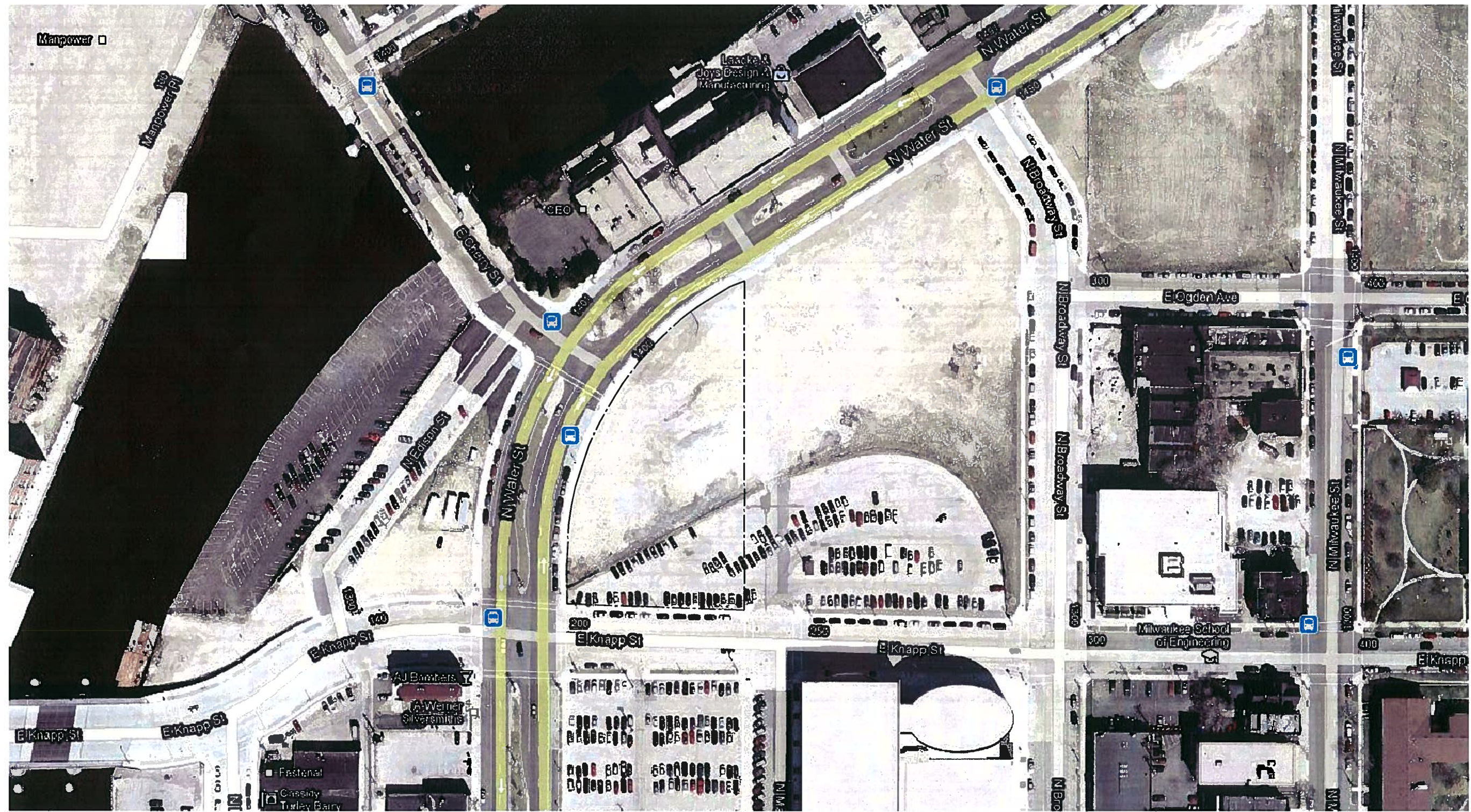


FN 101465 continued  
EXHIBIT A as of  
01.03.12



N  
SITE AERIAL PHOTO  
SCALE: N.T.S.

SITE - AERIAL VIEW

# M&I KNAPP ST PARKING

MILWAUKEE, WISCONSIN







1 INT OF WATER ST AND MARKET ST LOOKING SOUTH  
SCALE: N.T.S.



2 INT OF WATER ST AND MARKET ST LOOKING SOUTHWEST  
SCALE: N.T.S.



3 WATER ST LOOKING NORTHEAST  
SCALE: N.T.S.



4 OGDEN ST LOOKING WEST  
SCALE: N.T.S.

SITE PHOTOGRAPHS

M&I KNAPP ST PARKING





1 INT OF KNAPP ST AND MARKET ST LOOKING SOUTHWEST  
SCALE: N.T.S.



2 INT OF KNAPP ST AND MARKET ST LOOKING WEST  
SCALE: N.T.S.



3 INT OF KNAPP ST AND MARKET ST LOOKING NORTHWEST  
SCALE: N.T.S.

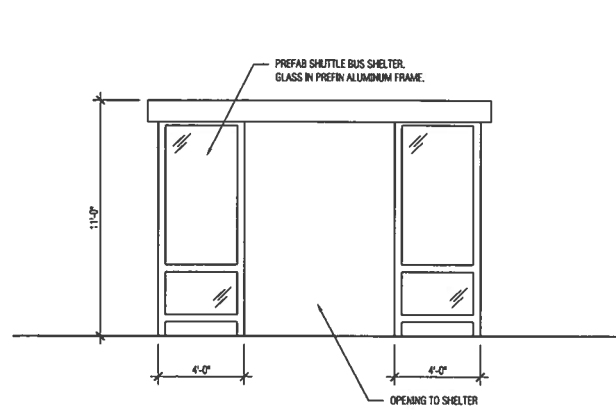


2 INT OF KNAPP ST AND MARKET ST LOOKING NORTH  
SCALE: N.T.S.

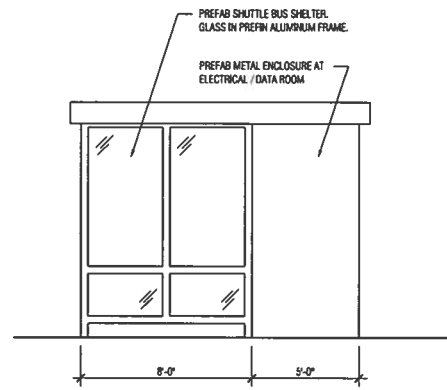
SITE PHOTOGRAPHS

M&I KNAPP ST PARKING

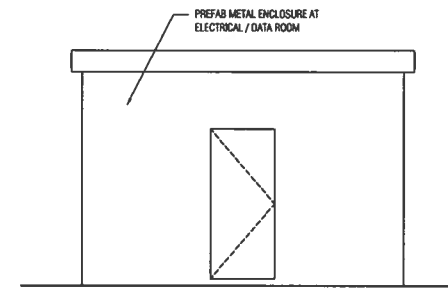




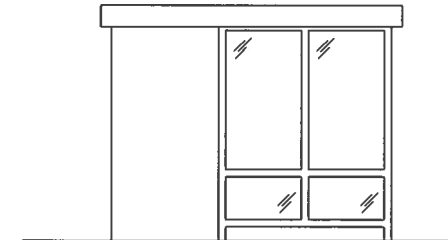
1 SOUTH ELEVATION  
SCALE: 1/4" = 1'-0"



2 EAST ELEVATION  
SCALE: 1/4" = 1'-0"



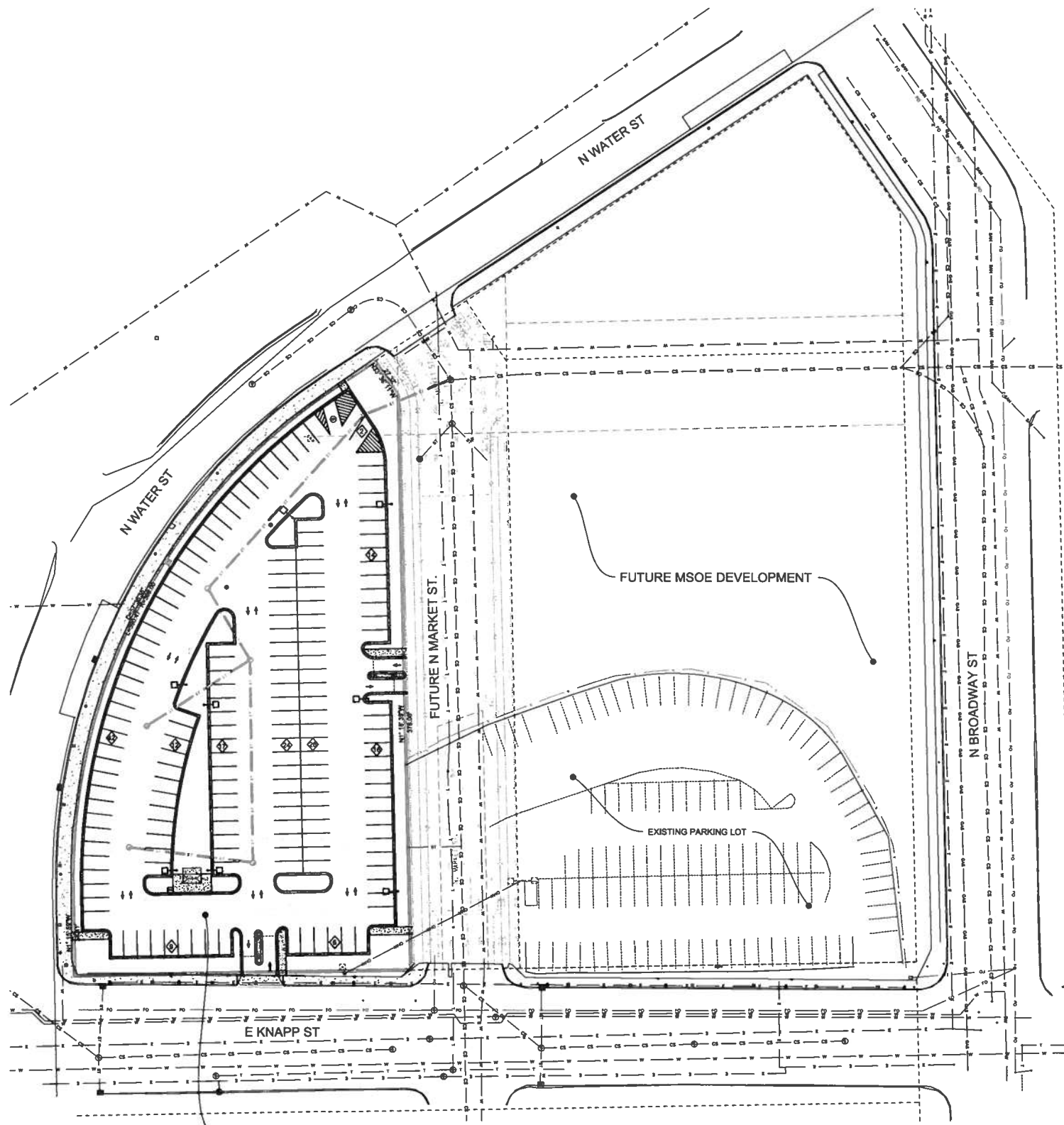
3 NORTH ELEVATION  
SCALE: 1/4" = 1'-0"



4 WEST ELEVATION  
SCALE: 1/4" = 1'-0"



5 SIMILAR TYPE OF PREFAB STRUCTURE  
SCALE: N.T.S.



**PROPOSED PARKING LOT  
173 SPACES**

**SITE ZONING AND LOCATION TABLE**

**LEGAL DESCRIPTION:**  
LOT 3 OF PROPOSED CSM

**PROPERTY LOCATION:** 1303 N BROADWAY STREET MILWAUKEE, WI

**EXISTING ZONING:** RED

**PROPOSED ZONING:** DPD

**ZONING SETBACKS:**

**BUILDING SETBACK:** 6 FEET (KNAPP STREET)  
0 FEET (WATER & MARKET STREETS)

**PARKING SETBACK:** 6 FEET (KNAPP STREET)  
5 FEET (WATER & MARKET STREETS)

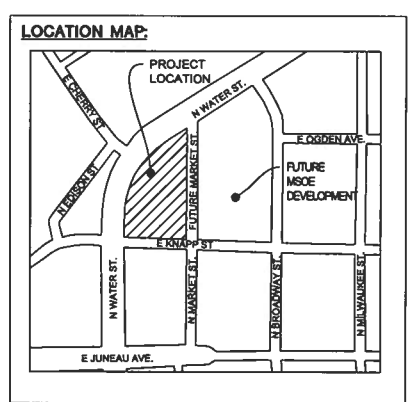
**PROPERTY OWNER:** M&I MARSHALL & ILSLEY BANK

**PROPOSED USAGE:** PARKING LOT

**SITE CALCULATION TABLE**

TOTAL SITE AREA 67,728 SF / 1.56 AC  
 TOTAL DISTURBED AREA 67,728 SF / 1.56 AC  
 EXISTING IMPERVIOUS AREA 67,728 SF / 1.56 AC  
 PROPOSED IMPERVIOUS AREA 55,147 SF / 1.27 AC  
 PROPOSED GREENSPACE 12,589 SF / 0.29 AC (18.58% OF SITE)

PROPOSED REGULAR PARKING SPACES 173  
 PROPOSED TOTAL PARKING 173



**HATCH LEGEND**

PROPOSED CONCRETE SIDEWALK

EXISTING CONCRETE SIDEWALK

PROPOSED REGULAR DUTY ASPHALT PAVEMENT

PROPOSED DEPRESSED CURB

PROPOSED CURB TAPER

PROPOSED REVERSE CURB

**CIVIL SHEET INDEX:**

C1.00 SITE PLAN - OVERALL  
 C1.01 SITE PLAN - DETAILED  
 C1.02 GRADING AND EROSION CONTROL PLAN  
 C1.03 DEMOLITION PLAN  
 C1.04 EXISTING SITE SURVEY  
 C5.01 CONSTRUCTION DETAILS  
 C5.02 CONSTRUCTION DETAILS

- GENERAL NOTES AND SPECIFICATIONS**
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  - NOTIFY THE PUBLIC WORKS INSPECTION DEPT. AT LEAST 48 HOURS BEFORE STARTING CONSTRUCTION.
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  - SEE ARCHITECTURAL PLANS FOR EXACT BUILDING & FOUNDATION DETAILS AND ORIENTATION.
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**UTILITY LEGEND**

SYMBOL	DESCRIPTION
— W — W — W —	EXISTING WATER MAIN
— W — W — W —	PROPOSED WATER SERVICE
— E — E — E —	EXISTING ELECTRICAL LINE
— E — E — E —	PROPOSED ELECTRICAL LINE
— GAS — GAS — GAS —	EXISTING GAS MAIN
— GAS — GAS — GAS —	PROPOSED GAS MAIN
— SAN — SAN — SAN —	EXISTING SANITARY SEWER
— SAN — SAN — SAN —	PROPOSED SANITARY SEWER
— ST — ST — ST —	EXISTING STORM SEWER
— ST — ST — ST —	PROPOSED STORM SEWER
— OW — OW — OW —	OVERHEAD WIRES
⊙	EXISTING POWER POLES
⊙	EXISTING LIGHT POLES
⊙	SANITARY MANHOLE
⊙	FIRE HYDRANT
⊙	EXISTING WATER VALVE
⊙	PROPOSED WATER VALVE
⊙	EXISTING STORM STRUCTURE
⊙	PROPOSED STORM STRUCTURE
⊙	DENOTES EMERGENCY OVERFLOW ROUTE / DRAINAGE PATH
⊙	PROPOSED & EXISTING SPOT ELEVATIONS



IN ACCORDANCE WITH WISCONSIN STATUTE 182.0175, DAMAGE TO TRANSMISSION FACILITIES, EXCAVATOR SHALL BE SOLELY RESPONSIBLE TO PROVIDE ADVANCE NOTICE TO THE DESIGNATED "ONE CALL SYSTEM" NOT LESS THAN THREE WORKING DAYS PRIOR TO COMMENCEMENT OF ANY EXCAVATION REQUIRED TO PERFORM WORK CONTAINED ON THESE DRAWINGS, AND FURTHER, EXCAVATOR SHALL COMPLY WITH ALL OTHER REQUIREMENTS OF THIS STATUTE RELATIVE TO EXCAVATOR'S WORK.

