

**REAL ESTATE & DEVELOPMENT SERVICES
INDUSTRIAL ENGINEERING & SERVICING REQUIREMENTS**

PURCHASER'S RESPONSIBILITIES & REQUIREMENTS

1. Architectural Control Guidelines

- (a) The Purchaser should familiarize itself with the Guidelines registered against the Lands. Prior to being given authorization to apply for a Development Permit ("DP"), the Purchaser must submit all preliminary drawings to The City of Calgary Real Estate and Development Services (RE&DS), who will review submissions to ensure that they conform to the Guidelines. Please contact your Sales Negotiator at 403-268-8979 for further information.

2. Lot Grading, Storm Drainage, Sidewalks, etc

- (a) The Purchaser must contact their Sales Negotiator at RE&DS (403-268-8979 or by fax 403-537-3099) for information on lot grading, storm drainage criteria and service connection installations.
- (b) All lots have a minimum floor slab grade and finished lot property line grades assigned to them. These grades will be available from RE&DS and must be strictly adhered to in accordance with the requirements of The City of Calgary Lot Grading Bylaw 32M2004 and direction from RE&DS. RE&DS does not warrant that the existing grades or the grades as they exist at the closing date are sufficient to allow the Purchaser to meet the minimum grade requirement or the finished lot property line grades. It is the Purchaser's responsibility, as part of its "due diligence" to ensure the development will meet all grading requirements. All lots are designed on an individual basis. Any combination or consolidation of lots must conform to the pre-established lot grading plan. Any negative impacts created by consolidation or subdivision of lots will be at the Purchaser's risk and expense.
- (c) The Purchaser is obligated to strike a straight-line grade between the property line elevations that are provided on the building grade plan, unless it has obtained a building grade approval to match any previously approved and/or finished grades on adjacent properties.
- (d) In situations where the pre-established lot grading plan indicates a site grade that is offset from the property line, it is the obligation of the Purchaser to either build a retaining wall to contain the grade difference from the adjacent property(ies) or provide for back sloping within its property. RE&DS will not unreasonably object to changes in pre-established grades at property lines, if there is agreement between all adjacent lot owners to modify grades from the pre-established lot grading plan, without impairing the original design intention of onsite stormwater storage and related matters; however, this is subject to review and approval by the applicable Government Authority.
- (e) In the event of disputes between adjacent lot purchasers, RE&DS reserves the right to impose a solution at the sole cost of the offending development. The Vendor reserves all rights and remedies in law to sue for recovery of any costs incurred.

- (f) Concrete drainage swales exist in some locations. These swales function as grade control in the development and cannot be removed.
- (g) Any sidewalks or other surface infrastructure that the Purchaser is required to build as part of their Development Permit (DP), in addition to that constructed as per the approved engineering drawings for the subdivision, must be built to The City of Calgary standards at the sole cost of the Purchaser. The Purchaser is also responsible for the full cost of removal and replacement of sidewalks and curbs by RE&DS to construct driveway crossings or to construct utility service connections.

