BAY MILLS INDIAN COMMUNITY
"*GNOOZHEKAANING*" PLACE OF THE PIKE

BAY MILLS TRIBAL ADMINSTRATION
12140 West Lakeshore Drive
Brimley, Michigan 49715

WEBSITE: BAYMILLS.ORG

PHONE: (906) 248-3241
FAX: (906) 248-3283

REQUEST FOR QUOTES

Request for Quotes for Construction of Residential Septic Systems

The Bay Mills Indian Community (BMIC) is requesting quotes from qualified individuals and firms for construction of two (2) residential septic systems to be located on tribal member homesites on Sugar Island in Sault Ste Marie, Michigan. All three homes are located on BMIC Reservation land and are not subject to Chippewa County Health Department permits. BMIC has already procured site designs (attached), and is ready to proceed with construction. A contract award will be made as soon as possible after receipt of bids.

Project Administration
The Bay Mills Indian Community is the owner for this project. The selected firm will contract directly with BMIC for services to be rendered.

Quotes are due by **Friday June 27th at 4:00pm** and can be submitted via email or mail and the following address:

Brianna Gunka, Planning Manager
Bay Mills Indian Community
12140 W. Lakeshore Drive
Brimley, MI 49715
bgunka@baymills.org

Scope of Work:
The scope of work includes two (2) separate homesites. Contractor will be responsible for the following:

1. Contractor shall furnish all materials, equipment, labor and experience skilled supervision necessary to maintain project schedule for performing the work under this contract.
2. Contractor shall perform all operations required to complete the work as described in the approved site plans.
3. Contractor shall replace any existing items destroyed or damaged during the replacement/installation of the residential septic systems, including but not limited to: fence, asphalt, pavement, curb, gutters, rutting, etc.
4. Replacement of residential septic systems shall comply with good industry practice and applicable safety standards.
5. Contractor shall coordinate work among suppliers and trade workers to insure a complete and satisfactory job at each residence.
6. Procuring all project materials. Should there be increases in material costs at the time of purchase, a change order must be submitted and approved prior to purchase. Contractor is responsible for supplying material according to approved site plans, if Contractor purchases incorrect material, Contractor is fully responsible to replace incorrect material. BMIC will not pay for the replacement of incorrect material.

7. Contractor shall supply copies of delivery tickets or proof of source for imported aggregate or soil to BMIC.
8. Systems must be installed according to the approved Indian Health Services site plan. Contractor shall also ensure work complies to Michigan Plumbing Code, Michigan Residential Code, Michigan Building Code, NFPA 70 National Electrical Code and any other applicable codes for this construction.
9. Schedule final inspection with Indian Health Service 72 hours prior to completion of the system (IHS: (906) 635-3620). IHS will inspect the installation within 3 working days. Leave the items on the permit exposed for inspection. Do not leave open tanks unattended for safety reasons.
10. After inspection and final approval from Indian Health Service is obtained, backfilling must be completed within 72 hours. Seed and mulch as soon as possible.
11. All parts of new septic must be greater than 75ft away from any surface water.
12. Contractor responsible for excavation and proper disposal of excavated material. Contractor responsible for stump removal as required. Proof of disposal required to be submitted to BMIC Construction Mgr.
13. Contractor shall be responsible for the maintenance of traffic. Residential and emergency access must be maintained at all times during construction.
14. Contractor shall furnish and install effluent pumps which shall be wired by a licensed electrician or by owner under electrical permit. Pump installations must be inspected and approved by an electrical inspector. Proof of licensed electrician for install and proof of approval by electrical inspector to be supplied to Contractor to BMIC Construction Mgr
15. Contractor responsible to supply and maintain portable bathroom dedicated for residence occupants to utilize during septic replacement.
16. Contractor shall supply proof of insurance to BMIC Construction Mgr. prior to starting work onsite.
17. All materials, products, systems and equipment installed on the job require submittal to BMIC Construction Mgr. and approval prior to installation.
18. Contractor shall submit all shop drawings, data sheets, operation and maintenance manuals, charts, certifications for all materials, products, systems and equipment installed on the job.
19. Contractor to restore excavated areas to match existing conditions, stabilize and grade.
20. Contractor responsible for supplying seed and mulch (or sod) to restore excavated areas.
21. Contractor shall remove all trash and debris generated from construction operation from residence upon completion of the work.
22. Contractor shall ensure equipment has the capacity to lift required material.
23. Contractor shall ensure lifts maintain required distances from power lines.
24. Contractor shall verify dimensions in the field before fabrication, procurement and installation of piping, material and equipment.
25. Contractor is responsible for locating all underground utilities in the area of construction
26. Contractor shall be responsible for any special handling and all short term and long-term storage requirements of material necessary to preserve the warranty and to protect the material and/or equipment.
27. Contractor is required to produce a daily report in written form that will include progress, manpower, equipment onsite and testing/inspection performed. Each daily report shall be submitted by 8am the next business day to BMIC Construction Mgr.

Proposal Requirements:

1. Cover letter
2. Please describe the specific experience of the firm in providing services for residential septic systems.

3. Associations: Please provide a description of any associations with other firms or any form of subcontracting that is planned for the project. Please include pertinent information as to subcontracted firms.
4. Certifications and Licenses: Please include a copy of any pertinent licenses or certifications.
5. References: Please include a minimum of three references that can be contacted by the Owner. Provide three references of significant subcontractors as well.
6. Disclosure of Claims: Please disclose any claims, lawsuits, or formal disputes for work or services previously or currently being performed.
7. Itemized quote: Please detail all costs required to assist with these services and required timelines for payments.
8. Timeline: Please provide an estimated timeline for project completion. Preference will be given to bids that can complete construction in 2024.
9. Indian Preference (Optional): Please provide any evidence to demonstrate that the firm is a qualified, Indian-owned enterprise, with at least 51% active ownership by a member of federally recognized Indian tribe.

Evaluation Criteria

	Score Received: 1-5	**Weight**	**Weighted Scores**
Demonstrated experience with construction of residential septic systems		20%	
Qualifications- identification of key personnel and experience/capability		25%	
Schedule- timeliness and value for money		25%	
Cost- reasonableness of rate schedule		25%	
Indian Preference		5%	
Total		**100%**	

Ratings:	
Clearly Outstanding-Above and Beyond Expectations	5
Well qualified	4
Average	3
Weak	2
Unsatisfactory	1
Insufficient Response	0

The Tribe, at its sole discretion, may elect to interview selected firm(s). If a firm is requested to take part in an interview (via Tribal arranged remote means), the key proposed project staff will be expected to take part. The interview will be an opportunity for the Tribe's selection team to review the firm's proposal and other matters deemed relevant to the evaluation.

Compensation

The proposal should provide a cost for all work associated with the provision of these services. The final cost of services may be negotiated, prior to award of the contract. This project must comply with Davis Bacon requirements.

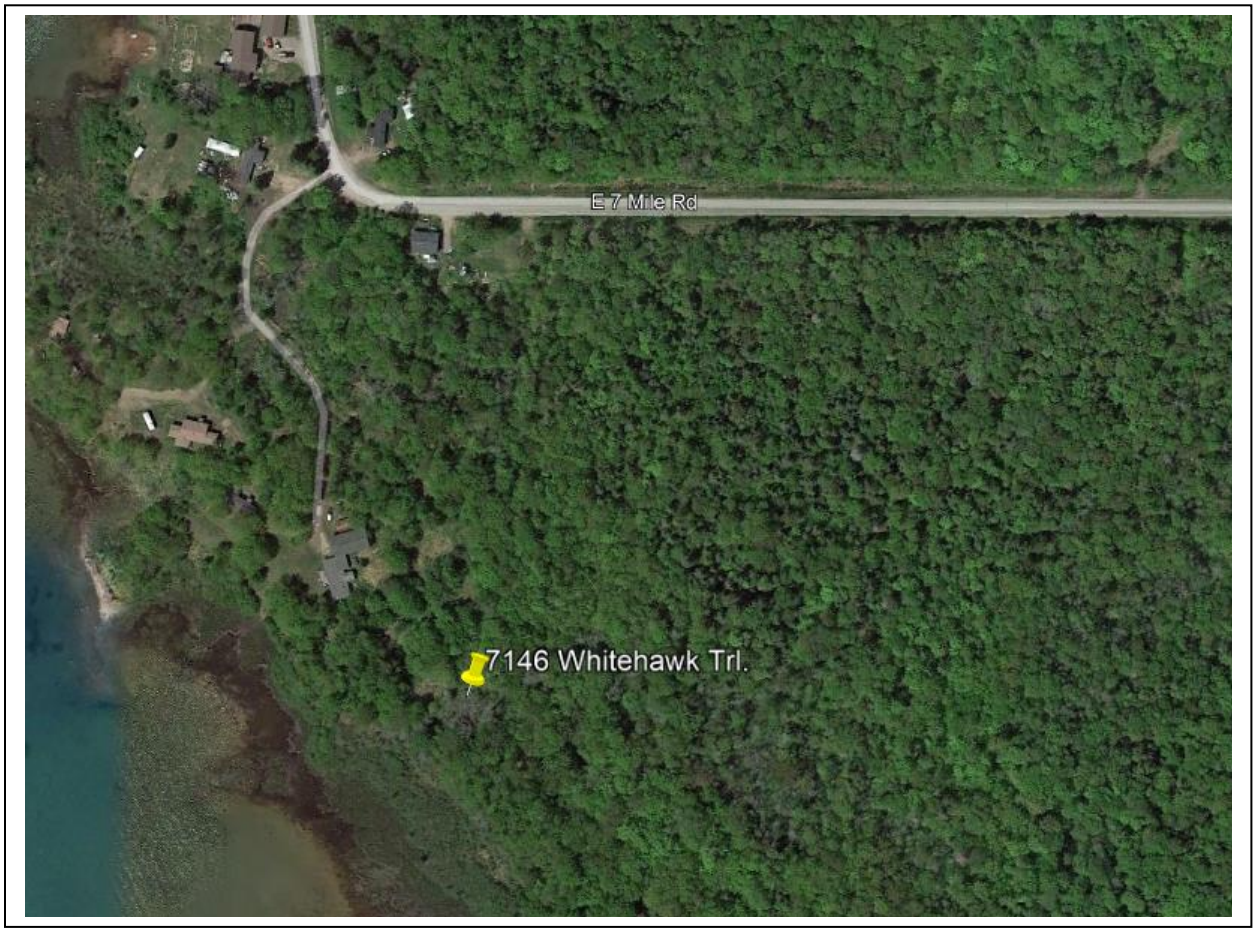
Attachments

- IHS Site Designs
- IHS Supplemental Requirements
- Bid Schedule
- IHS Administrative Requirements
- IHS As-Built Drawing
- IHS Requirements: Photo Documentation