**Zimmerman**  
ARCHITECTURAL STUDIOS, INC.

**HARWOOD ENGINEERING CONSULTANTS, LTD.**  
7420 West State Street Milwaukee Wisconsin 53213  
414.475.5554 414.475.5498 fax harwood@harc.com  
HEC Project Number: 11-0204.00

Project:  
**M&I WATER STREET PARKING**

Location:  
MILWAUKEE, WI

**MUNICIPAL REVIEW SET**  
(NOT FOR CONSTRUCTION)  
DATE: DECEMBER 2, 2011

Scale: 1"=40'

Sheet:  
**SITE PLAN - OVERALL**

Date:	Issue Set:

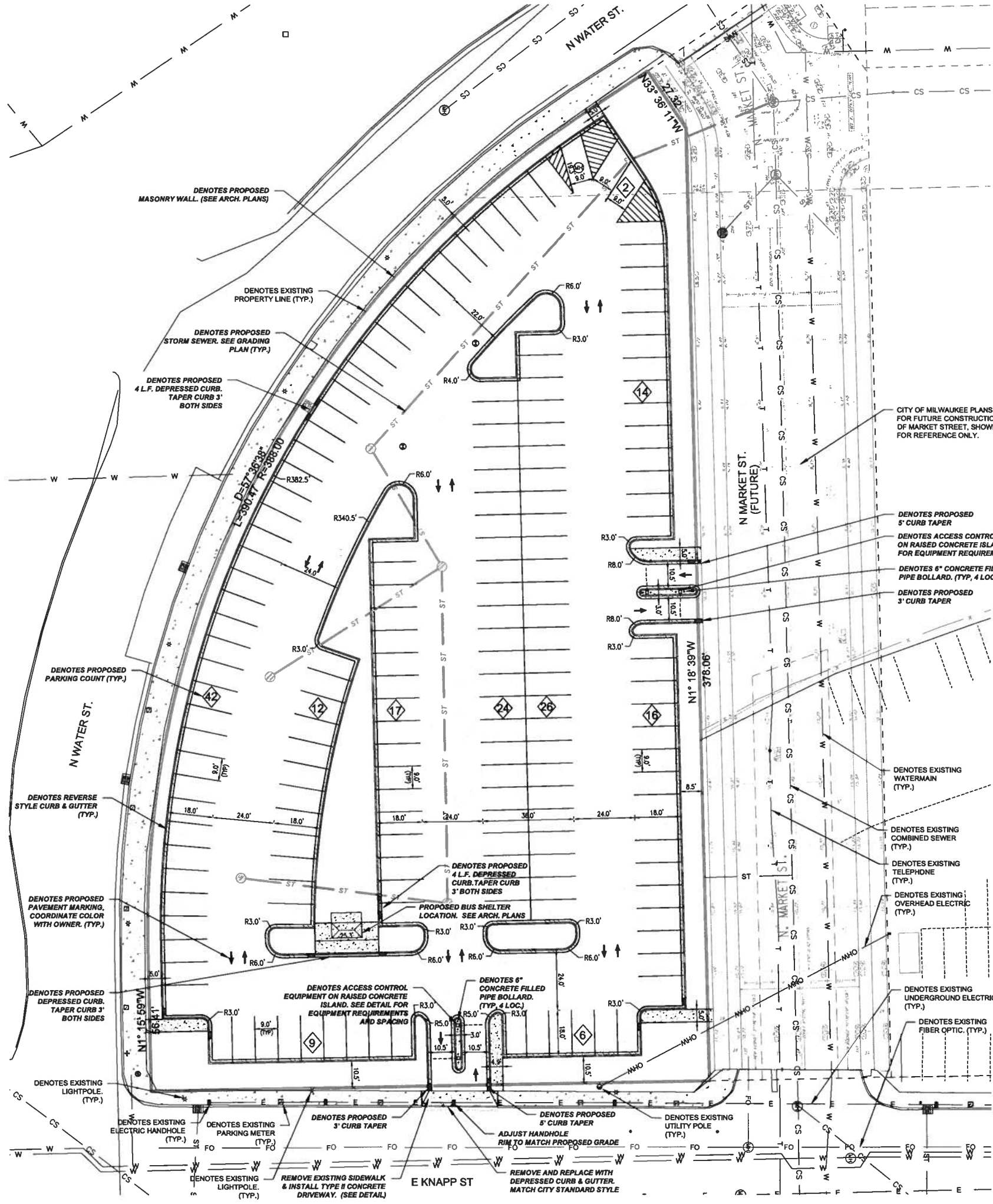
Date:  
01/03/2012

Project No.:  
011-0034.00

Sheet No.:

**C1.00**

5105 N. Port Washington Rd. | Glendale, WI 53217 | zstudio.com  
TELEPHONE 414.475.8500



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HCC Project Number: 11-0034.00

Project:  
**M&I WATER STREET PARKING**

Location:  
**MILWAUKEE, WI**

**MUNICIPAL REVIEW SET**  
(NOT FOR CONSTRUCTION)  
DATE: DECEMBER 2, 2011

Scale: 1"=20'

Sheet:  
**SITE PLAN - DETAILED**

Date:  
01/03/2012

Project No.:  
011-0034.00

Sheet No.:  
**C1.01**

**UTILITY LEGEND**

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— P —	PROPOSED WATER SERVICE
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— GAS —	PROPOSED GAS MAIN
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— H —	FIRE HYDRANT
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— V —	PROPOSED WATER VALVE
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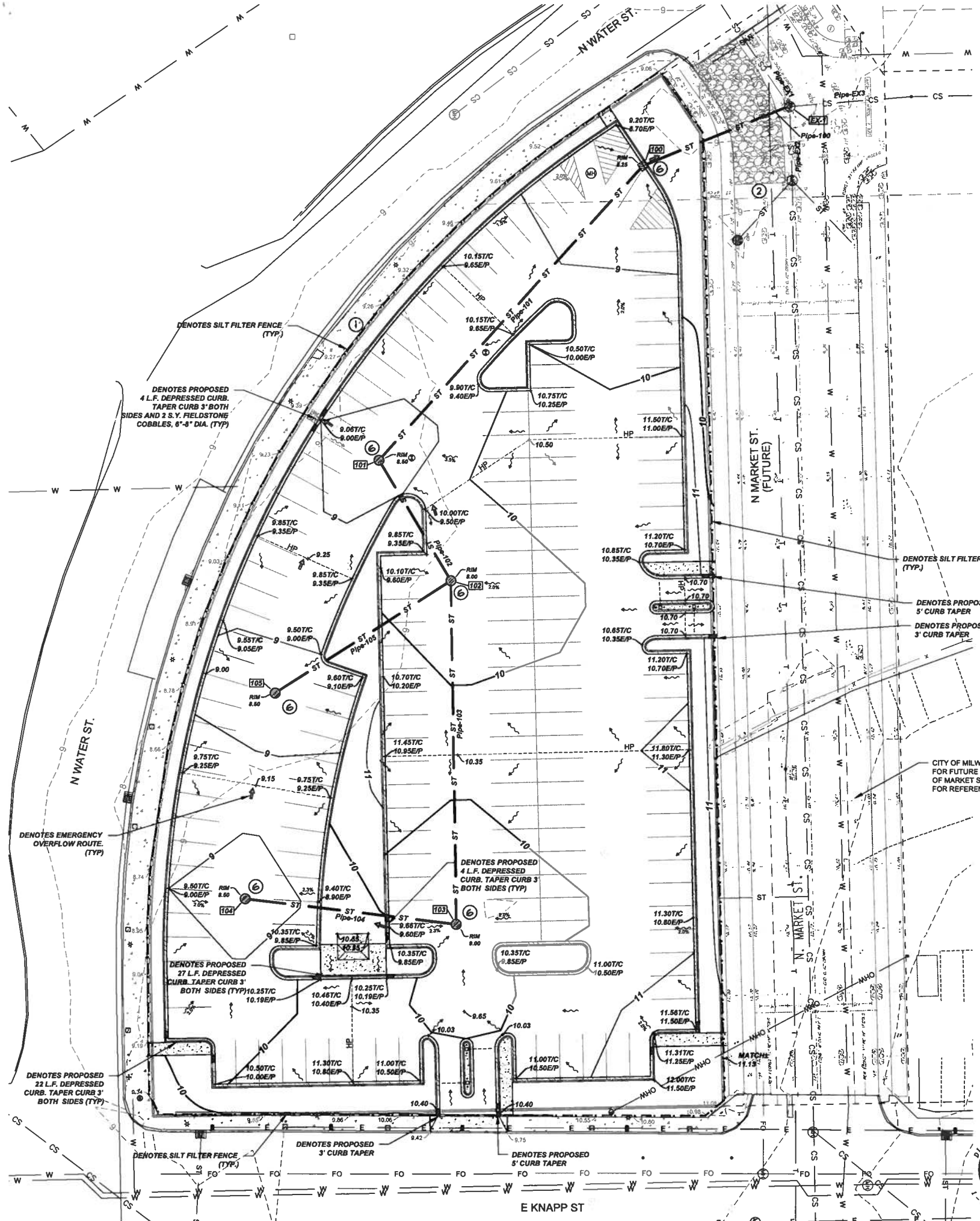
**HATCH LEGEND**

▨	PROPOSED CONCRETE SIDEWALK
▨	PROPOSED REGULAR DUTY ASPHALT PAVEMENT
▨	PROPOSED DEPRESSED CURB
▨	PROPOSED CURB TAPER
▨	PROPOSED REVERSE CURB



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### EROSION CONTROL NOTES AND PHASING

1. ESTIMATED CONSTRUCTION TIMEFRAMES:  
 INSTALL EROSION CONTROL = MAY 2012  
 GRADING AND UTILITY INSTALLATION = MAY 2012  
 FINAL SITE GRADING AND RESTORATION = AUGUST 2012  
 COMPLETE CONSTRUCTION = SEPTEMBER 2012  
  
 ALL CHANGES TO THE ABOVE SCHEDULE SHALL BE REVIEWED AND APPROVED BY THE MUNICIPALITY.
2. CONTRACTOR SHALL INSPECT ALL EROSION CONTROL PRACTICES WEEKLY AND AFTER ANY RAINFALL EVENT OF 0.5 INCHES OR GREATER. THE CONTRACTOR SHALL PERFORM ALL INSPECTIONS AND DOCUMENTATION PER WISCONSIN DEPARTMENT OF COMMERCE, CHAPTER COMM. 60. ALL REQUIRED REPAIRS SHALL BE MADE WITHIN 24 HOURS.
3. PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR WILL HAVE IN PLACE, ALL APPLICABLE PLAN APPROVALS AND PERMITS.
4. INSTALL CONSTRUCTION ENTRANCES, SEDIMENT TRACKING PADS, AND ALL SILT FILTER FENCING, AS INDICATED ON PLANS. SEDIMENT TRACKING PADS TO BE MAINTAINED THROUGHOUT CONSTRUCTION PROJECT. SEDIMENT TRACKED ONTO STREETS SHALL BE REMOVED (BY SWEEPING) AT END OF EACH WORK DAY.
5. BEGIN ROUGH GRADING SITE, AND INSTALLING STORM SEWER UTILITIES
6. DISTRIBUTE TOPSOIL TO A DEPTH OF 6 INCHES. SURPLUS TOPSOIL SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR, COORDINATE WITH OWNER, FINAL GRADE, SEED AND MULCH SITE. PLACE EROSION CONTROL MATTING WHERE INDICATED ON PLANS. (SEEDING AND MULCHING TO CONFORM WITH APPROVED SEED MIXTURES AND APPLICATION RATES, SEE LANDSCAPE PLAN FOR FINAL SEED AND SOD SPECS. EROSION CONTROL MATTING TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.)
7. INSTALL AGGREGATE BASE COURSE IN AREAS TO BE ASPHALT AND/OR CONCRETE PAVED
8. INSTALL ASPHALT AND CONCRETE SECTIONS.
9. UPON SITE STABILIZATION, REMOVE TEMPORARY EROSION CONTROL PRACTICES. CLEAN STRUCTURES OF ANY SEDIMENT AND/OR CONSTRUCTION DEBRIS.
10. CONSTRUCTION AND WASTE MATERIALS SHALL BE PROPERLY DISPOSED OF ON A ROUTINE BASIS. NO CONSTRUCTION OR WASTE MATERIALS SHALL BE TRACKED, BLOWN OR OTHERWISE LOCATED OR STORED ON ADJACENT PROPERTIES.
11. DUST CONTROL SHALL BE MAINTAINED ONSITE WITH USE OF A WATER TRUCK (IF NECESSARY).

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19. ALL CONCRETE FOR CURB AND GUTTER, ROADWAY AND SIDEWALKS MUST CONFORM TO THE STANDARD SPECIFICATIONS FOR READY MIXED CONCRETE. MINIMUM 28 DAY COMPRESSIVE STRENGTH TEST MUST EQUAL 4000 PSI.
20. CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL PROPERTY CORNERS.
21. CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO EXISTING UTILITIES OR SITE IMPROVEMENTS. CONTRACTOR SHALL DOCUMENT ALL EXISTING DAMAGE PRIOR TO START OF CONSTRUCTION AND NOTIFY CONSTRUCTION MANAGER OF ANY FINDINGS.
22. PROJECT SAFETY ON-SITE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
23. CONTRACTOR IS RESPONSIBLE FOR VERIFYING EXISTING SOIL CONDITIONS. CONSTRUCTION MANAGER MAY HAVE SOILS REPORT FOR MORE INFO.
24. CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE OWNER WITH A SET OF MARKED UP PLANS (AS-BUILTS) SHOWING ANY CHANGES DURING CONSTRUCTION.

#	Structure Details
100	TRAPPED CATCH BASIN - CURB RIM = 8.25 Pipe-100 = 2.32 Pipe-101 = 2.32
101	4" CATCH BASIN RIM = 8.50 Pipe-101 = 2.83 Pipe-102 = 3.63
102	4" CATCH BASIN RIM = 8.50 Pipe-102 = 3.85 Pipe-103 = 4.10 Pipe-105 = 4.35
103	4" CATCH BASIN RIM = 8.50 Pipe-103 = 4.77 Pipe-104 = 5.02
104	3" CATCH BASIN RIM = 8.50 Pipe-104 = 5.43
105	3" CATCH BASIN RIM = 8.50 Pipe-105 = 5.18
EX-1	EXISTING MANHOLE RIM = 4.23 Pipe-EX1 = -0.90 Pipe-EX2 = 1.46 Pipe-EX3 = -0.84 Pipe-EX2 = -0.17

Pipe Name	Size	Material	Length	Slope	Notes
Pipe-100	15	RCP	61	1.40%	OUTLET CONTROL PIPE
Pipe-101	30	RCP	154	0.20%	
Pipe-102	18	RCP	54	0.40%	
Pipe-103	15	RCP	133	0.50%	
Pipe-104	12	RCP	82	0.50%	
Pipe-105	12	RCP	81	1.00%	
Pipe-EX1	48	RCP	91	1.25%	EXST. COMBINED SEWER
Pipe-EX2	48	RCP	28	0.64%	EXST. COMBINED SEWER
Pipe-EX3	48	RCP	47	0.64%	EXST. COMBINED SEWER

SYMBOL	DESCRIPTION
— W — W — W — W	EXISTING WATER MAIN
— W — W — W — W	PROPOSED WATER SERVICE
— E — E — E — E	EXISTING ELECTRICAL LINE
— E — E — E — E	PROPOSED ELECTRICAL LINE
— GAS — GAS — GAS — GAS	EXISTING GAS MAIN
— GAS — GAS — GAS — GAS	PROPOSED GAS MAIN
— SAN — SAN — SAN — SAN	EXISTING SANITARY SEWER
— SAN — SAN — SAN — SAN	PROPOSED SANITARY SEWER
— ST — ST — ST — ST	EXISTING STORM SEWER
— ST — ST — ST — ST	PROPOSED STORM SEWER
— W — W — W — W	OVERHEAD WIRES
— W — W — W — W	EXISTING POWER POLES
— W — W — W — W	EXISTING LIGHT POLES
○	SANITARY MANHOLE
○	FIRE HYDRANT
○	EXISTING WATER VALVE
○	PROPOSED WATER VALVE
○	EXISTING STORM STRUCTURE
○	PROPOSED STORM STRUCTURE
○	DENOTES EMERGENCY OVERFLOW ROUTE / DRAINAGE PATH
○	PROPOSED & EXISTING SPOT ELEVATIONS

① SILT FILTER FENCE	④ DITCH CHECK
② CONSTRUCTION ENTRANCE	⑤ STABILIZED TOPSOIL PILE
③ EROSION MAT	⑥ INLET SEDIMENT GUARD

IN ACCORDANCE WITH WISCONSIN STATUTE 182.0775, DAMAGE TO TRANSMISSION FACILITIES. EXCAVATOR SHALL BE SOLELY RESPONSIBLE TO PROVIDE ADVANCE NOTICE TO THE DESIGNATED "ONE CALL SYSTEM" NOT LESS THAN THREE WORKING DAYS PRIOR TO COMMENCEMENT OF ANY EXCAVATION REQUIRED TO PERFORM WORK CONTAINED ON THESE DRAWINGS, AND FURTHER, EXCAVATOR SHALL COMPLY WITH ALL OTHER REQUIREMENTS OF THIS STATUTE RELATIVE TO EXCAVATOR'S WORK.

