchasing. Lighting layout shall meet the recommended illuminations below:
  - Parking: 1-2 fc
  - Entrance/Exit (exterior): 5 fc
  - Lobby: 30 fc
  - Office: 50 fc
  - Concessions/Kitchen: 50 fc
  - Community Room Storage: 20 fc
  - Community Room: 50 fc
  - Equipment Storage: 20 fc
  - IT: 20 fc
  - Family Room: 50 fc
  - Locker Room: 30 fc
  - Custodial: 20 fc
  - Gymnasium: 60-80 fc
  - Stairwells: 10-20 fc
  - Elevator Shaft: 10-20 fc
  - Fitness Studio: 50 fc
  - Fitness Studio Storage: 20 fc
  - Restrooms: 20 fc
  - Fitness: 50 fc
  - Corridors: 25 fc
  - Track: 50 fc
  - MEP: 20 fc

- Fixtures shall be of the type listed below or as approved by Owner/Architect:
  - Parking: Pole mounted roadway fixture; 20' pole w/ sonotube foundation extended 3' above grade.
  - Entrance/Exit (exterior): Wall Pack
  - Lobby: 30 fc
  - Office: 50 fc
  - Concessions/Kitchen: 2 x 2 troffer or linear strip
  - Community Room Storage: Linear strip
  - Community Room: Recessed linear strip
  - Equipment Storage: Linear strip
  - IT: Linear Strip
  - Family Room: 2x2 troffer
  - Locker Room: 2x2 troffer and 6" downlights
  - Custodial: Linear Strip
  - Gymnasium: High Bay with wire guard
  - Stairwells: Wall mounted linear strip with integral occupancy sensor
  - Elevator Shaft: Vapor tight linear strip
  - Fitness Studio: Recessed linear strip
  - Fitness Studio Storage: Linear strip
  - Restrooms: 2 x 2 troffer or linear strip
  - Fitness: 2x2 troffer or recessed linear strip
  - Corridors: 6" downlight

- Track: low bay
- MEP: Linear strip

Exit and Egress Lighting

- Emergency egress lighting and exit signage will be in accordance with all applicable codes and standards including NFPA 101 and NEC article 700. Select fixtures shall be tied to lighting inverter through a UL-924 device. In event of a power outage, light fixtures shall turn to full brightness and override control system. Provide the following emergency and exit fixtures and equipment:
  - Lighting Inverter 2200W
  - Edge Lit Exit Signs
  - UL-924 Transfer Device for select emergency fixtures

Lighting Controls

- Contractor shall work with Convergence Lighting or CLSA for selection and layout of lighting controls. Lighting controls shall be a hardwired non-networked solution placed throughout to meet IECC as follows:
  - Parking: Photocell and timeclock
  - Entrance/Exit (exterior): Photocell and timeclock
  - Lobby: Ceiling mounted occupancy sensor with dimmer switch
  - Office: Ceiling mounted occupancy sensor with dimmer switch
  - Concessions/Kitchen: Ceiling mounted occupancy sensor with single pole switch
  - Community Room Storage: Ceiling mounted occupancy sensor with on/off switch
  - Community Room: Ceiling mounted occupancy sensor with dimmer switch; multi-zoned
  - Equipment Storage: Ceiling mounted occupancy sensor with on/off switch
  - IT: Wall mounted Occupancy Sensor on/off switch
  - Family Room: Wall mounted Occupancy Sensor on/off switch
  - Locker Room: Ceiling mounted occupancy sensor with on/off switch
  - Custodial: Wall mounted Occupancy Sensor on/off switch
  - Gymnasium: Ceiling mounted occupancy sensor with dimmer switch; multi-zoned
  - Stairwells: Integral occupancy sensor in fixtures
  - Elevator Shaft: 3-way switch at top and bottom of shaft
  - Fitness Studio: Ceiling mounted occupancy sensor with dimmer switch
  - Fitness Studio Storage: Ceiling mounted occupancy sensor with on/off switch
  - Restrooms: Ceiling mounted occupancy sensor with on/off switch
  - Fitness: Ceiling mounted occupancy sensor with dimmer switch
  - Corridors: Ceiling mounted occupancy sensor
  - Track: Ceiling mounted occupancy sensors with on/off switch
  - MEP: Single-pole switch