Residential Septic System Design

Monica Spencer

7146 Whitehawk Trl. Sault Ste. Marie, MI 49783



Septic System Design by: Shane Albrecht, REHS Date: November 7th, 2024

ASP Wastewater Solutions, LLC

7595 E. Plains Trl.

Sault Ste. Marie, MI 49783

Shane.asp@outlook.com

(906)203-6731

Site and soils evaluation

Replacement or new build: New Build

Bedrooms: 2

Bathrooms: 1

Garbage disposal (Y/N): No

Sewage lift/grinder pump in home (Y/N): No

Sump pump: Must be routed to daylight, not into septic system

Water Softener/ treatment: Must be routed to daylight, not into septic system

Footing drain termination: Must be routed to daylight, not into septic system

Predominant soil type: Fine Sand

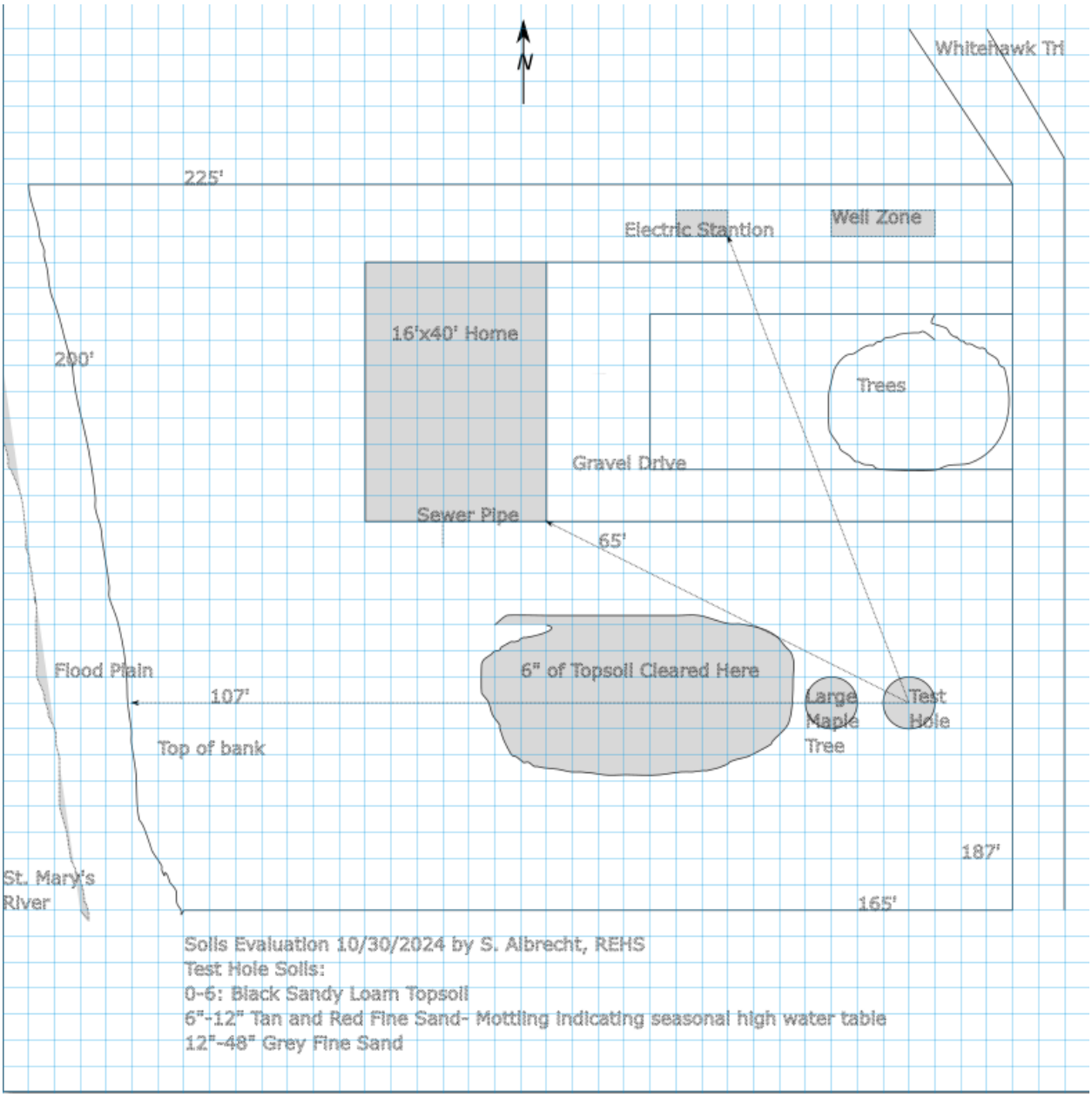
Limiting soil type: Seasonal high-water table present at 6”

Depth to limiting layer: 6”

Project Overview

The applicant is proposing to install a new septic system to accommodate a new two-bedroom home. The lot is somewhat wooded but the area where the septic system will be installed is cleared. The site will require a 1000-gallon concrete septic tank, 350-gallon concrete pump tank and pressure dosed mound system raised 2.5ft. above grade. The 6-inch topsoil layer in the area of the septic system has already been removed. The installer must place 36 inches of clean, medium sand under a 300 sq. ft. pressure dosed mound.

Soils Evaluation and Test Hole Locations



Septic System Design

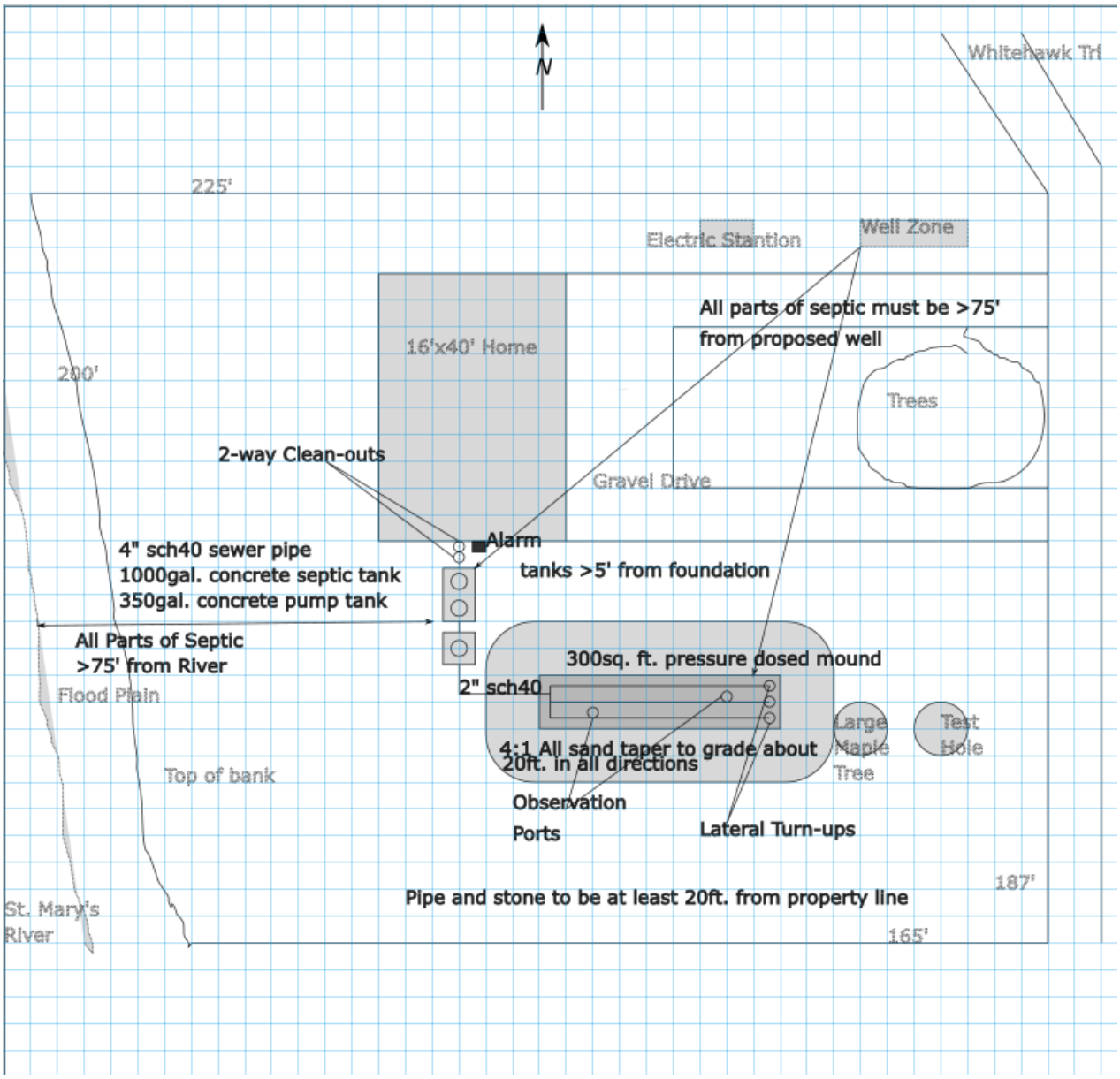
Fixtures to be connected to septic system: Kitchen, laundry, and bathroom wastes.

Fixtures that cannot be connected to septic system: Sump discharge, water treatment backwash, all footing and gutter drains.

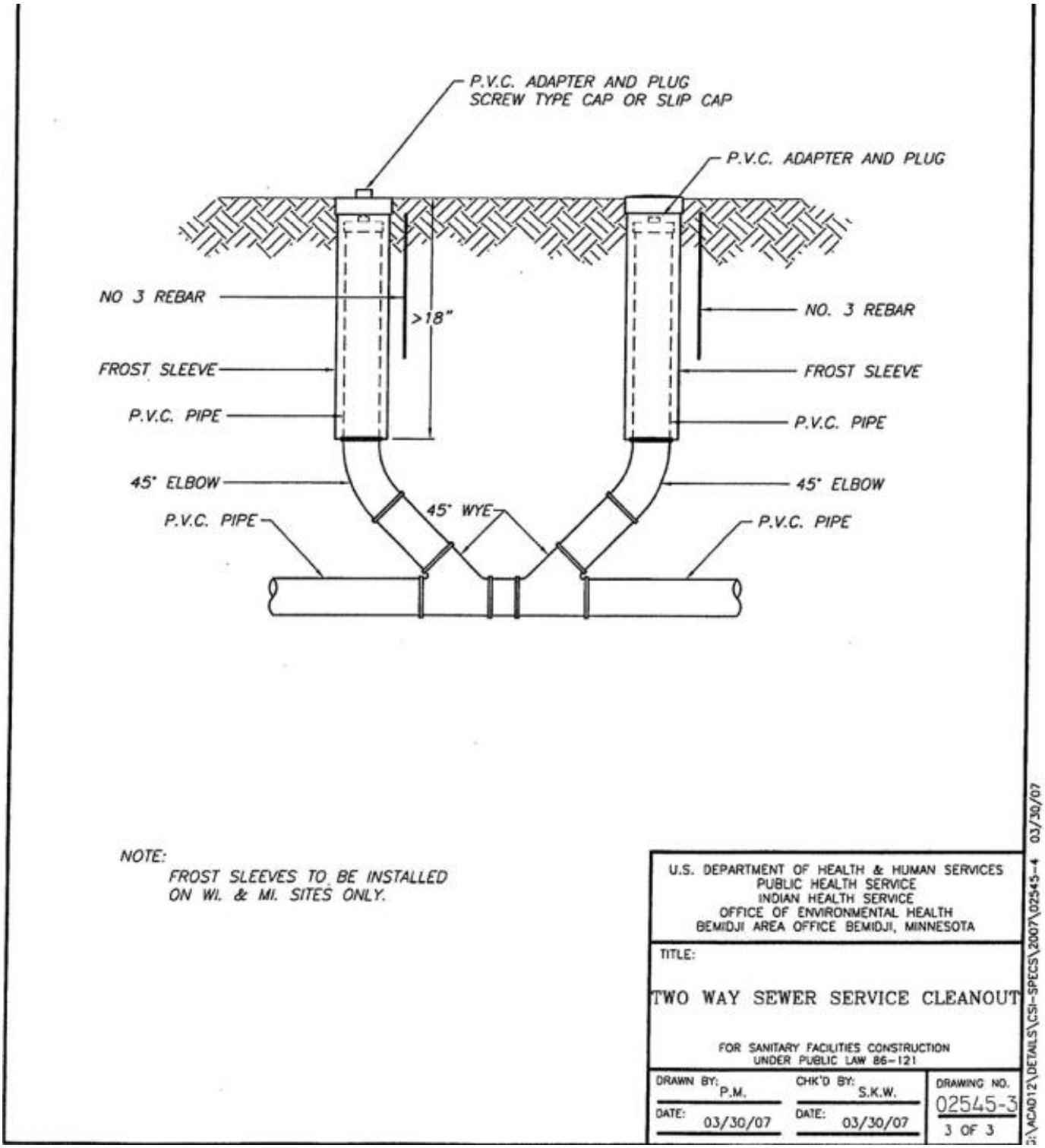
1. **Sewer Pipe must be 4" schedule 40 PVC with Two-way sewer service clean-out (see Appendix A):** Try to keep the sewer pipe as straight as possible with no unnecessary joints or bends as shown in the site plan.
2. **Septic tank size and construction: 1000-gallon concrete septic tank. (see appendix B):** Install PVC baffles in the inlet and outlet end of the tank. Risers must be installed on the inlet and outlet ends. Riser lids must be even with grade and left exposed after final grading. An effluent filter must be installed on the discharge end of the septic tank. Concrete lids left in place under riser lids.
3. **Pump tank size and construction: 350-gallon concrete pump tank (see appendix C):** Pipe from septic tank to the pump tank must be 4 inch schedule 40. The pump tank must have a riser installed to grade. An audio and visual alarm must be installed in a visible location.
4. **Pump specifications:** Pump must be a cast iron effluent pump capable of pumping 21 gallons per minute at 12 feet of head pressure.
5. **Dose Size:** Pump must dose 75 gallons of effluent per cycle.
6. **Effluent line size: 2" schedule 40 PVC**
7. **Septic field size and construction: 300 sq. ft. pressure dosed mound (See Appendix D):** Remove 6 inches of topsoil and hardpan in a 50x70ft area. Add 36 inches of medium sand fill under a 300 sq. ft. pressure dosed mound.
8. **Cover, taper, and seeding:** Cover the pipe and stone with filter fabric and then about 6 inches of medium sand before tapering to grade at 4:1 slope with all clean medium sand. Then cover with 4-6 inches of topsoil, seed and mulch. The field will be about 42 inches above grade when finished.

