1 General

1.1 RELATED WORK

.1 Coordinate the requirements of this section with all other sections, including but not limited to:

.1 Section 02210 Rough Grading

.2 Section 02523 Concrete

1.2 QUALITY CONTROL

.1 **City of Saskatoon, Parks Branch** to approve pipe culvert construction.

.1 Alternate methods of construction subject to review and written approval.

1.3 INSPECTION

.1 Notify **Consultant** for inspection of:

.1 Sub grade preparation, before installation of pipe.

.2 Installation of pipe before backfilling.

.3 Installation of concrete and culvert end grates.

2 Products

2.1 PIPE

.1 Heavy Duty Polyethylene Pipe 300mm diameter, conform with CSA B182.6-M92(R1998).

2.2 CULVERT END GRATES

.1 Provide bolting system at top of grate to allow for removal during maintenance.

.2 Standard **City of Saskatoon** Culvert End Grates for Work may be obtained from:

.1 Luna Metal Works
1008 20th St W
Saskatoon, Saskatchewan

.2 or approved equivalent.

3 Execution

3.1 LAYOUT

.1 Establish and maintain line and grade controls using appropriate survey personnel and equipment.

.1 Contractor is responsible for layout accuracy.

3.2 SUB GRADE PREPARATION

.1 See Section 02210 - Rough Grading.

.2 Excavate to depths required for installation.

.1 Remove loose material in excavations and compact to 97% Standard Proctor Density.

3.3 PIPE CULVERTS

.1 Start pipe layout at downstream end.

.1 Ensure bottom of pipe is in contact with shaped sub grade bed throughout length.

.2 Lay pipe with outside circumference laps facing upstream and longitudinal laps at side of quarter points.

.2 Join pipes per manufacturer's specifications.

.3 Backfill around and over culverts as indicated.

.1 Place approved backfill material in 150mm layers to full width, alternately on each side of culvert to maintain layout.

.4 Compact each layer to 97% Standard Proctor Density, ASTM D698-78 (AASHTO T99-74, Method C) taking special care to obtain required density under haunches.

.5 Protect installed culvert with min. 600mm compacted fill cover before heavy equipment is permitted to cross during construction.

.1 Width of fill at grade to be at least twice diameter of pipe. Slopes not to be steeper than 1:2.

3.4 CONCRETE AND CULVERT END GRATES

.1 Cut ends of culvert to match slope of adjacent finished grade.

