



CONSTRUCTION PLAN REVIEW CHECK LIST

Date: _____

Address: _____

PID: _____

Name: _____

Genesee County Road Commission

2 Sets Site Plans (If Required)

Genesee County Drain Commision (Surface Water)

1 Set Site Plans (If Required)

Genesee County Drain Commission (Water & Waste)

1 Set Construction Plans
 Construction Plan Checklist
 DEQ Part 41 and/or Act 399 Applications
 NDPES Application
 \$250.00 Construciton Plan Review Fee
 \$400.00 NDPES Fee

Grand Blanc Township Department of Public Works

2 Sets Constuctions Plans
 Plan Review Fees (Fill out atched schedule)

MINIMUM CONSTRUCTION PLAN STANDARDS

FOR

DESIGN OF PUBLIC SANITARY SEWER & WATER SUPPLY

FOR

GENESEE COUNTY, MICHIGAN



5th EDITION

FORWARD

In an effort to expedite the processing of construction plans, the following minimum standards have been formulated by the Genesee County Drain Commissioner Division of Water and Waste Services (GCDC-WWS). Please read and follow these carefully, as there have been significant changes in the standards. PLEASE NOTE: GCDC-WWS approvals are valid for one year. After one year, the project will be subject to start the review process from the beginning.

A. PLAN SUBMISSION

The submission to GCDC-WWS shall include the following items:

- a. Completed Construction Plan Checklist
- b. One set of 24" x 36" Construction Plans, signed and sealed by a professional engineer licensed in the State of Michigan.
- c. A completed Act 451 Part 41 Permit Application with basis of design (if applicable).
- d. A completed Act 399 Permit Application (if applicable).
- e. All easements properly signed and recorded at the Genesee County Register of Deeds. The easement should be returned to this office once it has been recorded at the Register of Deeds. These easements and any conditions on shall appear on the plans.
- f. Project specifications (if differing from GCDC-WWS 5th Edition).
- g. Detailed shop drawings shall be supplied for any special structure, pump station, etc.
- h. Copies of any other permit applications necessary for the project (wetlands, floodplain, etc.)
- i. Letter from a licensed professional engineer certifying the capacity (for sanitary sewer only).
- j. A Letter of Authorization to construct from the local municipality.

B. GENERAL

The basic format for construction plans must include:

- a. Cover Sheet.
- b. Note Sheet(s).
- c. Construction Plan Sheet(s).
- d. Construction Profile Sheet(s).
- e. Sanitary Sewer and/or Watermain Standard Details.
- f. General Notes Sheet.
- g. Soil Erosion/ Sedimentation Control Details.
- h. Pump Station and Force main Detail Sheets.
- i. Meter Pit Note Sheets.
- j. Paving and Storm Sewer Details.

- Please make sure ALL UTILITIES are shown in both plan and profile. All plans must have, as a minimum, one sheet showing the utilities master plan for the project.

- Plans shall be submitted on a standard 24" x 36" format. The minimum scale for the detailed construction drawings shall be 1"=50' horizontal and 1"=10' vertical.
- All plans shall be submitted to all utility companies, any affected municipality, etc.

C. COVER SHEET

A cover sheet shall be supplied for all public utility projects. The cover sheet shall, at a minimum, contain the following basic information:

- a. Project Name along with the Municipality, County name, and section number clearly shown.
- b. Location map with layout sketch of project. (Larger projects may require a separate layout sheet).
- c. Engineer's Seal, signed & dated.
- d. Developer's name, address, and phone number.
- e. Sheet index.
- f. Legal property description.
- g. Legend.
- h. Listing of Plan Distribution with contact person and date plans submitted to utility
 - i. Total Disturbed Area and statement clarifying whether an NPDES storm water permit is or is not required.
 - j. Miss Dig Alert
 - k. Easement Statement - All public sanitary sewers and public watermains shall have an easement granted to GCDC-WWS and/or local municipality for maintenance, repair and/or replacement. For condominiums, the easement shall be recorded on the master deed document and for a subdivision, the easement shall be noted on the final recorded plat. All others shall be recorded on the NEW standard GCDC-WWS easement form.
- l. (Place BOLDLY on the cover sheet). **Note: This project has been designed implementing the latest GCDC-WWS Design Specifications. Carefully review the notes, details, and design prior to submitting a bid. Full compliance with the new standards will be required.**
- m. A statement clarifying whether or not existing utilities were exposed for verification of location and elevations.

D. NOTE SHEET

The second sheet of any set of construction plans shall be a general information sheet for contractors regarding this project. The following items shall be on this page:

- a. General Construction Notes
- b. Watermain Notes
- c. Sanitary Sewer Notes
- d. Bid Notes
- e. Special Project Notes
- f. Force main & Pump Station Notes
- g. Storm Sewer & Pavement Notes

E. MINIMUM ITEMS TO BE INCLUDED ON THE PLANS:

The plan shall include but will not necessarily be limited to the following items:

- a. All geographical and topographical features.
- b. Location of proposed utility.
- c. All property lines shown on the plans.
- d. All phase lines shown on the plans.
- e. All existing underground utilities shown in plan and in profile.
- f. All 6" service risers are to be shown on the plan to their termination point.
Riser locations are to be determined in the field by project engineer or county inspector.
- g. A riser schedule showing the station and invert elevation for each house riser.
It shall be the contractor's responsibility to install the service leads at a sufficient depth to service house basements if the main line sewer is sufficiently deep. Where feasible the service risers shall be installed at a minimum depth of 8' to 10' at the property line.
- h. All existing buildings and properties shall be provided with a sanitary service riser. This includes boring a road to serve buildings and properties on the opposite side of the road where the sanitary sewer is being installed.
- i. Where possible, the North Arrow shall be located to the top or to the right of the sheet.
- j. All easements and easement conditions shall be shown on the plan view.
- k. All utilities shall be centered within the easement, where applicable.
- l. All vacant lots shall be numbered.
- m. All proposed buildings shall be numbered.
- n. Roadways, ROW size, lot numbers, future building numbers, parcel ID numbers, street address for site, street address for surrounding buildings, and lot configuration.
- o. The location of all physical features that may be affected by the construction shall be shown on the plan view. The feature shown shall be listed and the distance left or right of the road centerline shall be shown. Physical features to be listed shall include trees, poles, headwalls, culverts, watermain valves or hydrants, driveways and type of surface, signs, mailboxes, shrubbery, gas markers, telephone markers, stumps, etc.
- p. Size, grade, length, bedding, and material of pipe between manholes or structures.
- q. First floor elevations shall be shown where critical to the design.
- r. Stationing along the utility centerline.
- s. All compacted sand backfill shall be noted on both plan and profile view.
- t. A benchmark referenced the USGS or NGV vertical datum. Benchmark locations shall be identified on the plan view. All benchmarks shall be listed with a description, elevation and location.
- u. For the crossing of any stream or county drain, the direction of flow, low water elevation, high water elevation, flood plain limits, wetlands, and low point of channel bottom at crossing, shall be listed by elevation.

F. GENERAL NOTES TO BE INCLUDED:

Utility Warning - Underground utility locations as shown on the plans were obtained from utility owners, and were not field located. A minimum of three (3) working days prior to beginning construction, the contractor shall notify "MISS DIG" (800-482-7171) and have all underground utilities staked before any work may begin. The contractor shall be responsible for the protection and/ or relocation of all utilities that may interfere with construction. Three (3) Working Days Before You DIG - Call MISS DIG (1-800-482-7171).

G. PRIOR TO SUBMITTAL TO THE STATE OF MICHIGAN:

Prior to submittal to the State of Michigan Department of Environmental Quality the following items shall be submitted to GCDC-WWS:

- a. Approval from GCDC-WWS and/or the local community.
- b. Construction plans submitted on clear, 4 mil mylar reproducible.
- c. The appropriate number of plans to be sent to State of Michigan.
- d. Notice of Coverage for the NPDES permit, if 5 acres or more are disturbed. The Engineer shall prepare the Notice of Coverage and submit it, along with a check for \$125.00 payment to the State of Michigan, along with the completed Soil Erosion and Sedimentation Control application, to GCDC-WWS.
- e. Payment shall be made for all inspection and water usage fees. GCDC-WWS Inspection fees are \$2.00/ft with a minimum of \$200.00. The charge for Final Inspection services is \$300.00 and the water usage fee is \$85.00.

