

Community of Victoria

Servicing Standards



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Section 1

Septic System Permit Information (On-site Septic System)

COMMUNITY OF VICTORIA

Septic System Permit Information (On-site Septic System)

1. REQUIREMENT FOR A SEPTIC SYSTEM PERMIT (On-site System)

In accordance with the Community of Victoria Zoning & Subdivision Control Bylaws, no person shall:

- a) construct, erect, demolish, change the exterior dimensions of a building, or construct an apartment within any building or structure;
- b) **change the use of any land** or existing building or structure, or expand the existing use of a building or structure to the extent that it will require the provision of **new or expanded services** by the Community; or
- c) move within or into the Community any building or structure, without applying for and receiving a development permit from the Community's Development Officer prior to commencing any construction, erection, demolition, movement, change of use or site excavation.

The applicant is to also adhere to the Community Servicing Standards.

2. SEPTIC SYSTEM PERMIT APPLICATION PROCESS

2.1 Introduction

The Community of Victoria has a unique sewer system. The Central Core area, see appendix **"B"**, Zoning Map, shown shaded in light blue. This area has smaller sized lots which have to be connected to the Community Sewer System. The Community Sewer System originates in the Central Core and follows Nelson Street to the corner of Victoria Road. The system's force main follows westerly along Victoria Road to the Community Treatment Site. Any proposed septic systems outside the Central Core area and adjacent to the existing Community Sewer System will be reviewed on an individual basis. It will be determined by Council if the proposed septic system should be connected to the Community System or not. See appendix **"C"**, Service Area Plan.

2.2. On-Site Septic System

If the applicant is installing an on site septic system, the applicant will be required to apply for an On-site Sewage Disposal System Permit from the Department of Environment, Labour and Justice. Contact the Building & Development Section at 31 Gordon Drive, Charlottetown (902-368-5280) for an application form and a list of licensed Sewage Disposal Contractors. Arrange with a contractor to complete the required form and to pay the required fee on the applicant's behalf. (** Note: a building permit will not be issued until an on-site sewage disposal system permit has been issued). Either deliver a copy of the permit to the Victoria Community Office, 24 Bardin Street, Victoria between the hours of 3:00 p.m. and 6:00 p.m. (Tuesdays) or 9:00 a.m. to 12:00 p.m. (Thursdays) **or** mail a copy of the permit to: Community of Victoria, P.O. Box 7, Victoria, PE C0A 2G0, Attn: Development Officer.

3. CONTACTS

- 3.1. Community Development Officer, Derek French, 902-394-2945.
- 3.2. Community of Victoria, Hilary Price, Administrator, 902-658-2541.

Section 2

Septic System Permit Information (Central System)

COMMUNITY OF VICTORIA

Servicing Standards

Septic System Permit Information (Central System)

1. REQUIREMENT FOR A SEPTIC SYSTEM PERMIT - (Central System)

In accordance with the Community of Victoria Zoning & Subdivision Control Bylaws, no person shall:

- a) construct, erect, demolish, change the exterior dimensions of a building, or construct an apartment within any building or structure;
- b) **change the use of any land** or existing building or structure, or expand the existing use of a building or structure to the extent that it will require the provision of **new or expanded services** by the Community; or
- c) move within or into the Community any building or structure,

without applying for and receiving a development permit from the Community's Development Officer prior to commencing any construction, erection, demolition, movement, change of use or site excavation.

All sewer systems proposed to be connected to the Community system must be designed and constructed in accordance with these servicing standards. These standards are not meant to limit or impair good judgment and ingenuity nor are they intended to eliminate the need for detailed engineering design.

2. SEPTIC SYSTEM PERMIT APPLICATION PROCESS

2.1 Introduction

The Community of Victoria has a unique sewer system within the Central Core area, see appendix **"B"**, Zoning Map, is shown shaded in light blue. This area has smaller sized lots which have to be connected to the Community Sewer System. The Community Sewer System originates in the Central Core and follows Nelson Street to the corner of Victoria Road. The system's force main follows westerly along Victoria Road to the Community Treatment Site. Any proposed septic systems outside the Central Core area and adjacent to the existing Community Sewer System will be reviewed on an individual basis. It will be determined by Council if the proposed septic system should be connected to the Community System or not. See appendix **"C"**, Service Area Plan.

2.2 Community Sewer System Connection Permit Application

When connecting to the Community Sewer System, an applicant shall complete, or have a licensed Sewage Disposal Contractor (who is familiar with installing these type(s) of systems) on the applicant's behalf, the enclosed application form, see appendix **"D"**, Community Septic System Application.

a) drop the documents off at the Victoria Community Office, 24 Bardin Street, Victoria between the hours of 3:00 p.m. and 6:00 p.m. (Tuesdays) or 9:00 a.m. to 12:00 p.m. (Thursdays) **or**

b) mail the documents to:

Community of Victoria
P.O. Box 7
Victoria, PE C0A 2G0
Attn: Development Officer

2.3 Approval Process

The following is the approval process for the installation of sewer systems within the Community;

- i. Applicant must first obtain preliminary approval from the Community, if necessary;
- ii. Applicant or their Consultant(s) shall submit to the Community Development Officer detailed design drawings and specifications with the Permit Fee as outlined herein for approval;
- iii. Licensed Sewage Disposal Contractor construct the sewer services in accordance with the approved drawings and specifications unless approval to deviate from the approved drawings and specifications is obtained from the Victoria Water and Sewer Commission (“Commission”) in advance of any deviations from the approved drawings and specifications;
- iv. Applicant obtains final subdivision approval from the Community; and
- v. The Commission accepts the sewer services after substantial completion of the work and upon receipt of acceptance requirements.

3. COMMUNITY CENTRAL SEWER SYSTEMS

3.1 Introduction

There are two types of sewer service units that can be used, Septic Tank Effluent Pressure, (STEP) unit and Septic Tank Effluent Gravity, (STEG) unit. The site and type of adjacent sewer main will determine the type of sewer unit. These are unique septic systems and must be installed by contractors experienced with such a system. All installations are to follow these Servicing Standards. All materials (approved by the Commission), installation and inspection costs will be the responsibility of the applicant. Once complete, the sewer system will be maintained by the Commission. The Commission will be responsible for periodic maintenance which includes cleaning, replacement of filters and removal of sludge. All structures and equipment are the responsibility of the applicant/property owner. Please use caution when working around the septic system, vehicles and heavy equipment must stay clear. Any damage to the septic system will be the responsibility of the applicant/property owner.

3.2 STEP Unit

If the applicant is installing a Septic Tank Effluent Pressure sewer system (STEP) unit, ie: septic system that requires a pump, the applicant will be required to purchase the unit (approved by the Commission) and have the unit installed by a licensed Sewage Disposal Contractor the items outlined in appendix **“F”**, STEP Unit Specifications and Estimated Costs. The installation shall be observed by a staff member or someone under contract from the Commission.

3.3 STEG Unit

If the applicant is installing a Septic Tank Effluent Gravity sewer system (STEG) unit, ie: septic system that flows by gravity to a sewer main, the applicant will be required to purchase the unit (approved by the Commission) and have the unit installed by a licensed Sewage Disposal Contractor the items outlined in appendix **“G”**, STEG Unit Specifications and Estimated Costs. The installation shall be observed by a staff member or someone under contract from the Commission.

3.4 Purchasing Unit

Once the type of unit has been determined, the applicant will notify the Commission. The septic system must be approved by the Commission or a staff member or someone under contract from the Commission, for compliance with the Community Servicing Standards. The applicant/property owner will then purchase the approved septic system.

3.5 Cost Responsibility

The applicant is responsible for all costs of the sewer system, this includes connecting, installation and materials costs for the infrastructure from the street limits to the structure to be serviced. The Commission shall be responsible for the costs including connection to the main line, installation, and materials costs to provide a service from the sewer main or force main located directly in front of the applicant’s lot to the street limit.

3.6 Observation

The installation shall be observed by a staff member or someone under contract from the Commission. Allow twenty four (24) hours notice to the Commission prior to inspection time. All costs will be the responsibility of the Commission.

3.7 Legal Easement

A legal easement shall be granted from the property owner to the Commission for certain rights for services essential to the maintenance of the septic system, see appendix **“E”**, Sample Easement. All costs incurred for the preparation and registration (into the Registry of Deeds) for the legal easement shall be the full responsibility of the property owner.

3.8 Maintenance

A staff member or someone under contract from the Commission, who is experienced or trained in the installation and maintenance of these type of systems; from time to time as needed will clean or replace the filter(s), have the tank pumped and any other necessary maintenance. All maintenance

costs will be the responsibility of the Commission. Any costs incurred due to neglect; ie: flushing dangerous and damaging substances, flushing grease and/or using garborators, damage to the septic system will be the responsibility of the property owner.

3.9 Re-placement Costs

All costs incurred (including connecting, installation and materials costs) for the re-placement of any or all of the infrastructure from the street limit to the serviced structure shall be the full responsibility of the property owner.

3.10 Re-Locating Costs

All costs incurred for the re-locating of the septic system shall be the full responsibility of the property owner.

3.11 Other Requirements

The design and installation of sewer systems shall meet all applicable municipal, provincial and federal regulations including, but not limited to, the Occupational Health & Safety Act for the Province of Prince Edward Island and shall conform to good engineering practice using the following guidelines:

- “Atlantic Canada Wastewater Guidelines Manual for Collection, Treatment and Disposal of Sanitary Sewage” prepared by Atlantic Environment Departments;
- Environmental Protection Act; &
- Sewage Disposal Systems Regulations.

3.12 Revisions to Servicing Standards

These standards are subject to change without notice and the onus lies with the Applicant to ensure that they are in possession of the latest revision.

3.13 Other Services

Other work, including water services, road construction, storm drainage, electrical and communication services, shall be coordinated with the work herein.

4. COMMUNITY SEWER SYSTEMS RECORD INFORMATION

The Community staff member or someone under contract with the Commission will be required to document measurements in order for the Community to re-locate the tank and lines if needed. The licensed Sewage Disposal Contractor is required to notify (with minimum of twenty four (24) hours notice), a Community staff member or someone under contract with the Community to document the record information prior to the infrastructure being covered. These measurements include:

- a. distance from the corner of the dwelling foundation to the sewer pipe location;

- b. indication of the size and type of the sewer pipe;
- c. depth of the sewer pipe, relative to the top of the dwelling foundation;
- d. distances from corners of the dwelling foundation to the corners of the tank;
- e. distance from the dwelling foundation to the tank;
- f. dimensions of the tank and capacity;
- g. depth of the tank, relative to the top of the dwelling foundation; &
- h. depth of the riser, relative to the top of the dwelling foundation.

5. HOMEOWNER'S MANUALS

5.1. Pump STEP Tanks

See appendix **"H"**, How to take care of your Wastewater System, Pump STEP Tanks.

5.2. Gravity STEG Tanks

See appendix **"I"**, How to take care of your Wastewater System, Gravity STEG Tanks.

6. NON-COMPLIANCE

Any septic system that does not comply with this servicing standard will be suspended from use. The Commission will not reinstate services until all non-compliances have been rectified.

7. CONTACTS

7.1. Community Development Officer, Derek French, 902-394-2945.

7.2. Community of Victoria, Hilary Price, Administrator, 902-658-2541.

****Note:** Failure to complete any of the above-noted forms (as required), could result in a delay in the issuance of your septic system permit. Please make sure that you, or your septic contractor on your behalf, have provided all relevant information requested on the forms, paid all required fees and received all required permits.

If all documentation, etc. is in order, you should receive your approved building permit within approximately 2 weeks of receipt of the completed application.

If you have any questions respecting the application process, please contact Derek French, Development Officer for the Community of Victoria, (902)-394-2945 or send an e-mail to dfrench@pei.sympatico.ca.

Section 3

Water Service Permit Information (On-site System)

COMMUNITY OF VICTORIA

Water Service Permit Information (On-site System)

1. REQUIREMENT FOR A WATER SERVICE PERMIT (On-site Water Servicing)

In accordance with the Community of Victoria Zoning & Subdivision Control Bylaws, no person shall:

- a) construct, erect, demolish, change the exterior dimensions of a building, or construct an apartment within any building or structure;
- b) **change the use of any land** or existing building or structure, or expand the existing use of a building or structure to the extent that it will require the provision of **new or expanded services** by the Community; or
- c) move within or into the Community any building or structure,

without applying for and receiving a development permit from the Community's Development Officer prior to commencing any construction, erection, demolition, movement, change of use or site excavation.

The applicant is to also adhere to the Community Servicing Standards.

2. WATER SERVICE PERMIT APPLICATION PROCESS

2.1 Introduction Community Water System

The Community of Victoria has a Community water system which supplies water to the Central Core area, see appendix "B", Zoning Map, shown shaded in light blue. This area has smaller sized lots which have to be connected to the Community Water System. The Community Water System originates on Victoria Road where the well house and wells are located. The water system runs easterly along Victoria Road until it reaches the intersection of Nelson Street. It then heads south to the Central Core. Any proposed water systems outside the Central Core area and adjacent to the existing Community Water System will be reviewed on an individual basis. It will be determined by Council if the proposed water system should be connected to the Community System or not. See appendix "C", Service Area Plan.

2.2. On-Site Well

If the applicant is installing a well on site, the applicant will be required to contact a licensed well drilling contractor. The contractor is to complete the Department of Environment, Labour and Justice's required form and to pay the required fee on the applicant's behalf. (** Note: a building permit will not be issued until the Development Approval has been issued). Either deliver a copy of the approval to the Victoria Community Office, 24 Bardin Street, Victoria between the hours of 3:00 p.m. and 6:00 p.m. (Tuesdays) or 9:00 a.m. to 12:00 p.m. (Thursdays) **or** mail a copy of the permit to: Community of Victoria, P.O. Box 7, Victoria, PE C0A 2G0, Attn: Development Officer.

3. CONTACTS

- 3.1. Community Development Officer, Derek French, 902-394-2945.
- 3.2. Community of Victoria, Hilary Price, Administrator, 902-658-2541.

Section 4

Water Service Permit Information (Central System)

COMMUNITY OF VICTORIA
Servicing Standards
Water Services Permit Information (Central System)

1. REQUIREMENT FOR A SERVICING PERMIT - (Central System)

In accordance with the Community of Victoria Zoning & Subdivision Control Bylaws, no person shall:

- a) construct, erect, demolish, change the exterior dimensions of a building, or construct an apartment within any building or structure;
- b) **change the use of any land** or existing building or structure, or expand the existing use of a building or structure to the extent that it will require the provision of **new or expanded services** by the Community; or
- c) move within or into the Community any building or structure,

without applying for and receiving a development permit from the Community's Development Officer prior to commencing any construction, erection, demolition, movement, change of use or site excavation.

All sewer systems or water systems proposed to be connected to the Community system must be designed and constructed in accordance with these servicing standards. These standards are not meant to limit or impair good judgment and ingenuity nor are they intended to eliminate the need for detailed engineering design.

2. WATER SERVICE PERMIT APPLICATION PROCESS

2.1 Introduction Community Water System

The Community of Victoria has a Community water system which supplies water to the Central Core area, see appendix **"B"**, Zoning Map, shown shaded in light blue. This area has smaller sized lots which have to be connected to the Community Water System. The Community Water System originates on Victoria Road where the well house and wells are located. The water system runs easterly along Victoria Road until it reaches the intersection of Nelson Street. It then heads south to the Central Core. Any proposed water systems outside the Central Core area and adjacent to the existing Community Water System will be reviewed on an individual basis. It will be determined by Council if the proposed water system should be connected to the Community System or not. See appendix **"C"**, Service Area Plan.

2.2 Community Water System Connection Permit Fee

When you wish to connect to the Community Water System, have your contractor complete the enclosed application form, see appendix **"D"**, Community Services Permit Application.

- a) drop the documents off at the Victoria Community Office, 24 Bardin Street, Victoria

between the hours of 3:00 p.m. and 6:00 p.m. (Tuesdays) or 9:00 a.m. to 12:00 p.m. (Thursdays) **or**

b) mail the documents to:

Community of Victoria
P.O. Box 7
Victoria, PE C0A 2G0
Attn: Development Officer

2.3 Approval Process

The following is the approval process for the connection to the Central Water System;

- i. Applicant must first obtain preliminary approval from the Community, if necessary;
- ii. Contractor shall submit a completed Community Services Permit Application form to the Community Development Officer showing details of the type of pipe being used, location and depth, etc.
- iii. Water Permit Fee has been paid.
- iv. Applicant obtains final subdivision approval from the Community;
- v. Applicant obtains a building permit from the Community;
- vi. The installation shall be observed by a staff member or someone under contract from the Commission. Allow at least twenty four (24) hours notice to the Commission prior to inspection time.

3. COMMUNITY WATER SYSTEM

3.1 Cost Responsibility

The Commission shall be responsible for the costs including connecting, installation and materials costs to provide a service from the water main located directly in front of the applicant's lot to the street limit.

The Commission shall also supply the contractor with a water meter. Installation costs for installing the water meter shall be the full responsibility of the property owner.

The property owner shall be responsible for the costs including connecting, installation and materials costs from the street limit to the structure being serviced.

3.2 Observation

The installation shall be observed by a staff member or someone under contract from the Commission. Allow at least twenty four (24) hours notice to the Commission prior to inspection time. All costs will be the responsibility of the Commission.

3.3 Re-placement Costs

All costs incurred (including connecting, installation and materials costs) for the re-placement of any or all of the infrastructure from the street limit to the serviced structure shall be the full responsibility of the property owner.

3.4 Re-locating Costs

All costs incurred for the re-locating of the water system shall be the full responsibility of the property owner.

3.5 Other Requirements

The design and installation of water system shall meet all applicable municipal, provincial and federal regulations including, but not limited to, the Occupational Health & Safety Act for the Province of Prince Edward Island and shall conform to good engineering practice using the following guidelines:

- “Atlantic Canada Guidelines for the Supply, Treatment, Storage, Distribution and Operation of Drinking Water Supply Systems;
- Environmental Protection Act; &
- Water Well Regulations.

3.12 Revisions to Servicing Standards

These standards are subject to change without notice and the onus lies with the Applicant to ensure that they are in possession of the latest revision.

3.13 Other Services

Other work, including sewer services, road construction, storm drainage, electrical and communication services, shall be coordinated with the work herein.

4. COMMUNITY WATER SYSTEM RECORD INFORMATION

The Community staff member or someone under contract with the Commission will be required to document measurements in order for the Community to re-locate the water services if needed. The Contractor is required to notify (with minimum of twenty four (24) hours notice), a Community staff member or someone under contract with the Community to record the as-built information prior to the infrastructure being covered. These measurements include:

- a. distances from the corners of the dwelling foundation to the curb stop location;
- b. indicate the size and type of the water service;
- c. depth of the water line, relative to the top of the dwelling foundation;
- d. distance from the nearest corner of the dwelling foundation to the location that the service enters the dwelling; &
- e. location of the water meter.

5. NON-COMPLIANCE

Any water system that does not comply with this servicing standard will be suspended from use. The Commission will not reinstate services until all non-compliances have been rectified.

6. CONTACTS

6.1. Community Development Officer, Derek French, 902-394-2945.

6.2. Community of Victoria, Hilary Price, Administrator, 902-658-2541.

****Note:** Failure to complete any of the above-noted forms (as required), could result in a delay in the issuance of your water system permit. Please make sure that you, or your contractor on your behalf, have provided all relevant information requested on the forms, paid all required fees and received all required permits.

If all documentation, etc. is in order, you should receive your approved building permit within approximately 2 weeks of receipt of the completed application.

If you have any questions respecting the application process, please contact Derek French, Development Officer for the Community of Victoria, (902)-394-2945 or send an e-mail to dfrench@pei.sympatico.ca

Section 5

Community Servicing Standards (Multi-lots)

1. INTRODUCTION

a. General

The Victoria Water and Sewer Commission (the “Commission”) has developed these servicing standards for the design and construction of water and sewer systems in the Community of Victoria (the “Community”) to:

- achieve the best combination of installation, maintenance and operating costs for water and sewer systems;
- allow developers to plan and budget with the prior knowledge of the Commission’s requirements;
- make the approval process more effective and efficient; and
- coordinate Commission requirements within the overall Community subdivision approval process.

All water and sewer systems proposed to be connected to the Community system must be designed and constructed in accordance with these servicing standards. These standards are not meant to limit or impair good judgment and ingenuity nor are they intended to eliminate the need for detailed engineering design.

b. Design

The design of water and sewer services must be carried out by a Professional Engineer (the “Consultant”) licensed to practice in the Province of P.E.I. The Consultant shall consult with the Commission or its representative at an early stage in the design to ensure that the proposed design is considered in light of the Community’s overall servicing strategy and to allow for any over-sizing to be included to meet future developments (at the developer’s cost in accordance with these standards). The Consultant shall submit detailed design drawings and specifications for water and sewer services for review and approval by the Commission prior to the commencement of construction. Once approved by the Commission, drawings and specifications issued for construction shall be signed, dated and sealed by the Consultant.

Where, in the judgment of the Consultant, variations from this document are justified or required and where the Consultant can show that alternate approaches can produce the desired results, the alternate approaches will be considered for approval upon submission of appropriate documentation to the Commission. Approval of any variations by the Commission does not remove the responsibility for proper design from the Consultant.

Other Requirements

The design and installation of water and sewer systems shall meet all federal and provincial requirements and shall conform to good engineering practice using the following guidelines:

- “Atlantic Canada Guidelines for the Supply, Treatment, Storage, Distribution and Operation of Drinking Water Supply Systems”;
- “Water Well Regulations”;
- “Atlantic Canada Wastewater Guidelines Manual for Collection, Treatment and Disposal of Sanitary Sewage” prepared by Atlantic Environment Departments;
- Environmental Protection Act; and
- Sewage Disposal Systems Regulations.

All contract documents prepared for municipal services work in the Community shall contain a clause requiring the contractor to carry out all work in compliance with all applicable municipal, provincial and federal regulations including, but not limited to, the Occupational Health & Safety Act for the Province of Prince Edward Island.

c. Revisions to Servicing Standards

These standards are subject to change without notice and the onus lies with the Consultant to ensure that they are in possession of the latest revision.

d. Other Services

Other work, including road construction, storm drainage, electrical and communication services, shall be coordinated with the work herein.

2. APPROVAL REQUIREMENTS

a. Approval Process

The following is the approval process for the installation of water and sewer systems within the Community;

- i. Applicant must first obtain preliminary subdivision approval from the Community;
- ii. Applicant must enter into a Subdivision Agreement with the Commission which shall set out the responsibilities and obligations of the Applicant and

- the Commission;
- iii. Applicant or their Consultant(s) shall submit detailed design drawings and specifications as outlined herein for approval by the Commission, Department of Environment, Labour and Justice (Certificate of Approval) and Department of Transportation and Infrastructure Renewal, Environmental Management Section, (EMS Approval);
- iv. Qualified contractor shall construct the water and/or sewer services in accordance with the approved drawings and specifications unless approval to deviate from the approved drawings and specifications is obtained from the Commission in advance of any deviations from the approved drawings and specifications. The Applicant's Consultant shall verify that all constructed water and/or sewer services be in accordance with acceptable standards;
- v. Applicant obtains final subdivision approval from the Community; and
- vi. The Commission accepts the water and sewer services after substantial completion of the work and upon receipt of acceptance requirements.

b. Subdivision Agreement

The Subdivision Agreement shall set out the Applicant's responsibilities for design and construction supervision, cost responsibility, time lines, approval prior to completion of the works, security, insurance etc.

c. Acceptance Requirements

The following items shall be submitted to the Commission prior to acceptance of the work and the Commission assuming ownership of the system:

- i. three paper and one digital copy (AutoCAD) and (PDF) of the project record drawings prepared by the Consultant (dated, sealed and stamped) which includes the original design information plus any site changes thereto, tie ins for valves, stub lines, manholes, bends, tees, tanks, laterals, service lines and anything encountered on the site that was not shown on the design drawings (rock, other services etc.);
- ii. operation and maintenance manuals for any mechanical or electrical equipment or specialized equipment;
- iii. list of materials used indicating manufacturer and model number;
- iv. a list of any deficiencies or outstanding work;
- v. easements where required;
- vi. test results;
- vii. any cost or deposit required including water supply contribution in accordance with clause (e), financial guarantee required for acceptance prior to completion in accordance with clause (f) or the maintenance period

- security deposit required for the one year maintenance period in accordance with clause (f); and
- viii. confirmation that there is no outstanding financial obligation by the Developer to the Consultant, contractor or any other party associated with the work.

d. Cost Responsibility

The Applicant is responsible for the cost of water and sewer systems sized to service the subdivision. The Commission will pay the cost of over-sizing systems to serve adjacent areas where the Commission deems the over-sizing necessary and upon submission of acceptable information showing the cost to be reasonable and in line with the Commission's estimates based on similar works.

e. Water Supply

Where the Applicant is required to install a central water system as a condition of subdivision approval pursuant to the Community's Development Bylaw, the Commission will, at its discretion, extend the municipal water supply to the subdivision. Where the municipal water supply is or will be made available by the Commission, the Applicant shall pay a per lot contribution toward the cost of water supply in accordance with the Victoria Commission Service Bylaw. Where the Commission opts not to extend municipal water service, the Applicant shall install a water supply in the subdivision at his or her cost in accordance with the requirements herein. The water supply contribution may be paid as lots are sold provided that the Applicant provides a financial guarantee (an unconditional letter of credit or other credit in a form acceptable to the Commission) equal to the value of the remaining value of the contribution.

f. One Year Warranty Period

The Applicant shall guarantee all work done in connection with the installation of the water and/or sewer system (the "Work") for one year after substantial completion of the Work ("One Year Warranty Period"). At the time of Commission acceptance, the Applicant shall submit at its expense, covenants and agrees to provide a certified cheque/bank draft/letter of credit for 15% (Infrastructure Bond) of the sanitary sewer, water and engineering costs to be held in-trust by the Community until substantial completion. Upon substantial completion 10% will be released and the remaining 5% will be held for one year from date of substantial completion. Upon the one year anniversary, the subject site will be inspected for any deficiencies. The Applicant will be required to repair any deficiencies to the satisfaction of the Commission prior

to receiving the remaining Infrastructure Bond.

If the deficiencies identified are not completed to the satisfaction of the Commission or if the Applicant does not complete any uncompleted Work, the Commission shall give written notice to the Applicant and the Applicant shall have 14 days to correct the deficiencies or complete the Work to the satisfaction of the Commission. If, after the 14 day period, the deficiencies are not corrected or the Work is not completed to the satisfaction of the Commission, the Commission shall correct the deficiencies and/or complete the uncompleted Work and then return any unused portion of the security deposit to the Applicant at the end of the one year warranty period.

g. Acceptance Prior to Completion

Where the Applicant requests final subdivision approval prior to completion of the installation of the water and/or sewer system (the “Work”) or prior to achieving the acceptance requirements so that building permits can be issued, the Applicant shall submit a financial guarantee (an unconditional letter of credit or other credit in a form acceptable to the Commission) equal to 110% of the value of the remaining Work and/or the cost of meeting the acceptance requirements. The Commission shall then accept ownership of the water and/or sewer system and shall return the financial guarantee upon satisfactory completion of the Work and/or the acceptance requirements.

If the Work and/or the acceptance requirements are not completed to the satisfaction of the Commission, the Commission shall give written notice to the Applicant and the Applicant shall have 14 days to complete the Work and/or the acceptance requirements to the satisfaction of the Commission. If, after the 14 day period, the Work and/or the acceptance requirements are not completed to the satisfaction of the Commission, the Commission shall complete the Work and/or the acceptance requirements and deduct the cost from the financial guarantee and then return any unused portion of the financial guarantee to the Applicant.

3. SUBMISSION REQUIREMENTS

This section summarizes some of the information that must be submitted in order for the Commission to properly evaluate and approve the construction drawings and specifications. Drawings must be developed using NAD 83 Datum and be done in metric at scales of 1:500 horizontal and 1:50 vertical. Any application for approval of the installation of municipal services must include the following:

a. Water System

- i. plan and profile drawings indicating the existing and proposed water distribution system, including mains and the location of valves, lot laterals, fire hydrants, and appurtenances;
- ii. specifications and contract documents;
- iii. cross sections and detail drawings; and
- iv. water pump station details including pump data, well construction specification, pumphouse building specification and detailed material specification.

b. Sanitary Sewerage System

- i. plan and profile drawings indicating the existing and proposed sewer collection system, including mains indicating flow direction and the location of manholes, STEG systems, STEP systems, pump stations, lot laterals and appurtenances;
- ii. specifications and contract documents;
- iii. cross sections and detail drawings;
- iv. sewage lift station and forcemain details including forcemains, pump data, wet and dry well specifications and detailed material specification; and
- v. easements where required.

c. Design Brief

- i. water supply design brief including groundwater allocation, well pumping capacity and storage capacity;
- ii. water distribution design brief including fire flow calculations (if applicable) and domestic water supply calculations;
- iii. sewage lift station design brief including sewershed design criteria, station pumping capacity and design calculations and peak flow calculations;
- iv. sewer collection design brief including flow and infiltration calculations; and
- v. STEP and STEG system design briefs.

d. Approvals

- i. groundwater exploration permit;
- ii. certificate of approval from the Department of Energy and Environment;
- iii. environmental approval from the Department of Transportation and Public Works; and

- iv. any other approvals required.

