MENOMONEE RIVER PARKWAY
CONGRESS TO BURLEIGH

PARKWAY RECONSTRUCTION AND GREEN INFRASTRUCTURE

MILWAUKEE COUNTY PARKS

P280-13626

07/03/2014

MILWAUKEE COUNTY DEPARTMENT OF
Administrative Services
Architecture, Engineering &
Environmental Services Section

CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

LEGEND:

- EXISTING CATCH BASIN OR INLET
- EXISTING LIGHT POLE
- EXISTING GAS METER
- EXISTING TELEPHONE BOX
- EXISTING TRANSFORMER
- EXISTING MANHOLE
- X — EXISTING FENCE
- W — EXISTING UNDERGROUND WATER LINE
- E — EXISTING UNDERGROUND ELECTRIC LINE
- L — EXISTING UNDERGROUND LIGHTING
- SS — EXISTING STORM SEWER
- 700 — EXISTING CONTOURS
- EXISTING PAVEMENT
- EXISTING CURBFACE
- IRON PIPE (PROPERTY CORNER)
- PROPOSED CATCH BASIN
- SURVEY CONTROLE POINT
- PROPOSED LIGHT POLE
- SAN — PROPOSED SANITARY SEWER
- PROPOSED PAVEMENT
- PROPOSED CURBFACE
- 700 — PROPOSED CONTOURS
- L — PROPOSED UNDERGROUND LIGHTING
- SS — PROPOSED STORM SEWER
- xxxxxxxxxxx BUTT JOINT
- EXISTING TREE/BUSH LINE
- PROPOSED TREE/BUSH LINE
- EXISTING PROFILE
- PROPOSED PROFILE
- EXISTING CONIFEROUS TREE
- EXISTING DECIDUOUS TREE
- PROPOSED DECIDUOUS TREE
- TREE TO BE REMOVED
- SOD AREA

ABBREVIATIONS:

ASP	ASPHALT
CABC	CRUSHED AGGREGATE BASE COURSE
CB	CATCH BASIN
C.I.	CAST IRON
CL	CENTERLINE
CMP	CORRUGATED METAL PIPE
CONC	CONCRETE
COND	CONDUIT
DIA.	DIAMETER
E	ELECTRICAL
ELEV	ELEVATION
EXST	EXISTING
E	EASTING
F TO F	FACE TO FACE
FOC	FACE OF CURB
G	GAS
G.W.I.	GALVANIZED WROUGHT IRON
HOR	HORIZONTAL
HP	HIGH POINT
I.E.	INVERT ELEVATION
LT	LEFT
L	LIGHTING CABLE/CONDUIT
MAX	MAXIMUM
MIN	MINIMUM
MH	MANHOLE
N	NORTHING
PAVT	PAVEMENT
PKG	PARKING
PKWY	PARKWAY
PROP	PROPOSED
PVC	POLYVINYL CHLORIDE
R	RADIUS
RT	RIGHT
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
SAN	SANITARY SEWER
SS	STORM SEWER
ST	STREET
STA	STATION
T	TELEPHONE
TYP	TYPICAL
UD	UNDER DRAIN
VERT	VERTICAL
W	WATER
WEPCO	WI ELECTRICAL POWER CO
X	EXTRA

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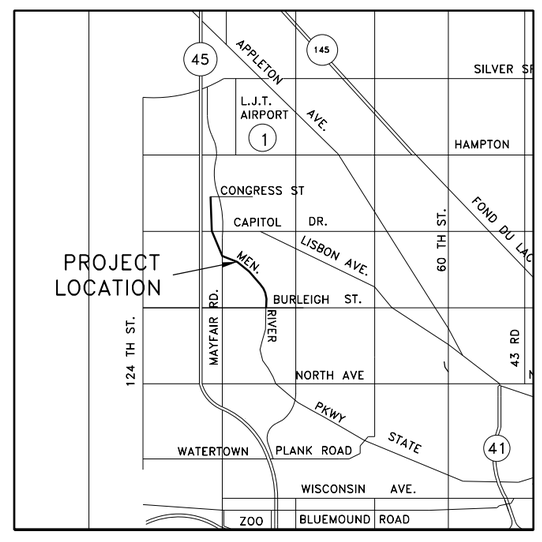


KEN SAIKI DESIGN
LANDSCAPE ARCHITECTS

gai consultants

PROJECT APPROVAL BY _____ DIRECTOR-DAS
DATE _____

RECOMMENDED FOR APPROVAL BY: _____
DATE _____

UNIT MANAGER REVIEW BY: _____
DATE _____

PROJECT MANAGER _____
DATE _____

BUILDING NO.

SITE NO.

PROJECT NO.
P280-13626

SHEET NO.
1
1 OF 110

FILE NO.

GENERAL NOTES

APPLICATION SPECIFICATIONS - STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS, STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, 2008 EDITION, WITH AMMENDMENTS TO DATE, AND STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN.

ALL INFORMATION SHOWN ON EXISTING CONDITIONS IS BASED ON RECORDS AVAILABLE TO MILWAUKEE COUNTY DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS AS OF AUGUST 2013, ALTHOUGH THE COUNTY IN NO WAY GUARANTEES THE INFORMATION AS BEING ENTIRELY ACCURATE IN THE EVENT PERSONS PERFORMING WORK FOR MILWAUKEE COUNTY SHOULD ENCOUNTER ERRORS OR OMISSIONS IN THESE DRAWINGS DURING CONSTRUCTION OF THIS PROJECT, IT SHALL BE THEIR RESPONSIBILITY TO INFORM THE COUNTY AS SOON AS POSSIBLE.

ALL RADII SHOWN ON THE PLAN WHERE THERE IS CONCRETE CURB & GUTTER ARE MEASURED TO THE BACK OF CURB.

CONCRETE CURB & GUTTER GRADES ARE TO THE TOP OF CURB, UNLESS OTHERWISE NOTED.

CURB AND GUTTER JOINT SPACING SHALL BE 10 FEET.

CONTRACTOR SHALL GRUB SHRUBS AND BUSHES WITHIN SLOPE LIMITS AS DIRECTED AND APPROVED BY THE ENGINEER.

MULTI-USE PATH WILL BE CONSTRUCTED TO MATCH EXISTING GRADE WHERE PATH IS LOCATED 15' BEYOND NEW BACK OF CURB UNLESS NOTED.

CROSS SECTIONS SHOWN INCLUDE THE THICKNESS OF TOPSOIL WHERE REQUIRED. TOPSOIL SHALL BE REPLACED WITH 4-INCH TYPICAL DEPTH.

FERTILIZE, SEED AND MULCH ALL TOPSOILED AREAS WITHIN 7 WORKING DAYS AFTER GRADING WORK IS COMPLETED.

REMOVAL OF EROSION CONTROL DEVICES WILL BE INCLUDED IN THE COST OF THEIR RESPECTIVE BID ITEMS.

NO TREES OR SHRUBS SHALL BE REMOVED WITHOUT THE APPROVAL OF THE PROJECT ENGINEER OR LANDSCAPE ARCHITECT.

2% CROSS SLOPE UNLESS OTHERWISE NOTED.

ALL TRAFFIC CONTROL, SIGNS & DETOUR PLAN SHALL FOLLOW MUTCD GUIDELINES.

ALL CITY OF WAUWATOSA SANITARY MANHOLE ADJUSTMENTS SHALL REQUIRE NEW NEENAH R-1661-B FRAME WITH SELF SEALING LID & 1" VENT HOLE & PLUG. AND NEW CHIMNEY WITH INTERNAL SEAL.

ALL CITY & COUNTY STORM MANHOLE ADJUSTMENTS REQUIRE NEW CHIMNEY WITH NEENAH R-3222-1A FRAME & GRATE (COUNTY) OR NEENAH R-1661-B FRAME & GRATE (CITY)

THE CONTRACTOR SHALL BUILD RAIN GARDENS & BIO BASINS PER EACH SPECIFIED SEGMENT. TEMPORARY SEED WITH RYE SEED IF WEATHER DOES NOT ALLOW FOR PERMANENT SEEDING. COST INCIDENTAL TO OTHER ITEMS.

EXISTING CROSS-SECTIONS DETAIL EXISTING ASPHALT, CONCRETE & BASE TO BE REMOVED, SALVAGED/RECYCLED, STOCKPILED ON SITE & RE-USED AS BASE COURSE ON THE ROAD & PATH. THE CONTRACTOR WILL BE REQUIRED TO REMOVE & PROCESS THE EXISTING MATERIAL TO MEET SPECIFICATIONS & MAXIMIZE THE AMOUNT OF RECYCLED MATERIAL UTILIZED. POTENTIAL STOCK PILE LOCATIONS ARE SHOWN ON THE PLAN BUT CONTRACTOR WILL BE REUIRED TO SUBMIT FINAL STOCKPILE LOCATIONS WHICH COULD INCLUDE LOCATIONS ON THE ROADWAY. COMMON EXCAVATION WILL INCLUDE DEPTH BELOW THESE LOCATIONS.

SET CATCH BASIN CASTINGS 1/2-INCH BELOW FINISHED GRADE WITH SMOOTH TROWELED EDGES.

CURB FLARES FOR DEPRESSED CURB OPENINGS WHERE SHOWN ON PLAN SHALL BE AT A 6:1 SLOPE.

CONTRACTOR SHALL SECURE ALL REQUIRED PERMITS.

SAWCUT LIMITS OF REMOVAL OF EXISTING PAVEMENT.

DETAILS OF CONSTRUCTION NOT SHOWN ON THE PLAN SHALL CONFORM TO THE PERTINENT REQUIREMENTS AND APPLICABLE SPECIAL PROVISIONS. CONTRACTOR SHALL UNCOVER AND CHECK ELEVATION OF EXISTING UTILITIES WHERE CROSSED BY NEW STORM SEWER. ALTERATION OF UTILITY OR REVISION OF SEWER ELEVATION MAY BE NECESSARY.

EXCAVATION BELOW SUBGRADE (EBS) IS NOT USED TO BALANCE YARDAGE AND IS NOT SHOWN ON CROSS SECTIONS BUT IS MEASURED AND PAID FOR AS EBS. THE LOCATION FOR EBS WILL BE DETERMINED BY THE ENGINEER.

THE EROSION CONTROL ITEMS SHOWN ON THE PLANS ARE AT APPROXIMATE LOCATIONS. THE EXACT LOCATION AND DIMENSIONS SHALL BE DETERMINED BY THE ENGINEER. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL SUCH TIME AS THE ENGINEER DETERMINES THE MEASURE IS NO LONGER NECESSARY.

THE LOCATION OF EXISTING, ABANDONED AND PROPOSED UTILITIES SHOWN ON THE PLAN ARE APPROXIMATE. THERE MAY BE OTHER UTILITIES WITHIN THE PROJECT AREA NOT SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO HAVE ALL UTILITIES LOCATED BEFORE EXCAVATION.

EXISTING SIGNS AFFECTED BY CONSTRUCTION SHALL BE PROTECTED OR RELOCATED AS DIRECTED BY THE ENGINEER. CONTRACTOR TO SALVAGE EXISTING SIGNS AND INSTALL NEW SIGNS AS SHOWN. CLEARANCE TO THE BOTTOM OF SIGNS SHALL BE 7 FEET. WHEN TWO SIGNS ARE MOUNTED ON A SINGLE POST, THE BOTTOM OF SIGN SHALL BE 5 FEET MEASURED FROM THE BOTTOM OF THE SIGN. WHEN THREE SIGNS ARE MOUNTED ON A SINGLE POST, THE BOTTOM SIGN SHALL BE 4 FEET MEASURED FROM THE BOTTOM OF THE SIGN. MOUNT ALL NO PARKING SIGNS AT 45° ANGLE TO PARKWAY. SALVAGED SIGNS SHALL BE DELIVERED TO PARKS MAINTENANCE AT 1150 N. 68TH STREET.

ALL NEW CABLE & DUCT FOR LIGHTING SHALL BE INSTALLED 1' BACK OF CURB TO AVOID INSTALLATION BELOW RAIN GARDENS OR BIOFILTRATION BASINS.

WETLAND LINES ARE APPROXIMATE BASED UPON DNR SURFACE DATA VIEWER.

LARRY ANDERSON (MMSD), 414-225-2241, SHALL BE CONTACTED AT LEAST THREE BUSINESS DAYS PRIOR TO CONSTRUCTION ON OR IN THE VICINITY OF MMSD FACILITIES.

LARRY ANDERSON (MMSD), 414-225-2241, SHALL ALSO BE CONTACTED AT LEAST THREE BUSINESS DAYS PRIOR TO CONSTRUCTION OF THE STORM OUTFALLS ON THE MILWAUKEE RIVER ON OR IN THE VICINITY OF MMSD FACILITIES.

CONTACT MMSD, BOB REBITSKI, 414-225-2214 AT LEAST 5 DAYS PRIOR TO START OF CONSTRUCTION & COORDINATE SANITARY MANHOLE ADJUSTMENTS BY OTHERS.

HORIZONTAL DATUM IS BASED ON THE WISCONSIN STATE PLANE COORDINATE SYSTEM GRID, SOUTH ZONE, (NAD 1927). ALL BEARINGS ARE REFERENCED TO GRID NORTH. COORDINATES SHOWN ON PLAN ARE GRID COORDINATES. COMBINATION SCALE AND SEA LEVEL REDUCTION FACTOR = 0.99991464. VERTICAL DATUM IS BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929.

MENOMONEE RIVER PARKWAY
HMA PAVEMENT SHALL BE 4 INCH THICK CONSTRUCTED WITH THE FOLLOWING LAYERS AND GRADATIONS. HMA PAVEMENT, 2-1/4 INCH LOWER LAYER, TYPE E-1, NOMINAL 19.00 MM, AND ASPHALTIC MATERIAL WITH A PERFORMANCE GRADED DESIGNATION OF PG 58-28.
1-3/4 INCH UPPER LAYER, TYPE E-1, NOMINAL 9.50 MM, AND ASPHALTIC MATERIAL WITH A PERFORMANCE GRADED DESIGNATION OF PG 64-22.

BIKE PATH
HMA PAVEMENT SHALL BE 3 INCH THICK CONSTRUCTED WITH ONE LAYER HMA PAVEMENT, 3 INCH, TYPE E-0.3, NOMINAL 9.50 MM, AND ASPHALTIC MATERIAL WITH A PERFORMANCE GRADED DESIGNATION OF PG 64-22.

WHEN QUANTITY OF THE ITEMS OF LOWER OR UPPER LAYER OF ASPHALT IS MEASURED FOR PAYMENT BY THE TON, THE DEPTH OR THICKNESS OF THE LAYER SHOWN ON THE PLAN IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.

TO OBTAIN LOCATION OF
PARTICIPANTS' UNDERGROUND
FACILITIES BEFORE YOU
DIG IN WISCONSIN

DIGGERS HOTLINE

Call 811 3 Work Days Before You Dig
or Toll Free (800) 242-8511
Hearing Impaired TDD (800) 542-2289
www.DiggersHotline.com

WIS. STATUTE 182.0175 (1974)
REQUIRES MIN. OF 3 WORK DAYS
NOTICE BEFORE YOU EXCAVATE.

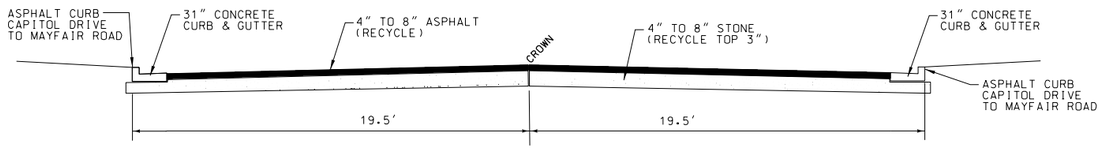
PARKS MAINTENANCE DIVISION

(414) 258-2322

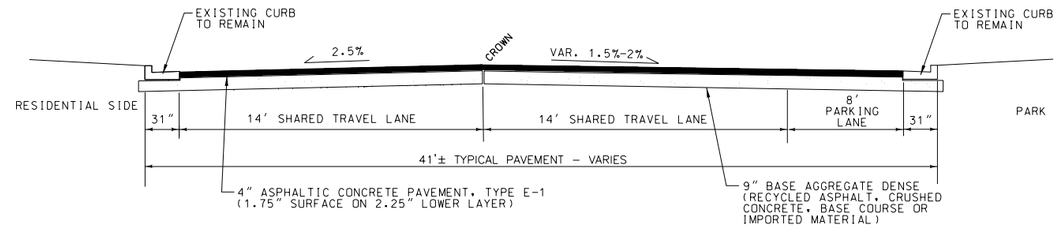
THE CONTRACTOR MUST NOTIFY DIGGERS HOTLINE AND AFFECTED UTILITIES PRIOR TO THE START OF WORK. PARKS MAINTENANCE WHICH IS NOT A MEMBER OF DIGGERS HOTLINE MUST ALSO BE CONTACTED SEPARATELY AT LEAST 5 DAYS IN ADVANCE OF EXCAVATION.

MILWAUKEE COUNTY DEPARTMENT OF
ADMINISTRATIVE SERVICES
Architecture, Engineering &
Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

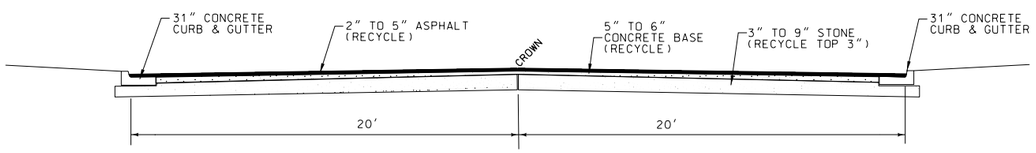
DRAWN BY:	BJG
CHECKED BY:	TH
SCALE:	NTS
DATE:	7/03/14
PROJECT TITLE:	MENOMONEE RIVER PARKWAY
SHEET DESCRIPTION:	GENERAL NOTES
SITE NO.	
BUILDING NO.	
PROJECT NO.	P280-13626
SHEET NO.	2
	2 OF 110
FILE NO.	



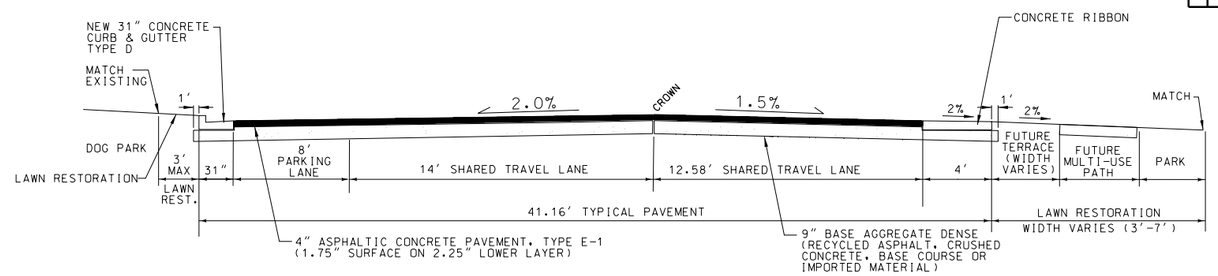
EXISTING TYPICAL SECTION
CONGRESS STREET TO MAYFAIR ROAD
STA 10+00 TO STA 57+32



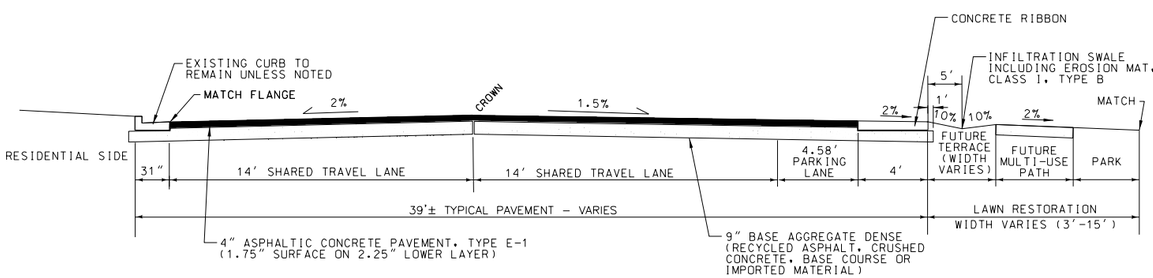
STATION 37+75 TO STATION 39+80



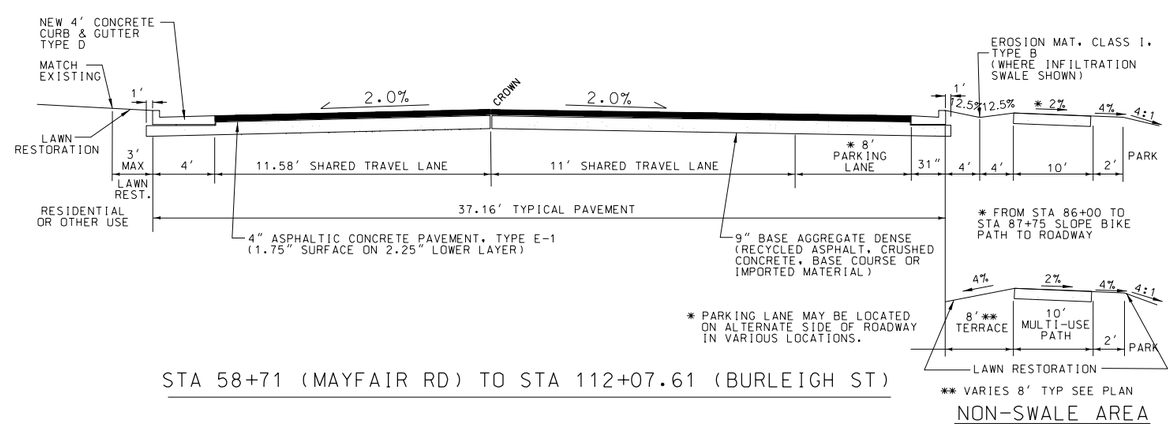
EXISTING TYPICAL SECTION
MAYFAIR ROAD TO BURLEIGH ROAD
STA 58+71 TO STA 112+07.61



STA 39+80 TO STA 57+32 (MAYFAIR ROAD)
* STA 39+80 TO 40+85 CROWN VARIES



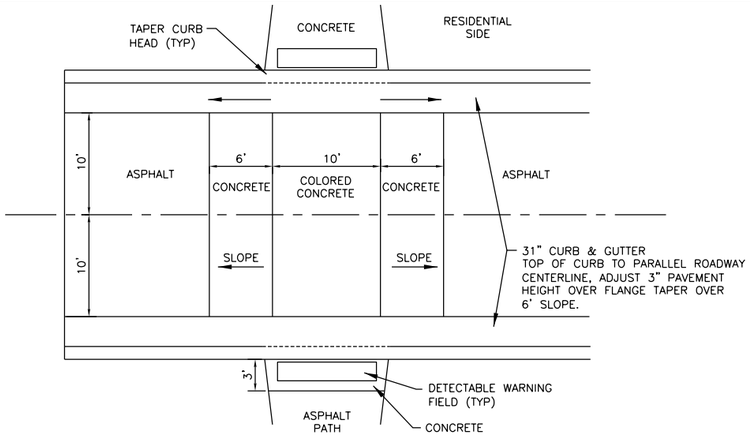
STA 10+00 (CONGRESS ST) TO STA 37+75



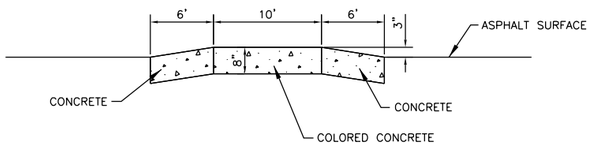
STA 58+71 (MAYFAIR RD) TO STA 112+07.61 (BURLEIGH ST)
NON-SWALE AREA

MILWAUKEE COUNTY DEPARTMENT OF ADMINISTRATIVE SERVICES
Architecture, Engineering & Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

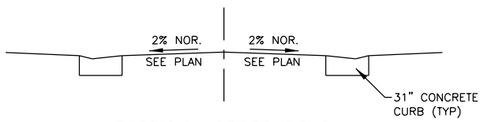
DRAWN BY: BJG	CHECKED BY: TH
SCALE: NTS	DATE: 7/03/14
PROJECT TITLE: MENOMONEE RIVER PARKWAY	SHEET DESCRIPTION: TYPICAL SECTIONS
SITE NO.	BUILDING NO.
PROJECT NO. P280-13626	
SHEET NO. 3	3 OF 110
	FILE NO.



PLAN VIEW

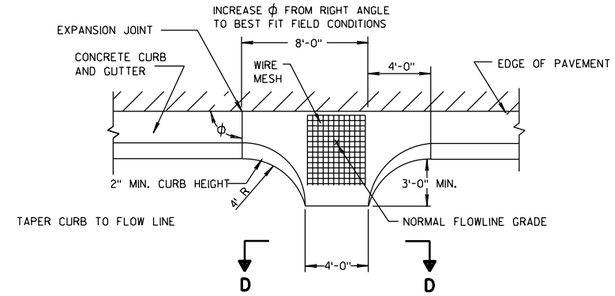


SECTION ALONG ROAD

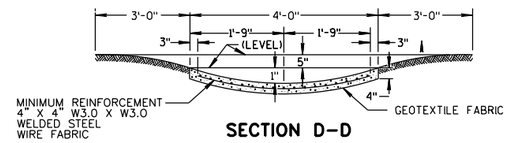


SECTION ACROSS ROAD

8" CONCRETE RAISED PEDESTRIAN CROSSING

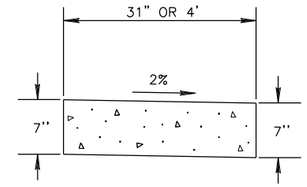


PLAN VIEW

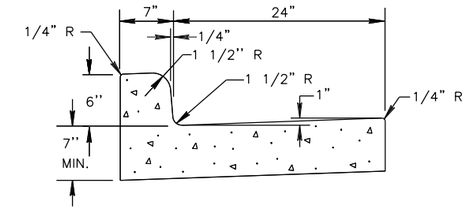


SECTION D-D

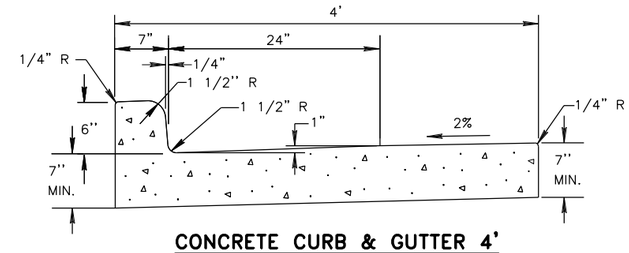
CONCRETE SURFACE DRAIN



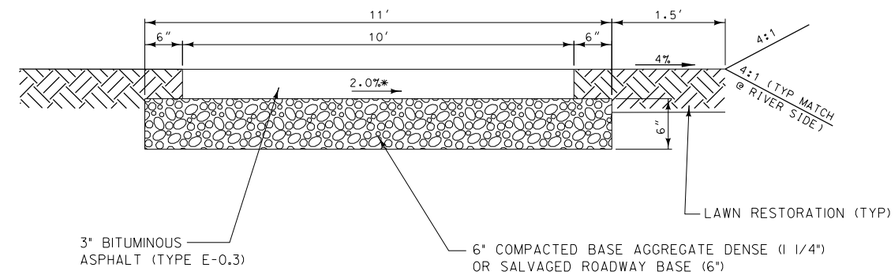
CONCRETE RIBBON



CONCRETE CURB & GUTTER 31"

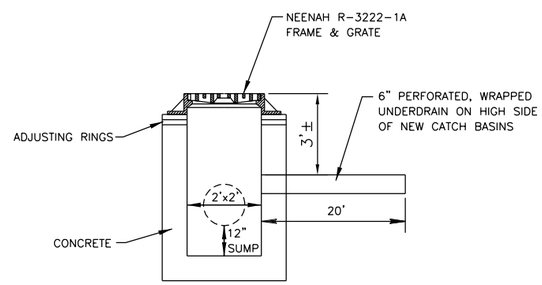


CONCRETE CURB & GUTTER 4'

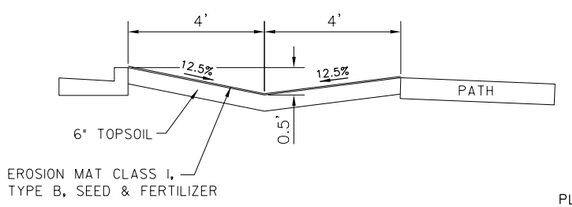


PEDESTRIAN PATH DETAIL

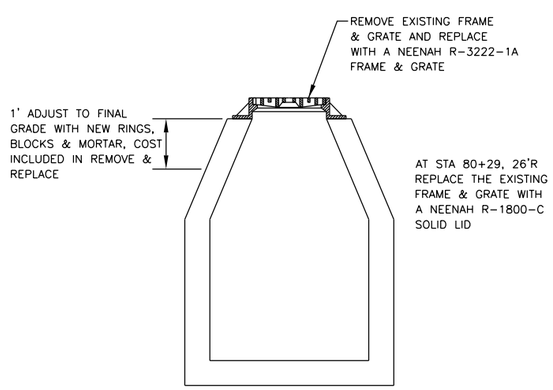
*NOTE:
CROSS SLOPE OF PAVEMENT SHALL BE TO LOW SIDE OF TOPOGRAPHY SEE PLAN AND CROSS SECTIONS.



NEW CATCH BASIN DETAIL

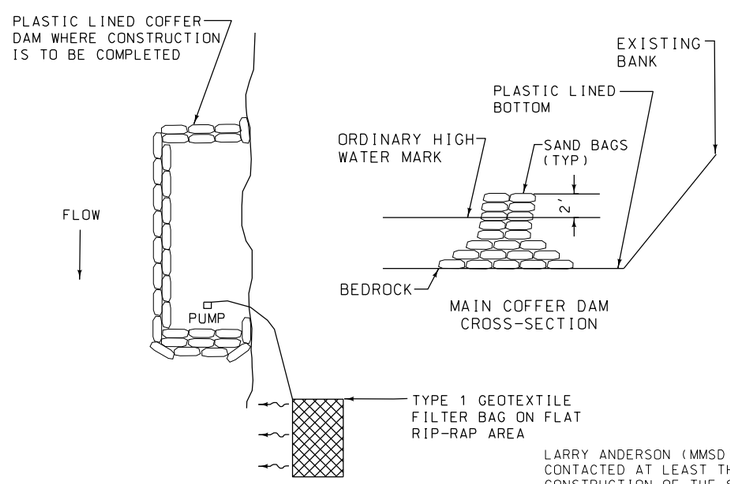


INFILTRATION SWALE DETAIL



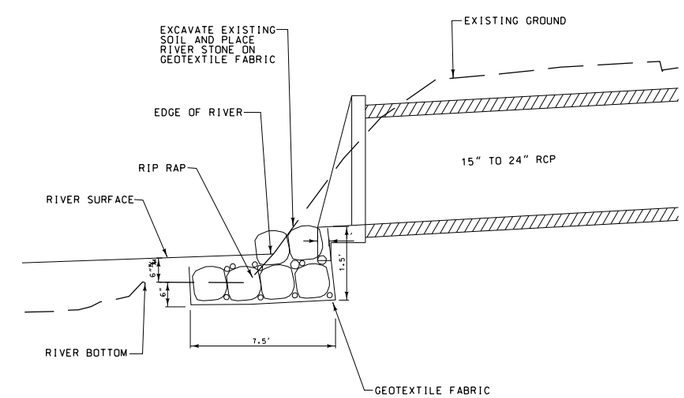
EXISTING CATCH BASIN DETAIL

REMOVE & REPLACE GRATE



COFFER DAM DETAIL

LARRY ANDERSON (MMSD), 414-225-2241, SHALL ALSO BE CONTACTED AT LEAST THREE BUSINESS DAYS PRIOR TO CONSTRUCTION OF THE STORM OUTFALLS ON THE MILWAUKEE RIVER ON OR IN THE VICINITY OF MMSD FACILITIES.

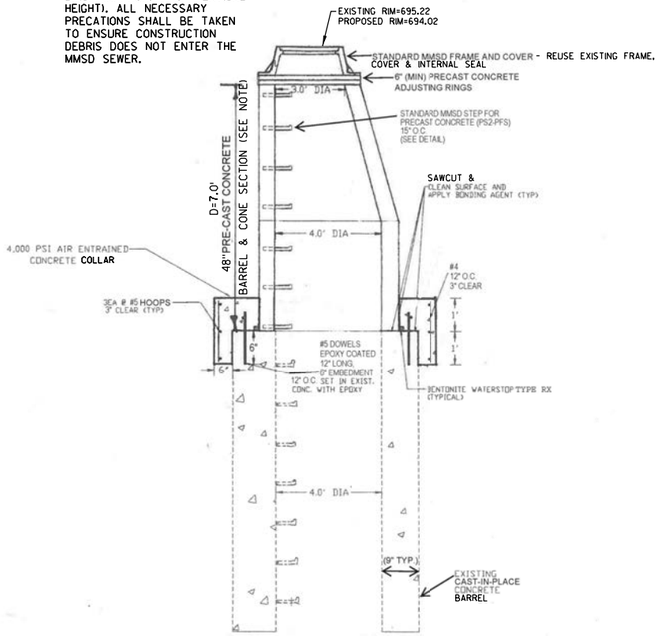


TYPICAL OUTFALL CROSS SECTION VIEW

MILWAUKEE COUNTY DEPARTMENT OF ADMINISTRATIVE SERVICES
Architecture, Engineering & Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

DRAWN BY: BJG	CHECKED BY: TH
SCALE: NTS	DATE: 7/03/14
PROJECT TITLE: MENOMONEE RIVER PARKWAY	SHEET DESCRIPTION: DETAILS
SITE NO.	BUILDING NO.
PROJECT NO. P280-13626	
SHEET NO. 4	4 OF 110
	FILE NO.

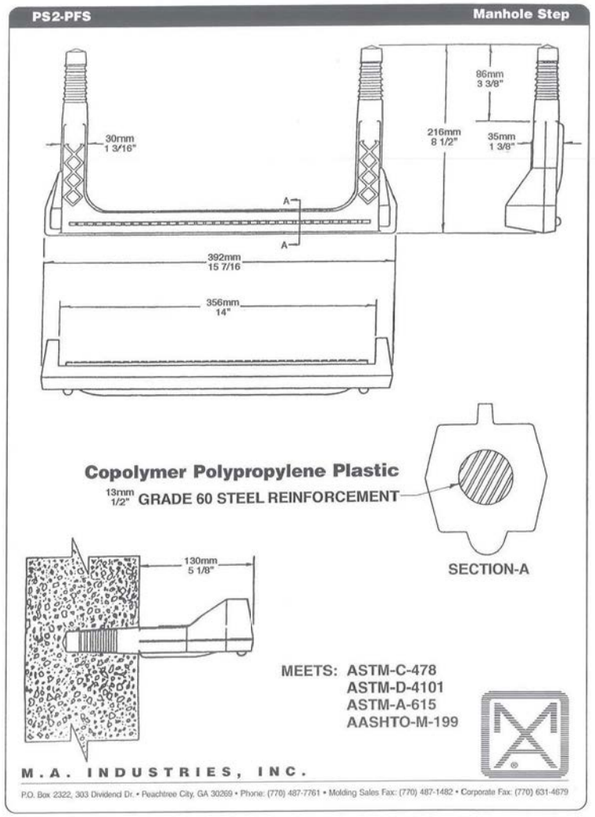
NOTE: REMOVE ALL EXISTING BRICK (APPROX. 7'-0" VERTICAL HEIGHT). ALL NECESSARY PRECATIONS SHALL BE TAKEN TO ENSURE CONSTRUCTION DEBRIS DOES NOT ENTER THE MMSD SEWER.



DETAIL FOR PRECAST MANHOLE EXTENSION TO A MONOLITHIC MANHOLE WITH CONCRETE COLLAR

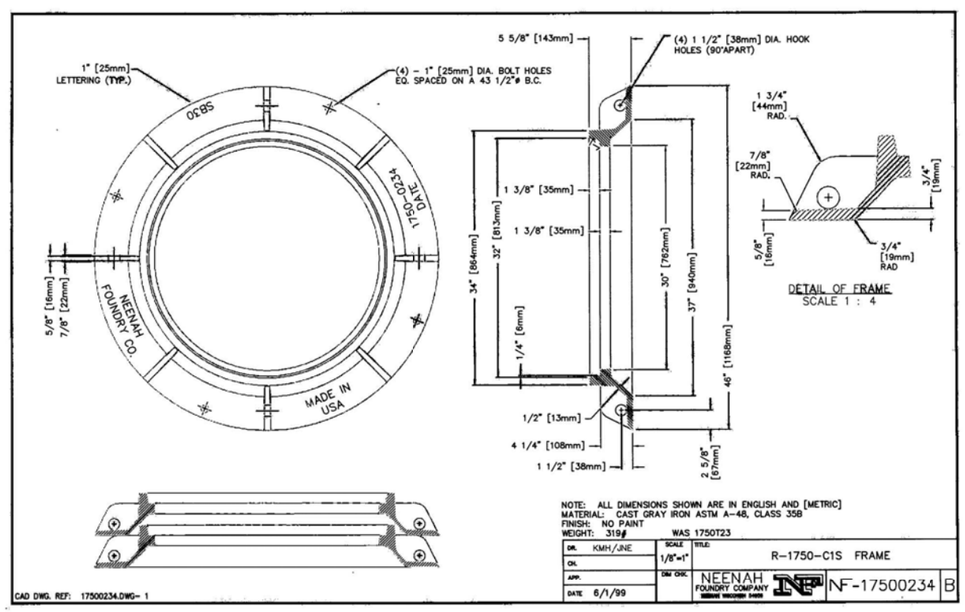
NTS

MIS MH RECONSTRUCT AT NASH ST



NOTE: THE R-1750-C1S FRAME CAN BE MACHINED BY NEENAH FOUNDRY TO RECEIVE THE STANDARD MMSD MIS COVER (NEENAH FOUNDRY CATALOG NO. 0000-1736)

LARRY ANDERSON (MMSD), 414-225-2241, SHALL BE CONTACTED AT LEAST THREE BUSINESS DAYS PRIOR TO CONSTRUCTION ON OR IN THE VICINITY OF MMSD FACILITIES.



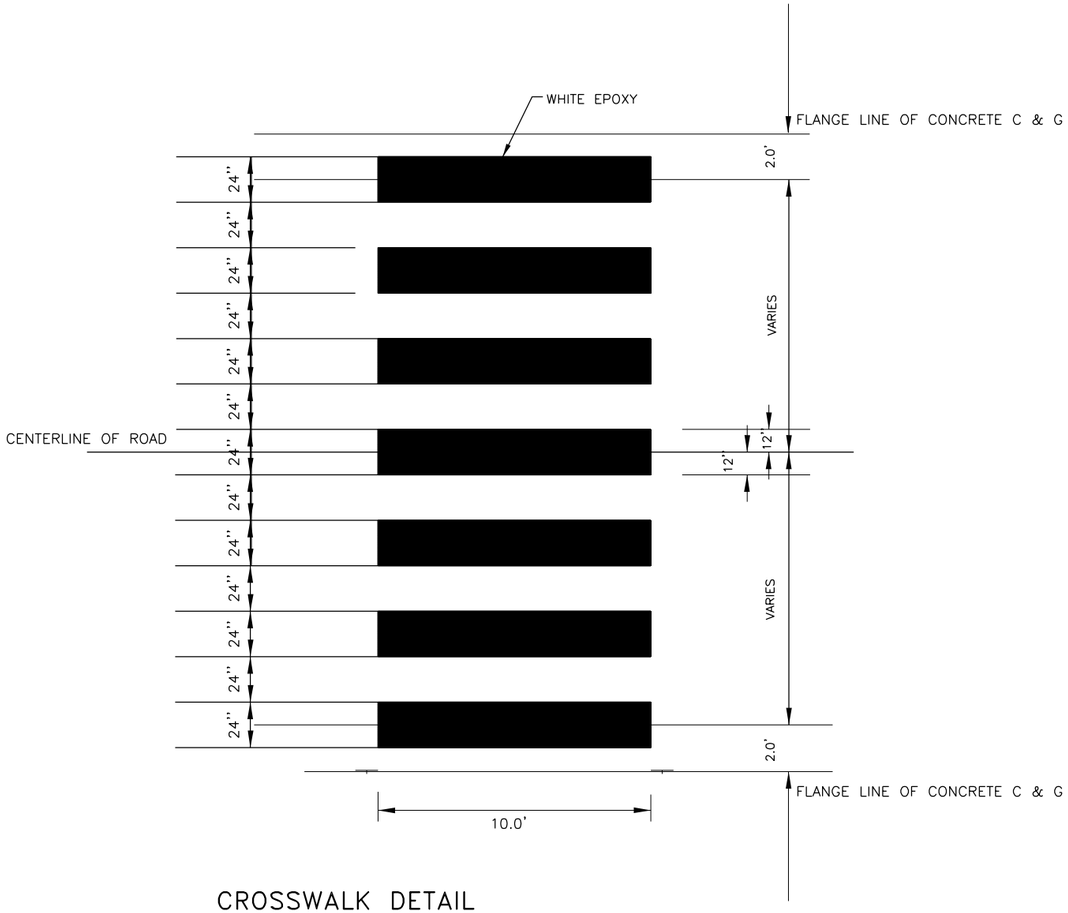
LOW PROFILE FRAME

MIS MH AT STEWART ST

NOTES:
1. USE OF LOW PROFILE FRAME WILL REQUIRE THE INSTALLATION OF AN EXTERNAL RUBBER BOOT FOR THE MANHOLE SEAL AT THE CONTRACTOR'S COST.
2. THE EXISTING MMSD MANHOLE COVER SHALL BE SALVAGED AND REINSTALLED

MILWAUKEE COUNTY DEPARTMENT OF ADMINISTRATIVE SERVICES
Architecture, Engineering & Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

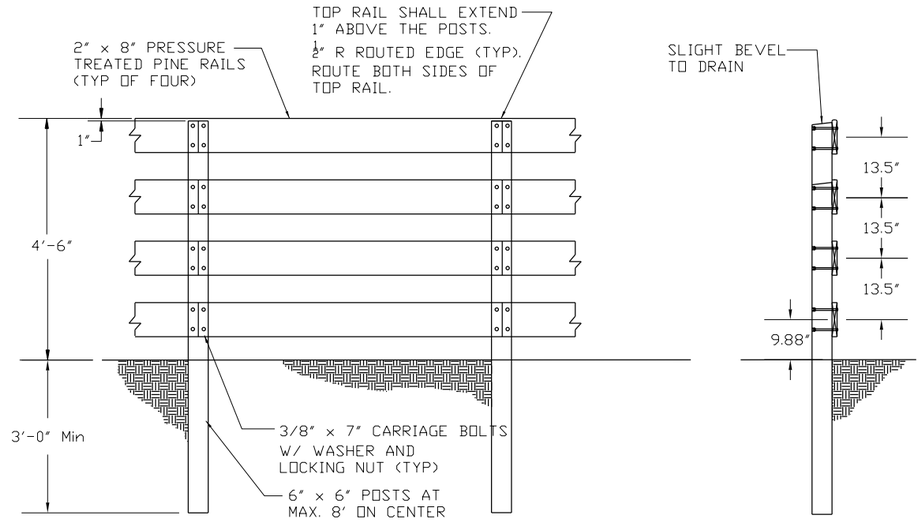
DRAWN BY: BJG
CHECKED BY: TH
SCALE: NTS
DATE: 7/03/14
PROJECT TITLE: MENOMONEE RIVER PARKWAY
SHEET DESCRIPTION: DETAILS
SITE NO.
BUILDING NO.
PROJECT NO. P280-13626
SHEET NO. 4a
5 OF 111
FILE NO.

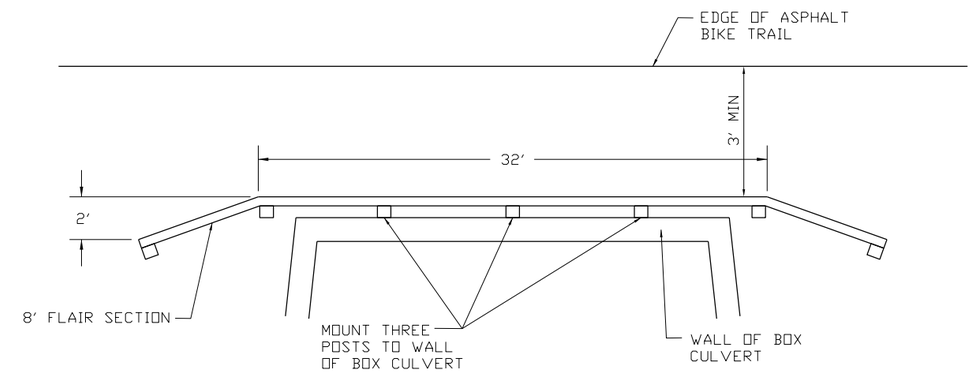


CROSSWALK DETAIL

SECTION

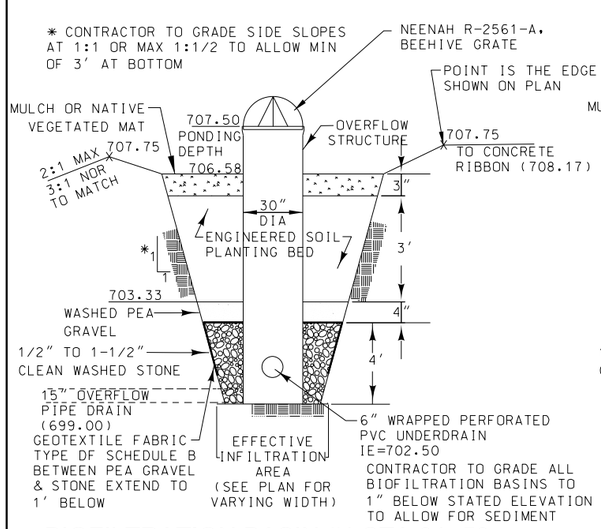
Scale: NO SCALE





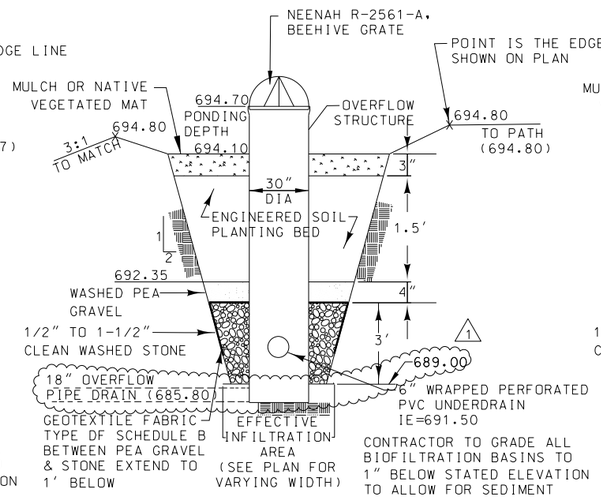
WOODEN RAILING DETAILS AT BOX CULVERT (59+00±)

NO SCALE



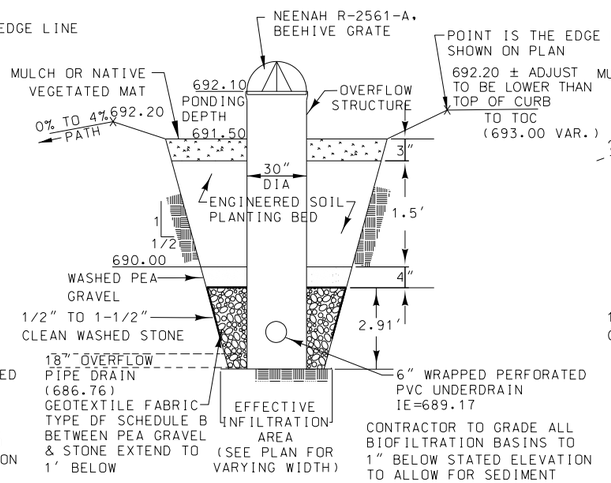
BIOFILTRATION BASIN #1 STA 31+50

NTS



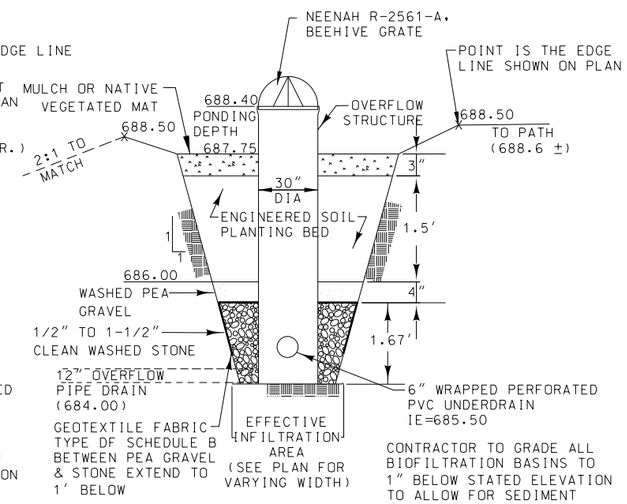
BIOFILTRATION BASIN #2 STA 65+00

NTS



BIOFILTRATION BASIN #3 STA 81+00

NTS



BIOFILTRATION BASIN #4 STA 92+00

NTS

12/4/14	REVISED STORM GRADE & OVERFLOW STRUCTURE DEPTH	TTH

MILWAUKEE COUNTY DEPARTMENT OF ADMINISTRATIVE SERVICES
Architecture, Engineering & Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

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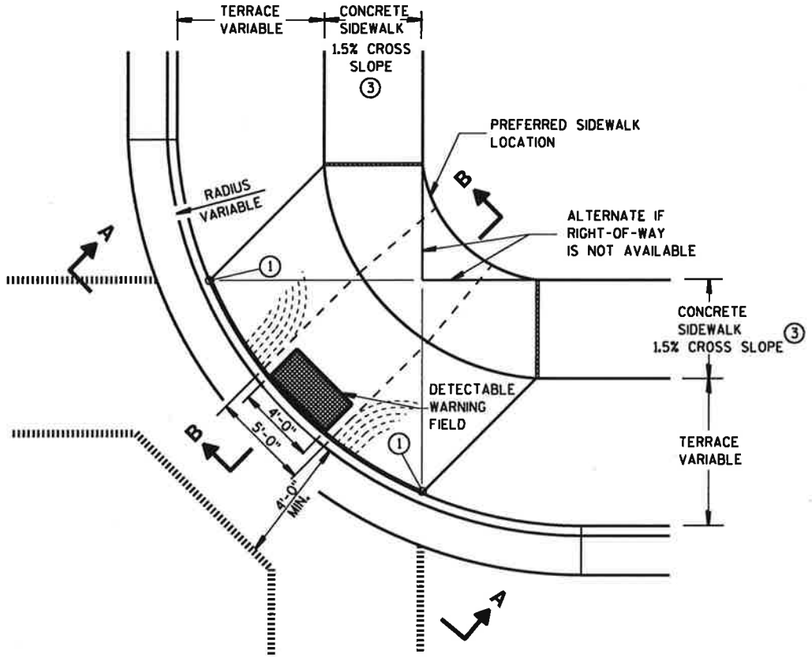
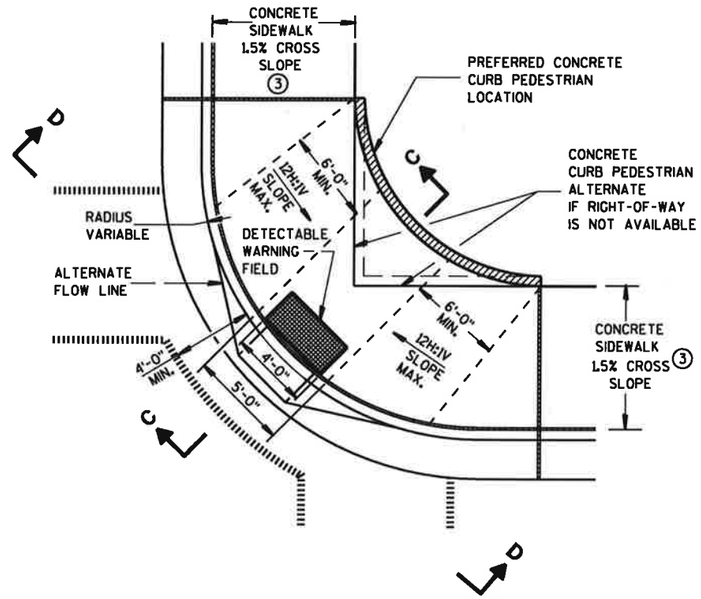
SHEET DESCRIPTION: DETAILS
SITE NO.
BUILDING NO.
PROJECT NO. P280-13626
SHEET NO. 5
5 OF 110
FILE NO.



PLAN VIEW
TYPE 1 RAMP
(CENTER OF CORNER RADIUS)



PLAN VIEW
TYPE 1-A RAMP
(NO TERRACE)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

RAMPS SHALL BE BUILT AT 12H:1V OR FLATTER. WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

TYPE 1 RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.

DETECTABLE WARNING FIELD SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE LINEAL FOOT AS "CONCRETE CURB PEDESTRIAN". CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK, INCLUDING THE AREA UNDER THE DETECTABLE WARNING FIELD.

SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD".

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.

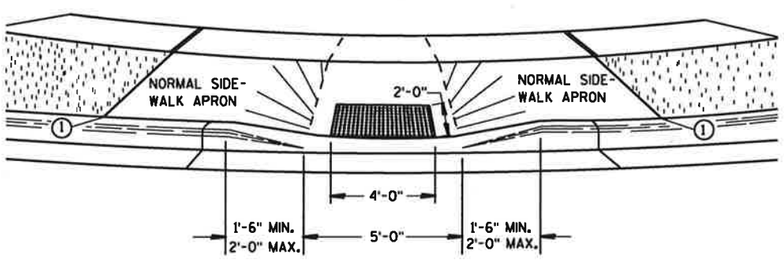
① THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB.

② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.

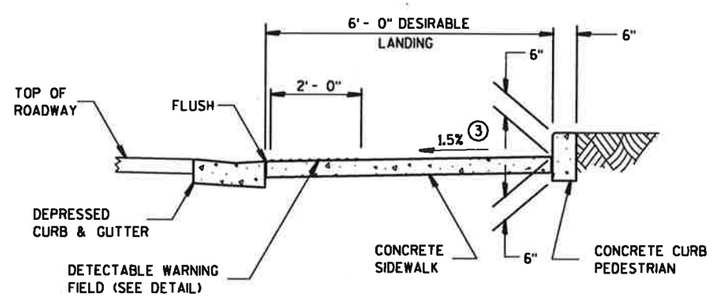
③ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

LEGEND

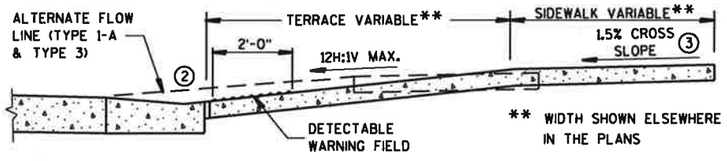
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



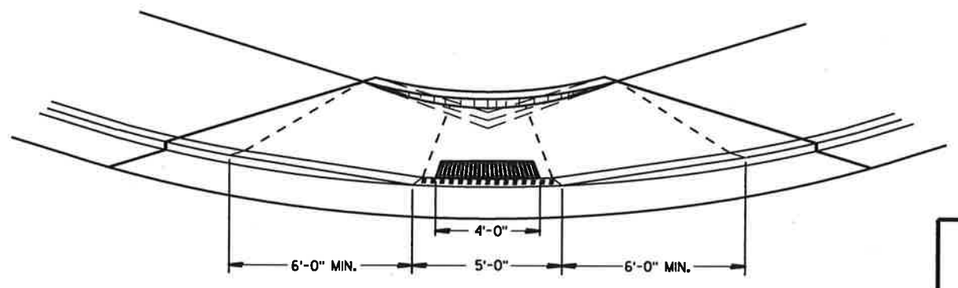
VIEW A-A



SECTION C-C



SECTION B-B

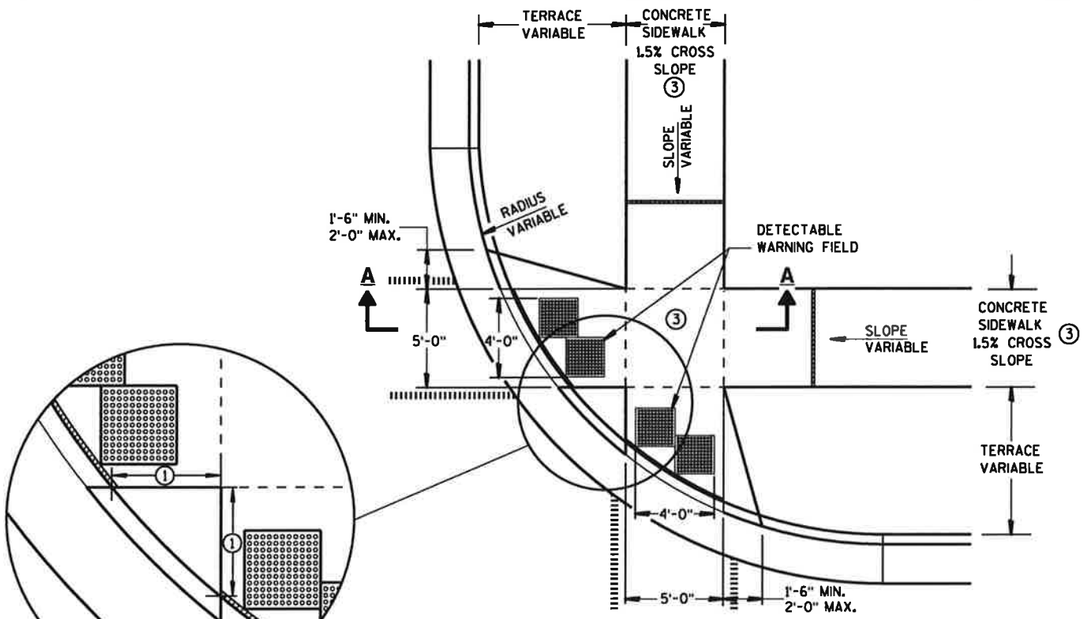


VIEW D-D

CURB RAMPS TYPES 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
S.D.D. 8 D 5-15a



PLAN VIEW
TYPE 2 RAMP
(ON LINE WITH SIDEWALK)

GENERAL NOTES

USE THE TYPE 3 RAMP ONLY WHEN A TYPE 1 OR TYPE 2 CANNOT BE ACHIEVED BECAUSE OF FIELD CONDITIONS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

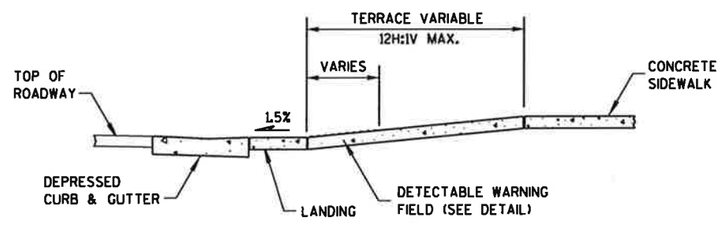
1. WHEN THIS DISTANCE IS LESS THAN 6'-0" IT MAY BE DIFFICULT TO ACHIEVE A 12H:1V SLOPE, OR FLATTER, ON THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 12H:1V SLOPE, OR FLATTER, ON RAMP. 2" MINIMUM CURB HEIGHT.

2. GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.

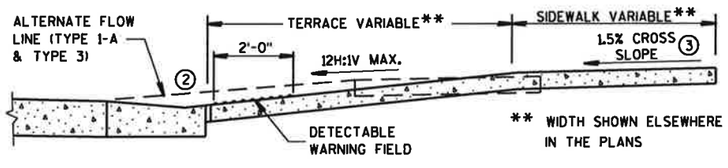
3. ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

LEGEND

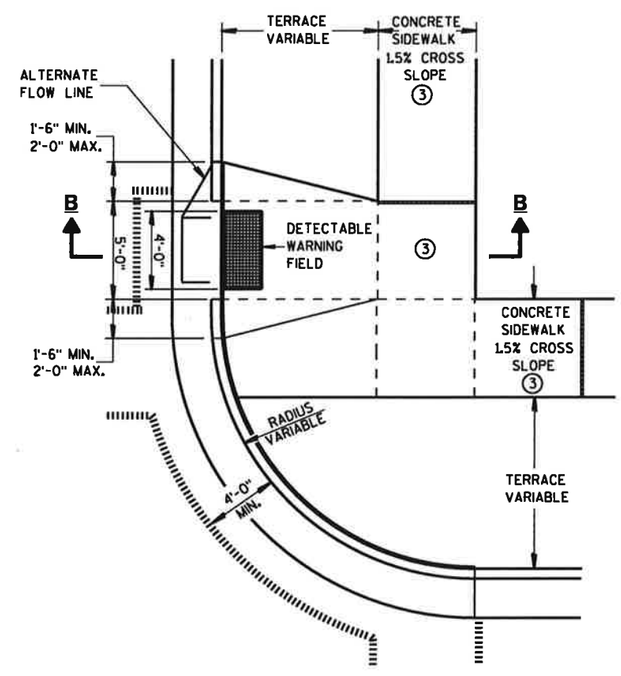
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



SECTION A-A



SECTION B-B



PLAN VIEW
TYPE 3 RAMP
(OUTSIDE OF CROSSWALK AREA)

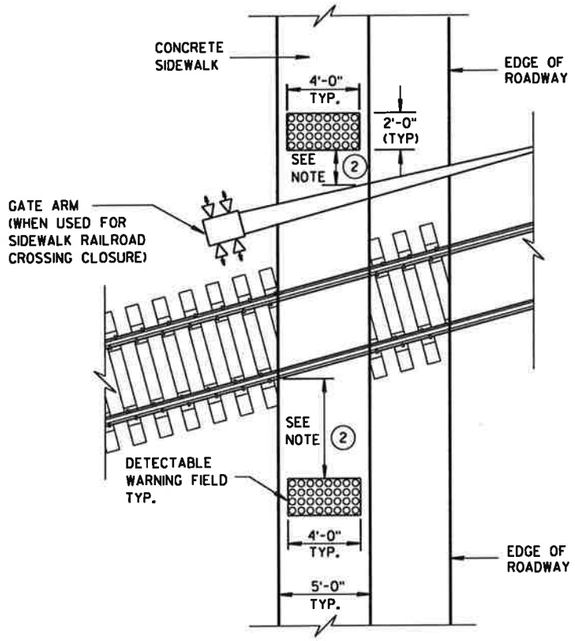
6

6

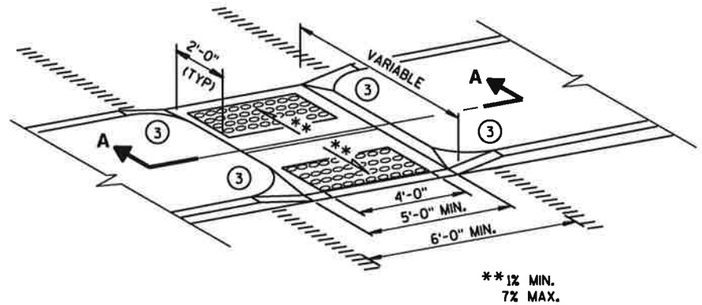
CURB RAMPS
TYPES 2 AND 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

S.D.D. 8 D 5-15b



TYPE 8
DETECTABLE WARNINGS AT RAILROAD CROSSING



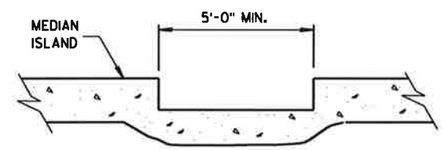
MEDIAN ISLAND
NON-ELEVATED CROSSING
TYPE 5

GENERAL NOTES

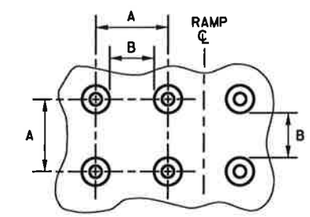
SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

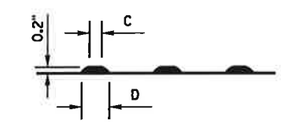
1. SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.
2. THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ± 0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.
3. INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.
4. ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.



SECTION A-A



PLAN VIEW

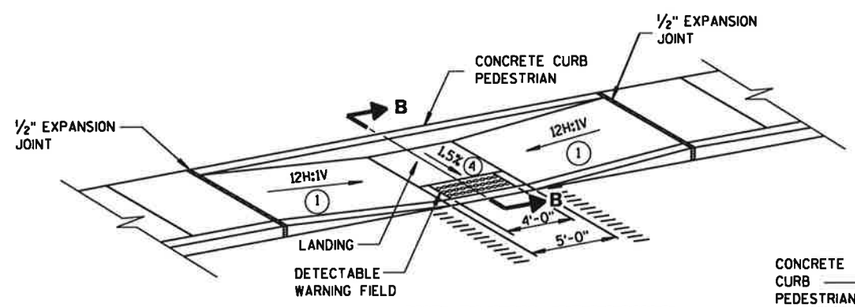


ELEVATION VIEW

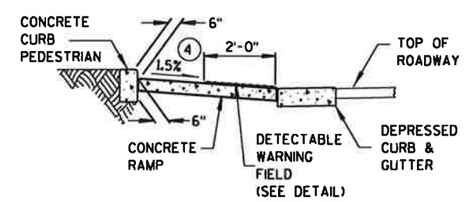
	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.

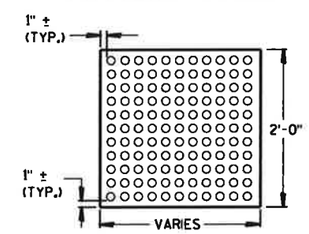
TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



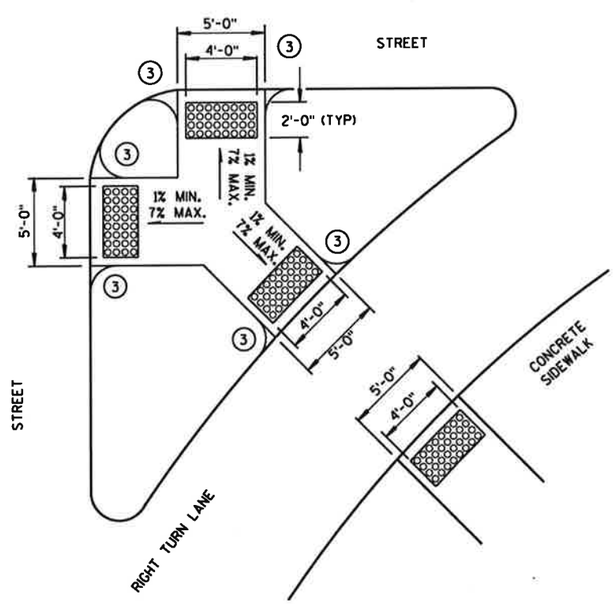
MID-BLOCK CROSSING
TYPE 7A



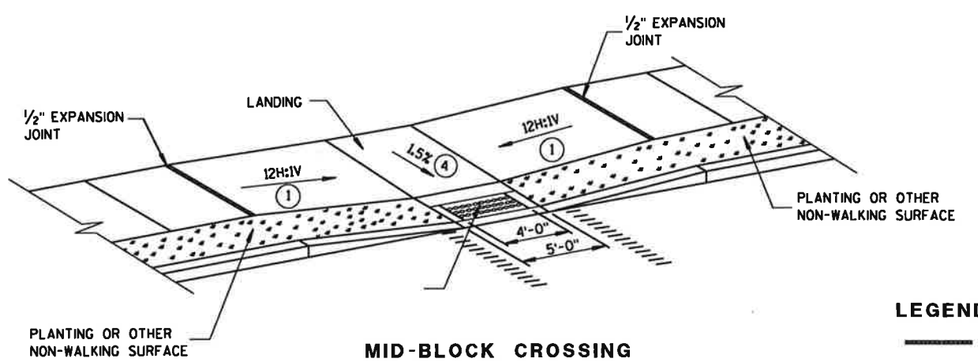
SECTION B-B



PLAN VIEW
DETECTABLE WARNING FIELD (TYPICAL)



TYPE 6
DETECTABLE WARNING AT ISLANDS



MID-BLOCK CROSSING
TYPE 7B

NOTE: THESE PARALLEL AND PARALLEL/PERPENDICULAR CURB RAMPS MAY BE USED AT INTERSECTIONS AND MID BLOCK LOCATIONS.

LEGEND

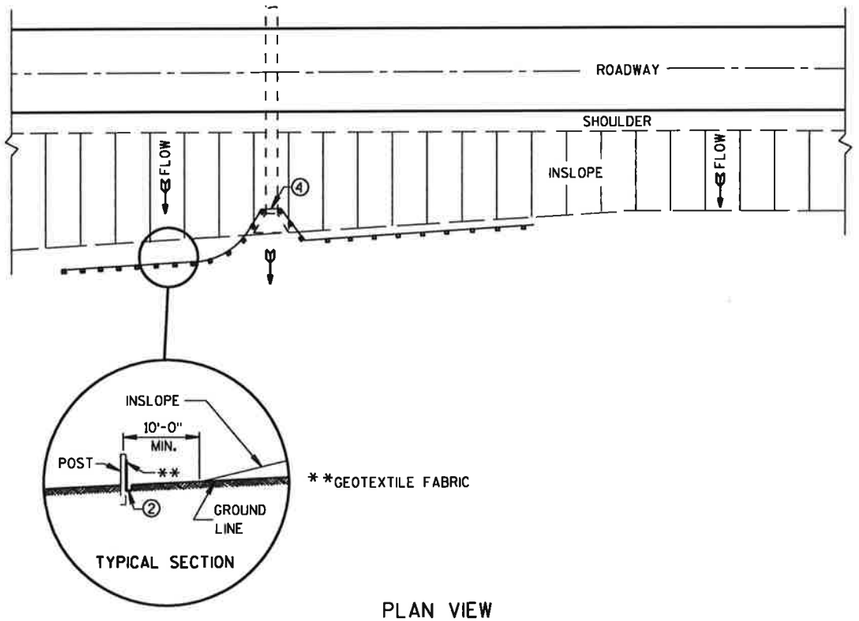
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPES 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

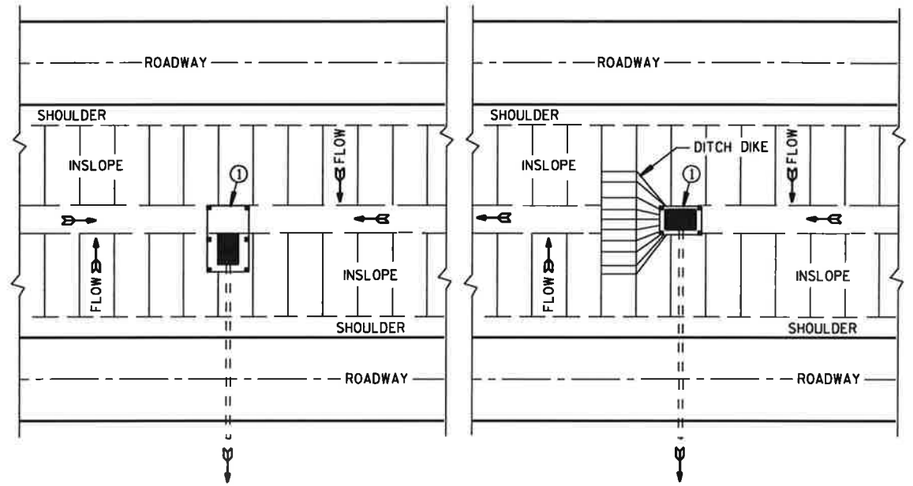
APPROVED
2-6-2013 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6
S.D.D. 8 D 5-15e



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

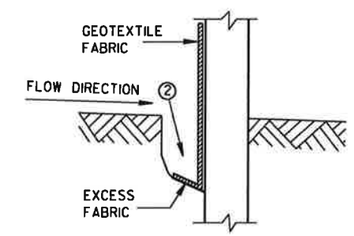
① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.

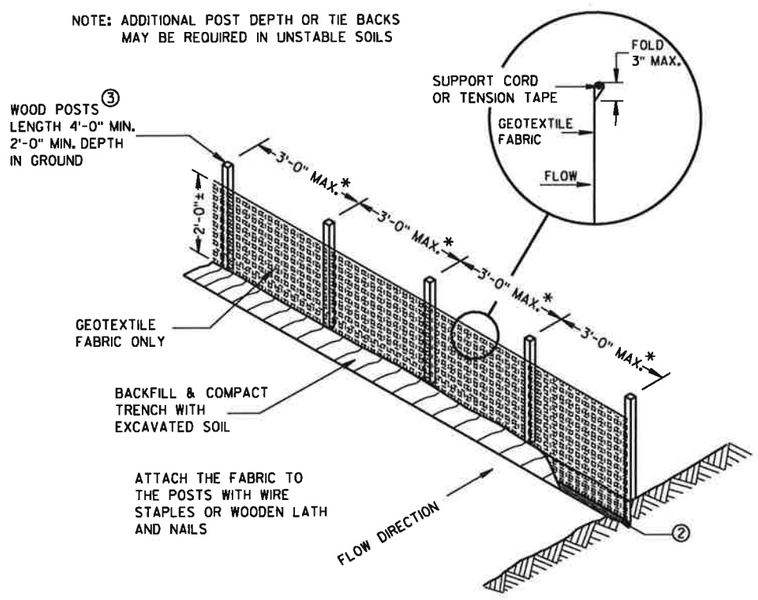
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.

⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.

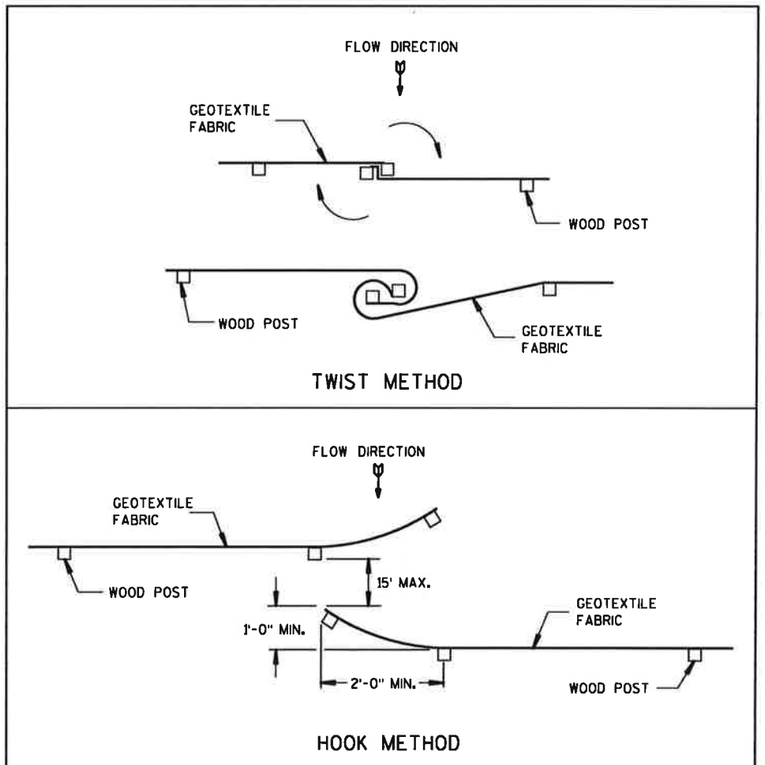


TRENCH DETAIL

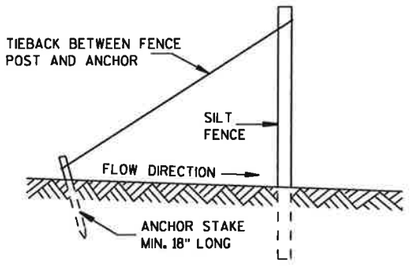


*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE



JOINING TWO LENGTHS OF SILT FENCE ⑤

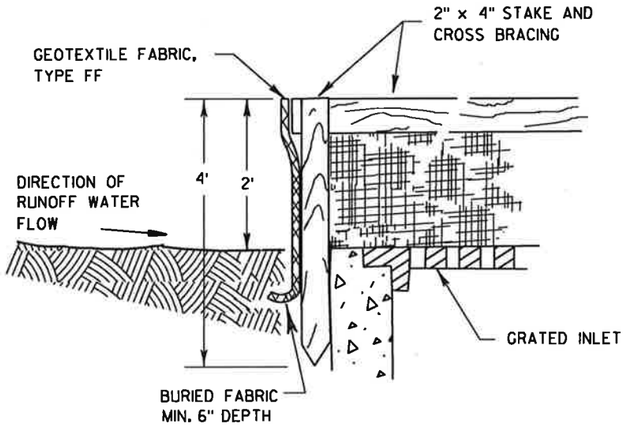


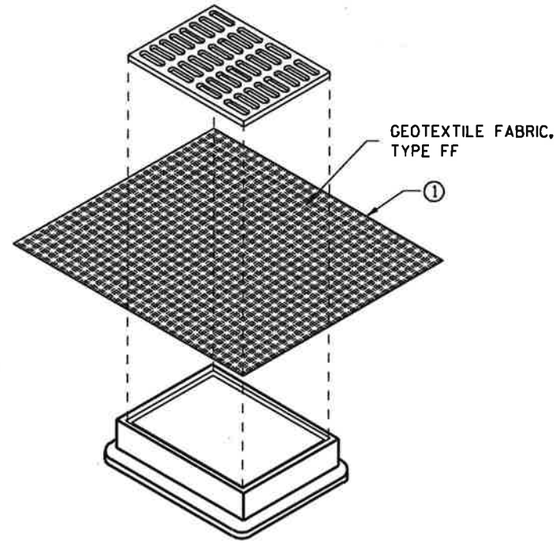
SILT FENCE TIE BACK
(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 4-29-05 DATE FHWA	/S/ Beth Connestra CHIEF ROADWAY DEVELOPMENT ENGINEER

6
S.D.D. 8 E 9-6

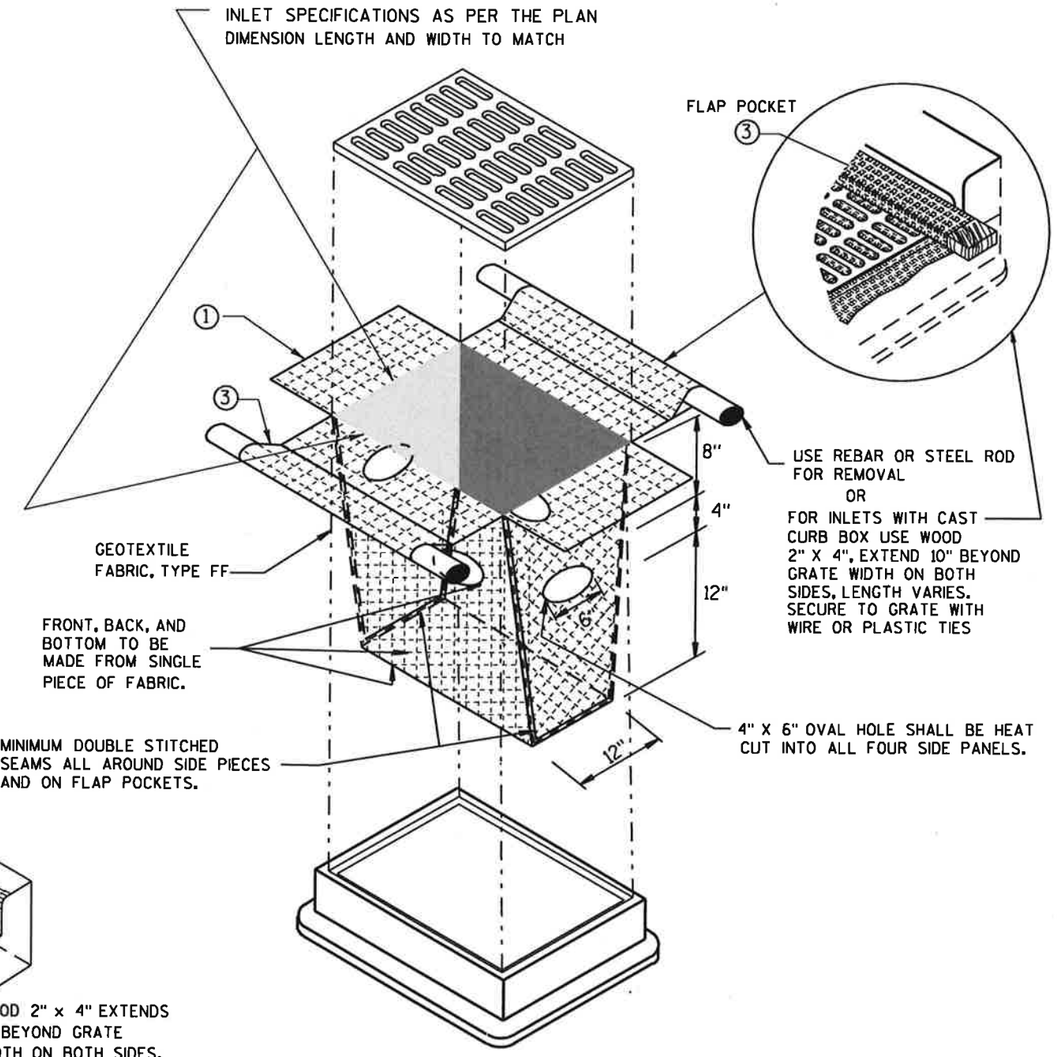
8E10: Inlet Protection Type A, B, C and D

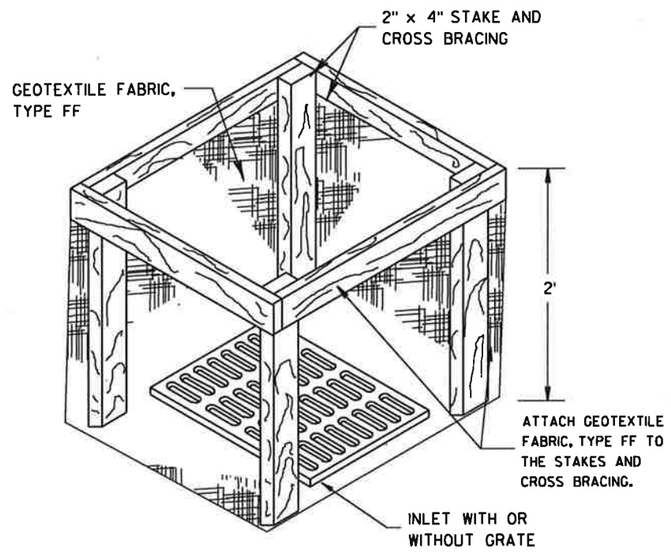




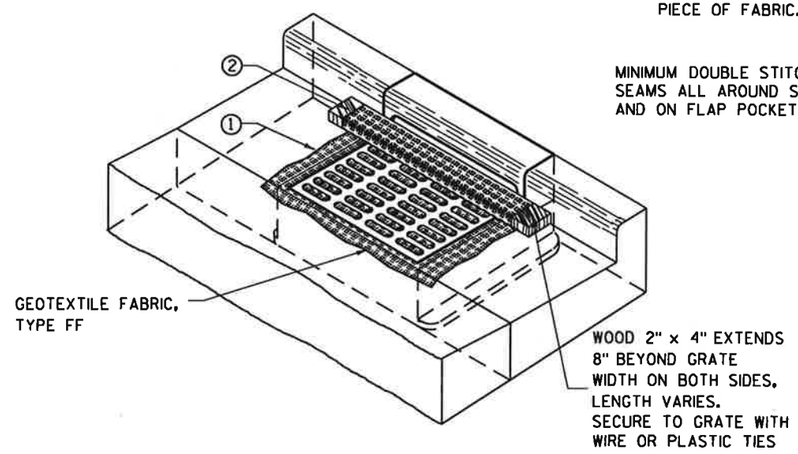
INLET PROTECTION, TYPE B (WITHOUT CURB BOX)

(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)





INLET PROTECTION, TYPE A



INLET PROTECTION, TYPE C (WITH CURB BOX)

INLET PROTECTION, TYPE D

(CAN BE INSTALLED IN ANY INLET TYPE WITH OR WITHOUT A CURB BOX AS PER NOTE ②)

GENERAL NOTES

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.

③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

INSTALLATION NOTES

TYPE B & C

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

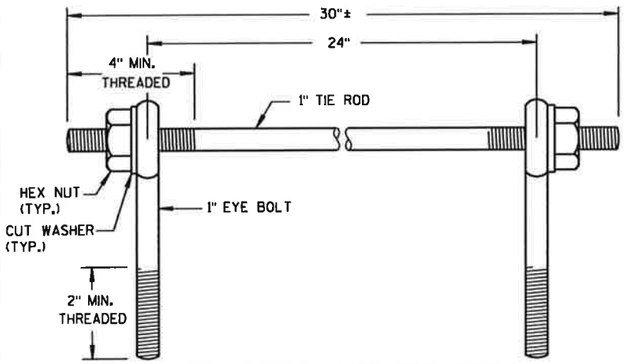
THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

INLET PROTECTION TYPE A, B, C, AND D

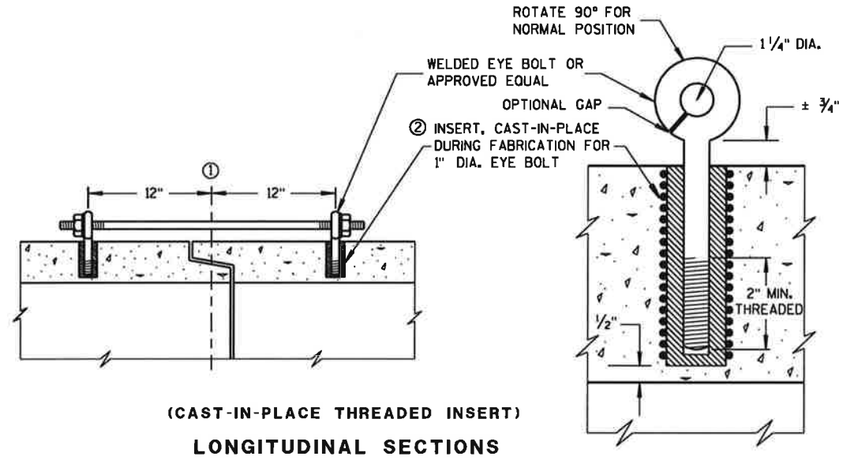
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/16/02 — DATE
/S/ Beth Connestra — CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6
S.D.D. 8 E 10-2



EYE BOLTS AND TIE ROD



(CAST-IN-PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

CONCRETE CULVERT AND STORM SEWER PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED IN THE STANDARD SPECIFICATIONS AND THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES, UNLESS OTHERWISE STATED IN THE CONTRACT. THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE THE PIPE BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO THE PIPE AND APRON ENDWALLS IF REQUIRED.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

① ℄ OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

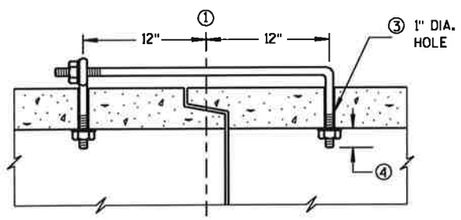
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ℄ OF TONGUE AND GROOVE.

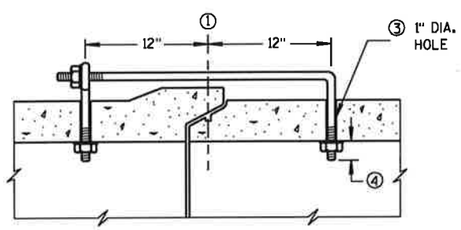
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

⑤ OPENING TO BE ROD DIAMETER PLUS 1 INCH.

⑥ LENGTH ADEQUATE TO EXTEND TO WITHIN 1/2 INCH OF THE INNER SURFACE OF THE PIPE.



(TONGUE & GROOVE PIPE)

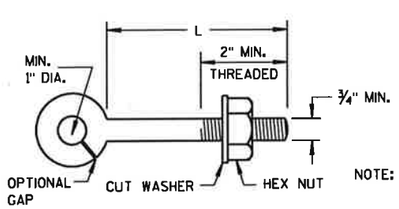


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

EYE BOLT DIMENSION TABLE

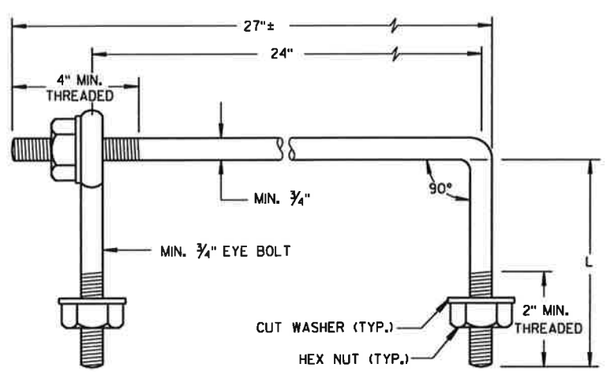
PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



NOTE:

EYE BOLT

NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD

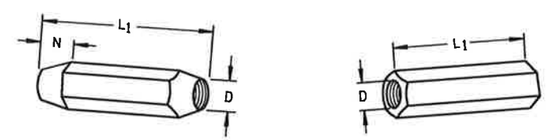
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12-60	5/8	5/8	5	1/2
66-84	3/4	3/4	5	1/2
90-108	1	1	7	1 7/16

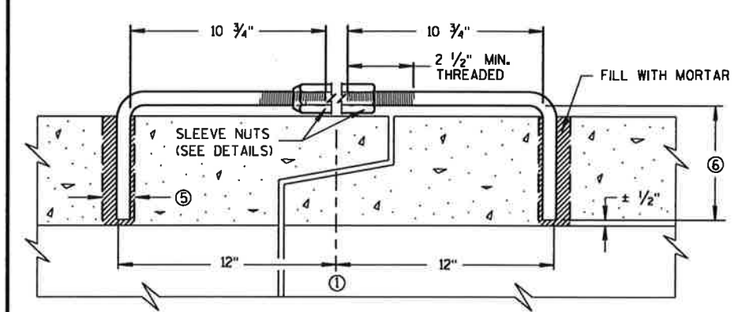
DIMENSIONS SHOWN ARE IN INCHES



TAPERED PLAIN

RIGHT AND LEFT THREADS

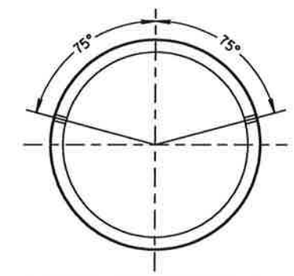
SLEEVE NUTS



LONGITUDINAL SECTION

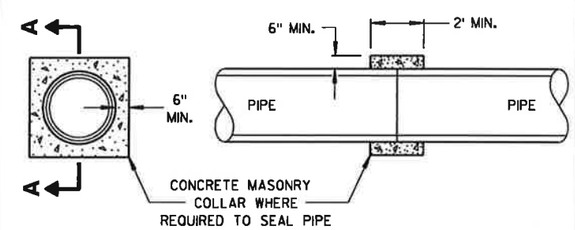
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION



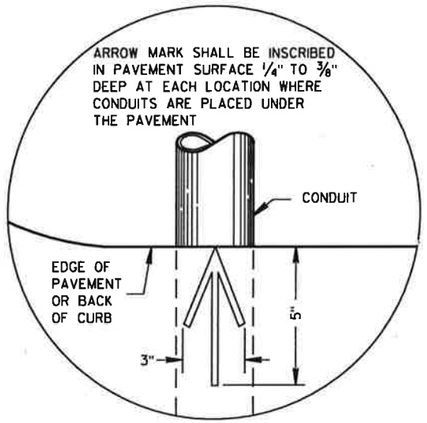
SECTION A-A

CONCRETE COLLAR DETAIL

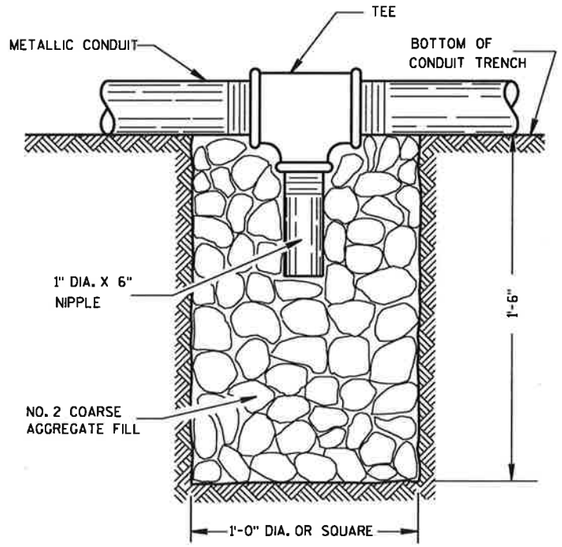
JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

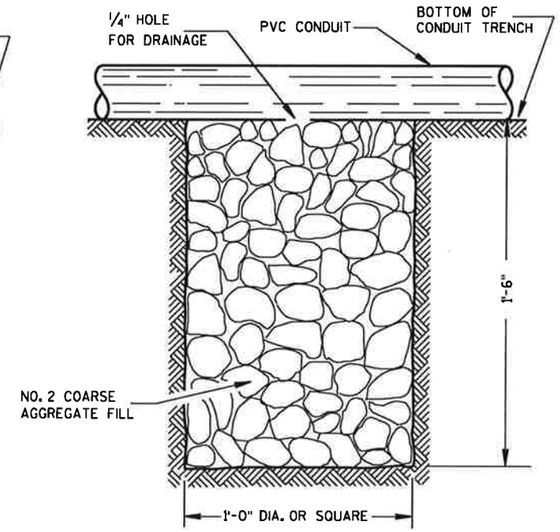


PLAN VIEW
ARROW MARK



NOTE: INSTALL AT LOCATIONS WHERE METALLIC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR METALLIC CONDUIT



NOTE: INSTALL AT LOCATIONS WHERE PVC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR PVC CONDUIT

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR EMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY U.L. LISTED ADAPTER FITTINGS SHALL BE USED.

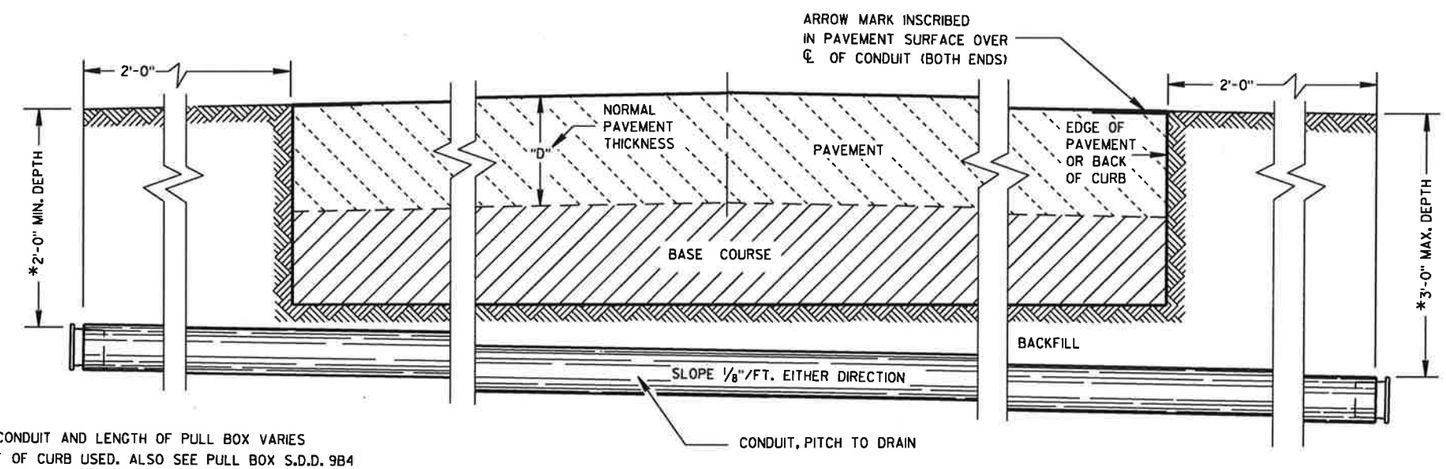
PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

CONDUIT RUNS SHALL BE THE SAME SIZE OF CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX-OR-BASE TO BASE, ETC.).

POLY ROPE OR A PULL WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.



*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

SIDE ELEVATION
DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

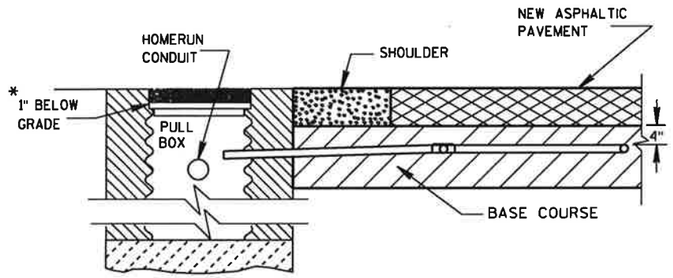
CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/23/03 — DATE
/S/ Balu Ananthanarayanan — STATE ELECTRICAL ENGINEER FOR HWYS
FHWA

6
S.D.D. 9 B 2-7

9F8: Loop Detector Placed in Crushed Aggregate Base (New Asphaltic Pavement)



SECTION A-A
NO CURB & GUTTER

DETECTOR LOOP INSTALLATION DETAIL

*RECESS PULL BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

LOOP SIZE, LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

PITCH LEAD-OUT CONDUIT TO DRAIN TO ROADSIDE PULL BOX.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS SUCH AS 3M TYPE 82A1 OR APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

MEASURE GROUND RESISTANCE USING A MEGGER. REPLACE LOOP WIRE NOT ATTAINING A READING OF INFINITY TO GROUND.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READINGS TO THE PROJECT ENGINEER FOR EVALUATION.

ANTI-SIEZE LUBRICATING MATERIAL SHALL BE USED ON ALL THREADS OF THREADED ASSEMBLIES BEFORE INSTALLATION.

LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

THE #12 AWG LOOP WIRE FROM THE LOOP TO THE ROADSIDE PULL BOX, SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE INSTALLATION.

SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL BOXES AT THE SIDE OF THE ROAD.

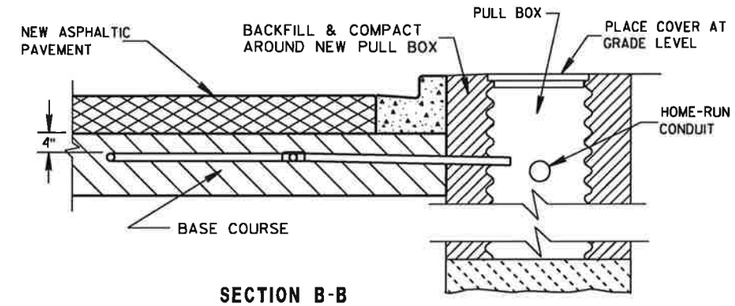
THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL BOX, THROUGH THE LOOP DUCT, BACK TO THE ROADSIDE PULL BOX, AND BE INSTALLED IN ONE, NON-SPLICED, CONTINUOUS LENGTH.

PROTECTION OF THE CONDUIT AND CONDULET SHALL BE REQUIRED AFTER INSTALLATION AND BEFORE THE ASPHALTIC PAVEMENT IS PLACED.

WHEN MULTIPLE LAYERS OF ASPHALTIC PAVEMENT ARE TO BE PLACED, LOOPS MAY BE INSTALLED BY SAWING A TWO INCH WIDE SLOT IN THE FIRST LAYER, DIG OUT THE ASPHALTIC MATERIAL AND BASE COURSE, PLACE THE LOOP, FILL THE SLOT WITH BASE COURSE MATERIAL AND NEW ASPHALTIC MATERIAL AND TAMP THE ASPHALTIC MATERIAL IN PLACE.

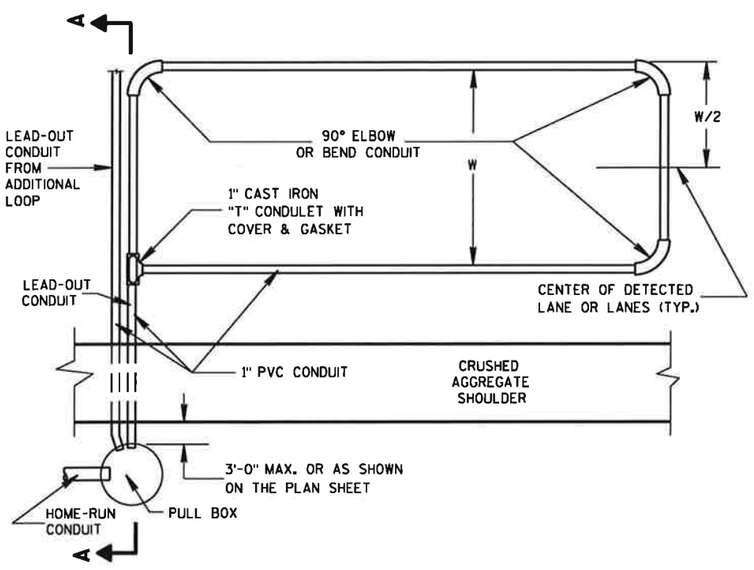
SHOULD TRAFFIC BE ALLOWED TO USE THE AREA OF ROADWAY WITH THE NEWLY INSTALLED LOOP BEFORE THE PLACEMENT OF THE NEXT LAYER OF ASPHALTIC PAVEMENT, THE SLOT/PAVEMENT OPENING SHALL BE SEALED WITH HOT POURED ELASTIC TYPE MATERIAL CONFORMING TO THE REQUIREMENTS OF THE "SPECIFICATION FOR JOINT SEALANTS, HOT POURED, FOR CONCRETE AND ASPHALT PAVEMENTS, ASTM DESIGNATION: D3405".

DRIVE A 1½" MAX. PK NAIL INTO THE NEW ASPHALTIC PAVEMENT AND DIRECTLY ABOVE THE CONDULET AFTER THE FINAL LAYER OF NEW ASPHALTIC PAVEMENT IS COMPLETELY INSTALLED, IF REQUIRED BY THE DISTRICT TRAFFIC SECTION.

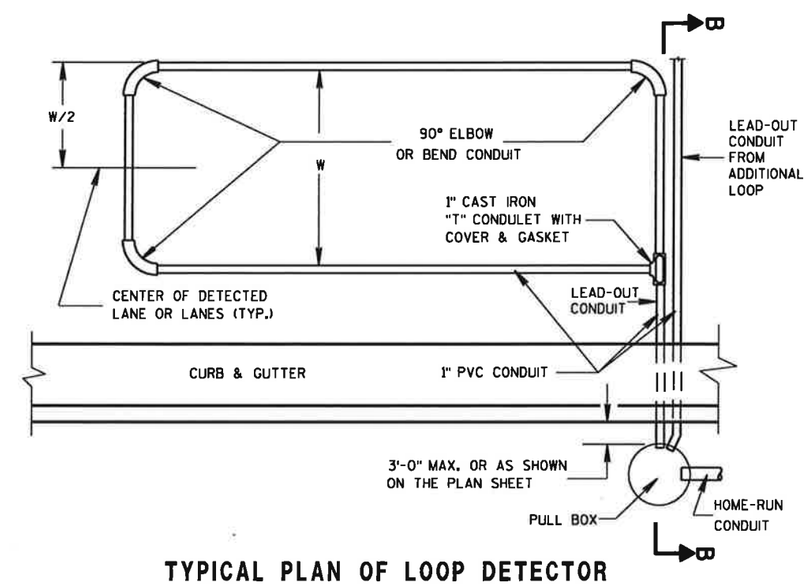


SECTION B-B
CURB & GUTTER

LOOP DETECTOR INSTALLATION DETAIL

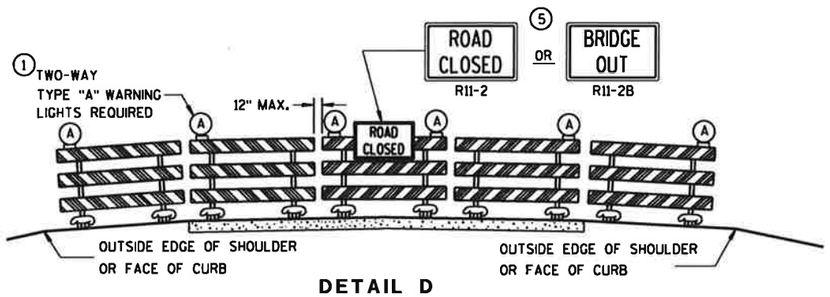


TYPICAL PLAN OF LOOP DETECTOR



TYPICAL PLAN OF LOOP DETECTOR

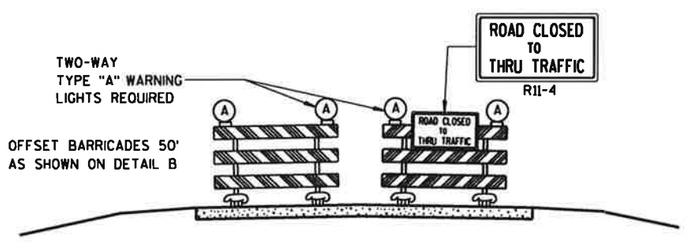
LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW ASPHALTIC PAVEMENT)
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED 6/7/06 — DATE /S/ Balu Ananthanarayanan — STATE ELECTRICAL ENGINEER FOR HWYS FHWA



DETAIL D

ROAD CLOSURE BARRICADE DETAIL

APPROACH VIEW



DETAIL E

LANE CLOSURE BARRICADE DETAIL

APPROACH VIEW

SEE SDD 15C2-SHEET "a" FOR LEGEND

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3, M4-9, R11-4 AND R10-61 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

"WO AND "MO" SIGNS ARE THE SAME AS "W" AND "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:

- R11-2 SHALL BE 48" X 30".
- R11-3, R11-4 AND R10-61 SHALL BE 60" X 30".
- M4-9 SHALL BE 30" X 24".
- M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1-1 SHALL BE 36" X 36".

1. TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8-FOOT LIGHT SPACING).
2. THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.
3. FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL D.
4. FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE LANE CLOSURE BARRICADE DETAIL E.
5. FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11-2 AND R11-3 SIGNS.
6. INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.
7. "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

8/2013 — DATE

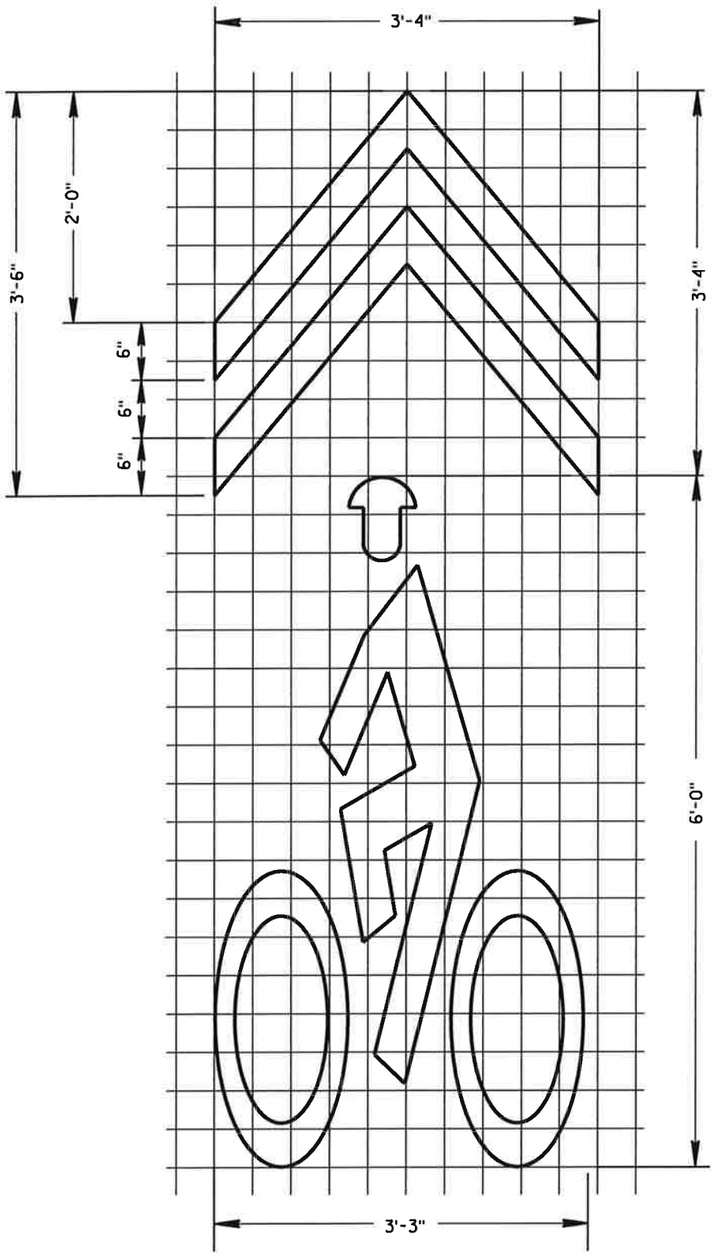
/S/ Travis Feltes — STATE TRAFFIC ENGINEER OF DESIGN

FHWA

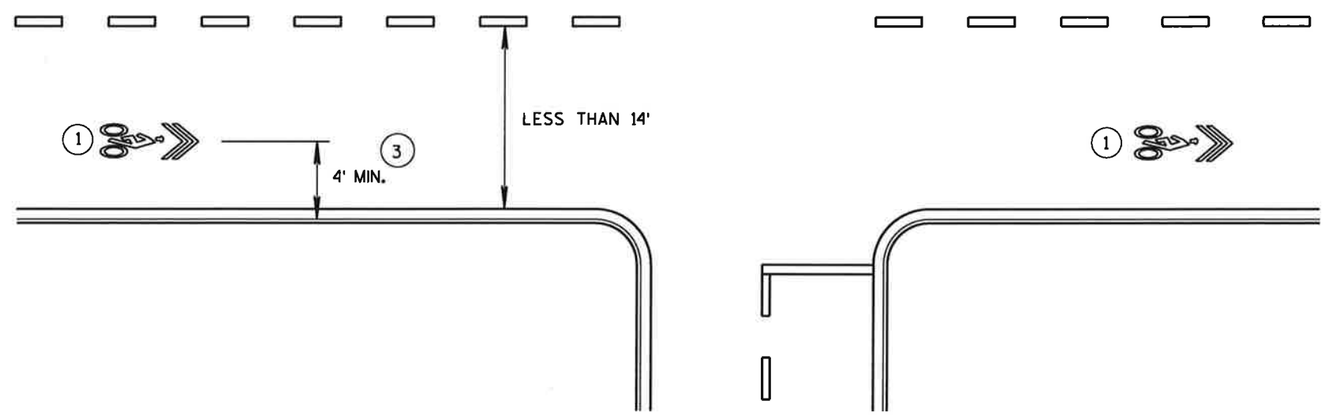
GENERAL NOTES

ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.

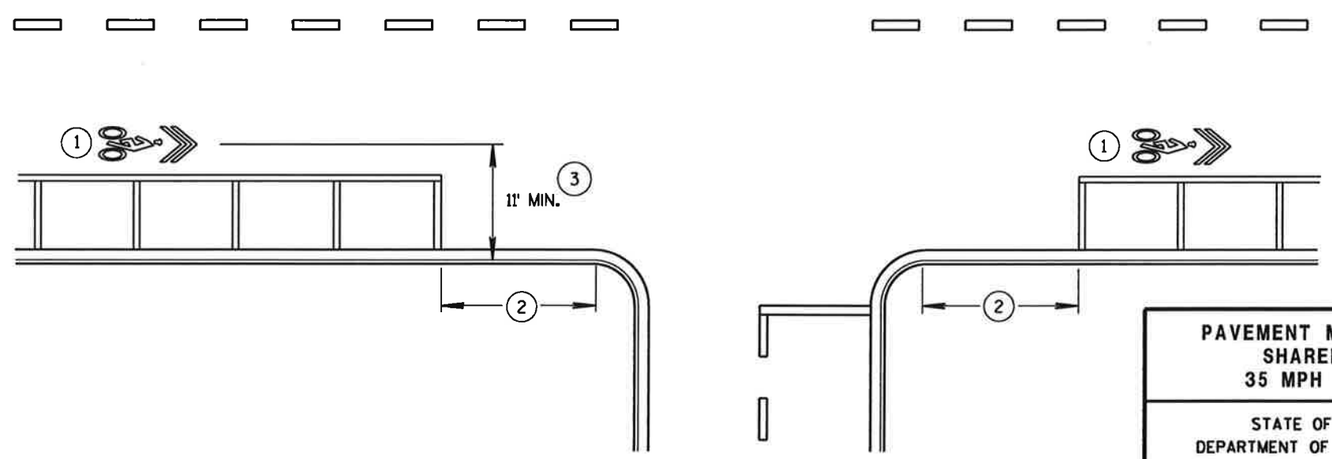
1. SPACED A MAXIMUM OF 250 FEET.
2. 20 FOOT MINIMUM FROM CURB RADIUS.
3. OR TO EDGE OF PAVEMENT WITHOUT CURB.