3. Service Connections and Driveways – Fees & Invoicing

- (a) The cost of service connections (storm, sanitary, water) and driveway crossings is an obligation of the Purchaser in the road right of way (or other City lands) and on the Purchaser's private property. **Service connections and driveway crossings within the road right of way (Or other City lands) must be arranged and are to be completed by RE&DS.**
- (b) Payment - At closing, the Purchaser is required to prepay an estimated fee towards the service connections and driveway crossing(s) costs. The fee is \$95,000 for the first lot, and \$95,000 for each additional adjacent lot purchased and consolidated.
- (c) In the event that the purchased lot is to be subdivided, an additional deposit (in the amount of \$95,000 per subdivided lot) is required for the installation of service connections and driveway crossings to the additional lot(s). This additional fee must be paid prior to any work beginning on any portion of the original lot.
 - i. The fee represents an estimate towards the cost of installing the service connections from their location in the road to the lot boundary, the construction of depressed driveway curb and sidewalk crossings and concrete aprons, and any fee associated with permits, where applicable.
 - ii. The Purchaser is solely responsible for the cost of extending the service connections from the property line to any building or any other location on the property and for all the arrangements necessary to accomplish this work. In accordance with normal practice, the Purchaser is also responsible for extending any of their on-site surface asphalt or concrete from the back of the RE&DS installed concrete curb or sidewalk, even though a small portion of this work is within the road right-of-way.
- (d) After construction of the service connections, a final statement will be submitted to the Purchaser. The statement will reflect the total cost to the Purchaser for the installation of the service connections and the initial driveway crossing construction, in accordance with the details contained in Table 1. The Purchaser acknowledges and agrees that the costs outlined in Table 1 are based on 2016 rates and are for reference only. Costs are subject to change. The Purchaser agrees to accept the updated costs in effect at the time of construction. If the cost of the work identified in the statement and in Table 1 is greater than the fee amount, an invoice will be submitted and is forthwith payable upon receipt by the Purchaser. If the cost of the work identified in the statement and in Table 1 is less than the fee amount, a refund will be issued by RE&DS to the Purchaser.

4. Service Connection and Driveway Construction - Procedure for Initiation and Construction

- (a) First step – RE&DS will review draft copies of the Development Site Servicing Plan (“DSSP”) and the Development Permit (“DP”) site plan as the first step towards arranging the construction of service connections and driveways. The early submission of these draft plans to RE&DS for general comment before they are finalized for submission by the applicant to the applicable Government Authority, will facilitate service connection and driveway construction.
- (b) Second Step -After approval of the formal DSSP and DP drawings, by the applicable Government Authority and in order to initiate the second step in the process of service connections and driveway crossing construction, the Purchaser must submit the **APPROVED** copies of **EACH** of the DSSP and the DP site plan to your Sales Negotiator at RE&DS. Upon receipt of two copies each of the stamped approved plans (in a scalable hard copy format) and a PDF digital file for each drawing, RE&DS will arrange for the service connections to be constructed within a 45-day period in the frost free season, or otherwise, as weather conditions permit.
- (c) Driveway locations that are not impacted by service connection trenches will be constructed within a 45 day period after receipt of the approved plans, provided weather conditions permit, or otherwise at the earliest time they can reasonably be scheduled after the beginning of frost free conditions. It is the Purchaser’s obligation to layout driveway locations and advise RE&DS on the site readiness.
- (d) Driveway, curb and gutter locations impacted by service connection trenches will be temporarily rehabilitated with asphalt. Permanent reconstruction of these locations will be delayed for two full construction seasons (at least 1.5 years) to allow for backfill settlement/consolidation.

5. Service Connection and Driveway Design Suggestions / Requirements/Obligations

- (a) Absolutely no utility service connections will be permitted into a major standard roadway, if an alternative option exists into an adjacent minor street frontage. A service connection into a major standard roadway may be rejected by RE&DS even if such a plan has been reviewed and approved through the DSSP process by the Government Authority. RE&DS encourages purchasers to direct their DSSP designers to include three deep utilities in a single common trench (maximum spacing between utilities of 3 m) as additional costs will be incurred by the Purchaser (as outlined in Table 1) for any additional trenches that may be required. If possible, storm and sanitary utility ties should be made directly into existing manholes. Vertical bends should be considered in situations where one utility is “hidden” from an adjacent utility.
- (b) If on-site utilities are installed by the Purchaser before RE&DS has completed its service tie installation from the right of way, the Purchaser will be solely responsible for any additional costs to alter the grade or alignment of the on-site work, if required to complete the ties. These changes typically result from unforeseen grade conflicts and required clearance from pipe joint in the right of way that prevents the installation, as designed. It is strongly suggested that on-site installations DO NOT proceed until the ties in the street are completed.