H. SANITARY SEWER DESIGN

In general, all sanitary sewers shall be designed in accordance with the current edition of the Recommended Standards For Wastewater Facilities (10 State Standards) and the GCDC-WWS Standard Specifications and Details.

1. DESIGN BASIS

Average sewage flow: 1 unit = 3.5 people at 90 gpd = 315 gallons/day. The engineer may be required to submit the basis of design to GCDC-WWS.

2. DESIGN CRITERIA

All construction and material shall conform to the latest GCDC-WWS Standard Specifications and Standard Details. All public systems shall have a minimum pipe size of 8". All public systems shall be extended to the furthest limits of the property and properly sized according to GCDC-WWS determination.

3. PLAN REQUIREMENTS

- a. Generally no lateral sewer shall be constructed with less than 8' of cover below the crown of the existing or proposed road grade. Where shallow sewers are anticipated, the basement elevation of all affected buildings (proposed and existing) shall be shown on the plan. Where the cover over the crown of the sanitary sewer is less than 48", the design engineer shall specify a minimum

thickness of an approved insulation cover above the top of the sewer and extending one foot either side.

- b. The minimum size of a public sewer shall be 8" in internal diameter.
- c. All public systems shall be **extended** to the furthest limits of the property, including corner lots, properly sized according to GCDC-WWS determination.
- d. Proposed inverts and surface elevations of each manhole shall be shown.
- e. In the profile view, show the proposed ground elevation, existing ground elevations, existing ditch centerline elevations, and the centerline of road elevation.
- f. A numbering sequence for manholes, valves, hydrants, etc.
- g. All sanitary sewers shall be designed and constructed so as to discharge a minimum velocity of 2' per second when flowing full. Velocities greater than 12' per second should be avoided where possible.
- h. Manhole spacing shall not exceed 400' for sewers under 15" and not exceed 600' for sewers larger than 18".
- i. Core drill all existing manholes and install an approved flexible rubber boot.
- j. Internal drop connections will not be allowed on public sanitary sewers. Connections within 30" from the invert of the outlet sewer are acceptable without an external drop connection.
- k. Show all external drops for sewer connection exceeding 30" from the existing invert and reference the sanitary sewer standard detail.
- l. A horizontal separation of 10' shall be maintained between sanitary/storm sewer and public water supply.
- m. Show method of connection referenced to Standard Details including the method of connection.
- n. Plan or profile note: "Contractor shall not connect to the existing outlet sewer until the proposed sanitary system is tested and approved by GCDC-WWS." The ENGINEER shall indicate the connection method to be used.
- o. For mainline bores, in plan **and** profile view, show length, size and thickness of the casing pipe with a reference to the appropriate standard detail.
- p. Show approved bedding requirements for all pipes to be used.
- q. Show length, grade, and pipe material between manholes.
- r. 6" service risers shall be shown and referenced to a standard detail. Design shall incorporate one lead per parcel on both sides of the road with the exact location to be determined in the field. Indicate a typical length for main side and bore and include material and length. For bores, show casing size, thickness, material and length. All 6" service risers are to be bedded pursuant to PVC bedding detail. Show invert elevation for all service leads.
- s. All saddle taps shall be made by GCDC-WWS. The developer shall submit required fee per tap. There shall be NO 6" saddle taps made on interceptor sewers.
- t. All public sanitary sewer shall be televised by a reputable company whose approval is determined by GCDC-WWS and submitted to GCDC-WWS prior to final acceptance. Reference Note: All public sanitary sewer 8" or larger shall be internally televised by the contractor, and the TV reports, including the

tapes, shall be given to GCDC-WWS prior to the request for final acceptance. The contractor shall be responsible for cleaning the line and assuring all dirt and debris has been removed prior to televising. The TV report shall list the distance a house lead is located from a manhole, all shear breaks in the main or service riser, all longitudinal cracks, broken pipe, dips in the line, pin holes, etc. For PVC public sanitary sewers, these defects shall be repaired by the contractor by excavating, or if applicable & approved, grouting. A leaking joint is defined as having sufficient infiltration to wet the interior of the joint. GCDC-WWS shall be notified when the line is to be televised to be present to inspect repairs. The sanitary sewer shall be televised in an upstream mode, so as to correlate measurements of tees to inspector's field measurements.

I. WATERMAIN DESIGN

In general, all watermains shall be designed in accordance with the current edition of the Recommended Standards For Water Works (10 State Standards) and the GCDC-WWS Standard Specifications and Details.

1. DESIGN BASIS

Water supply systems shall be designed to furnish an average daily flow of 100 gallons per capita per day and a maximum of 200 gallons per capita per day. The water supply system shall be designed to provide a minimum of 1500 gpm at 30 psi residual pressure. When the fire protection is to be provided, system design should be such that fire flows and facilities are in accordance with the requirements of the State Insurance Services Office. The engineer may be required to submit the basis of design to GCDC-WWS.

2. DESIGN CRITERIA

All construction and material shall conform to the latest GCDC-WWS Standard Specifications and Standard Details. All public systems shall have a minimum pipe size of 8" and be designed to loop all watermain and eliminate dead end lines. All public systems shall be extended to the furthest limits of the property and properly sized according to GCDC-WWS determination.

3. PLAN REQUIREMENTS

- a. Place a note on plan or profile regarding testing procedures used.
- b. If the contractor is pressure testing against an existing valve, then a note shall be placed on the construction plans regarding procedures.
- c. Notes for temporary corporations for chlorinating and proper testing procedures.
- d. Remove corporations after satisfactory testing, and cap with copper threaded plugs.
- e. Show depth of cover, bedding, length and material in profile view.
- f. Show typical water service connection size in plan view, and reference standard detail.
- g. In profile view, show the proposed and existing ground elevation.

- h. For hydrant assemblies in plan, note the tee, hydrant, valve, box, approved restraints & standard detail.
- i. Show PROPER size manholes on ALL pressure taps and cut in valves.
- j. Place fire hydrants (temporary or permanent) at the end of ALL lines.
- k. Watermains shall have at least 10' of horizontal separation from any Sanitary Sewer or Storm Sewer.
- l. Hydrants shall be installed at a minimum of every 500 feet.
- m. The minimum watermain size shall be 8" in diameter. A maximum of 300 lineal feet of 6" may be allowed in cul-de-sacs, etc., if this size meets with the allowable design basis.
- n. Gate valves at the end of lines shall have one pipe length added prior to any reducer and end with a fire hydrant, then with a restrained plug.
- o. All public systems shall be extended to the furthest limits of the property, including corner lots, properly sized according to GCDC-WWS determination.

J. FORCEMAIN CONSTRUCTION NOTES

In general, all watermains shall be designed in accordance with the current edition of the Recommended Standards For Wastewater Facilities (10 State Standards) and the GCDC-WWS Standard Specifications and Details.

1. PLAN REQUIREMENTS

- a. All material and construction procedures for forcemain shall conform to GCDC-WWS standard details and specifications. All forcemain shall be Ductile Iron when forcemains are 4" in diameter or greater. All piping within any submersible stations shall be supported in an approved method.
- b. Minimum cover over the top of the forcemain shall be 5' from final grade. The forcemain may be lowered during construction to avoid underground problems.
- c. The connection shall not be made to the outlet gravity sewer until approval has been granted by GCDC-WWS.
- d. Contractor shall place approved thrust restraints at all horizontal and vertical bends. Restraints shall be in accordance with manufacturers recommendations for pressure generated by the pumping system and in accordance with the GCDC-WWS standard details and specifications.
- e. All constructed elevations at point of beginning, at stream or drain crossings, if any, and at point of ending shall be field determined by the contractor using proper surveying equipment and the information incorporated into the As-Built drawings.
- f. All forcemain shall be pressure tested in accordance with the GCDC-WWS standard details and specifications. All testing is to be done by the Contractor under the observation and supervision of a representative of GCDC-WWS.
- g. The entire project shall be restored to as near as original condition as feasible and in accordance with standard specifications. Restoration shall include repair and replacement of sidewalks and drives, gravel restoration, and re-surfacing of any hard surfaced areas disturbed during construction. Culverts, mailboxes,

shrubs, etc. shall be replaced prior to placement of 4" of clean topsoil. The contractor is responsible for seeding, fertilizing and mulching the entire length of the project.

