Bradford West Gwillimbury

Field Services Manual

September 2026

Revision #0 (Date)

Preamble
Field Services Manual

The material presented herein is intended as a manual to aid in the construction of municipal infrastructure, site alteration works, and development sites within the Town of Bradford West Gwillimbury (abbreviated to “the Town of BWG,” and referred to as “the Town”). It is incumbent upon the Owner’s Engineering Consultant to ensure the latest specifications and guidelines are being utilized, all work is completed as per accepted plans, and that all work is conducted in a safe and minimally disruptive manner, as per this manual.

This manual is to be read in conjunction with the Town’s Design Criteria Manual (DCM), as well as any other industry-accepted criteria. Should inconsistencies between documents be encountered, the more stringent criteria shall take precedent. The Town is to be notified of any such inconsistencies.

Should any items arise that deviate from this manual, such deviations shall be clearly identified in writing and accompanied by sound rationale for consideration by the Town prior to implementation. The Town reserves the right to not accept any deviations from this manual at its sole discretion. Should any unidentified deviations be encountered by the Town, remediation may be required at the Town’s sole discretion.

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Field Services Manual

1.1. INTRODUCTION

This section serves as a guideline for field activities for site alteration works pertaining to both existing sites and new development sites. It outlines the requirements for site alteration activities, including grading, excavation, fill placement, and soil movement, which must be carefully managed to minimize environmental impact, protect existing infrastructure, and ensure regulatory compliance.

For detailed guidance regarding Town inspections, refer to Appendix C of this document.

1.2. PERMITS AND APPROVALS

Ensure all permits, approvals, and clearances have been acquired prior to the Preconstruction Meeting from the following:

- Conservation Authority (if applicable)
- Ministry of the Environment, Conservation and Parks (MECP) (if required)
- Ministry of Transportation (MTO) (if required)
- Signed and accepted drawings
- Securities
- Certificate of Insurance (Town to be named on COI)
- Road Occupancy Permits (ROPs)
- Any other approvals as identified on a case-by-case basis

1.2.1. ROP Requirements

ROPs shall be obtained and adhered to as per Design Criteria Manual Section B10.01.

To facilitate the review and issuance of a Road Occupancy Permit, the following is to be provided:

- Certificate of Insurance confirming:
  - The Town and the Developer are named as Additional Insured under the contractor's insurance policy, which must carry a minimum General Liability limit of $5 million
- A copy of the WSIB certificate from the Contractor
- Traffic Management Plan identifying the applicable Ontario Traffic Manual (OTM) Book 7 layout that will be implemented

- Proposed start date, expected completion date, and anticipated working hours
- Contractor Information, including:
  - Company name
  - Primary and emergency contacts
  - Telephone number
  - Email address
- Detailed Description of the Proposed Work, including the location, scope of work, and any anticipated impacts to the municipal right-of-way (ROW)

Upon receipt and review of the above information, the Town will complete its review and, if satisfactory, proceed with the issuance of the Road Occupancy Permit.

1.3. PRECONSTRUCTION

Consultant and Landowner to coordinate and provide the following items prior to the mandatory Preconstruction Meeting to be held with the Town.

1.3.1. Precondition Survey

- The Town will be conducting pre-condition survey videos of site boundaries, including all existing infrastructure within the municipal right-of-way (ROW).
- Unless otherwise directed by the Town to complete a pre-condition survey, the Landowner is encouraged to conduct their own pre-condition survey of boundaries.
  - All existing infrastructure within ROW and adjacent properties are to be included.
- Provide assessment of conflicts with poles, trees, utilities, etc.
- Confirm the status of existing structures (to be demolished or to remain).
  - Existing structures or unforeseen conditions not previously noted are to be brought to the attention of the Town.
- Geotechnical Consultant to confirm if monitoring wells are to be removed or further protected.
- The Landowner may be required to complete a foundation assessment survey of dwellings on adjacent properties when compaction is required in close proximity to existing building or structures.

1.3.2. Preconstruction Meeting

A mandatory Preconstruction Meeting is to be held with the Town to discuss and address the following:

- Project overview
- Start-up Documentation (as required)
- Confirmation of extent of tree preservation and removal
- Traffic controls and Traffic Management Plan
- Road cleaning program, complete with schedule and proposed equipment to be utilized
  - Written plan to be provided once agreed upon
- Bi-weekly meetings with Town, if deemed necessary by the Town
- Contact list with emergency numbers
- Work schedule
- Communication protocols between the Town and the Landowner's team
- Consultant's responsibilities
- Trades parking (if required)

1.3.3. Resident Communication

- Consultant to send letter informing surrounding residents about staging, timing, and potential impacts, and provide residents with a site contact, if required by the Town.
- Resident complaints pertaining to the works will be forwarded to the Consultant for resolution with the complainant, in consultation with the Town.

1.4. SITE PREPARATION

1.4.1. Safety Considerations

- Ensure traffic management measures are installed as per OTM Book 7 and accepted plans.
- Ensure site is secure when vacant (e.g., gates, barriers and fencing).
- Ensure there are adequate safety measures and signage for pedestrians.

Note: All safety measures are to be implemented prior to the commencement of any work and are to remain in place until all work is completed, unless otherwise permitted by the Town.

1.4.2. Erosion and Sedimentation Control (ESC) and Stormwater Management (SWM)

ESC Measures

- Implement measures to prevent ponding during topsoil removal.
- Establish topsoil pile location with proper ESC measures as per accepted drawings.
- SWM facility must be inspected and maintained regularly to ensure functionality, if applicable (refer to Section 5.3 for more details).
- When applicable, implement dust suppression strategies using site-appropriate measures (e.g., street sweeper, surface dampening, alternating onsite haul route, etc.).

ESC Inspection Requirements

- The Owner shall ensure that an ESC plan is prepared and temporary ESC measures are installed prior to commencement of project works and are maintained throughout.
- Inspections of ESC measures are to be routinely conducted by the Consultant at a frequency specified in the accepted ESC plans.
    - Proposed inspection frequencies are to be specified for dry weather conditions during both active and inactive construction phases, and Winter Maintenance Periods.
    - Inspections are to be conducted after significant storm and snowmelt events within a timeframe as determined in conjunction with the Town.
    - Refer to Appendix C.4 for details on the Town's ESC inspection criteria.
- Any deficiencies shall be addressed, and any required maintenance action(s) shall be undertaken as soon as practicable once they have been identified.
- Inspections and maintenance of the ESC measures shall continue until they are no longer required.
- The Consultant shall ensure that inspection records are kept and provided to the Town when submitting a request for Acceptance of site alteration works (refer to Appendix A.5), as well as at the Town's discretion.
    - Inspection reports are to include the name of the inspector, date of inspection, visual observations, and any proposed remedial measures.

Stormwater Management Measures

- Catchbasins and Ditches:
    - Check cleanliness of existing catchbasins and ditches and ensure protection is installed and maintained as per accepted drawings.

- Ensure clean water discharge to appropriate outlets.

- Temporary Swales and Drainage:
  - Install temporary swales for positive drainage maintenance.
  - Manage on-site ponding by pumping or conveying through swales.
  - When pumps are used, a filter bag will be required.
  - Manage existing surface runoff.
- Identify stockpile and staging locations.
- Conduct ESC compliance walkthrough with the Town and Consultant prior to commencement of earthworks.

1.4.3. Site Monitoring Preparation

- Assess and install all required monitoring devices as identified by corresponding studies (e.g., noise, vibration, settlement, etc.).
- Implement appropriate tree protection measures.
- Stake limits of disturbance and buffer zones.

1.5. EARTHWORKS

1.5.1. Topsoil Handling & Placement

- Implement measures to prevent ponding during topsoil removal.
- Confirm topsoil stockpile location will not affect surrounding properties or municipal ROW.
  - Stockpiles are to be stabilized within 30 days after the commencement of works, or as otherwise agreed to by the Town, with any methods to be accepted by the Town.
- Establish topsoil pile with proper ESC measures, as per accepted drawings.

1.5.2. Fill Material Handling & Placement

- Town to receive chemical analysis from Consultant.
  - Qualified Person to review and certify soil chemical analysis for imported fill prior to submission to Town.
- Inspection reports to be submitted to the Town.

- If vibration is a concern, the site may require vibration monitoring and mitigation measures to be implemented.

1.5.3. Engineered Fill Material Handling & Placement

- Town to receive chemical analysis from Consultant.
  - Qualified Person to review and certify soil chemical analysis for imported fill prior to submission to Town.
- Monitor and perform compaction tests during fill placement.
  - Geotechnical Consultant to confirm compaction testing meets design requirements.
- Inspection reports to be submitted to the Town.
- If vibration becomes a concern, the site may require vibration monitoring and mitigation measures to be implemented.

1.5.4. Grading

- Ensure grading and slopes are constructed as per accepted drawings.
- Ensure adequate stabilization of banks.
- Other grading adjustments as may be identified on-site and required.

1.5.5. Ongoing Site Monitoring

- Monitor and maintain ESC measures weekly and after significant rainfall events.
- Refresh any components identified as having failed or not functioning as intended.
- Provide the Town with weekly Erosion and Sedimentation Monitoring Reports, unless otherwise directed.
- Accepted road cleaning program to be maintained at all times.
- Monitor site and surrounding roads for general cleanliness and dust control.
- Weather permitting, road flushing may be required at the Town's discretion.
- Refresh mud mat as required.
- Overgrown vegetation to be mitigated on an ongoing basis.
- Debris and trash to be collected and secured onsite and disposed of in an appropriate manner.

1.6. SITE ALTERATION ACCEPTANCE REQUIREMENTS

Note: Acceptance of site alteration works shall not be granted until a complete acceptance package (refer to Appendix A.5) has been submitted to and accepted by the Town.

1.6.1. Prior to Final Inspection

The Consultant must submit the following documents prior to organizing a final inspection with the Town:

- As-built grading drawings
- Certification Letters from respective Consulting Engineer(s) regarding the following:
  - Grading
  - General Conformance
- Geotechnical Consultant to certify and provide the following as required:
  - Compaction
  - Soil analysis
  - Abandoned well records

1.6.2. Final Inspection

For detailed guidance regarding Town inspections, refer to Appendix C of this document.

A final inspection is to be organized with the Town to address and confirm the following:

- Verification of stabilization (to the satisfaction of the Town)
- General grading conformance
- Removal of ESC measures (e.g., temporary ponds, silt fence, etc.)
- Inspection of municipal ROW
- Verify absence of standing water
- Removal of traffic control measures

Note: Site alteration acceptance inspections will not be conducted during the winter months, unless otherwise agreed to by the Town.

1.6.3. Security Release

- Upon successful completion of the final inspection and provision of a completed A.5 to the Town, the Consultant may submit a Security Release Request.

2.1. INTRODUCTION

This section serves as a guide for subdivision development within the Town of BWG. It outlines the inspection and construction requirements from the pre-construction phase to post-assumption of the development. For detailed guidance regarding Town inspections, refer to Appendix C of this document.

This guide provides Developers, Consultants, and Contractors with a structured approach to ensure compliance with municipal standards.

This document serves as a reference for all stakeholders involved in subdivision development within the Town and aims to facilitate the Town's expectations of project execution.

Note: For any site alteration activities pertaining to subdivision development, please refer to Section 1 of this document.

2.2. PERMITS AND APPROVALS

Prior to the mandatory Preconstruction Meeting, ensure all permits, approvals, and clearances have been acquired, including:

- Executed Pre-servicing or Subdivision Agreement
- Conservation Authority (if required)
- Ministry of the Environment, Conservation and Parks (MECP) (if required)
- Ministry of Transportation (if required)
- County of Simcoe approval (if required)
- Signed and accepted drawings
- Confirmation of securities
- Certificate of Insurance (Town to be named on COI)
- Road Occupancy Permits (ROPs)
- Any other approvals as identified on a case-by-case basis
- DFO notification (if required)

2.2.1. ROP Requirements

ROPs shall be obtained and adhered to as per Design Criteria Manual Section B10.01.