4. WATER SYSTEM STANDARDS

a. Design Criteria

Water systems shall be designed to meet the following criteria:

- i. using a pipeline roughness coefficient of 120;
- ii. minimum 275.8 kpa (40 psi) pressure to a maximum of 413.7 kpa (60 psi) pressure under normal flow conditions; and
- iii. the present Community water system will not meet fire flow demands.

b. Watermains

Watermains shall:

- i. be PVC DR18 polyvinyl chloride pressure pipe: pressure class 150, 1 Mpa gasket bell end, cast iron outside diameter and to CSA B137.3M and suitable for potable water;
- ii. include hydrants for flushing at low points and dead ends and in accordance with AWWA Manual of Practice;
- iii. be looped wherever possible and as required by the Commission;
- iv. be at least 150 mm in diameter;
- v. be installed with at least 1800 mm of cover or be insulated to the satisfaction of the Commission where 1800 mm of cover is not possible;
- vi. be connected to existing watermains using tapping sleeve and valve;
- vii. include air relief/air vacuum valves where high points are created;
- viii. include thrust blocks at changes in direction, changes in size and dead ends;
- ix. include at least one length of pipe installed downstream of dead end valves; and
- x. be identified with metallic warning tape buried 450 mm below finished grade.

c. Location

Watermains and appurtenances shall:

- i. be located within the street right-of-way on the opposite side of the street to the sanitary sewer;
- ii. be bored under existing streets unless prior written approval for an open cut is obtained from the Department of Transportation and Public Works;
- iii. be extended to the edge of the property boundary for future street extensions

- or connections through easements;
- iv. include easements where necessary for inter-connections, future extensions or looping; and
- v. not be installed with isolated high and low points except as shown on the design drawings.

d. Valves

Valves shall be installed as follows:

- i. at the interconnection(s) with the existing watermains;
- ii. at street intersections;
- iii. at hydrants;
- iv. at stubs for future street or easement connections;
- v. at service lateral terminations at the property line;
- vi. on sprinkler services;
- vii. at maximum spacings per fire Underwriters Survey; and
- viii. at other locations identified by the Commission for system control and isolation.

e. Hydrants

Hydrants shall:

- i. be installed 1 metre from the edge of the street right-of-way at:
 - (1) low points;
 - (2) dead ends; and
 - (3) other locations identified by the Commission for flushing and maintenance of the system;
- ii. be installed in streets with open ditches, include driveway access via a culvert with a 4 metre level space and side slopes not exceeding 2.5 horizontal to 1 vertical;
- iii. include a breaking flange 150 mm above shoulder elevation;
- iv. be marked with fluorescent orange markers, 40 mm diameter polyethylene pipe with ductile iron base plate; and
- v. be designed without drains if susceptible to groundwater contamination.

f. Service Laterals

Service Laterals shall:

- i. for 75 mm (3") and smaller diameter, be type K copper, installed from the mains to the edge of the street right-of-way for all approved lots;

- ii. be sized to meet domestic demand for all units on the lot minimum, 19 mm diameter;
- iii. for larger than 75 mm (3"), be DR26 PVC installed from the mains to the edge of the street right-of-way for all approved lots;
- iv. terminate in a Mueller brass curb stop and drain, bend both sides of the cotter pin during installation of the curb stop rod;
- v. be marked with a blue painted stake extending at least 600 mm above finished grade;
- vi. be teed off the PVC watermains 150 mm and larger using direct tap or tapped couplings;
- vii. be teed off the PVC 100mm watermains using saddles; and
- viii. be teed off the ductile iron watermains using direct taps.

g. Testing and Inspection

Watermains may be tested in phases provided that each phase is clearly identified and isolated to the satisfaction of the Commission. Watermain testing shall include:

- i. pressure and leakage testing between adjacent valves to AWWA standards; and
- ii. bacteriological tests at all locations per AWWA standards so that there is zero E. coli, zero coliform bacteria and less than 150 ppm background growth in all samples for two consecutive days.

5. SEWER SYSTEM STANDARDS

a. Design Criteria

Sewer systems shall be designed to meet Orenco Systems Inc. acceptable standards.

b. Gravity Sewer Mains

Gravity Sewer Mains shall:

- i. Series 200 PVC SDR 21 pipe;
- ii. be at least 150 mm in diameter;
- iii. be installed straight between pigging ports in plan and profile and at a uniform slope between pigging ports;
- iv. be installed at a minimum grade of 0.5% or at a minimum grade of 0.8% for sewer mains at dead ends from last pigging port and per "Atlantic Canada Standards & Guidelines Manual for the Collection, Treatment & Disposal of Sanitary Sewage";
- v. Locked-in separate gasket and integral bell system or chemically welded in

- vi. accordance with manufacturer's recommendations; where shallow, be installed with at least 1800 mm of cover or be insulated to the satisfaction of the Commission where 1800 mm of cover is not possible; and
- vii. achieve a watertight connection when connected to existing sewer mains.

c. Forcemains

Forcemains shall:

- i. (75 mm to 150 mm) diameter shall be Series 200 PVC piping unless otherwise approved by the Consultant;
- ii. Less than (75 mm) diameter shall be SCH 40, unless otherwise approved by the Commission; and
- iii. be installed with at least 1800 mm of cover or be insulated to the satisfaction of the Commission where 1800 mm of cover is not possible.

d. Location

Sewer mains shall:

- i. be located within the street right-of-way on the opposite side of the street to the watermain;
- ii. be bored under existing streets unless prior written approval for an open cut is obtained from the Department of Transportation and Infrastructure Renewal;
- iii. be extended to the edge of the property boundary for future street extensions or connections through easements; and
- iv. include easements where necessary for inter-connections or future extensions.

e. Pigging Ports Access Points

Pigging Ports shall:

- i. be installed at dead ends;
- ii. be installed at recommended locations by the Consultant; and
- iii. be enclosed in a minimum diameter of 1050 mm concrete manhole with a steel frame and cover.

f. Service Laterals

Service Laterals shall:

- i. (75 mm to 150 mm) diameter shall be Series 200 PVC piping unless otherwise approved by the Consultant;

- ii. Less than (75 mm) diameter shall be SCH 40, unless otherwise approved by the Commission; and
- iii. be installed with at least 1800 mm of cover or be insulated to the satisfaction of the Commission where 1800 mm of cover is not possible.
- iv. minimum grade on all piping shall be 0.5% or as advised by the Consultant.
 - i. terminate in a full pipe length with a bell end and plug;
 - ii. be marked at the termination with a 50 mm x 100 mm wooden marker extending from the pipe to 600 mm above finished grade with the depth to the pipe invert from grade painted in red on the marker; and
 - iii. be teed off of the mains or directly into the manhole matching outlet elevation.

g. Lift Stations

Sewage lift stations shall include:

- i. Myers or approved equal components as per Consultant;
- ii. Orenco Systems Inc. approved equal components as per Consultant;
- iii. precast concrete manhole as per Consultant;
- iv. all components to be stainless steel or approved otherwise by the Consultant;
- v. piping and appurtenances to make a complete system; and
- vi. Self-adhered waterproofing membrane shall be applied to all exterior joints and seams in accordance with manufacturer's current recommendations. Acceptable product is Bakor Blueskin WP 200 or equivalent.

h. Testing and Inspection

Sewer system testing and inspection shall include, but not be limited to, the following:

- i. Gravity Sewer lines shall undergo:
 - (1) water tightness testing by an air test after backfilling to finish grades between consecutive pigging ports to pass pressure drop requirements specified by manufacturer; and
 - (2) test for acceptable standards for STEP/STEG systems.
- ii. Pump station chambers shall be leakage tested after the structure has developed sufficient strength to withstand stresses produced by the test so that water loss in the structure after 72 hour is not more than an amount consistent with normal evaporation and consistent with normal evaporation and absorption, and in any case, not more than 300 IG/in.dia./mile/day; and
- iii. Pump stations shall be tested and certified acceptable by the pumping equipment manufacturer and the Consultant and Commission maintenance

personnel shall be trained in the operation and maintenance of the station by the pumping equipment manufacturer.

6. Operation and Maintenance Manuals

Five copies of operation and maintenance manuals shall be provided for water supply stations and sewage pumping stations. The maintenance manuals shall include:

- a. startup certification from the equipment supplier (certifying that the equipment has been satisfactorily installed and is in proper working order);
- b. approved shop drawings;
- c. equipment descriptions, wiring or other diagrams, materials list and parts list;
- d. details of equipment operation and maintenance;
- e. warranty and service contact information; and
- f. any other information which will assist the Commission in the operation and maintenance of the equipment.

Appendix A

Standard Subdivision Agreement Form

**Victoria Commission Corporation
Municipal Servicing Standards**

Draft: Jan. 26, 2012

Community of Victoria
Subdivision Agreement
“Subject Development”

THIS AGREEMENT made on this _____ day of
_____, A.D., 201_.

BETWEEN : The Community of Victoria, of Queens County,
Province of Prince Edward Island,

(Hereinafter referred to as the “Community”)

AND: “**Developer**”
of Queens County, Province of Prince Edward Island,

(Hereinafter referred to as the “Developer”)

WHEREAS the Developer is desirous of subdividing land in the Community of Victoria, Prince Edward Island referred to herein as the **Development**, parcel number ----- and more particularly described on Schedule “A”, Dwg. No. ---, dated -----, 2010, encompassing Lots 1 to ---- inclusive and hereinafter referred to as the Concept Plan annexed hereto;

AND WHEREAS the Developer claims to be the beneficial owner(s) of the lands described in Schedule “A”, the Concept Plan, being **Development**;

AND WHEREAS the Community has developed standards which clearly articulate the Community requirements for construction of water and sewer parties now wish to enter into an agreement for
this subdivision;

AND WHEREAS the parties now wish to enter into an agreement for
this subdivision;

NOW THEREFORE THIS AGREEMENT WITNESSETH that in consideration of the mutual covenants hereinafter expressed, the parties hereto

Draft: Jan. 26, 2012

mutually covenant and agree with each other as follows:

Article #1 - Scope

The parties to this agreement covenant and agree that the attached Schedule “A” Dwg. No. ---, dated -----, 2010) shall be a Masterplan for the overall subdivision encompassing Lots 1 to ---- inclusive and may only be changed upon the mutual agreement between the Developer and the Community.

Article 2 - Engineering Drawings and Specifications

The Developer must have the Engineering Drawings and specifications stamped and certified by a professional engineer licensed to practice in the Province of Prince Edward Island and submitted to the Community for approval.

Article 3 - Infrastructure Bond

The Developer, at its expense, covenants and agrees to provide a certified cheque/bank draft/letter of credit for 15% of sanitary sewer, water and engineering costs to be held in-trust by the Community until substantial completion. Upon substantial completion 10% will be released and the remaining 5% will be held for one year from date of substantial completion. Upon the one year anniversary, the subject site will be inspected for any deficiencies. The Developer will be required to repair any deficiencies prior to receiving the remaining Infrastructure Bond.

Article 4 - Developer’s Responsibilities

The Developer shall pay any professional fees related to any sewage treatment system upgrades as well as any costs incurred by the Community and or its representatives with regards to this project. This includes but is not limited to preparation of this document, consultations with the treatment system manufacturers, consultations with the Developer and or its representatives, review of the project’s drawings and specifications and any other consultations in order to accommodate the proposed development.

The Developer shall pay any construction related costs for any upgrades to the existing sewage treatment system to accommodate the proposed development.

Draft: Jan. 26, 2012

All pertinent materials shall be purchased and installed at the treatment site in accordance with the manufacturer's specifications. All materials will be purchased by the Community and shall be reimbursed by the Developer within 30 days of receiving the invoice. All installation costs will be at the Developers's expense. Only Community approved installers shall be contracted.

The Developer shall supply a registered copy of all easements required for sewer, water and/or storm water servicing for the subject development to the Community.

The Developer shall dedicate and supply a registered copy of the deed of conveyance for ten (10) percent of the total development area.

Article 5 - Community's Responsibilities

The Community, at its expense, covenants and agrees to supply water to the entrance to the development.

Article 6 - Insurance

The Developer, at its expense, covenants and agrees to provide proof of Insurance - Comprehensive General Liability in the amount of \$3 million with the Community added as an insured, but not limited to:

- a. Products and completed operations liability;
- b. Owner's and Contractor's protective liability;
- c. Blanket written contractual liability;
- d. Contingent employer's liability;
- e. Personal injury liability;
- f. Non-owned automobile liability;
- g. Cross liability;
- h. Employees as additional insureds;
- i. Broad form property damages; and
- j. Operation of attached machinery.
- k. Automobile liability on all vehicles owned, leased, operated or licensed in the name of the Contractor in an amount not less than \$2 million.

Draft: Jan. 26, 2012

1. Certified copies of the above insurance must be presented at the time of signing of the contract.

Article 7 - Final Approval

Final subdivision approval shall be granted by the Community only after the applicant has complied fully with all applicable requirements of the bylaw and subdivision agreements between the Developer and the Community.

1. The Developer must have submitted eight (8) copies of a final survey plan showing all lots pinned and certified by a surveyor registered to practice in the province of Prince Edward Island.
2. The Developer must have completed an agreement with the Provincial Department of Transportation and Public Works respecting road construction and the roads must have been accepted as public.
3. The Developer, at its expense, covenants and agrees to have the sanitary sewer and water infrastructure constructed in conformance with the Community's design specifications.
4. The Developer, at its expense, covenants and agrees to extend existing sanitary sewer services to service all lots in conformance with the Community's policies and regulations and the Community's municipal bylaws.
5. The Developer, at its expense, covenants and agrees to extend existing central water supply services to service all lots in conformance with the Community's policies and regulations and the Community's municipal bylaws.
6. The Developer shall be responsible for ensuring that increased storm water run-off that will be created as a result of development will be addressed. The Developer is responsible for preparing a storm water management plan acceptable to the Community and to the Department of Transportation and Public Works. Such a plan will include measures to mitigate erosion prior to individual lot development. In addition, erosion control measures shall be implemented during the construction phase of individual lots, in compliance with Section 21 of the Environmental Protection Act.
7. The Developer, at its expense, covenants and agrees to supply the Community with record drawings in paper and digital form showing all infrastructure installed and constructed in conformance with the Community's policies and regulations and the Community's municipal bylaws.
8. The Community shall give notice of final approval of a subdivision in writing, and shall place its seal on the eight copies of the survey plan and shall return one copy to the Developer.

Draft: Jan. 26, 2012

9. The Community shall file copies of the final survey plan with:
- (a) the Registrar of Deeds
 - (b) the Dept. of Transportation and Public Works
 - (c) Council files
 - (d) local utilities, as required.

Article 8 - Subdivision Fees

The Developer shall pay to the Community a subdivision application fee.

Article 9 - Building Permits

The Community reserves the right to deny or delay issuance of a building permit in accordance with its bylaws. The parties agree that the Community will not issue a building permit until such time as all items in Article 7 - Final Approval have been complied with to the satisfaction of the Community.

Article 10 - Sale of lots

The Developer shall not sell or convey a lot in the subdivision before the Community has issued final approval for the subdivision.

Any covenants made pursuant to this agreement between the Developer and the owners of land within the subdivision and expressed to run with the land and be binding upon any subsequent owner thereof notwithstanding that such covenant is positive in nature.

This agreement shall enure to the benefit of and be binding upon the parties, their heirs, successors and assigns.

IN WITNESS WHEREOF the parties hereto have hereunto affixed their corporate seals, duly attested by the signatures of their proper signing officers on the day and year first above written.

Draft: Jan. 26, 2012

SIGNED, SEALED AND DELIVERED

THE COMMUNITY OF
VICTORIA

in the presence of:

Per: _____

Authorized to Sign

Per: _____

Authorized to Sign

SIGNED, SEALED AND DELIVERED

Developer.

in the presence of:

Per: _____

Authorized to Sign

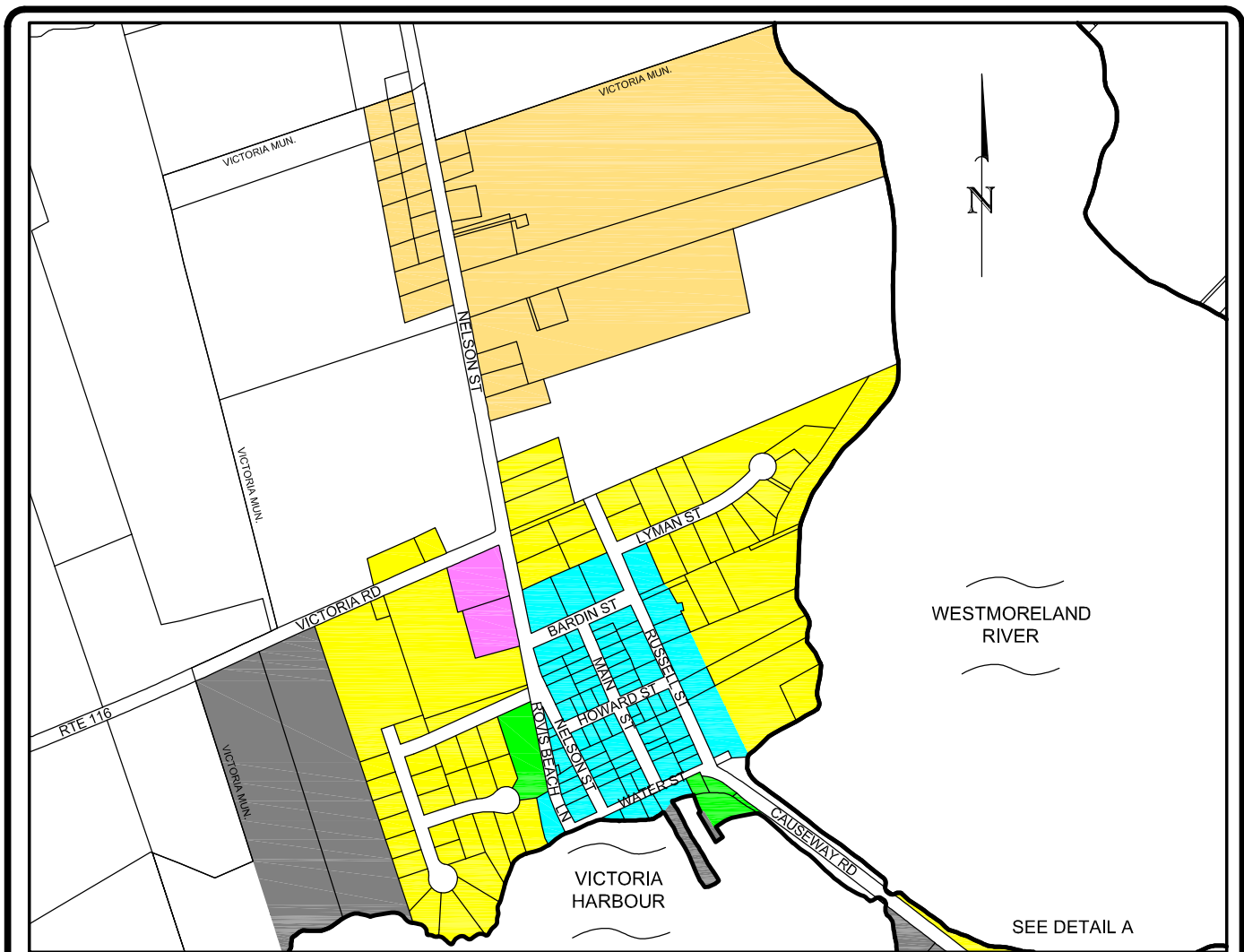
Per: _____

Authorized to Sign

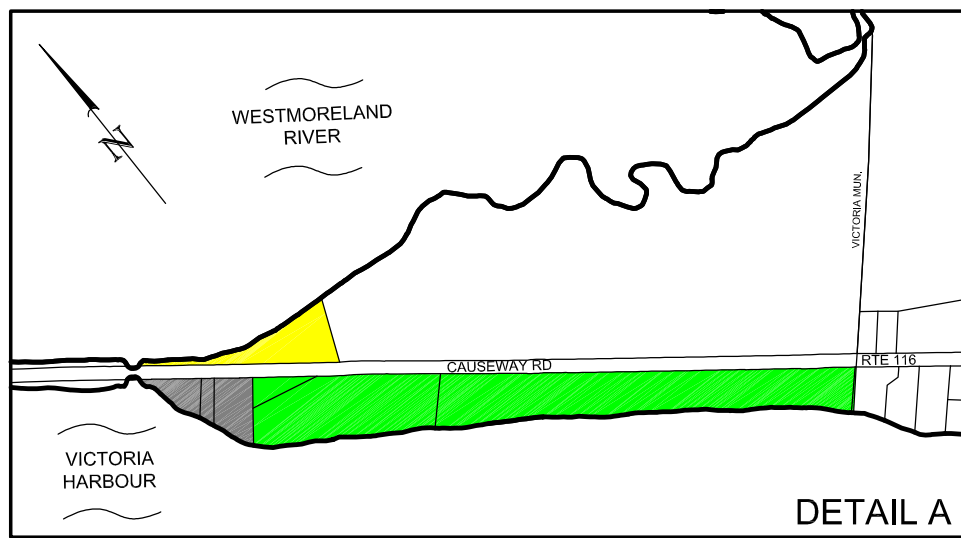
DRAFT

Appendix B

Zoning Map

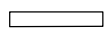








SEE DETAIL A



DETAIL A

LEGEND:

-  A - AGRICULTURE
-  C - COMMERCIAL
-  CC - CENTRAL CORE
-  M - LIGHT INDUSTRIAL
-  O - RECREATION AND PUBLIC OPEN SPACE
-  R1 - SINGLE FAMILY RESIDENTIAL
-  R2 - TWO-FAMILY RESIDENTIAL

Derek A. French, P.Eng., CPT, PEILS
 500 Cameron Road
 New Haven, PE
 COA 1H3
 t: 902-394-2945
 f: 902-569-2944
 dfrench@pel.sympatico.ca
 CONSULTING ENGINEERING • PLANNING • SURVEYING

Project Title
COMMUNITY OF VICTORIA

Title
ZONING MAP

Date Printed:
24-01-12

Drawn by:
DAF

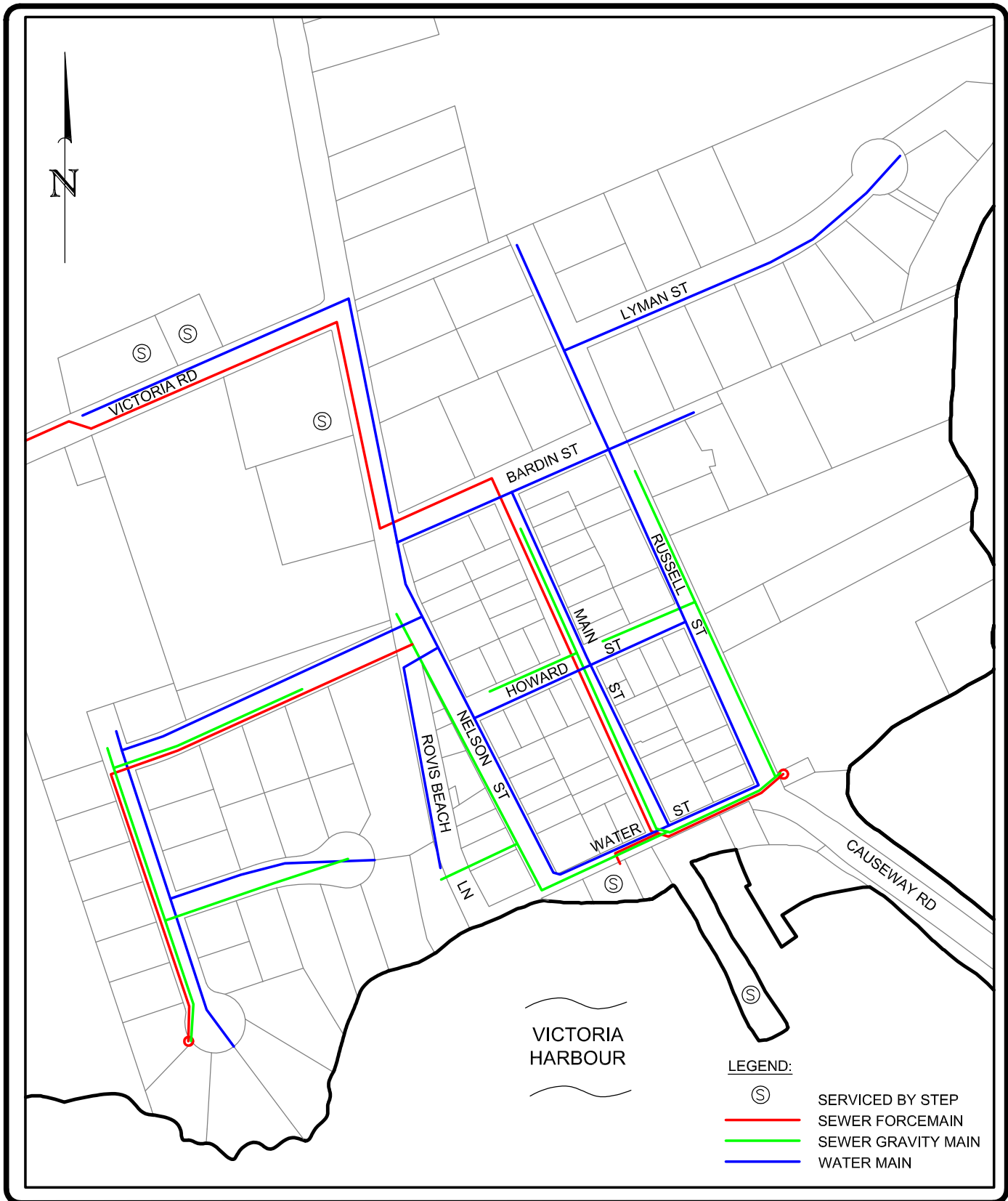
Job No.
11-02

Plan No.
Z1

Scale:
nts

Appendix C

Service Area Plan



Derek A. French, P.Eng., CPT, PEILS
 500 Cameron Road
 New Haven, PE
 COA 1H3
 t: 902-394-2945
 f: 902-569-2944
 dfrench@pel.sympatco.ca
 CONSULTING ENGINEERING • PLANNING • SURVEYING

Project Title
COMMUNITY OF VICTORIA

Title
SERVICE AREA PLAN

Date Printed:
26-01-12

Job No.
11-02

Scale:
nts

Drawn by:
DAF

Plan No.
S1

Appendix D

Services Permit Application

COMMUNITY OF VICTORIA SERVICES PERMIT APPLICATION

NOTE: Please refer to the Community of Victoria Official Plan and Zoning & Subdivision Control Bylaws (www.victoria.pe.ca) for information regarding building within the Community of Victoria.

Septic system permit application for (check appropriate section):

- new STEP unit (pump service to force main) replace existing system
 new STEP unit (pump service to sewer main) repair system
 new STEG unit (gravity service to sewer main) upgrade existing system
 new water service

I. Property Information:

Property tax no: _____ Location of property (street name): _____

Subdivision lot no: (if applicable): _____ Civic no: _____

Property owner's name: _____

Existing use of property: _____ Width ___ Depth ___ Acreage ___

II. Applicant information:

Applicant's name (if different from above): _____

Mailing address: _____

Postal code: _____ Phone no: (h) _____ (w) _____

Fax: _____ Email: _____

III. Permit information:

What is the proposed/present use of the structure on the property? _____

If applicable, number of bedrooms? ___

The proposed use of the "new" or "existing" structure is:

- single family dwelling ___ duplex ___ seasonal dwelling ___ rental cottage ___
agriculture ___ commercial ___ public service/institutional ___ recreation ___
non-commercial garage ___ non-commercial storage ___ resource-based industrial ___
other (please state what the proposed use will be) _____

IV. Site plan:

Draw a sketch of property showing the following:

- dimension of lot (width and depth);
- location or proposed location (distance from all boundary lines and new or existing buildings) of new or existing septic system structure(s), ie: septic tank, sewer lateral, water service, water valve, etc.;
- location of existing or proposed sewer/water line to corner(s) of dwelling foundation;
- location of existing or proposed sewer/water line from the top of the dwelling foundation to top of the pipe(s);
- indicate size and type of sewer/water pipe; and
- elevation of the top of the new or existing concrete foundation.

Affirmation:

I, _____, hereby affirm to the best of my knowledge and ability, the information that I have provided on this form is true and complete.

Applicant's signature: _____ Date: _____, 201_, or

Agent for applicant signature: _____ Date: _____, 201_

NOTE: In order for your building permit to be issued, you must attach a copy of your approved septic permit to this application. The Community Development Officer may contact you for any other information considered relevant to this application.

Community Use:

Date application received: _____, 201_ Application no. _____

Application complete? yes ___ no ___

Appropriate building permit fee attached? yes ___ no ___

Person who received the fee? (please print) _____

Was a receipt issued? no ___ yes ___ Receipt no. _____

Appendix E

Sample Easement

THIS GRANT OF EASEMENT made the ____ day of _____,

BETWEEN:

(hereinafter called the "Grantors")

OF THE FIRST PART;

AND:

COMMUNITY OF VICTORIA, a body corporate, incorporated pursuant to the *Municipalities Act*, R.S.P.E.I. 1988, Cap. M-3;

(hereinafter called the "Grantee")

OF THE SECOND PART.

WHEREAS the Grantors herein are the owners of certain lands and premises located in Queens County, Province of Prince Edward Island, being lands identified as Provincial Parcel No. _____ and more particularly referenced in Schedule "A" annexed hereto (the "Property"), in respect to which the Grantee desires certain rights for services essential to the development and maintenance of a sewer system (the "System");

AND WHEREAS both parties are desirous of entering into this Agreement in order that the Grantors may grant an easement for the Grantee to enter, construct, maintain, inspect, alter and repair the System, including all appurtenances thereto on and under the Property, and for the employees, agents, contractors, workers and assigns of the Grantee to enter with machinery, materials, vehicles and equipment necessary for the use of the easement through, along, under and over the Property;

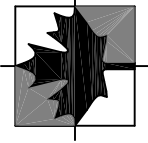
NOW THEREFORE THIS AGREEMENT WITNESSETH that in consideration of the sum of Five Dollars (\$5.00) now paid by the Grantee to the Grantors (the receipt of which is hereby acknowledged), the Grantors do hereby grant unto the Grantee, its successors and assigns, an easement and certain other rights over the Property (the "Easement"), to have and to hold the Easement unto the Grantee, its successors and assigns forever.

1. The Easement hereby granted shall give the Grantee the right:
 - (a) To enter, construct, maintain, inspect, alter and repair the System, including all appurtenances thereto, on, over and under the Property;
 - (b) To cut and trim trees on and around the Property and to make such other excavations as may be reasonably necessary to use the Easement for the Grantee's purposes;
 - (c) For the employees, agents, contractors, workers and assigns of the Grantee to enter upon the Property at all reasonable times with machinery, materials, vehicles and equipment necessary for the use of the Easement.
2. The Grantors shall not obstruct the Property and shall not interfere with the normal use and maintenance of the Easement by the Grantee.
3. The Grantee hereby undertakes as follows:
 - (a) That it shall exercise its rights under the Easement so as not to unduly interfere with the reasonable use of the Property by the Grantors;
 - (b) That it shall repair, at its own expense, any physical damage to the Property that is due to the actions of its employees, agents, contractors, workers and assigns;
 - (c) That it shall fill in all excavations and, as far as practicable, restore the surface of the Property to the same condition as prior to the commencement of construction of the System or any subsequent work thereto.
4. The Easement and rights herein shall run with the lands comprising the Property.
5. This Indenture shall enure to the benefit of and be binding upon the parties hereto, their heirs, executors, administrators, successors and assigns.

Appendix F

STEP Unit Specifications and Estimated Costs

2			
1			
No.	REVISIONS	By	MM/DD/YY



Engineering Technologies Canada Ltd.

- o Innovative Wastewater Management & Design
- o Environmental Engineering
- o Geotechnical Engineering
- o Geographic Information Systems

16 Myrtle St., Unit #1
Stratford, PE
Canada C1B 2W2
(902) 628-1705 TEL
(902) 628-1703 FAX
www.engei.ct.ca

HARLAND 02 ASSOCIATES INC
ENGINEERS, PROJECT MANAGERS.