DIVISION 28 TECHNOLOGY SYSTEMS

Data – IT Room

- Provide a main backboard (3/4"x4'x8') for equipment and incoming communications conduit and cable.
- Provide one 72RU floor mounted two-post data rack with horizontal and vertical cable management
- Provide telecom main ground bar and rack mounted ground bar.
- Provide all punch down blocks, 48 port copper patch panels and make all cross connections.
- Provide all patch cables.
- Provide two network switches – Cisco Meraki MS120 or equivalent.
- Provide UPS – 3kVA Tripp Lite or equivalent

Data - General

- A complete interior Cat6 distribution system. All cabling shall be wired back to the Main Distribution Frame (MDF) with a standard of two ports per network drop.
  - Three network drops in Office
  - Three network drops in Community Room (TV, general use)
  - One network drop in Concessions/Kitchen
  - Three network drops in Lobby (TV, Reception Desk)
  - One network drop per Locker Room (TV)
  - Four network drops in Gymnasium
  - Two network drops in Fitness Studio
  - Twelve (12) network drops in Fitness (TV's, exercise equipment)
- Provide six (6) Wireless Access Points (WAPs); Cisco Meraki MR36 or equivalent
  - Provide (1) Cat6 cable to each WAP.
  - Install in Community Room, Locker Room, Gymnasium (2), Fitness and Fitness Studio
- Provide two (2) Cat6 cables to common area outlets and at locations as designated by Owner and Architect
- Provide one (1) Cat6 cable to each CCTV Camera and activation boxes (behind TVs).
- Provide two (2) Cat6 to each floor box.
- Provide one (1) Cat6 cable to each printer.
- Cabling shall be supported by j-hooks throughout, provide flexible conduit for data cabling located in walls and above drop ceilings. Cabling in gymnasium shall be installed in flexible conduit.

Access Control System

- Provide complete Access Control System – Basis of Design: Gallagher to match existing system
  - Provide controllers, cabinet, batteries, relay boards and software for a complete and operational system.
  - Provide two keypad/readers and nine card readers located at doors designated by Owner.
  - Provide door contacts at each door.
  - Provide request to exit devices at each door without panic hardware.
- Provide Cat6 cable from IT room to above door at each card reader location shown.
- Cabling shall be ran with no splicing between device and head end equipment.
- Provide 200 access cards to owner for use.
- System shall be on premises type. Contractor shall coordinate with Owner's IT consultant for setting up WAN to interconnect new system to existing system.
- All licenses and software shall be included.

CCTV

- Provide a web-based CCTV System with interior and exterior cameras and recording for Facility.
  - Basis of Design: Hanwha to match existing
  - Provide 16TB NVR with twelve (12) PoE ports

- Provide licensing for cameras, NVR and software
- Provide Cat6 cable to each camera location and provide 15 FT of slack at each camera location.
- Cameras (Types may be modified for more cost-effective solution given coverage is the same):
- Head end equipment to be located in IT Rack.
- Cameras shall have SD storage internal to each unit with 30 day storage capacity.
  - Interior Dome Hanwha Vision
  - Exterior Dome Hanwha Vision QNV-C6083R
  - Hanwha Vision 270 PNM-C32084RWZ-8XE4T-W
  - Hanwha Vision Fisheye HCF-8011RV
- Cameras shall be PoE.
- Provide all mounting hardware.

Audio Video Systems

- Provide one (1) Cat6 and one (1) coaxial cable to each TV from Data Rack.
- Provide Duplex Receptacle behind each TV, receptacle box to be recessed type.
- Ceiling mounted 70v/100v high efficiency speakers zoned for volume and source control.
  - Gymnasium ceiling pendant speakers
    - JBL Control 65 P/T
  - Fitness, Fitness studio, Community room etc in ceiling speakers
    - JBL Control 16 C/T
- Rack mount amplifier(s), multi-zone mixer
  - JBL CSA-1300z amplifier
  - JBL CSM-28 Mixer
- Rack Mount source for overall coverage
- Media input controller for Fitness Studio zone and basketball courts
  - JBL CSR-2sv source switch and volume
  - In room source input 500028-WP-US, RCA over Cat6