K. PUBLIC PUMP STATIONS

In general, all pump stations shall be designed in accordance with the current edition of the Recommended Standards For Wastewater Facilities (10 State Standards) and the GCDC-WWS Standard Specifications and Details.

1. PUMP STATION DATA

The following information shall be provided to GCDC-WWS for review and approval:

- a. Basis of design
- b. Station type: wetwell/submersible or wetwell/drywell.
- c. Proposed pumping units to be served by this project & future
- d. Average sewage flow: 1 unit = 3.5 people @ 90 gpd = 315 gallons/day
- e. Must be able to pump existing and projected sewage with largest pump out of service.
- f. Pump curve, as a minimum, will show: Total Dynamic Head, GPM, RPM, impeller size, HP, motor eff., NPSHR, NPSHA, design peak flow.
- g. Wetwell diameter, working volume, drawdown time, fill time.
- h. Auxiliary equipment: as a minimum, in conformance with standard detail for control panels.
 - i. Pump controls - mercury float switches.
 - j. Size, material, length, and velocity of forcemain
 - k. Buoyancy calculations
 - l. Any needed air release valves.
 - m. Spare parts: (alt., lights, etc.)

2. PLAN REQUIREMENTS

- a. All components and construction of the proposed pump station shall be in accordance with GCDC-WWS standard details and specifications.
- b. Contractor shall submit sufficient copies of shop drawings for approval by the design engineer and by GCDC-WWS.
- c. The contractor shall order and pay for all costs associated with supplying power to the pump station. The power supply shall be 3 Phase. The supply of power shall include, but is not limited to, any required 3 Phase power extension, power poles, transformers, power drop, meter, etc.
- d. All electrical work and material shall be in accordance with NEC, local, state codes, and any other applicable codes.
- e. Design engineer shall show all pump station data, design, and buoyancy calculations on the plan sheet.
- f. The wetwell shall be sized according to service area, proposed and future flows, and pump sizes. The wetwell shall conform to GCDC-WWS standard

details and specification. A basis of design shall be submitted to GCDC-WWS for review and approval.

- g. The valve vault shall be separate from the wet well with valves, emergency connection, etc. and approved through the shop drawing submittal process.
- h. Contractor shall be responsible for all installations and start-up work and shall furnish and install all materials to deliver a functional pumping station.
- i. O&M manuals shall be supplied to GCDC-WWS and approved prior to final acceptance.
- j. The contractor shall install 6AA crushed limestone (A1) under the wetwell and valve vault. 6AA crushed limestone (A1) shall extend from the bottom of the excavated area to the top of the forcemain and any inlet gravity lines. Compacted sand backfill shall be placed around the rest of the wetwell and valve vault.

L. SIMPLEX AND DUPLEX GRINDER PUMP STATION

In general, all grinder pump stations shall be designed in accordance with the current edition of the Recommended Standards For Wastewater Facilities (10 State Standards) and the GCDC-WWS Standard Specifications and Details. These will only be allowed in Sanitary Sewer District #7.

1. GENERAL

- a. All components and construction of the proposed grinder pump station shall be in accordance with GCDC-WWS standard details and specifications.
- b. Contractor shall be responsible for all excavation, backfill and surface restoration. All excavated areas shall be stabilized with topsoil, fertilizer and mulch as necessary.
- c. Contractor shall submit sufficient copies of shop drawings for approval by the design engineer and by GCDC-WWS. Submit a proper pump curve, pursuant to #6 under Pump Station Data.
- d. The contractor shall order and pay for all costs associated with supplying power to the pump station. The supply of power shall include, but is not limited to, any required 3-phase power extension, power poles, transformers, power drop and meter.
- e. All electrical work and material shall be in accordance with NEC, local and state codes.
- f. Design engineer shall show all pump station design, data, and buoyancy calculations on the plan sheet.
- g. Contractor shall slope finish grade away from the grinder pump station and prevent water and silt from ponding around the station cover.
- h. The control panel, alarm light, and disconnect switch shall be located within 10' of the basin entrance. The control panel shall have adequate extra space for future computer polling.
- i. All discharge piping within the fiberglass basin and to the outlet shall be PVC schedule 80. For simplex stations use 1 $\frac{1}{4}$ ", for duplex stations use 1 $\frac{1}{2}$ ".

- j. Duplex grinder stations require a separate valve vault for the check & gate valves. Simplex grinder station can incorporate the check & gate valves inside the station.
- k. A dual check valve system will be required on the discharge piping.
- l. All fill material under and to the top of the influent piping and discharge piping shall be 6AA crushed limestone (A1), field compacted.
- m. Station shall be manufactured to allow complete pump down of the basin.
- n. All sealed mercury switches shall be field adjustable and separated from the power cables by use of an aluminum or stainless steel guide bar.
- o. All pressure taps onto the existing low-pressure system shall be done only by GCC-WWS personnel. GCDC-WWS is to be notified 48 hours in advance at the District 3 Waste Water Treatment Plant (810-735-7135). The fee of \$300.00 for each pressure tap shall be paid at GCDC-WWS administration office before any tap.
- p. The outlet forcemain shall be pressure tested by using maximum pump pressure pumping against a closed valve at the tap. The test shall continue for 5 minutes with no detectable pressure loss.
- q. A 2" PVC schedule 80 vent with birdscreen shall be constructed in the top.
- r. Contractor shall be responsible for all installations and start-up work and furnish and install all materials to deliver a functional pumping station, including an approved O&M manual.
- s. Provide spare parts.
- t. Forcemain for a grinder station shall be per the detail sheet for grinder stations.
- u. Provide buoyancy calculations.
- v. Approved tracer wire shall be placed along ALL PVC pressure mains.
- w. All PVC forcemains are to be laid on a prepared 4" 6AA crushed limestone (A1) base with recesses to accommodate bells. The 6AA crushed limestone (A1) shall extend to the top of the forcemain. D.I. forcemains may have sand bedding (A5), unless otherwise shown.

GENESEE COUNTY DRAIN COMMISSIONER'S OFFICE
DIVISION OF WATER AND WASTE SERVICES
CONSTRUCTION PLAN SUBMITTAL CHECK LIST 5TH EDITION

**THE FOLLOWING INFORMATION SHALL BE INCLUDED WITH OR APPEAR ON ALL
CONSTRUCTION PLANS SUBMITTED TO THIS OFFICE:**

Please note that if any of the following information is not applicable to the development being submitted so state with reason

GENERAL

- \$250 construction plan review fee. Checks payable to "The Genesee County Drain Commissioner".
- A copy of this Construction Plan Submittal Checklist, signed and dated.
- Transmittal sheet indicating if this is a first time submission or if the plans are being resubmitted
- Letter signed and sealed from a professional engineer stating there is adequate sanitary sewer capacity for this development which shall include all calculations and flow maps.
- Site plan approval letter from the local municipality.
- Tax map of area with appropriate property highlighted. Tax map shall also show the surrounding area, including both sides of the road and can be obtained from the Genesee Co. Dept. of Equalization
- Sheet size of 24" x 36" (If a different sheet size is proposed, this office must be contacted prior to submitting plans.)
- Legend
- GCDC-WWS Demolition Notes if applicable.
- Minimum scale shall be 1" = 50'
- All parcels have been serviced with sanitary and watermain adjacent to this property.
- IPP Permit Application for all non-residential buildings if applicable.
- Copies or applications for all MDEQ permits as applicable to the development.
- Soil Erosion & Sedimentation Control Plan (SESC) or copy of SESC permit.
- All existing (water, sanitary sewer and storm water) utilities shown on the plans and labeled with their size (rims, inverts), elevation and material. Please also label any utilities in other areas where conflicts may arise.

- Recorded easements. Minimum width for easements shall be Sanitary Sewer = 20' and Watermain = 15'. The utility shall be centered in the easement.
- Benchmarks shall be shown and labeled in either USGS or NGV datum
- Utilities shall be extended to the furthest limits of the property
- Location of the 100-year flood plain elevations and wetlands
- Roadways, ROW size, lot numbers, future building numbers, parcel ID numbers, street address for site, street address for surrounding buildings, and lot configuration.
- GCDC-WWS's 5th Edition detail sheets and general construction notes as applicable.
- Plans have been submitted to GCDC-SWM (Surface Water Management) for Storm and/or Surface Water review (if applicable).

