



As such, the MSP will anchor the key concepts that the City values as fundamental requirements that the Developer must adhere to unless proven otherwise with agreement from City Engineering. Development strategies may change as development progresses but each relevant development application should uphold the over-arching concept of the MSP. The City reserves the right to review and amend the MSP upon each new application submitted as new information arises.

Any review of and requirements pertaining to those other than City utilities such as Building, Environment, Parks, Traffic & Transportation, foreign utilities, external agencies, and public realm may not necessarily be part of the MSP and, as such, the Developer is required to seek communication with other departments as these departments may have additional requirements above and beyond those identified under the MSP.

### **3.0 FORM OF SUBMISSION**

In general, the MSP submission package shall consist of:

- 1) A report document signed and sealed by the Design Engineer describing the proposed development, densities, phases, and timelines.
- 2) Conceptual servicing drawings signed and sealed by the Design Engineer showing proposed servicing layouts for each utility.
- 3) One electronic copy (PDF) submission and one hard copy submission of the report and drawing package set is required. The City may require additional hard copies if needed.

The MSP submission must be sent directly to the Engineering Department, to the attention of the Engineering Infrastructure Planning Manager, by the Developer or the Developer's Engineering Consultant.

### **4.0 GENERAL REQUIREMENTS**

To better guide Developers, the following are standard requirements that the City would review as part of the MSP process.

- The MSP shall clearly identify and describe the proposed development location (address, intersections, et. al.) along with proposed density values for full build out and for each phase of the development. This is to include number of residential unit counts, industrial/commercial/office/institutional square footage, impervious vs. pervious area, and land area.
- The MSP is to include a description of the above and below ground existing conditions (form, function, use, etc.) as well as the proposed ultimate condition that is envisioned for the development.
- The MSP shall show all proposed dedications, rights-of-way, easements, and lot lines.
- The MSP is to include a conceptual layout drawing of the proposed development that will include, but may not be limited to, the following:
  - Proposed podium and building locations with estimate storeys and heights;
  - Site entrance and exit locations;
  - Site grading plan;
  - Surface features (including landscaped and paved areas); and,
  - Extents of underground parkade structures.

- The MSP is to show a conceptual servicing layout for sanitary, stormwater, and water utilities and where proposed connections to the municipal system shall be located along with any associated replacements or upsizing of existing infrastructure needed to support the development.
- The MSP shall also provide an estimate of timing for each phase to be built and the overall horizon for the development to be fully built out.
- The MSP is to clearly identify what is private vs. public infrastructure.
- Avoid proposing City infrastructure within private property, roads, and lanes when possible, unless proven unable to otherwise. If this is the case, the MSP is to clearly identify any rights-of-way required to ensure City access onto private property is provided for operation and maintenance purposes.
- Avoid servicing private lots through private lots.
- Each parcel shall have its own City sanitary and stormwater service connection and each building shall have its own City water service connection unless proven unable to otherwise.
- Design calculations and proposed servicing strategies are to be in accordance with the City's current Design Criteria Manual (DCM), policies, practices, and procedures. A copy of the City's DCM may be found under the following website link:  
  
<https://www.burnaby.ca/Assets/our+city+hall/city+departments/engineering/Engineering+Design+Criteria.pdf>
- Design calculations and proposed servicing strategies are to be in compliance with Regional, Provincial, and Federal Regulations.
- If there are any impacts to Metro Vancouver owned infrastructure or if Metro Vancouver infrastructure is located within, crossing through, or adjacent to the proposed development that may be directly or indirectly impacted, this must be identified clearly and as early as possible to the City for agreement prior to any discussions with Metro Vancouver.
- The Developer shall consider any existing or proposed foreign utilities within or near the development to minimize conflicts with the proposed servicing strategy.
- All values shall be shown in metric units unless otherwise specified (such as floor square footage).

## **5.0 SANITARY**

- The MSP must show all existing sanitary infrastructure that surrounds the development or will be impacted by the development.
- The MSP must clearly show how the development intends on connecting into the City's existing sanitary system.
- The MSP must show where downstream infrastructure requires upgrade in order to properly service the development and to not negatively impact surrounding areas while meeting the City's current design standards, practices, and policies.
- The MSP must show all proposed sanitary infrastructure that is required at the ultimate full build out condition of the development. All design calculations and assumptions made to appropriately size proposed new infrastructure are to be included, and the City may require modelling analysis to be completed on a localized or catchment scale.

- In the event that the City deems it necessary to complete a comprehensive study due to the potential impacts this development may have on the City's sanitary system, the City may choose to retain a Consultant to complete this study at a cost to the Developer.
- The City requires above ground units to be sanitary gravity serviced towards the City sanitary system. For underground parkades and structures, if unable to provide gravity servicing and pumping is required, a controlled rate of discharge from the pump must be provided to the City for review and acceptance.
- The City does not permit groundwater or stormwater to be discharged into the sanitary system as per Sewer Connection Bylaw 1961, No.4247, Sec. 19.1 unless otherwise specified.