Intrusion Detection Systems

- Not Required

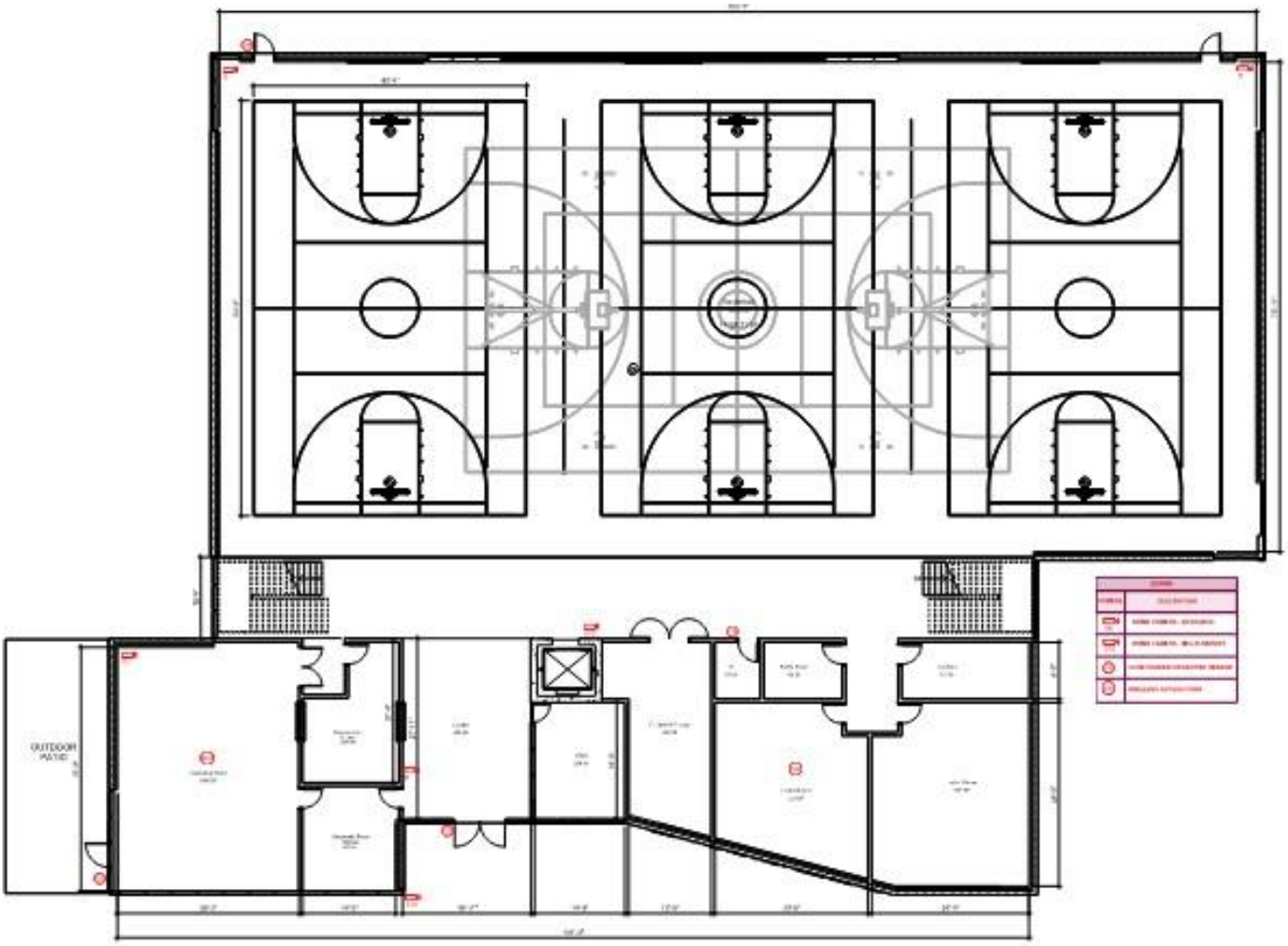
Fire Alarm & Detection

- An addressable fire alarm system shall be designed and provided for the addition. There is an existing Fire Alarm Control Panel (FACP) installed in the main Electrical Room. EC shall work with previous installer/manufacturer to provide new control panel, detectors and notification devices. The FACP will be sized for an anticipated maximum quantity of detection appliances, notification appliances, and zones. A remote dialer or cellular modem will be included to provide automatic notification to an approved 24-hour security service of any alarm condition. A Fire Alarm Annunciator Panel (FAAP) will be installed flush- mounted in the wall inside the Main Entry, for easy access by the Fire Department.
- Fire alarm notification appliances, consisting of strobe/horn and/or strobe units, duct heaters, smoke and heat detectors and manual pull stations will be provided throughout the building, as required by Code. Activation of the fire alarm system will largely depend on the flow switches installed at the sprinkler system main header valve.
- An alarm condition will activate the notification appliances, automatically dial the security service company, release magnetic door holders (if any), and shut down the air handling units. A tamper switch will cause a supervisory trouble alarm if the sprinkler valve is closed.
- Fire alarm wiring will be type FPLP.
  - Fire Alarm shall be designed by a Level III-IV NICET certified engineer
  - Provide an addressable Fire Alarm & Detection System per NFPA 72 and all other applicable Codes

