

Drainage Report for The Waterfront 6th Addition

Wichita, Kansas

Location

The site is located in Wichita, Sedgwick County, Kansas, on the northeast corner of Webb Road and 13th Street North. The site is bounded by Webb Road to the west, 13th Street to the south, and undeveloped meadow area to the east. The Waterfront and Waterfront Second Additions surround the site along with undeveloped land. It lies in the Southwest Quarter, Section 9, Township 27 South, Range 2 East. The site is shown on the Quad map, Appendix A.

Pre-Project Conditions

Development

The site was undeveloped open space prior to the Waterfront Addition. The site was used as a recreational area for an employee's club. The land is currently vacant with retail development adjacent to the site. The site was included in the Drainage Report for the Waterfront Addition revised October 2006.

Post-Project Conditions

Development

The Waterfront is planning to expand commercial development east of the current development and the Foliage Addition will develop as commercial. Current and future development in Basins 045, 051, 052, 055, 061 and a portion of 065 has been modeled with commercial land use. The Waterfront 6th Addition is included in Basins 052 and 065.

Landform and Slope

The north half of the property will drain into the hotel ponds along existing drainage boundaries. The south half of the site will continue to drain under 13th Street and into Beech Lake. Both basins were modeled in the earlier report. The preliminary drainage and utility plan shows the site and surrounding properties, Appendix B. A preliminary storm water sewer system is shown. The layout will be adjusted as building and parking layouts are determined. The pipes will be sized to handle at least the 5-year design storm.

Runoff Characteristics

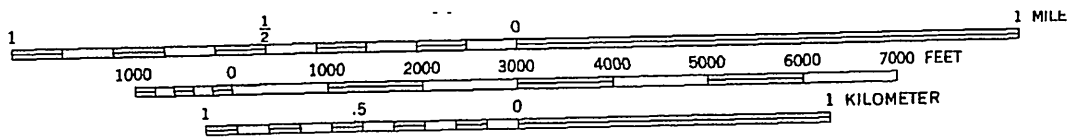
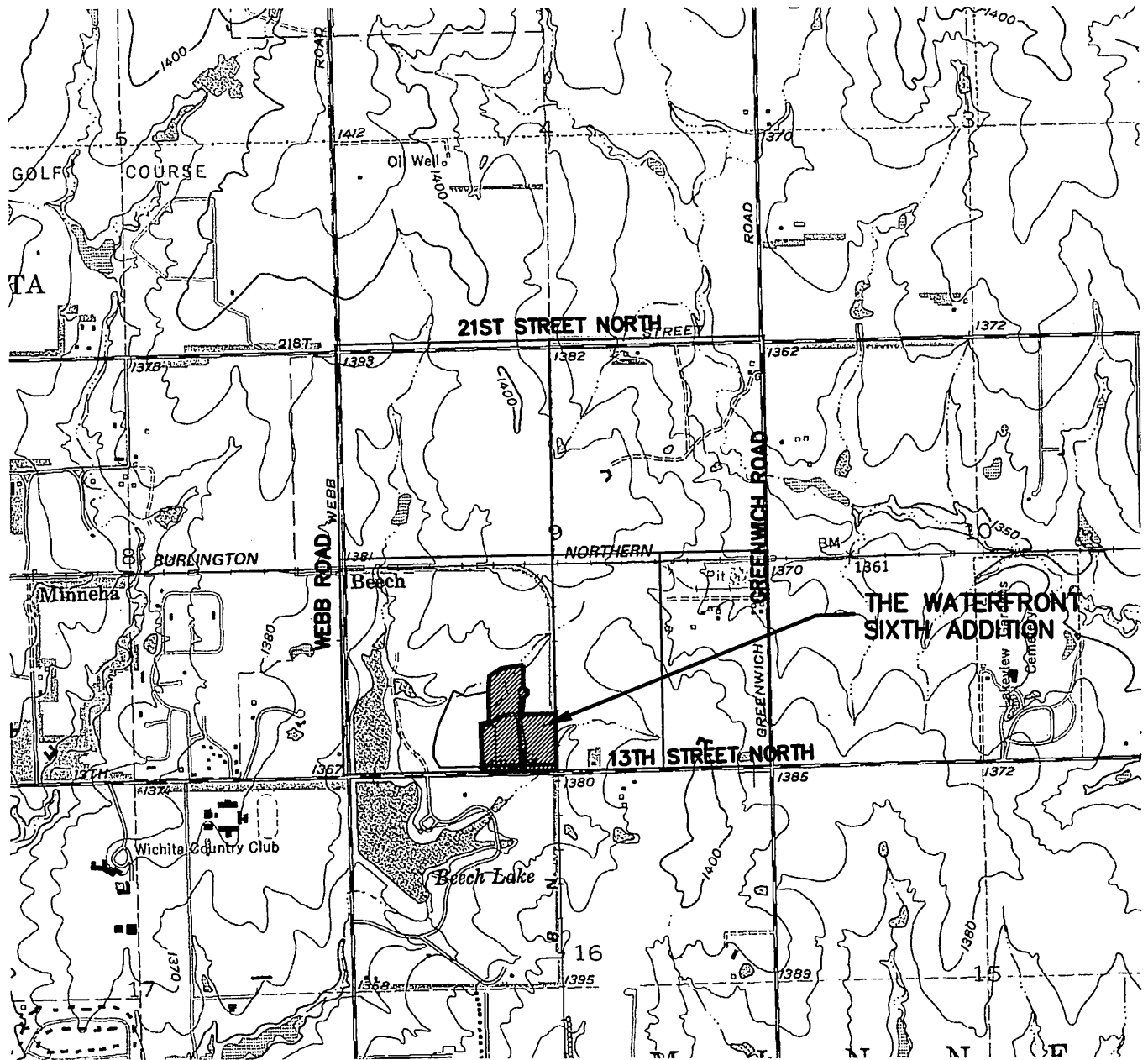
The current pond at the hotel site will be modified to provide an additional detention for the proposed development and future development in the basin. The Structure will be restricted to reduce peak flow rates from the site and provide more detention.

