



Developer's/Consultants Field Services Guidelines

2007

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CITY OF REGINA

Engineering and Works Department

DEVELOPER'S/CONSULTANT'S FIELD SERVICES GUIDELINES

Fourth Electronic Edition

February 2007

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**STATEMENT OF COMPLETION #1
INFRASTRUCTURE SERVICES**

[State Subdivision Phase – Stage
Servicing Agreement SA __ - __]

I, _____, the Developer’s Consultant Engineer, state as follows with respect to the captioned Servicing Agreement:

1. We have been engaged by the Developer to provide field services in accordance with “Developer’s/Consultant’s Field Service Guidelines” of the City of Regina;
2. We have made tests and inspections of the services constructed or installed or have caused such tests and inspections to be made, and all services inspected and/or tested meet standards and specifications set forth in the Servicing Agreement in accordance with the Guidelines.
3. All Utility Easements and Property Lines have been graded prior to the installation of utilities in accordance with the City of Regina Standard Construction Specifications.
4. To the best of our information and belief the services have been constructed or installed in accordance with drawings, standards and specifications set forth in the Guidelines or the relevant Contract Documents, and that construction deficiencies in such construction or installation have been remedied.

Dated _____, 20__.

Company

Title

Signature

Professional Seal

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STATEMENT OF COMPLETION #2
LANDSCAPE SERVICES
[State Subdivision Phase – Stage
Servicing Agreement SA __ - __]

I, _____, the Developer's Landscape Consultant, state as follows with respect to the captioned Servicing Agreement:

1. We have been engaged by the Developer to provide field services in accordance with "Developer's/Consultant's Field Service Guidelines" of the City of Regina;
2. We have made tests and inspections of the services constructed or installed or have caused such tests and inspections to be made, and all services inspected and/or tested meet standards and specifications set forth in the Servicing Agreement in accordance with the Guidelines.
3. All drainage elevations including infrastructure services confirm with the reviewed landscape design drawings.
4. To the best of our information and belief the services have been constructed or installed in accordance with drawings, standards and specifications set forth in the Guidelines or the relevant Contract Documents, and that construction deficiencies in such construction or installation have been remedied.

Dated _____, 20__.

Company

Title

Signature

Professional Seal

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1.0 PREAMBLE AND OBJECTIVES

The parties agree that the primary objective is to construct subdivisions, complying with the minimum City standards and specifications or higher, with a minimum of duplication in inspection, testing and site attendance by the City and the Consultant. In order to reduce a duplication of inspection services, the Developer's Consultant will be responsible for the task. The Consultant must satisfy himself as to the nature and extent of field services required for a particular project. This document outlines the minimum field services that the City requires to reasonably assure that standards and specifications are achieved.

The standard Servicing Agreement's Clause 6.3 makes reference to the Developer's/Consultant's Field Services Guidelines.

Notwithstanding the above, it is understood and agreed that the Developer is responsible to the City for full performance of the obligations defined in the Servicing Agreement. Carrying out any inspections or failure to carry out inspections shall not impose any obligations or response for the work upon the City or the Consultant, nor shall they relieve the Developer of the responsibility to complete the work in accordance with the Servicing Agreement.

2.0 DEFINITIONS

- 2.1 "City" means the City of Regina, a municipal corporation in the province of Saskatchewan;
- 2.2 "Director" means The Director of Engineering and Works of the City or his delegate;
- 2.3 "Consultant" means the individual and/or corporation contracted by the Developer to provide the service(s) as either a "Consulting Engineer" with regard to "Infrastructure Services" and/or "Landscape Consultant" with regard to "Landscape Services";
- 2.4 "Consulting Engineer" means the professional engineer, duly licensed to practice by the Association of Professional Engineers and Geoscientists of Saskatchewan, to be engaged by the Developer for the purpose of design and project management in relation to the Infrastructure Services and for delivery to the City of documents and written statements as to completion;
- 2.5 "Contractor" means the Contractor hired by the Developer to supply, construct and/or install the work pursuant to a Servicing Agreement by or at the expense of the Developer. The Contractor shall supply materials and carry out the construction and installation in accordance with the City's specifications and approved designs, or as otherwise required by the Director;
- 2.6 "Construction Completion Certificate #1" or "C.C.C. #1" means a document provided to the Developer by the Director. The C.C.C. #1 will be issued in accordance to Clauses 8.1 and 8.2 of the Servicing Agreement Standard Conditions after the Consulting Engineer certifies the completion of the work by the Developer;
- 2.7 "Construction Completion Certificate #2" or "C.C.C. #2" means a document provided to the Developer by the Director. The C.C.C. #2 will be issued in accordance to Clause 8.1, of the Servicing Agreement Standard Conditions with such changes only as the context requires, and only after the Landscape Consultant certifies the substantial performance of the work as defined by the Saskatchewan Builders Lien Act have been met;
- 2.8 "Developer" means the individual and/or corporation who, subject to the approval of the proper officials of the City, proposes to install and construct the work as defined in the Servicing Agreement. The Developer shall ensure that all materials supplied and the construction, installation and inspection of all of the work conforms in all respects to the City's specifications and approved designs, or as otherwise required by the Director;

