

THE CITY OF EDMONTON
PROJECT AGREEMENT
VALLEY LINE LRT – STAGE 1

Schedule 28

Project Approvals and URP Matters

Part B – Utility, Railway and Pipeline Matters

Schedule 28

PROJECT APPROVALS AND URP MATTERS

Part B – Utility, Railway and Pipeline Matters

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Schedule 28

Project Approvals and URP Matters

Part B – Utility, Railway and Pipeline Matters

1. GENERAL

1.1 Background and Purpose

To assist with the interpretation and administration of Part B of Schedule 28 this Section 1.1 has been included to provide background context for the operative provisions of the Schedule. To the extent there is any inconsistency or conflict between this Section 1.1 and another section or provision of this Part B, the other section or provision will take precedence and prevail over Section 1.1.

The background to and purposes of this Part B can be summarized as follows:

- (a) To accommodate and support the completion of the Project Work according to the Project Requirements and Construction Schedule, Project Co is required to coordinate and carry-out the timely completion of the URP Work described in this Schedule;
- (b) The scope of the URP Work to be coordinated and carried out by Project Co is specifically defined in Section 1.2.32 and generally consists of:
 - (i) project management, planning, scheduling, coordination and administrative services in respect the completion of all URP Work other than Future URP Work or City URP Work;
 - (ii) oversight responsibility for the design build work activities in relation to URP Work carried out by Project Co and Project Co Persons and of the URP Companies (who retain the right to perform all or portions of the work on or in respect of their URP Infrastructure through URP Company employees or contractors); and
 - (iii) performance of the actual design build work on or in respect of certain portions of the URP Infrastructure relating to the foregoing URP Work through Project Co or Project Co Persons and their employees and contractors;
- (c) The City has retained responsibility for the oversight, coordination and completion of the City URP Work (with coordination support from Project Co), which is URP Infrastructure related work the City had commenced but could not complete prior to the Effective Date;
- (d) In addition to undertaking URP Work on the foregoing basis in respect of the URP Infrastructure, Project Co will also be undertaking Project Work involving or relating to the System and the Infrastructure that will interface or intersect in some manner with the URP Infrastructure and URP Work;
- (e) Pursuant to the Existing URP Agreements the allocation of responsibility for the performance of, and the costs of completing, the URP Work as between the City and the

URP Companies varies for each URP Company in various circumstances having regard to the work activity in question;

- (f) Regardless of how the responsibility for the cost or physical performance of the URP Work may be allocated as between the City and the URP Company under the Existing URP Agreements, Project Co is responsible under this Schedule for planning, scheduling, coordinating and overseeing the completion of all URP Work (except for the City URP Work and Future URP), and where permitted or required by the URP Companies under the Existing URP Agreements, to carry out and perform through Project Co Persons the design build work activities and tasks;
- (g) Project Co and the City intend to work cooperatively together to retain and administer City and/or Project Co rights to cost recovery or funding from, or cost absorption by, the URP Companies in respect of the URP Work under the Existing URP Agreements in a manner that effectively mitigates and minimizes the costs of the URP Work that will have to be borne by Project Co or the City under the terms of this Schedule;
- (h) Project Co and the City also intend to work cooperatively together according to the protocols and terms of this Schedule to proactively manage and mitigate the potential impacts to the Project of unexpected and unreasonable work requirements, demands, delays and disruptions that are caused by one or more of the URP Companies or by reason of other unexpected conditions or events;
- (i) There are numerous defined categories and sub-components of URP Work set out in this Schedule to recognize the foregoing background and to facilitate and support the foregoing objectives, and to amongst other things, distinguish between work being carried out directly in respect of the URP Infrastructure (example: relocation or rebuild utility infrastructure work) and other Infrastructure related work required to support the System that must be designed and built around, over, under or in alignment with the URP Infrastructure.
- (j) As between the City and Project Co, Project Co is responsible for all costs (including cost overruns) associated with the scope of work described in subparagraph (b) above except for those costs:
 - (i) that are the responsibility of a URP Company under an Existing URP Agreement or enforceable URP Interface Protocol or as set out in this Schedule 28, Part B;
 - (ii) that are the responsibility of the City hereunder in relation to the City URP Work; and
 - (iii) those costs that are the responsibility of the City on the basis that they qualify for relief, pursuant to Section 8 [*URP Relief Events*] of this Schedule;
- (k) The purpose of this Part B [*Utility, Railway and Pipeline Matters*] of this Schedule is to set out the allocation of the responsibilities, tasks, and risks in relation to URP Work as between Project Co and the City.

1.2 Definitions

In this Part B [*Utility, Railway and Pipeline Matters*] of this Schedule, capitalized terms have the meanings given in Schedule 1 [*Definitions and Interpretation*] and the following capitalized terms have the following meanings:

- 1.2.1 **City Pipeline Work** means all Pipeline Work activities or undertakings described in Appendix 28B [*City URP Work Completed Prior to Effective Date*] and Appendix 28C [*Incomplete City URP Work*];
- 1.2.2 **City Railway Work** means all Railway Work activities or undertakings described in Appendix 28B [*City URP Work Completed Prior to Effective Date*] and Appendix 28C [*Incomplete City URP Work*];
- 1.2.3 **City Support Statements** has the meaning given in Section 2.7 [*City Support Statements*] of this Schedule;
- 1.2.4 **City URP Work** means City Pipeline Work, City Railway Work or City Utility Work, as applicable;
- 1.2.5 **City Utility Work** means all Utility Work activities or undertakings described in Appendix 28B [*City URP Work Completed Prior to Effective Date*] and Appendix 28C [*Incomplete City URP Work*];
- 1.2.6 **CNR At-Grade Agreement** has the meaning given in Section 3(d) [*Part C – Railway Agreements*] of Appendix 28E [*URP Work Background Information*];
- 1.2.7 **CNR Grade Separation Agreement** has the meaning given in Section 3(c) [*Part C – Railway Agreements*] of Appendix 28E [*URP Work Background Information*];
- 1.2.8 **CPR Grade Separation Construction Agreement** has the meaning given in Section 3(a) [*Part C – Railway Agreements*] of Appendix 28E [*URP Work Background Information*];
- 1.2.9 **CPR Overpass Crossing and Maintenance Agreement** has the meaning given in Section 3(b) [*Part C – Railway Agreements*] of Appendix 28E [*URP Work Background Information*];
- 1.2.10 **Deferred Pipeline Work** means all Pipeline Work activities or undertakings described in Appendix 28D [*Deferred URP Work*];
- 1.2.11 **Deferred Railway Work** means all Railway Work activities or undertakings described in Appendix 28D [*Deferred URP Work*];
- 1.2.12 **Deferred URP Work** means all Deferred Utility Work, Deferred Railway Work and Deferred Pipeline Work;
- 1.2.13 **Deferred Utility Work** means all Utility Work activities or undertakings described in Appendix 28D [*Deferred URP Work*] and in Section 5.3 [*Deferred Utility Work*] of this Schedule;

- 1.2.14 **Disclosed Practices** has the meaning given in Section 2.2 [*URP Best Practices*] of this Schedule.
- 1.2.15 **Existing URP Agreements** means the Utility Agreements, Pipeline Agreements, Railway Agreements listed and described in Appendix 28E [*URP Work Background Information*].
- 1.2.16 **Extraordinary Delay** means a delay to Project Co and the critical path for the completion of the Design and Construction caused by a URP Company Breach or URP Company Fault that could not have been reasonably anticipated and properly taken into account by Project Co in its URP Coordination Plan or Construction Schedule or otherwise reasonably planned for, avoided or substantially mitigated by Project Co, having regard to the reasonably expected timelines for the applicable URP Company for the work activity in question based on the following factors or information in the following priority:
- (a) the relevant timelines stipulated in this Schedule, this Agreement and the applicable URP Interface Protocol (if any) that are relevant to the specific URP Work activity;
 - (b) the relevant timeline stipulated in an Existing URP Agreement, if applicable to the specific URP Work activity as confirmed in a City Support Statement;
 - (c) the relevant forecasted or scheduled timelines set out in the applicable URP Coordination Plan based on written confirmations, assurances or forecasts of a URP Company;
 - (d) City experiences with the same URP Company for similar URP Work activities in similar circumstances prior to the Effective Date in relation to the Valley Line Project that are included in the Disclosed Data, or were reasonably discoverable by the Proponents through Standard Due Diligence prior to the Financial Submission Date, including through reasonable enquiries of the City or the applicable URP Company; and
 - (e) to the extent the factors or information described in sub-paragraphs (a) to (d) above do not clearly establish the basis for a reasonably expected timeline, then the experiences of other contractors in their dealings with similar utility, railway or pipeline companies in respect of similar URP Work activities in similar circumstances taking into account relevant differences in LRT or URP project size, scope, complexity, the existence or lack of project specific binding timelines and protocols and general experiences in adherence to the timelines by these companies.
- 1.2.17 **Extraordinary Requirements** means the work requirements or performance standards applicable to Project Co URP Work that are binding on Project Co by reason of, an Existing URP Agreement or a URP Interface Protocol or this Agreement, where Project Co has no reasonable alternative other than to comply with the requirements or standards in order to perform its obligations under this Schedule in a timely manner and which could not have been reasonably anticipated and properly taken into account by Project Co in its URP Coordination Plan, Design Management Plan or Construction Management Plans or otherwise reasonably planned for, avoided or substantially mitigated by Project Co having regard to the reasonably expected work requirements or performance standards for the applicable URP Company for the work activity in question based on the following factors or information in the following priority:

- (a) the work requirement or performance standard stipulated in this Schedule, this Agreement and the applicable URP Interface Protocol (if any) that are relevant to the specific URP Work activity;
- (b) the relevant work requirement or performance standard stipulated in an Existing URP Agreement, if applicable to the specific URP Work activity as confirmed in a City Support Statement;
- (c) the relevant forecasted or planned for work requirement or performance standard set out in the applicable URP Coordination Plan based on written confirmations, stipulations, or indications from a URP Company;
- (d) City experiences with the same URP Company for similar URP Work activities in similar circumstances prior to the Effective Date in relation to the Valley Line Project that are included in the Disclosed Data, or were reasonably discoverable by the Proponents through Standard Due Diligence prior to the Financial Submission Date, including through reasonable enquiries of the City or the applicable URP Company; and
- (e) to the extent the factors or information described in sub-paragraphs (a) to (d) above do not clearly establish the basis for reasonably expected work requirements or performance standards, then the experiences of other contractors in their dealings with similar utility, railway or pipeline companies in respect of similar URP Work activities in similar circumstances taking into account relevant differences in LRT or URP project size, scope, complexity, the existence or lack of project specific binding requirements, standards and protocols and general experiences in adherence to these requirements by these companies.

1.2.18 Future Railway Work means Railway Work:

- (a) occurring during the Operating Period; or
- (b) occurring during the Construction Period which: (i) was not disclosed or known to Project Co prior to the Financial Submission Date; and (ii) is not required to accommodate the Design or Construction of the Infrastructure;

1.2.19 Future Pipeline Work means Pipeline Work:

- (a) occurring during the Operating Period; or
- (b) occurring during the Construction Period which: (i) was not disclosed or known to Project Co prior to the Financial Submission Date; and (ii) is not required to accommodate the Design or Construction of the Infrastructure;

1.2.20 Future URP Work means Future Railway Work, Future Pipeline Work or Future Utility Work, as applicable;

1.2.21 Future Utility Work means Utility Work:

- (a) occurring during the Operating Period; or

- (b) which (i) was not disclosed or know to Project Co prior to the Financial Submission Date; and (ii) is not required to accommodate the Design or Construction of the Infrastructure;
- 1.2.22 **GeoEdmonton** means the City's spatial data system, created and managed using geographic information system technology;
- 1.2.23 **GeoEdmonton Utility Alliance** means the association or alliance of Utility Companies that utilize GeoEdmonton for their Utility Infrastructure;
- 1.2.24 **Pipeline Agreements** means the existing pipeline agreements listed in Appendix 28E [*URP Work Background Information*];
- 1.2.25 **Pipeline Company** means those owners and operators of Pipeline Infrastructure within or adjacent to the City Lands, including as of the Effective Date:
- ATCO Pipelines,
 - Keyera Corporation,
 - Kinder Morgan Canada,
 - Pembina Pipeline Corp, and
 - Plains Midstream Canada.
- 1.2.26 **Pipeline Crossing Agreement** has the meaning given to Section 6.1(h) [*General*];
- 1.2.27 **Pipeline Infrastructure** means privately, publicly or cooperatively owned lines, facilities or systems for transmitting or distributing gas, oil and petroleum products, or other similar commodity or substance which serve the public directly or indirectly, including underground, surface facilities as well as facilities on a shared basis, and all related infrastructure;
- 1.2.28 **Pipeline Interface Protocols** has the meaning given in Section 2.2 [*URP Best Practices*] of this Schedule;
- 1.2.29 **Pipeline Work** means all work activities or undertakings being carried out or to be performed in, on, under, over or otherwise in connection with the existence, before or after the Effective Date, of Pipeline Infrastructure.
- 1.2.30 **Project Co Pipeline Work** means all Deferred Pipeline Work and any other Pipeline Work, except City Pipeline Work and Future Pipeline Work, that is required to accommodate the Design or Construction of the Infrastructure;
- 1.2.31 **Project Co Railway Work** means all Deferred Railway Work and any other Railway Work, except City Railway Work and Future Railway Work, that is required to accommodate the Design or Construction of the Infrastructure;
- 1.2.32 **Project Co URP Work** means all Project Co Pipeline Work, Project Co Railway Work and Project Co Utility Work;

- 1.2.33 **Project Co Utility Work** means all Deferred Utility Work and any other Utility Work, except City Utility Work and Future Utility Work, that is required to accommodate the Design or Construction of the Infrastructure;
- 1.2.34 **Railway Agreements** has the meaning given in Section 3 [*Part C - Railway Agreements*] of Appendix 28E [*URP Work Background Information*];
- 1.2.35 **Railway Company** means the owner and operators of Railway Infrastructure, including as of the Effective Date:
- Canadian National Railway, and
 - Canadian Pacific Railway.
- 1.2.36 **Railway Infrastructure** means all Heavy Rail tracks, bridges, culverts, track, turnouts, rail bed, railway ties, anchors, support systems, switches, signal and communications systems (including signals, conduits, cables, fibre optic infrastructure, radio towers, associated equipment and facilities), whether on a Railway Company's lands or elsewhere.
- 1.2.37 **Railway Interface Protocols** has the meaning given in Section 2.2(p) [*URP Best Practices*] of this Schedule;
- 1.2.38 **Railway Work** means all work activities or undertakings being carried out or to be performed in, on, under, over or otherwise in connection with the existence, before or after the Effective Date, of Railway Infrastructure;
- 1.2.39 *, Redaction under review, Subject to dept review

1.2.40 **ULA Process** has the meaning set out in Section 5.1(e) [*General*] of this Schedule;

- 1.2.41 **URP Best Practices** has the meaning given in Section 2.2 [*URP Best Practices*] of this Schedule;
- 1.2.42 **URP Company** means a Utility Company, a Railway Company or a Pipeline Company, or all of them, as applicable.
- 1.2.43 **URP Company Breach** means a breach of, or a non-compliance by a URP Company with, a specific requirement or obligation set out in an Existing URP Agreement, or URP Interface Protocol, including a failure to comply with a specified timeframe for review, response or performance of any other obligation, provided the City has not confirmed in a City Support Statement or otherwise in writing (and acknowledged by Project Co), or it has been determined through the Dispute Resolution Procedure, that the requirement is not relevant or applicable to the URP Work activity in question;
- 1.2.44 **URP Company Fault** means the Legal Fault of a URP Company in its performance of URP Work.
- 1.2.45 **URP Contacts** has the meaning given in Section 9.2(b) [*Information Only*] of this Schedule;
- 1.2.46 **URP Coordination Plan** has the meaning given in Section 2.3 [*URP Coordination Plan*] of this Schedule;
- 1.2.47 **URP Infrastructure** means the Pipeline Infrastructure, the Railway Infrastructure, and the Utility Infrastructure, as applicable;
- 1.2.48 **URP Interface Protocols** means the Utility Interface Protocols, the Railway Interface Protocols and the Pipeline Interface Protocols collectively as defined in Section 2.2(p) [*URP Best Practices*];
- 1.2.49 **URP Report** has the meaning given in Section 2.6 [*URP Work Reporting*] of this Schedule.
- 1.2.50 **URP Services** means the project management, work coordination and oversight, and administrative services, tasks, and work activities that are Project Co's responsibility to perform under this Schedule.
- 1.2.51 **URP Technical Standards** has the meaning given in Section 2.2(e) [*URP Best Practices*] of this Schedule.
- 1.2.52 **URP Work** means Utility Work, Railway Work or Pipeline Work, as applicable.
- 1.2.53 **URP Work Relief Event** means an event, condition or circumstance described in Section 8.1 [*URP Work Relief Events Defined*] of this Schedule.
- 1.2.54 **Utility Agreements** means the existing utility agreements listed in Appendix 28E [*URP Work Background Information*].

