HRA Forest Lake Heights Housing Development

Grand Rapids, MN 55744

February 3rd, 2025

DESIGNER
Cameron B. Persons
HAWK CONSTRUCTION, INC.
1833 W Hwy. 2
Grand Rapids, Minnesota 55744
218-327-0069





TABLE OF CONTENTS

HRA Forest Lake Heights Housing Development GRAND RAPIDS, MN

TABLE OF CONTENTS

ADVERTISEMENT FOR BID	3
BIDDING REQUIREMENTS	4
BIDDING REQUIREMENTS	4
SPECIFIC REQUIREMENTS:	5
GENERAL REQUIREMENTS	6
BID FORMError! Bookm	ark not defined.
GENERAL CONDITIONS	10
OUTLINE SPECIFICATIONS	13
DIVISION 3 – CONCRETE	13
DIVISION 6 – WOOD & PLASTIC	13
DIVISION 7 – THERMAL & MOISTURE PROTECTION	13
DIVISION 8 – DOORS & WINDOWS	14
DIVISION 9 - FINISHES	14
DIVISION 10 – ACCESSORIES	15
DIVISION 12 – CUSTOM CASEWORK	15
DIVISION 22 & 23 – MECHANICAL	15
DIVISION 26 – ELECTRICAL	16
DIVISION 31 – EARTHWORK	17
DIVISION 33 – UTILITIES	17

ADVERTISEMENT FOR BID

Construction of Eight Single-Family Residential Homes in Grand Rapids

Site: Former Forest Lake School Grand Rapids, MN 55744

Housing and Redevelopment Authority of Itasca County

The Housing and Redevelopment Authority of Itasca County will accept bids for the furnishing of all labor, materials, tools, equipment, and services necessary for the construction of four to eight single family residential homes as shown in bid documents. **Bids will be received until 2:00 p.m. (local time) February 20, 2025,** at the Housing and Redevelopment Authority's Offices at 1115 NW 4th Street, Grand Rapids, MN 55744. At which time bids will be publicly opened and read aloud.

Bidding documents (instructions, plans, and specifications) will be released on Monday, February 3rd and may be examined electronically on the Housing & Redevelopment Authority of Itasca County's website at www.itascacountyhra.org;, the Duluth Builders Exchange, and the Minnesota Builders Exchange. Free access to the plans & specifications may be obtained by contacting the Architect at 218-327-0069. Pre-printed plans and specifications can be obtained for a non-refundable cost of \$150 per complete set of plans and specifications or \$5.00 per plan sheet and \$.15 per specification page.

A pre-bid conference will be held at the Itasca County HRA Office located at 1115 NW 4th Street, Grand Rapids, MN on February 11th at 10:30am.

It is the Housing and Redevelopment Authority's intention to award a single prime contract to the lowest bid for the project listed above. The project's construction start is anticipated to be in early spring/summer 2025. The owner will consider bids that deliver 4 homes in 2025 and 4 homes on or before July 31, 2026. This project does not require the use of prevailing wage rates.

It is the Bidder's responsibility to inquire as to the addenda issued.

Contractors must take affirmative action to ensure that employees and applicants for employment are not discriminated against because of race, color, creed, religion, national origin, sex, marital status, age, sexual orientation, disability, familial status or status with regard to public assistance.

No bidder shall modify, withdraw or cancel his Bid or any part thereof for forty-five (45) days after the date designated for the receipt of bids. The Housing and Redevelopment Authority of Itasca County reserves the right to reject any or all bids, to waive any informalities in the bidding and to award the contract to the lowest responsible bidder, if in their discretion the interests of the project will be best served thereby.

Sealed Bids shall be addressed to: Housing and Redevelopment Authority of Itasca County

Attn: Diane Larson 1115 NW 4th Street Grand Rapids, MN 55744

BIDDING REQUIREMENTS

BIDDING REQUIREMENTS CONSTRUCTION OF FOUR TO EIGHT SINGLE-FAMILY RESIDENTIAL HOMES IN GRAND RAPIDS

PROJECT OVERVIEW: The Housing and Redevelopment Authority (HRA) of Itasca County is requesting proposals for the construction of four and up to eight single-family homes, in Grand Rapids, MN. The homes will be constructed on residential lots at the site of the former Forest Lake School. The HRA intends to construct four of the two-bedroom designs and four of the three-bedroom design. Homes must meet Minnesota Green Communities Criteria and be Energy Star Certified upon completion. The HRA intends to use this proposal process to identify a contractor to undertake the construction of four and up to eight homes. Construction should begin in spring 2025/early summer of 2025. Completion dates will be staggered and negotiated with the successful bidder. Notably, a bidder may bid the four-2 bedroom homes or the four-3 bedroom homes or all 8 homes. The maximum number of contracts to be entered into through this bid process is two. The Project is supported by local and state grant programs. This project does not require the use of prevailing wage rates.