COVER SHEET

The cover sheet shall, at a minimum contain the following basic information:

- Project name, address, scale and north arrow
- Location map with layout sketch of project
- County, municipality, and section number
- Plans signed and sealed by a professional engineer, surveyor, or an architect
- Developer's name, address, and phone number
- Sheet Index
- Legal description
- Plan distribution list including contact names and dates submitted to utility
- Total disturbed area and a statement clarifying whether an NPDES permit is or is not required.
- MISS DIG Alert
- GCDC-WWS Contractor Alert Statement and Easement Statement.
- A statement clarifying whether or not existing utilities were exposed for verification of location and elevations.

APPLICATIONS

The following applications shall be submitted with the site plan:

- IPP permit application for all non-residential buildings (Includes churches, schools, etc.)
Applications can be downloaded from www.gcdcwws.com.
- SESC permit application, plans and appropriate fees.
- MDEQ Part 41 of Act 451 (Sanitary Sewer) and Act 399 (Watermain) permit applications completed and signed by the appropriate agency. This office signs the Part 41 and 399 for the following communities:

* Atlas Township	* Fenton Township	* Gaines Township	* Mundy Township
* Clayton Township	* Flint Township	* Genesee Township	* Richfield Township
* Davison Township	* Flushing Township	* Montrose Township	* Vienna Township
* Village of Goodrich	* Village of Lennon	* City of Clio	* City of Grand Blanc
* City of Swartz Creek			

I hereby certify that the aforementioned items have been provided with the submitted plans.

Signature: _____ **Date:** _____

Note: It is necessary to submit only one set of construction plans for review & approval of sanitary sewer and watermain and only one set of plans for SESC review and permitting.



NOTICE OF COVERAGE

FOR NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) STORM WATER DISCHARGES FROM CONSTRUCTION ACTIVITY

By Authority of R 323.2190 promulgated under Part 31 of Act 451, Public Acts of 1994, as amended
Failure to comply with the terms and provisions of R 323.2190 may result in fines up to \$25,000
per day and the possibility of imprisonment.

FOR DEQ USE ONLY
NPDES Number
Receipt No.:
Permit Id:

Filing of this Notice of Coverage (NOC) with the Michigan Department of Environmental Quality (DEQ) is required before initiation of construction activities **that disturb 5 acres or more of land or is part of a larger common plan of development or sale** that requires a national permit pursuant to the provisions of 40 CFR Section 122.26(a). This constitutes notice that the construction permittee is authorized under R 323.2190 to discharge storm water associated with the construction activities. The construction permittee must be the landowner or the recorded easement holder of the property where the construction activity is located.

INSTRUCTIONS AND FEE INFORMATION: Soil Erosion and Sedimentation Control (SESC) coverage is required under Part 91, SESC, of Act 451 before submitting this NOC. The construction permittee will be deemed to have an NPDES permit for storm water discharges from a construction site when the DEQ receives the completed NOC, **a copy of the appropriate SESC permit, a copy of the approved SESC Plan, a site map and the \$400 fee**. These must be received before construction begins. **This authorization to discharge construction storm water will expire** on the same day as the SESC permit originally submitted to the DEQ with this package. The expiration date will be specified in the NOC acknowledgement letter provided by the DEQ (please make sure you receive the NOC acknowledgement letter). NOC Authorization to discharge storm water may be extended (up to five years after original issuance date) by submitting a NOC Renewal form and a copy of the revised or extended SESC permit to the DEQ **prior to the NOC expiration**. If the SESC permit number changes, expires, is revoked or terminated, prior to the complete stabilization of the site, a **new** administratively complete NOC and all the requirements, including the fee must be submitted to obtain storm water authorization.

PERMIT BY RULE REQUIREMENTS: The permittee must abide by the requirements of R 323.2190 which states in part:
(a) Not directly or indirectly discharge waste materials into the waters of the state in violation of Part 31, Water Resources Protection, of the Act or rules promulgated there under; **(b)** Be in compliance with a soil erosion and sedimentation control permit for the site; **(c)** Properly maintain and operate the soil erosion control measures; **(d)** Have the soil erosion control measures under the specific supervision and control of a storm water operator who has been certified by the Department; **(e)** Cause the construction activity to be inspected by a certified storm water operator once per week, and within 24 hours after every precipitation event that results in a discharge from the site. Refer to R 323.2190 for the complete listing of requirements at: http://www.michigan.gov/deq/0,1607,7-135-3313_3682_3716-23997--,00.html.

CONSTRUCTION PERMITTEE INFORMATION (Landowner, Easement Holder, or Authorized Public Agency)					
LANDOWNER/PERMITTEE			AGENT FOR LANDOWNER (OPTIONAL)		
CONTACT PERSON (FIRST AND LAST NAME)			CONTACT PERSON (FIRST AND LAST NAME)		
E-MAIL ADDRESS			E-MAIL ADDRESS		
TELEPHONE			TELEPHONE		
MAILING ADDRESS			MAILING ADDRESS		
CITY	STATE	ZIP	CITY	STATE	ZIP
STORM WATER CERTIFIED OPERATOR (CONSTRUCTION ONLY)			For Cashier's Office Only:		
CERTIFIED OPERATOR		CERTIFICATION NUMBER C-			
CERTIFIED OPERATOR E-MAIL AND TELEPHONE					

SITE DESCRIPTION			
TOTAL ACRES OF SITE	ACRES OF DISTURBANCE	RECEIVING WATERS	
PROJECT INFORMATION			
PROJECT NAME		COUNTY	TOWNSHIP
STREET		$\frac{1}{4}$	$\frac{1}{4}$
CITY	STATE	ZIP	TOWN (T) RANGE (R)
PART 91 SESC PERMITTING ENTITY INFORMATION			
NAME OF PART 91 SESC PERMITTING ENTITY OR APA AGENCY			
E-MAIL ADDRESS (OPTIONAL FOR FASTER SERVICE)			PHONE NUMBER
ADDRESS			SESC PERMIT NUMBER OR APA STATUS
CITY	STATE	ZIP	ISSUE DATE

CERTIFICATION - Michigan regulations require this form be signed as follows:

Corporation: a principal executive officer of at least the level of vice president, or his designated representative, if the representative is responsible for the overall operation of the facility from which the discharge described in this form originates.

Partnership: a general partner.

Sole Proprietorship: the proprietor.

Municipal, State, or other public facility: either a principal executive officer, the mayor, village president, city or village manager, or other duly authorized employee.

I certify that I have read R 323.2190 and that all provisions of R 323.2190 will be complied with and that all information contained in this NOC is, to the best of my knowledge and belief, true, accurate and complete. I acknowledge that any discharge that is authorized by this NOC shall be in compliance with Act 451, Part 31, and the rules promulgated thereunder. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment. I certify under penalty of law that I possess full authority on behalf of the legal landowner/permittee to sign and submit this NOC.

SIGNATURE (ORIGINAL SIGNATURE REQUIRED) X	DATE	TELEPHONE
PRINTED NAME	TITLE	

MAKE CHECK OR MONEY ORDER IN THE AMOUNT OF \$400 PAYABLE TO: STATE OF MICHIGAN

MAIL COMPLETED APPLICATION, LOCATION MAP, SESC PERMIT AND PLAN, ALONG WITH THE **\$400** FEE TO:

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
CASHIERS OFFICE - WRD-SINV
P O BOX 30657
LANSING, MI 48909-8157

ADDRESS FOR OVERNIGHT MAILING:

MDOT-ASC CASHIERS OFFICE FOR DEQ
WRD-SINV
425 WEST OTTAWA STREET
LANSING, MI 48933

If you have any questions about the preparation of this form or do not receive acknowledgement within 30 days of submittal, call 517-284-5587 or email: KIMBLEK@MICHIGAN.GOV.

PERMIT APPLICATION FOR WATER SUPPLY SYSTEMS

(CONSTRUCTION - ALTERATION - ADDITION OR IMPROVEMENT) AS DESCRIBED HEREIN
Required under the Authority of 1976 PA 399, as amended

This application becomes an Act 399 Permit only when signed and issued by authorized Michigan Department of Environmental Quality (DEQ) Staff. See instructions below for completion of this application.

<p>1. Municipality or Organization, Address and WSSN that will own or control the water facilities to be constructed. This permit is to be issued to:</p> <p>WSSN:</p>	Permit Stamp Area (DEQ use only)	
<p>2. Owner's Contact Person (provide name for questions):</p> <p>Contact: Title: Phone:</p>		
<p>3. Project Name (Provide phase number if project is segmented):</p>	<p>4. Project Location (City, Village, Township):</p>	<p>5. County (location of project):</p>

ISSUED UNDER THE AUTHORITY OF THE DIRECTOR OF THE DEPARTMENT OF ENVIRONMENT QUALITY

CC:

Issued by: _____

Reviewed by: _____

If this box is marked see attached special conditions.