Access boxes and observation ports required (see appendix E)

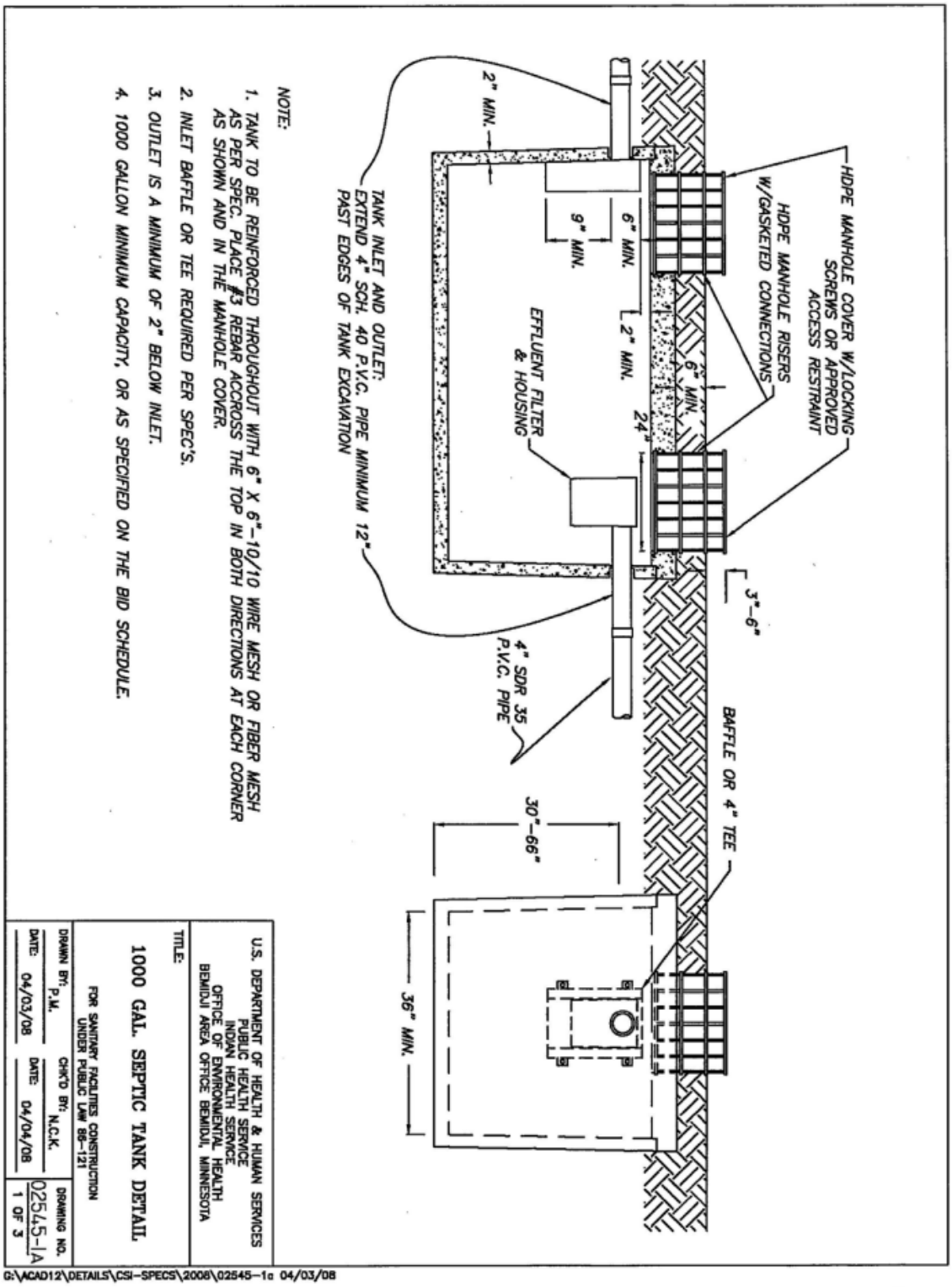
Site Plan


N
Whitehawk Trl
225'
Electric Stantion
Well Zone
All parts of septic must be >75'
from proposed well
16'x40' Home
200'
Trees
2-way Clean-outs
Gravel Drive
Alarm
4" sch40 sewer pipe
1000gal. concrete septic tank
350gal. concrete pump tank
tanks >5' from foundation
All Parts of Septic
>75' from River
300sq. ft. pressure dosed mound
2" sch40
Flood Plain
Large
Maple
Tree
Test
Hole
4:1 All sand taper to grade about
20ft. in all directions
Top of bank
Observation
Ports
Lateral Turn-ups
187'
Pipe and stone to be at least 20ft. from property line
St. Mary's
River
165'

Appendix A: 2 Way clean-out in sewer pipe



Appendix B: Septic Tank Construction



NOTE:

1. TANK TO BE REINFORCED THROUGHOUT WITH 6" X 6"-10/10 WIRE MESH OR FIBER MESH AS PER SPEC. PLACE #3 REBAR ACCROSS THE TOP IN BOTH DIRECTIONS AT EACH CORNER AS SHOWN AND IN THE MANHOLE COVER.
2. INLET BAFFLE OR TEE REQUIRED PER SPEC'S.
3. OUTLET IS A MINIMUM OF 2" BELOW INLET.
4. 1000 GALLON MINIMUM CAPACITY, OR AS SPECIFIED ON THE BID SCHEDULE.

U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES
PUBLIC HEALTH SERVICE
INDIAN HEALTH SERVICE
OFFICE OF ENVIRONMENTAL HEALTH
BEMIDJI AREA OFFICE BEMIDJI, MINNESOTA

TITLE:

