

RUSH

Contract Routing Form

ROUTING: Urgent Rush

printed on: 05/01/2014

Contract between: Speedway Sand & Gravel Inc
and Dept. or Division: Engineering Division
Name/Phone Number:

Project: State St Reconstruction Assessment District-2014

Contract No.: 7206
Enactment No.: RES-14-00333
Dollar Amount: 4,733,488.80

File No.: 33630
Enactment Date: 04/30/2014

(Please DATE before routing)

Signatures Required	Date Received	Date Signed
City Clerk	5-1-14	5-1-2014
Director of Civil Rights	5-1-14	5/1/14 [Signature]
Risk Manager	5/1/14	5/1/14 [Signature]
Finance Director	5-2-14	5-2-14 [Signature]
City Attorney 546	5-2-14	5-2-14
Mayor	5-2-14	5-5-14

Please return signed Contracts to the City Clerk's Office
Room 103, City-County Building for filing.

Original + 2 Copies

81537206 5/2/14 [Signature]

05/01/2014 11:12:11 enjap - C Petykowski - 266-4751

RUSH

RUSH

Dis Rights: OK / N/A / Problem - Hold
Prev Wage: AA / Agency / No
Contract Value: See above
AA Plan: Approved
Amendment / Addendum #
Type: POS / DVM / Sbdv / Gov't /
Grant / PW / Goal / Loan / Agrmt



CERTIFICATE OF LIABILITY INSURANCE

SPEED-1

OP ID: JC

DATE (MM/DD/YYYY)

03/24/2014

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Schwarz Insurance - Madison 6609 University Ave. Middleton, WI 53562-3021 Kathryn A. Schwarz	CONTACT NAME:	
	PHONE (A/C, No. Ext): FAX (A/C, No):	
INSURED Speedway Sand & Gravel, Inc. 8500 Greenway Blvd. Middleton, WI 53562	E-MAIL ADDRESS:	
	INSURER(S) AFFORDING COVERAGE	NAIC #
	INSURER A: Regent Insurance Co.	24449
	INSURER B: Wilson Mutual Insurance Co	19950
	INSURER C: General Casualty Co.	24414
	INSURER D: Hanover Insurance Company	
INSURER E:		
INSURER F:		

COVERAGES**CERTIFICATE NUMBER: 2****REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADD'L SUBR INSR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> GENERAL LIABILITY	X	CCI1012366	04/01/2014	04/01/2015	EACH OCCURRENCE \$ 1,000,000
	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY					DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 500,000
	<input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR					MED EXP (Any one person) \$ 10,000
						PERSONAL & ADV INJURY \$ 1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:					GENERAL AGGREGATE \$ 2,000,000
	<input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PROJECT <input type="checkbox"/> LOC					PRODUCTS - COMP/OP AGG \$ 2,000,000
A	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY		CBA1012363	04/01/2014	04/01/2015	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000
	<input checked="" type="checkbox"/> ANY AUTO					BODILY INJURY (Per person) \$
	<input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS					BODILY INJURY (Per accident) \$
	<input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> NON-OWNED AUTOS					PROPERTY DAMAGE (PER ACCIDENT) \$
C	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR		CCU1012365	04/01/2014	04/01/2015	EACH OCCURRENCE \$ 10,000,000
	<input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE					AGGREGATE \$ 10,000,000
	<input type="checkbox"/> DED <input checked="" type="checkbox"/> RETENTION \$ 10000					
B	<input checked="" type="checkbox"/> WORKERS COMPENSATION AND EMPLOYERS' LIABILITY	N/A	3200052490	04/01/2014	04/01/2015	<input checked="" type="checkbox"/> WC STATUTORY LIMITS <input type="checkbox"/> OTHER
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH)					E.L. EACH ACCIDENT \$ 100,000
	If yes, describe under DESCRIPTION OF OPERATIONS below					E.L. DISEASE - EA EMPLOYEE \$ 100,000
						E.L. DISEASE - POLICY LIMIT \$ 500,000
D	Installation Fltr		IH14360028	04/01/2014	04/01/2015	50,000
A	Ltd Pollution		CCI1012366	04/01/2014	04/01/2015	1,000,000

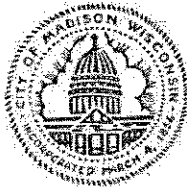
DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

The City of Madison, its officials, and employees are included as additional insureds on the general liability, as required in written agreement, per endorsement form CG8102.

COPYINS OK
5-1-14 MCL

CERTIFICATE HOLDER	CANCELLATION
CITY-1	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
City Engineering/Public Works City of Madison ATTN: Janet Pien 210 Martin Luther King Jr Blvd Madison, WI 53703	AUTHORIZED REPRESENTATIVE

© 1988-2010 ACORD CORPORATION. All rights reserved.



City of Madison

City of Madison
Madison, WI 53703
www.cityofmadison.com

Master

File Number: 33630

File ID: 33630	File Type: Resolution	Status: Passed
Version: 1	Reference:	Controlling Body: BOARD OF PUBLIC WORKS
Lead Referral: BOARD OF PUBLIC WORKS	Cost:	File Created Date : 04/02/2014
File Name: Awarding Public Works Contract No. 7206, State Street Reconstruction Assessment District - 2014.		Final Action: 04/29/2014
Title: Awarding Public Works Contract No. 7206, State Street Reconstruction Assessment District - 2014.		

Notes:

CC Agenda Date: 04/29/2014

Agenda Number: 82.

Sponsors: BOARD OF PUBLIC WORKS

Effective Date: 04/30/2014

Attachments: Contract 7206.pdf

Enactment Number: RES-14-00333

Author: Rob Phillips, City Engineer

Hearing Date:

Entered by: mhacker@cityofmadison.com

Published Date:

Approval History

Version	Date	Approver	Action
1	04/14/2014	Craig Franklin	Approve

History of Legislative File

Ver- sion:	Acting Body:	Date:	Action:	Sent To:	Due Date:	Return Date:	Result:
1	Engineering Division	04/02/2014	Refer	BOARD OF PUBLIC WORKS	04/09/2014	04/09/2014	
	Action Text: This Resolution was Refer to the BOARD OF PUBLIC WORKS due back on 4/9/2014						
	Notes:						
1	BOARD OF PUBLIC WORKS	04/09/2014	RECOMMEND TO COUNCIL TO ADOPT UNDER SUSPENSION OF RULES 2.04, 2.05, 2.24, & 2.25 - REPORT OF OFFICER				Pass

Action Text: A motion was made by Skidmore, seconded by Branson, to RECOMMEND TO COUNCIL TO ADOPT UNDER SUSPENSION OF RULES 2.04, 2.05, 2.24, & 2.25 - REPORT OF OFFICER. The motion passed by voice vote/other.

Notes:

1	COMMON COUNCIL	04/29/2014	Adopt Under Suspension of Rules 2.04, 2.05, 2.24, and 2.25	Pass
---	----------------	------------	---	------

Action Text: A motion was made by Schmidt, seconded by DeMarb, to Adopt Under Suspension of Rules 2.04, 2.05, 2.24, and 2.25. The motion passed by voice vote/other.

Notes:

Text of Legislative File 33630

Fiscal Note

Budget authority is available in the Acct. Nos. listed on the attached.

Title

Awarding Public Works Contract No. 7206, State Street Reconstruction Assessment District - 2014.

Body

BE IT RESOLVED, that the following low bids for miscellaneous improvements be accepted and that the Mayor and City Clerk be and are hereby authorized and directed to enter into a contract with the low bidders contained herein, subject to the Contractor's compliance with Section 39.02 of the Madison General Ordinances concerning compliance with the Affirmative Action provisions **and subject to the Contractor's compliance with Section 33.07 of the Madison General Ordinances regarding Best Value Contracting:**

BE IT FURTHER RESOLVED, that the funds be encumbered to cover the cost of the projects contained herein.

See attached document (Contract No. 7206) for itemization of bids.

PROJECT	CONTRACTOR	AMOUNT OF BID
---------	------------	---------------

CONTRACT NO. 7206
STATE STREET RECONSTRUCTION ASSESSMENT DISTRICT - 2014

SPEEDWAY SAND & GRAVEL, INC.	\$4,733,488.80
------------------------------	----------------

Acct. No. CS53-58280-810732-00-53W1193-53TIF032	\$3,477,249.97
Contingency 8%±	278,180.00
Plan & Prep 15%±	<u>521,590.03</u>
Sub-Total	\$4,277,020.00

Acct. No. CS53-58910-810732-00-53W1193-53TIF032	\$5,500.00
Contingency 8%±	440.00
Plan & Prep 15%±	<u>830.00</u>
Sub-Total	\$6,770.00

Acct. No. CS53-58270-810732-00-53W1193-53TIF032	\$431,872.27
Contingency 8%±	34,550.00
Plan & Prep 15%±	<u>64,777.73</u>
Sub-Total	\$531,200.00

Acct. No. ES01-58275-810332-00-53W1193	\$111,788.29
Contingency 8%±	<u>8,941.71</u>
Sub-Total	\$120,730.00

Acct. No. EW01-58273-810455-00-53W1193	\$316,004.40
Contingency 8%±	<u>25,285.60</u>
Sub-Total	\$341,290.00

Acct. No. CS53-58545-810732-00-53W1193-53TIF032	\$368,683.87
Contingency 8%±	29,495.00
Plan & Prep 15%±	<u>55,301.13</u>
Sub-Total	\$453,480.00

Acct. No. CS53-58540-810732-00-53W1193-53TIF032	\$22,390.00
Contingency 8%±	1,791.00
Plan & Prep 15%±	<u>3,359.00</u>
Sub-Total	\$27,540.00

GRAND TOTAL	<u>\$5,758,030.00</u>
-------------	-----------------------

**Wisconsin Office of the Commissioner of Insurance
Licensed Producer Search***

Monday, April 28, 2014

 MOSCA, ELIZABETH
MIDDLETON WI

 Year of Birth: 1957
 Status: Active
 License Number: 2530156
 NPN**: 12305256
 Effective Date: 11-18-2008
 Expiration Date: 03-31-2015
 License Type: Resident Intermediary Indv
 CE Compliance: 03-31-2015
Lines of Authority

Line of Authority	Residency	Effective Date	Status
Property	Resident	11-25-2008	Active
Casualty	Resident	11-18-2008	Active

Appointments and Terminations

Company Name	Qualification Type/Status	Effective Date	Termination Date	Termination Reason
American Casualty	CAS/Active	05-21-2013		
Company of Reading, Pennsylvania	CAS/Inactive	01-08-2009	09-29-2010	Vol. Surrender per Agent Rqst
	PROP/Active	05-21-2013		
	PROP/Inactive	01-08-2009	09-29-2010	Vol. Surrender per Agent Rqst
American Economy Insurance Company	CAS/Active	01-18-2010		
	PROP/Active	01-18-2010		
American Fire and Casualty Company	CAS/Active	01-18-2010		
	PROP/Active	01-18-2010		
American States Insurance Company	CAS/Active	01-18-2010		
	PROP/Active	01-18-2010		
Berkley Regional Insurance Company	CAS/Active	01-12-2009		
	PROP/Active	01-12-2009		
Colonial American Casualty and Surety Company	CAS/Active	05-14-2013		
	PROP/Active	05-14-2013		
Consolidated Insurance Company	CAS/Active	01-18-2010		
	PROP/Active	01-18-2010		
Continental Casualty Company	CAS/Active	05-21-2013		
	CAS/Inactive	01-08-2009	09-29-2010	Vol. Surrender per

						Agent Rqst
						Vol. Surrender per Agent Rqst
	PROP/Active	05-21-2013				
	PROP/Inactive	01-08-2009	09-29-2010			
Continental Insurance Company, The	CAS/Active	05-21-2013				
	PROP/Active	05-21-2013				
Fidelity and Deposit Company of Maryland	CAS/Active	05-14-2013				
	PROP/Active	05-14-2013				
First National Insurance Company of America	CAS/Active	01-18-2010				
	PROP/Active	01-18-2010				
First Sealord Surety, Inc.	CAS/Inactive	09-17-2009	02-08-2012			Canceled
General Insurance Company of America	CAS/Active	01-18-2010				
	PROP/Active	01-18-2010				
Granite Re, Inc.	CAS/Active	01-14-2009				
Guarantee Company of North America USA, The	CAS/Inactive	01-22-2009	12-28-2011			Vol. Surrender per Agent Rqst
Hawkeye-Security Insurance Company	CAS/Active	01-18-2010				
	PROP/Active	01-18-2010				
Indiana Insurance Company	CAS/Active	01-18-2010				
	PROP/Active	01-18-2010				
Liberty Mutual Insurance Company	CAS/Active	02-04-2010				
Merchants Bonding Company (Mutual)	CAS/Active	05-03-2013				
	CAS/Inactive	12-03-2008	10-12-2010			Canceled
Merchants National Bonding, Inc.	CAS/Active	05-03-2013				
Midwestern Indemnity Company, The	CAS/Active	01-18-2010				
	PROP/Active	01-18-2010				
National Fire Insurance Company of Hartford	CAS/Active	05-21-2013				
	CAS/Inactive	01-08-2009	09-29-2010			Vol. Surrender per Agent Rqst
	PROP/Active	05-21-2013				
	PROP/Inactive	01-08-2009	09-29-2010			Vol. Surrender per Agent Rqst
Netherlands	CAS/Active	01-18-2010				

Insurance Company, The	PROP/Active	01-18-2010			
Ohio Casualty	CAS/Active	01-18-2010			
Insurance Company, The	PROP/Active	01-18-2010			
Ohio Security	CAS/Active	01-18-2010			
Insurance Company	PROP/Active	01-18-2010			
Old Republic	CAS/Active	12-30-2010			
Insurance Company	CAS/Inactive	12-20-2008	07-06-2010		Canceled
Old Republic Surety	CAS/Active	12-30-2010			
Company	CAS/Inactive	12-20-2008	07-06-2010		Canceled
Peerless Indemnity	CAS/Active	01-18-2010			
Insurance Company	PROP/Active	01-18-2010			
Peerless Insurance	CAS/Active	01-18-2010			
Company	PROP/Active	01-18-2010			
SAFECO Insurance	CAS/Active	01-18-2010			
Company of America	PROP/Active	01-18-2010			
SAFECO Insurance	CAS/Active	01-18-2010			
Company of Illinois	PROP/Active	01-18-2010			
Star Insurance	CAS/Inactive	07-06-2010	04-19-2011		Canceled
Company	PROP/Inactive	07-06-2010	04-19-2011		Canceled
Transportation	CAS/Active	05-21-2013			
Insurance Company	PROP/Active	05-21-2013			
United Fire &	CAS/Active	10-03-2013			
Casualty Company	PROP/Active	10-03-2013			
Valley Forge	CAS/Active	05-21-2013			
Insurance Company	PROP/Active	05-21-2013			
West American	CAS/Active	01-18-2010			
Insurance Company	PROP/Active	01-18-2010			
West Bend Mutual	CAS/Active	08-08-2011			
Insurance Company	PROP/Active	08-08-2011			
Western National	CAS/Active	04-03-2014			
Mutual Insurance	PROP/Active	04-03-2014			
Company					
Western Surety	CAS/Active	09-25-2013			
Company	CAS/Inactive	01-08-2009	10-28-2010		Vol. Surrender per Agent Rqst
Zurich American	CAS/Active	05-14-2013			

Insurance Company	PROP/Active	05-14-2013
-------------------	-------------	------------

* Photocopies of this report provided to an insurer should be confirmed on-line for accuracy.

** NPN = National Producer Number assigned by the National Insurance Producer Registry to assist with nonresident licensing in the future.

\$4,733,488.80
CONTRACTOR'S OFFICE COPY

BID OF SPEEDWAY SAND & GRAVEL, INC.

2014

PROPOSAL, CONTRACT, BOND AND SPECIFICATIONS

FOR

STATE STREET RECONSTRUCTION ASSESSMENT DISTRICT - 2014

CONTRACT NO. 7206

IN

MADISON, DANE COUNTY, WISCONSIN

AWARDED BY THE COMMON COUNCIL
MADISON, WISCONSIN ON APRIL 29, 2014

CITY ENGINEERING DIVISION
1600 EMIL STREET
MADISON, WISCONSIN 53713

<https://bidexpress.com/login>

**STATE STREET RECONSTRUCTION ASSESSMENT DISTRICT - 2014
CONTRACT NO. 7206**

INDEX

SECTION A: ADVERTISEMENT FOR BIDS AND INSTRUCTIONS TO BIDDERS	A-1
SECTION B: PROPOSAL SECTION	B-1
SECTION C: SMALL BUSINESS ENTERPRISE	C-1
SECTION D: SPECIAL PROVISIONS	D-1
SECTION E: BIDDER'S ACKNOWLEDGEMENT	E-1
SECTION F: DISCLOSURE OF OWNERSHIP & BEST VALUE CONTRACTING	F-1
SECTION G: BID BOND	G-1
SECTION H: AGREEMENT	H-1
SECTION I: PAYMENT AND PERFORMANCE BOND	I-1
SECTION J: PREVAILING WAGE RATES	J-1

This Proposal, and Agreement have
been prepared by:

**CITY ENGINEERING DIVISION
CITY OF MADISON
MADISON, DANE COUNTY, WISCONSIN**

A handwritten signature in black ink, appearing to read "Robert Phillips", is written over a horizontal line.

Robert F. Phillips, P.E., City Engineer

RFP: cp

SECTION A: ADVERTISEMENT FOR BIDS AND INSTRUCTIONS TO BIDDERS

REQUEST FOR BID FOR PUBLIC WORKS CONSTRUCTION CITY OF MADISON, WISCONSIN

A BEST VALUE CONTRACTING MUNICIPALITY

PROJECT NAME:	STATE STREET RECONSTRUCTION ASSESSMENT DISTRICT - 2014
CONTRACT NO.:	7206
SBE GOAL	15%
BID BOND	5%
PRE BID MEETING (1:00 P.M.)	MARCH 14, 2014
PREQUALIFICATION APPLICATION DUE (1:00 P.M.)	MARCH 14, 2014
BID SUBMISSION (1:00 P.M.)	WEDNESDAY, MARCH 26, 2014
BID OPEN (1:30 P.M.)	WEDNESDAY, MARCH 26, 2014
PUBLISHED IN WSJ	FEBRUARY 28 & MARCH 7, 14 & 21, 2014

PRE BID MEETING: Representatives of the Affirmative Action Department will be present to discuss the Small Business Enterprise requirements at 1600 Emil Street, Madison Wisconsin.

PREQUALIFICATION APPLICATION: Forms are available on our website, www.cityofmadison.com/business/pw/forms.cfm. If not currently prequalified in the categories listed in Section A, an amendment to your Prequalification will need to be submitted prior to the same due date. Postmark is not applicable.

BIDS TO BE SUBMITTED by hand to 1600 EMIL ST., MADISON, WI 53713 or online at www.bidexpress.com.

THE BID OPENING is at 1600 EMIL ST., MADISON, WI 53713.

STANDARD SPECIFICATIONS

The City of Madison's Standard Specifications for Public Works Construction - 2014 Edition, as supplemented and amended from time to time, forms a part of these contract documents as if attached hereto.

These standard specifications are available on the City of Madison Public Works website, www.cityofmadison.com/Business/PW/specs.cfm.

The Contractor shall review these Specifications prior to preparation of proposals for the work to be done under this contract, with specific attention to Article 102, "BIDDING REQUIREMENTS AND CONDITIONS" and Article 103, "AWARD AND EXECUTION OF THE CONTRACT." For the convenience of the bidder, below are highlights of three subsections of the specifications.

SECTION 102.1: PRE-QUALIFICATION OF BIDDERS

In accordance with Wisconsin State Statutes 66.0901 (2) and (3), all bidders must submit to the Board of Public Works proof of responsibility on forms furnished by the City. The City requires that all bidders be qualified on a biennial basis.

Bidders must present satisfactory evidence that they have been regularly engaged in the type of work specified herein and they are fully prepared with necessary capital, materials, machinery and supervisory personnel to conduct the work to be contracted for to the satisfaction of the City. All bidders must be pre-

qualified by the Board of Public Works for the type of construction on which they are bidding prior to the opening of the bid.

In accordance with Section 39.02(9)(a)l. of the General Ordinances, all bidders shall submit in writing to the Affirmative Action Division Manager of the City of Madison, a Certificate of Compliance or an Affirmative Action Plan at the same time or prior to the submission of the proof of responsibility forms.

The bidder shall be disqualified if the bidder fails to or refuses to, prior to opening of the bid, submit a Certificate of compliance, Affirmative Action Plan or Affirmative Action Data Update, as applicable, as defined by Section 39.02 of the General Ordinances (entitled Affirmative Action) and as required by Section 102.11 of the Standard Specifications.

SECTION 102.4 PROPOSAL

No bid will be accepted that does not contain an adequate or reasonable price for each and every item named in the Schedule of Unit Prices.

A lump sum bid for the work in accordance with the plans and specifications is required. The lump sum bid must be the same as the total amounts bid for the various items and it shall be inserted in the space provided.

All papers bound with or attached to the proposal form are considered a part thereof and must not be detached or altered when the proposal is submitted. The plans, specifications and other documents designated in the proposal form will be considered a part of the proposal whether attached or not.

A proposal submitted by an individual shall be signed by the bidder or by a duly authorized agent. A proposal submitted by a partnership shall be signed by a member/partner or by a duly authorized agent thereof. A proposal submitted by a corporation shall be signed by an authorized officer or duly authorized registered agent of such corporation, and the proposal shall show the name of the State under the laws of which such corporation was chartered. The required signatures shall in all cases appear in the space provided thereof on the proposal.

Each proposal shall be placed, together with the proposal guaranty, in a sealed envelope, so marked as to indicate name of project, the contract number or option to which it applies, and the name and address of the Contractor or submitted electronically through Bid Express (www.bidexpress.com). Proposals will be accepted at the location, the time and the date designated in the advertisement. Proposals received after the time and date designated will be returned to the bidder unopened.

The Bidder shall execute the Disclosure of Ownership form. REFER TO SECTION F.

SECTION 102.5: BID DEPOSIT (PROPOSAL GUARANTY)

All bids, sealed or electronic, must be accompanied with a Bid Bond equal to at least 5% of the bid or a Certificate of Annual/Biennial Bid Bond or certified check, payable to the City Treasurer. Bid deposit of the successful bidders shall be returned within forty-eight (48) hours following execution of the contract and bond as required.

PREVAILING WAGE RATES

Prevailing Wage Rates may be required and are attached in Section J of the contract. See Special Provisions to determine applicability.

