



Project: Lot 80 & 81 N Nokomis Trail, Unincorporated McHenry

Bid Category: Foundation

SCOPE

Habitat for Humanity (HFH) is building (1) single family detached home located at Lot 80 & 81 N Nokomis Trail in unincorporated McHenry, Grant Township, unincorporated Lake County. This home will be on a crawl space foundation and with private well water and septic system. Planned to start work Summer 2025 and complete by December 2026.

The Contractor shall furnish all labor, materials and equipment necessary to complete all Work as indicated on the drawings, and product material specifications matrix, or specified herein. The work is to be completed on the scheduled day per the Agreement. The Work includes, but is not limited to, the following:

- 1) Installation of silt fencing as shown on site plan
- 2) Removal of all tree stumps cut down due to proximity to foundation, septic and site plans
- 3) Excavation of crawlspace and garage. (Excavation to be figured with a 3.25 D-Factor, unless otherwise informed by Architect)
- 4) All formwork for concrete
- 5) Installation of concrete encased electrode (2021 IRC Section E3608). Location to be identified by HFH
- 6) Foundation footings, foundation walls, floor slabs, walks, stoops, steps, piers, column pads, grade beams, and slush coat for crawl space
- 7) Keyed in excavation required for concrete footings, forms, walks, and slabs
- 8) Install all sleeves or chases as required for septic and well system connections
- 9) Anchor bolts per plans
- 10) Gravel for slabs
- 11) Mesh and steel reinforcement in concrete as called for by plans, specifications, building code
- 12) Construction of pads for concrete slabs
- 13) Sump pit with sealed lid which meets radon protection requirements
- 14) Ejector pit and floor drain per the blueprints
- 15) Compliance with Illinois Radon Resistant Construction Act [420 ILCS 52] (copy can be provided by HFH), including but not limited to:
 - a) Subfloor preparation

- b) Soil Gas Retarder
- c) Passive Sub-slab Depressurization System
- 16) Waterproofing of foundation walls
- 17) 4" Drain tile on the outside of footings per plan with 12" of gravel cover and a filter membrane
- 18) Installation of perimeter foundation insulation where called for on plan (material to be provided by HFH)
- 19) Grouting as needed, excluding caulking for other trades
- 20) Expansion joints
- 21) Protection of concrete from weather to ensure a quality finish.
- 22) Sub-grading of lot.
- 23) On-site hauling of excess material. Offsite hauling is to be billed per load.
- 24) Grading of driveways from curb to garage locations, provide 6in compacted crushed concrete or limestone for temporary driveway base.
- 25) Furnish and install exterior concrete work
- 26) Pumping or conveying charges must be included in bid. No additional payments will be made without prior discussion or approval by HFH.

WORK NOT INCLUDED

1) Well Contractor will run water service under footings

SAFETY

 The Contractor shall be responsible to be informed of the latest OSHA safety requirements. The Contractor shall conform to all applicable OSHA safety requirements throughout the performance of this contract.

CODES

- All work is to be done in accordance with the latest applicable rules and regulations of state and local codes. This includes any additional codes and/or ordinances that have jurisdiction over the work
- 2) Lake County has jurisdiction and has adopted the 2018 International Residential Code
- 3) Habitat for Humanity standard is to build to the most recent code (2021 IRC) when it doesn't conflict with jurisdiction ordinances
- 4) Contractor shall be licensed, if required, in Lake County and pay any fees associated with licensing.

MATERIALS

- 1)The contractor shall break down the proposal costs as follows (if proposal does not include specified work it should be listed as such):
 - a) Silt fencing
 - b) Excavation and backfill
 - c) Forming, pouring and finishing foundation and slabs, to include all fill material, sleeves and/or chases for water and sewer connections, drain tile & sump pit to include all fill materials required, and installation of exterior foundation foam board (provided by HFH)
 - d) Stoops and porch, to include porch step as grade requires
 - e) Material and grading for temporary driveways
 - f) Removal of spoils from lot (per truckload cost)
 - g) Final grading of lot
- 2) Partial bids or bids not including cost breakdowns as required will not be considered.
- 3) All concrete mixtures shall conform to American Concrete Institute Standards pertaining to materials, quality and testing, and all governing codes.
- 4) All walls, footings, and slabs shall have a minimum compressive strength of 3,000 PSI in 28 days. (Or, as required by code)
- 5) Exterior concrete shall be 4,000 lbs. air-entrained concrete (6% air-entraining agent) and shall be broom finished.