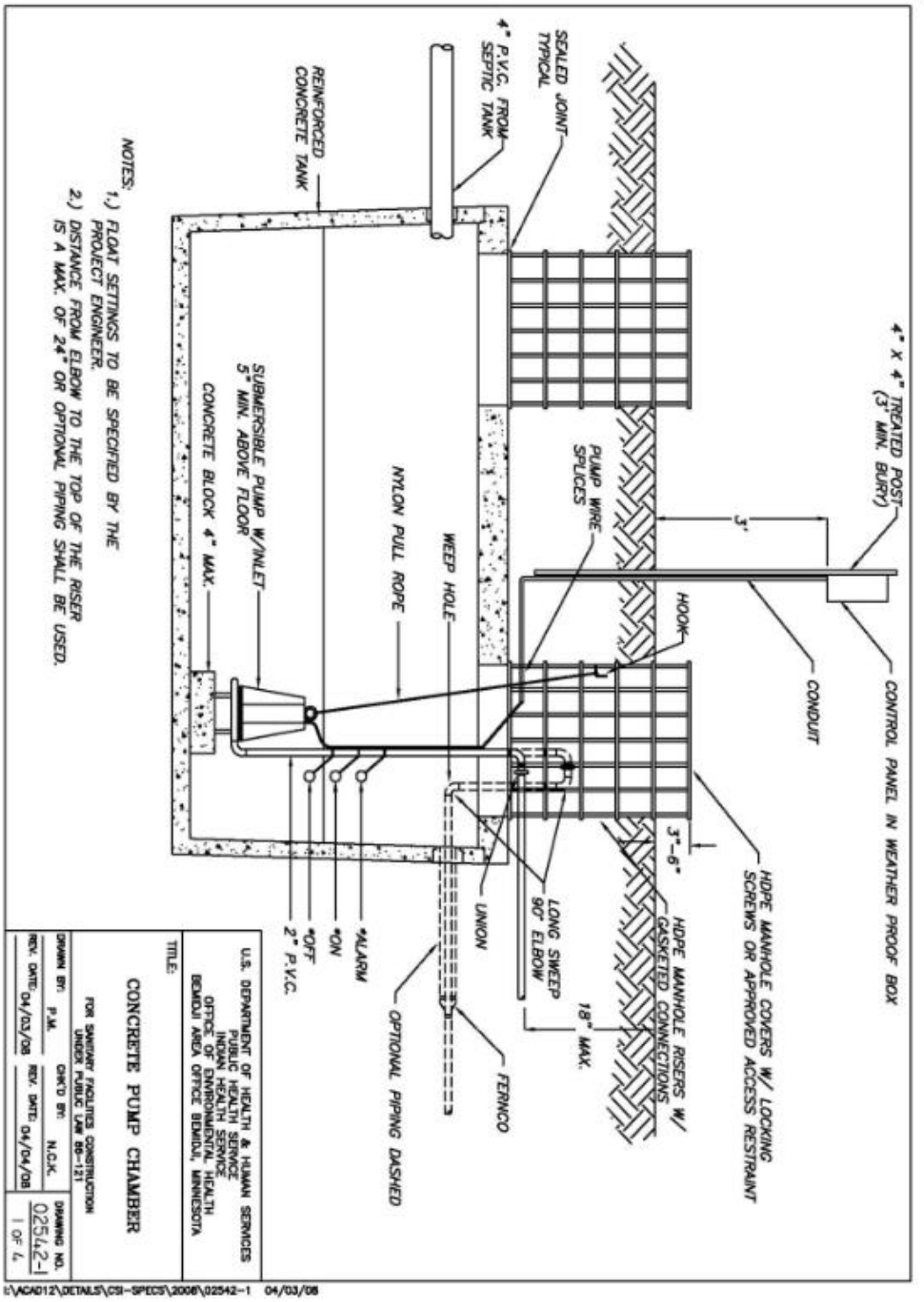
1000 GAL. SEPTIC TANK DETAIL

FOR SANITARY FACILITIES CONSTRUCTION
UNDER PUBLIC LAW 86-121

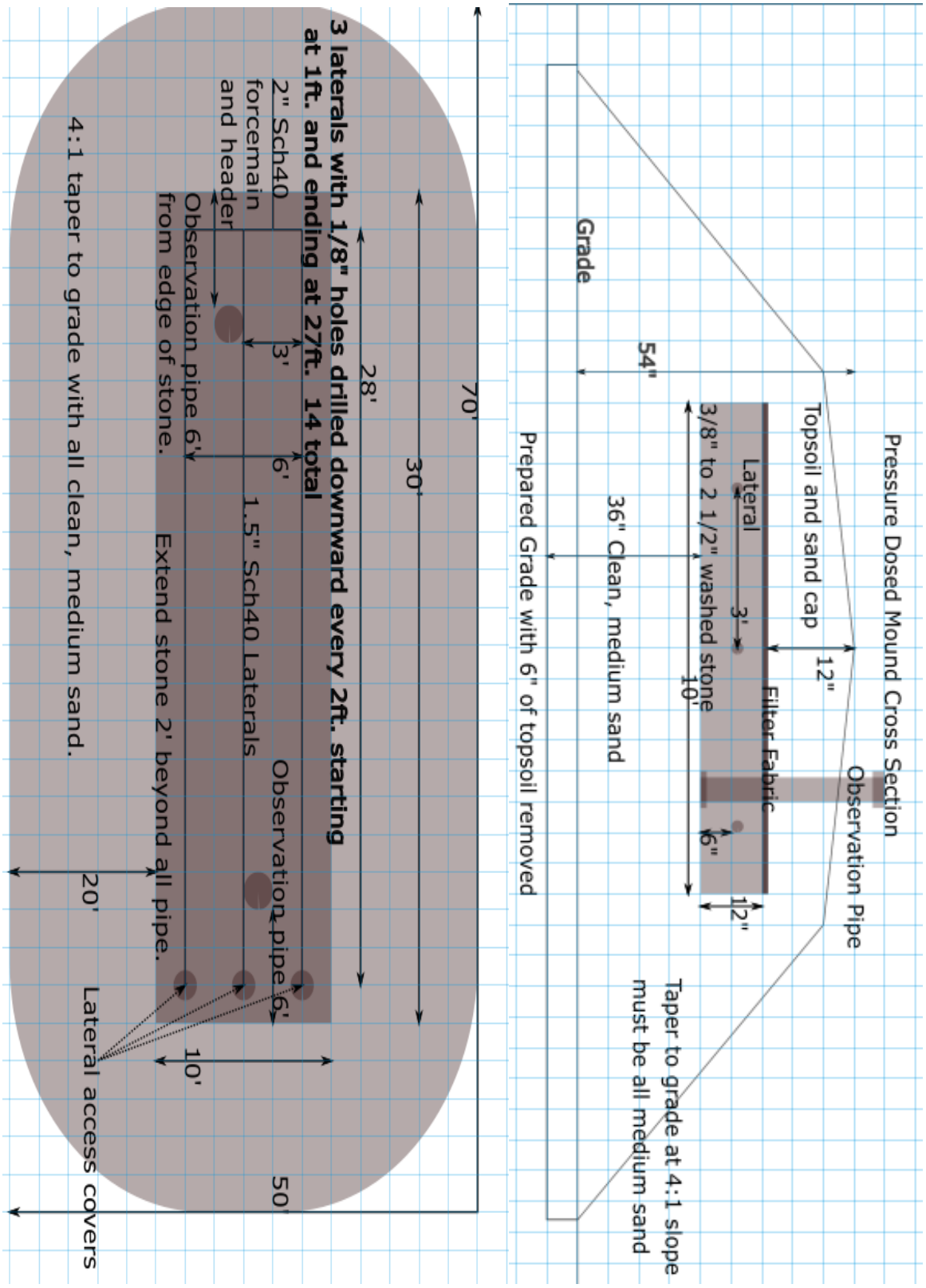
DRAWN BY: P.M.	CHK'D BY: N.C.K.	DRAWING NO.
DATE: 04/03/08	DATE: 04/04/08	02545-1A
		1 OF 3

G:\ACAD12\DETAILS\CSI-SPECS\2008\02545-1a 04/03/08

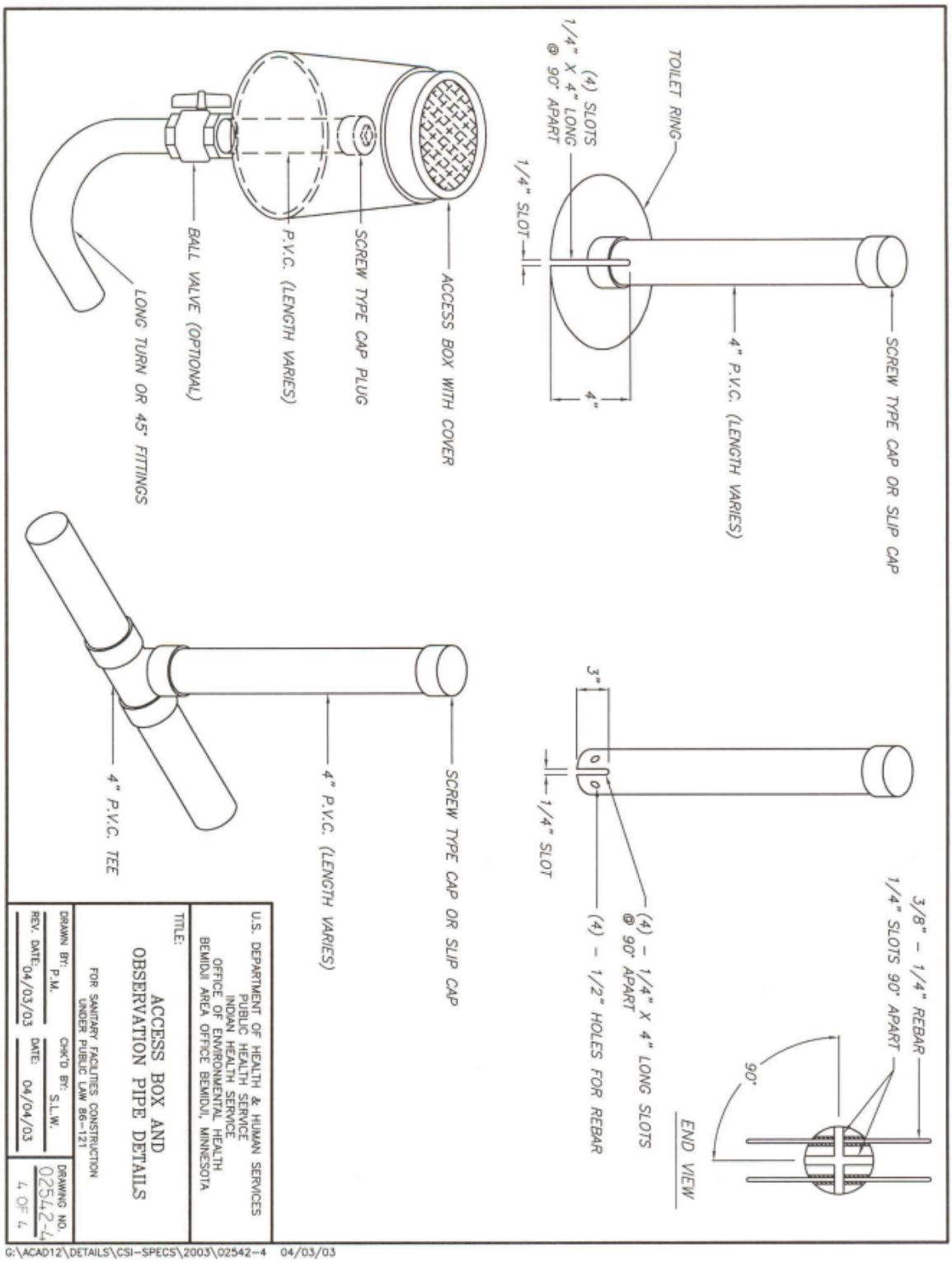
Appendix C: Pump Tank Construction



Appendix D: Pressure Dosed Mound Construction



Appendix E: Observation Ports and Lateral Turn-up Access Covers



Residential Septic System Design

Rosamond Nasser

7148 S. Whitehawk Trl.

Sault Ste. Marie, MI

Sugar Island Township

Septic System Design by: Shane Albrecht, REHS Date: April 24th, 2025

Albrecht Soo Properties, LLC

7595 E. Plains Trl.

Sault Ste. Marie, MI 49783

Shane.asp@outlook.com

(906)203-6731

Site and soils evaluation

Replacement or new build: New Build

Bedrooms: 3

Bathrooms: 1

Garbage disposal (Y/N): No

Sewage lift/grinder pump in home (Y/N): No

Sump pump: N/A

Water Softener/ treatment: N/A

Footing drain termination: N/A

Predominant soil type: Fine Sand

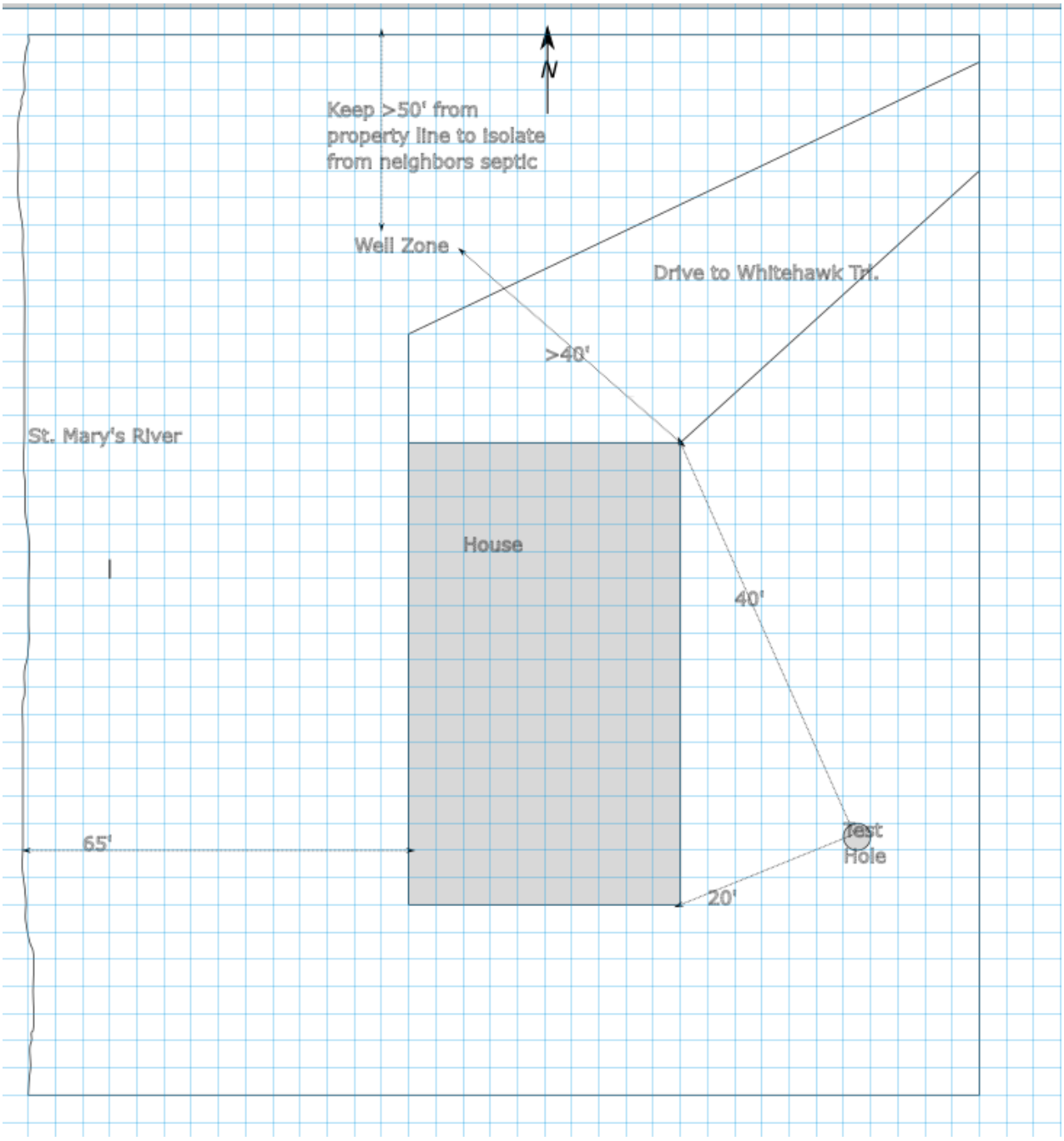
Limiting soil type: Water Table

Depth to limiting layer: 6”

Project Overview

Applicant is proposing to install a septic system to serve a new home on a partially wooded lot. All trees have been cleared in the area of the system. The septic system will consist of a 1060-gallon plastic septic tank, 600 sq. ft. pipe and stone field placed no less than 30 inches above grade. This will be a gravity flow system. The sewer pipe, septic tank and drainfield must be kept as high as possible to achieve the required height. Place the pipe and stone 10 feet from the foundation and cover level to the house. Taper to grade at 3:1 on all other sides.