Instructions: Complete items 1 through 5 above and 6 through 21 on the following pages of this application. Print or type all information except for signatures. Mail completed application, plans and specifications, and any attachments to the DEQ District Office having jurisdiction in the area of the proposed construction.

Please Note:

- a. This **PERMIT** only authorizes the construction, alteration, addition or improvement of the water system described herein and is issued solely under the authority of 1976 PA 399, as amended.
- b. The issuance of this **PERMIT** does not authorize violation of any federal, state or local laws or regulations, nor does it obviate the necessity of obtaining such permits, including any other DEQ permits, or approvals from other units of government as may be required by law.
- c. This **PERMIT** expires two (2) years after the date of issuance in accordance with R 325.11306, 1976 PA 399, administrative rules, unless construction has been initiated prior to expiration.
- d. Noncompliance with the conditions of this permit and the requirements of the Act constitutes a violation of the Act.
- e. Applicant must give notice to public utilities in accordance with 1974 PA 53, (MISS DIG), being Section 460.701 to 460.718 of the Michigan Compiled Laws, and comply with each of the requirements of that Act.
- f. All earth changing activities must be conducted in accordance with the requirements of the Soil Erosion and Sedimentation Control Act, Part 91, 1994 PA 451, as amended.
- g. All construction activity impacting wetlands must be conducted in accordance with the Wetland Protection Act, Part 303, 1994 PA 451, as amended.
- h. Intentionally providing false information in this application constitutes fraud which is punishable by fine and/or imprisonment.
- i. Where applicable for water withdrawals, the issuance of this permit indicates compliance with the requirements of Part 327 of Act 451, Great Lakes Preservation Act.

6. Facilities Description – In the space below provide a detailed description of the proposed project. Applications without adequate facilities descriptions **will be returned**. SEE EXAMPLES BELOW. Use additional sheets if needed.

EXAMPLES – EXAMPLES – EXAMPLES – EXAMPLES – EXAMPLES – EXAMPLES

Water Mains	<p>500 feet of 8-inch water main in First Street from Main Street north to State Street.</p> <p>OR</p> <p>250 feet of 12-inch water main in Clark Road from an existing 8-inch main in Third Avenue north to a hydrant.</p>
Booster Stations	A booster station located at the southwest corner of Third Avenue and Main Street, and equipped with two, 15 Hp pumps each rated 150 gpm @ 200 feet TDH. Station includes backup power and all other equipment as required for proper operation.
Elevated Storage Tank	A 300,000 gallon elevated storage tank located in City Park. The proposed tank shall be spherical, all welded construction and supported on a single pedestal. The tank shall be 150 feet in height, 40 feet in diameter with a normal operating range of 130 – 145 feet. The interior coating system shall be ANSI/NSF Standard 61 approved or equivalent. The tank will be equipped with a cathodic protection system, and includes a tank level control system with telemetry.
Chemical Feed	A positive displacement chemical feed pump, rated at 24 gpd @ 110 psi to apply a chlorine solution for Well No. 1. Chlorine is 12.5% NaOCL, ANSI/NSF Standard 60 approved and will be applied at a rate of 1.0 mg/l of actual chlorine.
Water Supply Well	Well No. 3, a 200 foot deep well with 170 feet of 8-inch casing and 30 feet of 8-inch, 10 slot screen. The well will be equipped with a 20 Hp submersible pump and motor rated 200 gpm @ 225 feet TDH, set at 160 feet below land surface.
Treatment Facilities	A 5 million gpd water treatment plant located at the north end of Second Avenue. The facility will include 6 low service pumps, 2 rapid mix basins, 4 flocculation/sedimentation basins, 8 dual media filters, 3 million gallon water storage reservoir and 6 high service pumps. Also included are chemical feed pumps and related appurtenances for the addition of alum, fluoride, phosphate and chlorine.

Permit Application for Water Systems (Continued)

General Project Information – Complete all boxes below.	
7. Design engineer's name, engineering firm, address, phone number, and email address:	8. Indicate who will provide project construction inspection: <input type="checkbox"/> Organization listed in Box 1. <input type="checkbox"/> Engineering firm listed in Box 7. <input type="checkbox"/> Other - name, address, and phone number listed below.
9. Is a basis of design attached? <input type="checkbox"/> YES <input type="checkbox"/> NO <u>If no, briefly explain why a basis of design is not needed.</u>	
10. Are sealed and signed engineering plans attached? <input type="checkbox"/> YES <input type="checkbox"/> NO <u>If no, briefly explain why engineering plans are not needed.</u>	
11. Are sealed and signed construction specifications attached? <input type="checkbox"/> YES <input type="checkbox"/> NO <u>If specifications are not attached, they need to be on file at DEQ.</u>	
12. Were Recommended Standards for Water Works, Suggested Practice for Water Works, AWWA guidelines, and the requirements of Act 399 and its administrative rules followed? <input type="checkbox"/> YES <input type="checkbox"/> NO <u>If no, explain which deviations were made and why.</u>	
13. Are all coatings, chemical additives and construction materials ANSI/NSF or other adequate 3 rd party approved? <input type="checkbox"/> YES <input type="checkbox"/> NO <u>If no, describe what coatings, additives or materials did not meet the applicable standard and why.</u>	
14. Are all water system facilities being installed in the public right-of-way or a dedicated utility easement? (For projects not located in the public right-of-way, utility easements must be shown on the plans.) <input type="checkbox"/> YES <input type="checkbox"/> NO <u>If no, explain how access will be obtained.</u>	
15. Is the project construction activity within a wetland (as defined by Section 324.30301(d)) of Part 303, 1994 PA 451? <input type="checkbox"/> YES <input type="checkbox"/> NO <u>If yes, a wetland permit must be obtained.</u>	
16. Is the project construction activity within a 100-year floodplain (as defined by R 323.1311(e)) of Part 31, 1994 PA 451, administrative rules? <input type="checkbox"/> YES <input type="checkbox"/> NO <u>If yes, a flood plain permit must be obtained.</u>	
17. Is the project construction activity within 500 feet of a lake, reservoir, or stream? <input type="checkbox"/> YES <input type="checkbox"/> NO <u>If yes, a Soil and Erosion Control Permit must be obtained or indicate if the owner listed in box 2 of this application is an Authorized Public Agency (Section 10 of Part 91, 1994 PA 451) <input type="checkbox"/> Owner is APA.</u>	

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

Permit Application for Water Systems (Continued)

18. Will the proposed construction activity be part of a project involving the disturbance of five (5) or more acres of land?

 YES NO

If yes, is this activity regulated by the National Pollutant Discharge Elimination System storm water regulations?

 YES: NPDES Authorization to discharge storm water from construction activities must be obtained. NO: Describe why activity is not regulated:

Please call 517-241-8993 with questions regarding the applicability of the storm water regulations.

19. Is the project in or adjacent to a site of suspected or known soil or groundwater contamination?

 YES NO

If yes, attach a copy of a plan acceptable to the DEQ for handling contaminated soils and/or groundwater disturbed during construction. Contact the local DEQ district office for listings of Michigan sites of environmental contamination.

20. IF YOU ARE A CUSTOMER/WHOLESALE/BULK PURCHASER, COMPLETE THE FOLLOWING

1) Name and WSSN of source water supply system (seller) _____

2) Does the water service contract require water producer/seller to review and approve customer/wholesale/bulk purchaser water system construction plans?

 YES NO

If yes to #2, the producer/seller approval letter must be attached when submitted to DEQ.

21. **Owner's Certification** The owner of the proposed facilities or the owner's authorized representative shall complete the owner's certification. It is anticipated that the owner will either be a governmental agency (city, village, township, county, etc.) or a private owner (individual, company, association, etc.) of a Type I public water supply.

OWNER'S CERTIFICATION

I, _____ (name), acting as the _____ (title/position) for _____ (print) _____ (print)

(entity owning proposed facilities) certify that this project has
(print)

been reviewed and approved as detailed by the Plans and Specifications submitted under this application, and is in compliance with the requirements of 1976 PA 399, as amended, and its administrative rules.