PROPOSALS: Builders wishing to be considered must submit proposals as follows:

- Bid Proposal Form Proposals must include a completed and signed Bid Proposal Form.
- Experience Proposals must contain a written narrative outlining experience in single family home construction and building performance/energy efficient residential construction. Please include experience you have had in working with local, state and/or federal funds, if any. Proposals must include three (3) client references, a list of homes constructed from 2021 through 2024, including specific addresses, square footage, completion dates, and construction prices. Photos can be attached.
- Timeline Provide a proposed construction schedule for the completion of all
 proposed homes from permitting to Certificate of Occupancy. The HRA seeks bids
 that deliver 4 homes in 2025 and 4 homes on or before July 31, 2026. Completion
 dates will be staggered and ultimately negotiated with the successful bidder.
- Additional Documents All submissions must include:
 - o Copy of builder's contractor license
 - Proof of General Liability, Risk, and Workers Compensation insurance coverage.

PLANS & SPECS: May be examined electronically on the Housing & Redevelopment Authority of Itasca County's website at www.itascacountyhra.org, the Duluth Builders Exchange, and the Minnesota Builders Exchange. Free access to the plans & specifications may be obtained by contacting the Architect at 218-327-0069. Pre-printed plans and specifications can be obtained for a non-refundable cost of \$150 per complete set of plans and specifications or \$5.00 per plan sheet and \$.15 per specification page.

PRE-BID Conference: A non-mandatory but encouraged pre-bid conference will be held at the Grand Rapids HRA Office located at 1115 NW 4th Street, Grand Rapids, MN on February 11th at 10:30am.

QUESTIONS, REVIEW & SELECTION: Proposals must be submitted or mailed to the address below. All submittals must be received no later than 2 p.m. on Thursday, February 20th, 2025, with a public bid opening at 2 p.m. at the HRA offices, 1115 NW 4th Street, Grand Rapids, MN. Any questions should be referred to:

Cameron Persons cameron@hawkconstructioninc.com

(218) 360-9992 HAWK Construction Inc. 1833 West Hwy 2 Street Grand Rapids, MN 55744

IMPORTANT: Late or incomplete proposals will not be accepted. All accepted proposals will be opened publicly at our office on Thursday, February 20, 2025, at 2 p.m.

Proposing builders may be contacted for additional information, and may be invited to meet with, or make formal presentations to the HRA as part of the review process. The HRA of Itasca County reserves the right to engage in discussions or negotiations with none, any, or all proposing builders as part of the selection process. It reserves the right to select or reject any or all proposals, and if deemed necessary, to engage in subsequent builder proposal rounds. After selection, the HRA and the Builder will finalize all outstanding matters and execute a contract for construction of four or eight homes.

SPECIFIC REQUIREMENTS:

- 1. All requirements and standards must be included in a FIRM FIXED CONSTRUCTION PRICE submitted by Builder with Proposal/Bid and shall become part of a Construction Agreement/Contract between the HRA and Builder. Builder may not assign construction agreement to another party.
- 2. Builder shall provide the HRA a list of all individuals and entities that have a contract with Builder to perform any portion of work at the site ("Subcontractor"), including names, addresses, Federal ID numbers, and dollar amount of subcontracts, prior to construction start.
- 3. Final payment of retainage will occur after the municipality has issued a Certificate of Occupancy, Energy Star Certificate has been received, and sales tax documentation provided.
- 4. Builder is responsible for exact measurements, materials, and labor needed for bidding purposes. Bids must include all labor and materials to complete the job in a workmanship-like manner.
- 5. All costs to complete the Work described in these specifications and included on any drawings or plans should be included the bid price. Any scope of work Builder does not believe is covered but is needed for a workman-like completion of the Work, should be discussed with the Architect before submitting a Proposal/Bid.