To facilitate the review and issuance of a Road Occupancy Permit, the following is to be provided:

- Certificate of Insurance confirming:
  - The Town and the Developer are named as Additional Insured under the contractor's insurance policy, which must carry a minimum General Liability limit of $5 million
- A copy of the WSIB certificate from the Contractor
- Traffic Management Plan identifying the applicable Ontario Traffic Manual (OTM) Book 7 layout that will be implemented
- Proposed start date, expected completion date, and anticipated working hours
- Contractor Information, including:
  - Company name
  - Primary and emergency contacts
  - Telephone number
  - Email address
- Detailed Description of the Proposed Work, including the location, scope of work, and any anticipated impacts to the municipal right-of-way (ROW)

Upon receipt and review of the above information, the Town will complete its review and, if satisfactory, proceed with the issuance of the Road Occupancy Permit.

2.3. PRECONSTRUCTION

Consultant and Developer to coordinate and provide the following items prior to preconstruction meeting with the Town:

2.3.1. Precondition Survey:

- The Town will be conducting video pre-condition surveys of site boundaries, including all existing infrastructure within the municipal right-of-way (ROW).
- Unless otherwise directed by the Town to complete a pre-condition survey, the Landowner is encouraged to conduct their own pre-condition survey of boundaries.
  - All existing infrastructure within ROW and adjacent properties are to be included.

- Provide assessment of conflicts with poles, trees, utilities, etc.
- Confirm the status of existing structures (to be demolished or to remain).
    - Existing Structures or unforeseen conditions not previously noted are to be brought to the attention of the Town.
- Geotechnical Consultant to confirm if monitoring wells are to be removed or further protected.
- The Developer may be required to complete a foundation assessment survey of dwellings on adjacent properties when compaction is required in close proximity to existing building or structures.

2.3.2. Preconstruction Meeting

A mandatory Preconstruction Meeting is to be held with the Town to address the following:

- Project overview
- Start-up Documentation (WSIB, COI, Notice of Project)
- Road cleaning program, complete with schedule and proposed equipment to be utilized
    - Written plan to be provided once agreed upon
- Confirmation of extent of tree preservation and removal
- Traffic controls and Traffic Management Plan
- Town to be included in Bi-weekly meetings
- Contact list with emergency numbers
- Work schedule
- Plans for stormwater management facility construction (if applicable)
    - Determine if temporary or permanent.
- Provide lists for the following, if applicable:
    - List of sub-contractors
    - List of suppliers
    - List of requested material substitutions
- Communication protocols between the Town and the Developer's team
- Consultant's responsibilities

2.3.3. Resident Communication

- Consultant to send letter informing surrounding residents about staging, timing, potential impacts and provide residents with a site contact.
- Resident complaints pertaining to the development may be forwarded to the Consultant for resolution with the complainant, in consultation with the Town.

2.4. SITE PREPARATION

2.4.1. Safety and Traffic Management

- Ensure traffic management measures are installed as per OTM Book 7 and accepted plans.
- Ensure site is secure when vacant (e.g., gates, barriers, and fencing).
- Ensure there are adequate safety measures and signage for pedestrians.

Note: All safety measures are to be implemented prior to the commencement of any work and are to remain in place until all work is completed, unless otherwise permitted by the Town.

2.4.2. Erosion and Sedimentation Control and Stormwater Management

ESC Measures:

- Implement measures to prevent ponding during topsoil removal.
- Establish topsoil pile location with proper ESC measures as per accepted drawings.
- SWM facility must be inspected and maintained regularly to ensure functionality, if applicable (refer to Section 5.3 for more details).
- When applicable, implement dust suppression strategies using site-appropriate measures (e.g., street sweeper, surface dampening, alternating onsite haul route etc.).

ESC Inspection Requirements

- The Owner shall ensure that an ESC plan is prepared, and temporary ESC measures are installed prior to commencement of project works and are maintained throughout.
- Inspections of ESC measures are to be routinely conducted at a frequency as specified in the accepted ESC plans.
    - Proposed inspection frequencies are to be specified for dry weather conditions during both active and inactive construction phases, and Winter Maintenance Periods.

- Inspections are to be conducted after significant storm and snowmelt events within a timeframe as determined in conjunction with the Town.

- Any deficiencies shall be addressed, and any required maintenance action(s) shall be undertaken as soon as practicable once they have been identified.
- Inspections and maintenance of the ESC measures shall continue until they are no longer required.
- The Consultant shall ensure that inspection records are kept and provided to the Town when submitting a request for Underground Acceptance, Municipal Acceptance, and Final Assumption, as well as at the Town's discretion.
    - Inspection reports are to include the name of the inspector, date of inspection, visual observations, and any proposed remedial measures.

Stormwater Management Measures

- Catchbasins and Ditches:
    - Check cleanliness of existing catchbasins and ditches and ensure protection is installed and maintained as per accepted drawings.
    - Ensure clean water discharge to outlets as accepted by the Town.
- Temporary Swales and Drainage:
    - Install temporary swales for positive drainage maintenance.
    - Manage on-site ponding by pumping or conveying through swales.
    - When pumps are used, a filter bag will be required.
    - Manage existing surface runoff.
- Identify stockpile and staging locations.
- Conduct ESC compliance walkthrough with the Town and Consultant prior to commencement of earthworks.

2.4.3. Site Monitoring Preparation

- Assess and install all required monitoring devices as identified by corresponding studies (e.g., noise, vibration, settlement, etc.).
- Implement appropriate tree protection measures.
- Stake limits of disturbance and buffer zones.

2.5. SOIL HANDLING

2.5.1. Site Works/Soil Management

- Topsoil Handling:
  - Implement measures to prevent ponding during topsoil removal.
  - Establish topsoil pile location with proper ESC measures.
- Engineered Fill Placement:
  - Geotechnical Consultant to confirm compaction testing is meeting the design requirements.
  - Should vibrations be a concern, the development may be required to have vibration monitoring measures implemented to ensure it is within appropriate levels, as determined by the Town.
  - Inspection reports to be submitted to the Town on a weekly basis, as well as a complete package once placement of engineered fill has been completed accompanying the certification letter.

2.5.2. Grading

- Ensure safe banking and sloping as per accepted drawings.
- Ensure adequate stabilization of banks and slopes.
- Other grading adjustments as may be identified on-site and required.

2.5.3. Ongoing Site Monitoring

- Monitor and maintain ESC measures weekly and after significant rainfall events, as required under the CLI ECA.
- Refresh any components identified as having failed or not functioning as intended.
- Provide the Town with weekly Erosion and Sedimentation Monitoring Reports, unless otherwise directed.
- Accepted road cleaning program to be maintained at all times.
- Monitor site and surrounding roads for general cleanliness and dust control.
- Weather permitting, road flushing may be required at the Town's discretion.
- Refresh mud mat as required.
- Overgrown vegetation to be mitigated on an ongoing basis.

- Debris and trash to be collected and secured on site and disposed of in an appropriate manner.

2.6. UNDERGROUND SERVICING

2.6.1. Pre-Servicing

Pre-Servicing Coordination Meeting to be held with The Town and the following parties in attendance:

- Consultant(s)
- Developer
- Servicing Contractor
- Utilities Contractor
- Geotechnical Consultant
- Others as required

2.6.2. Consultant Oversight

The Consultant shall be required to perform the following oversight duties throughout the underground servicing process:

- Verify the Geotechnical Consultant's presence during backfilling, compaction, and stone placement around the pipe.
- Submit weekly geotechnical reports to the Town, as well as a complete package upon request for underground acceptance.
- Ensure correct materials are being provided and installed (e.g., correct product, proper pipe size, class, and strength, etc.).
- Collect and provide as-built data.
- Routinely conduct inspections and provide reports on the following:
    - Sewer installation
    - Maintenance hole installation, including required spray sealant and wrapping
    - Lateral installation
    - Rear lot catchbasin (RLCB) installation
    - Water service Installation, including tracer wire as required
    - Cleanout locations, pipe length, and concrete encasement within easements

- Road subdrains
- Proof rolls
- Spot elevation checks
- Hydrant installation

Note: Unscheduled spot inspections may be required at the discretion of the Town and may require installations to be exposed for inspection.

2.6.3. Water Distribution System Installation

- Watermains:
  - Watermain to arrive to site in new condition and capped (by Supplier).
  - Watermain material to not have signs of weathering.
  - Verify correct size, strength, and installation details.
  - Implement proper sand bedding, cathodic protection, bituminous tape and tracer wire.
  - Curb stop to be located immediately adjacent to the municipal side of the property line.
  - Curb stop not to be installed in driveway, unless approved by the Town and a frost collar is provided.
  - Minimum installation depth is 1.8 metres below finished grade in boulevards.
  - Minimum installation depth is 2.2 metres below finished road grade for road crossings.
- Water Services:
  - Shall be wet tapped.
  - Copper services require cathodic protection.
  - Non-metallic services require tracer wire.

2.6.4. Sanitary Drainage System Installation

- Sanitary Mainline:
  - Ensure correct materials are being used as per accepted drawings.
  - Ensure pipe installation follows correct method for field conditions and trench type.
  - Ensure proper elevation and slopes.
  - Ensure proper joint connection.
  - Ensure trench plugs are installed.

- Sanitary Lateral:
  - Lateral line elevations and slope to be verified.
  - Ensure proper bedding is used.
  - Ensure proper joint connection.
  - Ensure cleanout is located on property line.
  - Ensure lateral line is installed, capped, and marked at one (1) full pipe-length within the property from the property line.
- Mainline Sanitary Mechanical Plug Installation:
  - Sanitary mechanical plugs shall be obtained from the Town.
  - Sanitary mechanical plugs shall be installed into the first maintenance hole downstream of the connection point once Underground Acceptance has been granted. Sanitary mechanical plugs shall be obtained from the Town.
  - Consultant to identify location of sanitary mechanical plugs on a drawing.
  - Installation of sanitary plug identification signage, as per Town Standard Drawing BWG.E1.10.
- Sanitary Sewer Maintenance Holes:
  - Ensure sanitary maintenance holes have been appropriately waterproofed, when conditionally required.
  - Ensure all required maintenance hole components have been wrapped, as per Town of BWG General Notes.
  - Ensure all required safety platforms and ladders/steps have been installed correctly, where applicable.

2.6.5. Stormwater Drainage System Installation

- Storm Sewer Mainline:
  - Ensure correct materials are being used as per accepted drawings.
  - Ensure pipe installation follows correct method for field conditions and trench type.
  - Ensure proper joint connections.
  - Ensure proper elevation and slopes.
- Storm Sewer Lateral:
  - Lateral line elevations and slope to be verified by a survey.
  - Ensure proper bedding is used.
  - Ensure proper joint connections.

- Ensure cleanout is located on property line.
- Ensure lateral line is installed, capped, and marked at one (1) full pipe-length within the property from the property line.

- Storm Sewer Maintenance Holes:
  - Ensure all required maintenance hole components have been wrapped, as per Town of BWG General Notes.
  - Ensure all required safety platforms and ladders/steps have been installed correctly, where applicable.
  - Ensure installation of storm bulkhead until Municipal Acceptance.
  - Consultant to provide map depicting location of storm bulkheads.
- Manufactured Treatment Devices (MTDs):
  - Ensure all MTDs are installed as per accepted plans
  - Owner is responsible for all maintenance of MTDs within the Town's ROW until assumption
- Low Impact Development (LID) Measures:
  - Ensure all LID measures are implemented as per accepted plans

2.6.6. Road Construction

- Proof Roll and Subgrade:
  - Placement of road granular base.
  - Witness proof roll of subgrade with the Town in attendance.
  - Address subgrade deficiencies recommended by Geotechnical Engineer.
  - Implement recommendations provided by Geotechnical Engineer (e.g., extra stone, dig and dry, engineered product or type of stone, etc.).
  - Geotechnical Engineer to provide proof roll report and certification to The Town.
  - Install subdrains as per accepted drawings.
  - Ensure proper maintenance hole and catchbasin adjustments.
  - Geotechnical Engineer to conduct compaction testing on the road base and provide testing results to the Town.
  - Geotechnical Engineer to review and provide acceptance of all mix designs for concrete and asphalt.
  - Install base curb with Geotechnical Engineer's oversight.