Bidders for this Contract(s) must be Pre-Qualified for at least one of the following type(s) of construction denoted by an ☒

Building Demolition

- 101 ☐ Asbestos Removal
120 ☐ House Mover

- 110 ☐ Building Demolition

Street, Utility and Site Construction

- 201 ☐ Asphalt Paving
205 ☐ Blasting
210 ☐ Boring/Pipe Jacking
215 ☐ Concrete Paving
220 ☐ Con. Sidewalk/Curb & Gutter/Misc. Flat Work
221 ☐ Concrete Bases and Other Concrete Work
222 ☐ Concrete Removal
225 ☐ Dredging
230 ☐ Fencing
235 ☐ Fiber Optic Cable/Conduit Installation
240 ☐ Grading and Earthwork
241 ☐ Horizontal Saw Cutting of Sidewalk
242 ☐ Infrared Seamless Patching
245 ☐ Landscaping, Maintenance
250 ☐ Landscaping, Site and Street
251 ☐ Parking Ramp Maintenance
252 ☐ Pavement Marking
255 ☐ Pavement Sealcoating and Crack Sealing
260 ☐ Petroleum Above/Below Ground Storage Tank Removal/Install
265 ☐ Retaining Walls, Precast Modular Units

- 270 ☐ Retaining Walls, Reinforced Concrete
275 ☒ Sanitary, Storm Sewer and Water Main Construction
276 ☐ Sawcutting
280 ☐ Sewer Lateral Drain Cleaning/Internal TV Insp.
285 ☐ Sewer Lining
290 ☐ Sewer Pipe Bursting
295 ☐ Soil Borings
300 ☐ Soil Nailing
305 ☐ Storm & Sanitary Sewer Laterals & Water Svc.
310 ☒ Street Construction
315 ☐ Street Lighting
318 ☐ Tennis Court Resurfacing
320 ☐ Traffic Signals
325 ☐ Traffic Signing & Marking
332 ☐ Tree pruning/removal
333 ☐ Tree, pesticide treatment of
335 ☐ Trucking
340 ☐ Utility Transmission Lines including Natural Gas, Electrical & Communications
399 ☐ Other _____

Bridge Construction

- 501 ☐ Bridge Construction and/or Repair

Building Construction

- 401 ☐ Floor Covering (including carpet, ceramic tile installation, rubber, VCT)
402 ☐ Building Automation Systems
403 ☐ Concrete
404 ☐ Doors and Windows
405 ☐ Electrical - Power, Lighting & Communications
410 ☐ Elevator - Lifts
412 ☐ Fire Suppression
413 ☐ Furnishings - Furniture and Window Treatments
415 ☐ General Building Construction, Equal or Less than \$250,000
420 ☐ General Building Construction, \$250,000 to \$1,500,000
425 ☐ General Building Construction, Over \$1,500,000
428 ☐ Glass and/or Glazing
429 ☐ Hazardous Material Removal
430 ☐ Heating, Ventilating and Air Conditioning (HVAC)
433 ☐ Insulation - Thermal
435 ☐ Masonry/Tuck pointing

- 437 ☐ Metals
440 ☐ Painting and Wallcovering
445 ☐ Plumbing
450 ☐ Pump Repair
455 ☐ Pump Systems
460 ☐ Roofing and Moisture Protection
464 ☐ Tower Crane Operator
461 ☐ Solar Photovoltaic/Hot Water Systems
465 ☐ Soil/Groundwater Remediation
466 ☐ Warning Sirens
470 ☐ Water Supply Elevated Tanks
475 ☐ Water Supply Wells
480 ☐ Wood, Plastics & Composites - Structural & Architectural
499 ☐ Other _____

State of Wisconsin Certifications

- 1 ☐ Class 5 Blaster - Blasting Operations and Activities 2500 feet and closer to inhabited buildings for quarries, open pits and road cuts.
2 ☐ Class 6 Blaster - Blasting Operations and Activities 2500 feet and closer to inhabited buildings for trenches, site excavations, basements, underwater demolition, underground excavations, or structures 15 feet or less in height.
3 ☐ Class 7 Blaster - Blasting Operations and Activities for structures greater than 15' in height, bridges, towers, and any of the objects or purposes listed as "Class 5 Blaster or Class 6 Blaster".
4 ☐ Petroleum Above/Below Ground Storage Tank Removal and Installation (Attach copies of State Certifications.)
5 ☐ Hazardous Material Removal (Contractor to be certified for asbestos and lead abatement per the Wisconsin Department of Health Services, Asbestos and Lead Section (A&LS).) See the following link for application: www.dhs.wisconsin.gov/Asbestos/Cert. State of Wisconsin Performance of Asbestos Abatement Certificate must be attached.
6 ☐ Certification number as a Certified Arborist or Certified Tree Worker as administered by the International Society of Arboriculture
7 ☐ Pesticide application (Certification for Commercial Applicator For Hire with the certification in the category of turf and landscape (3.0) and possess a current license issued by the DATCP)
8 ☐ State of Wisconsin Master Plumbers License.

SECTION B: PROPOSAL

Please refer to the
Bid Express Website
at <https://bidexpress.com>
look up contract number
and go to
Section B: Proposal Page

You can access all City of Madison bid solicitations for FREE at www.bidexpress.com

Click on the "Register for Free" button and follow the instructions to register your company and yourself. You will be asked for a payment subscription preference, since you may wish to bid online someday. Simply choose the method to pay on a 'per bid' basis. This requires no payment until / unless you actually bid online. You can also choose the monthly subscription plan at this time. You will, however, be asked to provide payment information. Remember, you can change your preference at anytime. You will then be able to complete your free registration and have full access to the site. Your free access does not require completion of the 'Digital ID' process, so you will have instant access for viewing and downloading. To be prepared in case you ever do wish to bid online, you may wish to establish your digital ID also, since you cannot bid without a Digital ID.

If you have any problems with the free registration process, you can call the bidexpress help team, toll free at 1-888-352-2439 (option 1, option1).

SECTION C: SMALL BUSINESS ENTERPRISE

Instructions to Bidders City of Madison SBE Program Information

2 Small Business Enterprise (SBE) Program Information

2.1 Policy and Goal

The City of Madison reaffirms its policy of nondiscrimination in the conduct of City business by maintaining a procurement process which remains open to all who have the potential and ability to sell goods and services to the City. It is the policy of the City of Madison to allow Small Business Enterprises (SBE) maximum feasible opportunity to participate in City of Madison contracting. The bidder acknowledges that its bid has been submitted in accordance with the SBE program and is for the public's protection and welfare.

Please refer to the "ADVERTISEMENT FOR BIDS" for the goal for the utilization of SBEs on this project. SBEs may participate as subcontractors, vendors and/or suppliers, which provide a commercially useful function. The dollar value for SBE suppliers or 'materials only' vendors shall be discounted to 60% for purposes of meeting SBE goals.

A bidder which achieves or exceeds the SBE goal will be in compliance with the SBE requirements of this project. In the event that the bidder is unable to achieve the SBE goal, the bidder must demonstrate that a good faith effort to do so was made. Failure to either achieve the goal or demonstrate a good faith effort to do so will be grounds for the bidder being deemed a non-responsible contractor ineligible for award of this contract.

A bidder may count towards its attainment of the SBE goal only those expenditures to SBEs that perform a commercially useful function. For purposes of evaluating a bidder's responsiveness to the attainment of the SBE goal, the contract participation by an SBE is based on the percentage of the total base bid proposed by the Contractor. The total base bid price is inclusive of all addenda.

Work performed by an SBE firm in a particular transaction can be counted toward the goal only if it involves a commercially useful function. That is, in light of industry practices and other relevant considerations, does the SBE firm have a necessary and useful role in the transaction, of a kind for which there is a market outside the context of the SBE Program, or is the firm's role a superfluous step added in an attempt to obtain credit towards goals? If, in the judgment of the Affirmative Action Division, the SBE firm will not perform a commercially useful function in the transaction, no credit towards goals will be awarded.

The question of whether a firm is performing a commercially useful function is completely separate from the question of whether the firm is an eligible SBE. A firm is eligible if it meets the definitional criteria and ownership and control requirements, as set forth in the City of Madison's SBE Program.

If the City of Madison determines that the SBE firm is performing a commercially useful function, then the City of Madison must then decide what that function is. If the commercially useful function is that of an SBE vendor / supplier that regularly transacts business with the respective product, then the City of Madison will count 60% of the value of the product supplied toward SBE goals.

To be counted, the SBE vendor / supplier must be engaged in selling the product in question to the public. This is important in distinguishing an SBE vendor / supplier, which has a regular trade with a variety of customers, from a firm which performs supplier-like functions on an ad hoc basis or for only one or two contractors with whom it has a special relationship.

A supplier of bulk goods may qualify as an eligible SBE vendor / supplier if it either maintains an inventory or owns or operates distribution equipment. With respect to the distribution equipment; e.g., a fleet of trucks, the term "operates" is intended to cover a situation in which the supplier leases the equipment on a regular basis for its entire business. It is not intended to cover a situation in which the firm simply provides drivers for trucks owned or leased by another party; e.g., a prime contractor, or leases such a party's trucks on an ad hoc basis for a specific job.

If the commercially useful function being performed is not that of a qualified SBE vendor / supplier, but rather that of delivery of products, obtaining bonding or insurance, procurement of personnel, acting as a broker or manufacturer's representative in the procurement of supplies, facilities, or materials, etc., only the fees or commissions will apply towards the goal.

For example, a business that simply transfers title of a product from manufacturer to ultimate purchaser; e. g., a sales representative who re-invoices a steel product from the steel company to the Contractor, or a firm that puts a product into a container for delivery would not be considered a qualified SBE vendor / supplier. The Contractor would not receive credit based on a percentage of the cost of the product for working with such firms.

Concerning the use of services that help the Contractor obtain needed supplies, personnel, materials or equipment to perform a contract: only the fee received by the service provider will be counted toward the goal. For example, use of a SBE sales representative or distributor for a steel company, if performing a commercially useful function at all, would entitle the Contractor receiving the steel to count only the fee paid to the representative or distributor toward the goal. This provision would also govern fees for professional and other services obtained expressly and solely to perform work relating to a specific contract.

Concerning transportation or delivery services: if an SBE trucking company picks up a product from a manufacturer or a qualified vendor / supplier and delivers the product to the Contractor, the commercially useful function it is performing is not that of a supplier, but simply that of a transporter of goods. Unless the trucking company is itself the manufacturer or a qualified vendor / supplier in the product, credit cannot be given based on a percentage of the cost of the product. Rather, credit would be allowed for the cost of the transportation service.

The City is aware that the rule's language does not explicitly mention every kind of business that may contribute work on this project. In administering these programs, the City would, on a case-by-case basis, determine the appropriate counting formula to apply in a particular situation.

2.2 Contract Compliance

Questions concerning the SBE Program shall be directed to the Contract Compliance Officer of the City of Madison Department of Civil Rights, Affirmative Action Division, 210 Martin Luther King, Jr. Blvd., Room 523, Madison, WI 53703; telephone (608) 266-4910.

2.3 Certification of SBE by City of Madison

The Affirmative Action Division maintains a directory of SBEs which are currently certified as such by the City of Madison. Contact the Contract Compliance Officer as indicated in Section 2.2 to receive a copy of the SBE Directory or you may access the SBE Directory online at www.cityofmadison.com/dcr/aaTBDDir.cfm.

All contractors, subcontractors, vendors and suppliers seeking SBE status must complete and submit the **Targeted Business Certification Application** to the City of Madison Affirmative Action Division by the time and date established for receipt of bids. A copy of the Targeted Business Certification Application is available by contacting the Contract Compliance Officer at the address and telephone indicated in Section 2.2 or you may access the Targeted Business Certification Application online at www.cityofmadison.com/dcr/aaTBDDir.cfm. Submittal of the Targeted Business Certification Application by the time specified does not guarantee that the applicant will be certified as a SBE eligible to be utilized towards meeting the SBE goal for this project.

2.4 Small Business Enterprise Compliance Report

2.4.1 Good Faith Efforts

Bidders shall take all necessary affirmative steps to assure that SBEs are utilized when possible and that the established SBE goal for this project is achieved. A contractor who self performs a portion of the work, and is pre-qualified to perform that category of work, may subcontract that portion of the work, but shall not be required to do so. When a bidder is unable to achieve the established SBE goal, the bidder must demonstrate that a good faith effort to do so was made. Such a good faith effort should include the following:

- 2.4.1.1 Attendance at the pre-bid meeting.
- 2.4.1.2 Using the City of Madison's directory of certified SBEs to identify SBEs from which to solicit bids.
- 2.4.1.3 Assuring that SBEs are solicited whenever they are potential sources.
- 2.4.1.4 Referring prospective SBEs to the City of Madison Affirmative Action Division for certification.
- 2.4.1.5 Dividing total project requirements into smaller tasks and/or quantities, where economically feasible, to permit maximum feasible SBE participation.
- 2.4.1.6 Establishing delivery schedules, where requirements permit, which will encourage participation by SBEs.
- 2.4.1.7 Providing SBEs with specific information regarding the work to be performed.
- 2.4.1.8 Contacting SBEs in advance of the deadline to allow such businesses sufficient time to prepare a bid.
- 2.4.1.9 Utilizing the bid of a qualified and competent SBE when the bid of such a business is deemed reasonable (i.e. 5% above the lowest bidder), although not necessarily low.
- 2.4.1.10 Contacting SBEs which submit a bid, to inquire about the details of the bid and confirm that the scope of the work was interpreted as intended.

2.4.2 Reporting SBE Utilization and Good Faith Efforts

The Small Business Enterprise Compliance Report is to be submitted by the bidder with the bid. This report is due by the specified bid closing time and date. Bids submitted without a completed SBE Compliance Report as outlined below

shall be deemed non-responsible and the bidder ineligible for award of this contract.

2.4.2.1 If the Bidder meets or exceeds the goal established for SBE utilization, the Small Business Enterprise Compliance Report shall consist of the following:

- 2.4.2.1.1 **Cover Page**, Page C-6; and
- 2.4.2.1.2 **Summary Sheet**, C-7.

2.4.2.2 If the bidder does not meet the goal established for SBE utilization, the Small Business Enterprise Compliance Report shall consist of the following:

- 2.4.2.2.1 **Cover Page**, Page C-6;
- 2.4.2.2.2 **Summary Sheet**, C-7; and
- 2.4.2.2.3 **SBE Contact Report**, C-8 and C-9. (A separate Contact Report must be completed for each applicable SBE which is not utilized.)

2.5 Appeal Procedure

A bidder which does not achieve the established goal and is deemed non-responsible for failure to demonstrate a good faith effort to achieve such goal and subsequently denied eligibility for award of contract may, within 72 hours of receiving such notification, appeal that decision to a special appeals committee composed of three (3) members of the Affirmative Action Commission, three (3) members of the Board of Public Works and a seventh member appointed by the Mayor. All appeals must be made in writing to the City Engineer and received within 72 hours of City of Madison's notice. Postmark not applicable.

2.6 SBE Requirements After Award of the Contract

The successful bidder shall identify SBE subcontractors, suppliers and vendors on the subcontractor list in accordance with the specifications. The Contractor shall submit a detailed explanation of any variances between the listing of SBE subcontractors, vendors and/or suppliers on the subcontractor list and the Contractor's SBE Compliance Report for SBE participation.

No change in SBE subcontractors, vendors and/or suppliers from those SBEs indicated in the SBE Compliance Report will be allowed without prior approval from the Engineer and the Affirmative Action Division. The contractor shall submit in writing to the City of Madison Affirmative Action Division a request to change any SBE citing specific reasons which necessitate such a change. The Affirmative Action Division will use a general test of reasonableness in approving or rejecting the contractor's request for change. If the request is approved, the Contractor will make every effort to utilize another SBE if available.

The City will monitor the project to ensure that the actual percentage commitment to SBE firms is carried out.

2.7 SBE Definition and Eligibility Guidelines

A Small Business Enterprise is a business concern awarded certification by the City of Madison. For the purposes of this program a Small Business Enterprise is defined as:

- A. An independent business operated under a single management. The business may not be a subsidiary of any other business and the stock or ownership may not be held by any individual or any business operating in the same or a similar field. In determining whether an entity qualifies as a SBE, the City shall consider all factors relevant to being an independent business including, but not limited to, the date the business was established, adequacy of its resources for the work in which it proposes to involve itself, the degree to which financial, equipment leasing and other relationships exist with other ineligible firms in the same or similar lines of work. SBE owner(s) shall enjoy the customary incidents of ownership and shall share in the risks and profits commensurate with their enjoyment interests, as demonstrated by an examination of the substance rather than form or arrangements that may be reflected in its ownership documents.
- B. A business that has averaged no more than \$4.0 million in annual gross receipts over the prior three year period and the principal owner(s) do not have a personal net worth in excess of \$1.32 million.

Firm and/or individuals that submit fraudulent documents/testimony may be barred from doing business with the City and/or forfeit existing contracts.

SBE certification is valid for one (1) year unless revoked.

SECTION D: SPECIAL PROVISIONS

TABLE OF CONTENTS

DESCRIPTION	PAGE #
PART I – GENERAL CONDITIONS.....	D-8
ARTICLE 101 DEFINITIONS AND TERMS	D-8
SECTION 102.10 MINIMUM RATE OF WAGE SCALE	D-8
SECTION 102.12 BEST VALUE CONTRACTING	D-8
ARTICLE 104 SCOPE OF WORK.....	D-8
SECTION 105.12 COOPERATION BY THE CONTRACTOR.....	D-8
SECTION 107.1 PUBLIC CONVENIENCE AND SAFETY	D-13
SECTION 107.7 MAINTENANCE OF TRAFFIC.....	D-13
SECTION 107.15 NOTICE TO CONTRACTOR.....	D-17
SECTION 108.2 PERMITS	D-18
ARTICLE 109 PROSECUTION AND PROGRESS.....	D-18
BID ITEM 10901 FIELD OFFICE.....	D-21
SECTION 109.2 PROSECUTION OF WORK.....	D-21
SECTION 109.9 LIQUIDATED DAMAGES.....	D-21
ARTICLE 201 EXCAVATION CUT.....	D-22
BID ITEM 20221 TOPSOIL.....	D-22
ARTICLE 203 REMOVAL OF MISCELLANEOUS STRUCTURES	D-22
BID ITEM 20314 REMOVE PIPE (WATER).....	D-22
BID ITEM 20336 – PIPE PLUG	D-23
BID ITEM 21001 EROSION CONTROL IMPLEMENTATION PLAN.....	D-23
BID ITEM 20801 – SODDING.....	D-23
SECTION 301.3 REINFORCING STEEL.....	D-24
SECTION 301.4 EXPANSION JOINT FILLER.....	D-24
SECTION 301.7 CURING	D-24
SECTION 303.2 SIDEWALK JOINTS.....	D-24
ARTICLE 500 - SEWERS & SEWER STRUCTURES.....	D-24

BID ITEM 50390 – SEWER ELECTRONIC MARKERS	D-25
BID ITEM 50801 – UTILITY LINE OPENING (ULO)	D-26
PART VI - TRAFFIC ENGINEERING ELECTRICAL	D-26
ARTICLE 601 - GENERAL.....	D-26
SECTION 604.5 REMOVAL OF EXISTING STREET LIGHT POLE	D-27
PART VII - WATER MAINS & SERVICE LATERALS.....	D-27
ARTICLE 701 – GENERAL.....	D-28
BID ITEM 70040 – FURNISH AND INSTALL HYDRANT.....	D-28
BID ITEM 90001 – CRACK AND DAMAGE SURVEY.....	D-28
BID ITEM 90002 – TEST STEAM TUNNEL/PIPE AND STEAM VAULT APPRURTENANCES FOR ASBESTOS.....	D-29
BID ITEM 90003 – FENCE SAFETY	D-30
BID ITEM 90004 – REMOVE CONCRETE CURB	D-31
BID ITEM 90005 – REMOVE CONCRETE GRAVITY RETAINING WALLS.....	D-31
BID ITEM 90006 – REMOVE COMBINATION RETAINING WALL – CURB AND GUTTER.....	D-32
BID ITEM 90007 – REMOVE STEEL CHAIN FENCE.....	D-32
BID ITEM 90008 – REMOVE WALL MOUNTED BENCH	D-33
BID ITEM 90009 – REMOVE RAILING	D-33
BID ITEM 90010 – REMOVE CONCRETE GUTTER.....	D-34
BID ITEM 90011 – REMOVE DRINKING FOUNTAIN.....	D-34
BID ITEM 90012 – REMOVE BENCHES	D-35
BID ITEM 90013 – SALVAGE AND HAUL CONCRETE PLANTER TUBS.....	D-35
BID ITEM 90014 – REMOVE WALL MOUNTED TRASH CAN.....	D-36
BID ITEM 90015 – REMOVE FOUR POLE KIOSK WITH LIGHTS.....	D-36
BID ITEM 90016 – REMOVE OCTAGONAL KIOSK WITH LIGHTS.....	D-36
BID ITEM 90017 – REMOVE ELECTRICAL PEDESTAL.....	D-37
BID ITEM 90018 – REMOVE KIOSK BASE	D-37
BID ITEM 90019 – REMOVE MAP KIOSK.....	D-38
BID ITEM 90020 – REMOVE BIKE RACK.....	D-38

BID ITEM 90021 – REMOVE CONCRETE PLANTER WALLS.....	D-38
BID ITEM 90022 – REMOVE CONCRETE FOUNTAIN	D-39
BID ITEM 90023 – REMOVE CONCRETE PULPIT.....	D-39
BID ITEM 90024 – REMOVE CONCRETE PLANTER WITH TREE GROVE.....	D-40
BID ITEM 90025 – REMOVE TERRACED STAGE AND SEATING	D-40
BID ITEM 90026 – REMOVE, SALVAGE, & DELIVER CLOCK TOWER & GRANITE SLABS.....	D-41
BID ITEM 90027 – REMOVE CLOCK TOWER FOUNDATION	D-42
BID ITEM 90028 – DISCONNECT PULPIT ELECTRICAL SERVICE CABINET	D-42
BID ITEM 90029 – REMOVE AND RESET PAVERS	D-43
BID ITEM 90030 – ABANDON STEAM VAULT.....	D-43
BID ITEM 90031 – REMOVE & DISPOSE STEAM TUNNEL/PIPE AND STEAM VAULT APPURTENANCES	D-44
BID ITEM 90032 – REMOVE & DISPOSE REGULATED ASBESTOS CONTAINING MATERIAL STEAM TUNNEL/PIPE AND STEAM VAULT APPURTENANCES.....	D-45
BID ITEM 90033 – STORM SEWER TAP BOX CULVERT SPECIAL	D-45
BID ITEM 90034 – 4' DIA STORM SEWER SAS	D-46
BID ITEM 90035 –PVC STORM SEWER LATERAL.....	D-46
BID ITEM 90036 – SIDEWALK DRAIN.....	D-47
BID ITEM 90037 – ADJUST UW CASTING	D-47
BID ITEM 90038 – ADJUST UW STRUCTURE	D-48
BID ITEM 90070 – ADJUST SAS SPECIAL	D-48
BID ITEM 90071 – INSTALL CASING PIPE.....	D-49
BID ITEM 90072 – 3' DIAMETER SEWER ACCESS STRUCTURE	D-50
BID ITEM 90100 – PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 6-INCH	D-51
BID ITEM 90120 – CONCRETE BASES LB-3 MODIFIED.....	D-52
BID ITEM 90121 – CONCRETE BASES LB-8 RAISED	D-52
BID ITEM 90122 – CONCRETE BASES LB-SP.....	D-52
BID ITEM 90123 – STEEL TRANSFORMER BASES BLACK FINISH	D-53
BID ITEM 90124 – INSTALLATION OF STEEL POLE 30-FOOT 11 GAUGE BLACK FINISH	D-54