BIKE SYMBOL FOR SHARED LANE



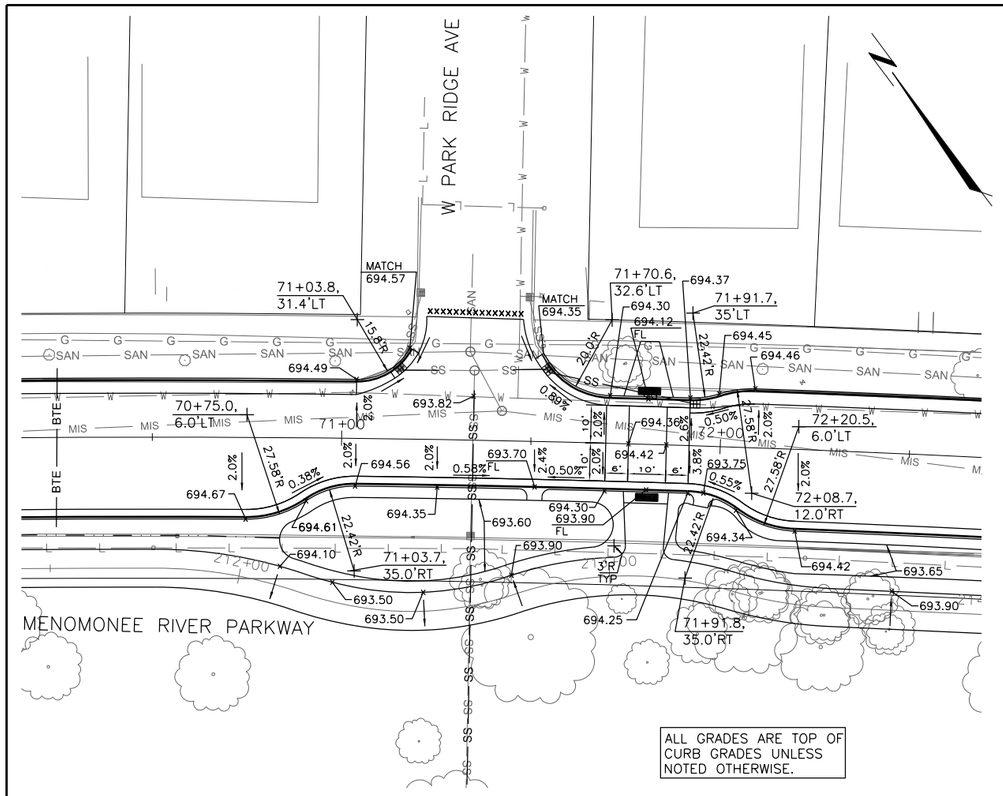
WITHOUT PARKING

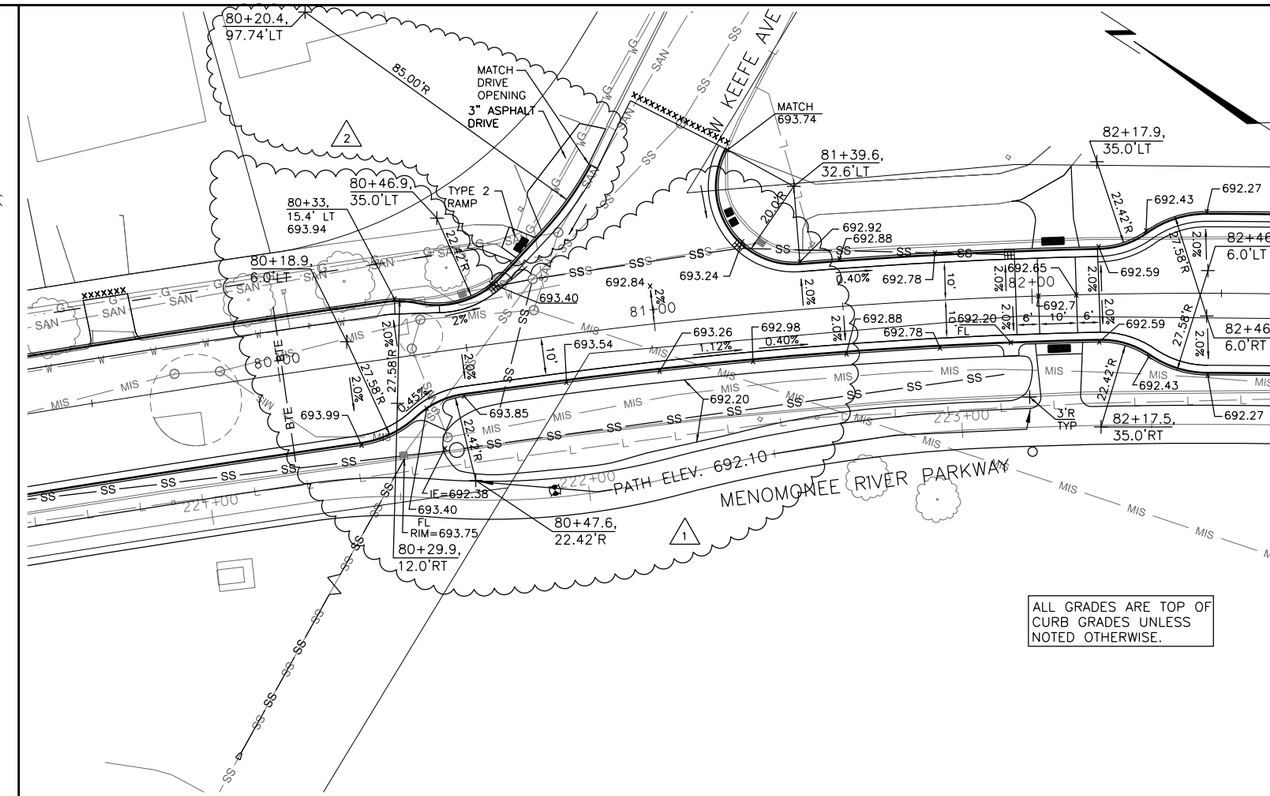


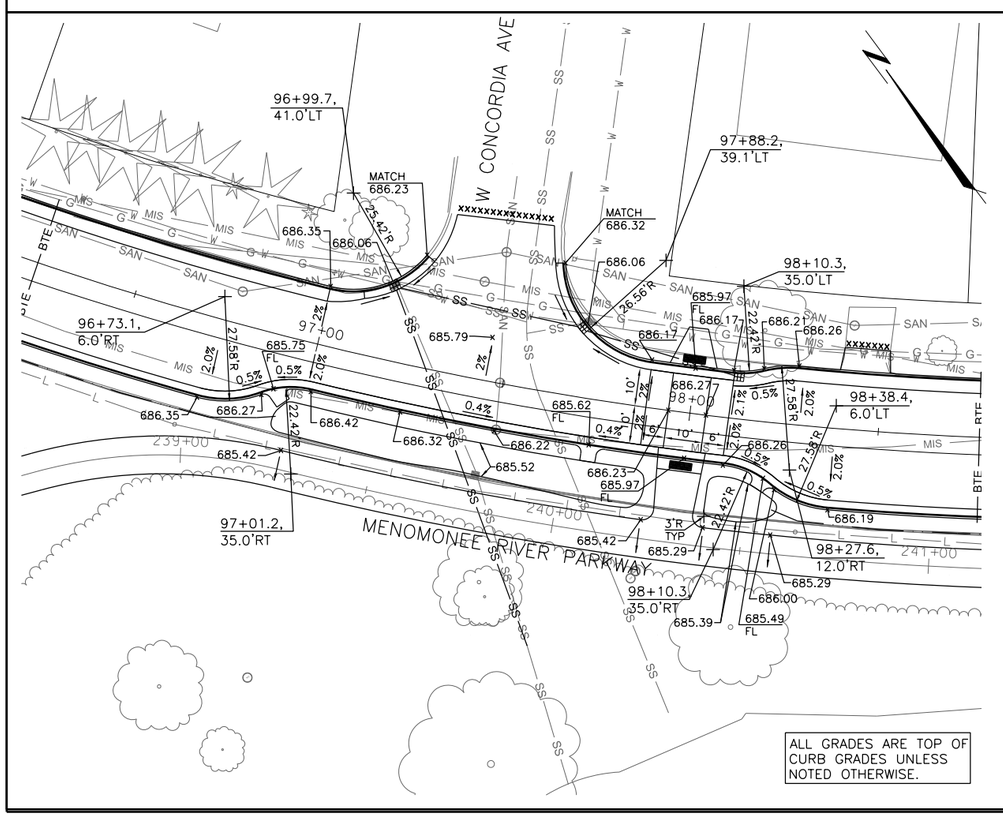
WITH PARKING

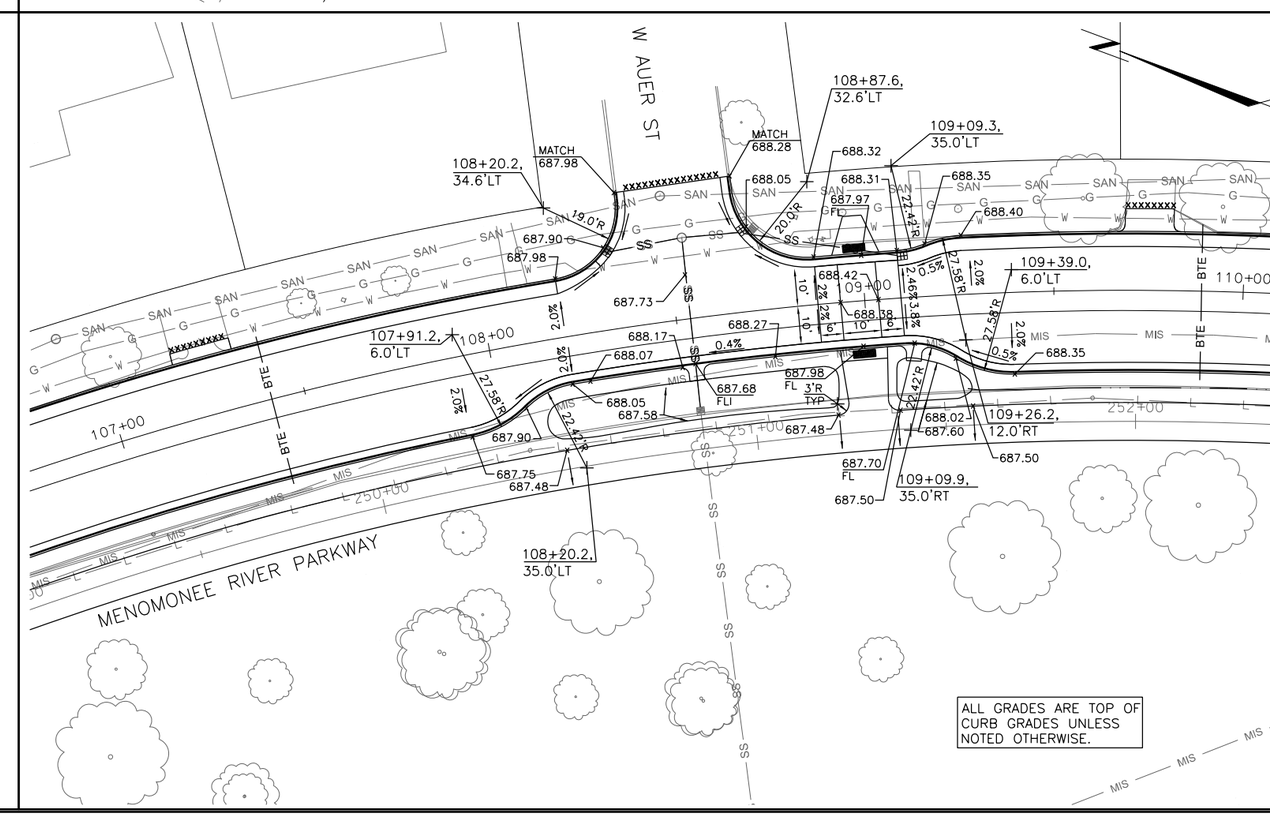
PAVEMENT MARKING FOR SHARED LANE 35 MPH OR LESS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 4-30-2013 DATE	/S/ Travis Feltes STATE TRAFFIC ENGINEER
FHWA	

S.D.D. 15 C 29-3f









DATE:	REVISION DESCRIPTION:	BY:
11/17/14	RAISED PROFILE & REVISED GRADES	BJG
12/8/14	REVISED CURB & GUTTER LIMITS & LAYOUT TO MATCH FIELD CONDITIONS	BJG

MILWAUKEE COUNTY DEPARTMENT OF ADMINISTRATIVE SERVICES
Architecture, Engineering & Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

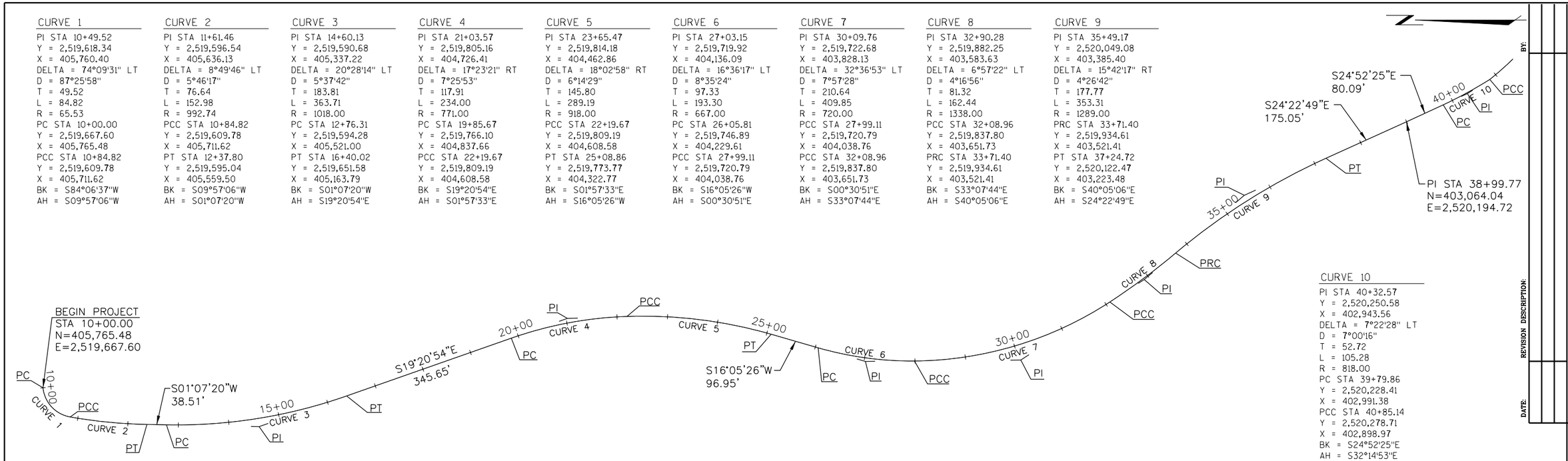
DRAWN BY: BJG
SCALE: 1"=40'
CHECKED BY: TH
DATE: 7/03/14

PROJECT TITLE: MENOMONEE RIVER PARKWAY
SHEET DESCRIPTION: INTERSECTION DETAILS

SITE NO.
BUILDING NO.
PROJECT NO. P280-13626

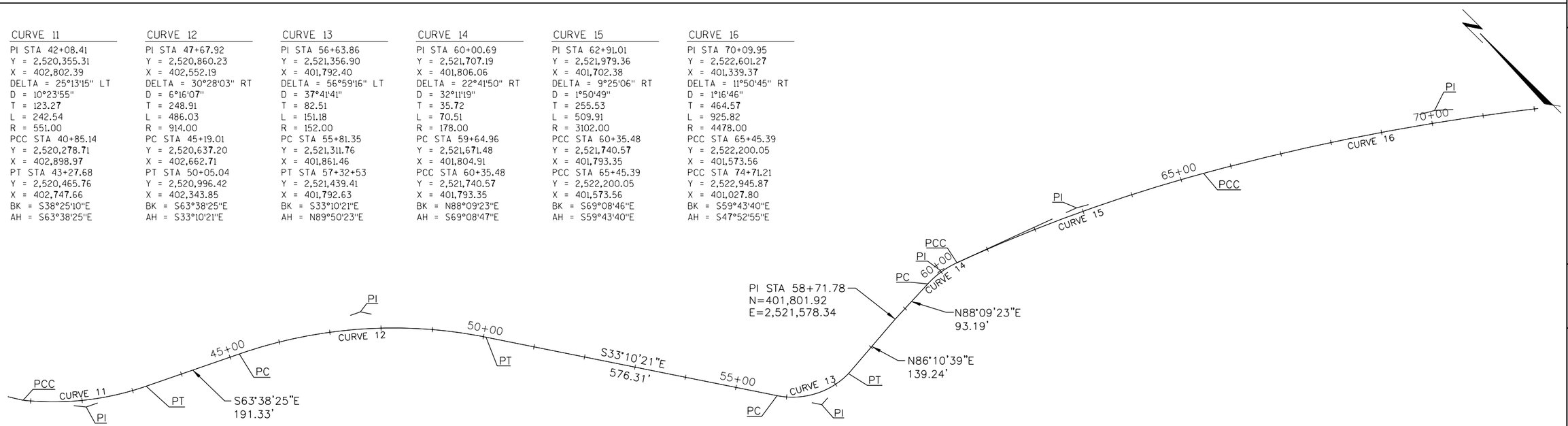
SHEET NO. 6
6 OF 110
FILE NO.

CURVE 1	CURVE 2	CURVE 3	CURVE 4	CURVE 5	CURVE 6	CURVE 7	CURVE 8	CURVE 9
PI STA 10+49.52	PI STA 11+61.46	PI STA 14+60.13	PI STA 21+03.57	PI STA 23+65.47	PI STA 27+03.15	PI STA 30+09.76	PI STA 32+90.28	PI STA 35+49.17
Y = 2,519,618.34	Y = 2,519,596.54	Y = 2,519,590.68	Y = 2,519,805.16	Y = 2,519,814.18	Y = 2,519,719.92	Y = 2,519,722.68	Y = 2,519,882.25	Y = 2,520,049.08
X = 405,760.40	X = 405,636.13	X = 405,337.22	X = 404,726.41	X = 404,462.86	X = 404,136.09	X = 403,828.13	X = 403,583.63	X = 403,385.40
DELTA = 74°09'31" LT	DELTA = 8°49'46" LT	DELTA = 20°28'14" LT	DELTA = 17°23'21" RT	DELTA = 18°02'58" RT	DELTA = 16°36'17" LT	DELTA = 32°36'53" LT	DELTA = 6°57'22" LT	DELTA = 15°42'17" RT
D = 87°25'58"	D = 5°46'17"	D = 5°37'42"	D = 7°25'53"	D = 6°14'29"	D = 8°35'24"	D = 7°57'28"	D = 4°16'56"	D = 4°26'42"
T = 49.52	T = 76.64	T = 183.81	T = 117.91	T = 145.80	T = 97.33	T = 210.64	T = 81.32	T = 177.77
L = 84.82	L = 152.98	L = 363.71	L = 234.00	L = 289.19	L = 193.30	L = 409.85	L = 162.44	L = 353.31
R = 65.53	R = 992.74	R = 1018.00	R = 771.00	R = 918.00	R = 667.00	R = 720.00	R = 1338.00	R = 1289.00
PC STA 10+00.00	PCC STA 10+84.82	PC STA 12+76.31	PC STA 19+85.67	PCC STA 22+19.67	PC STA 26+05.81	PCC STA 27+99.11	PCC STA 32+08.96	PRC STA 33+71.40
Y = 2,519,667.60	Y = 2,519,609.78	Y = 2,519,594.28	Y = 2,519,766.10	Y = 2,519,809.19	Y = 2,519,746.89	Y = 2,519,720.79	Y = 2,519,837.80	Y = 2,519,934.61
X = 405,765.48	X = 405,711.62	X = 405,521.00	X = 404,837.66	X = 404,608.58	X = 404,229.61	X = 404,038.76	X = 403,651.73	X = 403,521.41
PCC STA 10+84.82	PT STA 12+37.80	PT STA 16+40.02	PCC STA 22+19.67	PT STA 25+08.86	PCC STA 27+99.11	PCC STA 32+08.96	PRC STA 33+71.40	PT STA 37+24.72
Y = 2,519,609.78	Y = 2,519,595.04	Y = 2,519,651.58	Y = 2,519,809.19	Y = 2,519,773.77	Y = 2,519,720.79	Y = 2,519,837.80	Y = 2,519,934.61	Y = 2,520,122.47
X = 405,711.62	X = 405,559.50	X = 405,163.79	X = 404,608.58	X = 404,322.77	X = 404,038.76	X = 403,651.73	X = 403,521.41	X = 403,223.48
BK = S84°06'37"W	BK = S09°57'06"W	BK = S01°07'20"W	BK = S19°20'54"E	BK = S01°57'33"E	BK = S16°05'26"W	BK = S00°30'51"E	BK = S33°07'44"E	BK = S40°05'06"E
AH = S09°57'06"W	AH = S01°07'20"W	AH = S19°20'54"E	AH = S01°57'33"E	AH = S16°05'26"W	AH = S00°30'51"E	AH = S33°07'44"E	AH = S40°05'06"E	AH = S24°22'49"E



CURVE 10
PI STA 40+32.57
Y = 2,520,250.58
X = 402,943.56
DELTA = 7°22'28" LT
D = 7°00'16"
T = 52.72
L = 105.28
R = 818.00
PC STA 39+79.86
Y = 2,520,228.41
X = 402,991.38
PCC STA 40+85.14
Y = 2,520,278.71
X = 402,898.97
BK = S24°52'25"E
AH = S32°14'53"E

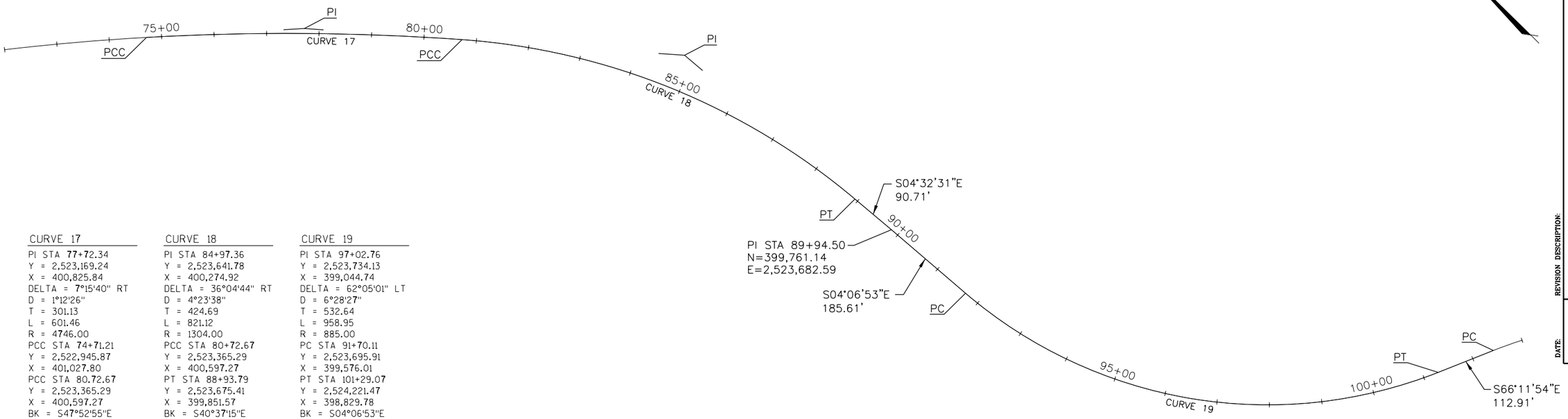
CURVE 11	CURVE 12	CURVE 13	CURVE 14	CURVE 15	CURVE 16
PI STA 42+08.41	PI STA 47+67.92	PI STA 56+63.86	PI STA 60+00.69	PI STA 62+91.01	PI STA 70+09.95
Y = 2,520,355.31	Y = 2,520,860.23	Y = 2,521,356.90	Y = 2,521,707.19	Y = 2,521,979.36	Y = 2,522,601.27
X = 402,802.39	X = 402,552.19	X = 401,792.40	X = 401,806.06	X = 401,702.38	X = 401,339.37
DELTA = 25°13'15" LT	DELTA = 30°28'03" RT	DELTA = 56°59'16" LT	DELTA = 22°41'50" RT	DELTA = 9°25'06" RT	DELTA = 11°50'45" RT
D = 10°23'55"	D = 6°16'07"	D = 37°41'41"	D = 32°11'19"	D = 1°50'49"	D = 1°16'46"
T = 123.27	T = 248.91	T = 82.51	T = 35.72	T = 255.53	T = 464.57
L = 242.54	L = 486.03	L = 151.18	L = 70.51	L = 509.91	L = 925.82
R = 551.00	R = 914.00	R = 152.00	R = 178.00	R = 3102.00	R = 4478.00
PCC STA 40+85.14	PC STA 45+19.01	PC STA 55+81.35	PC STA 59+64.96	PCC STA 60+35.48	PCC STA 65+45.39
Y = 2,520,278.71	Y = 2,520,637.20	Y = 2,521,311.76	Y = 2,521,671.48	Y = 2,521,740.57	Y = 2,522,200.05
X = 402,898.97	X = 402,662.71	X = 401,861.46	X = 401,804.91	X = 401,793.35	X = 401,573.56
PT STA 43+27.68	PT STA 50+05.04	PT STA 57+32+53	PCC STA 60+35.48	PCC STA 65+45.39	PCC STA 74+71.21
Y = 2,520,465.76	Y = 2,520,996.42	Y = 2,521,439.41	Y = 2,521,740.57	Y = 2,522,200.05	Y = 2,522,945.87
X = 402,747.66	X = 402,343.85	X = 401,792.63	X = 401,793.35	X = 401,573.56	X = 401,027.80
BK = S38°25'10"E	BK = S63°38'25"E	BK = S33°10'21"E	BK = N88°09'23"E	BK = S69°08'46"E	BK = S59°43'40"E
AH = S63°38'25"E	AH = S33°10'21"E	AH = N89°50'23"E	AH = S69°08'47"E	AH = S59°43'40"E	AH = S47°52'55"E



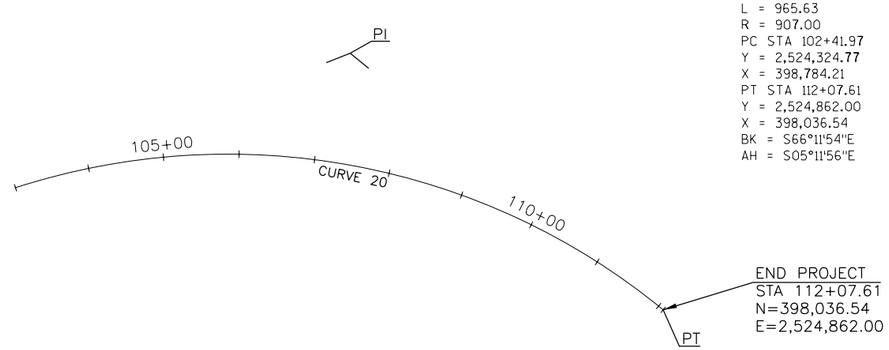
DATE: REVISION DESCRIPTION: BY:

MILWAUKEE COUNTY DEPARTMENT OF ADMINISTRATIVE SERVICES
Architecture, Engineering & Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

DRAWN BY: BJG
CHECKED BY: TH
SCALE: 1"=40'
DATE: 7/03/14
PROJECT TITLE: MENOMONEE RIVER PARKWAY
SHEET DESCRIPTION: ALIGNMENT PLAN
SITE NO.
BUILDING NO.
PROJECT NO. P280-13626
SHEET NO. 7
7 OF 110
FILE NO.



CURVE 17	CURVE 18	CURVE 19
PI STA 77+72.34	PI STA 84+97.36	PI STA 97+02.76
Y = 2,523,169.24	Y = 2,523,641.78	Y = 2,523,734.13
X = 400,825.84	X = 400,274.92	X = 399,044.74
DELTA = 7°15'40" RT	DELTA = 36°04'44" RT	DELTA = 62°05'01" LT
D = 1°12'26"	D = 4°23'38"	D = 6°28'27"
T = 301.13	T = 424.69	T = 532.64
L = 601.46	L = 821.12	L = 958.95
R = 4746.00	R = 1304.00	R = 885.00
PCC STA 74+71.21	PCC STA 80+72.67	PC STA 91+70.11
Y = 2,522,945.87	Y = 2,523,365.29	Y = 2,523,695.91
X = 401,027.80	X = 400,597.27	X = 399,576.01
PCC STA 80.72.67	PT STA 88+93.79	PT STA 101+29.07
Y = 2,523,365.29	Y = 2,523,675.41	Y = 2,524,221.47
X = 400,597.27	X = 399,851.57	X = 398,829.78
BK = S47°52'55"E	BK = S40°37'15"E	BK = S04°06'53"E
AH = S40°37'15"E	AH = S04°32'31"E	AH = S66°11'54"E



CURVE 20

PI STA 107+76.23
Y = 2,524,813.59
X = 398,568.60
DELTA = 60°59'58" RT
D = 6°19'01"
T = 534.26
L = 965.63
R = 907.00
PC STA 102+41.97
Y = 2,524,324.77
X = 398,784.21
PT STA 112+07.61
Y = 2,524,862.00
X = 398,036.54
BK = S66°11'54"E
AH = S05°11'56"E

DATE: REVISION DESCRIPTION: BY:

MILWAUKEE COUNTY DEPARTMENT OF
ADMINISTRATIVE SERVICES
Architecture, Engineering & Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

DRAWN BY: BJG
CHECKED BY: TH
SCALE: 1"=40'
DATE: 7/03/14
PROJECT TITLE: MENOMONEE RIVER PARKWAY
SHEET DESCRIPTION: ALIGNMENT PLAN
SITE NO.
BUILDING NO.
PROJECT NO. P280-13626
SHEET NO. 8
8 OF 110
FILE NO.

CURVE 1
PI STA 201+33.64
Y = 2,521,701.87
X = 401,774.29
DELTA = 22°4'50" RT
D = 39°07'55"
T = 29.39
L = 58.00
R = 146.42
PC STA 201+04.25
Y = 2,521,672.50
X = 401,773.35
PCC STA 201+62.25
Y = 2,521,729.33
X = 401,763.83
BK = N88°09'23"E
AH = S69°08'47"E

CURVE 2
PI STA 202+20.94
Y = 2,521,784.17
X = 401,742.94
DELTA = 2°11'24" RT
D = 1°51'58"
T = 58.69
L = 117.36
R = 3070.42
PCC STA 201+62.25
Y = 2,521,729.33
X = 401,763.83
PT STA 202+79.61
Y = 2,521,838.18
X = 401,719.97
BK = S69°08'46"E
AH = S66°57'21"E

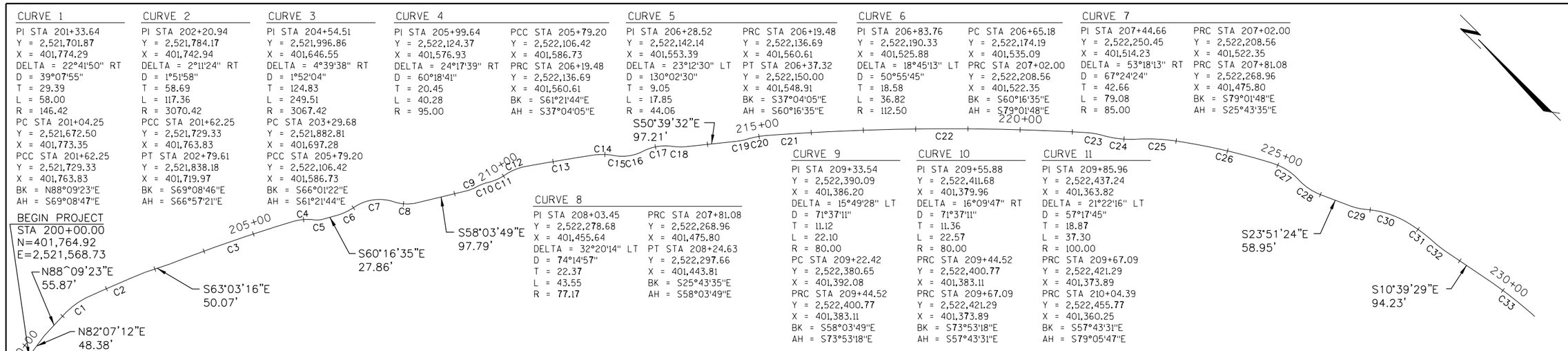
CURVE 3
PI STA 204+54.51
Y = 2,521,996.86
X = 401,646.55
DELTA = 4°39'38" RT
D = 1°52'04"
T = 124.83
L = 249.51
R = 3067.42
PC STA 203+29.68
Y = 2,521,882.81
X = 401,697.28
PCC STA 205+79.20
Y = 2,522,106.42
X = 401,586.73
BK = S66°01'22"E
AH = S61°21'44"E

CURVE 4
PI STA 205+99.64
Y = 2,522,124.37
X = 401,576.93
DELTA = 24°17'39" RT
D = 60°18'41"
T = 20.45
L = 40.28
R = 95.00
PCC STA 205+79.20
Y = 2,522,106.42
X = 401,586.73
PRC STA 206+19.48
Y = 2,522,136.69
X = 401,560.61
BK = S61°21'44"E
AH = S37°04'05"E

CURVE 5
PI STA 206+28.52
Y = 2,522,142.14
X = 401,553.39
DELTA = 23°12'30" LT
D = 130°02'30"
T = 9.05
L = 17.85
R = 44.06
PRC STA 206+19.48
Y = 2,522,136.69
X = 401,560.61
PT STA 206+37.32
Y = 2,522,150.00
X = 401,548.91
BK = S37°04'05"E
AH = S60°16'35"E

CURVE 6
PI STA 206+83.76
Y = 2,522,190.33
X = 401,525.88
DELTA = 18°45'13" LT
D = 50°55'45"
T = 18.58
L = 36.82
R = 112.50
PC STA 206+65.18
Y = 2,522,174.19
X = 401,535.09
PRC STA 207+02.00
Y = 2,522,208.56
X = 401,522.35
BK = S60°16'35"E
AH = S79°01'48"E

CURVE 7
PI STA 207+44.66
Y = 2,522,250.45
X = 401,514.23
DELTA = 53°18'13" RT
D = 67°24'24"
T = 42.66
L = 79.08
R = 85.00
PRC STA 207+02.00
Y = 2,522,208.56
X = 401,522.35
PRC STA 207+81.08
Y = 2,522,268.96
X = 401,475.80
BK = S79°01'48"E
AH = S25°43'35"E



CURVE 8
PI STA 208+03.45
Y = 2,522,278.68
X = 401,455.64
DELTA = 32°20'14" LT
D = 74°14'57"
T = 22.37
L = 43.55
R = 77.17
PRC STA 207+81.08
Y = 2,522,268.96
X = 401,475.80
PT STA 208+24.63
Y = 2,522,297.66
X = 401,443.81
BK = S25°43'35"E
AH = S58°03'49"E

CURVE 9
PI STA 209+33.54
Y = 2,522,390.09
X = 401,386.20
DELTA = 15°49'28" LT
D = 71°37'11"
T = 11.12
L = 22.10
R = 80.00
PC STA 209+22.42
Y = 2,522,380.65
X = 401,392.08
PRC STA 209+44.52
Y = 2,522,400.77
X = 401,383.11
BK = S58°03'49"E
AH = S73°53'18"E

CURVE 10
PI STA 209+55.88
Y = 2,522,411.68
X = 401,379.96
DELTA = 16°09'47" RT
D = 71°37'11"
T = 11.36
L = 22.57
R = 80.00
PRC STA 209+44.52
Y = 2,522,400.77
X = 401,383.11
PRC STA 209+67.09
Y = 2,522,421.29
X = 401,373.89
BK = S73°53'18"E
AH = S57°43'31"E

CURVE 11
PI STA 209+85.96
Y = 2,522,437.24
X = 401,363.82
DELTA = 21°22'16" LT
D = 57°17'45"
T = 18.87
L = 37.30
R = 100.00
PRC STA 209+67.09
Y = 2,522,421.29
X = 401,373.89
PRC STA 210+04.39
Y = 2,522,455.77
X = 401,360.25
BK = S57°43'31"E
AH = S79°05'47"E

CURVE 12
PI STA 210+25.77
Y = 2,522,476.77
X = 401,356.20
DELTA = 24°08'37" RT
D = 57°17'45"
T = 21.39
L = 42.14
R = 100.00
PRC STA 210+04.39
Y = 2,522,455.77
X = 401,360.25
PCC STA 210+46.53
Y = 2,522,494.28
X = 401,343.92
BK = S79°05'47"E
AH = S54°57'10"E

CURVE 13
PI STA 211+12.24
Y = 2,522,548.08
X = 401,306.19
DELTA = 1°41'40" RT
D = 1°17'22"
T = 65.71
L = 131.42
R = 4443.42
PCC STA 210+46.53
Y = 2,522,494.28
X = 401,343.92
PCC STA 211+77.94
Y = 2,522,600.73
X = 401,266.87
BK = S54°57'10"E
AH = S53°15'30"E

CURVE 14
PI STA 211+97.21
Y = 2,522,616.17
X = 401,255.35
DELTA = 18°53'40" RT
D = 49°28'49"
T = 19.27
L = 38.19
R = 115.80
PCC STA 211+77.94
Y = 2,522,600.73
X = 401,266.887
PRC STA 212+16.13
Y = 2,522,627.05
X = 401,239.44
BK = S53°15'30"E
AH = S34°21'50"E

CURVE 15
PI STA 212+24.31
Y = 2,522,631.67
X = 401,232.69
DELTA = 9°15'11" LT
D = 56°42'11"
T = 8.18
L = 16.32
R = 101.05
PRC STA 212+16.13
Y = 2,522,627.05
X = 401,239.44
PCC STA 212+32.45
Y = 2,522,637.31
X = 401,226.77
BK = S34°21'50"E
AH = S43°37'01"E

CURVE 16
PI STA 212+53.58
Y = 2,522,651.88
X = 401,211.48
DELTA = 28°19'16" LT
D = 68°25'05"
T = 21.13
L = 41.39
R = 83.74
PCC STA 212+32.45
Y = 2,522,637.31
X = 401,226.77
PRC STA 212+73.84
Y = 2,522,671.97
X = 401,204.93
BK = S43°37'01"E
AH = S71°56'17"E

CURVE 17
PI STA 213+04.04
Y = 2,522,700.69
X = 401,195.56
DELTA = 35°11'10" RT
D = 60°09'03"
T = 30.20
L = 58.50
R = 95.25
PRC STA 212+73.84
Y = 2,522,671.97
X = 401,204.93
PRC STA 213+32.34
Y = 2,522,718.76
X = 401,171.36
BK = S71°56'17"E
AH = S36°45'07"E

CURVE 18
PI STA 213+45.86
Y = 2,522,726.85
X = 401,160.53
DELTA = 13°54'25" LT
D = 51°40'06"
T = 13.52
L = 26.92
R = 110.89
PRC STA 213+32.34
Y = 2,522,718.76
X = 401,171.36
PT STA 213+59.25
Y = 2,522,737.31
X = 401,151.95
BK = S36°45'07"E
AH = S50°39'32"E

CURVE 19
PI STA 214+66.33
Y = 2,522,820.12
X = 401,084.07
DELTA = 10°44'27" LT
D = 54°34'03"
T = 9.87
L = 19.68
R = 105.00
PC STA 214+56.46
Y = 2,522,812.49
X = 401,090.33
PRC STA 214+76.15
Y = 2,522,828.79
X = 401,079.34
BK = S50°39'32"E
AH = S61°23'59"E

CURVE 20
PI STA 214+95.68
Y = 2,522,845.94
X = 401,069.99
DELTA = 12°26'57" RT
D = 31°59'39"
T = 19.53
L = 38.91
R = 179.08
PRC STA 214+76.15
Y = 2,522,828.79
X = 401,079.34
PCC STA 215+15.06
Y = 2,522,860.67
X = 401,057.17
BK = S61°23'59"E
AH = S48°57'02"E

CURVE 21
PI STA 215+56.51
Y = 2,522,891.93
X = 401,029.95
DELTA = 1°04'08" RT
D = 1°17'22"
T = 41.45
L = 82.89
R = 4443.42
PCC STA 215+15.06
Y = 2,522,860.67
X = 401,057.17
PCC STA 215+97.95
Y = 2,522,922.67
X = 401,002.15
BK = S48°57'02"E
AH = S47°52'55"E

CURVE 22
PI STA 218+62.36
Y = 2,523,118.80
X = 400,824.82
DELTA = 6°25'27" RT
D = 1°12'58"
T = 264.41
L = 528.26
R = 4711.42
PCC STA 215+97.95
Y = 2,522,922.67
X = 401,002.15
PCC STA 221+26.21
Y = 2,523,293.85
X = 400,626.67
BK = S47°52'55"E
AH = S41°27'28"E

CURVE 23
PI STA 221+42.55
Y = 2,523,304.67
X = 400,614.42
DELTA = 12°51'41" RT
D = 39°30'52"
T = 16.34
L = 32.55
R = 145.00
PCC STA 221+26.21
Y = 2,523,293.85
X = 400,626.67
PRC STA 221+58.76
Y = 2,523,312.49
X = 400,600.07
BK = S41°27'28"E
AH = S28°35'47"E

CURVE 24
PI STA 221+91.25
Y = 2,523,328.05
X = 400,571.54
DELTA = 19°15'48" LT
D = 29°55'15"
T = 32.50
L = 64.38
R = 191.49
PRC STA 221+58.76
Y = 2,523,312.49
X = 400,600.07
PRC STA 222+23.14
Y = 2,523,352.15
X = 400,549.73
BK = S28°35'47"E
AH = S47°51'35"E

CURVE 25
PI STA 222+64.18
Y = 2,523,382.58
X = 400,522.19
DELTA = 12°10'17" RT
D = 14°52'55"
T = 41.05
L = 81.79
R = 385.00
PRC STA 222+23.14
Y = 2,523,352.15
X = 400,549.73
PCC STA 223+04.92
Y = 2,523,406.53
X = 400,488.85
BK = S47°51'35"E
AH = S35°41'18"E

CURVE 26
PI STA 223+97.31
Y = 2,523,460.43
X = 400,413.81
DELTA = 8°19'32" RT
D = 4°30'49"
T = 92.39
L = 184.45
R = 1269.42
PCC STA 223+04.92
Y = 2,523,406.53
X = 400,488.85
PCC STA 224+89.38
Y = 2,523,502.89
X = 400,331.76
BK = S35°41'18"E
AH = S27°21'47"E

CURVE 27
PI STA 225+20.18
Y = 2,523,517.05
X = 400,304.41
DELTA = 29°59'57" RT
D = 49°50'21"
T = 30.80
L = 60.19
R = 114.96
PCC STA 224+89.38
Y = 2,523,502.89
X = 400,331.76
PRC STA 225+49.57
Y = 2,523,515.63
X = 400,273.63
BK = S27°21'47"E
AH = S2°38'11"W

CURVE 28
PI STA 225+75.65
Y = 2,523,514.43
X = 400,247.58
DELTA = 26°29'34" LT
D = 51°42'36"
T = 26.08
L = 51.23
R = 110.80
PRC STA 225+49.57
Y = 2,523,515.63
X = 400,273.63
PT STA 226+00.80
Y = 2,523,524.98
X = 400,223.72
BK = S2°38'11"W
AH = S23°51'24"E

CURVE 29
PI STA 226+76.45
Y = 2,523,555.58
X = 400,154.54
DELTA = 16°29'26" LT
D = 49°42'32"
T = 16.70
L = 33.17
R = 115.26
PC STA 226+59.75
Y = 2,523,548.82
X = 400,169.81
PRC STA 226+92.93
Y = 2,523,566.39
X = 400,141.81
BK = S23°51'24"E
AH = S40°20'50"E

CURVE 30
PI STA 227+35.48
Y = 2,523,593.94
X = 400,109.37
DELTA = 26°45'56" RT
D = 32°02'00"
T = 42.55
L = 83.56
R = 178.86
PRC STA 226+92.93
Y = 2,523,566.39
X = 400,141.81
PCC STA 227+76.48
Y = 2,523,603.94
X = 400,068.01
BK = S40°20'50"E
AH = S13°34'54"E

CURVE 31
PI STA 228+06.67
Y = 2,523,611.02
X = 400,038.67
DELTA = 10°48'32" RT
D = 17°57'22"
T = 30.19
L = 60.20
R = 319.09
PCC STA 227+76.48
Y = 2,523,603.94
X = 400,068.01
PRC STA 228+36.68
Y = 2,523,612.48
X = 400,008.51
BK = S13°34'54"E
AH = S02°46'22"E

CURVE 32
PI STA 228+52.60
Y = 2,523,613.25
X = 399,992.61
DELTA = 7°53'07" LT
D = 24°47'34"
T = 15.93
L = 31.81
R = 231.10
PRC STA 228+36.68
Y = 2,523,612.48
X = 400,008.51
PT STA 228+68.48
Y = 2,523,616.20
X = 399,976.95
BK = S2°46'22"E
AH = S10°39'29"E

CURVE 33
PI STA 230+20.92
Y = 2,523,644.39
X = 399,827.15
DELTA = 7°48'26" RT
D = 6°43'00"
T = 58.21
L = 116.23
R = 853.03
PC STA 229+62.71
Y = 2,523,633.63
X = 399,884.35
PCC STA 230+78.95
Y = 2,523,647.29
X = 399,769.01
BK = S10°39'29"E
AH = S02°51'03"E

CURVE 34
PI STA 230+96.45
Y = 2,523,648.16
X = 399,751.53
DELTA = 21°40'54" RT
D = 62°40'53"
T = 17.50
L = 34.59
R = 91.41
PCC STA 230+78.95
Y = 2,523,647.29
X = 399,769.01
PRC STA 231+13.54
Y = 2,523,642.51
X = 399,734.96
BK = S02°51'03"E
AH = S18°49'51"W

CURVE 35
PI STA 231+22.54
Y = 2,523,639.60
X = 399,726.44
DELTA = 23°05'12" LT
D = 130°02'30"
T = 9.00
L = 17.75
R = 44.06
PRC STA 231+13.54
Y = 2,523,642.51
X = 399,734.96
PT STA 231+31.29
Y = 2,523,640.27
X = 399,717.47
BK = S18°49'51"W
AH = S04°15'21"E

CURVE 36
PI STA 231+78.33
Y = 2,523,643.76
X = 399,670.56
DELTA = 22°49'23" LT
D = 130°13'04"
T = 8.88
L = 17.53
R = 44.00
PC STA 231+69.44
Y = 2,523,643.10
X = 399,679.42
PRC STA 231+86.97
Y = 2,523,647.81
X = 399,662.66
BK = S04°15'21"E
AH = S27°04'45"E

CURVE 37
PI STA 232+07.36
Y = 2,523,657.09
X = 399,644.51
DELTA = 25°08'43" RT
D = 62°41'13"
T = 20.38
L = 40.11
R = 91.40
PRC STA 231+86.97
Y = 2,523,647.81
X = 399,662.66
PT STA 232+27.08
Y = 2,523,657.77
X = 399,624.13
BK = S27°04'45"E
AH = S01°56'01"E

CURVE 38
PI STA 232+95.83
Y = 2,523,662.70
X = 399,555.76
DELTA = 2°13'11" LT
D = 6°13'50"
T = 17.81
L = 35.62
R = 919.58
PC STA 232+78.01
Y = 2,523,661.42
X = 399,573.52
PRC STA 233+13.64
Y = 2,523,664.66
X = 399,538.05
BK = S04°06'53"E
AH = S06°20'03"E

CURVE 39
PI STA 233+55.01
Y = 2,523,669.23
X = 399,496.93
DELTA = 30°29'45" RT
D = 37°44'52"
T = 41.38
L = 80.79
R = 151.79
PRC STA 233+13.64
Y = 2,523,664.66
X = 399,538.05
PRC STA 233+94.43
Y = 2,523,652.29
X = 399,459.18
BK = S06°20'03"E
AH = S24°09'41"W

CURVE 40
PI STA 234+46.01
Y = 2,523,631.18
X = 399,412.11
DELTA = 13°20'53" LT
D = 12°59'47"
T = 51.59
L = 102.71
R = 440.86
PRC STA 233+94.43
Y = 2,523,652.29
X = 399,459.18
PT STA 234+97.13
Y = 2,523,621.50
X = 399,361.44
BK = S24°09'41"W
AH = S10°48'48"W

CURVE 41
PI STA 236+62.88
Y = 2,523,590.40
X = 399,198.63
DELTA = 78°07'46" LT
D = 42°37'29"
T = 109.10
L = 183.30
R = 134.42
PC STA 235+53.78
Y = 2,523,610.87
X = 399,305.79
PT STA 237+37.08
Y = 2,523,691.06
X = 399,156.55
BK = S10°48'48"W
AH = S67°18'58"E

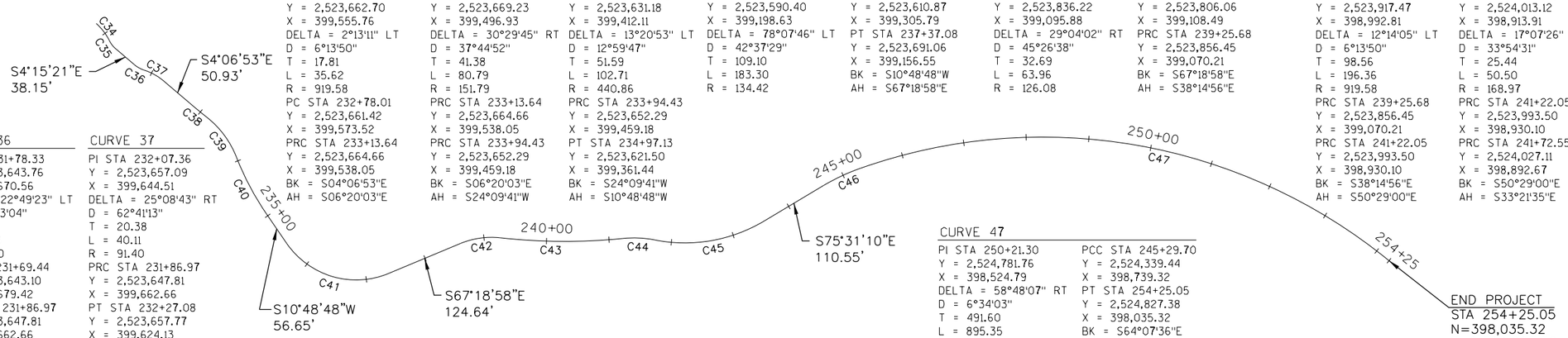
CURVE 42
PI STA 238+94.41
Y = 2,523,836.22
X = 399,095.88
DELTA = 29°04'02" RT
D = 45°26'38"
T = 32.69
L = 63.96
R = 126.08
PC STA 238+61.72
Y = 2,523,806.06
X = 399,108.49
PRC STA 239+25.68
Y = 2,523,856.45
X = 399,070.21
BK = S67°18'58"E
AH = S38°14'56"E

CURVE 43
PI STA 240+24.24
Y = 2,523,917.47
X = 398,992.81
DELTA = 12°14'05" LT
D = 6°13'50"
T = 98.56
L = 196.36
R = 919.58
PRC STA 239+25.68
Y = 2,523,856.45
X = 399,070.21
PRC STA 241+22.05
Y = 2,523,993.50
X = 398,930.10
BK = S38°14'56"E
AH = S50°29'00"E

CURVE 44
PI STA 241+47.49
Y = 2,524,013.12
X = 398,913.91
DELTA = 17°07'26" RT
D = 33°54'31"
T = 25.44
L = 50.50
R = 168.97
PRC STA 241+22.05
Y = 2,523,993.50
X = 398,930.10
PRC STA 241+72.55
Y = 2,524,027.11
X = 398,892.67
BK = S50°29'00"E
AH = S33°21'35"E

CURVE 45
PI STA 242+67.85
Y = 2,524,079.52
X = 398,813.07
DELTA = 42°09'35" LT
D = 23°10'26"
T = 95.30
L = 181.93
R = 247.24
PRC STA 241+72.55
Y = 2,524,027.11
X = 398,892.67
PT STA 243+54.47
Y = 2,524,171.80
X = 398,789.23
BK = S33°21'35"E
AH = S75°31'10"E

CURVE 46
PI STA 244+97.47
Y = 2,524,310.25
X = 398,753.48
DELTA = 11°23'34" RT
D = 17°36'55"
T = 32.44
L = 64.68
R = 325.26
PC STA 244+65.02
Y = 2,524,278.83
X = 398,761.59
PCC STA 245+29.70
Y = 2,524,339.44
X = 398,739.32
BK = S75°31'10"E
AH = S64°07'36"E

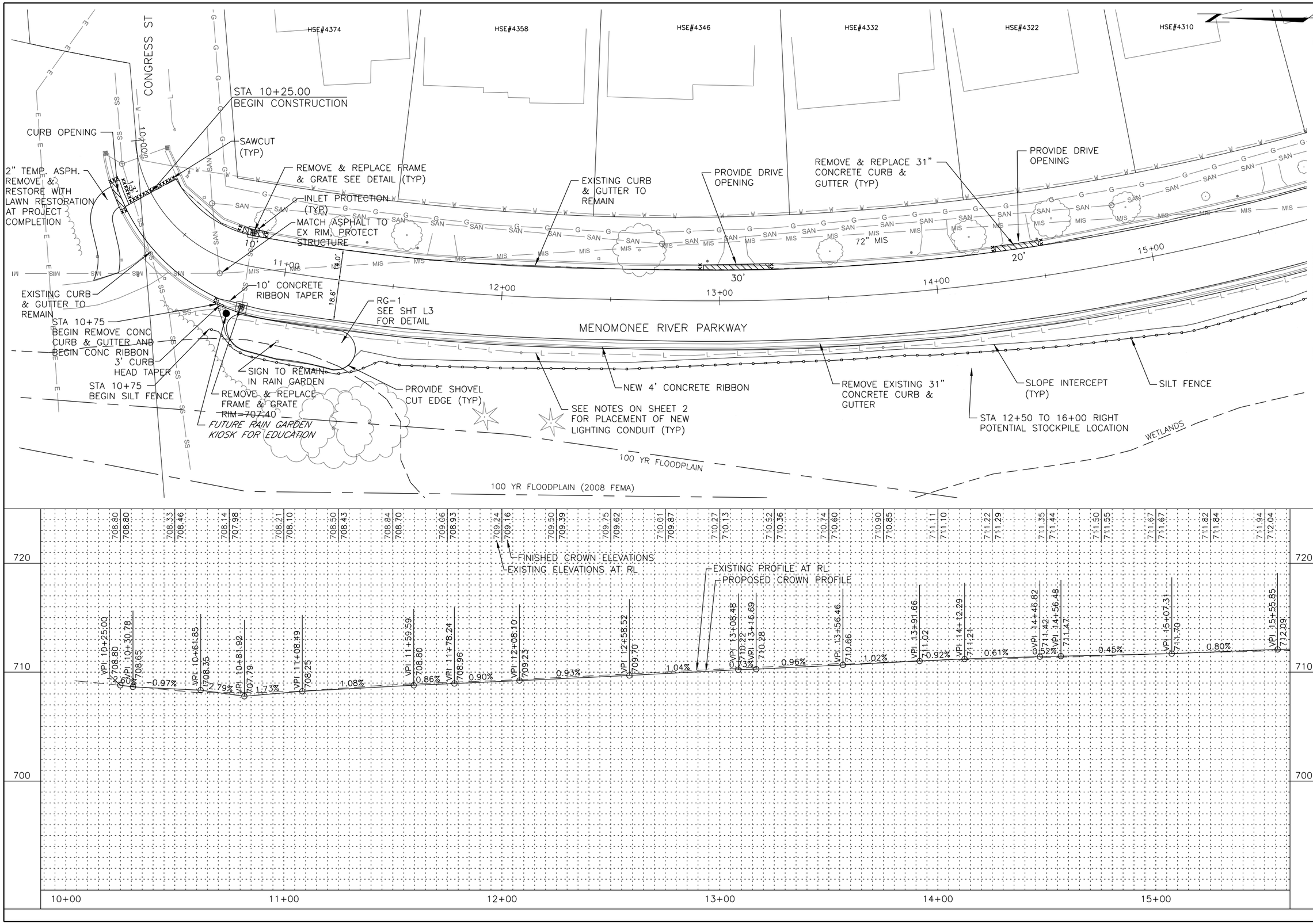


CURVE 47
PI STA 250+21.30
Y = 2,524,781.76
X = 398,524.79
DELTA = 58°48'07" RT
D = 6°34'03"
T = 491.60
L = 895.35
R = 872.42
PCC STA 245+29.70
Y = 2,524,339.44
X = 398,739.32
PT STA 254+25.05
Y = 2,524,827.38
X = 398,035.32
BK = S64°07'36"E
AH = S5°19'29"E

DATE: | REVISION DESCRIPTION: | BY:

MILWAUKEE COUNTY DEPARTMENT OF
ADMINISTRATIVE SERVICES
Architecture, Engineering & Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

DRAWN BY: BJG
CHECKED BY: TH
SCALE: 1"=40'
DATE: 7/03/14
PROJECT TITLE: MENOMONEE RIVER PARKWAY
SHEET DESCRIPTION: ALIGNMENT PLAN – PATH
SITE NO.
BUILDING NO.
PROJECT NO. P280-13626
SHEET NO. 9
9 OF 110
FILE NO.

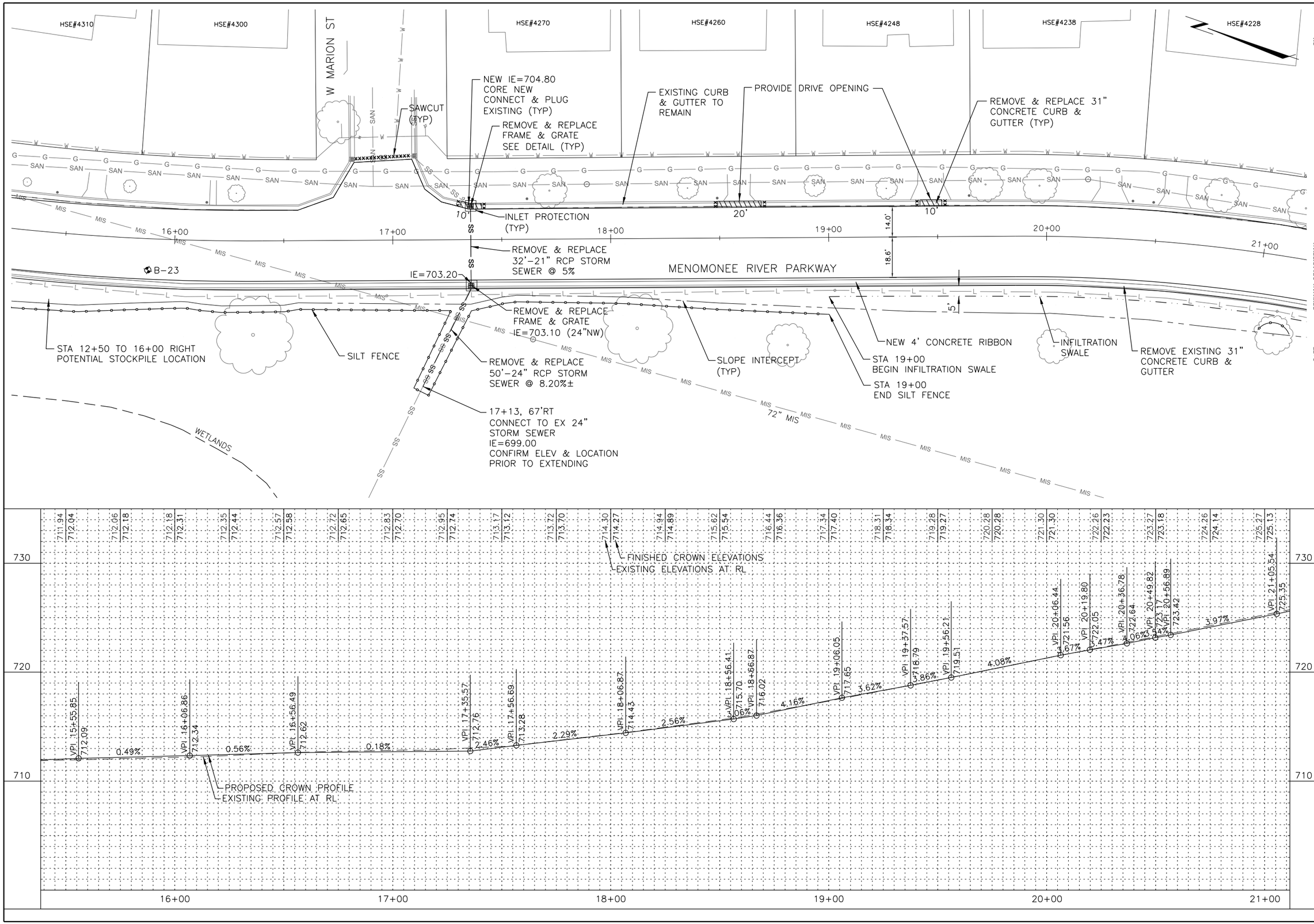


MILWAUKEE COUNTY DEPARTMENT OF ADMINISTRATIVE SERVICES
Architecture, Engineering & Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

DATE: REVISION DESCRIPTION: BY:

DRAWN BY: BJG
CHECKED BY: TH
SCALE: 1"=40'
DATE: 7/03/14

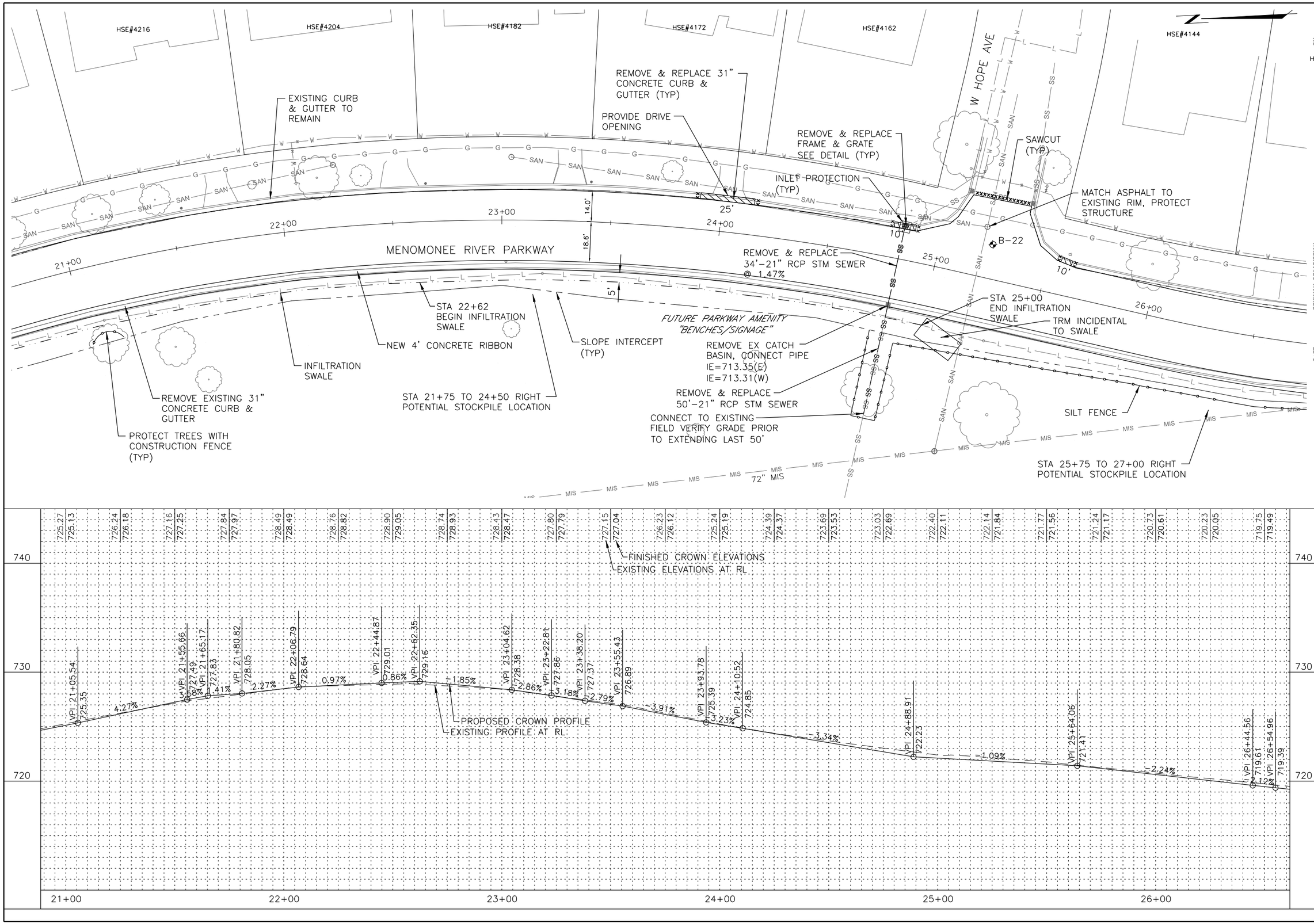
PROJECT TITLE: MENOMONEE RIVER PARKWAY
SHEET DESCRIPTION: PLAN & PROFILE 10+00 TO 15+50
SITE NO.
BUILDING NO.
PROJECT NO. P280-13626
SHEET NO. 10
10 OF 110
FILE NO.



DATE: REVISION DESCRIPTION: BY:

MILWAUKEE COUNTY DEPARTMENT OF
ADMINISTRATIVE SERVICES
Architecture, Engineering &
Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

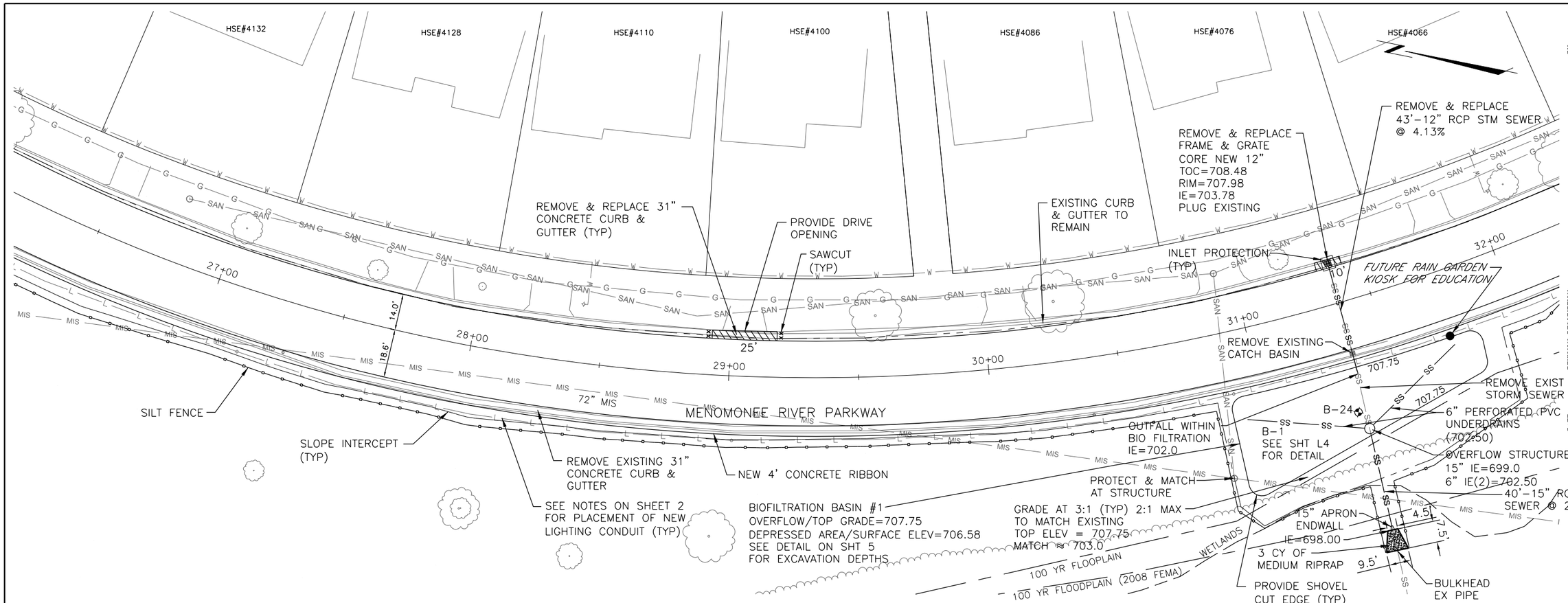
DRAWN BY: BJG	CHECKED BY: TH
SCALE: 1"=40'	DATE: 7/03/14
PROJECT TITLE: MENOMONEE RIVER PARKWAY	SHEET DESCRIPTION: PLAN & PROFILE 15+50 TO 21+00
SITE NO.	BUILDING NO.
PROJECT NO. P280-13626	
SHEET NO. 11	11 OF 110
FILE NO.	