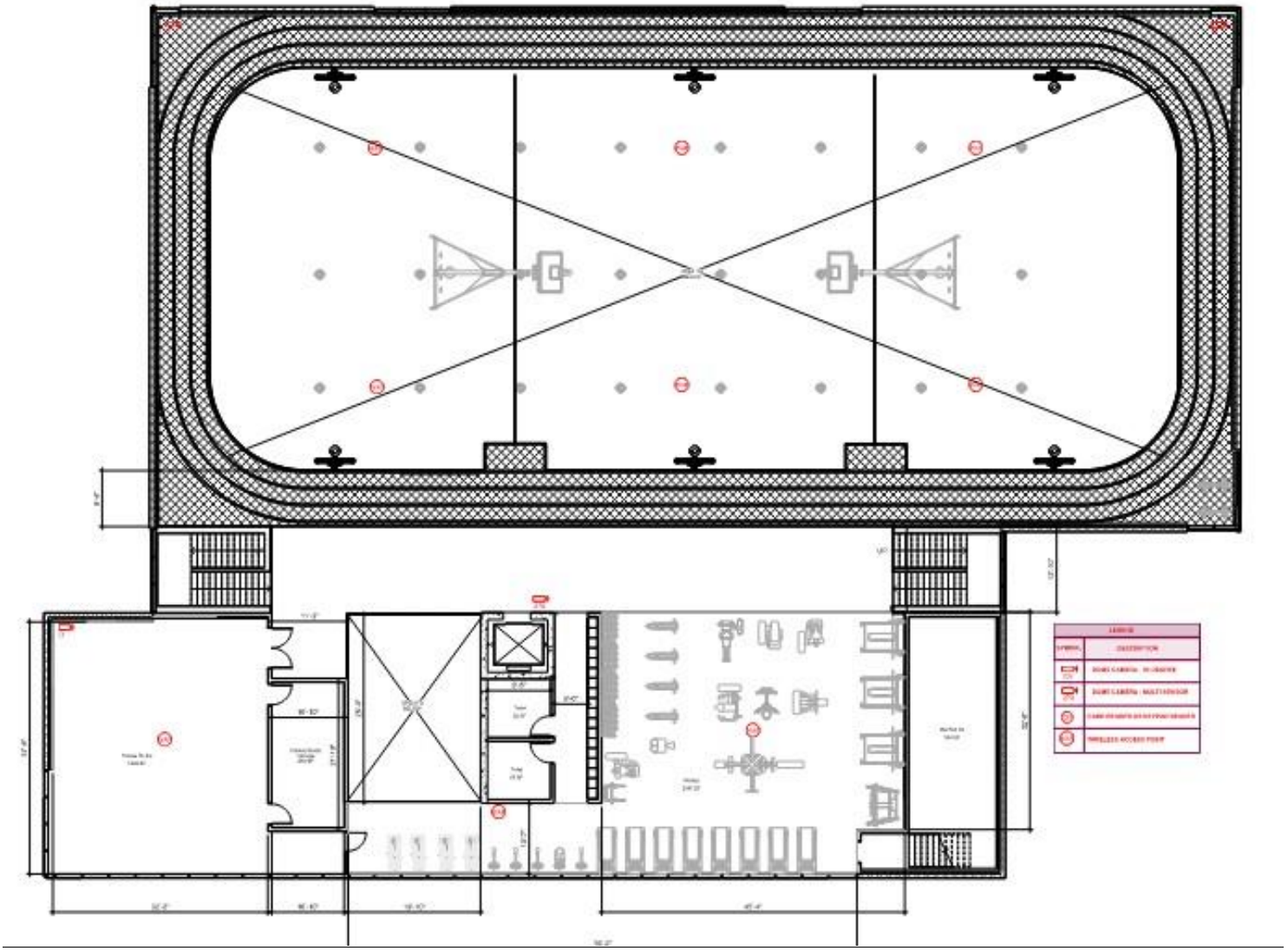
Demonstration and Training of Systems

- Test and provide reports for all Cat6. Replace or re-terminate any failed cabling or connectors.
- Access Control System shall be tested and all deficiencies corrected. Provide training to Owner on operation of system.

- Security Camera System shall be tested and all deficiencies corrected. Provide training to Owner on operation of system.
- Fire Alarm and Detection Systems shall be tested and all deficiencies corrected. Provide training to Owner on operation of systems.



FIRST FLOOR SECURITY PLAN



SECOND FLOOR SECURITY PLAN

Riverside Community Center **10441-10011**
STRUCTURAL NARRATIVE

The following Structural Design Narrative for the new Riverside Community Center project is intended to provide an early set of assumptions for all parties to be able to better understand the project and to evaluate very high-level schematic pricing assumptions in this early stage. This narrative is being provided at the early schematic concept phase to assist in determining Order of Magnitude costs associated with this proposed facility for the purpose of a future bond referendum, budget planning, and potential project timeline. The status of the design at the time of this writing is conceptual/schematic in nature – being made up of conceptual imagery, massing, renderings by OPN Architects, a conceptual site plan by Axiom Consultants, and narratives for the structural and MEPT scopes of work. No engineering design has been completed at this time. Narrative work is generated from information gathered through stakeholder meetings, schematic design completed by OPN Architects, and assumptions/decisions made by our engineering personnel. No geotechnical investigation has been completed at this time.

Invited parties should make themselves familiar with as many aspects of this conceptual level design as possible. Any questions or clarifications from interested parties should be investigated utilizing the materials provided. Further questions can be directed to Brian Boelk of Axiom Consultants.

GENERAL INFORMATION
