



GENERAL REQUIREMENTS FOR COMMERCIAL/INDUSTRIAL LOT GRADING AND SERVICING PLAN SUBMISSION

All submitted lot grading and servicing plans shall be stamped and signed by a Professional Engineer.

Engineer to contact the City and/or Developer's consultant to obtain all design criteria prior to any design work being conducted.

Contractor installing services or doing work on a City right-of-way must obtain an "Excavation Permit" from the City's Engineering Department prior to start of construction.

- All surface water drainage runoff from the lot(s) shall not be allowed to flow onto existing adjacent properties.
- The lot legal information and civic address should be indicated on the drawing.
- Two full sized hard copy drawings (minimum A1 size) are required for submission.
- Indicate "final design lot corner elevations" at all corners of the property boundaries and grade changes along the property boundaries.
- Indicate all design elevations and any change of grade within the lot and indicate the percent grade between these points.
- Contact the Engineering Department for lot specific storm water management requirements as it varies for different areas of the City.
- Show all detail storm water management calculations in metric (if required) including design discharge rate, design storm pond capacity, available storm pond capacity and storm events where applicable.
- When asphalt or gravel areas are used for site storage, the ponding area and maximum ponding depth should be indicated around the catch basin locations.
- Use small arrows to show direction of surface water runoff within the lot.
- Use larger arrows to show direction of overland flow when all ponding capacities have been exceeded.
- Show all drainage locations where the runoff from the lot enters the City rights-of-way.
- Show all rip rap (erosion control) details. Note: erosion control must go all the way from the property line to the far edge of the ditch at discharge points in rural road cross sections when applicable.
- Controlled discharge points into the ditch with rip rap are preferred but "Sheet drainage" designed to the City's satisfaction will be allowed for lots draining towards a subdivision storm water pond and ditch. In subdivisions where the Developer has already constructed an erosion control blanket on the ditch back slope as well as a temporary erosion control fence along the property line, the property owner will then be responsible to maintain this "erosion and sediment control system" during the lot development process. Where there is no "erosion control system" in place at time of development, the property owner shall construct an erosion control system to the satisfaction of the City during the lot development process.



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- In most areas the access approach shall take into account the final elevation of the City's roadway. Note: the existing roadway may be staged and, therefore, require another asphalt lift.
- No concrete curb returns are to extend into the City right of way any further than the center line of a ditch.
- Show all existing elevations of adjacent lots along property line and indicate if the adjacent lots have been developed or not.
- All swales within the lot must indicate direction of flow, elevations at grade changes and associated grade, plus indicate what type of erosion control method is to be used.
- Indicate all culvert sizes, type of material and design invert elevations as well as the existing elevation of ditch at invert locations.
- Indicate all vehicular directional and regulatory signage if applicable.
- Show all existing and proposed servicing (water, sanitary, storm) along with the appropriate elevations, sizes and slopes.
- Industrial and commercial lots are to have a "sewer sampling manhole" at the property line.
- Indicate where frost protection is needed over any service.
- Where service connections have to be constructed and tied into City mains, the Engineer must show all tie-in elevations and slope of pipes where applicable.
- The portion of private access within the City right of way must be built to at least an equivalent structure of the adjacent road.
- When an orifice is required a minimum size of 70 mm will be used on small catchment areas. Additionally, a removable mesh cage (one inch square spacing) around the entrance is required due to maintenance and operational issues.
- When lots are consolidated and existing water services are not used the valve stem and valve box need to be removed. If they are still under warranty the original contractor needs to be contacted to abandon the services.

As builts will be required for the above works and are to be stamped by an Engineer. The Engineer must review the as builts and include a statement on the plan indicating that he/she has reviewed the as built drawings and that for all intensive purposes the as builts meet the intent of the original design concept and will not impact any adjacent lands.

FOR FURTHER INFORMATION/CLARIFICATION AND TO OBTAIN AN EXCAVATION PERMIT CALL: CITY OF LEDUC ENGINEERING SERVICES DEPARTMENT 780.980.7107

Revision Date: May 20, 2010