- Install base asphalt and temporary asphalt curbing with Geotechnical Engineer's oversight.

2.7. UNDERGROUND ACCEPTANCE REQUIREMENTS

Note: Acceptance of underground infrastructure will not be granted until a complete underground acceptance package (refer to Appendix A.1) has been submitted to and accepted by the Town.

2.7.1. Watermain Commissioning Requirements

For complete watermain commissioning requirements, refer to the following Town Documents:

- Town of BWG Design Criteria Manual
- Town of BWG General Notes located on the BWG Standard Notes Drawing
- Town of BWG Watermain Commissioning Policy (available upon request)
- Watermain Commissioning Checklist (available upon request)

Note: The Town requires that the Watermain Commissioning Checklist and other supporting documents be submitted within one (1) week after final connection has taken place.

2.7.2. Underground Mainline Sewer Inspections

- Mandrel test, air test, visual inspection, and any other tests that may be required.
  - Qualified contractor is to perform testing.
  - Perform mandrel test and air test on PVC sewers.
  - Conduct visual inspection of maintenance holes, catch basins, rear lot catchbasins, valve chambers.
  - Platforms to be raised prior to inspection and lowered after inspection (if applicable).

2.7.3. Maintenance Hole Testing (CLI ECA Requirements)

Leakage Testing to be conducted in accordance with the Town of BWG's CLI ECA requirements, and the Town's DCM and General Notes.

2.7.4. Sanitary and Storm Sewer Mainline CCTV Inspections

- Flushing to be conducted prior to CCTV inspection.
- CCTV inspections are to be conducted on all mainline pipes and catchbasin leads.

- Videos to be reviewed by Consultant and are to be submitted with accompanying deficiencies lists to the Town.
- Any proposed repairs are to be conducted with the Town's approval.

2.7.5. Temporary Signage Installation

- Unassumed development signage
- Street names
- Stop signs
- Speed signs
- No parking signs
- Other signage, as applicable

2.7.6. Underground Acceptance Security Release Requirements

Note: Underground acceptance inspections cannot be performed during the winter months, unless approved by The Town.

- Completed copy of the Underground Acceptance Request Form as shown in Appendix A.1 and applicable accompanying documents
- Completed copy of the Underground Acceptance Inspection Checklist as shown in Appendix B.1 and applicable accompanying documents
- Statutory Declaration
- Worker Safety Insurance Board (WSIB) Clearance
- Certificate of Publication of lien period
- Written request for security reduction

2.8. BUILDING CONSTRUCTION PHASE

2.8.1. Preconstruction Meeting

A Preconstruction Meeting is to be held with the Town, Builder, Developer, and Consultant to discuss the following:

- Site trailer, work compound and staging area locations
- Locations of temporary power supply
- Location of mortar stations (not at intersections)

- Updated road cleaning program
- Review of lateral video inspection program

2.8.2. Utility Installation

- Ensure the Town is included in the Utility Preconstruction Meeting.
- Ensure duct bank crossings are completed before base asphalt.
- All crossings are to be compacted and is to be verified by the Geotechnical Consultant.
- Installation of temporary utility services shall be as per accepted plans.
- Verification from Utility Consultant that at-grade boxes are in the correct locations and will be installed at the correct grade.
- Utility Consultant is to review at-grade utility box elevations to suit proposed final grading.
- Utility Consultant to provide authorization of energization form the Electrical Safety Authority (ESA).
    - Ensure all ESA regulations, electrical design drawings, and relevant Hydro Authority standards have been adhered to.
    - Ensure that the Town is notified a minimum of 48 hours prior to streetlight energization, and that energization is completed prior to first occupancy.
    - Upon energization, an evening inspection shall be conducted to ensure that all luminaires are functional.
    - Should any streetlights be non-functional, the Developer will have two (2) weeks to conduct repairs before the Town undertakes repairs on the Developer's behalf and at their expense.

2.8.3. General Site Maintenance

- Keep roads clean and accessible.
- Watermain valves to be marked, always maintained, clear, and accessible.
- Ensure hydrants, utility boxes, light standards are protected with required hoarding.
- Ensure right-of-way is clear of debris, portable water closets and construction materials.
- General site cleanliness must be maintained and garbage and debris disposed of regularly.
- Temporary trailer locations and trade parking areas to be maintained to the satisfaction of the Town.

2.8.4. Sanitary Lateral Video Inspections.

- Inspections are to be requested and scheduled by the Builder with Town of BWG Development Engineering Division staff.
  - The Town's Wastewater Division will conduct all sanitary lateral inspections.
  - Development Engineering Division will distribute results to the applicable parties.

2.8.5. Base Curb Inspection/Top Curb and Sidewalk Placement

- Concrete mix design certification is to be provided by Geotechnical Consultant to the Town.
- Notify residents about driveway access restrictions and parking requirements during top curb and sidewalk construction.
- Inspect condition of base curb.
- Remove and replace deficiencies on base curb as noted during inspection.
- Inspect and ensure proper placement and thicknesses of top curb and sidewalk.
- Consulting Engineer to verify driveway widths are in accordance with the accepted lot grading plan.

2.8.6. Procedure Prior to First Occupancy

- Consultant to notify the Town a minimum of one (1) month prior to first occupancy date.
- Confirm with the Town when any occupancies will take place during the winter months.
- Sanitary system to be cleaned prior to sanitary plug extraction.
- Removal of sanitary plug to be witnessed by the Town.
  - Sanitary plug to be cleaned and returned to the Town.
- Sanitary plug identification signage to be removed.
- Temporary barricades to be removed for Town operations.
- Verification of light standards functionality by the Utility Consultant.
- Review and amend the road cleaning program.

2.8.7. Final Signage Installation

- All signage to be installed as per accepted drawings.
- Signage inspection to be conducted with the Town prior to first occupancy.

2.8.8. Lot Grading

- Consultant to arrange mandatory pre-sod inspection with the Town.
- Consultant to arrange lot grading inspection after a winter season or at the discretion of the Town.
- Consultant to issue lot grading inspection report to the Town.
- Consultant to re-issue lot grading inspection report to the Town once deficiencies are addressed.
- Provide lot grading certification letter and as built drawing.
- Issue notice of certification to homeowners.
- Developer to address any homeowner complaints pertaining to lot grading and ensure drainage adherence.
- Final grading and sod are to have been through one winter season before a post-sod inspection may be conducted, unless otherwise directed by the Town.

2.8.9. Landscaping, Parks, and Open Space

- Landscape Architect to verify proper tree installation and landscape features.
- Park blocks to be graded as per accepted drawings, be sodded, and have a topsoil depth of 150mm (6”).
- At their own expense, the Developer is to remediate any damage to existing infrastructure when required by the Town.
- All work and materials are to be guaranteed for a minimum period of two (2) years, and any deficiencies are to be rectified by the Developer within two weeks of inspection or notification.
- Ensure cleanliness of the parkland is maintained by appropriately disposing of debris, cleaning nearby roadways on a daily basis and at the direction of the Town and keeping the municipal ROW clear of debris and equipment.

Note: Burying or dumping of debris, construction material, and waste within the parkland is strictly prohibited at all phases of project development.

2.8.10. Top Asphalt Placement

Note: Top asphalt placement will not be allowed between October 15th and May 1st, unless otherwise approved by the Town.

Prior to top asphalt placement:

- Ensure all sanitary lateral inspections are complete.

- Review CCTV Mainline videos and provide deficiency list from Consulting Engineer to the Town.
  - All deficiencies must be remediated prior to placement of top asphalt.
- All lots, blocks, vacant lands, and boulevards must be otherwise complete prior to top asphalt placement.
- Base asphalt inspection to be completed with Geotechnical Consultant and deficiencies to be rectified.
- Provide approved asphalt mix design.
- Coordinate with waste collection provider responsible for collection within the County of Simcoe for uninterrupted collection of garbage, recycling, organics, etc.
- Provide notification to residents with Consultant's contact information.
- Maintenance hole and catchbasin covers are to be raised no more than one week prior to top asphalt placement.
  - Should top asphalt date be moved, maintenance hole and catchbasin covers may be required to be lowered at the sole discretion of the Town.
- Geotechnical Consultant must verify ambient temperature is acceptable for placement.
- Inspect manhole adjustments and safety considerations.

2.9. MUNICIPAL ACCEPTANCE

Note: The maintenance period shall not begin until a complete Acceptance Package (Refer to Appendix A.2) has been submitted to and accepted by the Town.

2.9.1. Required Inspections

Prior to consideration for Municipal Acceptance, it is required that certain inspections be undertaken in coordination with the Town, as per the Municipal Acceptance Inspection Checklist shown in Appendix B.2, which is required to be completed on an ongoing basis. At the Town's discretion, additional inspections may be required. For information regarding typical criteria for each inspection type, refer to the Inspection Guidance List located in Appendix C.

Note: Acceptance inspections cannot be performed during the winter months, unless approved by The Town.

2.9.2. Municipal Acceptance Security Release

Prior to consideration for the release of securities pertaining to Municipal Acceptance, the following items are to be completed and submitted to the Town:

- Completed copy of the Municipal Acceptance Request Form as shown in Appendix A.2 and applicable accompanying documents
- Completed copy of the Municipal Acceptance Inspection Checklist as shown in Appendix B2 and applicable accompanying documents
- Town of BWG Infrastructure Data Sheets (available upon request)
- Written request for a security reduction
- Statutory Declaration
- Worker Safety Insurance Board (WSIB) clearance
- Certificate of publication of lien period

2.10. POST-MUNICIPAL ACCEPTANCE SITE MONITORING

2.10.1. Monitoring

Consultant to conduct ongoing monitoring and produce reports addressing the following on a monthly basis, or as directed by the Town:

- Line painting and signage
- Site access
- Street cleanliness
- Site security (i.e., fencing)
- Stormwater control measures inspection (ongoing)
- Hazard identification
- Sidewalks
- Boulevards
- Damaged utilities
- Streetlights

2.10.2. Resident Inquires

- Any inquiries or complaints received by the Town regarding project works will be forwarded to the Consultant for resolution.

2.11. FINAL ASSUMPTION

Note: Final Assumption will not be granted until a complete Final Assumption Package (refer to Appendix A.3) has been submitted to and accepted by the Town.

2.11.1. Required Inspections

Prior to consideration for Final Assumption, it is required that certain inspections be undertaken in coordination with the Town, as per the B.3, which is required to be completed on an ongoing basis. At the Town's discretion, additional inspections may be required. For detailed guidance regarding Town inspections, refer to Appendix C of this document.

Note: Final Assumption inspections cannot be performed during the winter months, unless approved by The Town.

2.11.2. Assumption Security Release

Prior to consideration for the release of securities pertaining to Final Assumption, the following items are to be completed and submitted to the Town:

- Completed copy of the Final Assumption Request Form as shown in Appendix A.3 and all applicable accompanying documents
- Completed copy of the Final Assumption Inspection Checklist as shown in Appendix B.3 and all accompanying documents
- Written request for a security reduction
- Statutory Declaration
- Worker Safety Insurance Board (WSIB) clearance
- Certificate of publication of lien period

2.12. POST-ASSUMPTION

2.12.1. Required Inspections

Following Final Assumption, it is required that certain inspections be undertaken in coordination with the Town, as per the Post-Assumption Inspection Checklist in Appendix B.4, which are required to be completed on an ongoing basis. At the Town's discretion, additional inspections may be required. For detailed guidance regarding Town inspections, refer to Appendix C of this document.

Note: Post-Assumption inspections cannot be performed during the winter months.