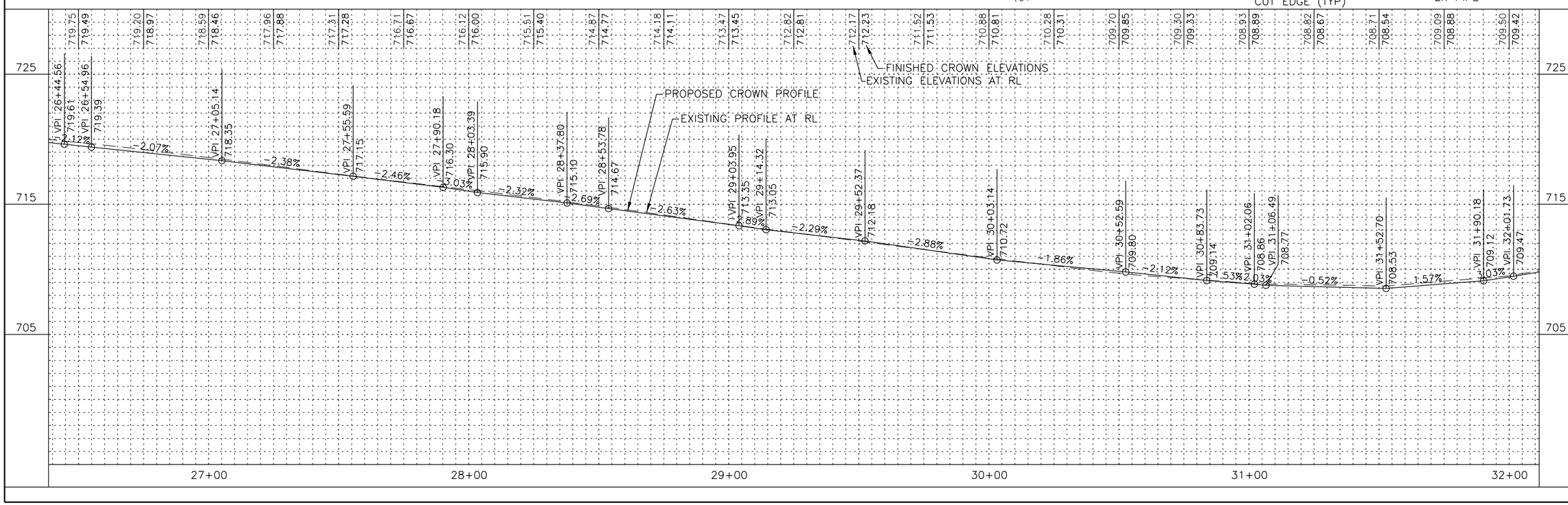


MILWAUKEE COUNTY DEPARTMENT OF ADMINISTRATIVE SERVICES
Architecture, Engineering & Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

DATE: REVISION DESCRIPTION: BY:

DRAWN BY: BJG	CHECKED BY: TH
SCALE: 1"=40'	DATE: 7/03/14
PROJECT TITLE: MENOMONEE RIVER PARKWAY	
SITE NO.	BUILDING NO.
SHEET DESCRIPTION: PLAN & PROFILE 21+00 TO 26+50	
PROJECT NO. P280-13626	
SHEET NO. 12	12 OF 110
FILE NO.	

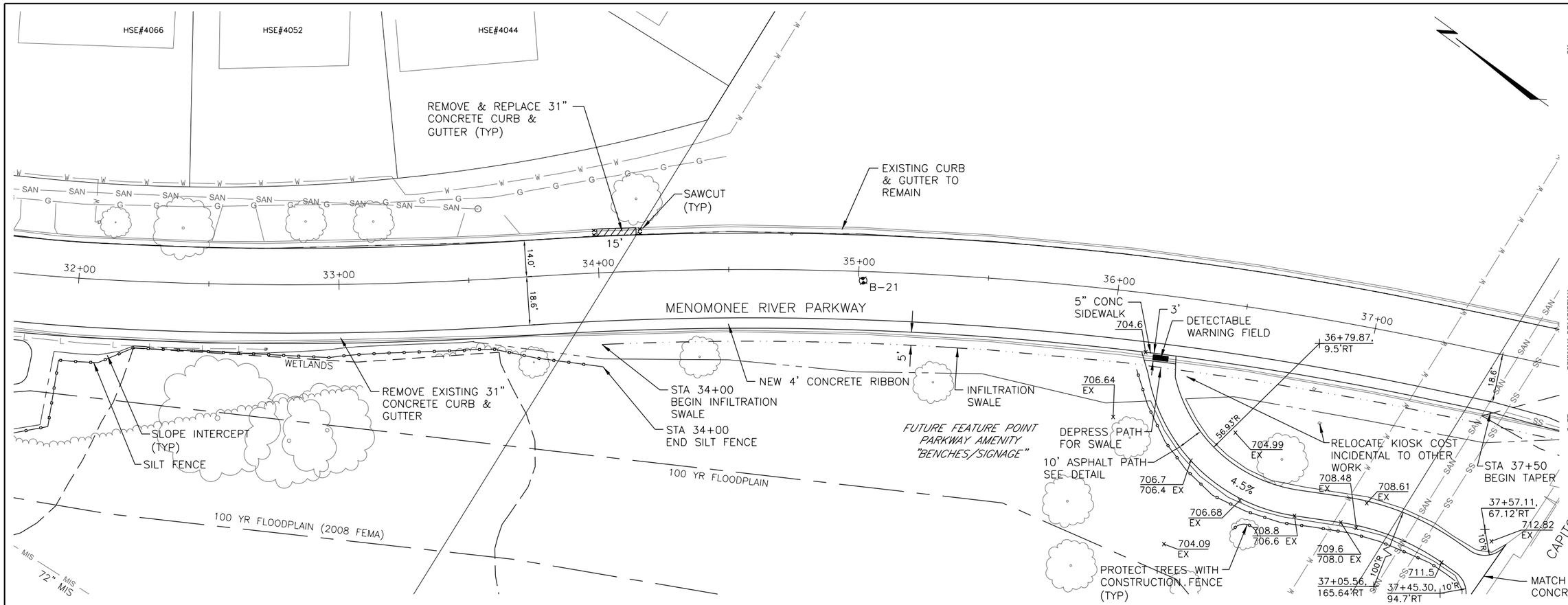




MILWAUKEE COUNTY DEPARTMENT OF ADMINISTRATIVE SERVICES
Architecture, Engineering & Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

DATE:	REVISION DESCRIPTION:	BY:

DRAWN BY: BJG	CHECKED BY: TH
SCALE: 1"=40'	DATE: 7/03/14
PROJECT TITLE: MENOMONEE RIVER PARKWAY	SHEET DESCRIPTION: PLAN & PROFILE 26+50 TO 32+00
SITE NO.	BUILDING NO.
PROJECT NO. P280-13626	
SHEET NO. 13	13 OF 110
FILE NO.	



DATE: | REVISION DESCRIPTION: | BY:

MILWAUKEE COUNTY DEPARTMENT OF ADMINISTRATIVE SERVICES
Architecture, Engineering & Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

DRAWN BY: BJG	CHECKED BY: TH
SCALE: 1"=40'	DATE: 7/03/14
PROJECT TITLE: MENOMONEE RIVER PARKWAY	
SITE NO.	BUILDING NO.
SHEET DESCRIPTION: PLAN & PROFILE 32+00 TO 37+50	
PROJECT NO. P280-13626	
SHEET NO. 14	14 OF 110
FILE NO.	

HSE#11001

CAPITOL DRIVE OVERPASS

4' CONCRETE RIBBON

REMOVE & REPLACE FRAME & GRATE SEE DETAIL (TYP)

REMOVE & REPLACE 31" CONCRETE CURB & GUTTER (TYP)

100 YR FLOODPLAIN (2008 FEMA)

10' CONCRETE RIBBON TAPER

END CONCRETE RIBBON

3' CURB HEAD TAPER

INLET PROTECTION (TYP)

37+50 BEGIN TAPER

INFILTRATION SWALE

REMOVE & REPLACE CB & RECONNECT 15" E & N
IE=693.46
RIM=699.51
NO CURB HEAD

EXISTING CURB & GUTTER TO REMAIN

REMOVE & REPLACE FRAME & GRATE
TOC=697.26
RIM=696.76

SAWCUT (TYP)

697.34 TOC

REMOVE & REPLACE FRAME & GRATE
TOC=697.08
RIM=696.58

697.34 TOC

NEW 31" CONCRETE CURB & GUTTER

STA 40+50.00
END 31" CONCRETE CURB & GUTTER
BEGIN 4' CONC RIBBON

STA 39+93.5
BEGIN 31" CONCRETE CURB & GUTTER TYPE D

STA 40+50
BEGIN BASE BID

NEW 31" CONCRETE CURB & GUTTER TYPE D

10' CONCRETE RIBBON TAPER

STA 40+50
BEGIN SILT FENCE

3' CURB HEAD TAPER

100 YR FLOODPLAIN

MENOMONEE RIVER PARKWAY

B-20

REMOVE EXIST CATCH BASIN
NEW CATCH BASIN
42+51.6, 24.58'LT
TOC=700.90
RIM=700.40
IE=695.68

REMOVE & REPLACE
15'-12" RCP STM SEWER
SPOT REPLACEMENT
IE=694.70± FIELD VERIFY

5" CONC SIDEWALK

DETECTABLE WARNING FIELD

SILT FENCE

NEW 4' CONCRETE RIBBON

SLOPE INTERCEPT (TYP)

REMOVE EXIST CATCH BASIN, CONNECT PIPE
IE=694.27(12"S)
FIELD VERIFY ELEV

72" MIS

38+00 39+00 40+00 41+00 42+00 43+00

FINISHED CROWN ELEVATIONS
EXISTING ELEVATIONS AT RL

VPI 37+51.20 699.54
-2.04%
VPI 38+01.15 698.52
-0.88%
VPI 38+51.22 698.08
-0.80%
VPI 38+99.85 697.69
-0.50%
VPC 39+50.00 697.44
100.00'
K: 37.04
VPI 39+90.74 697.22
VPT 40+50.00 697.69
VPI 40+00.00 696.89
1.60%
VPC 42+75.00 701.29
50.00'
K: 45.45
VPI 43+00.00 701.69

EXISTING PROFILE AT RL
PROPOSED CROWN PROFILE

710 700 690

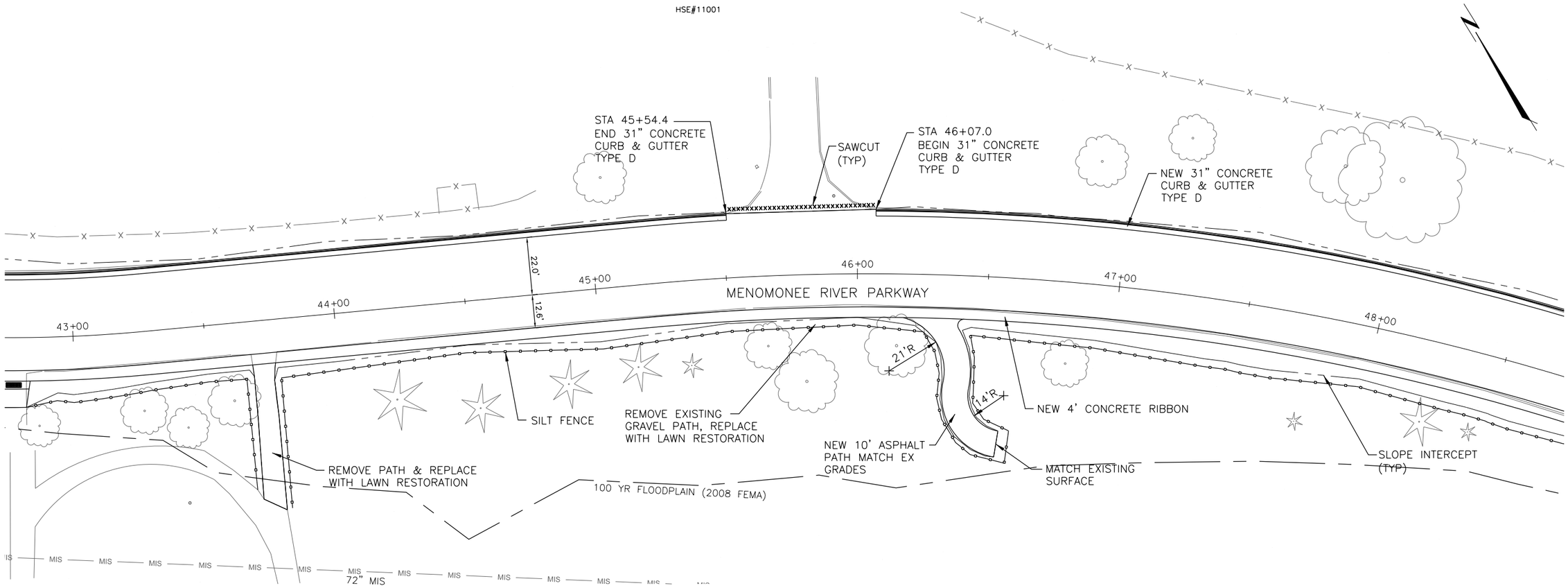
MILWAUKEE COUNTY DEPARTMENT OF ADMINISTRATIVE SERVICES
Architecture, Engineering & Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

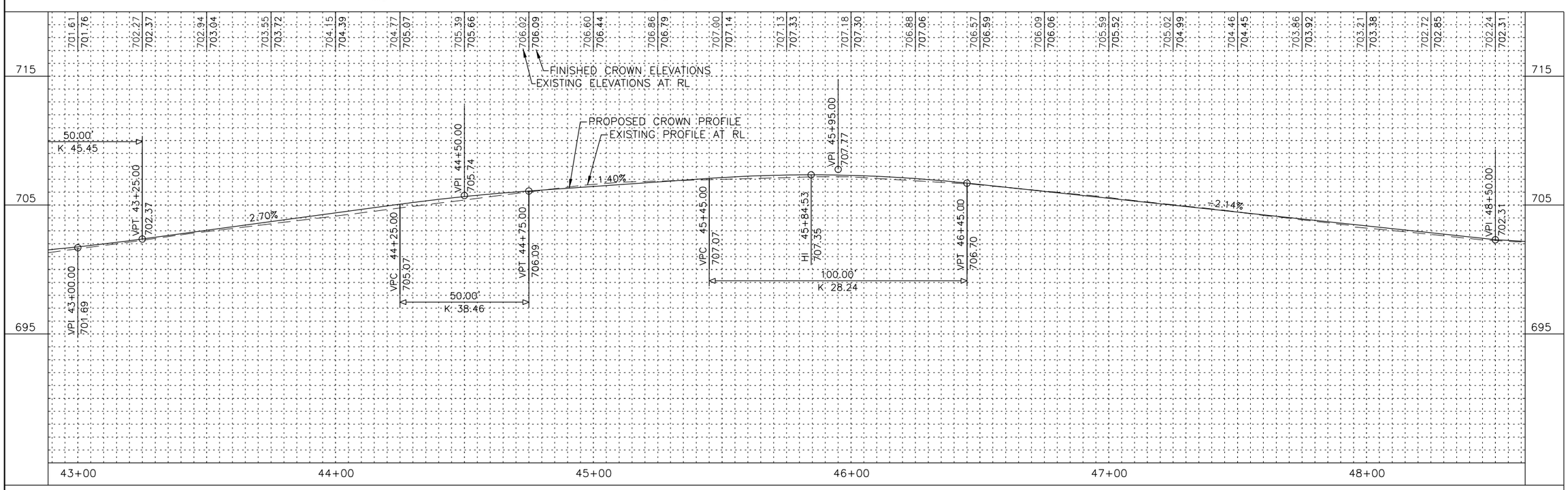
DATE: REVISION DESCRIPTION: BY:

DRAWN BY: BJG
CHECKED BY: TH
SCALE: 1"=40'
DATE: 7/03/14

PROJECT TITLE: MENOMONEE RIVER PARKWAY
SHEET DESCRIPTION: PLAN & PROFILE 37+50 TO 43+00
SITE NO.
BUILDING NO.
PROJECT NO. P280-13626
SHEET NO. 15
15 OF 110
FILE NO.

HSE#11001





DATE: REVISION DESCRIPTION: BY:

MILWAUKEE COUNTY DEPARTMENT OF
ADMINISTRATIVE SERVICES
Architecture, Engineering &
Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

DRAWN BY: BJG
CHECKED BY: TH
SCALE: 1"=40'
DATE: 7/03/14
PROJECT TITLE: MENOMONEE RIVER PARKWAY
SHEET DESCRIPTION: PLAN & PROFILE 43+00 TO 48+50
SITE NO.
BUILDING NO.
PROJECT NO. P280-13626
SHEET NO. 16
16 OF 110
FILE NO.

HSE#11001

REMOVE EX CB
NEW CB 50+51.6, 24.58'LT
TOC=699.97
RIM=699.47
IE=694.55 (12"S)

NEW 31" CONCRETE
CURB & GUTTER
TYPE D

REMOVE & REPLACE
38'-12" RCP STM
SEWER @ 1.50%

DEPRESS CURB HEAD
& MATCH AT RAMP

72" MIS

B-19

MENOMONEE RIVER PARKWAY

22.0'

12.6'

49+00 50+00 51+00 52+00 53+00 54+00

INLET PROTECTION
(TYP)

NEW 4' CONCRETE RIBBON

100 YR FLOODPLAIN (2008 FEMA)

SILT FENCE

51+67.8 TO 51+79.8
12'-15" RCP STM SEWER
SPOT REPLACEMENT
CONNECT TO EXISTING
IE=692.5±
FIELD VERIFY

SLOPE INTERCEPT
(TYP)

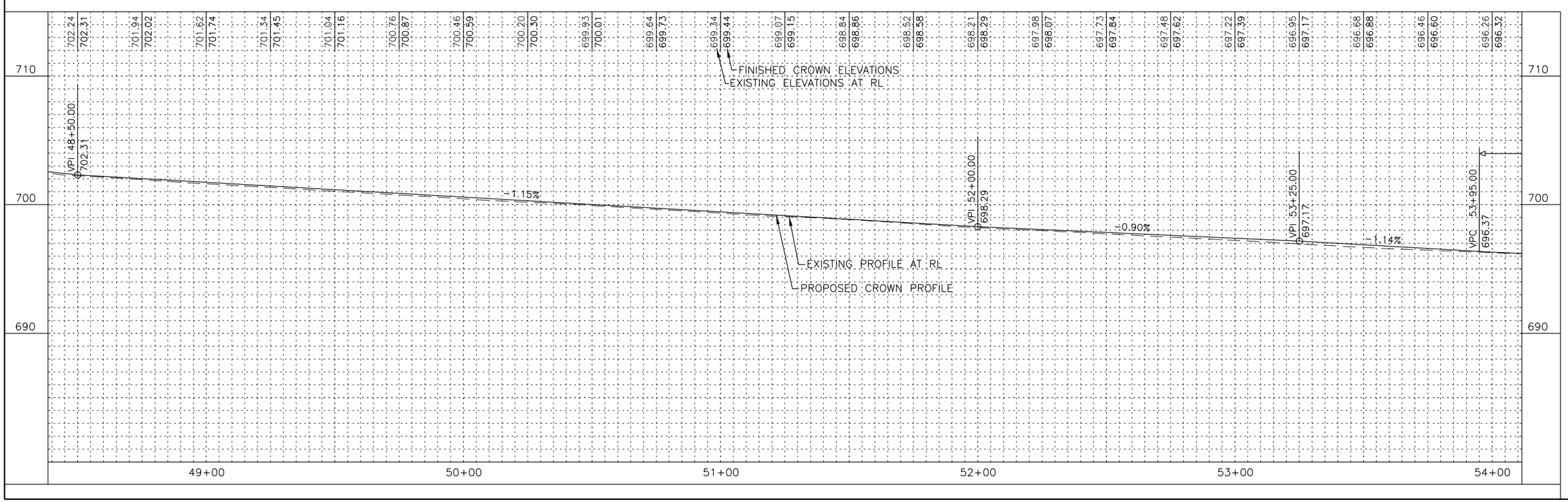
FUTURE RAIN GARDEN-
KIOSK FOR EDUCATION

WETLANDS

EDGE OF WATER

100 YR FLOODPLAIN

REMOVE EX CB
NEW CB 50+51.4, 14.6'RT
RIM=699.78
IE=693.98 (15"NE)
IE=693.05 (15"SE)
IE=695.17 (6"NE-RECONNECT)
FIELD VERIFY & CONNECT
15" E



DATE: REVISION DESCRIPTION: BY:

MILWAUKEE COUNTY DEPARTMENT OF
ADMINISTRATIVE SERVICES
Architecture, Engineering &
Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

DRAWN BY: BJG
CHECKED BY: TH
SCALE: 1"=40'
DATE: 7/03/14

PROJECT TITLE: MENOMONEE RIVER PARKWAY
SHEET DESCRIPTION: PLAN & PROFILE 48+50 TO 54+00
SITE NO.
BUILDING NO.
PROJECT NO. P280-13626
SHEET NO. 17
17 OF 110
FILE NO.

HSE#11001

INLET PROTECTION (TYP)

REMOVE & REPLACE 40'-15" RCP STM SEWER @ 0.48%

REMOVE EX CB
NEW CB 54+51.3, 24.58'LT
TOC=695.97
RIM=695.47
IE=690.17 (15"NE&SW)

RELAY 8'-21" RCP STM SEWER RECONNECT WITH 21" CONC FITTING TO EX 21" STORM
IE=689.40

696.10 TOC

0.50%

0.50%

2.3%

696.09 TOC

54+00

55+00

56+00

57+00

58+00

NEW 31" CONCRETE CURB & GUTTER TYPE D

SAWCUT (TYP)

CROSSWALK PROPOSED BY THE DOT

STA 57+32±
END CONSTRUCTION
CONTRACTOR TO MATCH DOT LIMITS CURRENTLY UNDER CONSTRUCTION

10' CONCRETE RIBBON TAPER

5" CONC SIDEWALK 5' WIDE

22.0'

12.6'

695.60

ADJUST MH +0.2'
RECONNECT 15" N
IE=689.97

RG-2
SEE SHT L5 FOR DETAIL

B-25

MENOMONEE RIVER PARKWAY

56+82
BEGIN CROWN LINE TAPER

STA 57+33
END SILT FENCE

REMOVE EX CB
REMOVE STM SEWER PIPE

WETLANDS

PROVIDE SHOVEL CUT EDGE (TYP)

EDGE OF WATER

SILT FENCE

NEW 4' CONCRETE RIBBON

SLOPE INTERCEPT (TYP)

MAYFAIR ROAD (STH 100)

100 YR FLOODPLAIN (2008 FEMA)

100 YR FLOODPLAIN

696.26 696.32 696.15 696.12 696.09 696.05 696.14 696.11 696.34 696.29 696.56 696.52 696.78 696.75 696.98 696.97 697.16 697.10 697.34 697.23 697.49 697.37 697.55 697.50 697.68 697.63 697.65 697.76

FINISHED CROWN ELEVATIONS

EXISTING ELEVATIONS AT RL

710

700

690

100.00'

K: 48.98

VPC 53+95.00
696.37

LO 54+50.92
696.05

VPT 54+95.00
696.25

0.90%

VPI 55+75.00
696.97

0.53%

VPI 57+32.53
697.80

VPI 54+45.00
695.80

EXISTING PROFILE AT RL

PROPOSED CROWN PROFILE

54+00

55+00

56+00

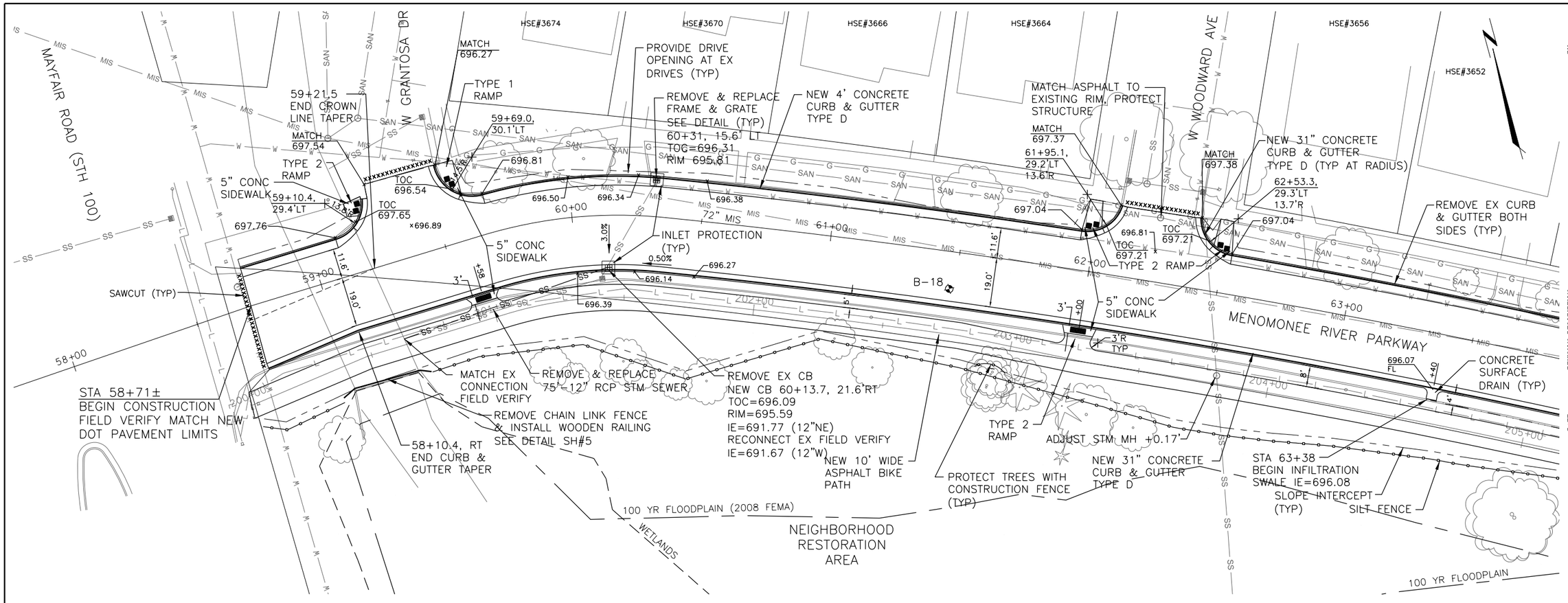
57+00

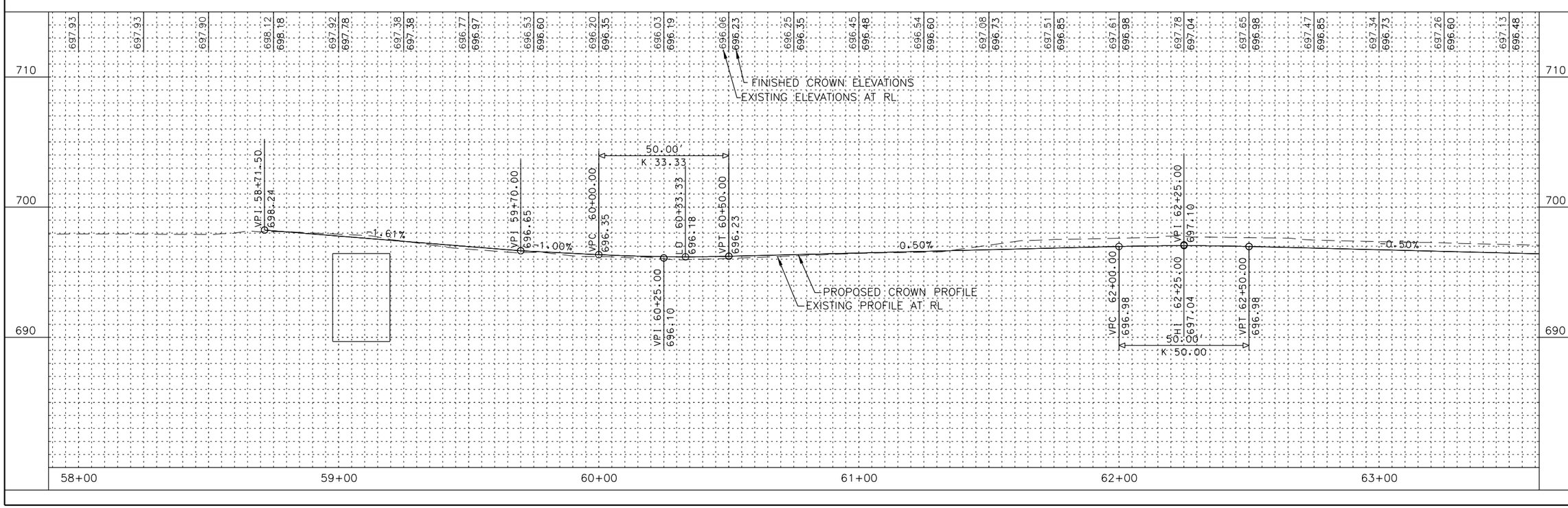
MILWAUKEE COUNTY DEPARTMENT OF ADMINISTRATIVE SERVICES
Architecture, Engineering & Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

DATE: REVISION DESCRIPTION: BY:

DRAWN BY: BJG
CHECKED BY: TH
SCALE: 1"=40'
DATE: 7/03/14

PROJECT TITLE: MENOMONEE RIVER PARKWAY
SHEET DESCRIPTION: PLAN & PROFILE 54+00 TO 57+50
SITE NO.
BUILDING NO.
PROJECT NO. P280-13626
SHEET NO. 18
18 OF 110
FILE NO.

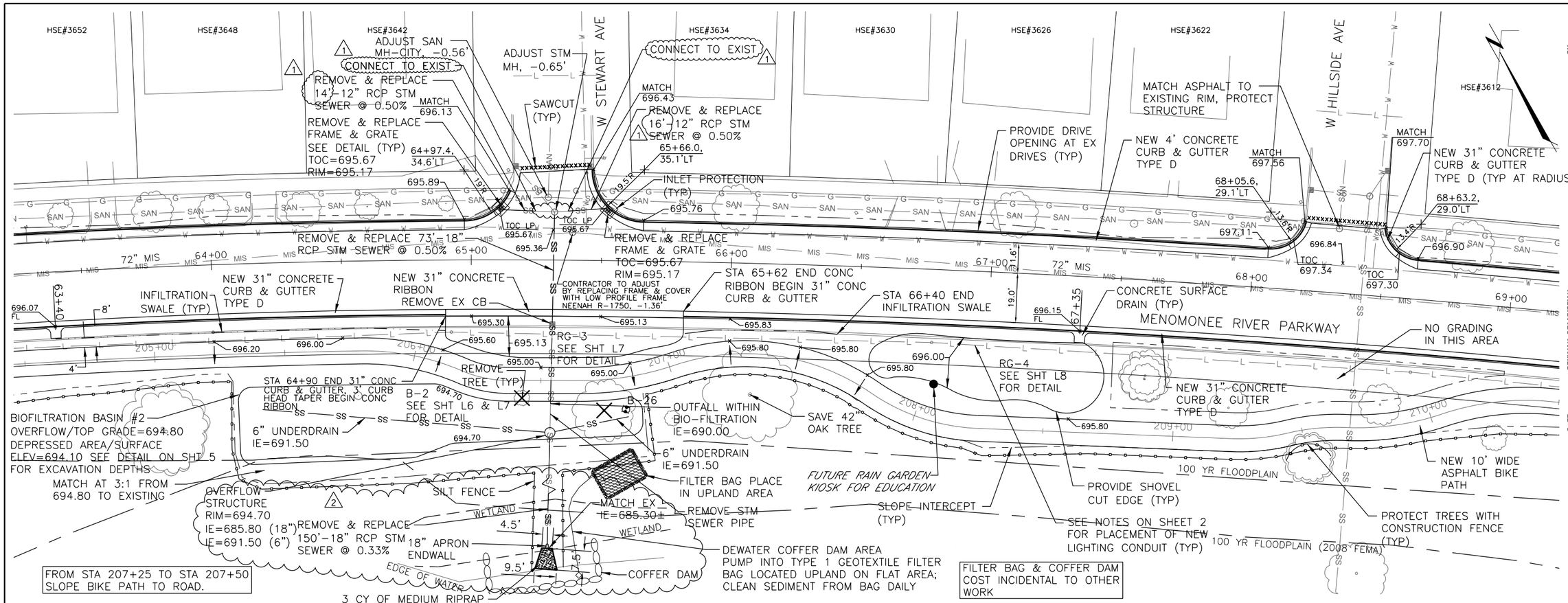


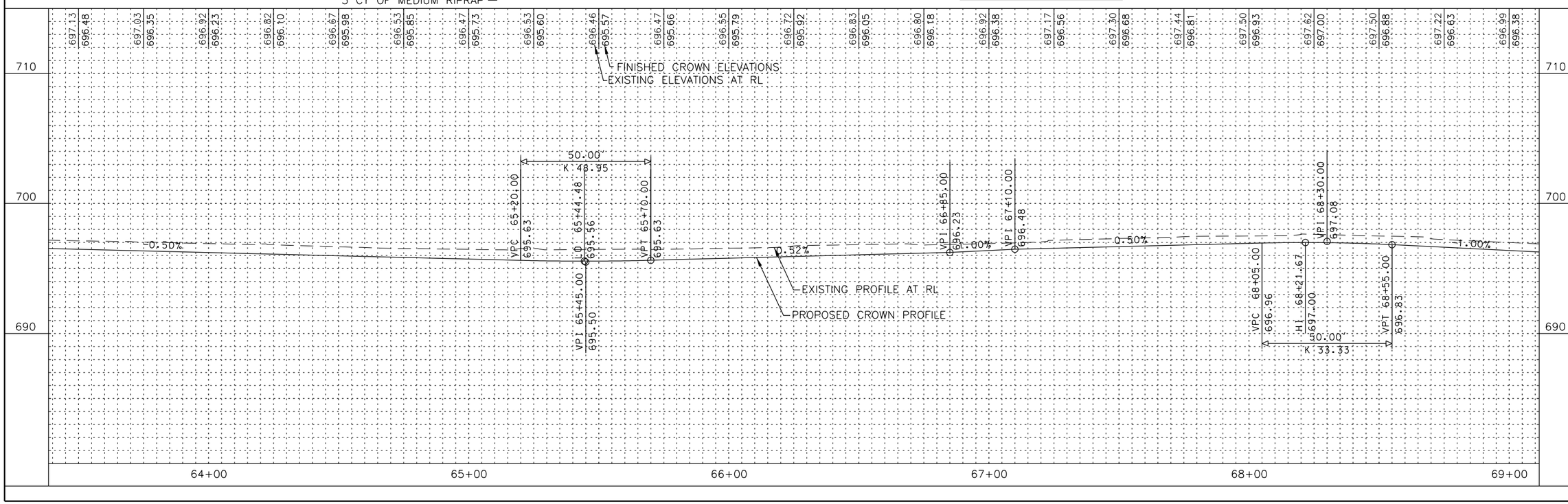


MILWAUKEE COUNTY DEPARTMENT OF ADMINISTRATIVE SERVICES
Architecture, Engineering & Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

DATE: REVISION DESCRIPTION: BY:

DRAWN BY: BJG	CHECKED BY: TH
SCALE: 1"=40'	DATE: 7/03/14
PROJECT TITLE: MENOMONEE RIVER PARKWAY	SHEET DESCRIPTION: PLAN & PROFILE 58+00 TO 63+50
SITE NO.	BUILDING NO.
PROJECT NO. P280-13626	
SHEET NO. 19	19 OF 110
FILE NO.	





DATE:	REVISION DESCRIPTION:	BY:
11/13/14	REVISED STORM SEWER REPLACEMENT LENGTHS	BJG
12/4/14	REVISED STORM GRADE & OVERFLOW STRUCTURE DEPTH	TH

MILWAUKEE COUNTY DEPARTMENT OF ADMINISTRATIVE SERVICES
Architecture, Engineering & Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

DRAWN BY: BJG
CHECKED BY: TH
SCALE: 1"=40'
DATE: 7/03/14
PROJECT TITLE: MENOMONEE RIVER PARKWAY
SHEET DESCRIPTION: PLAN & PROFILE 63+50 TO 69+00
SITE NO.
BUILDING NO.
PROJECT NO. P280-13626
SHEET NO. 20
20 OF 110
FILE NO.

HSE#3612 HSE#3606 HSE#3602 HSE#10367 HSE#3554 HSE#3546

W PARK RIDGE AVE

W SUNSET AVE

MENOMONEE RIVER PARKWAY

MATCH ASPHALT TO EXISTING RIM, PROTECT STRUCTURE

CONNECT TO EXIST

REMOVE & REPLACE 12'-12" RCP STM @ 0.50%, MATCH EXISTING INVERTS

3" PVC CONDUIT & REBAR AT ENDS (FOR FUTURE FLASHERS)

INLET PROTECTION (TYP)

PROVIDE DRIVE OPENING AT EX DRIVES (TYP)

REMOVE & REPLACE FRAME & GRATE SEE DETAIL (TYP) TOC=694.14

ADJUST STM MH -0.38'

CONNECT TO EXIST

REMOVE & REPLACE 11'-12" RCP STM @ 0.50%, MATCH EXISTING INVERTS

SAN MH ADJUST BY OTHERS, -1.13'

REMOVE & REPLACE FRAME & GRATE TOC=694.14

40'-12" RCP STM SEWER @ 0.50%

TYPE 2 RAMP

NEW CATCH BASIN 71+93, 12.6'LT TOC=694.38 RIM=693.88 IE=689.26

SAWCUT (TYP)

3' REMOVE & REPLACE CONCRETE DRIVEWAY

NEW 4' CONCRETE CURB & GUTTER TYPE D

NEW 31" CONCRETE CURB & GUTTER TYPE D (TYP AT RADIUS)

MATCH ASPHALT TO EXISTING RIM, PROTECT STRUCTURE

MATCH 696.26

MATCH 696.13

74+06.0, 28.8'LT

695.65

695.85

695.95

695.27

695.56

133'R

72" MIS

69+00 70+00 71+00 72+00 73+00 74+00

693.82

CONNECT TO EXIST

5" CONC SIDEWALK

+51 +95 11.6' 19.0'

695.42 FL

+50 4' 8'

INFILTRATION SWALE

693.60

RG-5 SEE SHT L9 FOR DETAIL

3'

PROVIDE SHOVEL CUT EDGE (TYP)

694.64 FL +40

693.65

693.55

693.55

8'

211+00 212+00 213+00 214+00 215+00

NEW 31" CONCRETE CURB & GUTTER TYPE D

NEW 10' WIDE ASPHALT BIKE PATH

REMOVE EXISTING CB

TYPE 2 RAMP

STA 71+81 (CENTER) RAISED PEDESTRIAN CROSSING WITH COLORED CONCRETE

CONCRETE SURFACE DRAIN (TYP)

100 YR FLOODPLAIN

FUTURE RAIN GARDEN KIOSK FOR EDUCATION

SAVE 52" RED OAK TREE

REMOVE TREE (TYP)

RG-6 SEE SHT L10 & L11 FOR DETAIL

3" PVC CONDUIT & REBAR AT ENDS (FOR FUTURE FLASHERS)

STA 69+48 BEGIN INFILTRATION SWALE IE=695.44

STA 69+00 TO STA 70+00 POTENTIAL STOCK PILE LOCATIONS (TYP)

REMOVE & REPLACE 130'-18" RCP STM SEWER, MATCH EXISTING GRADE

FILTER BAG PLACE IN UPLAND AREA COST INCIDENTAL TO OTHER WORK

PROTECT TREES WITH CONSTRUCTION FENCE (TYP)

SLOPE INTERCEPT (TYP)

100 YR FLOODPLAIN (2008 FEMA)

SILT FENCE

18" APRON ENDWALL

4.5'

MATCH EX INVERT

COFFER DAM

DEWATER COFFER DAM AREA PUMP INTO TYPE 1 GEOTEXTILE FILTER BAG LOCATED UPLAND ON FLAT AREA; CLEAN SEDIMENT FROM BAG DAILY, COST INCIDENTAL TO OTHER WORK

SEE NOTES ON SHEET 2 FOR PLACEMENT OF NEW LIGHTING CONDUIT (TYP)

WETLAND

3 CY OF MEDIUM RIPRAP

7.5'

EDGE OF WATER

9.5'

WETLAND

FROM STA 212+75 TO STA 213+75 SLOPE BIKE PATH TO ROAD

SEE SHEET 6 FOR INTERSECTION DETAILS

710

696.99 696.38 696.75 696.13 696.49 695.88 696.26 695.63 695.99 695.38 695.74 695.13 695.49 694.88 695.25 694.63 695.09 694.38 695.04 694.13 694.94 694.02 694.91 694.11 694.99 694.26 695.12 694.41 695.25 694.56 695.35 694.71 695.48 694.86 695.63 695.01 695.77 695.16 695.97 695.31 696.07 695.46 696.20 695.52 696.09 695.46

FINISHED CROWN ELEVATIONS

EXISTING ELEVATIONS AT RL

700

50.00'

K 31.25

VPC 71+20.00 694.18

71+51.25 694.02

VPT 71+70.00 694.08

-1.00%

0.60%

690

VPI 71+45.00 693.93

EXISTING PROFILE AT RL

PROPOSED CROWN PROFILE

VPC 73+95.00 695.43

VPI 74+20.00 695.58

74+25.00 695.52

50.00

K 50.00

VPT 74+45.00 695.48

69+00 70+00 71+00 72+00 73+00 74+00

DATE:	REVISION DESCRIPTION:	BY:
11/13/14	REVISED STORM SEWER REPLACEMENT LENGTHS	BJG

MILWAUKEE COUNTY DEPARTMENT OF ADMINISTRATIVE SERVICES
Architecture, Engineering & Environmental Services Section

CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

DRAWN BY: BJG

CHECKED BY: TH

SCALE: 1"=40'

DATE: 7/03/14

PROJECT TITLE: MENOMONEE RIVER PARKWAY

SHEET DESCRIPTION: PLAN & PROFILE 69+00 TO 74+50

SITE NO.

BUILDING NO.

PROJECT NO. P280-13626

SHEET NO. 21

21 OF 110

FILE NO.

W SUNSET AVE
HSE#3536
HSE#3534
HSE#3528
HSE#3524
W NASH ST
HSE#3516
HSE#3512
HSE#3508
HSE#3504

REMOVE & REPLACE 12'-12" RCP STM @ 0.50%, MATCH EXISTING INVERTS
REMOVE & REPLACE 14'-12" RCP STM @ 0.50%, MATCH EXISTING INVERTS
MATCH 694.85
MATCH 694.82
7' REMOVE & REPLACE CONCRETE DRIVEWAY
4' REMOVE & REPLACE CONCRETE DRIVEWAY
NEW 31" CONCRETE CURB & GUTTER TYPE D (TYP AT RADIUS)
REMOVE & REPLACE FRAME & GRATE SEE DETAIL (TYP) TOC=694.40
77+02.5, 32.5'LT
ADJUST SAN MH CITY, -0.29'
CONNECT TO EXIST
REMOVE & REPLACE FRAME & GRATE TOC=694.65
INLET PROTECTION (TYP)
77+66.9, 32.7'LT
6' REMOVE & REPLACE CONCRETE DRIVEWAY
NEW 4' CONCRETE CURB & GUTTER TYPE D
NEW CATCH BASIN 78+87.5, 15.6'LT TOC=693.88 RIM=693.38 IE=689.60
6' REMOVE & REPLACE CONCRETE DRIVEWAY
PROVIDE DRIVE OPENING AT EX DRIVES (TYP)
PROVIDE 4' WIDE CURB OPENING
ADJUST SAN MH BY OTHERS, +0.30'
74+63.4, 29.22'LT
SAWCUT (TYP)
694.60
5" CONC SIDEWALK
694.34
693.94
GRADE TO DRAIN
SWALE
CONNECT TO EXIST
ADJUST STM MH, -0.56'
IE=688.51 MATCH EX. INVERT
694.09
TYPE 2 RAMP
75+00
76+00
77+00
78+00
79+00
80+00
B-17
MENOMONEE RIVER PARKWAY
72" MIS
12" MIS
34'-12" RCP STM @ 2.00%
79+10 FL=693.55
ADJUST SAN MH BY OTHERS, +0.35
MATCH ASPHALT TO EXISTING RIM PROTECT STRUCTURE
3'R TYP
NEW 10' WIDE ASPHALT BIKE PATH
SLOPE INTERCEPT (TYP)
REMOVE EXISTING CB SAN MH RECONSTRUCT -1.2', SEE DETAIL SHT 4a
NEW 31" CONCRETE CURB & GUTTER TYPE D
5" CONC SIDEWALK
NEW CATCH BASIN 78+87.5, 21.6'RT TOC=693.77 RIM=693.27 IE=688.92 IE=688.82
141'-12" RCP STM @ 2.00%
100 YR FLOODPLAIN
3" PVC CONDUIT & REBAR AT ENDS (FOR FUTURE FLASHERS)
REMOVE & REPLACE 123'-18" RCP STM SEWER, MATCH EXISTING GRADE
SILT FENCE
100 YR FLOODPLAIN (2008 FEMA)
18" APRON ENDWALL
4.5'
FILTER BAG PLACE IN UPLAND AREA, COST INCIDENTAL TO OTHER WORK
PROTECT TREES WITH CONSTRUCTION FENCE (TYP)
WETLANDS
3 CY OF MEDIUM RIPRAP
MATCH EX INVERT
DEWATER COFFER DAM AREA PUMP INTO TYPE 1 GEOTEXTILE FILTER BAG LOCATED UPLAND ON FLAT AREA; CLEAN SEDIMENT FROM BAG DAILY, COST INCIDENTAL TO OTHER WORK
EDGE OF WATER
9.6'
7.5'
COFFER DAM

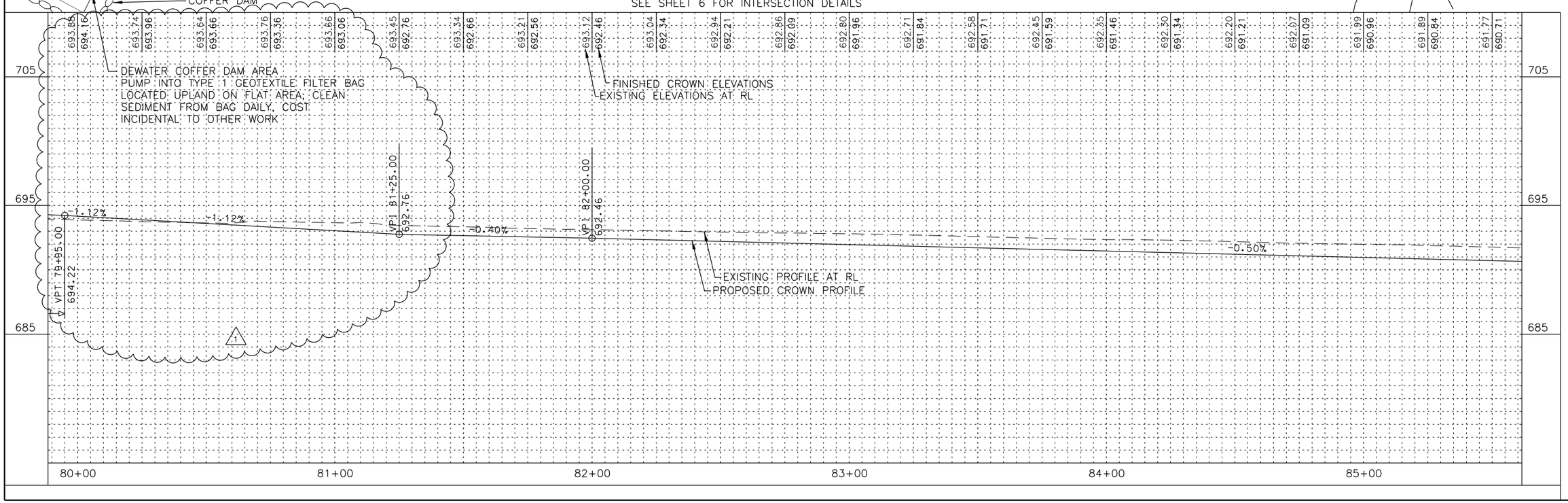
FINISHED CROWN ELEVATIONS
EXISTING ELEVATIONS AT RL
710
700
690
VPI 74+45.00 695.48
-0.40%
EXISTING PROFILE AT RL
PROPOSED CROWN PROFILE
50.00' K 31.25
VPC 78+75.00 693.76
LO 78+87.50 693.73
VPT 79+25.00 693.96
-1.20%
VPI 79+00.00 693.66
VPC 79+45.00 694.20
HI 79+70.83 694.36
50.00' K 21.53
VPI 79+70.00 694.50
VPT 79+95.00 694.22
-1.12%

DATE:	REVISION DESCRIPTION:	BY:
11/13/14	REVISED STORM SEWER REPLACEMENT LENGTHS	BJG
11/17/14	RAISED PROFILE & REVISED GRADES	BJG

MILWAUKEE COUNTY DEPARTMENT OF ADMINISTRATIVE SERVICES
Architecture, Engineering & Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

DRAWN BY: BJG
SCALE: 1"=40'
CHECKED BY: TH
DATE: 7/03/14
PROJECT TITLE: MENOMONEE RIVER PARKWAY
SHEET DESCRIPTION: PLAN & PROFILE 74+50 TO 80+00
SITE NO.
BUILDING NO.
PROJECT NO. P280-13626
SHEET NO. 22
22 OF 110
FILE NO.

HSE#3500
MATCH ASPHALT TO EXISTING RIM, PROTECT STRUCTURE
REMOVE & REPLACE 8'-12" RCP STM @ 1.00%
3" ASPHALT DRIVE
SAWCUT (TYP)
NEW 4' CONCRETE CURB & GUTTER TYPE D
INSTALL NEW CATCH BASIN TOC=693.40 RIM=692.90 IE=687.01
ADJUST SAN MH BY OTHERS -0.04'
ADJUST SAN MH BY OTHERS -0.17'
REMOVE 10" STORM REMOVE CB
ADJUST STM MH, -0.22' IE=686.93 MATCH EX
SWALE GRADE TO DRAIN
ADJUST SAN MH BY OTHERS -0.45'
MATCH ASPHALT TO EXISTING RIM, 80.00 PROTECT STRUCTURE
72" MIS
72" MIS
35'-18" RCP STM @ 1.00%
IE=692.38 PLUG EAST
141'-12" RCP STM @ 2.00%
18" STM OUTFALL IE=686.76
B-27
ADJUST SAN MH BY OTHERS -0.91'
B-3 SEE SHT L12 & L13 FOR DETAIL
6" UNDERDRAIN IE=689.17
OVERFLOW STRUCTURE RIM=692.10, IE=686.76
13'-18" RCP STM @ 6.61%
SILT FENCE
REMOVE & REPLACE FRAME & GRATE NEENAH R-1800-C RIM=693.75 IE=685.90 CORE HOLES IE=686.00 SEE DETAIL(TYP)
FILTER BAG PLACE IN UPLAND AREA COST INCIDENTAL TO OTHER WORK
18" APRON ENDWALL
REMOVE & REPLACE 181'-18" RCP STM SEWER @ 0.90%
WETLAND
MATCH EXISTING INVERT = 684.27±
3 CY OF MEDIUM RIPRAP (4.5' WIDE X 9.5' WIDE X 7.5' LONG)
COFFER DAM
REMOVE & REPLACE 55'-12" RCP STM @ 1.32%, MATCH EXISTING INVERTS
W KEEFE AVE
NEW 4' CONCRETE CURB & GUTTER TYPE D (TYP AT RADIUS)
INLET PROTECTION (TYP)
INSTALL NEW CB IE=687.93 TOC=693.24 RIM=692.74
REMOVE CB
72'-12" RCP STM SEWER @ 0.50%
TYPE 1 RAMP
5" CONC SIDEWALK
REMOVE STM SEWER PIPE
5" CONC SIDEWALK
TYPE 2 RAMP
NEW CATCH BASIN 81+94.4, 12.6'LT TOC=692.70 RIM=692.20 IE=688.29
STA 82+06.5 (CENTER) RAISED PEDESTRIAN CROSSING WITH COLORED CONCRETE
3" PVC CONDUIT & REBAR AT ENDS (FOR FUTURE FLASHERS)
FUTURE 5' SIDEWALK
6' PARKING LANE
NEW 31" CONCRETE CURB & GUTTER TYPE D
SEE NOTES ON SHEET 2 FOR PLACEMENT OF NEW LIGHTING CONDUIT (TYP)
ROW
MENOMONEE RIVER PARKWAY
NO GRADING IN THIS AREA
96" MIS
690.68 FL
FUTURE RAIN GARDEN KIOSK FOR EDUCATION
TRAIL COUNTER & PEDESTRIAN COUNTER
NEW 10' WIDE ASPHALT BIKE PATH
100 YR FLOODPLAIN (2008 FEMA)
SLOPE INTERCEPT (TYP)
NEW 31" CONCRETE CURB & GUTTER TYPE D
100 YR FLOODPLAIN
PROTECT TREES WITH CONSTRUCTION FENCE (TYP)
CONCRETE SURFACE DRAIN (TYP)
690.40
690.50
690.40
42" MIS
PROVIDE SHOVEL CUT EDGE (TYP)
BIOFILTRATION BASIN #3 OVERFLOW/TOP GRADE=692.10 DEPRESSED AREA/SURFACE ELEV=691.50 SEE DETAIL ON SHT 5 FOR EXCAVATION DEPTHS
REMOVE TREE (TYP)
RG-7 SEE SHT L14 & L15 FOR DETAIL
GRADE TO DRAIN
WETLANDS
FUTURE RAIN GARDEN KIOSK FOR EDUCATION
SEE SHEET 6 FOR INTERSECTION DETAILS



DATE:	REVISION DESCRIPTION:	BY:
11/17/14	RAISED PROFILE & REVISED GRADES	BJG
12/8/14	REVISED CURB & GUTTER LIMITS & LAYOUT TO MATCH FIELD CONDITIONS	BJG

MILWAUKEE COUNTY DEPARTMENT OF ADMINISTRATIVE SERVICES
Architecture, Engineering & Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

DRAWN BY: BJG
CHECKED BY: TH
SCALE: 1"=40'
DATE: 7/03/14
PROJECT TITLE: MENOMONEE RIVER PARKWAY
SHEET DESCRIPTION: PLAN & PROFILE 80+00 TO 85+50
SITE NO.
BUILDING NO.
PROJECT NO. P280-13626
SHEET NO. 23
23 OF 110
FILE NO.

HSE#3400

FUTURE 5' SIDEWALK

NEW 31" CONCRETE CURB & GUTTER TYPE D

INLET PROTECTION (TYP)

REMOVE & REPLACE 20'-EX 8" TO 12" RCP STORM SEWER @ 4.70%

STA 87+38, 15.6'LT NEW CATCH BASIN TOC=689.80 RIM=689.30 IE=686.08 (12"E,W)

REMOVE 8" STM SEWER PIPE

REMOVE EX CB

NEW 4' CONCRETE CURB & GUTTER TYPE D

ADJUST SAN MH BY OTHERS -0.50'

CONCRETE SURFACE DRAIN (TYP)

MENOMONEE RIVER PARKWAY

ROW

REMOVE & REPLACE 42'-EX 8" TO 12" RCP STM SEWER @ 0.50%

REMOVE EX CB

INFILTRATION SWALE

STA 86+00 BEGIN INFILTRATION SWALE, IE=690.00

RG-8 SEE SHT L16 FOR DETAIL

STA 88+70 BEGIN INFILTRATION SWALE, IE=689.84

STA 91+10 BEGIN INFILTRATION SWALE, IE=688.36

ADJUST STM MH, -2.1'

REMOVE & REPLACE 50'-EX 8" TO 12" RCP STM SEWER AT EX GRADE

CONNECT TO EX 8" INVERT WITH CONC COLLAR. COST INCIDENTAL TO OTHER WORK

REMOVE TREE (TYP)

GRADE TO DRAIN

WETLANDS

NEW 10' WIDE ASPHALT BIKE PATH

RG-9 SEE SHT L17 FOR DETAIL

WALL

FUTURE RAIN GARDEN KIOSK FOR EDUCATION

SILT FENCE (TYP)

SLOPE INTERCEPT (TYP)

100 YR FLOODPLAIN

100 YR FLOODPLAIN (2008 FEMA)

NEW 31" CONCRETE CURB & GUTTER TYPE D

RG-7 SEE SHT L15 FOR DETAIL

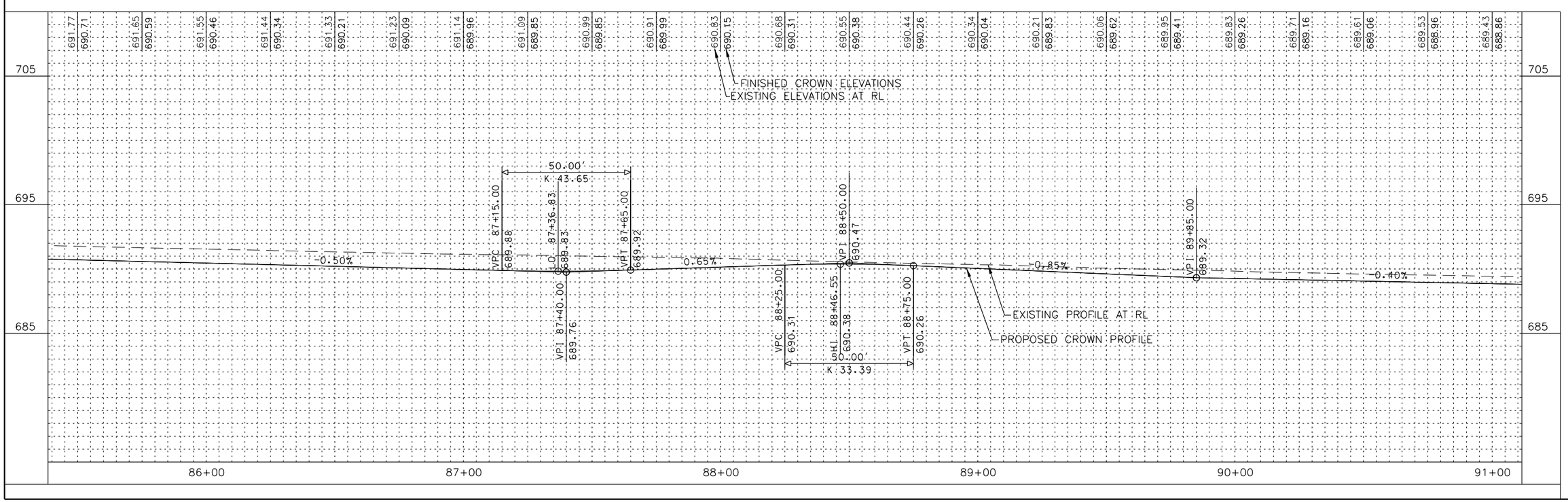
PROVIDE SHOVEL CUT EDGE (TYP)

SEE NOTES ON SHEET 2 FOR PLACEMENT OF NEW LIGHTING CONDUIT (TYP)

PROTECT TREES WITH CONSTRUCTION FENCE (TYP)

EDGE OF WATER

FROM STA 227+10 TO STA 229+10 SLOPE BIKE PATH TO ROAD

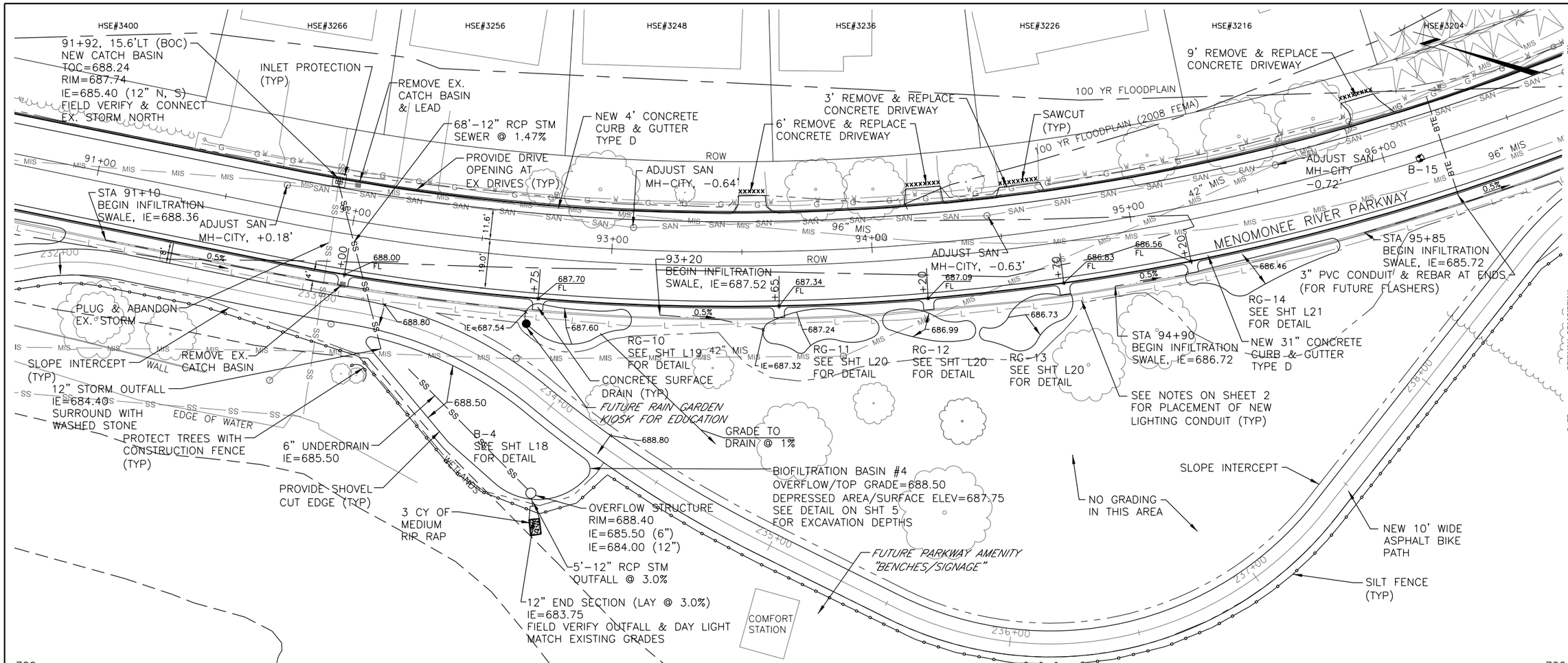


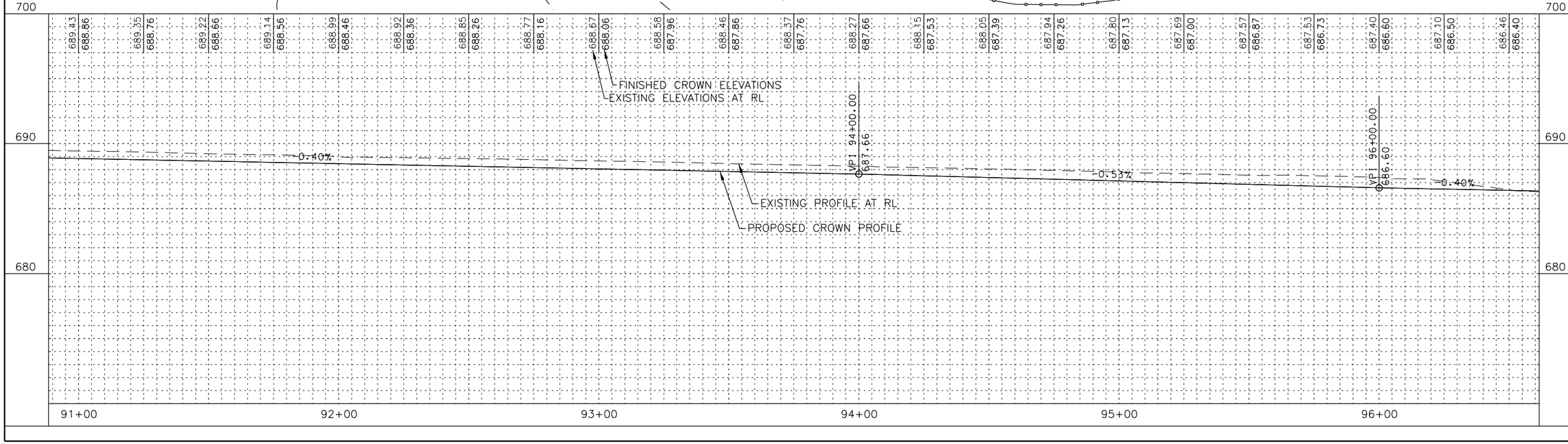
DATE: REVISION DESCRIPTION: BY:

MILWAUKEE COUNTY DEPARTMENT OF ADMINISTRATIVE SERVICES
Architecture, Engineering & Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

DRAWN BY: BJG
CHECKED BY: TH
SCALE: 1"=40'
DATE: 7/03/14

PROJECT TITLE: MENOMONEE RIVER PARKWAY
SHEET DESCRIPTION: PLAN & PROFILE 85+50 TO 91+00
SITE NO.
BUILDING NO.
PROJECT NO. P280-13626
SHEET NO. 24
24 OF 110
FILE NO.