1.2.55 **Utility Company** means those owners and operators of Utility Infrastructure within or adjacent to the City Lands, including as of the Effective Date:

- ATCO Gas;
- Bell;
- MTS Allstream;
- Rogers Communications;
- Shaw;
- TELUS;
- EPCOR Distribution and Transmission; and
- EPCOR Water.

For the purposes of this Part B [*Utility, Railway and Pipeline Matters*] of this Schedule the City's Drainage Services Branch is deemed not to be a Utility Company.

1.2.56 **Utility Conflicts** has the meaning specified in Section 5.2 [*Management of Utility Conflicts and Constraints*] of this Schedule.

1.2.57 **Utility Infrastructure** means privately, publicly or cooperatively owned lines, facilities or systems for transmitting or distributing electricity, data, communications, water or other similar commodity or substance which serve the public directly or indirectly, including underground, surface and overhead facilities as well as facilities which use common poles, ducts or conduits on a shared basis, and all related infrastructure.

1.2.58 **Utility Work** all work activities or undertakings being carried out or to be performed in, on, under, over or otherwise in connection with the existence, before or after the Effective Date, of Utility Infrastructure, but excluding any work or infrastructure required to:

- (a) provide and connect utility services to the Infrastructure; and
- (b) provide utility services and support required by Project Co to perform the Project Work, including those required for the Design and Construction of the Infrastructure or the Operation and Maintenance of the System.

For clarification references in this Part B of Schedule 28 [*Project Approvals and URP Matters*] to "*this Schedule*" shall be deemed to mean this Part B only and not the whole of Schedule 28.

2. PROJECT CO RESPONSIBILITIES:

2.1 General

Subject to and in accordance with the terms of this Schedule and other applicable terms of the Agreement, Project Co shall be responsible for and shall assume all of the obligations, tasks, and risks related to the Project Co URP Work.

2.2 URP Best Practices

Project Co shall perform all its obligations provided for in this Schedule in accordance with Good Industry Practice, including (without duplication) the following practices, standards (including where applicable and instructive by reference to analogous industry practices) and by compliance with the following obligations as applicable to this Project under the Agreement (collectively, "**URP Best Practices**"):

- (a) using standards, practices, methods and procedures to a good commercial standard, conforming to Applicable Law;
- (b) exercising that degree of professional judgment, skill and care, diligence, prudence and foresight which would reasonably and ordinarily be expected from a qualified, skilled and experienced contractor engaged in a similar type of undertaking under the same or similar circumstances in relation to URP Work;
- (c) proactively meeting and otherwise communicating regularly with all applicable URP Companies, Governmental Authorities, and the City to investigate, forecast, anticipate, assess, coordinate, manage, minimize, and mitigate the impact of URP Work, including City URP Work and Project Co URP Work, on the Project Work;
- (d) providing proactive, diligent, and prudent project management oversight of all Project Co URP Work, including active coordination of Project Co URP Work with the other Project Work;
- (e) complying with all applicable technical performance standards, including all applicable Design and Construction Requirements, codes, City Policies, City Regulatory Policies, bylaws, URP Company policies and guidelines, including information provided by the URP Companies, information included in the Disclosed Data, Governmental Authority requirements, and the terms and conditions set out in Part 3 [*Civil*] of Schedule 5 [*D&C Performance Requirements*] (collectively, the "**URP Technical Standards**");
- (f) utilizing experienced, qualified, and trained Project Co Persons, having credentials consistent with first tier reputable contractors specializing in the applicable type of URP Work;
- (g) diligently organizing all meetings, communications, exchanges of information and ensuring timely submission of quality designs, drawings, construction schedules, and plans among Project Co, Project Co Persons, URP Companies, the City, City Persons, Governmental Authorities, and other relevant Persons to facilitate the orderly and timely completion of all Project Co URP Work in a manner that mitigates the potential adverse impacts to the Project, the Project Work, and the Infrastructure;
- (h) diligently coordinating and accommodating and supporting the URP Companies and the City in the completion of any City URP Work that is outstanding as of the Effective Date;
- (i) supporting, coordinating and accommodating URP Companies in their performance of URP Work according to the terms of this Agreement;
- (j) complying with the then current URP Coordination Plan;

- (k) providing timely information to URP Companies regarding Design, Construction, Operations, Maintenance and other activities as is necessary for the effective and efficient performance of the Project Co URP Work and other Project Work, including identifying and disclosing to the applicable URP Companies in a timely manner:
 - (i) the URP Infrastructure that is expected to be affected by the Project Work;
 - (ii) the utility services that require connection to the Infrastructure;
 - (iii) the utility services and support required for the performance of the Project Work; and
 - (iv) the Project Work that is expected to be affected by the URP Infrastructure;
- (l) providing timely response to inquiries and requests from URP Companies, including requests for review and comment on design and performance of field reviews;
- (m) taking reasonable steps to avoid, and to mitigate the impact of, disputes in relation to URP Work as between or with the City and/or a URP Company;
- (n) accommodating reasonable requests from the City or URP Companies for adjustments to scheduled Project Work activities as reasonably required to permit the effective, coordinated and efficient performance of the URP Work, Future URP Work and the Project Work;
- (o) consistent with the URP Coordination Plan, phasing the Project Co URP Work so as to provide a progressive and orderly flow of Design Data and other Submittals to the City and the URP Companies so as to allow sufficient time for consideration and response, taking into account: (i) any agreed review and response times; (ii) the volume and complexity of the Submittals; and (iii) and the resources available to the City and the applicable URP Companies to consider such Submittals;
- (p) subject to Section 2.4 [*URP Interface Protocols*] of this Schedule, in good faith having regard to the best interests of the Project diligently arranging, negotiating, and entering into all protocols, approvals, arrangements, understandings, guidelines, and agreements, which may be contractual and legally binding or non-contractual and non-binding (but confirmed in writing by the URP Company) in order to supplement the Existing URP Agreements where reasonably possible and anticipated to be helpful, with:
 - (i) the Utility Companies in respect of the Project Co Utility Work in accordance with Section 2.4.1 [*Utility Interface Protocols*] (the "**Utility Interface Protocols**");
 - (ii) the Railway Companies in respect of the Project Co Railway Work in accordance with Section 2.4.2 [*Railway Agreements and Supplemental Interface Protocols*] (the "**Railway Interface Protocols**"); and
 - (iii) the Pipeline Companies in respect of the Project Co Pipeline Work in accordance with Section 2.4.3 [*Pipeline Agreements and Supplemental Interface Protocols*] (the "**Pipeline Interface Protocols**");
- (q) complying with the applicable terms of the Existing URP Agreements, in accordance with Section 2.5 [*Existing URP Agreements*] of this Schedule the Pipeline Crossing

Agreements in accordance with Section 6 [*Pipeline Work Requirements*], and any applicable URP Interface Protocol in accordance with Section 2.4 [*URP Interface Protocols*];

- (r) regularly consulting with relevant Governmental Authorities, industry associations, and the URP Companies and investigating and reviewing developments and practices in relevant jurisdictions in relation to adopted codes, standards, conditions, protocols, and related practices applicable to work plans and activities similar to the Project Co URP Work;
- (s) through diligent investigations and enquiries consistent with Standard Due Diligence practices before and after the Effective Date confirming existing URP Infrastructure locations by site investigation and, where required, by detailed survey of above ground and exposed underground infrastructure;
- (t) periodically reviewing and updating available information and data relating to the Project Co URP Work, including information included in the Disclosed Data to assess and validate the relevancy and accuracy of the information; and
- (u) consistent with its general duty to mitigate the adverse impacts to the Project and to the City of events, conditions or circumstances that form the basis of a URP Work Relief Event use reasonable commercial efforts to avoid adversely affecting, impairing or compromising the recourse rights or remedies of the City as against the applicable URP Company or any other relevant Person in the circumstances.

If there is a Dispute between the Parties regarding the meaning or application of *URP Best Practices* in or to any particular circumstance or situation the determination of what it means or how it should be applied shall be made having regard to the following factors in the following priority: **(a)** the applicable requirements and standards of this Agreement, the applicable terms of the URP Interface Protocols; **(b)** the applicable terms, requirements and standards of the Existing URP Agreements; **(c)** the practices and standards applied by the City prior to Commercial Close in respect of the City URP Work which was made known to, or was capable of being made known to Project Co on reasonable enquiry of the City and the URP Companies prior to Financial Submission Date; **(d)** the practices and standards of the City and its contractors in respect of other capital projects in which URP Work is required to be performed where the applicable URP Company was also involved based on the disclosed practices of the URP Company in material filed in the Data Room prior to the Financial Submission Date together with sub-paragraph (c) - ("***Disclosed Practices***") ; **(e)** the practices and standards customarily followed or applied by other contractors on other capital projects not involving the City when working with the applicable URP Company in respect of similar work activities in similar situations; and **(f)** the practices and standards of other contractors and utilities, railways or pipeline companies in respect of capital projects in Alberta or elsewhere in Canada in similar circumstances.

2.3 URP Coordination Plan

Not more than 30 days after the Effective Date, Project Co shall prepare and submit an URP Coordination Plan to the City (the "***URP Coordination Plan***") that looks forward for the next 270 days. Project Co shall further prepare and submit an updated URP Coordination Plan covering the whole of the Construction

Period not later than 180 days following the Effective Date. The URP Coordination Plan shall be consistent with the version included in the Proposal Extracts and shall:

- (a) describe all anticipated, Project Co URP Work and the planned scheduling and sequencing of this work through the Construction Period;
- (b) describe the Project Co URP Work coordination role and responsibilities required for each phase of the Design and Construction, including an organizational chart, identifying the roles and responsibilities of each individual position relevant to this work for each of Project Co; its Subcontractors; the applicable URP Company and its Subcontractors; the City (if applicable); and any other relevant Person or Governmental Authority;
- (c) describe the process, including processing times, for submitting, reviewing, commenting on and exchanging information with the URP Companies, City, and other stakeholders, including a description of the process to ensure compliance with Applicable Law, the URP Technical Standards and the requirements of any Existing URP Agreements, URP Interface Protocols, the ULA Process (Appendix 28G [*Utility Line Assignment (ULA) Data and Processes*]) and Pipeline Crossing Agreements;
- (d) include a narrative describing the as-built survey information to be gathered for Project Co URP Work as prepared or provided by the URP Company or Project Co;
- (e) describe the Project Co URP Work risk mitigation measures, including protection measures for each temporary or permanent crossing location (road and rail) within the Lands;
- (f) describe the approach to maintaining URP Company access to their facilities throughout the Term, including details of any risks and the associated mitigation strategies;
- (g) describe the approach to pre-design field investigation;
- (h) describe the approach for identifying, maintaining, modifying and reinstating existing utility services as necessary to adjacent properties, residences, businesses and affected utility customers;
- (i) include a mark-up of the reference design URP Infrastructure drawings included in the Disclosed Data, identifying all proposed variances in the Project Co URP Work;
- (j) include a list of URP Infrastructure separation values, or clearance requirements including both a preferred and constricted separation value, to be incorporated into the applicable Final Designs;
- (k) include any confirmations or indications of schedule or cost commitments made during the RFP or the Term by a URP Company in respect of its deliverables for URP Work which Project Co based on written confirmations, assurances, or forecasts from the URP Companies; and
- (l) include a description of how the timelines or work requirements have been changed since the initial URP Coordination Plan and the Baseline Construction Schedule including the identification of possible Extraordinary Delays or Extraordinary Requirements that may arise as a result of developments that have occurred outside of

Project Co's control where the associated adverse impacts may not be capable of being fully managed and mitigated by Project Co.; and

- (m) to the extent relevant and necessary, include Project Co's stated assumptions regarding URP Company compliance with specific terms of specified Existing URP Agreements and the expected enforcement of these terms by the City together with confirmation of the expected corresponding support activities from the City as set out in a City Support Statement.

2.4 URP Interface Protocols

2.4.1 Utility Interface Protocols

Project Co shall use commercially reasonable efforts and apply URP Best Practices in endeavouring to enter into written Utility Interface Protocols with each Utility Company and as soon as is reasonably and practically possible having regard to the URP Coordination Plan and Construction Schedule and the Utility Company in question. The intended purpose of these Utility Interface Protocols is to supplement the Existing URP Agreements with Project specific protocols that facilitate and support the meaningful coordinated planning, scheduling, completion and commissioning of Utility Work. The process to be followed in finalizing, and the content to be incorporated into, the Utility Interface Protocols is as follows:

Process: Project Co shall, in consultation with the applicable Utility Company, determine for each Utility Company work package or program whether a Utility Interface Protocol will be helpful in managing and mitigating the risk of potential delays or misunderstood work requirements or protocols and:

- (a) periodically confer with the City Representative, or designate, regarding the proposed key terms and principles of the Utility Interface Protocols;
- (b) except as may be clarified or confirmed by the City in an applicable City Support Statement, ensure that all Utility Interface Protocols are consistent with, do not conflict with, and are supplemental to, the Utility Agreements;
- (c) update and modify the Utility Interface Protocols during the Term to respond to changing circumstances or conditions relating to the URP Work and the other Project Work;
- (d) duly perform and carry out the obligations of Project Co pursuant to any Utility Interface Protocols;
- (e) investigate and obtain all approvals or authorizations and attend to all notifications and filings that may be required by the Utility Companies or the City for which Project Co is responsible under or pursuant to the Utility Agreements or Utility Interface Protocols; and
- (f) promptly following confirmation of each Utility Interface Protocols, deliver a copy to the City for its information, along with all correspondence and supporting documentation.

Content: Each Utility Interface Protocol should to the extent reasonably possible and applicable, and as determined necessary having regard to the scope and nature of the Utility Work in question, describe some or all of:

- (g) the advance coordination procedures and the minimum lead time required by the applicable Utility Company:
 - (i) where any existing Utility Infrastructure is affected by the Project Work;
 - (ii) where Utility Work requires connection to any existing URP Infrastructure; and
 - (iii) to implement measures required to accommodate any Project Work impacts on service recipients and Utility Companies;
- (h) the requirements for preparation of preliminary Utility Work base plans, drawings, sketches, profiles, specifications, and other documents required to permit review of proposed Utility Work and incorporation of revisions from review;
- (i) protocols and expected or targeted timing, including key milestones for coordinating delivery, review, and acceptance by the Utility Company of Project Co submissions, including:
 - (i) procedures, timing and coordination requirements for Utility Company inspections and sign-offs; and
 - (ii) requirements for preparation of final construction plans, profiles, specifications, and other documents, required for review and acceptance by the Utility Company;
- (j) protocols and expected or targeted timing, including key milestones for the performance of all Utility Work to be performed by the Utility Company;
- (k) requirements for notification of the applicable Utility Company prior to undertaking Utility Work, or other Project Work in proximity to their Utility Infrastructure or property;
- (l) handover procedures for all Utility Infrastructure;
- (m) advance notification of construction phasing to the relevant Utility Company, Governmental Authorities, and other interested parties; and
- (n) access rights for the Utility Company to access the Lands for the purposes of the performance of the Utility Work, including the inspection of Project Co Utility Work.