- 6. All materials used are to be new, of first quality and without defects, except in the case of harvest, salvaged, or recycled materials used in finishes, trim, etc., which have been approved by the Architect.
- 7. Change orders are for unforeseen circumstances or substantial changes to the Scope of Work only. All reasonable costs to complete the Work in the manner outlined in this document and submitted with Builder's Proposal/Bid are assumed to be included in the original contract.
- 8. Builder will work closely with the HRA to resolve any defects in materials or workmanship. Builder agrees to remedy any defect due to faulty material or workmanship and pay for all damage to other work resulting therefrom, in accordance with the timeframe indicated in the current state statute.
- 9. Builder must be licensed and certified in accordance with State and/or municipal requirements as necessary to complete the proposed work as required.
- 10. Builder will submit to the HRA a listing of all Minnesota State and local sales tax paid for any materials by them and all subcontractors at construction close-out. The HRA will provide a form for the builder and each subcontractor to complete.
- 11. Visitable unit design and construction allow people with mobility impairments to enter and comfortably stay for a duration. This project must meet the following visitability requirements, as is designed in the provided plan documents:
 - 32-inch clear opening doorways throughout the Qualified Dwelling Unit;
 - At least one no-step entrance; and
 - A half bath, or larger bathroom, on the main level.

GENERAL REQUIREMENTS

- 1. The primary goals for this project are superior building performance balanced with efficiency and economy of systems. The Contractor is encouraged to offer input as to materials, methods and equipment that will enhance these goals.
- 2. Any changes sought by the contractor regarding materials or methods outlined in the construction documents shall be approved in writing by the Owner.
- 3. General code requirements:
 - a. Building materials, construction methods, heating, ventilation, and other mechanical systems will conform to or exceed MN State Energy Code chapter 1322.
 - b. Building construction will conform to or exceed the requirements of the current Minnesota State Residential Code, or any more stringent local codes currently adopted.

- 4. Applicable design standards and regulations: The project shall meet or exceed the following standards:
 - a. Current State of Minnesota and City of Grand Rapids Building Codes
 - b. Enterprise Green Communities Criteria (EGCC) for Single Family (SF) homes
 - i. Certification checklists, submittals and verification for EGCC to be completed <u>by</u>
 <u>Owner</u> with full cooperation of builder.
 - ii. All requirements of the EGCC have been incorporated into the bid materials, specifications, and plans for the convenience of the bidders.
 - c. Homes must achieve Energy Star Certification. Certification testing must be conducted by an independent rater. Certified Energy Star Raters may be located at:

https://www.energystar.gov/partner resources/partner locator

Energy Rating Companies Serving Duluth, MN and surrounding areas:

Center for Energy and Environment: 651-789-5713, Phil Anderson, New Homes Manager Building Knowledge: 952-944-5605

- d. The General Contractor is encouraged to hire local, minority and woman-owned businesses.
- 5. The General Contractor shall provide the following services as part of the contract:
 - a. Energy Star Compliance paperwork and Rater Checklists
 - b. Compilation of O&M manuals, as-built drawings, and warranty information, 2-copies, in an organized <u>binder for the homeowner</u>
- 6. Additional items to be paid and coordinated by the General Contractor:
 - a. Building Permit (see general conditions)
 - i. ICHRA wishes to be listed on permit application so as to receive city notices and to be aware of inspections.
 - b. All utility hook-ups and fees. (see general conditions)
 - c. Builder's Risk Insurance for full amount of construction contract
 - d. Payment and Performance bond
 - e. Temporary power and water during construction
 - f. Final cleaning
 - g. Street closures, barricades, and street cleaning as required.
 - h. Temporary heat, if needed, and general conditions
 - i. Site security as required (fencing, storage, monitoring etcetera)

BID FORM - Page 1

BID FOR:

Forest Lake Heights – Phase 2 HRA Housing Development 1115 NW 4th Street Grand Rapids, MN 55744

BID FROM:	
Name:	
Address:	
Telephone/Fax:	
Email:	
Three Bedroom Houses (4 total) For the Stipulated Sum of:	
(\$)	Dollars,
Two Bedroom Modern Style Houses (2 total) For the Stipulated Sum of:	
(\$)	Dollars,
Two Bedroom Ranch Style Houses (2 total) For the Stipulated Sum of:	
(\$)	Dollars,
NAME(Correct and full name of firm)	
ByTitle Affix corporate seal if a corporation.	
Date	

BID FORM – Page 2

The Bidder has carefully examined all Bidding Documents prepared by **HAWK Construction, Inc.**, 1833 W. US Hwy. 2, Grand Rapids, MN 55744, dated February 3rd, 2025 and has personally inspected the actual location of the work, and local sources of supply, is confident of quantities and conditions, and understands that in signing this Bid, the right to plead misunderstandings regarding same is waived.