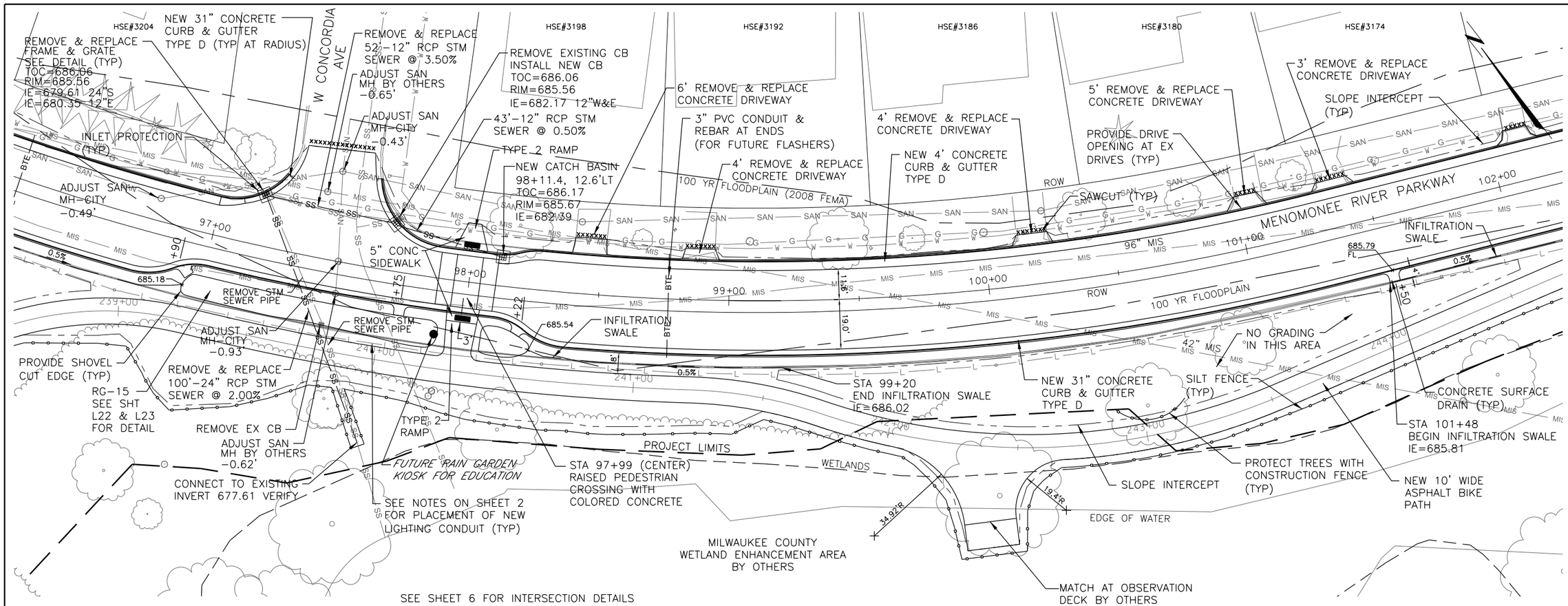


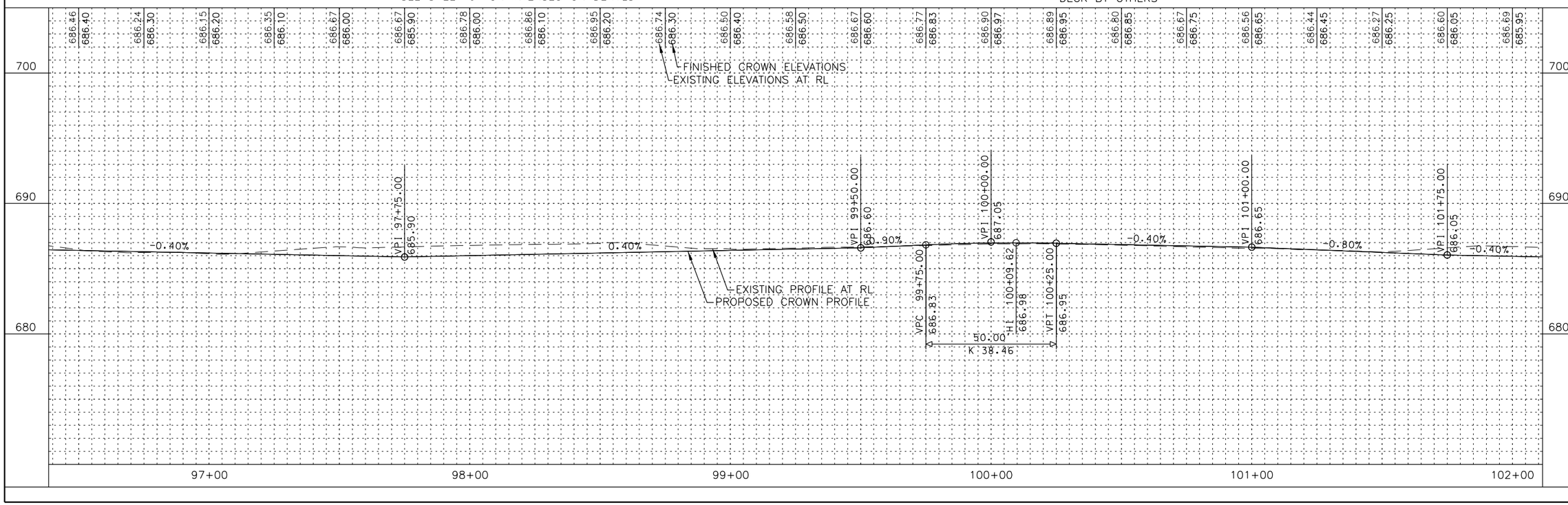


MILWAUKEE COUNTY DEPARTMENT OF ADMINISTRATIVE SERVICES
Architecture, Engineering & Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

DATE: REVISION DESCRIPTION: BY:

DRAWN BY: BJG
CHECKED BY: TH
SCALE: 1"=40'
DATE: 7/03/14
PROJECT TITLE: MENOMONEE RIVER PARKWAY
SHEET DESCRIPTION: PLAN & PROFILE 91+00 TO 96+50
SITE NO.
BUILDING NO.
PROJECT NO. P280-13626
SHEET NO. 25
25 OF 110
FILE NO.





MILWAUKEE COUNTY DEPARTMENT OF ADMINISTRATIVE SERVICES
Architecture, Engineering & Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

DATE: REVISION DESCRIPTION: BY:

DRAWN BY: BJG	CHECKED BY: TH
SCALE: 1"=40'	DATE: 7/03/14
PROJECT TITLE: MENOMONEE RIVER PARKWAY	SHEET DESCRIPTION: PLAN & PROFILE 96+50 TO 102+00
SITE NO.	BUILDING NO.
PROJECT NO. P280-13626	
SHEET NO. 26	26 OF 110
FILE NO.	

HSE#3170
HSE#3160
HSE#3154
HSE#3148
HSE#3144
HSE#3138

102+96, 15.6'LT
REMOVE & REPLACE
FRAME & GRATE
SEE DETAIL (TYP)
TOC=685.72
RIM=685.22

INLET PROTECTION (TYP)

NEW 4' CONCRETE
CURB & GUTTER
TYPE D

11' REMOVE & REPLACE
CONCRETE DRIVEWAY

4' REMOVE & REPLACE
CONCRETE DRIVEWAY

PROVIDE DRIVE
OPENING AT EX
DRIVES (TYP)

4' REMOVE & REPLACE
CONCRETE DRIVEWAY

SAWCUT
(TYP)

4' REMOVE & REPLACE
CONCRETE DRIVEWAY

5' REMOVE & REPLACE
CONCRETE DRIVEWAY

100 YR FLOODPLAIN (2008 FEMA)

3" PVC CONDUIT & REBAR AT ENDS
(FOR FUTURE FLASHERS)

3' REMOVE & REPLACE
CONCRETE DRIVEWAY

REMOVE & REPLACE 38'-15"
RCP STM @ 4.00%

IE=679.42

INFILTRATION
SWALE

REMOVE & REPLACE
FRAME & GRATE
RIM=685.00

686.09
FL

B-14

STA 105+02 END
INFILTRATION SWALE
IE=686.10

MENOMONEE RIVER PARKWAY

ADJUST SAN MH
BY OTHERS
-0.79

685.11
FL

96" MIS

REMOVE
TREE (TYP)

CONCRETE SURFACE
DRAIN (TYP)

CONNECT TO
EXISTING
IE=677.02
VERIFY

GRADE TO DRAIN
SWALES TO CB

EDGE OF WATER

WETLANDS

PROJECT LIMITS

PROTECT TREES WITH
CONSTRUCTION FENCE
(TYP)

100 YR FLOODPLAIN

NEW 31" CONCRETE
CURB & GUTTER
TYPE D

NEW 10' WIDE
ASPHALT BIKE
PATH

SLOPE INTERCEPT
(TYP)

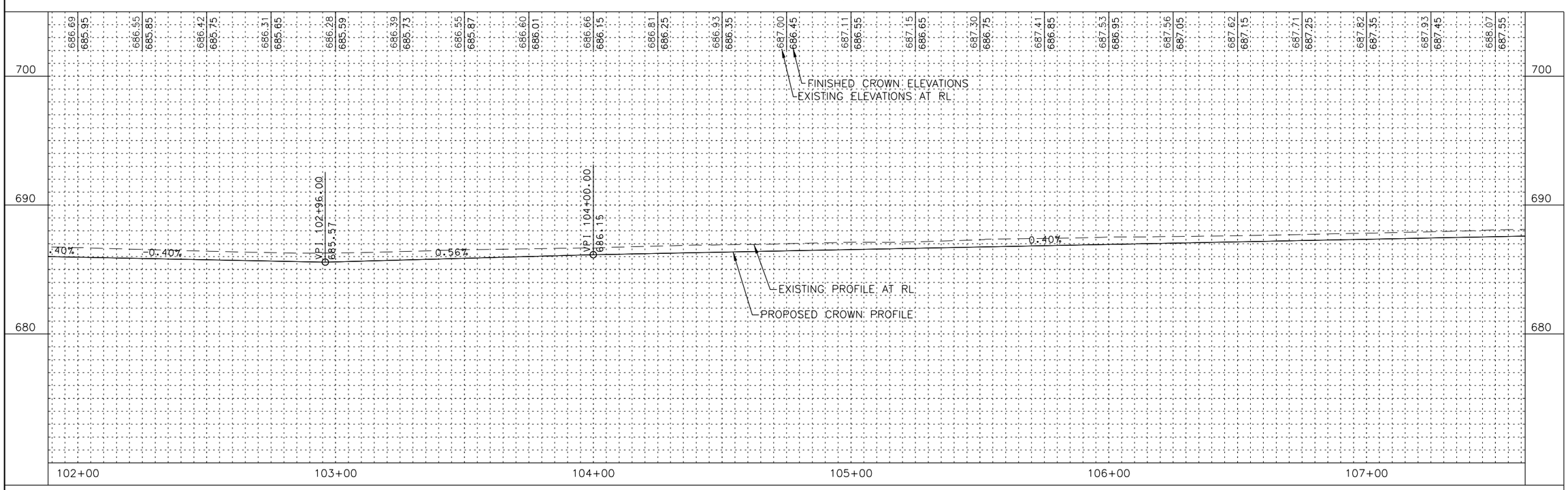
SILT FENCE
(TYP)

REMOVE & REPLACE 22'-24"
RCP STM @ 4.00%

MILWAUKEE COUNTY
WETLAND ENHANCEMENT AREA
BY OTHERS

STA 105+50 TO 110+00 RIGHT
POTENTIAL STOCKPILE LOCATION

42" MIS

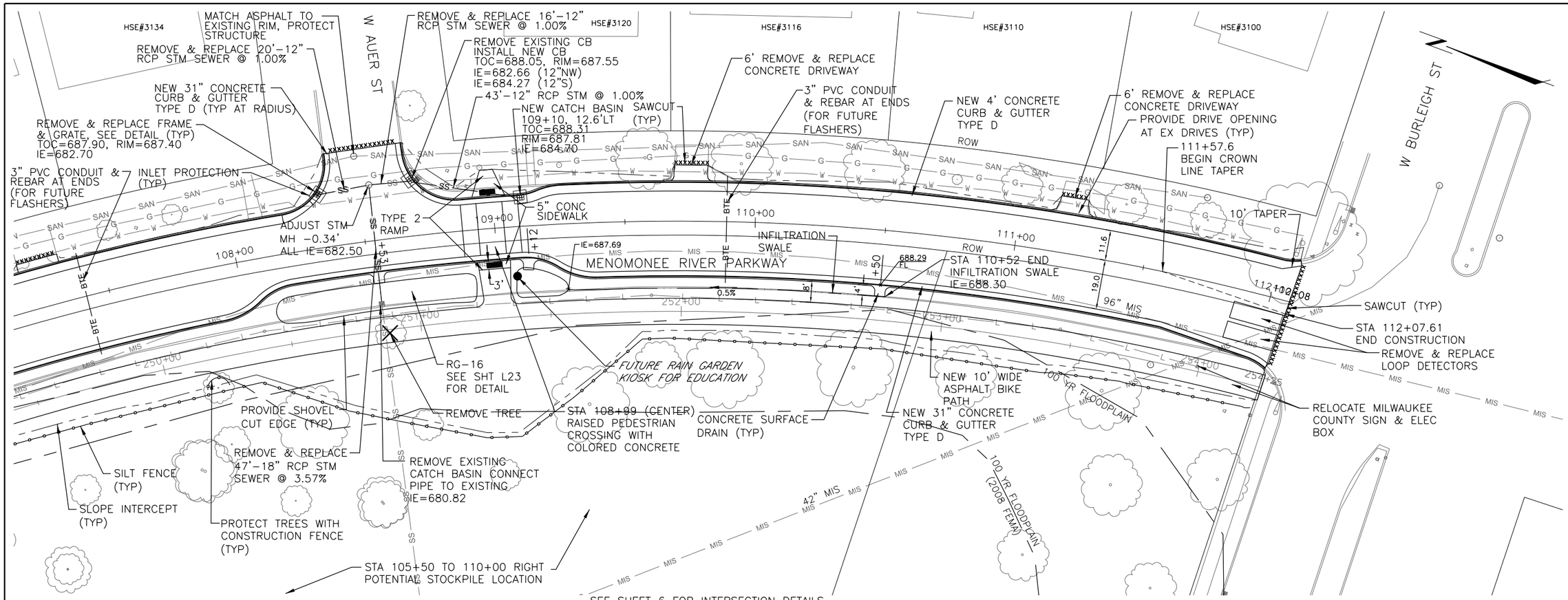


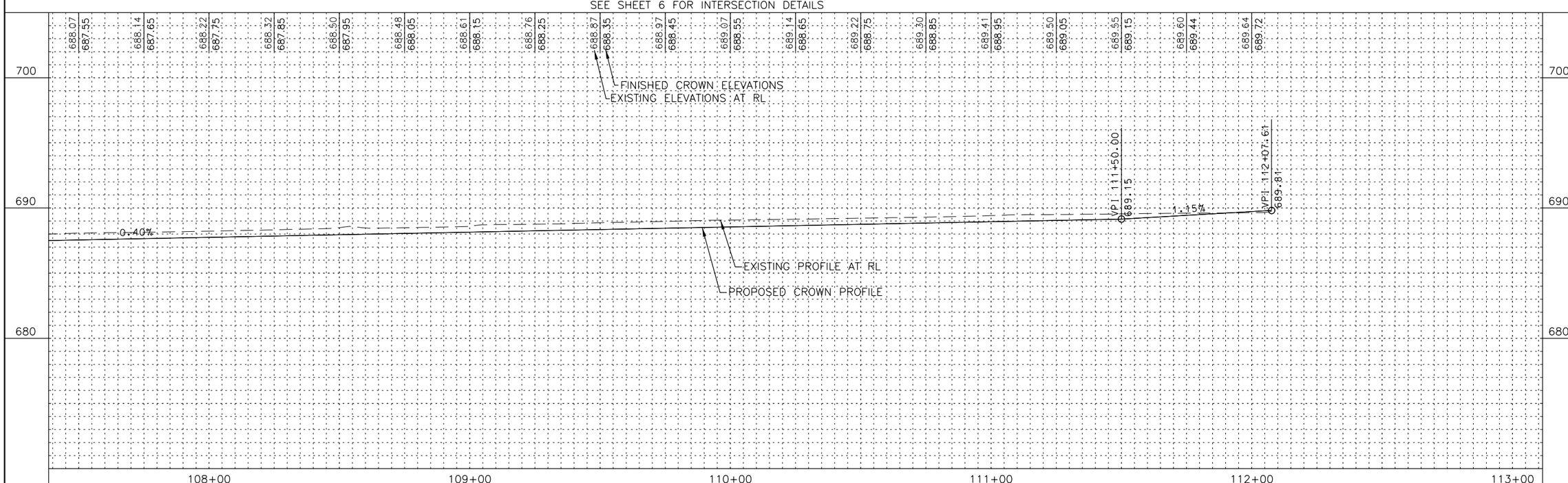
MILWAUKEE COUNTY DEPARTMENT OF
ADMINISTRATIVE SERVICES
Architecture, Engineering &
Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

DATE: REVISION DESCRIPTION: BY:

DRAWN BY: BJG
CHECKED BY: TH
SCALE: 1"=40'
DATE: 7/03/14

PROJECT TITLE: MENOMONEE RIVER PARKWAY
SHEET DESCRIPTION: PLAN & PROFILE 102+00 TO 107+50
SITE NO.
BUILDING NO.
PROJECT NO. P280-13626
SHEET NO. 27
27 OF 110
FILE NO.

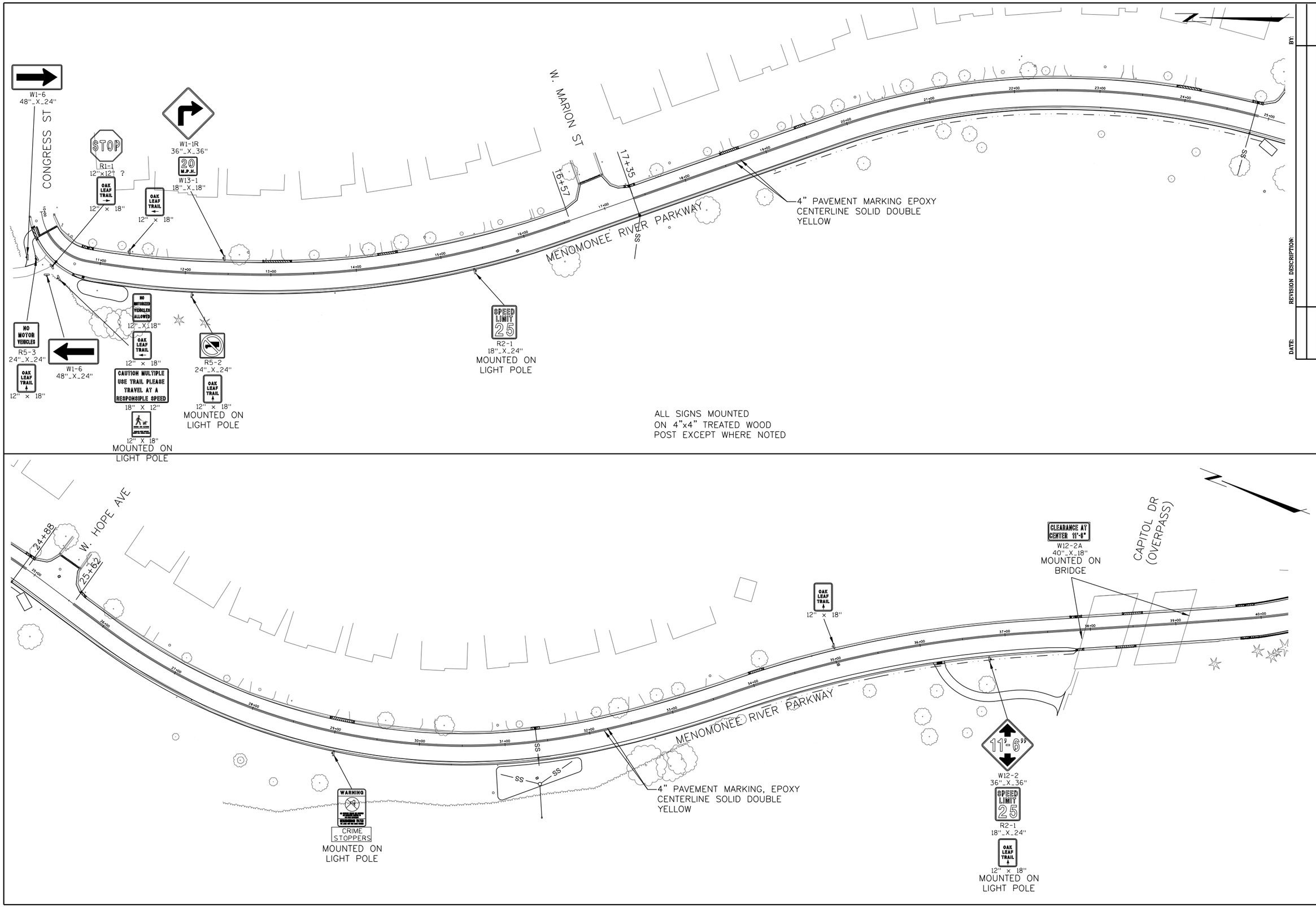




MILWAUKEE COUNTY DEPARTMENT OF ADMINISTRATIVE SERVICES
Architecture, Engineering & Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

DATE: | REVISION DESCRIPTION: | BY:

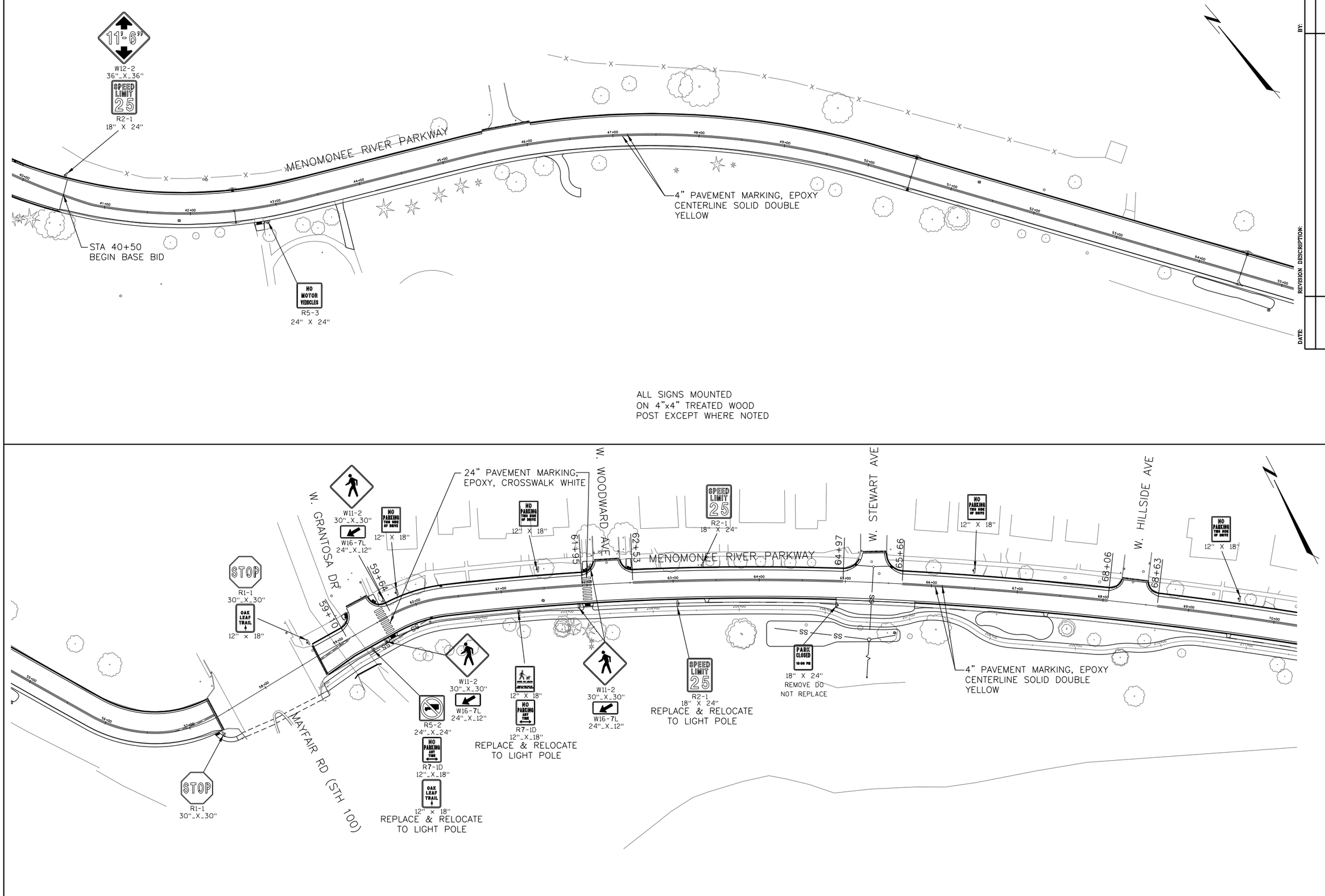
DRAWN BY: BJG	CHECKED BY: TH
SCALE: 1"=40'	DATE: 7/03/14
PROJECT TITLE: MENOMONEE RIVER PARKWAY	SHEET DESCRIPTION: PLAN & PROFILE 107+50 TO 113+00
SITE NO.	BUILDING NO.
PROJECT NO. P280-13626	
SHEET NO. 28	28 OF 110
	FILE NO.



DATE: REVISION DESCRIPTION: BY:

MILWAUKEE COUNTY DEPARTMENT OF ADMINISTRATIVE SERVICES
Architecture, Engineering & Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

DRAWN BY: BJG	CHECKED BY: TH
SCALE: 1"=100'	DATE: 7/03/14
PROJECT TITLE: MENOMONEE RIVER PARKWAY	SHEET DESCRIPTION: PERMANENT SIGNING & PAVEMENT MARKING
SITE NO.	BUILDING NO.
PROJECT NO. P280-13626	
SHEET NO. 29	29 OF 110
	FILE NO.



DATE: REVISION DESCRIPTION: BY:

MILWAUKEE COUNTY DEPARTMENT OF
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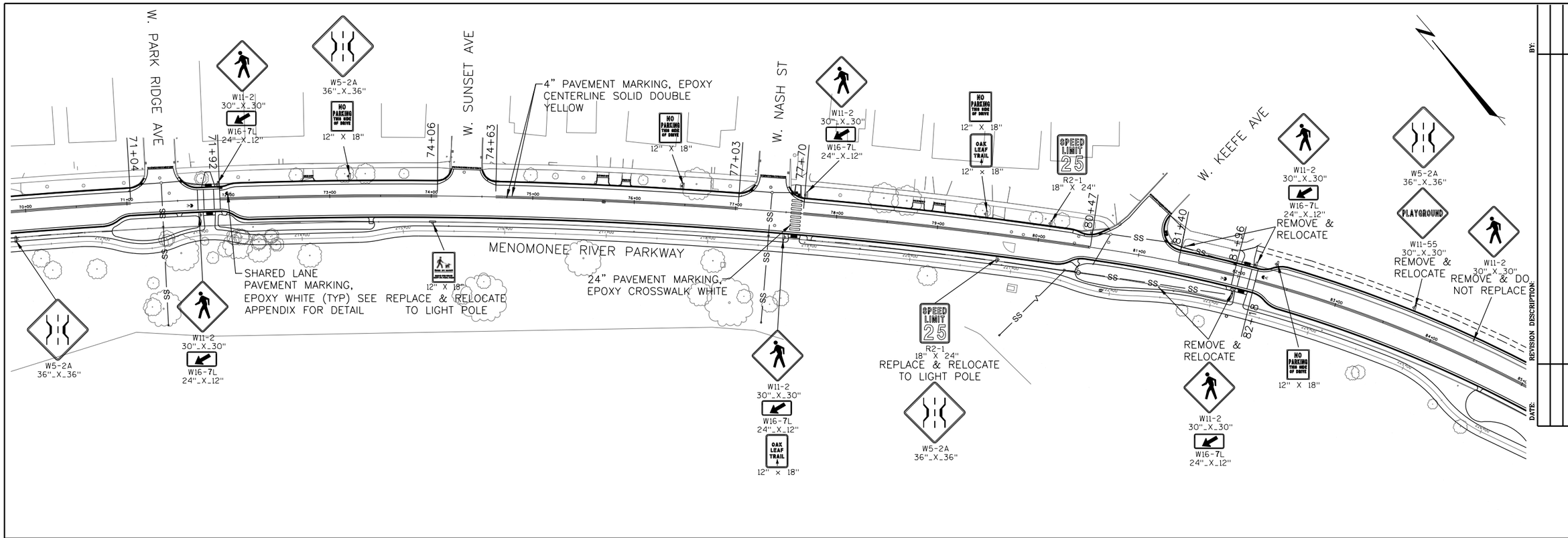
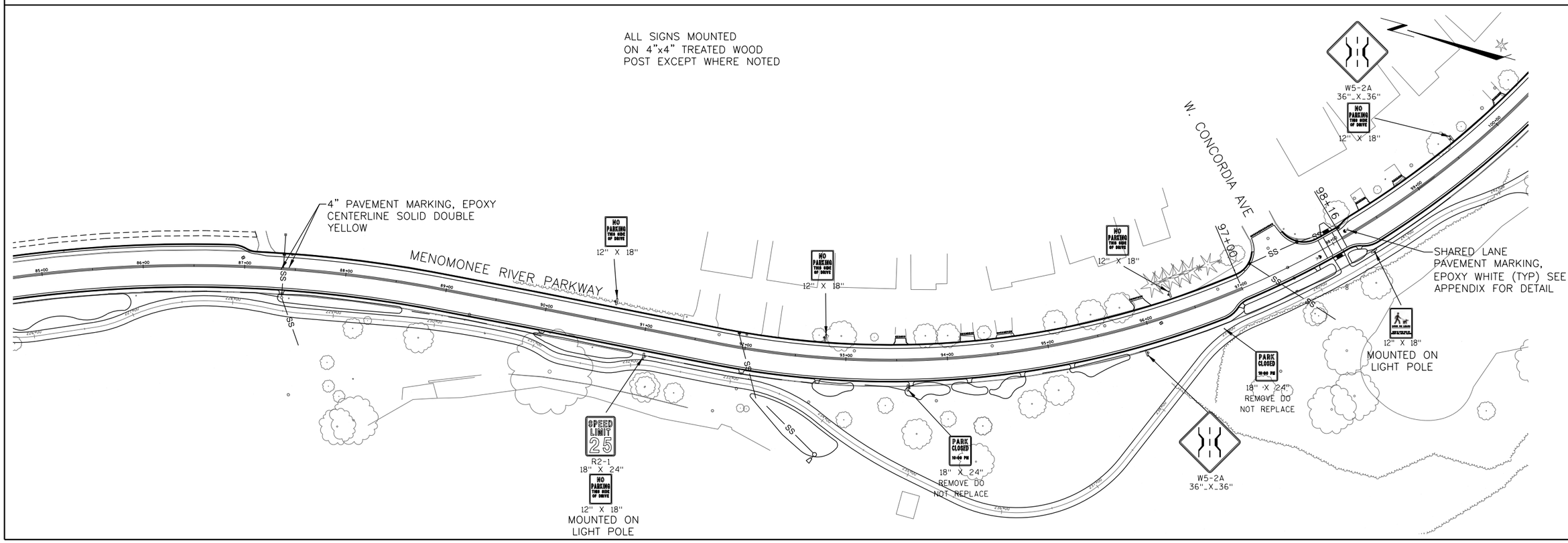
Architecture, Engineering &
Environmental Services Section

CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

DRAWN BY: BJG	CHECKED BY: TH
SCALE: 1"=100'	DATE: 7/03/14
PROJECT TITLE: MENOMONEE RIVER PARKWAY	SHEET DESCRIPTION: PERMANENT SIGNING & PAVEMENT MARKING
SITE NO.	BUILDING NO.
PROJECT NO. P280-13626	
SHEET NO. 30	30 OF 110
	FILE NO.

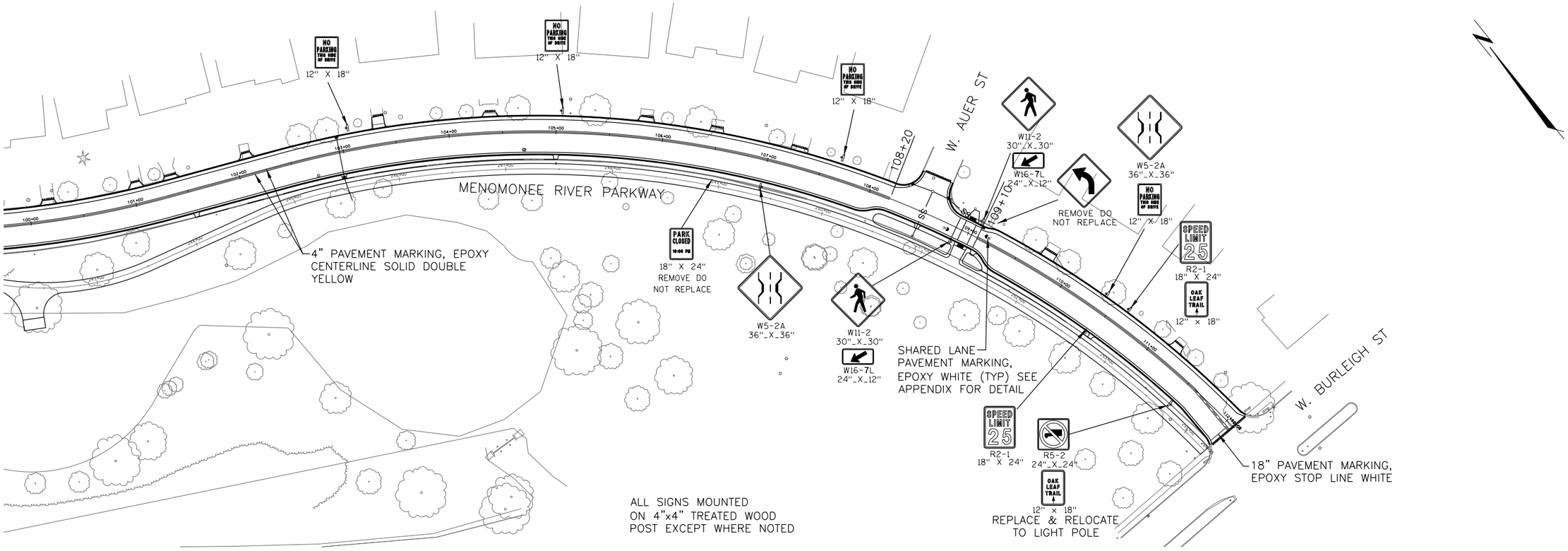


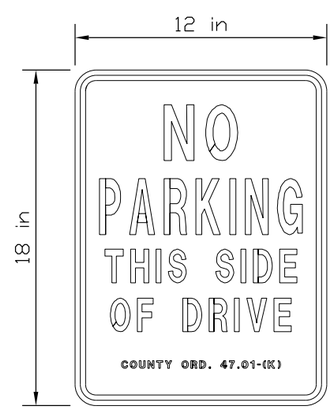


MILWAUKEE COUNTY DEPARTMENT OF ADMINISTRATIVE SERVICES
Architecture, Engineering & Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

DATE: | REVISION DESCRIPTION: | BY:

DRAWN BY: BJG	CHECKED BY: TH
SCALE: 1"=100'	DATE: 7/03/14
PROJECT TITLE: MENOMONEE RIVER PARKWAY	SHEET DESCRIPTION: PERMANENT SIGNING & PAVEMENT MARKING
SITE NO.	BUILDING NO.
PROJECT NO. P280-13626	
SHEET NO. 31	31 OF 110
	FILE NO.





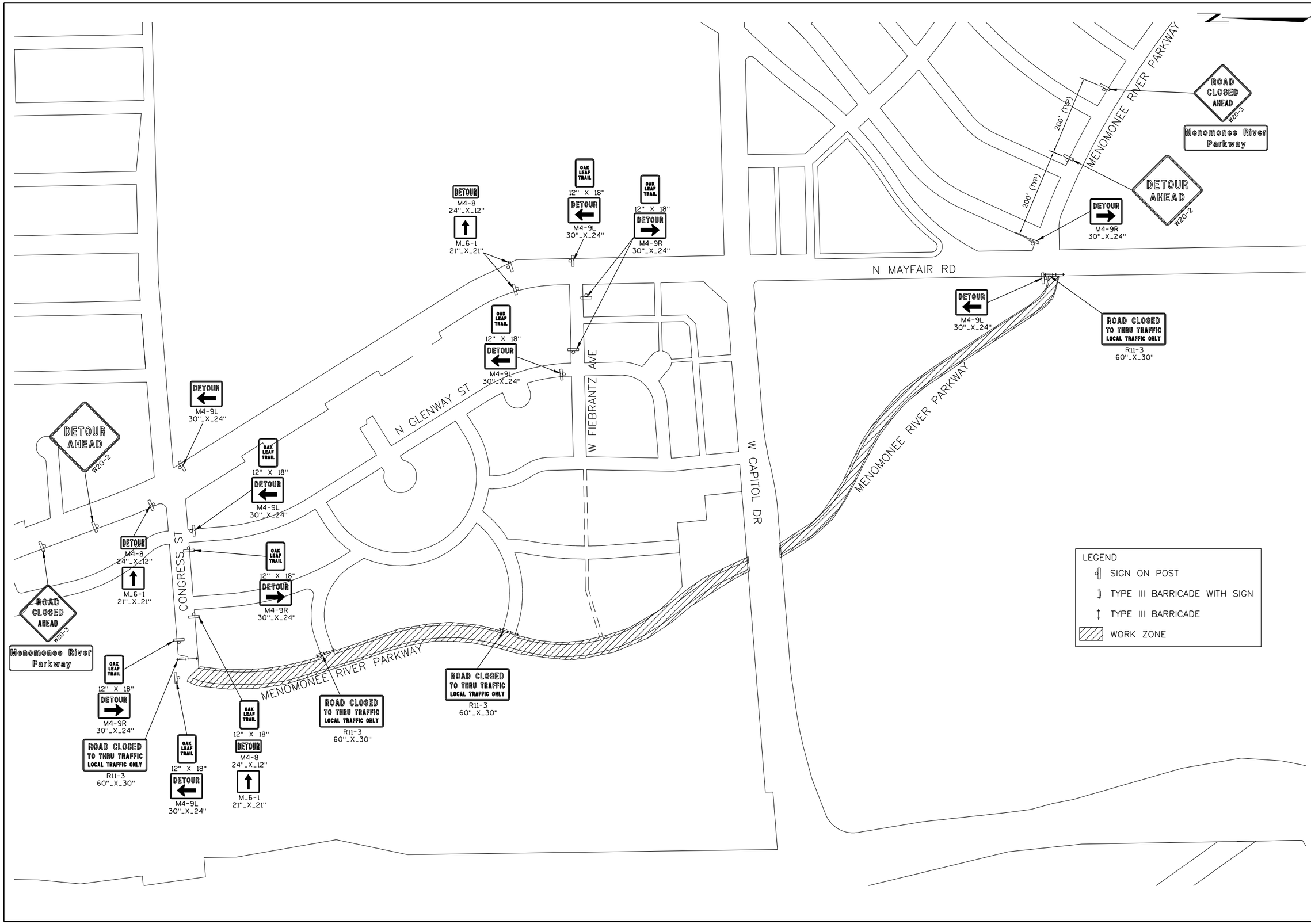
RED ON WHITE

BLUE ON WHITE

DATE: REVISION DESCRIPTION: BY:

MILWAUKEE COUNTY DEPARTMENT OF ADMINISTRATIVE SERVICES
Architecture, Engineering & Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

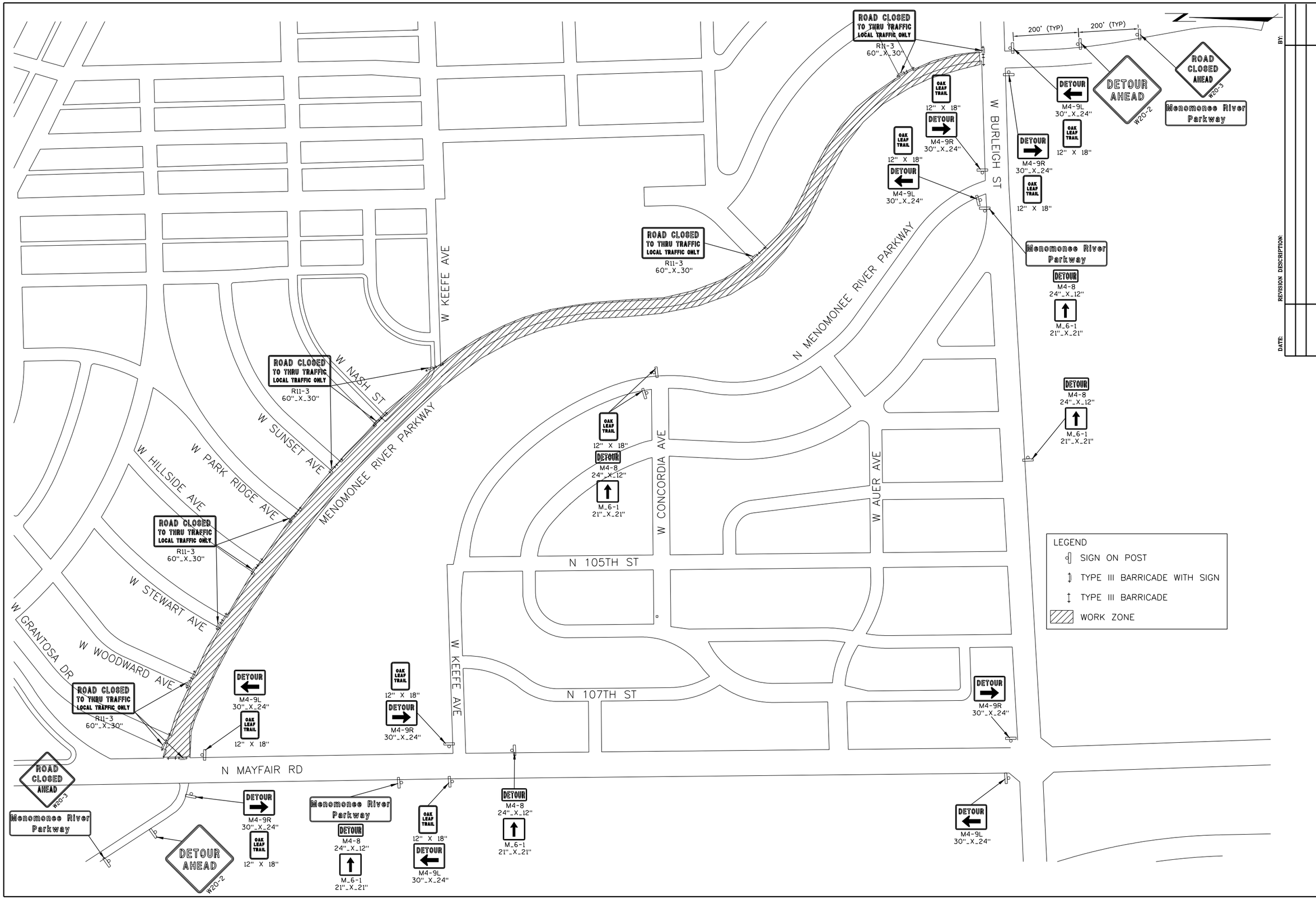
DRAWN BY: BJG	CHECKED BY: TH
SCALE: 1"=100'	DATE: 7/03/14
PROJECT TITLE: MENOMONEE RIVER PARKWAY	SHEET DESCRIPTION: PERMANENT SIGNING & PAVEMENT MARKING
SITE NO.	BUILDING NO.
PROJECT NO. P280-13626	
SHEET NO. 32	32 OF 110
FILE NO.	



DATE: REVISION DESCRIPTION: BY:

MILWAUKEE COUNTY DEPARTMENT OF ADMINISTRATIVE SERVICES
Architecture, Engineering & Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

DRAWN BY: BJG	CHECKED BY: TH
SCALE: 1"=100'	DATE: 7/03/14
PROJECT TITLE: MENOMONEE RIVER PARKWAY	SHEET DESCRIPTION: DETOUR ROUTE CONGRESS ST TO MAYFAIR RD
SITE NO.	BUILDING NO.
PROJECT NO. P280-13626	
SHEET NO. 33	33 OF 110
FILE NO.	



DATE: REVISION DESCRIPTION: BY:

MILWAUKEE COUNTY DEPARTMENT OF ADMINISTRATIVE SERVICES
Architecture, Engineering & Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

DRAWN BY: BJG
SCALE: 1"=100'
CHECKED BY: TH
DATE: 7/03/14

PROJECT TITLE: MENOMONEE RIVER PARKWAY
SHEET DESCRIPTION: DETOUR ROUTE MAYFAIR RD TO BURLEIGH ST

SITE NO.
BUILDING NO.

PROJECT NO. P280-13626

SHEET NO. 34
34 OF 110
FILE NO.

LEGEND

- EXISTING UNDERGROUND CONDUCTORS
- EXISTING UNDERGROUND CONDUCTORS TO BE REMOVED
- EXISTING LIGHTING UNIT
- NEW LIGHTING UNIT
- NEW LIGHTING PULL BOX
- NEW CONDUCTORS IN DUCT: 4–6AWG AND 1–6AWG GROUND IN 1.25" HDPE DUCT, UNLESS NOTED
- NEW CONDUCTORS IN DUCT: 4–2AWG AND 1–2AWG GROUND IN 1.50" HDPE DUCT, UNLESS NOTED

16+10, 27'RT — STATION (LOCATION)
MRP1–1.3–1
- POLE NUMBER
- CIRCUIT NUMBERS
- CONTROL CABINET (SOURCE)

REM REMOVE

KEYED NOTES:

1. REMOVE EXISTING BURIED TRANSFORMER AND DISPOSE OF PROPERLY.
2. INTERCEPT EXISTING CABLING AND ROUTE INTO NEW CONTROL CABINET.
3. INTERCEPT EXISTING CABLING AND ROUTE INTO NEW PULL BOX.
4. PHOTOCELL AND WIRING TO CONTROL CABINET TO BE REMOVED.
5. COORDINATE REMOVAL AND REINSTALLATION OF ANTENNA(S) ON EXISTING POLE TO NEW POLE WITH MMSD.
6. ELEVEN (11) EXISTING LIGHTING UNITS TO THE SOUTH OF BURLEIGH ON THIS LIGHTING SYSTEM SHALL BE RE–BALLASTED WITH 150W HPS MULTI–TAP AUTO REGULATOR BALLASTS (CONNECTED AT 240V).

GENERAL NOTES:

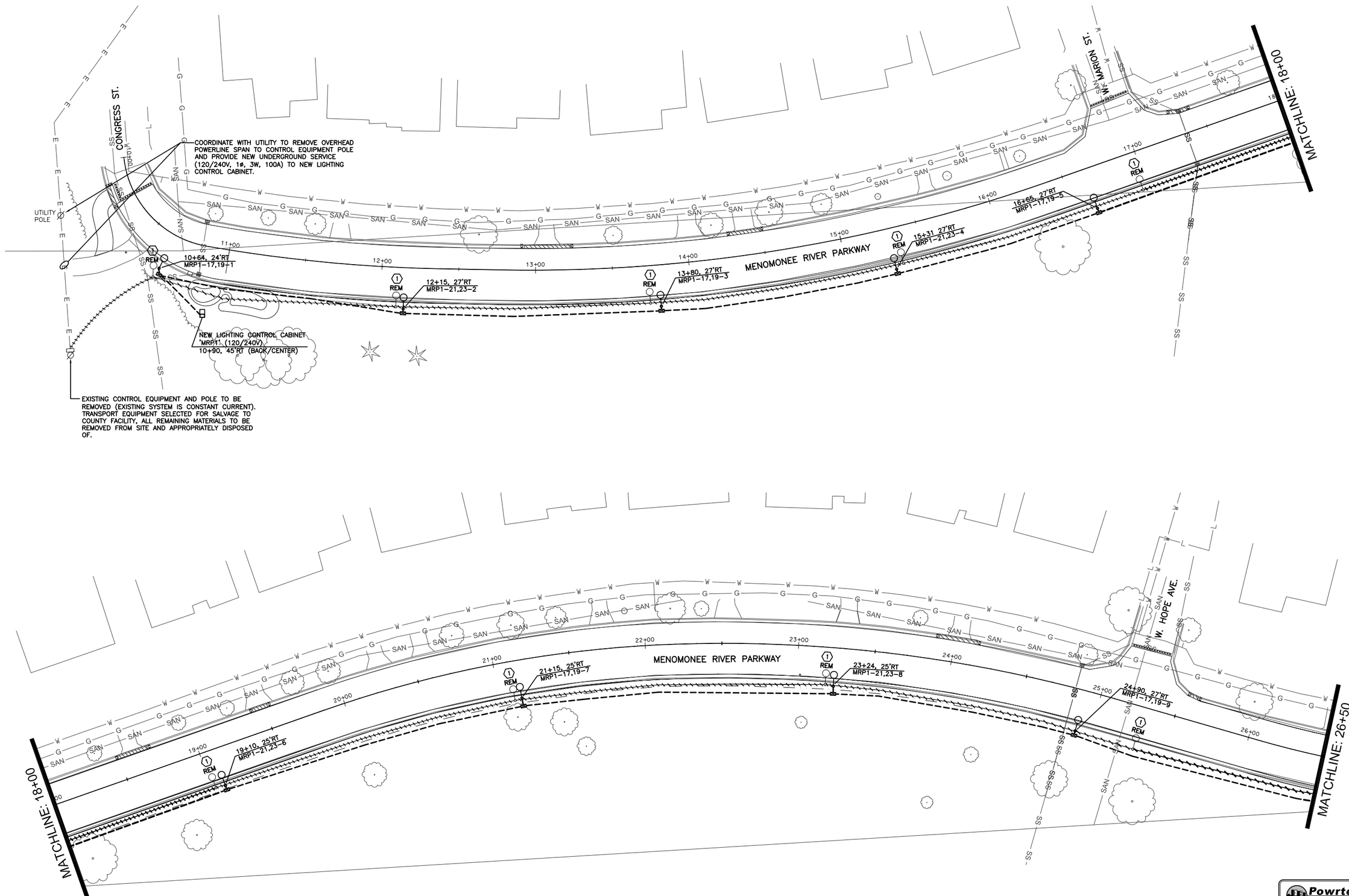
1. CONTRACTOR WILL NEED TO INSTALL LED ASSEMBLY COMPONENTS INTO LUMINAIRE.
2. PROVIDE TWO (2) LUMINAIRES, FOUR (4) LED ASSEMBLIES AND 500 FT OR 1.5" HDPE DUCT (ON REEL) AS SPARE PARTS – TRANSPORT TO COUNTY FACILITY.
3. INCLUDE $10,000 ALLOWANCE IN BID FOR UTILITY INSTALLATION CHARGES. ONLY ACTUAL COST TO BE PAID.
4. PRE–WIRED DUCT IS NOT ALLOWED.
5. EXACT LOCATIONS OF LIGHTING UNITS, PULL BOXES AND CONTROL CABINETS TO BE APPROVED BY OWNER. STAKE LOCATIONS FOR OWNER'S REVIEW AND ADJUST AS DIRECTED. SEVEN (7) EXISTING LIGHTING UNITS.

Powrtek Engineering, Inc.
20711 WATERTOWN RD., SUITE C
WAUKESHA, WI 53186
VOICE: 262-827-9575
FAX: 262-827-9615

DATE: REVISION DESCRIPTION: BY:

MILWAUKEE COUNTY DEPARTMENT OF ADMINISTRATIVE SERVICES
Architecture, Engineering & Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

DRAWN BY: BEF
CHECKED BY: GWS
SCALE: NO SCALE
DATE: 7/03/14
PROJECT TITLE: MENOMONEE RIVER PARKWAY
SHEET DESCRIPTION: LEGEND AND NOTES
SITE NO.
BUILDING NO.
PROJECT NO. P280–13626
SHEET NO. E–1
1 OF 9
FILE NO.



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WAUKESHA, WI 53186
VOICE: 262-827-9575
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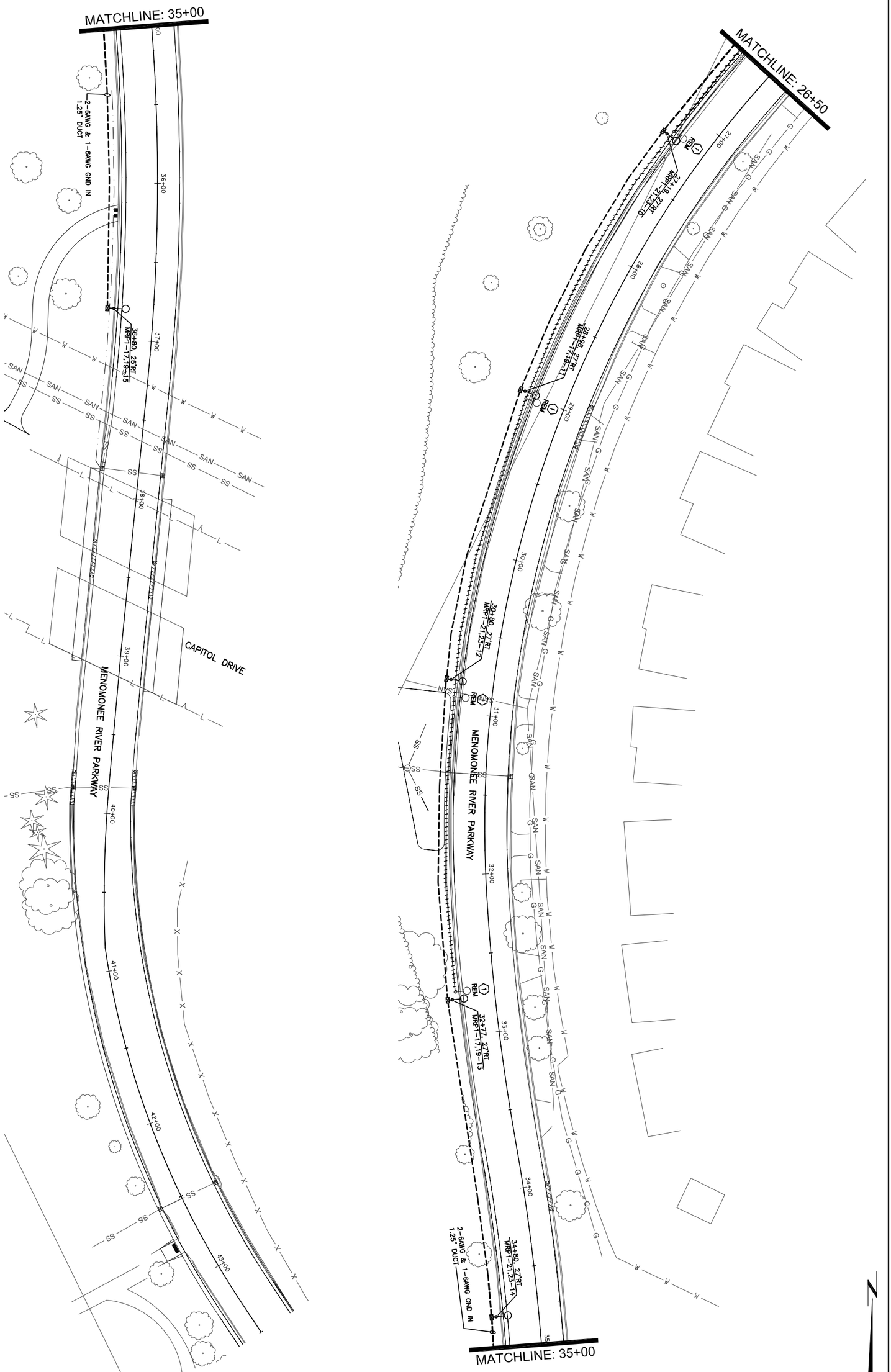
DATE: REVISION DESCRIPTION: BY:

MILWAUKEE COUNTY DEPARTMENT OF ADMINISTRATIVE SERVICES
Architecture, Engineering & Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

DRAWN BY: BEF	SCALE: 1"=60'
CHECKED BY: GWS	DATE: 7/03/14
PROJECT TITLE: MENOMONEE RIVER PARKWAY	SHEET DESCRIPTION: LIGHTING PLAN 10+00 TO 26+50
SITE NO.	BUILDING NO.
PROJECT NO. P280-13626	
SHEET NO. E-2	2 OF 9
FILE NO.	