BID ITEM 90125 - INSTALLATION OF PEDESTRIAN LIGHT BANNER AND BRACKET, BLACK FINISH	D-54
BID ITEM 90126 - INSTALLATION OF AREA LIGHT BANNER AND BRACKET, BLACK FINISH	D-54
BID ITEM 90127 - INSTALLATION OF TEMPORARY STREET LIGHT FIXTURES AND BRACKETS	D-55
BID ITEM 90128 - INSTALLATION OF TEMPORARY WOOD POLES	D-55
BID ITEM 90129 – ELECTRICAL WIRE LIGHTING 12 AWG	D-55
BID ITEM 90130 – ELECTRICAL WIRE LIGHTING 10 AWG	D-55
BID ITEM 90131 – ELECTRICAL WIRE LIGHTING 8 AWG	D-55
BID ITEM 90132 – ELECTRICAL WIRE LIGHTING 6 AWG	D-55
BID ITEM 90133 -DOUBLE DUPLEX RECEPTACLE IN FLUSH BOX.....	D-56
BID ITEM 90134 -208 VOLT RECEPTACLE IN FLUSH BOX.....	D-56
BID ITEM 90135 - ELECTRIC FOR KIOSK.....	D-57
BID ITEM 90136 – LED POWER SUPPLY & VAULT	D-58
BID ITEM 90137 – LED UNDER BENCH LIGHTING.....	D-59
BID ITEM 90138 – FURNISH AND INSTALL BASCOM HILL PEDESTRIAN POLE LIGHTING.....	D-59
BID ITEM 90139 –FURNISH AND INSTALL ¾-INCH PVC (SCHEDULE 40) CONDUIT BY “OPEN TRENCH” METHOD	D-60
BID ITEM 90160 – WATER MAIN BYPASS.....	D-60
BID ITEM 90161 – AIR SUPPLY CONNECTION	D-64
BID ITEM 90162 - CURB STOP 1-INCH	D-64
BID ITEM 90163 - CURB BOX 1-INCH	D-64
BID ITEM 90164 - WALL HYDRANT MOUNTED IN CONCRETE.....	D-64
BID ITEM 90165 – WALL HYDRANT MOUNTED IN CABINET.....	D-64
BID ITEM 90166 – WATER PIPE COPPER 1-INCH.....	D-64
BID ITEM 90167 – WATER PIPE COPPER 1 ½ -INCH.....	D-64
BID ITEM 90168 – DRINKING FOUNTAIN	D-66
BID ITEM 90169 – FURNISH AND INSTALL WATER METER VAULT CASTING LID	D-66
BID ITEM 90200 – 6-INCH CONCRETE SIDEWALK	D-67
BID ITEM 90201 – C1 CONCRETE SIDEWALK 7-INCH.....	D-67

BID ITEM 90202 – COLORED CONCRETE SIDEWALK 7-INCH.....	D-68
BID ITEM 90203 –CONCRETE SIDEWALK 7-INCH REINFORCED	D-70
BID ITEM 90204 – CONCRETE STRUCTURAL SLAB 8-INCH.....	D-70
BID ITEM 90205 – COLORED CONCRETE STRUCTURAL SLAB 8-INCH.....	D-71
BID ITEM 90206 – CARDBOARD VOID FORM.....	D-72
BID ITEM 90207 – REINFORCED CONCRETE SIDEWALK BAND.....	D-73
BID ITEM 90208 –CONCRETE SIDEWALK BAND	D-73
BID ITEM 90209 – GRANITE PAVERS.....	D-73
BID ITEM 90210 – CONCRETE MASONRY FOOTING	D-75
BID ITEM 90211 – CONCRETE MASONRY WALLS.....	D-75
BID ITEM 90212 – CONCRETE MASONRY WALLS COLORED.....	D-76
BID ITEM 90213 – CONCRETE MASONRY SIDEWALK REINFORCED	D-77
BID ITEM 90214 – CONCRETE GUTTER 24-INCH	D-78
BID ITEM 90215 –CONCRETE CURB 12-INCH.....	D-78
BID ITEM 90216 –CONCRETE MOW EDGE REINFORCED.....	D-78
BID ITEM 90217 –LIMESTONE PAVER MOW EDGE.....	D-79
BID ITEM 90218 – PAVED SURFACE TEMPORARY	D-80
BID ITEM 90219 – CONCRETE STEPS	D-80
BID ITEM 90220 – LIMESTONE VENEER.....	D-81
BID ITEM 90221 – PRECAST CONCRETE CAP FOR SEAT WALL.....	D-82
BID ITEM 90222 – PRECAST CONCRETE CAP FOR SINGLE TERRACE SEATING.....	D-84
BID ITEM 90223 – PRECAST CONCRETE CAP FOR DOUBLE TERRACE SEATING.....	D-86
BID ITEM 90224 – WOOD SURFACE FOR SEAT WALL.....	D-88
BID ITEM 90225 – WOOD DECKING AT LEAF BASE	D-90
BID ITEM 90226 – CANTILEVER WOOD SEAT.....	D-92
BID ITEM 90227 – PRECAST CONCRETE CAP FOR VENEER WALL	D-94
BID ITEM 90228 – EXTERIOR HANDRAILS	D-96
BID ITEM 90229 – CUT LIMESTONE BLOCK WALL.....	D-98

BID ITEM 90230 – TREE GRATE	D-99
BID ITEM 90231 – ‘SIENNA’ FREEMAN MAPLE 3 ½” B&B	D-99
BID ITEM 90232 – ‘AUTUMN GOLD’ GINKGO 3 ½” B&B	D-99
BID ITEM 90233 – ‘SKYLINE’ HONEYLOCUST 3 ½” B&B	D-99
BID ITEM 90234 – ‘ESPRESSO’ KENTUCKY COFFEE TREE 3 ½” B&B	D-99
BID ITEM 90235 – EXCLAMATION LONDON PLANETREE 3 ½” B&B	D-99
BID ITEM 90236 – ‘NEW HORIZON’ ELM 3 ½” B&B	D-99
BID ITEM 90237 – ‘AUTUMN BRILLIANCE’ SERVICEBERRY 3” B&B	D-100
BID ITEM 90238 – ‘ADAMS’ CRABAPPLE 3” B&B	D-100
BID ITEM 90239 – ‘ACCOLADE’ FLOWERING CHERRY 3” B&B	D-100
BID ITEM 90240 – ‘CLEVELAND SELECT’ CALLERY PEAR 3” B&B	D-100
BID ITEM 90241 – PEKING LILAC 3” B&B	D-100
BID ITEM 90242 – PERENNIALS & GRASSES	D-100
BID ITEM 90243 – SHRUBS	D-100
BID ITEM 90244 – GROUNDCOVERS	D-101
BID ITEM 90245 – BULBS	D-101
BID ITEM 90246 – PLANTING SOIL MIXTURE	D-102
BID ITEM 90247 – BENCH, 6-FOOT	D-103
BID ITEM 90248 – BIKE RACK, 4 STALL-SINGLE SIDED	D-104
BID ITEM 90249 – BIKE RACK, 5 STALL-SINGLE SIDED	D-104
BID ITEM 90250 – BIKE RACK, 6 STALL-SINGLE SIDED	D-104
BID ITEM 90251 – TRASH RECEPTACLE	D-104
BID ITEM 90252 – RECYCLING RECEPTACLE	D-104
BID ITEM 90253 – SOLAR TRASH COMPACTOR	D-105
BID ITEM 90254 – 33” HEIGHT TABLE	D-106
BID ITEM 90255 – 42” HEIGHT TABLE	D-106
BID ITEM 90256 – MOVEABLE TABLE	D-107
BID ITEM 90257 – MOVEABLE CHAIR	D-107

BID ITEM 90258 – DUAL BASE BINOCULARS.....	D-108
BID ITEM 90259 – ELECTRICAL KIOSK.....	D-108
BID ITEM 90260 – POSTING KIOSK.....	D-113
BID ITEM 90261 – GRANITE STREET FORMS TYPE G.....	D-113
BID ITEM 90262 – GRANITE STREET FORMS TYPE J.....	D-113
BID ITEM 90263 – GRANITE STREET FORMS TYPE G ETCHED.....	D-113
BID ITEM 90264 – GRANITE STREET FORMS TYPE J ETCHED.....	D-113
BID ITEM 90265 – LEAF-FOUNDATION.....	D-115
BID ITEM 90266 – LEAF SCULPTURE.....	D-116
BID ITEM 90267 – LEAF-ELECTRICAL.....	D-117
BID ITEM 90269 – IRRIGATION SYSTEM AND APPURTENANCES.....	D-118
BID ITEM 90270 – REDUCED PRESSURE REGULATOR.....	D-120
BID ITEM 90271 – REDUCED PRESSURE REGULATOR CABINET.....	D-120

PART I – GENERAL CONDITIONS

ARTICLE 101 DEFINITIONS AND TERMS

State of Wisconsin Standard Specifications. The State of Wisconsin Standard Specifications for Highway and Structure Construction 2014 Edition published by the Wisconsin Department of Transportation. <http://roadwaystandards.dot.wi.gov/standards/stndspec/ss-title.pdf>

SECTION 102.10 MINIMUM RATE OF WAGE SCALE

The wages and benefits paid on the contract shall not be less than those specified in the Prevailing Wage Determination included with these contract documents for the following types of work:

- ☐ Building and Heavy Construction
- ☐ Sewer, Water, and Tunnel Construction
- ☒ Local Street and Miscellaneous Paving Operations
- ☐ Residential and Agricultural Construction

SECTION 102.12 BEST VALUE CONTRACTING

This Contract shall be considered a Best Value Contract if the Contractor's bid is equal to or greater than \$54,000 for a single trade contract; or equal to or greater than \$264,500 for a multi-trade contract pursuant to MGO 33.07(7).

ARTICLE 104 SCOPE OF WORK

The work under this contract shall consist of grading, removals, base aggregate, sanitary sewer, water main, storm sewer, concrete pavement, HMA pavement Type E-3, concrete curb and gutter, concrete sidewalk, concrete walls, pavement marking, street lights, conduit, concrete bases, electrical kiosks, tree plantings, streetscape items, landscaping, and all incidental items necessary to complete the work as shown on the plans and included in the proposal and contract.

SECTION 105.12 COOPERATION BY THE CONTRACTOR

The City of Madison has been given to understand that the following work will be undertaken by others in approximately the same time frame and the same area as the proposed project. It shall be the Contractor's responsibility to verify this information and any subsequent changes in the scheduling of the work by others and to make corrections in his/her construction timetable as required.

Wisconsin Division of Facilities Development (DFD) has contracted with Joe Daniels Construction Co, Inc. (Lead Contractor) and Braun ThyssenKrupp Elevator to complete project 11K21 within the interior of the Wisconsin State Historical Society building at 816 State Street. The Contractor shall coordinate with the DFD Construction Representative(s), to maintain 11K21 contractor access to temporary parking on Park Street, outside the work zone limits. The 11K21 project contractors also require access to the patio area of the Wisconsin Historical Society (WHS) building for building access and material storage. The patio area is between the south balustrade wall and the WHS building and outside the work zone for the State Street project. The primary access to the patio is from Park Street and is within the work zone on Park Street. Provide DFD and Joe Daniels Construction notice of all work in Park Street that may limit access to the patio. The primary contact for DFD is Casey New at (608) 513-3507 and for Joe Daniels Construction is Steve Hanson at (608) 271-4800. The Contractor shall provide DFD and Joe Daniels with the time and location for pre-construction and weekly construction meetings.

Madison B-Cycle will be installing a B-Cycle station on Fitch Court as indicated in the plans. The contractor should notify Claire Hurley with B-Cycle at 608-772-1186 when the sidewalk and conduit connection for the b-cycle station is completed. The Contractor is responsible for protecting the conduit from being damaged until the b-cycle station installation has been completed.

There are underground utilities located within the project limits. There are known utility adjustments required for the construction project as noted below. The Contractor shall coordinate his construction activities with a call to Diggers Hotline or a direct call to the utilities, which have facilities in the area as required per statutes. The Contractor shall use caution to insure the integrity of underground facilities and shall maintain code clearances from overhead facilities at all times.

Bidders are advised to contact each utility company listed in the plans, prior to preparing their bids, to obtain current information as to the status of existing utility locations and any new utility locations.

Prospective bidders are cautioned that the arrangements set forth in this Article represent the utility companies' best estimate of their plans to relocate and/or adjust conflicting facilities. Frequently, the utility companies encounter problems that prevent them from meeting their anticipated schedules. Bidders are advised to contact each utility company listed in the plans, prior to preparing their bids, to obtain current information on the status of any utility relocation work stated herein.

City of Madison – Electric/Fiber Optic

The City of Madison maintains buried electric lines throughout the project limits that supply power to the existing street lights and electrical outlet pedestals. The lines supplying power to lights and pedestals that are called out for removal on the removal plans will be deactivated and replaced with the project. There are underground electric lines on the east side of Park Street and on the west side of Lake Street that provide power to street lights that will not be removed or replaced. The Contractor shall maintain these lines and keep the lights on Park Street and Lake Street operational at all times.

New electrical services for the proposed street area lights and pedestrian light pole assemblies will be installed by the Contractor as part of this project.

Utility Line Openings (ULO's) are called out in the plans where there is potential for storm sewer conflicts with City of Madison electric facilities. The ULO's should be performed as early in the project as possible to allow for redesign of storm sewer facilities or relocation of the duct.

Proposed light bases may be in conflict with existing utilities. An undistributed quantity of Bid Item # 90122 Concrete Base LB-SP has been included in the contract for use in place of the proposed light base to avoid the conflict. The Engineer in the field will determine the use of Bid Item # 90122 Concrete Base LB-SP. The Engineer may also adjust the location of the base to avoid the conflict.

The Contractor shall adjust the final grade of the existing handholes along Lake Street and Park Street that are within the proposed paving limits.

City of Madison Water Utility

The City of Madison Water Utility has existing water main within the project limits from Park Street to Lake Street and under Park Street and Lake Street. The contract includes work items to remove and replace the main and service laterals in the 700 & 800 blocks of State Street and within the work limits on Park Street. See Provisions for Water Installation and Abandonment, Article 701 of these Special Provisions.

City of Madison Sanitary Sewer

The City of Madison has sanitary sewer main, manholes, and services laterals within the project limits from Park Street to Lake Street and under Park Street. The contract includes work items associated with this sanitary sewer main. See the Sanitary Sewer General Notes, Article 500 of these Special Provisions.

City of Madison Storm Sewer

The City of Madison has storm sewer inlets, manholes, and pipe along two storm sewer trunk lines within the project limits. The contract includes work items to remove and replace both trunk lines with a new trunk line. See Storm Sewers and Storm Sewer Structures General Notes, Section V of these Special Provisions.

Madison Gas & Electric - Gas

Madison Gas & Electric (MG&E) maintains gas main and building service laterals within the project limits. A 2-inch steel gas main crosses Park Street from Bascom Mall to the east side of Park Street where it intersects a 4-inch steel gas main that parallels the east side of Park Street and the south right of way line of the 800 block of State Street. This 4-inch steel main turns north at East Campus Mall and continues approximately centered in the right of way on the 700 block of State Street. A 4-inch steel gas main extends to the south below East Campus Mall and Fitch Court.

MG&E will adjust all gas valves within the project to match new grades during construction. The Contractor shall provide MG&E with two weeks' notice to begin their work.

MG&E requires that rock shield shall be placed between all copper water services and steel gas main lines and service lines.

Utility Line Openings (ULO's) are called out in the plans where there is potential for storm sewer conflicts with MG&E facilities. The ULO's should be performed as early in the project as possible to allow for redesign of storm sewer facilities or relocation of the gas main. MG&E will have a construction crew available to work with the Contractor to relocate gas facilities as required ahead of underground utility and street light base construction.

Madison Gas & Electric - Electrical

Madison Gas & Electric (MG&E) has a concrete electrical duct package for the length of the project, approximately 15 to 20 feet south of the north R/W line. The package is a 15 duct package to the east of East Campus Mall through the 700 block of State Street and an 8 duct package to the west of East Campus Mall through the 800 block of State Street with a minimum expected size concrete encasement of 3 feet by 3 feet. MG&E manholes within the project limits are approximately 10' x 10'. The concrete duct has approximately 30" – 36" of cover outside of the manholes.

MG&E owns the duct in the 800 block to the manhole located in Park Street; however UW Facilities maintains the duct package and uses it for their electrical facilities. UW Facilities owns the manhole in Park Street and the duct package below Park Street. If this duct would need to be relocated it would take 4-6 weeks for relocation. Utility Line Openings (ULO's) are called out in the plans where there is potential for storm sewer conflicts with MG&E facilities. The ULO's should be performed as early in the project as possible to allow for redesign of storm sewer facilities or relocation of the duct.

A majority of the existing MG&E duct packages in this project area were constructed without rebar reinforcement and therefore are not self-supporting. If the duct package is undermined it will need to be supported by external means by the Contractor.

Additional MG&E service vaults are located beneath the east sidewalk of East Campus Mall outside of the project limits.

Existing electrical power for City of Madison street lights are served by MG&E through an electrical panel located within the concrete pulpit at Sta. 1155+30, 15' RT. The electrical service Contractor shall

coordinate with MG&E and the City of Madison two weeks prior to removing the existing electrical panel and pulpit structure to allow MG&E to disconnect the service.

Service to the new electrical kiosks is to be coordinated with MG&E three weeks prior to proposed final grading to allow MG&E time for placement of underground services. Service extension to the proposed Kiosk locations will take approximately three days to complete. The Contractor shall request dates of service to MG&E prior to these services being energized. Kiosk services must be rated for MG&E Downtown network fault current capacities.

MG&E will adjust all existing manhole covers within the project to match new grades during construction. Provide MG&E with five working day notice to adjust manhole cover elevations.

The Contractor will provide MG&E with a one-month notice to begin their work.

Additional conflicts may occur during construction of the project.

AT&T

AT&T has a direct buried 600 pair telephone line along the west side of Library Mall crossing State Street to the southeast towards East Campus Mall.

AT&T intends to enclose this line in conduit and add an additional conduit alongside. The Contractor shall notify AT&T five working days in advance of the site being available to AT&T's crews to complete this work. AT&T anticipates two working days to complete the work.

Carol Anason: (608) 252-2385 (office) or (608) 475-2799 (cell)

UW Facilities

Steam Tunnels

UW Facilities has steam tunnels located within the project limits. Steam tunnels cross diagonally across State Street from the east side of Library Mall to continue south on East Campus Mall. Another steam tunnel crosses State Street along the west side of Library Mall and continues to the south between the Humanities building and the University Club. There is a connection of these two tunnels that crosses east/west across Library Mall.

An abandoned steam tunnel runs along the south right of way line from the University Club towards the west to the base of Bascom Hill at which point it continues to the south. East of East Campus Mall along the southern right of way is an additional abandoned steam tunnel which bends to the south at Fitch Court and continues to the south. An abandoned steam pit is located on the northwest corner of the University Bookstore.

The abandoned steam tunnel along state Street from University Club to the east side of East Campus Mall and the section on Fitch Court is approximately 4' wide x 2.5' tall 6" thick concrete steam conduit with 4" Ret. and 10" HP piping and two 2" internal vent pipes. The steam tunnel along State Street from East Campus Mall to Fitch Court is approximately 3' wide x 2' tall envelope resting on a 4" thick concrete pad.

Record drawings are available upon request to the City of Madison.

Conflict with the active steam tunnels is not anticipated, however, if steam tunnels are exposed, the contractor must take care not to damage the existing waterproofing. If the waterproofing is damaged, the contractor is responsible for repairing the waterproofing. The contractor should take care when crossing the active tunnels with heavy equipment and vehicles. The contractor should not store materials above any active tunnels.

Abandoned steam tunnels may be encountered during construction activities. Some of these tunnels are known to have asbestos and should be removed using the Bid Item "Remove & Dispose Asbestos Containing Material Tunnel/Pipe and Steam Vault Appurtenances", Bid Item 90032. Some of these facilities are unknown if they contain Asbestos Containing Material (ACM) and should be tested using Bid Item "Test Tunnel/Pipe and Steam Vault Appurtenances for Asbestos", Bid Item 90002. Remove facilities in conflict according specifications based on the results of the testing.

Electrical

UW Facilities has existing electrical and communications conduit within the project limits. Buried electrical and communications facilities run along the west side of Library Mall and cross State Street diagonally towards East Campus Mall.

UW Facilities own the electrical and communications manhole and facilities located on the west side of Park Street as well as the facilities under the east sidewalk of Park Street. Bid item 90038 Adjust UW Structure is intended for adjusting the Park Street Structure up to proposed grade.

There are two electrical and communications manholes located at approximately Sta. 1153+94, 50' LT and 1154+00, 50' LT. These manholes are approximately 8 ft. x 8 ft. x 8.5 ft. deep. Bid item 90038 Adjust UW Structure is intended for adjusting these structures up to proposed grade.

Foundation walls will be formed around the buried facilities and structures. The contractor shall adjust all existing manhole covers within the project to match new grades during construction.

There is an existing sump pit and additional electrical manholes located near the west edge of Library Mall at approximately Sta. 1153+50, 50' LT. Conflict with these facilities is not anticipated.

Record drawings are available upon request to the City of Madison.

Communications

UW Facilities has facilities within MG&E's duct running along the north side of State Street from East Campus Mall to Park Street. UW Facilities continue within the duct along the west side of Park Street.

If this duct would need to be relocated it would take 4-6 weeks for relocation. Utility Line Openings (ULO's) are called out in the plans where there is potential for storm sewer conflicts with MG&E/UW facilities. The ULO's should be performed as early in the project as possible to allow for redesign of storm sewer facilities or relocation of the duct.

Water

UW Facilities has existing chilled water within the project limits along the east side of Park Street. There are other UW water facilities located on the west side of Park Street and into Bascom Hill.

There is an existing water meter vault structure located within Bascom Hill. The contractor should not use the vault area for construction staging or use any heavy equipment over the top of this structure. If this structure is damaged it is the contractor's responsibility to repair the structure and its contents.

Record drawings are available upon request to the City of Madison.

Other

UW Facilities has an existing wood box conduit that runs along the west side of Library Mall. This box contains asbestos wrapped pipe approximately 3' - 4' below grade. Conflict is anticipated with wall

foundation construction. This may be in conflict during foundation construction and should be removed using the Bid Item "Remove & Dispose Asbestos Containing Material Tunnel/Pipe and Steam Vault Appurtenances", Bid Item 90032.

Record drawings are available upon request to the City of Madison.