The Bidder acknowledges receipt of the following Addenda, numbered ____, ____, and has incorporated the requirements of the Addenda in the Bid.

The Bidder agrees to do, perform and complete the work in accordance with the Contract Documents and to accept in full compensation therefore the amount of the Total Bid for the portion of the Work so completed. The Bidder agrees to accept the provisions of the Instruction to Bidders regarding disposition of the Bid Security.

The Bidder agrees that this Bid shall be good and may not be withdrawn for forty-five (45) days after the scheduled time and date for receiving Bids.

The Bidder agrees that the Owner reserves the right to accept or reject any or all Bids or alternates and to waive informalities in Bids received and minor discrepancies in bidding procedure.

The Bidder agrees, if awarded the Contract, to enter into a Contract with the Owner on the terms stated in the Bid and to execute the Agreement within ten (10) calendar days after receipt of the proposed Agreement Form.

By his/her signature on the Bid, the Trade Contractor warrants and guarantees that he has included in the Bid the amount of all Sale, Excise and Use Taxes which he is liable to pay under the laws of the State of Minnesota for materials and equipment required to complete his/her work.

GENERAL CONDITIONS

CONTRACTOR RESPONSIBILITIES

- 1: The Contractor is required to obtain and pay for all building permits, water access charges including the cost of the water meter, sewer access charges, gas service charges and electrical service charges as required by local governing agencies to obtain all utility services.
- 2: The Contractor agrees to adequately and properly protect its workers of construction. The Contractor agrees to adhere to the Federal Occupational Safety Act, State and local safety regulations and the Contractor's Safety Program, so as to avoid injury or damage to persons or property, and to be directly responsible for damage to persons and property resulting from failure to do so.
- 3: The Contractor agrees to maintain an adequate force of experienced workers and the necessary materials, supplies and equipment to meet the requirements of the Owner's progress schedules, as established by the Owner. In the event that its force is, in the judgment of the Owner, inadequate to meet the established schedules during the regular work hours, the Contractor agrees to work sufficient overtime hours or increase its work force to meet such schedules at no extra cost to the Owner.
- 4: The Contractor shall insure that construction tools, equipment, temporary facilities, and other items used in accomplishing the work, whether purchased, rented, or otherwise provided by the Contractor or provided by others, are in a safe, sound and good condition; it must be capable of performing the functions for which they are intended and maintained in conformance with applicable laws and regulations.
- 5: In no event shall any act or omission on the part of the Owner relieve the Contractor from its obligations to perform its work in full compliance with applicable laws and regulations.
- 6: The Contractor shall be responsible for the acts and omissions of all its employees and Subcontractors, their agents and employees, and all other persons performing any of the work under a contract with the Contractor.

USE OF THE SITE

- 1: Contractor will be responsible to continually maintain project sites as required to insure safety and cleanliness.
- 2: Before making any shipment of materials to the project site, the Contractor shall ascertain that the project site is in a condition to receive the shipment. If material should be delivered to the project site and project site is not in condition to receive the materials, the materials shall be removed from the site and properly stored off-site at the expense of the Contractor or its Subcontractor. All deliveries must be coordinated through the Contractor.

CLEANING UP

1: The Contractor shall at all times keep the premises free from the accumulation of waste materials or rubbish caused by his operations. At the time of the completion of the Work, the Contractor shall remove all of his remaining waste materials and rubbish from and about the Project as well as his tools, construction equipment, machinery and surplus materials.

TEMPORAY FACILITIES

1.01 CONSTRUCTION HEAT

A. As a part of their work the Contractor or each subcontractor shall provide and pay all costs associated with temporary heat and ventilation as required to maintain adequate environmental conditions to facilitate the projects of the work, to meet specified minimum conditions for the installation and proper curing of materials, and to protect materials and finishes from damage due to temperature or humidity. Provide adequate forced ventilation of enclosed areas for curing of installed materials, to disperse humidity, and to prevent hazardous accumulations of dust, fumes, vapors, or gases.

1.04 TEMPORARY LIGHT AND POWER SYSTEM

- A. Contractor's responsibilities:
 - The Contractor will coordinate temporary light and power during construction phases of the project.
 - 2. The Contractor shall pay for electrical energy used.