Summary


The Waterfront Addition is a multi-use development. Many of the areas around the lake have developed as banks, restaurants, and office space. An additional portion of the project is being platted as Waterfront 6th Addition. This area has been included in the overall development plan for the site. The site is continuing to develop with planned uses including restaurants and office space. An existing detention pond near the hotel will be expanded and modified to provide detention for future commercial development of the Waterfront Addition. The peak outflow at the outlet of Beech Lake will not increase from pre-project conditions with the development of the Waterfront Addition and the Foliage Addition.

Appendix A

Quadrangle Map



CONTOUR INTERVAL 10 FEET
 NATIONAL GEODETIC VERTICAL DATUM OF 1929

 MKEC ENGINEERING CONSULTANTS 411 N. WEBB ROAD WICHITA, KS. 67206 316 - 684 - 9600	THE WATERFRONT SIXTH ADDITION PROJECT NAME		
	ANDOVER, KANSAS QUADRANGLE SHEET TITLE		
	KLA DESIGN BY.	CMJ DRAWN BY.	GA CHECKED BY.
	DECEMBER 2006 DATE	02014 JOB NO.	1 / 1 SHEET/OF

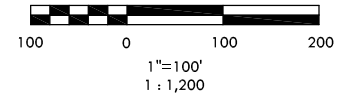
H:\G:\14\02014\6TH_ADD\DWG\DRWG\02014_04.DWG