Signature*

Date

Phone

*Original signature only, no photocopies will be accepted.

PROJECT BASIS OF DESIGN – FOR WATER MAIN PROJECTS

PROJECT NAME: _____

For this PROJECT the following information must be provided per Act 399 unless waived by the Department. For projects other than water main installation, or if additional space is needed, attach separate sheet(s) with detailed Basis of Design calculations.

A. A general map of the initial and ultimate service areas
 Included on engineering plans Attached separately

B. Number of service connections served by this permit application _____

C. Total number of service connections ultimately served by entire project _____

D. Residential Equivalent Units (REUs) served by this permit application _____

E. Total Residential Equivalent Units (REUs) ultimately served by entire project _____

F. Water flow rates for proposed project based on REUs listed in "D" and "E" above

1. Initial design average day flow (mgd) _____
2. Initial design maximum day flow (mgd) _____
3. Total design average day flow (mgd) _____
4. Total design maximum day flow (mgd) _____
5. Required fire flows: ⁽¹⁾ _____ gpm for _____ hours

G. Actual flows and pressures of existing system at the connection point(s) ⁽²⁾ _____ gpm at _____ psi
 _____ gpm at _____ psi
 _____ gpm at _____ psi
 _____ gpm at _____ psi

H. Estimated minimum flows and pressures within the proposed water main system ⁽³⁾ _____ gpm at _____ psi

(1) Every water system must decide what levels of fire fighting flows they wish to provide. Fire flow should be appropriate for the area (residential, commercial, industrial) being served by the project. Typical fire flow rates can be obtained from the water supply, local fire dept., ISO or AWWA. The water system must then be designed to be able to provide the required fire flows while maintaining at least 20 psi in all portions of the distribution system.

(2) Flows and pressures at the connection points must be given to determine if the existing water main(s) are able to deliver water to the new service area. These numbers can be obtained from a properly modeled and calibrated distribution system hydraulic analysis or hydrant flow tests performed in the field. If more than one connection is proposed, list as needed.

(3) List what the estimated minimum flows can be expected in the proposed water mains based on estimated water demands, head losses, elevation changes and other factors that may affect flows, such as dead end mains.



PERMIT APPLICATION FOR WASTEWATER SYSTEMS

Construction - Alteration - Addition or Improvement as Described Herein

Required under the Authority of Part 41, Sewerage Systems, of 1994 PA 451, as amended (Act 451)

This application becomes a Part 41 Construction Permit only when signed and issued by authorized DEQ staff.

INSTRUCTIONS: Complete items 1 through 32 on this form and complete the Project Basis of Design (attached form EQP-4600A) or provide same information. Print or type all information except for signatures. Complete the Streamlined Checklist (EQP5937) for sewer projects that qualify; checklist available at www.michigan.gov/deq (select Water; then select Wastewater Construction). Complete the Non-Governmental Ownership Checklist (attached for EQP-4600C) for non-governmentally owned projects. Deliver complete application, plans and specifications, and attachments to the DEQ district office having jurisdiction for the project.

PROCESSING TIME FRAME: Part 13, Permits, of Act 451 allows 150 days for processing of an administratively complete Part 41 permit application, with extensions available when requested by the applicant. However, permits are generally processed within 45 days or less for routine projects. For information regarding recent permit processing time frames, refer to the [WRD Metrics Web page](#) (refer to metric B-9). For a fee, an expedited permit review process is available for applicants seeking quicker review time frames; information about this process is available at www.michigan.gov/deq (select Water; then select Wastewater Construction) or click [here](#).

REQUIRED NOTIFICATIONS: The permittee shall provide Startup Notification (just prior to excavation) including permit number and date of issuance and Completion Notification (upon completion of the project) including permit number and date of issuance to the DEQ district office having jurisdiction for the project (attached form EQP-4600B).

PERMIT NUMBER (DEQ USE ONLY)	DATE OF ISSUANCE (DEQ USE ONLY)	
1. Municipality or Organization Name and Address that will own the wastewater facilities to be constructed. This permit is to be issued to:	Permit Stamp Area (DEQ use only)	
2. Owner's Contact Person (provide name for questions) Contact: Phone:		
3. Project Name (Provide phase number if project is segmented)	4. Project Location	5. County (location of project)

ISSUED UNDER THE AUTHORITY OF THE DIRECTOR OF THE DEPARTMENT OF ENVIRONMENTAL QUALITY

CC:

Issued by: _____

Reviewed by: _____

If this box is marked see special conditions attached to this permit.

GENERAL PERMIT CONDITIONS

- a. This **PERMIT** only authorizes the construction, alteration, addition, or improvement of the wastewater system as described herein and is issued solely under the authority of Part 41 of Act 451.
- b. Issuance of this **PERMIT** does not authorize any violation of federal, state, or local laws or regulations, nor does it obviate the need to obtain other permits or approvals from the DEQ or other units of government as may be required by law.
- c. This **PERMIT** expires two (2) years after the above date of issuance unless construction starts prior to the expiration date in accordance with R 299.2939(2) of the Part 41 Administrative Rules.
- d. Any portion of the herein described facilities constructed prior to the date of issuance is not authorized by this **PERMIT** and is a violation of Act 451.
- e. No sewer shall be placed into service unless and until the outlet sewer has been constructed, tested, and placed into service.
- f. Failure to meet any condition of this **PERMIT** or any requirement of Act 451 constitutes a violation of Act 451.
- g. The applicant must provide notice of impending construction to public utilities and comply with the requirements of the Protection of Underground Facilities Act, 1974 PA 53, as amended (MISS DIG).
- h. All earth changing activities must be conducted in accordance with Part 91, Soil Erosion and Sedimentation Control, of Act 451.
- i. All construction activity impacting wetlands shall be conducted in accordance with Part 303, Wetlands Protection, of Act 451.
- j. Intentionally providing false information in this application constitutes a violation of Section 249 of the Michigan Penal Code, 1931 PA 328, as amended.

Michigan Department of Environmental Quality
Water Resources Division
Permit Application for Wastewater Systems (Continued)

6. **Facilities Description** In the space below, provide a detailed description of the proposed project in the format shown in the examples at the bottom of this page. Applications with inadequate facilities descriptions **will be returned**. Use additional sheets if needed.

EXAMPLES OF FACILITIES DESCRIPTIONS

Sanitary Sewers and/or Force Mains	250 feet of 10" sanitary sewer in Mark Avenue between John and Lincoln Streets. OR 250' of 10" sewer in an easement from the intersection of Mark Avenue and John Street to the north.
Pumping Stations	A wetwell/drywell, suction lift, submersible, etc. pumping station rated for 250 gpm at a TDH of 34' located at the northeast corner of Mark Avenue and Lincoln Street, and equipped with two pumps, backup power, pump around capability, and all other equipment as required for proper operation.
Wastewater Treatment Facilities	A 10 million gpd (avg. flow) facility located at the north end of Ronald Street including a 2.0 million gallon equalization basin, six 0.5 million gallon primary clarifiers, four 0.75 million gallon aeration basins with fine bubble aerators, four 0.8 million gallon circular secondary clarifiers, ultraviolet disinfection, and all necessary appurtenances and piping as shown on the plans and described in the specifications for the proper operation of the treatment facility to provide a discharge quality in compliance with the facility's discharge permit.