1.05 WATER

A. The Contractor shall make arrangements with the local governing agency for a supply of water as required and water consumption will be paid by the Contractor.

1.06 TEMPORARY TOILET FACILITIES

A. The Contractor shall provide and maintain one or more portable "Satellite type" temporary toilets convenient to each major area of construction, at each project site, for the use of all contractors, subcontractors, their personnel and employees.

1.07 WASTE DISPOSAL SERVICE

- A. Each contractor/subcontractor shall collect waste from the construction areas and dispose of in dumpsters as provided by the Contractor.
- B. Contractor/subcontractor shall recycle metal and cardboard waste.
- C. Separate construction waste and recycle dumpsters may be provided, and if so, all contractors shall separate all waste materials as directed and place into proper dumpster.

PAYMENT PROCEDURES

- 1: Based upon applications for payment submitted by the contractor, the owner shall make progress payments on account of contract sum to the contractor as provided in the contract documents for the period ending the last day of each month as follows:
- 2: Not later than the last day of each month, the contractor shall submit to the Owner two (2) of applications for payment for work performed through the end of the month, for (a) the value of all labor and materials incorporated into the work as computed on the basis of the approved schedule of values, prices and allowable quantities of work; and (b) to the extent allowable by the contract documents, the value of materials not incorporated in the work but delivered and suitably stored at the project site, less the aggregate of previous payments made by the owner.
- 3: The contractor shall submit an itemized application for payment, based upon the approved schedule of values, on AIA Documents G702 and G703, supported by such data substantiating the contractor's right to payment as the Owner may require, and reflecting the retainage provided for in the contract documents.
- 4. Upon review and approval of the payment application, the Owner will make payment to the Contractor within 30 days after request by contractor.
- 5. Round off all figures on all progress payments to the nearest dollar, any adjustment required shall be made on the final application for payment.
- H. No payment will be made to a contract on account of materials and equipment in transit or stored at offsite locations unless prior approval is received from the Owner. Proof of proper insurance must be submitted for materials stored off site before approval will be considered.
- I. Lien Waivers will be required for each payment request.

1.05 RETAINAGE

- A. To ensure the proper performance of the contract, the owner will retain **FIVE PERCENT** of the amount of each payment application issued by the contractor.

 Such amount will be retained by the owner until final payment.
- B. Such retainage will be retained by the owner until the owner certifies that the work is completed and all deficiencies are corrected.
- C. In the event of a very minor amount of work incomplete or not corrected due to the weather, unsuitable conditions for testing or similar conditions preventing the contractor from proceeding, the retained amount may be reduced to three times the value of the incomplete work as approved by the owner.

OUTLINE SPECIFICATIONS

DIVISION 3 – CONCRETE

- A. Building foundation to consist of frost protected thickened edge concrete slabs on grade as detailed on construction documents.
- B. Building slab to be 4" concrete with fiber reinforcement over hydronic tube heating system.

DIVISION 6 – WOOD & PLASTIC

- A. Building structure to be stick framed in accordance with the requirements of IBC Chapter 23.
- B. Roof trusses to be engineered to carry: 45 psf top chord live load, 15 psf top chord dead load, 5 psf bottom chord dead load.
- C. All wall and roof sheathing shall be APA rated plywood or APA rated OSB (7/16" at walls, 1/2" at roof). Nailed to meet IBC-23.
- D. Wood Base: Bayer Built base profile 241A, Painted or approved equivalent or better
- E. Wood Casings: Bayer Built casing profile 153A or approved equivalent or better

DIVISION 7 – THERMAL & MOISTURE PROTECTION

- A. Entire slab to receive rigid extruded polystyrene foam insulation under it as well as around the entire perimeter per construction documents. Insulation to be 2" minimum R=10.
- B. Walls to receive a minimum R=21 of fiberglass batt insulation, ceiling to be blown-in fiberglass with binder, minimum R=50.
- C. Provide a minimum 6 mil polyethylene continuous vapor barrier at interior side of all exterior walls and separating conditioned living space from unconditioned garage space
- D. Under-slab vapor barrier to be a minimum 15-mil vapor barrier (ASTM E96, WVTR 0.006 or lower). Seal all joints and penetrations per the manufacturer's instructions.
- E. Apply a continuous insulated air infiltration barrier over exterior wall sheathing. Prepare and flash openings per manufacturer's instructions. Lap barrier, in shingle fashion, over flashings. Flashings at roof /wall intersections and wall penetrations to be integrated with the weather- resistive barrier and drainage plane prior to any exterior finish being installed to prevent bulk water from