Soils Evaluation and Test Hole Locations



Septic System Design

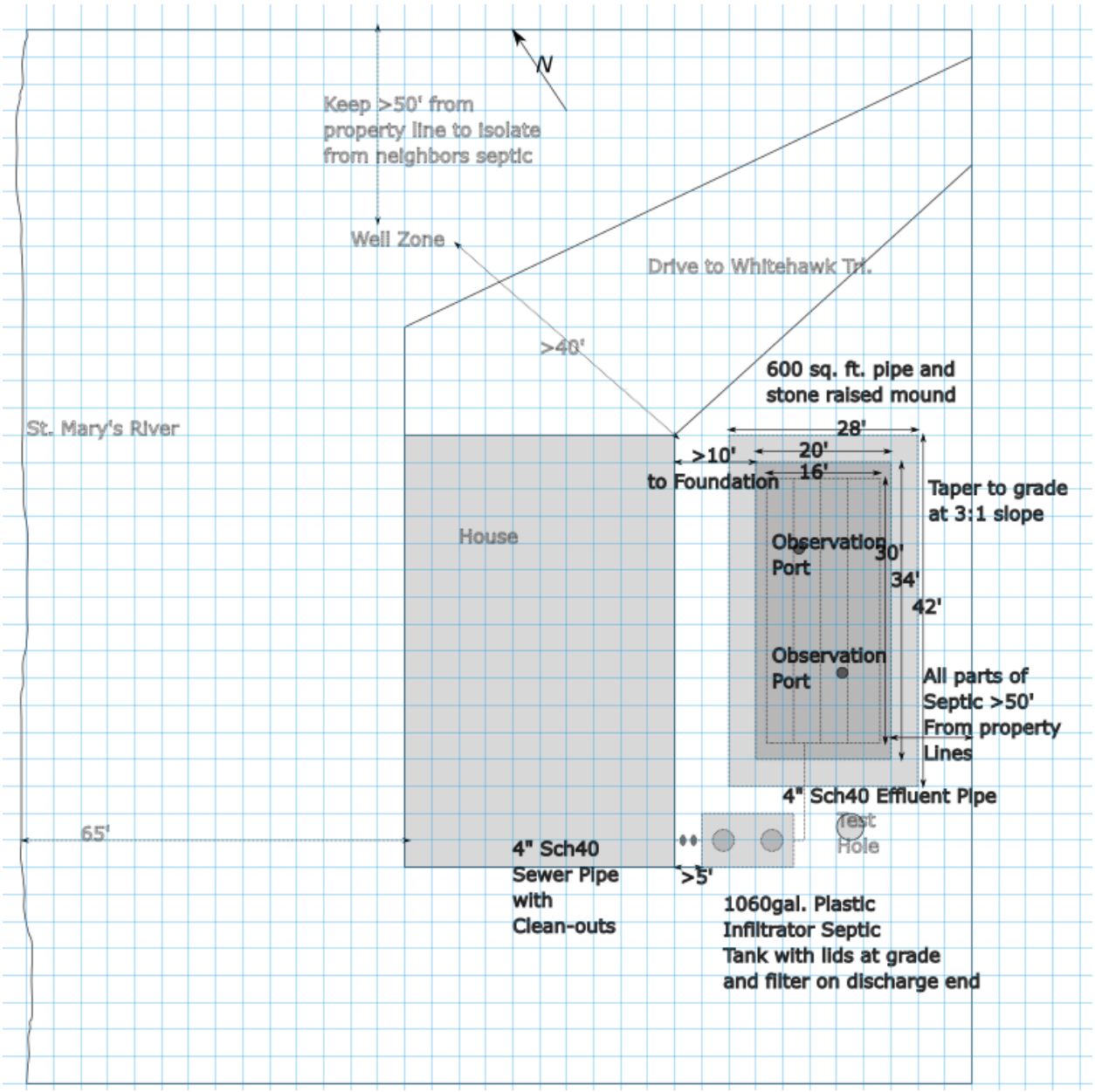
Fixtures to be connected to septic system: Kitchen, laundry, and bathroom wastes.

Fixtures that cannot be connected to septic system: Sump discharge, water treatment backwash, all footing and gutter drains.

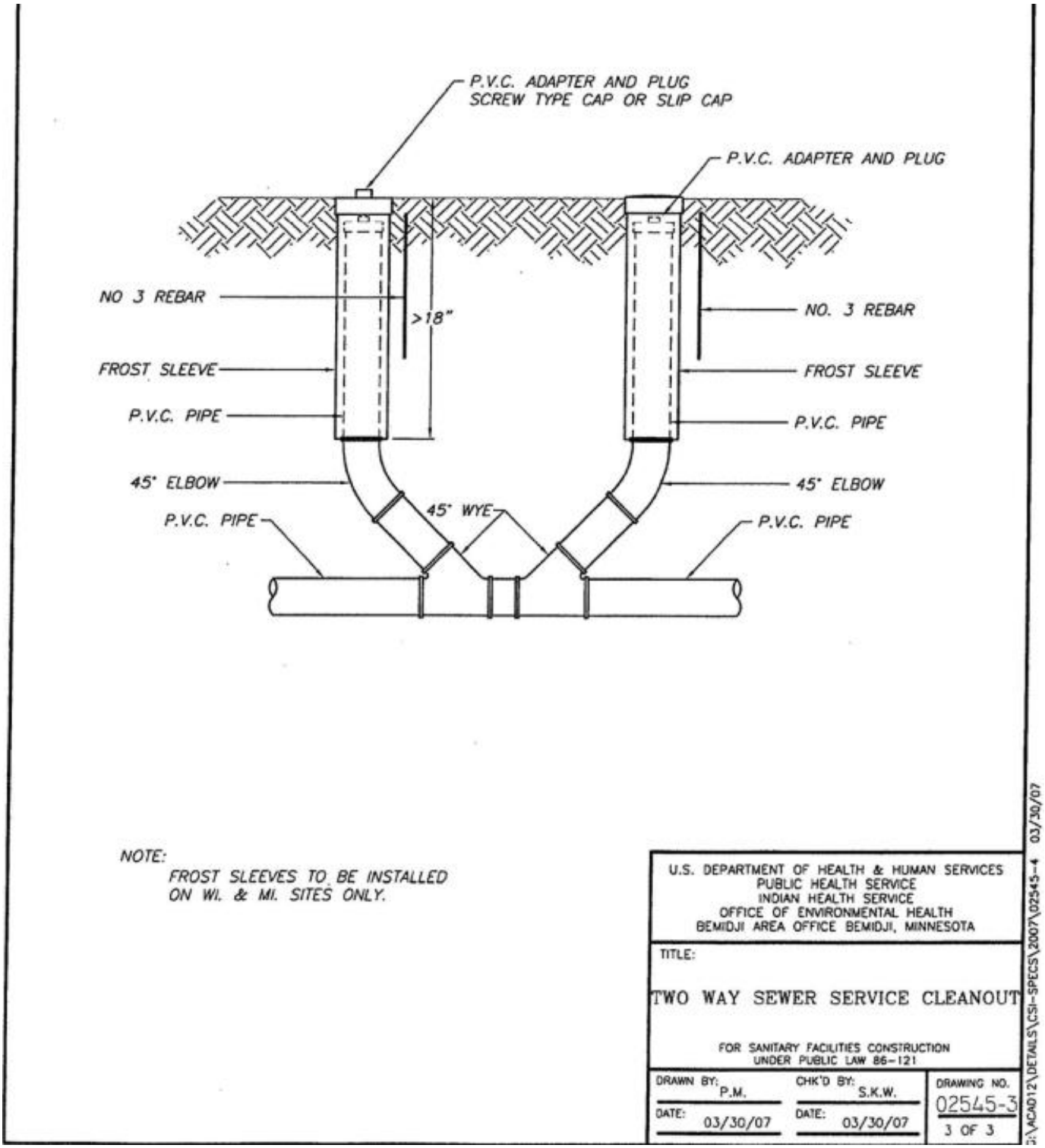
Existing septic system abandonment instructions: N/A

1. **Sewer Pipe must be 4" schedule 40 PVC with Two-way sewer service clean-out (see Appendix A):** Keep the sewer pipe as straight with no joints or bends as shown in the site plan. Place the septic tank at least 5ft. from the foundation but otherwise as close as possible. The sewer pipe must come out of the house as far South as possible as shown on the site plan.
2. **Septic tank(s) size and construction: 1060 gallon Infiltrator Septic Tank (see appendix B):** Install PVC baffles, safety lids and risers on outlet and inlet ends of the tank. Risers/lids must be even with grade and left exposed after final grading. An effluent filter must be installed on the discharge end of the tank.
3. **Effluent line size: 4" schedule 40 PVC**
4. **Septic field size and construction: 600 sq. ft. conventional pipe and stone bed (See Appendix C):** Remove no more than 6 inches of topsoil and roots before installing 36 inches of clean, medium sand in an area large enough for a 600 sq. ft. drainfield with 4 foot level sand berm. Washed stone must range in size from 3/8" to 2 ½" with fines content not exceeding 0.5% loss by washing.
5. **Cover, taper, and seeding:** Cover the pipe and stone with filter fabric and then 12 inches of sand and topsoil. Taper to grade at 4:1 slope. Seed and mulch immediately.
6. **Observation ports required (see appendix D)**