**Zimmerman**  
 ARCHITECTURAL STUDIOS, INC.

**HARWOOD**  
 ENGINEERING  
 CONSULTANTS, LTD

Project:  
**M&I WATER STREET  
 PARKING**

Location:  
 MILWAUKEE, WI

**MUNICIPAL REVIEW SET**  
 (NOT FOR CONSTRUCTION)  
 DATE: DECEMBER 2, 2011

Scale: 1" = 20'  
 Sheet:  
**GRADING & EROSION  
 CONTROL PLAN**

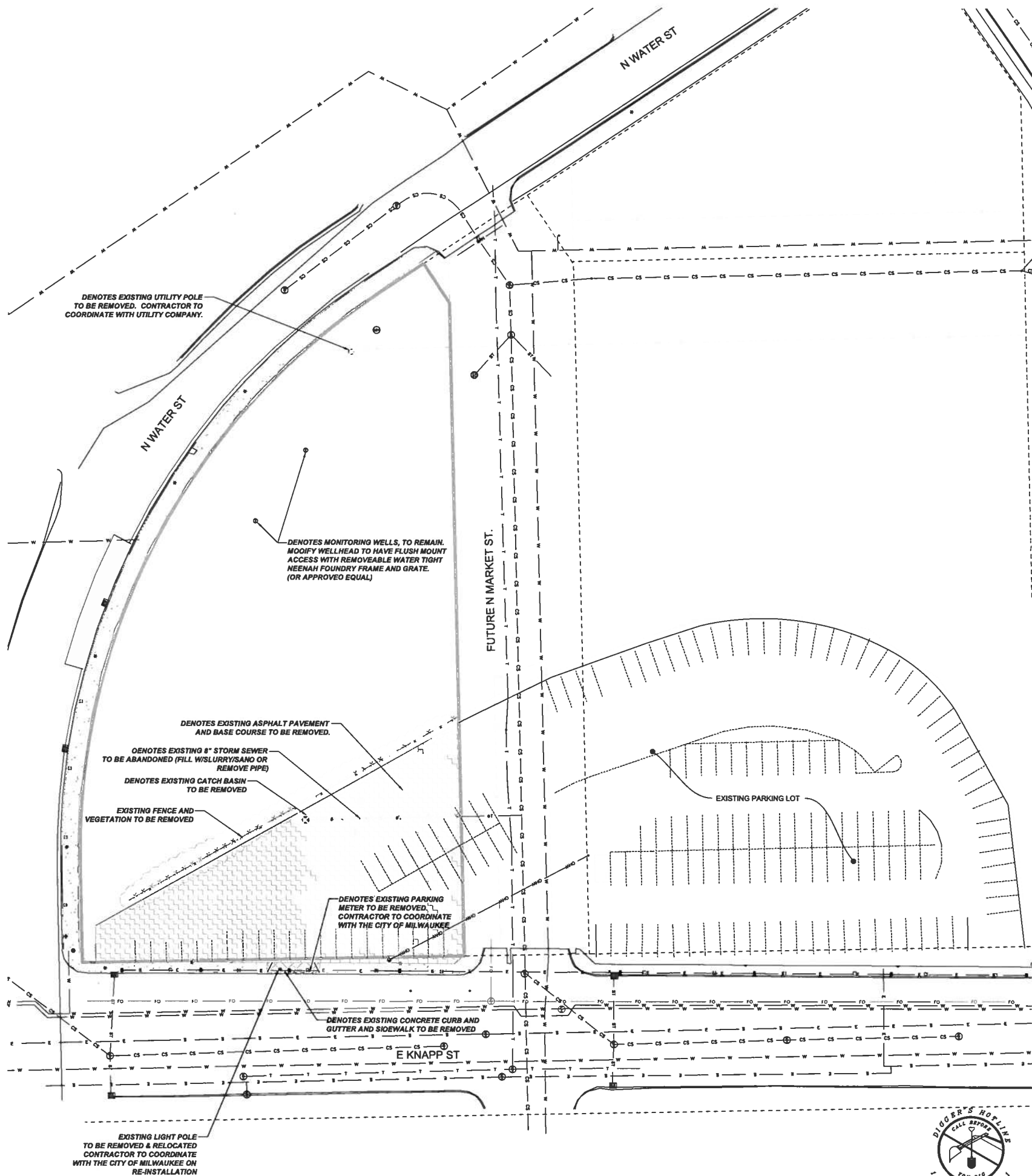
Date:  
 01/03/2012

Project No.:  
 011-0034.00

Sheet No.:

**C1.02**

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 TELEPHONE 414.478.9500



DENOTES EXISTING UTILITY POLE TO BE REMOVED. CONTRACTOR TO COORDINATE WITH UTILITY COMPANY.

DENOTES MONITORING WELLS, TO REMAIN. MODIFY WELLHEAD TO HAVE FLUSH MOUNT ACCESS WITH REMOVEABLE WATER TIGHT NEENAH FOUNDRY FRAME AND GRATE. (OR APPROVED EQUAL)

DENOTES EXISTING ASPHALT PAVEMENT AND BASE COURSE TO BE REMOVED.

DENOTES EXISTING 8" STORM SEWER TO BE ABANDONED (FILL W/SLURRY/SAND OR REMOVE PIPE)

DENOTES EXISTING CATCH BASIN TO BE REMOVED

EXISTING FENCE AND VEGETATION TO BE REMOVED

DENOTES EXISTING PARKING METER TO BE REMOVED. CONTRACTOR TO COORDINATE WITH THE CITY OF MILWAUKEE

DENOTES EXISTING CONCRETE CURB AND GUTTER AND SIDEWALK TO BE REMOVED

EXISTING LIGHT POLE TO BE REMOVED & RELOCATED CONTRACTOR TO COORDINATE WITH THE CITY OF MILWAUKEE ON RE-INSTALLATION

**NOTE**  
1. ITEMS SHOWN FOR DEMOLITION ON THIS PLAN WILL BE PHASED. REFER TO PHASING PLANS FOR SEQUENCE OF ITEMS TO BE DEMOLISHED, RE-LOCATED, OR ABANDONED.



IN ACCORDANCE WITH WISCONSIN STATUTE 182.0175, DAMAGE TO TRANSMISSION FACILITIES, EXCAVATOR SHALL BE SOLELY RESPONSIBLE TO PROVIDE ADVANCE NOTICE TO THE DESIGNATED "ONE CALL SYSTEM" NOT LESS THAN THREE WORKING DAYS PRIOR TO COMMENCEMENT OF ANY EXCAVATION REQUIRED TO PERFORM WORK CONTAINED ON THESE DRAWINGS, AND FURTHER, EXCAVATOR SHALL COMPLY WITH ALL OTHER REQUIREMENTS OF THIS STATUTE RELATIVE TO EXCAVATOR'S WORK.

**GENERAL NOTES AND SPECIFICATIONS**

1. THE EXISTING SITE INFORMATION ON THIS PLAN WAS TAKEN FROM A SITE SURVEY PROVIDED BY THE SIGMA GROUP. THE ENGINEER MAKES NO WARRANTY OR REPRESENTATION WITH REFERENCE TO THE ACCURACY AND COMPLETENESS OF THE EXISTING CONDITIONS INDICATED OR NOT INDICATED ON THE ENGINEERING PLANS PROVIDED. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING SITE CONDITIONS INCLUDING UNDERGROUND UTILITIES, UNDERGROUND UTILITY ELEVATIONS, BUILDING SETBACKS AND EXISTING BUILDING LOCATIONS. THE CONTRACTOR SHALL INFORM THE OWNER AND ENGINEER OF ANY DISCREPANCIES PRIOR TO COMMENCING WITH WORK. QUESTIONS REGARDING THE EXISTING SURVEY SHALL BE DIRECTED TO THE PARTIES LISTED ABOVE.
2. BEFORE PROCEEDING WITH ANY UTILITY CONSTRUCTION, CONTRACTOR SHALL EXCAVATE EACH EXISTING LATERAL TO BE CONNECTED TO (VERIFYING ELEVATION, LOCATION AND SIZE). SHOULD THE EXISTING UTILITY NOT BE AS INDICATED ON THE PLAN, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY FOR EVALUATION.
3. ALL UTILITY CONSTRUCTION SHALL ADHERE TO THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN (2003), AS WELL AS, THE CITY OF MILWAUKEE CONSTRUCTION STANDARDS AND THE DEPT. OF COMMERCE SEC. 62-67.
4. ALL UTILITY PERMITS MUST BE RECEIVED FROM THE CITY OF MILWAUKEE PRIOR TO THE START OF CONSTRUCTION.
5. NOTIFY THE PUBLIC WORKS INSPECTION DEPT. AT LEAST 48 HOURS BEFORE STARTING CONSTRUCTION.
6. BACKFILL REQUIREMENTS AND ROADWAY/SIDEWALK RESTORATION SHALL ADHERE TO LOCAL STANDARDS (GRANULAR BACKFILL UNDER OR WITHIN 5' OF CURBS, SIDEWALK, OR PAVEMENT. SPOIL MAY BE USED ELSEWHERE. SLURRY BACKFILL WILL BE REQUIRED IN PUBLIC ROADWAYS.)
7. PROPOSED STORM SEWER SHALL BE RCP, ASTM C-76, CLASS III WITH RUBBER GASKET JOINTS CONFORMING TO ASTM C-433 (UNLESS OTHERWISE NOTED).
8. UTILITY TRENCHES SHALL BE MECHANICALLY COMPACTED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN.
9. SILT FENCE AND ALL OTHER EROSION CONTROL METHODS MUST BE INSTALLED PRIOR TO COMMENCEMENT OF CONSTRUCTION. ALSO, CONTRACTOR IS RESPONSIBLE FOR REMOVING EROSION CONTROL METHODS ONCE THE SITE IS STABILIZED.
10. THE PROPOSED SITE LOCATION AND SURROUNDING STREETS MUST BE KEPT DEBRIS FREE. SWEEP STREETS AS NEEDED TO MAINTAIN CLEAN STREETS.
11. ALL EXCAVATED OR STRIPPED MATERIALS NOT BEING REPLACED IN UTILITY TRENCHES OR BEING USED FOR FILL SHALL BE REMOVED FROM THE SITE, UNLESS OTHERWISE DIRECTED BY THE OWNER.
12. ALL DISTURBED GRASS AREAS SHALL BE STABILIZED (PER DNR TECHNICAL STANDARDS) WITHIN 7 DAYS OF COMPLETION. DISTURBED GRASS AREAS SHALL BE TOPSOILED (6"), RESEDED AND STABILIZED. AREAS WITH A SLOPE OF 3:1V OR STEEPER SHALL BE COVERED WITH A CLASS 1 - TYPE A EROSION FABRIC. (SEE SPECIFICATIONS)
13. SEE ARCHITECTURAL PLANS FOR EXACT BUILDING & FOUNDATION DETAILS AND ORIENTATION.
14. ALL ON-SITE CONCRETE CURB AND GUTTER TO BE 18" WIDE VERTICAL FACE, UNLESS OTHERWISE NOTED. REVERSE OR REGULAR STYLE CURB DENOTED ON PLANS.
15. ALL CURB ELEVATIONS ARE EDGE OF PAVEMENT UNLESS OTHERWISE NOTED. SEE CURB DETAIL FOR TOP OF CURB ELEVATIONS.
16. ALL CURB RADII ARE MEASURED TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
17. CONTRACTOR SHALL MATCH PROPOSED CONCRETE CURB AND GUTTER, SIDEWALK AND PAVEMENT TO EXISTING IN ELEVATION AND ALIGNMENT.
18. REMOVAL OF CURB AND GUTTER, SIDEWALK AND PAVEMENT SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS OF THE WISCONSIN D.O.T.
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UTILITY LEGEND	
SYMBOL	DESCRIPTION
— W — W —	EXISTING WATER MAIN
— W — W —	PROPOSED WATER SERVICE
— E — E —	EXISTING ELECTRICAL LINE
— E — E —	PROPOSED ELECTRICAL LINE
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— GAS — GAS —	PROPOSED GAS MAIN
— SAN — SAN —	EXISTING SANITARY SEWER
— SAN — SAN —	PROPOSED SANITARY SEWER
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— ST — ST —	PROPOSED STORM SEWER
— OW — OW —	OVERHEAD WIRES
⊙	EXISTING POWER POLES
⊙	EXISTING LIGHT POLES
⊙	SANITARY MANHOLE
⊙	FIRE HYDRANT
⊙	EXISTING WATER VALVE
⊙	PROPOSED WATER VALVE
⊙	EXISTING STORM STRUCTURE
⊙	PROPOSED STORM STRUCTURE
⊙	DENOTES EMERGENCY OVERFLOW ROUTE / DRAINAGE PATH
100.00	PROPOSED & EXISTING SPOT ELEVATIONS

DEMOLITION LEGEND	
⊘	DENOTES PAVEMENT REMOVAL AREA
⊘	DENOTES CONCRETE SIDEWALK REMOVAL AREA
⊘	DENOTES ITEM TO BE ABANDONED OR REMOVED

**Zimmerman**  
ARCHITECTURAL STUDIOS, INC.

**HARWOOD**  
ENGINEERING  
CONSULTANTS, LTD.  
7430 West State Street Milwaukee Wisconsin 53213  
414.475.5554 414.475.5698 Fax: harwood@hrec.com  
REC Project Number: 11-003403

Project:  
**M&I WATER STREET  
PARKING**

Location:  
**MILWAUKEE, WI**

**MUNICIPAL REVIEW SET**  
(NOT FOR CONSTRUCTION)  
DATE: DECEMBER 2, 2011

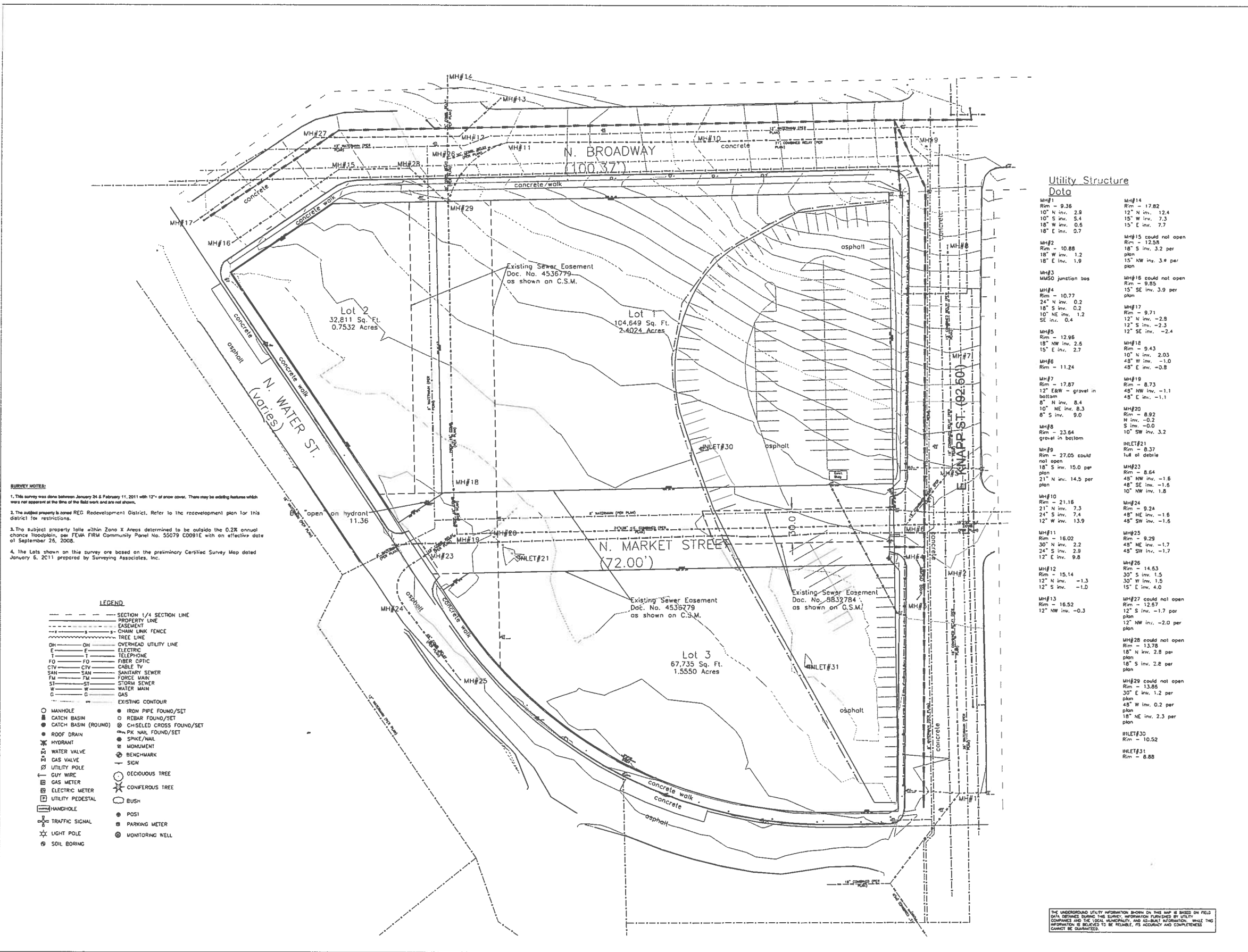
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Sheet:  
**SITE DEMOLITION  
PLAN**

Date:	Issue Set:

Date:  
**01/03/2012**  
Project No.:  
**011-0034.00**  
Sheet No.:  
**C1.03**

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TELEPHONE 414.476.9500





**SURVEY NOTES:**

- This survey was done between January 24 & February 11, 2011 with 12" of snow cover. There may be existing features which were not apparent at the time of the field work and are not shown.
- The subject property is zoned REC Redevelopment District. Refer to the redevelopment plan for this district for restrictions.
- The subject property falls within Zone X Areas determined to be outside the 0.2% annual chance floodplain, per FEMA FIRN Community Panel No. 50079 C0091E with an effective date of September 26, 2008.
- The Lots shown on this survey are based on the preliminary Certified Survey Map dated January 6, 2011 prepared by Surveying Associates, Inc.