SECTION 107.1 PUBLIC CONVENIENCE AND SAFETY

All vehicles traveling on public roads that are hauling materials or removals that are subject to spillage, by either wind or vibration, shall be equipped with tailgates and adequate sideboards. Canvas covers and any other protective devices shall be used to prevent spillage as determined necessary by the Engineer. The Contractor shall comply with all local ordinances.

The Contractor will arrange and conduct meetings with City officials, business owners, property owners, residents, Madison Central Business Improvement District (Mary Carbine, 608-443-1973), and the Greater State Street Business Association, (Sachi Komai 608-204-2644) to discuss the project schedule of operations including pedestrian access during construction operations. A construction schedule for the next two weeks shall be provided to the Engineer for distribution to businesses and for posting on the website. The first meeting shall be held prior to the start of work under this contract and one meeting per week held thereafter. Meetings shall be held at the onsite field office.

SECTION 107.7 MAINTENANCE OF TRAFFIC

Coordination

The Contractor shall notify the Engineer and the following City of Madison and UW departments forty-eight (48) hours in advance of any changes to traffic operations or closures of Park Street. Notifications must be given by 4:00 p.m. on Thursday for any such work to be done on the following Monday.

- City of Madison Police Department – Captain Carl Gloede (608) 261-9274
- City of Madison Fire Department – Ed Ruckriegel (608) 266-4457
- City of Madison Traffic Engineering – Scott Langer (608) 266-5987
- UW Transportation Services – Rob Kennedy, (608) 263-1034

The contractor shall furnish portable changeable message signs at the plan locations 10 calendar days prior to closing Park Street, notifying the traveling public of the closure. The Engineer shall approve the message.

Madison Metro Transit operates bus routes that utilize State Street (600 block), Lake Street, and Park Street. The Contractor shall notify Madison Metro Transit two weeks prior to beginning construction and two weeks prior to any work with lane restrictions in Lake Street and two weeks before closure of Park Street. The Contractor shall also notify Madison Metro Transit two weeks in advance of reopening Park Street. The contact for Madison Metro Transit is Katie Sellner (608) 261-9633.

Adjacent Streets

The Contractor shall at all times conduct his operations in a manner that will cause a minimum of inconvenience to the free flow of vehicle, bicycle, and pedestrian traffic on Lake Street and Park Street. Temporary lane closures and/or halting of traffic within open roadways for delivery of materials or equipment shall require flaggers. All traffic control items and flaggers for any temporary lane closure for delivery of materials shall be included in the bid item "Traffic Control", under this contract.

Roadway and sidewalk signing shall be in place as detailed on the plans and specials and in conformance with the Manual on Uniform Traffic Control Devices (MUTCD), latest edition. Conflicting signs shall be covered or removed by the City of Madison forces as necessary to avoid confusion. A two-week notice is required to Phil Nehmer (608) 267-1960 to cover or remove traffic signs.

The Contractor shall use only City of Madison designated truck routes for material haul roads as detailed in Section 618 of the State of Wisconsin Standard Specifications.

Pedestrian Movements & Building Access

The Contractor shall conduct operations in a manner that will cause the least interference to pedestrian movements adjacent to the work site and pedestrian access to buildings within the project limits. Pedestrian access shall be maintained at all times to buildings within the limits of construction. The stairs to the Humanities Building at Station 1152+00 and 1153+00 shall be considered access to the Humanities Building. The Contractor shall coordinate with each business or building manager for the best time and day of the week to construct utilities and sidewalk as to not interrupt the business or building operations during open hours, as indicated in the Prosecution and Progress. No sidewalk being used for pedestrian movements or access to buildings shall be closed overnight, unless approved by the Engineer and building manager.

The Contractor shall post "Walk Bikes" signs on both sides of State Street at Park Street, on both sides of State Street at Lake Street and on East Campus Mall at the end of the project working limits as shown in the Construction Staging Details or as directed by the Engineer.

The Contractor shall provide pedestrian walkways at all times within the project limits that provide the following pedestrian movements:

- East/West direction on State Street
- North/South direction on the west side of Lake Street
- North/South direction on the east side of Park Street
- North/South direction between East Campus Mall and Library Mall/Langdon Street

Pedestrian walkways shall be surfaced of existing concrete, asphalt, or temporary pavement and be maintained ADA accessible, and free from mud, sand, and construction debris. Sections of the walkways that are disturbed or removed during construction shall be repaired with temporary pavement or other Engineer approved material prior to reopening. Walkway sections shall not be closed overnight. Safety fencing or other Engineer approved method shall guide pedestrian walkways; traffic control barrels shall not be used for pedestrian corridors.

Pedestrian walkways shall have a minimum clear width of 12-feet. If two walkways are provided to serve a movement listed above, the minimum clear width shall be 8-feet.

The Contractor shall maintain pedestrian crosswalks between the 700 and 600 blocks of State Street across Lake Street at all times.

The Contractor shall not close the south sidewalk on Bascom Mall unless the north sidewalk is open and accessible to the existing sidewalk and stairs or to the new sidewalk, new stairs, and new crossing of Park Street. The new stairs shall be complete, including hand rails, prior to opening to pedestrian traffic. The Contractor shall not close the pedestrian bridge over Park Street to pedestrian traffic unless approved by the Engineer.

The pedestrian access through the balustrade wall on the southeast corner of the Wisconsin Historical Society property is the ADA accessible access for this building. This access shall remain open at all times, except when necessary to complete utility and sidewalk construction. The Contractor may elect to close this access during open building hours if the coordination requirements are met and temporary ADA accessible access is provided and approved by the building manager at the south entrance near Station 1151+75.

The Contractor shall not block access on Fitch Court between University Avenue and Lake Street with equipment, materials, vehicles, or traffic control devices.

The Contractor shall note that the following events scheduled for the State Street corridor that may impact the Contractor's schedule of operations.

- People's Brat Fest – May 25
- Cars on State - June 7
- Maxwell Street Days - July 18-20
- Ironman Wisconsin - September 7, 2014

Cars on State and Ironman Wisconsin do not use the 700 or 800 blocks of State Street, however large numbers of pedestrians should be expected in the area that weekend. The Contractor shall not use Lake Street for materials delivery or construction operations during these events. The Contractor shall have open the pedestrian crossings of Lake Street on both the north and south side of State Street and the west Lake Street sidewalk open for these events. The Contractor shall not close walkways on the 700 Block of State Street during these events. Additional work restrictions for these events can be found in Article 109, Prosecution & Progress.

Additional downtown Madison events may increase the pedestrian traffic to the project area. These include, but are not limited to:

May

Syttende Mai 10 Mile Run/Walk, May 17, <http://www.stoughtonwi.com/syttendemai.shtml>

Madison Marathon (Twilight 10K & Half Marathon), May 24-25, <http://www.madisonmarathon.org/>

June

Ride the Drive-Downtown, June 1, <http://www.cityofmadison.com/ridethedrive>

Make Music Madison, June 21, <http://makemusicmadison.org/>

August

Outreach Pride Parade & Rally (Memorial Union to Capitol), Aug. 10, <http://www.lgbtoutreach.org/>

Student Move-Out/Move-In (apartments) – August 14-16

Madison Mini-Marathon, Aug. 16, <http://www.madisonminimarathon.com/>

UW Student Move-In (Dorms): Aug. 28-29
<http://www.housing.wisc.edu/assignment/moving/>

September

UW Classes begin, Tues., Sep. 2, <http://www.secfac.wisc.edu/acadcal/>

Badger Football at home vs. Western Illinois, Sep. 6 <http://www.uwbadgers.com/schedules.html>

Ian's Pizza Eating Contest

October

Great Midwest Marijuana Harvest Festival, October 3-6
<http://madisonhempfest.com/>

Traffic shall be maintained as shown on the plans and as briefly described below.

Stage 1

Maintain all existing pedestrian traffic with the exception of Fitch Court which can be closed to all traffic between State Street and the east west connection of Fitch Court and Lake Street.

Stage 2

Maintain pedestrian traffic on walkways along the north and south sides of State Street and a minimum of one walkway between East Campus Mall and Library Mall at all times except as noted in this article. The crossing between East Campus Mall and Library Mall shall be located between Station 1153+00 and 1156+00. It is expected that the location of this walkway will be moved to accommodate construction activity. The contract quantities for Fence Safety and Temporary Pavement include payment items for relocating this walkway once. Compensation for relocating this walkway more than once will not be given.

The south walkway in the 700 block may be closed at utility lateral locations for a maximum of 5 calendar days to complete utility lateral work. The walkway shall remain open on either side of the closure if required to provide access to adjacent buildings. The south and north walkways shall not be closed at the same time. Sidewalk closed ahead signs at East Campus Mall and Lake Street are required.

The north walkway in the 700 block may be closed at utility lateral locations for a maximum of 2 calendar days to complete utility lateral work. The walkway shall remain open on either side of the closure to provide access to adjacent buildings. The south and north walkways shall not be closed at the same time. Sidewalk closed ahead signs at East Campus Mall and Lake Street are required.

The north and south walkways in the 800 block may be closed a maximum of 2 calendar days each to complete utility connections. The walkway shall remain open on either side of the closure to provide access to adjacent buildings. The north and south walkways shall not be closed at the same time.

Maintain a pedestrian walkway along the west side of Lake Street at all times, except during active utility and sidewalk construction, at which time this walkway can be closed and pedestrian traffic detoured to the east side of Lake Street. Restore the north-south walkway on the west side of Lake Street after completion of the utility work.

Install traffic control signs and pavement marking at the Lake Street and State Street intersection as detailed in the plans for utility work in Lake Street. Restore the intersection to normal operations on finished pavement within 10 calendar days of altering the traffic pattern.

Park Street - Stage 2A

Maintain the west sidewalk on Park Street at all times. The sidewalk on the east side of Park Street may be closed for relocation of the fire hydrant at Station 3001+38 and for completion of the storm sewer and water main crossings of the east Park Street sidewalk. Complete this work and reopen the east sidewalk on Park Street prior to removing the Park Street retaining walls and west sidewalk. The west Park Street sidewalk, ramp below the pedestrian bridge, and the curb ramp on the east side of Park Street below the bridge shall remain open while the east sidewalk is closed.

Maintain the north sidewalk on Bascom Mall at all times. The Contractor may close the south sidewalk on Bascom Mall for a maximum of 5 calendar days to complete storm sewer and sidewalk replacement.

Park Street - Stage 2B

Close Park Street to through traffic and close the west sidewalk on Park Street. Close the north sidewalk on Bascom Mall. Park Street may be closed for a maximum of 70 calendar days. The Contractor shall not close Park Street prior to May 19, 2014 and shall reopen Park Street prior to August 22, 2014.

Stage 3

Maintain pedestrian traffic on State Street and between East Campus Mall and Library Mall at all times. The crossing between East Campus Mall and Library Mall shall be located between Station 1153+00 and 1156+00.

Maintain a pedestrian walkway along the west side of Lake Street at all times, except during active utility and sidewalk construction, at which time this walkway can be closed and pedestrian traffic detoured to the east side of Lake Street. Restore the north-south walkway on the west side of Lake Street after completion of the utility work.

Maintain a pedestrian walkway along the east side of Park Street at all times. The walkway may be moved east to accommodate utility and sidewalk construction. The walkway shall be no farther east than Station 1151+00.

Maintain pedestrian access to building entrances at all times except during sidewalk construction. Coordinate the closure of access with the business or building manager prior to constructing sidewalk as described earlier in this section. The sidewalk access must be reopened within 24 hours of it being closed. Pedestrian access to building entrances shall be surfaced of existing concrete, asphalt, or temporary pavement and be maintained ADA accessible, and free from mud, sand, and construction debris. Sections of the access routes that are disturbed or removed during construction shall be repaired with temporary pavement or other Engineer approved material prior to reopening. Safety fencing or other Engineer approved method shall guide pedestrian access routes; traffic control barrels shall not be used.

Stage 4

The Contractor may close the east sidewalk on Park Street to complete sidewalk work. The new crossing of Park Street shall be open and the west sidewalk shall be open prior to closing the east sidewalk. Park Street closures must take place within the construction window of May 19, 2014 to August 22, 2014.

The Contractor may close the north and south Lake Street crosswalks to complete the granite paver installation. The north and south crosswalks shall not be closed at the same time.

Stage 5

Maintain 20 feet clear pedestrian walkway on State Street from Lake Street to Park Street and 10 feet clear pedestrian walkway from East Campus Mall to the Confluence area at all times. Maintain clear all sidewalks on Park Street and Lake Street in the project limits. Maintain access to all walkways and sidewalks adjoining the project limits. Maintain access to all building entrances.

The Contractor shall furnish and install Fence Safety around areas of work that remain including walls without seat caps or seating surfaces and planters that are not backfilled, or as directed by the Engineer.

SECTION 107.15 NOTICE TO CONTRACTOR

The Contractor shall take care not to damage the pedestrian bridge over Park Street or the balustrade on State Street along the Wisconsin Historic Society. Both the balustrade and the bridge structure are contributing elements to the National Register listed Bascom Hill Historic District.

Vertical clearance of the bridge structure is unknown. Construction deliveries may need to find an alternate route to avoid traversing under this structure if clearance is a concern.

The contractor is responsible for damage to either of these elements incurred as a result of construction activities.

The Contractor is notified that the trees on Bascom Hill are important elements to the National Register listed Bascom Hill Historic District. The plans call for fence to be placed around the trees. The Contractor shall conduct operations to avoid the tree protection area to the greatest extent practical. The Contractor

shall not operate equipment or store materials within this area except as necessary to complete the contract work.

SECTION 108.2 PERMITS

The City of Madison has submitted a DNR Notice of Intent (NOI) to obtain coverage under a Construction Site General Permit. A City of Madison Erosion Control permit has been obtained and weekly inspections shall be completed by City Staff.

The Contractor shall meet the conditions of the City of Madison erosion control permit by properly installing and maintaining the erosion control measures shown on the plans, specified in these Special Provisions, or as directed by the Construction Engineer or his designees. This work will be paid for under the appropriate contract bid items or, if appropriate items are not included in the contract, shall be paid for as Extra Work. A copy of the permit is available at the City of Madison, Engineering Division office.

This permit covers trench dewatering to a maximum of 70 gallons/minute from the project, provided appropriate control measures are in place. The City's obtaining this permit is not intended to be exhaustive of all permits that may be required to be obtained by the Contractor for construction of this project. It shall be the responsibility of the Contractor to identify and obtain any other permits needed for construction.

ARTICLE 109 PROSECUTION AND PROGRESS

The Contractor shall begin work on **MAY 19, 2014**. Work shall begin only after the start work letter is received. The Contractor shall begin work within 7 calendar days of receiving the start work letter.

To revise the start date, submit a written request to the Engineer at least two weeks before the intended start date. The Engineer will approve or deny that request based on the conditions cited in the request and its effect on the City's scheduled resources.

The pre-construction meeting will be scheduled after the contract is awarded.

An interim completion date of 7:00 PM on **AUGUST 21, 2014** is required for all work necessary to open Park Street to traffic. There will be no extension given to this completion date.

An interim completion date of 7:00 PM on **AUGUST 29, 2014** is required for all cast in place concrete wall items; all pavement surface items, including sidewalk, sidewalk band, granite paver, and structural slab items; all sodding and turf restoration; and all permanent lighting items. Permanent lighting items shall be fully operational and all temporary lighting shall be removed by this date. There will be no extension given to this completion date.

An interim completion date of 7:00 PM on **OCTOBER 31, 2014** is required for all work except perennial, shrub, and groundcover plantings that are not available in the fall and will be planted in the spring per the following paragraph.

All tree & bulb planting shall occur between the dates of September 1, 2014 and October 1, 2014. The Contractor shall coordinate tree planting work with City of Madison Forestry (call Dean Kahl, 608-266-4891). Perennial, shrub, and groundcover plantings shall be completed between September 1, 2014 and October 31, 2014 or may be completed in the spring between April 15, 2015 and May 31, 2015 if plant materials are not available for fall planting. The **FINAL COMPLETION** date shall be **JUNE 1, 2015**.

Should the Contractor wish to use High Early Strength Concrete on the job to meet the schedule no additional compensation shall be given.

It is anticipated the Contractor will need multiple crews working in multiple locations to complete the job in the time frame specified.

The City of Madison will be removing the following from the project limits. The Contractor shall notify the listed people a minimum of two weeks prior to the start of construction to schedule the removal of these items.

<u>Item</u>	<u>Contact Name and Phone Number</u>
Existing Traffic Signing	Phil Nehmer, 608-267-1960
Trash Receptacles	Tom Skaife, 608-267-4937

The Contractor shall place crushed aggregate base course on the same day as excavation and grading of subgrade.

MadCity Communications maintains fiber optic cable in City owned conduit between Lake Street and 723 State Street. This line will not be maintained during construction.

The Contractor is advised to mobilize construction equipment that is a size suitable for maneuvering in the limited area throughout the project. There are many movement limitations both horizontally and vertically in the project limits (trees, overhead wires, poles, etc). The Contractor shall be responsible for any damages done to items inside the project limits.

The Contractor shall ensure permanent or temporary lighting within the project limits is functional at all times during the project.

There is a great concern from the business & property owners along the project regarding the amount of dust that will be present from the construction operations. The Contractor shall minimize the amount of dust created from construction.

The Contractor shall take care in protecting all building faces from damage, dirt, and concrete. When doing the work near the buildings, the Contractor shall put a shield (plywood, sheeting, etc.) up against the building to protect it. The cost of this work is included in the bid item that is being worked on at the time. If any damage, dirt, or concrete does occur to the building face the Contractor is responsible for returning the building face to its original condition.

Once the concrete pavement and concrete sidewalks are poured the Contractor shall take extreme care to preserve the condition of the new concrete, not allowing equipment to "track-up" the new pavement or new sidewalks. The sidewalk areas are expected to be clean of any markings at the opening of the project. The Contractor shall be responsible to replace any pavement or sidewalk that is damaged.

No utility work, utility disruption, or sidewalk construction can commence in front of a building entrance without notifying the business or building manager a minimum of 48 hours in advance. Utilities or entrances shall not be shut down during the business or building open times unless approved by the business or building manager and the Engineer.

The contractor shall not operate equipment or create noise levels greater than 60 decibels within 50 feet of any entrance to St. Paul's Church (723 State Street) Monday thru Friday from 12pm – 1pm for the duration of the construction.

The Contractor shall not store materials or equipment outside the work zone unless approved by the Engineer.

The Contractor shall contact Tom Skaife, City of Madison Parks Department, at 266-6031 two weeks prior to the need for installation of the Area Light and Pedestrian Light Banner installation. All banners must be installed prior to completion of the project.

Cars on State is an event that takes place on the 100 through 600 blocks of State Street. The event is from 6:00 AM to 6:00 PM Saturday June 7, 2014. The Contractor shall have the storm sewer tap and water main connection in Lake Street completed, the concrete pavement and curb and gutter paved on Lake Street, and all temporary traffic control removed from travel lanes on Lake Street by 7:00 PM on Friday June 6, 2014. The Contractor's operations on Saturday June 7 shall be such that dust does not carry from the project site to the 100 through 600 blocks of State Street.

Maxwell Street Days are from 6:00 AM Friday July 18, 2014 to 6:00 AM July 21, 2014. The Contractor shall not work in the 700 block of State Street or on Lake Street on these days and shall remove all equipment, barricades and other items that will impede the free flow of pedestrians between the 600 & 700 blocks of State Street during Maxwell Street Days. The Contractor shall have paved surface on all areas south of the reference line between Station 1156+50 1159+00 and maintain the area free of barricades, safety fence, materials, and equipment. The Contractor's operations on between 7:00 PM on July 17, 2014 through 6:00 AM on July 21, 2014 shall be such that dust does not carry from the project site to the 100 through 700 blocks of State Street. The Contractor shall present a plan of what State Street will look like 10 days prior to the event to the Engineer.

The Contractor shall notify Dean Kahl, City of Madison Parks Division – Forestry at (608) 266-4816 at least two weeks before construction to verify that the city completed the tree pruning operations.

The schedule of operations shall conform to the construction staging as shown in the plans and as described under the Section 107.7 Maintenance of Traffic, unless modifications to the schedule are approved in writing by the Engineer. The schedule of operations shall conform to the following construction staging as described herein:

Stage 1:

Remove concrete curb, walls, benches, and trees in the 800 block of State Street and install temporary pavement. Construct utility, lighting, storm sewer, and sidewalk items on Fitch Court. Install temporary lighting. Stage 2 can begin prior to completion of work on Fitch Court. Furnish and install safety fence between the Fitch Court work area and the south walkway on State Street if Stage 2 is started prior to completing work on Fitch Court. Fitch Court work may also be completed during Stage 3.

Stage 2:

Complete removals and construct sanitary sewer, storm sewer, water main, parks watering, and electrical items in the center of the State Street right of way. Construct the Reinforced Concrete Sidewalk Band, Sidewalk Band, and C1 Concrete Sidewalk 7-inch items in the center of the State Street right of way. Begin construction of the seat walls & LEAF structure in the Confluence area.

Park Street – Stage 2A

Complete the storm sewer and water main crossing of the east sidewalk on Park Street. Construct the storm sewer and sidewalk replacement work items on the south sidewalk of Bascom Mall.

Park Street – Stage 2B

Begin construction of the storm sewer, water main, walls, stairs, and sidewalk on Park Street and Bascom Mall.

Stage 3:

Complete remaining storm sewer, water main, and sanitary sewer bid items. Complete concrete bases and electrical installations. Complete Parks Watering items and irrigation items. Construct the concrete sidewalk, cast in place walls, and structural slab items on the north and south edges of the State Street right of way. Complete the cast in place walls, sidewalk, pavers, and LEAF sculpture in the Confluence area. Complete construction on Bascom Mall and Park Street.

The Contractor shall complete all curb and gutter, concrete gutter, HMA pavement, concrete pavement, and pavement marking on Park Street prior to opening Park Street to through traffic. The Contractor shall have Park Street open to traffic within 60 calendar days after closing. If the contractor fails to open Park Street within 60 calendar days, liquidated damages will be assessed in accordance with Section 109.9 of the standard specifications and these Special Provisions.

Stage 4 (Completion date: August 29, 2014):

Complete granite pavers and sidewalk items on the east side of Park Street. Complete granite paver items at Lake Street. Begin working on remaining seat wall, underbench lighting, furniture installations, and finishing items.

Stage 5 (Completion date: October 31, 2014):

Complete tree and bulb plantings. Plant shrubs, perennials, groundcovers that are available from the nursery. Complete all remaining seat wall, underbench lighting, banner installation, and furniture installation.

BID ITEM 10901 FIELD OFFICE

DESCRIPTION

This item shall consist of providing a Field Office for use by the Engineer during construction. The University Book Store (711 State Street) has reserved space for rent under a 6 month lease in anticipation of this project. The lease shall include utilities and restroom access. The Contractor shall contact Pat McGowan at the University Book Store (608-310-5950) to coordinate the lease agreement. The Contractor shall furnish a table and 8 chairs for the office. The Field Office shall remain available for the Engineer to use for the duration of the construction and shall not be removed or closed without the permission of the Engineer.