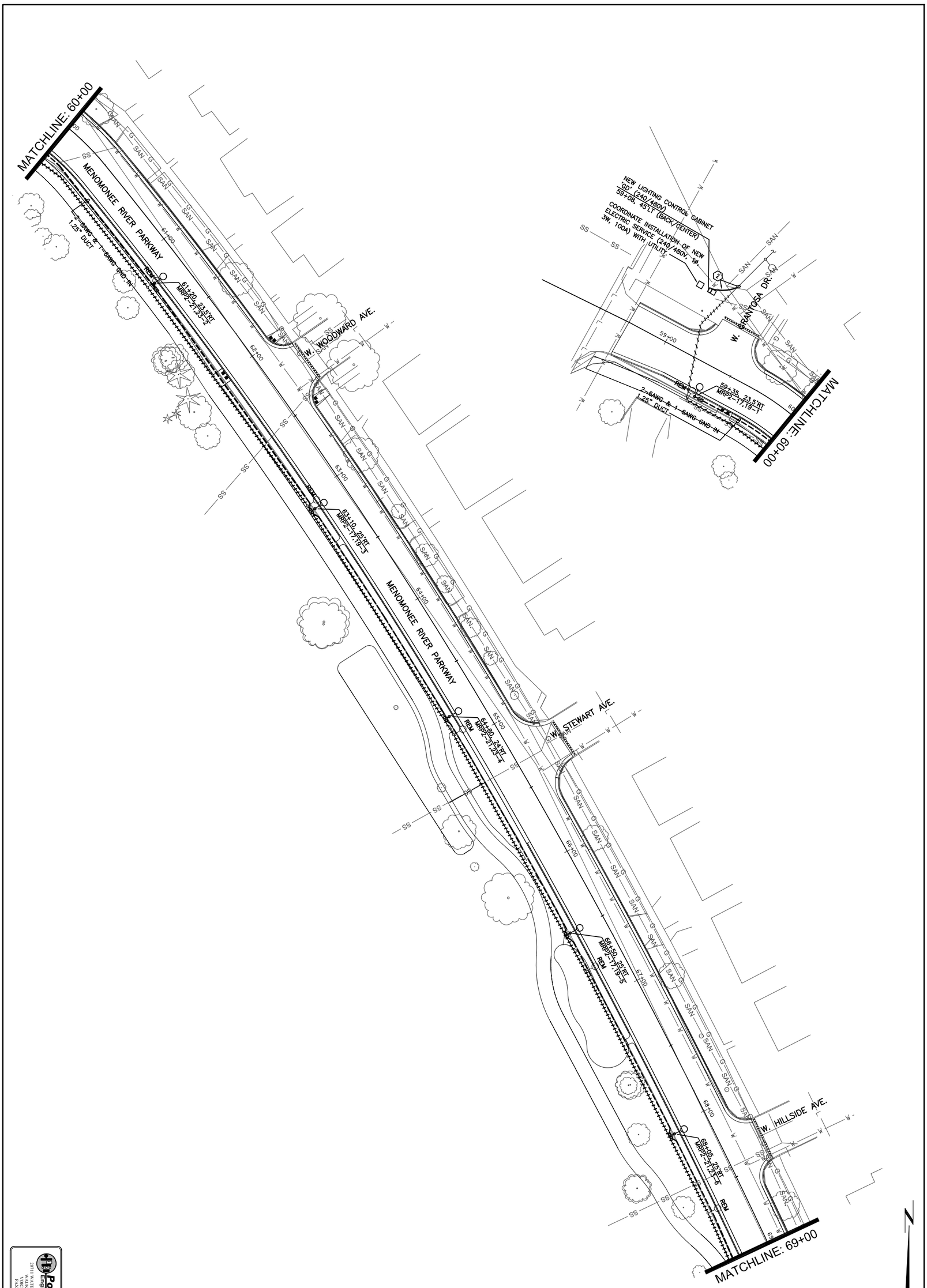


Powrtek Engineering, Inc.
20711 WATERTOWN RD., SUITE C
WAUKESHA, WI 53186
VOICE: 262-547-9939
FAX: 262-547-9615

DATE:	REVISION DESCRIPTION:	BY:

SHEET NO.	PROJECT NO.	SITE NO.	PROJECT TITLE:	SCALE:	DRAWN BY:
E-3	P280-13626		MENOMONEE RIVER PARKWAY	1"=60'	BEF
3 OF 9		BUILDING NO.	SHEET DESCRIPTION: LIGHTING PLAN 26+50 TO 43+50	DATE: 7/03/14	CHECKED BY: GWS
FILE NO.					

MILWAUKEE COUNTY DEPARTMENT OF ADMINISTRATIVE SERVICES
Architecture, Engineering & Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

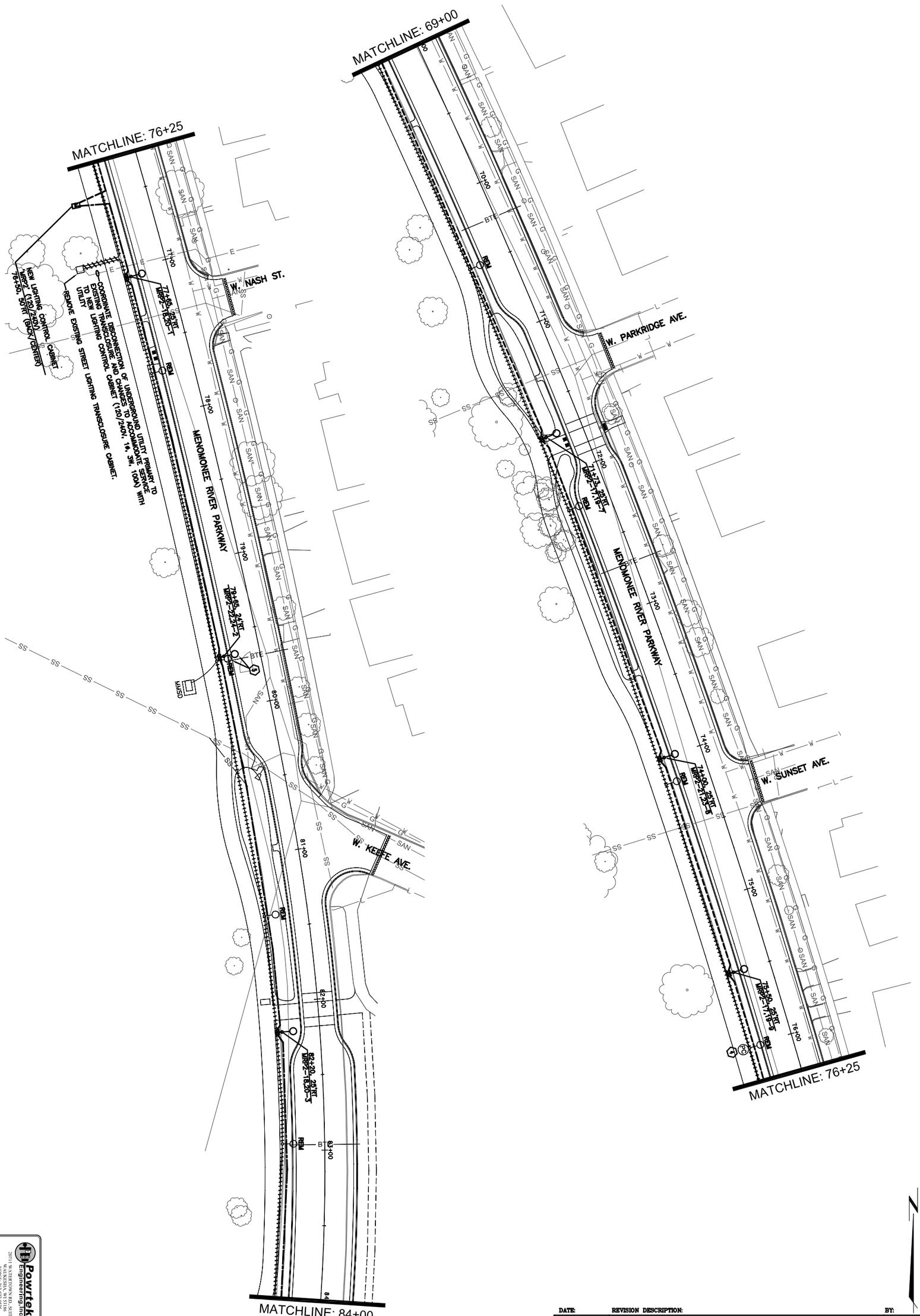


Powrtek Engineering, Inc.
20711 WATERTOWN RD., SUITE C
WAUKESHA, WI 53186
VOICE: 262-547-9939
FAX: 262-547-9615

DATE:	REVISION DESCRIPTION:	BY:

SHEET NO.	PROJECT NO.	SITE NO.	PROJECT TITLE:	SCALE:	DRAWN BY:
E—4	P280—13626		MENOMONEE RIVER PARKWAY	1"=60'	BEF
4 OF 9		BUILDING NO.	SHEET DESCRIPTION: LIGHTING PLAN 60+00 TO 69+00	DATE: 7/03/14	CHECKED BY: GWS
FILE NO.					

MILWAUKEE COUNTY DEPARTMENT OF ADMINISTRATIVE SERVICES
Architecture, Engineering & Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208



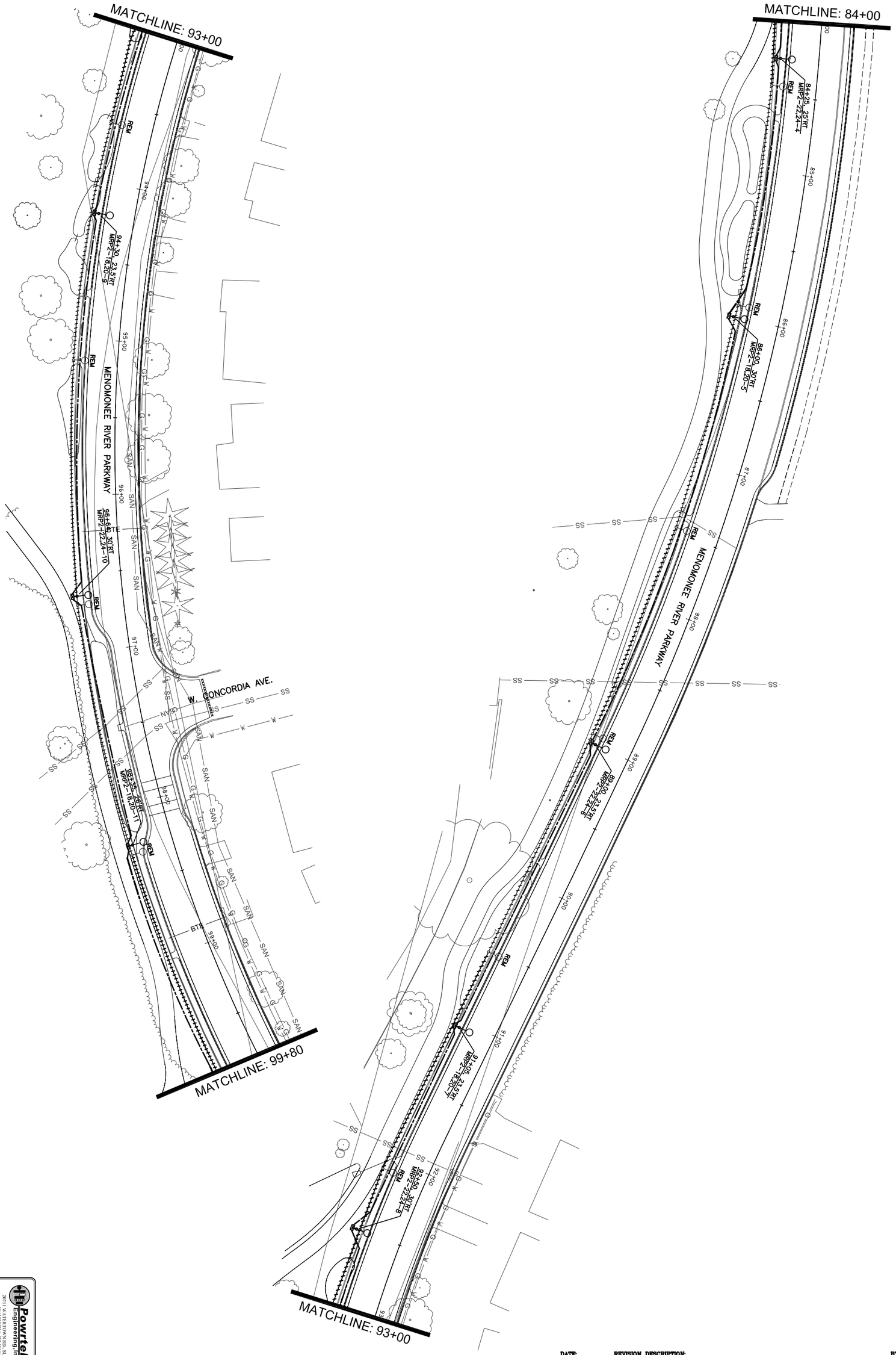
Powrtek Engineering, Inc.
20711 WATERTOWN RD., SUITE C
WAUKESHA, WI 53186
VOICE: 262-547-9939
FAX: 262-547-9615

SHEET NO.	PROJECT NO.	SITE NO.	PROJECT TITLE:	SCALE:	DRAWN BY:
E–5	P280–13626		MENOMONEE RIVER PARKWAY	1"=60'	BEF
5 OF 9		BUILDING NO.	SHEET DESCRIPTION: LIGHTING PLAN 69+00 TO 84+00	DATE: 7/03/14	CHECKED BY: GWS
FILE NO.					

DATE:	REVISION DESCRIPTION:	BY:

MILWAUKEE COUNTY

MILWAUKEE COUNTY DEPARTMENT OF ADMINISTRATIVE SERVICES
Architecture, Engineering & Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

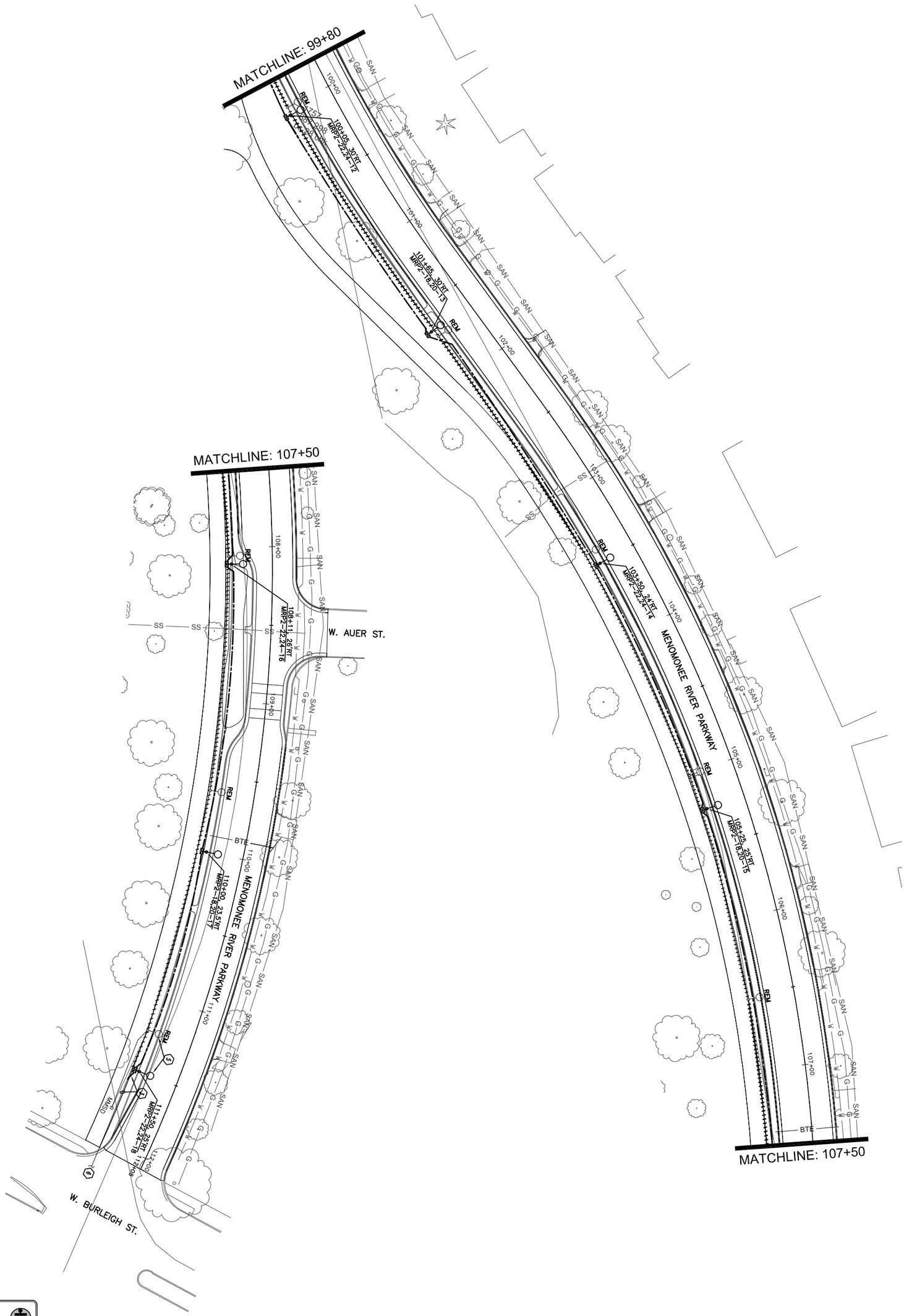


Powrtek Engineering, Inc.
20711 WATERTOWN RD., SUITE C
WAUKESHA, WI 53186
VOICE: 262-547-9939
FAX: 262-547-9615

DATE:	REVISION DESCRIPTION:	BY:

SHEET NO.	PROJECT NO.	SITE NO.	PROJECT TITLE:	SCALE:	DRAWN BY:
E—6	P280—13626		MENOMONEE RIVER PARKWAY	1"=60'	BEF
6 OF 9		BUILDING NO.	SHEET DESCRIPTION: LIGHTING PLAN 84+00 TO 98+80	DATE: 7/03/14	CHECKED BY: GWS
FILE NO.					

MILWAUKEE COUNTY DEPARTMENT OF ADMINISTRATIVE SERVICES
Architecture, Engineering & Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

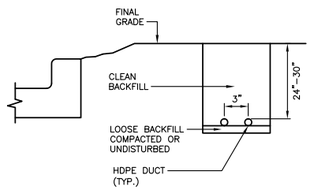


Powrtek Engineering, Inc.
20711 WATERTOWN REL SUITE C
WAUKESHA, WI 53186
VOICE: 262-547-9939
FAX: 262-547-9615

DATE:	REVISION DESCRIPTION:	BY:

SHEET NO.	PROJECT NO.	SITE NO.	PROJECT TITLE:	SCALE:	DRAWN BY:
E—7	P280—13626		MENOMONEE RIVER PARKWAY	1"=60'	BEF
7 OF 9		BUILDING NO.	SHEET DESCRIPTION: LIGHTING PLAN 99+80 TO 112+00	DATE: 7/03/14	CHECKED BY: GWS
FILE NO.					

MILWAUKEE COUNTY DEPARTMENT OF ADMINISTRATIVE SERVICES
Architecture, Engineering & Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

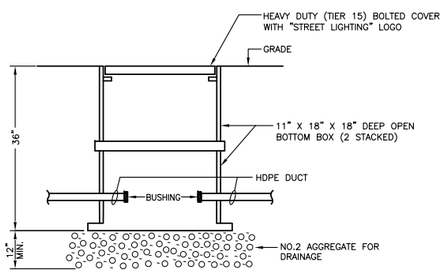


NOTE:

1. HDPE DUCT SHALL BE HAND TRENCHED OR DIRECTIONAL BORED AS REQUIRED.

TRENCH FOR HDPE DUCT DETAIL

NO SCALE

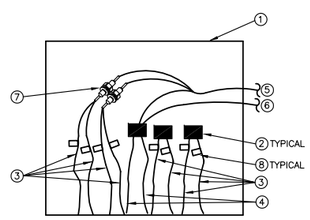


NOTES

1. PULLBOX IS A CONCRETE COMPOSITE, UL LISTED, QUAZITE PG SERIES.
2. SHIM BETWEEN SECTIONS AS REQUIRED SO BOX IS LEVEL WITH FINAL GRADE.
3. SEAL ALL OPENINGS IN BOX FOR CONDUIT, UF CABLE AND GROUNDING CONDUCTOR.

LIGHTING PULL BOX DETAIL

NO SCALE



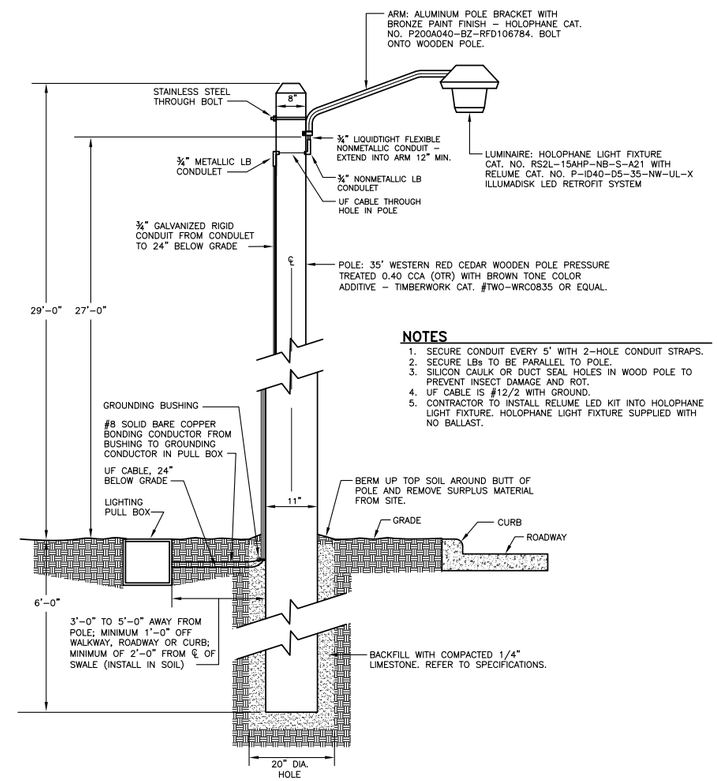
1. LIGHTING PULL BOX
2. INSULATED SPLICE
3. UNGROUNDED CONDUCTORS
4. SYSTEM GROUNDING CONDUCTORS
5. #12/2 WITH GROUND UF CABLE TO LUMINAIRE
6. #8 BARE COPPER GROUNDING CONDUCTOR TO CONDUIT GROUNDING BUSHING
7. 2–POLE INLINE FUSE ASSEMBLY W/5A KTK FUSES (SUBMERSION RATED)
8. CIRCUIT TAG

NOTE

CONDUCTOR LENGTH SHALL BE ADEQUATE TO ALLOW SPLICES AND FUSE HOLDERS TO EXTEND 12" OUTSIDE OF PULL BOX.

PULL BOX/LIGHTING UNIT WIRING DETAIL

NO SCALE



NOTES

1. SECURE CONDUIT EVERY 5' WITH 2–HOLE CONDUIT STRAPS.
2. SECURE LBs TO BE PARALLEL TO POLE.
3. SILICON CAULK OR DUCT SEAL HOLES IN WOOD POLE TO PREVENT INSECT DAMAGE AND ROT.
4. UF CABLE IS #12/2 WITH GROUND.
5. CONTRACTOR TO INSTALL RELUME LED KIT INTO HOLOPHANE LIGHT FIXTURE. HOLOPHANE LIGHT FIXTURE SUPPLIED WITH NO BALLAST.

LIGHTING UNIT DETAIL

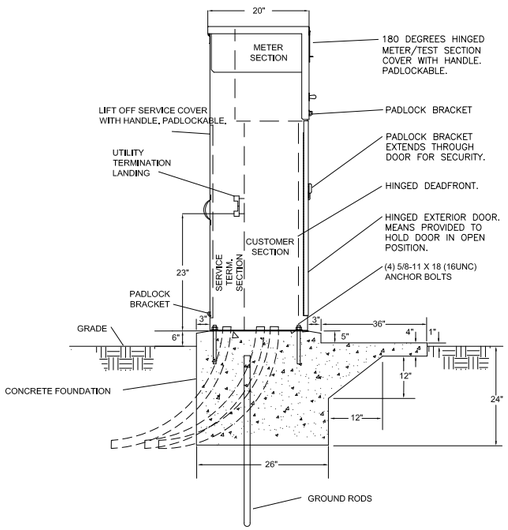
NO SCALE

Powrtek Engineering, Inc.
20711 WATERTOWN RD., SUITE C
WAUKESHA, WI 53186
VOICE: 262-827-9575
FAX: 262-827-9615

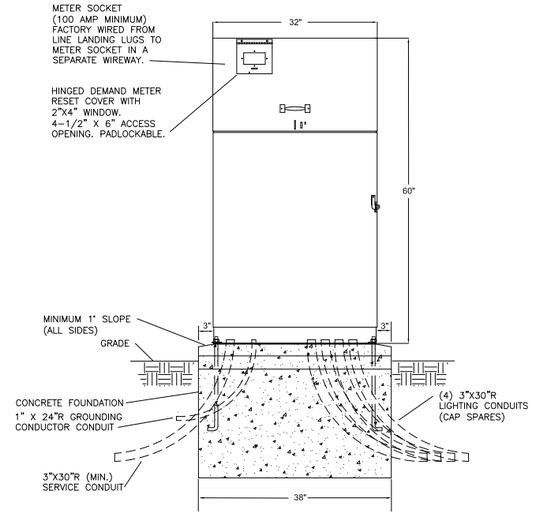
DATE:	REVISION DESCRIPTION:	BY:

MILWAUKEE COUNTY DEPARTMENT OF ADMINISTRATIVE SERVICES
Architecture, Engineering & Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

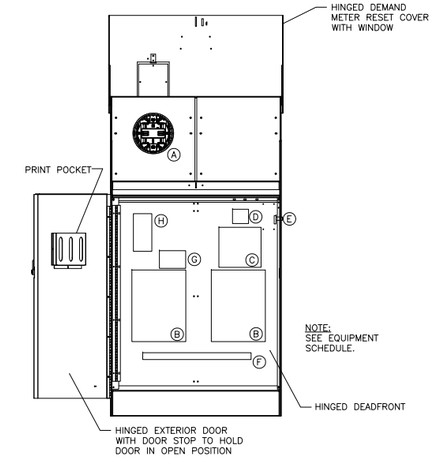
DRAWN BY: BEF
CHECKED BY: GWS
SCALE:
DATE: 7/03/14
PROJECT TITLE: MENOMONEE RIVER PARKWAY
SHEET DESCRIPTION: LIGHTING DETAILS
SITE NO.
BUILDING NO.
PROJECT NO. P280–13626
SHEET NO. E–8
8 OF 9
FILE NO.



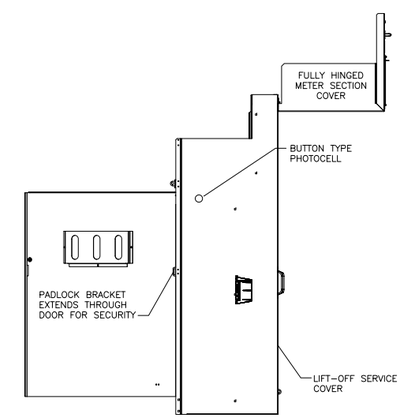
SIDE VIEW



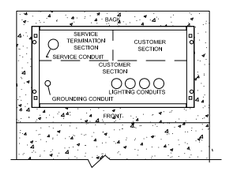
FRONT VIEW



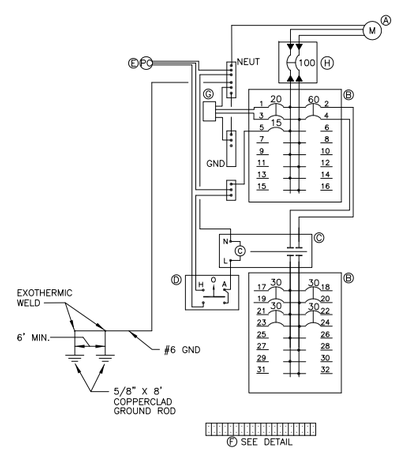
FRONT VIEW
(CABINET OPEN)



SIDE VIEW
(CABINET OPEN)



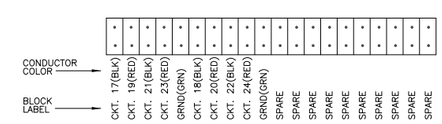
BASE DETAIL
(TOP VIEW)



CONTROL DIAGRAM

EQUIPMENT SCHEDULE

- (A) UTILITY APPROVED 0-200A, 1PH, 3W, 120/240V OR 240/480V METER SOCKET.
- (B) 16CKT PANELBOARD WITH CIRCUIT BREAKERS AS INDICATED, RATED 22K AIC (MIN.). IDENTIFY CIRCUITS AS SHOWN.
- (C) 600V ELECTRICALLY HELD CONTACTOR WITH 120V OR 240V CONTROL COIL
- (D) HAND-OFF-AUTO SWITCH.
- (E) BUTTON TYPE PHOTOCELL, 120V OR 240V INSTALLED IN NORTH SIDE OF CABINET NEAR TOP.
- (F) FIELD WIRING TERMINATION STRIP (20 BLOCKS).
- (G) SURGE PROTECTIVE DEVICE.
- (H) MAIN CIRCUIT BREAKER.



TERMINAL BLOCK DETAIL

NOTES

1. CONTROL CABINET SHALL BE UL LISTED "INDUSTRIAL CONTROL PANEL" PER UL 508.
2. CONSTRUCTION SHALL BE NEMA 3R.
3. VOLTAGE RATINGS OF SERVICE EQUIPMENT SHALL CONFORM TO THE SERVICE VOLTAGES (120/240V or 240/480V) AS INDICATED ON THE PLANS.
4. SERVICE EQUIPMENT ENCLOSURE AND METERING EQUIPMENT SHALL MEET THE REQUIREMENTS OF THE SERVING UTILITY. THE METER AREA SHALL HAVE A SEALABLE, LOCKABLE, RAINTIGHT COVER THAT CAN BE REMOVED WITHOUT THE USE OF TOOLS.
5. SERVICE EQUIPMENT SHALL BE FACTORY WIRED AND CONFORM TO NEMA STANDARDS.
6. THE EXTERIOR DOOR SHALL HAVE PROVISIONS FOR PADLOCKING. THE PADLOCK HOLE SHALL BE A MINIMUM DIAMETER OF 11mm.
7. ALL TERMINALS FOR INCOMING SERVICE CONDUCTORS SHALL BE COMPATIBLE WITH EITHER COPPER OR ALUMINUM CONDUCTORS SIZED TO SUIT THE CONDUCTORS SHOWN ON THE PLAN. TERMINAL LUGS SHALL BE COPPER OR TIN-PLATED ALUMINUM. SOLID NEUTRAL TERMINAL STRIP SHALL BE RATED 125A UNLESS OTHERWISE SPECIFIED AND FOR USE WITH COPPER OR ALUMINUM CONDUCTORS. THE TERMINAL SHOULD INCLUDE BUT NOT BE LIMITED TO:
   A) INCOMING TERMINALS (LANDING LUGS)
   B) NEUTRAL LUGS
   C) SOLID NEUTRAL TERMINAL STRIP.
   D) TERMINAL STRIPS FOR CONDUCTORS WITHIN THE ENCLOSURE.
8. CIRCUIT BREAKER INTERIORS SHALL BE COPPER. INTERIORS SHALL ACCEPT PLUG-IN OR CABLE-IN/CABLE-OUT CIRCUIT BREAKERS.
9. PANEL MOUNTED CIRCUIT BREAKERS SHALL BE MOUNTED IN THE HORIZONTAL POSITION. CABLE-IN/CABLE-OUT CIRCUIT BREAKERS SHALL BE MOUNTED IN THE VERTICAL POSITION.
10. FASTENERS ON THE EXTERIOR OF THE ENCLOSURE SHALL BE VANDAL RESISTANT AND SHALL NOT BE REMOVABLE FROM THE EXTERIOR. ALL NUTS, BOLTS, SCREWS, WASHERS, AND HINGES SHALL BE STAINLESS STEEL.
11. PHENOLIC NAME PLATES SHALL BE PROVIDED AS REQUIRED.
12. A PLASTIC COVERED WIRING DIAGRAM SHALL BE ATTACHED TO THE INSIDE OF THE FRONT DOOR.
13. ENCLOSURE SHALL BE 14GA 304D STAINLESS STEEL.
14. SPARE CIRCUIT BREAKERS SHALL BE TURNED OFF.
15. ALL CONTROL WIRING TO BE COLOR CODED #12 AWG USE. UNLESS OTHERWISE NOTED.
16. ALL POWER AND CONTROL WIRING TO BE NEATLY LABELED, TRAINED AND SUPPORTED. USE PANDUIT CCH SERIES WIRE MOUNTING DEVICES TO SUPPORT CONDUCTORS.
17. FOR LIGHTING CIRCUITS: PROVIDE #10 AWG WIRE FROM 30A/2P CIRCUIT BREAKERS AND #10 AWG GROUND WIRE FROM GROUND BUS TO FIELD WIRING TERMINATION STRIP FOR EACH UNDERGROUND CABLE RUN, AS REQUIRED.
18. SEAL CONDUIT OPENINGS WITH DUCT SEAL. CAP SPARE CONDUITS.
19. ENCLOSURE SHALL BE GROUNDED.
20. LAYOUT OF EQUIPMENT INSIDE CABINET IS CONCEPTUAL. EXACT LAYOUT SHALL BE CONFIRMED BY THE CABINET MANUFACTURER.
21. PROVIDE PADLOCKS ON ALL DOORS (EXCEPT FOR METER DOOR SEALED BY UTILITY).

LIGHTING CONTROL CABINET
N.T.S.

Powrtek Engineering, Inc.
20711 WATERTOWN RD., SUITE C
WAUKESHA, WI 53186
VOICE: 262-827-9575
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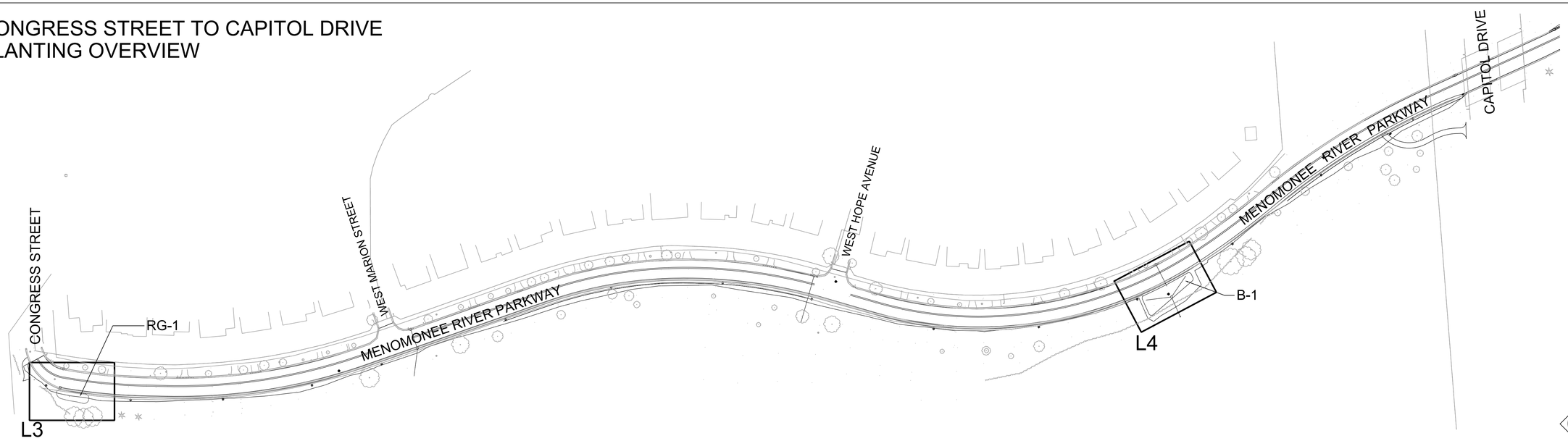
MILWAUKEE COUNTY DEPARTMENT OF ADMINISTRATIVE SERVICES
Architecture, Engineering & Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

DRAWN BY: BEF
CHECKED BY: GWS
SCALE:
DATE: 7/03/14
PROJECT TITLE: MENOMONEE RIVER PARKWAY
SHEET DESCRIPTION: LIGHTING DETAILS
SITE NO.
BUILDING NO.
PROJECT NO. P280-13626
SHEET NO. E-9
9 OF 9
FILE NO.

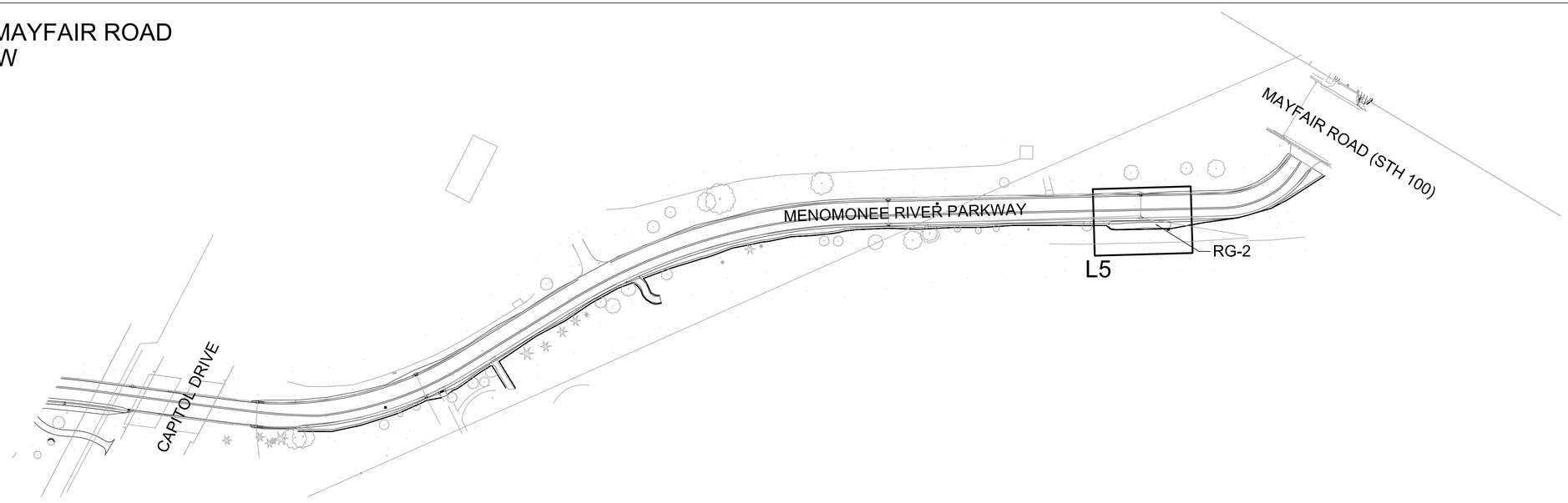
GENERAL NOTES:

1. SEE ENGINEERING DRAWINGS FOR ADDITIONAL GENERAL NOTES AND OTHER INFORMATION PERTAINING TO RAIN GARDENS AND BIOFILTRATION BASINS.
2. FIELD VERIFY ALL EXISTING AND PROPOSED SITE UTILITIES. CONTACT DIGGERS HOTLINE AND MILWAUKEE COUNTY FOR UNDERGROUND UTILITY LOCATIONS. NOTIFY CONSTRUCTION REPRESENTATIVE OF ANY PROBLEMS.
3. PROTECT ALL PAVEMENTS, CURBS, UTILITIES, AND OTHER SITE ELEMENTS DURING PLANTING OPERATIONS. ANY ELEMENTS DAMAGED BY CONSTRUCTION ACTIVITIES SHALL BE REPAIRED TO EXISTING CONDITION BY CONTRACTOR.
4. RECREATIONAL PATHS SHALL NOT BE DISTURBED BY CONSTRUCTION ACTIVITIES AND MUST REMAIN OPEN AT ALL TIMES.
5. SUBMIT TOPSOIL TESTING REQUIREMENTS AS OUTLINED IN THE PROJECT SPECIFICATIONS.
6. RAIN GARDEN AND BIOFILTRATION GRADES AND PLANTING SOIL/ENGINEERED SOIL DEPTHS SHALL BE APPROVED BEFORE BEGINNING PLANTING.
7. LAYOUT, STAKE OR PAINT THE PROPOSED LOCATION OF ALL PLANTINGS FOR APPROVAL BY CONSTRUCTION REPRESENTATIVE PRIOR TO PLANTING.
8. SPACE SHRUBS AND PERENNIALS PER PLANT SCHEDULE.
9. ALL WRAPPINGS, WIRE BASKETS, BURLAP, TWINE AND OTHER MISCELLANEOUS MATERIAL SHALL BE REMOVED FROM ENTIRE ROOT BALL PRIOR TO INSTALLATION.
10. ALL PLANTED AREAS , INLCUDING BIORETENTION BASINS ADJACENT TO LAWN SHALL HAVE SHOVEL CUT EDGING.
11. ALL PLANTED AREAS NOT COVERED BY NATIVE VEGETATED MAT SHALL HAVE 3 INCHES TWICE-SHREDDED HARDWOOD BARK MULCH.
12. ALL LAWN AREAS ADJACENT TO THE PROJECT SITE THAT ARE DISTURBED BY CONSTRUCTION ACTIVITIES INCLUDING, BUT NOT LIMITED TO, UTILITY TRENCHING, ACCESS, OR MATERIALS STORAGE SHALL BE REPAIRED PER PROJECT SPECIFICATIONS.
13. REPAIR TO ORIGINAL CONDITION ALL EXISTING PLANTING BEDS NOTED TO REMAIN INCLUDING VEGETATION, MULCH AND EDGING THAT HAVE BEEN DISTURBED BY CONSTRUCTION ACTIVITIES.

CONGRESS STREET TO CAPITOL DRIVE PLANTING OVERVIEW



CAPITOL DRIVE TO MAYFAIR ROAD PLANTING OVERVIEW



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Architecture, Engineering & Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

DRAWN BY: KSD	CHECKED BY: KSD
SCALE: 1"=100'	DATE: 7/03/14
PROJECT TITLE: MENOMONEE RIVER PARKWAY	SHEET DESCRIPTION: PLANTING OVERVIEW PLAN CONGRESS TO MAYFAIR
SITE NO.	BUILDING NO.
PROJECT NO. P280-13626	
SHEET NO. L1	1 OF 110
FILE NO.	

GENERAL NOTES:

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2. FIELD VERIFY ALL EXISTING AND PROPOSED SITE UTILITIES. CONTACT DIGGERS HOTLINE AND MILWAUKEE COUNTY FOR UNDERGROUND UTILITY LOCATIONS. NOTIFY CONSTRUCTION REPRESENTATIVE OF ANY PROBLEMS.
3. PROTECT ALL PAVEMENTS, CURBS, UTILITIES, AND OTHER SITE ELEMENTS DURING PLANTING OPERATIONS. ANY ELEMENTS DAMAGED BY CONSTRUCTION ACTIVITIES SHALL BE REPAIRED TO EXISTING CONDITION BY CONTRACTOR.
4. RECREATIONAL PATHS SHALL NOT BE DISTURBED BY CONSTRUCTION ACTIVITIES AND MUST REMAIN OPEN AT ALL TIMES.
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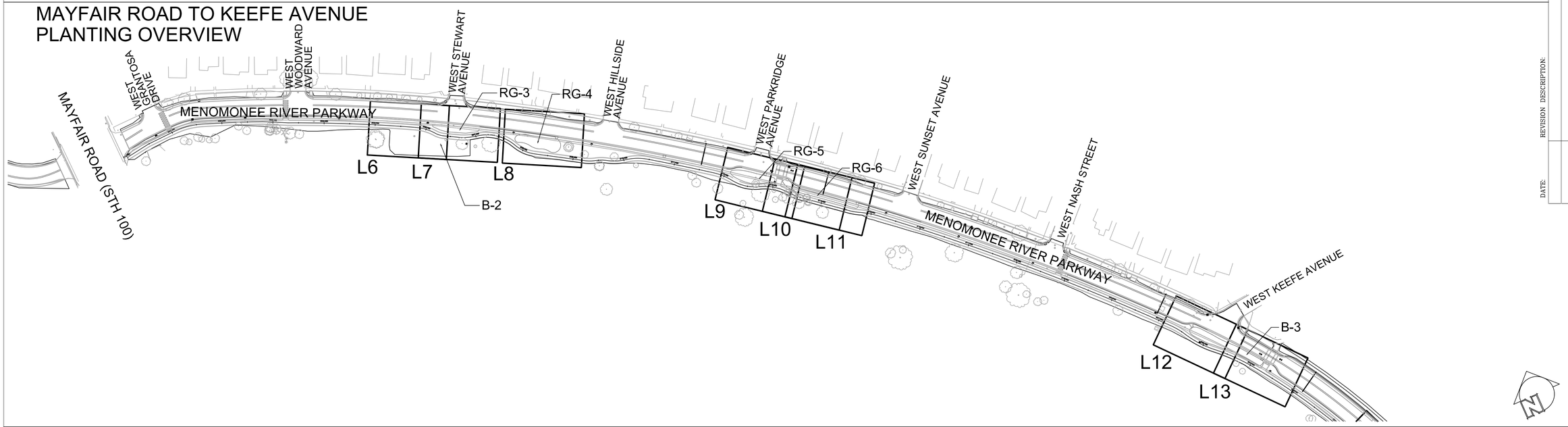
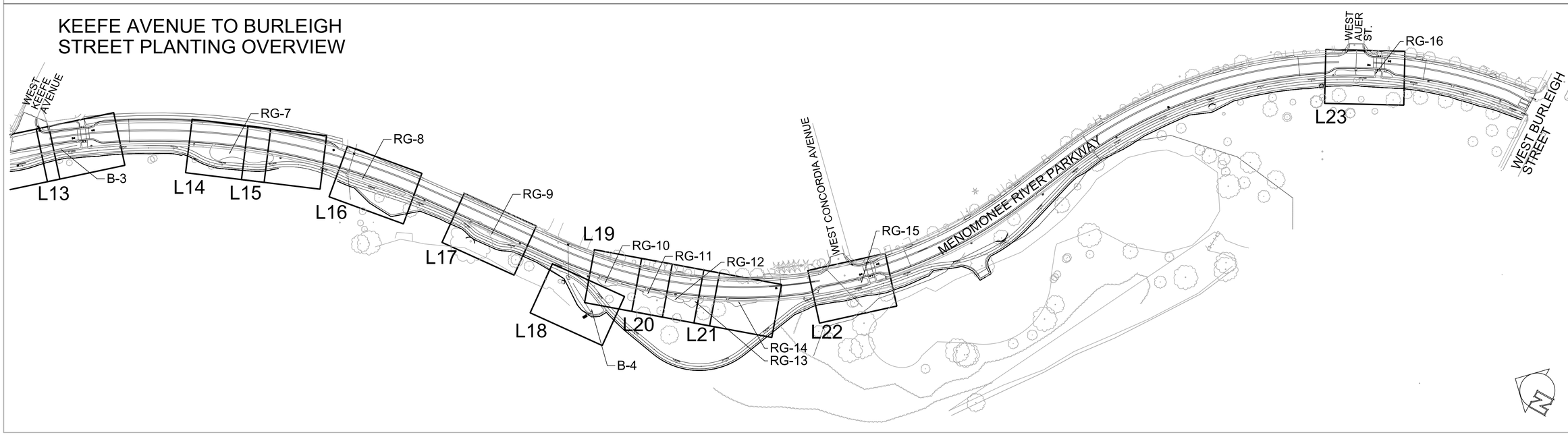
10. ALL PLANTED AREAS , INLCUDING BIORETENTION BASINS ADJACENT TO LAWN SHALL HAVE SHOVEL CUT EDGING.
11. ALL PLANTED AREAS NOT COVERED BY NATIVE VEGETATED MAT SHALL HAVE 3 INCHES TWICE-SHREDDED HARDWOOD BARK MULCH.
12. ALL LAWN AREAS ADJACENT TO THE PROJECT SITE THAT ARE DISTURBED BY CONSTRUCTION ACTIVITIES INCLUDING, BUT NOT LIMITED TO, UTILITY TRENCHING, ACCESS, OR MATERIALS STORAGE SHALL BE REPAIRED PER PROJECT SPECIFICATIONS.
13. REPAIR TO ORIGINAL CONDITION ALL EXISTING PLANTING BEDS NOTED TO REMAIN INCLUDING VEGETATION, MULCH AND EDGING THAT HAVE BEEN DISTURBED BY CONSTRUCTION ACTIVITIES.

MAYFAIR ROAD TO KEEFE AVENUE PLANTING OVERVIEW



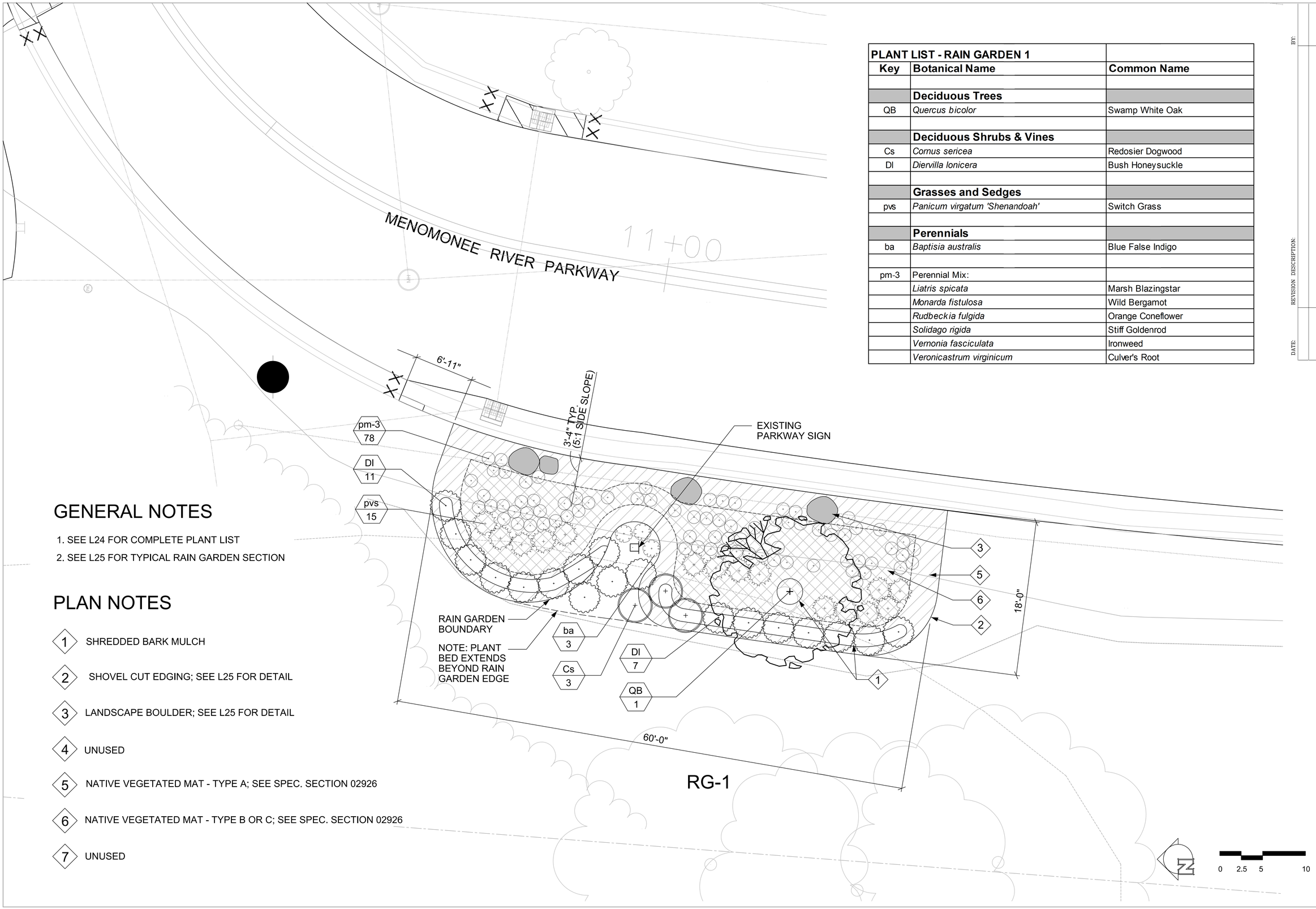
KEEFE AVENUE TO BURLEIGH STREET PLANTING OVERVIEW



MILWAUKEE COUNTY DEPARTMENT OF ADMINISTRATIVE SERVICES
Architecture, Engineering & Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

DATE: REVISION DESCRIPTION: BY:

SCALE: 1"=100'	DRAWN BY: KSD
DATE: 7/03/14	CHECKED BY: KSD
PROJECT TITLE: MENOMONEE RIVER PARKWAY	
SHEET DESCRIPTION: PLANTING OVERVIEW PLAN MAYFAIR TO BURLEIGH	
SITE NO.	
BUILDING NO.	
PROJECT NO. P280-13626	
SHEET NO. L2	2 OF 110
FILE NO.	



PLANT LIST - RAIN GARDEN 1		
Key	**Botanical Name**	**Common Name**
	Deciduous Trees	
QB	*Quercus bicolor*	Swamp White Oak
	Deciduous Shrubs & Vines	
Cs	*Cornus sericea*	Redosier Dogwood
DI	*Diervilla lonicera*	Bush Honeysuckle
	Grasses and Sedges	
pvs	*Panicum virgatum 'Shenandoah'*	Switch Grass
	Perennials	
ba	*Baptisia australis*	Blue False Indigo
pm-3	Perennial Mix:	
	Liatris spicata	Marsh Blazingstar
	Monarda fistulosa	Wild Bergamot
	Rudbeckia fulgida	Orange Coneflower
	Solidago rigida	Stiff Goldenrod
	Vernonia fasciculata	Ironweed
	Veronicastrum virginicum	Culver's Root

GENERAL NOTES

1. SEE L24 FOR COMPLETE PLANT LIST
2. SEE L25 FOR TYPICAL RAIN GARDEN SECTION

PLAN NOTES

1. SHREDDED BARK MULCH
2. SHOVEL CUT EDGING; SEE L25 FOR DETAIL
3. LANDSCAPE BOULDER; SEE L25 FOR DETAIL
4. UNUSED
5. NATIVE VEGETATED MAT - TYPE A; SEE SPEC. SECTION 02926
6. NATIVE VEGETATED MAT - TYPE B OR C; SEE SPEC. SECTION 02926
7. UNUSED

DATE: REVISION DESCRIPTION: BY:

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Architecture, Engineering & Environmental Services Section
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DRAWN BY: KSD
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SCALE: 1"–10'
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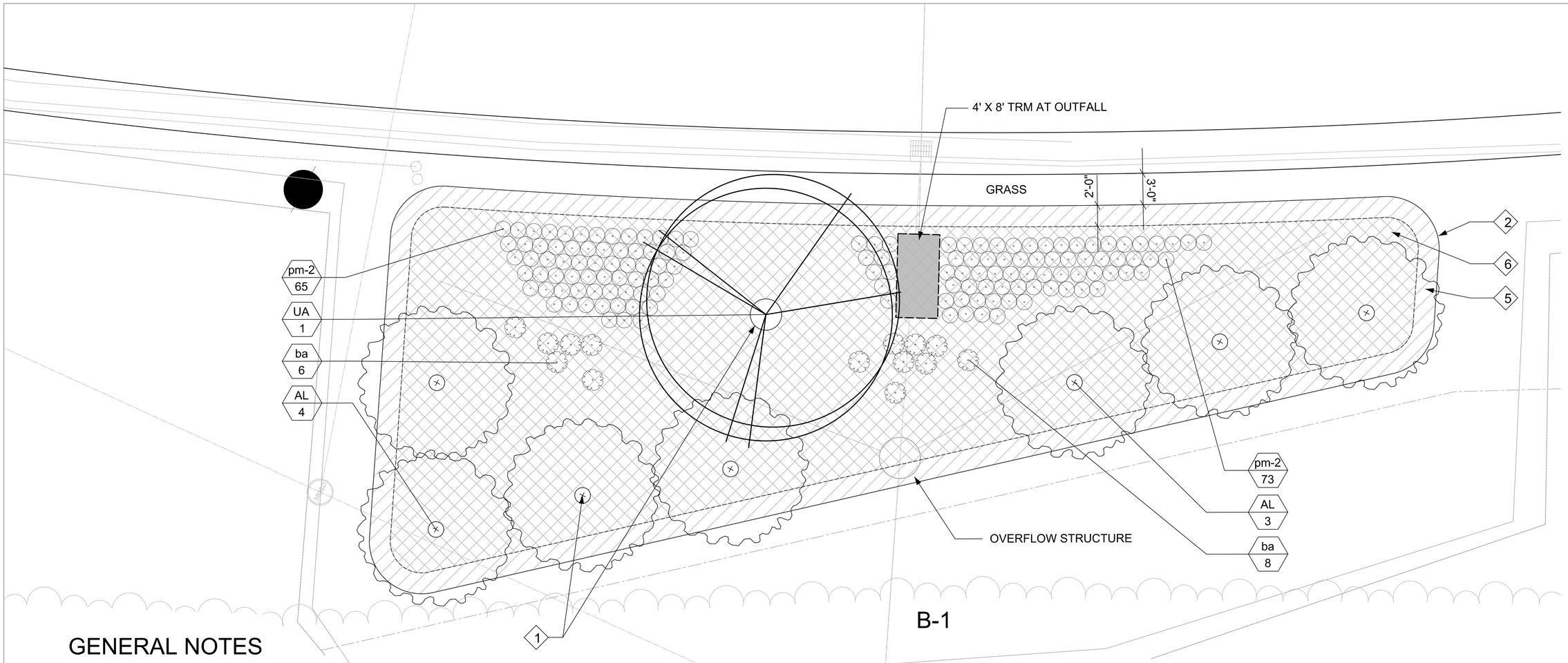
PROJECT TITLE: MENOMONEE RIVER PARKWAY
SHEET DESCRIPTION: PLANTING ENLARGEMENT PLAN RG–1

SITE NO.
BUILDING NO.
PROJECT NO. P280–13626

SHEET NO. L3
3 OF 110
FILE NO.