- entering the exterior wall assembly. This includes kick-out flashing where a sloped roof eave terminates in a wall with siding, stucco, or other applied finish apart from brick veneer.
- F. Shingle roofing to be equal to Certinteed Landmark Limited Lifetime shingles or approved equivalent or better. Apply per manufacturer's instructions over roof underlayment with reinforced rubberized asphalt sheet eave rake and valley protection extending to a minimum of 4'-0" inside of heated walls. Trim roof perimeter with style "D" roof edge. Apply a continuous "shingle over" ridge vent.
- G. Fascia's and soffits to be finished with prefinished aluminum components and trim. Soffits to be perforated.
- H. Siding to be pre-finished Louisiana Pacific (LP) SmartSide or approved equivalent or better as detailed on construction documents.
- I. Seal perimeter of all openings and penetrations with polyurethane caulking. Color to match siding.
- J. Gutters to be a pre-finished steel seamless gutter system with downs spouts as shown on construction documents.

DIVISION 8 - DOORS & WINDOWS

- A. Interior doors to be pre-hung prefinished Bayer Built doors or approved equivalent or better.
- B. Exterior entrance doors to be pre-hung insulated Bayer Built Steel doors or approved equivalent or better
- C. Exterior windows to be minimum Anderson 400 series & (100 series for 2 bedroom modern design) casement and awning style windows with an ENERGY STAR rating or approved equal or better.
 - 1. 400 series wood jamb extensions prefinished white. Color: white
 - 2. 100 series no jamb extensions. Color: black.
 - Gypsum board will return on head and jambs and sill to receive a solid surface sill as shown on construction documents.

DIVISION 9 – FINISHES

- A. All gypsum board to be $\frac{1}{2}$ " thick at walls and $\frac{5}{8}$ " thick at ceilings.
- B. Luxury Vinyl Plank (LVP): Basis of design: MSI Everlife Wilmont Collection or approved equal or better.
- C. Carpet (CPT): Basis of design: Mohawk Everstrand, Random Nature or approved equal or better.
- D. Painting and Finishing:
 - 1. Paint all gypsum board walls with latex enamel.

- a. All painted surfaces to be cleaned, sanded and primed prior to application of a minimum of 2 finish coats.
- Paint exterior steel doors.

DIVISION 10 - ACCESSORIES

- A. Provide 3 ½" heavy duty black coat hooks at cubby locations as shown on construction documents.
- B. Provide hanger rods and melamine shelves (R&S) at all closets as shown on construction documents
- C. (3 bedroom plan only) Provide 6 tier 48" wide by 72" high wire shelving at pantry closets as shown on construction documents.

DIVISION 12 - CUSTOM CASEWORK

- A. **Kitchen cabinets, bathroom vanities and cubbies** to be oak cabinets. Basis of design is Countryside Cabinets or approved equal or better. All finish selections to be reviewed and approved by Owner prior to ordering.
- B. **Kitchen countertops and cubbie tops** to be a plastic laminate countertop in the sizes and shapes as detailed on the construction documents. All finish selections to be reviewed and approved by Owner prior to ordering.
- C. **Vanities tops** to be a molded resin top with integral sink. All finish selections to be reviewed and approved by Owner prior to ordering.
- D. **Window sills** to be a solid surface sill: Corion or approved equal. All finish selections to be reviewed and approved by Owner prior to ordering.

DIVISION 22 & 23 – MECHANICAL

- A. All plumbing, heating and ventilation construction to be Design-Build by Contractor's Plumbing and HVAC contractor.
 - 1. Design-Build plumbing contractor shall provide all required plans, diagrams, other submittals and all fees necessary to obtain a plan review, permits and inspections related to their work.
 - 2. All plumbing, heating and ventilation work to meet the requirements of the Minnesota Plumbing Code, Minnesota Energy Code and all other applicable codes.
 - 3. Provide the installation of passive Radon system as required by code. Coordinate the installation of the system with the Earthwork Contractor prior to the installation of the concrete slab.
 - 4. All plumbing fixtures to be low flow and water conserving fixtures to meet EGCC requirements listed below and to be reviewed and approved by Owner prior to ordering.