P.O. Box 1653
Charlottetown
Prince Edward Island
Canada, C1A 7N4
Tel: (902) 368-3365
Fax: (902) 626-3412

This drawing is the property of ETC Limited and Harland Associates 02 Inc. and shall not be used on other projects or extension to this project.

RECORD DRAWINGS

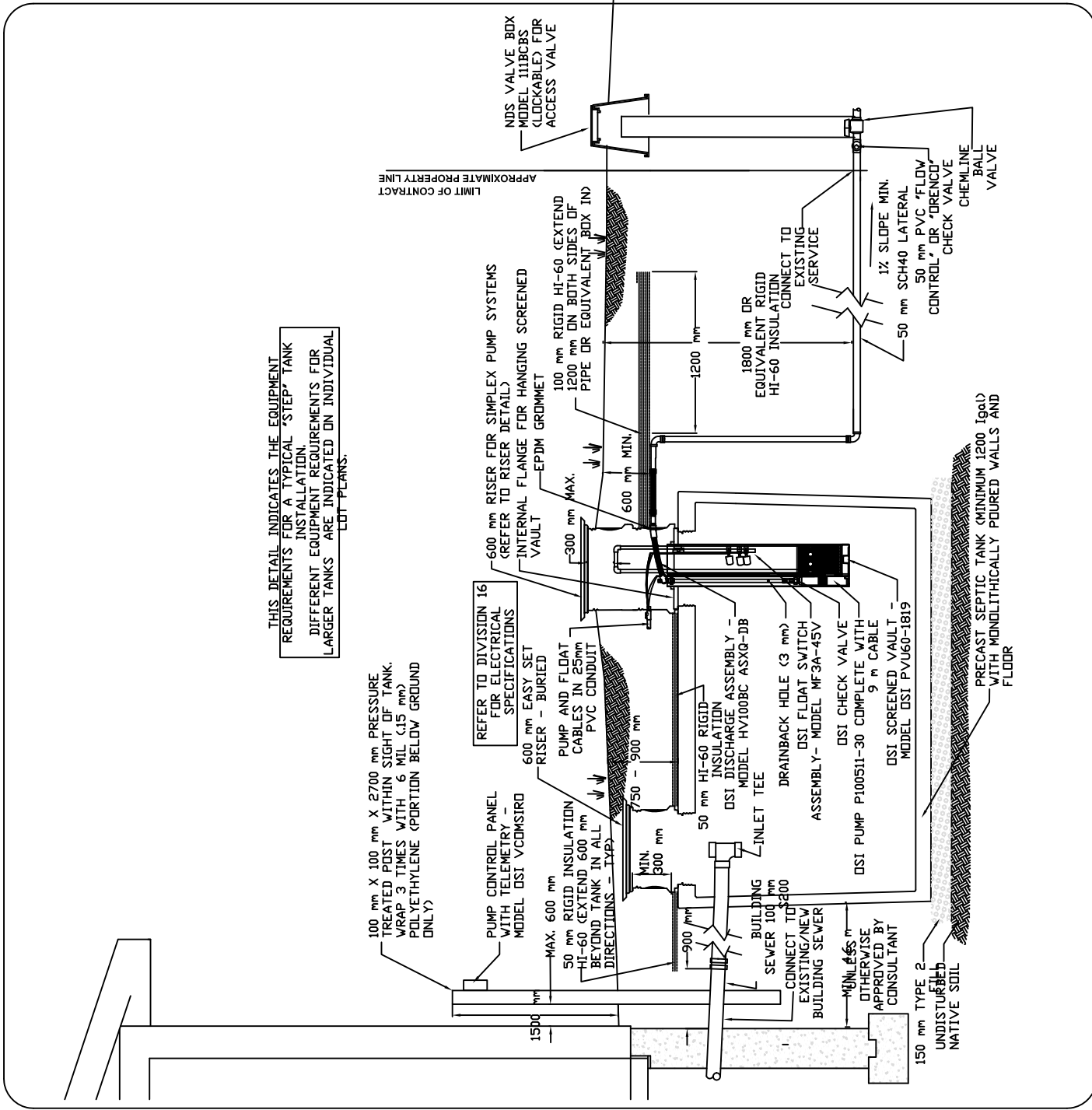
COMMUNITY OF VICTORIA WASTEWATER TREATMENT SYSTEM

STEP Detail

Date: July 14, 2008	Sheet
Scale: NTS	
Drawn: C.E.M.	
DESIGN: K.A.G.	

D2

File No: 05166-3B-72-2 Rev No. **0**



THIS DETAIL INDICATES THE EQUIPMENT REQUIREMENTS FOR A TYPICAL "STEP" TANK INSTALLATION. DIFFERENT EQUIPMENT REQUIREMENTS FOR LARGER TANKS ARE INDICATED ON INDIVIDUAL LOT PLANS.

100 mm X 100 mm X 2700 mm PRESSURE TREATED PIPE WITHIN SIGHT OF TANK. WRAP 3 TIMES WITH 6 MIL (15 mm) POLYETHYLENE (PORTION BELOW GROUND ONLY)

REFER TO DIVISION 16 FOR ELECTRICAL SPECIFICATIONS

600 mm EASY SET RISER - BURIED

PUMP AND FLOAT CABLES IN 25mm PVC CONDUIT BEYOND TANK IN ALL DIRECTIONS - TYPE

50 mm HI-60 RIGID INSULATION DISCHARGE ASSEMBLY - MODEL HV100BC ASXQ-DB

DRAINBACK HOLE (3 mm)

DSI FLOAT SWITCH ASSEMBLY - MODEL MF 3A-45V

DSI CHECK VALVE COMPLETE WITH 9 m CABLE

DSI PUMP P100511-30

DSI SCREENED VAULT - MODEL DSI PYU60-1819

PRECAST SEPTIC TANK (MINIMUM 1200 Igol) WITH MONOLITHICALLY POURED WALLS AND FLOOR

UNDISTURBED NATIVE SOIL

MIN 450 mm OTHERWISE APPROVED BY CONSULTANT

CONNECT TO EXISTING/NEW BUILDING SEWER

BUILDING SEWER 100 mm

MIN. 300 mm

50 mm HI-60 RIGID INSULATION

MAX. 600 mm

PUMP CONTROL PANEL WITH TELEMETRY - MODEL DSI VCOMS10R0

600 mm RISER FOR SIMPLEX PUMP SYSTEMS (REFER TO RISER DETAIL)

INTERNAL FLANGE FOR HANGING SCREENED VAULT

EPDM GROMMET

100 mm RIGID HI-60 (EXTEND 1200 mm ON BOTH SIDES OF PIPE OR EQUIVALENT BOX IN)

1800 mm DR EQUIVALENT RIGID HI-60 INSULATION

CONNECT TO EXISTING SERVICE

1/2 SLOPE MIN.

50 mm SCH40 LATERAL

50 mm PVC 'FLOW CONTROL' OR 'DRENCO' CHECK VALVE

CHEMLINE BALL VALVE

APPROXIMATE PROPERTY LINE

LIMIT OF CONTRACT

1500 mm

900 mm

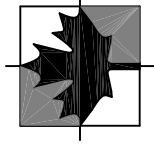
MIN. 300 mm

750 - 900 mm

600 mm MIN.

1200 mm

2			
1			
No.	REVISIONS	By	MM/DD/YY



Engineering Technologies Canada Ltd.

- o Innovative Wastewater Management & Design
- o Environmental Engineering
- o Geotechnical Engineering
- o Geographic Information Systems

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Fax: (902) 626-3412

ENGINEERS, PROJECT MANAGERS.

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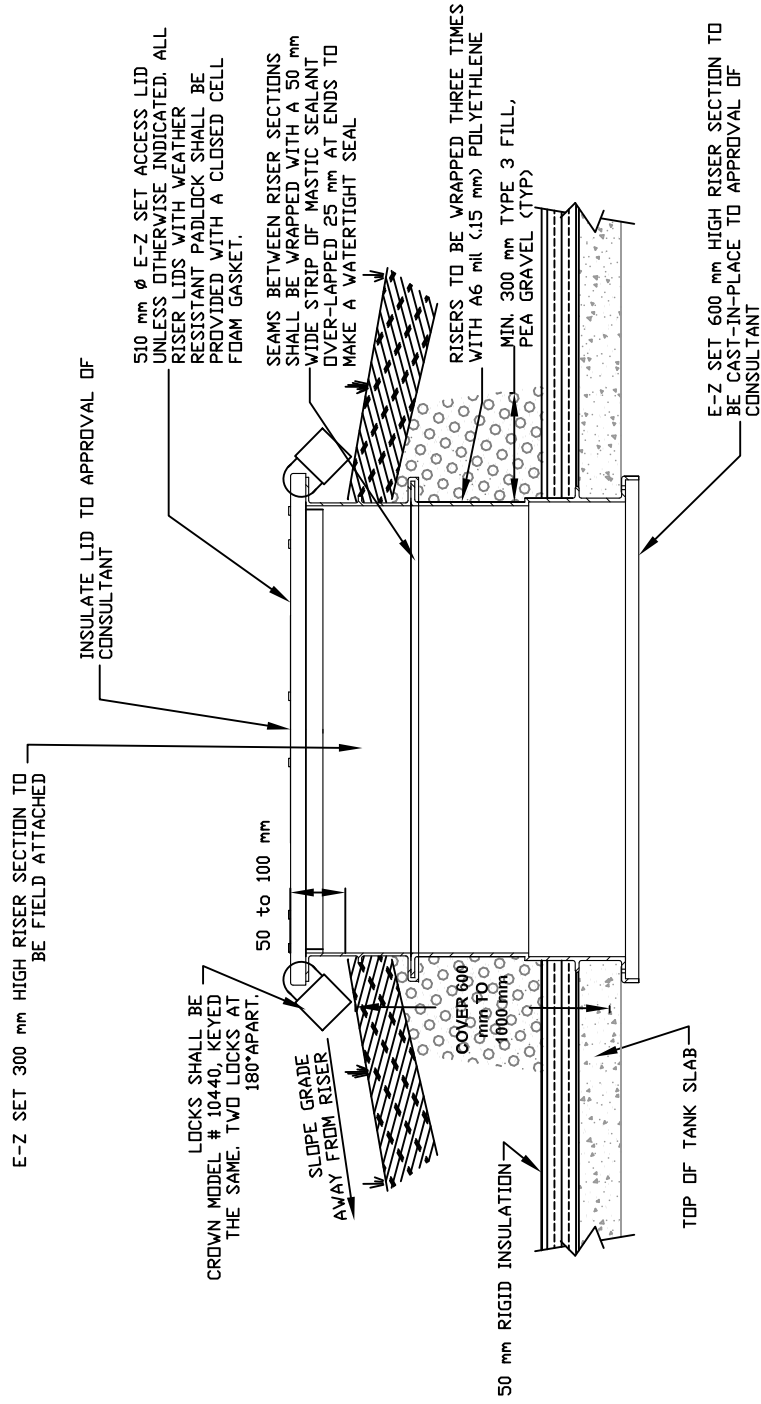
RECORD DRAWINGS

COMMUNITY OF VICTORIA WASTEWATER TREATMENT SYSTEM

Riser Detail

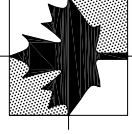
Date: July 14, 2008	Sheet
Scale: NTS	D3
Drawn: C.E.M.	
DESIGN: K.A.G.	

File No: 05166-3B-72-2 Rev No. **0**



Electrical Engineer:

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 This drawing is not to be used for construction unless stamped and signed by the Engineer.

Project Name:

COMMUNITY OF VICTORIA WASTEWATER TREATMENT SYSTEM

Drawing Title:

STEP DETAIL ELECTRICAL

Sheet

Date: JUNE, 2006

Scale: AS NOTED

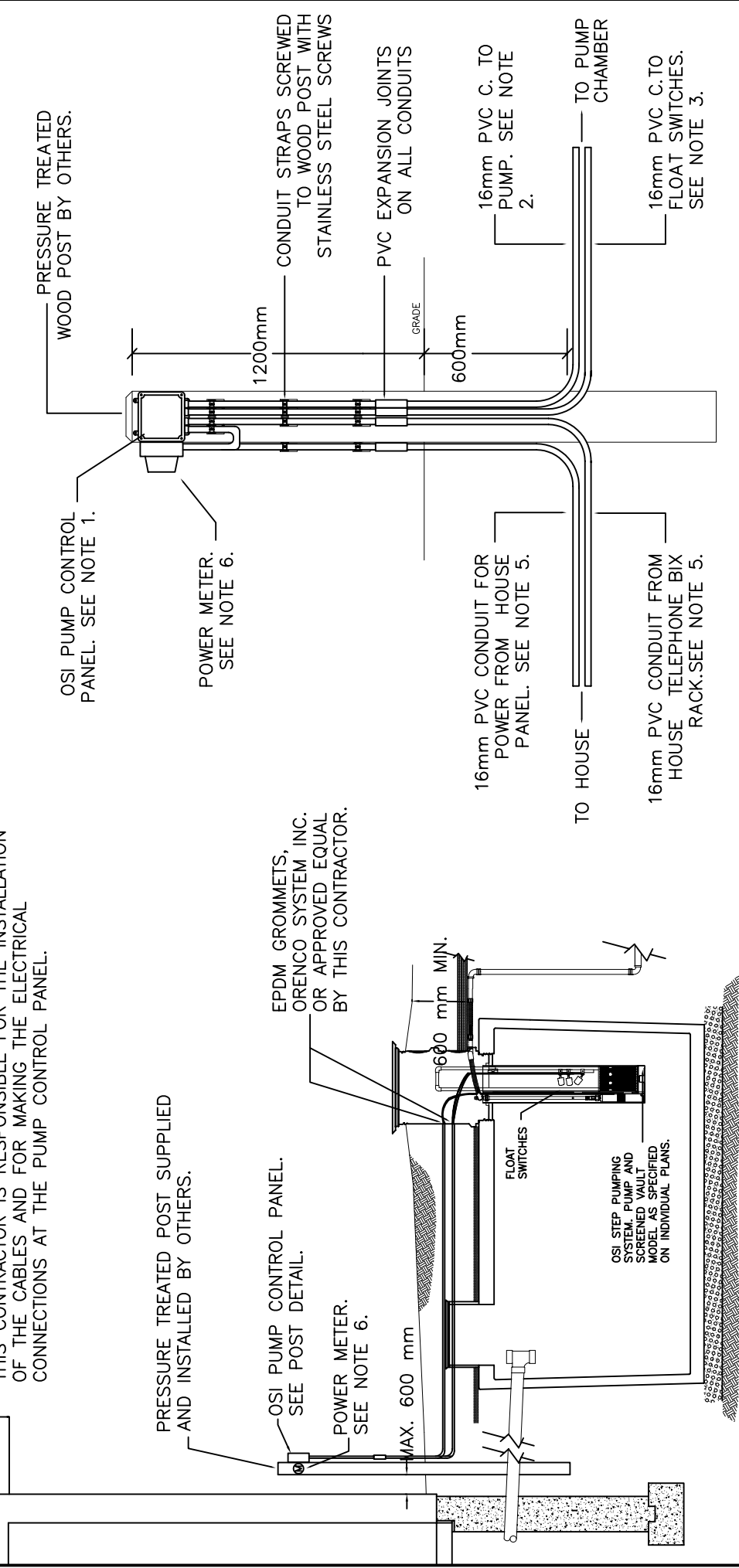
Drawn: CIW

DESIGN: NS

File No: 0638-E3

Rev No. **0**

- NOTES:**
- OSI PUMP CONTROL PANEL TO BE SUPPLIED BY OTHERS AND INSTALLED BY THIS CONTRACTOR. WIRE FROM HOUSE PANEL. SEE NOTE 4.
 - 1/2HP, 240V, 1 PHASE PUMP IS SUPPLIED AND INSTALLED BY OTHERS AND COME WITH APPROPRIATE LENGTH OF CABLES. THIS CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION OF THE CABLES AND FOR MAKING THE ELECTRICAL CONNECTIONS AT THE PUMP CONTROL PANEL.
 - FLOAT SWITCHES ARE SUPPLIED AND INSTALLED BY OTHERS AND COME WITH APPROPRIATE LENGTH OF CABLES. THIS CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION OF THE CABLES AND FOR MAKING THE ELECTRICAL CONNECTIONS AT THE PUMP CONTROL PANEL.
 - PROVIDE 20A-2P BREAKER (OR FUSE) IN HOUSE PANEL FOR OSI PUMP CONTROL PANEL.
 - POWER WIRING (3 #12 + BND) FROM HOUSE PANEL AND TELEPHONE CABLE TO BE BY THIS CONTRACTOR.
 - POWER METER FOR MEASURING KWH ENERGY USAGE TO BE ELSTER CAT. #AB1 (240V, 1 PHASE) c/w METER SOCKET OR APPROVED EQUAL.
 - REFER TO INDIVIDUAL LOT PLANS FOR NUMBER OF HOUSES REQUIRING THIS TYPE OF INSTALLATION.



POST DETAIL
 SCALE: NTS

STEP DETAIL - ELECTRICAL
 SCALE: NTS

BUDGET QUOTATION**Village of Victoria - STEP System**

Item	Description	Qty/Price
Primary Tank (ESTIMATED - \$1600)	1200 impg Seamless Concrete Primary Tank (Campbells) <i>Note: 1000 or 1500 usg fiberglass tank is also an option but a little more expensive</i>	1
STEP Primary Tank Risers	RR2448 Inlet & Outlet Riser 24" dia	2
	FL 24G-4B Fiberglass Lid with gasket	2
	PRTA24 Cast-in-place Tank Adapter	2
	PRTA24BDKIT Bolt Down Kit	2
	G1L 1" grommet for Splice Box piping penetrations	1
	SB4 Splice Box for Pumps & Floats	1
	G1L 1" grommet for pump discharge line penetration	1
Epoxy Adhesives	Adapter Epoxy Kit (MA320)	4
	Riser Adapter Adhesive (ADH100)	2
Tank & Access Riser Equipment Total		\$2,505.00
STEP Tank Pumps	PF100511 Effluent Pump, 1/2 hp, 10 gpm, 110v, 60 hz, 10' lead	1
	PVU57-1819 - Universal Pump Vault, 18" Cartridge	1
	HV100BCFCASX Discharge Hose & Valve Assembly	1
	HVCW100KIT - 1" Cold Weather Adapter Kit	1
	MF3A-YB,R,W Float Assembly - 10' cords	1
	<i>Note: The high level alarm and pump on is combined into one float. If the top float is up for more then 5 minutes, the panel calls out an alarm. Pump Off and Low Level alarm are the other two floats.</i>	
Control Panel	VeriComm Remote Telemetry Simplex Panel (VCOM S1 PTR0)	1
Pump & Controls Total		\$2,455.00
Service Connection Valving	SC100 Ball & check Valve Assembly	1
Access Riser	RA0848 - 8" access riser	1
	FL8G Riser Cap	1
Service Connection Equipment		\$108.00
Miscellaneous		
Start-up		Not Included
Shipping		\$1,100.00
TOTAL QUOTATION		\$6,168.00

Terms & Conditions:

Quote is Supply Only, Installation by Others

Net 30 OAC

All Taxes Extra

FOB: Victoria; Delivery: 2-4 weeks ARO

Kenneth F. Reardon, P.Eng.

Director of Business Development

Atlantic Purification Systems Ltd.

PO Box 877, 10 Ferguson Road

Dartmouth, NS, B2Y 3Z5

(902) 469 2806 ext 124 (office)

(902) 219 4406 (cell)

(902) 463 3529 (fax)

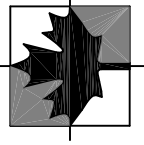
Email: kenreardon@aps.ns.ca

Web: www.aps.ns.ca

Appendix G

STEG Unit Specifications and Estimated Costs

2			
1			
No.	REVISIONS	By	MM/DD/YY



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COMMUNITY OF VICTORIA WASTEWATER TREATMENT SYSTEM

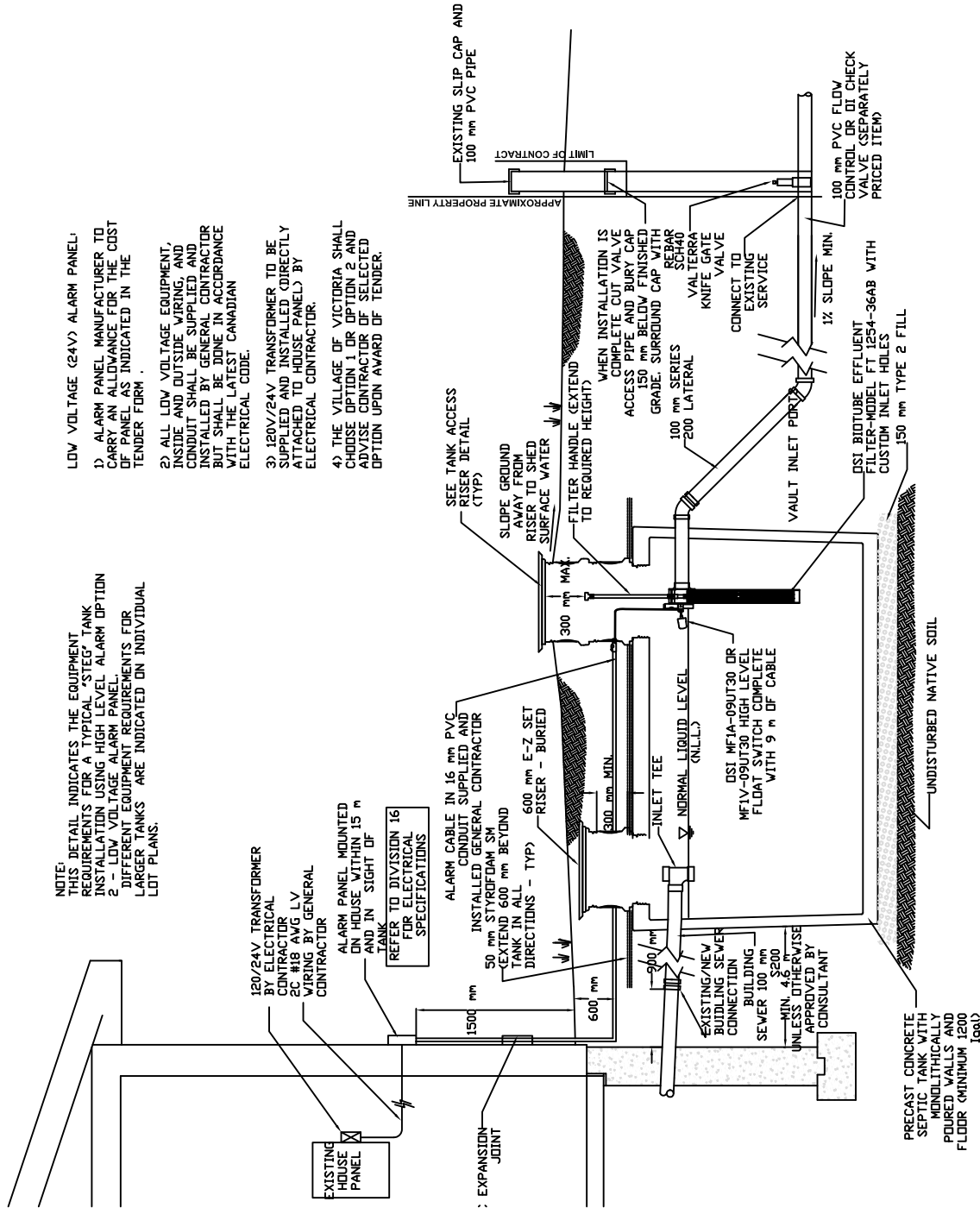
STEG Detail

Date: July 14, 2008	Sheet
Scale: NTS	D1
Drawn: C.E.M.	
DESIGN: K.A.G.	

File No: 05166-3B-72-2 Rev No. **0**

- LDV VOLTAGE (24V) ALARM PANEL:
- ALARM PANEL MANUFACTURER TO CARRY AN ALLOWANCE FOR THE COST OF PANEL AS INDICATED IN THE TENDER FORM.
 - ALL LDV VOLTAGE EQUIPMENT, INSIDE AND OUTSIDE WIRING, AND CONDUIT SHALL BE SUPPLIED AND INSTALLED BY GENERAL CONTRACTOR BUT SHALL BE DONE IN ACCORDANCE WITH THE LATEST CANADIAN ELECTRICAL CODE.
 - 120V/24V TRANSFORMER TO BE SUPPLIED AND INSTALLED DIRECTLY ATTACHED TO HOUSE PANEL BY ELECTRICAL CONTRACTOR.
 - THE VILLAGE OF VICTORIA SHALL CHOOSE OPTION 1 OR OPTION 2 AND ADVISE CONTRACTOR OF SELECTED OPTION UPON AWARD OF TENDER.

NOTE: THIS DETAIL INDICATES THE EQUIPMENT REQUIREMENTS FOR A TYPICAL "STEG" TANK INSTALLATION USING HIGH LEVEL ALARM OPTION 2 - LOW VOLTAGE ALARM PANEL. DIFFERENT EQUIPMENT REQUIREMENTS FOR LARGER TANKS ARE INDICATED ON INDIVIDUAL LOT PLANS.



PRECAST CONCRETE SEPTIC TANK WITH MONOLITHICALLY POURED WALLS AND FLOOR (MINIMUM 1200 lbs/cu ft)

UNLESS OTHERWISE APPROVED BY CONSULTANT

MIN. 4.6 m

EXISTING/NEW BUILDING SEWER CONNECTION BUILDING SEWER 100 mm

SEWER 100 mm

INLET TEE

NORMAL LIQUID LEVEL

DSI MF1A-09UT30 OR MF1V-09UT30 HIGH LEVEL FLOAT SWITCH COMPLETE WITH 9 m DF CABLE

300 mm MIN.

600 mm E-Z SET RISER - BURIED

50 mm STYROFOAM SLEEVE (EXTEND 600 mm BEYOND TANK IN ALL DIRECTIONS - TYP)

ALARM PANEL MOUNTED ON HOUSE WITHIN 15 m AND IN SIGHT OF TANK TO DIVISION 16 REFER TO ELECTRICAL SPECIFICATIONS

120V/24V TRANSFORMER BY ELECTRICAL CONTRACTOR PC #18 AVG LV WIRING BY GENERAL CONTRACTOR

EXISTING HOUSE PANEL

EXPANSION JOINT

SEE TANK ACCESS RISER DETAIL (TYP)

SLOPE GROUND RISER TO SHED SURFACE WATER

WHEN INSTALLATION IS COMPLETE CUT VALVE ACCESS PIPE AND BURN CAP 150 mm BELOW FINISHED GRADE. SURROUND CAP WITH VAL TERRA KNIFE GATE VALVE CONNECT TO EXISTING SERVICE

APPROXIMATE PROPERTY LINE
LIMIT OF CONTRACT

EXISTING SLIP CAP AND 100 mm PVC PIPE

100 mm PVC FLOW CONTROL OR DI CHECK VALVE (SEPARATELY PRICED ITEM)

1% SLOPE MIN.

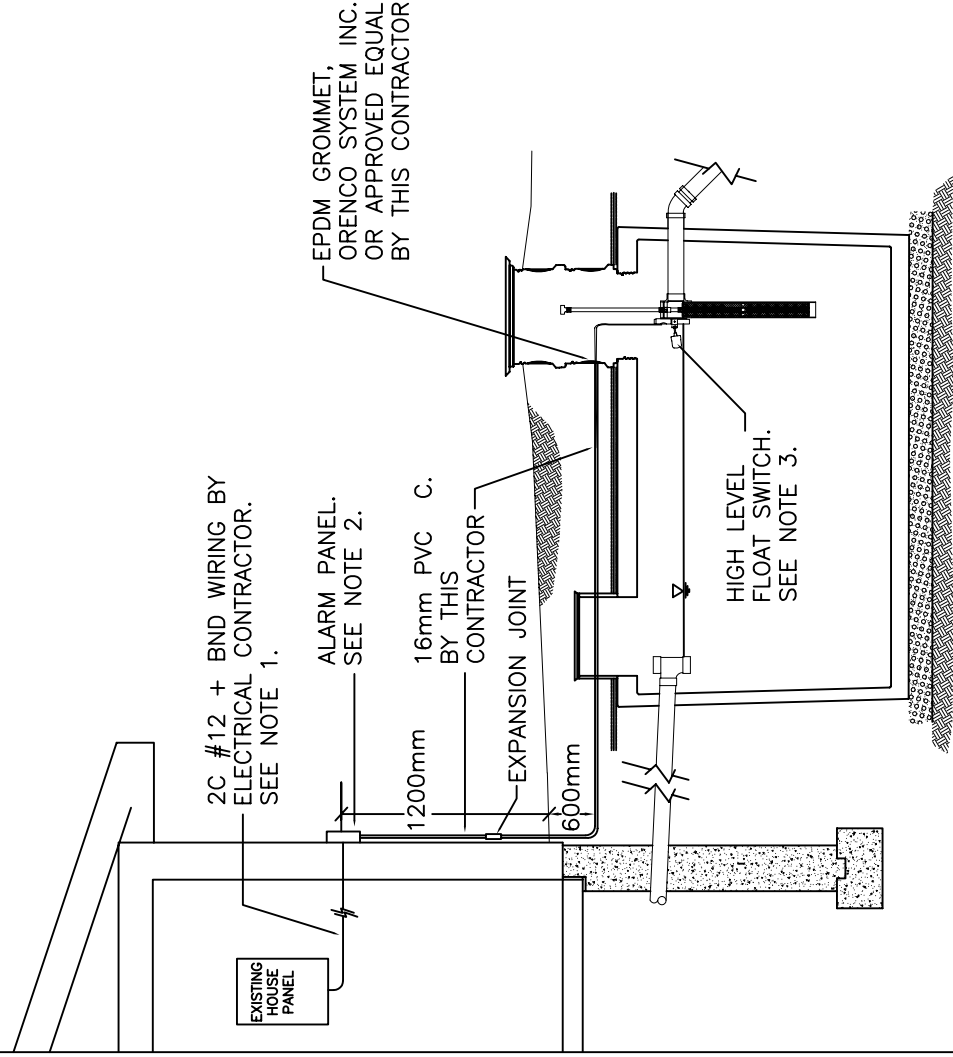
DSI BIOTUBE EFFLUENT FILTER-MODEL FT 1254-36AB WITH CUSTOM INLET HOLES

150 mm TYPE 2 FILL

UNDISTURBED NATIVE SOIL

NOTES - OPTION 1 (120V ALARM PANEL):

1. PROVIDE 2C #12 +BND WIRING FROM HOUSE PANEL TO ALARM PANEL. PROVIDE ONE NEW 15A-1P BREAKER (OR FUSE) IN EXISTING HOUSE PANEL. ALL TRANSITIONS FROM INSIDE TO OUTSIDE SHOULD BE MADE DISCREETLY AND SEALED WITH CLEAR SILICON OR ELECTRICAL PUTTY.
2. ALARM PANEL TO BE SUPPLIED BY OTHERS AND INSTALLED BY THIS CONTRACTOR.
3. HIGH LEVEL FLOAT SWITCH TO BE SUPPLIED AND INSTALLED BY OTHERS AND WILL COME WITH APPROPRIATE LENGTH OF CABLE. INSTALLATION OF CABLE IN CONDUIT AND FINAL CONNECTION AT ALARM PANEL TO BE BY THIS CONTRACTOR.
4. REFER TO INDIVIDUAL LOT PLANS FOR NUMBER OF HOUSES REQUIRING THIS TYPE OF INSTALLATION.
5. THE VILLAGE OF VICTORIA SHALL CHOOSE OPTION 1 OR OPTION 2 AND ADVISE CONTRACTOR OF SELECTED OPTION UPON AWARD OF TENDER.