METHOD OF MEASUREMENT

Field Office will be measured as a single lump sum unit.

BASIS OF PAYMENT

Field Office, measured as provided above, shall be full compensation for securing and maintaining the facility and furnishing tables and chairs. The maximum payment for this bid item is set at \$9,000.00 based on a 6 month lease of the reserved space at the University Book Store.

SECTION 109.2 PROSECUTION OF WORK

Motorized construction equipment shall not be operated from 7:00 PM until the following 7:00 AM, unless prior written approval is obtained from the Engineer. The Contractor will be able to start at 6:00 a.m. for concrete pours at building entrances and utility lateral connections if approved by the Engineer. The Contractor is encouraged to perform the sawcutting prior to 10:00 PM whenever possible.

SECTION 109.9 LIQUIDATED DAMAGES

The City will not grant time extensions for the following:

- Severe weather as specified in State of Wisconsin Standard Specifications 108.10.2.2.
- Labor disputes that are not industry wide.
- Delays in materials deliveries.
- Conflict with utilities.

The fixed, agreed, and liquidated damages for failure to complete the work at any of the locations in section 109 of these Special Provisions in timeframes specified in said section shall be \$855 per calendar day. In the event that more than one project location is not completed in the timeframe specified, the maximum fixed, agreed, and liquidated damages shall not exceed \$1155. The fixed, agreed, and liquidated damages for failure to complete all work within the contract in the timeframe specified in Section 109.2 of these Special Provisions shall be \$1155 per calendar day.

ARTICLE 201 EXCAVATION CUT

The quantity to be paid for as Excavation cut will be set forth in the contract plans without measurement thereof. Any modifications to the contract quantity caused by corrections or revisions of the original contract plan, which have been approved by the Engineer, will be measured in accordance with the applicable section of the Standard Specifications and the contract quantity will be adjusted accordingly to determine the final pay quantity.

Any undercut or excavation, directed by the Engineer, beyond the limits shown on the plan shall be measured in the field and paid for as excavation cut.

All excavated surfaces terminating on clayey soils shall be proof rolled at the discretion of the Engineer with a heavily loaded triaxle dump truck or similar heavy, rubber tired vehicle. Excavation should be accomplished with a backhoe equipped with a cleaning bucket. Soil conditions will vary through the project. The Contractor shall provide excavation schedules to the engineer at the weekly meetings. The Engineer or the City's Geotechnical Engineer will inspect and/or test the subgrade soils below all foundation excavations prior to backfilling the excavation with base material. The Contractor shall not backfill foundation excavations without inspection or testing completed by the Engineer or the City's Geotechnical Engineer.

BID ITEM 20221 TOPSOIL

Topsoil shall be placed to a depth of 12-Inches.

ARTICLE 203 REMOVAL OF MISCELLANEOUS STRUCTURES

Remove existing concrete pavement in a manner that causes minimal disturbance to the underlying base material.

Removing pavers and any subsurface paving supporting the pavers shall be performed in accordance with Article 203 and will be paid as Removing Sidewalk and Drive.

The Contractor shall note that the original State Street pavement (pre-1970) may remain below the raised concrete stage area. It is possible this pavement may be encountered during excavation for the seat wall foundations in the Confluence area.

BID ITEM 20314 REMOVE PIPE (WATER)

Removal of abandoned water main as it relates to this project shall be as follows:

- Sawcut and remove the existing water main at the limits of abandonment.
- Plug the end(s) of abandoned water main encountered in trenches while installing or removing other utilities. Plugging the water main shall be considered incidental to these removal operations.
- Prior to abandonment, maintain active water services on the existing water main until the appropriate bypasses are approved by the Engineer and properly installed.
- Dispose of the removed water main, and determine a location to appropriately do so.

- Backfill all trenches, holes, and pits resulting from the removal or abandoning of water main or other water structures according to Standard Specifications. Fill material required shall be considered incidental to the removal or abandonment.

SECTION 203.2 DISPOSING OF MATERIALS

The Contractor shall comply with Section 203.2 of the City of Madison Standard Specifications for Public Works Construction with regard to salvaging castings.

BID ITEM 20336 – PIPE PLUG

With regard to the City of Madison Standard Specifications for Public Works Construction 2014 Edition Article 203.2(c), any pipe found in a trench that is less than 10" in diameter while installing a sewer facility shall be considered incidental to the pipe being installed.

Any pipe plugs required to abandon or remove a sewer access structure (pipes directly connected to the structure) shall be considered incidental to abandoning or removing the structure regardless of the size of the pipe being abandoned.

BID ITEM 21001 EROSION CONTROL IMPLEMENTATION PLAN

In addition to the requirements detailed in Section 210.1(a) the Contractor shall supply a dewatering plan as part of the Erosion Control Implementation Plan. At minimum the dewatering plan shall include the Contractor's methods, practices, and or devices to perform TYPE I or TYPE II Dewatering per Section 502.1(c) Dewatering in the City of Madison Standard Specifications for Public Works Construction and Wisconsin Department of Natural Resources (WDNR) SOC Technical Standard 1061 Dewatering. If TYPE II Dewatering is expected to be used at a rate in excess of 70 g.p.m. the dewatering plan shall also include a copy of any applicable WDNR permits.

BID ITEM 20801 – SODDING

MATERIALS

Sod shall be approved by a UW Madison campus representative before it is laid at a project site. All sod used on campus shall be comprised of at least 25% fescue lawn grasses, mixed with Kentucky Bluegrass and perennial rye grasses, and free of pernicious weeds. Sod shall be sourced from locations where it is grown in mineral soil.

Provide Highland type, nursery-grown sod of dense growth, with a strong, fibrous root system. Cut the sod at a length of approximately 2" (5.1 cm), and rake the sod free of debris.

Fertilizer shall conform to the requirements set forth in Subsection 207.2(b) Fertilizers. All fertilizers shall conform to the local municipal regulations.

CONSTRUCTION

Protect sod from sun, wind and dehydration during transport to site.

Deliver fertilizer to the site in original, sealed containers, and store in a waterproof space. Provide the manufacturer's name, analysis, trademark and guarantee as per standards of the Wisconsin Department of Agriculture on the containers.

Do not install sod when the air temperature is above 95 degrees F.

Weeds shall be hand-pulled from all sodded areas by the contractor.

Watering: Water sodded areas thoroughly every 2 to 3 days, as required in the absence of rain.

Fertilizing: Fertilize sodded areas in early spring at a rate equivalent to 1/2 lb. per 1,000 sq.ft. (0.24 kg/100 sq. m.).

Perform all necessary weeding, mowing and trimming, and shall replace any section larger than 1 sq. ft. (0.09 sq. m.) that is bare or otherwise damaged. Mow grass to a height of 2-1/2" at least twice prior to acceptance.

Mowing: Mow cool season grasses, such as bluegrass, tall fescue, perennial ryegrass, and etcetera to a height of 2-1/2" in spring and fall, and no less than 3" from June through September. Maintain heights through repeat mowings as needed during the length of the contract.

Remove no more than forty (40) percent of grass leaf during any single mowing operation.

Include trimming around obstacles and the raking of excess grass clippings in the mowing operation. Do not use weed eaters around tree trunks.

Promptly remove waste and excess material from the seeding operation. Clean adjacent paved areas, and repair any damage to existing adjacent turf areas.

SECTION 301.3 REINFORCING STEEL

Reinforcing steel will not be measured for payment and is considered incidental to the bid item that calls for it.

Epoxy coating is required for all reinforcing steel.

SECTION 301.4 EXPANSION JOINT FILLER

The Contractor shall furnish and install expansion joint filler where called for in the plan details. Expansion joint filler material shall be closed cell foam type conforming to ASTM D 1752, ASTM D 5249, Type 41 2, ASTM D 7174.

SECTION 301.7 CURING

Curing compound shall be as required in the Special Provision articles for C1 Concrete Sidewalk and Colored Concrete Sidewalk.

SECTION 303.2 SIDEWALK JOINTS

All scoring and jointing for sidewalk and structural slab items shall be saw cut as detailed in the plans. The saw cutting for the scoring and joints is incidental to concrete pavement, all concrete sidewalk items, and all structural slab items.

ARTICLE 500 - SEWERS & SEWER STRUCTURES

STORM SEWER GENERAL

The designer of this project is Eric Dundee (608-266-4913).

Storm sewer work will consist of installing and removing storm sewer pipe, inlets, access structures, and castings. The project will also include connecting private storm sewer drains and tapping into existing structures. Structures requirements shall follow specifications herein and also as detailed on the storm sewer plans and schedules.

Reconnection of existing pipes at new structures, or new pipes at new structures, shall be considered to

be part of the work required to construct the new structure or to construct the new sewer pipe and shall not be rewarded with additional compensation. However, if the structure being removed is larger than the new structure, thus requiring additional pipe, the new pipe shall be paid under the appropriate bid item and the connection of the old pipe to the new pipe shall be accomplished with a concrete collar.

Where a new structure is to be constructed at an existing pipe, it is expected that the contractor shall saw cut the existing pipe in the required location to accommodate the placement of the new structure. If the contractor for his or her convenience deems it more suitable to remove the existing pipe to a full joint, the additional pipe and concrete collar required to reconnect to the new structure shall be the contractor's responsibility and shall not be compensated.

If there are structures where the pipe walls are to be poured into the structure roof of both the pipe walls and the structure casting are to be poured in the structure roof, the contractor shall not be provided additional compensation for complying with the structure requirements detailed on the storm sewer chart and plans.

Precast structures are only allowed where field poured structures are not specifically called for, and no precast structures are allowed until ULO's are completed and approval of the design engineer has been received.

The Contractor is notified that new storm sewer pipe and structures will be installed in close proximity to existing utilities. Coordination with utility companies and field adjustment of the storm sewer design is anticipated.

SANITARY SEWER GENERAL

The Sanitary Sewer Designer for this project is Mark Moder, Phone: 261-9250, mmoder@cityofmadison.com.

This project consists of installing 118' of 8" diameter pressure sanitary sewer main (Fitch Court), 40' of 12" diameter Pressure Sanitary Sewer main with a casing pipe on State Street, installing 5 new sewer access structures, adjusting 4 sewer access structure rims, installing 3 laterals into 723 State Street, and completing 1 sanitary sewer point repair.

All new sanitary sewer access structures shall include the Neenah R-1550-0054 with the new City of Madison casting detail (see S.D.D. 5.7.16 of the City of Madison Standard Specifications for Public Works Construction 2014 edition). All new sewer main connections may be factory cored and shall be included in the structure. All existing lateral and main connections shall be field cored to accommodate existing conditions and shall be compensated under BID ITEM 50791 SANITARY SEWER TAP. All sewer main and/or laterals not slated for replacement that are damaged during the installation of a structure shall be replaced by the Contractor and shall be considered incidental to the project. All benches and flowlines shall have a smooth trowel finish.

The Sanitary Sewer Point Repair will be paid for under pipe and select fill bid quantities. The paid quantities for these items will be reflect the length of pipe installed to remove the broken pipe encountered. Connections to the existing main for the sanitary point repairs shall be paid for under BID ITEM 50357 COMPRESSION COUPLING.

Tunneling is expected to be required at the existing utility crossings. Any utility tunneling required shall be considered incidental to the pipe being installed.

It is advised that the Contractor visit the site prior to bidding to determine the type of trench protection that will be necessary for the sanitary sewer main installation.

BID ITEM 50390 – SEWER ELECTRONIC MARKERS

With regard to the City of Madison Standard Specifications for Public Works Construction 2014 Edition Article 503.3(c), each sanitary lateral shall have a minimum of two (2) electronic markers with the City providing the Contractor with the required number of electronic markers. For sanitary laterals which only include the installation of a wye, a marker ball shall be installed directly above the wye connection to the main.

BID ITEM 50801 – UTILITY LINE OPENING (ULO)

The work under this item shall be completed in accordance with Article 508 of the Standard Specifications for Public Works Construction. It is the discretion of the contractor to locate utilities by either a trench excavation or by a pothole technique. However, the contractor shall not be compensated more than once for multiple utilities located within a maximum distance of five (5) feet long.

PART VI - TRAFFIC ENGINEERING ELECTRICAL

ARTICLE 601 - GENERAL

All work performed on the lighting and conduit/handhole system shall be in accordance with the Wisconsin Electrical Code, and applicable provisions of Section 601 of the Standard Specifications, and these special provisions and plans.

Lighting, General

Conductors to the luminaire shall be two No. 14 solid annealed copper, UF, 600 volt, as manufactured by Genral Cable, Anaconda, Rome, Kaiser, or approved equal, with a Bussmantype FNM or FNQ fuse or the required size (refer to the following table).

Required Size – In-Line Secondary Fuses					
VOLTAGE	LUMINAIRE WATTAGE				
	400W	250W	200W	150W	100W or less
480V	2 amps	2 amps	2 amps	2 amps	2 amps
240V	5 amps	3.2 amps	2 amps	2 amps	2 amps
120V	6.25 amps	5 amps	5 amps	3.2 amps	2 amps

- A. The phase wire shall not be spliced between the fuse assembly and luminaire. A sufficient length of No. 12 conductor shall be installed in the pole to permit removal of this fuse-holder through the handhole before disconnecting.
- B. A 24" length of No. 12 THHN Stranded Conductor tail shall be installed to supply wires permitting easy removal of fixture wires and fuse holder through the handhole. A tail of No. 4 wire from the neutral conductor splice shall be grounded to each ground rod and metal street light pole. The following color coding shall be used at all street light bases: Midnight Circuit (red), all night circuit (black), and neutral (white). Electrical splices and connections shall be electrically secure and made with pressure or compression fittings as manufactured by Thomas & Betts, Burndy, 3-M (scotch lock brand) or approved equal and used as recommended by the Engineer. Taps and splices shall be protected in the following manner:

1. All wire connections shall be coated with No-Lox Compound; taps and splices made with irregularly shaped connectors shall first be built up with insulating material "Air Seal" No. 18415 manufactured by Kearney or approved equal.
2. All sharp corners and voids, and fuseholders shall be filled; over this, install three half lapped layers of rubber electrical tape, dielectric strength, 300 volts per mil—self vulcanizing tape, installed as per manufacturer's instructions.
3. Apply 3 half lapped layers Scotch Brand 33 Plus or approved equal, vinyl plastic electrical tape.
4. Dip the entire splice 1" beyond the insulating material in Scotch-Kote or approved equal.
5. The constructed splice shall be allowed to air dry completely before insertion into the street light pole.
6. All wires leaving the splice shall be in one direction. Split bolts, when used shall be hammered and retightened three times and spacer shall be provided between any copper and aluminum conductors.
7. The fuse holder shall be connected to the All-Night circuit or Midnight circuit as indicated on the plans with an approved wire nut (3M or Ideal). The wire nut shall be dipped in Scotch-Kote or approved equal.

C. The lighting units shall be connected with the underground or overhead cable, as is applicable, and shall provide a complete, operations system when finished.

1. The removal of the existing wire that is not required as part of the project shall be completely removed and disposed of by the Contractor. This work is incidental to the electrical work.
2. Abandoned electrical conduits not required as part of the project shall be completely removed from existing manholes and the old entrances to the manholes shall be plugged by the Contractor. This work is incidental to the electrical work.
3. All splices shall be located in the handholes or as approved by the Engineer.
4. Connecting new conduit into an existing structure is included in the cost of the conduit.
5. Conduit that is less than 18 inches below the bottom of the concrete pavement shall have a concrete cap poured over the top of the conduit. The cap shall be a minimum of 12" wide and 5" thick and run the length of the conduit where the conduit is less than 18" below the bottom of the concrete pavement. The cost of the cap shall be included in the cost of the conduit.

SECTION 604.5 REMOVAL OF EXISTING STREET LIGHT POLE

604.5(b)

The Contractor shall remove and deliver two State Street Glitter Light poles and fixtures to the City of Madison Parks Division at Goodman Field, 1402 Wingra Creek Parkway, Madison WI. Coordinate delivery of the light poles with Laura Bauer, (office: (608) 266-6031 mobile: (608) 334-8870). The Glitter Lights are located at approximate Station 1158+05.

PART VII - WATER MAINS & SERVICE LATERALS

ARTICLE 701 – GENERAL

Water main

This project consists of water main improvements on State Street and Park Street. A general outline of the work is as follows:

- Install bypass system as described in these provisions and shown on the plans.
- Cut off existing water main on State St. as designated on the plans.
- Remove the abandoned water main during proposed storm installations.
- Install proposed water main as shown on the plans. Remove and dispose of retired storm sewer pipe during installation.
- Following water main testing, install new water services as designated on the plans, and remove bypass systems.

View the site prior to bidding and become familiar with existing conditions and utilities.

Parks Watering System

This is a potable and non-potable water system. The potable system will include the constructed hose bibs, water valves and curb stops located in various locations throughout the project. The potable water system will be protected by vacuum breakers at all the hose bibs. The non-potable water system will include the irrigation system for various planters within the project limits. The potable water system is protected from the non-potable water system by reduced pressure regulator.

The water system will be buried approximately 4 to 5 feet deep. The depth of bury may vary to avoid conflicts with other utilities, but at no time will the system be less than 24 inches deep. The curb stops required for the parks watering system shall require a water valve box. All water valve boxes located within the street shall be traffic rated and be in accordance with the City of Madison Standard Specifications for Public Works Construction 2014 edition.

The City of Madison Parks Department shall winterize the system by blowing water out the potable and non-potable parks watering system with an air compressor. The bury depth between the air blowout access and the water main shall be buried at a minimum depth of 6.5 feet.

All fittings below finish grade shall be schedule 80 brass fittings with flare connections. All soldered connections shall be soldered with silver solder for a stronger union. All work shall be tested to 100 psi for a duration of 1 hour before work will be accepted under this contract. Perform work in accordance with these provisions and City of Madison Standard Specifications for Public Works Construction 2014 edition.

SECTION 703 CONSTRUCTION METHODS

Perform all work in accordance with these provisions and the City of Madison *Standard Specifications For Public Works Construction, 2014 Edition* (adopted January 21, 2014) or most recent. Keep all valves accessible and functioning throughout the duration of the work, unless directed otherwise by a Water Utility representative.

BID ITEM 70040 – FURNISH AND INSTALL HYDRANT

Item 7. in Section 704.7.2 (3) shall be modified as follows: Fire Hydrants shall be painted black.

BID ITEM 90001 – CRACK AND DAMAGE SURVEY

DESCRIPTION

This special provision describes conducting a crack and damage survey of the buildings and any existing features/walls to remain including: the Wisconsin Historical Society balustrade, University Club brick planter wall, Memorial Library terrace wall, Pres House concrete retaining wall, the University Bookstore stone wall, and the Park Street pedestrian bridge located within the project limits.

This Crack and Damage Survey shall consist of two parts. The first part, performed prior to construction activities, shall include a visual inspection, photographs, and a written report describing the existing defects in the buildings being inspected. The second part, performed after the construction activities, shall also include a visual inspection, photographs, and written report describing any change in the building's condition.

Prior to any construction activities, thoroughly inspect the building structures for existing defects, including interior and exterior walls. Submit a written report of the inspector's name, date of inspection, descriptions and locations of defects, and photographs. The intent of the written report and photographs is to procure a record of the general physical condition of the building's interior and exterior walls and foundation. The report shall be typed on bond paper and be in text form.

The photographs shall be taken by a professional photographer capable of producing sharp, grain free, high-contrast colored pictures with good shadow details. The photographs shall be 3 1/2 inch by 5-inch color prints and mounted in protective storage pages. Each photograph shall contain the following information:

I.D. _____
Building Location _____
View Looking _____
Date _____
Photographer _____

Also include a digital CD of all photographs.

Prior to the start of any construction activities pertinent to this survey, submit a copy of the written report and photographs to the Engineer.

After the construction activities are complete, conduct another survey in the same manner, take photographs, and submit another written report to the Engineer.

In lieu of photographs, a professional videographer may be hired to use a video camera capable of producing a DVD with the clarity required to perform this work.

METHOD OF MEASUREMENT

Crack and Damage Survey will be measured as a single complete unit of work.

BASIS OF PAYMENT

Payment is full compensation for providing the before and after written reports, photographs or DVDs; and for furnishing all labor, tools, equipment, and incidentals necessary to complete the contract work.

BID ITEM 90002 – TEST STEAM TUNNEL/PIPE AND STEAM VAULT APPURTENANCES FOR ASBESTOS

DESCRIPTION

Work under this item shall include exposing, sampling, and testing materials in abandoned steam tunnels and steam vaults containing Ricwil pipe and casing and steam appurtenances for potential asbestos containing material. Sampling and testing is intended for abandoned steam tunnels/pipes and vaults that are proposed to be removed as indicated in the plans.

The locations and number of samples for testing are as shown in the plans or as determined by the Engineer.

Testing shall be done by a licensed abatement contractor. The Contractor shall schedule an asbestos abatement contractor three days prior to needing sampling of potentially asbestos containing material. Samples will be collected and results will be provided to the Engineer within 24 hours of sampling being completed.

CONSTRUCTION

The Contractor shall remove pavement and excavate to expose the steam tunnel or pipe, and or the steam vault to the requirements of the abatement contractor such that the abatement contractor can obtain samples for testing and an elevation of the top and bottom of the steam tunnel or pipe can be determined. Excavation shall be in accordance to Section 508.1(a) of the Standard Specifications. It is the discretion of the Contractor to locate utilities by either a trench excavation or by a pothole technique. The Contractor shall backfill the excavation after sampling, or, protect the site with additional safety fencing as directed by the Engineer until the test results are obtained and the Contractor can begin removal operations, if necessary. Safety fencing shall meet the requirements of Bid Item 90003 Fence Safety. No additional compensation will be given under Bid Item 90003 Fence Safety for safety fencing installed around sample sites.

METHOD OF MEASUREMENT

Test Steam Tunnel/Pipe and Steam Vault Appurtenances shall be paid for as a unit price each for collecting samples and completing lab testing.

BASIS OF PAYMENT

Test Steam Tunnel/Pipe and Steam Vault Appurtenances shall be measured as described above and shall be paid for at the contract price. Payment is full compensation for securing an abatement contractor and coordinating the sampling and testing schedule; for removing pavement and for excavation and exposure of the steam tunnel and steam vault; for furnishing and placing backfill, or, for furnishing and installing safety fence; for mobilization of sampling crews, sampling of materials, and lab submittals of pipe materials; for all sampling and testing fees; and for furnishing all labor, tools, equipment and incidentals necessary to complete the work.

BID ITEM 90003 – FENCE SAFETY

DESCRIPTION

This special provision describes constructing a plastic fence at locations shown on the plans or directed by the Engineer and as hereinafter provided.

MATERIALS

Provide notched conventional metal "T" or "U" shaped fence posts.
Provide fence fabric meeting the following requirements.