**LEGEND**

---	SECTION 1/4 SECTION LINE	---	PROPERTY LINE
- - -	EASEMENT	---	CHAIN LINK FENCE
---	TREE LINE	---	OVERHEAD UTILITY LINE
OH	OVERHEAD UTILITY LINE	E	ELECTRIC
T	TELEPHONE	FD	FIBER OPTIC
CTV	CABLE TV	SAN	SANITARY SEWER
FM	FORCE MAIN	ST	STORM SEWER
W	WATER MAIN	G	GAS
---	EXISTING CONTOUR	○	MANHOLE
○	CATCH BASIN	○	IRON PIPE FOUND/SET
○	CATCH BASIN (ROUND)	○	REBAR FOUND/SET
○	ROOF DRAIN	○	CHISELED CROSS FOUND/SET
○	HYDRANT	○	PK NAIL FOUND/SET
○	WATER VALVE	○	SPRINKLER
○	GAS VALVE	○	MONUMENT
○	UTILITY POLE	○	BENCHMARK
○	GUY WIRE	○	SIGN
○	GAS METER	○	DECIDUOUS TREE
○	ELECTRIC METER	○	CONIFEROUS TREE
○	UTILITY PEDESTAL	○	EUSH
○	HANDHOLE	○	POST
○	TRAFFIC SIGNAL	○	PARKING METER
○	LIGHT POLE	○	MONITORING WELL
○	SOIL BORING		

**Utility Structure Data**

MH#1 Rim - 9.36 10" N inv. 2.8 10" S inv. 5.4 18" W inv. 0.6 18" E inv. 0.7	MH#14 Rim - 17.82 12" N inv. 12.4 15" W inv. 7.3 15" E inv. 7.7
MH#2 Rim - 10.88 18" S inv. 1.2 18" E inv. 1.9	MH#15 could not open Rim - 12.58 18" S inv. 3.2 per plan 15" NW inv. 3.4 per plan
MH#3 MMSO junction box Rim - 9.85	MH#16 could not open 15" SE inv. 3.9 per plan
MH#4 Rim - 10.77 24" N inv. 0.2 18" S inv. 0.2 10" NE inv. 1.2 SE inv. 0.4	MH#17 Rim - 9.71 12" N inv. -2.8 12" S inv. -2.3 12" SE inv. -2.4
MH#5 Rim - 12.98 18" NW inv. 2.5 15" E inv. 2.7	MH#18 Rim - 9.43 10" N inv. 2.03 48" W inv. -1.0 48" E inv. -0.8
MH#6 Rim - 11.24	MH#19 Rim - 8.73 48" NW inv. -1.1 48" E inv. -1.1
MH#7 Rim - 17.87 12" E&W - gravel in bottom 8" N inv. 8.4 10" NE inv. 8.3 8" S inv. 9.0	MH#20 Rim - 8.92 N inv. -0.2 S inv. -0.0 10" SW inv. 3.2
MH#8 Rim - 23.64 gravel in bottom	INLET#21 Rim - 8.37 full of debris
MH#9 Rim - 27.05 could not open 18" S inv. 15.0 per plan 21" N inv. 14.5 per plan	MH#23 Rim - 8.64 48" NW inv. -1.6 48" SE inv. -1.5 10" NW inv. 1.8
MH#10 Rim - 21.16 21" N inv. 7.3 24" S inv. 7.4 12" W inv. 13.9	MH#24 Rim - 9.24 48" NE inv. -1.6 48" SW inv. -1.6
MH#11 Rim - 16.02 30" N inv. 2.2 24" S inv. 2.9 12" E inv. 9.8	MH#25 Rim - 9.29 48" NE inv. -1.7 48" SW inv. -1.7
MH#12 Rim - 15.14 12" N inv. -1.3 12" S inv. -1.0	MH#26 Rim - 14.63 30" S inv. 1.5 30" W inv. 1.5 15" E inv. 4.0
MH#13 Rim - 16.52 12" NW inv. -0.3	MH#27 could not open Rim - 12.67 12" S inv. -1.7 per plan 12" NW inv. -2.0 per plan
	MH#28 could not open Rim - 13.78 18" N inv. 2.8 per plan 18" S inv. 2.8 per plan
	MH#29 could not open Rim - 13.86 30" E inv. 1.2 per plan 48" W inv. 0.2 per plan 18" NE inv. 2.3 per plan
	INLET#30 Rim - 10.52
	INLET#31 Rim - 8.88

**SIGMA GROUP**  
Single Source. Smart Solutions.  
www.sigmagroup.com  
1300 West Canal Street  
Milwaukee, WI 53233  
Phone: 414-643-3200  
Fax: 414-643-4216

All bearings are referenced to the South line of the Southpass 1/4 Section 22-7-22, which is assumed to bear S 88°56'45" W, Slope Plane Coordinate System, South Zone.  
Elevation Datum is City of Milwaukee.  
Add 580.60 to convert to NAD83 29

**HARWOOD ENGINEERING CONSULTANTS, LTD**  
7420 West 51st Street Milwaukee Wisconsin 53213  
414-475-5554 414-475-5448 fax: harwood@hrc.com  
HEC Project Number: 11-0034-00

**TOPOGRAPHIC SURVEY**

MILWAUKEE, WISCONSIN

Project:  
**M&I WATER STREET PARKING**

Location:  
**MILWAUKEE, WI**

**MUNICIPAL REVIEW SET**  
(NOT FOR CONSTRUCTION)  
DATE: **DECEMBER 2, 2011**

Scale: 1" = 40'  
Sheet:  
**EXISTING SITE SURVEY**

1. Add utility invert 2/11/11 KAS

NO.	REVISION	DATE	BY

GRAPHIC SCALE  
0 30' 60'

DRAWING NO. 11-0034-01.04 Existing Site Survey  
DRAWN BY: BWR/KAS/B.H  
DATE: February 3, 2011  
PROJECT NO: 2805  
CHECKED BY: KAS  
APPROVED BY: KAS  
SHEET NO:  
**V 100**

THE UNDERGROUND UTILITY INFORMATION SHOWN ON THIS MAP IS BASED ON FIELD DATA OBTAINED DURING THE SURVEY. INFORMATION PROVIDED BY OTHER COMPANIES AND THE LOCAL MUNICIPALITY AND AD-BUILT INFORMATION, WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, ITS ACCURACY AND COMPLETENESS CANNOT BE GUARANTEED.

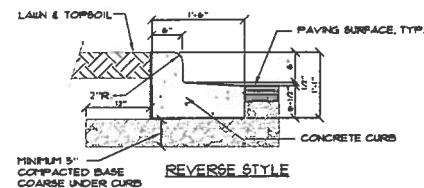
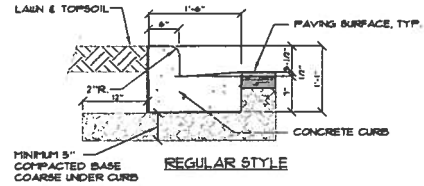
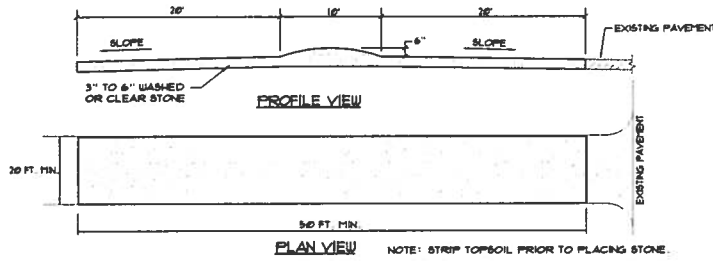
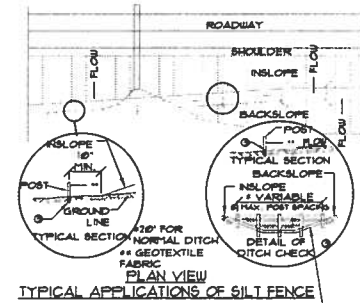
NOTE: SURVEY COMPLETED BY THE SIGMA GROUP. THE ENGINEER MAKES NO WARRANTY OR REPRESENTATION WITH REFERENCE TO THE ACCURACY AND COMPLETENESS OF THE EXISTING CONDITIONS INDICATED OR NOT INDICATED ON THE ENGINEERING PLANS PROVIDED.

**Zimmerman**  
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5106 N. Port Washington Rd. | Glendale, WI 53017 | zstudios.com  
TELEPHONE 414.476.3500

Date:  
01/03/2012  
Project No.:  
011-0034.00  
Sheet No.:  
**C1.04**

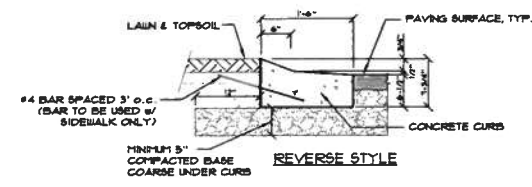
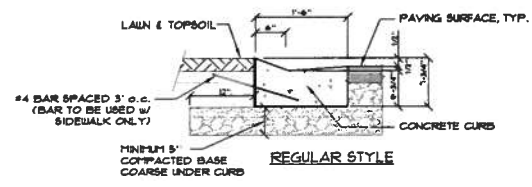


Date:	Issue Set:



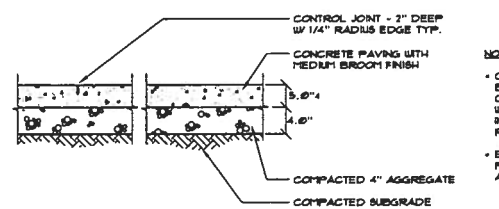
NOTE:  
 \* REVERSE STYLE CURB LOCATIONS ARE NOTED ON THE PLANS.  
 \* CONTRACTOR TO USE CITY OF MILWAUKEE CURB DETAILS FOR AREAS IN THE PUBLIC ROADWAY.

**7 18" VERTICAL FACE CURB**  
 NTS



NOTE:  
 \* REVERSE STYLE CURB LOCATIONS ARE NOTED ON THE PLANS.  
 \* CONTRACTOR TO USE CITY OF MILWAUKEE CURB DETAILS FOR AREAS IN THE PUBLIC ROADWAY.

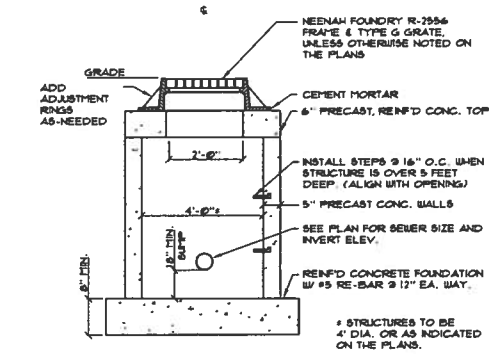
**8 18" DEPRESSED CURB**  
 NTS



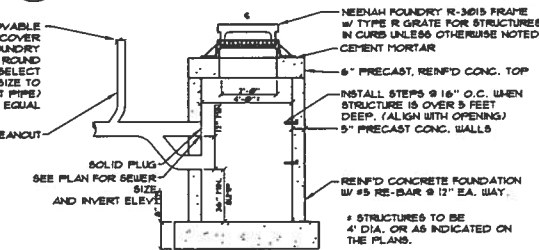
NOTES:  
 \* CONTROL JOINT SPACING SHALL BE A MAXIMUM OF 5' AND CONSTRUCTED IN CONFORMANCE WITH AMERICAN CONCRETE INSTITUTE (ACI) RECOMMENDATIONS.  
 \* EXPANSION JOINTS SHOULD BE PROVIDED UNLESS PAVEMENT ADJUTS FIXED OBJECTS.

NOTE:  
 \* SIDEWALK SHALL BE 1' AT DRIVEWAY SECTIONS  
 \* CONTRACTOR TO USE CITY OF MILWAUKEE SIDEWALK DETAIL IN PUBLIC R.O.W.

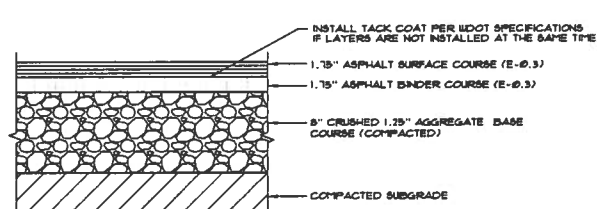
**9 CONCRETE SIDEWALK SECTION**  
 NTS



**5 TRAPPED CATCH BASIN - CURB**  
 NTS

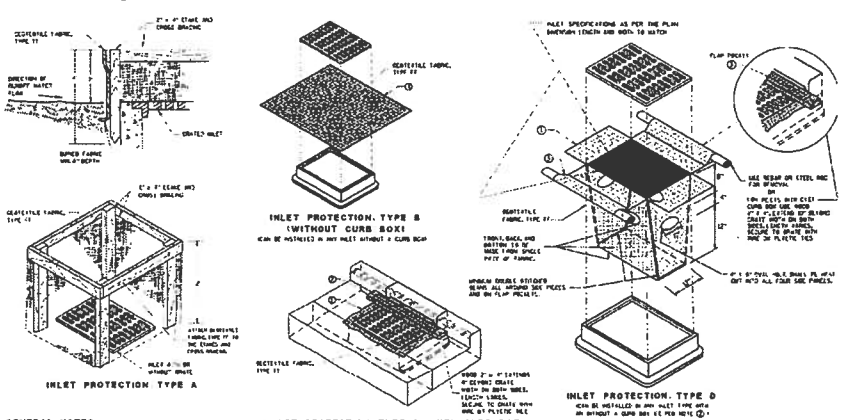


**6 BITUMINOUS ASPHALT SECTION - REGULAR DUTY PAVEMENT**  
 NTS



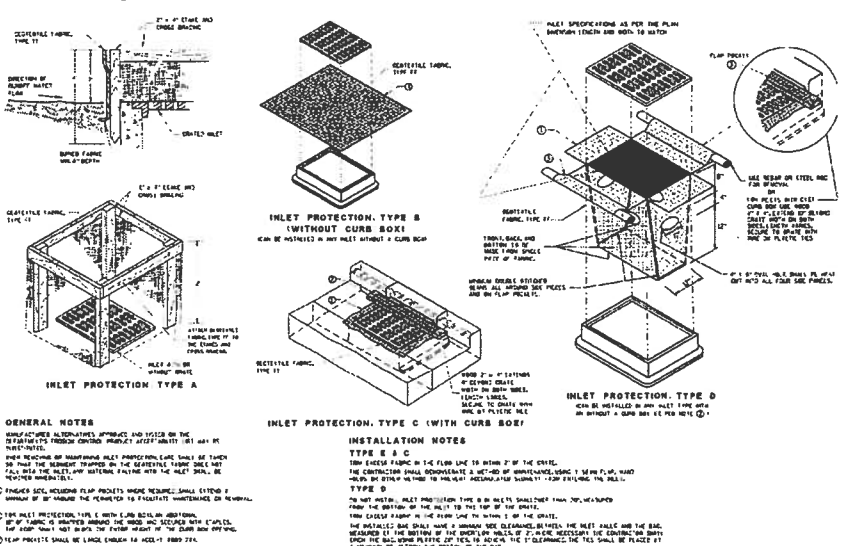
- GENERAL NOTES:**
- 1. DETAIL OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.
  - 2. WHEN POSSIBLE THE SILT FENCE SHOULD BE CONSTRUCTED IN AN ARC OR HORSESHOE SHAPE, WITH THE ENDS POINTING UPWIND TO MAXIMIZE BOTH STRENGTH AND EFFECTIVENESS.
  - 3. CROSS BRACE WITH 2" x 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS AS DIRECTED BY THE ENGINEER.
  - 4. MINIMUM 14 GAGE WIRE REQUIRED, FOLD FABRIC 3" OVER THE WIRE AND STAPLE OR PLACE WIRE RINGS ON 12" C-C.
  - 5. EXCAVATE A TRENCH A MINIMUM OF 4" WIDE AND 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC, FOLD MATERIAL TO FIT TRENCH AND BACKFILL AND COMPACT TRENCH WITH EXCAVATED SOIL.
  - 6. WIRE SUPPORT FENCE SHALL BE 14 GAGE MINIMUM WOVEN WIRE WITH A MAXIMUM MESH SPACING OF 6". REQUIRE TOP OR GEOTEXTILE FABRIC TO TOP OF FENCE WITH STAPLES OR WIRE RINGS AT 12" C-C.
  - 7. GEOTEXTILE FABRIC SHALL BE REINFORCED WITH AN INDUSTRIAL POLY-PROPYLENE NETTINGS WITH A MAXIMUM MESH SPACING OF 3/4" OR EQUAL. A HEAVY DUTY NYLON TOP SUPPORT CORD OR EQUIVALENT IS REQUIRED.
  - 8. STEEL POSTS SHALL BE STUDDED "TEE" OR "U" TYPE WITH A MINIMUM HEIGHT OF 1.25 DIA./IN. FL. (WITHOUT ANCHOR). FIN ANCHORS SUFFICIENT TO RESIST POST MOVEMENT ARE REQUIRED. WOOD POSTS SHALL BE A MINIMUM SIZE OF 4" DIA. OR 1-1/2" x 3-1/2" EXCEPT WOOD POSTS FOR GEOTEXTILE FABRIC REINFORCED WITH NETTINGS SHALL BE A MINIMUM SIZE OF 1-1/8" x 1-1/8" OAK OR HICKORY. ALTERNATIVES A AND B ARE EQUAL AND EITHER MAY BE USED.