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- 2.9 "Field Services" means those site inspections, materials testing, project management and record keeping services provided by the Consultant to the Developer relating to the construction, installation and inspection of the work as set forth in the Servicing Agreement;
- 2.10 "Final Acceptance Certificate #1" or "F.A.C.#1 " means a document provided by the Director to the Developer upon final acceptance of the infrastructure services. The F.A.C. #1 will be issued in accordance to Clauses 8.8 of the Servicing Agreement;
- 2.11 "Final Acceptance Certificate #2" or "F.A.C.#2" means a document provided by the Director to the Developer upon final acceptance of the Landscape services. The F.A.C. #2 will be issued in accordance to Clauses 8.17 of the Servicing Agreement;
- 2.12 "Infrastructure Services" means all services to be constructed or installed by the developer relating to roadways and utilities infrastructure, including grading of roadways and lots;
- 2.13 "Inspection" connotes that the Consultant and/or Consultant's agent will be in attendance at all critical times during construction activities related to the development and will otherwise be available promptly in the event his attendance is required on the site;
- 2.14 "Guidelines" means the document entitled Developer's/Consultants Field Services Guidelines;
- 2.15 "Landscape Consultant" means the Consultant engaged by the Developer in respect of Landscape Services, being a member of the Saskatchewan Association of Landscape Architects or otherwise being acceptable to the Director, acting reasonably, and includes the Consulting Engineer if that Consulting Engineer is engaged by the Developer for the provision of such service;
- 2.16 "Landscape Service(s)" means all services to be constructed or installed by the Developer relating to the landscaping of public lands within the Development Area, including grading, site lighting, plantings, ground covers, irrigation hard surfacing and other site amenities or structures;
- 2.17 "Materials" means all materials used in the construction of the work;
- 2.18 "Servicing Agreement" means the Servicing Agreement entered into by the City and the Developer in respect of the Development Area;
- 2.19 "Work" or "Construct" or "Provide": When used in the context of a covenant, agreement or undertaking otherwise of the Developer includes all labour, materials or services required, as shown or described in the Contract Documents, to be supplied, installed, planted, laid down, erected or otherwise required of the

Developer and the construction or provision of such things or measures shall be effected at no cost to the City unless the contrary is expressly provided in the contract Documents;

3.0 CONTRACTUAL RELATIONSHIPS

3.1 CITY/DEVELOPER

The Developer undertakes to complete the construction of a subdivision in accordance with the Servicing Agreement. Any subsequent revisions to the terms described in the Servicing Agreement must be to the satisfaction of the Director. If this is not done, the completed subdivision will not be accepted.

In order to achieve this, Clause 3.1 of the City standard Servicing Agreement requires that the Developer retain a Consultant. The Consultant designs, inspects and observes the work then certifies to the best of his knowledge, information and belief that all materials supplied and the construction, installation, inspection of the work being carried out under the Servicing Agreement conforms in all respects to the City's specifications and approved designs, or as otherwise required by the Director. It is understood and agreed too that the Developer is responsible to the City for the full and proper performance of all obligations and work under the Servicing Agreement.

The Developer will not engage a company in which the Consultant and Contractor functions are under the direction of a single management team.

3.2 DEVELOPER/CONSULTANT

The Consultant is retained by the Developer to prepare design drawings and specifications based upon the particular location, ground form, site conditions and specific information pertaining to the subdivision to be constructed. The Consultant designs and specifications must meet or exceed the City specifications or as required by the Director.

The Consultant contract with the Developer shall be defined such that they provide a quality product as assured by at least the minimum level of field services as specified in the guidelines. The Consultant shall, in accordance with the guidelines, certify to the best of his knowledge, information and belief that all materials supplied and the construction, installation and inspection of all work conforms in all respects to the City's specifications and approved designs, or as otherwise required by the Director.