GENERAL NOTES

1. SEE L24 FOR COMPLETE PLANT LIST
2. SEE ENGINEERING DRAWINGS FOR BIOFILTRATION DETAILS

PLAN NOTES

1. SHREDDED BARK MULCH
2. SHOVEL CUT EDGING; SEE L25 FOR DETAIL
3. UNUSED
4. INFILTRATION SWALE; SEE ENGINEERING DRAWINGS
5. NATIVE VEGETATED MAT - TYPE A; SEE SPEC. SECTION 02926
6. NATIVE VEGETATED MAT - TYPE B OR C; SEE SPEC. SECTION 02926
7. UNUSED

PLANT LIST - BIOFILTRATION BASIN 1		
Key	**Botanical Name**	**Common Name**
	Deciduous Trees	
UA	*Ulmus americana* 'Princeton'	Princeton American Elm
	Ornamental Trees	
AL	*Amelanchier laevis*	Allegheny Serviceberry
	Perennials	
ba	*Baptisia australis*	Blue False Indigo
pm-2	Perennial Mix:	
	Agastache foeniculum	Anise Hyssop
	Aster prenanthoides	Crooked-stem Aster
	Desmodium canadense	Canada Tick Trefoil
	Echinacea purpurea	Purple Coneflower
	Helenium autumnale	Sneezeweed
	Lobelia cardinalis	Cardinal Flower

0 2.5 5 10

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DRAWN BY: KSD
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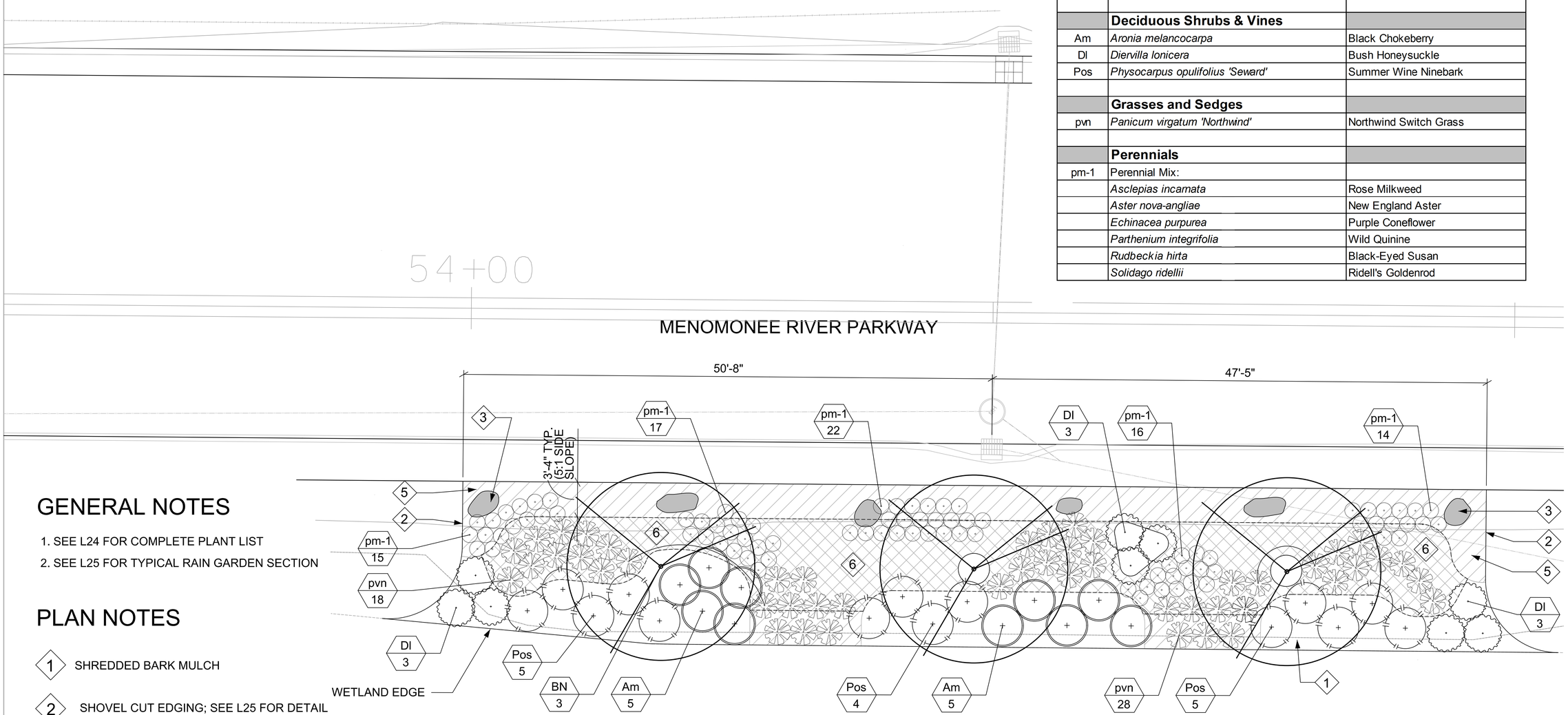
SCALE: 1"–10'
DATE: 7/03/14

PROJECT TITLE: MENOMONEE RIVER PARKWAY
SHEET DESCRIPTION: PLANTING ENLARGEMENT PLAN B–1
SITE NO.
BUILDING NO.
PROJECT NO. P280–13626
SHEET NO. L4
4 OF 110
FILE NO.

PLANT LIST - RAIN GARDEN 2		
Key	**Botanical Name**	**Common Name**
	Deciduous Trees	
BN	*Betula nigra*	River Birch
	Deciduous Shrubs & Vines	
Am	*Aronia melancocarpa*	Black Chokeberry
Dl	*Diervilla lonicera*	Bush Honeysuckle
Pos	*Physocarpus opulifolius 'Seward'*	Summer Wine Ninebark
	Grasses and Sedges	
pvn	*Panicum virgatum 'Northwind'*	Northwind Switch Grass
	Perennials	
pm-1	Perennial Mix:	
	Asclepias incarnata	Rose Milkweed
	Aster nova-angliae	New England Aster
	Echinacea purpurea	Purple Coneflower
	Parthenium integrifolia	Wild Quinine
	Rudbeckia hirta	Black-Eyed Susan
	Solidago ridellii	Ridell's Goldenrod



RG-2

GENERAL NOTES

1. SEE L24 FOR COMPLETE PLANT LIST
2. SEE L25 FOR TYPICAL RAIN GARDEN SECTION

PLAN NOTES

1. SHREDDED BARK MULCH
2. SHOVEL CUT EDGING; SEE L25 FOR DETAIL
3. LANDSCAPE BOULDER; SEE L25 FOR DETAIL
4. INFILTRATION SWALE; SEE ENGINEERING DRAWINGS
5. NATIVE VEGETATED MAT - TYPE A; SEE SPEC. SECTION 02926
6. NATIVE VEGETATED MAT - TYPE B OR C; SEE SPEC. SECTION 02926
7. UNUSED

DATE: REVISION DESCRIPTION: BY:

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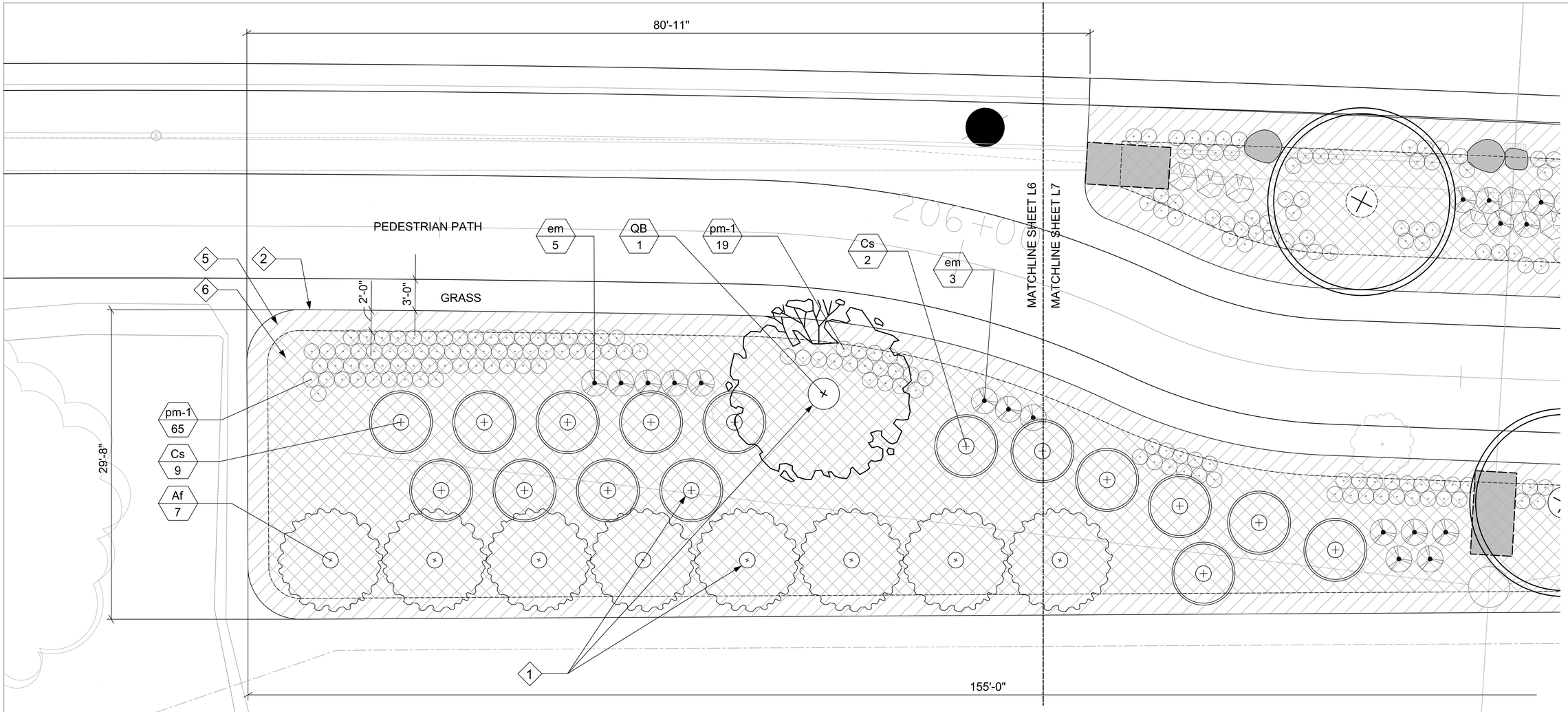
SITE NO.
BUILDING NO.
PROJECT NO. P280-13626
SHEET NO. L5
5 OF 110
FILE NO.



NOTE: THIS IS COMPLETE PLANT LIST FOR B-2

PLANT LIST - BIOFILTRATION BASIN 2		
Key	**Botanical Name**	**Common Name**
	Deciduous Trees	
CO	*Celtis occidentalis*	Hackberry
QB	*Quercus bicolor*	Swamp White Oak
	Deciduous Shrubs	
Af	*Amorpha fruticosa*	Desert False Indigo
Cs	*Cornus sericea*	Redosier Dogwood
	Perennials	
em	*Eupatorium maculatum* 'Gateway'	Gateway Spotted Joe-pye Weed
pm-1	Perennial Mix:	
	Asclepias incarnata	Rose Milkweed
	Aster nova-angliae	New England Aster
	Echinacea purpurea	Purple Coneflower
	Parthenium integrifolia	Wild Quinine
	Rudbeckia hirta	Black-Eyed Susan
	Solidago ridellii	Ridell's Goldenrod

PLAN NOTES

B-2

1. SHREDDED BARK MULCH
2. SHOVEL CUT EDGING; SEE L25 FOR DETAIL
3. UNUSED
4. INFILTRATION SWALE; SEE ENGINEERING DRAWINGS
5. NATIVE VEGETATED MAT - TYPE A; SEE SPEC. SECTION 02926
6. NATIVE VEGETATED MAT - TYPE B OR C; SEE SPEC. SECTION 02926
7. UNUSED

GENERAL NOTES

1. SEE L24 FOR COMPLETE PLANT LIST
2. SEE ENGINEERING DRAWINGS FOR BIOFILTRATION DETAILS

N

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DATE: REVISION DESCRIPTION: BY:

MILWAUKEE COUNTY DEPARTMENT OF ADMINISTRATIVE SERVICES
Architecture, Engineering & Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

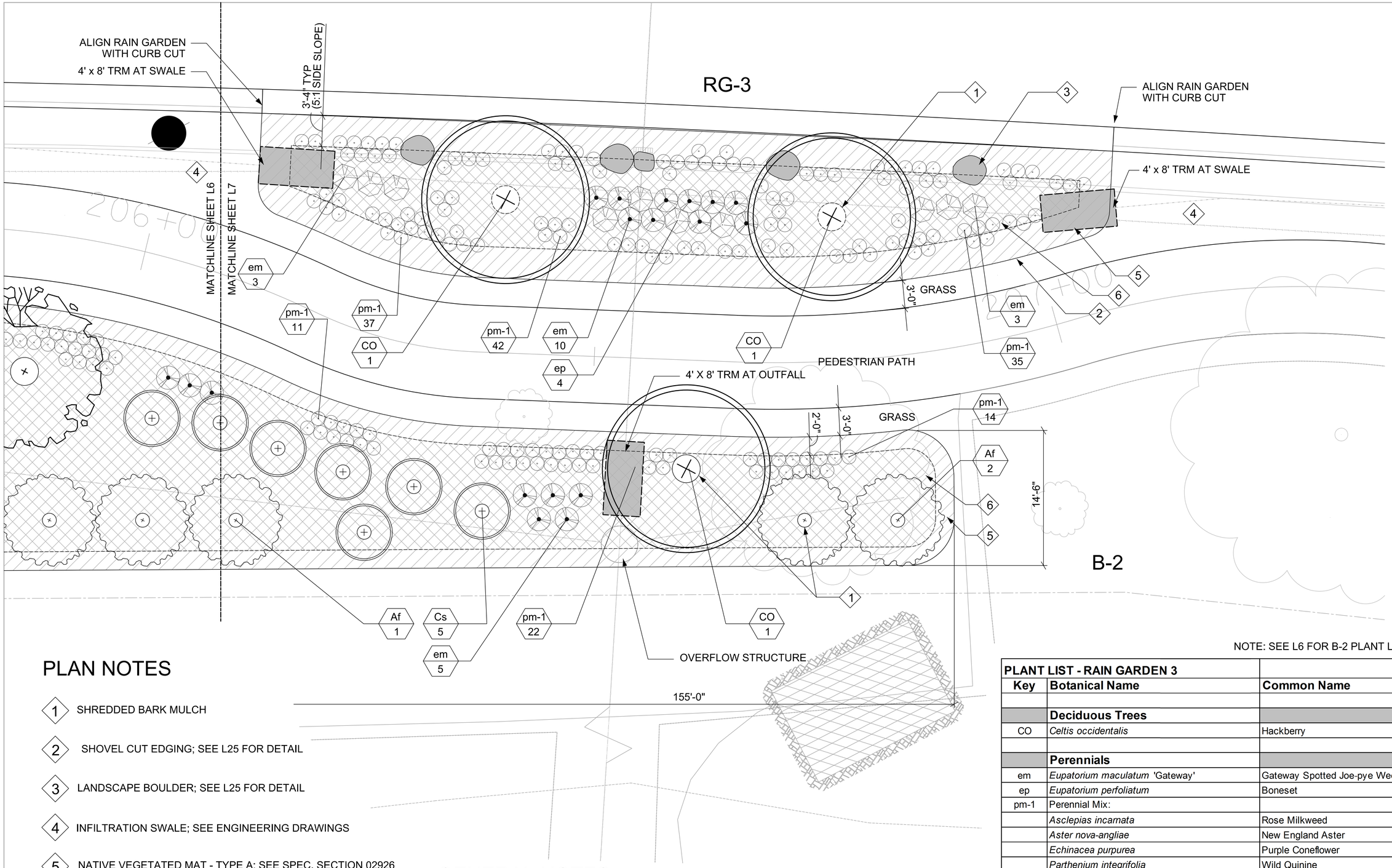
SCALE: 1"=10'
DRAWN BY: KSD
DATE: 7/03/14
CHECKED BY: KSD

PROJECT TITLE: MENOMONEE RIVER PARKWAY
SHEET DESCRIPTION: PLANTING ENLARGEMENT PLAN B-2

SITE NO.
BUILDING NO.

PROJECT NO. P280-13626

SHEET NO. L6
6 OF 110
FILE NO.



NOTE: SEE L6 FOR B-2 PLANT LIST

PLANT LIST - RAIN GARDEN 3		
Key	**Botanical Name**	**Common Name**
	Deciduous Trees	
CO	*Celtis occidentalis*	Hackberry
	Perennials	
em	*Eupatorium maculatum* 'Gateway'	Gateway Spotted Joe-pye Weed
ep	*Eupatorium perfoliatum*	Boneset
pm-1	Perennial Mix:	
	Asclepias incarnata	Rose Milkweed
	Aster nova-angliae	New England Aster
	Echinacea purpurea	Purple Coneflower
	Parthenium integrifolia	Wild Quinine
	Rudbeckia hirta	Black-Eyed Susan
	Solidago ridellii	Ridell's Goldenrod

PLAN NOTES

1. SHREDDED BARK MULCH
2. SHOVEL CUT EDGING; SEE L25 FOR DETAIL
3. LANDSCAPE BOULDER; SEE L25 FOR DETAIL
4. INFILTRATION SWALE; SEE ENGINEERING DRAWINGS
5. NATIVE VEGETATED MAT - TYPE A; SEE SPEC. SECTION 02926
6. NATIVE VEGETATED MAT - TYPE B OR C; SEE SPEC. SECTION 02926
7. UNUSED

GENERAL NOTES

1. SEE L24 FOR COMPLETE PLANT LIST
2. SEE ENGINEERING DRAWINGS FOR BIOFILTRATION DETAILS
3. SEE L25 FOR TYPICAL RAINGARDEN SECTION

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DATE: REVISION DESCRIPTION: BY:

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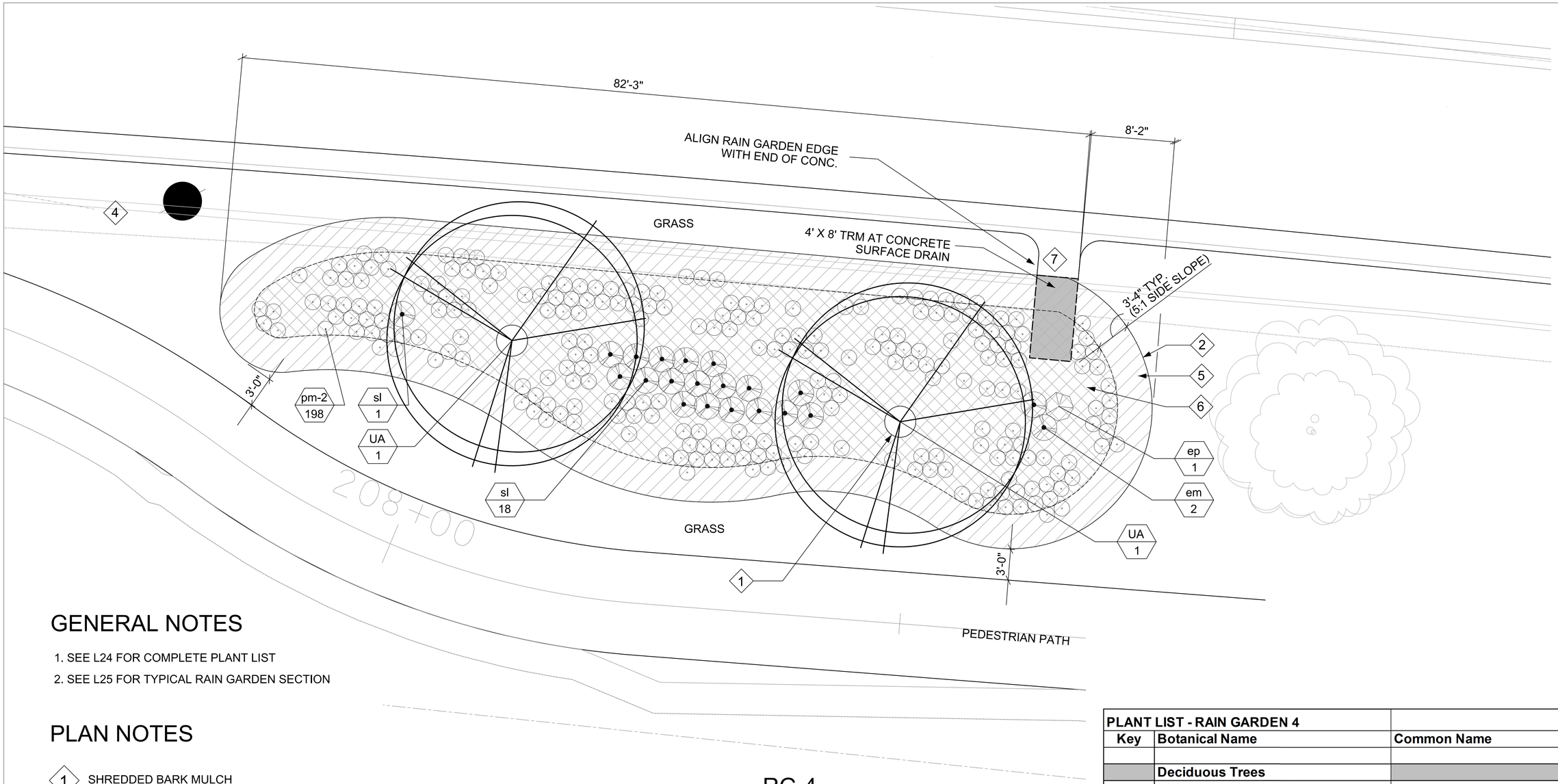
Architecture, Engineering & Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

DRAWN BY: KSD
CHECKED BY: KSD
SCALE: 1"=10'
DATE: 7/03/14

PROJECT TITLE: MENOMONEE RIVER PARKWAY
SHEET DESCRIPTION: PLANTING ENLARGEMENT PLAN B-2, RG-3
SITE NO.
BUILDING NO.
PROJECT NO. P280-13626
SHEET NO. L7
7 OF 110
FILE NO.



GENERAL NOTES

1. SEE L24 FOR COMPLETE PLANT LIST
2. SEE L25 FOR TYPICAL RAIN GARDEN SECTION

PLAN NOTES

1. SHREDDED BARK MULCH
2. SHOVEL CUT EDGING; SEE L25 FOR DETAIL
3. UNUSED
4. INFILTRATION SWALE; SEE ENGINEERING DRAWINGS
5. NATIVE VEGETATED MAT - TYPE A; SEE SPEC. SECTION 02926
6. NATIVE VEGETATED MAT - TYPE B OR C; SEE SPEC. SECTION 02926
7. CONCRETE SURFACE DRAIN; SEE ENGINEERING DRAWINGS

RG-4

PLANT LIST - RAIN GARDEN 4		
Key	**Botanical Name**	**Common Name**
	Deciduous Trees	
UA	*Ulmus americana* 'Princeton'	Princeton American Elm
	Perennials	
sl	*Silphilium laciniatum*	Compass Plant
pm-2	Perennial Mix:	
	Agastache foeniculum	Anise Hyssop
	Aster prenanthoides	Crooked-stem Aster
	Desmodium canadense	Canada Tick Trefoil
	Echinacea purpurea	Purple Coneflower
	Helenium autumnale	Sneezeweed
	Lobelia cardinalis	Cardinal Flower

N

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Architecture, Engineering & Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

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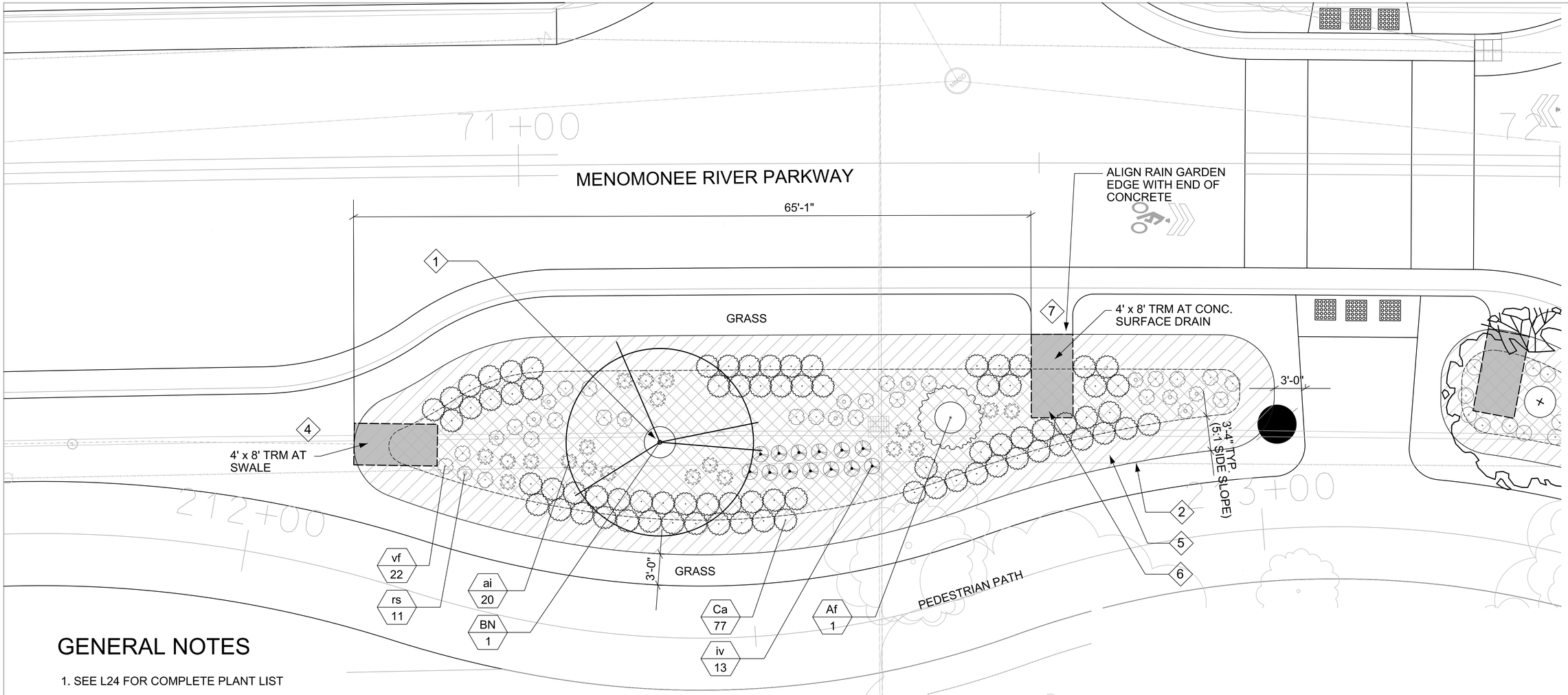
CHECKED BY: KSD
SCALE: 1"-10'
DATE: 7/03/14
PROJECT TITLE: MENOMONEE RIVER PARKWAY
SHEET DESCRIPTION: PLANTING ENLARGEMENT PLAN RG-4
SITE NO.
BUILDING NO.
PROJECT NO. P280-13626
SHEET NO. L8
8 OF 110
FILE NO.



GENERAL NOTES

1. SEE L24 FOR COMPLETE PLANT LIST
2. SEE L25 FOR TYPICAL RAIN GARDEN SECTION

PLAN NOTES

1. SHREDDED BARK MULCH
2. SHOVEL CUT EDGING; SEE L25 FOR DETAIL
3. UNUSED
4. INFILTRATION SWALE; SEE ENGINEERING DRAWINGS
5. NATIVE VEGETATED MAT - TYPE A; SEE SPEC. SECTION 02926
6. NATIVE VEGETATED MAT - TYPE B OR C; SEE SPEC. SECTION 02926
7. CONCRETE SURFACE DRAIN; SEE ENGINEERING DRAWINGS

RG-5

PLANT LIST - RAIN GARDEN 5		
Key	**Botanical Name**	**Common Name**
	Deciduous Trees	
BN	*Betula nigra*	River Birch
	Deciduous Shrubs	
Af	*Amorpha fruticosa*	Desert False Indigo
Ca	*Ceonothus americanus*	New Jersey Tea
	Perennials	
ai	*Asclepias incarnata*	Marsh Milkweed
iv	*Iris virginica shrevei*	Southern Blue Flag Iris
rs	*Rudbeckia subtomentosa*	Sweet Black-eyed Susan
vf	*Vernonia fasciculata*	Ironweed

N

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BY:
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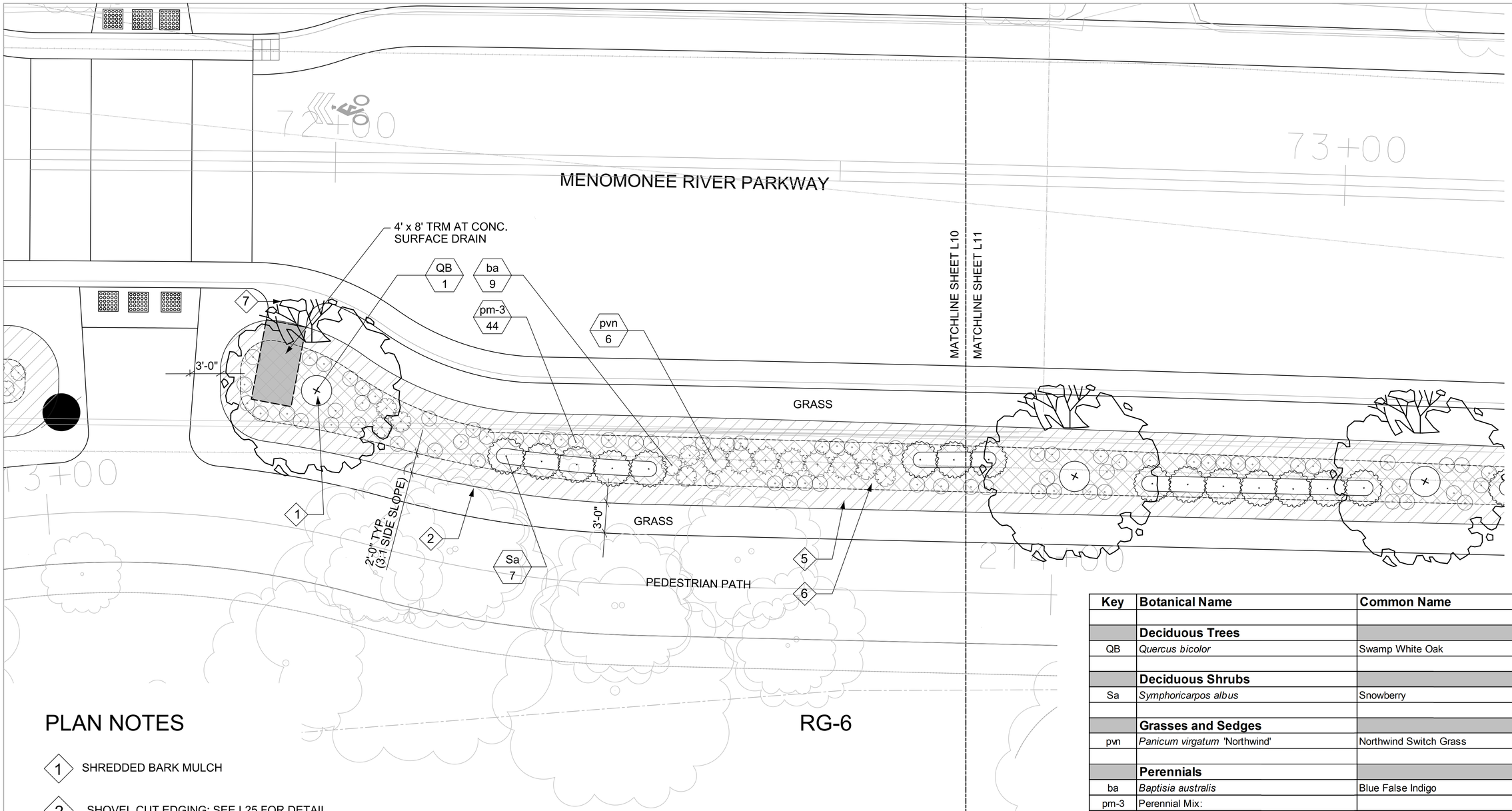
MILWAUKEE COUNTY DEPARTMENT OF ADMINISTRATIVE SERVICES
Architecture, Engineering & Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

DRAWN BY: KSD
CHECKED BY: KSD
SCALE: 1"=10'
DATE: 7/03/14
PROJECT TITLE: MENOMONEE RIVER PARKWAY
SHEET DESCRIPTION: PLANTING ENLARGEMENT PLAN RG-5
SITE NO.
BUILDING NO.
PROJECT NO. P280-13626
SHEET NO. L9
9 OF 110
FILE NO.



PLAN NOTES

1. SHREDDED BARK MULCH
2. SHOVEL CUT EDGING; SEE L25 FOR DETAIL
3. UNUSED
4. UNUSED
5. NATIVE VEGETATED MAT - TYPE A; SEE SPEC. SECTION 02926
6. NATIVE VEGETATED MAT - TYPE B OR C; SEE SPEC. SECTION 02926
7. CONCRETE SURFACE DRAIN; SEE ENGINEERING DRAWINGS

GENERAL NOTES

1. SEE L24 FOR COMPLETE PLANT LIST
2. SEE L25 FOR TYPICAL RAIN GARDEN SECTION

Key	Botanical Name	Common Name
	Deciduous Trees	
QB	*Quercus bicolor*	Swamp White Oak
	Deciduous Shrubs	
Sa	*Symphoricarpos albus*	Snowberry
	Grasses and Sedges	
pvn	*Panicum virgatum* 'Northwind'	Northwind Switch Grass
	Perennials	
ba	*Baptisia australis*	Blue False Indigo
pm-3	Perennial Mix:	
	Liatris spicata	Marsh Blazingstar
	Monarda fistulosa	Wild Bergamot
	Rudbeckia fulgida	Orange Coneflower
	Solidago rigida	Stiff Goldenrod
	Vernonia fasciculata	Ironweed
	Veronicastrum virginicum	Culver's Root

0 2.5 5 10

DATE: REVISION DESCRIPTION: BY:

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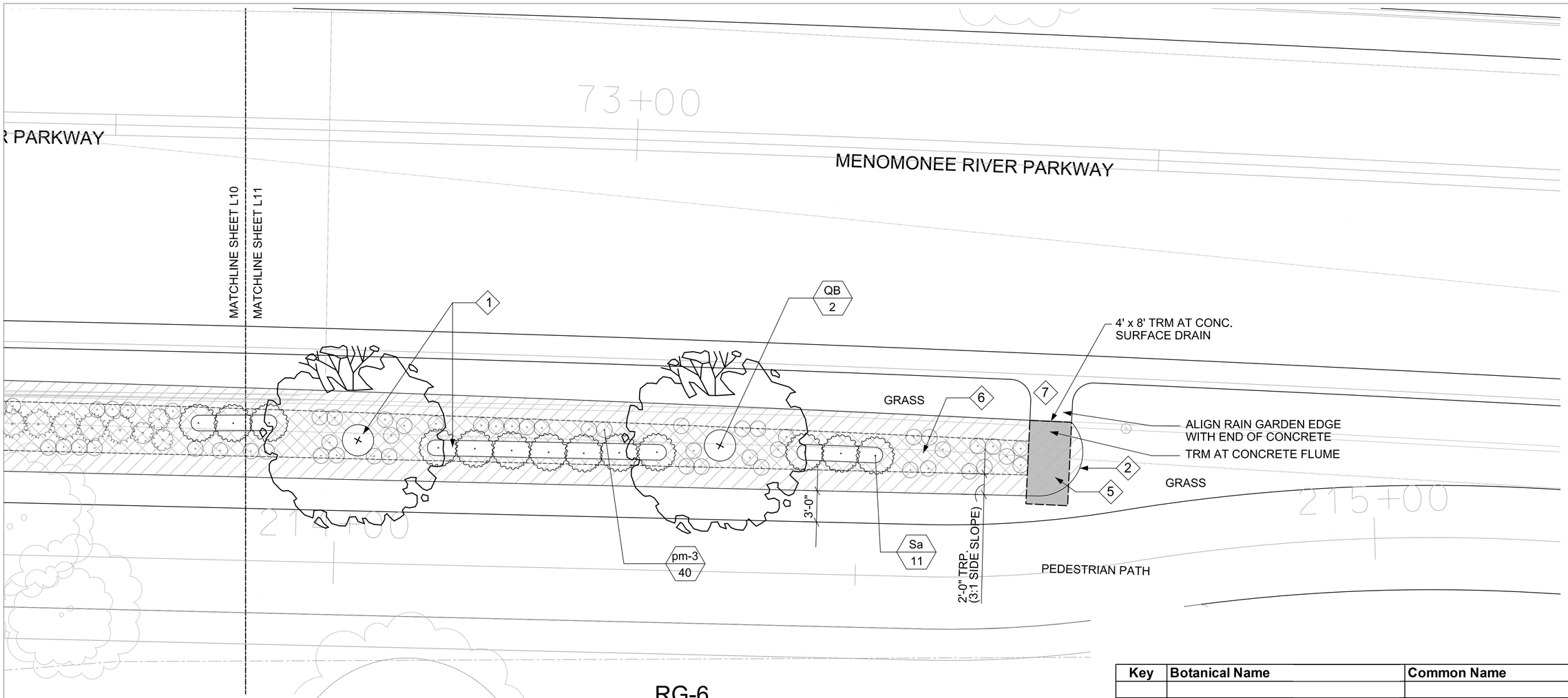
Architecture, Engineering & Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

DRAWN BY: KSD
CHECKED BY: KSD
SCALE: 1"=10'
DATE: 7/03/14
PROJECT TITLE: MENOMONEE RIVER PARKWAY
SHEET DESCRIPTION: PLANTING ENLARGEMENT PLAN RG-6
SITE NO.
BUILDING NO.
PROJECT NO. P280-13626
SHEET NO. L10
10 OF 110
FILE NO.



PLAN NOTES

1. SHREDDED BARK MULCH
2. SHOVEL CUT EDGING; SEE L25 FOR DETAIL
3. UNUSED
4. UNUSED
5. NATIVE VEGETATED MAT - TYPE A; SEE SPEC. SECTION 02926
6. NATIVE VEGETATED MAT - TYPE B OR C; SEE SPEC. SECTION 02926
7. CONCRETE SURFACE DRAIN; SEE ENGINEERING DRAWINGS

GENERAL NOTES

1. SEE L24 FOR COMPLETE PLANT LIST
2. SEE L25 FOR TYPICAL RAIN GARDEN SECTION

Key	Botanical Name	Common Name
	Deciduous Trees	
QB	*Quercus bicolor*	Swamp White Oak
	Deciduous Shrubs	
Sa	*Symphoricarpos albus*	Snowberry
	Grasses and Sedges	
pvn	*Panicum virgatum* 'Northwind'	Northwind Switch Grass
	Perennials	
ba	*Baptisia australis*	Blue False Indigo
pm-3	Perennial Mix:	
	Liatris spicata	Marsh Blazingstar
	Monarda fistulosa	Wild Bergamot
	Rudbeckia fulgida	Orange Coneflower
	Solidago rigida	Stiff Goldenrod
	Vernonia fasciculata	Ironweed
	Veronicastrum virginicum	Culver's Root

N

0 2.5 5 10

DATE: REVISION DESCRIPTION: BY:

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Architecture, Engineering & Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

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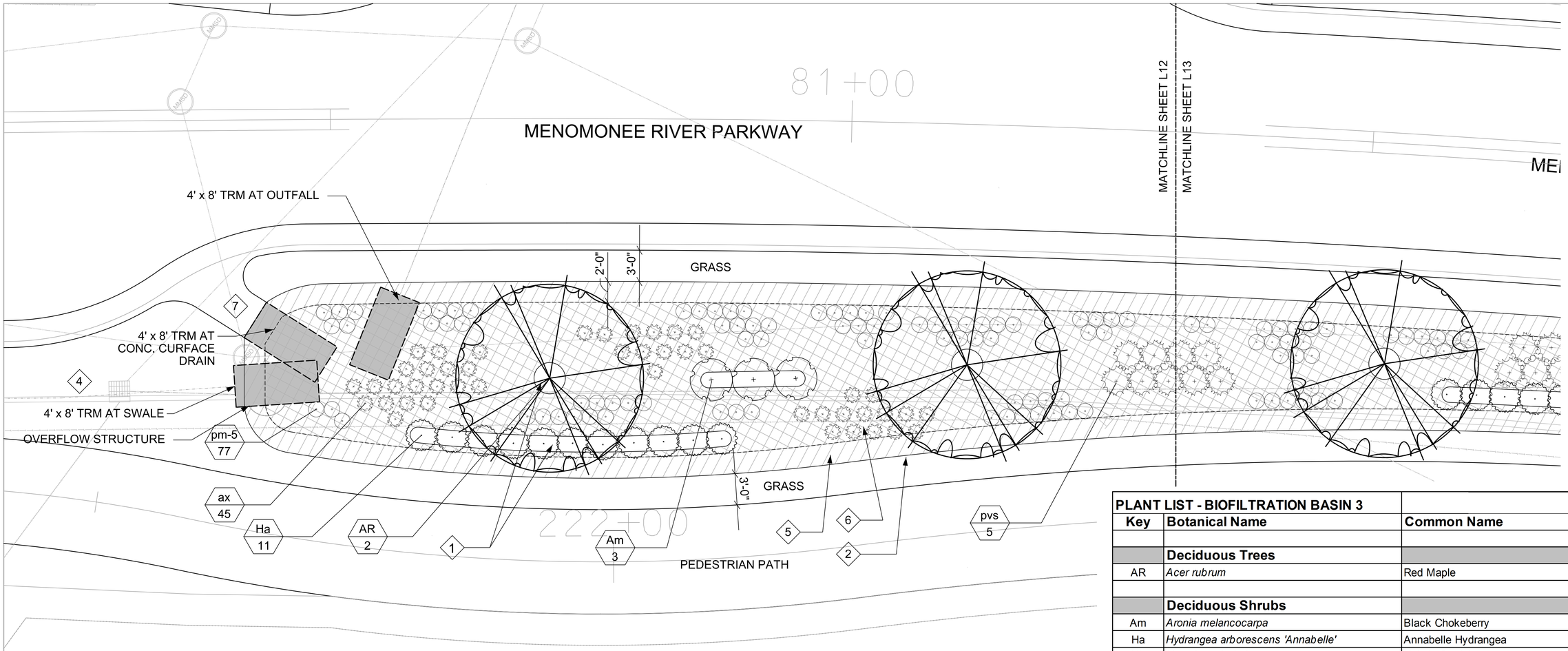
CHECKED BY: KSD
SCALE: 1"=10'
DATE: 7/03/14

PROJECT TITLE: MENOMONEE RIVER PARKWAY
SHEET DESCRIPTION: PLANTING ENLARGEMENT PLAN RG-6

SITE NO.
BUILDING NO.
PROJECT NO. P280-13626

SHEET NO. L11
11 OF 110
FILE NO.



B-3

PLAN NOTES

1. SHREDDED BARK MULCH
2. SHOVEL CUT EDGING; SEE L25 FOR DETAIL
3. UNUSED
4. INFILTRATION SWALE; SEE ENGINEERING DRAWINGS
5. NATIVE VEGETATED MAT - TYPE A; SEE SPEC. SECTION 02926
6. NATIVE VEGETATED MAT - TYPE B OR C; SEE SPEC. SECTION 02926
7. CONCRETE SURFACE DRAIN; SEE ENGINEERING DRAWINGS

GENERAL NOTES

1. SEE L24 FOR COMPLETE PLANT LIST
2. SEE ENGINEERING DRAWINGS FOR BIOFILTRATION DETAILS

PLANT LIST - BIOFILTRATION BASIN 3

Key	Botanical Name	Common Name
	Deciduous Trees	
AR	*Acer rubrum*	Red Maple
	Deciduous Shrubs	
Am	*Aronia melancocarpa*	Black Chokeberry
Ha	*Hydrangea arborescens 'Annabelle'*	Annabelle Hydrangea
Hk	*Hypericum kalmianum*	Kalm's St. Johnswort
	Grasses and Sedges	
pvs	*Panicum virgatum 'Shenandoah'*	Switch Grass
	Perennials	
ax	*Athyrium filix-femina*	Lady Fern
pm-3	Perennial Mix:	
	Liatris spicata	Marsh Blazingstar
	Monarda fistulosa	Wild Bergamot
	Rudbeckia fulgida	Orange Coneflower
	Solidago rigida	Stiff Goldenrod
	Vernonia fasciculata	Ironweed
	Veronicastrum virginicum	Culver's Root
pm-5	Perennial Mix:	
	Aquilegia canadensis	Wild Columbine
	Aster Drummondii	Drummond's Aster
	Campanula americana	American Bellflower
	Cimicifuga racemosa	Black Snakeroot
	Geranium maculatum	Spotted Geranium
	Solidago ulmifolia	Elm-leaf Goldenrod

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DATE: REVISION DESCRIPTION: BY:

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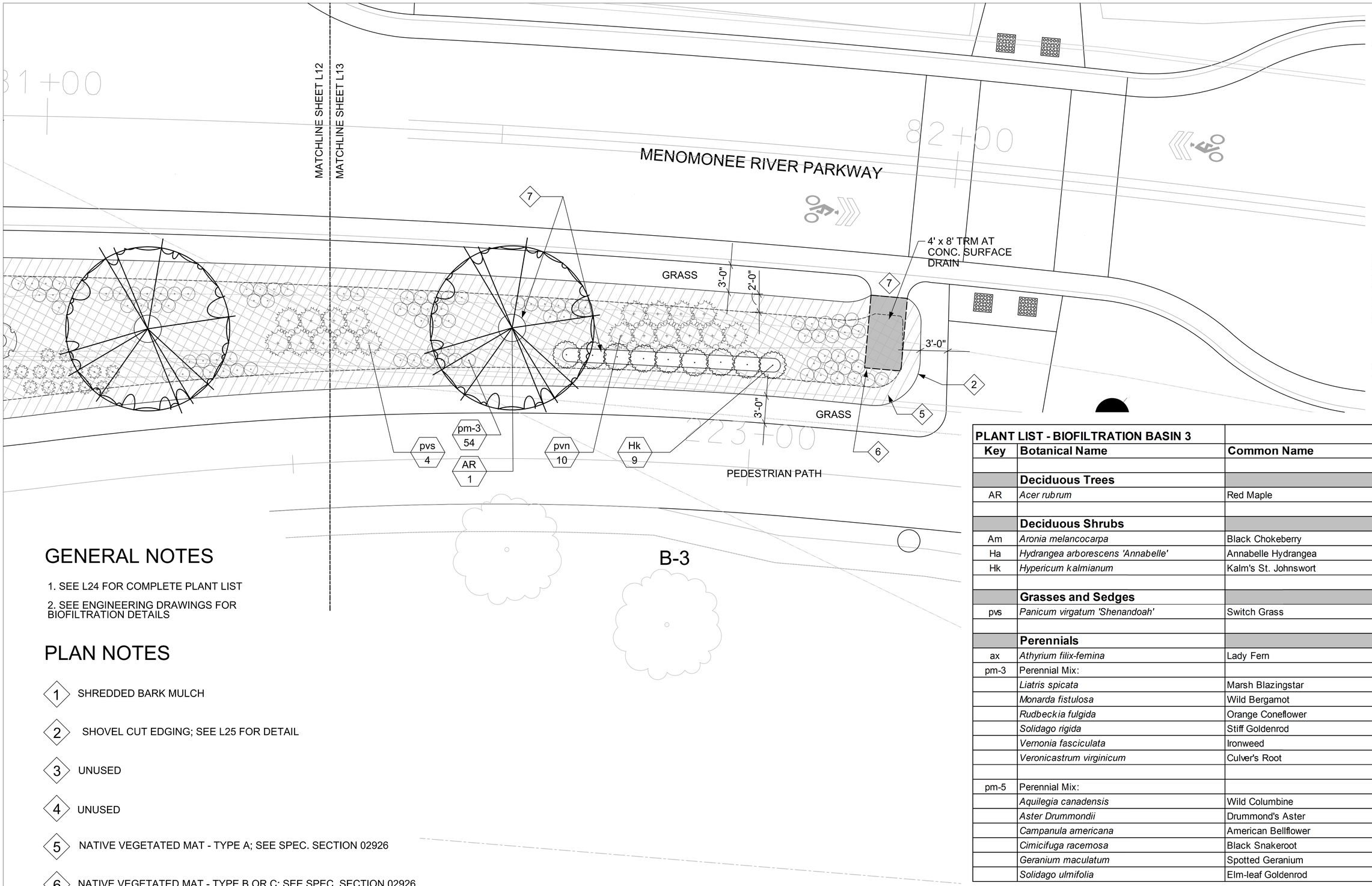
Architecture, Engineering & Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

DRAWN BY: KSD
CHECKED BY: KSD
SCALE: 1"=10'
DATE: 7/03/14
PROJECT TITLE: MENOMONEE RIVER PARKWAY
SHEET DESCRIPTION: PLANTING ENLARGEMENT PLAN B-3
SITE NO.
BUILDING NO.
PROJECT NO. P280-13626
SHEET NO. L12
12 OF 110
FILE NO.



GENERAL NOTES

1. SEE L24 FOR COMPLETE PLANT LIST
2. SEE ENGINEERING DRAWINGS FOR BIOFILTRATION DETAILS

PLAN NOTES

1. SHREDDED BARK MULCH
2. SHOVEL CUT EDGING; SEE L25 FOR DETAIL
3. UNUSED
4. UNUSED
5. NATIVE VEGETATED MAT - TYPE A; SEE SPEC. SECTION 02926
6. NATIVE VEGETATED MAT - TYPE B OR C; SEE SPEC. SECTION 02926
7. CONCRETE SURFACE DRAIN; SEE ENGINEERING DRAWINGS

PLANT LIST - BIOFILTRATION BASIN 3		
Key	**Botanical Name**	**Common Name**
	Deciduous Trees	
AR	*Acer rubrum*	Red Maple
	Deciduous Shrubs	
Am	*Aronia melancocarpa*	Black Chokeberry
Ha	*Hydrangea arborescens 'Annabelle'*	Annabelle Hydrangea
Hk	*Hypericum kalmianum*	Kalm's St. Johnswort
	Grasses and Sedges	
pvs	*Panicum virgatum 'Shenandoah'*	Switch Grass
	Perennials	
ax	*Athyrium filix-femina*	Lady Fern
pm-3	Perennial Mix:	
	Liatris spicata	Marsh Blazingstar
	Monarda fistulosa	Wild Bergamot
	Rudbeckia fulgida	Orange Coneflower
	Solidago rigida	Stiff Goldenrod
	Vernonia fasciculata	Ironweed
	Veronicastrum virginicum	Culver's Root
pm-5	Perennial Mix:	
	Aquilegia canadensis	Wild Columbine
	Aster Drummondii	Drummond's Aster
	Campanula americana	American Bellflower
	Cimicifuga racemosa	Black Snakeroot
	Geranium maculatum	Spotted Geranium
	Solidago ulmifolia	Elm-leaf Goldenrod

0 2.5 5 10

DATE: REVISION DESCRIPTION: BY:

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Architecture, Engineering & Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

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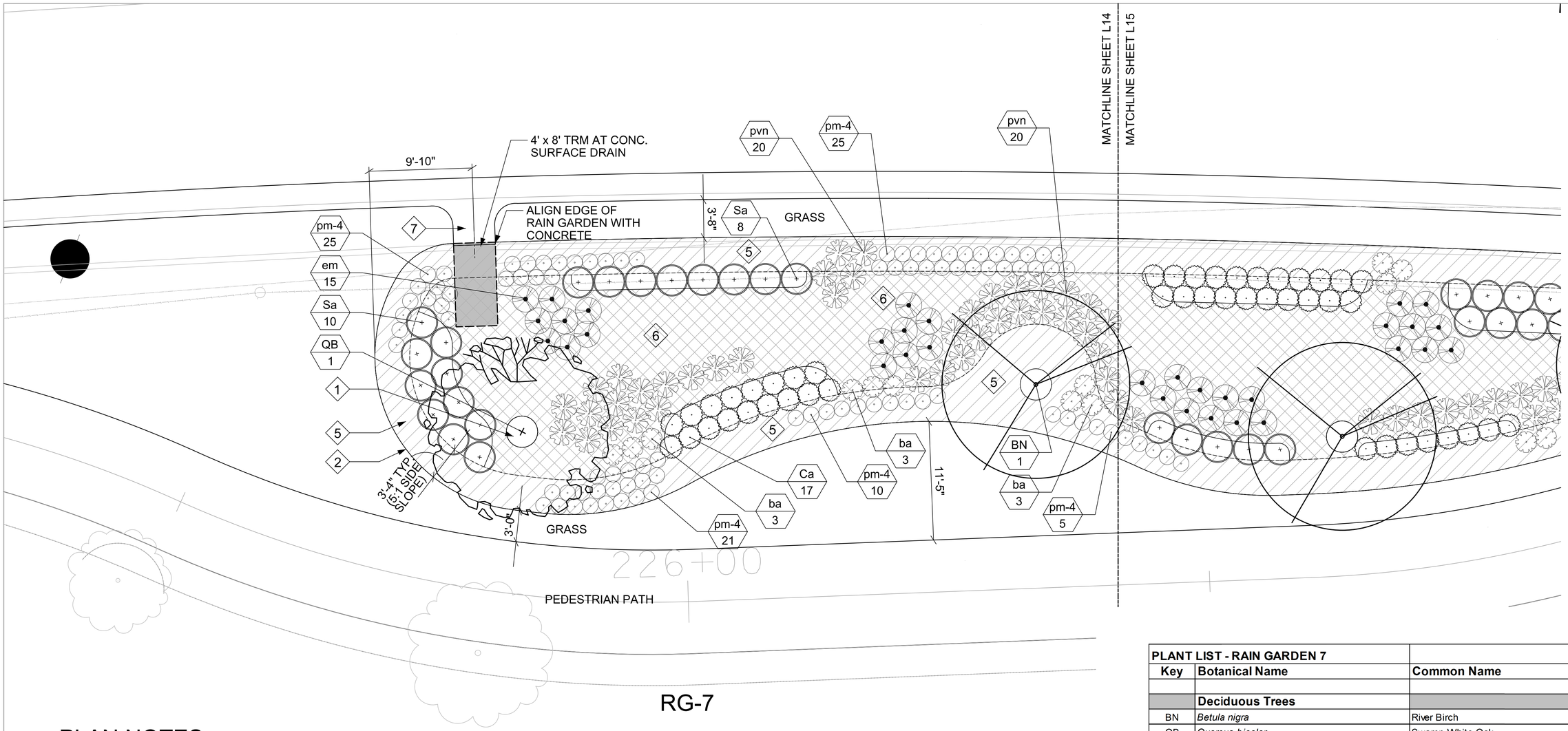
CHECKED BY: KSD
SCALE: 1"=10'
DATE: 7/03/14
PROJECT TITLE: MENOMONEE RIVER PARKWAY
SHEET DESCRIPTION: PLANTING ENLARGEMENT PLAN B-3
SITE NO.
BUILDING NO.
PROJECT NO. P280-13626
SHEET NO. L13
13 OF 110
FILE NO.



RG-7

PLAN NOTES

1. SHREDDED BARK MULCH
2. SHOVEL CUT EDGING; SEE L25 FOR DETAIL
3. UNUSED
4. UNUSED
5. NATIVE VEGETATED MAT - TYPE A; SEE SPEC. SECTION 02926
6. NATIVE VEGETATED MAT - TYPE B OR C; SEE SPEC. SECTION 02926
7. CONCRETE SURFACE DRAIN; SEE ENGINEERING DRAWINGS

GENERAL NOTES

1. SEE L24 FOR COMPLETE PLANT LIST
2. SEE L25 FOR TYPICAL RAIN GARDEN SECTION

PLANT LIST - RAIN GARDEN 7		
Key	**Botanical Name**	**Common Name**
	Deciduous Trees	
BN	*Betula nigra*	River Birch
QB	*Quercus bicolor*	Swamp White Oak
	Deciduous Shrubs & Vines	
Ca	*Ceonothus americanus*	New Jersey Tea
Sa	*Symphoricarpos albus*	Snowberry
	Grasses and Sedges	
pvn	*Panicum virgatum 'Northwind'*	Northwind Switch Grass
	Perennials	
ba	*Baptisia australis*	Blue False Indigo
em	*Eupatorium maculatum* 'Gateway'	Gateway Spotted Joe-pye Weed
pm-4	Perennial Mix:	
	Aster laevis	Sky Blue Aster
	Helenium autumnalis	Sneezeweed
	Liatris pycnostachya	Prairie Blazingstar
	Penstemon digitalis	Smooth Penstemon
	Phlox pilosa	Prairie Phlox
	Physotstegia virginiana	Obedient Plant

N

0 2.5 5 10

DATE: REVISION DESCRIPTION: BY:

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Architecture, Engineering & Environmental Services Section
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CHECKED BY: KSD
SCALE: 1"=10'
DATE: 7/03/14

PROJECT TITLE: MENOMONEE RIVER PARKWAY
SHEET DESCRIPTION: PLANTING ENLARGEMENT PLAN RG-7
SITE NO.
BUILDING NO.
PROJECT NO. P280-13626
SHEET NO. L14
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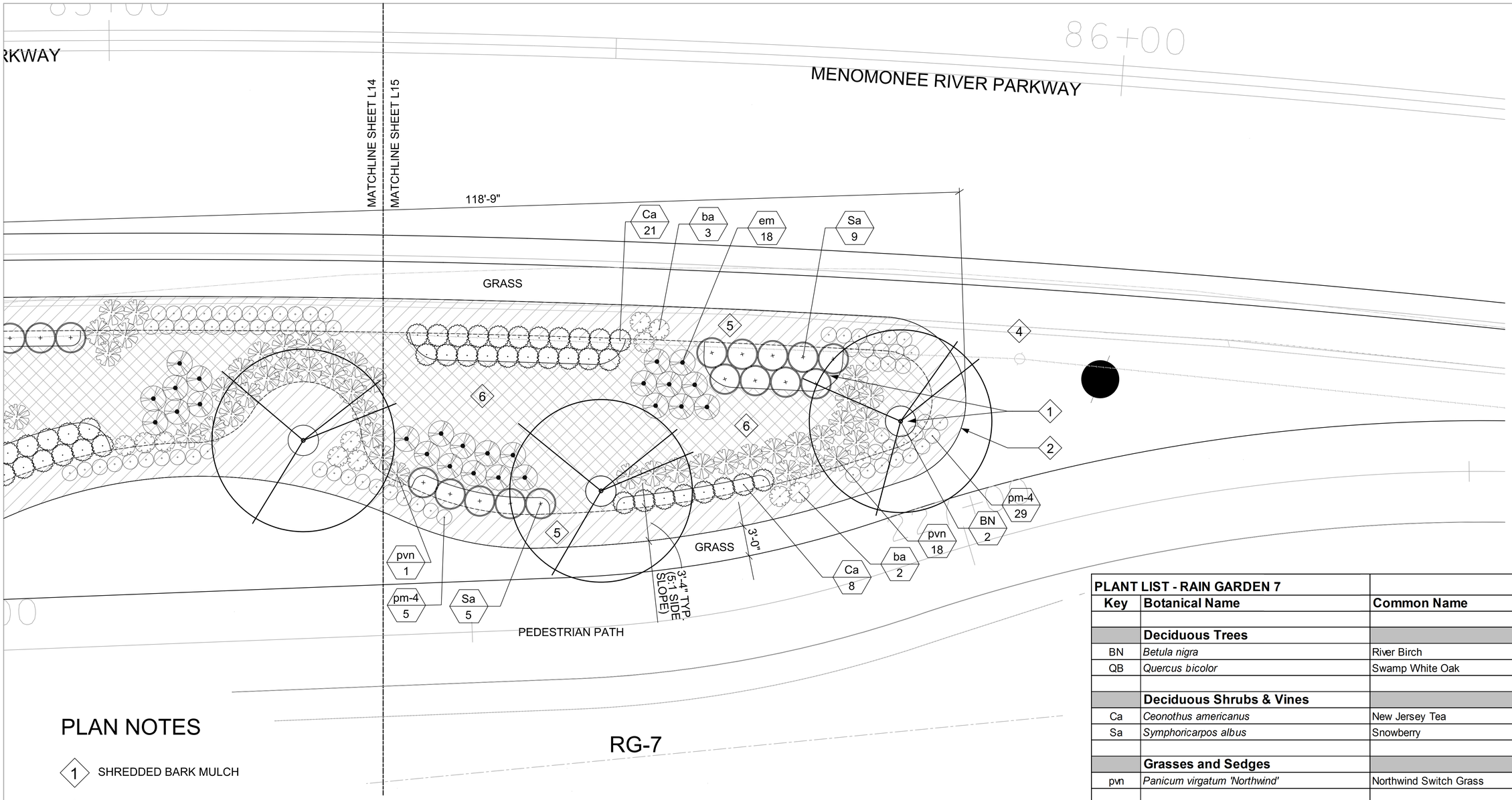

PLAN NOTES

1. SHREDDED BARK MULCH
2. SHOVEL CUT EDGING; SEE L25 FOR DETAIL
3. UNUSED
4. UNUSED
5. NATIVE VEGETATED MAT - TYPE A; SEE SPEC. SECTION 02926
6. NATIVE VEGETATED MAT - TYPE B OR C; SEE SPEC. SECTION 02926
7. UNUSED

GENERAL NOTES

1. SEE L24 FOR COMPLETE PLANT LIST
2. SEE L25 FOR TYPICAL RAIN GARDEN SECTION

PLANT LIST - RAIN GARDEN 7		
Key	**Botanical Name**	**Common Name**
	Deciduous Trees	
BN	*Betula nigra*	River Birch
QB	*Quercus bicolor*	Swamp White Oak
	Deciduous Shrubs & Vines	
Ca	*Ceonothus americanus*	New Jersey Tea
Sa	*Symphoricarpos albus*	Snowberry
	Grasses and Sedges	
pvn	*Panicum virgatum 'Northwind'*	Northwind Switch Grass
	Perennials	
ba	*Baptisia australis*	Blue False Indigo
em	*Eupatorium maculatum* 'Gateway'	Gateway Spotted Joe-pye Weed
pm-4	Perennial Mix:	
	Aster laevis	Sky Blue Aster
	Helenium autumnalis	Sneezeweed
	Liatris pycnostachya	Prairie Blazingstar
	Penstemon digitalis	Smooth Penstemon
	Phlox pilosa	Prairie Phlox
	Physotstegia virginiana	Obedient Plant

0 2.5 5 10

DATE: REVISION DESCRIPTION: BY:

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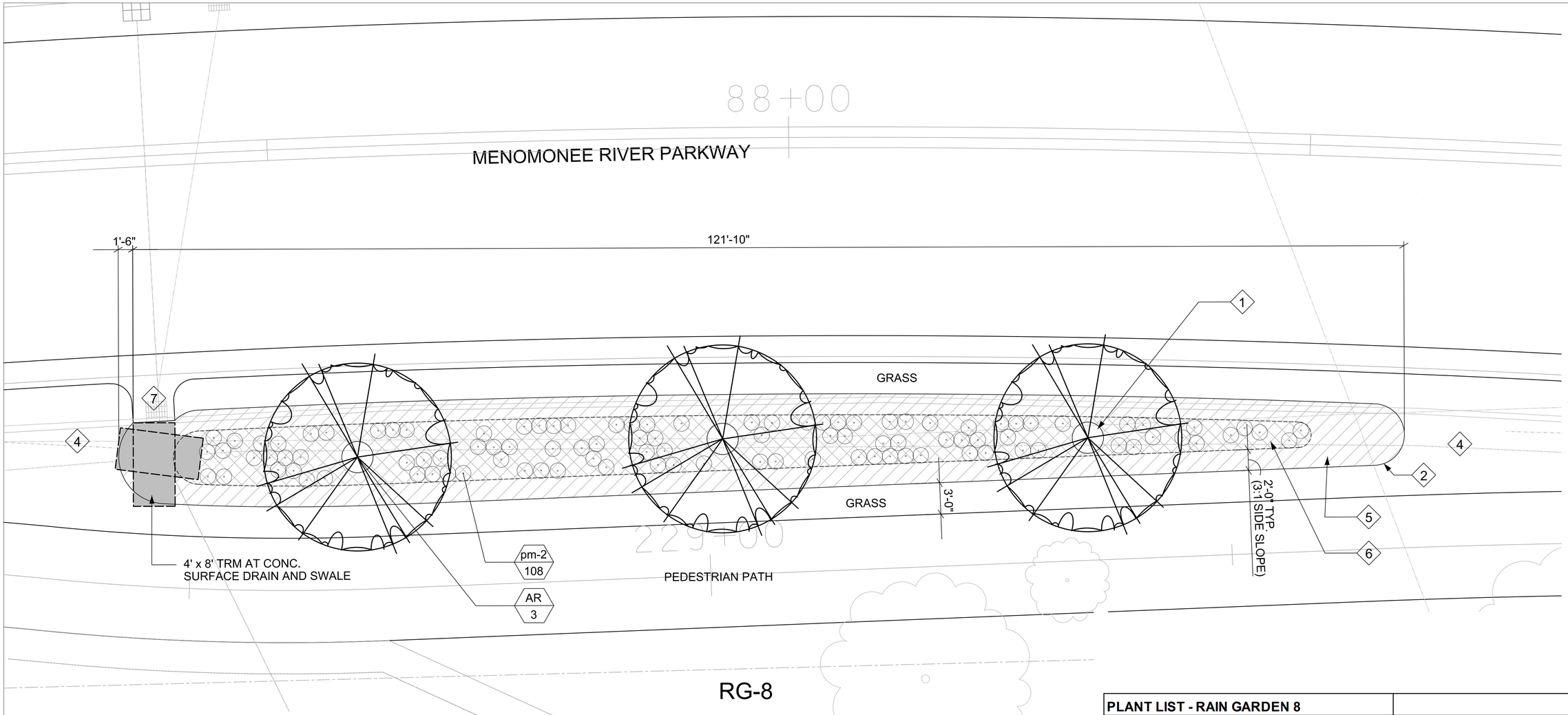
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

DRAWN BY: KSD
CHECKED BY: KSD
SCALE: 1"=10'
DATE: 7/03/14
PROJECT TITLE: MENOMONEE RIVER PARKWAY
SHEET DESCRIPTION: PLANTING ENLARGEMENT PLAN RG-7
SITE NO.
BUILDING NO.
PROJECT NO. P280-13626
SHEET NO. L15
15 OF 110
FILE NO.