**1 SILT FENCE DETAIL**  
 NTS



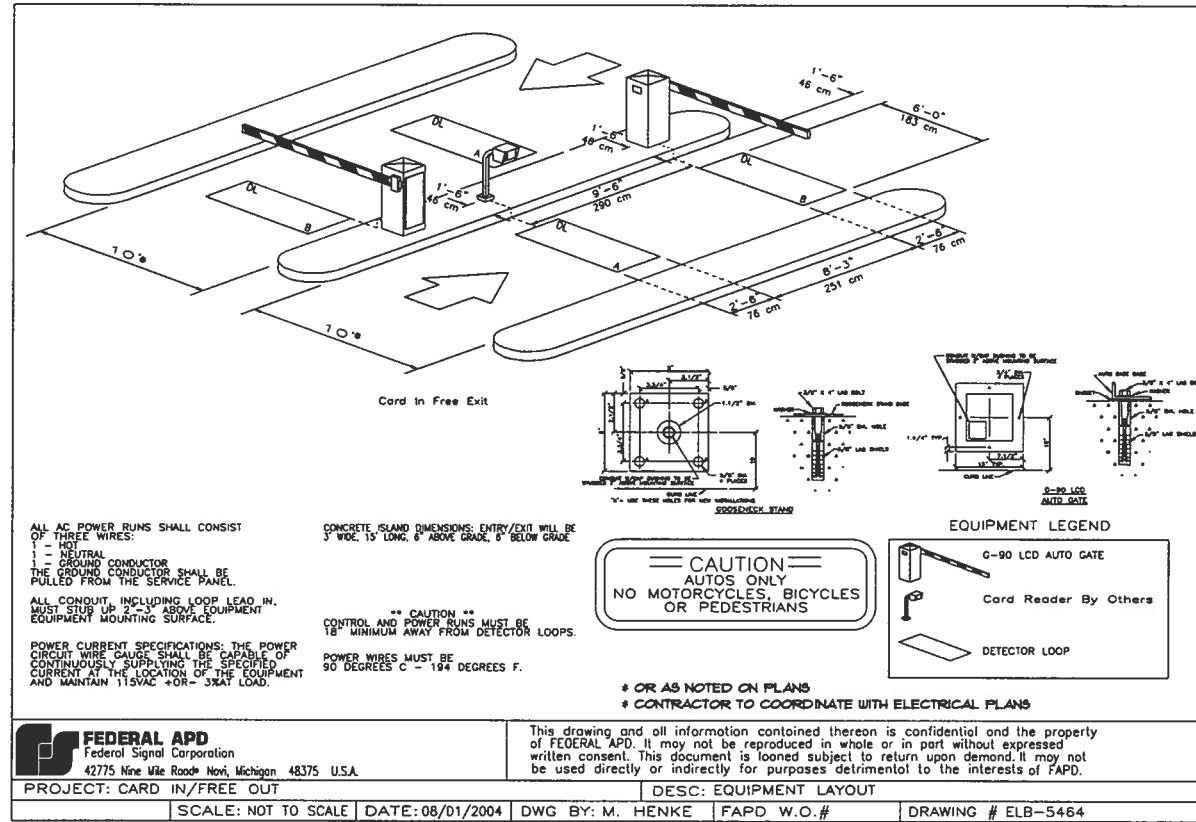
- GENERAL NOTES:**
- 1. WIRE SUPPORT FENCE SHALL BE 14 GAGE MINIMUM WOVEN WIRE WITH A MAXIMUM MESH SPACING OF 6". REQUIRE TOP OR GEOTEXTILE FABRIC TO TOP OF FENCE WITH STAPLES OR WIRE RINGS AT 12" C-C.
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**2 INLET PROTECTION**  
 NTS

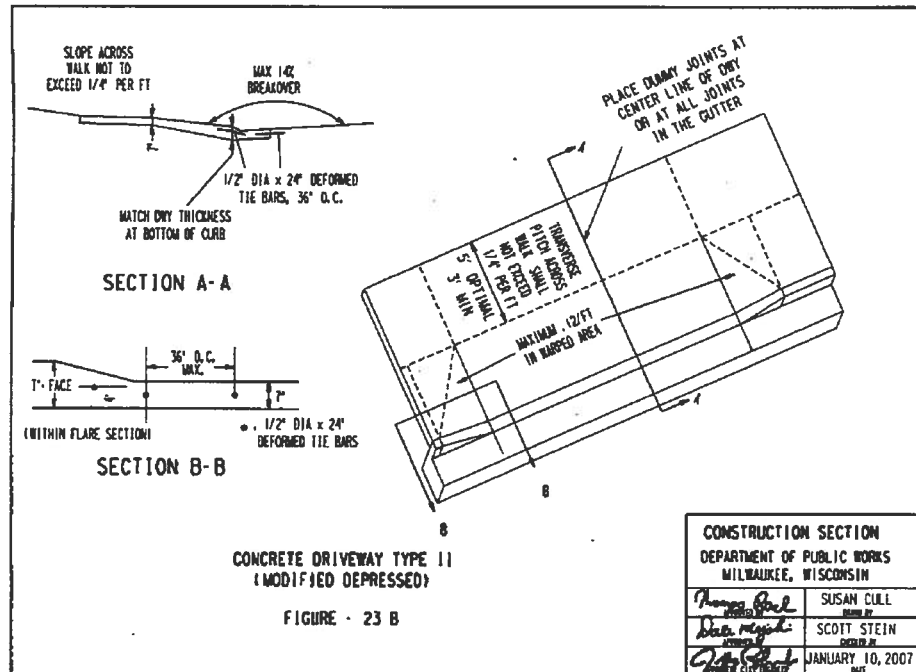


- GENERAL NOTES:**
- 1. WIRE SUPPORT FENCE SHALL BE 14 GAGE MINIMUM WOVEN WIRE WITH A MAXIMUM MESH SPACING OF 6". REQUIRE TOP OR GEOTEXTILE FABRIC TO TOP OF FENCE WITH STAPLES OR WIRE RINGS AT 12" C-C.
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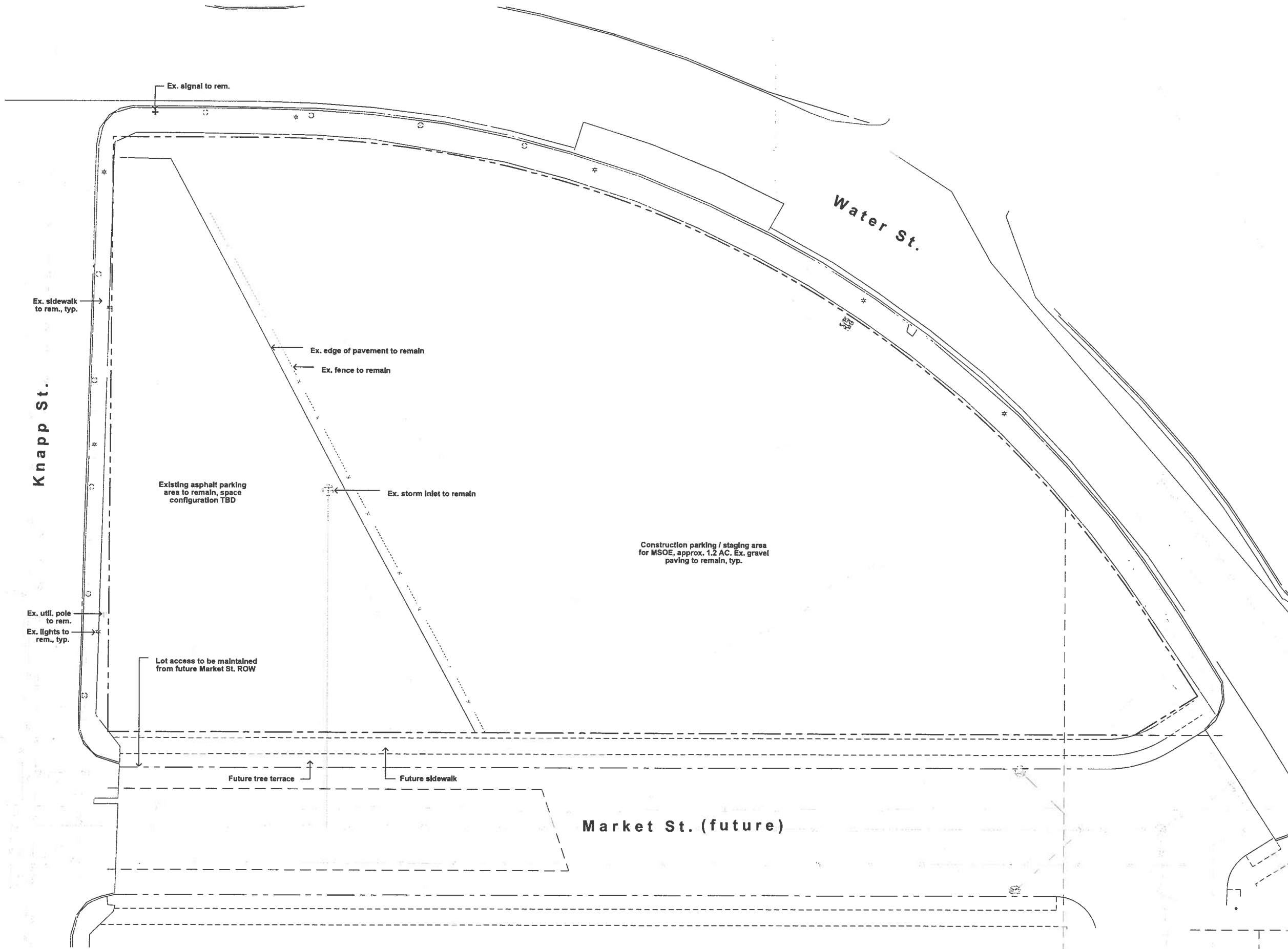
10 ACCESS GATE DETAIL  
 MTS



9 CONCRETE DRIVEWAY TYPE II  
 MTS

Date:	Issue Set:





Consultant:

Project:  
M&I Bank / BMO  
Knapp St. Parking Lot

Location:  
Milwaukee, Wisconsin

Key Plan:



Sheet:  
Landscape Plan  
Phase I - MSOE Const.

City DPD Submittal Set  
Not For Construction

Scale:  
1/16" = 1'-0"

Revisions:  
No. Date Description

No.	Date	Description

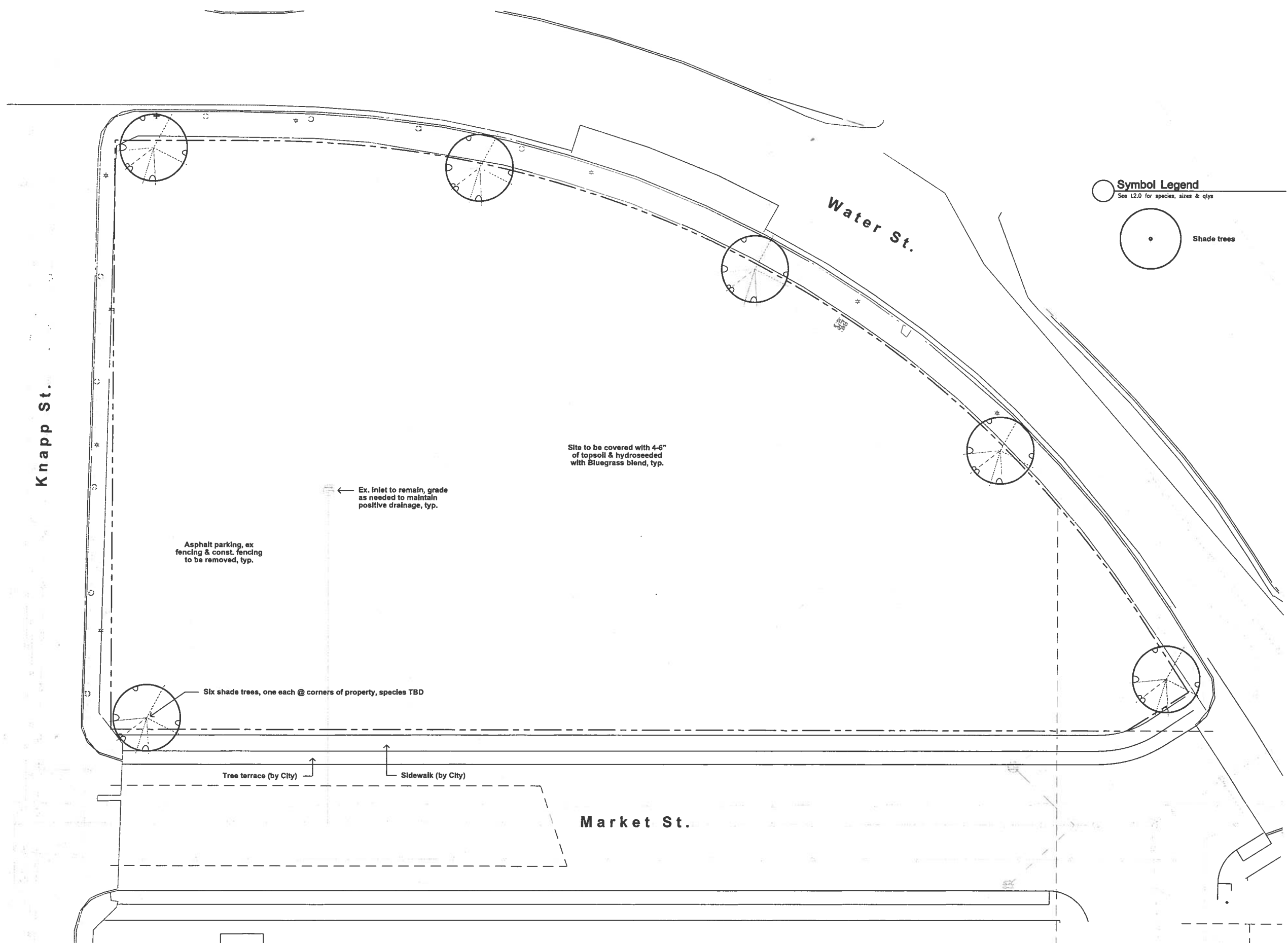
Date:  
January 3, 2012

Project No.: 110034.00 (Owner) Project No.:

Sheet No.:

**L1.0**





**Symbol Legend**  
 See L2.0 for species, sizes & qty's

○ Shade trees

Knapp St.

Water St.

Site to be covered with 4-6" of topsoil & hydroseeded with Bluegrass blend, typ.

← Ex. Inlet to remain, grade as needed to maintain positive drainage, typ.

Asphalt parking, ex fencing & const. fencing to be removed, typ.

Six shade trees, one each @ corners of property, species TBD

Tree terrace (by City)

Sidewalk (by City)

Market St.

**Zimmerman**  
 ARCHITECTURAL STUDIOS, INC.

2122 West Mount Vernon Avenue | Milwaukee, WI 53233 | zstudios.com  
 TELEPHONE | 414 | 478.9500  
 FACSIMILE | 414 | 478.8562

Consultant:

Project:  
 M&I Bank / BMO  
 Knapp St. Parking Lot

Location:  
 Milwaukee, Wisconsin

Key Plan:



Sheet:  
 Landscape Plan  
 Phase II - Interim

City DPD Submittal Set  
 Not For Construction

Scale:  
 1/16" = 1'-0"

Revisions:  
 No. Date Description

Date:  
 01/03/2012

Project No.: 110034.00 (Owner) Project No.:

Sheet No.:

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**L1.1**



Consultant:

Project:  
M&I Bank / BMO  
Knapp St. Parking Lot

Location:  
Milwaukee, Wisconsin

Key Plan:



Sheet:  
Landscape Plan  
Phase III - Build-Out

City DPD Submittal Set  
Not For Construction

Scale:  
1/16" = 1'-0"

Revisions:  
No. Date Description

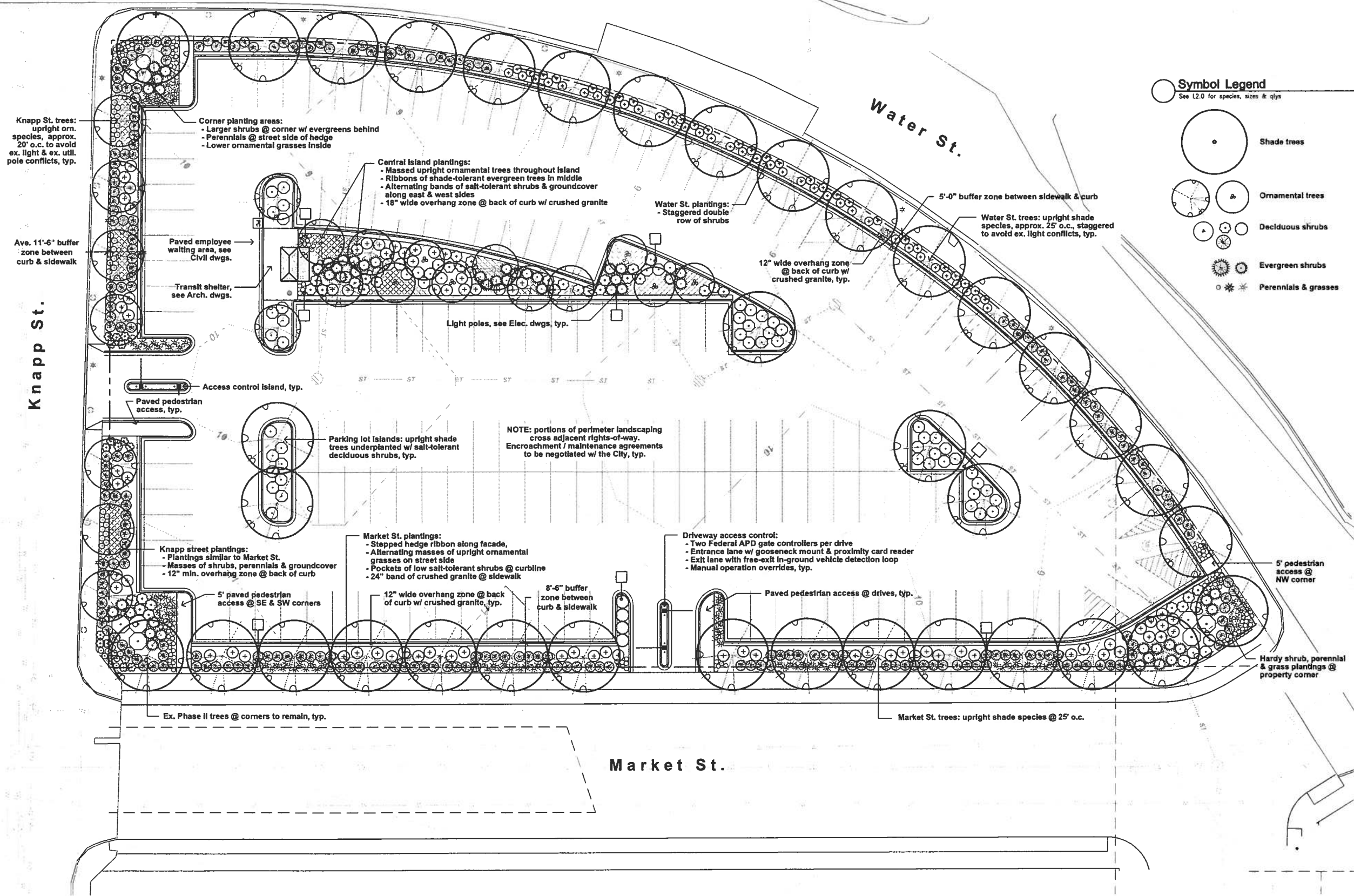
Date:  
01/03/2012

Project No.:  
110034.00

(Owner) Project No.:

Sheet No.:

**L1.2**



Consultant:

Project:  
M&I Bank / BMO  
Knapp St. Parking Lot

Location:  
Milwaukee, Wisconsin

Key Plan:

Sheet:  
Landscape Details,  
Schedules & Notes

City DPD Submittal Set  
Not For Construction

Scale:  
As Shown

Revisions:

No. Date Description

Date:  
01/03/2012

Project No.:  
110034.00

(Owner) Project No.:

Sheet No.:

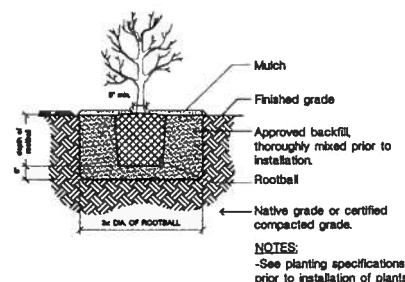
**L2.0**

### General Notes

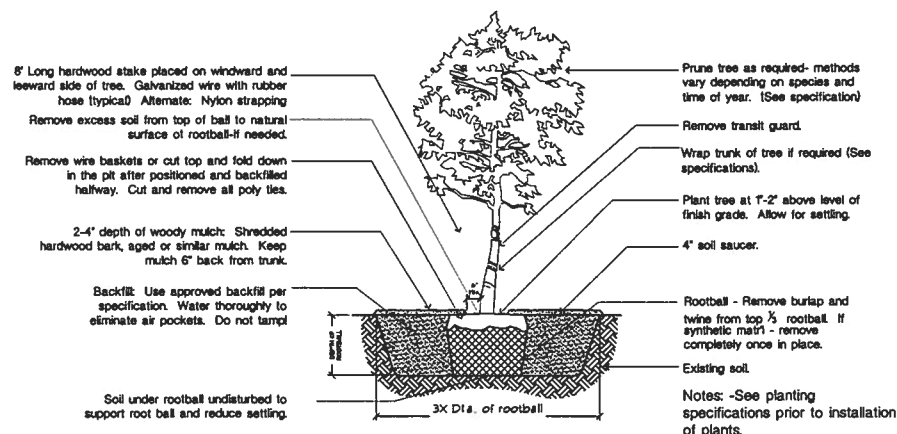
- All landscape installation & maintenance to conform with all applicable local codes & ordinances, including (but not limited to) City of Milwaukee Municipal Code Ch. 295-405 "Landscaping."
- See Site dwgs. for work limits, scope of construction, hardscape, dimensions &/or construction notes. See Civil dwgs. for all grading, stormwater management, site utilities & erosion control. See Landscape dwgs. for landscape plans, site amenities, details, schedules, notes. See Architectural dwgs. for all construction. See Electrical drawings for all power, circuiting, lighting & access control.
- Contractor shall provide shop drawings and material submittals of **all** hardscape & landscape construction elements shown in plan set for Landscape Architect review prior to construction, including (but not limited to) ornamental fencing & all access control equipment.
- Contractor to provide samples for Landscape Architect's approval on all colors, finishes & materials prior to construction, including (but not limited to) topsoil, gravels, mulches, seed mixes et al.
- Caution: underground utilities are present on site. The Contractor shall verify location of all above- and below-grade utilities, **both public & private**, prior to commencement of site construction. If unanticipated above- or below-grade conditions are encountered, notify Client & Landscape Architect prior to proceeding. Coordinate with local public utility locating entity as needed.
- Contractor to verify hardscape layout prior to construction. Contact Landscape Architect if discrepancies are found.
- Contractor to limit construction traffic to within work limit lines. All adjacent damage shall be the responsibility of the contractor to restore. See Civil drawings for limits of disturbance.
- All written dimensions supersede scaled dimensions. All dimensions are taken from face of curb, wall or existing building foundations.
- Any work done in the public right-of-way shall require an encroachment & maintenance agreement with the City of Milwaukee. Owner, LA & contractor to coordinate.

### Landscape Notes

- Rough grading & topsoil import/spreading are to be completed by others. Finish grading, seed area and ornamental planting bed preparation shall be the landscape contractor's responsibility. Verify all existing site and grading conditions prior to construction.
- All areas disturbed by site construction shall be fine graded and restored with vegetative cover as shown. See plans for cover types & locations, see specifications for materials & installation.
- Contractor shall verify plant quantities shown on plan. Symbol quantities take precedence over plant keys. Forward a material list to the Landscape Architect prior to construction identifying species, sizes & plant sources to be used on the project.
- All plant materials shall conform to the schedule and shall meet quality requirements outlined in the ANLA "American Standard for Nursery Stock", ANSI Z60.1-2004. The Landscape Architect reserves the right to reject any substandard planting material. Such rejected material shall be removed from the project site immediately.
- All nursery tags/labels shall be left on plant materials until the project punch-list inspection is completed by the Landscape Architect. Untagged materials will be assumed to be deficient.
- All planting beds shall contain screened blended topsoil mix to a min. depth of 18". All lawn areas shall have min. 6". Suitable existing soil may be used & mixed if previously approved. Contractor shall be responsible for obtaining soil tests if existing topsoil is reused. Soil testing results shall include (but is not limited to) soil pH, % organic matter, phosphorus, potassium, calcium & texture (percentages of sand, silt and/or clay.). Remove excessive clay, gravel & stones detrimental to healthy plant growth. Remove all debris greater than 1" diameter.
- Contractor is responsible for ensuring that all tree pits & planting areas drain properly. Notify Landscape Architect if drainage or moisture problems are encountered while planting.
- Contractor shall backfill all trees, shrubs & evergreens with a mix of 1/3 plant starter mix & 2/3 remaining soil. Plant Starter Mix to be provided by Liesener Solis, Cedarburg WI, or approved equal.
- All perennial and groundcover areas shall receive a 3" layer of plant starter mix and perennial starter fertilizer, rototilled into the top 6" of blended topsoil in beds.
- All perennial areas shall receive a 1-2" layer of shredded hardwood bark mulch. Groundcover beds do not receive a cover of shredded bark mulch. Do not allow mulch to touch stems or leaves of perennials! All woody planting areas shall receive a 3" layer. Unless otherwise shown in the plans, no landscape fabric or weed barrier is to be installed.
- Unless otherwise shown, all perennials & shrubs to be planted in triangular arrangements. For plants not shown individually, refer to the spacing shown in the plant schedule.
- All edging to be 3/16" x 4" alum. mill-finish. Permaloc "CleanLine" or "ProSlide", or approved equal.
- Stone mulch areas to contain 2-3" of decorative stone installed over poly weed barrier. Stone to be decomposed/rotted granite or approved equal. Coordinate final material selection with LA.
- Contractor shall provide positive drainage away from all structures for a minimum of 10'.



**Shrub Planting Detail**  
Not To Scale



**Tree Planting Detail**  
Not To Scale

### Hardscape / Amenity Notes

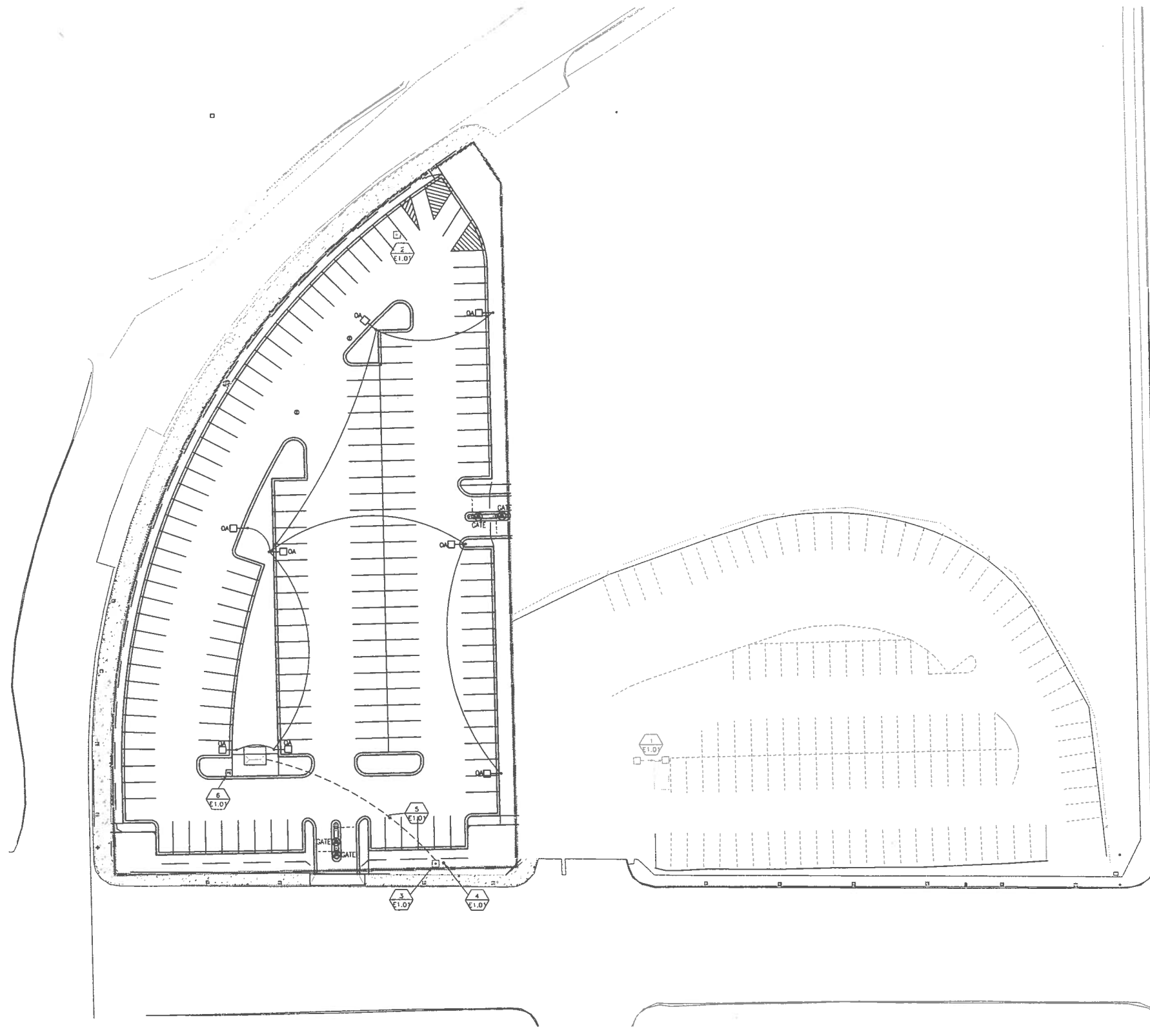
- Access control: Furnish, install, maintain (for one year) and warranty a vehicular access control system. Access gates to be "Federal APD" "G-90" series operators. Provide two each at each driveway. All associated equipment (gooseneck mount, vehicle detection loops, operator footings, conduit & control equipment) to be included. Colors TBD from standard ranges. Available from TAPCO, Brown Deer WI, 262-814-7000.
- Add-alternate irrigation system: Furnish, install, maintain (for one year) & warranty a fully-automated design-build irrigation system. System to consist of all required components for a functional system, including (but not limited to) all plumbing, street lateral, meter & pit, master valve, RPBP, digital controller w/ two-week programmable calendar, rain sensor, wiring, manifolds, lines, valves, laterals & heads. System to be designed by a Certified Irrigation Designer & installed by a Certified Irrigation Contractor. Layout to be based on the landscape plan. Shop drawings, details & specs shall be provided for review/approval.

### Plant Schedule (incl. all Phases)

Note: species shown are representative. Final selections TBD. Contractor is responsible for quantities, typ.

Symbol	Qty Prop.	Botanical Name	Common Name	Installed Size	Root	Spacing	Notes
<b>Shade Trees [Qty. 35]</b>							
Gln Mag		Ginkgo biloba 'Magyar'	Magyar Ginkgo	3" Cal.	B/B	As Shown	
Gym Esp		Gymnocladus dioica 'Espresso'	Seedless Kentucky Coffeetree	3" Cal.	B/B	As Shown	
Ulm New		Ulmus x 'New Horizon'	New Horizon Hybrid Elm	3" Cal.	B/B	As Shown	
<b>Ornamental Trees [Qty. 19]</b>							
Amo Col		Amelanchier x 'Cole's Select'	Cole's Select Serviceberry	8" HL	B/B	As Shown	Heavy Three Stem
Mal Sar		Malus sargentii 'Firebird'	Firebird Sargent Crabapple	6" HL	B/B	As Shown	Single Stem
Syr No		Syringa rel. 'Ivory Silk'	Ivory Silk Jap. Tree Lilac	2.5' Cal.	B/B	As Shown	Single Stem
Pyr Aut		Pyrus calleryana 'Autumn Blaze'	Autumn Blaze Ornamental Pear	2.5' Cal.	B/B	As Shown	Single Stem
Pyr Cle		Pyrus calleryana 'Cleveland Select'	Cleveland Select Ornamental Pear	2.5' Cal.	B/B	As Shown	Single Stem
<b>Deciduous Shrubs [Qty. 506]</b>							
Bux Gre		Buxus x 'Green Velvet'	Green Velvet Boxwood	24" Ht.	2 Gal.	42-48" o.c.	
Hyd Gra		Hydrangea arb. 'Grandiflora'	Snowhill Hydrangea	24" Ht.	2 Gal.	48" o.c.	
Myr Pan		Myrica pennsylvanica	Northern Bayberry	24" Ht.	2 Gal.	48" o.c.	
Rhu Gro		Rhus aromatica 'Gro Low'	Grow Low Sumac	24" Ht.	2 Gal.	48" o.c.	
Ros CFW		Rosa 'Caroline Wonder'	Caroline Wonder Rose	24" Ht.	2 Gal.	36" o.c.	
Spl Tor		Spirea betulifolia 'Tor'	Tor Birchleaf Spirea	24" Ht.	2 Gal.	42" o.c.	
Spl Fil		Spirea filicoides	Fritsch Spirea	24" Ht.	2 Gal.	36-42" o.c.	
Syr Pal		Syringa meyeri 'Palibin'	Palibin Dwarf Lilac	30-36" Ht.	2 Gal.	48-54" o.c.	
Vib Red		Viburnum dentatum 'JN Select'	Red Feather Arrowwood Viburnum	48" Ht.	B/B	72" o.c.	
<b>Evergreen Shrubs [Qty. 50]</b>							
Jun Kai		Juniperus chinensis 'Kaiway'	Kaiway Compact Juniper	24" sprd.	7 Gal.	54-60" o.c.	
Jun Ska		Juniperus sabina 'Skandia'	Skandia Juniper	24" sprd.	7 Gal.	54-60" o.c.	
Tax Gem		Taxus x. media 'Gem'	Gem Dwarf Yew	24" sprd.	7 Gal.	54-60" o.c.	
<b>Perennials &amp; Grasses [Qty. 260]</b>							
Alc Mol		Alchemilla mollis	Lady's Mantle	1 Gal.	Cont.	24" o.c.	
Anu Dio		Anuncis dioica	Goatsbeard	1 Gal.	Cont.	24" o.c.	
Hem Hap		Hemerocallis 'Happy Returns'	Happy Returns Daylily	4.5"	Cont.	18-24" o.c.	
Hem Hyp		Hemerocallis 'Hyperion'	Hyperion Daylily	4.5"	Cont.	24" o.c.	
Hem Ros		Hemerocallis 'Rosy Returns'	Rosy Returns Daylily	4.5"	Cont.	18-24" o.c.	
Host Roy		Hosta 'Royal Standard'	Royal Standard Hosta	1 Gal.	Cont.	36" o.c.	
Host Sum		Hosta 'Sum & Substance'	Sum & Substance Hosta	1 Gal.	Cont.	42" o.c.	
Mis Mor		Miscanthus 'Morning Light'	Morning Light Maidenhair Grass	1 Gal.	Cont.	36" o.c.	
Par Lt		Perovskia atr. 'Little Spire'	Little Spire Russian Sage	4.5"	Cont.	24" o.c.	
Spo Het		Sporobolus heterolepis	Prairie Dropseed	1 Gal.	Cont.	24" o.c.	
<b>Groundcover [Qty. 700 sf]</b>							
Euo Col		Euonymus fortunei 'Coloratus'	Purpleleaf Wintercreeper	2.5"	Cont.	10-12" o.c.	