Michigan Department of Environmental Quality
Water Resources Division
Permit Application for Wastewater Systems (Continued)

GENERAL PROJECT INFORMATION – Complete All Boxes Below

7. Design engineer's name, engineering firm, address, phone no., and e-mail address:	8. Indicate who will prepare "as-built" plans for this project: <input type="checkbox"/> Design Engineer in Box 7 <input type="checkbox"/> Other - name, organization, address, and phone no.:
9. Indicate who will provide project construction inspection: <input type="checkbox"/> Engineering firm listed in Box 7 <input type="checkbox"/> Other - name, organization, address, and phone no.:	10. Is groundwater dewatering expected for this project? <input type="checkbox"/> YES <input type="checkbox"/> NO If YES, provide dewatering specifications. If YES, will water wells or water bodies be impacted? <input type="checkbox"/> YES <input type="checkbox"/> NO
11. To which wastewater collection system will the project connect?	12. To which wastewater treatment system will the project connect? Final discharge is to: <input type="checkbox"/> Groundwater <input type="checkbox"/> Surface Water
13. Will this project be within 50 ft. of a private water well? <input type="checkbox"/> YES <input type="checkbox"/> NO If YES, locate on plans.	14. Will this project be within 200 ft. of a public water well? <input type="checkbox"/> YES <input type="checkbox"/> NO If YES, locate on plans.
15. Is the project construction activity within a wetland (as defined by Section 30301(p) of Part 303 of Act 451)? <input type="checkbox"/> YES <input type="checkbox"/> NO If YES, has application been made for a wetland permit? <input type="checkbox"/> YES <input type="checkbox"/> NO	16. Is the project construction activity within a 100-year floodplain (as defined by Section 3101 of Part 31, Water Resources Protection, of Act 451, and the associated Administrative Rules)? <input type="checkbox"/> YES <input type="checkbox"/> NO If YES, has application been made for a floodplain permit? <input type="checkbox"/> YES <input type="checkbox"/> NO
17. Is the project construction activity below the ordinary high water mark of an inland lake or stream (as defined by Section 30101(f) of Part 301 of Act 451)? <input type="checkbox"/> YES <input type="checkbox"/> NO If YES, has application been made for an inland lakes and streams permit? <input type="checkbox"/> YES <input type="checkbox"/> NO	18. Is the project construction activity within 500 ft. of a lake, reservoir, or stream? <input type="checkbox"/> YES <input type="checkbox"/> NO If YES, has application been made for a Soil Erosion and Sedimentation Control Permit? <input type="checkbox"/> YES <input type="checkbox"/> NO Is owner listed in box 2 of this application an Authorized Public Agency (Section 9110 of Part 91 of Act 451)? <input type="checkbox"/> YES <input type="checkbox"/> NO
19. Will the proposed construction activity be part of a project involving the disturbance of five (5) or more acres of land? <input type="checkbox"/> YES <input type="checkbox"/> NO Please contact 517-284-5587 with questions regarding the storm water regulations. If YES, is project regulated by the National Pollutant Discharge Elimination System (NPDES) storm water regulations? <input type="checkbox"/> YES: Attach copy of application or NPDES authorization to discharge storm water from construction activities. <input type="checkbox"/> NO: Describe why activity is not regulated:	
20. Is the project in or adjacent to a site of known soil or groundwater contamination? <input type="checkbox"/> YES <input type="checkbox"/> NO If YES, attach a copy of a plan acceptable to the DEQ for handling contaminated soils and/or groundwater disturbed during construction. Contact the local DEQ office for listings of Michigan sites of environmental contamination.	

SEWER SYSTEM CAPACITY

21. Are there any known capacity concerns in the collection system downstream of the proposed project? <input type="checkbox"/> YES <input type="checkbox"/> NO If YES, include a full explanation with the application.	Flow Rate	Units
22. Proposed project peak design flow rate:		
23. Total capacity of the existing outlet sewer:		
24. Current peak hour flow into the existing outlet sewer:		
25. Design capacity of nearest downstream pumping station (largest pump out of service):	N.A. <input type="checkbox"/>	
26. Current peak hour flow into nearest downstream pump station:	N.A. <input type="checkbox"/>	

OVERFLOWS AND BASEMENT FLOODING – For Proposed Sewer Projects, Mark All Boxes That Apply

27. Has the downstream collection system overflowed or flooded basements in the past five years? <input type="checkbox"/> YES <input type="checkbox"/> NO If YES, attach a listing of events in the past five years including date, location, cause, and corrective action.
28. Has the downstream collection system owner entered into an agreement satisfactory to the DEQ to address sanitary sewer overflows and flooding of basements? <input type="checkbox"/> YES <input type="checkbox"/> NO If YES, enter agreement name and number: .



Michigan Department of Environmental Quality
Water Resources Division
Permit Application for Wastewater Systems (Continued)

29. TREATED WASTEWATER DISCHARGE AUTHORIZATION – Mark Boxes As Appropriate

A. Does project include a new treatment facility or expansion, a change in discharge method, or a new discharge location?
 YES – Complete B below NO – skip to item 30

B. If A is marked YES, indicate discharge authorization and provide the requested information:

1. NPDES or Groundwater Discharge Permit No: _____ Permit Authorized Flow Rate: _____ Units: _____
2. Local health department approval. **Include a copy of the approval with this application.**

30. OWNERSHIP – Mark A or B as Appropriate Below

A. Ownership will be by a governmental entity before the sewer is placed in service.
 B. Ownership will be by a non-governmental entity, and a completed Non-Governmental Ownership Checklist is included with this application.

Note: A completed **Non-Governmental Ownership Checklist** (EQP-4600C) must be included with the application for **non-governmentally owned projects**. The checklist is attached to this application and the supporting information is available at www.michigan.gov/deq (select Water; then select Wastewater Construction).

31. COMPLETE APPLICATION CHECKLIST – Please confirm that this application is complete by using this checklist. Mark the box if the condition is met. This will help reduce DEQ review time and speed permit issuance.

<input type="checkbox"/> A. Items 1 to 30 of the application are completed.	<input type="checkbox"/> E. Owner's certification signed and complete (item 32).
<input type="checkbox"/> B. A contamination management plan is included for sites with known contamination (item 20). <input type="checkbox"/> N.A.	<input type="checkbox"/> F. A detailed basis of design is included with the application. Form EQP-4600A (attached) or similar form is completed providing information required by Rule 35(3) of the Part 41 Administrative Rules of Act 451.
<input type="checkbox"/> C. For projects with local health department discharge authorization, a copy of the health department authorization is included (item 29). <input type="checkbox"/> N.A.	<input type="checkbox"/> G. Final plans and specifications sealed and signed by a Michigan licensed professional engineer are provided.
<input type="checkbox"/> D. For non-governmentally owned projects, provide the Non-Governmental Ownership Checklist and all documents required by the checklist (item 30). <input type="checkbox"/> N.A.	

32. OWNER'S CERTIFICATION – The owner of the proposed facilities or the owner's authorized representative shall complete the following owner's certification:

I, _____ (name), acting as the _____ (title/position) for _____ (entity owning proposed facilities) certify that the information provided in and with this application is true and accurate to the best of my knowledge, and I certify that the plans and specifications and other documents submitted to the DEQ with the Part 41 Permit Application accurately represent what I intend to construct under the terms of the Part 41 Permit, once issued. Also, I certify that this proposed project as detailed in the plans and specifications submitted under this application is in compliance with the requirement of Rule 41(a) of the Part 41 Administrative Rules of Act 451, which states that "Proper devices are or will be available and are in satisfactory operation for the collection, transportation and treatment before discharge into any public watercourse, lake, drain, ditch or groundwater, of the sewage or wastes collected or conveyed by such systems, or a definite program or agreement satisfactory to the department leading to the construction and operation of such collection, transportation or treatment devices shall have been officially adopted by the applicant for such permit and filed in the offices of the department." Further, I hereby acknowledge the requirement to provide Startup Notification (just prior to excavation) with the permit number and date of issuance and Completion Notification (upon completion of the project) with the permit number and date of issuance to the DEQ district office having jurisdiction for the project.

SIGNATURE: _____ DATE: _____

NAME (TYPED): _____ PHONE: _____



PROJECT BASIS OF DESIGN

PROJECT NAME: _____

For this PROJECT the following information must be provided per Rule 35(3) of the Part 41 Administrative Rules of Act 451. Attach additional sheets as necessary.

A. A general map of the initial and ultimate service areas
 Included on engineering plans Attached separately

B. The design service area in acres Initial _____ Ultimate _____

C. The design population densities per acre Initial _____ Ultimate _____

D. 1. The ultimate design population _____ or total Residential Equivalent Units (REU) _____
2. The design per capita sewage contribution _____ (gpd) or design contribution per REU _____ (gpd)

E. The design commercial and industrial flow Initial _____
Ultimate _____

Mark this box if any commercial or industrial user(s) served by this project are subject to the federal categorical pretreatment standards or may discharge substances with the potential to interfere with the operation of the wastewater collection and/or treatment system.

F. Wastewater flow rates for proposed project
1. Initial design average flow _____ Units _____
2. Initial design peak flow _____ Units _____
3. Ultimate design average flow _____ Units _____
4. Ultimate design maximum flow (peak hour) _____ Units _____

G. An analysis, including calculations and/or flow monitoring, of the effect of the proposed additional flows on the receiving collection system. _____

H. For proposed pump stations and treatment facilities, attach a detailed explanation of steps to be taken in case of power failure or equipment breakdown, including a description of special reserve units available for emergency treatment, storage, and/or transportation of the wastewater.