The project involves the construction of a new 30,286 sq. ft. community center located in Riverside, IA. The new 2-story community consists of a 4,389 sq. ft. ground level area that includes a 14,095 sq. ft. gymnasium area and a 4,616 sq. ft. upper-level area that will also house a 3-lane walking track. The center will house a multipurpose room, exercise/yoga room, cardio/weightlifting area, operational offices, locker rooms and additional support spaces. The community center is intended to be constructed from insulated precast panels around the gymnasium exterior, concrete masonry unit (CMU) walls along the south 2-story portion of the building, structural steel bar joists framing for the floors and roof, interior framing walls from wood or metal stud walls, and a shallow foundation system.

The building will be designed for risk category II with an importance factor of 1. The City of Riverside has a ground snow load of 20 lb/ft^2. The design wind speed at the site will be 115 mph. Frost depth for the site is 3'-6" (42") below grade. State of Iowa/Local current adopted building codes and/or codes being used on this job are:

- International Building Code (IBC) – 2015 Edition
- American Society of Civil Engineers - Minimum Design Loads for Buildings and other Structures (ASCE 7-10)
- American Concrete Institute (ACI) – Field Reference Manual, MNL-15(20)
- American Concrete Institute (ACI) – Building Code Requirements for Structural Concrete (ACI 318-14)
- Concrete Reinforcing Steel Institute (CRSI) – Manual of Standard Practice – Newest Edition
- American Institute of Steel Construction (AISC) – Code of Standard Practice
- American Institute of Steel Construction (AISC) – Steel Construction Manual – 14th Edition
- American Welding Society (AWS) – Certified Welder Program
- Authority Having Jurisdiction Construction Requirements – City of Riverside, IA

GEOTECHNICAL

At this time, the assumed bearing capacity in the area should be 1,500 psf. Contract allowances should be made for some remedial work at the site related to subgrade preparation and foundation construction. This may include over-excavation and backfilling of unsuitable soils encountered at subgrade elevation or in the foundation excavations in accordance with typical recommendations or lowering of the foundations to suitable bearing materials. The amount of such work cannot be defined at this time; therefore, the owner should carry an allowance for testing and remedial action on foundations.