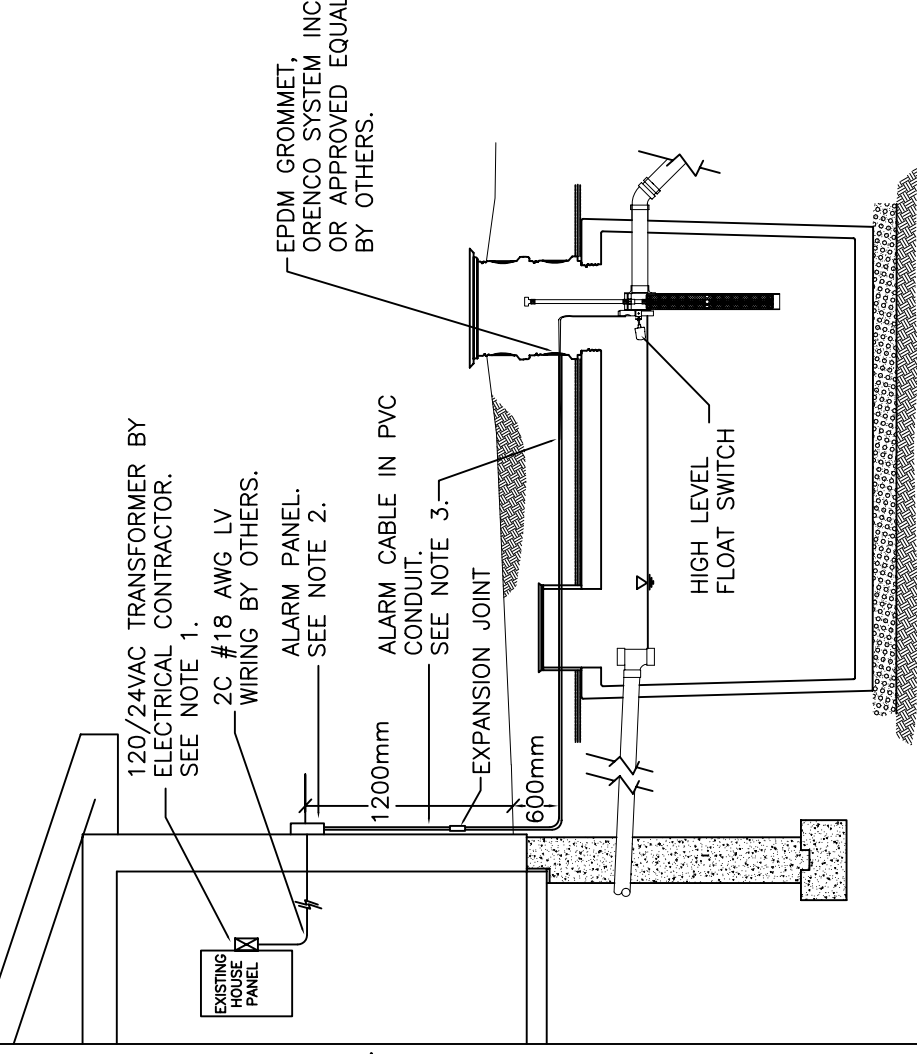


STEG DETAIL - ELECTRICAL (OPTION 1)

SCALE: NTS

NOTES - OPTION 2 (LOW VOLTAGE ALARM PANEL):

1. 120V/24V AC, 40VA, CLASS 2 TRANSFORMER TO BE SUPPLIED AND INSTALLED (DIRECTLY ATTACHED TO EXISTING HOUSE PANEL) BY ELECTRICAL CONTRACTOR. STANDARD OF ACCEPTANCE ATC-FROST #FTC2024 OR APPROVED EQUAL. MOUNTING OF TRANSFORMER ON ELECTRICAL JUNCTION BOX OR USE OF PLUG IN TRANSFORMER AND STANDARD OUTLET MAY ALSO BE APPROVED. IF PLUG-IN TYPE IS USED, ADDITIONAL RETAINING SCREW OR MECHANISM IS REQUIRED TO PREVENT ACCIDENTAL UNPLUGGING. PROVIDE ONE NEW 15A-1P BREAKER (OR FUSE) IN EXISTING HOUSE PANEL.
2. ALARM PANEL TO BE SUPPLIED AND INSTALLED BY OTHERS.
3. WIRING AND CONDUIT FROM ALARM PANEL TO HIGH LEVEL FLOAT SWITCH AND ALL FINAL CONNECTIONS AT ALARM PANEL TO BE BY OTHERS.
4. REFER TO INDIVIDUAL LOT PLANS FOR NUMBER OF HOUSES REQUIRING THIS TYPE OF INSTALLATION.
5. THE VILLAGE OF VICTORIA SHALL CHOOSE OPTION 1 OR OPTION 2 AND ADVISE CONTRACTOR OF SELECTED OPTION UPON AWARD OF TENDER.



STEG DETAIL - ELECTRICAL (OPTION 2)

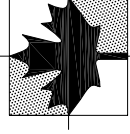
SCALE: NTS

Electrical Engineer:

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Facsimile 802 566 4989
E-mail bsen@roa93.com

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Canada C1A 7N4

No.	REVISIONS	By	MM/DD/YY
-	-	-	MM/DD/YY



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- Environmental Engineering
- Geotechnical Engineering
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Project Name:

COMMUNITY OF VICTORIA WASTEWATER TREATMENT SYSTEM

Drawing Title:

STEG DETAIL ELECTRICAL

Date: JUNE, 2006

Sheet

Scale: AS NOTED

Drawn: CIW

DESIGN: NS

File No: 0638-E4

Rev No. **0**

E4

BUDGET QUOTATION

Village of Victoria - STEG System



4/28/2010 - KFR

Item	Description	Qty/Price
Primary Tank (ESTIMATED - \$1600)	1200 impg Seamless Concrete Primary Tank (Campbells) <i>Note: 1000 or 1500 usg fiberglass tank is also an option but a little more expensive</i>	1
STEG Primary Tank Risers	RR2448 Inlet & Outlet Riser 24" dia	2
	FL 24G-4B Fiberglass Lid with gasket	2
	PRTA24 Cast-in-place Tank Adapter	2
	PRTA24BDKIT Bolt Down Kit	2
	G1L 1" grommet for Splice Box piping penetrations	1
	SB1 Splice Box for High Level Alarm Float	1
Epoxy Adhesives	Adapter Epoxy Kit (MA320)	4
	Riser Adapter Adhesive (ADH100)	2
Tank & Access Riser Equipment Total		\$2,501.00
Effluent Filter	FTS044-36A 4" effluent filter with float bracket	1
STEG Tank Alarm	AMSENTII-W battery Operated Sentinel II Alarm	1
High Level Float	MF1A High Level Alarm Float	1
Tank Filter & Alarm Equipment		\$265.00
Service Connection Valving	SC100 Ball & check Valve Assembly	1
Access Riser	RA0848 - 8" access riser	1
	FL8G Riser Cap	1
Service Connection Equipment		\$108.00
Miscellaneous		
Start-up		Not Incl.
Shipping		\$500.00
TOTAL QUOTATION		\$3,374.00

Terms & Conditions:

Quote is Supply Only, Installation by Others

Net 30 OAC

All Taxes Extra

FOB: Victoria; Delivery: 2-4 weeks ARO

Kenneth F. Reardon, P.Eng.

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Appendix H

How to take care of your Wastewater System Pump STEP Tanks

**Victoria Commission Corporation
Municipal Servicing Standards**

HOMEOWNER'S MANUAL

Onsite Wastewater Collection & Treatment Systems

How to Take Care of Your Wastewater System



Pump STEP Tanks



Orenco Systems®
Incorporated

*Changing the Way the
World Does Wastewater®*

800-348-9843
www.orenco.com
www.vericomm.net



How to Take Care of Your Wastewater System

Congratulations!

Your home includes reliable, carefully engineered equipment — manufactured by Orenco Systems®, Inc. — for the collection and/or treatment of household wastewater.




And your service provider should have a copy of this manual. It's available on our Document Library, at www.orenco.com. Or call 800-348-9843 and we'll send you another.

When properly designed and installed, onsite wastewater treatment does a terrific job of decomposing household waste and recycling precious water resources. Our systems use little energy and frequently outperform municipal sewage treatment plants. The treated effluent is often returned harmlessly to the soil, where it receives final polishing and filtration for groundwater recharge. There's no degrading of our nation's rivers and oceans . . . which is so often the case with municipal sewage.

As with any engineered system, such as your car or your heat pump, your onsite wastewater system will work better and last longer if it is regularly maintained by a qualified service provider. Your service provider should be present during installation, so he or she is familiar with your system, especially those service lines, conduits, and connections that get buried.

Your system will also work better and last longer if you learn what can go into it — and what can not. Little effort is required. Just read and practice the “do's and don'ts” that follow. Every member of your household should be familiar with these. And if you have guests who want to “help out in the kitchen,” be sure to tell them, too. With this preventive maintenance, along with periodic inspections, your onsite wastewater system should function for decades. And you'll save water and energy, too!



Do's and Don'ts for INSIDE the House

There are a number of do's and don'ts that will help ensure a long life and minimal maintenance for your system. As a general rule, nothing should be disposed into any wastewater system that hasn't first been ingested, other than toilet tissue, mild detergents, and wash water. Here are some additional guidelines.



Don't flush dangerous and damaging substances into your wastewater treatment system. (Please refer to the "Substitutes for Household Hazardous Waste," on the next panel.) Specifically, do not flush . . .

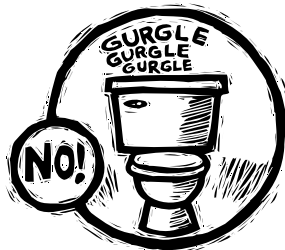
- Pharmaceuticals
- Excessive amounts of bath or body oils
- Water softener backwash
- Flammable or toxic products
- Household cleaners, especially floor wax and rug cleaners
- Chlorine bleach, chlorides, and pool or spa products
- Pesticides, herbicides, agricultural chemicals, or fertilizers



Do keep lint out of your wastewater treatment system by cleaning the lint filters on your washing machine and dryer before every load. Installing a supplemental lint filter on your washing machine would be a good precautionary measure. (This normally takes just a few minutes. Lint and other such materials can make a big difference in the frequency and cost of pumping out your primary treatment tank.)



Don't use special additives that are touted to enhance the performance of your tank or system. Additives can cause major damage to other areas in the collection system. The natural microorganisms that grow in your system generate their own enzymes that are sufficient for breaking down and digesting nutrients in the wastewater.



Don't ignore leaky plumbing fixtures; repair them. A leaky toilet can waste up to 2,000 gallons of water in a single day. That's 10-20 times more water than a household's typical daily usage. Leaky plumbing fixtures increase your water bill, waste natural resources, and overload your system.



Don't leave interior faucets on to protect water lines during cold spells. A running faucet can easily increase your wastewater flow by 1,000 to 3,000 gallons per day and hydraulically overload your system. Instead, properly insulate or heat your faucets and plumbing.



Do collect grease in a container and dispose with your trash. And avoid using garbage disposals excessively. Compost scraps or dispose with your trash, also. Food by-products accelerate the need for septage pumping and increase maintenance.



Do use your trash can to dispose of substances that cause maintenance problems and/or increase the need for septage pumping. Dispose of the following with your trash:

- Egg shells, cantaloupe seeds, gum, coffee grounds
- Tea bags, chewing tobacco, cigarette butts
- Paper towels, newspapers, sanitary napkins, diapers, kitty litter, candy wrappers
- Rags, large amounts of hair

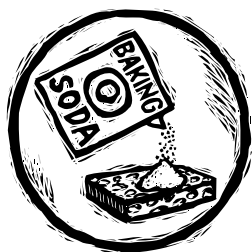
Do's and Don'ts for INSIDE the House



Don't use excessive amounts of water. Using 50 gallons per person per day is typical. If your household does not practice any of the “water conserving tips” below, you may be using too much water.

Do conserve water:

- Take shorter showers or take baths with a partially filled tub. Be cautious about excessive use of large soaking tubs.
- Don't let water run unnecessarily while brushing teeth or washing hands, food, dishes, etc.
- Wash dishes and clothes when you have a full load.
- When possible, avoid doing several loads in one day.
- Use water-saving devices on faucets and showerheads.
- When replacing old toilets, buy low-flush models.



Do use substitutes for household hazardous waste. Replace the following hazardous products with products that are less environmentally harmful. The hazardous cleaners are listed below, followed by the suggested substitute.

Ammonia-based cleaners:

Sprinkle baking soda on a damp sponge. For windows, use a solution of 2 tbs white vinegar to 1 qt water. Pour the mixture into a spray bottle.

Disinfectants:

Use borax: 1/2 cup in a gallon of water; deodorizes also.

Drain decloggers:

Use a plunger or metal snake, or remove and clean trap.

Scouring cleaners & powders:

Sprinkle baking soda on a damp sponge or add 4 tbs baking soda to 1 qt warm water. Or use Bon Ami; it's cheaper and won't scratch.

Carpet/upholstery cleaners:

Sprinkle dry cornstarch or baking soda on, then vacuum. For tougher stains, blot with white vinegar in soapy water.

Toilet cleaners:

Sprinkle on baking soda or Bon Ami; then scrub with a toilet brush.

Furniture/floor polishes:

To clean, use oil soap and warm water. Dry with soft cloth. Polish with 1 part lemon juice and 2 parts oil (any kind), or use natural products with lemon oil or beeswax in mineral oil.

Metal cleaners:

- Brass and copper: scrub with a used half of lemon dipped in salt.
- Stainless steel: use scouring pad and soapy water.
- Silver: rub gently with toothpaste and soft wet cloth.

Oven cleaners:

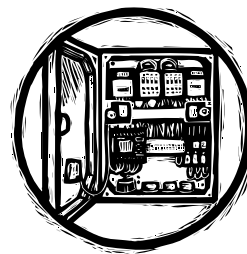
Quickly sprinkle salt on drips; then scrub. Use baking soda and scouring pads on older spills.



Laundry detergents:

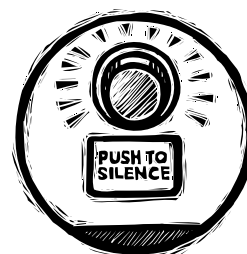
Choose a liquid detergent (not a powder) that doesn't have chlorine or phosphates.

At the Control Panel



Do familiarize yourself with the location of your wastewater system and electrical control panel. Refer to the panel's model and UL number (inside the door panel) when reporting a malfunction in the system.

Do take immediate action to correct the problem in the event of an alarm condition. Call your system operator or maintenance company immediately whenever an alarm comes on. (It sounds like a smoke alarm.)



Do remember that the audible alarm can be silenced by pushing the lighted button located directly above the “Push to Silence” label on the front of the electrical control panel. With normal use, the tank has a reserve storage capacity good for 24-48 hours.

Don't turn off the main circuit breaker to the wastewater pumps when going on vacation. If there is any infiltration or inflow into the system, the pumps will need to handle it.

Don't disconnect the phone line from the control panel. If there is an alarm condition the control panel will need to dial out to alert the operator. This is a toll free call so there is no long distance cost.

Do's and Don'ts for OUTSIDE the House



Don't enter your tank. Entering an underground tank without the necessary confined space entry training and procedures can result in death from asphyxiation or drowning. Keep children away from tank openings if lids are off or lid bolts are removed.

Do keep the tank access lid fastened to the riser at all times with stainless steel lid bolts. If the lid or riser becomes damaged, **BLOCK ACCESS TO THE TANK OPENING, IMMEDIATELY.**

Then call your service provider to repair it. If you or your service provider needs replacement bolts, call Orenco at 800-348-9843.



Don't dump RV waste into your wastewater system. It will increase the frequency of required septage pumping. When dumped directly into the pumping vault, RV waste clogs or fouls equipment, causing undue maintenance and repair costs. (Also, some RV waste may contain chemicals that are toxic or that may retard the biological digestion occurring within the tank.)

Don't ever connect rain gutters or storm drains to the sewer or allow surface water to drain into it. And don't discharge hot-tub water into your system. The additional water will increase costs, reduce the capacity of the collection and treatment systems, and flood the drainfield. It can also wash excess solids through the tank.



Don't dig without knowing the location of your wastewater system. As much as possible, plan landscaping and permanent outdoor structures before installation. But easily removable items, such as bird baths and picnic tables, are OK to place on top of your system.



Do make arrangements with a reliable service person to provide regular monitoring and maintenance. Place the service person's phone number on or in your control panel!

Do keep a file copy of your service provider's sludge and scum monitoring report and pumpout schedule. This information will be beneficial for real estate transactions or regulatory visits.

Do keep an "as built" system diagram in a safe place for reference.

This is also referred to as a "Record Drawing".



Don't drive over your tank or any buried components in your system, unless it's been equipped with a special traffic lid. If the system is subject to possible traffic, put up a barricade or a row of shrubs.

IMPORTANT! CAUTION!

Only a qualified electrician or authorized installer/operator should work on your control panel. Before anyone does any work on either the wiring to the level control floats and pumps in the vault or on the control panel itself, it is imperative to first switch the isolation fuse/breaker and the circuit breakers in the panel to the "Off" positions, then switch "Off" the power to the system at the main breaker!

Appendix I

How to take care of your Wastewater System Gravity STEG Tanks

**Victoria Commission Corporation
Municipal Servicing Standards**

HOMEOWNER'S MANUAL

Onsite Wastewater Collection & Treatment Systems

How to Take Care of Your Wastewater System



Gravity STEG Tanks



Orenco Systems®
Incorporated

*Changing the Way the
World Does Wastewater®*

800-348-9843
www.orenco.com
www.vericomm.net



How to Take Care of Your Wastewater System

Congratulations!

Your home includes reliable, carefully engineered equipment — manufactured by Orenco Systems®, Inc. — for the collection and/or treatment of household wastewater.




And your service provider should have a copy of this manual. It's available on our Document Library, at www.orenco.com. Or call 800-348-9843 and we'll send you another.

When properly designed and installed, onsite wastewater treatment does a terrific job of decomposing household waste and recycling precious water resources. Our systems use little energy and frequently outperform municipal sewage treatment plants. The treated effluent is often returned harmlessly to the soil, where it receives final polishing and filtration for groundwater recharge. There's no degrading of our nation's rivers and oceans . . . which is so often the case with municipal sewage.

As with any engineered system, such as your car or your heat pump, your onsite wastewater system will work better and last longer if it is regularly maintained by a qualified service provider. Your service provider should be present during installation, so he or she is familiar with your system, especially those service lines, conduits, and connections that get buried.

Your system will also work better and last longer if you learn what can go into it — and what can not. Little effort is required. Just read and practice the “do's and don'ts” that follow. Every member of your household should be familiar with these. And if you have guests who want to “help out in the kitchen,” be sure to tell them, too. With this preventive maintenance, along with periodic inspections, your onsite wastewater system should function for decades. And you'll save water and energy, too!



Do's and Don'ts for INSIDE the House

There are a number of do's and don'ts that will help ensure a long life and minimal maintenance for your system. As a general rule, nothing should be disposed into any wastewater system that hasn't first been ingested, other than toilet tissue, mild detergents, and wash water. Here are some additional guidelines.



Don't flush dangerous and damaging substances into your wastewater treatment system. (Please refer to the "Substitutes for Household Hazardous Waste," on the next panel.) Specifically, do not flush . . .

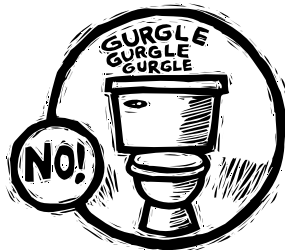
- Pharmaceuticals
- Excessive amounts of bath or body oils
- Water softener backwash
- Flammable or toxic products
- Household cleaners, especially floor wax and rug cleaners
- Chlorine bleach, chlorides, and pool or spa products
- Pesticides, herbicides, agricultural chemicals, or fertilizers



Do keep lint out of your wastewater treatment system by cleaning the lint filters on your washing machine and dryer before every load. Installing a supplemental lint filter on your washing machine would be a good precautionary measure. (This normally takes just a few minutes. Lint and other such materials can make a big difference in the frequency and cost of pumping out your primary treatment tank.)



Don't use special additives that are touted to enhance the performance of your tank or system. Additives can cause major damage to other areas in the collection system. The natural microorganisms that grow in your system generate their own enzymes that are sufficient for breaking down and digesting nutrients in the wastewater.



Don't ignore leaky plumbing fixtures; repair them. A leaky toilet can waste up to 2,000 gallons of water in a single day. That's 10-20 times more water than a household's typical daily usage. Leaky plumbing fixtures increase your water bill, waste natural resources, and overload your system.



Don't leave interior faucets on to protect water lines during cold spells. A running faucet can easily increase your wastewater flow by 1,000 to 3,000 gallons per day and hydraulically overload your system. Instead, properly insulate or heat your faucets and plumbing.



Do collect grease in a container and dispose with your trash. And avoid using garbage disposals excessively. Compost scraps or dispose with your trash, also. Food by-products accelerate the need for septage pumping and increase maintenance.



Do use your trash can to dispose of substances that cause maintenance problems and/or increase the need for septage pumping. Dispose of the following with your trash:

- Egg shells, cantaloupe seeds, gum, coffee grounds
- Tea bags, chewing tobacco, cigarette butts
- Paper towels, newspapers, sanitary napkins, diapers, kitty litter, candy wrappers
- Rags, large amounts of hair

Do's and Don'ts for INSIDE the House



Don't use excessive amounts of water. Using 50 gallons per person per day is typical. If your household does not practice any of the “water conserving tips” below, you may be using too much water.

Do conserve water:

- Take shorter showers or take baths with a partially filled tub. Be cautious about excessive use of large soaking tubs.
- Don't let water run unnecessarily while brushing teeth or washing hands, food, dishes, etc.
- Wash dishes and clothes when you have a full load.
- When possible, avoid doing several loads in one day.
- Use water-saving devices on faucets and showerheads.
- When replacing old toilets, buy low-flush models.



Do use substitutes for household hazardous waste. Replace the following hazardous products with products that are less environmentally harmful. The hazardous cleaners are listed below, followed by the suggested substitute.

Ammonia-based cleaners:

Sprinkle baking soda on a damp sponge. For windows, use a solution of 2 tbs white vinegar to 1 qt water. Pour the mixture into a spray bottle.

Disinfectants:

Use borax: 1/2 cup in a gallon of water; deodorizes also.

Drain decloggers:

Use a plunger or metal snake, or remove and clean trap.

Scouring cleaners & powders:

Sprinkle baking soda on a damp sponge or add 4 tbs baking soda to 1 qt warm water. Or use Bon Ami; it's cheaper and won't scratch.

Carpet/upholstery cleaners:

Sprinkle dry cornstarch or baking soda on, then vacuum. For tougher stains, blot with white vinegar in soapy water.

Toilet cleaners:

Sprinkle on baking soda or Bon Ami; then scrub with a toilet brush.

Furniture/floor polishes:

To clean, use oil soap and warm water. Dry with soft cloth. Polish with 1 part lemon juice and 2 parts oil (any kind), or use natural products with lemon oil or beeswax in mineral oil.

Metal cleaners:

- Brass and copper: scrub with a used half of lemon dipped in salt.
- Stainless steel: use scouring pad and soapy water.
- Silver: rub gently with toothpaste and soft wet cloth.

Oven cleaners:

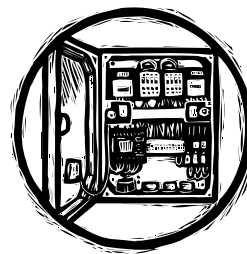
Quickly sprinkle salt on drips; then scrub. Use baking soda and scouring pads on older spills.



Laundry detergents:

Choose a liquid detergent (not a powder) that doesn't have chlorine or phosphates.

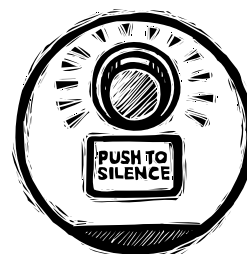
At the Alarm Panel



Do locate your alarm panel where it will be protected from potential vandalism and have unobstructed access.

DO familiarize yourself with the location of your wastewater system and alarm panel.

Do take immediate action to correct the problem in the event of an alarm condition. Call your system operator or maintenance company immediately whenever an alarm comes on. (It sounds like a smoke alarm.)



DO remember that the audible alarm can be silenced by pushing the button located directly above the “Test” label on the front of the alarm panel. With normal use, the tank has a reserve storage capacity good for 24-48 hours.

Don't turn off the main circuit breaker to the wastewater pumps when going on vacation. If there is any infiltration or inflow into the system, the pumps will need to handle it.

Note: Alarm panels for STEG tanks were manufactured and supplied by Engineering Technologies Canada Ltd. Not Orenco Systems Inc.

Do's and Don'ts for OUTSIDE the House



Don't enter your tank. Entering an underground tank without the necessary confined space entry training and procedures can result in death from asphyxiation or drowning. Keep children away from tank openings if lids are off or lid bolts are removed.

Do keep the tank access lid fastened to the riser at all times with stainless steel lid bolts. If the lid or riser becomes damaged, **BLOCK ACCESS TO THE TANK OPENING, IMMEDIATELY.**

Then call your service provider to repair it. If you or your service provider needs replacement bolts, call Orenco at 800-348-9843.



Don't dump RV waste into your wastewater system. It will increase the frequency of required septage pumping. When dumped directly into the pumping vault, RV waste clogs or fouls equipment, causing undue maintenance and repair costs. (Also, some RV waste may contain chemicals that are toxic or that may retard the biological digestion occurring within the tank.)

Don't ever connect rain gutters or storm drains to the sewer or allow surface water to drain into it. And don't discharge hot-tub water into your system. The additional water will increase costs, reduce the capacity of the collection and treatment systems, and flood the drainfield. It can also wash excess solids through the tank.



Don't dig without knowing the location of your wastewater system. As much as possible, plan landscaping and permanent outdoor structures before installation. But easily removable items, such as bird baths and picnic tables, are OK to place on top of your system.



Do make arrangements with a reliable service person to provide regular monitoring and maintenance. Place the service person's phone number on or in your control panel!

Do keep a file copy of your service provider's sludge and scum monitoring report and pumpout schedule. This information will be beneficial for real estate transactions or regulatory visits.

Do keep an "as built" system diagram in a safe place for reference.

This is also referred to as a "Record Drawing"



Don't drive over your tank or any buried components in your system, unless it's been equipped with a special traffic lid. If the system is subject to possible traffic, put up a barricade or a row of shrubs.

IMPORTANT! CAUTION!

Only a qualified electrician or authorized installer/operator should work on your control panel.

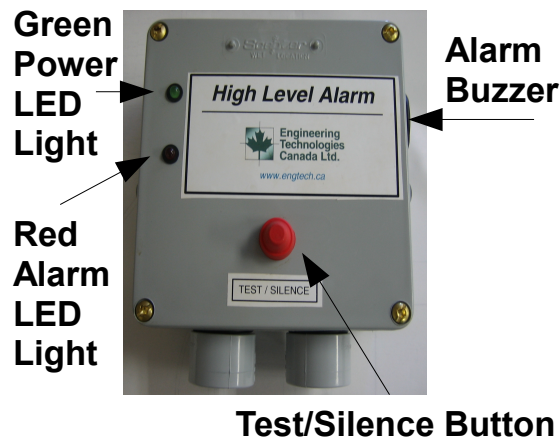
High Level Alarm (HLA) Panel

Installation Instructions and User Information

Revised: July 22, 2008

The **Engineering Technologies Canada Ltd. (ETC)** High Level Alarm Panel (ETC HLA) monitors liquid levels in septic tanks. The ETC HLA is a low voltage panel and can be used with virtually any third-party float switch. The alarm buzzer sounds and the red LED light illuminates when a potentially threatening liquid level conditions occurs. A green LED light indicates that there is power to the panel.

FEATURES/SPECIFICATIONS



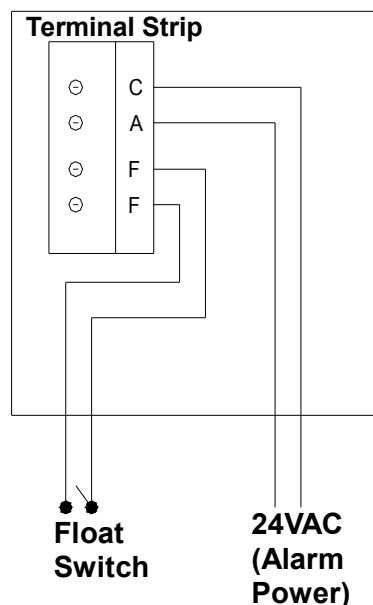
- Voltage 24 VAC, 50/60 Hz, 8.5 watts max.
- PVC water-tight enclosure (Nema 4 rated).
- Automatic alarm test/silence switch.
- Alarm buzzer.
- One-year limited warranty

NORMAL OPERATION

- When the ETC HLA is powered on, the green power LED light will be illuminated.
- If the alarm is not active, the red alarm LED light is off and the buzzer is silent.
- If the alarm is active; the red alarm LED light will be illuminated and the buzzer will also sound.
- The buzzer will stay on until either the “Test/Silence” button is pressed or the high level condition is corrected.
- The red alarm LED light will stay on even if the buzzer has been silenced until the high level condition is corrected.
- Verify that the ETC HLA is working properly, by briefly pressing the “Test/Silence” button. The alarm LED light will illuminate and the buzzer will sound; they will both stop when the button is released. Note: this test does not verify that the float input is wired to the panel correctly. Also the test feature cannot be performed while the alarm is active.
- Check that the float is wired correctly by manually tipping the float. The buzzer will sound and the LED light will illuminate.