**ELECTRICAL SITE PLAN**  
 SCALE: 1" = 30'-0"

**P/AN NOTES:**

1. EXISTING WE ENERGIES POLE TO BE DEMOLISHED AND REMOVED BY WE ENERGIES.
2. EXISTING POLE AND ABANDONED ELECTRICAL EQUIPMENT TO BE DEMOLISHED AND REMOVED BY CONTRACTOR.
3. EXISTING WE ENERGIES POLE TO REMAIN IN SERVICE.
4. NEW ELECTRICAL SERVICE METER PEDESTAL NEAR EXISTING POLE.
5. UNDERGROUND FEEDER TO ELECTRIC PANEL.
6. PHOTOCCELL CONTROL FOR SITE LIGHTING. MOUNT TO BUS SHELTER CANOPY. FINAL LOCATION, TBD.

**Zimmerman**  
 ARCHITECTURAL STUDIOS, INC.

5106 N. Port Washington Rd. | Glendale, WI 53217 | zstudios.com  
 TEL: 414.778.9500

**HARWOOD ENGINEERING CONSULTANTS, LTD.**  
7420 West State Street Milwaukee Wisconsin 53213  
 414.473.5524 414.473.3478 fax: 414.473.3478  
 HEC Project Number: 11-0024.02

Project:  
**M&I WATER STREET PARKING**

Location:  
**MILWAUKEE, WI**

**MUNICIPAL REVIEW SET**  
(NOT FOR CONSTRUCTION)  
 DATE: DECEMBER 2, 2011

Scale:  
 Sheet:  
**ELECTRICAL SITE PLAN**

Date:	Issue Set:

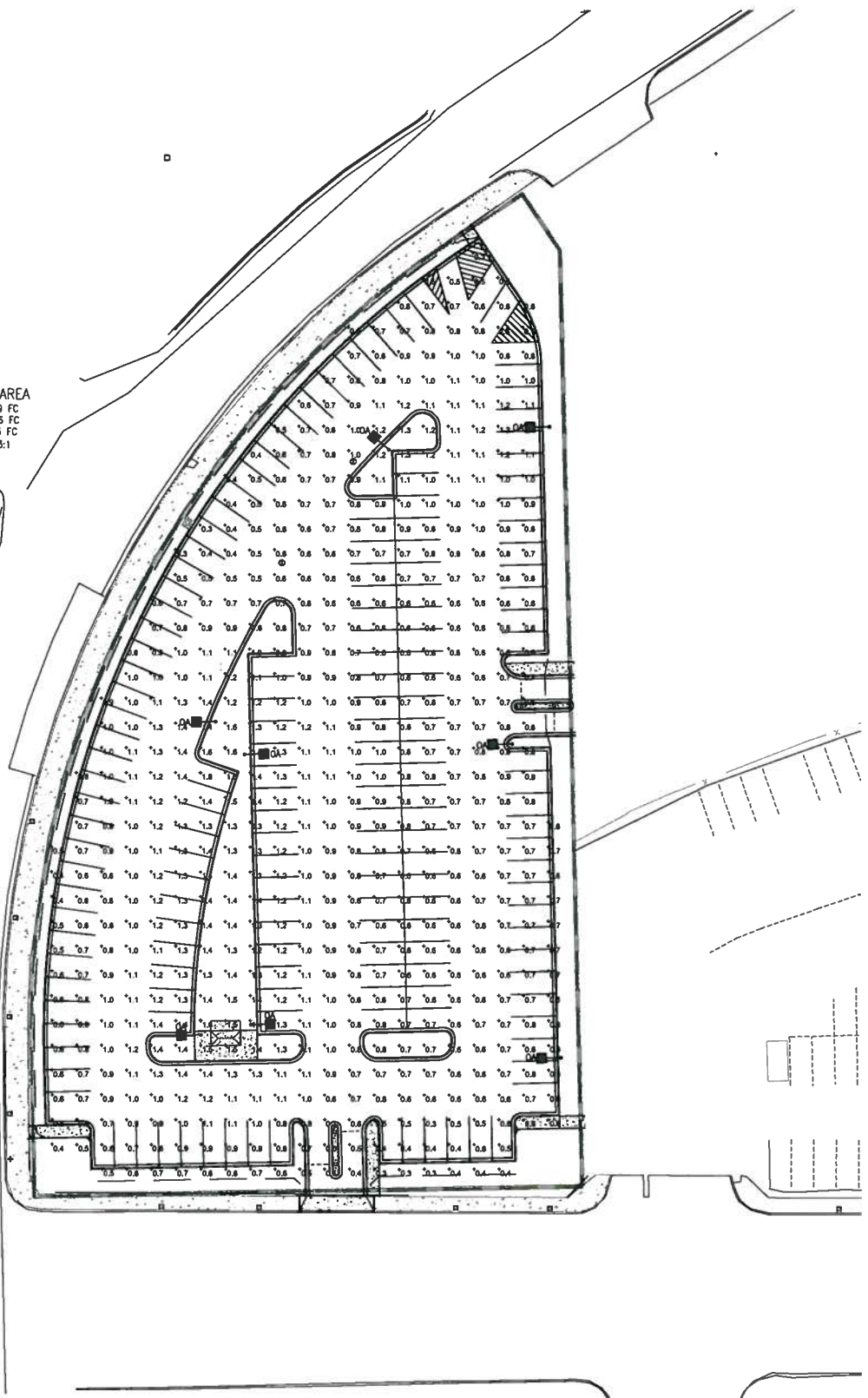
Date: **01/03/2012**

Project No.: **011-0034.00**

Sheet No.:

**E1.01**

PARKING AREA  
AVERAGE: 0.9 FC  
MAXIMUM: 1.6 FC  
MINIMUM: 0.3 FC  
MAX/MIN: 5.3:1

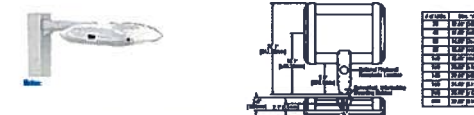


**SITE PHOTOMETRIC CALCULATION**  
SCALE: 1" = 30'-0"

NOTES:

- 1. THE RESULTS OF THIS STUDY ARE TO BE VIEWED ONLY AS AN INDICATION OF POSSIBLE PERFORMANCE. DUE TO VARIATIONS IN LAMPS, DRIVERS, MANUFACTURING, LINE VOLTAGE, AND SITE CONDITIONS, A GUARANTEED LEVEL OF PERFORMANCE IS NOT POSSIBLE AND IS NOT REPRESENTED BY THIS ANALYSIS.
- 2. ALL CALCULATION POINTS ARE MEASURED IN FOOT-CANDLES.
- 3. CALCULATION INDICATES MAINTAINED LIGHT LEVELS USING A LIGHT LOSS FACTOR OF 0.85.

ARI-E0C-SM-0A THE EDGE® LED Area Light - Type V Medium 414.478.4511



Product	Family	Light	Mounting	# of LED's	LED Rating	Voltage	Color Options	Beam Spread	Fixture-Specified Options
ARI-E0C-SM-0A	SM	LED	Surface	100	100lm/W	120V	White	30°	1. 100lm/W LED's 2. 5000K Color Temperature 3. 5000K LED's 4. 5000K LED's 5. 5000K LED's 6. 5000K LED's

Notes:  
1. All data subject to change without notice.  
2. All data subject to change without notice.  
3. All data subject to change without notice.  
4. All data subject to change without notice.  
5. All data subject to change without notice.  
6. All data subject to change without notice.  
7. All data subject to change without notice.  
8. All data subject to change without notice.  
9. All data subject to change without notice.  
10. All data subject to change without notice.

Point	X	Y	Z	Footcandle
1	0.0	0.0	0.0	0.9
2	0.0	0.0	0.0	0.9
3	0.0	0.0	0.0	0.9
4	0.0	0.0	0.0	0.9
5	0.0	0.0	0.0	0.9
6	0.0	0.0	0.0	0.9
7	0.0	0.0	0.0	0.9
8	0.0	0.0	0.0	0.9
9	0.0	0.0	0.0	0.9
10	0.0	0.0	0.0	0.9

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1  
E1.02  
NO SCALE  
FITURE TYPE 'OA'

Project:  
**M&I WATER STREET  
PARKING**

Location:  
**MILWAUKEE, WI**

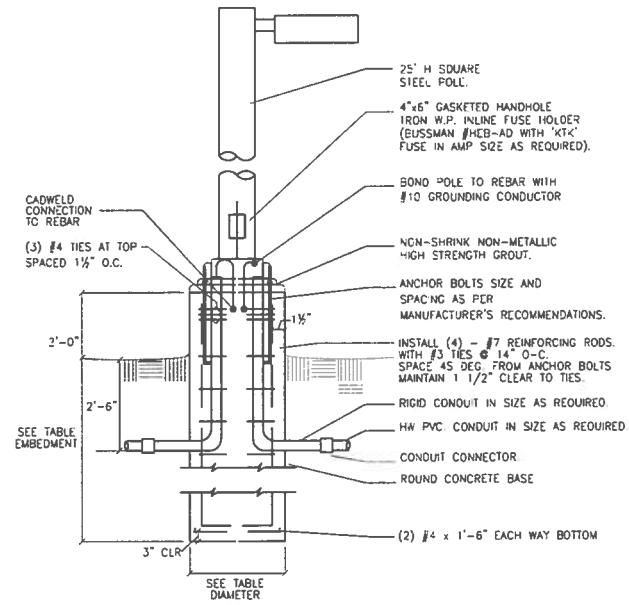
**MUNICIPAL REVIEW SET**  
(NOT FOR CONSTRUCTION)  
DATE: DECEMBER 2, 2011

Scale:  
Sheet:  
**SITE PHOTOMETRIC  
CALCULATION**

Date: Issue Set:  
Date: 01/03/2012  
Project No.: 011-0034.00  
Sheet No.:

**E1.02**





**1 POLE BASE DETAIL**  
E2.01 NTS

- NOTES:**
- DIMENSIONS GIVEN ARE MINIMUM. PROVIDE POLE BASE DIAMETER AND DEPTH AS REQUIRED IN ACCORDANCE WITH LOCAL SOIL AND WIND VELOCITY CONDITIONS.
  - ALL LIGHTING POLE CONCRETE BASES SHALL BE LOCATED A MINIMUM OF 12 INCHES OFF THE FACE OF THE CURBING OR CENTERED WITHIN AN ISLAND. IN ALL CASES, HOWEVER, FINAL LOCATIONS OF LIGHTING POLES MUST BE VERIFIED WITH THE ARCHITECT/ENGINEER PRIOR TO INSTALLATION.
  - ALL DIMENSIONS POLE BASE ARE FOR BIDDING ONLY. POLE BASE SHALL MATCH THOSE AT EXISTING POLES, IF APPLICABLE.

POLE HEIGHT	BASE EMBEDMENT/DIAMETER			
	1 HEAD	2 HEAD	3 HEAD	4 HEAD
15'-0"	6'-5 7/8"-0"	6'-5 7/8"-0"	6'-5 7/8"-0"	6'-5 7/8"-0"
20'-0"	6'-5 7/8"-0"	6'-5 7/8"-0"	8'-0 1/2"-0"	8'-0 1/2"-0"
25'-0"	6'-5 7/8"-0"	8'-0 1/2"-0"	9'-0 1/2"-0"	10'-0 1/2"-0"
30'-0"	8'-0 1/2"-6"	9'-0 1/2"-6"	10'-0 1/2"-6"	10'-0 1/2"-6"

NOTES:  
1. TABLE IS BASED ON SOIL BEARING PRESSURE OF 3000 PSF.

LIGHTING FIXTURE SCHEDULE												
DES.	DESCRIPTION	LAMP DATA		VOLT	DEPTH	LIGHTING FIXTURE			BALLAST TYPE	MTG.	MFG. SURF.	SEE NOTE (F. #)
		NO.	TYPE			MFR.	SERIES	OPTIONS/ACCESSORIES				
0A	SINGLE HEAD POLE LT. LUMINAIRE 25' H SOL. POLE ON CONC. BASE. TYP. V. DIS. FINISH BY ARCH.	6	LED MODULES (120 LED'S)	24C	-	BETA LED	ARE-EDG-SM-DA-12-C-24 SERIES	18.26	-	SURT	CONC. BASE	-

**ABBREVIATIONS:**

AR	AS REQUIRED	GRD	GROUND	NA	NOT APPLICABLE	S	STANDARD (HID)	VAR	VARIABLE
CONC. BASE	CONCRETE BASE	GYP	GYP/SLM BOARD	PS	PULSE START BALLAST	SPEC	SPECIAL	LAS	LENGTH AS SHOWN
E	ELECTRONIC EXPOSED STRUCTURE	LAS	LENGTH AS SHOWN	PEND	PENDANT	STAN	STANTION SURF	DRY	LED DRIVER
EXP	EXPOSED STRUCTURE	LIG	LAY-IN GRID	REC	RECESSED			DRY	LED DIMMABLE DRIVER

**OPTIONS/ACCESSORIES CODE LISTING:**

01. 0.125" PATTERN 12 ACRYLIC LEHS	10. CUSTOM COLOR	21. QUARTZ RESTRIKE
02. HOLOPHANE B246 LENS	11. PENDANT MOUNT	22. EMERGENCY OPERATION- INTEGRAL NICAD BATTERY
03. PAINT AFTER FABRICATION	12. SAFETY CHAIN	23. LOCKING TYPE SOCKETS
04. SPRING LOADED LATCHES	13. NEMA HOOK, CORD AND PLUG	24. SLOPE ADAPTER
05. FLUSH ALUMINUM DOOR FRAME	14. WIRE GUARD	25. TWO BALLAST COVERS
06. ELECTRONIC BALLAST, TOTAL HARMONIC DISTORTION < 10%	15. EMERGENCY BALLAST	26. STANDARD FINISH TO BE SELECTED BY ARCHITECT
07. FLUORESCENT DIMMING BALLAST	16. TOP AND BOTTOM LENSING	27. 277/24 VOLT TRANSFORMER
08. WHITE TRIM RING	17. TIME DELAY	28. LEAD-CALCIUM BATTERY
09. SEMI-DIFFUSE, LOW-IRIDESCENT CLEAR ALZAK REFLECTOR	18. WET LOCATION LABEL	29. INCLUDE SELF-DIAGNOSTICS
	19. DAMP LOCATION CONSTRUCTION	
	20. FURNISH WITH UNIVERSAL ARROWS AND RED STENCIL FACE	

- LIGHTING FIXTURE NOTES:**
- NOTES LF1 - LF5 ARE GENERAL NOTES APPLICABLE TO ENTIRE LIGHTING FIXTURE SCHEDULE WHERE APPROPRIATE.
- LF1 - PROVIDE ALL NECESSARY COMPONENTS AND ACCESSORIES FOR A COMPLETE OPERATING INSTALLATION PER APPLICABLE CODES AND MANUFACTURER'S RECOMMENDATIONS.
- LF2 - CONTRACTOR SHALL REVIEW THE ENTIRE LIGHTING FIXTURE SCHEDULE INCLUDING THE DESCRIPTION AND CATALOG NUMBER. CONTRACTOR SHALL NOTIFY THE A/E OF ANY DISCREPANCIES PRIOR TO BIDDING.
- LF3 - VERIFY ALL FINISHES/COLORS OF FIXTURES WITH A/E PRIOR TO ORDERING.
- LF4 - FOR FIXTURES LISTED IN SCHEDULE WITH (E) ELECTRONIC TYPE BALLASTS, OR (S) HID TYPE BALLAST, PROVIDE A BALLAST AS INDICATED IN SPECIFICATION.
- LF5 - PROVIDE 4 EXTRA LAMPS OF EACH TYPE INDICATED IN LIGHT FIXTURE SCHEDULE AND TURN OVER TO OWNER.