Appendix B

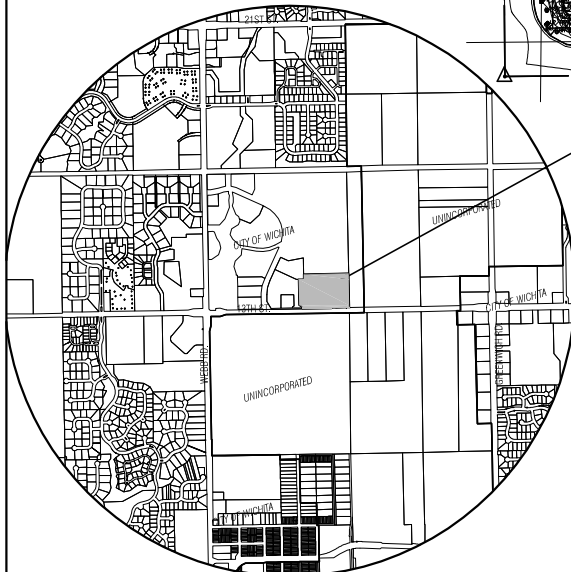
Drainage and Utility Plan

LEGEND

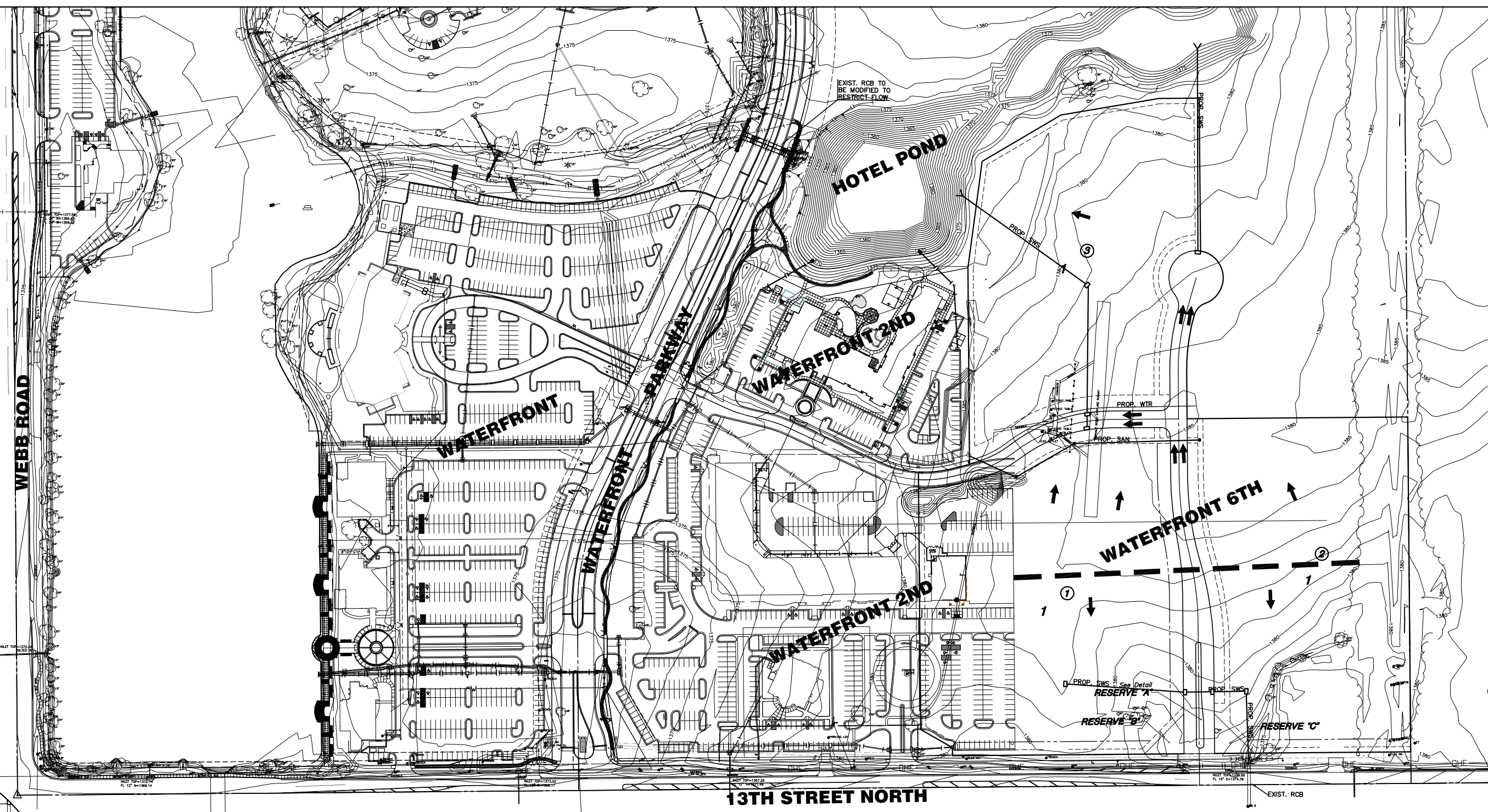
- ⊗ - CONIFEROUS TREE & DIAMETER
- - DECIDUOUS TREE & DIAMETER
- △ - SIGN
- PK - POWER POLE AND GUY ANCHOR
- ELEC BOX - ELECTRIC BOX
- LP - LIGHT POLE
- FH - FIRE HYDRANT
- WV - WATER VALVE
- WM - WATER METER
- SC - SECTION CORNER
- BM - BENCHMARK
- - - - - EASEMENT
- - - - - FENCE
- - - - - STORM SEWER PIPE
- - - - - WATER LINE
- - - - - SANITARY SEWER LINE
- - - - - GAS LINE
- - - - - GAS PIPELINE
- - - - - TELEPHONE LINE
- - - - - UNDERGROUND ELECTRIC LINE
- - - - - OVERHEAD ELECTRIC
- - - - - CONCEPTUAL SIDEWALK
- 32.7 - SPOT ELEVATION



VICINITY MAP



PLAT LOCATION



NOTES

ACTUAL SIZE AND LOCATION OF SWS WILL BE DETERMINED WITH SITE PLANS.

<p>MKEC ENGINEERING CONSULTANTS, INC.</p> <p>411 N. WEBB ROAD WICHITA, KS. 67206 316 - 684 - 9600</p>	<p>WATERFRONT SIXTH ADDITION PROJECT NAME</p> <p>PRELIMINARY DRAINAGE & UTILITY PLAN SHEET TITLE</p>		
	<p>DESIGN BY: KLA</p> <p>DATE: DECEMBER 2006</p>	<p>DRAWN BY: CMJ</p> <p>JOB NO.: 06064</p>	<p>CHECKED BY: GJA</p> <p>SHEET/OF: 1 / 1</p>