POWER-UP PROCESS

Wiring Schematic



- Wire float cable leads and alarm power conductors to terminal block positions as shown in wiring schematic.
- When the ETC HLA first receives power, it will perform a self-test which may take between 5 and 15 seconds.
- During the self-test the green power LED light will be illuminated.
- Upon completion of the self-test, each light will blink once and the buzzer will sound twice rapidly.
- After this point the ETC HLA is fully operational.
- If the “Test/Silence” button is pressed and held for 5 seconds at any point after the power-up, the ETC HLA will reset itself and re-perform the power-up process.

PREVENTATIVE MAINTENANCE

- Periodically inspect the ETC HLA. Check that the cable has not become worn or that the housing has not been damaged so as to impair the protection of the ETC HLA. Replace the ETC HLA immediately if any damage is found or suspected.
- Periodically check to see that the float is free to move and manually tip the float.
- Use only ETC suggested replacement parts.

ETC ONE-YEAR LIMITED WARRANTY

ETC warrants to the original consumer that this product shall be free of manufacturing defects for one year after the date of purchase. During the time period and subject to the conditions set forth below, **ETC** will repair or replace, for the original consumer, any component which proves to be defective due to defective materials or workmanship of **ETC**. This express warranty does not apply to the float switch or septic tank. Electrical wiring and servicing of this product must be performed by a licensed electrician.

This warranty does not apply:

- (a) To damage due to lightning or conditions beyond the control of **ETC**;
- (b) To defects or malfunctions resulting from failure to properly install, operate or maintain the unit in accordance with printed instructions provided;
- (c) To failures resulting from abuse, misuse, accident or negligence;
- (d) To units which are not installed in accordance with applicable local codes, ordinance, or accepted trade practices;
- (e) To units repaired and/or modified without prior authorization from **ETC**.

Some jurisdictions do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from jurisdictions to jurisdictions.

To obtain warranty service: The consumer shall assume all responsibility and expenses for removal, re-installation and freight. Any items to be repaired or replaced under warranty must be returned to **ETC**, or such place as designated by **ETC**.

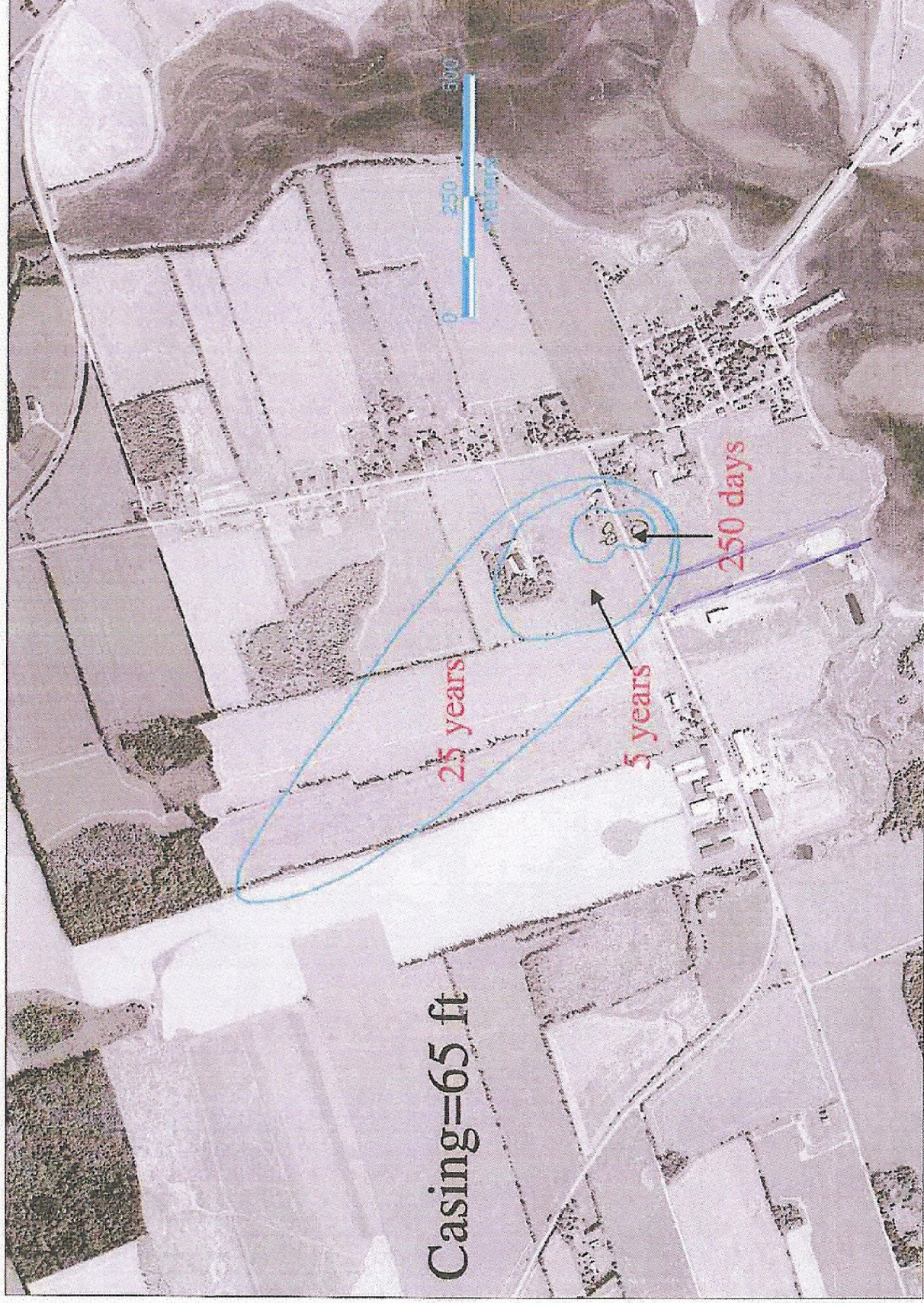
Any implied warranties of merchantability or fitness are limited to the duration of this written warranty. ETC shall not, in any manner, be liable for any incidental or consequential damages as a result of a breach of this written warranty or any implied warranty.

Appendix J

Well Field Protection Area

**Victoria Commission Corporation
Municipal Servicing Standards**

Well field captured zones, Victoria



Casing=65 ft

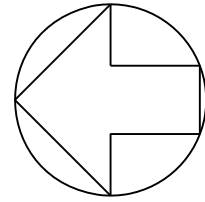
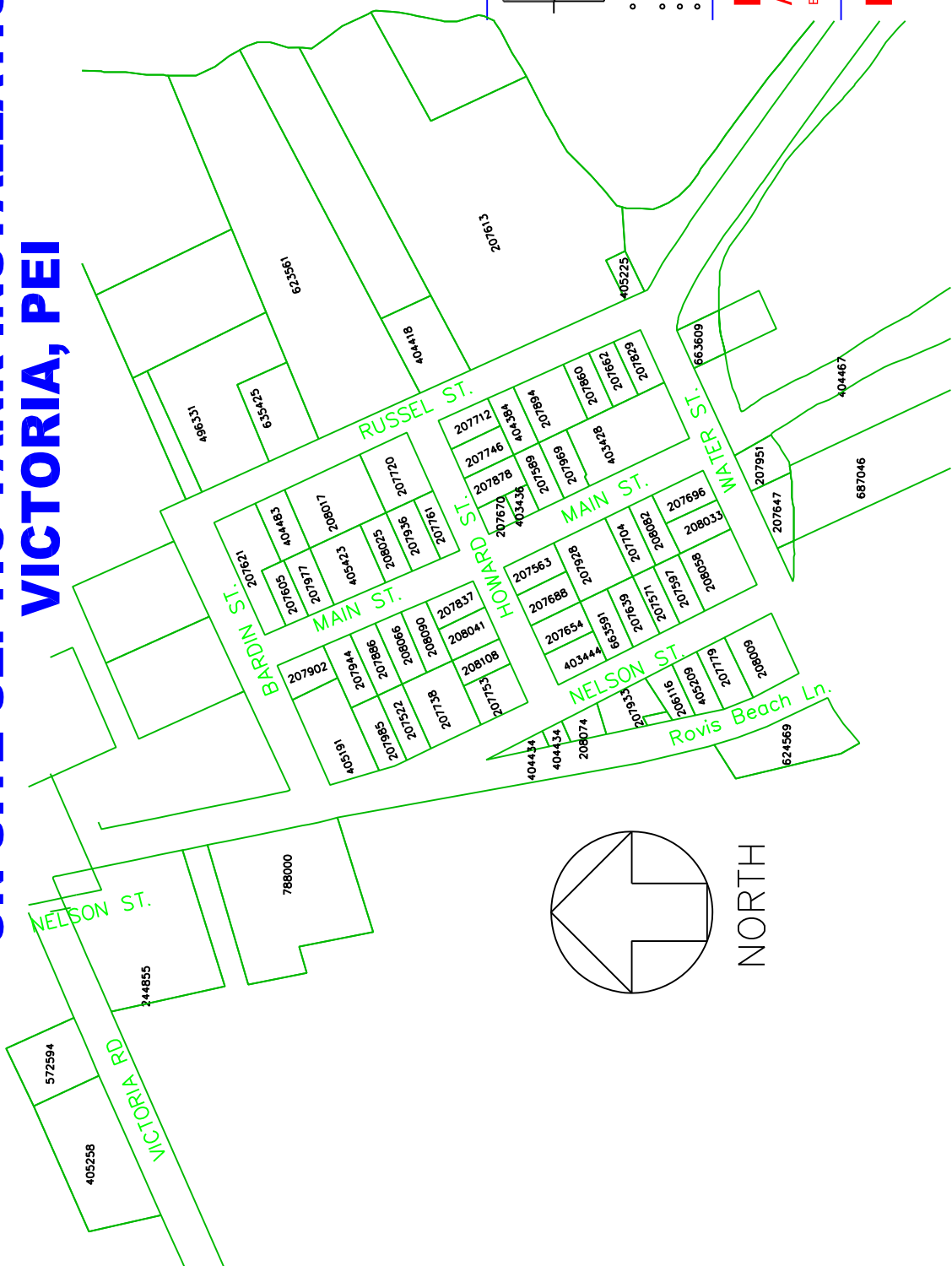
QA=30 igpm (10 igpm for each of the three wells)

Appendix K

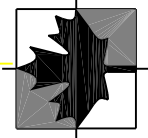
Keyplan, Legend and Table of Contents (Record Drawings)

**Victoria Commission Corporation
Municipal Servicing Standards**

COMMUNITY OF VICTORIA WASTEWATER TREATMENT SYSTEM ON-SITE SEPTIC TANK INSTALLATIONS VICTORIA, PEI



NORTH



**Engineering
Technologies
Canada Ltd.**

16 Myrtle St. Unit #1
Stratford, PE
Canada, C1B 2W2
(902) 628-1705 TEL
(902) 628-1703 FAX
www.engtech.ca

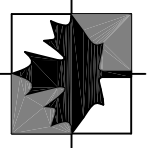
- o Innovative Wastewater Management & Design
- o Environmental Engineering
- o Geotechnical Engineering
- o Geographic Information Systems

P.O. Box 1653
Charlottetown
Prince Edward Island
Canada, C1A 7N4
Tel: (902) 368-3365
Fax: (902) 626-3412

**HARLAND 02
ASSOCIATES INC**
ENGINEERS, PROJECT MANAGERS.

**RECORD DRAWINGS
AUGUST 2008**

2			
1	RECORD DRAWINGS	06/--/08	
No.	R E V I S I O N S	By	MM/DD/YY



Engineering Technologies Canada Ltd.

16 Myrtle St., Unit #1
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 www.engtech.ca

- o Innovative Westcoast Management & Design
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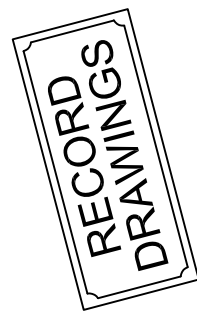
HARLAND 02 ASSOCIATES INC

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 Canada, C1A 7N4

Tel: (902) 368-3365
 Fax: (902) 626-3412

ENGINEERS. PROJECT MANAGERS.

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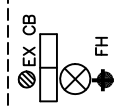


COMMUNITY OF VICTORIA WASTE WATER TREATMENT SYSTEM

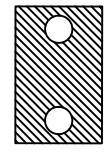
LEGEND

LEGEND

- RIGHT OF WAY
- PROPERTY LINE
- EDGE OF ASPHALT
- SHOULDER
- BACK OF SLOPE
- EXISTING C/L OF DITCH
- COLLECTION GRAVITY LINE
- COLLECTION PRESSURE LINE
- BUILDING SEWER AND STEG SERVICE LATERAL
- STEP LATERAL
- EXISTING MANHOLE
- NEW MANHOLE
- EX FORCEMAIN
- NEW FORCEMAIN
- EXISTING STORM
- CATCHBASIN
- STRAWBALE CHECKDAM
- UNDER SIDING - 2.438m
- FIRE HYDRANT
- NEW WATERMAIN
- SPOT ELEVATION
- FLOWER BED
- BUSH
- EDGE OF BUSH
- TREE
- INVERT ELEVATION
- CORRUGATED STEEL PIPE
- GUY WIRE
- UTILITY POLE
- NEW 1200 lgal SEPTIC TANK
- TOP OF TANK



+38.60



TOT 6.016m

* ALL DIMENSIONS IN METERS UNLESS OTHERWISE NOTED.

Date: JUNE 9, 2006 Sheet

Scale: NTS

Drawn: CEM/KAG

DESIGN: KAG

L1

File No: 05166-3B-72-2

Rev No. **0**

COMMUNITY OF VICTORIA WASTEWATER TREATMENT SYSTEM ON-SITE SEPTIC TANK INSTALLATIONS

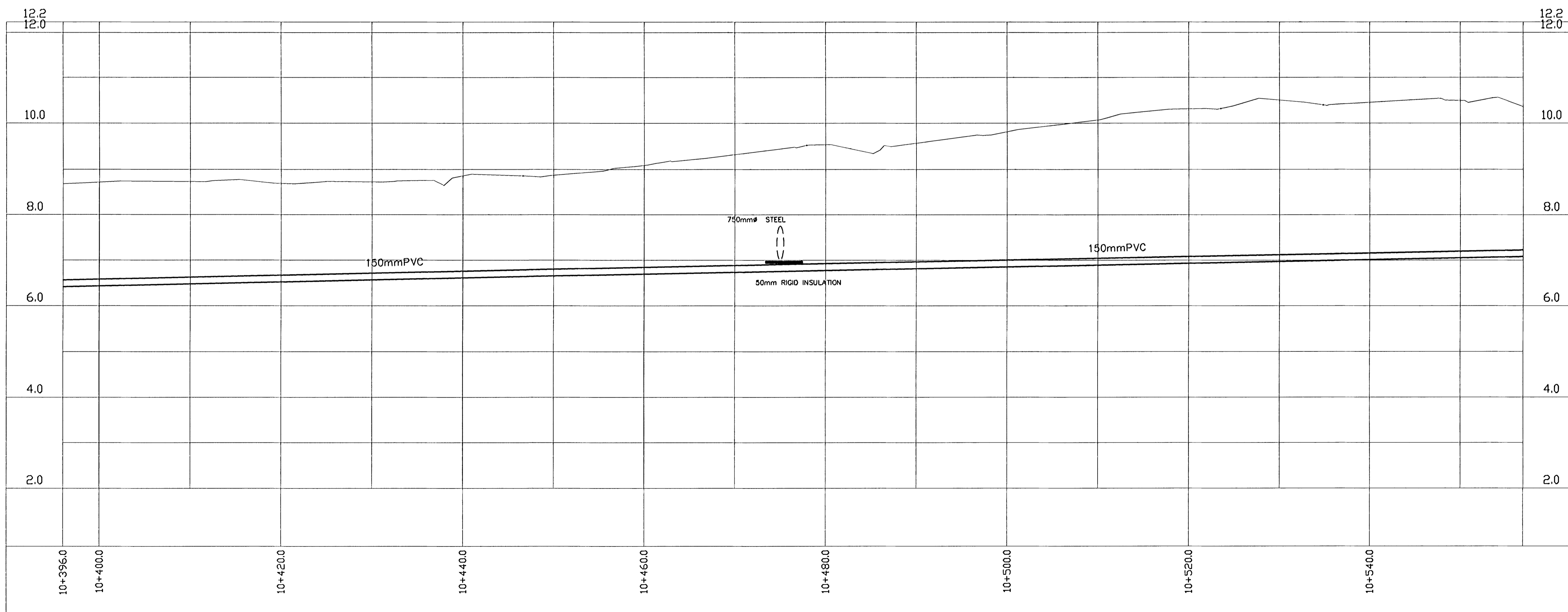
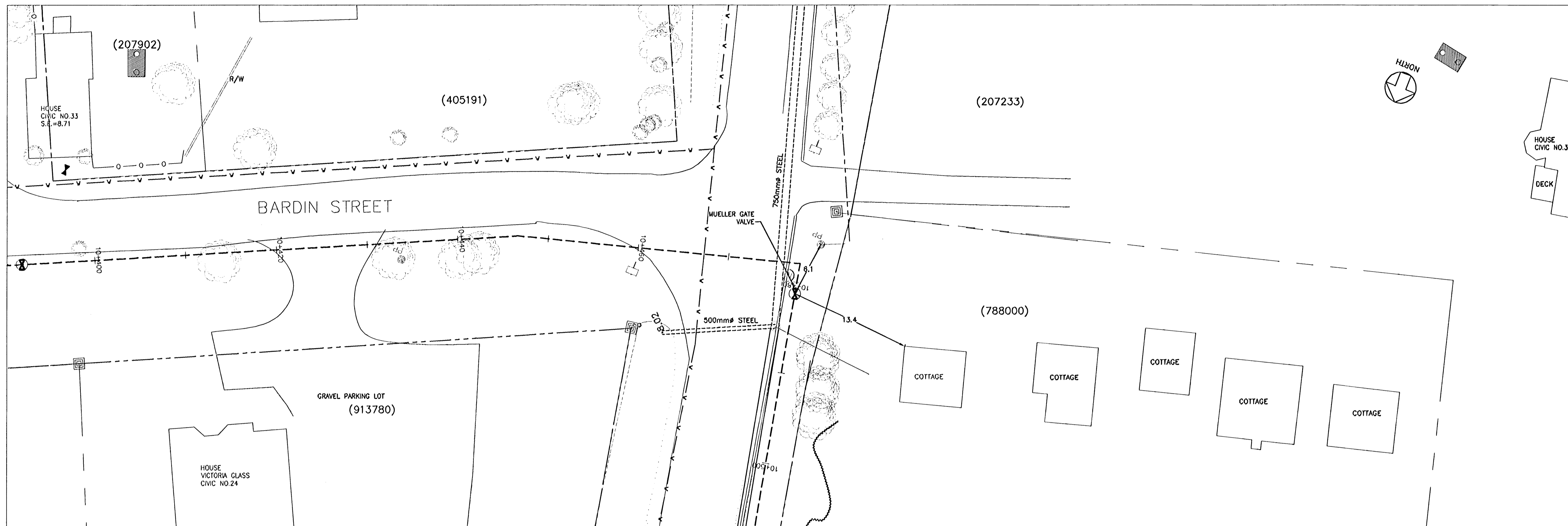
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D2	STEP DETAIL	10M	10 Main St.	403436	24N	24 Nelson St.	207738
D3	RISER DETAIL	11M	11 Main St.	207563	26N	26 Nelson St.	207522
E3	STEP DETAIL ELECTRICAL	12M	12 Main St.	207670	28N	28 Nelson St.	207985
E4	STEP DETAIL ELECTRICAL	22M	22 Main St.	207936	31N	31 Nelson St.	207233
GN	GENERAL NOTES	24M	24 Main St.	208025	3R	3 Russell St.	207662
L1	LEGEND	25M	25 Main St.	208090	5R	5 Russell St.	207860
2H	2 Howard St.	27M	27 Main St.	208066	9R	9 Russell St.	207894
3H	3 Howard St.	28M	28 Main St.	405423	13R	13 Russell St.	207712
5H	5 Howard St.	29M	29 Main St.	207886	14R	14 Russell St.	404418
6H	6 Howard St.	30M	30 Main St.	207977	23R	23 Russell St.	208017
20H	20 Howard St.	31M	31 Main St.	207944	24R	24 Russell St.	635425
22H	22 Howard St.	32M	32 Main St.	207605	28R	28 Russell St.	496331
23H	23 Howard St.	33M	33 Main St.	207902	30RB	30 Rovis Bch Ln.	624569
24H	24 Howard St.	34M	34 Main St.	207621	2W	2 Water St.	207829
25H	25 Howard St.	1N	1 Nelson St.	208009	20W	20 Water St.	207696
26H	26 Howard St.	3N	3 Nelson St.	207779	22W	22 Water St.	208033
5M	5 Main St.	4N	4 Nelson St.	207597	65N	65 Nelson St.	244855
6M	6 Main St.	8N	8 Nelson St.	207639	724V	724 Victoria	572594
7M	7 Main St.	10N	10 Nelson St.	663591	730V	730 Victoria Rd.	405258
		11N	11 Nelson St.	207993	19W-1	19 Water St.	Rd. 404467
		13N	13 Nelson St.	208074	19W-2	19 Water St.	404467
					27W	27 Water St.	207647

Appendix L

Bardin Street Record Drawings

**Victoria Commission Corporation
Municipal Servicing Standards**



- GENERAL NOTES:
1. THIS DRAWING IS NOT TO BE SCALED.
 2. DIMENSIONS ARE GIVEN IN METRES, UNLESS NOTED.
 3. PROPERTY LINES ARE APPROXIMATE ONLY.
 4. SEPTIC TANK LOCATIONS ARE APPROXIMATE AND SHOWN FOR INFORMATION ONLY. SEE UTILITY FOR DETAILED LOCATIONS.

LEGEND

RIGHT OF WAY	---
PROPERTY LINE	---
EDGE OF ASPHALT	---
SHOULDER	---
BACK OF SLOPE	---
C/L OF DITCH	---
SANITARY SERVICE	---
SANITARY MANHOLE	---
FORCE MAIN	---
STORM CATCHBASIN	---
STRAWBALE CHECKDAM	---
UNDER SOING - 2.43m	---
FIRE HYDRANT	---
WATER MAIN	---
SPOT ELEVATION	---
FLOWER BED	---
BUSH	---
EDGE OF BUSH	---
TREE	---
INVERT ELEVATION	---
CORRUGATED STEEL PIPE	---
CUY WIRE	---
UTILITY POLE	---

3		
2		
1		
ISSUED FOR RECORD DRAWINGS		01/14/08
No.	REVISIONS	By MM/DD/YY

Engineering Technologies Canada Ltd.

- Innovative Wastewater Management & Design
- Environmental Engineering
- Geotechnical Engineering
- Geographic Information Systems

18 Myrtle St., Unit #1
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MACDONALD HARLAND ENGINEERING INC
 ENGINEERS PROJECT MANAGERS

9 Queen St
 Charlottetown, PE
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PROFESSIONAL ENGINEER
 Gary M. MacDonald
 No. 830
 PRINCE EDWARD ISLAND

Project Name:
COMMUNITY OF VICTORIA WASTEWATER COLLECTION SYSTEM VICTORIA, PEI

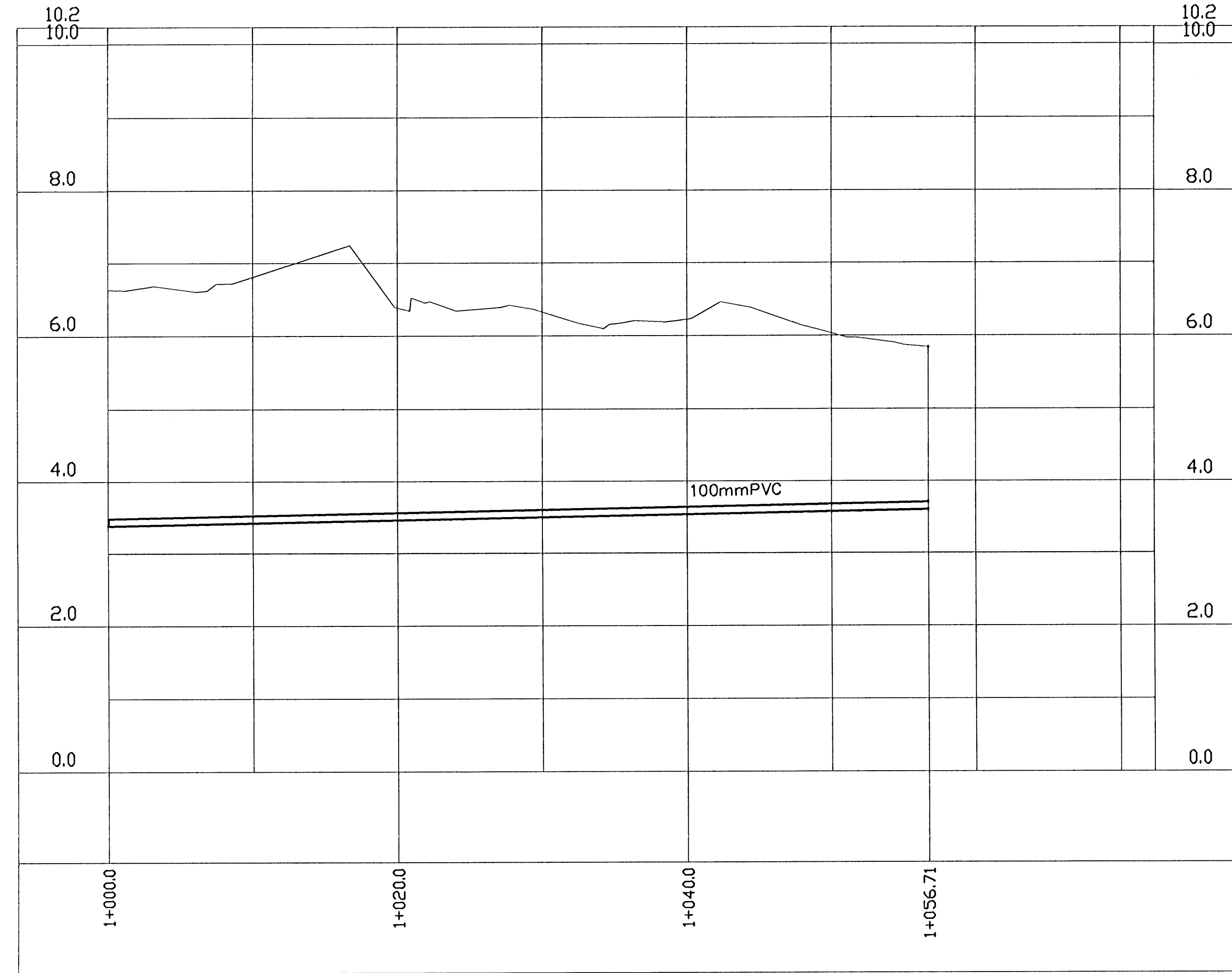
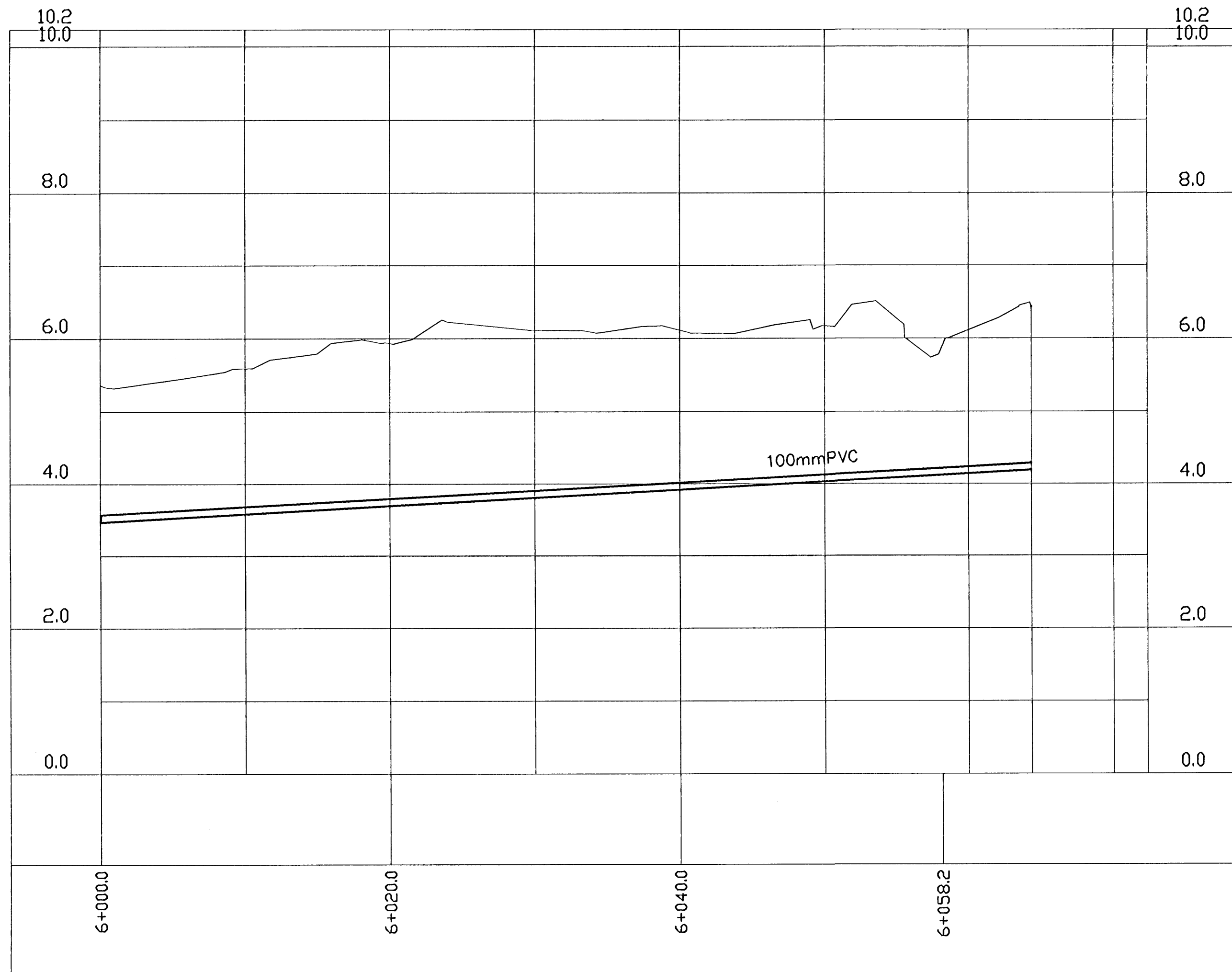
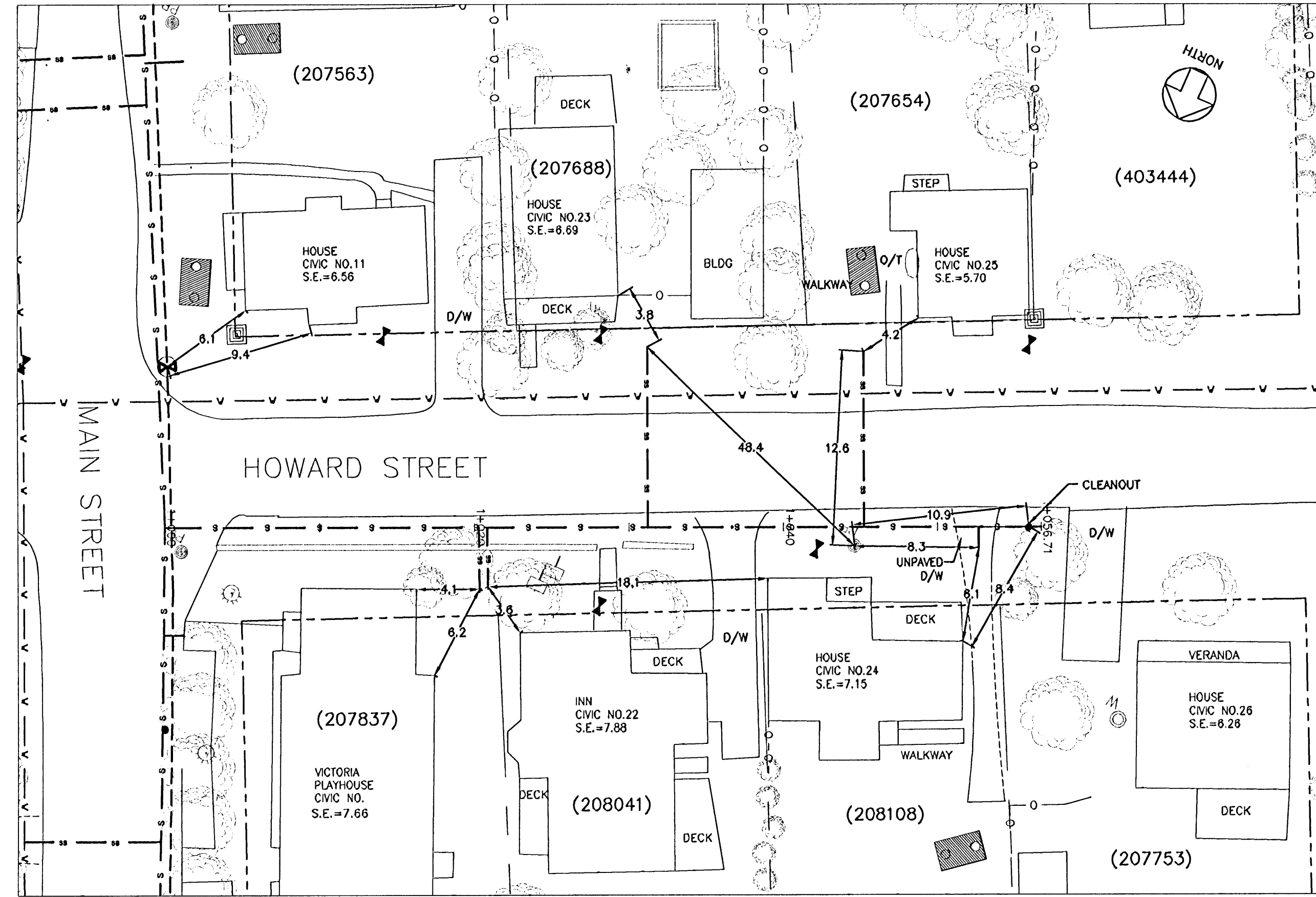
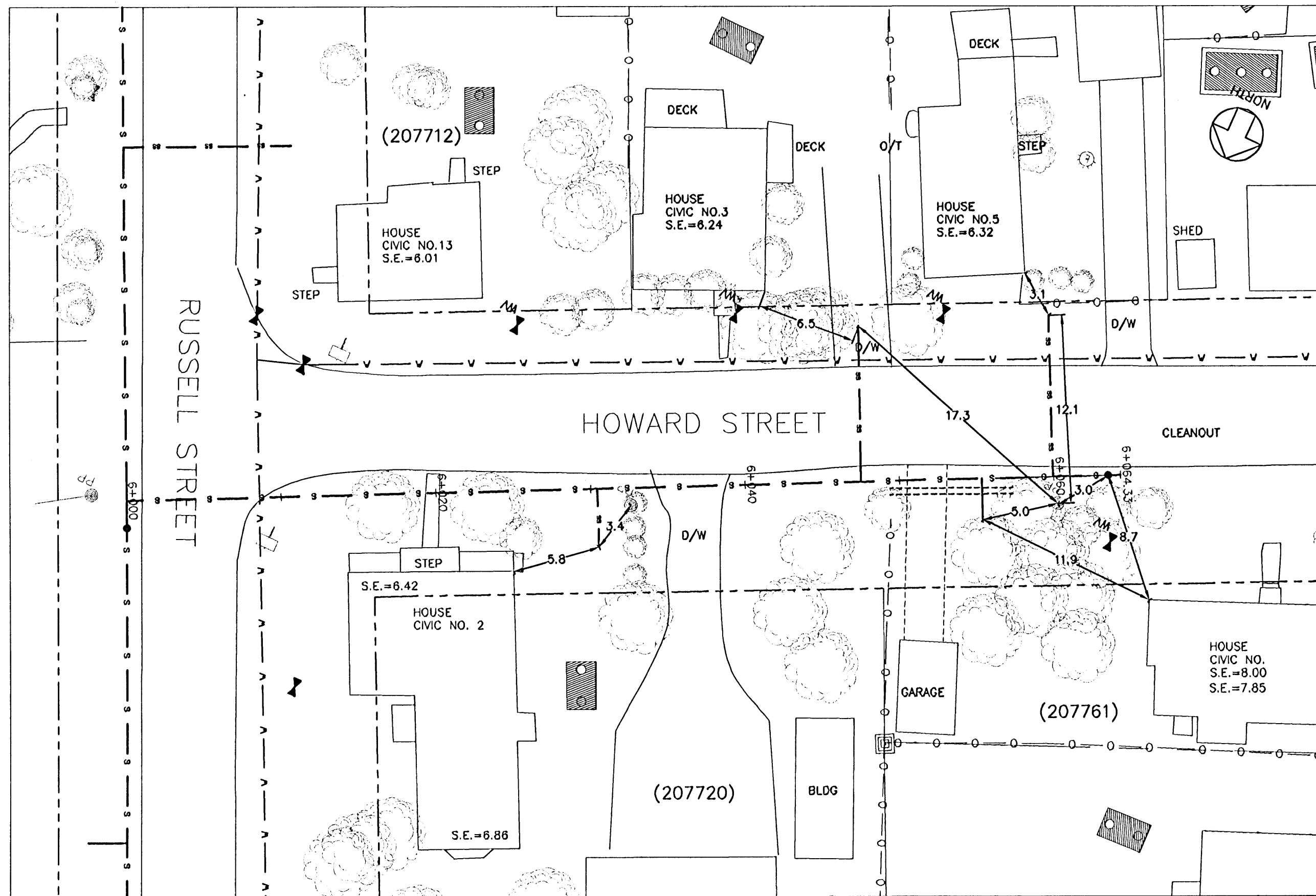
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Drawn	M.M. / G.M.D	
DESIGN	G.M.D	
File No:	RECORD-534_01.12.08	Rev No. 0