2.12.2. Post Assumption Security Release

Prior to consideration for the release of securities following Final Assumption, the following items are to be completed and submitted to the Town:

- Completed copy of the Post-Assumption Request Form as shown in Appendix A.4 and all applicable accompanying documents
- Completed copy of the Post-Assumption Inspection Checklist as shown in Appendix B.4 and all applicable accompanying documents
- Written request of security reduction

3.1. INTRODUCTION

This section provides an overview of the requirements for developments governed by Site Plan Control within the Town of Bradford West Gwillimbury.

Developers, Consultants, and Contractors must adhere to the permitting, preconstruction, and construction requirements outlined in this section to ensure compliance.

By following these guidelines, stakeholders can minimize potential conflicts and facilitate successful project completion in accordance with Town expectations.

3.2. PERMITS AND APPROVALS

Ensure all permits, approvals, and clearances have been acquired prior to the mandatory Preconstruction Meeting, including:

- Conservation Authority (if required)
- Ministry of the Environment, Conservation and Parks (MECP) (if required)
- Ministry of Transportation (if required)
- County of Simcoe (if required)
- Town of Bradford West Gwillimbury Building Division (if required)
- Signed and accepted drawings
- Signed Site Plan Agreement (SPA)
- Confirmation of securities
- Certificate of Insurance (Town to be named on COI)
- Road Occupancy Permits (ROPs)
- Any other approvals as identified by the Town

3.2.1. ROP Requirements

ROPs shall be obtained and adhered to as per Design Criteria Manual Section B10.01.

To facilitate the review and issuance of a Road Occupancy Permit, the following is to be provided:

- Certificate of Insurance confirming that the Town and the Developer are named as Additional Insured under the contractor's insurance policy, which must carry a minimum General Liability limit of $5 million

- A copy of the WSIB certificate from the Contractor
- Traffic Management Plan identifying the applicable Ontario Traffic Manual (OTM) Book 7 layout that will be implemented
- Proposed start date, expected completion date, and anticipated working hours
- Contractor Information, including:
  - Company name
  - Primary and emergency contacts
  - Telephone number
  - Email address
- Detailed Description of the Proposed Work, including the location, scope of work, and any anticipated impacts to the municipal right-of-way (ROW)

Upon receipt and review of the above information, the Town will complete its review and, if satisfactory, proceed with the issuance of the Road Occupancy Permit.

3.3. PRECONSTRUCTION

The Owner and Consultant are to coordinate and provide the following items prior to the mandatory Preconstruction Meeting with the Town:

Precondition Survey:

- The Town will be conducting video pre-condition surveys of site boundaries, including a visual above-ground inspection of existing infrastructure within the municipal right-of-way (ROW).
- Unless otherwise directed by the Town to complete a pre-condition survey, the Landowner is encouraged to conduct their own pre-condition survey of boundaries.
  - All existing infrastructure within ROW and adjacent properties are to be included.

3.3.1. Preconstruction Meeting

A mandatory Preconstruction Meeting is to be held with the Town to address the following:

- Project overview discussion
- Start-up Documentation (as required)
- Construction Management Plan
- Proposed site services and commissioning plans
- Road cleaning program to be provided to the Town

- Town to be included in bi-weekly meetings, if required by the Town
- Establish contact list with emergency numbers
- Establish work schedule
- Establish communication protocols between Town and Developer's team
- Establish Consultant responsibilities
- Trades parking to be reviewed

3.3.2. Resident Communication

- Consultant to send letter informing surrounding residents about staging, timing, and potential impacts, and provide a site contact.
- Resident complaints pertaining to the development will be forwarded to the Consultant for resolution with the complainant in consultation with the Town.

3.4. SITE PREPARATION

The items in this Section are to be reviewed and considered for implementation, including any additional items as required at the discretion of the Town.

3.4.1. General Preparation and Monitoring

- Survey boundaries and assess conflicts with poles, trees, utilities, etc.
- Confirm the status of existing structures (to be demolished or to remain).
- Geotechnical Engineer to confirm if monitoring wells are to be removed or further protected.
- Existing Structures or unforeseen conditions not previously noted are to be brought to the attention of the Town.
    - The Developer may be required to complete a foundation assessment survey on adjacent properties when compaction is required in close to proximity to existing buildings or structures.
- Assess and install all required monitoring devices as identified by corresponding study (e.g., noise, vibration, settlement, etc.).
- Confirm the extent of tree preservation and removal.
- Implement appropriate measures to protect trees.
- Stake limits of disturbance and buffer zones.

3.4.2. Safety Considerations

- Ensure site is secure when vacant (e.g., gates, barriers and fencing).
- Ensure there are adequate safety measures and signage for pedestrians.
- Consider construction fencing for safety.
- Trench boxes are required, as applicable.

Note: All safety measures are to be implemented prior to the commencement of work and are to remain in place until all work is completed, unless otherwise permitted by the Town.

3.4.3. Traffic Control and Management

Ensure traffic management measures are installed as per OTM Book 7 and accepted plans.

Note: Advance notice must be provided to the Town before any closures, detours, and/or extended lane restrictions may be implemented. Timeframes for advanced notice will be determined by the Town, as applicable.

3.4.4. Erosion and Sedimentation Control (ESC) and Stormwater Management (SWM)

- ESC Measures:
  - Confirm installation, location, and functionality of ESC measures are as per accepted drawings.
  - Implement measures to prevent ponding during topsoil removal.
  - Establish topsoil pile location with proper ESC measures as per accepted drawings.
  - Stormwater control devices must be inspected and maintained regularly to ensure functionality, as applicable.
- Catchbasins and Ditches:
  - Check cleanliness of existing catchbasins and ditches and ensure protection is installed and maintained as per accepted drawings.
  - Ensure clean water discharge to appropriate outlets.
- Temporary Swales and Drainage:
  - Install temporary swales for positive drainage conveyance.
  - Manage on-site ponding by pumping or conveying through swales.
  - When pumps are used, a filter bag will be required.
  - Manage existing surface runoff.
- Identify stockpile and staging locations.

- Conduct ESC compliance walkthrough with the Town and Consultant prior to commencement of earthworks.
    - For information regarding earthworks and soil handling, refer to Section 1.5.

3.5. COMPLETION OF MUNICIPAL CONNECTIONS

Notification of the intent to connect to municipal servicing infrastructure and a schedule of the proposed connection works are to be provided to the Town, at which point a mandatory Pre-connection Meeting is to take place in coordination with the Town. Requirements pertaining to connections to specific municipal servicing infrastructure are outlined in this section.

3.5.1. Pre-Connection Requirements

- Building Permit is required prior to connection of sanitary lateral on private property.
- Mandatory External Servicing Meeting to be held with the Town, Consultant, Servicing Contractor, and others as necessary.
    - Timelines for service connections to be discussed and provided to the Town.
    - Consultant's responsibilities are to be reviewed.
    - Potential impacts to ROW (i.e., lane closures, sidewalk closures and servicing conflicts) are to be discussed.
    - ROW restoration plan to be discussed and provided to the Town.
- Consultant is to remain on site full-time for all works pertaining to the municipality.
- ROW safety measures are to be installed prior to construction and remain in place until construction is complete.
- Leakage testing on sanitary maintenance holes is to be conducted in accordance with the Town of BWG's CLI ECA requirements, and the Town's DCM and General Notes.
- Commissioning plan prepared by a Licensed Water Commissioning Contractor is to be submitted to the Town.
    - The Town's Compliance Division and Water Division will be circulated on the water commissioning plan for acceptance.
- Schedule of commissioning works to be coordinated with the Town.

Note: The Town is required to witness all commissioning procedures, and samples will be taken, collected, and processed exclusively by the Town's Water Department.

3.5.2. Sanitary Drainage System Connection Requirements

- The Town's Wastewater Division to be notified in advance by Town Staff.
- Consultant is to remain onsite full-time for the duration of works.
- Ensure proper materials are onsite for service connection.
- Consultant to verify proper installation in accordance with accepted plans.
- Geotechnical Engineer to confirm bedding and backfill materials and compaction.
- Unshrinkable fill is required to be placed to underside of road granular when connections are crossing the road.
- Connection must be witnessed by the Consultant and the Town.
- Where a property line maintenance hole is installed, a mechanical plug shall be installed on the downstream side of the property line maintenance hole.

3.5.3. Storm Drainage System Connection Requirements

- Consultant to remain onsite full-time for the duration of works.
- Ensure proper materials are onsite for service connection.
- Consultant to verify proper installation in accordance with accepted plans.
- Geotechnical Engineer to confirm bedding and backfill materials and compaction.
- Unshrinkable fill is required to be placed to underside of road granular when connections are crossing the road.
- Connection must be witnessed by the Consultant and the Town.
- Manufactured Treatment Devices (MTDs):
  - Ensure all MTDs are installed as per accepted plans.
  - Owner is responsible for all maintenance of MTDs within the Town's ROW until assumption.
- Low Impact Development (LID) Measures:
  - Ensure all LID measures are implemented as per accepted plans.

3.5.4. Water Distribution System Connection Requirements

- Prior to connection, a Commissioning Package with all required documents is to be submitted to the Town by the Consultant.
- The Town's Water Division shall be notified in advance by Town Staff.
- Consultant is to remain onsite full-time for the duration of works.

- Ensure proper materials are onsite for service connection.
- Consultant to verify proper installation in accordance with accepted plans.
- Geotechnical Engineer to confirm bedding and backfill materials and compaction.
- Unshrinkable fill is required to be placed to underside of road granular when connections are crossing the road.
- Connection to be witnessed by Consultant and the Town.

3.5.5. Post-Connection Requirements

- Consultant to provide a package containing as-built drawings, certification letters from the Consultant, and any additional materials, as identified by the Town.

3.6. CONSTRUCTION PHASE

3.6.1. Site Monitoring Requirements

Throughout the construction phase of project works, the following items are to be monitored on an ongoing basis:

- Ensure ESC Measures are maintained throughout construction.
- Ensure ROW is cleared of construction material and debris.
- Road cleaning program to be updated to suit site conditions.
  - Additional road cleaning may be required at the sole discretion of the Town.
- Any resident complaints received by the Town may be forwarded to the Consultant and are to be investigated and addressed by the Developer and/or Consultant within a reasonable timeframe as defined by the Town.

3.6.2. Pre-sod Grading Requirements

It is required that a pre-sod grading inspection be conducted in correspondence with the Town before sod may be installed. For detailed guidance regarding Town inspections, refer to Appendix C of this document.

Note: It is recommended that pre-sod grading and inspection be conducted after major construction works have been completed, and that sod be placed within approximately one (1) week after a successful pre-sod inspection.

3.7. FINAL INSPECTION REQUIREMENTS

In accordance with the Site Plan Agreement (SPA), the Consultant must submit the following documents prior to final inspections:

- As-builts for Civil and Landscape works
- Certification Letters for Civil and Landscape works

After receipt of the required documentation, it is required that the following inspections be conducted in correspondence with the Town:

- Boulevard inspection
- Line painting inspection
- Lighting inspection
- Asphalt inspection
- Signage inspection
- Post-sod grading inspection
- General landscape and planting inspection
- Services inspection

At the Town's discretion, additional inspections may be required. For detailed guidance regarding Town inspections, refer to Appendix C of this document.

3.8. SECURITY RELEASE

Upon successful completion of the required final inspections, the Consultant may submit a security release request in accordance with the SPA.

4.1. INTRODUCTION

This section serves as a guide regarding the requirements for installing new municipal services within the municipal right-of-way (ROW). This guide provides instructions for Homeowners, Builders, Developers, Consultants, and Contractors to ensure adherence to the permitting, preconstruction, and construction processes, and compliance with Town Standards. By following these guidelines, stakeholders can minimize the potential for conflicts and facilitate a successful connection to the municipal water distribution, wastewater, and stormwater drainage systems. Town Building Permits will be required for any work within private lands.

For detailed guidance regarding Town inspections, refer to Appendix C of this document.

4.2. PERMITS AND APPROVALS

Ensure all necessary permits, approvals and clearances are obtained prior to commencing work.