Michigan Department of Environmental Quality
Water Resources Division
Permit Application for Wastewater Systems (Continued)

REQUIRED NOTIFICATIONS

Sample Notification Form

Part 41, Sewerage Systems, of 1994 PA 451, as amended

NOT To Be Submitted With Application (For Construction Notifications)

The **permittee** shall provide Startup Notification just prior to excavation and Completion Notification upon completion of the project to the Part 41 Engineer in the local DEQ district office, Water Resources Division, by telephone, e-mail, or first class mail. This form or other format may be used as long as the permit number, date of issuance, project name, and type of notification (startup or completion) are provided.

Permit No: _____

Issuance Date: _____

Project Name: _____

Mark box to identify type of notification and enter date.

Startup Notification: Excavation will begin on or about _____ (date)

Completion Notification: Project was completed on _____ (date)

Signature: _____

Name: _____

Title: _____

Date: _____ **Phone:** _____



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER RESOURCES DIVISION

NON-GOVERNMENTAL OWNERSHIP CHECKLIST

Addendum to **PERMIT APPLICATION FOR WASTEWATER SYSTEMS**

Part 41, Sewerage Systems, of 1994 PA 451, as amended (Act 451)

Permit applications for non-governmentally owned, publicly used sewerage systems must include a completed copy of this checklist. Water Resources Division (WRD) Policy and Procedure WRD-010 for addressing this issue is available at www.michigan.gov/deq (select Water; then select Wastewater Construction).

Items 1 through 5: Enter information as on page 1 of the PERMIT APPLICATION FOR WASTEWATER SYSTEMS (EQP-4600).	
1. Legal Entity and Address that will own the proposed wastewater facilities:	3. Project Name
	4. Project Location
2. Owner's Contact Person (provide name for questions) Name: _____ Phone: _____	5. County (location of project)

6. Operation and Maintenance (O&M) Program for the proposed sewerage system:

Use **Section A** if the local unit of government (LUG) has accepted responsibility in accordance with MCL 324.3109(3).

Use **Section B** if the LUG has declined to accept responsibility in accordance with MCL 324.3109(3) and the applicant has set up a Section B program to fulfill WRD-010.

Use **Section C** if the LUG has declined to accept responsibility in accordance with MCL 324.3109(3) and the applicant has fulfilled WRD-010 in some other manner.

Section A For projects that the LUG has accepted responsibility.

Yes No

A copy of a resolution from the LUG agreeing to accept responsibility is attached.
 A copy of the O&M agreement between the LUG and the owner is attached.

Section B For projects that the LUG has declined to accept responsibility and the following program has been put in place.

1. **Either** A LUG signed statement declining responsibility is attached. OR Proof of LUG unresponsiveness is attached.

Yes No

2. a A "legal entity" has been created to own and be responsible for the sewerage system.
b Each co-owner of the sewerage system is a member of the "legal entity."
c A copy of the "legal entity" creation certificate from the Department of Licensing and Regulatory Affairs is attached.
3. a A Restrictive Covenant that runs with the project land is executed and is in effect. Enter Liber _____ and Page _____
b The Restrictive Covenant has been recorded on the titles of all properties served by the project.
c The Restrictive Covenant provides for continued proper operation and maintenance of the sewage system.
D The Restrictive Covenant fully complies with R 299.2941 and 299.2955 of the Part 41 Administrative Rules of Act 451 and WRD-010.
4. a The cost of 5 years of O&M of the sewerage system has been calculated and certified by a Michigan Licensed P.E.
b An escrow account with escrow agreement in the 5-year O&M amount has been established in accordance with WRD-010.
C The escrow account is payable to the "legal entity" and is restricted for emergency O&M of the sewerage system.

Section C For projects that the LUG has declined to accept responsibility and WRD-010 is fulfilled in some alternative way.

1. **Either** A LUG signed statement of declination of responsibility is attached. OR Proof of LUG unresponsiveness is attached.

Yes No

2. A program is in force and effect that fulfills all the requirements of WRD-010.

3 A full explanation of how the program intends to fulfill all of the requirements of WRD-010 is included with this application.

Note: The DEQ will review alternative operation and maintenance assurance programs to confirm that they meet all requirements.

7. Owner's Certification: I, _____ (name), acting as the _____ (title/position) for _____ (entity owning the proposed facilities) do hereby certify that the information provided on this checklist is true and accurate to the best of my knowledge. I also hereby certify that the documents described above on this checklist have been executed, are currently in effect, and have been completed in conformance with WRD-010; Part 41 of Act 451 (MCL 324.4101 *et seq.*); and R 299.2941 and 299.2955 of the Part 41 Administrative Rules. I will provide any document herein described to the DEQ upon request.

Signature: _____

Date: _____ Phone No: _____

SUBSCRIBED AND SWORN to before me on the _____ day of _____, _____, a notary public in and for
_____ County, Michigan.

Notary Public: _____ My Commission Expires: _____

LAND DEVELOPMENT REVIEW FEE SCHEDULE

Engineering Review of Construction Plans

Project Name: _____

Proprietor: _____

SPR File# _____ Section: _____

Address: _____

Office Use Only
Escrow Account # _____
Cash Receipt # _____
Date Paid: _____

Phone: _____ Fax: _____

Contact: _____

Engineering Consultant

Name: _____

Name: _____

Address: _____

Address: _____

Phone: _____ Fax: _____

Phone: _____ Fax: _____

Contact: _____

Contact: _____

ESTIMATED CONSTRUCTION COSTS FOR:

Public Pathways \$ _____

Sanitary Sewer \$ _____

Water Main \$ _____

Storm Sewer, Detention Basins \$ _____

Public or Private Roads \$ _____

Other \$ _____

TOTAL ESTIMATED COST \$ _____

*FEE REQUIRED ____ % X TOTAL ESTIMATED COST \$ _____

<u>*CONSTRUCTION COSTS</u>	<u>FEE</u>
Up to \$50,000	31/2% (\$600.00 minimum)
\$50,000 - \$100,000	3% (\$1,750.00 minimum)
\$100,000 - \$1,000,000	11/2% (\$3,000.00 minimum)
Over \$1,000,000	1% (\$15,000.00 minimum)

ENGINEERING ADMINISTRATIVE CHARGE: 15% (\$90.00 minimum) \$ _____

TOTAL REVIEW FEE REQUIRED \$ _____

Make checks payable to: Charter Township of Grand Blanc

For initial plan review, seven (7) ** sets of professionally sealed and signed construction plans along with all calculations for sanitary, water, storm and detention plus an engineers estimate are required for the submittal. Based on the engineering estimate being acceptable to Grand Blanc Township, review fees are calculated as a percentage of the estimated construction cost per Ordinance.

** Any subsequent revisions will require five (5) sets of plans.

CONSTRUCTION OBSERVATION FEE SCHEDULE

General

Construction observation fee for 2004 is \$700 per 10-hour day. This fee may be adjusted annually to reflect increases in labor costs and related overhead. The fees are to be paid prior to the preconstruction meeting and will be deposited in an escrow account. The contractor is required to estimate the number of days required for each applicable infrastructure construction, and calculate the total dollar amount for each infrastructure type, and the total estimated fee for the project. The Township will review this estimate and may adjust the fee estimate as necessary. Observation time will be billed against the escrow account. When the project is completed, but prior to being accepted by the Township, the escrow account will be audited and if additional fees are due they must be paid prior to final acceptance. Any funds remaining in the escrow account at the time of the audit will be returned to the entity that paid the fees. Make checks payable to Charter Township of Grand Blanc.

Project Name _____ SPR # _____ Date _____
Proprietor _____ Phone _____ Fax _____
Address _____
Contact: _____

Office use only: Escrow Acct # _____ Cash Receipt # _____ Date Paid _____

ESTIMATED CONSTRUCTION OBSERVATION FEES

Public Pathways	_____ Days	Total _____
Sanitary Sewer	_____ Days	Total _____
Water Main	_____ Days	Total _____
Storm Sewer	_____ Days	Total _____
Detention Basins	_____ Days	Total _____
Public or Private Roads	_____ Days	Total _____
Final Project Inspection	_____ Days	Total _____
Other	_____ Days	Total _____
TOTAL ESTIMATED FEE		_____