Clarifications: Recognizing the Utility Agreements are of general application to a broad range of different projects and that certain terms of certain Utility Agreements may not necessarily be relevant to or capable of being applied to certain aspects or components of the Project Co Utility Work, Project Co may in accordance with the protocol set out in Section 2.7 [*City Support Statements*] of this Schedule obtain clarification from the City from time to time regarding the need or appropriateness of Project Co applying and adhering to specific terms of the applicable Utility Agreement for certain specific work activities.

2.4.2 Railway Agreements and Supplemental Interface Protocols

The existing Railway Agreements are expected to contain adequate terms, conditions and protocol requirements to support and facilitate the timely completion of all Railway Work including Project Co Railway Work. Accordingly, as of the Effective Date, the Parties are not contemplating Railway Interface Protocols or further railway crossing agreements being entered into by Project Co or the City with the Railway Companies.

Project Co may at any time at its discretion seek agreement or further understandings from the Railway Companies with respect to supplemental or clarifying terms or protocols that may be instructive to the completion of certain portions of the Project Co Railway Work, provided that:

- (a) Project Co shall provide advance notice to the City of any proposed Railway Interface Protocol;
- (b) any such Railway Interface Protocol:
 - (i) must be consistent with the terms of the applicable Railway Agreement;
 - (ii) must not amend any of the terms of the applicable Railway Agreement;
 - (iii) must not purport to be binding upon the City; and
- (c) Project Co shall have no claim against the City for compensation or any other relief, if the applicable Railway Company fails to perform or comply with the terms of such Railway Interface Protocol.

2.4.3 Pipeline Crossing Agreements and Supplemental Interface Protocols

In accordance with Section 2.2(p) *[URP Best Practices]* of this Schedule, Project Co shall use commercially reasonable efforts to arrange and negotiate on behalf of the City contractually binding Pipeline Crossing Agreements, and if necessary Pipeline Interface Protocols, with each Pipeline Company in respect of the Pipeline Work. Recognizing that the City will be required to sign the binding Pipeline Crossing Agreement (or if applicable a Pipeline Interface Protocol), Project Co shall proactively and in a timely manner confer with and involve the City in finalizing the proposed terms, and report on the progress of negotiations through the reporting procedures set out in Section 2.6 *[URP Work Reporting]* of this Schedule and the City support protocols as set out in Section 2.7 *[City Support Statements]* of this Schedule.

A binding Pipeline Interface Protocols or Pipeline Crossing Agreement shall, be executed by the City and the applicable Pipeline Company prior to Project Co or the City entering onto, disturbing or accessing lands, over, under or around a pipeline in accordance with Applicable Laws.

The binding Pipeline Interface Protocols shall be in the form of a Pipeline Crossing Agreement (unless otherwise agreed by the City), shall be generally consistent with and supplement the terms of the applicable Pipeline Agreements and shall to the extent reasonably possible and relevant include the same protocols and terms as are set out in Section 2.4.1 *[Utility Interface Protocols]* of this Schedule, as

modified to apply to the Pipeline Work, together with additional terms or provisions addressing the following:

- (i) the required design information (and drawings) to be included into the Pipeline Interface Protocols (including a Pipeline Crossing Agreement);
 - (ii) access rights for Pipeline Company representatives to reasonably inspect Project Co Pipeline Work and any Project Work expected to have an impact on the Pipeline Infrastructure; and
 - (iii) protocols to support the protection of the safety and integrity of the Pipeline Infrastructure.
- (b) **Non-Binding Protocols:** If Project Co determines that a binding Pipeline Interface Protocol (or Crossing Agreement) that may be required to properly complete the Project Co Pipeline Work may not be capable of being finalized in a timely manner, Project Co shall immediately notify the City and seek its support pursuant to Section 2.7 [*City Support Statements*] of this Schedule to assist with this objective.
- (c) **Scope of Protocols:** The terms of the Pipeline Interface Protocols should be developed to facilitate the performance of those requirements set out in Section 6.2 [*Performance of Project Co Pipeline Work*] of this Schedule.

2.5 Existing URP Agreements

Project Co shall duly perform and carry out on behalf of the City all of the City's obligations under the Existing URP Agreements in respect of the Project, except that Project Co shall not have any obligation to:

- (a) collect on behalf of the City any amount, including any cost contributions, to be paid by a person to the City under an Existing URP Agreement (and all such amounts will be payable to and for the credit of the City and not Project Co);
- (b) remit on behalf of the City any amount, including any cost contributions, to be paid by the City under an Existing URP Agreement; or
- (c) perform, follow, or abide by those specific sections or provisions of a particular Existing URP Agreement which the City confirms pursuant to Section 2.7(b) [*City Support Statements*] of this Schedule are not relevant or applicable to particular URP Work activities for which Project Co has identified in a City Support Statement and requested the City's input and direction regarding the application of the relevant Existing URP Agreement.

2.6 URP Work Reporting

Not less than bi-weekly during the Construction Period, and no less than bi-annually during the Operating Period, Project Co shall prepare and submit a report on the development of and compliance by the URP Companies and Project Co with the protocols, terms, and conditions of the URP Interface Protocols and

Existing URP Agreements as they relate to the Project, URP Work, Future URP Work, or Project Work, and including:

- (a) an overview status report of all URP Work;
- (b) a summary overview of records being maintained and key activities occurring in relation to the oversight and administration of the URP Interface Protocols and URP Existing Agreements;
- (c) a record of the steps taken by Project Co to investigate, assess, mitigate and manage all Project Co URP Work, including identified issues or adverse impacts associated with Future URP Work and with an expected or existing URP Work Relief Event;
- (d) a record of the steps taken by Project Co to coordinate the Project Work, including the Project Co URP Work, with other URP Work, including City URP Work and Future URP Work;
- (e) Project Co URP Work costs;
- (f) relevant City Support Statements, if any;
- (g) excerpts from the Construction Schedule summarizing the status of all Project Co URP Work completed and planned for completion; and
- (h) other material developments relating to URP Work matters.

(each, a “**URP Report**”)

Without limiting the preceding paragraph, Project Co shall prepare and submit a supplemental URP Report promptly upon:

- (i) commencement of each new Project Co URP Work program or job;
- (j) becoming aware of any Future URP Work for the purposes only of proactively managing, coordinating and mitigating the potential adverse impact of such work on Project Co URP Work or Project Work more generally;
- (k) becoming aware of any existing or likely to occur URP Work Relief Event.

The scope and level of detail of each URP Report shall be commensurate with the scope and complexity of new developments to be covered in each URP Report having regard to timing and scheduling considerations and the stages of the URP Work in relation to the URP Coordination Plan.

2.7 City Support Statements

(a) Preparation of Statements:

Concurrently with each URP Report, Project Co shall provide the City with a statement of the specific steps, actions, or activities that Project Co reasonably requests the City to perform or undertake in support of Project Co fulfilling its Project Co URP Work obligations, including any dates by which the

steps, actions or activities must be performed (each, a “**City Support Statement**”). The steps, actions, or activities described in a City Support Statement must be consistent with the scope of City responsibilities described in Section 3.1 [*City Responsibilities*] of this Schedule.

To the extent Project Co may ascertain or be aware that it may be a relevant factor or consideration, Project Co may include in a City Support Statement a request that the City confirm and clarify the: (i) relevancy and application or non-application of certain terms of certain Existing URP Agreements to specific URP Work activities; or (ii) possible recourse rights or remedies the City may have in the circumstances of a URP Work Relief Event that may have to be preserved or relied up in some manner.

(b) City Review:

Upon receipt of a City Support Statement, the City shall consider the steps, actions or activities requested by Project Co and will either:

- (i) accept the City Support Statement; or
- (ii) reject the City Support Statement, in whole or in part, and provide a substitute list of steps, actions or activities or a substitute schedule for performance of the steps, actions or activities, which are intended to achieve the equivalent outcome in the circumstances.

(c) City Acceptance:

Where the City accepts a City Support Statement or provides a substitute list of steps, actions or activities which Project Co acknowledges as appropriate, the City will use reasonable commercial efforts to carry out the specified steps, actions or activities within the applicable timeframe as described therein.

(d) Disputes:

If the City does not accept a City Support Statement and Project Co does not accept the City’s proposed substituted steps or schedule: (i) either Party may treat this as a Dispute and refer the matter to the Dispute Resolution Procedure; (ii) Project Co may still request the City to proceed with the substituted steps or schedule and such request will be without prejudice to Project Co’s rights in the Dispute; and (iii) the City’s performance of its proposed substituted steps or schedule shall be without prejudice to its rights in the Dispute.

2.8 Additional Project Co Responsibilities

Without limiting, and in addition to, the other provisions of this Section 2 [*Project Co Responsibilities*] of this Schedule, Project Co shall use reasonable commercial efforts consistent with URP Best Practices and subject to the terms of this Agreement to:

- (a) provide reasonable advance notice to the City of all meetings with URP Companies and permit representatives of the City to attend any such meetings if the City so desires;

- (b) carry out all necessary inquiries and investigations of the City and of the URP Companies to determine all applicable URP Technical Standards and any other special requirements, protocols, limitations, or constraints which may apply to the applicable Project Co URP Work;
- (c) support the City in respect of any City URP Work that is not complete as at the Effective Date;
- (d) store, maintain, regularly update, and make available the graphic inventory of all Infrastructure in, on, under, or adjacent to the Lands constructed by or in possession of Project Co as can be imposed on the associated cadastral base maps in the GeoEdmonton system;
- (e) reproduce markings, or include on any spatially-related digital products and related material copied by Project Co from the GeoEdmonton system all such copyright, trademark, and other proprietary and confidentiality notices as were marked on or included on the original copies of those products and materials;
- (f) coordinate with, and provide access to, URP Companies to enable them to access their facilities on, in, under, or adjacent to the Lands for the purposes of continued operations, installations, maintenance, repairs, or other purposes throughout the Term;
- (g) permit URP Company inspectors to access the URP Infrastructure on, in, under, or adjacent to the Lands as requested by the URP Company, acting reasonably, and, where the performance of the Project Work, including the Project Co URP Work, necessitates an inspection, paying any such fees or costs to the URP Company for the inspection;
- (h) obtain all necessary consents, approvals, permits and authorizations from the appropriate URP Company(ies) prior to performing any Project Co URP Work or having any Project Co URP Work performed;
- (i) comply with City processes for accessing municipal rights of way, as described in Appendix 28G [*Utility Line Assignment (ULA) Data and Processes*];
- (j) within sixty (60) days of completion of Project Co URP Work compile all drawings from the applicable URP Company and other available information relevant to this work and update the as built utility drawings to reflect the applicable Project Co URP Work; and
- (k) comply with, the technical performance requirements and standards applicable to URP Work as set out in Section 3-5 [*Utilities, Railways and Pipelines*] of Schedule 5 [*D&C Performance Requirements*], and the specific Utility Work requirements set out in Section 5 [*Utility Work Specific Requirements*], the specific Pipeline Work requirements set out in Section 6 [*Pipeline Work Specific Requirements*], and the specific Railway Work requirements set out in Section 7 [*Railway Work Specific Requirements*], of this Schedule.

2.9 Future URP Work

Project Co shall not be responsible for performance of the Future URP Work, but shall:

- (a) according to the requirements of Section 7.4.3 of the Agreement and any applicable URP Existing Agreement or URP Interface Protocol cooperate with and provide reasonable site access to permit URP Companies to perform Future URP Work within the Lands;
- (b) perform all of its obligations as a member of the GeoEdmonton Utility Alliance;
- (c) use all reasonable efforts to mitigate the impact of any Future URP Work in accordance with Section 14.8 [*General Duty of Project Co to Mitigate*] of this Agreement;
- (d) provide detailed reports to the City in respect of Future URP Work activities consistent with the requirements of Section 2.6 [*URP Work Reporting*] of this Schedule.

2.10 Project Co Deferred URP Work

Project Co shall perform the Deferred URP Work described in Appendix 28D [*Deferred URP Work*] following and in accordance with URP Best Practices and the terms of this Schedule.

3. CITY RESPONSIBILITIES:

3.1 City Responsibilities

The City will assume the following responsibilities, tasks, and risks related to the completion of the City URP Work and except as expressly set out in this Agreement will have no other responsibilities, tasks, or risks related to the URP Work:

- (a) be responsible for and bear all risks and costs for organizing, designing, coordinating, constructing, overseeing, supporting, performing and completing all City URP Work;
- (b) providing in a timely manner available relevant information and reasonable guidance, consultation, feedback, suggestions, and support, upon request from Project Co in relation to the timely and coordinated completion of the URP Work;
- (c) when requested, communicating with URP Company representatives to constructively assist Project Co in resolving any issues with the Existing URP Agreements or the URP Interface Protocols which Project Co has not been able to resolve to its reasonable satisfaction, despite the exercise of URP Best Practices;
- (d) updating Project Co when there is a change to an Existing URP Agreement or if the City is made aware of any changes to URP Technical Standards that may be relevant to the URP Work;
- (e) undertaking reasonable administrative efforts to diligently enforce Existing URP Agreements against URP Companies, including sending notice letters to URP Company representatives with appropriate levels of seniority of City official or representative,

attending follow-up phone calls or meetings, or involving senior City officials or representative, but excluding the commencement by the City of any legal proceedings;

- (f) providing in a timely manner Project Co with such information within the City's possession related to the Existing URP Agreements and cooperating with Project Co in relation to the Existing URP Agreements and the URP Interface Protocols as reasonably requested by Project Co;
- (g) when requested assist Project Co in communicating and negotiating with the URP Companies with respect to the Existing URP Agreements, the URP Interface Protocols, and the URP Work, generally, provided that under no circumstance shall the City be obligated to commence legal action to enforce any terms of the Existing URP Agreements;
- (h) acting in a timely manner upon any requests contained in an accepted City Support Statement or a substitute steps, actions or activities described in Section 2.7(ii) [*City Support Statements*] of this Schedule or according to the determination or directions resulting from a related Dispute Resolution Procedure;
- (i) providing Project Co with online access to relevant spatially-related digital products, including overlays of schools and hospitals, parks, facilities, and registered survey plan indexes;
- (j) granting Project Co a royalty-free, non-exclusive licence to use, and to sub-licence to Project Co Persons the right to use, the GeoEdmonton system and the spatially-related digital products set out in Section 2.8(d) [*Additional Project Co Responsibilities*] of this Schedule, subject to the terms and conditions of Schedule 8 [*Intellectual Property*];
- (k) providing Project Co with online access to the GeoEdmonton system in accordance with Appendix 28A [*GeoEdmonton System Availability*], subject to any changes to the normal hours of operation of the GeoEdmonton system, which the City may change in its sole discretion by notifying Project Co in writing thirty (30) days prior to any such change;
- (l) providing direction to Project Co regarding the relevancy or application of an Existing URP Agreement to particular work activities or circumstances; and
- (m) providing Project Co with relief in the manner and circumstances provided for in Section 8 [*URP Work Relief Events*] of this Schedule according to the protocol and terms of Section 13 [*Relief Events*] of this Agreement, to the extent applicable as set out in Section 8 [*URP Work Relief Events*] of this Schedule.

3.2 Outstanding City URP Work

Project Co acknowledges that, in the event the City has not completed a portion of the City URP Work as at the Effective Date, the City may either:

- (a) complete the City URP Work; or
- (b) issue a Change Enquiry or Change Directive to require that Project Co complete the certain, or all, outstanding City URP Work. Upon issuance of a Change Order

Confirmation or a Change Directive, the applicable outstanding City URP Work will be deemed to be Project Co URP Work.