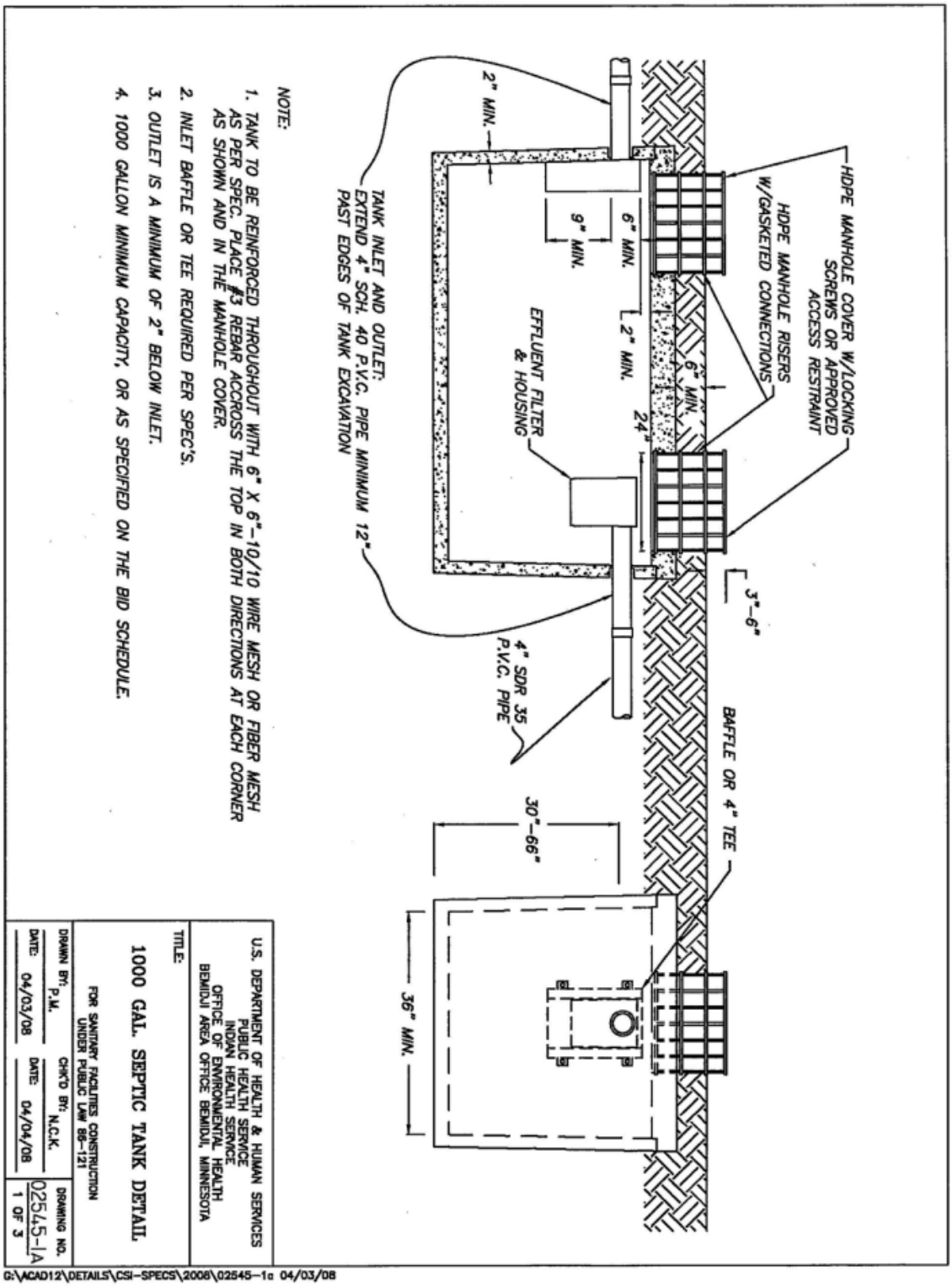
Site Plan


N
Keep >50' from property line to isolate from neighbors septic
Well Zone
Drive to Whitehawk Trl.
>40'
600 sq. ft. pipe and stone raised mound
St. Mary's River
28'
>10'
20'
16'
to Foundation
Taper to grade at 3:1 slope
House
Observation Port
30'
34'
42'
Observation Port
All parts of Septic >50' From property Lines
4" Sch40 Effluent Pipe
Test Hole
65'
4" Sch40 Sewer Pipe with Clean-outs
>5'
1060gal. Plastic Infiltrator Septic Tank with lids at grade and filter on discharge end

Appendix A: 2 Way clean-out in sewer pipe



Appendix B: Septic Tank Construction



NOTE:

1. TANK TO BE REINFORCED THROUGHOUT WITH 6" X 6"-10/10 WIRE MESH OR FIBER MESH AS PER SPEC. PLACE #3 REBAR ACCROSS THE TOP IN BOTH DIRECTIONS AT EACH CORNER AS SHOWN AND IN THE MANHOLE COVER.
2. INLET BAFFLE OR TEE REQUIRED PER SPEC'S.
3. OUTLET IS A MINIMUM OF 2" BELOW INLET.
4. 1000 GALLON MINIMUM CAPACITY, OR AS SPECIFIED ON THE BID SCHEDULE.

U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES
PUBLIC HEALTH SERVICE
INDIAN HEALTH SERVICE
OFFICE OF ENVIRONMENTAL HEALTH
BEMIDJI AREA OFFICE BEMIDJI, MINNESOTA

TITLE:

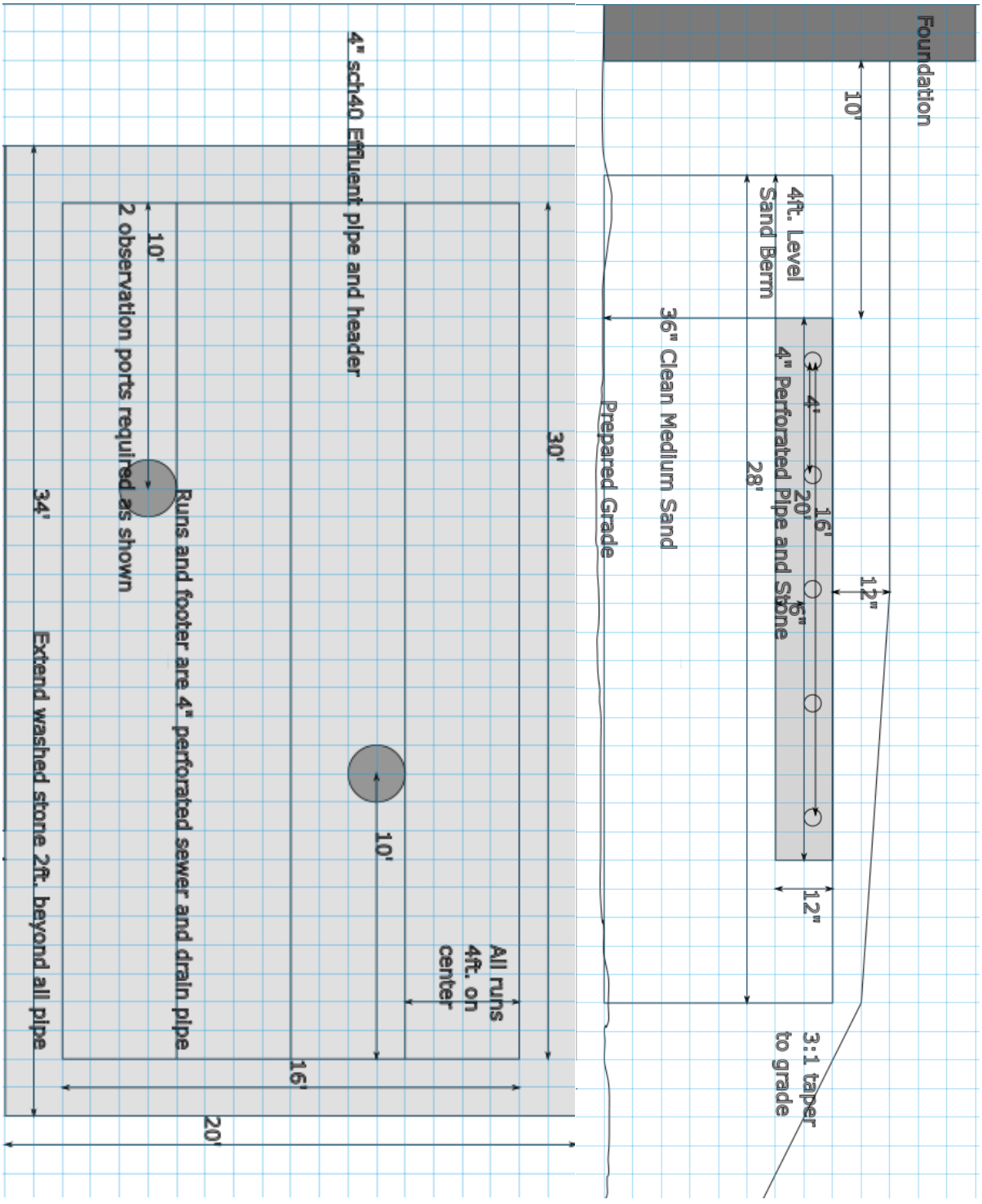
1000 GAL. SEPTIC TANK DETAIL

FOR SANITARY FACILITIES CONSTRUCTION UNDER PUBLIC LAW 86-121

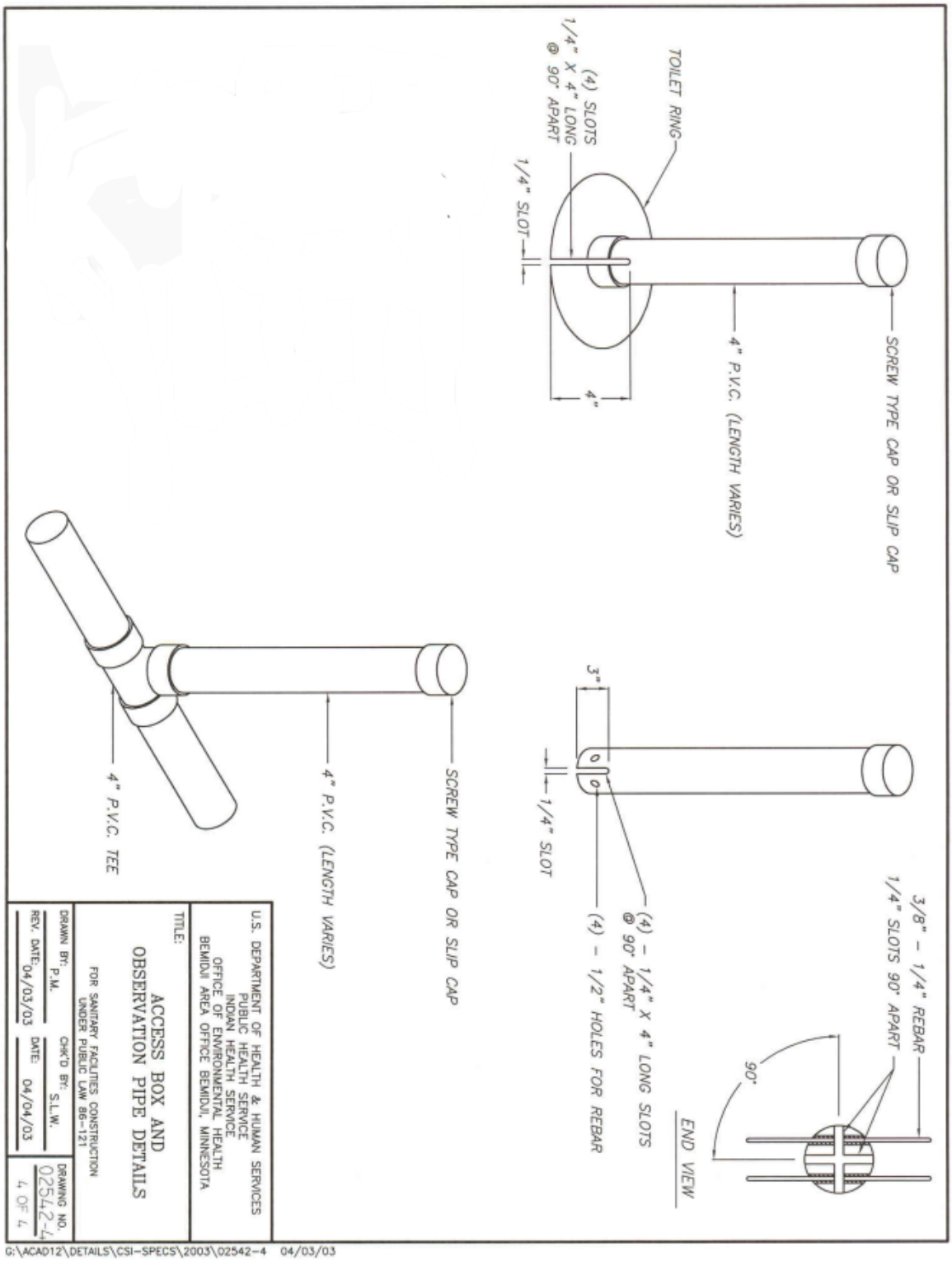
DRAWN BY: P.M.	CHK'D BY: N.C.K.	DRAWING NO.
DATE: 04/03/08	DATE: 04/04/08	02545-1A
		1 OF 3

G:\ACAD12\DETAILS\CSI-SPECS\2008\02545-1a 04/03/08

Appendix C: Conventional Drainfield Construction



Appendix D: Observation Ports



SEPTIC SPECIFICATIONS (GRAVITY SYSTEMS)
IHS SUPPLEMENTAL REQUIREMENTS

PART 1 - GENERAL

1.01 SUMMARY

A. This specification adds sanitary components to the Contractor's scope of work that may not already be included in the County issued permit.