## **6.0 WATER**

- The MSP must show all existing water infrastructure that surrounds the development or will be impacted by the development.
- The MSP must clearly show how the development intends on connecting into the City's existing water system.
- The MSP must show where infrastructure requires upgrade in order to properly service the development and to not negatively impact surrounding areas while meeting the City's current design standards, practices, and policies.
- The MSP must show all proposed water infrastructure that is required at the ultimate full build out condition of the development. All design calculations and assumptions made to appropriately size proposed new infrastructure are to be included, and the City may require modelling analysis to be completed on a localized or water pressure zone scale.
- In the event that the City deems it necessary to complete a comprehensive study due to the potential impacts this development may have on the City's water system, the City may choose to retain a Consultant to complete this study at a cost to the Developer.

## **7.0 DRAINAGE**

- The MSP must show all existing drainage infrastructure that surrounds the development or will be impacted by the development.
- The MSP must clearly show how the development intends on connecting into the City's existing drainage system.
- The MSP must show where infrastructure requires upgrade in order to properly service the development and to not negatively impact surrounding areas while meeting the City's current design standards, practices, and policies.
- The MSP must show all proposed drainage infrastructure that is required at the ultimate full build out condition of the development. All design calculations and assumptions made to appropriately size proposed new infrastructure are to be included, and the City may require modelling analysis to be completed on a localized or catchment scale.
- In the event that the City deems it necessary to complete a comprehensive study due to the potential impacts this development may have on the City's drainage system or watershed, the City may choose to retain a Consultant to complete this study at a cost to the Developer.

- The City requires large developments to submit a Master Stormwater Management Plan (SWMP). The Developer is required to ensure that any drainage strategies proposed in the MSP are coordinated with the SWMP. The SWMP may be reviewed by other City staff or parties if necessary. Further details on objectives, requirements, and process for SWMP review and acceptance is not part of this document.

## 8.0 OTHER

- The City's review and acceptance of the MSP mainly focuses on sanitary, water, and drainage utilities. Items pertaining to City Parks, Environment, Traffic, Transportation, Foreign Utilities, Metro Vancouver Regional, Provincial, or Federal requirements are not necessarily reviewed as part of the MSP, however the City may require the MSP to reflect items of this nature if the development imposes a direct impact or relies on infrastructure from these parties in order to provide a more complete servicing strategy. The Developer is encouraged to discuss and coordinate these items with the City as early as possible.

## 9.0 PROCESS

Upon City Engineering receiving the MSP submission, the City will initiate the internal process for review and acceptance of the MSP. The following summarizes next steps and estimated duration of each step for MSP acceptance:

- **Step 1: Initial MSP submitted to the City and must be received by the Infrastructure Planning Manager and deemed a complete submission (2 weeks)**
  - Initial MSP submitted will be reviewed to determine if the submission is considered to be complete. If so, it will be circulated internally to all necessary staff for review and comments, else the Developer will be notified that the submission has been considered incomplete and will not be further reviewed.
- **Step 2: Internal City Staff Review Meeting (RM #1) (4 weeks)**
  - An internal City staff review meeting will be scheduled with Engineering, Planning, and other departments if necessary to collect initial comments, anecdotal information, and potential requirements from staff.
  - Meeting minutes from the review meeting will be created and circulated internally for final comments to be added or changed.
- **Step 3: Engineering Requirements Memo (2 weeks)**
  - From the RM #1 Meeting Minutes, City requirements for the MSP shall begin formalizing. These requirements will be consolidated into one comprehensive Engineering Requirements Memo that will be directed to the corresponding City Planner and copied to the Developer and Developer's Engineering Consultant and Assistant Director – Infrastructure & Development.

**□ Step 4: MSP re-submission to the City and received by the Infrastructure Planning Manager (Developer is allowed 12 weeks for re-submission)**

- The Developer is required to review and address each identified requirement in the Engineering Requirements Memo to the satisfaction of City Engineering.
- Continued coordination with City staff during this time is encouraged to ensure requirements are understood and addressed appropriately. The Developer is to re-submit the MSP for final review and acceptance by City Engineering.
- The City will allow up to 12 weeks from the date of the Engineering Requirements Memo for the Developer to re-submit. After this time, the City may consider any subsequent submission from the Developer as an initial MSP submission, in which case Steps 1 through 4 may be required to be completed again.
- The City understands that there may be several iterations to the MSP prior to final acceptance and will work with the Developer to minimize delays in the process.

**□ Step 5: MSP acceptance letter by the Engineering Infrastructure Planning Manager on behalf of City Engineering**

- Once the MSP submission has been deemed acceptable, the City will issue an MSP acceptance letter directed to the corresponding City Planner and copied to the Developer and Developer's Engineering Consultant confirming that no further comments are provided. Duration to complete this step may vary depending on the issues and requirements identified.

The MSP objectives, requirements, and process stipulated here may vary depending on the complexity and nature of the large development. This document is to be used for information purposes only and serves to only provide guidance to City staff, the Developer, and other interested parties on the MSP process.



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MP/mm

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