SPECIAL OUTLET SCHEDULE																	
NO.	TO FEED	LOC.	FEED FROM		BREAKER		WIRING				TERMINAL			VOLT	β	LOAD (KW)	SEE NOTE
			PANEL	CKT.	SIZE	POLE	NO.	SIZE	GND	COND.	R	D	E				
GATE	SECURITY LIFT GATE																

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REC Project Number: 11-02810D

Project:  
**M&I WATER STREET PARKING**

Location:  
**MILWAUKEE, WI**

**MUNICIPAL REVIEW SET**  
(NOT FOR CONSTRUCTION)  
DATE: **DECEMBER 2, 2011**

Scale:  
Sheet:  
**ELECTRICAL SCHEDULES AND DETAILS**

Date	Issue Set

Date:  
01/03/2012

Project No.:  
011-0034.00

Sheet No.:

**E2.01**

SECTION 15060  
ELECTRICAL WORK

1. GENERAL
  - A. The Contractor shall provide all labor and materials to erect a complete electrical installation in accordance with the plans and specifications.
  - B. All work shall be in accordance with local, state, International Building, and National Electrical Codes.
  - C. All equipment shall be new and UL listed for the intended purpose.
  - D. The Contractor shall apply for all permits one pay all fees.
  - E. The electrical contractor shall submit a Bill of Material and shop drawings upon request of the A/E.
  - F. The Contractor shall conduct final tests to demonstrate compliance with plans and specifications. Owner shall be present for demonstration of all special systems.
  - G. All work shall be guaranteed for one year after date of final acceptance.
  - H. All electrical equipment shall be pre-tested. Provide nameplates describing panel name, usage, voltage, phase, # of wires, and equipment. Install new panel directories (typed, not free hand).
  - I. Cutting, Patching and Relinishing: The Contractor shall provide all openings in new and existing construction except where noted on the plans. The Contractor shall do all patching and relinishing of existing surfaces.
  - J. Definitions:
    1. A/E: Architect and/or Engineer
    2. Provide: Furnished, installed, wired and connected to the Contractor.
    3. Contractor: The person or group responsible for project construction.
  - K. Demolition, Renovation and Disposition of Existing Equipment:
    1. All work required shall be done in a manner and time acceptable to the Owner and shall be acceptable as to time and duration.
    2. Existing electrical equipment not otherwise noted, or in conflict with construction, shall be removed and/or relocated as indicated on the drawings, as directed or requested. Remove all electrical equipment released from service as a result of construction, and no equipment removed shall be reused except as specifically directed on the drawings or elsewhere herein. All electrical equipment, apparatus and hardware removed and not reused, and not retained by the Owner, shall become the property of the contractor and shall be removed from the site.
  - L. Shop Drawings and Maintenance Manuals:
    1. Furnish a minimum of 3 copies of shop drawings for approval. Shop drawings of system equipment and common equipment shall be submitted in a bound brochure with an index sheet describing contents therein.
    2. All shop drawings when submitted shall bear the contractor's name, date and approval. Shop drawings will not be reviewed by the A/E if this requirement is not met.
    3. Shop drawings shall be submitted electronically in pdf format.
  - M. Warranty:
 

The Contractor, in full knowledge of requirements of the contract documents relative to electrical work, guarantees that the electrical installation has been done in full accord with the same. Additionally, the Contractor shall warrant and maintain, remedy and/or replace at his expense any work or materials which may become defective within one year from date of substantial completion, provided such defects are not due to "Acts of God", or abuse/misuse by agents of the owner.
2. RACEWAY
  - A. Raceway shall be concealed wherever possible.
  - B. Use rigid steel 1/2" minimum for all conduit above grade or concrete. Use liquid tight and greenfield where required.
  - C. Conduit installed in concrete or underground shall be heavy wall schedule 40 PVC. Install no conduit larger than 3/4" in floor slab.
  - D. Couplings, connectors and fittings shall be standard devices to properly attach conduit to outlet boxes, panel enclosures, all steel, rain tight, and concrete type, specifically designed for the application and bearing the UL label.
  - E. Outlet boxes shall be 4" square minimum, 2-1/2" deep unless noted otherwise.
  - F. Exterior underground conduit shall be heavy wall Schedule 40 PVC.
    1. Exterior underground conduit shall be buried at a depth of not less than 30 IN below grade. Provide conduits or ducts terminating below grade with means to prevent entry of dirt or moisture. Underground conduits shall slope 1/8" per foot for proper drainage. Conduits shall drain toward manholes and junction boxes, not the electrical equipment.
3. CONDUCTOR
  - A. All conductors shall be stranded copper with Types TW, THHN or THW (No. 12 and larger) 600 volt insulation.
4. ELECTRIC SERVICE AND DISTRIBUTION EQUIPMENT
  - A. Provide temporary service in the area of construction for all trades. Include local lighting and 120 volt power. Cost of power shall be paid by Owner.
  - B. Present permanent services, if existing, shall remain in place; otherwise locate as shown on plans. New feeders and panel boards shall be provided in accordance with drawings. Provide new distribution panels complete with circuit breakers with AIC rating as indicated.
  - C. Grounding shall be in accordance with Code.
  - D. Safety switches shall be heavy duty (HD) type fused or unfused as required and rated at 200kva.
5. TRANSIENT VOLTAGE SURGE SUPPRESSION
  - A. The unit shall be rated for service entrance Category C location per ANSI/IEEE C62.41-1991, and for 150,000 amperes per phase. Phase should be measured between (L-N & L-G). The TVSS shall provide protection modes to L-N, L-G, L-L, N-G. The unit shall have indicator status lights for the TVSS device, verifying proper operation. The internal design of the unit shall incorporate sine wave tracking and have EMI/RFI filtering for high frequency purposes. Acceptable manufacturer's: Current Technology TC series or Intermatic PG or SG series.
  - B. The specified system shall be installed no further than twelve (12) inches in total wire lead length distance from the panel board it is protecting, and shall avoid any unnecessary bends. Insulated conductors shall be provided for all necessary power and ground connections. System shall be complete, including status indicator lights providing, with independent protection circuit status.
  - C. Manufacturer shall provide a product warranty for 5 YEARS from date of installation. Warranty shall cover unlimited replacement of system components during the warranty period.
6. WIRING DEVICES
  - A. Verify color of all devices and receptacles with Architect. Adjustment in color shall be made in the field without additional compensation.
  - B. Local Switches:
    - a. Hubbell 1221, 1223, 1224 series with single pole, three-way and four-way, as required.
  - C. Receptacles:
    - a. In General: All receptacles shall be rated for the capacity and characteristics of the equipment served and shall be complete with one additional pole for grounding.
    - 2) 20 Amp 125 Volt Duplex: Hubbell 5352.
    - 3) Ground Fault Interrupter: 15 Amp, with built-in ground fault interruption, 5 mA sensitivity, LED indicator light ("ON" when operable) and reset, UL 2003 compliant. Duplex, Leviton B598.
    - 4) TVSS 13ko 20 Amp 125 Volt Duplex with light and alarm: Hubbell 53625.
  - b. All connections to wiring devices must be made by the binding screws only.
  - d. Mounting height:
    - 1) Receptacles: 18" up
    - 2) Switches: 48" up
    - 3) Receptacles Above Counters: 6" up above counter
- D. Furnish combination, multi-gang and special plates as required.
  - a. In general: P&S p-line smooth thermoset plastic.
  - b. Unfinished areas: Satin Stainless Steel with plate screws at similar material, Sierra Type 302.
  - c. Weatherproof: Of type indicated by symbol on the drawings with Hubbell GF5362, 20 amp 125 volt ground fault receptacle with white-in-use cover interlock; WP1000 series.

7. LIGHTING FIXTURES AND LAMPS
  - A. Provide fixtures complete with initial bill of lamps as scheduled.
8. Refer to Lighting Fixture Schedule on plans.
9. MOTOR WIRING
  - A. Applicable motors furnished under General Construction, Heating, Ventilating, Air Conditioning and Plumbing branches of the work. Motor starters and controllers shall be erected by the Contractor in an approved manner at locations established by contractor supplying the equipment. The Contractor shall extend motor circuit connections in each instance. All line voltage motor control wiring from starter to motor controllers and all incidental line voltage motor control wiring shall be done by the Contractor. Low voltage wiring (less than 120 volts) shall be by mechanical trade contractor. Provide HP rated motor disconnect switches as required by Code. Provide NEMA 1 enclosures in general; NEMA 3 enclosures wherever exposed to weather. The Contractor shall verify that all materials are provided for a complete electrical installation.
10. SPECIAL OUTLET OUTLETS
  - A. Special Purpose outlet shall be located as required by equipment. The Contractor shall be responsible for verifying electrical characteristics of the actual equipment being furnished for the project prior to installation of outlets. The Contractor shall verify that all materials are provided for a complete electrical installation.
11. EXCAVATION
  - A. The contractor shall perform all excavation, and furnish and install all pipe and make terminals as detailed on drawings.
  - B. Measurements: The contractor shall lay out this work and make all measurements required to fit his work to field conditions. He shall take all levels necessary and establish proper grade. The contractor shall verify all dimensions of the site and be responsible for their accuracy and coordination with all existing trees, shrubs, etc.
  - C. Excavation shall include all necessary clearing of the site, of grubbing and all wet, dry rock excavation and all incidental work such as sheet piling, shoring, plumbing and boring, all transportation and backfilling.
  - D. The Contractor shall obtain final grades from the owner before proceeding with trench work.
  - E. Where the earth trench meets conduit either above or below the trench line, the trench shall be sloped at a grade of not more than two inches per foot to meet the conduit. Do not bend conduit to meet the trench.
  - F. The material excavated from the trench may be stored or soil banked adjacent to trench. During the period that trenches may be left open, the trench shall either be covered or barricaded with warning lights to the satisfaction of the engineer.
  - G. The trench shall be cleared of large stones, or large objects such as described under "Backfill". The trench bed shall be relatively clean, of debris and firm.
  - H. During excavation, the Contractor shall exercise care to avoid injuring to existing trees, utilities, connections, etc. The expense of repairing any damage and restoring same shall be borne by the Contractor.
  - I. All conduit shall drain to junction boxes. No pockets shall be permitted in conduit lines.
12. BACK FILL
  - A. The excavated material adjacent to the trench may be used as back fill except for hard chunks of earth, broken concrete, bricks, stones, or other objects larger than 2" in diameter which might damage the duct system.
  - B. Additional back fill may be required to supplement excavated material in order to restore trench to meet pre-cut condition and allow for setting.
  - C. Back fill shall be firmly tamped and solidly packed. However, do not tamp on top of PVC conduit.
  - D. Inspect installation after 30 days with the Owner and perform such additional work as necessary and directed by Owner.

13. BIDDING PROCEDURES
  - A. Base Bid:
    1. Base Bid shall include all labor required and all materials and equipment as shown on the contract drawings and heretofore specified.
    2. Base Bid shall not include any conditions or qualifying statements, shall be in strict accordance with specification requirements and shall be based upon the installation of materials and equipment as specified.





ABBREVIATIONS






A/E	ARCHITECT/ENGINEER	I	INSTALLED
AF	AMP FUSE	IU	INTEGRAL TO UNIT
AFB	AVAILABLE FAULT CURRENT	KW	KILOWATT
AFP	ABOVE FINISHED FLOOR	LIC	LAY-IN GRID
ARCH	ARCHITECT	LDC	LOCATION
AFG	ABOVE FINAL GRADE	LTC	LIGHTING
AR	AS REQUIRED	MAG	MAGNETIC STARTER
AS	AMP SWITCH	MAN	MANUAL STARTER
B	JUNCTION BOX	MC	MECHANICAL CONTRACTOR
BKR	BREAKER	MCB	MAIN CIRCUIT BREAKER
BFG	BELOW FINAL GRADE	MLO	MAIN LUGS ONLY
C	MOUNTED 6" ABOVE COUNTER	MSB	MAIN SWITCHBOARD
CAB	CABINET	MTD	MOUNTED
CB	CIRCUIT BREAKER	NU	NEAR UNIT
cd	CANDELA	NIC	NOT IN CONTRACT
CKT	CIRCUIT	O	OTHERS
CLG	CEILING	OC	ON CENTER
COMB	COMBINATION STARTER W/DISCONNECT SWITCH	ORS	OVER RIDE SWITCH
CONC	CONCRETE	OU	ON UNIT
CP	CONTROL PANEL	P	POLE
CS	COMBINATION STARTER/DISC. SWITCH	PC	PHOTOCELL
D	DISCONNECT SWITCH	PEND	PENDANT
DISC	DISCONNECT SWITCH	PLBC	PLUMBING CONTRACTOR
DN	DOWN	PNL	PANEL
DNLT	DOWN LIGHT	PB	PUSH-BUTTON
EWC	ELECTRIC WATER COOLER	R	RECEPTACLE
E.C	ELECTRICAL CONTRACTOR	REC	RECESSED
ELEV	ELEVATION	SS	SWITCH STATION
EMT	ELECTRICAL METALLIC TUBING	SURF	SURFACE
ENT	ELECTRICAL NON-METALLIC TUBING	SUSP	SUSPENDED
ER	EXISTING TO BE REMOVED	SW	SWITCH
EXP	EXPOSED	TC	TIME CLOCK
EXR	EXISTING IN NEW LOCATION	TCC	TEMPERATURE CONTROL CONTRACTOR
EX	EXISTING TO REMAIN	TYP	TYPICAL
F	FURNISHED	UM	UNIT MANUFACTURER
FXIT	FIXTURE	VER	VERIFY
FLUOR	FLUORESCENT	VFD	VARIABLE FREQUENCY DRIVE
G.C.	GENERAL CONTRACTOR	W	WIRE
GFI	GROUND FAULT INTERRUPTING	WP	WEATHERPROOF
GRC	GALVANIZED RIGID CONDUIT	XPWR	TRANSFORMER
GYP	GYP-SUM BOARD		
HOA	HAND-OFF-AUTO SELECTOR SWITCH		
HP	HORSEPOWER		
HVAC	HEATING, VENTILATING, AND AIR CONDITIONING CONTRACTOR		
HV	AIR CONDITIONING CONTRACTOR		
HW	HEAVYWALL		

GENERAL RENOVATION/DEMOLITION NOTFS:

1. ELECTRICAL DRAWINGS ARE BASED ON THE BEST INFORMATION AVAILABLE. FOR AREAS BEING DEMOLISHED, WORK SHOWN REFLECTS INFORMATION SHOWN ON AS-BUILT PLANS AND FIELD OBSERVATION; IT IS NOT GUARANTEED 100% ACCURATE. THIS CONTRACTOR MUST FIELD VERIFY CONDITIONS AND MAKE NECESSARY ADJUSTMENTS WITHOUT EXTRA COSTS TO THE PROJECT TO SUIT ACTUAL NEEDS.
2. MAINTAIN THE INTEGRITY OF ALL SYSTEMS AFFECTED BY THE REMOVAL OR ADDITION OF ELECTRICAL DEVICES AND CONTROLS IN REMODELED AREAS.
3. CIRCUITS INDICATED ARE INTENDED TO DENOTE WHICH DEVICES/FIXTURES ARE TO BE WIRED TO A COMMON CIRCUIT BREAKER, AND NOT ITS POSITION IN THE PANEL UNLESS RELIEVED/SPARE CIRCUIT BREAKER MOUNTING SPACES, PROVIDE CIRCUIT BREAKERS AS REQUIRED. REBALANCE LOADS BETWEEN PHASES (MAX. 7.5%) UPON COMPLETION OF WIRING.
4. ALL EXISTING DEVICES WHICH ARE NOT SHOWN ON THESE DRAWINGS OR DIRECTED BY A/E SHALL BE REMOVED.
5. EXACT LOCATION OF SPECIAL PURPOSE OUTLETS SHALL BE VERIFIED IN FIELD. VERIFY SPECIFIC WIRING REQUIREMENTS WITH VENDORS' DRAWINGS/INSTRUCTION. COORDINATE ELECTRICAL WORK WITH WORK OF OTHER TRADES.
6. INCLUDE FISH WIRE IN ALL NON-POWER CONDUITS.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY DISCONNECTING POWER AND REMOVING THE EXISTING FIXTURES FOR REUSE. ANY FIXTURE(S), ELECTRICAL DEVICES, NOT INDICATED TO BE REUSED SHALL BE PROPERLY DISPOSED OF AND/OR IN ACCORDANCE WITH THE SPECIFICATIONS.
8. VERIFY EXACT LOCATION OF LIGHTING FIXTURES IN THE FIELD TO AVOID CONFLICT WITH MECHANICAL EQUIPMENT, DUCT WORK, AND PIPES.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING AND Aiming ALL FIXTURES TO THE OPTIMUM DISTRIBUTION AND OWNER'S SATISFACTION.
10. THE CONTRACTOR SHALL DO THE NECESSARY DEMOLITION WORK IN THE AFFECTED AREAS INCLUDING THE REMOVAL OF LIGHTING FIXTURES, LAMPS, WIRING, ACCESSIBLE CONDUIT, AND ELECTRICAL EQUIPMENT. IN ADDITION, PRECEDING DEMOLITION WORK, HE SHALL DE-ENERGIZE ALL CIRCUITS IN THE AFFECTED AREAS AND WHERE WIRING IS ROUTED THROUGH THESE AREAS SERVING AREAS OF THE BUILDING REMAINING IN SERVICE, PROVIDE TEMPORARY AND/OR PERMANENT WIRING AS REQUIRED. ALSO, WHERE NECESSARY TO MAINTAIN SERVICE IN OTHER AREAS, PROVIDE NECESSARY AND REQUIRED SOURCES OF POWER AND TEMPORARY WIRING. REMOVE ALL CONDUIT AND WIRING OF EQUIPMENT BEING REMOVED AND/OR ABANDONED BACK TO SOURCE.
11. A/E REVIEW OF REDUNDANT SUBMITTALS FROM BACKUP, SECOND SOURCE OR REPLACEMENT SUPPLIERS/CONTRACTORS IS CONTRACTOR'S EXPENSE.
12. A/E SERVICES RELATED TO A SUBSTITUTION OR CHANGE PROPOSED BY THE CONTRACTOR ARE THE CONTRACTOR'S EXPENSE. DO NOT RELY ON ACCEPTANCE IN PREPARING BIDS. THE A/E MAY REJECT THESE WITHOUT CAUSE.

SYMBOLS

-  POLE MOUNTED LIGHT FIXTURE - SIDE ARM
-  ELECTRICAL POLE
-  SPECIAL PURPOSE OUTLET - SEE SCHEDULE
-  PHOTOCELL.

- MISCELLANEOUS SYMBOLS
-  INDICATES DETAIL NUMBER
  -  SEE DETAIL
  -  INDICATES SHEET NUMBER
  -  SEE NOTE
  -  INDICATES SHEET NUMBER

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M&I WATER STREET  
PARKING

Location:  
MILWAUKEE, WI

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EL

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EL02	SITE PHOTOMETRIC CALCULATION
EL03	ELECTRICAL SCHEDULES AND DETAILS.