3.3 DEVELOPER/CONTRACTOR

The Developer shall enter into a contract with the Contractor based upon the approved designs, specifications and contract documents prepared by the Consultant. The Contractor is responsible to the Developer for the quality of his work. Notwithstanding the above, the Developer is responsible to the City for the performance of all obligations, terms and conditions specified in the Servicing Agreement.

If deficient work is suspected during construction, the Consultant may be required to issue a Stop Work Order. The Stop Work Order will be forwarded to the Developer. Any work completed while a Stop Work Order is in effect may not be accepted.

There is no contractual relationship between the Contractor and the City.

3.4 CONSULTANT/CITY

The Consultant will inform the Director before construction starts. The Consultant shall keep adequate records to satisfy the Director that the work is being constructed and installed in an approved and workmanlike fashion. The Consultant shall have any maintenance deficiency items dealt with expeditiously and apply for the Construction Completion Certificates and Final Acceptance Certificates as warranted.

There is no direct contractual relationship between the Consultant and the City. However, the Director has the right to request that the Developer, through the Consultant, corrects deviations from approved specifications and plans as they are observed by the Director. Any such deviations observed by the Director during the construction will be brought to the attention of the Developer and the Consultant, as they are observed, in writing. The Consultant will notify the Director when the deviation will be corrected and will confirm correction in writing.

3.5 DIRECTOR/CONTRACTOR

Any communication from the Director regarding the ongoing work will go directly to the Consultant, unless as otherwise provided for in Section 3.4. There is no direct contractual relationship between the City and the Contractor.

3.6 DEFAULT BY THE DEVELOPER

Should the Developer not fulfil the obligations of the Servicing Agreement, abandon the project, not complete the works, or elect not to correct the deficiencies identified by the Director or the Consultant, the Consultant shall not be held responsible to complete the project. The Consultant will be responsible for completing his duties on any shut down work subsequent to such events.

In case of default by the Developer, the City may retain the Consultant, where practical, to complete the obligations of the Servicing Agreement.

4.0 DEVELOPER'S/CONSULTANT'S FIELD SERVICES GUIDELINES

4.1 INTENT OF SERVICES

Field services shall be provided by the Consultant in order to confirm that the work conforms to the approved designs and specifications. If testing or inspections determine that any work is in contravention of approved specifications and designs, corrective work will be required prior to application for the Construction Completion Certificate.

The Consultant shall arrange for all surveys, inspections and testing necessary to ensure that the materials and the work conform to the approved designs and specifications; to be certain of the materials supplied and the work constructed. The Consultant shall keep appropriate records to demonstrate conformance. Copies shall be supplied to the Director.

The City reserves the right to conduct additional inspections or testing at any stage during the development project.

4.2 LEVEL OF SITE SERVICE

The Consultant shall determine and conduct the necessary inspections to certify to the best of his knowledge, information and belief the conformity of the work with the City's specifications and approved designs, or as otherwise required by the Director. It shall be the responsibility of the Consultant to determine if field services in excess of the levels specified in the guidelines are necessary.

In order to perform the survey, inspection, materials testing, project management and record keeping obligations, the Consultant shall retain qualified staff.

The Consultant shall provide and keep up to date all documentation required by the Director. The Consultant shall issue this documentation and test records to the Director on a timely basis. In addition, photographs typical of underground installations such as main stops, hydrants, valves, curb stops, et cetera should be made for future reference. All structures that deviate from typical design characteristics should be photographed for future reference.

The Consultant will do the project management for a number of miscellaneous issues related to construction of infrastructure. For example:

- Arranging all traffic accommodation and control, especially if existing roadways are to be restricted during construction of subdivisions. The Director must approve traffic accommodation plans.

- Dust control.
- Clean up of mud or dirt tracked onto streets adjacent to the development.
- Communications with adjacent residents regarding problems such as disruptions in service.
- Advising the Fire Department when fire hydrants are to be out of service.

In order to maintain the relationship of the Consultant to the Contractor, all instructions issued by the Director shall be given to the Consultant, unless as otherwise provided for in Section 3.4 of this document.

It is understood and agreed to that, notwithstanding conformance with the qualifications, procedures and working relationships described in this section, the Developer is responsible to the City for proper performance of all obligations and work under the Servicing Agreement.