- Signed and accepted drawings
- Additional Connection Authorization Letter
- Securities
- Certificate of Insurance (Town to be named on COI)
- Traffic Management Plan (as required)
- Obtain startup documentation, including WSIB, and Notice of Project (NOP) (as required)

Note: Additional connections cannot be scheduled during winter months, unless otherwise approved by The Town.

4.3. PRECONSTRUCTION

The Owner and Consultant are to coordinate the following items prior to the mandatory preconstruction meeting:

- Confirm locations and elevations of all existing infrastructure within the municipal ROW.
- Identify and assess potential conflicts with poles, trees, and utilities.

4.3.1. Preconstruction Meeting

A mandatory Preconstruction Meeting is to be held with the Town to discuss and address the following:

- Work schedule (provided by Contractor)
- Traffic Management Plan
- Management of road and ROW occupancy
- Road cleanliness
- Consultant responsibilities
- Potential conflicts with existing infrastructure
- Municipal ROW and road restoration (as required)
- Locates to be valid at time of construction
- Any other items as identified by the Town

The following parties are to attend the Pre-Construction Meeting:

- Town staff (as required)
- Qualified Civil Engineering Consultant
- Qualified Contractor
- Owner/Owner's representative

4.3.2. Resident Communication

- Consultant may be required to send a letter informing surrounding residents about staging, timing, and potential impacts, and provide residents with a site contact.
- Resident complaints pertaining to site works will be forwarded to the Consultant for resolution with the complainant in consultation with the Town.

4.4. SITE PREPARATION

4.4.1. Traffic Management

- Traffic Management Plan prepared in accordance with OTM Book 7 to be provided by Consultant for Town review.
    - Traffic controls to be implemented prior to start of construction in accordance with OTM Book 7 and accepted drawings.

- Advance notice must be provided to the Town for closures, detours, and extended lane restrictions to provide the Town the opportunity to adequately review.
- A minimum of one week of public notice is required prior to any road closure or lane reductions.
- Steel plates may be required for reopening of lanes prior to asphalt placement.

- Ensure traffic management signage is installed correctly as per accepted plans.

4.4.2. Safety

- Ensure site is safe and secure at all times (e.g., barriers, fencing, etc.).
- Ensure there are adequate safety measures and signage for pedestrians.
- Trench boxes are required, as applicable.

4.4.3. Road cleanliness

- Maintain road cleanliness to the Town's satisfaction.
  - Weather permitting, road flushing may be required at the Town's discretion.
- Debris and trash to be collected and secured onsite and disposed of in an appropriate manner.

4.4.4. Drainage and Catchbasins

- Check cleanliness of existing catchbasins and ensure protection is installed and maintained.
- Ensure clean water discharges to appropriate outlet.
  - A filter bag may be required as directed by The Town.

4.4.5. Pre-connection Testing

- Leakage testing on sanitary maintenance holes is to be conducted in accordance with the Town of BWG's CLI ECA requirements, the Town's DCM and General Notes.

4.5. CONNECTION REQUIREMENTS

4.5.1. Storm and Sanitary

- Approved fittings to be used for connection to the main.
- Consultant and the Town to witness connection within ROW.

4.5.2. Water

- Connection(s) must be conducted by live tap, unless otherwise approved by the Town.
- Consultant and the Town to witness connection and live tap within ROW.
- Cathodic protection is required to be installed as directed by the Town.

Note: Municipal Water System shall be operated exclusively by appropriate Town Staff.

4.6. ROAD RESTORATION REQUIREMENTS

4.6.1. Trench and Asphalt Restoration

- Existing asphalt is to be saw cut with clean straight edges.
- Lap joints will be required as per accepted plans or as directed by the Town.
- Asphalt restoration is required across entire width of road (curb-to-curb).
- Trenches within close proximity (as determined by the Town) to one another will be required to be reinstated with one continuous patch of asphalt extending across all trenches.
- Unshrinkable fill is required to be used and shall be placed to the underside of granular road base.
    - Roadway makeup is to be as per existing conditions or as noted on the accepted plans or as directed by the Town.

4.6.2. Municipal Right of Way (ROW) Restoration

- Disturbed areas within the ROW must be restored, including sod, asphalt, and concrete, as per accepted plans and to the satisfaction of the Town.

4.7. FINAL INSPECTION

4.7.1. Prior to Final Inspection

The Consultant must submit the following documents prior to final inspection:

- As-built site servicing drawing
- Certification letters from the Consulting Engineer that confirm the site servicing and restoration are in general conformance with the accepted plans

4.7.2. Final and Post-Warranty Period Inspections

- Final inspection to be conducted with the Consultant following receipt of the required documents.
  - For detailed guidance regarding Town inspections, refer to Appendix C of this document.

Note: Inspections cannot be conducted during winter months unless otherwise agreed to by The Town.

4.8. SECURITY RELEASE

- Upon successful completion of the final inspection, the Consultant may submit a Security Reduction Request to reduce the Security to 20%, which is to be retained by the Town for the one-year maintenance period, as a minimum.
- Following completion of the minimum one-year maintenance period, The Town will undertake a visual inspection of the area and, if satisfactory, the 20% maintenance security will be released.

Should deficiencies be identified, repairs will be required to the satisfaction of the Town, and the maintenance security will not be released until the required repairs are undertaken to the Town's satisfaction.

5.1. INTRODUCTION

This section serves as a guide for the construction, ongoing maintenance, acceptance, and assumption processes for municipal stormwater management (SWM) facilities within the Town of Bradford West Gwillimbury. It is to be read in conjunction with Section 1 and Section 2 of this document.

5.2. CONSTRUCTION

5.2.1. Components

- Install inlet and outlet structures.
- Construct forebays and permanent pools.
- Install emergency spillways and overflows, and drawdowns (if applicable).
- Ensure outlet is installed as per accepted design and elevation.
- Water level marker, inlet and outlet identification, and SWM facility identification signage.
- SWM facilities are not to be over-excavated under any circumstances.

5.2.2. Lining & Stabilization

- Install clay or synthetic liners (if applicable).
- Stabilize side slopes with topsoil and approved seed mix.
- Install riprap or gabion stone mattresses at berm, as per accepted design.
- Install riprap or gabion at spillway(s) (If applicable).
- SWM Facility features:
    - Consultant to confirm permanent pool depths and volumes.
    - Establish wetland and vegetative zones.
    - Installation of pond safety features.
        - Chainlink fence on headwalls and structures
        - Perimeter fencing (if applicable)
        - Appropriate safety signage (as per accepted plans)
        - Safety grates to be installed (inlets and outlets)

5.3. ONGOING MAINTENANCE AND MONITORING

Any SWM facility constructed within the Town of BWG is subject to ongoing maintenance and monitoring for the duration of its operation under the Owner, alongside monitoring conducted by the Town. In addition to the Owner's own monitoring program, compliance inspections will be conducted by the Town on an annual basis, and after any significant weather events. Should deficiencies be identified by either party, the Owner is to rectify within a certain timeframe, as defined by the Town.

Ongoing Monitoring of the SWM Facility is to include inspections with regard for the following items and their conditions:

- General Observations (weather conditions, time of day, etc.)
- Condition of ESC measures
- Accumulation of sediment
- Condition of SWM facility components (headwalls, inlets, outlets, etc.)
- Integrity of weir, shoreline, and surrounding slopes
- Debris and blockages
- Flow rate of discharge
- Turbidity of discharge
- Signage
- Access/Site Security
- Fencing/Railing
- Vegetation/overgrowth

Any SWM Facility inspection reports are to be submitted to the Town and be accompanied by a deficiencies list, should any deficiencies be observed. Remediation of deficiencies is to be to the satisfaction of the Town.

5.4. SWM FACILITY CLEANING REQUIREMENTS

5.4.1. Prior to Cleaning

The following items are to be discussed in a Preconstruction Meeting with the Town and provided prior to the commencement of cleaning works:

- Bathymetric survey to be conducted to determine volume of sediment.
- Relevant Permits and Approvals (e.g., MECP, Conservation Authority) to be provided in a complete package.
- Fish Rescue and Relocation Plan to be discussed and provided.
- Sampling and Analysis Report to be provided.
- Construction Management Plan (CMP) and accompanying Dewatering Plan to be provided.
- Excess Soils Management Plan (including sediment disposal location) to be provided.
    - Qualified Person(s) to oversee execution
- Ensure existing ESC measures are adequate and updated as directed by the Town.
- Road cleaning program and Material haul route to be discussed and provided.
- The Town's Stormwater Department inspection report pertaining to pond maintenance.
    - Should deficiencies be identified by either party, the Owner is to rectify within a certain timeframe, as identified by the Town.
- Consultant will be required to send a letter that is to be accepted by the Town informing surrounding residents about staging, timing, and potential impacts, including a map of the proposed haul route, and provide residents with a site contact.
    - Advanced notice of one (1) week is to be provided prior to resident communication for the Town to release public communication.
- Resident complaints pertaining to SWM Facility works will be forwarded to the Consultant for resolution with the complainant, in consultation with the Town.

5.4.2. During Cleaning

Throughout the cleaning process, the Consultant shall coordinate the following:

- Monitor and maintain ESC measures daily and after significant rainfall events.
- Refresh any ESC components identified as not working as intended.

- Monitor condition of haul routes and surrounding areas to ensure cleanliness is maintained.
- Ensure CMP and Dewatering Plans are being followed as accepted by the Town.
- Consultant to conduct ongoing inspections and weekly meetings with the Town to ensure compliance with accepted plans.

5.4.3. Post Cleaning

Once pond cleanout is complete, the Consultant is to conduct and provide the following to the Town in one complete package:

- As-Built Drawings, including bathymetric survey and final berm elevations
- Certification Letters
- Soil Assessment Report
- Wildlife and Fish Management Documentation
- Sampling Methods and Timing Information
- Other Regulatory Submissions
- Copies of all inspection reports created throughout the cleaning process
- Consultant to coordinate final pond inspection with the Town's Development Engineering Division and Stormwater Department.
    - Should deficiencies be found, repairs will be required as soon as possible to the satisfaction of the Town.
- Consultant to coordinate follow-up inspection once deficiencies have been rectified.

5.5. ACCEPTANCE SUBMISSION

5.5.1. Required Inspections

A request for Municipal Acceptance requires that inspections addressing the following items be conducted in correspondence with the Town:

- Infrastructure
- General Observation
- Signage
- Access/Site Security
- Fencing/Railing/Grates

- Compliance inspection requirements
- Vegetation/overgrowth
- CCTVs of all lines leading to SWM Pond
- All Inspection reports to be submitted to the Town

For detailed guidance regarding Town inspections, refer to Appendix C of this document.

5.5.2. Certification Letters

- SWM Facility Capacity (Bathymetric survey)
  - Should sedimentation levels approach 20% of design capacity, a cleaning program may be required prior to consideration for acceptance at the discretion of the Town. For details regarding cleaning requirements, refer to Section 5.4.
- SWM Facility Functionality
- General conformance in accordance with approved plans
- Confirmation of deficiency completion
- As-constructed drawings, including berm elevations
- Sampling and analysis reports certifying water and soil quality, as applicable
- Provide evidence of compliance with requirements from the relevant agencies, if cleaning is to be undertaken, or if otherwise applicable.

5.6. ASSUMPTION SUBMISSION

5.6.1. SWM Facility Cleaning

Prior to consideration for Assumption of a SWM Facility, it is required that the SWM Facility be cleaned to the satisfaction of the Town. For details regarding cleaning requirements, refer to Section 5.4.

- A cleaning program is required to be provided prior to commencement of cleaning works.
- Provide evidence of compliance with MECP, and Conservation Authority requirements, as applicable.
- SWM Facility shall be cleaned to the designed bottom.