FOUNDATIONS

The exterior foundations of the building will utilize a standard spread footing and foundation wall – constructed of cast-in-place concrete. Walls for the exterior foundation are expected to be 10" thick around the gymnasium and 16" thick at the CMU exterior walls. These walls are expected to terminate at FFE location and extend to the minimum frost coverage depth specified in general information. Assumptions can be utilized of a 3' wide, 12" thick strip footing running the perimeter of the building. Interior column locations, if required, will utilize standard spread footings placed directly under the slab, isolated from the slab on grade. Columns located along exterior walls, if required, will be placed on the interior of the building, as close to the stud wall as possible, supported on PCC piers and spread footings. Interior and exterior spread footings can be assumed at 10'-0" square and 1'-0" thick. Any interior load bearing walls will utilize a thickened slab for foundation support. A potential remedial option would be rammed-aggregate piers should the conditions of the site not be adequate for typical construction, but we don't anticipate this.

Stoops will be used at each exterior door location to avoid heaving of the exterior slab in the swing path of exterior doors. Stoops will be constructed of a wing-wall chamber coming out from the doorway, typically insulated with polystyrene boards, and filled with compacted granular backfill. The slab cap over the chamber will create the sidewalk/entry portion of the paving in front of the door. This slab is expected to be 0'-6" thick PCC fully tied into the wing walls with rebar. The stoop will also be pinned into the foundation with rebar. The depth of the stoop perimeter walls will be 3'-6" to supply proper frost depth.

FLOOR SYSTEM

The ground level floor system of the center shall consist of 0'-4" PCC slab-on-grade. This interior floor finish is unknown at this time. The floor would receive 3'-0" of 2" XPS insulation running down the inside of the foundation wall and 2'-0" of XPS running under the floor slab perimeter in a horizontal orientation. The slab on grade will receive 0'-6" of structural crushed stone fill directly beneath. The floor is expected to be a floating slab, sealed at the perimeter where it will abut with the foundation wall edge. The upper-level floor system shall consist of 0'-4" PCC slab-on-metal decking spanning between 14"-16" deep steel bar joists supported by the building's exterior walls or a steel beam bearing line. The walking track will be 0'-4" PCC slab-on-metal deck supported by a structural beams system suspended by steel columns attached to the steel roof framing.

WALL SYSTEMS
Exterior wall material will consist of 8" concrete masonry unit construction with a mix of bond beams and steel lintels to accommodate window and door openings. Exterior CMU walls will be utilized as load bearing elements for roof support where applicable. The exterior wall systems around the gymnasium will be 10" insulated precast panels supported by conventional steel framing. A steel support frame will be provided at the aluminum storefront/curtain wall locations. The lateral system for the building will consist of a combination of CMU shear wall and steel moment frames and/or bracing.

ROOF CONSTRUCTION
The roof shall be constructed with steel bar joists in coordination with drainage requirements and architectural design intent of the roof. Weights and approximate locations for rooftop mechanical units will be provided and coordinated on loading plans to be integrated into the design of the steel bar joists. Additional steel framing between joists is anticipated to support the walking tracking around the gymnasium. Most of the roof framing support is anticipated to be supported by precast panels, CMU wall elements, and steel beams bearing lines.

SITE ELEMENTS
Associated site work will include foundation design for a CMU constructed dumpster enclosure. All utility equipment foundation pads shall be provided by the utility provider.