4.3 TYPICAL SITE INSPECTION DUTIES

4.3.1 Preconstruction Duties

The Consultant, shall be completely familiar with:

- Approved engineering plans and specifications of the specific subdivision;
- Developer's/Consultant's Field Services Guidelines;
- City of Regina's approved specifications, standards, procedures and design guidelines with regards to the Engineering and Works Department and/or Community Services Department, Project Services and Landscape Design Division;
- The Servicing Agreement and any special clauses therein for the subdivision; and
- The proposed work schedule of the Contractor(s) and the equipment to be used.

The Consultant shall arrange a preconstruction site meeting with the Developer/Consultant, that the Director may attend.

4.3.2 Stripping and Grading

The Consultant shall deal with any unexpected soil conditions that could affect construction or the development potential of the subdivision. During construction, the Consultant shall inspect the stripping and grading operation to certify to the best of his knowledge, information and belief that the City's specifications and approved designs are complied with. As a minimum, one compaction test for every 1000 square metres of fill for each 150 millimetres compacted lift of material shall be done.

4.3.3 Underground Utilities (Watermains and Hydrants, Sanitary Sewers, Storm Sewers, Sewer and Water Service Connections, Catch Basin Leads and Overland Drainage Control Features)

4.3.3.1 Site Inspection

The Consultant shall notify the Director at least three days prior to when and where all above noted works are to be performed, and shall advise the Director of all changes to the work schedule. The same notice will be given before existing infrastructure is tied into.

Inspection should be provided by the Consultant during installation of all underground utilities.

Inspection will include the tests on the completed installation, as described in the specifications and television camera inspection of sewers.

Complete documentation of all test results noted in the foregoing are to be provided to the Director.

The extent of inspection during the reinstallation of underground utilities repairs will be determined by the Consultant. The Consultant will notify the Director of all such work 24 hours in advance.

4.3.3.2 Materials and Procedures Compliance

The Consultant shall certify to the best of his knowledge that all materials supplied and the construction and installation procedures used, comply in all respects with the City Standard Specifications. The minimum requirement for sieve testing of pipe bedding sand to be one sieve test for every 500 tonnes of bedding sand. The minimum requirement for compaction testing of trench backfill is one test for each 1,000 square metres for each 150 millimetre compacted lift, including the pipe-bedding zone.

If materials that deviate from City Standard Specifications are to be used, the Consultant shall obtain the certified results of tests conducted by each material manufacturer. If these manufacturer's test results are not available, the Consultant shall arrange for all material testing and certification to satisfy the City Standard Specifications. The testing reports, as identified in the specifications, shall be forwarded by the Consultant to the Director prior to installation of materials.

4.3.4 Surface Improvements – (Sidewalks, Curb, Gutters and Catch Basins, Paved Roads, Paved Alley, Paved Walkways, Gravelled Alleys and Sound Attenuation Fencing)

4.3.4.1 Site Inspection

Prior to proceeding with the construction of the surface improvements, the Consultant ensures that all underground utility trenches have been backfilled and compacted, and comply in all respects to the Standard Specifications. The Consultant will decide how much inspection is required during the construction of surface improvements. The following is a description of how much inspection the City perceives as a minimum requirement for promoting compliance with the Standard Specifications.

Inspection by the Consultant is required when more than two cubic meters of Portland cement concrete is to be poured for sections of sidewalks, curbs and gutters. The level of inspection, when less than two cubic metres of Portland cement concrete for sidewalks, curbs and gutters is to be poured, shall be determined by the Consultant.

Inspection shall be provided when placing more than 15 tonnes of asphaltic material for roads, alleys, walkways, et cetera.

Inspection shall be provided when placing more than 15 tonnes of granular material for surface works.

Material testing must be conducted during the placement of all works in compliance with the appropriate minimum test frequency requirements, as specified in Section 4.3.4.2.

The amount of inspection required during replacement or maintenance of sidewalks, curbs and gutters shall be determined by the Consultant.

A Professional Engineer shall provide inspection for sound attenuation fencing.

4.3.4.2 Materials Compliance

On-site materials compliance testing will be the responsibility of the Consultant. Test results will be sent to the Director. Information relating to non-compliant material shall be forwarded to the Director together with an account of what remedial action was taken.

Minimum frequency of materials testing for surface is as follows:

1. Gradation testing of sub drainage sand - one test per 500 tonnes of material placed.
2. Gradation testing of sub base sand - one test per 500 tonnes of material placed. Proof that P.I. is in specification should accompany mix design submissions.