Appendix M

Howard Street Record Drawings

**Victoria Commission Corporation
Municipal Servicing Standards**



- GENERAL NOTES:
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LEGEND

RIGHT OF WAY	---
PROPERTY LINE	---
EDGE OF ASPHALT	---
SHOULDER	---
BACK OF SLOPE	---
C/L OF DITCH	---
SANITARY SERVICE	---
SANITARY MANHOLE	---
FORCEMAIN	---
STORM	---
CATCHBASIN	---
STRAWBALE CHECKDAM	---
UNDER SIDING - 2.438m	---
FIRE HYDRANT	---
WATERMETER	---
SPOT ELEVATION	---
FLOWER BED	---
BUSH	---
EDGE OF BUSH	---
TREE	---
INVERT ELEVATION	---
CORRUGATED STEEL PIPE	---
GY WIRE	---
UTILITY POLE	---

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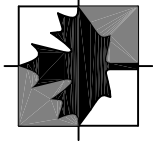
PROFESSIONAL ENGINEER
Gary M. MacDonald
No. 630
PRINCE EDWARD ISLAND

Project Name:
COMMUNITY OF VICTORIA WASTEWATER COLLECTION SYSTEM VICTORIA, PEI

Drawing Title:
HOWARD ST(E) STA. 6+000 TO STA. 6+058 HOWARD ST STA. 1+000 TO STA. 1+054

Date	JANUARY 12, 2008	Sheet
Scale	1:250 HORIZONTAL, 1:50 VERTICAL	C8
Drawn	M.M. / G.M.D	
DESIGN	G.M.D	
File No:	RECORD-534_01.12.08	Rev No. 0

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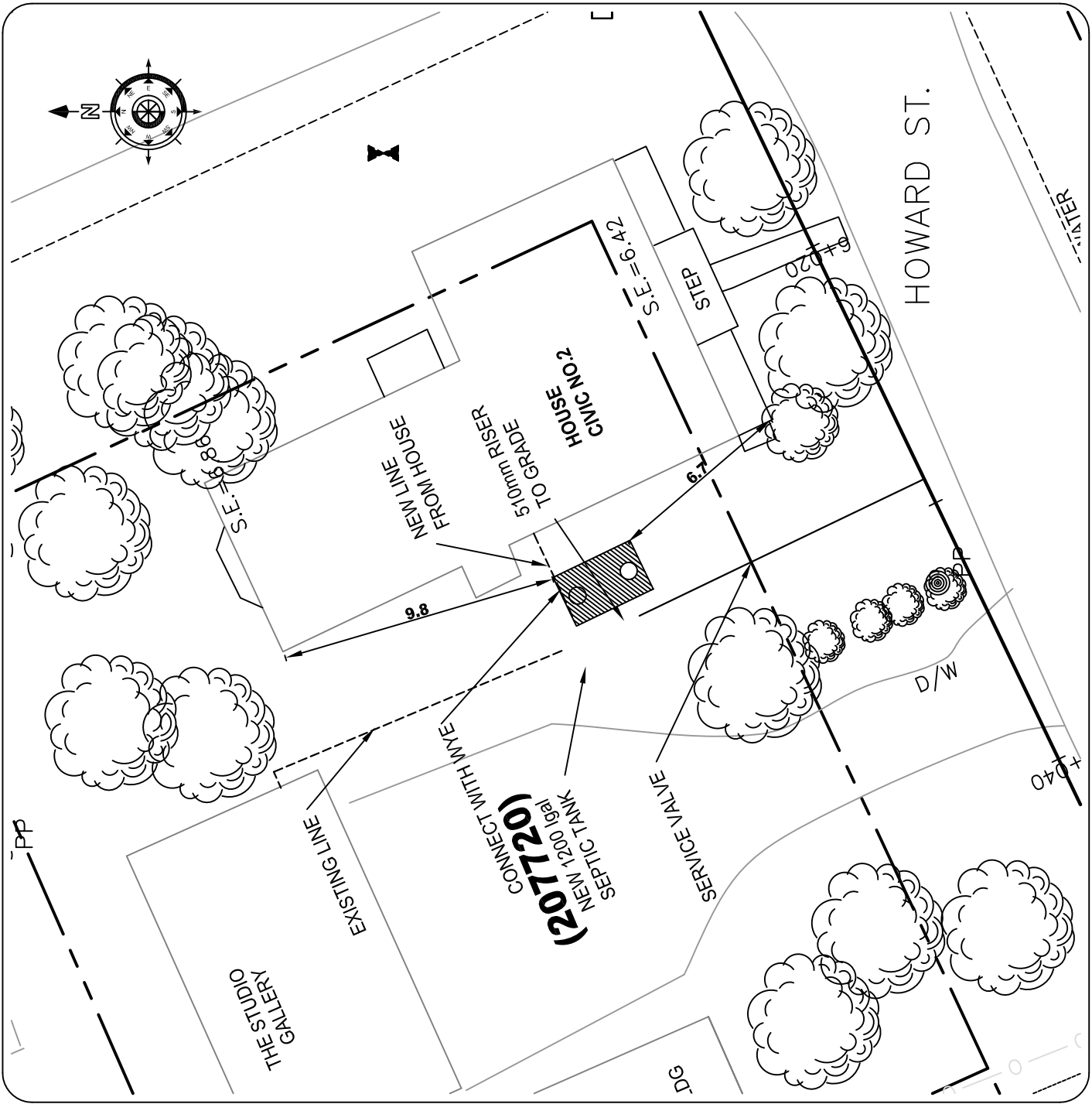
DRAFT

**COMMUNITY OF VICTORIA
WASTEWATER TREATMENT
SYSTEM**

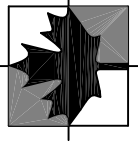
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Date: September 04, 2008	Sheet
Scale: 1:200	2H
Drawn: C.E.M.	
DESIGN: K.A.G.	

File No: 05166-3B-72-2 Rev No. **0**



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1			
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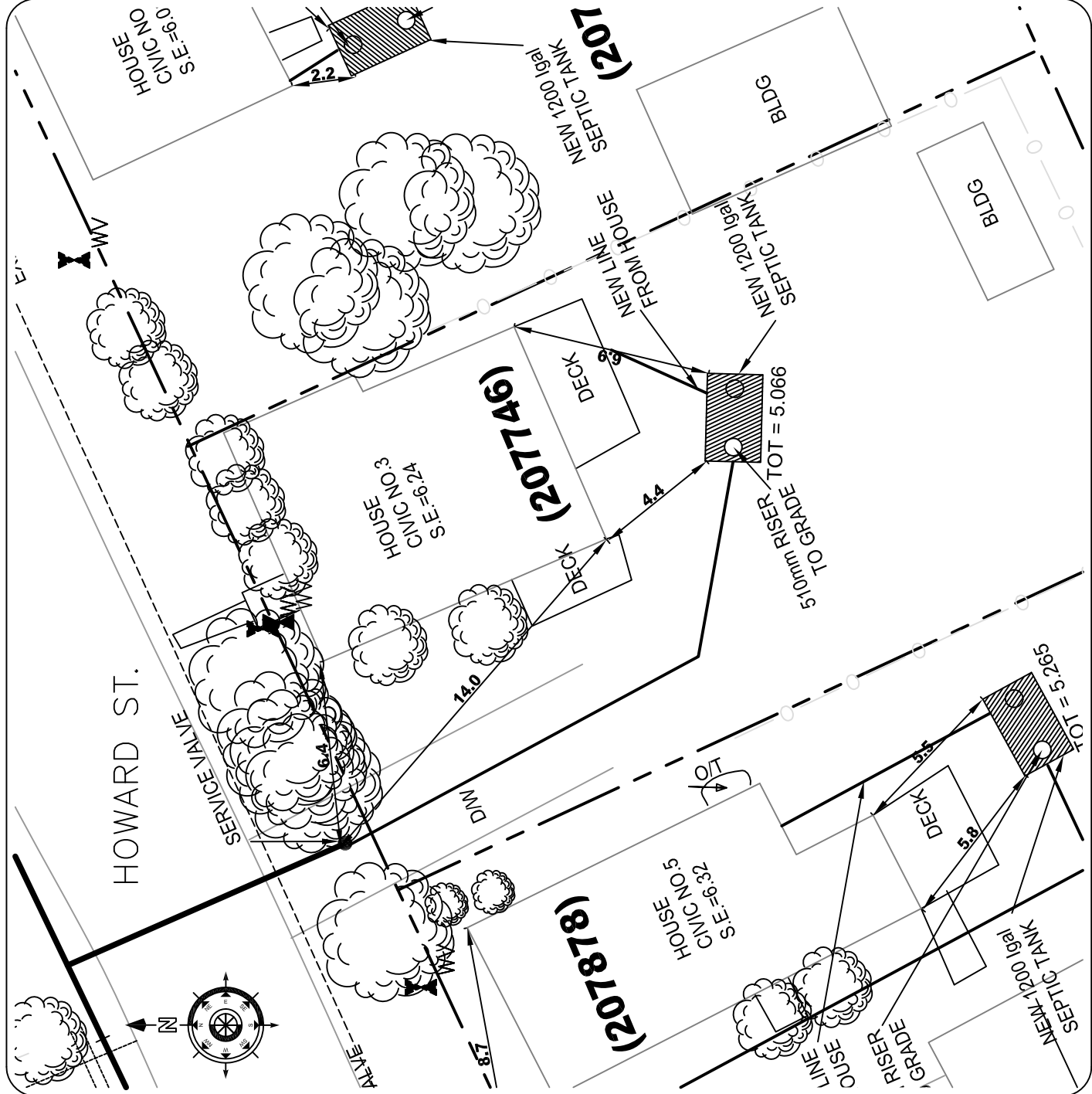
RECORD DRAWINGS

COMMUNITY OF VICTORIA WASTEWATER TREATMENT SYSTEM

3 Howard St.

Date: July 30, 2008	Sheet
Scale: 1:200	3H
Drawn: C.E.M.	
DESIGN: K.A.G.	

File No: 05166-3B-72-2 Rev No. **0**



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1			
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**COMMUNITY OF VICTORIA
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SYSTEM**

5 Howard St.

Date: July 30, 2008

Sheet

Scale: 1:200

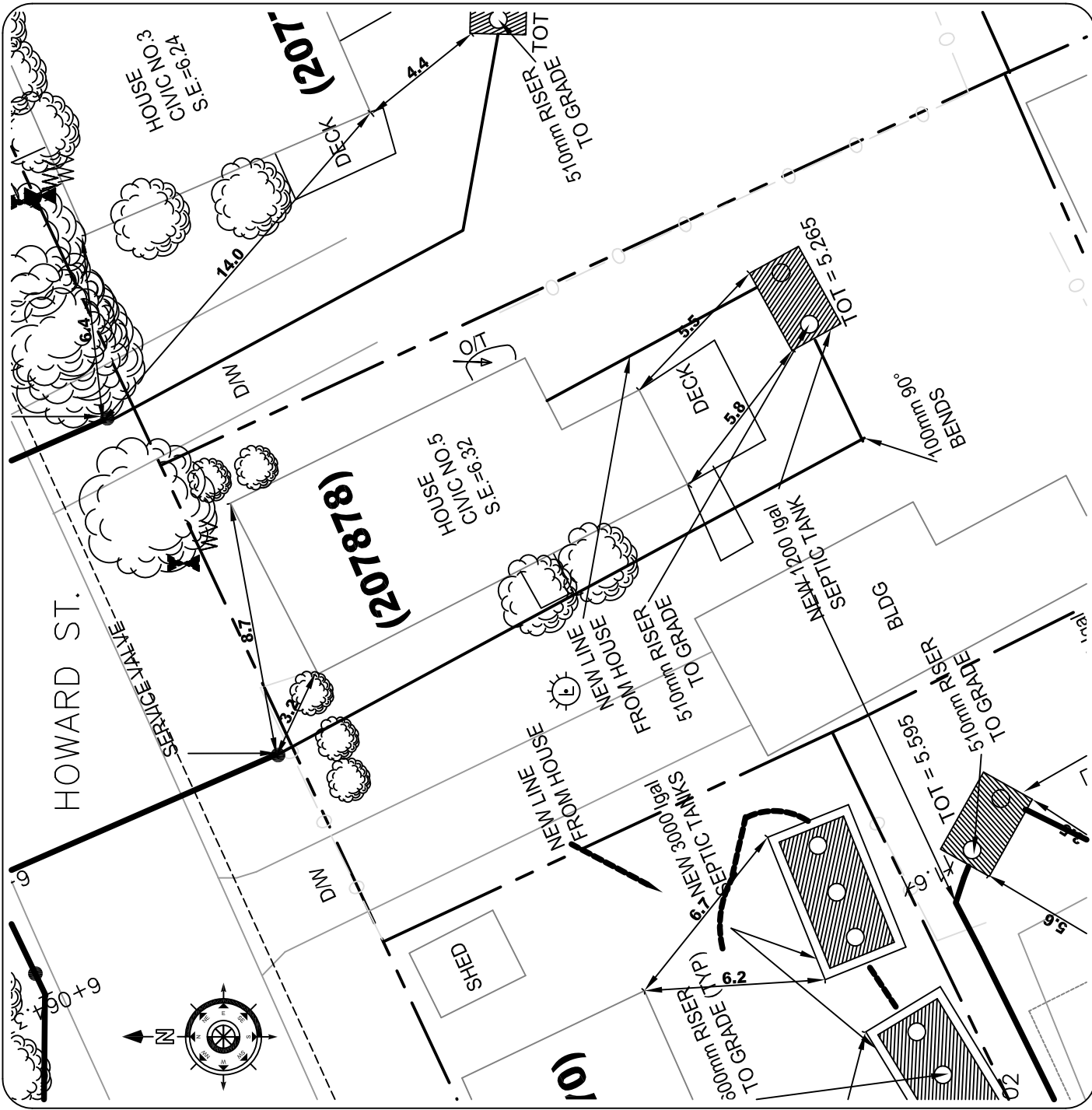
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Drawn: C.E.M.

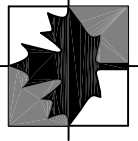
DESIGN: K.A.G.

File No: 05166-3B-72-2

Rev No. **0**



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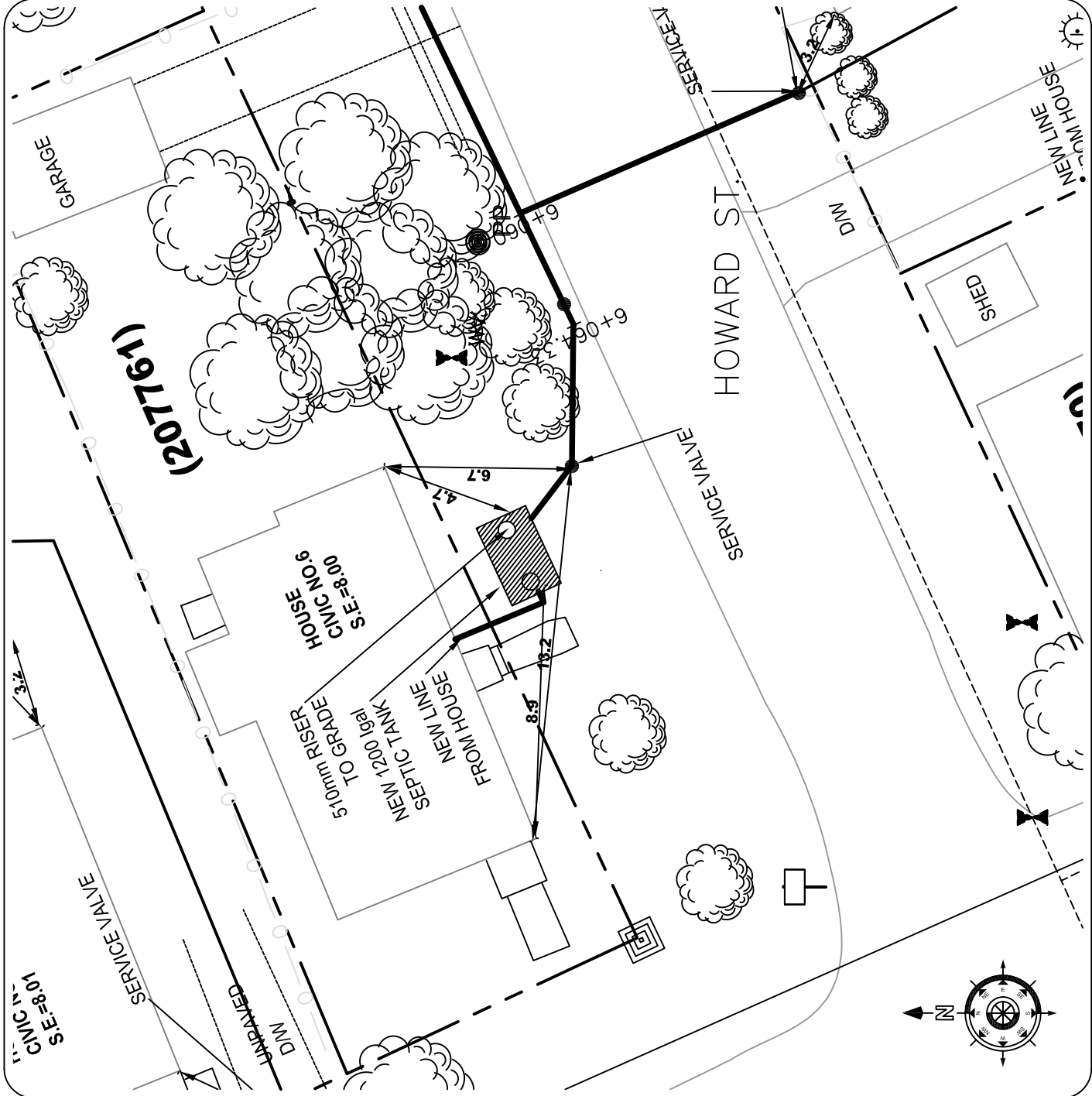
DRAFT

COMMUNITY OF VICTORIA WASTEWATER TREATMENT SYSTEM

6 Howard St.

Date: July 30, 2008	Sheet
Scale: 1:200	6H
Drawn: C.E.M.	
DESIGN: K.A.G.	

File No: 05166-3B-72-2 Rev No. **0**



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RECORD DRAWINGS

DRAFT

**COMMUNITY OF VICTORIA
WASTEWATER TREATMENT
SYSTEM**

20 Howard St.

Date: July 30, 2008

Sheet

Scale: 1:200

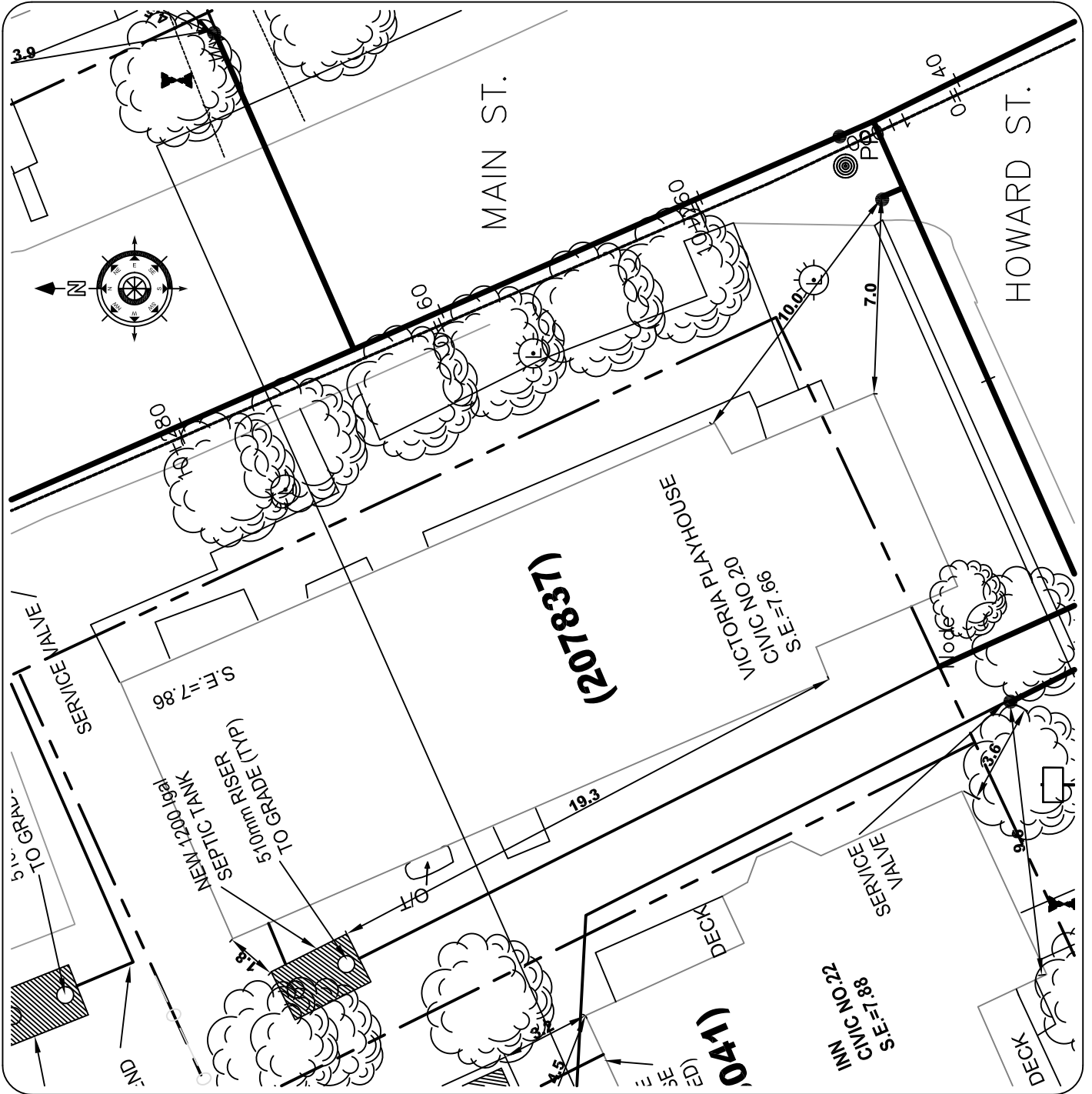
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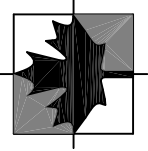
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20H

File No: 05166-3B-72-2

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**COMMUNITY OF VICTORIA
WASTEWATER TREATMENT
SYSTEM**

22 Howard St.

Date: July 30, 2008

Scale: 1:200

Drawn: C.E.M.

DESIGN: K.A.G.