Resource Management Dashboard - Riverside Wellness Center

Funding Pipeline Progress

Revenue Tracker

Submission Rate vs Approval Rate

Goal	Anticipated	Requested	Awarded
$ 10,000,000	$ 9,226,000	$ 1,500,000	$ 1,500,000

Awarded Funding Diversity

Resource Management Pipeline Data

Pipeline Stage	ID	Resource Name (Link to Web Info)	Funder	Funding Type	Status	Priority	Submission Deadline	Date Submitted	Date Awarded / Declined	Award Period Start Date	Award Period End Date	Anticpated Request	Amount Requested	Amount Rewarded	Notes
Funded		City Contribution	City of Riverside	City Funds	Funded – Active	Medium						$ 1,500,000	$ 1,500,000	$ 1,500,000	Also utilized for Engineering & Architecture
Prospect		General Obligation Bond		Debt	Research	High	09/17/2025					$ 2,500,000			Septenber 19th - Deadline to Auditor if Utilizing Traditional Route
Prospect		Revenue Bond		Debt	Research	Medium									
Prospect		Walmart Foundation	Walmart	Grant - Corporate Foundation	Research	Medium						$ 5,000			
Prospect		Hometown Grant	T-Mobile	Grant - Corporate Foundation	Research	Medium						$ 50,000			
Prospect		WCRF		Grant - Private Foundation	Research	High						$ 4,000,000			Naming Rights?
Prospect		Enhance Iowa CAT	IEDA	Grant - State / Local Government	Research	High						$ 500,000			
Prospect		Commercial New Construction Program	Alliant & MidAmerican	Other Incentives	Research	High									
Prospect		General Fundraising		Donation	Research	High						$ 500,000			
Prospect		USDA Community Facilites Grant		Grant - Federal Government	Research										
Prospect		Community Project Appropriation		Grant - Federal Government	Research										Rep. Mariannette Miller-Meeks - Likely low chance of success unless childcare is include
Prospect		CDBG Community Facilities & Services		Grant - Federal Government	Research										
Prospect		Casey's		Donation	Research							$ 10,000			$25k towards Mt. Morris, IL Fire Station - Focus on Children, Education, and Community Servants
Prospect		Maverik		Grant - Corporate Foundation	Research										
Prospect		Farmer's and Merchant's Savings Bank		Donation	Research							$ 25,000			
Prospect		Hills Bank		Donation	Research							$ 25,000			Gave $50k to North Liberty's Centenial Park
Prospect		Riverside Casino & Golf Resort		Donation	Research										Possible Matching Donation?
Prospect		Community Foundation of Washington County		Grant - Private Foundation	Research							$ 1,000			
Prospect		Aureon Ripple Effect			Research										
Prospect		Aureon Charity Grant		Grant - Corporate Foundation	Research							$ 10,000			
Prospect		Tax Increment Financing		Debt	Research	Medium									Using TIF could impact TIF usage for residential development in the surrounding area
Prospect		Sharon Telephone Company			Research										
Prospect		Roy J. Carver Charitable Trust		Grant - Private Foundation	Research							$ 50,000			FY21- $500k to YMCA of QC for new facility (we are just outside of the target area, but can still be considered on a case by case scenario)
Prospect		Principal Foundation		Grant - Corporate Foundation	Research										
Prospect		System and Capacity Building Grant	Delta Dental of Iowa	Grant - Corporate Foundation	Research							$ 50,000			Statement of Intent due 4/3 and 9/3

Pipeline Data Overview — Calculates Automatically; Do Not Alter or Delete —

Pipeline Stage		Resource Type		Resource Type – Funded	
Prospect	24	Grant - Federal Government	3	Grant - Federal Government	0
Active	0	Grant - State / Local Government	1	Grant - State / Local Government	0
Submitted	0	Grant - Association	0	Grant - Association	0
Awarded	0	Grant - Corporate Foundation	6	Grant - Corporate Foundation	0
Funded	1	Grant - Private Foundation	3	Grant - Private Foundation	0
Closed	0	Debt	3	Debt	0
0	0	Donation	5	Donation	0
0	0	City Funds	1	City Funds	1
0	0	Other Incentives	1	Other Incentives	0

Submitted	Approved
0	1

Status	
Research	24
Application Submitted	0
Under Review	0
Denied	0
Funded – Active	1
Funded – Closed	0
0	0
0	0
0	0

Source	Annual
LOST	$ 150,000
H/M	$ 150,000
G&W	$ 400,000
Constitutional Debt Limit	$ 9,141,920

Allocation per Ordinance

40% General Fund / 60% Capital Projects

>50% must be used for Culture & Recreation

Unallocated, but Typically used for Capital Projects