3. Concrete testing – one complete test, as defined by the Canadian Standards Association, for each 50 cubic metres or portion thereof per day per class or supplier of concrete. Quantities of less than six metres per day need not be tested if there is manifest evidence that the material meets specifications.
4. Sieve testing of base – one test per 500 tonnes of material placed. The test should include a fractured faces determination. Proof that P.I. meets specification should accompany mix design submissions.
5. Density testing of base – one test for each 250 square metres of surface.
6. Marshall, Extraction and Sieve of Asphalt – one test per each 400 tonnes of asphalt or portion thereof per day of construction.
7. Nuclear density testing of asphalt – one test per 250 square metres of asphalt where thickness allows for testing.
8. Coring of finished asphalt for thickness and density one test for each 500 square metres of surface. Location of coring shall be strategically selected to ensure the minimum thickness and densities are met in all areas (i.e. centre third of pavement passes).
9. Proctor tests as required.

4.3.5 Landscape Improvements – Planting, Turf, Irrigation, Unit Pavers, Sand/Pea Stone Safety Surfacing, Crushed Stone Paving

4.3.5.1 Site Inspection

Prior to proceeding with the construction of the landscape improvements, the Consultant shall ensure that all underground utility trenches have been backfilled and compacted, and comply in all respects to the Standard Specifications.

The Consultant will decide how much inspection is required during the construction of surface improvements. The following is a description of how much inspection the City perceives as a minimum requirement for promoting compliance with the Standard Specifications.

4.3.5.2 Stripping and Grading

Existing or imported topsoil intended as a topsoil component for projects smaller than 0.5 hectares shall be inspected and approved by the City prior

to installation. Projects 0.5 hectares and larger shall be tested for soil acceptability. Provide 1 test every 500 cubic metres.

Provide 1 density test every 1,000 square metres in areas of fill for each 150 millimetre compacted lift, where hard landscaping is the intended surface treatment.

4.3.5.3 Material Compliance

On-site materials compliance testing will be the responsibility of the Consultant. Test results will be submitted to the Director. Information relating to non-compliant material shall be forwarded to the Director together with an account of what remedial action was taken.

Minimum frequency of material testing for Landscape improvements is as follows:

a) Sand/Pea Stone Safety Surfacing

Material must meet or exceed the specifications outlined in the CSA Children's Playspaces and Equipment with testing frequency to be a minimum of one test per 500 cubic metres of material.

b) Planting Soil

Imported material must meet the specifications outlined in the City of Regina Standard construction Specifications

Material Compliance:

Topsoil: Test for pH level, salinity, and nutrients. One test per 500 m³ cubic metres of material used.

Sand: One gradation test per 100 cubic metres of material used

Planting Soil: Test for pH level, salinity, nutrients, organic matter, particle size (texture), and fertilizer recommendations. One test per 500 cubic metres of material placed.

c) Plantings

Arrange for City Integrated Pest Technologists to examine for nursery stock health.

d) Irrigation

Inspect all irrigation installation before trenches are backfilled.

Provide density tests at trenched lines supporting hard landscape surface treatments.

Provide 1 pressure test for entire system.

4.4 APPLICATION FOR CONSTRUCTION CERTIFICATES

When work is complete the Consultant shall certify to the best of his knowledge, information and belief that construction of all work has met the approved specifications and drawings. Documentation of all test results, photographs and inspection reports completed during the course of the work. With these tasks completed, the Construction Completion Certificate may be applied for and will be issued on approval of the Director.

4.5 ACTIVITY SUBSEQUENT TO ISSUANCE OF CONSTRUCTION COMPLETION CERTIFICATES

During the warranty period the Consultant shall:

- Prepare a statement of as-built quantities for all works constructed;
- Prepare and submit as-built records, as outlined in the Development Standards Manual and Servicing Agreement Standard Conditions based upon field survey and field notes;
- Inspect the subdivision and note any failures, settlement, or other deficiencies in the work, as well as respond to any "complaint" calls forwarded by the City to the Consultant;
- Arrange to have all warranty deficiencies corrected; and
- Arrange for springtime joint inspections of works with the Director for winter damage by the City of Regina's Engineering and Works Department.

4.6 APPLICATION FOR FINAL ACCEPTANCE CERTIFICATES

After all warranty deficiencies are corrected, application for the Final Acceptance Certificates may be made. The Developer shall then request a joint inspection with the Director. If further deficiencies are noted, a list of the deficiencies shall be prepared by the Consultant and the Director. When the deficiencies have been corrected, the Consultant shall then, within a reasonable period of time, request from the Director, a reinspection for only the inspection of deficient items.

The Final Acceptance Certificates will be issued by the Director when all the foregoing tasks are completed to the City's satisfaction.