Sheet

22H

File No: 05166-3B-72-2

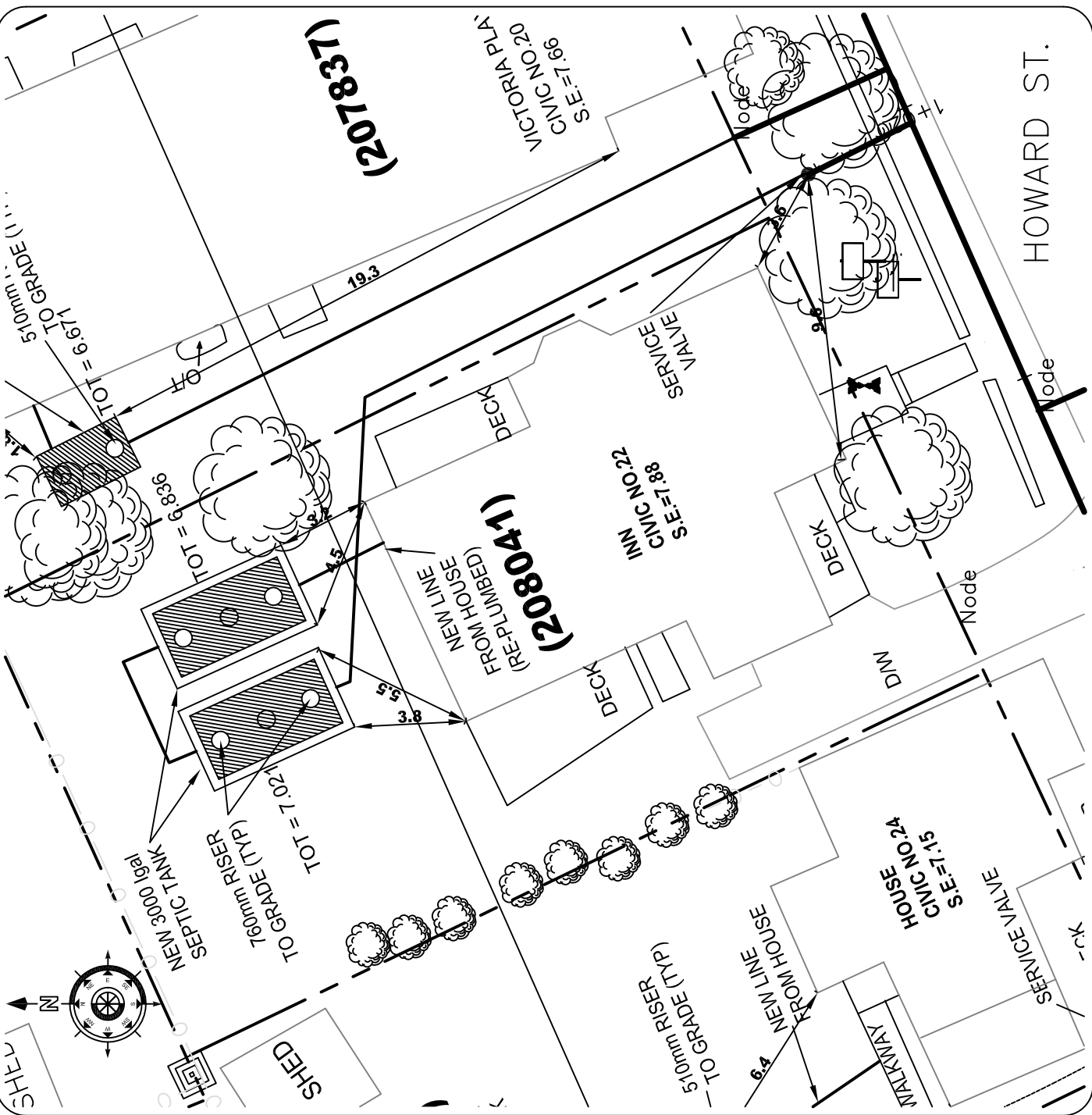
Rev No. **0**

No. R E V I S I O N S

By

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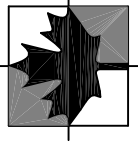
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(208041)

HOWARD ST.

CHECK

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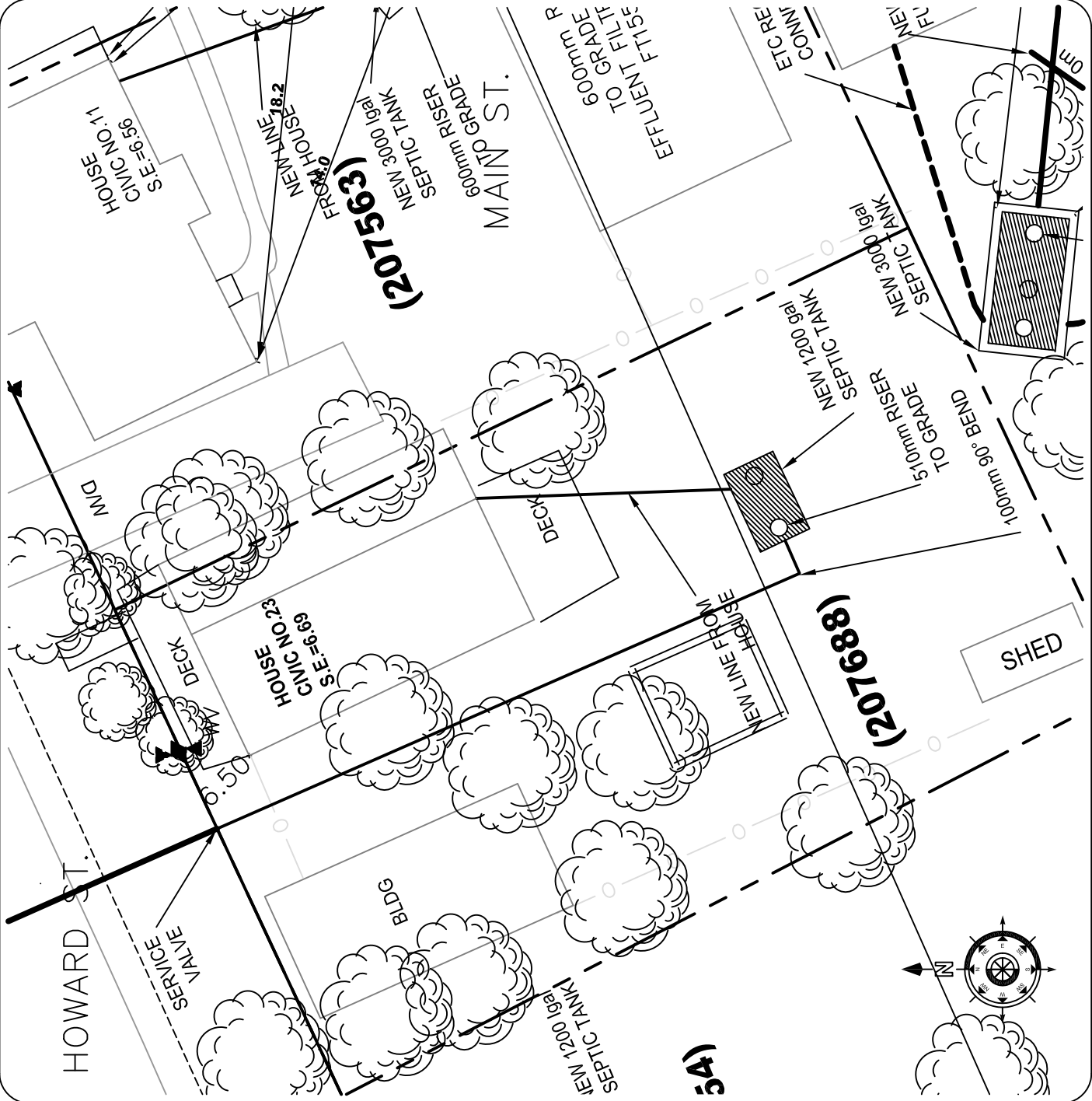
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COMMUNITY OF VICTORIA WASTEWATER TREATMENT SYSTEM

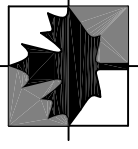
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Date: July 30, 2008	Sheet
Scale: 1:200	23H
Drawn: C.E.M.	
DESIGN: K.A.G.	

File No: 05166-3B-72-2 Rev No. **0**



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**COMMUNITY OF VICTORIA
WASTEWATER TREATMENT
SYSTEM**

24 Howard St.

Date: July 30, 2008

Sheet

Scale: 1:200

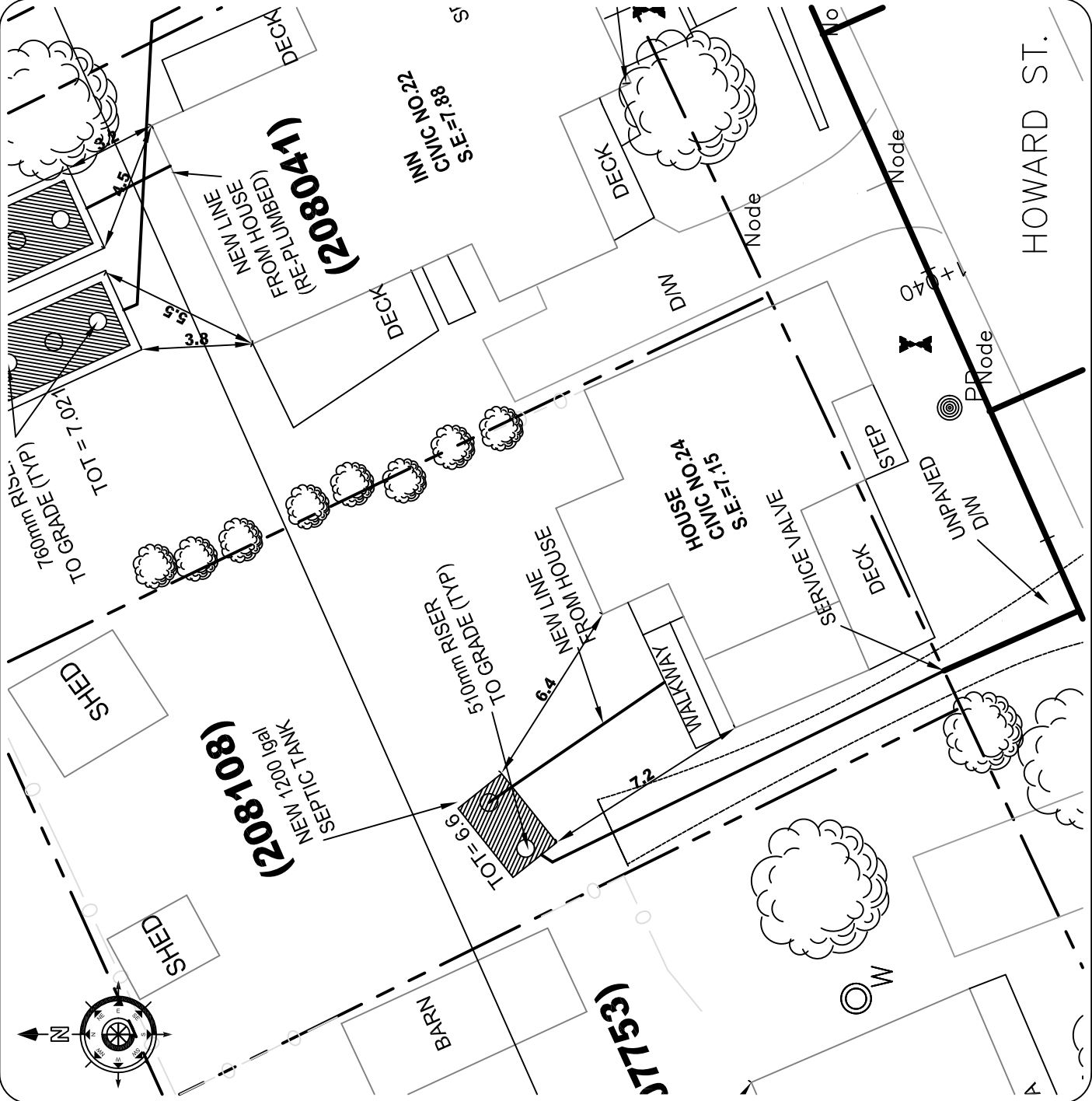
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DESIGN: K.A.G.

24H

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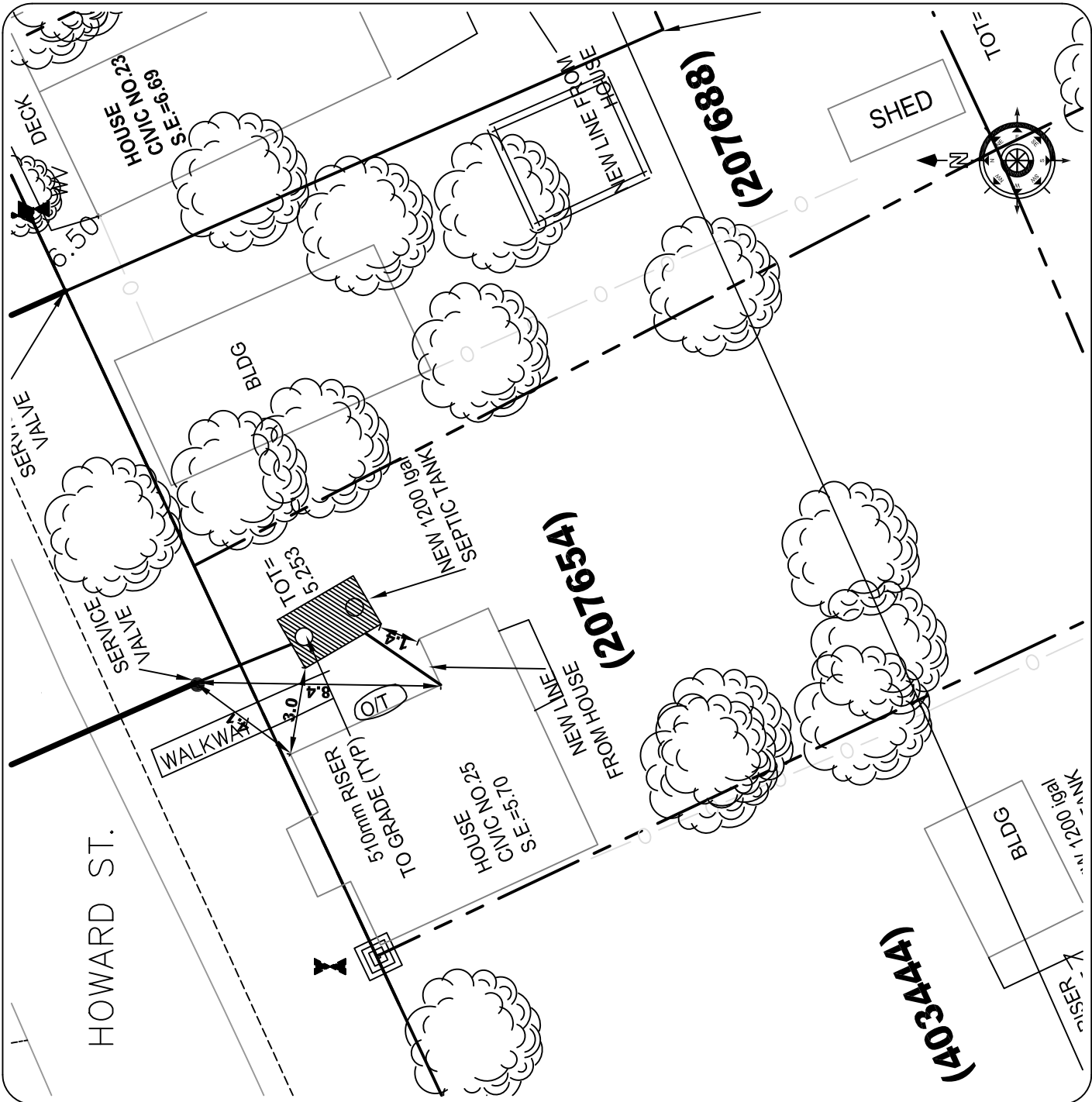
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COMMUNITY OF VICTORIA WASTEWATER TREATMENT SYSTEM

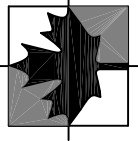
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Date: July 30, 2008	Sheet
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Drawn: C.E.M.	
DESIGN: K.A.G.	

File No: 05166-3B-72-2 Rev No. **0**



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26 Howard St.

Date: July 30, 2008

Sheet

Scale: 1:200

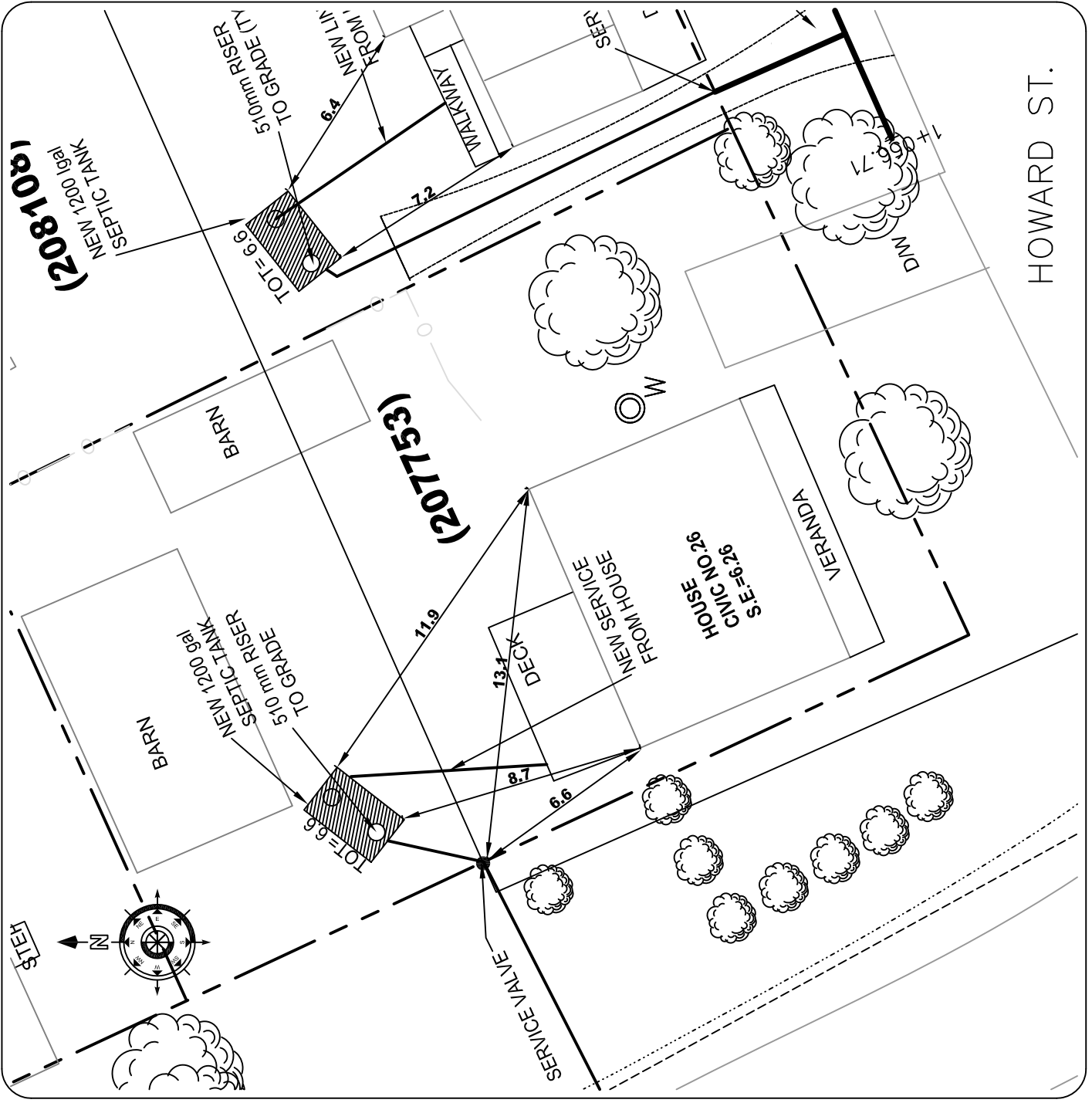
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Drawn: C.E.M.

DESIGN: K.A.G.

File No: 05166-3B-72-2

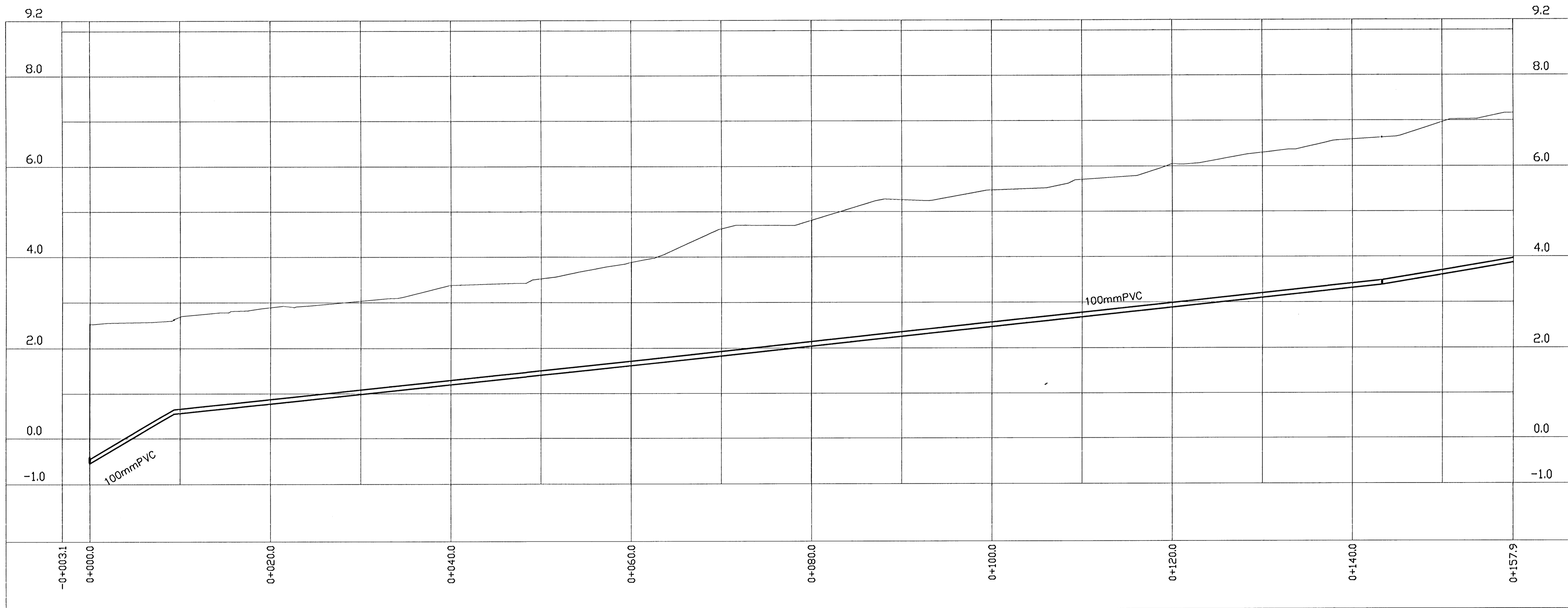
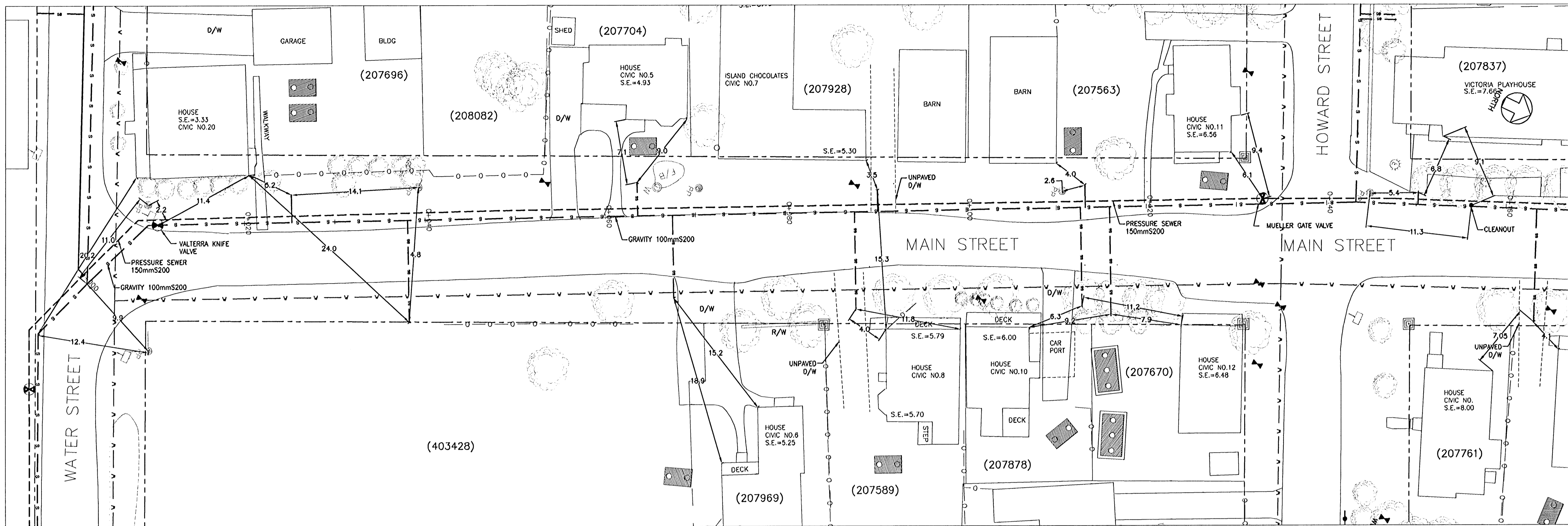
Rev No. **0**



Appendix N

Main Street Record Drawings

**Victoria Commission Corporation
Municipal Servicing Standards**



GENERAL NOTES:
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 3. PROPERTY LINES ARE APPROXIMATE ONLY.
 4. SEPTIC TANK LOCATIONS ARE APPROXIMATE AND SHOWN FOR INFORMATION ONLY. SEE UTILITY FOR DETAILED LOCATIONS.

LEGEND

RIGHT OF WAY	---
PROPERTY LINE	---
EDGE OF ASPHALT	---
SHOULDER	---
BACK OF SLOPE	---
C/L OF DITCH	---
SANITARY SERVICE	---
SANITARY MANHOLE	○
FORGEHAM SYSTEM	○
CATCHBASIN	○
STRANABLE CHECKDAM	○
UNDER SIDING - 2.438m	○
FIRE HYDRANT	○
WATERMANK	○
SPOT ELEVATION	○
FLOWER BED	○
BUSH	○
EDGE OF BUSH	○
TREE	○
INVERT ELEVATION	○
CORRUGATED STEEL PIPE	○
GUY WIRE	○
UTILITY POLE	○

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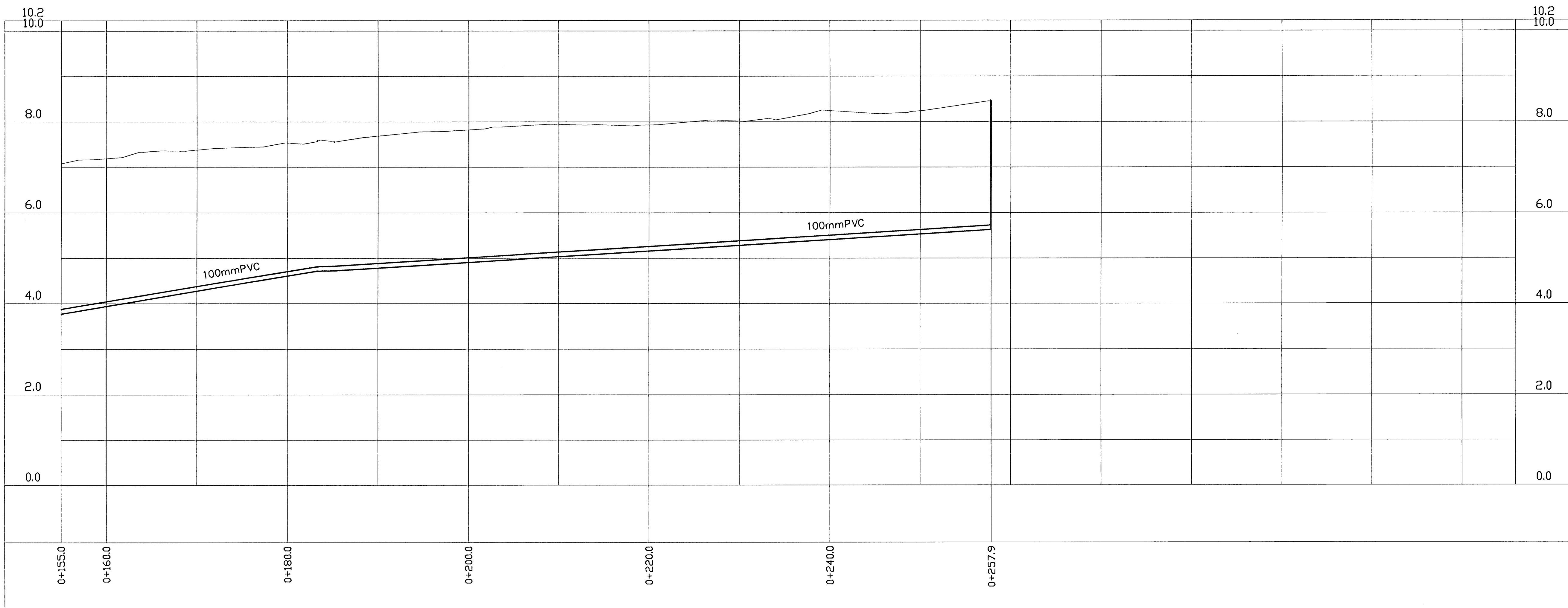
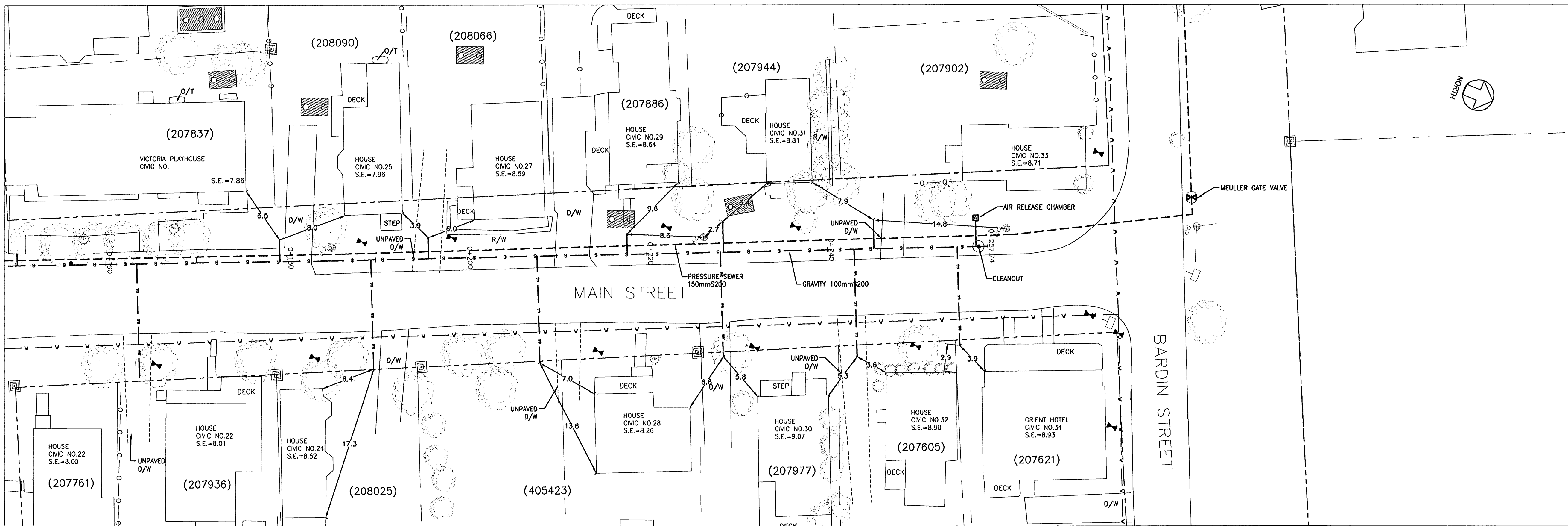
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Project Name:
COMMUNITY OF VICTORIA WASTEWATER COLLECTION SYSTEM VICTORIA, PEI