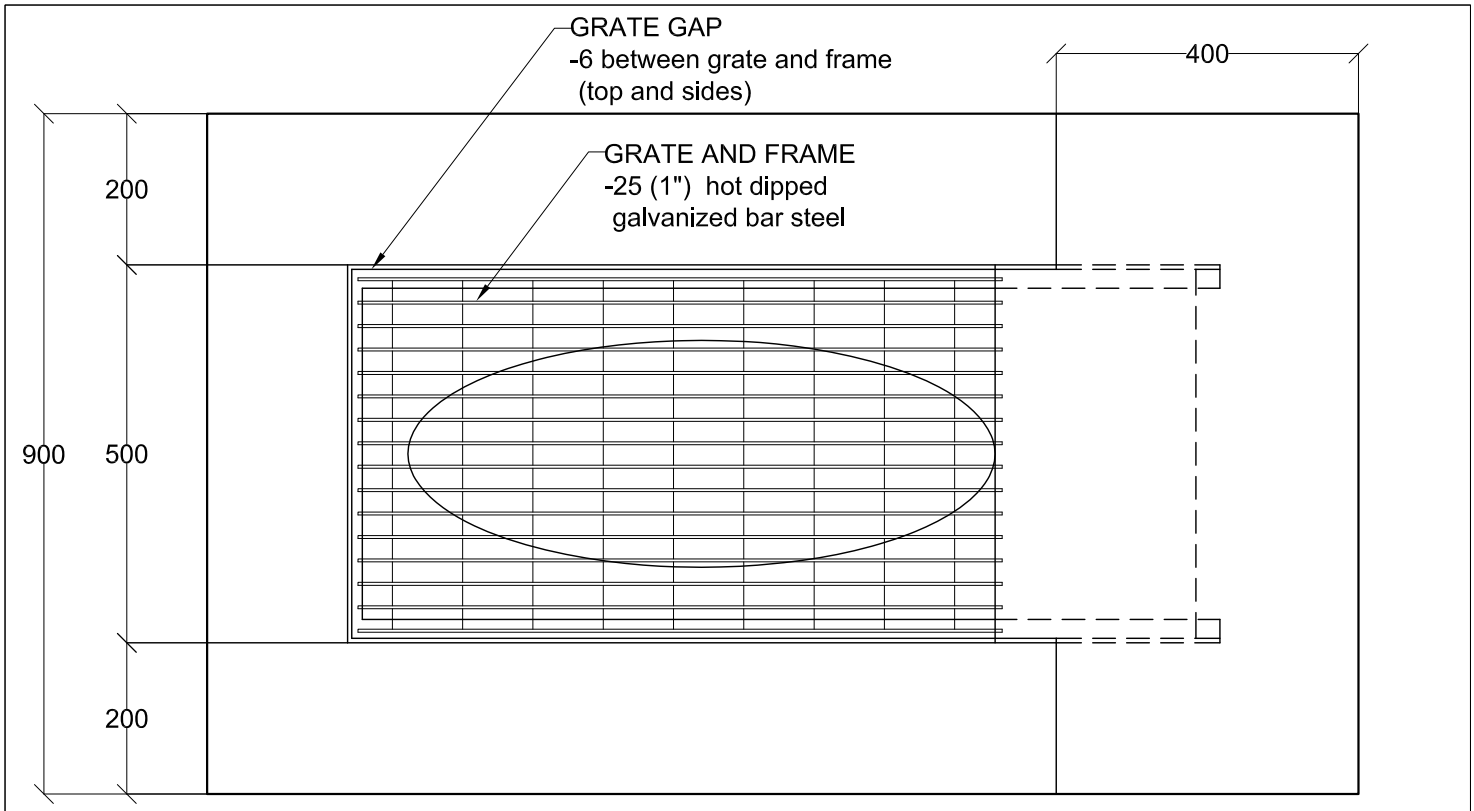
.2 Install concrete splash pads and end grates per details.

.3 Install supplied lock on grate.