INSTALLATION

- 1) The Contractor shall be responsible to accurately lay out all work. He shall work from an established benchmark for determining elevations and layout from the surveyor's stakes. Survey markers are not to be disturbed.
- 2) Any discrepancies are to be brought to the attention of HFH and resolved prior to commencement of work.
- 3) Prior to backfill, Well Contractor must be provided notice to install water stub under footings before crawl floor poured

EXCAVATION

1) Excavate all work to elevations and dimensions indicated on the drawings and as approved by the Architect and HFH. Sub grade cuts beyond one foot (1'-0") are to be done as an extra and must be pre-approved by HFH and the Architect. Material that is removed in excess of 1'-0", without written pre-approval shall not be billed or paid. Allow for spaces where required for construction operations

- and inspections. Over-dig should be calculated at 2' for crawl space and garage. Excess over-dig will be remedied at the expense of the Contractor.
- 2) All footings shall rest on undisturbed soil or 95% compacted fill at elevations shown. All unauthorized excavations below elevations shown will be filled with a suitable material at no increase cost to the Owner.
- 3) Bottom of excavation shall be level and free of loose material.
- 4) Footings are to be excavated in undisturbed ground to a depth that equals half the depth of the footing. The minimum depth is 4".
- 5) Offsite hauling shall be done at the expense of the Contractor. No offsite hauling shall be performed without the prior approval of HFH. The Contractor shall provide evidence to validate the quantities hauled offsite.
- 6) Balance the dirt on lot within the project site, including parkways. Dirt will not be piled along the paths needed to be trenched for water, electric and gas connections to the house, nor within the planned septic system footprint
- 7) The plumbing Contractor shall place his spoils outside the foundation. The excavation Contractor is responsible to dispose of these spoils, if completed prior to backfill.
- 8) It shall be the responsibility of the Contractor to correct excavation cave-ins due to natural causes, at no additional charge
- 9) The Contractor shall layout the excavation site from provided survey markers. Survey markers are not to be disturbed
- 10) The Contractor shall build dirt ramps in low areas providing sufficient height to pour foundation wall without the use of a conveyor
- 11) Prepared house pads exceeding five feet (5') larger than the building footprint on both sides and exceeding two feet (2') in depth which requires removal, shall be done as an extra with prior written approval from HFH. Material removed in excess of these tolerances without prior written approval shall not be billed or paid

FOUNDATIONS & BASEMENTS

- All footings shall rest on solid, undisturbed soil or compacted as approved by a soil-testing engineer. Footings on fill areas shall be compacted to a density as required to be capable of supporting a superimposed load of
- 2) 4,000 P.S.F. No footing or foundation walls to be placed on frozen soil or soil containing frost.
- 3) Foundation walls to be as per plans.
- 4) All snap ties to be broken and removed. Spot tar the holes on exterior walls prior to damp proofing.
- 5) Waterproofing membrane shall be applied to basement walls.
- 6) Install all interior pea gravel or granular fill in basement and crawl space. Work to include placing and spreading. Stone in over-dig areas to be supplied and placed by others.

- 7) Install 6 mil Vapor barrier under garage and crawl space floor slabs. Control joints to be troweled into floor in 4 directions.
- 8) Install 6 mil vapor barrier in crawlspace area. Install 6-mil sheet polyethylene across the entire ground surface. Overlay all seams by 12". Seal the polyethylene at least 6" up the foundation walls.
- 9) All foundation walls to be shot with transit and are to be level. Top of foundation will be within one tenth of a foot from proposed plan grade.
- 10) All basement slabs shall be 4" thick and have a hard steel trowel finish. All floors must properly slope down to floor drain and sump pit. Zip strips to be installed per concrete standard.
- 11) No extra fill or concrete to be placed without written authorization from HFH. This applies to any additional work beyond contracted work.
- 12) All forms for concrete shall be plumb and level.
- 13) All concrete to be free of honeycombs and smooth.
- 14) Supply labor and pump to remove any excess water before pouring any slab, footing, walls or walks. Excludes subsurface (below slab grade) dewatering.
- 15) The Contractor shall protect concrete during winter conditions to ensure proper curing. (Use thermal blankets when required).
- 16) Grouting of all wall plates, columns and beam pockets as required. Contractor must ensure columns are plumb before securing in floor.
- 17) Supply and install anchor bolts, with washers and nuts as required per plans. Anchor bolts shall be placed so they are in line with the bottom plate and high enough so washers and nuts can be properly installed. Should they not meet with these requirements, it will be the Contractor's responsibility to go back and place them properly, at no cost to HFH.
- 18) House slabs to be poured over a minimum 4" of pea gravel.
- 19) Garage slab shall be a minimum of 4" thick and sloped per drawings. Provide 1/2" to 3/4" depressed slab along the length of the overhead garage door.
- 20) Garage slab will be reinforced with fiber or steel mesh to prevent cracking and separating
- 21) Concrete stoops shall be poured at the time of basement and/or garage slab pour. The foundation will be plated and stoop backing attached only at the sill plate by the carpenter. It is the concrete contractor's responsibility to verify that the carpenter's stoop framing is plumb prior to pouring.
- 22) Stoops to have continuous felt paper or vinyl flashing applied to framing, lapping over top of foundation extending up a minimum of 4" above surface of stoop. Flashing to be lapped under exterior door flashing.
- 23) All exterior concrete (stoops and service walks) to have a broom finish.