5.6.2. Required Inspections

A request for Assumption requires that the following inspections be conducted to address the following items, and that they be conducted in correspondence with the Town's Development Engineering Division and Stormwater Department once cleaning of the SWM Facility has been completed:

- Infrastructure
- General Observation
- Signage
- Access/Site Security
- Fencing/Railing/Grates
- Compliance inspection requirements
- Vegetation/overgrowth
- CCTVs of all lines leading to SWM Pond
- Inspection reports to be submitted to the Town

For detailed guidance regarding Town inspections, refer to Appendix C of this document.

5.6.3. Certification Letters

- SWM Facility Capacity (Bathymetric survey)
- General conformance in accordance with approved plans, including SWM facility cleanout certification
- Confirmation of deficiency completion
- Post-cleaning as-constructed drawings, including berm elevation
- Sampling and analysis reports certifying water and soil quality, as applicable
- Performance Reports ensuring SWM Facility's functionality
- Provide evidence of compliance with requirements from the relevant agencies, as applicable.
- Provide O&M manual, which is to contain the Maintenance Schedule, Maintenance Logbook, and the Spill Contingency Plan.

Bradford West Gwillimbury

A Growing Tradition

Appendix A

Milestone Submission Request Forms

A.1 Underground Acceptance Request Form

Underground Acceptance Request						Bradford West Gwillimbury A Growing Tradition
Development Name:		***Phase:***		***File Number:***		
Consultant Representative:		***Development Engineering Representative:***		***Manager of Development Engineering:***		
Name:		*Name:*		*Name:*		
Signature:		*Signature:*		*Signature:*		
Date:		*Date:*		*Date:*		
Item #	***Description***					***Date Submitted (DD/MM/YYYY)***
CERTIFICATION LETTERS & GEOTECHNICAL REPORTS						
1	Certification letter from the Civil Engineering Consultant that all Municipal Services are substantially completed to base curb and base asphalt elevation					
2	Certification letter from the Civil Engineering Consultant confirming all municipal services constructed within easements have been constructed entirely within easement limits					
3	Certification letter from the Civil Engineering Consultant stating that “Unassumed Road” signs, temporary street name signs, and applicable regulatory signs have been installed					
4	Soils chemical analysis report from the Geotechnical Engineering Consultant					
5	Certification letter from the Geotechnical Engineering Consultant confirming engineered fill placement					
6	Trench backfill compaction testing report from the Geotechnical Engineering Consultant					
7	Subgrade evaluation (proof roll) report from the Geotechnical Engineering Consultant					
8	Sieve analysis reports for construction materials used during site servicing from the Geotechnical Engineering Consultant					
9	Concrete mix design review/acceptance and corresponding field-testing reports from the Geotechnical Engineering Consultant					

10	Asphalt mix design review/acceptance and corresponding field-testing reports from the Geotechnical Engineering Consultant	
11	Well decommissioning report from the Environmental Engineer (if applicable)	
12	Groundwater monitoring report from the Environmental Engineer (if applicable)	
INSPECTION REPORTS (Deficiencies Lists)		
1	Underground visual inspection report and deficiency list	
2	Mandrel deflection testing inspection report and deficiency list	
3	Erosion and sediment control inspection reports	
4	Air testing inspection reports for all required sewer infrastructure	
5	CCTV inspection reports	
6	Maintenance hole leakage testing reports	
7	Submission of Completed Underground Acceptance Inspection Checklist	
NOTE:	*Repair confirmation for all deficiencies noted in the above inspection reports will be required prior to consideration for acceptance, unless otherwise agreed to by the Town.*	
MISCELLANEOUS REQUIREMENTS		
1	CCTV videos of complete SAN & STM sewer systems including a deficiency list and confirmation of repair of all noted deficiencies unless otherwise agreed to by the Town	
2	Completed watermain commissioning package (as specified in Town of Bradford West Gwillimbury Watermain Commissioning Checklist available upon request)	
3	Confirmation that a mechanical plug has been installed at the downstream connection to the existing SAN sewer (if applicable)	
4	Confirmation that a half bulkhead has been installed at the downstream connection to the existing STM sewer (if applicable)	
5	Confirmation that all stormwater management facilities have been constructed to substantial capacity	
6	Confirmation that hoarding has been installed around all above ground infrastructure (as required)	

A.2 Municipal Acceptance Request Form

Municipal Acceptance Request					Bradford West Gwillimbury A Growing Tradition
Development Name:		***Phase:***	***File Number:***		
Consultant Representative:		***Development Engineering Representative:***		***Development Engineering Representative:***	
Name:		*Name:*		*Name:*	
Signature:		*Signature:*		*Signature:*	
Date:		*Date:*		*Date:*	
Item #	***Description***				***Date Submitted (DD/MM/YYYY)***
CERTIFICATION LETTERS & GEOTECHNICAL REPORTS					
1	Traffic control certification letter from the Civil Engineering Consultant				
2	Stormwater management facility certification letter from the Civil Engineering Consultant				
3	Municipal services substantial completion to top asphalt elevation, certification letter from the Civil Engineering Consultant				
4	Lot Grading Certification letter(s) for all required lots within the Registered Plan of Subdivision from a Civil Engineering Consultant				
5	Certification letter from a Landscape Architect that landscaping and fencing have been 95% completed				
6	Concrete mix design review & subsequent testing reports from a Geotechnical Engineer				
7	Noise attenuation certification letter from an Acoustical Engineer (if applicable)				
8	Light standard certification letter and ESA certification of energization from the Electrical Consulting Engineer				
9	Asphalt mix design review, certification, and corresponding field-testing reports from the Geotechnical Engineer				

10	Well decommissioning report from the Environmental Engineer (if applicable)	
11	Groundwater monitoring report from the Environmental Engineer (if applicable)	
INSPECTION REPORTS (Deficiencies Lists)		
1	Base curb inspection report	
2	Base asphalt inspection report	
3	Top curb inspection report	
4	Sidewalk inspection report	
5	Underground visual inspection report	
6	Waterbox inspection report	
7	Mainline valve and hydrant / secondary valve inspection report	
8	Top asphalt inspection report (if applicable)	
9	Line painting and traffic signage inspection report	
10	Boulevard inspection report	
11	Landscape inspection report	
12	Streetlight and utility inspection report	
13	Submission of Completed Municipal Acceptance Inspection Checklist	
NOTE:	*Repair confirmation for all deficiencies noted in the above inspection reports will be required prior to consideration for acceptance, unless otherwise agreed to by the Town.*	
MISCELLANEOUS REQUIREMENTS		
1	CCTV's and corresponding inspection reports of complete SAN & STM sewer systems including a deficiency list and confirmation of repair of all noted deficiencies unless otherwise agreed to by the Town (prior to top asphalt placement)	
2	As-Constructed Drawings and Infrastructure Data Sheets (as specified in Town of Bradford West Gwillimbury Design Criteria Manual)	
3	Confirmation that all hydrants have been painted	
4	Confirmation that SAN lateral CCTVs for all lots within the Registered	

	Plan of Subdivision have passed (prior to top asphalt placement)	
5	Confirmation that all vacant lots and blocks have been topsoil and seeded	
6	Confirmation that 85% of all buildings or structures have been substantially constructed and that any vacant lots have been topsoiled and seeded	
7	Confirmation that 85% of all street trees are installed	
8	Confirmation that 95% of all fencing and landscaping is complete	

A.3 Final Assumption Request Form

Final Assumption Request						
Development Name:		***Phase:***		***File Number:***		
Consultant Representative:		***Development Engineering Representative:***		***Development Engineering Representative:***		
Name:		*Name:*		*Name:*		
Signature:		*Signature:*		*Signature:*		
Date:		*Date:*		*Date:*		
Item #	***Description***					***Date Submitted (DD/MM/YYYY)***
CERTIFICATION LETTERS & GEOTECHNICAL REPORTS						
1	Certification letter from a Registered Ontario Land Surveyor (OLS)					
2	Lot Grading certification letter(s) for all remaining lots within the registered plan of subdivision from a Civil Consulting Engineer					
3	Certification letter from a Landscape Architect that landscaping and fencing have been completed					
4	Retaining wall certification letter from a Structural Engineer and Geotechnical Engineer (as applicable)					
5	Certification letter from an Electrical Consulting Engineer confirming that the street lighting and appurtenances are functional and as per accepted plans					
6	Stormwater management facility certification letter from a Civil Consulting Engineer					
7	Concrete mix design review & subsequent testing reports from a Geotechnical Engineer					
INSPECTION REPORTS (Deficiencies Lists)						
1	Underground visual inspection report					
2	Curb inspection report					

3	Sidewalk inspection report	
4	Top asphalt inspection report.	
5	Line painting and traffic signage inspection report.	
6	Boulevard inspection report.	
7	Landscape inspection report.	
8	Streetlight and utility inspection report.	
9	Submission of Completed Final Assumption Inspection Checklist	
NOTE:	*Repair confirmation for all deficiencies noted in the above inspection reports will be required prior to consideration for assumption, unless otherwise agreed to by the Town.*	
MISCELLANEOUS REQUIREMENTS		
1	CCTV's and corresponding inspection reports of complete SAN & STM sewer systems including a deficiency list and confirmation of repair of all noted deficiencies.	
2	Confirmation of previous submission of CCTV footage.	
3	Confirmation of cash-in-lieu payment to the Town for installation of survey monuments.	**Municipal Use Only**

A.4 Post-Assumption Request Form

Post-Assumption Request					
Development Name:		***Phase:***	***File Number:***		
Consultant Representative:		***Development Engineering Representative:***		***Development Engineering Representative:***	
Name:		*Name:*		*Name:*	
Signature:		*Signature:*		*Signature:*	
Date:		*Date:*		*Date:*	
Item #	***Description***				***Date Submitted (DD/MM/YYYY)***
CERTIFICATION LETTERS & GEOTECHNICAL REPORTS					
1	Certification letter from a Landscape Architect for trees and fencing two (2) years following Final Assumption.				
2	Retaining wall certification letter from a Structural Engineer and Geotechnical Engineer five (5) years following Final Assumption, if applicable.				
INSPECTION REPORTS (Deficiencies Lists)					
1	Planting Inspection Report				
2	Fencing Inspection Report				
3	Retaining Wall Inspection Report				
NOTE:	*Repair confirmation for all deficiencies noted in the above inspection reports will be required prior to consideration for assumption, unless otherwise agreed to by the Town.*				

A.5 Site Alteration Acceptance Request Form

Site Alteration Acceptance Request						
Development Name:		***Phase:***		***File Number:***		
Consultant Representative:		***Development Engineering Representative:***		***Manager of Development Engineering:***		
Name:		*Name:*		*Name:*		
Signature:		*Signature:*		*Signature:*		
Date:		*Date:*		*Date:*		
Item #	***Description***					***Date Submitted (DD/MM/YYYY)***
CERTIFICATION LETTERS & GEOTECHNICAL REPORTS						
1	Earthworks certification letter from Consultant (to include confirmation of final inspection conducted with the Town).					
2	As-constructed drawings stamped and certified by a Professional Engineer.					
3	Certification of Engineered Fill placement by a Geotechnical Engineer.					
INSPECTION REPORTS (Deficiencies Lists)						
1	All ESC inspection reports to be provided by Consultant in one complete package.					
NOTE:	*Repair confirmation for all deficiencies noted in the above inspection reports will be required prior to consideration for acceptance, unless otherwise agreed to by the Town.*					
MISCELLANEOUS REQUIREMENTS						
1	Confirmation of slope stabilization on project site from Consultant.					
2	Confirmation of decommissioning of temporary ESC measures and SWM Facilities, if applicable.					
3	Final Walkthrough to be conducted with Town Staff.					

