

GEODETTIC BENCHMARK-VERTICAL CONTROL POINTS		
GBM	LOCATION	ELEVATION
34-004	Tblt. in 7.6 m Conc. pile, 2.1m N. of line of N. wall of No. 146 Tache St. S. of St.	229.873m

SURVEY BAR - HORIZONTAL CONTROL POINTS - PROJECT COORDINATES NAD 83 DATUM			
CONTROL POINT	LOCATION	NORTHING	EASTING
#1	SURVEY BAR @ NE PL LYNDAL DRIVE AND FERDALE ST	5526051.700	634554.020
#2	SURVEY BAR @ NE PL ST LYNDAL DRIVE TACHE ST	5526110.339	634853.484
#3	SURVEY BAR @ NW PL LYNDAL DRIVE AND GAUVIN ST	5526113.304	635223.804

**SCOPE OF WORK:**

**A. Riverbank Stabilization (Fall 2016 – March 15, 2017)**

- (i) Implement traffic and pedestrian control measures & mobilize.
- (ii) Construction of temporary access ramp(s) and working platform.
- (iii) Drilling of rockfill column shafts.
- (iv) Supply, placement and compaction of rockfill for rockfill columns.
- (v) Supply and placement of rip rap erosion protection.
- (vi) Removal of temporary access ramp(s) and reshaping of riverbank.
- (vii) Construction of limestone terrace below elevation 225.00.
- (viii) Installation of riverbank erosion control blanket.
- (ix) Removal of traffic and pedestrian control measures.

**B. Riverbank Grading and Trail Construction (Spring 2017 – July 2017)**

- (i) Implement traffic and pedestrian control measures.
- (ii) Riverbank grading including demolition of existing wall.
- (iii) Construction of gravel riverbank trail including gabion wall alcoves.
- (iv) Construction of limestone terrace above elevation 225.00.
- (v) Site restoration, topsoil and plantings.

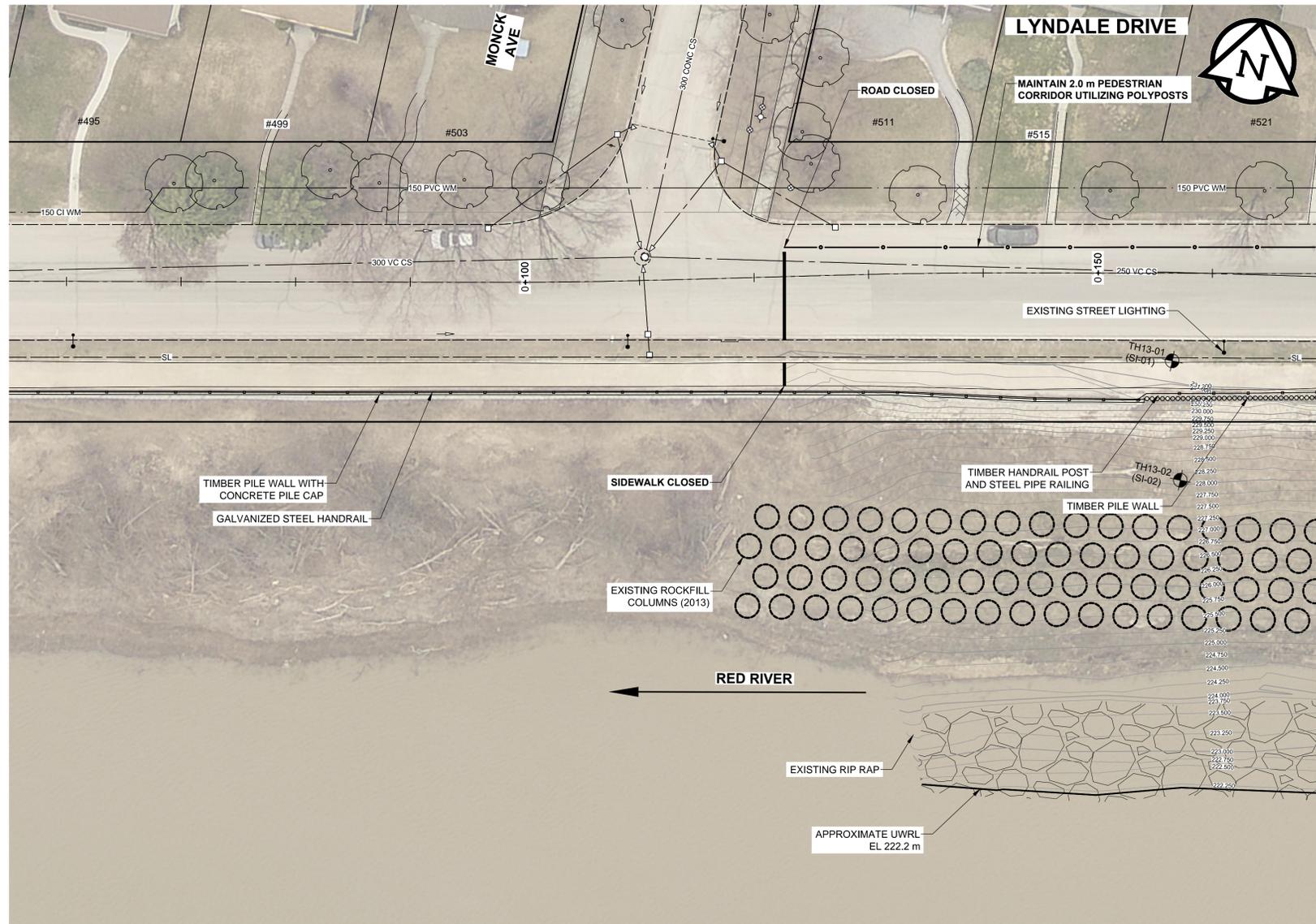
**C. Road and Sidewalk Works (June 19, 2017 – September 1, 2017)**