- (c) For mutual access driveways, RE&DS will normally only construct the portion of the driveway adjacent to the Purchaser's lands. If the Purchaser's lands have a mutual access agreement registered on title at the time of closing, RE&DS will construct the entire driveway and the Purchaser will only be charged for the cost of its half of the driveway. If the Purchaser requests that the entire mutual access driveway be constructed, RE&DS will construct the entire driveway and the Purchaser will be charged for the cost of the entire driveway. The Purchaser shall then be responsible for recovering costs from the adjacent land owner once the adjacent lands are sold by the Vendor.

Normally, RE&DS will not consider any request to construct a mutual access driveway if The City of Calgary is the adjacent owner.

- (d) Locations of driveways are subject to constraints imposed by other utility infrastructure that may not yet be constructed at the time of sale. It is the responsibility of the Purchaser or its consultants to confirm the location of all power poles, pole anchors, street lights, hydrants, communication pedestals, electrical pull boxes, catch basins etc, and design around these obstructions. RE&DS will not authorise the relocation of this type of infrastructure unless unavoidable. If the relocation of existing infrastructure is required, the endorsement of RE&DS for the new location must be received prior to showing this information on the DSSP.
- (e) All costs for the relocation of other utility infrastructure will be borne by the Purchaser in addition to the costs identified in Table 1. RE&DS will not be responsible for obtaining permission to relocate other utility infrastructure and normally will not arrange for its relocation, unless it has explicitly agreed to do so.

6. Pre- and Post Construction Inspection

- (a) The Purchaser must request an inspection prior to commencing any construction activities in order to document the baseline condition of the adjacent infrastructure (i.e. sidewalks, roads, curbs and gutters, poles, communication pedestals, electrical pull boxes, hydrants, catch basins, landscaping, etc). Please contact the construction coordinator at RE&DS - PO Box 2100 Station M, # 195, Calgary, Alberta, T2P 2M5 (403-268-1916) to schedule a pre-construction inspection to document the baseline condition of the existing infrastructure. If no pre-construction inspection is requested in writing, all the adjacent infrastructure will be deemed to be in new condition.
- (b) Once all construction and landscaping is completed, the Purchaser must contact the construction coordinator at RE&DS to request a post construction inspection. Any damages to infrastructure and landscaping will be assessed and costs incurred will be charged back to the Purchaser.

7. Shallow Utilities

- (a) Shallow utilities are not warranted by RE&DS to be available at the Closing Date.
- (b) Applications for data, communication, natural gas and power utility connections are the sole responsibility of the Purchaser, as are all costs associated with this work. All infrastructure to the lots must be installed via underground connections and all road

crossings must be cored beneath the roadways and sidewalks. Any damage to infrastructure within the road right of way resulting from these third party activities will be charged to the Purchaser as damages. It is the Purchaser's responsibility to recover these costs from the third party utility contractors.

- (c) Easements may exist or may be required on some lot areas to accommodate shallow utility infrastructure. The locations of these encumbrances will not be adjusted by RE&DS.

8. Boulevard Construction and Purchaser Obligations

- (a) The Purchaser is responsible for loaming and seeding/sodding all boulevard areas within the road right of way adjacent to its lots including the subgrade preparation work. The Purchaser will be responsible to include this work on its DP plans and complete it in accordance with The City of Calgary Parks' specifications. The Purchaser is also responsible for the regular upkeep of the boulevard and for any rehabilitation of landscaped boulevard areas required as a result of damage during development of the site.
- (b) Underground watering systems must have piping installed no closer than 0.3 m from the curb or sidewalk as it is likely to be damaged should concrete rehabilitation be required. RE&DS will not be responsible for damage to irrigation systems installed too close to the back of the curb or sidewalk, and will charge the Purchaser for the repair cost.
- (c) Prior to commencing boulevard landscaping, the Purchaser shall contact the construction coordinator at RE&DS in order to set up a pre/post construction inspection of the existing utilities (i.e. fire hydrants, sanitary test manholes, curb boxes, shallow utilities, etc). During a pre-construction inspection, the current condition will be reviewed and recorded and the requirements for landscaping around above noted items will be discussed with the contractor or Purchaser's representative. All items will be re-inspected during a post construction inspection. If no pre-construction inspection is requested in writing, the entire existing infrastructure within the boulevard area will be deemed to be in new condition and any repair costs incurred by RE&DS to repair any damage will be charged back to the Purchaser.