A.6 Site Plan Acceptance Request Form

Site Plan Acceptance Request					
Site Address:		***File Number:***			
Consultant Representative:		***Development Engineering Representative:***		***Development Engineering Representative:***	
Name:		*Name:*		*Name:*	
Signature:		*Signature:*		*Signature:*	
Date:		*Date:*		*Date:*	
Item #	***Description***				***Date Submitted (DD/MM/YYYY)***
CERTIFICATION LETTERS & GEOTECHNICAL REPORTS					
1	As-constructed drawings stamped and certified by a Professional Engineer.				
2	Certification letter for completion of site works, as per the approved Site Plan Agreement.				
3	Certification letter for completion of servicing works within the municipal ROW, and that restorations have been completed to the Town's satisfaction.				
4	Grading certification letter from the Consultant, if required by the Town.				
5	Landscaping certification letter from the Landscape Architect.				
INSPECTION REPORTS (Deficiencies Lists)					
1	All ESC inspection reports to be provided by Consultant in one complete package, if applicable.				
2	Underground Visual Inspection Report.				
3	Final walkthrough report and all accrued deficiencies lists to be provided as one package.				
NOTE:	*Repair confirmation for all deficiencies noted in the above inspection reports will be required prior to consideration for acceptance, unless otherwise agreed to by the Town.*				

MISCELLANEOUS REQUIREMENTS		
1	Completed watermain commissioning package (as specified in Town of Bradford West Gwillimbury Watermain Commissioning Checklist, available upon request).	
2	Confirmation of removal of half-bulkhead.	
3	Confirmation of removal of sanitary plug.	
4	Confirmation that final walkthrough has been conducted with Town Staff.	
NOTE:	*Prior to final walkthrough with Town Staff, the Consultant is to provide certification that all site works have been completed in accordance with accepted drawings and plans, and as-constructed drawings have been provided to the Town.*	

Bradford West Gwillimbury

A Growing Tradition

Appendix B

Milestone Inspection Checklists

B.1 Underground Acceptance Inspection Checklist

Underground Acceptance Inspection Checklist						Bradford West Gwillimbury A Growing Tradition
Development Name:		***Phase:***		***File Number:***		
Consultant Representative:		***Development Engineering Representative:***		***Manager of Development Engineering:***		
Name:		*Name:*		*Name:*		
Signature:		*Signature:*		*Signature:*		
Date:		*Date:*		*Date:*		

Inspection Name	***Initial Inspection Date (DD/MM/YYYY)***	***Deficiencies List Provided? (Y/N)***	***Successful Reinspection Date (DD/MM/YYYY)***
Subgrade Evaluation Inspection (Proof-Roll)			
Underground Visual Inspection			
Mandrel Deflection Testing			
Erosion Sediment Control Inspections			
Air Testing Inspection			
CCTV Inspection			
Maintenance Hole Leakage Testing			
Mechanical Plug Inspection			
Watermain Commissioning			

B.2 Municipal Acceptance Inspection Checklist

Municipal Acceptance Inspection Checklist						Bradford West Gwillimbury A Growing Tradition
Development Name:		***Phase:***		***File Number:***		
Consultant Representative:		***Development Engineering Representative:***		***Manager of Development Engineering:***		
Name:		*Name:*		*Name:*		
Signature:		*Signature:*		*Signature:*		
Date:		*Date:*		*Date:*		

Inspection Name	***Initial Inspection Date (DD/MM/YYYY)***	***Deficiencies List Provided? (Y/N)***	***Successful Reinspection Date (DD/MM/YYYY)***
Visual Underground Inspection			
Waterbox			
Mainline Valve and Hydrant/Secondary Valve			
Top Asphalt			
Line Painting and Traffic Signage			
Boulevard			
Landscape Inspection			
Planting Inspection			
Streetlight And Utilities			
Pond Inspection (if applicable)			
Retaining Wall (if applicable)			

B.3 Final Assumption Inspection Checklist

Final Assumption Inspection Checklist					
Development Name:		***Phase:***		***File Number:***	
Consultant Representative:		***Development Engineering Representative:***		***Manager of Development Engineering:***	
Name:		*Name:*		*Name:*	
Signature:		*Signature:*		*Signature:*	
Date:		*Date:*		*Date:*	

Inspection Name	***Initial Inspection Date (DD/MM/YYYY)***	***Deficiencies List Provided? (Y/N)***	***Successful Reinspection Date (DD/MM/YYYY)***
Top Curb			
Sidewalk			
Visual Underground Inspection			
Mainline Valve and Hydrant/Secondary Valve			
Top Asphalt			
Line Painting and Traffic Signage			
Boulevard			
Landscape Inspection			
Planting Inspection			
Streetlight And Utilities			
SWM Facility Inspection (if applicable)			
Retaining Wall (if applicable)			

B.4 Post-Assumption Inspection Checklist

Post-Assumption Inspection Checklist						
Development Name:		***Phase:***		***File Number:***		
Consultant Representative:		***Development Engineering Representative:***		***Manager of Development Engineering:***		
Name:		*Name:*		*Name:*		
Signature:		*Signature:*		*Signature:*		
Date:		*Date:*		*Date:*		

Inspection Name	***Initial Inspection Date (DD/MM/YYYY)***	***Deficiencies List Provided? (Y/N)***	***Successful Reinspection Date (DD/MM/YYYY)***
Planting Inspection			
Fencing Inspection			
Retaining Wall Inspection			

Bradford West Gwillimbury

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Appendix C

Inspection Guidance Lists

C.1 Boulevard and Grading Inspections

Boulevard and Grading Inspections	
Item	**Description**
Planting Inspection	
Prior to Inspection	- De-weed mulch beds - Top up mulch beds - Deadwood removal - Pruning of offshoots - Remove stakes and tree protection guards after one (1) year
Trees	- Check for signs of disease, pests, damage, etc. - Look for dead or broken branches - Ensure trees have healthy leaf colour and density - Check the stability of the tree - Look for signs of leaning or root upheaval - Inspect the trunk for cracks, wounds, or decay - Check for signs of insect activity or fungal growth - Assess the shape and fullness of the tree canopy - Ensure branches are not interfering with power lines, structures, or roadways - Check if the tree needs pruning - Ensure any previous pruning has been done correctly - Ensure leader is in good health
Mulch Mounds	- Ensure mulch is applied at an appropriate depth (2-4 inches) - Avoid piling mulch against the tree trunk (volcano mulching) - Check for signs of mold or decay in the mulch - Ensure mulch is evenly spread and not compacted - Inspect for weeds growing through the mulch - Ensure mulch is effectively suppressing weed growth
Shrubs and Plants	- Check the overall health of shrubs and other plants - Look for signs of pests, disease, or nutrient deficiencies - Ensure shrubs are pruned correctly and not overgrown - Check for dead or damaged branches - Ensure plants are spaced appropriately for growth and air circulation - Check for overcrowding or competition among plants
General Landscape Inspection	
Safety Hazards	- Identify any potential trip hazards in landscaped areas - Note the location and severity of hazards - Ensure vegetation or other elements do not obstruct visibility for

	pedestrians and drivers - Check for clear sightlines at intersections and pathways - Identify settlement and uneven terrain - Identify any construction debris or waste produced by the project
Drainage	- Ensure proper drainage along boulevard - Ensure adjacent areas' drainage is not affecting the boulevard - Identify obstructions that may affect drainage or otherwise impact the conveyance of stormwater runoff
Sod	- Ensured that sod placement is as per project plans - Check for healthy, uniform growth - Look for signs of disease, pests, or dead patches
Retaining Walls	- Ensure retaining walls have been constructed and located as per accepted plans - Ensure the proper tiebacks have been implemented correctly - If applicable, ensure retaining wall drains to appropriate outlet, as per accepted plans - Verify the use of filter fabric, if required ***Note:*** The Town will hold a security for five years once a retaining wall has been assumed
Utilities Inspection	
Flush-to-Grade Boxes, Pedestals, and Transformers	- Look for settlement surrounding pedestals or at-grade boxes - Ensure correct alignment with pedestal so as not to expose underground infrastructure - Identify any conflicts with driveways, sidewalks, infrastructure, etc. - Identify any damage to utility infrastructure
Temporary Utility Poles	- Ensure temporary hydro poles and appurtenances have been removed and holes resulting from removal are filled - Look for settlement of pole locations - Ensure utility poles are straight and are not standing at an angle - Identify any damage to utility poles - Ensure correct installation of identification plates
Streetlight Inspection	
Streetlight Poles	- Look for settlement of pole locations - Ensure streetlight poles are straight and are not standing at an angle - Identify any damage to streetlight poles - Ensure panels are closed and secured - Ensure all streetlight appurtenances are installed correctly - Ensure streetlights are operating at the correct wattage, as per plans - Ensure streetlight lenses and photosensitive panels have been cleaned and remain unobstructed

	- Ensure identification plates are installed correctly - Ensure streetlight circuit-breaker panel is installed correctly, secured, and undamaged
Evening Inspection Items	- Identify any non-functioning luminaires - Ensure streetlighting conforms with the provided photometric study
Signage	
General Conditions, Positioning, and Alignment	- Ensure the correct type of signs are located and installed as per plans - Ensure correct spacing - Identify any signs that are in the incorrect locations - Identify any missing signage - Ensure all signs are appropriately visible and legible from a distance - Identify any obstructed signage - Ensure all signage poles are standing straight - Ensure all signs are mounted correctly on the correct type of pole as per plans and Town Design Criteria - Ensure signs are sized correctly as per applicable standard - Ensure signage is located at the correct viewing height and angle - Ensure reflectivity of all signage - Identify any damage to signage and appurtenances
Guidance Signage	- Ensure street names are correct - Ensure street signs are located and directed to the correct street - Ensure streets named after Veterans display the correct poppy symbol on their signage - Ensure directional signs are oriented correctly - Ensure street signs are placed atop one another as per the Town's hierarchical system
Warning and Regulatory Signage	- Ensure all warning signs give appropriate notice - Ensure visibility and legibility from appropriate distance
Pre-Sod Inspection	
Sub-Grade and Drainage Pattern	- Inspect grading and drainage of entire lot including front yard, rear yard, side yard, and boulevards - Verify survey square iron bars (SIBs) are at corners of property or as otherwise required - Ensure curb stop location has been staked to prevent obstruction during sodding - Ensure grading stakes have correct elevations, as per accepted plans - Ensure drainage patterns are properly defined within the subgrade - Ensure sheet drainage slopes are directed away from all

	structures - Ensure high and low points within the drainage pattern are identified on site with stakes and reflect accepted plans - Ensure mid-rear yard cutoff swales are adequately defined - Ensure slopes and berms have been properly graded as per accepted plans and are in accordance with Town standards - Identify potential ponding areas and advise rectification as required - Ensure top of window well sheathing is above subgrade and planned final grade - Ensure risers are as per grading plans - Identify any areas exhibiting settlement and areas that are not as per accepted plans - Identify any areas affected by excess runoff and washout - Ensure grading surrounding servicing and utilities infrastructure is implemented appropriately - Identify obstructed curb stops and mainline water valves for rectification prior to final grading
Post-sod Inspection	
Final Grading and Drainage Pattern	- Final grading and sod are to have been through one winter season before a post-sod inspection may be conducted, unless otherwise directed by the Town - Inspect grading and drainage of entire lot including front yard, rear yard, side yard, and boulevards - Ensure grading and drainage pattern have not been impacted since lot grading work has been completed - Ensure all grading stakes have been removed - Ensure proper drainage pattern has been implemented and has not been impacted since grading work has been completed - Ensure top of window well sheathing is sufficiently above final grade - Verify curb stops and mainline water valves are not buried or obstructed, and are flush-to-grade - Identify any safety hazards associated with final grading (tripping hazards, abrupt settlement, steep slopes, etc.)
Miscellaneous Property Items	- Ensure splash pads are located beneath all downspouts and are oriented correctly - Ensure clear stone has been placed beneath all decks - Ensure top asphalt has been applied to driveways - Ensure sod is as per project plans and has taken root
Sidewalk Inspection	
Condition	- Identify and assess any cracking in sidewalk bays and along edges - Identify and assess signs of spalling and chipping - Identify any vandalism (graffiti, impressions in the concrete, etc.) - Identify any significant settlement of sidewalk bays and