3.3 No Other City Obligation

Subject to Section 8 [*URP Work Relief Events*] of this Schedule, except for those applicable responsibilities, obligations, work activities and tasks expressly described in this Agreement, including this Section 3 [*City Responsibilities*] of this Schedule or confirmed through a City Support Statement accepted by the City, the City will have no further or other obligation or liability of any kind (including no implied or inferred obligations or liabilities) to Project Co in relation to the URP Work.

4. URP COMPANY RESPONSIBILITIES:

The scope and required standards of work activities or tasks to be performed or undertaken by the URP Company in respect of or in relation to URP Work shall be as expressly set out in the applicable Existing URP Agreements, URP Interface Protocols, and the Pipeline Crossing Agreements, as applicable.

To the extent Project Co believes that a URP Company has an obligation or responsibility in respect of any portion of the URP Work that is supplemental to or different to these expressly stated requirements Project Co shall advise and obtain the City's acknowledgement of these supplemental or different requirements through a City Support Statement. If a work activity, task or other responsibility in relation to Project Co URP Work is not expressly included as part of the defined City URP Work, a City Support Statement accepted by the City (or imposed through the Dispute Resolution Procedure) or a URP Company responsibility, as described above, the work activity, task or responsibility shall be deemed to be the obligation of Project Co.

To the extent Project Co may ascertain or be aware that it may be a relevant factor or consideration in the performance of the URP Work, Project Co may include in a City Support Statement a request that the City confirm and clarify the relevance and application or non-application of certain terms of certain Existing URP Agreements to specific URP Work activities.

5. UTILITY WORK REQUIREMENTS

5.1 General

Consistent with URP Best Practices, applicable Utility Interface Protocols, the relevant URP Coordination Plan, any relevant City Support Statements and the applicable terms of any relevant Utility Agreement:

- (a) ***Coordination and Completion:*** Project Co shall, subject to the terms of this Agreement, including this Schedule, be responsible for, and bear all risks and costs for, organizing, designing, coordinating, constructing, overseeing, supporting, performing, and completing, or overseeing the completion of, all Project Co Utility Work. Project Co shall coordinate the Project Work with all Project Co Utility Work and any other work related to Utility Infrastructure, whether undertaken by, or on behalf of, Project Co or a Utility Company during the Term.

- (b) **Advance Confirmations:** Project Co shall coordinate and confirm in advance with the applicable Utility Company any special requirements for work around Utility Infrastructure and comply with all such special requirements in the performance of the Project Work.
- (c) **Designs, Drawings and Construction Programs:** Project Co shall be responsible for the design and construction of all Project Co Utility Work, whether performed by Project Co or a Utility Company.
- (d) **Codes & Standards:** Project Co shall comply with the technical performance requirements applicable to Project Co Utility Work as set out in Section 3-5 [*Utilities, Railways and Pipelines*] of Schedule 5 [*D&C Performance Requirements*].
- (e) **Approvals and Rights of Access:** Project Co shall be responsible for investigating and obtaining all necessary approvals or authorizations associated with the Project Co Utility Work including those set out in the applicable Utility Interface Protocols and Project Co shall comply with City processes for accessing municipal rights of way, as described in Section 3 [*Drawing Standards for ULA Permit Submission*] of Appendix 28G [*Utility Line Assignment (ULA) Data and Processes*], (the "**ULA Process**").
- (f) **Utility Conflict Mitigation Design and Construction:** Project Co shall proactively coordinate, monitor and oversee the management and mitigation of conflicts and variances in relation to Project Co Utility Work in accordance with Section 5.2 [*Management of Utility Conflicts and Constraints*] of this Schedule below.
- (g) **Third Party Notifications:** Project Co shall notify the applicable Utility Companies, Governmental Authorities, and interested parties prior to undertaking work within proximity to their respective Utility Infrastructure or property.

5.2 Management of Utility Conflicts and Constraints

Project Co acknowledges that prior to the Technical Submission Date, written notifications were provided by the City to Utility Companies, identifying areas of known potential conflict between the existing Utility Infrastructure and the Infrastructure, (the "**Utility Conflicts**"). A list of the Utility Conflicts is included in the Disclosed Data.

5.3 Deferred Utility Work

Design and construction of Utility Conflict mitigation work identified in Appendix 28D [*Deferred URP Work*] has been deferred for Project Co to coordinate and complete (the "**Deferred Utility Work**"). The Deferred Utility Work has been identified to the Utility Companies for mitigation and is included in the Project Co Utility Work.

In consultation with the Utility Companies, work to mitigate known Utility Conflicts has been deferred as follows for various reasons including:

- (a) mitigation measures have been identified; however the construction of such measures has been deferred to facilitate construction staging of the Utility Work with construction

of the Infrastructure. Project Co shall coordinate the construction of the mitigation measures with the applicable Utility Company.

- (b) design of the mitigation measures have been deferred until the design of the Infrastructure is sufficiently complete to determine the necessary mitigation measures. Project Co shall coordinate the design and construction of the necessary mitigation measures with the applicable Utility Companies.

Project Co shall not be responsible for the Utility Companies' costs of designing and implementing the mitigation measures for Deferred Utility Work.

5.4 Utilities Left in Place

The Utility Conflicts listed in Table 5.4 [*Utility Infrastructure Left In Place*] of this Schedule were determined by the City to have minimal impacts on the Infrastructure and have been allowed to remain in place without mitigation. If Project Co determines any of these Utility Conflicts require mitigation to accommodate the Design or Construction of the Infrastructure, Project Co shall be responsible for coordination and all costs related to the mitigation.

Table 5.4 – Utility Infrastructure Left In Place

Description	Utility Company	Location
36 way duct bank and vaults	Telus	Section between vault V-6A and V-139B (102 Ave – W of 100 to 101 Street)
Manhole 111 - leave in place	Allstream	South side of 102 Avenue; West of 100 Street
Vault MN783, MN322, MN1159, MH328, MH793 and associated ductbank	EPCOR D&T	West of 99 St, South of Churchill Stop platform
Conduits entering & within churchill tunnel cavity	Telus / Allstream	99 Street and 102 Avenue
EPCOR D&T distribution power vaults	EPCOR D&T	102 Avenue; 97 to 99 Street
Existing watermain and steel casing	EPCOR Water	83 Street; North of 86 Avenue

Description	Utility Company	Location
Existing vault and conduit	Telus	83 Street; North of 84 Avenue
EPCOR D&T distribution aerial power pole	EPCOR D&T	83 Street; alley between 79 & 78 Avenue
EPCOR D&T distribution power duct bank	EPCOR D&T	66 Street; 31 Avenue intersection

5.5 Utilities Infrastructure Not To Be Relocated

Project Co shall not relocate, modify or otherwise impact any of the Utility Infrastructure listed in Table 5.5 [Utility Infrastructure Not to be Relocated] of this Schedule.

Table 5.5 – Utility Infrastructure Not to be Relocated

Description	Utility Company	Location
406 IP5 ST Gas Main	ATCO Gas	Connors Road; west of Cloverdale Hill Road
EPCOR 72kV underground transmission power cable	EPCOR D&T	98 Avenue; west of 96A Street
Telecommunications duct banks/conduits, vaults	Telus	98 Avenue; west of 96 A Street
9 way power duct bank	EPCOR D&T	Intersection of Argyll Road and 83 Street
405 IP5 ST gas main	ATCO Gas	North of Argyll Road on 83 Street
Telecommunications Vaults and duct banks	Telus, Bell, Shaw	Intersection of Argyll Road and

Description	Utility Company	Location
between and running along Argyll Road		83 Street
88 M1 ST gas main and service	ATCO Gas	Coronet Road
Ledcor Rogers Fibre Optic	Rogers	75 Street CN Rail crossing
12 way power duct bank	EPCOR D&T, Allstream	75 Street; Whitemud bridge crossing

6. PIPELINE WORK REQUIREMENTS

6.1 General

Consistent with URP Best Practices, applicable Pipeline Interface Protocols (if any), the relevant URP Coordination Plan, any relevant City Support Statements and the applicable terms of any relevant Pipeline Agreement or Pipeline Crossing Agreement:

- (a) **Coordination and Completion:** Project Co shall, subject to the terms of this Agreement including this Schedule, be responsible for, and bear all risks and costs for, organizing, designing, coordinating, constructing, overseeing, supporting, performing and completing, or overseeing the completion of, all Project Co Pipeline Work. Project Co shall coordinate the Project Work with all Project Co Pipeline Work and any other work related to Pipeline Infrastructure, whether undertaken by, or on behalf of, Project Co or a Pipeline Company during the Term;
- (b) **Advance Confirmations:** Project Co shall coordinate and confirm in advance with the applicable Pipeline Company any special requirements for work around Pipeline Infrastructure and comply with all such special requirements in the performance of the Project Work.
- (c) **Designs, Drawings and Construction Programs:** Project Co shall be responsible for the design and construction of all Project Co Pipeline Work whether performed by Project Co or a Pipeline Company.
- (d) **Codes & Standards:** Project Co shall comply with the technical performance requirements applicable to Project Co Utility Work as set out in Section 3-5 [*Utilities, Railways and Pipelines*] of Schedule 5 [*D&C Performance Requirements*].
- (e) **Responsibility for Costs:** Project Co shall be responsible for all costs, including those charged by the Pipeline Company for performance of Project Co Pipeline Work, including designing and implementing mitigation measures for Deferred Pipeline Work

subject only to the terms of this Agreement that expressly provide for the City having some responsibility for these costs.

- (f) **Approvals and Rights of Access:** Project Co shall be responsible for investigating and obtaining all approvals or authorizations, and attending to all notifications and filings that may be required by the Pipeline Companies or the City, that are the responsibility of Project Co under or pursuant to the Pipeline Interface Protocols described in Section 2.4.3 [*Pipeline Crossing Agreements and Supplemental Interface Protocols*] of this Schedule.
- (g) **Third Party Notifications:** Project Co shall notify the applicable Pipeline Companies, Governmental Authorities, and Interested Parties prior to undertaking work within proximity to their respective Pipeline Infrastructure or property.
- (h) **Pipeline Crossing Agreements:** Project Co shall not commence Pipeline Work unless it has first negotiated and arranged for the City to sign a Pipeline Crossing Agreement that is consistent with and supplemental to any existing and applicable master Pipeline Agreement (a "**Pipeline Crossing Agreement**").

6.2 Performance of Project Co Pipeline Work

(a) **Advancement of Preliminary Plans:**

Project Co shall finalize and submit to the City in accordance with the Review Procedure all developed and final plans and schematic drawings in relation to the Project Co Pipeline Work prior to submitting the same to the Pipeline Companies for their review and approval. Such finalized plans and other schematic drawings may be required for finalization of the applicable Pipeline Crossing Agreements and any applicable Pipeline Interface Protocols.

(b) **City Participation:**

In accordance with Section 2.7 [*City Support Statements*] of this Schedule Project Co shall: (i) provide reasonable notice of and permit the City to attend all meetings; and (ii) include the City in all correspondence and discussions with the Pipeline Companies during the negotiation of any Pipeline Interface Protocols or amendments of Pipeline Interface Protocols. Any proposed Pipeline Interface Protocols or amendments of Pipeline Interface Protocols shall be submitted to the City in accordance with the Review Procedure prior to submitting to the Pipeline Company. If Project Co is seeking a specific approval or agreement from a Pipeline Company and requires the City to acknowledge, approve, consent or agree to the proposed action or decision Project Co shall confirm the support required of the City in the specific City Support Statement.

(c) **City Approval:**

The City shall be a party to any Pipeline Interface Protocols or amended Pipeline Interface Protocols. Project Co shall not enter into, or otherwise agree to, any proposed Pipeline Interface Protocols or amendment of a Pipeline Interface Protocols without the prior written consent of the City which consent may be withheld in the City's discretion. If consent is granted by the City, the amendment or Pipeline

Interface Protocols shall be signed by the Pipeline Company prior to being sent to the City for execution. Project Co shall have the right to claim a Relief Event if the City acknowledges or it is determined through the Dispute Resolution Procedure that the City unreasonably withheld its approval, consent or agreement in the circumstances.

(d) Work Standards:

Design and construction of all Pipeline Infrastructure, including confirmation of the required work specifications and standards, shall require extensive coordination between Project Co and the Pipeline Company noting that some work related to the Pipeline Infrastructure will most likely be undertaken by the Pipeline Companies' own resources, personnel and contractors.

Project Co must schedule and allow for all work and undertakings of the Pipeline Companies as the Pipeline Companies require according to the terms of the applicable Pipeline Agreements or Pipeline Crossing Agreements.

As required by the Pipeline Companies or otherwise based on Project Co's needs, Project Co shall make arrangements to retain the services of and be responsible for the costs associated with retaining Pipeline Company personnel to assist with construction activities.

Subject to Section 8 [*URP Work Relief Events*] of this Schedule, as between City and Project Co, the cost and schedule implications for all Pipeline Work activities described in this Section 6.2 [*Performance of Project Co Pipeline Work*] of this Schedule shall remain the responsibility of Project Co.

6.3 Deferred Pipeline Work

Design and construction of Pipeline Work identified in Appendix 28D [*Deferred URP Work*] has been deferred for Project Co to coordinate and complete (the "**Deferred Pipeline Work**"). The Deferred Pipeline Work has been discussed on a preliminary basis with the Pipeline Companies and is included in the Project Co Pipeline Work.

6.4 Keyera Pipeline Work

Construction of Keyera Pipeline Work including Pipeline crossings at 66 Street south of Whitemud Drive and at 66 Street south of 31 Avenue, and the valve relocation from 66 Street south of Whitemud Drive to 51 Avenue west of 75 Street has been deferred for Project Co to coordinate and complete. The design of the Keyera Pipeline Work has been initiated with the Pipeline Company. Although the Keyera Pipeline Work is included in the Project Co Pipeline Work, the City is responsible for Pipeline Company costs for the Keyera Pipeline Work.

7. RAILWAY WORK REQUIREMENTS

7.1 Railway Work Acknowledgement

Project Co shall, subject to the terms of this Agreement including this Schedule, be responsible for, and bear all risks and costs for, organizing, designing, coordinating constructing, overseeing, supporting, performing, and completing, or overseeing the completion of, all Project Co Railway Work. Project Co acknowledges and agrees that:

- (a) Project Co is in receipt of a copy of and has reviewed each of the Railway Agreements;
- (b) Project Co shall until the end of the Term or sooner termination of this Agreement duly perform and carry out on behalf of the City all obligations of the City under the Railway Agreements in coordinating, overseeing and completing the Project Co Railway Work; and
- (c) notwithstanding Section 7.1(b) [*Railway Work Acknowledgment*] of this Schedule, Project Co shall not have any obligation to collect on behalf of the City any amount, including any cost contributions, to be paid by the applicable Railway Company to the City under the applicable Railway Agreement and all such amounts shall be payable to and for the credit of the City and not Project Co.

7.2 Performance of Railway Works

(a) Preliminary Plans:

The Railway Agreements include preliminary Railway Work plans and schematic drawings on which the Railway Agreements were based. Such plans and drawings include bridge, road and rail configurations, clearance envelope requirements, signal plans and construction staging concepts and appurtenances, such as warning signal layouts. Project Co shall be solely responsible to confirm the applicability and feasibility of the information set out in these plans and drawings.

(b) Changes to Railway Work Requirements:

If Project Co wishes to design and build the Railway Work in variance from that contemplated in the applicable Railway Agreements, Project Co must negotiate any Railway Interface Protocol, replacement Railway Agreements or amendments of Railway Agreements, as required, with the applicable Railway Company.

(c) Advancement of Preliminary Plans:

Project Co shall finalize and submit to the City in accordance with the Review Procedure all developed and final plans and schematic drawings in relation to the Railway Works prior to submitting the same to the Railway Companies for their review and approval. Such finalized plans and other schematic drawings may require amendments to the applicable Railway Agreement or any applicable Railway Interface Agreement.