24) Slope walkways for proper drainage. Include expansion joints for walks, at intersections and at top and bottom of steps or stoops. Walkways must have expansion joints every 50 feet minimum. Stoops and steps to be well anchored to foundation.

BACKFILL

- 1) Contractor shall be responsible for repair costs of foundations due to backfill operations.
- 2) Stoop areas to be filled with granular material.
- 3) The exterior over-dig of garage and driveway shall be backfilled with granular material.
- 4) Driveways shall include a stone base sufficient to allow access to building. The base shall be laid out as indicated on the Plat of Survey. Costs for this stone base shall be included on the base bid and should be broken out as a separate cost line.
- 5) Sub-grading will be to allow for 6" of topsoil across the entire lot, including parkways.
- 6) Sub-grading for service walks, driveways, stoops and patios.

WALKS

- 1) All concrete pads shall be placed upon a base of gravel fill. Gravel base to be #CA6 stone, compacted to 6" (or depth as required by local code).
- 2) All concrete shall be capable of supporting a superimposed load of 4,000 PSF @ 28 days.
- 3) All concrete work shall be cured & sealed; Contractor shall install expansion materials where necessary.

RESHAPING

1) Reshape sub-grading as necessary to allow proper drainage one time during the construction process after all septic, well and gas work is completed.

PROTECTION

- 1) The Contractor will be responsible for the protection of curbs and land improvement structures during the performance of the work. Extreme caution is to be taken when crossing curbs. Curbs are to be protected with rubber tires when being crossed by a tracked machine.
- 2) Prior to placing black dirt, all structures, manholes, inlets and B-Boxes are to be located and sprayed with bright paint and staked.
- 3) Damage to existing utility lines, services, poles, well, septic and other structures shall be repaired or replaced by the Contractor at his own expense.

SUPERVISION

1) The Contractor is responsible for his employees, and suppliers (sub-contractors are not allowed) for disturbing any surveyor's stakes or any in-ground structures (i.e., manholes, buffalo boxes, street curbs, septic cover, well head, etc.). It is the responsibility of the Contractor to ensure any in

- ground structures are at proper grade, B-Box is keyable, and manhole rings aligned, prior to placing concrete around same.
- 2) The Contractor is to provide supervision for his work. The supervisor is to inspect the job to see if all conditions are acceptable prior to commencing his work.

WARRANTY

- 1) The Contractor shall warranty any defects in materials, workmanship and performance. Copies of all manufacturer warranties for products shall be provided when the contract is awarded.
- 2) Grading warranty will be in effect until grading verification has been completed by surveyor and building inspectors
- 3) Foundation and concrete warranty will be for a period of 1 year from date of occupancy

CLEANUP

- 1) The Contractor shall do all work in a neat and workmanlike manner, removing from the premises all rubbish and debris resulting from operation under this contract and leave the site clean. This includes sweeping walks, stoops, and driveways. The street shall be cleaned at the end of each workday. No gravel storage allowed on vacant lots or stocked on streets. Storage only allowed on lots that the material will be used. The site shall be left clean at the end of each phase of work so the next trade can start work.
- 2) Any concrete needing to be removed and replaced shall be removed from the subdivision.
- 3) Ready mix trucks will wash down their equipment at a location designated by HFH with periodic cleaning and removal by the Contractor as requested by the site superintendent.
- 4) Forms for flat work shall be removed within 24 hours of pouring.
- 5) Wall forms will be completely removed from site as they are removed from walls. Removal of wall forms will proceed on a continuous basis once the task has begun. Foundations will be ready for drain tile within 48 hours of starting form removal.
- 6) Ready for drain tile will be defined as follows:
 - a) All forms removed from foundation and site.
 - b) Waterproofing completed.
 - c) All debris removed from site.
- 7) No gravel to be dumped on streets, removal of excess gravel pile at end of each workday is required.
- 8) All foundation spoils will be removed from the site within 48 hours of foundation being ready for rough framing

CONTRACTOR INSURANCE REQUIREMENTS:

- 1) Prior to commencement of work, The Contractor will show and maintain in effect during its performance of the Work the following policies of insurance:
 - a) Workers Compensation insurance as required by law

b) Contractor's commercial general liability policy shall name HFH as additional insureds

PAYMENT SCHEDULE

1) Invoices shall be addressed to:

Habitat for Humanity of McHenry County 907 Front St McHenry IL 60050

- 2) HFH will consider deposits not to exceed 50% of the total contract if requested in bid
- 3) Contractor shall invoice HFH within 2 weeks upon completion of each phase of work. If work takes longer than 30 days, Contractor shall submit monthly invoices for work performed
- 4) Standard HFH payment terms are net-30 from date of invoice. If other payment terms are required they must be identified in the bid. Payment will not be processed unless all work invoiced is completed