9. Electrical Services

- (a) The Purchaser is responsible for the cost of providing electrical service to their lot(s) in accordance with standard Enmax cost sharing agreements.
- (b) The area developer will be constructing the electrical distribution system for the development area. The distribution system may be a combination of overhead and underground lines. Pole anchor easements (typically 3m X 12m) can be anticipated in some areas. In locations where underground lines will exist, various cabinets and pedestals may be located with easements on some lots. A 3.5m right of way may be required inside the property line of some lots to allow for this infrastructure.

10. Erosion and Sedimentation Control

- (a) The Purchaser is obligated to address all matters of erosion and sedimentation control in a manner consistent with The City of Calgary's current policy. As such, the Purchaser is obligated to control the inadvertent tracking of dirt, mud and water runoff from its site onto adjacent roadways, and will be responsible for the cleanup of any such material. The Purchaser shall be responsible for any damage that the Purchaser or its agents may cause as a result of violating any of these policies. These costs will be charged back to the Purchaser by being applied against the service connection and driveway crossing fee.

11. Signage

- (a) Please refer to the Guidelines for information on signage. The location for the signage, if applicable must be indicated on DP plans.

12. Geotechnical, Environmental and Soils Reports

- (a) RE&DS makes no representations regarding the subsurface or environmental conditions of the subject lot. It is the Purchaser's responsibility as part of its due diligence to ensure the lot meets its requirements.
- (b) Prior to accessing the Property to perform any due diligence, the Purchaser must notify their Sales Negotiator of those dates and to ensure that the proper approvals are in place.

Table 1

2016 SERVICE CONNECTION & DRIVEWAY CROSSING INSTALLATION CHARGES

Service Connection Charges		Minor Road (less than 25m RW)	Major Road (more than 25m RW)
Basic service charge including road restoration (assuming storm, sanitary, and water in a single common trench and includes supply and installation of a 5A sanitary test manhole and 50mm water service)		\$50,000	\$62,500
Additional charges	Each additional trench	\$8,500	\$12,000
	Rehab. additional trench	\$5,500	\$9,500
	Water larger than 50mm	\$9,500	\$11,000
	Each additional manhole		
	- Type 5A	\$9,500	\$11,000
	- Type 1-S (1.2m x 1.2m)	\$17,000	\$19,000
	Each hydrant relocation	\$18,000	\$25,000
	Catch basin installation and modification due to driveway location		
	- New installation	\$6,500	\$6,500
	- Modification	\$700	\$700
	Additional charges to tie street sides service pipes to match lot services installed in advance	At cost	At cost
Driveway Crossing Charges		Minor Road (less than 25m RW)	Major Road (more than 25m RW)
Curb crossing	13 m crossing	\$5,000	
	16 m crossing	\$6,000	
	22 m crossing	\$8,500	
1.2m Mono. walk crossing	13 m crossing	\$6,000	
	16 m crossing	\$8,000	
	22 m crossing	\$10,500	
	Sidewalk (dowelled)	\$200 / meter	
Full commercial crossing (includes depressed curb and reinforced sidewalk & apron)	13 m crossing		\$24,000
	16 m crossing		\$30,000
	22 m crossing		\$40,000
Shard access road for mutual driveway crossing	300mm thick of recycled asphalt c/w oiling	\$5,000	\$5,000

1. All charges include a mark up to cover administration, surveying, testing, inspection and maintenance. GST is not included in the above noted charges and will be added to the final invoice.
2. These rates are applied to the 2016 construction season only and assume frost free conditions. Stamped, approved plans that are received after September 1, 2016 may have a 25% winter work premium applied. This premium may be applied at the Engineer's sole discretion against any installation where winter conditions occur at the time of installation. Any construction deferred to 2017 may also be subject to an increase in the installation rates identified in this table.