(d) City Participation:

In accordance with Section 2.7 [*City Support Statements*] of this Schedule, Project Co shall: (i) provide reasonable notice of and permit the City to attend all meetings; and (ii) include the City in all correspondence and discussions with the Railway Companies during the negotiation of any Railway Interface Protocol, replacement Railway Agreements, or amendments of Railway Agreements. Any proposed Railway Interface Protocol, replacement Railway Agreements or amendments of Railway Agreements shall be submitted to the City in accordance with the Review Procedure prior to submitting to the Railway Companies. If Project Co is seeking a specific approval or agreement from a Railway Company and requires the City to acknowledge, approve, consent or agree to the proposed action or decision Project Co shall confirm the support required of the City in the specific City Support Statement.

(e) City Approval:

The City shall be a party to any replacement Railway Agreements or amended Railway Agreements. Project Co shall not enter into, or otherwise agree to, any proposed replacement Railway Agreement or amendment of a Railway Agreement without the prior written consent of the City which consent may be withheld in the City's discretion. If consent is granted by the City, the amendment or replacement Railway Agreement shall be signed by the Railway Company prior to being sent to the City for execution. Project Co shall have the right to claim a Relief Event if the City acknowledges or it is determined through the Dispute Resolution Procedure that the City unreasonably withheld its approval, consent or agreement in the circumstances.

(f) Project Co Acknowledgement:

Project Co acknowledges that existing and future railway crossing agreements established between the Railway Companies and the City in relation to other City locations, projects or work activities may be impacted by negotiation of amended or supplemental Railway Agreements which may delay or prevent the City from granting its approval, consent or agreement as contemplated by subparagraph (e) above. Project Co also acknowledges that this may be taken into account as a factor in determining whether the City is being or was reasonable in withholding its approval, consent or agreement for the purpose of determining whether relief may be claimed by Project Co pursuant to Section 8.1 [*URP Work Relief Events Defined*] of this Schedule.

(g) Communications and Notices:

Project Co shall be responsible for the notices of proposed Railway Work, as may be required by the *Railway Safety Act* (Canada) and shall be responsible for addressing any objections received in respect of such notices.

Project Co shall contact the Railway Companies directly in order to locate railway-owned Utilities in the vicinity of railway crossing locations.

Project Co shall obtain all necessary approvals and permissions which include those required for construction activities on or adjacent to railway lines, construction of temporary at-grade crossings, temporary railway closures, and temporary clearance boxes desired during construction.

(h) Work Standards:

Design and construction of all Project Co Railway Work including confirmation of the required work specifications and standards, shall require extensive coordination between Project Co and the Railway Companies. Project Co acknowledges that some work related to the railway crossings must be undertaken by the Railway Companies' own resources, personnel and contractors. Project Co also acknowledges that the Railway Companies may choose to design and construct temporary works proposed by Project Co, including possible detours, shooflies or temporary crossings.

Project Co must schedule and allow for all work and undertakings of the Railway Companies as the Railway Companies require, including the relocation or modification of the existing crossing warning system and the implementation of the new crossing warning system as contemplated in the CNR At-Grade Agreement.

For the purposes of Section 8.1 [*URP Work Relief Events Defined*] of this Schedule, unless otherwise specified in the applicable Railway Agreement or any applicable Railway Interface Protocol, the Railway Companies shall have:

- (a) 30 days to review and respond (accept or reject) to a submission received from Project Co;
- (b) 120 days for the completion of CN Rail's review, comment and possible revision to a warning signal design for 75th Street, after the requirement for such revision has been confirmed with CN Rail by Project Co and after CN Rail is in receipt of all necessary information to make such review, comment and revision;
- (c) 60 days for the completion by CN Rail of each scheduled stage (as per the URP Coordination Plan, the applicable Railway Agreement and the commencement dates specified by CN Rail) of its warning signal work on or in respect of the applicable Railway Infrastructure at 75th Street, resulting from the removal or installation of warning signals at an identified crossing caused by the Project Work.

Promptly following any failure of a Railway Company to perform a review, provide a response or perform any other obligation, for which an explicit timeframe has been specified in this Section 7.2(h) or in the applicable Railway Agreement, within the specified period of time, Project Co shall provide the City with written notice setting out details of the Railway Company's failure.

As required by the Railway Companies or otherwise based on Project Co's needs, Project Co shall make arrangements to retain the services of and be responsible for the costs associated with retaining Railway Company personnel, such as flag persons or operations coordinators, to assist with construction activities.

(i) Responsibility for Costs:

For the avoidance of doubt, and with reference to Section 7.1(b) [*Railway Work Acknowledgment*] of this Schedule, it shall be Project Co's responsibility to pay all costs associated with fulfilling the obligations of the City under the Railway Agreements in respect of the Project Co Railway Work.

Except as expressly provided for otherwise in this Agreement any use of Railway Company supplied material, equipment or manpower to assist Project Co with reviews in accordance with Section 7.2(a) [Preliminary Plans], (b) [Changes to Railway Work Requirements] or (c) [Advancement of Preliminary Plans] of this Schedule, fulfilling the obligations of the City under the Railway Agreements in relation to completing the Project Co Railway Work shall be at Project Co's cost with the exception of direct costs associated with the following:

- (a) supply and installation of the concrete crossing surface as described in the CNR At-Grade Agreement;
- (b) supply and installation of the parts, equipment and materials for the new crossing warning system as already ordered by the City pursuant to the CNR At-Grade Agreement;
- (c) maintenance of the concrete crossing surface as described in the CNR At-Grade Agreement; and
- (d) maintenance of the crossing warning systems as described in the CNR At-Grade Agreement.

(j) Reimbursement and Set-off:

Any Railway Company costs invoiced to and paid by the City that are the responsibility of Project Co shall be set off by the City against payments owing to Project Co in accordance with set off terms of Section 9.5 of this Agreement.

8. URP WORK RELIEF EVENTS

8.1 URP Work Relief Events Defined

Without limiting, and in addition to, but without duplication of, Section 13.1.1 [Included Events] of this Agreement, and subject to Section 8.2 [Consequences of a URP Work Relief Event] of this Schedule, the following URP Work related events, conditions and circumstances shall constitute *URP Work Relief Events*:

Standard Events: for which there is no specific cost sharing mechanism provided for in this Schedule (as there is with Extraordinary Delays and Extraordinary Requirements), include:

- (a) **Future Work:** Future URP Work;
- (b) **Undisclosed URP Infrastructure:** the existence of undisclosed URP Infrastructure that could not have been ascertained by Project Co or Project Co Persons from the Disclosed Data and from other information or data available to Project Co in the course of carrying out Standard Due Diligence according to URP Best Practices, prior to the Financial Submission Date;
- (c) **Latent Defects:** the existence of latent defects in the existing URP Infrastructure that could not have been reasonably ascertained by Project Co or Project Co Persons from the Disclosed Data and from other information or data available to Project Co in the

course of carrying out Standard Due Diligence according to URP Best Practices, prior to the Financial Submission Date;

- (d) **City Responsibility:** performance by the City of City URP Work after the Effective Date, or the Legal Fault of the City or a City Person in relation to URP Work generally; or
- (e) **Contamination:** the existence of Contamination or Hazardous Substances as provided for in Section 11.3 [*Contamination and Hazardous Substances*] of this Schedule;

Extraordinary Events: for which the cost sharing terms included in the definition of Recoverable Direct Losses apply, include:

- (f) **Extraordinary Delays:** the occurrence of an Extraordinary Delay or a delay resulting from a second or subsequent cancellation of the same confirmed track blockage window by a Railway Company notwithstanding the adoption and application of relevant URP Best Practices by Project Co; and
- (g) **Extraordinary Requirements:** the imposition by a URP Company on Project Co of an Extraordinary Requirement that results in an Extraordinary Delay or which otherwise has an adverse cost impact to Project Co relating to the performance of its obligations under this Schedule or its other Project Work notwithstanding the adoption and application of relevant URP Best Practices by Project Co.

8.2 Consequences of a URP Work Relief Event

If a URP Work Relief Event described in Section 8.1 [*URP Work Relief Events Defined*] of this Schedule occurs:

- (a) **Standard Events:** The URP Work Relief Events listed in Sections 8.1(a) to 8.1(e) [*URP Work Relief Events Defined*] of this Schedule shall be treated as a Relief Event under Section 13 [*Relief Events*] and all sections of Section 13 [*Relief Events*] shall apply to these events.
- (b) **Extraordinary Events:** The URP Work Relief Events listed in Sections 8.1(f) and 8.1(g) [*URP Work Relief Events Defined*] of this Schedule shall be generally treated as a Relief Event under Section 13 [*Relief Events*] and all sections of Section 13 [*Relief Events*] shall apply to these events except that any Direct Losses that would be payable to Project Co under Section 13 [*Relief Events*] as a consequence of the event shall be limited to *Recoverable Direct Losses* as defined in Section 1.2.39 [*Definitions*] of this Schedule.

Project Co shall be required to notify the City as soon as it encounters an Extraordinary Event or an Extraordinary Delay and provide the City with monthly updates of the costs it is incurring as a result of their occurrence. Once the costs incurred by Project Co reach the threshold for sharing with and payment by the City in the definition of Recoverable Direct Losses, these costs shall be invoiced and reimbursed monthly. To the extent that there is any mitigation or other savings realized by Project Co, such mitigation or other savings will be set off against future payments in respect of Extraordinary Events, Extraordinary Delays or any other payment to Project Co hereunder such that the City will, as of the Service Commencement Date, have paid an amount equal to Recoverable Direct Losses.

9. URP WORK DISCLOSED DATA

The City and Project Co acknowledge and agree that the following documents and information are relevant to, and form the informational background of, this Part B [*Utility, Railway and Pipeline Matters*] of this Schedule and for the following stated purposes.

9.1 Descriptive of Scope or Standards of Work

The following data or documents have been referred to for background information purposes and when applicable to the circumstances in question to assist in determining or clarifying the scope, nature or performances standards of URP Work required to be undertaken or performed in a particular circumstance, or in determining or clarifying the allocation of responsibilities, obligations and liabilities as between Project Co, the City and the applicable URP Company:

- (a) the Existing URP Agreements;
- (b) the City URP Work that is completed or is to be completed by the City prior to the Effective Date and that is set out at Appendix 28B [*City URP Work Completed Prior to Effective Date*];
- (c) the City URP Work that may be expected to carry over into the Construction Period and is set out at and Appendix 28C [*Incomplete City URP Work*]; and
- (d) the Deferred URP Work, including all required notifications or performance of repair replacement or removal work in relation to existing URP Infrastructure, required to be carried out and coordinated by Project Co during the Construction Period all of which is listed at Appendix 28D [*Deferred URP Work*].

9.2 Information Only

The following data or documents have been referred to for background information purposes only:

- (a) the background information of utility locations, current utility conflicts, and variances, possible mitigation strategies, ULA process steps/diagrams, service connection requirements, and similar information or data that Project Co will require to investigate and assess the URP Work, all of which is listed at Appendix 28E [*URP Work Background Information*] to this Schedule;
- (b) the individual contact particulars for each URP Company (the “**URP Contacts**”) that have been identified to the City by the applicable URP Companies, all of which is listed at Appendix 28F [*URP Company Contact Particulars*];
- (c) references to the ULA data and processes, which are listed at Appendix 28G [*Utility Line Assignment (ULA) Data and Processes*]; and
- (d) information requested and compiled by the City from each Pipeline Company known to possess Pipeline Infrastructure within the Lands. Information requested was as follows:
 - (i) Pipeline Company standards and specifications;
 - (ii) exceptions to Pipeline Company standards and specifications;
 - (iii) notification requirements;

- (iv) documentation requirements;
- (v) emergency response requirements;
- (vi) review & response time commitments;
- (vii) onsite personnel requirements;
- (viii) Pipeline Work commitment by Pipeline Company; and
- (ix) Pipeline Company personnel costs for call outs.

The information obtained by the City is provided as, and included in, the Disclosed Data. Not all Pipeline Companies provided data.

- (e) information requested and compiled by the City from each Utility Company known to possess Utility Infrastructure within the Lands. Information requested was as follows:
 - (i) Utility Company standards and specifications;
 - (ii) exceptions to Utility Company standards and specifications;
 - (iii) notification requirements;
 - (iv) documentation requirements;
 - (v) emergency response requirements;
 - (vi) review & response time commitments;
 - (vii) onsite personnel requirements;
 - (viii) Utility Work commitment by Utility Company;
 - (ix) Utility Company personnel costs for call outs; and
 - (x) Utility base mapping drawings, design files and other related data have been compiled and are available to Project Co as Disclosed Data.

The information obtained by the City is provided as, and included in, the Disclosed Data.

10. URP WORK DISPUTE RESOLUTION

10.1 Dispute Procedures

Where contracts, permissions, consents, approvals, certificates, licences, agreements, authorizations, or permits governing Project Co URP Work:

- (a) include dispute resolution procedures similar to those in Schedule 20 [*Dispute Resolution Procedure*], any disputes between Project Co and the applicable entity, including the City or the URP Companies, shall be dealt with in substantially the same manner as set out in Schedule 20 [*Dispute Resolution Procedure*] and Project Co shall be deemed to have consented to arbitration of any such claims, disputes, and other matters; and

- (b) do not include dispute resolution procedures similar to those in Schedule 20 [*Dispute Resolution Procedure*], any disputes between Project Co and the applicable entity, including the City and the URP Companies, shall be dealt with in accordance with the terms of any agreed protocols or, in the absence of an agreement, in accordance with Applicable Law.

10.2 Project Co Constraints

Project Co acknowledges that the City may have to reasonably take into account the implications of the City of its broader and longer term commercial relationships with the URP Companies of Project Co potentially proceeding with a formal adversarial dispute proceeding against a URP Company in respect of a dispute that relates only to some aspect of the URP Work and the Project. Accordingly before initiating formal litigation, arbitration or mediation proceedings against a URP Company, Project Co shall consult with, and obtain the consent of, the City, which consent may be granted or withheld in the City's discretion. Provided however, that Project Co shall have the right to claim a Relief Event if the City acknowledges or it is determined through the Dispute Resolution Procedure that the City unreasonably withheld its consent in the circumstances.

11. MISCELLANEOUS

11.1 Other Works

For confirmation and clarity, this Schedule does not address or apply to the allocation of responsibilities between Project Co and the City with respect to City Works, Other Works, or Other Contractors or interfacing with the general public in respect of the LRT Corridor and the Project Work.

11.2 Project Utility Services

For confirmation and clarity, this Schedule does not address or apply to the allocation of responsibilities between Project Co and the City with respect to work or infrastructure required to:

- (a) provide and connect Utility services to the Infrastructure; and
- (b) provide Utility services and support required by Project Co to perform the Project Work, including those required for the Design and Construction of the Infrastructure or the Operation and Maintenance of the System.

11.3 Contamination and Hazardous Substances

In relation to Project Co URP Work, Project Co shall be responsible for managing Contamination and Hazardous Substances in accordance with the requirements of Schedule 10 [*Environmental Performance Requirements*] and shall be entitled to claim a URP Work Relief Event in accordance with Section 8.1 for:

- (1) Hazardous Substances in URP Infrastructure;
- (2) Hazardous Substances in soil, soil vapour, sediment, groundwater, pore water and surface water to the extent those Hazardous Substances are caused by URP Infrastructure; and
- (3) Contamination to the extent caused by URP Infrastructure.

except to the extent that Project Co has not complied with its obligations under this Agreement and with its obligations under any Existing URP Agreement or URP Interface Protocol as those obligations apply or are otherwise relevant to the Contamination or Hazardous Substances.

11.4 City Drainage and Stormwater Management

For confirmation and clarity, this Schedule does not apply to City drainage and stormwater management systems. Accordingly, for greater certainty for the purposes of this Schedule, the City's Drainage Services Branch shall be deemed not to be a Utility Company and the City drainage and stormwater management systems shall be deemed not to be Utility Infrastructure.