Color:	International orange (UV stabilized)
Roll Height:	4 feet
Mesh opening:	1 inch min to 3-inch max
Resin/construction:	High density polyethylene diamond mesh
Service temperature:	-60° F to 200° F (ASTM D648)
Tensile Yield:	Avg. 2000 lb per 4 ft. width (ASTM D638)
Ultimate tensile strength:	Avg. 3000 lb per 4 ft. width (ASTM D638)
Elongation at break (%):	Greater than 100% (ASTM D638)

Chemical resistance: Inert to most chemicals and acids

CONSTRUCTION

Drive posts into the ground 12 to 18 inches or use other Engineer approved method to secure posts. Space posts at 7 feet.

Use a minimum of three wire ties to secure the fence at each post. Weave tension wire through the top row of strands to provide a top stringer that prevents sagging.
Overlap two rolls at a post and secure with wire ties.

METHOD OF MEASUREMENT

Fence Safety will be measured by the linear foot along the base of the fence, center to center of posts. Fence ordered removed by the Engineer to provide access for Maxwell Street Days and other special events shall be measured again for payment upon re-installation. Fence moved or removed and replaced for construction activities will not be measured and paid again.

BASIS OF PAYMENT

Payment is full compensation for furnishing and installing fence and posts; maintaining the fence and posts in satisfactory condition; removing and disposing of fence and posts at project completion; and for furnishing all labor, tools, equipment and incidentals necessary to complete the work.

BID ITEM 90004 – REMOVE CONCRETE CURB

DESCRIPTION

This special provision describes removing reinforced concrete curb located in the 800 block of State Street in accordance with the pertinent provisions of Article 203 of the Standard Specifications and as hereinafter provided.

Remove Concrete Curb locations and details of the concrete curb to be removed are shown in the Removal Plan. The Removal Plan Details are copied from the original construction plan detail, not an as-built plan, and are included to provide an estimate of work effort for the removal item. All materials shall be disposed of by the Contractor.

METHOD OF MEASUREMENT

Remove Concrete Curb shall be measured by the linear foot removed.

BASIS OF PAYMENT

Payment is full compensation for furnishing all labor, tools, equipment, and incidentals necessary to complete the work.

BID ITEM 90005 – REMOVE CONCRETE GRAVITY RETAINING WALLS

DESCRIPTION

This special provision describes removing Concrete Gravity Retaining Walls located between the base of Bascom Mall and the elevated sidewalk on the west side of Park Street. The concrete gravity walls shall be removed in accordance with the pertinent provisions of Article 203 of the Standard Specifications and as hereinafter provided.

CONSTRUCTION

The Contractor shall saw cut the wall at the plan location, or as directed by the Engineer. The removal of the concrete gravity retaining walls shall include removal of the exposed wall and all foundations as shown in the Removal Plan Details, including the walls adjacent to the stairs at east end of Bascom Mall. The Removal Plan Details are copied from the original construction plan detail, not an as-built plan, and are included to provide an estimate of work effort for the removal item.

The Contractor shall take extreme care in removing the gravity wall elements to prevent any damage to the existing utility vaults and utilities that are located behind the gravity wall in the Bascom Mall area. The Contractor will be responsible for any damage to the utility vaults and utilities.

The Contractor is responsible for disposing of all materials associated with this removal.

METHOD OF MEASUREMENT

Remove Concrete Gravity Retaining Walls shall be measured by the linear foot removed.

BASIS OF PAYMENT

Payment is full compensation for sawing the existing wall; for removing the wall and foundation, vertical sawcut joints, and for furnishing all labor, tools, equipment, and incidentals necessary to complete the work.

BID ITEM 90006 – REMOVE COMBINATION RETAINING WALL – CURB AND GUTTER

DESCRIPTION

This special provision describes removing the combination retaining wall and curb and gutter on the west side of Park Street as shown in the Removal Plan. This includes the walls that abut the ramp and steps between the elevated sidewalk and Park Street. The wall shall be removed in accordance with the pertinent provisions of Article 203 of the Standard Specifications and as hereinafter provided.

CONSTRUCTION

The Contractor shall saw cut the wall at the plan location, or as directed by the Engineer. Remove Combination Retaining Wall-Curb and Gutter shall include removal of the walls, including all foundations and concrete bollards, as shown in the Removal Plans. The Removal Plan Details are copied from the original construction plan detail, not an as-built plan, and are included to provide an estimate of work effort for the removal item.

The Contractor is responsible for disposing of all materials associated with this removal.

METHOD OF MEASUREMENT

Remove Combination Retaining Wall – Curb and Gutter shall be measured by the linear foot removed.

BASIS OF PAYMENT

Payment is full compensation for sawing the existing wall; for removing the wall and foundation, vertical sawcut joints, and for furnishing all labor, tools, equipment, and incidentals necessary to complete the work.

BID ITEM 90007 – REMOVE STEEL CHAIN FENCE

DESCRIPTION

This special provision describes removing the steel chain fence between concrete bollard posts on Park Street in accordance with the pertinent provisions of Article 203 of the Standard Specifications and as hereinafter provided.

CONSTRUCTION

The contractor shall remove the steel chain to the nearest remaining bollard. Secure the remaining chain to the last remaining bollard in a manner matching chain ends at other locations on Park Street.

The Contractor is responsible for disposing of all materials associated with this removal.

METHOD OF MEASUREMENT

Remove Steel Chain Fence shall be measured by the linear foot of chain removed.

BASIS OF PAYMENT

Payment is full compensation for furnishing all labor, tools, equipment, and incidentals necessary to complete the work.

BID ITEM 90008 – REMOVE WALL MOUNTED BENCH

DESCRIPTION

This special provision describes removing wood benches mounted to concrete curb and walls in the 800 block of State Street as shown in the Removal Plan and in accordance with the pertinent provisions of Article 203 of the Standard Specifications and hereinafter provided.

The removal of the wall mounted benches shall include removal of the wood seating surface, support frame, and support frames for the wall mounted benches as shown in the Removal Plans. The Removal Plan Details are copied from the original construction plan detail, not an as-built plan, and are included to provide an estimate of work effort for the removal item.

The Contractor is responsible for disposing of all materials associated with this removal.

METHOD OF MEASUREMENT

Remove Wall Mounted Bench shall be measured by the linear foot removed.

BASIS OF PAYMENT

Payment is full compensation for furnishing all labor, tools, equipment, and incidentals necessary to complete the work.

BID ITEM 90009 – REMOVE RAILING

DESCRIPTION

This special provision describes removing metal pedestrian railing along the Park Street sidewalk ramp and on top of the curb near the staircase to the Humanities Building as shown in the Removal Plans. The Contractor shall remove the railing in accordance with the pertinent provisions of Article 203 of the Standard Specifications, and as hereinafter provided.

MATERIALS

The Contractor shall furnish paint to match the existing railing color and suitable for painting steel surfaces.

CONSTRUCTION

The Contractor shall remove the railing along the sidewalk ramp on Park Street entirely.

The Contractor shall saw and remove the railing on top of the concrete curb at the Humanities building to the base of the staircase hand rail. The Contractor shall grind smooth the remaining vertical rail post and paint the ground surface to match the adjacent railing.

The Contractor is responsible for disposing of all materials associated with this removal.

METHOD OF MEASUREMENT

Remove Railing shall be measured by the linear foot removed, measured at the base of the railing.

BASIS OF PAYMENT

Payment is full compensation for furnishing paint; for grinding the railing; for removing and disposing of steel railing; and for all labor, tools, equipment, and incidentals necessary to complete the work.

BID ITEM 90010 – REMOVE CONCRETE GUTTER

DESCRIPTION

This special provision describes removing concrete gutter along the Bascom Mall sidewalk in accordance with the pertinent provisions of Article 203 of the Standards Specifications and as hereinafter provided.

CONSTRUCTION

The Contractor shall remove the gutter without damaging adjacent Bascom Mall sidewalk and in accordance with the tree protection specifications in Section 107.13 of the Standard Specifications. Full depth sawcuts are required and are incidental to the Remove Gutter bid item.

The Contractor is responsible for disposing of all materials associated with this removal.

METHOD OF MEASUREMENT

Remove Concrete Gutter shall be measured by the linear foot removed, measured at the center of the gutter.

BASIS OF PAYMENT

Payment is full compensation for furnishing all labor, tools, equipment, and incidentals necessary to complete the work.

BID ITEM 90011 – REMOVE DRINKING FOUNTAIN

DESCRIPTION

This special provision describes removing the drinking fountain in accordance with the pertinent provisions of Article 203 of the Standard Specifications and as hereinafter provided.

CONSTRUCTION

The Contractor shall remove the existing drinking fountain, including the fountain foundation. The water service shall be shut off and the valve and valve box removed. The drain lateral should be abandoned in accordance with Article 503 of the Standard Specifications.

The Contractor is responsible for disposing of all materials associated with this removal.

METHOD OF MEASUREMENT

Remove Drinking Fountain, shall be measured by the unit each removed.

BASIS OF PAYMENT

Payment is full compensation for furnishing all labor, tools, equipment, and incidentals necessary to complete the work.

BID ITEM 90012 – REMOVE BENCHES

DESCRIPTION

This special provision describes removing the wood seat benches as shown in the Removal Plans, in accordance with the pertinent provisions of Article 203 of the Standard Specifications and as hereinafter provided.

The Removal Plan Details are copied from the original construction plan detail, not an as-built plan, and are included to provide an estimate of work effort for the removal item.

The Contractor is responsible for disposing of all materials associated with this removal.

METHOD OF MEASUREMENT

Remove Bench, shall be measured by the unit each removed.

BASIS OF PAYMENT

Payment is full compensation for furnishing all labor, tools, equipment, and incidentals necessary to complete the work.

BID ITEM 90013 – SALVAGE AND HAUL CONCRETE PLANTER TUBS

DESCRIPTION

This special provision describes salvaging and hauling concrete planter tubs in accordance with the pertinent provisions of Article 203 of the Standard Specifications and as hereinafter provided.

CONSTRUCTION

The Contractor shall carefully remove and haul the concrete planter tubs to Yahara Hills Course 6701 Hwy 12 & 18, Madison, WI 53718. The planter tubs are approximately 5 feet in diameter and 3 feet tall. The Contractor shall take care to not damage the planter tubs, including cracks, chips, or spalls. The Contractor is encouraged to document any pre-removal damage with the Engineer.

Coordinate with Charlie Romines at 608-838-3126 three working days prior to hauling the planter tubs to Yahara Hills Golf Course.

METHOD OF MEASUREMENT

Salvage and Haul Concrete Planter Tub, shall be measured by the unit each removed.

BASIS OF PAYMENT

Payment is full compensation for furnishing all labor, tools, equipment, and incidentals necessary to complete the work.

BID ITEM 90014 – REMOVE WALL MOUNTED TRASH CAN**DESCRIPTION**

This special provision describes removing the wall mounted trash cans in accordance with the pertinent provisions of Article 203 of the Standard Specifications and as hereinafter provided.

CONSTRUCTION

Removing Wall Mounted Trash Can includes removal of trash can as shown in the removing details. The Removal Plan Details are copied from the original construction plan detail, not an as-built plan, and are included to provide an estimate of work effort for the removal item.

The Contractor is responsible for disposing of all materials associated with this removal.

METHOD OF MEASUREMENT

Remove Wall Mounted Trash Can, shall be measured by the unit each removed.

BASIS OF PAYMENT

Payment is full compensation for furnishing all labor, tools, equipment, and incidentals necessary to complete the work.

BID ITEM 90015 – REMOVE FOUR POLE KIOSK WITH LIGHTS**DESCRIPTION**

This special provision describes removing the Four Pole Kiosk with Lights in accordance with the pertinent provisions of Article 203 of the Standard Specifications and as hereinafter provided.

The removal of the Four Pole Kiosk with Lights shall include removal of the kiosk posts, including all foundations, concrete light bases and light fixtures, timber members, and electrical cabinet and elements as shown on the removing details. The Removal Plan Details are copied from the original construction plan detail, not an as-built plan, and are included to provide an estimate of work effort for the removal item.

The Contractor is responsible for disposing of all materials associated with this removal.

METHOD OF MEASUREMENT

Remove Four Pole Kiosk with Lights, shall be measured by the unit each removed.

BASIS OF PAYMENT

Payment is full compensation for furnishing all labor, tools, equipment, and incidentals necessary to complete the work.

BID ITEM 90016 – REMOVE OCTAGONAL KIOSK WITH LIGHTS**DESCRIPTION**

This special provision describes removing the Octagonal Kiosk with Lights in accordance with the pertinent provisions of Article 203 of the Standard Specifications and as hereinafter provided.

The removal of the Octagonal Kiosk with Lights shall include removal of the kiosk structure, including all foundations, concrete base, roof structure, light fixtures, all electrical elements as shown on the Removal Plan. The Removal Plan Details are copied from the original construction plan detail, not an as-built plan, and are included to provide an estimate of work effort for the removal item.

The Contractor is responsible for disposing of all materials associated with this removal.

METHOD OF MEASUREMENT

Remove Octagonal Kiosk with Lights, shall be measured by the unit each removed.

BASIS OF PAYMENT

Payment is full compensation for furnishing all labor, tools, equipment, and incidentals necessary to complete the work.

BID ITEM 90017 – REMOVE ELECTRICAL PEDESTAL

DESCRIPTION

This special provision describes removing the electrical outlet pedestals in accordance with the pertinent provisions of Article 203 of the Standard Specifications, Article 604.5 of the Standard Specifications and as hereinafter provided.

The removal of the electrical pedestals shall include removal of the electrical pedestal, including any concrete bases and all associated electrical appurtenances.

The Contractor is responsible for disposing of all materials associated with this removal.

METHOD OF MEASUREMENT

Remove Electrical Pedestal shall be measured by the unit each removed.

BASIS OF PAYMENT

Payment is full compensation for furnishing all labor, tools, equipment, and incidentals necessary to complete the work.

BID ITEM 90018 – REMOVE KIOSK BASE

DESCRIPTION

This special provision describes removing concrete kiosk bases in accordance with the pertinent provisions of Article 203 of the Standards Specifications and as hereinafter provided.

Remove Kiosk Base includes removal of kiosk base, and the entire kiosk footing as shown in the Removal Plan. The Removal Plan Details are copied from the original construction plan detail, not an as-built plan, and are included to provide an estimate of work effort for the removal item.

The Contractor is responsible for disposing of all materials associated with this removal.

METHOD OF MEASUREMENT

Remove Kiosk Base shall be measured by the unit each removed.

BASIS OF PAYMENT

Payment is full compensation for furnishing all labor, tools, equipment, and incidentals necessary to complete the work.

BID ITEM 90019 – REMOVE MAP KIOSK

DESCRIPTION

This special provision describes removing metal map kiosks in accordance with the pertinent provisions of Article 203 of the Standard Specifications and as hereinafter provided.

The Contractor shall remove the map panel, support post, and base plate in one piece. The map kiosks can be set aside for pick up by Mall Maintenance. Coordinate pick up of the map kiosks by calling Tom Skaife, 608-267-4937.

METHOD OF MEASUREMENT

Remove Map Kiosk shall be measured by the unit each removed.

BASIS OF PAYMENT

Payment is full compensation for furnishing all labor, tools, equipment, and incidentals necessary to complete the work.

BID ITEM 90020 – REMOVE BIKE RACK

DESCRIPTION

This special provision describes removing existing bike racks on Fitch Court in accordance with the pertinent provisions of Article 203 of the Standard Specifications and as hereinafter provided.

The Contractor shall remove and dispose of the bike rack, including any associated bolts or anchors.

METHOD OF MEASUREMENT

Remove Bike Rack shall be measured as a single complete unit of work.

BASIS OF PAYMENT

Payment is full compensation for furnishing all labor, tools, equipment, and incidentals necessary to complete the work.

BID ITEM 90021 – REMOVE CONCRETE PLANTER WALLS

DESCRIPTION

This special provision describes removing the concrete planter walls and concrete sidewalk surrounding the existing clock tower in the Confluence area. The walls and sidewalk shall be removed in accordance with the pertinent provisions of Article 203 of the Standard Specifications and as hereinafter provided.

The removal of the Concrete Planter Wall shall include removal of the round concrete planter walls, adjacent stepped terrace walls and curb, and adjacent sidewalk, including all foundations and all fill material inside the planter walls. The pay limits for this bid item are shown on the Removal Plan. The

Removal Plan Details are copied from the original construction plan detail, not an as-built plan, and are included to provide an estimate of work effort for the removal item.

The Contractor is responsible for disposing of all materials associated with this removal.

METHOD OF MEASUREMENT

Remove Concrete Planter Walls shall be measured as a single complete unit of work.

BASIS OF PAYMENT

Payment is full compensation for furnishing all labor, tools, equipment, and incidentals necessary to complete the work.

BID ITEM 90022 – REMOVE CONCRETE FOUNTAIN

DESCRIPTION

This special provision describes removing the three concrete fountain elements in the 800 block of State Street. The concrete fountain shall be removed in accordance with the pertinent provisions of Article 203 of the Standard Specifications and as hereinafter provided.

The removal of the Concrete Fountain shall include removal of the three concrete fountain elements, including all foundations and water and plumbing appurtenances associated with the fountain. The pay limits for this bid item are shown on the Removal Plan. The Removal Plan Details are copied from the original construction plan detail, not an as-built plan, and are included to provide an estimate of work effort for the removal item.

The Contractor is responsible for disposing of all materials associated with this removal.

METHOD OF MEASUREMENT

Remove Concrete Fountain shall be measured as a single complete unit of work.

BASIS OF PAYMENT

Payment is full compensation for furnishing all labor, tools, equipment, and incidentals necessary to complete the work.

BID ITEM 90023 – REMOVE CONCRETE PULPIT

DESCRIPTION

This special provision describes removing the Concrete Pulpit in accordance with the pertinent provisions of Article 203 of the Standard Specifications and as hereinafter provided.

Remove Concrete Pulpit includes removal of concrete pulpit as shown in the Removal Plan. The removal of the concrete pulpit shall include removal of the pulpit stand, including all foundations, concrete steps, railing, and electrical cabinet. The disconnection of the service for the electrical cabinet will be paid for under the Bid Item 90028, Disconnect Pulpit Electrical Service Cabinet. The Removal Plan Details are copied from the original construction plan detail, not an as-built plan, and are included to provide an estimate of work effort for the removal item.

The Contractor is responsible for disposing of all materials associated with this removal.

METHOD OF MEASUREMENT

Removing Concrete Pulpit shall be measured as a single complete unit of work.

BASIS OF PAYMENT

Payment is full compensation for furnishing all labor, tools, equipment, and incidentals necessary to complete the work.

BID ITEM 90024 – REMOVE CONCRETE PLANTER WITH TREE GROVE

DESCRIPTION

This special provision describes removing concrete walls and sidewalk in the concrete planter in the 800 block of State Street. The concrete walls and sidewalk shall be removed in accordance with the pertinent provisions of Article 203 of the Standard Specifications and as hereinafter provided.

Remove Concrete Planter with Tree Grove includes removal of all concrete walls, foundations, concrete steps, concrete curb, wood seating surface, light bases, flag pole bases, and surface drainage within the area shown on the Removal Plan. The Removal Plan Details are copied from the original construction plan detail, not an as-built plan, and are included to provide an estimate of work effort for the removal item.

The Contractor is responsible for disposing of all materials associated with this removal.

METHOD OF MEASUREMENT

Remove Concrete Planter with Tree Grove shall be measured as a single complete unit of work.

BASIS OF PAYMENT

Payment is full compensation for furnishing all labor, tools, equipment, and incidentals necessary to complete the work.

BID ITEM 90025 – REMOVE TERRACED STAGE AND SEATING

DESCRIPTION

This special provision describes removing concrete walls, concrete steps, pavers, concrete sidewalk, concrete bollards, and street light bases in the raised stage area in the 700 Block of State Street. The Contractor shall remove the items in accordance with the pertinent provisions of Article 203 of the Standard Specifications and as hereinafter provided.

Remove Terraced Stage and Seating includes removal of the concrete steps and walls, including all foundations, all fill material within the planter, concrete bollards, brick pavers, and electrical elements within the area shown on the Removal Plan. The Removal Plan Details are copied from the original construction plan detail, not an as-built plan, and are included to provide an estimate of work effort for the removal item.

The Contractor is responsible for disposing of all materials associated with this removal.

METHOD OF MEASUREMENT

Remove Terraced Stage and Seating shall be measured as a single complete unit of work.

BASIS OF PAYMENT

Payment is full compensation for furnishing all labor, tools, equipment, and incidentals necessary to complete the work.

BID ITEM 90026 – REMOVE, SALVAGE, & DELIVER CLOCK TOWER & GRANITE SLABS

DESCRIPTION

This special provision describes removing, salvaging, and delivering components of the clock tower. The clock tower was a gift to the University of Wisconsin from the Class of 1923 and shall be handled with care. The Contractor shall notify Daniel Einstein with Campus Planning and Landscape Architecture (608-265-3417 deinstein@fpm.wisc.edu five working days prior to removing any elements of the clock and to coordinate delivery of the clock elements.

CONSTRUCTION

Clock Faces: Remove four clock faces (with clock movements still attached) and four exterior glass panels from "housing cube" atop tower. Secure all parts in packing crates for long term storage in unheated interior warehouse. Provide appropriate packing material to protect from breakage or marring. Exterior glass and clock faces are approximately 3 ft. by 4 ft.

Deliver palletized clock faces, to:

Kegonsa Research Campus, 3725 Schneider Dr. Stoughton, WI, 53589

Tower Legs: Detach tower legs from base plate anchored to concrete foundation. Do not mar bronze sheathing. Cut four tower legs 24 inches below clock tower housing cube (just below "plank bars", as noted on shop drawing.)

Deliver tower legs to loading dock at: ***Humanities Building, 455 N. Park Street***

Clock tower housing cube: Place

housing cube in protective crate and secure for transport. Crate should permit lifting by forklift. Housing cube is approximately 8 ft. tall (with leg stubs) and 4 ft. wide.

Deliver palletized housing cube, to:

Kegonsa Research Campus, 3725 Schneider Dr. Stoughton, WI, 53589

Forklift will be available at destination for off-loading, if needed. Coordinate with Daniel Einstein to arrange delivery.

Granite slabs: Remove whole granite cladding slabs from base of clock tower foundation, intact and without damage. Slabs are fixed to concrete foundation; however no documentation exists as to how the slabs are attached.

Granite slabs are approximately three inches thick. Total of eight panels: (3) 6 X 5 feet; (3) 6 X 2 feet; (1) 6 X 4 feet; and (1) 6 X 3 feet. Granite slabs to be handled in manner that does no harm to any finished surface. Slabs will be stored in a single stack. Provide "stickers" to provide for adequate support and weight distribution on the stack.

Deliver granite slabs to:

MDS Warehouse: 1061 Thousand Oaks Trail, Verona, WI 53593

Forklift will be available at destination for off-loading, if needed. Coordinate with Daniel Einstein to arrange delivery.

METHOD OF MEASUREMENT

Remove, Salvage, & Deliver Clock Tower & Granite Slabs shall be measured as a single complete unit of work.