Drawing Title:
MAIN ST STA 0+000 TO STA 0+155

Date	JANUARY 12, 2008	Sheet
Scale	1:250 HORIZONTAL, 1:50 VERTICAL	C2
Drawn	M.M. / G.M.D	
DESIGN	G.M.D	
File No:	RECORD-534_01.12.08	Rev No. 0



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LEGEND

RIGHT OF WAY	---
PROPERTY LINE	---
EDGE OF ASPHALT	---
SHOULDER	---
BACK OF SLOPE	---
C/L OF DITCH	---
SANITARY SERVICE	---
SANITARY MANHOLE	---
FORCEMAIN	---
STORM CATCHBASIN	---
STRAWBALE CHECKDAM	---
UNDER SIDING - 2.438m	---
FIRE HYDRANT	---
WATERMAIN	---
SPOT ELEVATION	---
FLOWER BED	---
BUSH	---
EDGE OF BUSH	---
TREE	---
INVERT ELEVATION	---
CORRUGATED STEEL PIPE	---
GLY WIRE	---
UTILITY POLE	---

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2		
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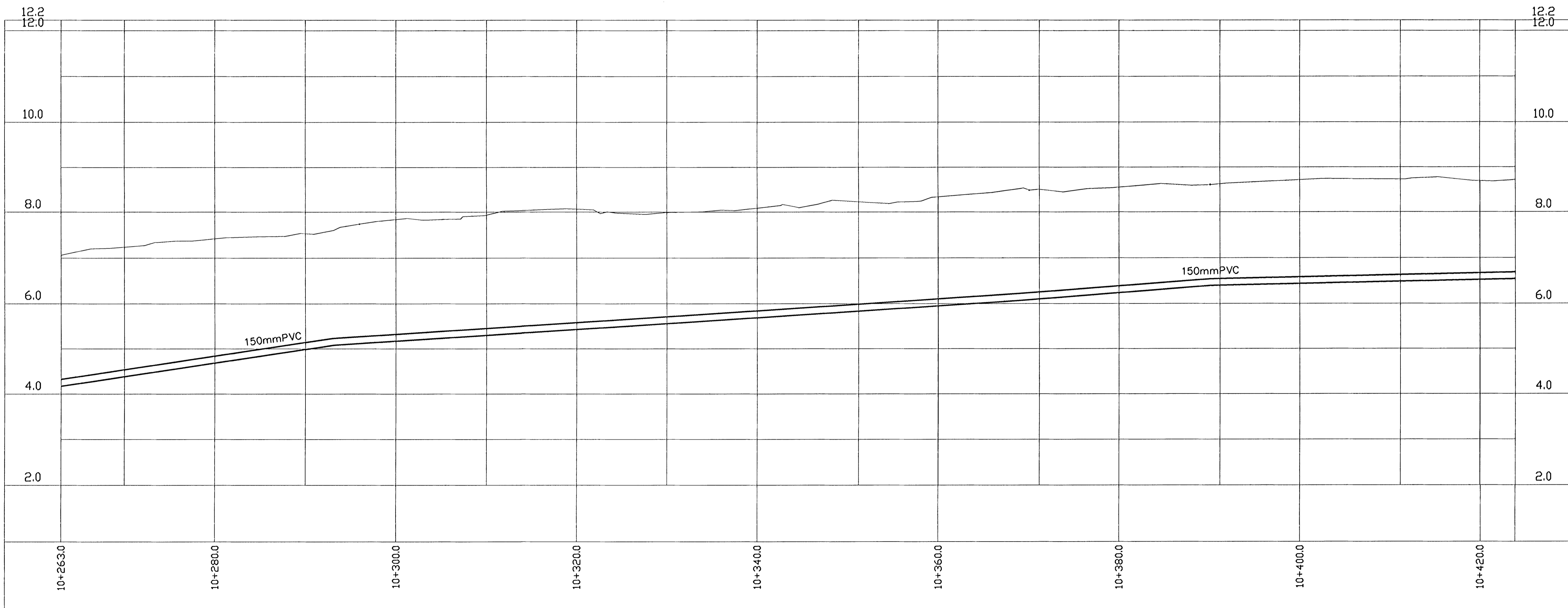
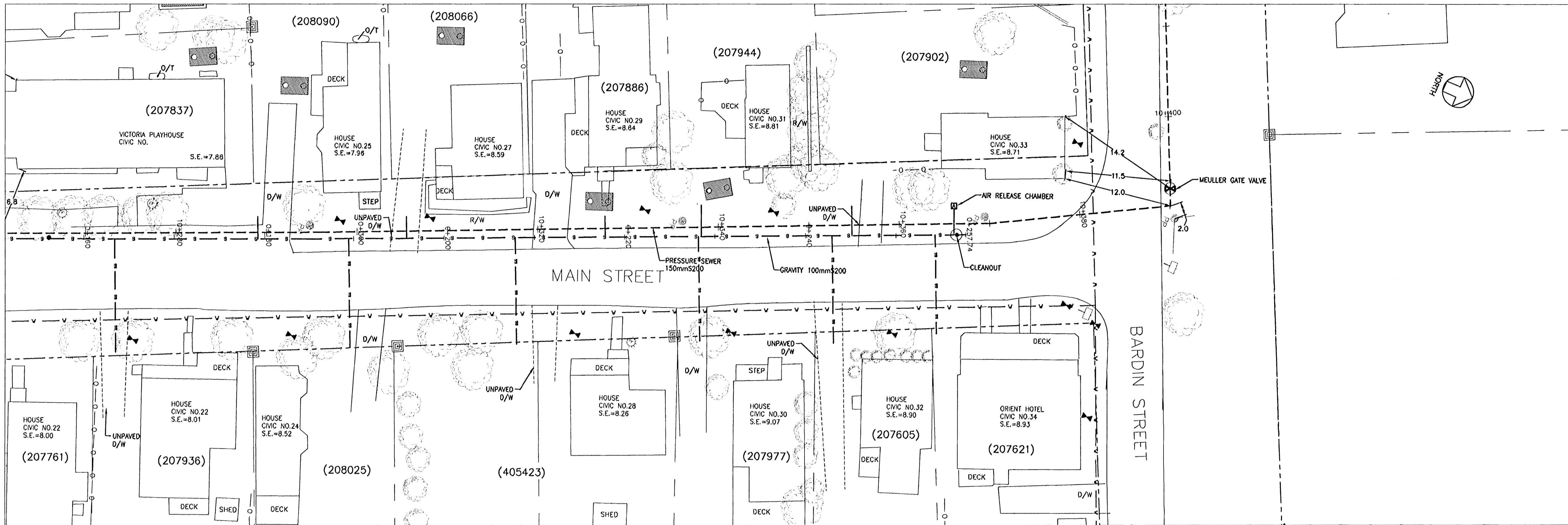
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PROFESSIONAL ENGINEER
 Garry M. MacDonald
 No. 630
 PRINCE EDWARD ISLAND

Project Name:
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Drawing Title:
MAIN ST STA. 0+155 TO STA. 0+257

Date	JANUARY 12, 2008	Sheet
Scale	1:250 HORIZONTAL, 1:50 VERTICAL	C3
Drawn	M.M. / G.M.D.	
DESIGN	G.M.D.	Rev No. 0
File No:	RECORD-534_01.12.08	



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LEGEND

RIGHT OF WAY	---
PROPERTY LINE	---
EDGE OF ASPHALT	---
SHOULDER	---
BACK OF SLOPE	---
C/L OF DITCH	---
SANITARY SERVICE	---
SANITARY MANHOLE	---
FORCEMAIN	---
STORM CATCHBASIN	---
STRAWBALE CHECKDAM	---
UNDER SIDING - 2.436m	---
FIRE HYDRANT	---
WATERMAIN	---
SPOT ELEVATION	---
FLOWER BED	---
BUSH	---
EDGE OF BUSH	---
TREE	---
INVERT ELEVATION	---
CORRUGATED STEEL PIPE	---
GLY WIRE	---
UTILITY POLE	---

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2		
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PROFESSIONAL ENGINEER
 Garry M. MacDonald
 No. 630
 PRINCE EDWARD ISLAND

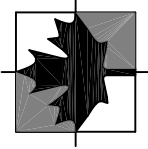
Project Name:
COMMUNITY OF VICTORIA WASTEWATER COLLECTION SYSTEM VICTORIA, PEI

Drawing Title:
PRESSURE SEWER MAIN ST STA. 10+263 TO STA. 10+400

Date	JANUARY 12, 2008	Sheet
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DESIGN	G.M.D.	Rev No. 0
File No:	RECORD-534_01.12.08	

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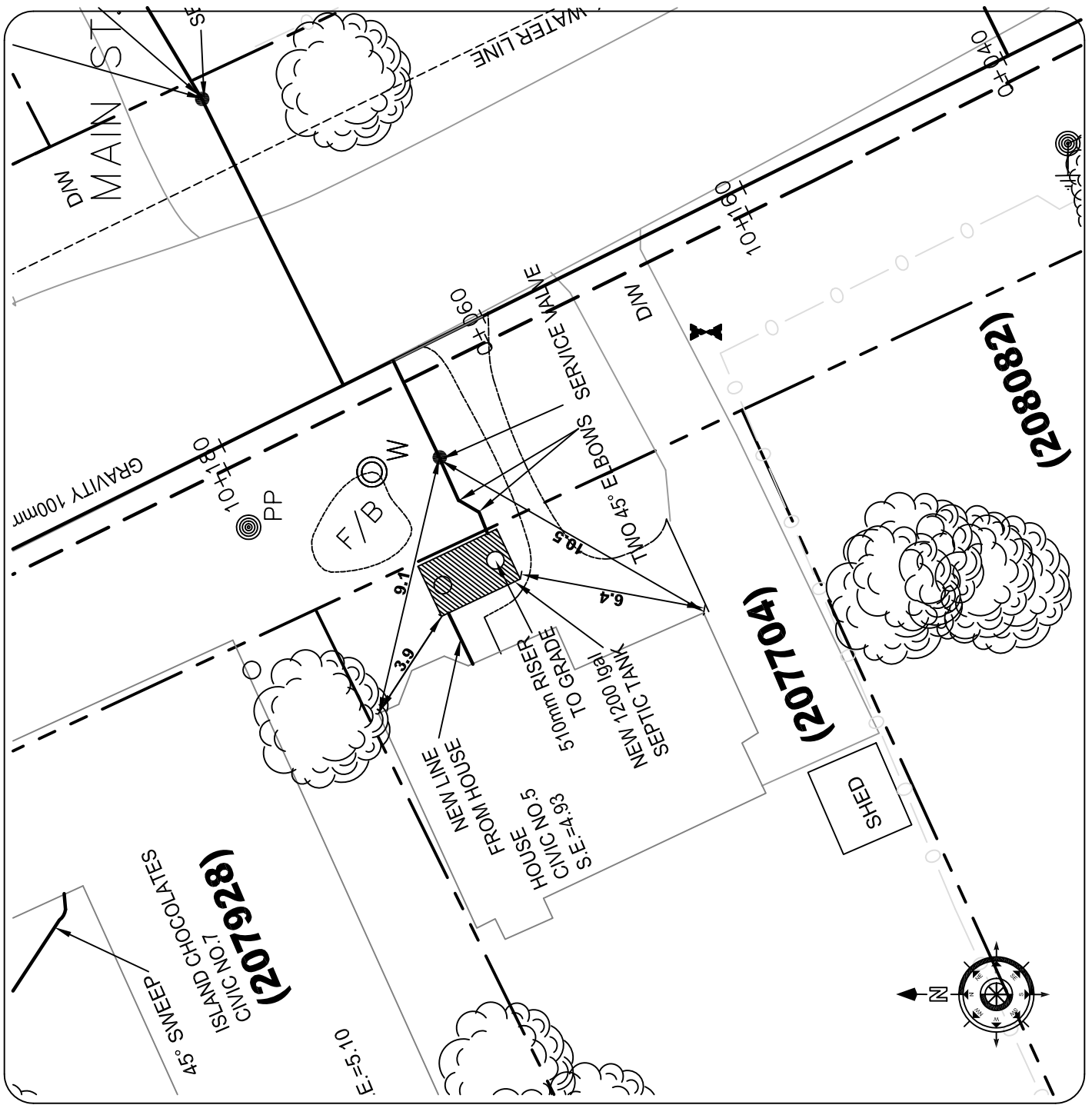
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DRAWINGS

**COMMUNITY OF VICTORIA
WASTEWATER TREATMENT
SYSTEM**

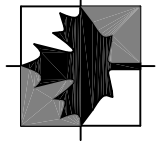
5 Main St.

Date: July 30, 2008	Sheet
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Drawn: C.E.M.	
DESIGN: K.A.G.	

File No: 05166-3B-72-2 Rev No. **0**



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**RECORD
DRAWINGS**

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**COMMUNITY OF VICTORIA
WASTEWATER TREATMENT
SYSTEM**

6 Main St.

Date: July 30, 2008

Sheet

Scale: 1:200

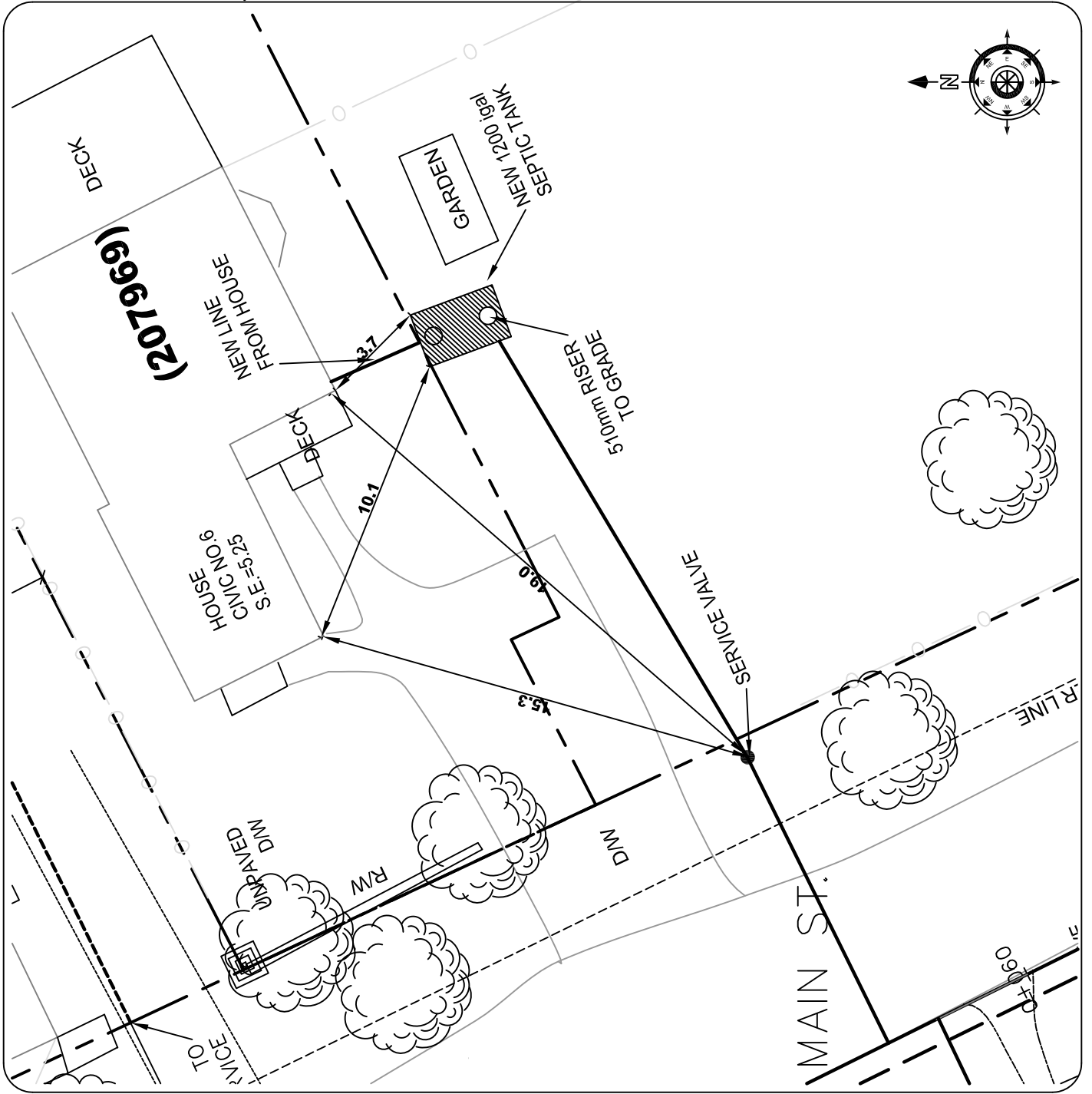
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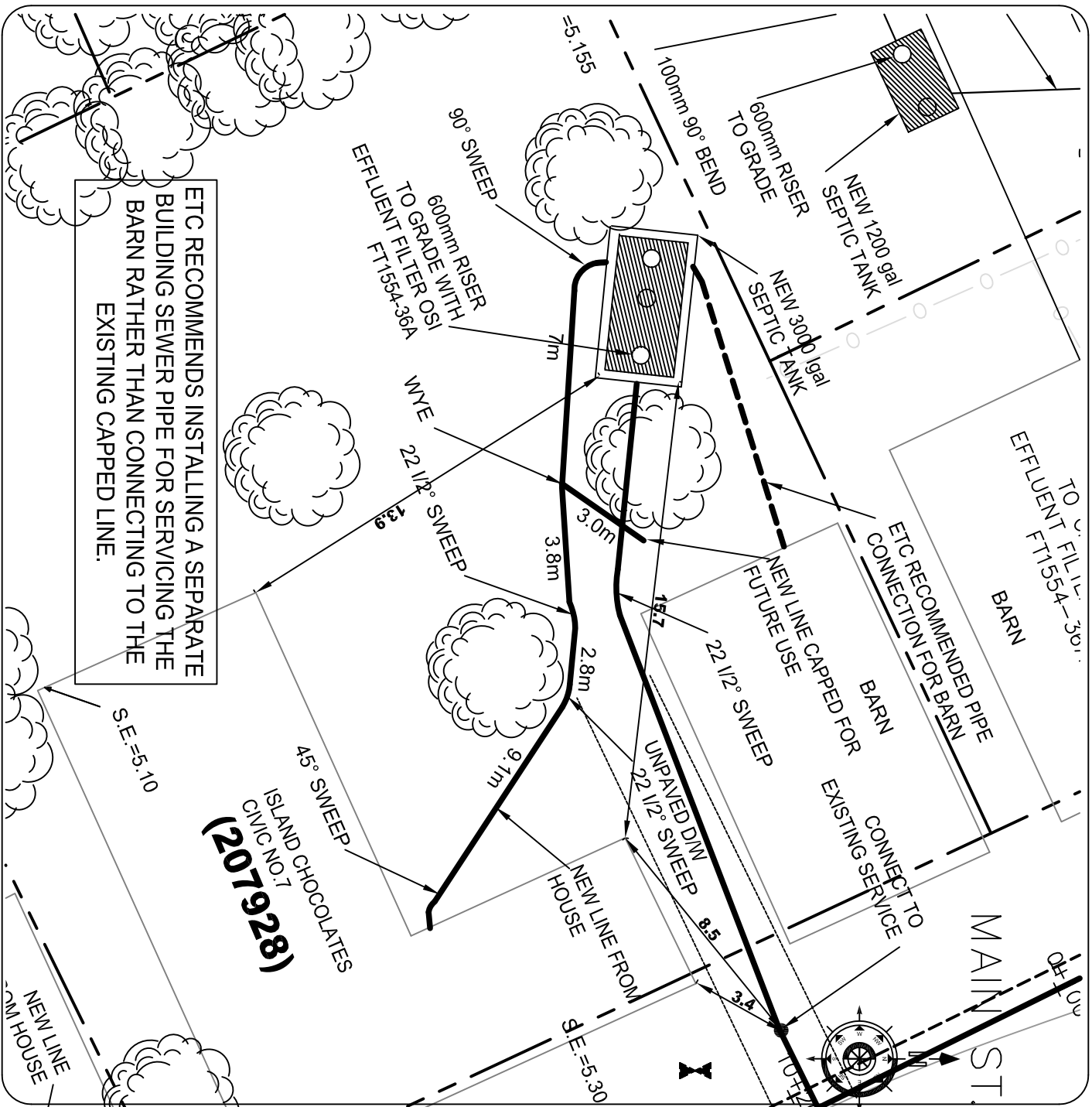
Drawn: C.E.M.

DESIGN: K.A.G.

File No: 05166-3B-72-2

Rev No. **0**

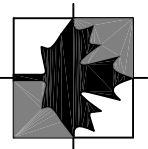




ETC RECOMMENDS INSTALLING A SEPARATE BUILDING SEWER PIPE FOR SERVICING THE BARN RATHER THAN CONNECTING TO THE EXISTING CAPPED LINE.

ISLAND CHOCOLATES
CIVIC NO. 7
(207-628)

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7 Main St.

Date: July 30, 2008

Sheet

Scale: 1:200

Drawn: C.E.M.

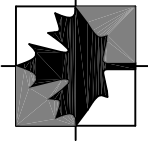
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DESIGN: K.A.G.

File No: 05166-3B-72-2 Rev No. **0**

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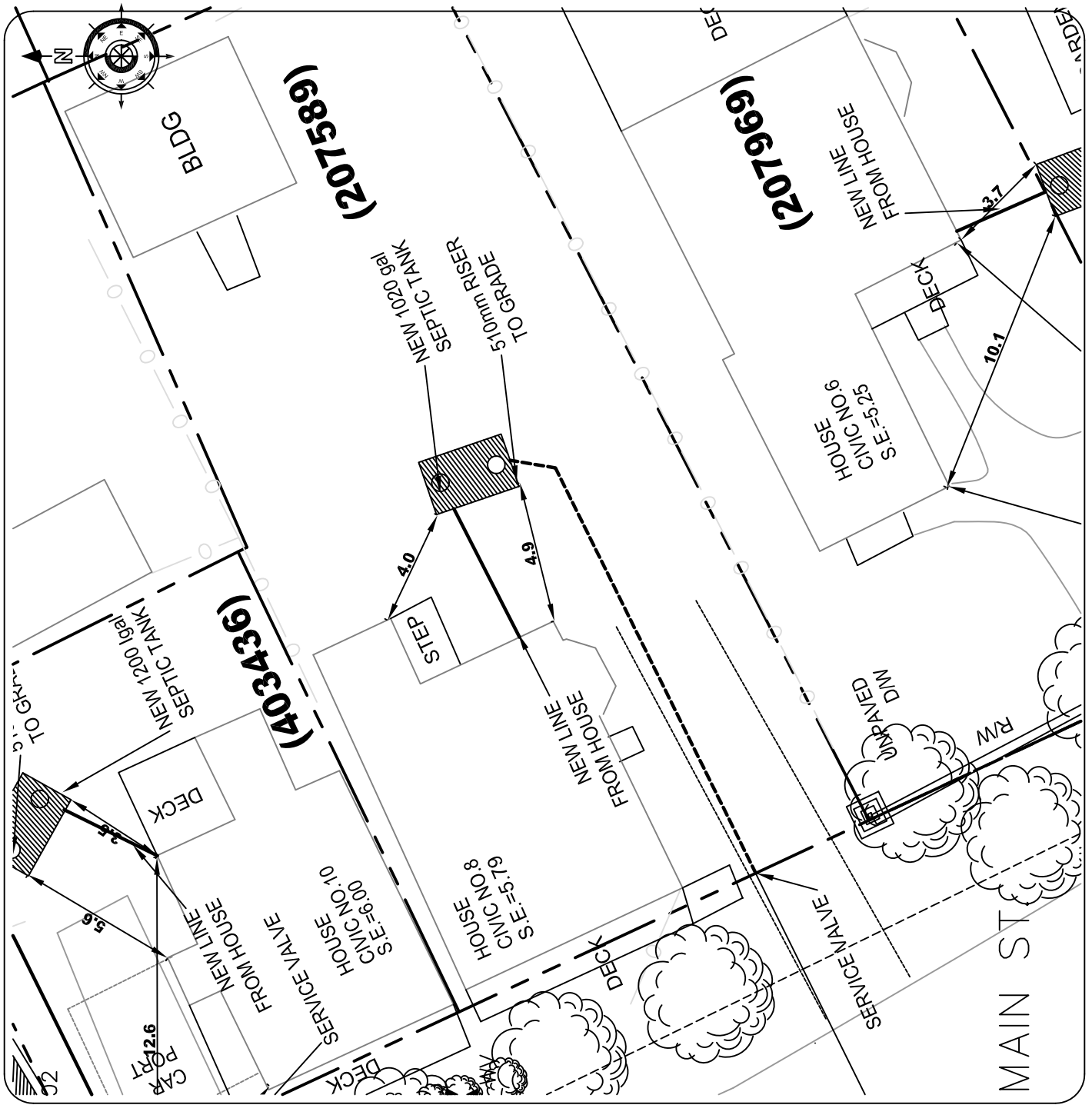
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RECORD DRAWINGS

COMMUNITY OF VICTORIA WASTEWATER TREATMENT SYSTEM

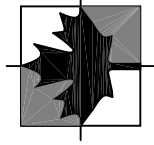
8 Main St.

Date: July 30, 2008	Sheet
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DESIGN: K.A.G.	
File No: 05166-3B-72-2	Rev No. 0



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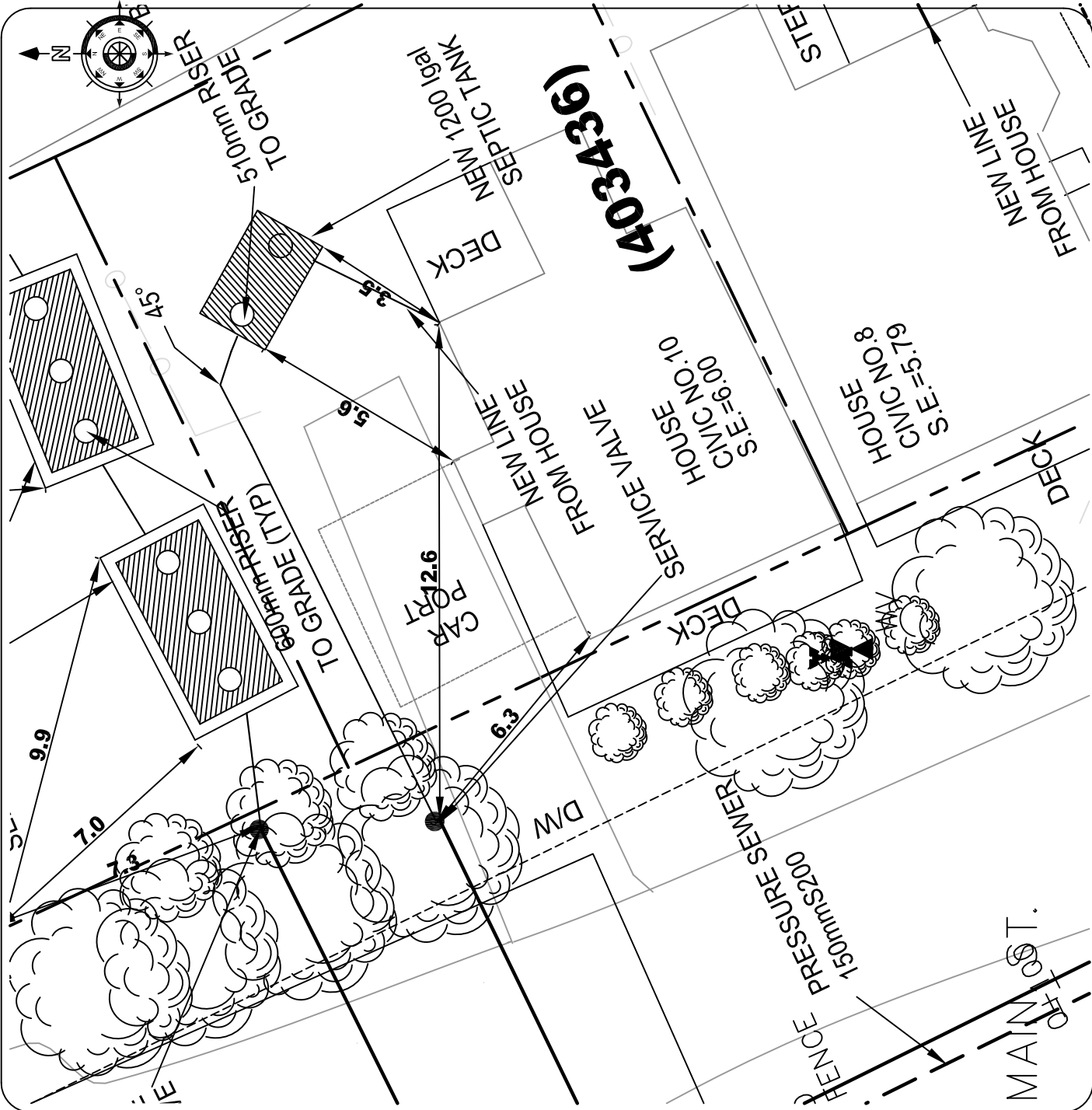
RECORD DRAWINGS

COMMUNITY OF VICTORIA WASTEWATER TREATMENT SYSTEM

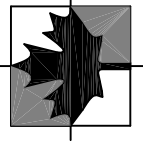
10 Main St.

Date: July 30, 2008	Sheet
Scale: 1:200	10M
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11 Main St.

Date: July 30, 2008	Sheet
Scale: 1:200	11M
Drawn: C.E.M.	
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