- (i) Removal of existing asphalt pavement and curbs.
- (ii) Milling of existing asphalt pavement.
- (iii) Installation of catch basins, subdrains and sewer service pipe.
- (iv) Curb and gutter installation (100 mm curb height).
- (v) Installation of new street lighting (cables, bases and poles).
- (vi) Placement of geotextile fabric, subbase material, and base course for sidewalk.
- (vii) Implement pedestrian control measures.
- (viii) Widen existing roadway (excavation, subgrade compaction, geotextile fabric, subbase material and base course).
- (ix) Installation of catchpits and drainage connection pipe.
- (x) Curb and gutter installation (100 mm curb height).
- (xi) Placement of asphalt pavement (Type 1A, 100 mm thick (2 lifts)).
- (xii) Adjustment of existing manholes and appurtenances.
- (xiii) Placement of asphalt overlay (Type 1A, average thickness 50 mm (1 lift)).
- (xiv) Boulevard restoration (including private approaches and sidewalks) and landscaping.
- (xv) Placement of asphalt pavement for sidewalk (Type 1A, 75 mm thick (1 lift)). Note: Riverbank grading and trail construction must be complete prior to paving the asphalt sidewalk.
- (xvi) Removal of traffic and pedestrian control measures.

**TRAFFIC MANAGEMENT:**

Time Frame	Traffic on Lyndale Drive	Pedestrian Access
Fall 2016 - March 15, 2017	Closed between Monck and Gauvin	2 m Pedestrian corridor maintained along existing north gutter
Spring 2017 - June 18, 2017	Closed between Monck and Gauvin (must re-open for Manitoba Marathon on June 18, 2017)	2 m Pedestrian corridor maintained along existing north gutter
June 19 - September 1, 2017	Closed between Monck and Gauvin (with short term closures of Monck and Gauvin)	2 m pedestrian corridor maintained along existing north gutter until new sidewalk base course is constructed Pedestrians utilize new sidewalk (on base course) until end of construction.

Note: If no Work is occurring for a significant period of time (ie. in the spring of 2017), the Contractor shall open Lyndale Drive to traffic and pedestrians as approved by the Contract Administrator.



MATCH LINE - STA 0+170 DWG. No. 2

**METRIC**  
WHOLE NUMBERS INDICATE MILLIMETRES  
DECIMALIZED NUMBERS INDICATE METRES

EXISTING	NEW	EXISTING	NEW	EXISTING	NEW	EXISTING	NEW

**LOCATION APPROVED**  
UNDERGROUND STRUCTURES

DATE: \_\_\_\_\_

**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.

BM 34-004	ELEV 229.873m								
<table border="1"> <thead> <tr> <th>No.</th> <th>REVISIONS</th> <th>DATE</th> <th>BY</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>		No.	REVISIONS	DATE	BY				
No.	REVISIONS	DATE	BY						

<b>MORRISON HERSHFELD</b>	
DESIGNED BY: JGK	CHECKED BY: RPB
DRAWN BY: DID	APPROVED BY: BWB
BY: JGK	DATE: 16/09/06
DATE: 16/09/06	DATE: 16/09/06

PROFESSIONAL'S SEAL

PROVINCE OF MANITOBA

**J.G. KENNEDY**  
Member  
22326

REGISTERED PROFESSIONAL ENGINEER

CONSULTANT FILE NAME  
5160047-Lyndale-PP-01.dwg

**THE CITY OF WINNIPEG**  
PUBLIC WORKS DEPARTMENT  
ENGINEERING DIVISION

**LYNDAL DRIVE RIVERBANK STABILIZATION AND ASSOCIATED WORKS**  
EXISTING CONDITIONS  
STA 0+055 TO STA 0+170

CITY DRAWING NUMBER: RW751-2016-1  
SHEET 1 OF 32  
DRAWING No. 1 REV C

BID OPPORTUNITY No. 721-2016