BASIS OF PAYMENT

Remove, Salvage, & Deliver Clock Tower & Granite Slabs, measured as provided above, shall be paid at the contract unit price for work as described above, including all tools, equipment, labor, and materials necessary to complete the work.

BID ITEM 90027 – REMOVE CLOCK TOWER FOUNDATION

DESCRIPTION

This special provision describes removing the concrete foundation of the clock tower in the Confluence area in accordance with the pertinent provisions of Article 203 of the Standard Specifications and as hereinafter provided.

The removal of the clock tower foundation shall include removal of the concrete foundation and walls, including all footings and all fill material within the foundation.

The Contractor is responsible for disposing of all materials associated with this removal.

METHOD OF MEASUREMENT

Remove Clock Tower Foundation shall be measured as a single complete unit of work.

BASIS OF PAYMENT

Remove Clock Tower Foundation, measured as provided above, shall be paid at the contract unit price for work as described above.

BID ITEM 90028 – DISCONNECT PULPIT ELECTRICAL SERVICE CABINET

DESCRIPTION

This special provision describes disconnecting the pulpit electrical cabinet prior to removal of the pulpit.

The Contractor is responsible for coordinating with Madison Gas and Electric (Electric) five (5) working days prior to disconnecting pulpit electrical service cabinet. Temporary lighting shall be installed and operational prior to disconnecting the pulpit electrical cabinet.

The contractor shall disconnect and remove all electrical components and appurtenances to allow for complete removal and disposal of the cabinet under the Bid Item 90023, Remove Concrete Pulpit.

METHOD OF MEASUREMENT

Disconnect Pulpit Electrical Service Cabinet shall be measured as a single complete unit of work.

BASIS OF PAYMENT

Payment is full compensation for furnishing all labor, tools, equipment, and incidentals necessary to complete the work.

BID ITEM 90029 – REMOVE AND RESET PAVERS

DESCRIPTION

This special provision describes removing and resetting pavers adjacent to concrete sidewalk that will be removed and replaced. The limits of removal are defined by the limits of new sidewalk construction or as approved by the engineer.

CONSTRUCTION

The Contractor shall remove and salvage pavers adjacent to sidewalk that will be removed and replaced. The Contractor is responsible for storing the pavers in a secure location to prevent damage or theft. The pavers shall remain place until the adjacent sidewalk is removed. The Contractor shall barricade sidewalk areas where pavers are removed.

The pavers in East Campus Mall and the pavers along the Memorial Library building columns are set on a rigid base. The Contractor shall remove the pavers and adjacent sidewalk without removing or damaging the rigid paver base. Any rigid paver base that is damaged or removed with the adjacent sidewalk removal shall be replaced by the Contractor as directed by the Engineer. No additional compensation will be provided.

The pavers adjacent to the Park Street sidewalk are anticipated to be sand set. The Contractor shall bring the sand foundation to line and grade using like base materials and compact using a plate compactor or Engineer approved method.

Once the adjacent sidewalk is replaced, the Contractor shall re-install the pavers to the same construction method of the original pavers.

METHOD OF MEASUREMENT

Remove and Reset Pavers shall be measured by the square foot of paver removed, installed and accepted.

BASIS OF PAYMENT

Payment is full compensation for furnishing all labor, tools, equipment, and incidentals necessary to complete the work.

BID ITEM 90030 – ABANDON STEAM VAULT

DESCRIPTION

This special provision describes abandoning University of Wisconsin steam facility vaults in accordance with the pertinent provisions of Article 203 of the Standard Specifications and as hereinafter provided. The vault was abandoned in place by a previously completed project and the abandoned vault is in conflict with proposed utility work. Removal of the steam tunnel appurtenances within the vault will be paid under a separate bid item.

MATERIALS

The Contractor shall furnish select materials for backfill. The select materials shall meet the requirements of Section 202.2(b) Select Fill of the Standard Specifications.

CONSTRUCTION

The Contractor shall remove the vault roof, access casting, and part of the outer walls. The limits of wall removal shall be three feet below the surface of existing sidewalk, or as necessary to complete proposed utility construction. Any saw cuts or other necessary work in the removal is included in the bid item. The Contractor shall crack the floor of the vault floor to the extent necessary to allow drainage through the floor to the surrounding soils.

All removed material shall be disposed of by the Contractor.

Backfill all trenches, holes, and pits resulting from the removal of steam vault structures according to the Article 203 of the Standard Specifications.

METHOD OF MEASUREMENT

Abandon Steam Vault shall be measured by the unit each abandoned.

BASIS OF PAYMENT

Abandon Steam Vault, measured as provided above, shall be paid at the contract unit price for work as described above. Payment is full compensation for furnishing all labor, tools, equipment, and incidentals necessary to complete the work.

BID ITEM 90031 – REMOVE & DISPOSE STEAM TUNNEL/PIPE AND STEAM VAULT APPURTENANCES

DESCRIPTION

This special provision describes removing and disposing of tunnel/pipe and steam vault appurtenances that do not contain asbestos containing material that are in conflict with the proposed work. The tunnel/pipe and steam vault appurtenances shall be removed in accordance with the pertinent provisions of Article 203 of the Standard Specifications and as hereinafter provided.

CONSTRUCTION

The contractor shall remove and dispose of the existing steam tunnel/pipe and steam vault appurtenances:

Sawcut and remove the existing steam tunnel/pipe and steam vault appurtenances at the limits of removal. Dispose of the removed steam tunnel/pipe and steam vault appurtenances. Abandon the exposed ends of pipe and tunnel in accordance with Article 203 of the Standard Specifications.

Backfill all trenches, holes, and pits resulting from the removal of steam tunnels/pipe and steam vault appurtenances according to Article 203 of the Standard Specifications.

METHOD OF MEASUREMENT

Remove and Dispose Steam Tunnel/Pipe and Steam Vault Appurtenances shall be measured by the linear foot removed. Measurement shall be along the center of the steam tunnel/pipe and through the center of the steam vault and shall include all appurtenances within the vault.

BASIS OF PAYMENT

Payment is full compensation for sawing the existing tunnel/pipe; for removing the tunnel/pipe and steam tunnel appurtenances; disposing of all materials associated with this removal; and for furnishing all labor, tools, equipment, and incidentals necessary to complete the work.

BID ITEM 90032 – REMOVE & DISPOSE REGULATED ASBESTOS CONTAINING MATERIAL STEAM TUNNEL/PIPE AND STEAM VAULT APPURTENANCES

DESCRIPTION

Work under this item shall include removing abandoned steam tunnel/pipe and steam vault appurtenances with regulated asbestos containing material (RACM) encountered during construction that is in conflict with the proposed work.

Testing for RACM containing materials shall be paid for under the Bid Item "Test Tunnel/Pipe and Steam Vault Appurtenances for Asbestos, Bid Item 90002. If testing determines RACM is present in the steam tunnel/pipe and steam vault appurtenance materials, this bid shall be used in place of Bid Item 900031 to cover the removal of the steam tunnel/pipe and steam vault appurtenances.

The Regulated Asbestos Containing Material (RACM) must be abated by a licensed abatement contractor. In accordance with NR447 and DHS159, ensure that DNR and DHS receives a completed Notification of Demolition and/or Renovation (DNR Form 4500-113 (r 4/11), or subsequent revision via U.S. mail, hand delivery, or using the online notification system at least 10 days prior to beginning any construction or demolition. The Contractor shall pay all associated fees. The Contractor shall comply with all Department of Natural Resources and Department of Public Health licensing and regulations for removal and disposal of all RACM.

METHOD OF MEASUREMENT

Remove and Dispose Asbestos Containing Material Steam Tunnel/Pipe and Steam Vault Appurtenances shall be measured by the linear foot measured along the centerline of the pipe, acceptably completed. Measurement shall be along the center of the steam tunnel/pipe and through the center of the steam vault and shall include all appurtenances within the vault.

BASIS OF PAYMENT

Remove and Dispose Asbestos Containing Material Steam Tunnel/Pipe and Steam Vault Appurtenances is full compensation for sawing the existing tunnel/pipe; for removing the tunnel/pipe and steam tunnel appurtenances; hauling and disposing of all materials associated with this removal; for all disposal, and permitting fees; and for furnishing all labor, tools, equipment, and incidentals necessary to complete the work.

BID ITEM 90033 – STORM SEWER TAP BOX CULVERT SPECIAL

DESCRIPTION

This work shall consist of tapping into an existing storm sewer box culvert and reconstructing the wall of the existing culvert, using Grade A concrete.

The work under these items shall be in accordance with the provisions of Section 501, 502, 504, 505, and 611 of the standard specifications, as shown on the plans and as provided herein.

The Contractor shall submit shop drawings for all reinforcement including: bending steel, radii, and bar overlap for approval by the Engineer.

MATERIALS

The contractor shall furnish the following items:

- Furnish steel reinforcement conforming to section 505
- Furnish concrete conforming to section 501

- Furnish masonry anchors conforming to section 502

CONSTRUCTION

Provide full depth sawcuts around the entire perimeter of the pipe tap hole. Support the new elliptical pipe as necessary to allow complete encapsulation of the pipe by the concrete and to prevent shearing of the pipe. Formwork is required for all sides, both interior and exterior, of the reconstructed box culvert wall.

Water levels may fluctuate in the existing reinforced concrete box culvert and Contractor may encounter water levels above the flow line of the proposed storm sewer pipe. If this is the case, the Contractor shall also comply with Section 502.3.5.3 of the State of Wisconsin Standard Specifications. The tapped pipe shall be left flush with the interior wall of the existing box culvert.

The Contractor shall be responsible for all work involved with the necessary dry or wet weather storm water control necessary to complete this work.

METHOD OF MEASUREMENT

Storm Sewer Tap Special will be measured separately as units of each installed and accepted.

BASIS OF PAYMENT

Storm Sewer Tap Special, measured as provided above, will be paid for at the contract unit price each, which price shall be full compensation for tapping the hole, sawcuts, dewatering and pumping, connection of the pipe (pipe paid separately), furnishing and placing bar steel reinforcement and masonry anchors; furnishing and placing concrete; furnishing and placing casting; and for furnishing all labor, tools, equipment, and incidentals necessary to complete the work.

BID ITEM 90034 – 4' DIA STORM SEWER SAS

DESCRIPTION

This work shall consist of furnishing and installing 4' diameter storm sewer access structures and castings in accordance with the Department of Facilities Development Specifications Section 33 40 00.

METHOD OF MEASUREMENT

4' Dia. Storm Sewer SAS will be measured separately as units of each installed and accepted.

BASIS OF PAYMENT

4' Dia. Storm Sewer SAS is full payment for furnishing all materials necessary to perform the work; for excavation; for installation and removal of sheeting and bracing; for removal of water from excavation; for disposal of surplus material from the excavation; for backfilling the excavation and compaction of the backfill material; for furnishing and preparing the foundation; for construction of the structure; for reconnection of existing pipes, and connection of new pipes; for furnishing and installing the casting; for cleaning out the structure; for restoring the site; and for furnishing all labor, tools, equipment, and incidentals necessary to complete the work.

BID ITEM 90035 –PVC STORM SEWER LATERAL

DESCRIPTION

Work under this item shall include all work, materials, labor, and incidentals necessary to install the size storm sewer lateral as indicated in the plans in accordance with Part 503 of the Standard Specifications except as herein after amended.

MATERIALS

The contractor shall provide the indicated size Solid-Wall Poly (Vinyl Chloride) (PVC) sewer pipe and fittings, labeled as "(Size) PVC" on the plans, shall conform to the requirements of the Specification for Type PSM Poly (Vinyl Chloride) (PVC) Sewer Pipe and Fittings, ASTM D 3034, SDR-35 or SDR-26. Joints shall be elastomeric or solvent cement and shall be made as recommended by the manufacturer.

CONSTRUCTION

Storm Sewer Marker Disks shall be provided where non-metallic storm sewer pipe is installed in the public Right of Way, and where no access or inlet structures are available on the surface to allow the pipe to be visually located. Storm Sewer Electronic Markers shall meet the specifications of Article 503 for sanitary sewer. Electronic Markers will be paid for under the Bid Item "Storm Sewer Electronic Marker", Bid Item 50390.

METHOD OF MEASUREMENT

PVC Storm Sewer Lateral shall be measured to the nearest whole linear foot of each size measured along the centerline of the pipe center to center of junctions and fittings installed and accepted.

BASIS OF PAYMENT

PVC Storm Sewer Lateral shall be measured as described above which shall be full compensation for all work and materials; including all sizes of PVC pipe, taps, and incidentals to complete the work as described above.

BID ITEM 90036 – SIDEWALK DRAIN

DESCRIPTION

Work under this item shall include all work, materials, labor and incidentals necessary to construct a sidewalk drain in accordance with the City of Madison Standard Detail Drawing 5.7.36 in the Standard Specifications except as herein after amended and as modified by the plan details.

Length, rim grades, pipes sizes and depths of structure shall be as called out on the plans or as adjusted in the field.

The concrete used and the method of finishing that concrete shall be in accord with the requirements described in Part 3 of the Standard Specifications.

METHOD OF MEASUREMENT

Sidewalk Drain shall be measured by linear foot as installed in the field.

BASIS OF PAYMENT

Sidewalk Drain shall be measured as described above which shall be full compensation for all work and materials; including concrete, reinforcement, PVC pipe, pipe taps, concrete casting, and incidentals to complete the work as described above.

BID ITEM 90037 – ADJUST UW CASTING

DESCRIPTION

This work shall consist of adjusting UW manhole castings in accordance with the Department of Facilities Development Specifications Section 33 40 00.

METHOD OF MEASUREMENT

Adjust UW Casting will be measured separately as units of each installed and accepted.

BASIS OF PAYMENT

Adjust UW Casting will be measured as units of each, and all costs including labor, materials (except castings), loading, transporting and unloading both existing and replacement castings, disposal of materials, and incidentals necessary to complete the work.

BID ITEM 90038 – ADJUST UW STRUCTURE

DESCRIPTION

Work under this item shall include adjusting UW Structures as called out in the plans by furnishing and installing manhole sections and adjustment rings and salvaging and installing castings on top of existing UW electrical and communications structures. This work shall conform to Department of Facilities Development Specifications Section 33 40 00 and herein as described. This bid item is required because the casting adjustment is greater than 9" of vertical adjustment to set the casting to the final grade.

MATERIALS

Furnish manhole sections and adjustment rings in accordance to Department of Facilities Development Specifications Section 33 40 00. The sections and rings shall be an equivalent diameter to fit the existing casting and structure roof opening, which is estimated at 4 feet in diameter.

Furnish concrete in accordance to Department of Facilities Development Specifications Section 33 40 00.

CONSTRUCTION

Place and anchor the new manhole section over the existing opening onto the existing UW structure. Place a concrete seal to the base of the new manhole riser. Adjust the structure to the final proposed grades as indicated by the plans.

METHOD OF MEASUREMENT

Adjust UW Structure will be measured separately as units of each installed and accepted.

BASIS OF PAYMENT

Adjust UW Structure will be measured as units of each, and all costs including labor, materials; including castings, loading, transporting and unloading both existing and replacement castings as specified in Section 203, removal and disposal of materials, and incidentals necessary to complete the work.

BID ITEM 90070 – ADJUST SAS SPECIAL

DESCRIPTION

Work under this item shall include adjusting Sanitary Sewer Access Structure (Rim) castings as called for on the plan set to the final proposed grades. This bid item is required because the casting adjustment is greater than 9" of vertical adjustment to set the casting to the final grade or the chimney was determined to be in poor condition. Manhole adjustments less than 9" shall be paid for separately under BID ITEM 20501 ADJUST SEWER ACCESS STRUCTURE.

This bid item will require adjustment rings to be removed and concrete barrel sections to be installed. The maximum allowed adjustment on the Sewer Access Structure shall not exceed 9 inches and the final configuration of the structure shall be in accordance of SDD 5.7.2 and 5.7.15 of the City of Madison

Standard Specifications for Public Works Construction – 2014 Edition. Precast concrete barrel sections and manhole adjustment rings shall meet the requirements of Article 507.3, as well as SDD 5.7.2 and 5.7.15 of the City of Madison Standard Specifications for Public Works Construction – 2014 Edition

Rotation of an existing cone sections shall also be considered incidental to this bid item.

METHOD OF MEASUREMENT

ADJUST SAS SPECIAL shall be measured as each completed unit.

BASIS OF PAYMENT

ADJUST SAS SPECIAL shall be measured as described above and shall be paid for at the contract price which shall be full compensation for all work, materials, labor and incidentals required to complete the work set forth in the description.

BID ITEM 90071 – INSTALL CASING PIPE

DESCRIPTION

Work under this item shall include the installation and material cost to install casing pipe with a sanitary sewer pipe inside of as called for on the plans. This work was determined to be necessary because of a Leaf Sculpture being built on top of the City Sanitary Sewer. The sanitary sewer shall be installed open cut method. The casing pipe must be sized by the contractor in order for the inner sanitary sewer main to properly fit within the casing pipe. All costs for furnishing and installing the steel casing pipe with the sanitary sewer pipe set to the proper grade shall be considered incidental to this bid item. If is determined by the ULO (SAN ULO #1) that the Casting cannot be installed below the 12" sanitary sewer due to a lack of available space between the bottom of the sanitary sewer and the top of UW utility tunnel, the casing pipe shall being installed beginning at the edge of the UW Utility Tunnel vault.

The 12" diameter sanitary sewer being installed with the casing will be paid for separately under Bid Item 50323- 12" PVC Pressure Sanitary Sewer Pipe.

The Contractor is informed that the casing pipe specified shall be at a minimum of 22" diameter or as large as deemed necessary by the contractor to successfully complete the work in accordance with the construction plans.

B. Materials

Install Casing Pipe shall include all materials necessary to install a 12" diameter sanitary sewer pipe with a casing. Casing pipe included with this item shall be in accord with the following:

- ASTM specification A139 Grade B or AWWA specification C200
- Outside diameter as specified by the Contractor
- Not coated or cathodically protected, no hydrostatic testing required
- 0.4375" minimum thickness (See chart on Sheet SAN3 for casing thickness requirements)
- Specified minimum yield strength, SMYS, of at least 35,000 psi
- New and unused pipe
- Straight and round pipe
- Beveled ends for butt welding

The Contractor shall submit the following to the Engineer for approval prior to ordering of materials and the start of construction:

- Certificate of compliance for the steel casing pipe
- Materials for sand of pea gravel

- Materials for casing spacers and distances between spacers if spacers are to be used (4 wooden blocks also an acceptable installation method)
- Materials and methods for bulkheading the casing ends

CONSTRUCTION METHODS

Prior to installing pipe in the casing, a set of **four** wood blocks shall be strapped to **both** ends of the pipe **five feet (5')** from **each end**. The blocks shall be set so that the pipe does not touch the casing. Pipe joints shall be made outside of the casing. Sand or Pea gravel shall be washed or blown into the casing to the spring line of the pipe to provide bedding under the pipe.

If the contractor prefers to use spacers rather than wood blocking, contractor shall submit the spacer specifications to Mark Moder, mmoder@cityofmadison.com.

Connection of adjacent lengths of steel pipe shall be done by continuous, circumferential, field butt welding in accordance with AWWA C206. The connection shall result in a straight and true casing with a watertight seal.

The conduit pipe shall be installed on line and grade through the casing pipe. Install approved casing spacers at the approved distances. Fill the annular space between the casing and carrier pipe with the approved material (sand or pea gravel).

METHOD OF MEASUREMENT

Install Pipe Casing shall be measured by the lineal foot for installing a casing pipe as described above which shall include all materials, equipment, labor, and incidentals necessary to complete the work.

BASIS OF PAYMENT

Install Casing Pipe shall be measured as described above and shall be paid for at the contract price which shall be full compensation for all work, materials, labor and incidentals required to complete the work as set forth in the description.

BID ITEM 90072 – 3' DIAMETER SEWER ACCESS STRUCTURE

DESCRIPTION

Work under this item shall include the installation of a 3' diameter manhole on Fitch Court in order to avoid installing the proposed sanitary sewer main on private property. All work shall be completed in conformance of Article 507 of the City of Madison Standard Specification for Public Works Construction 2014 Edition. Precast concrete barrel sections and manhole adjustment rings shall meet the requirements of Article 507.3, as well as SDD 5.7.2 and 5.7.15 of the City of Madison Standard Specifications for Public Works Construction – 2014 Edition but the width of the structure shall be 3 foot diameter. The roof of the structure shall be a 3' diameter flat top. With an concentric 2' diameter opening.

METHOD OF MEASUREMENT

3' Diameter Sewer Access Structure shall be measured by each completed unit acceptably completed.

BASIS OF PAYMENT

3' Diameter Sewer Access Structure shall be measured as described above and shall be paid for at the contract price which shall be full compensation for all work, materials, labor and incidentals required to complete the work set forth in the description.

BID ITEM 90100 – PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 6-INCH

DESCRIPTION

This special provision describes furnishing, grooving, and installing preformed wet reflective pavement marking tape for grooved applications as shown on the plans, according to State of Wisconsin Standard Specification Section 646, and as hereinafter provided.

MATERIALS

3M Stamark Pavement Marking Tape or approved equal. Furnish grooved wet reflective pavement marking tape and adhesive material per manufacturer's recommendations.

Furnish a copy of the manufacturer's recommendations to the engineer before preparing the pavement marking grooves.

CONSTRUCTION

C.1 General

For quality assurance, provide the Engineer evidence of manufacturer training in the proper placement and installation of pavement marking tape.

Plane the grooved lines according to details in the plan and per manufacturer's recommendations. Use grooving equipment with a free-floating, independent cutting head. Plane a minimum number of passes to create a grooved surface per manufacturer's recommendations.

C.2 Groove Depth

Cut the groove to a depth of 120 mils \pm 10 mils from the pavement surface or, if tined, from the high point of the tined surface. To measure the depth, the contractor may use a depth plate placed in the groove and a straightedge placed across the plate and groove, or the contractor may use a straightedge placed perpendicular to the groove. The Engineer may periodically check groove depths.

C.3 Groove Width – Longitudinal Markings

Cut the groove one-inch wider than the width of the tape.

C.4 Groove Position

Position the groove edge according to plan details. Achieve straight alignment with the grooving equipment.

C.5 Groove Cleaning

C.5.1 Concrete

Cooling the cutting head with water may be necessary for some applications and equipment. If cooling water is necessary, flush the groove immediately with high-pressure water after cutting to remove any build-up of cement dust and water slurry. If this is not done, the slurry may harden in the groove.

If water is used in the grooving process, allow the groove to dry a minimum of 24 hours after groove cleaning, and prior to pavement marking application. The groove surface shall be clean and dry before applying the adhesive, and pavement marking tape. Use a high-pressure air blower with at least 185 ft³/min air flow and 120 psi air pressure to clean the groove; use of the air blower does not decrease the amount of time required for the groove to dry.

C.6 Tape Application

Apply the wet reflective pavement marking tape when both the air and surface temperature are 40 degrees F and rising.

Apply tape in the groove as per manufacturer's recommendations. Refer to the manufacturer's instructions for determining when the surface preparation adhesive is set.