PLAN NOTES

1. SHREDDED BARK MULCH
2. SHOVEL CUT EDGING; SEE L25 FOR DETAIL
3. UNUSED
4. INFILTRATION SWALE; SEE ENGINEERING DRAWINGS
5. NATIVE VEGETATED MAT - TYPE A; SEE SPEC. SECTION 02926
6. NATIVE VEGETATED MAT - TYPE B OR C; SEE SPEC. SECTION 02926
7. CONCRETE SURFACE DRAIN; SEE ENGINEERING DRAWINGS

GENERAL NOTES

1. SEE L24 FOR COMPLETE PLANT LIST
2. SEE L25 FOR TYPICAL RAIN GARDEN SECTION

PLANT LIST - RAIN GARDEN 8		
Key	**Botanical Name**	**Common Name**
	Deciduous Trees	
AR	*Acer rubrum*	Red Maple
	Perennials	
pm-2	Perennial Mix:	
	Agastache foeniculum	Anise Hyssop
	Aster prenanthoides	Crooked-stem Aster
	Desmodium canadense	Canada Tick Trefoil
	Echinacea purpurea	Purple Coneflower
	Helenium autumnale	Sneezeweed
	Lobelia cardinalis	Cardinal Flower

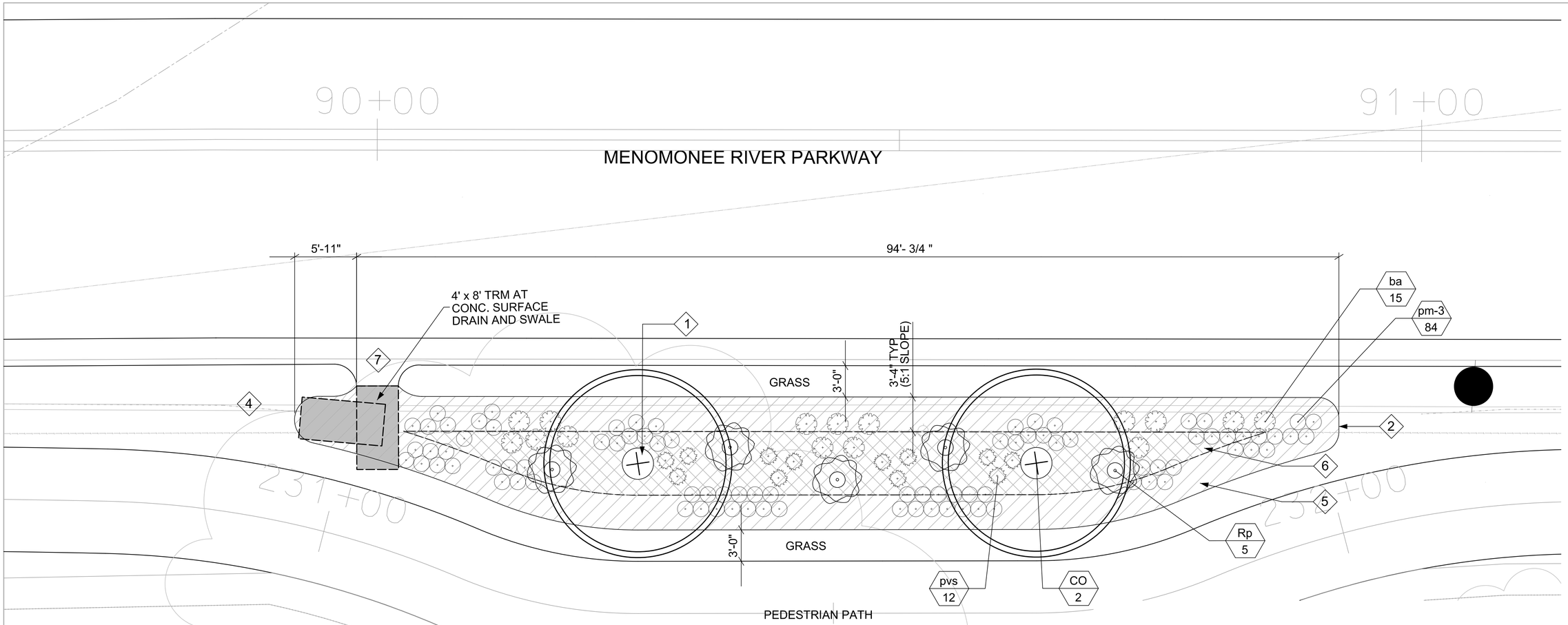
N

0 2.5 5 10

DATE: REVISION DESCRIPTION: BY:

MILWAUKEE COUNTY DEPARTMENT OF ADMINISTRATIVE SERVICES
Architecture, Engineering & Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

DRAWN BY: KSD
CHECKED BY: KSD
SCALE: 1"=10'
DATE: 7/03/14
PROJECT TITLE: MENOMONEE RIVER PARKWAY
SHEET DESCRIPTION: PLANTING ENLARGEMENT PLAN RG-8
SITE NO.
BUILDING NO.
PROJECT NO. P280-13626
SHEET NO. L16
16 OF 110
FILE NO.



RG-9

PLAN NOTES

1. SHREDDED BARK MULCH
2. SHOVEL CUT EDGING; SEE L25 FOR DETAIL
3. UNUSED
4. INFILTRATION SWALE; SEE ENGINEERING DRAWINGS
5. NATIVE VEGETATED MAT - TYPE A; SEE SPEC. SECTION 02926
6. NATIVE VEGETATED MAT - TYPE B OR C; SEE SPEC. SECTION 02926
7. CONCRETE SURFACE DRAIN; SEE ENGINEERING DRAWINGS

GENERAL NOTES

1. SEE L24 FOR COMPLETE PLANT LIST
2. SEE L25 FOR TYPICAL RAIN GARDEN SECTION

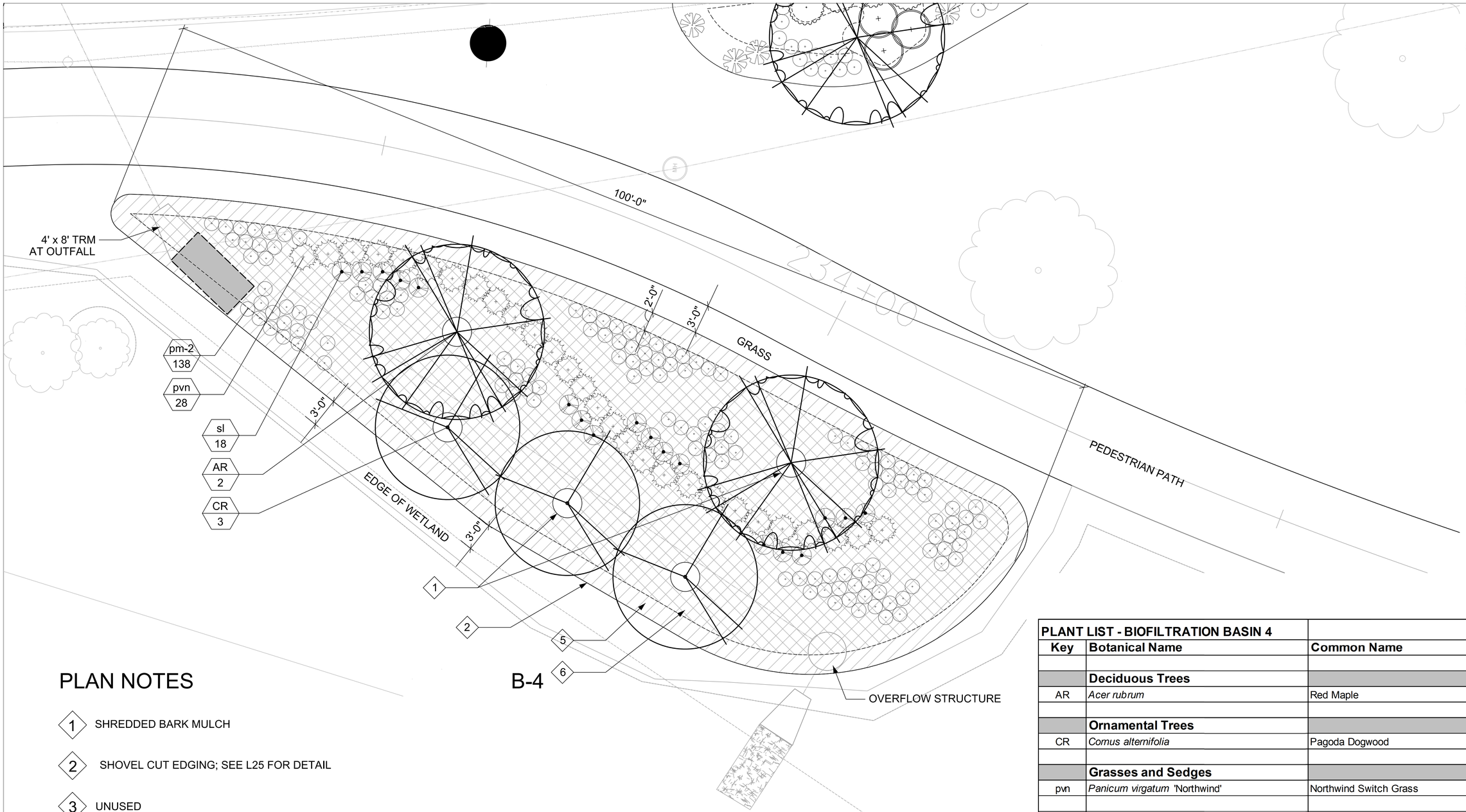
PLANT LIST - RAIN GARDEN 9		
Key	**Botanical Name**	**Common Name**
	Deciduous Trees	
CO	*Celtis occidentalis*	Hackberry
	Deciduous Shrubs & Vines	
Rp	*Rosa palustris*	Swamp Rose
	Grasses and Sedges	
pvs	*Panicum virgatum 'Shenandoah'*	Shenandoah Switch Grass
	Perennials	
ba	*Baptisia australis*	Blue False Indigo
pm-3	Perennial Mix:	
	Echinacea purpurea	Purple Coneflower
	Helenium autumnale	Sneezeweed
	Iris virginica shrevei	Southern Blue Flag Iris
	Liatris spicata	Marsh Blazingstar
	Physostegia virginiana	Obedient Plant
	Rudbeckia laciniata	Wild Golden Glow

0 2.5 5 10

DATE: REVISION DESCRIPTION: BY:

MILWAUKEE COUNTY DEPARTMENT OF ADMINISTRATIVE SERVICES
Architecture, Engineering & Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

DRAWN BY: KSD
CHECKED BY: KSD
SCALE: 1"–10'
DATE: 7/03/14
PROJECT TITLE: MENOMONEE RIVER PARKWAY
SHEET DESCRIPTION: PLANTING ENLARGEMENT PLAN RG–9
SITE NO.
BUILDING NO.
PROJECT NO. P280–13626
SHEET NO. L17
17 OF 110
FILE NO.



PLAN NOTES

1. SHREDDED BARK MULCH
2. SHOVEL CUT EDGING; SEE L25 FOR DETAIL
3. UNUSED
4. UNUSED
5. NATIVE VEGETATED MAT - TYPE A; SEE SPEC. SECTION 02926
6. NATIVE VEGETATED MAT - TYPE B OR C; SEE SPEC. SECTION 02926
7. UNUSED

GENERAL NOTES

1. SEE L24 FOR COMPLETE PLANT LIST
2. SEE ENGINEERING DRAWINGS FOR BIOFILTRATION DETAILS

PLANT LIST - BIOFILTRATION BASIN 4		
Key	**Botanical Name**	**Common Name**
	Deciduous Trees	
AR	*Acer rubrum*	Red Maple
	Ornamental Trees	
CR	*Cornus alternifolia*	Pagoda Dogwood
	Grasses and Sedges	
pvn	*Panicum virgatum* 'Northwind'	Northwind Switch Grass
	Perennials	
sl	*Silphilium laciniatum*	Compass Plant
pm-2	Perennial Mix:	
	Agastache foeniculum	Anise Hyssop
	Aster prenanthoides	Crooked-stem Aster
	Desmodium canadense	Canada Tick Trefoil
	Echinacea purpurea	Purple Coneflower
	Helenium autumnale	Sneezeweed
	Lobelia cardinalis	Cardinal Flower

N

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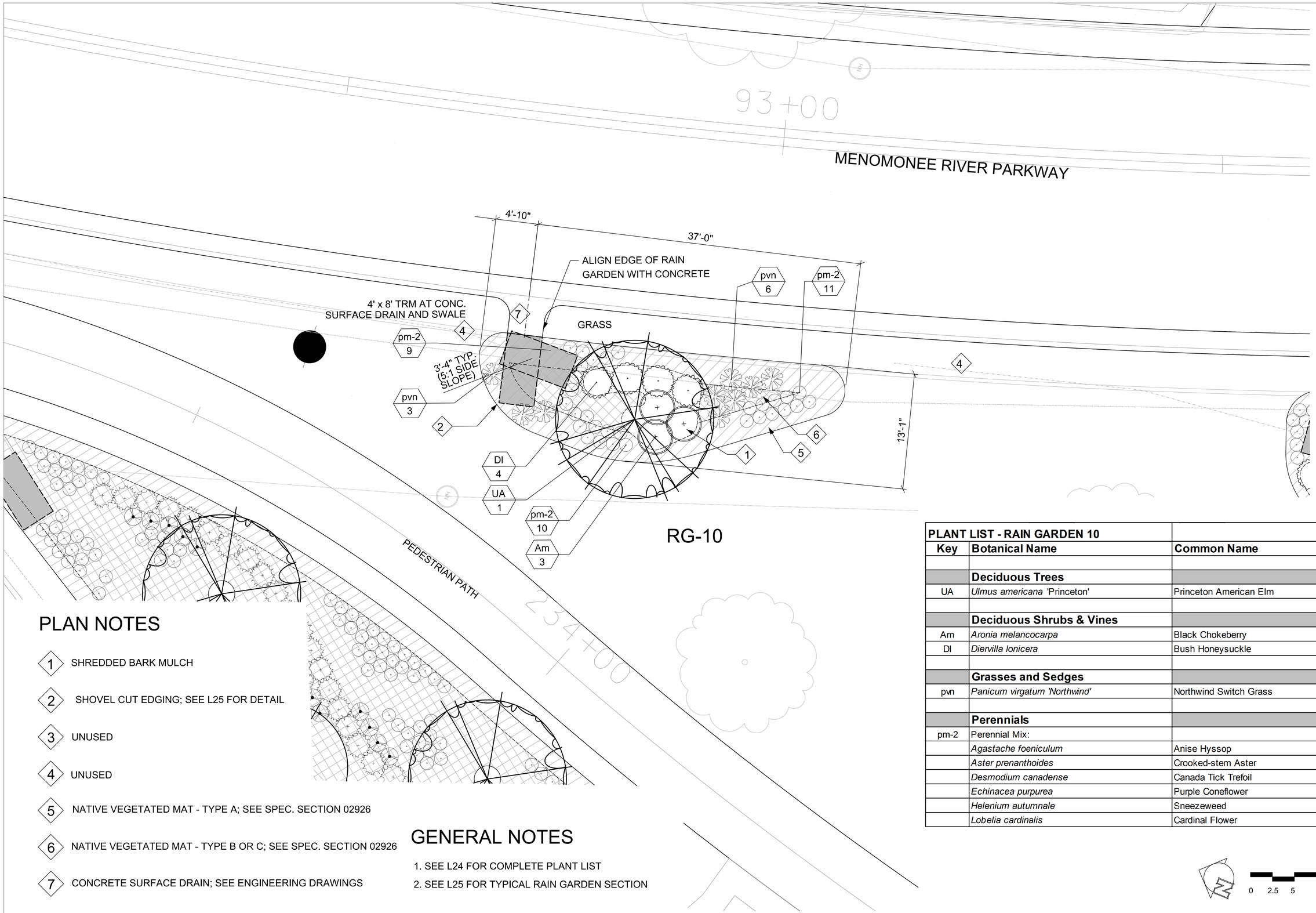
DATE: REVISION DESCRIPTION: BY:

MILWAUKEE COUNTY DEPARTMENT OF ADMINISTRATIVE SERVICES
Architecture, Engineering & Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

DRAWN BY: KSD
CHECKED BY: KSD
SCALE: 1"=10'
DATE: 7/03/14

PROJECT TITLE: MENOMONEE RIVER PARKWAY
SHEET DESCRIPTION: PLANTING ENLARGEMENT PLAN B-4
SITE NO.
BUILDING NO.
PROJECT NO. P280-13626
SHEET NO. L18
18 OF 110
FILE NO.



PLAN NOTES

1. SHREDDED BARK MULCH
2. SHOVEL CUT EDGING; SEE L25 FOR DETAIL
3. UNUSED
4. UNUSED
5. NATIVE VEGETATED MAT - TYPE A; SEE SPEC. SECTION 02926
6. NATIVE VEGETATED MAT - TYPE B OR C; SEE SPEC. SECTION 02926
7. CONCRETE SURFACE DRAIN; SEE ENGINEERING DRAWINGS

GENERAL NOTES

1. SEE L24 FOR COMPLETE PLANT LIST
2. SEE L25 FOR TYPICAL RAIN GARDEN SECTION

PLANT LIST - RAIN GARDEN 10		
Key	**Botanical Name**	**Common Name**
	Deciduous Trees	
UA	*Ulmus americana* 'Princeton'	Princeton American Elm
	Deciduous Shrubs & Vines	
Am	*Aronia melancocarpa*	Black Chokeberry
DI	*Diervilla lonicera*	Bush Honeysuckle
	Grasses and Sedges	
pvn	*Panicum virgatum 'Northwind'*	Northwind Switch Grass
	Perennials	
pm-2	Perennial Mix:	
	Agastache foeniculum	Anise Hyssop
	Aster prenanthoides	Crooked-stem Aster
	Desmodium canadense	Canada Tick Trefoil
	Echinacea purpurea	Purple Coneflower
	Helenium autumnale	Sneezeweed
	Lobelia cardinalis	Cardinal Flower

0 2.5 5 10

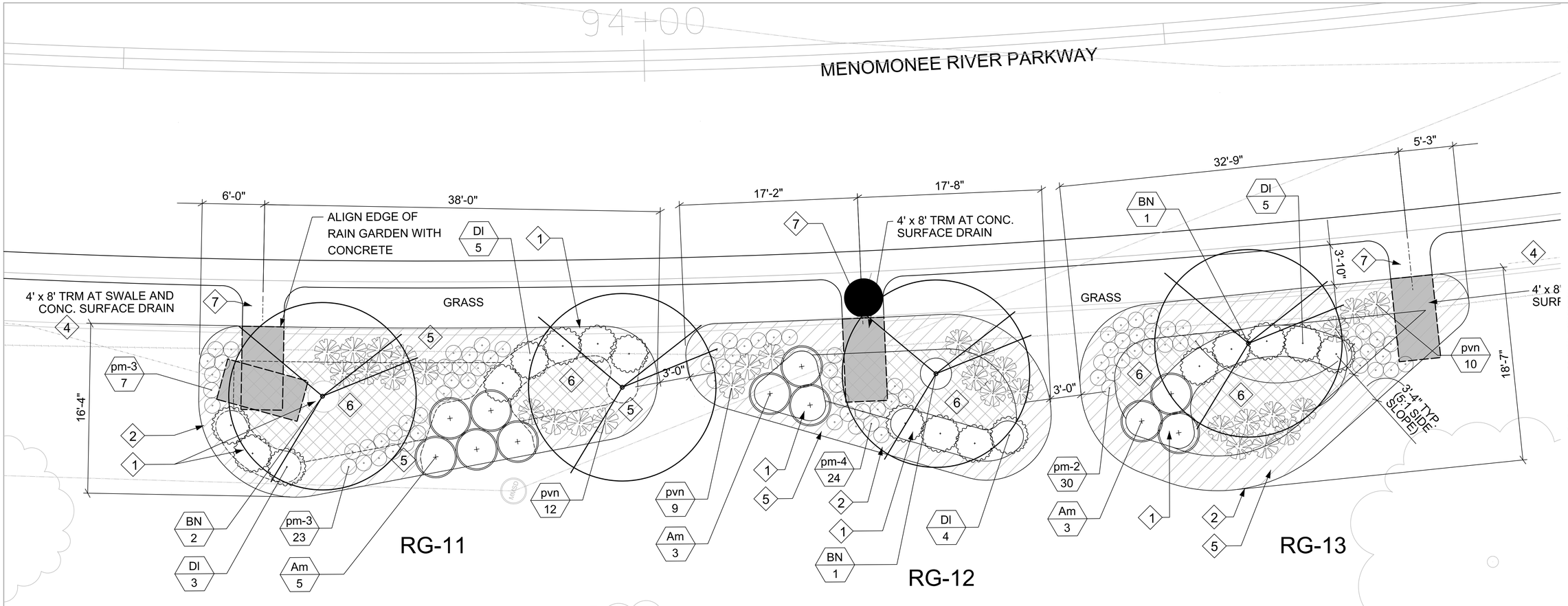
DATE: REVISION DESCRIPTION: BY:

MILWAUKEE COUNTY DEPARTMENT OF ADMINISTRATIVE SERVICES
Architecture, Engineering & Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

SCALE: 1"=10'
DRAWN BY: KSD
DATE: 7/03/14
CHECKED BY: KSD

PROJECT TITLE: MENOMONEE RIVER PARKWAY
SHEET DESCRIPTION: PLANTING ENLARGEMENT PLAN RG-10

SITE NO.
BUILDING NO.
PROJECT NO. P280-13626
SHEET NO. L19
19 OF 110
FILE NO.



GENERAL NOTES

1. SEE L24 FOR COMPLETE PLANT LIST
2. SEE L25 FOR TYPICAL RAIN GARDEN SECTION

PLAN NOTES

1. SHREDDED BARK MULCH
2. SHOVEL CUT EDGING; SEE L25 FOR DETAIL
3. UNUSED
4. INFILTRATION SWALE; SEE ENGINEERING DRAWINGS
5. NATIVE VEGETATED MAT - TYPE A; SEE SPEC. SECTION 02926
6. NATIVE VEGETATED MAT - TYPE B OR C; SEE SPEC. SECTION 02926
7. CONCRETE SURFACE DRAIN; SEE ENGINEERING DRAWINGS

PLANT LIST - RAIN GARDEN 11

Key	Botanical Name	Common Name
	Deciduous Trees	
BN	*Betula nigra*	River Birch
	Deciduous Shrubs & Vines	
Am	*Aronia melancocarpa*	Black Chokeberry
DI	*Diervilla lonicera*	Bush Honeysuckle
	Grasses and Sedges	
pvn	*Panicum virgatum 'Northwind'*	Northwind Switch Grass
	Perennials	
pm-3	Perennial Mix:	
	Liatris spicata	Marsh Blazingstar
	Monarda fistulosa	Wild Bergamot
	Rudbeckia fulgida	Orange Coneflower
	Solidago rigida	Stiff Goldenrod
	Vernonia fasciculata	Ironweed
	Veronicastrum virginicum	Culver's Root

PLANT LIST - RAIN GARDEN 12

Key	Botanical Name	Common Name
	Deciduous Trees	
BN	*Betula nigra*	River Birch
	Deciduous Shrubs & Vines	
Am	*Aronia melancocarpa*	Black Chokeberry
DI	*Diervilla lonicera*	Bush Honeysuckle
	Grasses and Sedges	
pvn	*Panicum virgatum 'Northwind'*	Northwind Switch Grass
	Perennials	
pm-4	Perennial Mix:	
	Aster laevis	Sky Blue Aster
	Helenium autumnalis	Sneezeweed
	Liatris pycnostachya	Prairie Blazingstar
	Penstemon digitalis	Smooth Penstemon
	Phlox pilosa	Prairie Phlox
	Physotstegia virginiana	Obedient Plant

PLANT LIST - RAIN GARDEN 13

Key	Botanical Name	Common Name
	Deciduous Trees	
BN	*Betula nigra*	River Birch
	Deciduous Shrubs & Vines	
Am	*Aronia melancocarpa*	Black Chokeberry
DI	*Diervilla lonicera*	Bush Honeysuckle
	Grasses and Sedges	
pvn	*Panicum virgatum 'Northwind'*	Northwind Switch Grass
	Perennials	
pm-2	Perennial Mix:	
	Agastache foeniculum	Anise Hyssop
	Aster prenanthoides	Crooked-stem Aster
	Desmodium canadense	Canada Tick Trefoil
	Echinacea purpurea	Purple Coneflower
	Helenium autumnale	Sneezeweed
	Lobelia cardinalis	Cardinal Flower

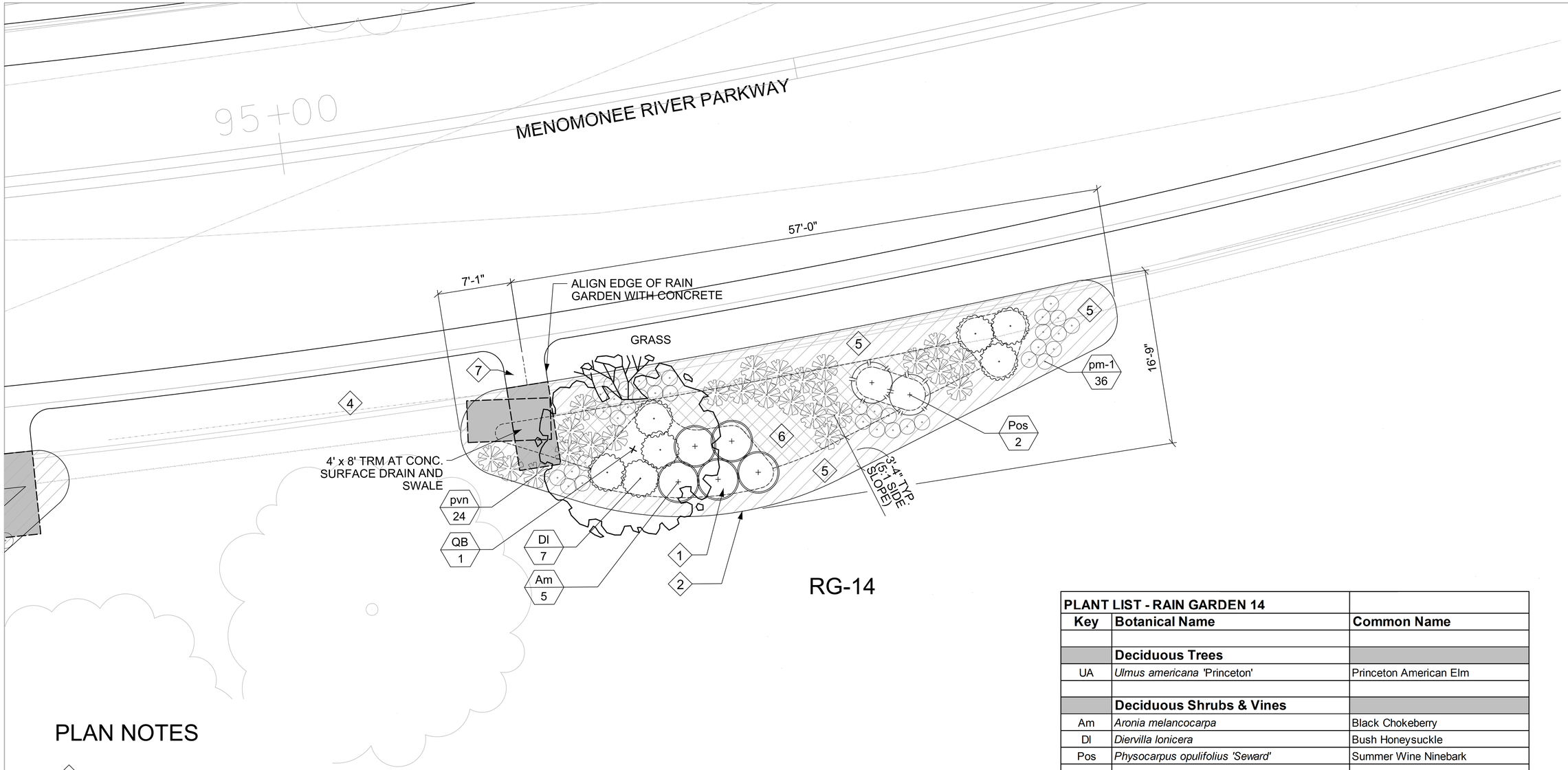
0 2.5 5 10

DATE: REVISION DESCRIPTION: BY:

MILWAUKEE COUNTY DEPARTMENT OF ADMINISTRATIVE SERVICES
Architecture, Engineering & Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

DRAWN BY: KSD
CHECKED BY: KSD
SCALE: 1"–10'
DATE: 7/03/14

PROJECT TITLE: MENOMONEE RIVER PARKWAY
SHEET DESCRIPTION: PLANTING ENLARGEMENT PLAN RG–11, RG–12, RG–13
SITE NO.
BUILDING NO.
PROJECT NO. P280–13626
SHEET NO. L20
20 OF 110
FILE NO.



RG-14

PLAN NOTES

1. SHREDDED BARK MULCH
2. SHOVEL CUT EDGING; SEE L25 FOR DETAIL
3. UNUSED
4. INFILTRATION SWALE; SEE ENGINEERING DRAWINGS
5. NATIVE VEGETATED MAT - TYPE A; SEE SPEC. SECTION 02926
6. NATIVE VEGETATED MAT - TYPE B OR C; SEE SPEC. SECTION 02926
7. CONCRETE SURFACE DRAIN; SEE ENGINEERING DRAWINGS

GENERAL NOTES

1. SEE L24 FOR COMPLETE PLANT LIST
2. SEE L25 FOR TYPICAL RAIN GARDEN SECTION

PLANT LIST - RAIN GARDEN 14		
Key	**Botanical Name**	**Common Name**
	Deciduous Trees	
UA	*Ulmus americana* 'Princeton'	Princeton American Elm
	Deciduous Shrubs & Vines	
Am	*Aronia melancocarpa*	Black Chokeberry
Dl	*Diervilla lonicera*	Bush Honeysuckle
Pos	*Physocarpus opulifolius 'Seward'*	Summer Wine Ninebark
	Grasses and Sedges	
pvn	*Panicum virgatum 'Northwind'*	Northwind Switch Grass
	Perennials	
pm-1	Perennial Mix:	
	Asclepias incarnata	Rose Milkweed
	Aster nova-angliae	New England Aster
	Echinacea purpurea	Purple Coneflower
	Parthenium integrifolia	Wild Quinine
	Rudbeckia hirta	Black-Eyed Susan
	Solidago ridellii	Ridell's Goldenrod

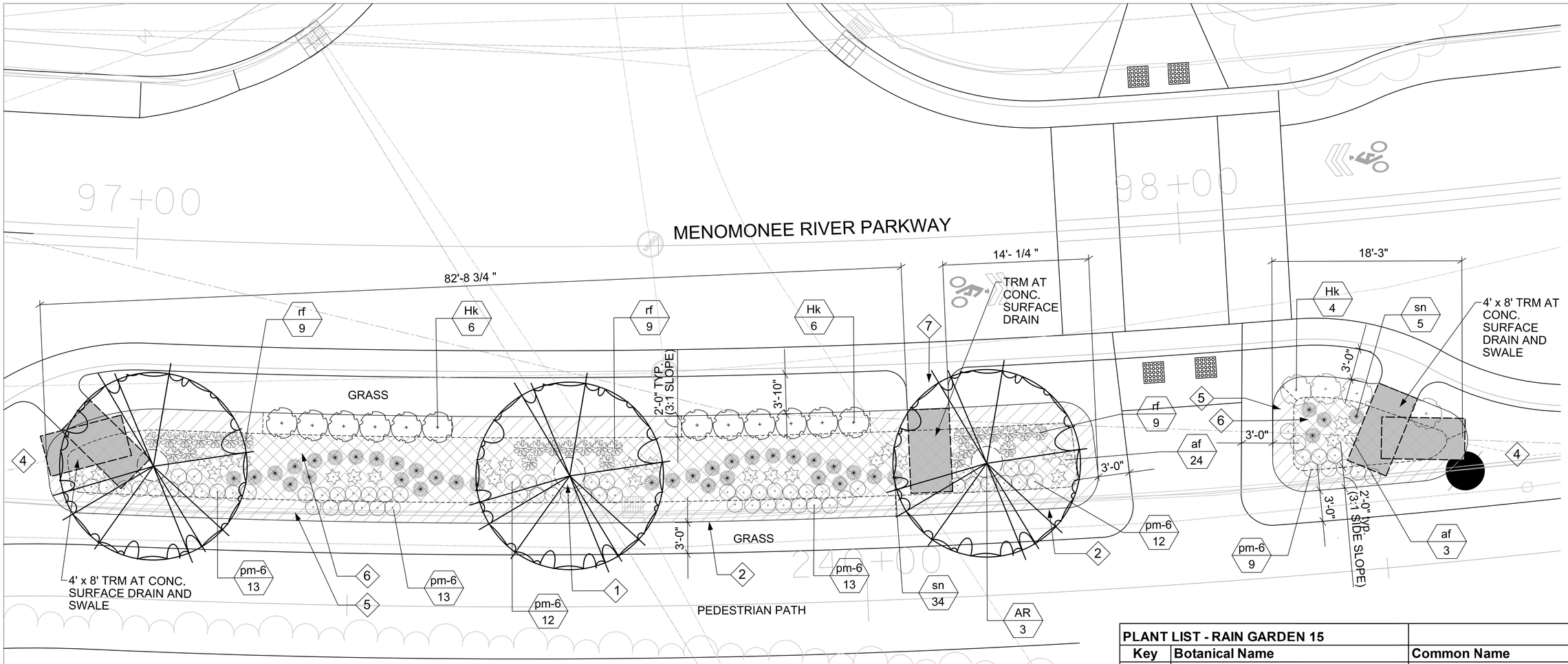
N

0 2.5 5 10

DATE: REVISION DESCRIPTION: BY:

MILWAUKEE COUNTY DEPARTMENT OF ADMINISTRATIVE SERVICES
Architecture, Engineering & Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

DRAWN BY: KSD
CHECKED BY: KSD
SCALE: 1"–10'
DATE: 7/03/14
PROJECT TITLE: MENOMONEE RIVER PARKWAY
SHEET DESCRIPTION: PLANTING ENLARGEMENT PLAN RG–14
SITE NO.
BUILDING NO.
PROJECT NO. P280–13626
SHEET NO. L21
21 OF 110
FILE NO.



RG-15

PLAN NOTES

1. SHREDDED BARK MULCH
2. SHOVEL CUT EDGING; SEE L25 FOR DETAIL
3. UNUSED
4. INFILTRATION SWALE; SEE ENGINEERING DRAWINGS
5. NATIVE VEGETATED MAT - TYPE A; SEE SPEC. SECTION 02926
6. NATIVE VEGETATED MAT - TYPE B OR C; SEE SPEC. SECTION 02926
7. CONCRETE SURFACE DRAIN; SEE ENGINEERING DRAWINGS

GENERAL NOTES

1. SEE L24 FOR COMPLETE PLANT LIST
2. SEE L25 FOR TYPICAL RAIN GARDEN SECTION

PLANT LIST - RAIN GARDEN 15		
Key	**Botanical Name**	**Common Name**
	Deciduous Trees	
AR	*Acer rubrum*	Red Maple
	Deciduous Shrubs & Vines	
Hk	*Hypericum kalmianum*	Kalm's St. Johnswort
	Grasses and Sedges	
sn	*Sorghastrum nutans*	Indian Grass
	Perennials	
af	*Agastache foeniculum*	Anise Hyssop
rf	*Rudbeckia fulgida*	Orange Coneflower
pm-6	Perennial Mix:	
	Anemone canadensis	Canada Anemone
	Heuchera richardsonii	Prairie Alumroot
	Lobelia cardinalis	Cardinal Flower
	Phlox glaberrima	Marsh Phlox
	Thalictrum dasycarpum	Meadow Rue
	Zizia aurea	Golden Alexanders

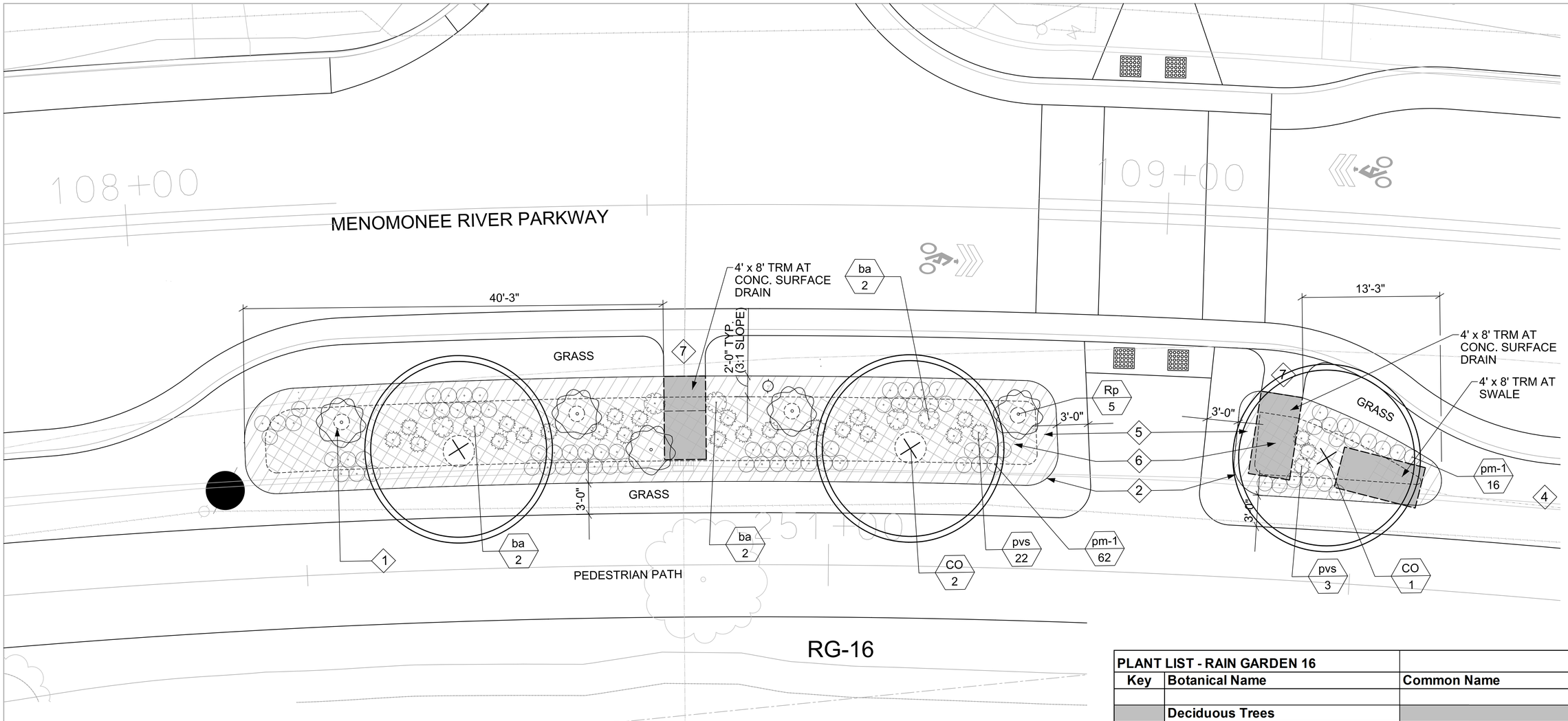
0 2.5 5 10

DATE: REVISION DESCRIPTION: BY:

MILWAUKEE COUNTY DEPARTMENT OF ADMINISTRATIVE SERVICES
Architecture, Engineering & Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

DRAWN BY: KSD
CHECKED BY: KSD
SCALE: 1"–10'
DATE: 7/03/14

PROJECT TITLE: MENOMONEE RIVER PARKWAY
SHEET DESCRIPTION: PLANTING ENLARGEMENT PLAN RG–15
SITE NO.
BUILDING NO.
PROJECT NO. P280–13626
SHEET NO. L22
22 OF 110
FILE NO.



PLAN NOTES

1. SHREDDED BARK MULCH
2. SHOVEL CUT EDGING; SEE L25 FOR DETAIL
3. UNUSED
4. UNUSED
5. NATIVE VEGETATED MAT - TYPE A; SEE SPEC. SECTION 02926
6. NATIVE VEGETATED MAT - TYPE B OR C; SEE SPEC. SECTION 02926
7. CONCRETE SURFACE DRAIN; SEE ENGINEERING DRAWINGS

GENERAL NOTES

1. SEE L24 FOR COMPLETE PLANT LIST
2. SEE L25 FOR TYPICAL RAIN GARDEN SECTION

PLANT LIST - RAIN GARDEN 16		
Key	**Botanical Name**	**Common Name**
	Deciduous Trees	
CO	*Celtis occidentalis*	Hackberry
	Deciduous Shrubs & Vines	
Rp	*Rosa palustris*	Swamp Rose
	Grasses and Sedges	
pvs	*Panicum virgatum 'Shenandoah'*	Shenandoah Switch Grass
	Perennials	
ba	*Baptisia australis*	Blue False Indigo
pm-1	Perennial Mix:	
	Asclepias incarnata	Rose Milkweed
	Aster nova-angliae	New England Aster
	Echinacea purpurea	Purple Coneflower
	Parthenium integrifolia	Wild Quinine
	Rudbeckia hirta	Black-Eyed Susan
	Solidago ridellii	Ridell's Goldenrod

0 2.5 5 10

DATE: REVISION DESCRIPTION: BY:

MILWAUKEE COUNTY DEPARTMENT OF ADMINISTRATIVE SERVICES
Architecture, Engineering & Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

DRAWN BY: KSD
CHECKED BY: KSD
SCALE: 1"–10'
DATE: 7/03/14

PROJECT TITLE: MENOMONEE RIVER PARKWAY
SHEET DESCRIPTION: PLANTING ENLARGEMENT PLAN RG–16
SITE NO.
BUILDING NO.
PROJECT NO. P280–13626
SHEET NO. L23
23 OF 110
FILE NO.

Plant List

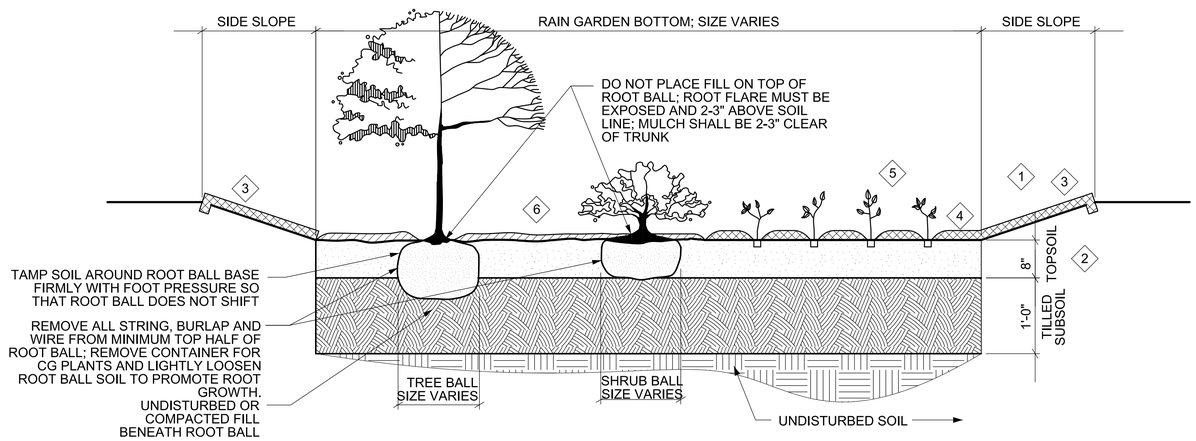
Key	Botanical Name	Common Name	Size	Spec	Comments	Total Quantity
	Deciduous Trees					
AR	*Acer rubrum*	Red Maple	2.5" cal.	B&B	Single, straight leader	11
BN	*Betula nigra*	River Birch	2.5" cal.	B&B	Multistem, min. 3 leaders	11
CO	*Celtis occidentalis*	Hackberry	2.5" cal.	B&B	Single, straight leader	8
QB	*Quercus bicolor*	Swamp White Oak	2.5" cal.	B&B	Single, straight leader	6
UA	*Ulmus americana* 'Princeton'	Princeton American Elm	2.5" cal.	B&B	Single, straight leader	5
	Ornamental Trees					
AL	*Amelanchier laevis*	Allegheny Serviceberry	6' ht.	B&B	Multistem, min. 3 leaders	7
CR	*Cornus alternifolia*	Pagoda Dogwood	6' ht.	B&B	Multistem, min. 3 leaders	3
	Deciduous Shrubs & Vines					
Af	*Amorpha fruticosa*	Desert False Indigo	3 gal.	Cont.	Space 10' on center	11
Am	*Aronia melancocarpa*	Black Chokeberry	3 gal.	Cont.	Space 4' on center	32
Ca	*Ceonothus americanus*	New Jersey Tea	1 gal.	Cont.	Space 2' on center	123
Cs	*Cornus sericea/alba*	Redosier Dogwood	3 gal.	Cont.	Space as indicated on plans	19
Dl	*Diervilla lonicera*	Bush Honeysuckle	3 gal.	Cont.	Space 3.5' on center	52
Ha	*Hydrangea arborescens* 'Annabelle'	Annabelle Hydrangea	3 gal.	Cont.	Space 3' on center	11
Hk	*Hypericum kalmianum*	Kalm's St. Johnswort	3 gal.	Cont.	Space 3' on center	26
Pos	*Physocarpus opulifolius* 'Seward'	Summer Wine Ninebark	3 gal.	Cont.	Space 4' on center	16
Rp	*Rosa palustris*	Swamp Rose	3 gal.	Cont.	Space as indicated on plans	10
Sa	*Symphoricarpos albus*	Snowberry	3 gal.	Cont.	Space 3' on center	50
	Grasses and Sedges					
pvn	*Panicum virgatum* 'Northwind'	Northwind Switch Grass	1 gal.	Cont.	Space 2.5' on center	205
pvs	*Panicum virgatum* 'Shenandoah'	Shenandoah Switch Grass	1 gal.	Cont.	Space 2.5' on center	71
sn	*Sorghastrum nutans*	Indian Grass	1 gal.	Cont.	Space 2' on center	38

Key	Botanical Name	Common Name	Size	Spec	Comments	
	Perennials					
af	*Agastache foeniculum*	Anise Hyssop	1 gal.	Cont.	Space 2' on center	27
ai	*Asclepias incarnata*	Marsh Milkweed	1 gal.	Cont.	Space as indicated on plans	20
ax	*Athyrium filix-femina*	Lady Fern	1 gal.	Cont.	Space 2' on center	45
ba	*Baptisia australis*	Blue False Indigo	1 gal.	Cont.	Space 2.5' on center	61
em	*Eupatorium maculatum* 'Gateway'	Gateway Spotted Joe-pye Weed	1 gal.	Cont.	Space 2.5' on center	62
ep	*Eupatorium perfoliatum*	Boneset	1 gal.	Cont.	Space 2.5' on center	4
iv	*Iris virginica shrevei*	Southern Blue Flag Iris	1 gal.	Cont.	Space 2' on center	13
lp	*Liatris pycnostachya*	Prairie Blazingstar	1 gal.	Cont.	Space 1.5' on center	44
rh	*Rudbeckia hirta*	Black-Eyed Susan	1 gal.	Cont.	Space 1.5' on center	42
rs	*Rudbeckia subtomentosa*	Sweet Black-eyed Susan	1 gal.	Cont.	Space as indicated on plans	11
rf	*Rudbeckia fulgida*	Orange Coneflower	1 gal.	Cont.	Space 1.5' on center	27
sl	*Silphilium laciniatum*	Compass Plant	1 gal.	Cont.	Space 2' on center	40
vf	*Vernonia fasciculata*	Ironweed	1 gal.	Cont.	Space as indicated on plans	22
pm-1	Perennial Mix:		2" sq. x 5" deep	Plug	Mix species and arrange randomly in planting area area as indicated; space 1.5' on center	
	Asclepias incarnata	Rose Milkweed				74
	Aster nova-angliae	New England Aster				74
	Echinacea purpurea	Purple Coneflower				74
	Parthenium integrifolia	Wild Quinine				74
	Rudbeckia hirta	Black-Eyed Susan				74
	Solidago ridellii	Ridell's Goldenrod				74
pm-2	Perennial Mix:		2" sq. x 5" deep	Plug	Mix species and arrange randomly in planting area area as indicated; space 1.5' on center	
	Agastache foeniculum	Anise Hyssop				107
	Aster prenanthoides	Crooked-stem Aster				107
	Desmodium canadense	Canada Tick Trefoil				107
	Echinacea purpurea	Purple Coneflower				107
	Helenium autumnale	Sneezeweed				107
	Lobelia cardinalis	Cardinal Flower				107
pm-3	Perennial Mix:		2" sq. x 5" deep	Plug	Mix species and arrange randomly in planting area area as indicated; space 1.5' on center	
	Liatris spicata	Marsh Blazingstar				55
	Monarda fistulosa	Wild Bergamot				55
	Rudbeckia fulgida	Orange Coneflower				55
	Solidago rigida	Stiff Goldenrod				55
	Vernonia fasciculata	Ironweed				55
	Veronicastrum virginicum	Culver's Root				55
pm-4	Perennial Mix:		2" sq. x 5" deep	Plug	Mix species and arrange randomly in planting area area as indicated; space 1.5' on center	
	Aster laevis	Sky Blue Aster				24
	Helenium autumnalis	Sneezeweed				24
	Liatris pycnostachya	Prairie Blazingstar				24
	Penstemon digitalis	Smooth Penstemon				24
	Phlox pilosa	Prairie Phlox				24
	Physotstegia virginiana	Obedient Plant				24
pm-5	Perennial Mix:		2" sq. x 5" deep	Plug	Mix species and arrange randomly in planting area area as indicated; space 1.5' on center	
	Aquilegia canadensis	Wild Columbine				13
	Aster drummondii	Drummond's Aster				13
	Campanula americana	American Bellflower				13
	Cimicifuga racemosa	Black Snakeroot				13
	Geranium maculatum	Spotted Geranium				13
	Solidago ulmifolia	Elm-leaf Goldenrod				13
pm-6	Perennial Mix:		2" sq. x 5" deep	Plug	Mix species and arrange randomly in planting area area as indicated; space 1.5' on center	
	Anemone canadensis	Canada Anemone				12
	Heuchera richardsonii	Prairie Alumroot				12
	Lobelia cardinalis	Cardinal Flower				12
	Phlox glaberrima	Marsh Phlox				12
	Thalictrum dasycarpum	Meadow Rue				12
	Zizia aurea	Golden Alexanders				12

DATE: REVISION DESCRIPTION: BY:

MILWAUKEE COUNTY DEPARTMENT OF ADMINISTRATIVE SERVICES
Architecture, Engineering & Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

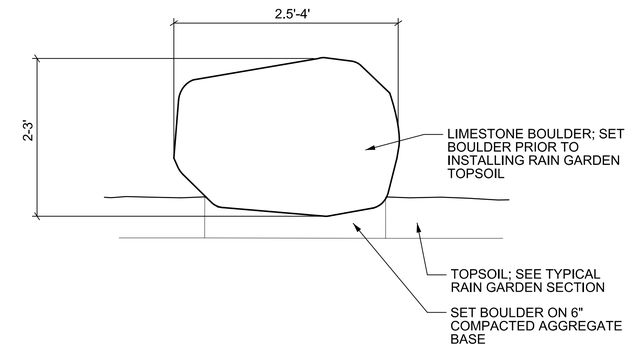
DRAWN BY: KSD
CHECKED BY: KSD
SCALE: NO SCALE
DATE: 7/03/14
PROJECT TITLE: MENOMONEE RIVER PARKWAY
SHEET DESCRIPTION: PLANT LIST
SITE NO.
BUILDING NO.
PROJECT NO. P280-13626
SHEET NO. L24
24 OF xx
FILE NO.



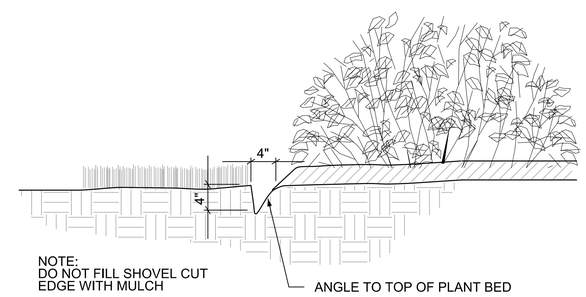
NOTES: SEE SPECIFICATION 02930 FOR MORE INFORMATION

1. PONDING DEPTH FOR ALL RAINGARDENS IS 8".
2. IMPORTED TOPSOIL; TESTED AND APPROVED
3. SIDE SLOPES ARE TYPICALLY 40" WIDE (APPROX. 5:1; SOME RAIN GARDENS HAVE STEEPER SIDE SLOPES (3:1) – SEE PLANS FOR LOCATIONS
4. NATIVE VEGETATED MAT (NVM) TYPE A ON SIDE SLOPES, TYPE B ON RAIN GARDEN BOTTOM; INSTALL PER MANUFACTURER'S INSTRUCTIONS; CUT TO FIT SHAPE OF RAINGARDEN
5. PERENNIAL PLUGS – INSTALL TRHOUGH NVM; SPACE PER PLANT LIST. WHERE PLUGS ARE PLANTED IN BARE SOIL, APPLY TWICE-SHREDDED HARDWOOD MULCH.
6. TREES AND SHRUBS – PLANT BEFORE INSTALLING NVM. CUT NVM TO FIT AROUND INDIVIDUAL OR GROUPS OF TREES OR SHRUBS. APPLY 3" TWICE-SHREDDED HARDWOOD MULCH TO BARE SOIL AROUND TREES AND SHRUBS.

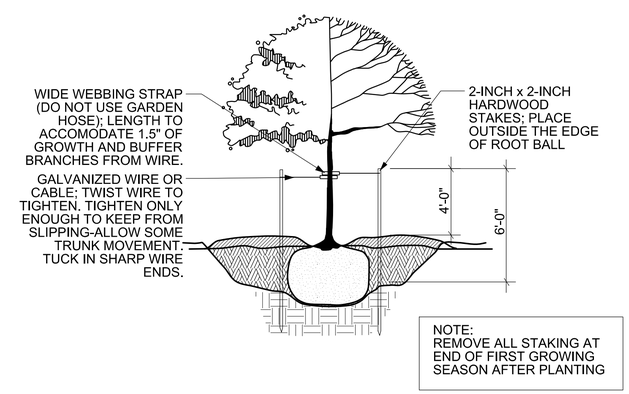
TYPICAL RAIN GARDEN SECTION



LANDSCAPE BOULDER SETTING DETAIL



SHOVEL CUT EDGING DETAIL



TREE STAKING DETAIL

DATE: REVISION DESCRIPTION: BY:

MILWAUKEE COUNTY DEPARTMENT OF ADMINISTRATIVE SERVICES
Architecture, Engineering & Environmental Services Section
CITY CAMPUS 2711 W. WELLS ST. SECOND FLOOR MILWAUKEE, WI 53208

DRAWN BY: KSD
CHECKED BY: KSD
SCALE: NTS
DATE: 7/03/14

PROJECT TITLE: MENOMONEE RIVER PARKWAY
SHEET DESCRIPTION: PLANTING DETAILS
SITE NO.
BUILDING NO.
PROJECT NO. P280-13626
SHEET NO. L25
25 OF xx
FILE NO.