APPENDIX 28A

GEOEDMONTON SYSTEM AVAILABILITY

Days	Time	Activity
Monday – Friday Excluding Statutory Holidays observed in the Province of Alberta	8:00 am - 4:30 pm	Production system available. Unless the parties otherwise agree, Project Co shall use this right of access for minor updates only. The City will endeavor to notify Project Co of any conflict in the GeoEdmonton system access or general unavailability of the GeoEdmonton system.
	4:30 pm - 12:00 am	System maintenance blocked down-time.
	12:00 am - 8:00 am	Production system available for mass data transfers. Project Co may access the GeoEdmonton system on an after-hours basis and for mass updates but such access must terminate by 8:00 A.M. of every weekday. Project Co shall notify the City of its intention to access the GeoEdmonton system for mass updates to minimize the risk of computer down time for normal and other servicing requirements.
Saturday – Sunday and Statutory Holidays	12:00 am- 12:00 pm	System maintenance blocked down time. Project Co may access the GeoEdmonton system on weekends and statutory holidays on an unsupported basis.

APPENDIX 28B

City URP Work Completed Prior To Effective Date

A. Part A – Completed Utility Work

Description	Utility Company	Location
Crossing across 102 Ave, network to 100A St	MTS Allstream	101 St, 102A-102 Ave (joint with EPCOR D&T CIV 5)
Install new Duct Line	BELL	101 St - 102A to 102 Ave (joint with EPCOR D&T CIV 5)
Install new Duct Line	EPCOR D&T	CIV 4 (STAGE 2) - 102A Ave 100 St to 101 St
New duct line, vault	ROGERS	101 Street - lane S of 102 Ave
New duct line, vault	BELL	102 Ave & 101 St (SE corner)
Refeed to Churchill Square, abandonments	ATCO Gas	102 Ave - 100 to 99 Street & Churchill Square
Lower crossing; Abandonments	ATCO Gas	100 Street & 102 Av
Winspear Re-feed crossing	EPCOR D&T	CIV 8 Phase 2 – 102 Ave & 97 Street
main install; crossings; services; hydrants	EPCOR Water	102 Ave - E of 99 St to E of 97 St
Ductbanks on 102A & 100 Av, Abd's, Services	TELUS, SHAW	97 Street to 95 Street - 102A Ave & 101A Ave
O/H to U/G crossing relocation + Abd	EPCOR D&T	CIV 1 - 102 Avenue crossing East of 97 St

Description	Utility Company	Location
		(China Gate)
Lower crossing, services	TELUS	102 Ave & lane E 97 Street (joint with EPCOR D&T CIV1)
Lower crossing, services	SHAW	102 Ave & lane E 97 Street (joint with EPCOR D&T CIV1)
Conduit, vaults, cabinets, abds	TELUS	102 Ave - 97 to 95 Street lanes
New poles, aerial modifications	EPCOR D&T	102 Ave - lane E 97 Street & lane W 96 Street
Abandon crossing	SHAW	102 Ave - lane W 96 Street
Line Lowering	ATCO Gas	102 Ave - lane W & lane E 96 Street
O/H to U/G crossing relocation + Abd	EPCOR D&T	102 Ave & lane E 96 Street
Main extension; abds	ATCO Gas	LE 96 Street - Jasper Ave to 102A Ave
Abandonments	ATCO Gas	102 Ave - lane W of 95 St/Jasper Av track crossing
Relocations	SHAW	95 St - 101 Av to S of Jasper Av
O/H to U/G, Service Cubicle	EPCOR D&T	98 Av - 96A St to W of alignment
Relocate private hydrant	Private	Muttart Station
O/H to U/G, relocates, abandonments	EPCOR D&T	Connors Rd & 95 St, 95 St & 95 Ave, 92 St,

Description	Utility Company	Location
		lane W 92 St
Crossing of 95 Avenue at 95 Street (Top of Connors)	EPCOR Water	Connors Rd & 95 Street
SE28/SE29 O/H removal	EPCOR D&T	Connors Rd & lane W of Strathearn Dr.
SE28/SE29 relocation/abandonment	aerial SHAW	Connors Rd & lane W of Strathearn Dr.
Service abandonments	ATCO Gas	Connors Rd & LW 94 Street
Abandoning water line	EPCOR Water	Connors Rd & lane W of 94 Street
Lowering, upgrades	EPCOR Water	95 Ave & 94 Street
Line abandonment/grouting	EPCOR Water	Connors Rd & 95 Ave
Relocates, abandonments	ATCO Gas	95 Ave - Connors Rd to 92 Street
Off Corridor Installation	EPCOR Water	Connors Rd - 90 Street to 92 Street
Off Corridor Installation	EPCOR Water	Connors Rd - roundabout to 90 Street
O/H to U/G (joint with EPCOR 241252)	SHAW	95 Ave - 91 to 92 Street
Conduit install and crossing	TELUS	95 Ave - Donnell Rd to 92 Street Lane
O/H to U/G line (joint with TELUS 2473222)	SHAW	95 Ave - Donnell Rd to 92 Street Lane

Description	Utility Company	Location
New Crossings at Donnel & 89ST	EPCOR Water	95 Ave/Donnell Rd, 92 St, 89 St
Upgrades, off Corridor	EPCOR Water	92 Street & Donnell Rd
Lower crossing	ATCO Gas	95 Ave - lane E 92 Street
Lowering, casing	EPCOR Water	95 Ave & lane E of 91 Street
New line connections, abandonments	ATCO Gas	95 Ave - LE 91 to 89 Street
Line install/abandonment/servicing	EPCOR Water	95 Ave - 90 Street to lane W
Install new duct	EPCOR D&T	95 Ave to 93 Ave & 89 to 87 Street
Relocate line	ATCO Gas	95 Ave & 87 Street
within trackway, crossings	BELL	95 Ave - 87 to 85 Street
O/H to U/G crossing	SHAW	95 Ave & 86 Street
lowering, upgrades	EPCOR Water	95 Ave & 85 Street
Lower Duct Bank Crossings, Abandon MH's	EPCOR D&T	85 Street & 95 Ave
Pole relocation	EPCOR D&T	85 Street & 95 Ave (North of)
2 hydrant relocations	EPCOR Water	85 Street & 93 Ave (West)

Description	Utility Company	Location
lowering, casing, hydrants	EPCOR Water	85 Street & 93 Ave (East)
O/H to U/G	EPCOR D&T	85 Street & LS of 92a Ave
O/H to U/G	TELUS	85 Street & lane S of 92a Ave
O/H to U/G	SHAW	85 Street & lane S of 92a Ave
Abandonment	ATCO Gas	85 Street & lane S of 92 Ave
Crossing (2 ducts), vaults	TELUS	Bonnie Doon Traffic Circle
Crossing (2 ducts), vaults (joint with TELUS 2502603)	SHAW	Bonnie Doon Traffic Circle
Crossing (2 ducts), vaults (joint with TELUS 2502603)	BELL	Bonnie Doon Traffic Circle
lowering, casing	EPCOR Water	Boonie Doon Traffic Circle
eliminate vault entrance, install new access vault	EPCOR D&T	Boonie Doon Traffic Circle
Hydrant in Future back of walk	EPCOR Water	83 Street & S of Bonnie Doon Traffic Circle
Lower and case pool service; install valve	EPCOR Water	83 Street & N of 86 Ave
realignment, hydrants, abandonment	EPCOR Water	83 Street - 86 Ave to lane N of 82 Ave

Description	Utility Company	Location
Realign 114M1 ST crossing	ATCO Gas	83 Street & North of 84 Ave
Hydrant relocation	EPCOR Water	83 Street & lane N of 82 Av
Lower Crossing 2-406ST	ATCO Gas	83 Street & 82 Ave
Lane crossings; distribution upgrades; 300 wm	EPCOR Water	83 Street - 82 Ave to lane S of 76 Ave
Lower Crossings	ATCO Gas	83 St & lane South of 82/81 Ave
Lower duct bank crossings	EPCOR D&T	83 Street and 81 Ave
Relocating crossing	BELL	83 Street & 81 Ave
Remove O/H crossing	EPCOR D&T	83 Street & lane S of 81 Ave
O/H to U/G crossing	TELUS	83 Street & lane S of 81 Ave
O/H crossing removals	SHAW	83 Street & lane S of 81 Ave
case & lower 762 Steel	EPCOR Water	83 Street & 80 Ave
Lower Crossing	ATCO Gas	83 Street - lane S of 80 Ave & lane S of 79 Ave
Remove O/H crossing	EPCOR D&T	83 Street & lane South of 80 Ave
Remove O/H crossing & pole variance	EPCOR D&T	83 Street & lane S of 79 Ave

Description	Utility Company	Location
Remove O/H crossing	EPCOR D&T	83 Street & lane S of 79 Ave
O/H crossing removals	SHAW	83 Street & lane S of 79 Ave
O/H to U/G crossing	TELUS	83 Street & lane S of 78 Ave
O/H crossing removals	SHAW	83 Street & lane S of 78 Ave
Lower crossing	ATCO Gas	83 Street & lane S 77 Ave
O/H to U/G crossing (joint with EPCOR D&T WIP)	SHAW	83 Street & lane S 77 Ave
Lower ductbank	TELUS	83 Street & 76 Ave
lower ductline (Joint with TELUS 2520604)	SHAW	83 Street & 76 Ave
New conduit & Abandonment	BELL	83 Street & 76 Ave to Argyll
O/H to U/G crossing	EPCOR D&T	83 Street & lane S of 76 Ave
O/H to U/G crossing (joint with EPCOR D&T WIP)	TELUS	83 Street & lane S of 76 Ave
O/H to U/G crossing (joint with EPCOR D&T WIP)	SHAW	83 Street & lane S of 76 Ave
Lower crossing	ATCO Gas	83 Street - lane S of 76 Ave & lane N of 73 Ave

Description	Utility Company	Location
Hydrant relocation	EPCOR Water	83 Street & lane N of 73 Ave
Lowering, casing	EPCOR Water	83 Street - Various Locations
Hydrant relocation	EPCOR Water	83 Street & lane S of 69 Ave
Abandonments	ATCO Gas	83 Street & Argyll Rd
Pedestal relocation	TELUS	83 Street & lane S of 73 Ave
O/H to U/G crossing	EPCOR D&T	83 Street & Coronet Rd
O/H to U/G crossing (joint with EPCOR D&T 245221)	TELUS	83 Street & Coronet Rd
O/H to U/G crossing (joint with EPCOR D&T 245221)	SHAW	83 Street & Coronet Rd
Relocation, lowering	ATCO Gas	Wagner Rd & Davies Rd
O/H to U/G	EPCOR D&T	Wagner Rd & Davies Rd
Pole Relocation	EPCOR D&T	Wagner Rd & West of Davies Rd
Casing, valves, replacements, abandonments	EPCOR Water	Wagner Rd & Davies Rd
Hydrant replacements	EPCOR Water	Wagner Rd & Davies Rd
O/H to U/G (joint with EPCOR D&T)	SHAW	75 Street & Wagner Rd

Description	Utility Company	Location
245238)		
Abandon vault & fiber facilities	MTS Allstream	75 Street - Wagner to Roper Rd
O/H to U/G, relocations	EPCOR D&T	75 Street - Union Tractor to 51 Ave
Case & lower service; hydrants relocate	EPCOR Water	75 Street & North of McIntyre
Install duct, vaults, pedestals	TELUS	75 Street - CN Crossing to 51 Ave
Install conduit (joint with TELUS 2475669)	SHAW	75 Street & McIntyre
CW Carry, temp pole relocate	EPCOR D&T	75 Street & McIntyre Rd (NE corner)
Pole & anchor replacement	EPCOR D&T	75 Street & McIntyre Rd
Casing, hydrant installation	EPCOR Water	75 Street & McIntyre Rd
New vault/pedestals	SHAW	75 Street & McIntyre Rd
Relocate & Lower Ducts & Vaults, New Cubicle	EPCOR D&T	75 Street & Roper Rd - SW Corner
Lower conduit, install/abandon pedestals	SHAW	75 Street & Roper Rd
Install 50mm conduit (joint with EPCOR D&T 241369)	SHAW	75 Street & South of Roper Rd
Relocate into new power duct	MTS Allstream	75 Street - South & East of Roper

Description	Utility Company	Location
Service abandonments	ATCO Gas	75 Street & Roper Rd
Relocate O/H across 51 ave to WM amusement park	TELUS	51 Ave - 75 Street to east end of SREIT property
Road upgrade, new utilities	City	51 Avenue - 75 Street to 54 Street
New water main, hydrants, valves	EPCOR Water	51 Avenue - 75 Street to 54 Street
Lower/case crossings	EPCOR Water	66 Street & Whitemud
Abandonment	EPCOR Water	66 Street & 39 to 41 Ave
Lower Crossing	ATCO Gas	66 Street & North of 38 Ave
Lower/Case Crossing	EPCOR Water	66 Street & 38 Ave
Relocate ductbank	EPCOR D&T	66 Street & 38 Ave
Lower/Case Crossing	EPCOR Water	66 Street & 36A Ave
Lower Crossing under 66 Street/abandonment	TELUS	66 Street & 36A Ave
Crossing relocation	SHAW	66 Street & 36A Ave
Lower Crossing	ATCO Gas	66 Street & North of 34 Ave
Abandonment	EPCOR Water	66 Street & North of 34 Ave

Description	Utility Company	Location
Abd 3 x 89mm service crossings	TELUS	66 Street & 34 Ave (North & South of)
Lower crossing	ATCO Gas	66 Street & 34 Ave
Lower & Relocate Ducts & Vaults, New Cubicle	EPCOR D&T	66 Street & 34 Ave
Case crossing	EPCOR Water	66 Street & 34 Ave
Lower Crossing under 66 Street	TELUS	66 Street & 34 Ave
Lower crossing	SHAW	66 Street & 34 Ave
Lower/Case Crossing	EPCOR Water	66 Street & 31 Ave
Lower Crossing	BELL	66 Street & 31 Ave
Lower conduit under 66 Street	TELUS	66 Street & 31 Ave
Relocate fibre crossing	SHAW	66 Street & 31 Ave
Lower conduit under 66 Street	TELUS	66 Street & 28 Ave
Lower conduit under 28 Ave	TELUS	66 Street (East of) & 28 Ave
Relocate & Lower Ducts & Vaults	EPCOR D&T	28 Ave - 66 Street to Hewes Way
Relocate watermain to north of 28 Ave	EPCOR Water	28 Ave - 66 Street to Hewes Way

B. Part B – Completed Pipeline Work

City Pipeline Work Completed Prior to Effective Date

Description	Pipeline Company	Location
Pipeline Crossings Design	Keyera	66 Street & South of Whitemud Drive
Relocate Valve Design	Keyera	66 Street & South of Whitemud Drive
Pipeline Crossings Design	Keyera	66 Street & South of 31 Ave

C. Part C – Completed Railway Work

City Railway Work Completed Prior to Effective Date

Description	Railway Company	Location
Install concrete crossing pad	Canadian National Railway	Canadian National Railway crossing on 75 Street