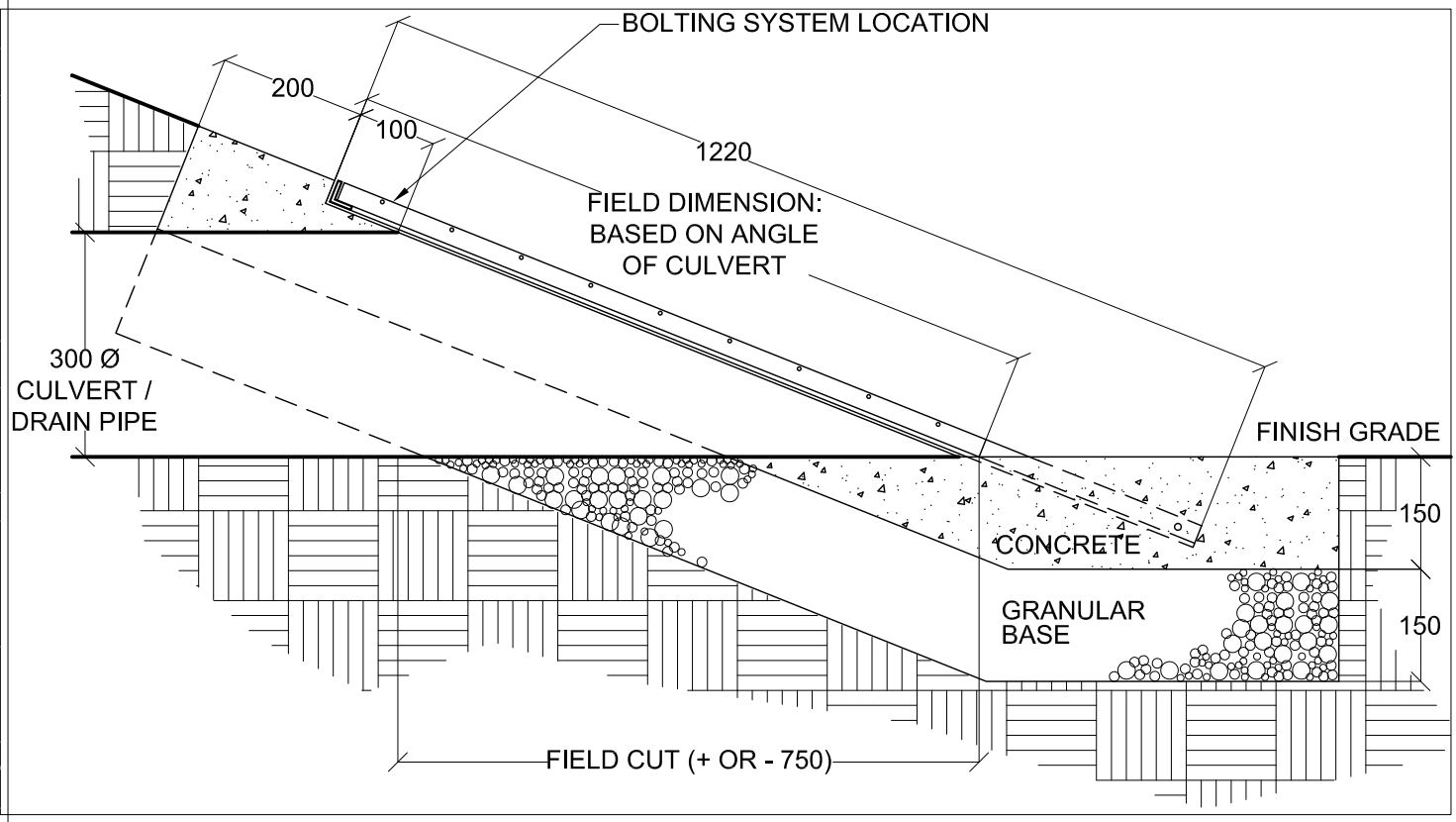
3.5 CLEAN UP

.1 Clean adjacent walks, road and other surfaces at the end of each working day.

END OF SECTION



PLAN



SECTION

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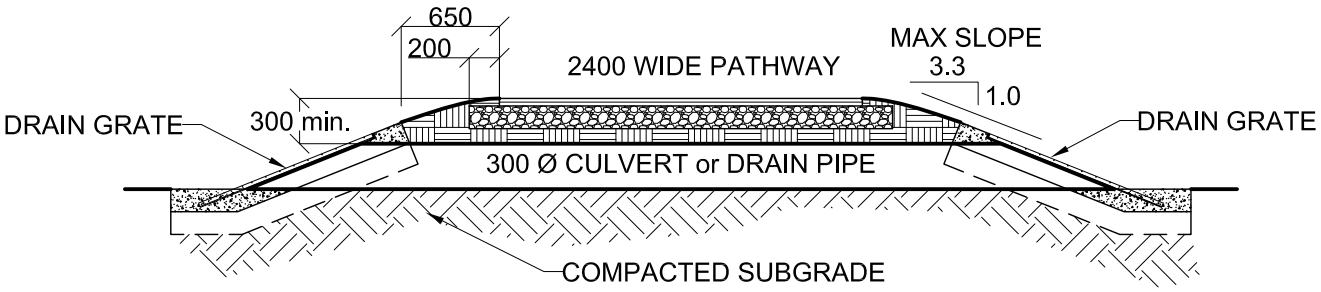
City of Saskatoon
Parks Branch

Drawing Title: Culverts/Drain Inlets

Drawn: HMK | Checked: AO | Date Y/M/D 09/11/23 | Scale: 1:10

Drawing No. 02723-01

2012 Standard Detail



NOTE:
1. All units are in millimeters U.N.O.
2. Refer to detail 02723-01 for end grate construction.
3. Maximum slope of adjacent grade to be 3.3 to 1.o, length of culvert will vary depending on required inverts for drainage purposes.

City of Saskatoon Parks Branch	Drawing Title: Pipe Culvert Grading		Drawing No.: 02723-02
	Drawn: HMK Checked: AO	Date Y/M/D 09/11/23	Scale: 1:50	2012 Standard Detail