	surrounding boulevard area - Identify areas where ponding has occurred or may occur - Ensure all sidewalk bays are properly aligned and oriented - Ensure smoothness and evenness of sidewalk surface finish, and identify any major imperfections - Identify instances of heaving due to thermal expansion or other reasons - Ensure proper implementation of expansion joints and seams and identify damage or improper placement - Identify vegetation growth through seams and joints
Safety and Accessibility	- Identify any tripping hazards (e.g., excessive surface openings, uneven surfaces, obstructions, etc.), or other safety concerns within and adjacent to sidewalks and pedestrian routes - Ensure all pedestrian routes are visible, accessible, and free of barriers or impediments - Ensure curb ramps, depressed curbs, and any pedestrian crossings meet accessibility standards and have been installed where required - Ensure the correct tactile walking surface indicators (TWSIs) have been properly installed, are in the correct locations, and have been properly maintained - Identify any signs of damage or improper installation of TWSIs - Identify drainage concerns, excessive slopes, overgrown vegetation, or other conditions that may negatively impact accessibility or pedestrian safety, including persons using any assistive aids
Adjacent Areas	- Ensure proper placement of any sidewalk furnishings (benches, bicycle racks, mailboxes, etc.) - Identify any missing appurtenances - Identify any vegetation encroaching onto or over the sidewalk
Fencing Inspection	
General Fence Conditions	- Identify any signs of damage - Identify any misaligned components - Identify any settlement or depressions surrounding fenceposts - Ensure fencing is installed as per plans and on the appropriate side of the property line(s) - Ensure fencing does not negatively impact drainage and identify any potential drainage concerns - Ensure fence is installed at the correct height and extent as per accepted plans - Ensure fence posts are spaced correctly
Privacy Fence	- Identify any signs of wood rot - Identify any loose, unfastened, or missing boards - Identify any large gaps between boards - Identify any warped or misshapen boards - Identify instances of discolouration and ensure correct application of wood stain - Ensure fence is within private property line when bordering

	municipal ROW
Chain-link Fence	- Ensure dimensions of wire mesh are correct as per accepted specifications - Ensure fence is located on municipal side of property line, if abutting municipal property (e.g., park, SWM facility, etc.) - Identify any unfastened or loose mesh - Ensure posts, rails, and wire mesh are coated correctly - Identify any exposed wire mesh - Identify any corrosion of metal parts
Acoustic Fence	- Ensure correct fence is installed on private property and as per approved plans - Ensure acoustic properties have been certified by appropriate Consultant and noise study has been conducted, if required

C.2 Road Inspections

Road Inspections	
Item	**Description**
Subgrade Evaluation Inspection (Proof-Roll)	
Pre-Inspection Preparation	- Review project specifications for subgrade requirements - Confirm required equipment for proof-roll (loaded tandem axle truck or equivalent) - Ensure test weight of proof-roll vehicle meets project specifications
Proof-Roll Process	- Ensure Geotechnical Consultant is present for inspection prior to commencement - Ensure proof-roll vehicle makes systematic passes over subgrade - Ensure full coverage of the test area, including intersections and transitions
Subgrade Performance Evaluation	- Check for uniformity in material response under load - Identify visible deflections, rutting, pumping, or excessive movement - Verify no excessive cracking or shear failure in the subgrade - Note areas requiring rework due to soft or unstable conditions - Ensure subgrade compaction meets project density requirements - Mark and document locations of failed areas for remediation - Specify corrective measures (re-compaction, dig and dry, material replacement or additional material requirements) - If extra material is required, ensure coverage up to next downstream catchbasin - Conduct follow-up inspections after repairs are completed
Final Verification	- Ensure subdrain has been installed as required and as per applicable Town of BWG Standard Drawings - Geotechnical Consultant to confirm subgrade is firm, stable, and properly compacted - Geotechnical Consultant to ensure proof-roll passes without significant deformation - Geotechnical Consultant approve subgrade for next phase of construction (base material placement)
Base Curb Inspection	
Condition of Base Curb	- Verify that the base curb surface has been adequately cleaned prior to inspection - Reschedule inspection if base curb is not visible due to debris - Ensure adjacent base asphalt has been removed prior to inspection - Identify any cracking and mark major cracks - Identify any sections exhibiting major spalling and chipping - Identify any major gouging for repair or replacement - Ensure the key/rut is intact and free of debris - Identify areas where curb has settled or is misaligned - Ensure rebar is doweled-in upon replacement

	- Identify any stirrups that have been bent, broken, or misaligned for replacement - Identify any exposed steel reinforcement (rebar) for replacement - Identify any safety concerns should they be found
Base Asphalt Inspection	
Condition of Base Asphalt	- Ensure Geotechnical Consultant is present for inspection - Identify any cracking and instances of asphalt segregation (“alligatoring”) - Identify any potholes or major settlement - Identify any major instances of asphalt raveling (loose aggregate and surface material) - Identify major instances of asphalt bleeding (binder rising to surface) - Identify major instances of polished asphalt aggregate - Ensure maintenance hole frames and covers are intact and at the correct elevations - Ensure catchbasin frames and covers are intact and at the correct elevations - Ensure depth of base asphalt at the curb is as per the road make-up design and identify areas where padding is required - Identify areas where grinding is required - Verify that the crown of the road is intact - Verify installation of temporary asphalt curbing in the correct locations (i.e., behind catchbasins) and ensure it is in adequate condition
Top Curb Inspection	
Condition of Top Curb	- Verify top curb has been adequately cleaned and made visible prior to inspection - Reschedule if top curb is not visible - Identify any significant cracking, spalling, or chipping for replacement - Identify sections that have settled or are misaligned - Ensure depressions have been implemented correctly in the necessary locations (i.e., driveways, sidewalk accesses, etc.) - Verify adequate application of proper concrete curing agent - Ensure proper finish has been applied - Verify that temporary asphalt curbing has been removed and replaced with concrete top curb - Identify any adjacent settlement
Top Asphalt Inspection	
Condition of Top Asphalt	- Identify any cracking and signs of asphalt segregation (“alligatoring”) - Identify any potholes and settlements - Identify any instances of rutting or other vehicular impacts - Identify any instances of asphalt raveling (loose aggregate and surface material) - Identify any rough or uneven surfaces

	- Identify any instances of bleeding (asphalt binder rising to surface) - Identify any instances of polished aggregate - Ensure maintenance hole frames and covers are intact and flush-to-grade - Ensure catchbasin frames and covers are intact and flush-to-grade - Ensure infrastructure is not blocked or clogged - Ensure asphalt is flush with the face of the top curb - Verify that the crown of the road is intact and drainage is directed away from the road's centre - Identify any inconsistent colouration of the asphalt surface and identify cause if possible - Extent of inspection to include the road surface, shoulder, edges of asphalt and adjacent areas
Road Lines and Markings	
General Conditions	- Ensure visibility of all lines and markings in all weather conditions - Inspect for signs of fading and discolouration - Identify any areas where lines are not easily distinguishable or legible - Identify locations where markings have been partially or completely worn away - Ensure all markings exhibit reflective properties
Alignment and Positioning	- Ensure correct road markings have been applied in the correct areas, as per the accepted plans - Verify the correct spacing between all lines and markings as per accepted plans - Identify any deviations or misalignments - Ensure all markings are the correct sizes and dimensions - Ensure overall compliance with relevant standards and guidelines

C.3 Services Infrastructure Inspections

Services Infrastructure Inspections	
Item	**Description**
Mandrel Deflection Test	
Pre-Inspection Preparation	- Ensure passage is clear of obstructions prior to mandrel insertion - Ensure mandrel used for testing is of the correct size based on pipe diameter (typically, 95% of the pipe's inner diameter) - Inspect the mandrel for any damage or wear that may affect testing results - Ensure all tools and equipment are in proper working condition - Ensure rope is secure and will not sever or break during inspection
Testing Procedure	- Ensure mandrel is inserted from the appropriate maintenance hole or access point and document - Check for any resistance or obstruction as the mandrel passes through the pipe - Ensure mandrel moves smoothly without the use of excessive force - Confirm the mandrel passes through the entire length of the pipe segment and document the exit point - Note any areas where the mandrel had difficulty passing, indicating potential pipe deformation - Measure and document the locations and extent of pipe deformation - Consultant to provide any recommendations for necessary repairs
Air Testing Inspection	
Pre-testing Preparation	- Consultant is to be present on site for all air testing - Ensure air compressors are in operating condition and are suitable for the required testing pressure - Ensure pressure gauges and testing instruments are calibrated - Ensure appropriate sealing materials are on hand (plugs, inflatable plugs) - Visually inspect access points and determine suitability for testing - Check for obstructions, debris, or other conditions that could affect testing
Testing Procedure	- Ensure system is pressurized and stabilized to the required pressure - Maintain specified testing pressure and continuously monitor pressure gauges for the required hold period - Once testing is complete, ensure pressure is released gradually, avoiding any sudden releases of air - Consultant to document any corrective actions taken during testing - Consultant to document the results of the test, including maximum pressure reached and any observed drops in pressure - Identify and provide recommendation for any necessary corrective actions

Examples of Common Failure Mechanisms	- Compromised lateral line caps - Inadequate parging - Dislodged rubber gaskets - Cracked pipes - Poorly connected joints

C.4 Site Preparation and Ongoing Maintenance Inspections

Site Preparation and Ongoing Maintenance Inspections	
Item	**Description**
Erosion and Sediment Control (ESC) Inspection	
Installation of ESC Measures	- Ensure sediment control fence has been installed to the correct extent and is in the correct location, as per accepted plans - Ensure correct type of fence, as per accepted plans - Ensure bottom of fence is adequately buried - Ensure any areas of double fence with straw bales, or any silt socks have been installed correctly and are located as per accepted plans - Ensure cut-off swales are installed in the correct locations as per accepted plans and properly convey runoff - Ensure swales are installed in the correct locations and accompanying rock-check dams have been installed as per plan - Ensure any silt bags have been installed properly in the correct locations, as per plan - Ensure mud mat(s) are installed as per accepted plans and function as intended - Ensure adequate protection from erosion - Ensure temporary pond has been excavated and is functional - Identify any slopes requiring stabilization - Identify any poorly installed ESC measures
Ongoing ESC Inspection Criteria	- Identify any sediment control fence or other ESC measures that have failed - Ensure drainage paths have not been altered and continue to effectively convey stormwater - Identify any potential or existing drainage concerns - Ensure silt bags are being regularly refreshed before they reach capacity - Ensure mud mat is being refreshed on a regular basis - Identify any slopes at risk of erosion and/or major failure - Ensure SWM Facility outfall is free of debris and discharge is clean - Identify any items in need of remediation - Ensure remediation measures have been undertaken within the allotted timeframe - Ensure ESC inspections are conducted on a regular basis, after any significant weather events, and at any time as directed of the Town
Hoarding Inspection	
Hoarding Placement	- All boulevard furniture is to be protected by hoarding before commencement of building phase - Wood hoarding shall fully surround all required items, as per plans - Hydrants to have only the sides and back protected to maintain front-side access for the Fire Department - Ensure hoarding is being maintained throughout the building phase

Tree Protection Inspection	
Tree Protection Measures Placement	- Ensure tree protection measures have been Installed as per approved plans, if applicable - Use correct materials as per approved plans - Tree protection measures to be maintained throughout the project
Winter Maintenance Inspection	
Inspection Criteria	- Ensure all sidewalks are clear and continuous for plowing - Sidewalk to have temporary asphalt in areas where boulevard is unfinished - All long-term parked vehicles, bins, portable restrooms, etc. are to be moved off the road to make room for snowplows - All building materials are to be placed behind the light standards for winter storage - Confirm when any occupancies will be added by the builder during the winter months

Bradford West Gwillimbury

A Growing Tradition

Appendix D

Document Revisions

Revision History
Field Services Manual

D.1 Revisions History

Revision No.	Section No.	Summary/Description of Revision	Date DD/MM/YYYY
Note:	*Any and all revisions made to this document are to be recorded in this table.*		