APPENDIX 28C
Incomplete City URP Work

1. Part A – City Utility Work Incomplete As Of Effective Date

Description	Utility Company	Location	Completion
Install new Duct Line	EPCOR D&T	CIV 5 - 101 St, 102 Ave to 102A Ave	March 31, 2016
Ductline (MN1161 to MN96)	EPCOR D&T	CIV 12 - 101 Street - 102 Ave to Land S 102 Ave	March 31, 2017
TELUS Toll Bld Re-feed	EPCOR D&T	CIV 7 - 102 Ave & 100 Street	August 31, 2016
Install new Duct Line	EPCOR D&T	CIV 4 (STAGE 1) - 102A Ave - 100 to 99 Street	January 31, 2017
Install new Duct Line	EPCOR D&T	CIV 6 - 100 St Duct line	April 29, 2016
Install new Duct (joint with CIV6)	BELL	102 Ave & 100 Street (joint with EPCOR D&T CIV6)	April 29, 2016
Install new Duct Line	EPCOR D&T	CIV 3 - 102A Ave & 99 - 97 St	August 31, 2016
Install new Duct	EPCOR D&T	CIV 2 (stage 1) - 97 St & 102 to 102A Ave	March 31, 2016
Install new Duct	EPCOR D&T	CIV 2 (stg 2) - 97 St & 102 to 102A Ave	March 31, 2016
Install new Duct	SHAW	102 Avenue & 97 St (joint with EPCOR D&T CIV2 stg 2)	March 31, 2016
Install New Vault + Line Relocation	BELL	102 Ave & 97 St (joint with EPCOR D&T CIV2 stg 2)	April 29, 2016
Re-feed & Vista vaults	EPCOR D&T	CIV 8 – 102 Av & 97 Street S	March 31, 2016
DB, Abd's, Services	TELUS	102 Ave - 99 to 97 Street	April 29, 2016
DB, Abd's, Services	SHAW	102 Ave - 99 to 97 St (joint with TELUS 2502604)	April 29, 2016

Description	Utility Company	Location	Completion
DB, Abd's, Services	AllStream	102 Ave - 99 to 97 St (joint with TELUS 2502604)	April 29, 2016
Lower crossing, relocate pedestals/vaults in median	TELUS	85 Street & 95 Ave	March 31, 2016
Lower crossing, relocate pedestals/vaults (joint with TELUS 2522685)	SHAW	85 Street & 95 Ave	March 31, 2016
Lower U/G crossing	TELUS	85 Street & 93 Ave (east)	March 31, 2016
Lower/rebuild applicable vaults; abandon west DB	TELUS	83 Street - 76 Avenue to Argyll Rd	April 29, 2016
Lower/rebuild applicable vaults (joint with TELUS)	SHAW	83 Street - 76 Avenue to Argyll Rd	April 29, 2016
O/H to U/G (joint with EPCOR D&T 245238)	TELUS	Wagner Rd & Davies Rd	March 31, 2016
O/H to U/G (joint with EPCOR D&T 245238)	TELUS	Wagner Rd & Davies Rd	March 31, 2016
Conduit install and crossing	TELUS	Wagner Rd & Davies Rd	April 16, 2016
O/H to U/G & services	Telus	51 Avenue - 75 Street to 54 Street	July 31, 2016
O/H to U/G & services	EPCOR D&T	51 Avenue - 75 Street to 54 Street	July 31, 2016

2. Part B – City Pipeline Work Incomplete as of Effective Date

None

3. Part C – City Railway Work Incomplete as of Effective

None

APPENDIX 28D
Deferred URP Work

A. Part A – Deferred Utility Work

Description	Utility Company	Location
YMCA Re-feed	EPCOR D&T	CIV 13 - 102 Ave & 102 Street
Replace MN103	EPCOR D&T	CIV 11 - 102 Ave & 102 Street
Ductbank + shaft (MH3 to MN99)	EPCOR D&T	CIV 9 - 102 Av: 101 to 101A St
Replace MN103/MN98	EPCOR D&T	CIV 10 - 102 Ave, 102 Street to 101 Street
Control Cabinet Install	EPCOR D&T	NV95N - 100A Street & South of 102 Ave
Control Cabinet Install	EPCOR D&T	NV748 - 100A Street & North of 101A Ave
Control Cabinet Install	EPCOR D&T	NV66A - 101 Street & North of Jasper Ave
12 DB, Abd's, Services	TELUS	102 Ave - W of 103 to 101 Street
DB, Abd's, Services	SHAW	102 Ave - W of 103 to 101 Street
DB, Abd's, Services	BELL	102 Ave - W of 103 to 101 Street
12 DB, Abd's, Services	TELUS	102 Ave - W of 101 to 100A Street
DB, Abd's, Services	SHAW	102 Ave - W of 101 to 100A Street
DB, Abd's, Services	BELL	102 Ave - W of 101 to 100A Street
12 DB, Abd's, Services	TELUS	102 Ave - W of 100A to 100 Street
DB, Abd's, Services	SHAW	102 Ave - W of 100A to 100 Street
DB, Abd's, Services	BELL	102 Ave - W of 100A to 100 Street
main install; crossings; services; hydrants	EPCOR Water	102 Av - 103 to 100 Street
Relocate 102Ave Duct Crossing: V4 to V16	TELUS	102 Ave & 100 Street

Description	Utility Company	Location
Relocate 102Ave Duct Crossing: V4 to V16	SHAW	102 Ave & 100 Street (joint with TELUS)
Relocate 102Ave Duct Crossing: V4 to V16	ROGERS	102 Ave & 100 Street (joint with TELUS)
Svc new TPSS	EPCOR D&T	102 Ave & Churchill Square
main install; crossings; services; hydrants	EPCOR Water	102 Av - 100 to E of 99 Street
DB, Abd's, Services	TELUS	102 Ave - 100 to 99 Street
DB, Abd's, Services	SHAW	102 Ave - 100 to 99 Street
main install; crossings; services; hydrants	EPCOR Water	102 Ave - E of 97 to 96 Street
main install; abds; services; hydrants	EPCOR Water	102 Ave - 96 Street to 95 Street
Relocate 406 IP	ATCO Gas	Muttart Station
Relocate service	ATCO Gas	Muttart Station
Service duct and transformer relocation	EPCOR D&T	Muttart Station
762 STL Relocation	EPCOR Water	Connors Rd (middle of hill)
Install electrostop fittings for crossing	ATCO Gas	Connors Rd & 95 Street
Vault Relocation	BELL	85 Street & 95 Ave (North of)
Lower fiber; vault	BELL	Boonie Doon Traffic Circle
O/H to U/G crossing	EPCOR D&T	83 Street & lane S of 82 Ave
O/H to U/G crossing (joint with EPCOR D&T WIP)	TELUS	83 Street & lane S of 82 Ave
O/H to U/G crossing (joint with EPCOR D&T WIP)	SHAW	83 Street & lane S of 82 Ave
O/H to U/G crossing	TELUS	83 Street & lane S of 80 Ave

Description	Utility Company	Location
O/H to U/G crossing (joint with TELUS 2513723)	SHAW	83 Street & lane S of 80 Ave
O/H to U/G crossing	TELUS	83 Street & lane S of 79 Ave
O/H to U/G crossing	EPCOR D&T	83 Street & lane S of 77 Ave
O/H to U/G crossing (joint with EPCOR D&T WIP)	TELUS	83 Street & lane S of 77 Ave
O/H removal	EPCOR D&T	83 Street & lane S of 73 Ave
Relocate services	ATCO Gas	83 Street - Argyll Rd & Coronet Rd
Case & lower 2 crossings, abandonment (Not anticipated to be required)	EPCOR Water	83 Street - Argyll Rd & Coronet Rd
Relocates/abandonments	EPCOR D&T	75 Street - Wagner to Union Tractor (SE81B)
O/H to U/G services	TELUS	75 Street – Wagner to CN Crossing
Relocate 750 CCP around pier; case/lower crossings	EPCOR Water	75 Street - North of CN Crossing
Install duct, vaults, pedestals	TELUS	75 Street - CN Crossing to 51 Ave
Abandon 60-IP5-PE main	ATCO Gas	75 Street - McIntyre to Roper Rd
Lowering, casing, hydrant abandonments	EPCOR Water	75 Street - McIntyre to Roper Rd
lowering, casing (x2), hydrant relocates	EPCOR Water	75 Street & Roper Rd
Relocate transmission pole	EPCOR D&T	75 Street & Roper Rd (SE corner)
Lower & case crossing, hydrant relocates	EPCOR Water	75 Street & South of Roper (Mr. Lube)
Lower & case crossing, hydrant relocates	EPCOR Water	75 Street & South of Roper (Proforma Strip Mall)
Lower & case crossing, hydrant relocates	EPCOR Water	75 Street & Titan Supply

Description	Utility Company	Location
Lower & case crossing, hydrant relocates	EPCOR Water	75 Street & ALCO
Service abandonment	EPCOR Water	75 Street & North of 51 Ave (SREIT/CEDA Bld)
Re-alignment on East side	ATCO Gas	75 Street - Roper to 51 Ave
Hydrant relocates	EPCOR Water	75 Street & North of 51 Ave
Relocate pipeline crossing / abd (valve service)	EPCOR D&T	66 Street - 41 Ave to Pipeline Crossings
Relocate pipeline crossing / abd (valve service)	TELUS	66 Street - 41 Ave to Pipeline Crossings
Variance/relocation	ATCO Gas	66 Street (East side) - 40 Ave to 38 Ave
Variance/relocation	ATCO Gas	66 Street (East side) - 38 Ave to 36A Ave
Variance/relocation	ATCO Gas	66 Street (East side) - 36A Ave to 34 Ave
Variance/relocation	ATCO Gas	66 Street (West side) - 41 Ave to 38 Ave
Variance/relocation	ATCO Gas	66 Street (West side) - 36A Ave to 34 Ave
Variance/relocation	ATCO Gas	66 Street (West side) - 34 Ave to 31 Ave
Conduit crossing relocate	EPCOR D&T	28 Ave & Hewes Way (west of)

B. Part B – Deferred Railway Work

Description	Railway Company	Location
Construct grade separated crossing	CP Rail	Scotford Subdivision Mile 171.32, Edmonton
Construct grade separated crossing	CN Rail	mileage 2.68 Strathcona Industrial Lead off mileage 4.46 Camrose Subdivision, Edmonton
Construct at-grade crossing	CN Rail	mileage 2.69 Strathcona Industrial Lead off

Description	Railway Company	Location
		mileage 4.46 Camrose Subdivision, Edmonton

C. Part C – Deferred Pipeline Work

Description	Pipeline Company	Location
Pipeline Crossing	Kinder Morgan / Trans-Mountain	66 Street & South of Whitemud
Pipeline Crossings	Plains Midstream	66 Street & South of Whitemud
Provide access to valve	Plains Midstream	66 Street & South of Whitemud
Pipeline Crossing	Plains Midstream	66 Street & South of 31 Avenue
Pipeline Crossings	Atco Pipelines	66 Street & South of Whitemud
Pipeline Crossing	Pembina	66 Street & South of Whitemud
Pipeline Crossings	Pembina	66 Street & South of 31 Avenue
Pipeline Crossings	Keyera	66 Street & South of Whitemud Drive
Relocate Valve	Keyera	66 Street & South of Whitemud Drive
Pipeline Crossings	Keyera	66 Street & South of 31 Ave

APPENDIX 28E

URP Work Background Information

1. *Part A – Utility Agreements*

Utility Company	Date	Agreement
MTS Allstream	21 September 2009	Rights of Way Consent and Access Agreement
Telus Communications Inc.	17 September 2001	Rights of Way Consent and Access Agreement
Bell Canada	11 April 2005	Rights of Way Consent and Access Agreement
Rogers Cable Communications Inc.	1 January 2009	Municipal Access Agreement
Shaw Cablesystems Ltd.	11 September 2012	Rights of Way Consent and Access Agreement
EPCOR Distribution Inc.	1 January 2004	Franchise Agreement
Atco Gas	Not Dated	Natural Gas Distribution System Franchise Agreement
EPCOR Water Services Inc.	1 April 2010	Franchise Agreement

2. *Part B – Pipeline Agreements*

Pipeline Company	Date	Agreement
Atco Pipelines Ltd.	Not Dated	Natural Gas Distribution System Franchise Agreement
Pembina Pipeline Corporation	8 March 2006	Master Crossing Agreement
Keyera Energy Ltd.	7 July 1997	Master Facility Crossing Agreement

3. *Part C – Railway Agreements*

- (a) Agreement dated December 11, 2014 between Canadian Pacific Railway Company and the City regarding construction of the grade separated crossing located at Scotford Subdivision Mile 171.32, Edmonton (the “**CPR Grade Separation Construction Agreement**”);

- (b) Agreement dated December 11, 2014 between Canadian Pacific Railway Company and the City regarding maintenance of the grade separated crossing located at Scotford Subdivision Mile 171.32, Edmonton (the “**CPR Overpass Crossing and Maintenance Agreement**”);
 - (c) Agreement dated April 21, 2015 between Canadian National Railway Company and the City regarding the grade separated crossing located at mileage 2.68 Strathcona Industrial Lead off mileage 4.46 Camrose Subdivision, Edmonton (the “**CNR Grade Separation Agreement**”); and
 - (d) Agreement dated April 21, 2015 between Canadian National Railway Company and the City regarding the at-grade crossing located at mileage 2.69 Strathcona Industrial Lead off mileage 4.46 Camrose Subdivision, Edmonton (the “**CNR At-Grade Agreement**”);
- (collectively, the “**Railway Agreements**”).

APPENDIX 28F

URP Company Contact Particulars

Utility Company Contacts

Company	Contact	Address	Phone Number / Email
EPCOR D&T (Distribution)	Gary Eggen Manager, Distribution Engineering Projects	EPCOR Distribution & Transmission Inc. 8743-58 Avenue Edmonton, AB T6E 5W4	780.412.3621 geggen@epcor.ca
EPCOR D&T (Transmission / Substations)	Wilf Behr Underground Transmission Engineer	EPCOR Distribution & Transmission Inc. 12116-107 Street Edmonton, AB T5G 2S7	780.412.3962 wbehr@epcor.com
Bell Canada	Nicholas Dollery OSP Engineering	Bell Canada 28th Floor, 10104-103 Avenue Edmonton, AB T5J 0H8	780.409.6945 nicholas.dollery@bell.ca
ATCO Gas	Laura Pysyk	ATCO Gas & Pipelines Ltd. 19th Floor, 10035-105 Street Edmonton, AB T5J 2V6	780.420.7933 laura.pysyk@atcogas.com
Rogers Communications	Lloyd Boulter	Rogers Cable Communication Inc. 301 Industrial Avenue Vancouver, BC V6A 4E6	403.298.7948 lloyd.boulter@rci.rogers.com
EPCOR Water (Network Services)	Kate Kirk Infrastructure Specialist	EPCOR Water Services Inc. Rossdale Water Treatment Plant 9469 Rossdale Road Edmonton, AB T5J 3B1	780.412.3072 kkirk@epcor.com
TELUS	Pasquale Rizzo Access Network	TELUS Communications Inc. National Infrastructure	780.508.2358 pasquale.rizzo@telus.com

Company	Contact	Address	Phone Number / Email
	Planner	Planning 17th Floor, 10020-100 Street Edmonton, AB T5J 0N5	
MTS Allstream	Robert Sudo	MTS Allstream Inc. 303, 9th Avenue SE Calgary, AB T2G 0R7	403.705.9889 Robert.Sudo@mtsallstream.com
Shaw Cable	Paul Thauvette	Shaw Cablesystems Company 10450-178 Street Edmonton, AB T5S 1S2	780.490.3436 Paul.Thauvette@sjrb.ca

Pipeline Company Contacts

Company	Contact	Address	Phone Number / Email
Kinder Morgan	Jim Wenner	Kinder Morgan Canada Box 3198 Sherwood Park, AB T8H 2T2	780.449.5960 jim_wenner@kindermorgan.com
Keyera	Jeff Esteves	Keyera Energy 1680-102 Avenue Edmonton, AB T6P 1V7	780.464.9112 Jeff_Esteves@keyera.com
Pembina Pipeline	Dave Ellery Manager, Central Division	Pembina Pipeline Corp 56 Liberty Road Sherwood Park, AB T8H 2J6	780.467.6464 (Ext 630) dellery@pembina.com
ATCO Pipelines	Chris Johnson Group Leader Pipeline Engineering	ATCO Gas & Pipelines Inc. 7210-42 Street Edmonton, AB T6B 3H1	780.420.7408 Chris.johnson@atcopipelines.com
Plains	Kerry Wilson	Plains Midstream Canada Unit 120, 2833 Broadmoor	780.400.2687 kerry.wilson@plainsmidstrea

Company	Contact	Address	Phone Number / Email
Midstream		Blvd Sherwood Park, AB T8H 2H3	m.com

Railway Company Contacts

Company	Contact	Address	Phone Number / Email
Canadian National Railway	David Brown, Assistant Engineering Design and Construction – Western Canada	10229 – 127 Avenue Operation Building B, 2 nd Floor Edmonton, AB T5E 0B9	780.472.4077 david.brown27@cn.ca
Canadian Pacific Railway	Stephen Cross Operations Engineering Director Special Projects –West	Building #1 7550 Ogden Dale Rd. SE Calgary, AB T2C 4X9	403.319.3286403.319.3286st ephen_cross@cpr.ca

APPENDIX 28G

Utility Line Assignment (ULA) Data and Processes

1. APPLICATION

1.1 Background

- A. Any installation of a temporary or permanent, overhead, at-grade, or underground Utility, settlement monitor, vibration monitor, environmental or other testing/instrument within City's road right of way shall be subject to the ULA application and permit system.