B. If access to the site requires the removal of trees, the Contractor shall coordinate with and obtain approval from Tribe/IHS prior to start of construction.

C. For projects in the Lower Peninsula, all parties involved in construction activities shall first watch MDNR's "60-Second Snakes: The Eastern Massasauga Rattlesnake" video (available at https://youtu.be/-PFnXe_e02w).

1. Any EMR observations during project implementation shall be reported to the USFWS or IHS Engineer within 24 hours.

1.02 SUBMITTALS

A. Before construction: Submit for IHS Engineer approval all "or equal" or alternate items.

B. Submittal Procedures

1. Submit copies of submittals to the Tribal contact and IHS Engineer, unless requested otherwise, utilizing one of the following options:

   a. An electronic copy in pdf format delivered to Tribal contact and Engineer via email or other means as approved.
   b. Two (2) hard copies to Tribal contact.

1.03 Contact Information

A. TJ Waybrant, IHS Engineering Technician
2847 Ashmun St., Suite #1
Sault Sainte Marie, MI 49783
906-632-1997
Tilitha-jane.waybrant@ihs.gov

PART 2 – PRODUCTS AND EXECUTION

2.01 SOLID SEWER PIPE, CLEANOUT AND FITTINGS

A. All gravity pipe, fittings, and caps shall be Schedule 40 PVC from the house to beyond tanks. SDR 35 PVC may be utilized to connect to drain field.

B. Minimum slope between the house and the septic tank is 1/8-inch per foot or per County Permit, whichever is greater.

C. There shall be no 90-degree bends in the pipe between the house and the Septic tank.

D. Install two-way cleanouts approximately 5 feet from the outside wall of home. An interior cleanout is acceptable if septic tank is not greater than 10 feet from home and pipe contains no bends.

2.02 SEPTIC TANKS

A. Provide new septic tank per County sizing requirements.

B. Place tank level.

C. Septic tank shall have 2 manholes and **2 access risers.**

D. Septic tank manholes and risers situated over the outlet pipe & effluent filter shall be no less than 24 inches in diameter.

E. Septic tank manholes and risers situated over the inlet pipe and baffle shall be no less than 16 inches in diameter.

F. Extend both septic tank risers to either

1. Finished grade and mound around septic tank to prevent ponding around risers, or
2. Above grade, but by no more than 3”-6” (applicable to low lying areas).

G. Septic tank risers shall be pre-manufactured with gasketed connections or other approved water-tight material.

H. Septic tank riser covers shall be of the same material as the riser. Provide suitable stainless steel locking screws or locking device.

I. All tank joints and connections to tank shall be watertight. A flexible boot shall be provided for piping connections.

2.03 EFFLUENT FILTER

A. Equal to Polylok PL-122 or equal.

B. Center filter under the outlet manhole opening. Solvent weld to 4-inch PVC Schedule 40 outlet pipe. Extend beyond the outside of the septic tank

excavation before connecting to SDR 35 pipe. Install filter handle and extend handle to within 6-inches of the top of the access riser for easy access. Conform to manufacturer's installation instructions.

2.04 INLET TEE OR BAFFLE

A. Provide an open-end sanitary tee or baffle made of approved material at the inlet.

B. Center tee or baffle under the inlet manhole opening. Solvent weld to 4 inch PVC Schedule 40 inlet pipe.

C. Tee or baffle shall extend at least 6 inches above and 9 inches below the liquid level, but not exceed 1/3 of the liquid depth. Provide at least 2 inches of clear space over the top of the tee or baffle.

2.05 OBSERVATION PIPE

A. Observation pipe material shall be Schedule 40 PVC, include perforations at the bottom, secured caps at the top, and should be securely anchored to drainfield.

B. Install observation pipes on 2 far end corners of drainfield/mound from the bottom of the trench/bed or mound system.

C. Install top of observation pipe flush with finished grade. Drive 12 inch length of rebar adjacent to pipe to assist with locating pipe in the future.

PART 3 – SITE RESTORATION

3.01 TOPSOILING, SEEDING, FERTILIZING, AND MULCHING

A. All work necessary for top soiling, fertilizing, seeding and mulching shall be completed by Contractor to ensure adequate re-establishment of vegetation around area of drain field and sewer service line. This work shall be performed during seeding dates for permanent cover (MDEQ guidelines). This is generally May 1-Oct 1.

B. Contractor shall strip and stockpile existing topsoil from all planned disturbed areas unless design requires topsoil to remain undisturbed. After grading is complete, spread stockpiled topsoil over all disturbed areas, excluding those where another type of finished surface is being provided. **Contractor shall**

restore topsoil depth to original conditions (minimum) or as needed to provide permanent vegetation.

C. The Contractor is responsible for re-establishing vegetation on all disturbed areas where vegetation existed prior to construction.

3.02 EXISTING SEPTIC TANK ABANDONMENT

A. Abandon existing septic tanks and drywells. Pump tanks prior to abandonment. Dispose the contents in accordance with state and federal requirements. Backfill interior of the tank with a suitable compactable soil material. Locate abandoned septic tanks on the as-built drawing.

END OF SECTION

SEPTIC SPECIFICATIONS (PUMPED SYSTEMS)
IHS SUPPLEMENTALREQUIREMENTS

PART 1 - GENERAL

1.01 SUMMARY

A. This specification adds sanitary components to the Contractor's scope of work that may not already be included in the County issued permit.

B. If access to the site requires the removal of trees, the Contractor shall coordinate with and obtain approval from Tribe/IHS prior to start of construction.

PART 2 – PRODUCTS AND EXECUTION

2.01 SOLID SEWER PIPE, CLEANOUT AND FITTINGS

A. All gravity pipe should be Schedule 40 PVC fittings and caps.

B. All pressure pipe shall be PVC (160 psi SDR 26 or Schedule 40)

C. Minimum slope between the house and the septic tank is 1/8-inch per foot or per County Permit, whichever is greater.

D. There shall be no 90-degree bends in the pipe between the house and the Septic tank.

G. Install two-way cleanouts approximately 5 feet from the outside wall of home **per attached drawing.**

2.02 SEPTIC TANKS

A. Provide new Septic tank per County sizing requirements (this includes sites where County allows for possible reuse of the septic tank).

B. Place tank level **per attached drawing.**

C. Septic tank shall have 2 manholes and **2 access risers per attached drawing.**

D. Septic tank manholes and risers should be no less than 24 inches square or 24 inches in diameter, with each single or multiple compartment tanks, situated over the inlet pipe & baffle and outlet pipe & effluent filter.

E. Extend both septic tank risers per selection the homeowner to either (1) finished grade and mound around septic tank to prevent ponding around riser, or (2) above grade, but by no more than 3-6". Provide suitable stainless steel locking screws or locking device **per attached drawing**.

F. Septic tank risers shall be cast in place polyethylene with gasketed connections or other approved water-tight material.

G. Septic tank riser covers shall be of the same material as the riser, with a warning label, printed with information regarding the hazards present when entering a septic tank affixed or supplied by the manufacturer.

H. Properly seal pipe connections to tanks to prevent groundwater infiltration.

I. Where County permit allows for the inclusion of the existing tank as a 2nd tank, and where the existing tank is determined to be in good condition for reuse, install two new access risers on the existing tank per Section 2.02 of this specification. This is in addition to the 2 new risers on the new septic tank.

2.03 EFFLUENT FILTER

A. **Equal to Polylok PL-525 or equal. Filters are intentionally oversized.**

B. Center filter under the outlet manhole opening. Solvent weld to 4-inch PVC Schedule 40 outlet pipe. Extend a minimum of 12-inches beyond the outside of the septic tank before connecting to SDR 35 pipe. Install filter handle and extend handle to within 6-inches of the top of the access riser for easy access. Conform to manufacturer's installation instructions.

2.04 OBSERVATION PIPE

A. Observation pipe material shall be Schedule 40 PVC, include perforations at the bottom, secured caps at the top, and should be securely anchored to drainfield.

B. Install observation pipes on 2 far end corners of drainfield/mound from the bottom of the trench/bed, or mound system to a height of 12 to 24 inches above grade.

2.05 PUMP CHAMBER

A. Locate pump chamber to allow drainback of forcemain from mound.

B. Manhole risers and covers

1. Provide at least one manhole opening on Pump Chamber, no less than 24 inches square or 24 inches in diameter, situated over the pump.

2. Manhole riser shall be cast in place polyethylene with gasketed connections or other approved water-tight material.

3. Extend risers per selection the homeowner to either (1) finished grade and mound around septic tank to prevent ponding around riser, or (2) above grade, but by no more than 3-6". Provide suitable stainless steel locking screws or locking device

C. Seal all joints between inlet piping, vent pipe, riser, etc. to eliminate ground water infiltration.

D. Install vent on pump chamber in accordance with codes.

2.06 ELECTRICAL POWER AND WIRING

A. All work to meet Electrical Code.

B. Power Supply Requirements: 120/240 volt, single phase, three wire service from one/two pole breaker off lighting panel in the residence on a separate/dedicated circuit.

C. All wires to be sized in accordance with National Electric Code (NEC). Electrical cable shall be type UF for direct burial. Size underground cable to limit voltage drop from power source to pump motor in accordance with pump manufacturer's recommendations.

D. Install all electrical wiring between control enclosure and the pump chamber in conduit. Seal conduit to prevent gasses from entering the enclosure.

2.07 EFFLUENT PUMP

A. Effluent pump motor shall have a built-in thermal overload protection with automatic reset.

B. Provide means of removing/pulling pump **per attached drawing.**

C. Place disconnect no more than 24" below grade **per attached drawing.**

2.08 CONTROLS AND ALARM SYSTEM

A. Install the alarm system outside the residence adjacent to the pump tank.

B. Use two float switches to detect on-off control levels for the pump.

C. Use SJE Rhombus Signal Master Control Switch, Liberty SX-Series Simplex Pump Control, or approved equal rated for outdoor use with NEMA 4X enclosure, rated for pump and amp selection.

D. Install Control panel in weather proof box, secured to a 4”x4” treated post, securely tied into the ground, extending a minimum 3 ft above grade.

E. Controls: Furnish and install controls to operate the pump based on on-off level control floats using one of the following two options:.

OPTION #1

1. A control panel compatible with the pump supplied and housed in a weatherproof enclosure equal to a NEMA Type 4X fiberglass enclosure.

2. Provide terminal blocks for connection of on-off level control floats.

3. A separate dead front enclosure section shall house a load switching motor contactor with door mounted heavy-duty hand-off-auto switch and a service disconnect mechanism.

OPTION #2

1. Pump Switch with Piggy-Back Plug and outlet rated for exterior use and housed in a weatherproof enclosure equal to a NEMA Type 4X fiberglass enclosure.

2. Enclosure area shall be a minimum of 1.5 times the area of the piggyback switch, outlet, and folded cables to allow for easy access, removal, and replacement of switch, outlet, and cables.