Toilets: WaterSense-labeled and 1.28 gpf;

Urinals: WaterSense-labeled and 0.5 gpf;

Showerheads: WaterSense-labeled and 2.0 gpm;

Kitchen faucets: 2.0 gpm;

- Lav faucets: WaterSense-labeled and 1.5 gpm
- 5. Provide all 1 piece fiberglass tub surrounds as shown on construction documents.
- 6. Provide all 1 piece fiberglass shower surrounds as shown on construction documents.
- 7. Provide fiberglass utility sinks.
- 8. Provide all floor drains as shown on floor plans.
- B. The building heating (in-floor hydronic tubing) and potable water systems are to be heated utilizing a combination gas boiler located as shown on construction documents.

Basis of Design is a Navien tankless combi-boiler or approved equal.

- 1. Fuel source to be natural gas.
- 2. Size and select heating equipment in accordance with the Air Conditioning Contractors of America (ACCA) Manuals J and S or in accordance with the most recent ASHRAE Handbook of Fundamentals available at time of specification.
- C. The building ventilation to be provided by a Heat Recovery Ventilator sized to meet all applicable codes for air exchange.

Basis of Design is a RenewAire SL75 or approved equal

- 1. Provide electric duct heater for tempering outside air.
- 2. Provide venting at exhaust fans in toilet rooms.

DIVISION 26 – ELECTRICAL

- A. All electrical to be Design-Build by contractor's electrician.
 - Design-Build electrical contractor shall provide required plans, diagrams, other submittals and all fees necessary to obtain all permits and inspections related to their work.
 - 2. All electrical work to meet the requirements of the national Electrical Code, the Minnesota Energy Code, and all other applicable codes.
- B. Provide a complete, suitably sized electrical service including an electrical panel of suitable size for all equipment, heating, power and lighting. Include the installation of all facilities required by the local electrical utility and the coordination of the electrical utilities installation.
- C. Provide all lighting as shown on construction documents. All lighting fixtures to be LED fixtures or contain LED bulbs so as to meet EGCC requirements.
 - 1. Provide exterior lighting at building entrances as shown on lighting plan. Final fixture selection to be reviewed and approved by owner.
 - 2. Provide interior lighting in each room as shown on lighting plan. Final fixture selection to be reviewed and approved by owner.
 - 3. Provide lighting control (switching, etc.) suitable to its use. All devices to be white
- D. Provide power outlets suitable to meet all applicable codes. All devices to be white

- 1. Provide weatherproof exterior outlets adjacent to each side of the building.
- E. Wire-up all equipment, including but not limited to, heating, ventilation and kitchen equipment.
- F. Provide Data and Communications installations as follows:
 - 1. Provide 2" data conduit from exterior to interior location for internet service entrance as shown on construction documents.
 - 2. Provide plastic network box wiring enclosure at interior location of service entrance shown on construction documents.
- G. Provide smoke detection and CO detection systems.
 - 1. Provide all smoke detectors as required to meet applicable codes.
 - 2. Provide hardwired CO detectors with battery back-up in each sleeping zone, placed per NFPA 72..

DIVISION 31 – EARTHWORK

- A. Provide all excavation and backfilling as required for the new building and driveway.
 - a. Provide min. of 12" of clean sand under new building slab coordinated with aggregate for passive radon system.
 - b. Provide all fill material as required to meet subgrade and achieve the final elevations as detailed on the site plan.
 - c. Provide and rough grade 8 inches of Class V over geotextile fabric at all driveway areas.
 - d. Provide an aggregate base as required for the installation of a passive Radon system installed by plumbing contractor.
- B. Provide all landscaping and site grading as shown on site plan.
 - a. All "green" areas to receive hydro mulch or slit seeding with appropriate cover/mulch; nylon or plastic-based retained straw mulch is not allowed. Ensure proper establishment and maintenance of turfgrass after planting.
 - b. Provide a \$400 Allowance for each tree shown on building lot site plan.

DIVISION 33 – UTILITIES

- A. Provide all underground service utilities as required for new building. Contractor responsible for all fees.
 - a. Locate and connect to city water service and extend to with-in five feet of building. Coordinate with plumbing contractor to extend service into building.
 - b. Locate and connect to city sanitary sewer and extend to with-in five feet of building. Coordinate with plumbing contractor to extend service into building.
- B. All appliances to be installed by contractor, provided by owner.

END OF OUTLINE SPECIFICATION