Scope of application shall be:

1. Utility
 - i. Sewer
 - Sanitary
 - Storm including soil cells
 - Combined
 - ii. Water
 - iii. Power
 - iv. Telecom
 - v. Street light
 - vi. Traffic Signals
2. Monitor
 - i. Settlement
 - ii. Vibration
3. Testing/Instrumentation Installations

- B. As the owner of the road right of way within the City of Edmonton, the City determines where Utility Infrastructure is placed and has developed the ULA permit system to administrate installation requests. No utility installation work can be undertaken without a valid ULA permit having been issued pursuant to Bylaw 12846, Regulation of Work and Equipment Installation on City Lands.
- C. Each applicant shall submit a separate application for their installation. Where joint installations will install infrastructure to be employed by another Utility, each company shall submit an application.
- D. Non-permanent investigation work, such as daylighting, does not require a ULA permit.
- E. ULA permit applications are to be reviewed by each department and agency with the City and all members of the GeoEdmonton Utility Alliance. A ULA permit is valid for one calendar year. Should work not occur within or extend beyond one year from the permit issue date, the applicant shall reapply for a new ULA permit. No work can be performed under an expired permit.

- F. Infrastructure installations within the City's road right of way require a valid ULA permit, confirming design, construction method and approximate schedule, to apply for an OSCAM permit. The OSCAM authorizes utility installations to temporarily possess space within the City's road right of way.
- G. Placement of Infrastructure within the City's road right of way shall seek to maximize the usability of the space available.

1.2 Process Overview

- A. The City unit that administrates the ULA permit system is the Right-of-Way Management Group. The Group collects applications, distributes them for review and collects responses from each City department, agency, and members of the GeoEdmonton Utility Alliance.
- B. Each affected GeoEdmonton Utility Alliance member will have access to information to their and other member application requests.
- C. Project Co shall designate a ULA representative and alternative making these contacts known to Right-of-Way Management and other interested parties as needed. Any changes to these individuals shall be communicated with Right-of-Way Management. The representative and alternative both must possess demonstrated technical competence to hold these positions.

1.3 Prior Coordination

- A. Prior to submission of an official ULA, coordination with Utility Companies shall have been performed. The official ULA system is not the process through which expected coordination and conflict resolutions are achieved, advance dialogue with Utility owners must precede formal ULA applications. Recommended process is:
 - o Conflict identification
 - o Potential conflict notification and resolution discussion with affected utility owners
 - o Conflict investigation and further resolution discussions
 - o Formal ULA application
- B. Design drawings shall contain sufficient detail to depict pictorially adherence to known separation standards from LRT infrastructure, Utility Infrastructure, and other conflicting items (landscaping, etc). Plan drawings shall contain designed horizontal and vertical separations. Where multiple Utility crossings will occur, plan/profile drawings shall be developed for coordination amongst effected parties.
- C. Prior coordination shall include obtaining the VCI (visual condition index) for proposed installation locations. A Moratorium Variance Application shall be submitted in conjunction with a ULA permit application where applicable; see Section 5-A.2.

1.4 Application

- A. Official applications are to be submitted electronically via the City's Envista on-line utility coordination and ULA permit application tool.
- B. An application has a 2 week review period and full distribution.

- C. A rush application has a 1 week review period and a reduced distribution list. These are restricted to suspended permit reapplications; see section 5-A.1.8 Permit Suspension.
- D. Applications are processed in the order they are received. Administration during periods of high applications could result in a delay to distribution. The review period will begin at the earlier of the distribution date, or one week following the submission date should a high volume of applications delay distribution.
- E. A ULA permit application must contain the following information:
 - 1. Application Information and
 - a. Application Date
 - b. Applicant Company
 - c. Applicant Address
 - d. Applicant Contact Name
 - e. Applicant Contact Phone Number
 - f. Applicant's Consultant (if applicable)
 - g. Utility Owner Contact Phone Number (if different from Applicant)
 - h. Location of Proposed Work
 - i. Infrastructure Affected (road, walk, curb & gutter, lane, blvd, other)
 - j. Installation Description
 - k. Alignment/Offset
 - l. Pipe Size and Joint Use; if applicable
 - m. Type of installation (aerial, direct buried, directional bore, other)
 - n. Backfill method (if applicable)
 - o. Utility installation/backfill by: (contractor / city)
 - p. Surface Restoration by: (contractor / city)
 - q. Estimated Construction Start Date
 - r. Estimated Construction Duration (days)
 - s. Estimated Construction Completion Date
 - t. Moratorium location per (yes / no)
 - u. Part of a City initiated Project (yes / no)
 - v. Program/project (if part of a City initiated project)
 - w. City contact (if part of a City initiated project)
 - x. Comments and /or other information

2. Pdf or CAD drawings in accordance with Section 5-A.3 Drawing Standards For ULA Permit Submission
- F. Where applicable, submit a Moratorium Variance Application in conjunction with a ULA submission.
- G. Incomplete information will result in return and refusal to process the application.

1.5 ULA Responses

- A. Responses to applications are mandatory within the applicable review period.
- B. Acceptable responses are limited to:
 1. Approved with no conditions,
 2. Denied with reasons stated, or
 3. Approved with conditions

Conditions contained within an application response must be clear, based upon application of a standard industry practice, and capable of being satisfied without creating other conflicts.

- C. If a response is not provided within the applicable review period a reminder to respond will be transmitted by Right-of-Way Management to those who have not yet provided a response. There will be one reminder distributed. The late submission period shall run for a maximum of one week from the end of the application review period.
- D. If outstanding responses remain at the end of the late submission period , the City will evaluate from responses received and the anticipated applicability of missing responses to determine whether a permit is granted. A maximum of one week will be allowed to complete this administrative review and issue a permit response.

1.6 Application Denial

- A. Any respondent, including the City, may deny an application, where based upon valid grounds. The registration of a valid denial response shall officially void the application. Right-of-Way Management will notify the applicant that the application has been denied, including reasons given.
- B. The applicant will be required to resolve the issues leading to the denial with the responder or responders who objected to the application, outside of the ULA application process, prior to reapplication. As no permit was ever granted, the standard two week application review period will apply to any reapplication made under these circumstances.
- C. Should reasonable efforts not yield a mutually agreeable solution, the applicant may request the City to mediate an agreement. In this case the applicant shall identify within its new application the presence of an existing objection; stating the following:
 1. description of the objection
 2. name of the dissenting company
 3. contact information for the representative of the company dissenting to the work

1.7 Application Acceptance

- A. Approval of an application will be through issuance of a Utility Line Assignment Permit document by Right-of-Way Management, containing the official permit number and issuance date.
- B. Where there are missing responses but no denials contained in received responses, the City may, at its sole discretion, grant a ULA permit without all responses having been received.
- C. A valid ULA permit number is required prior to application for an OSCAM permit and shall be supplied on the OSCAM application.
- D. All conditions identified by ULA application respondents are contained within the permit document, and shall be adhered to by the applicant in completing their work. Where satisfaction of one condition infringes upon another the permit shall be deemed automatically suspended; see Section 5-A.1.8 Permit Suspension. The applicant shall directly notify the affected parties to establish a mutually satisfactory solution, develop and submit a Rush application demonstrating compliance with all conditions.

1.8 Permit Suspension

- A. Presence of any of the following conditions shall automatically place the ULA permit into suspension:
 - 1. Where an installation varies from approved design by greater than the following horizontal and vertical deviations:
 - i. Horizontal: 0.15m
 - ii. Vertical: 0.25m
 - 2. Material deviation from an item within the application, including but not limited to:
 - i. Installation methodology (example: directional push to open cut)
 - ii. Substitution of materials
 - iii. Addition of previously unidentified installations
- B. Where a permit is suspended the applicant shall stop construction.
- C. Work may only resume once a permit is removed from suspension. To remove a permit from suspension requires successful processing of a Rush application.

1.9 Permit Revocation

- A. The City may revoke a permit due to:
 - 1. Repeated noncompliance with permit conditions
 - 2. Unsafe work
 - 3. Notification by the applicant that the work will no longer be undertaken

2. MORATORIUM EXEMPTION

2.1 Moratorium Exemption Request

- A. A moratorium exists where a roadway or alley has been classified with a VCI (visual condition index) greater than 6, or where special restoration requirements are needed. The City recognizes that in order to reduce the financial and operational impacts on its infrastructure, every effort must be made to minimize any disturbance of the roadways, sidewalks, trails and boulevards. To achieve this goal, installation and/or repair methods such as pre-servicing, in-situ repairs and upgrading, and other methods that do not require any excavation within the rights-of-way must be employed whenever and wherever possible. The City also recognizes that this is not possible in all circumstances and has developed restoration requirements that must be met to decrease the negative impacts on the infrastructure. The applicant acknowledges that their proposed techniques will be reviewed on a case by case basis, and that the restoration requirements outlined in the exemption letter must be met. The applicant further acknowledges that additional restoration may be required on-site by the Right-of-Way Inspectors.
- B. VCI classifications for roadways and alleyways are available from the City.

2.2 Moratorium Variance Application

- A. Application guidelines are as follows:
1. Complete and submit the form “No Cut Exemption Application” complete with contact phone number and email. The form is available through the City website.
 2. Email submissions shall employ the following naming convention in the subject line of the email “Company Name - Cut location - File ###”. Submit via email to NoCutExemption@edmonton.ca
 3. The file number shall be either your internal file number or the applicable ULA file/permit number.
 4. Include an applicable OSCAM permit number if available.
 5. Include design drawings with the application, see Section 5-A.4 Drawing Standards For Moratorium Variances.
- B. It takes approximately two weeks to process the exemption application. Incomplete applications will be rejected. All applications are reviewed and processed in the order they are received.
- C. Excavation cannot begin until restoration requirements relating to the application have been communicated.
- D. Restoration directions shall be adhered to without exception.

3. DRAWING STANDARDS FOR ULA PERMIT SUBMISSION

3.1 General

- A. ULA drawing submissions shall be clear, concise, and of legible design, produced in color at a size relevant to the overall project. Multiple pages may be required for legibility. Applications are received on-line and attachments shall be in pdf format with CAD drawings available upon request.

3.2 Drawing Requirements

A. Title Block shall contain:

1. Utility name and/or logo
2. Project / Job file number
3. Consultant name – if applicable
4. Location of proposed project
5. Designed by: Name & Phone number
6. Plan number
7. Drawing scale: Hor. 1:500 ; Vert. 1:50 true scale, minimum multiple page drawings may be scaled smaller to minimum 1:1000 true scale
8. Issue date (& revision date; if applicable)

3.3 Base Information

A. Shall contain:

1. Legal base plan, with Street and Avenue names, lot and block numbers, north arrow
2. Existing curb and property lines and walk ways
3. Existing Utility information – use international color code except as identified and label to identify size and type of Utility:

ATCO Gas – magenta (international color code yellow)

Power/Street Light/Traffic – Red

Telecom – orange

Water – blue

Drainage - green
4. Proposed conceptual details (if known)
5. Delete any unnecessary information not relevant to the project to ensure a clear uncluttered display

3.4 Installation Proposal

A. Shall contain:

1. Proposed alignment shown with bolder line weight

solid line => directional bore (<---bore--->)

dashed line => trenching
2. Notes to indicate type of installation and location (i.e. Install 1-100mm conduit, 2.3M north of south property line) as well as dimension details to property line
3. Alignment / offsets shown in metric or coordinates (northings and eastings)

4. Notes to indicate 'PUSH' for road and/or driveway crossings; if applicable
 5. Proposed alignment dimensionally tied to nearest property lines
 6. Notes on the plan shall provide explanation of proposed work – larger scaled detail plan may be used to clarify complex areas.
 7. All symbols relevant to your design shall provide a complete written description (i.e. type and size of pedestal/cabinets; vaults & handholes) or detail plan views.
 8. A key plan must be included for projects in difficult to locate areas or those covering a large area. (especially in 'named' subdivisions)
 9. Transportation Utility Corridor (TUC) and/or City boundaries shall be clearly indicated on the plan; when applicable. Aerial cables shall not be shown
 10. Identify and clearly demonstrate clearance to all other Utilities or other potential obstructions is maintained when proposed alignment is in vicinity of other Utilities.
- B. Installation Notes shall contain the requirement to perform locates including:
1. Utility locate contacts: - ie. Alberta One Call at 1 800 242 3447 and/or Shaw Cable at 1 866 DIG SHAW
 2. Any and all Information relevant to the installation
- C. Legend shall contain:
1. All symbols relevant to your design
 2. All line weights and line styles relevant to your installation
- 4. DRAWING STANDARDS FOR MORATORIUM VARIANCES**
- 4.1 General**
- A. Moratorium variance drawing submissions shall be clear, concise, and a legible presentation of the intended design. The drawing shall be produced in color at a size relevant to the overall project.
- B. Acceptable format shall be pdf.
- 4.2 Drawing Requirements**
- A. Title Block
- Shall contain:
- a. Utility name and/or logo
 - b. Project / Job file number
 - c. Location of proposed project
 - d. Drawing scale: Horiz. 1:500 ; Vert. 1:50 true scale, minimum
- B. Base Information

Shall contain:

- a. Legal base plan, with Street & Avenue names, north arrow
- b. Existing curb & property lines and walk ways
- c. Proposed conceptual details (if known)
- d. Delete any unnecessary information not relevant to project to ensure a clear uncluttered display

C. Installation Proposal Information

Shall contain:

- a. Proposed alignment shown with bolder line weight
- b. Installation notes to indicate type of installation, size and location of all pits and cores
- c. Cut and Core sizes / Alignment / offsets shown in metric
- d. Installation notes to indicate 'PUSH' for road and/or driveway crossings as well as pit size required for the 'push'; if applicable
- e. Notes on plan should provide explanation of proposed work – larger scaled detail plan may be used to clarify complex areas.
- f. A key plan must be included for projects in difficult to locate areas or those covering a large area.

4. Legend

Shall contain:

- a. All symbols relevant to the design
- b. All line weights and line styles relevant to the installation
- c. A written description of the symbols and lines employed

5. COMPLETED INSTALLATION RECORDS

5.1 General

- A. An as-built record of the installation shall be supplied to Right-of-Way Management. The as-built data should be electronically submitted into the cadastral GeoEdmonton system no later than two months following completion of the installation.
- B. The record should contain an accurate representation of the actual location of the installation (horizontal and vertical), size and orientation, connections, and appurtenances. Horizontal information should contain centerline alignment along with representative installation widths. Each alteration in horizontal and vertical alignment, orientation, materials should be included in the records.

- C. In accordance with CSA-S250-11 the level of accuracy of as-built record information shall be a minimum of Level 2; +/- 100mm in the x, y, and z coordinates. The quality level of data shall be level A for any section of open cut installation and level B for other installations.
- D. As-built drawings shall be supplied in accordance with existing City cadastral practices.