F. Provide an alarm system on a separate circuit from the pump.

1. Alarm system shall consist of a direct acting mechanical float switch, 24-volt control transformer, red alarm light, horn, push-to-test alarm button and a horn silence switch.

   a. Set up the alarm so that upon the occurrence of an alarm condition, the high alarm sensor will close its circuit, thus energizing the red alarm light and sounding the horn.

   b. The horn shall continue to sound until reset manually by a button located on the alarm panel.

c. Provide a switch that when moved from the “normal” to “silence” position will silence the audible alarm, and allow the red alarm light to remain energized.

d. The alarm light shall continue to operate until the alarm circuit has been opened, the operating condition has returned to normal, and the silencing switch has been returned to its “normal” position.

G. Seal all conduit openings entering the control panel and pump chamber with silicone caulk or other appropriate material.

2.09 FORCEMAIN TO MOUND

A. Install force main piping and union in the pump chamber per attached drawing.

B. Drill a 1/4-inch weep hole in the bottom elbow of the outlet pipe per attached drawing.

C. Slope forcemain to allow drainage when pump is not in use.

2.10 MOUND

A. All permits for pumped mound systems use only PVC pipe headers and laterals. Chambers or Infiltrators shall not be used.

B. On all IHS designed pressure dosed mound systems, install Orifice Shields on all lateral orifices, SimTech model, or equal.

2.11 SITE RESTORATION

A. All work necessary for top soiling, fertilizing, seeding and mulching shall be completed by Contractor to ensure adequate re-establishment of vegetation around area of drainfield and sewer service line.

B. The Contractor is responsible for re-establishing vegetation on all disturbed areas where vegetation existed prior to construction.

2.12 EXISTING SEPTIC TANK ABANDONMENT

A. Abandon existing septic tanks and drywells. Pump tanks prior to abandonment. Dispose the contents in accordance with state and federal requirements. Backfill interior of the tank with a suitable compactable soil material. Locate abandoned septic tanks on the as-built drawing.

2.13 SUBMITTALS

A. Contractor shall submit product literature on the following components that were installed on site:
   a. pump chamber (dimensions, manufacturer)
   b. effluent pump (brand, model)
   c. control and alarm package
   d. float settings for pump operation
   e. as-built drawing
   f. septic tank (dimensions, manufacturer)
   g. risers
   h. effluent filter

END OF SECTION

IHS Scattered Sites
Septic Systems

(Constructed under local County Health Department jurisdiction only)

IHS Requirements

1. Follow photo documentation requirements on next page.

2. Construct system per County Health Department permit, AND
    - Attached Detail drawing(s) and
    - IHS Supplemental Specifications

3. Provide as-built record drawing showing location of key system components with dimensions to these components from at least 2 house corners.

4. After septic system passes inspection with local County Health Department notify Tribe of completion, and provide photo documentation and invoice. Doing so will expedite payment.

Photo Documentation

Contractor shall provide photos to clearly document all underground and above ground facilities have been installed per the IHS Supplemental Requirements. Photos should be taken both during and after construction (following County Final Inspection).

Failure to provide adequate photo documentation may delay Contractor payment.

Photo log should include the following (note that photo examples may not reflect current requirements):

Figure 1: Tie in location to home

Figure 2: Two-way cleanout with frost sleeves

Figure 3: Two-way cleanout with frost sleeves

Figure 4: Two-way cleanout with frost sleeves – rebar not yet cut to grade. Frost sleeves could have been cut to keep cleanout at grade.

Figure 5: Tank placement

Figure 6: Tank placement with risers to be installed on each access port and brought to grade

Figure 7: Oversized effluent filter. Tank access cover needed to be widened to allow for installation of filter

Figure 8: Oversized effluent filter and tank access riser brought to grade

Figure 9: Backfilling of drainfield

Figure 10: Backfilling of drainfield

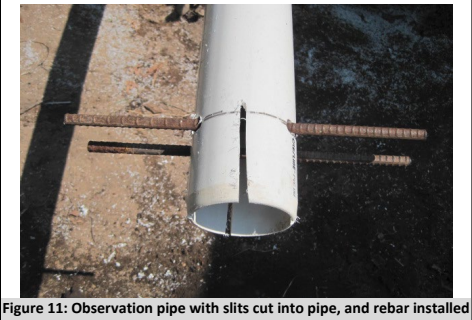


Figure 11: Observation pipe with slits cut into pipe, and rebar installed for stability per drawing.

Figure 12: Finished grade showing all access risers brought to grade. Observation pipes not yet cut down, and extra observation pipes added to each drainfield zone (not required), seeding/mulching not yet completed.

BID SCHEDULE A - Pumped Septic System					
No.	**Item**	**Qty**	**Unit**	**Unit Cost**	**Total Cost**
1	Septic tank (includes risers and inlet tee)	1	LS		
2	Effluent filter	1	EA		
3	Sewer gravity pipe	1	LS		
4	2-way cleanout	1	LS		
5	Pump tank (includes pump, controls, alarm, and all electrical work)	1	LS		
6	Sewer forcemain	1	LS		
7	Elevated mound (includes all sand, gravel, topsoil, header, laterals, observation and flush ports)	1	LS		
8	Septic tank abandonment (if applicable)	1	LS		
9	Finish grading, seed, topsoil, and mulch of all disturbed areas	1	LS		
				Total =	

NOTES

1 Costs include all labor and materials for installation of scope as outlined in County Permits, State Codes, and IHS Supplemental Specifications

2 Costs must be provided for all line items above otherwise bid will be considered incomplete.

3 Changes to quantities listed above **must** be approved in writing (email) by the IHS prior to performing the work.

4 Payment will not be made for quantities or changes in scope that are not previously approved.

5 Costs associated with site access, clearing, tree/brush removal and offsite disposal offsite are to be included in unit costs above

6 Photo documentation required as descirbed in attachment

SECTION 01300
ADMINISTRATIVE REQUIREMENTS

PART 1 - GENERAL

1.01 SUMMARY

A. Section includes the administrative notes and requirements for this contract.

1.02 For all contracts:

A. The Indian Health Service (IHS) is the engineer for this project; however, this is not a federal contract. IHS reserves the right to inspect the work performed by the Contractor or any of its Subcontractors. IHS does not represent the Tribe and the Tribe does not represent IHS regarding any matter related to administration of this Contract.

B. Indian Preference

1. IHS Indian preference requirements apply to the solicitation and award of this contract. Indian Preference will be used in selecting the contractor for this Work. If Bidder is eligible for Indian preference, documentation of tribal affiliation and ownership of the bidding enterprise must be provided with Bid.

   Contractor agrees that, to the greatest extent feasible, preferences and opportunities for training and employment in connection with this Agreement shall be given to Indians; and, as reasonable, preference in the award of any subcontracts in connection with this Agreement shall be given to Indian organizations and to Indian-owned economic enterprises as defined in Section 3 of the Indian Financing Act of 1974 (88 Stat. 77).

C. Suspension and Termination of Work

1. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by written notice to Contractor and Engineer. Such notice will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be entitled to an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension. Any change proposal seeking such adjustments shall be submitted no later than 30 days after the date fixed for resumption of Work.
2. If the Contractor fails to perform the work in accordance with the Contract Documents, Owner may declare the Contractor to be in default and give Contractor notice that the Contract is terminated. The termination will not

affect any rights or remedies of Owner against Contractor then existing or which may thereafter accrue, or any rights or remedies of Owner against Contractor.

3. Upon seven days written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Contractor shall be paid for completed and acceptable work executed in accordance with the Contract Documents prior to the effective date of termination. Contractor shall not be paid on account of loss of anticipated overhead, profits, or revenue, or other economic loss arising out of or resulting from such termination.

D. Contractor shall comply with 41 CFR 60-1.4(b) in accordance with Executive Order 11246, "Equal Employment Opportunity," as amended by Executive Order 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity.

E. Debarment and Suspension (Executive Orders 12549 and 12689)—A contract award (see 2 CFR 180.220) must not be made to parties listed on the government-wide exclusions in the System for Award Management (SAM), in accordance with the OMB guidelines at 2 CFR part 180 that implement Executive Orders 12549 (3 CFR part 1986 Comp., p. 189) and 12689 (3 CFR part 1989 Comp., p. 235), "Debarment and Suspension." SAM Exclusions contains the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549.

F. Contractor is required to perform thirty-three and one-third percent of the total amount of the Work using its own employees and equipment. Copies of subcontract agreements may be requested to verify the amount of Work performed.

G. Contractor is hereby notified that state lien laws do not apply on Federal trust land.

H. Dispute Resolution: This agreement shall be construed in accordance with and governed by the laws of the Tribe. In the absence of Tribal law on point, Federal law shall apply and, in the absence of Federal law, the laws of the State of Wisconsin shall govern.

1.03 For Contracts Exceeding $2,000:

A. The Contractor shall comply with wage and provisions of the Davis-Bacon Act (40 U.S.C. 3141-3148) as supplemented by Department of Labor regulations (29 CFR part 5). In accordance with the statute, Contractors must be required

to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor.

B. The Contractor shall comply with the Copeland “Anti-Kickback” Act (40 U.S.C. 3145), as supplemented by Department of Labor regulations (29 CFR part 3). The Act provides that each Contractor or subrecipient must be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled.

1.04 For Contracts Exceeding $10,000:

A. Contractor shall comply with the requirements of 41 CFR 60-4 regarding required notices and procedures to be followed in soliciting for federally assisted construction contracts (including subcontracts). Compliance with Executive Order 11246 and 41 CFR part 60-4 shall be based on implementation of the Equal Opportunity Clause, specific affirmative active obligations required by the Standard Federal Equal Employment Opportunity Construction Contract Specifications, as set forth in 41 CFR Part 60-4.3(a) and efforts to meet the goals established for the geographical area where the Contract is to be performed.

1.05 For Contracts Exceeding $100,000:

A. The Contractor shall comply with the provisions of the Work Hours and Safety Standards Act (40 U.S.C. 3701-3708). Under 40 U.S.C. 3702 of the Act, each Contractor must be required to compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week. The requirements of 40 U.S.C. 3704 are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous.

B. The Contractor shall comply with the provisions of the Byrd Anti-Lobbying Amendment (31 U.S.C. 1352), certifying that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award.

END OF SECTION

This Page Intentionally Left Blank

AS-BUILT DRAWING

NORTH ARROW

HOMEOWNER:
PROJECT NO:
RESERVATION:
ADDRESS:
LEGAL DESCRIPTION:

ITEM DESCRIPTION	SYMBOLS	MATERIALS SIZE	MAT'L	QUANT.
CURB STOP	⊙	"		
WELL	Ⓦ	"		
SEPTIC TANK		GAL		
COMBINATION SEPTIC/PUMP TANK		GAL		
TWO WAY CLEANOUT	●●	"		
ONE WAY CLEANOUT	●	"		
FREEZELESS RISER	Ⓕ	'		
WATER SERVICE LINE	—— W ——	"		
SEWER SERVICE LINE	—— S ——	"		
DRAIN FIELD		"		
PERFORATED PIPE		"		
SEWER FORCE MAIN	—— SFM ——			
INSULATION				
BURIED ELECTRICAL LINE	—— E ——			
WATER MAIN	—— W/M ——	"		
SEWER MAIN	—— S/M ——	"		

HOUSE CORNER TIES (FT.) A	B	C	D

DISPOSAL SYSTEM

TYPE: ☐ CONVENTIONAL ☐ IN-GROUND ☐ AT-GRADE ☐ MOUND

MATERIAL:
DIMENSIONS:

DRAWN BY:
DATE:
COMPANY:
REMARKS:

DRAWING NO.
01780-1

USER: jzierden FILE: I:\STANDARD DETAILS\CSI-SPECS\2012\01780-1.dwg 12/14/2012 - 9:20am