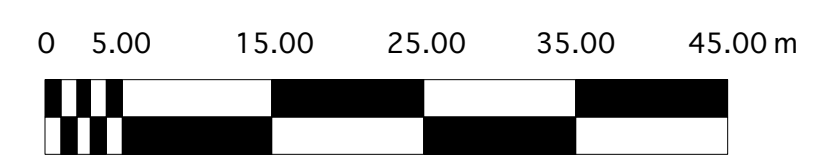
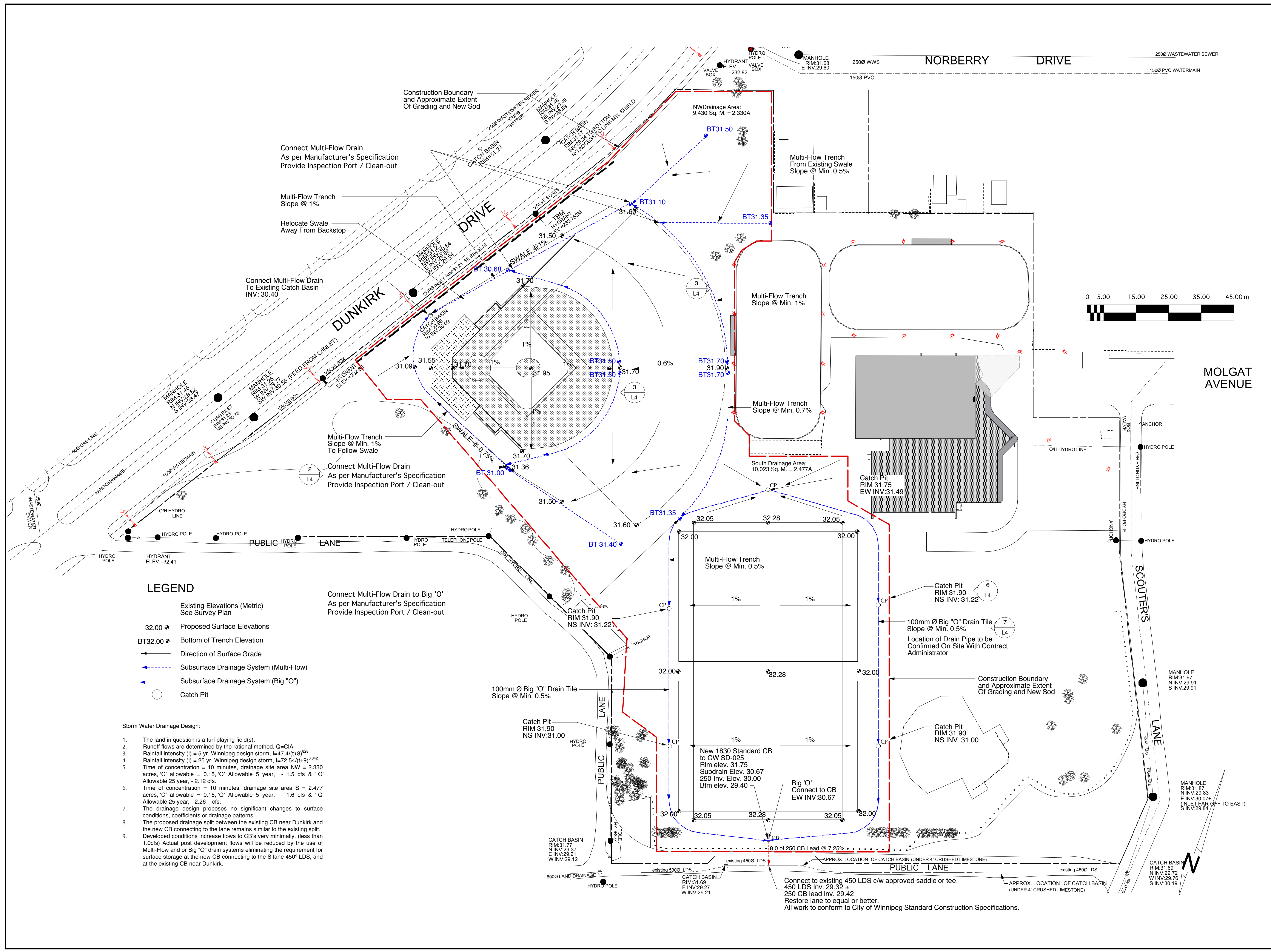


NOTE:
 LOCATION OF UNDERGROUND STRUCTURES AS SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE BUT NO GUARANTEE IS GIVEN THAT ALL EXISTING UTILITIES ARE SHOWN OR THAT THE GIVEN LOCATIONS ARE EXACT. CONFIRMATION OF EXISTENCE AND EXACT LOCATION OF ALL SERVICES MUST BE OBTAINED FROM THE INDIVIDUAL UTILITIES BEFORE PROCEEDING WITH CONSTRUCTION.



LEGEND

- Existing Elevations (Metric)
See Survey Plan
- 32.00 ⇨ Proposed Surface Elevations
- BT32.00 ⇨ Bottom of Trench Elevation
- ⇨ Direction of Surface Grade
- ⇨⇨⇨ Subsurface Drainage System (Multi-Flow)
- ⇨⇨⇨ Subsurface Drainage System (Big "O")
- Catch Pit

Storm Water Drainage Design:

- The land in question is a turf playing field(s).
- Runoff flows are determined by the rational method, Q=CIA
- Rainfall intensity (I) = 5 yr. Winnipeg design storm, I=47.4(I+8)^{0.28}
- Rainfall intensity (I) = 25 yr. Winnipeg design storm, I=72.54(I+9)^{0.842}
- Time of concentration = 10 minutes, drainage site area NW = 2.330 acres. 'C' allowable = 0.15, 'Q' Allowable 5 year, - 1.5 cfs & 'Q' Allowable 25 year, - 2.12 cfs.
- Time of concentration = 10 minutes, drainage site area S = 2.477 acres. 'C' allowable = 0.15, 'Q' Allowable 5 year, - 1.6 cfs & 'Q' Allowable 25 year, - 2.26 cfs.
- The drainage design proposes no significant changes to surface conditions, coefficients or drainage patterns.
- The proposed drainage split between the existing CB near Dunkirk and the new CB connecting to the lane remains similar to the existing split.
- Developed conditions increase flows to CB's very minimally. (less than 1.0cfs) Actual post development flows will be reduced by the use of Multi-Flow and or Big "O" drain systems eliminating the requirement for surface storage at the new CB connecting to the S lane 450' LDS, and at the existing CB near Dunkirk.



DO NOT SCALE DRAWINGS

Revisions	Revisions	Revision Note	DD-MM-YY
5			
4			
3			
2			
1			
0			

NORBERRY-GLENLEE C.C. SITE REDEVELOPMENT WINNIPEG, MANITOBA

approved by: _____
 designed by: DW scale: 1:500 METRIC
 drawn by: LLW date: 28.01.2011

Client: **BCI II : ST VITAL WARD BUILDING COMMUNITIES**

GRADING SCHEMATIC PLAN