Tamp the wet reflective pavement marking tape with a tamper cart roller, with a minimum of a 200-lb load, cut to fit the groove. Tamp a minimum of three complete cycles (6 passes) with grooved modified tamper roller cart.

METHOD OF MEASUREMENT

Pavement Marking Grooved Wet Reflective Tape 6-Inch shall be measured by the linear foot of tape installed and accepted in place.

BASIS OF PAYMENT

This item, measured as provided above, will be paid for at the contract unit price, which price shall be payment in full for cutting the groove; for cleaning and preparing the grooved pavement surface; and for furnishing and installing the material.

BID ITEM 90120 – CONCRETE BASES LB-3 MODIFIED

BID ITEM 90121 – CONCRETE BASES LB-8 RAISED

BID ITEM 90122 – CONCRETE BASES LB-SP

DESCRIPTION

This work shall consist of construction of concrete foundations, including necessary hardware, as shown on the plans, in accordance with the pertinent provisions of Section 604 of the State of Wisconsin Standard Specifications and as hereinafter provided.

MATERIALS

Concrete masonry shall be Grade A, A-WR, A-FA, or A-IP conforming to the requirements of Section 501 of the Standard Specifications.

- 1) Conduit cast within the bases shall be Schedule 40 polyvinyl chloride (PVC) electrical conduit and shall conform to the requirements of Section 652 of the State of Wisconsin Standard Specifications.
- 2) Anchor bolts for Type LB-3 Modified, Type LB-8, and Type LB-SP bases shall be made from high-strength steel (50 KSI minimum yield strength), ASTM A36, and each shall be fitted with two hard washers and two heavy hex nuts. Each bolt shall have approximately six (6) inches or more of thread at the top end. The bolts, washers, and nuts shall be galvanized. Bolts for the LB-3 Modified base shall be 3/4 inch by 30 inch including 4 inch L-bend at the bottom. Bolts for the LB-8 base shall be 1.00 inch by 40 inch, including 4 inch L-bend at the bottom. Bolts for the LB-SP base shall be 1.00 inch by 60 inch. Anchor bolt size for the LB-3 Modified base shall be confirmed by the Engineer prior to pouring the base.
- 3) Bar steel reinforcement shall conform to the requirements of Section 505 of the State of Wisconsin Standard Specifications.

CONSTRUCTION

The bases shall be placed with one side parallel to the centerline of the street.

- 1) Forms shall be of sufficient depth to provide a minimum of twelve (12) inches of formed base below the finished grade on the low side of the base. The top surface of the base shall be level with a three-quarter (3/4) inch bevel on the edges and shall be given a rubbed finish.

- 2) Anchor bolts shall be cast into the base as shown on the plans. Bolt circle diameters shall be verified before constructing the bases.
- 3) Manufactured elbows shall be furnished and installed in all bases by the Contractor, except as noted on the details. Elbows shall be installed to permit conduit and cable-in-duct to be installed in as nearly straight-line runs as possible, without unnecessary bends. Bases not installed to this standard will not be accepted. Existing conduit shall be extended into the bases. Elbows shall conform to the requirements of the type of conduit entering the base. Each base at the end of a run shall have an extra elbow installed as directed by the Engineer. Extra elbows shall also be installed in any base as directed by the Engineer.
- 4) Poles shall not be erected on the concrete bases until the bases have cured for at least seven (7) days.
- 5) Concrete Bases LB-8 raised and LB-SP requires a rubbed finish down to finished grade. No later than one day after form removal, moisten concrete surfaces and rub with carbonundum brick or another abrasive until producing a uniform color and texture. Do not apply cement grout other than that created by the rubbing process.

The top of the LB-3 concrete base must be 2-inch +/- 0.5 inch above the adjacent sidewalk/terrace and the bolt circle pattern of all concrete bases must be centered to be within a tolerance of +/- 0.25 inch. If the base is not within this tolerance the base will be required to be removed and reinstalled at the Contractors expense.

METHOD OF MEASUREMENT

Concrete Base (Type) will be measured as a unit complete in place.

BASIS OF PAYMENT

Concrete Base (Type) measured as provided above, will be paid for at the contract unit price each, which price shall be payment in full for furnishing and installing all materials including conduit, bushings, caps and/or plugs, ground rod, anchor bolts, cadwelding, copper grounding wire; bar steel reinforcement, and concrete masonry; for providing openings through existing pavement where required; for excavation, including hand-digging as required, backfill, and disposal of surplus materials; and for all labor, tools, equipment, and incidentals necessary to complete this item of work.

BID ITEM 90123 – STEEL TRANSFORMER BASES BLACK FINISH

DESCRIPTION

This work shall consist of transporting and installing City-supplied steel transformer bases as shown on the plans and as follows.

MATERIALS

The Contractor shall pick up, transport, and install the City-supplied steel transformer bases as called for on the plan and in accordance with the manufacturer's instructions. Steel connecting bolts, size 1.00 inches by 4 inches, hold down lugs for 1.00 inch bolts and nuts and washers shall be furnished by the City. Material is to be picked up at the City Traffic Operations Field Office, 1120 Sayle Street, Madison. Contact Dennis Rowe at 266-9034 at least 24 hours in advance prior to pick-up.

CONSTRUCTION

Steel Transformer bases shall be installed in accordance with the manufacturer's instructions, contract plans and specifications.

METHOD OF MEASUREMENT

Steel Transformer Bases Black Finish, will be measured as a unit complete in place.

BASIS OF PAYMENT

Steel Transformer Bases Black Finish, measured as provide above, will be paid for at the contract unit price each, which price shall be full compensation for picking up and installing City-furnished transformer bases, steel connecting bolts, hold down lugs, and associated nuts and washers; and for furnishing and installing mechanical grounding connector and related hardware; for leveling shims when required; and for all labor, tools, equipment, and incidentals necessary to complete the work.

BID ITEM 90124 – INSTALLATION OF STEEL POLE 30-FOOT 11 GAUGE BLACK FINISH

DESCRIPTION

This item shall consist of transporting and installing City-supplied poles and light fixtures, in accordance with Section 605 of the standard specifications, the details shown on the plans, and these special provisions.

MATERIALS

All City-supplied poles will be round tapered steel shafts with a base welded to the lower end. All 30-foot 11 Gauge poles will have two duplex receptacles, 20 amp, GFCI type. Each outlet shall be on a unique circuit from each other and the luminaire assembly. All poles and fixtures shall be picked up at City Traffic Engineering, 1120 Sayle Street, transported to the site, and installed and wired complete. Light fixtures are 156 Watt LED. Contact Dennis Rowe at 266-9034 for pick-up.

METHOD OF MEASUREMENT

Installation Steel Pole 30 foot 11 Gauge Light Unit, Black Finish, will be measured as units and the quantity measured for payment shall be the number of units completed in place and accepted in accordance with the contract.

BASIS OF PAYMENT

Installation Steel Pole 30 foot 11Gauge Light Unit, Black Finish, including installation of Lighting Fixture, 156 watt LED, Cooper Talon Luminaire, Black Finish, measured as provide above, will be paid for at the contract unit price each, which price shall be full compensation for picking up and installing City-furnished poles and fixtures; for furnishing and installing fuses, wire, and all miscellaneous hardware necessary to integrate the components into a single unit connected to the feeder system; for corrosion prevention when required; and for all labor, tools, equipment, and incidentals necessary to complete the work.

BID ITEM 90125 - INSTALLATION OF PEDESTRIAN LIGHT BANNER AND BRACKET, BLACK FINISH

BID ITEM 90126 - INSTALLATION OF AREA LIGHT BANNER AND BRACKET, BLACK FINISH

DESCRIPTION

This item shall consist of transporting and installing banner and brackets in accordance with Section 605 of the standard specifications, the details shown on the plans and these special provisions.

MATERIALS

All assembled banner brackets and banners shall be picked up at the city yard (1120 Sayle Street), transported to the site, and installed complete pedestrian and area light poles at intersections furnished as a part of this project. Contact Dennis Rowe at 266-9034 at least 24 hours in advance for pick-up.

METHOD OF MEASUREMENT

Installation of Area Light Banner and Brackets and Installation of Pedestrian Light Banner and Brackets will be measured as units, complete and accepted in place, meeting the performance specifications submitted by the Contractor.

BASIS OF PAYMENT

Area Light Banner and Brackets and Pedestrian Light Banner and Brackets shall be measured as provided above and will be paid for at the contract unit price each, which shall be full compensation for picking up and installing all materials, including mounting hardware and banners; and for all labor, tools, equipment and incidentals necessary to complete the work in accordance with the plans and specifications.

BID ITEM 90127 - INSTALLATION OF TEMPORARY STREET LIGHT FIXTURES AND BRACKETS BID ITEM 90128 - INSTALLATION OF TEMPORARY WOOD POLES

DESCRIPTION

The work under these items shall consist of picking up, transporting, installing poles, mast arms and luminaries, in accordance with the pertinent provisions of Section 661 of the State of Wisconsin Standard Specifications and as hereinafter provided and as shown on plans.

CONSTRUCTION

The Contractor shall pick up, transport, and install the poles, mast arms, and luminaries as called for on the plan. Material is to be picked up and returned to the City Traffic Operations Field Office, 1120 Sayle Street, Madison. Contact Dennis Rowe at 266-9034 at least 24 hours in advance for pick-up. All aerial cable, underground splices, conduit, messenger cables, supports, down guys, guy wire and anchors are a part of this item and shall be furnished and maintained by the Contractor. This item also includes all hole drilling, tamping, backfill, and necessary vehicles and tools to accomplish the same.

METHOD OF MEASUREMENT

Installation of Temporary Street Light Fixtures and Brackets and Installation of Temporary Wood Poles will be measured as single units installed in place.

BASIS OF PAYMENT

Installation of Temporary Street Light Fixtures and Brackets and Installation of Temporary Wood Poles shall be measured as provided above, which price shall be full compensation for picking up items furnished by the City, installing, and returning City furnished items to the City Traffic Operations Field Office at the end of the project.

BID ITEM 90129 – ELECTRICAL WIRE LIGHTING 12 AWG BID ITEM 90130 – ELECTRICAL WIRE LIGHTING 10 AWG BID ITEM 90131 – ELECTRICAL WIRE LIGHTING 8 AWG BID ITEM 90132 – ELECTRICAL WIRE LIGHTING 6 AWG

DESCRIPTION

The work under these items shall consist of furnishing and installing the required conductors as cable through the conduit as shown on the plans and as hereinafter provided.

MATERIALS

The proper type, size and number of electrical conductions as shown on the plans shall be installed. The applicable specifications in Section 602 of the Standard Specifications shall apply.

CONSTRUCTION

The applicable specifications in Section 602 of the Standard Specifications shall apply.

METHOD OF MEASUREMENT

Electrical Wire Lighting (size) AWG, complete in place and accepted, shall be measured in length in linear feet, from terminal connection to terminal connection along the centerline of the conduit, with the terminal connection begin the centerline of a junction box or at other terminal locations as required by the plans or specifications.

Additional lengths of wire for making the necessary splices and connections at lighting units, junction boxes, distribution centers, and other terminal locations shall be installed by the Contractor and considered as part of the work included in this item, but will not be measured or paid for directly.

BASIS OF PAYMENT

This item, measured as provided above, will be paid for at the contract unit price per linear foot, which price shall be payment in full for furnishing all materials, including wire, for installing wire in the conduit; for making connections as required and testing installed wire system; and for all labor, tools, equipment, and incidentals necessary to complete this item of work in accordance with the contract.

BID ITEM 90133 -DOUBLE DUPLEX RECEPTACLE IN FLUSH BOX

DESCRIPTION

This item consists of installation of a double duplex receptacle with an in-use weatherproof cover plate mounted in a 4" square box flush in the new reinforced concrete planter and bench walls.

MATERIAL

Provide all boxes, receptacles, cover plates, 3/4" PVC schedule 40 conduit and associated fitting in accordance with the materials listed on the drawings and referenced in the specification for installation of the double duplex weatherproof ground fault interrupter receptacles with in-use cover flush in the concrete wall. Provide all cable, wire nuts, fasteners, etc. to mount and wire all receptacles.

METHOD OF MEASUREMENT

Installation of Double Duplex Receptacle in Flush Box measured as a unit completed in place and fully operational.

BASIS OF PAYMENT

Installation of Double Duplex Receptacle in Flush Box, measured as provided above, will be paid for at the contract unit price each which will include all materials, labor, tools, equipment and incidentals necessary to complete this work in accordance with the contract.

BID ITEM 90134 -208 VOLT RECEPTACLE IN FLUSH BOX

DESCRIPTION

This item consists of installation of a 208 volt 30 amp NEMA 6-60R weather proof receptacle with an in-use weatherproof cover plate mounted in a 4" square box flush in the new reinforced concrete planter and bench walls.

MATERIAL

Provide all boxes, receptacles, cover plates, 3/4" PVC schedule 40 conduit and associated fitting in accordance with the the drawings and referenced in the specification for installation of the 208 volt 30 amp NEMA 6-60R weather proof receptacle with in-use cover flush in the concrete wall. Provide all cable, wire nuts, fasteners, etc. to mount and wire all receptacles.

METHOD OF MEASUREMENT

Installation of 208 Volt Receptacle in Flush Box measured as a unit completed in place and fully operational.

BASIS OF PAYMENT

Installation of 208 Volt Receptacle in Flush Box, measured as provided above, will be paid for at the contract unit price each which will include all materials, labor, tools, equipment and incidentals necessary to complete this work in accordance with the contract.

BID ITEM 90135 - ELECTRIC FOR KIOSK

DESCRIPTION

This item describes furnishing and installing electrical equipment inside of the new Kiosks. The electrical equipment consists of new main breakers served by MG&E service laterals. The main for Kiosk-1 feeds a 2 meter stack with breakers that feed 2 new panelboards. The main for Kiosk-2 feeds a 3 meter stack with breakers that feed 3 new panelboards.

MATERIALS

1. Main circuit breaker, surface mount, NEMA 3R enclosure, rated 120/208 volt, 400 amp frame with 400 amp trip, 3-pole, 4-wire, ground lug, suitable for service entrance, 65,000 AIC, U.L. listed.
2. Meter distribution center, 120/208 volt, 3 phase, 4-wire, 400 amp copper bus, 65000 A.I.C., 3 branch, 3 phase, 4-wire meter sockets each protected with a 200 or 100 amp, 3-pole circuit breaker, meter sockets shall conform to electric utility company metering department requirements, U.L. listed.
3. Two panelboards for Kiosk-1, surface mounted, NEMA 3R construction, (1) 225 amp and (1) 100 amp MLO, 3 phase, 4-wire, solid neutral, copper bus, bolt-on breakers. Three panelboards for Kiosk-2, surface mounted, NEMA 3R construction, (1) 225 amp and (2) 100 amp MLO, 3 phase, 4-wire, solid neutral, copper bus, bolt-on breakers. See plans for breaker sizes and quantities. Provide cabinet form with door-in-door construction, concealed hinge, and flush lock all keyed alike. Finish in manufacturer's standard gray enamel.
4. Lighting contactor, electrically held, 120-volt coil, 600-volt contacts, NEMA 3R enclosure, 30 amp continuous contacts, integral hand-off auto selector switch, U.L. listed.
5. Photocell, button style with wall plate, 120/277 volt, 1800 V.A. rated, single pole, single throw contact, weatherproof and corrosion proof faceplate. Mount in standard flush outlet box in side of Kiosk as detailed, U.L. listed.
6. Time switch, 7 day or yearly, astronomical, daylight savings time selectable, electronic, eight SPDT 20 amp contacts with capability of individual schedules on a 7 day time period, LED

display, non-volatile memory requires no back-up, time and calendar data minimum 8 years with lithium battery, NEMA 3R enclosure, U.L. listed.

7. Four light fixtures, Type F2 to uplight kiosk roof and to downlight poster holder in door. Use a 4 foot one lamp high output T8 strip fixture at 120 volt with aluminum housing, white enamel finish. Refer to drawings for placement.
8. Installation of internal duplex receptacle, weatherproof. In-use cover, GFI inside kiosk.

METHOD OF MEASUREMENT

Electric for Kiosk, will be measured as a unit complete in place and fully operational.

BASIS OF PAYMENT

Electric for Kiosk, measured as provided above, will be paid for at the contract unit price each which shall include all the main breaker, the electrical meter center panelboards, time clock, contactor, lights, receptacles, photocell, and all materials, labor, tools, equipment, permits, and incidentals necessary to complete this item of work.

BID ITEM 90136 – LED POWER SUPPLY & VAULT

DESCRIPTION

This item consists of furnishing and installing LED power supplies and power supply vaults at the locations shown in the plans.

MATERIALS

The Contractor shall furnish Q-Vault-5 LED power supply vault with optional Concrete Pour Ring and two Q-SET eLED 200 W, 24VDC LED power supply cassettes. The Contractor may furnish an approved equal with written documentation from the LED light fixture manufacturer that the LED light fixture will not be voided nor shortened with use of a different LED power source manufacturer. The Contractor shall furnish concrete in accordance with Article 304 of the Standard Specifications and gravel meeting the specifications for Clear Stone.

CONSTRUCTION

The Contractor shall install the LED power supply vault and LED power supply cassettes in accordance with the manufacturer's instructions and as detailed in the plans. The concrete vault pad shall be constructed and finished in accordance with Article 304 of the Standard Specifications.

METHOD OF MEASUREMENT

LED Power Supply & Vault will be measured by each vault and LED power supply installed and accepted in accordance with the contract.

BASIS OF PAYMENT

LED Power Supply & Vault, measured as provided above, will be paid for at the contract unit price, which price shall be payment in full for furnishing all materials, including power supply cassettes, power supply vaults, concrete, and clear stone; for installing the vault and concrete support foundation; for installing, connecting, and testing the power supply cassettes; for installing, connecting, and testing wire and wire connections; and for all labor, tools, equipment, and incidentals necessary to complete this item of work in accordance with the contract

BID ITEM 90137 – LED UNDER BENCH LIGHTING

DESCRIPTION

This item consists of furnishing and installing linear LED light fixtures below precast concrete seat wall caps, wood seat wall caps, and cantilevered wood seats.

MATERIALS

The Contractor shall furnish Plexineon White 1X series 3500k LED light fixtures as manufactured by iLight Technologies, or approved equal; stainless steel clips necessary to install the LED light fixture per the manufacturer's instructions; stainless steel concrete masonry screws and stainless steel wood screws; 2 ½ inch deep single gang steel masonry boxes; waterproof cord grips; silicone filled wire connectors; PVC conduit in accordance with Section 602 of the Standard Specifications; and 12 AWG minimum Type USE-2 electrical conductors.

CONSTRUCTION

The Contractor shall install PVC conduit in the cast in place concrete seat wall and terrace seat walls as detailed in the plans. The Contractor shall provide a pull cord in every conduit. The Contractor shall install the steel single gang masonry boxes and the Plexineon LED light fixtures according to the manufacturer's instructions. All wiring installation and connections shall be in accordance with the Plexineon wiring instructions and the pertinent sections of Section 602 of the Standard Specifications.

METHOD OF MEASUREMENT

Under Bench Lighting will be measured by the linear foot of Plexineon LED light fixture installed and accepted. Conduit and wire installed between the LED power source and the steel gang boxes will not be measured and are considered incidental to the Under Bench Lighting bid item.

BASIS OF PAYMENT

Under Bench Lighting, measured as provided above, will be paid for at the contract unit price per linear foot, which price shall be payment in full for furnishing all materials, including light fixtures, clips, stainless steel crews, gang boxes, waterproof cord grips, silicon filled wire connectors, wire, and conduit; for installing wire in the conduit; for making connections as required and testing installed wire system; and for all labor, tools, equipment, and incidentals necessary to complete this item of work in accordance with the contract.

BID ITEM 90138 – FURNISH AND INSTALL BASCOM HILL PEDESTRIAN POLE LIGHTING

DESCRIPTION

This item consists of furnishing and installing pedestrian pole lighting at the base of Bascom Hill according to the University of Wisconsin Technical Guidelines for Exterior Lighting Fixtures for historic areas of campus.

MATERIALS

The Contractor shall furnish pole top lantern "Main Street," Model MS805 as manufactured by Sternberg Lighting; lamps shall be 94-watt LED; fixture shall have decorative spikes (A); lens shall be clear seeded acrylic (CSA); post top (PT) mounted fixture; black finish on fixture, pole and all components; distribution type T3 shall have 12 feet tall, 4 inch diameter, smooth, straight pole (12P4) with Williamsburg base; distribution type T5 shall have 10 feet tall, 4 inch diameter, smooth, straight pole (10P4) with Williamsburg base; single fuse and holder (FHS). The Contractor shall coordinate driver voltage with existing circuit voltage.

CONSTRUCTION

The Contractor shall install the pole top and pole in a concrete footing 6 inches above grade, with 1 inch beveled edge at a 45 degree angle, rubbed finish, with circular broom finish on top of base as detailed in the plans. Diameter of concrete footing shall be kept to a minimum but also provide required structural support and be larger than base cover (shroud) for the lamp base. The base cover shall not overhang the concrete footing. The Contractor shall install the pole top and pole according to the manufacturer's instructions. Connect to the existing pedestrian pole circuit; match conduit and wire size and number. The Contractor shall verify circuit capacity prior to connecting. Provide hand-hole(s) as needed to connect to existing circuit. All wiring installation and connections shall be in accordance with the Sternberg wiring instructions and the pertinent sections of Section 602 of the Standard Specifications. The Contractor shall furnish concrete in accordance with Article 304 of the Standard Specifications.

METHOD OF MEASUREMENT

Pedestrian Pole Lighting will be measured by each pedestrian pole fixture installed and accepted. Conduit and wire installed between the fixtures and to connect with the circuit will not be measured and are considered incidental to the Pedestrian Pole Lighting bid item.

BASIS OF PAYMENT

Pedestrian Pole Lighting, measured as provided above, will be paid for at the contract price per each Pedestrian Pole Light, which price shall be payment in full for furnishing all materials, including light fixtures, poles, concrete, wire, and conduit; for installing wire in the conduit; for making connections as required and testing installed wire system; and for all labor, tools, equipment, and incidentals necessary to complete this item of work in accordance with the contract.

BID ITEM 90139 –FURNISH AND INSTALL ¾-INCH PVC (SCHEDULE 40) CONDUIT BY “OPEN TRENCH” METHOD

DESCRIPTION

Furnish & Install ¾ Inch PVC (Schedule 40) Conduit by Open Trench Method shall be installed, measured and paid for in accordance with the pertinent provisions of Article 602 of the Standard Specifications.

METHOD OF MEASUREMENT

Furnish & Install ¾ Inch PVC (Schedule 40) Conduit by Open Trench Method measured as a linear foot item completed in place and fully operational.

BASIS OF PAYMENT

Furnish & Install ¾ Inch PVC (Schedule 40) Conduit by Open Trench Method, measured as provided above, will be paid for at the contract unit price linear foot which will include all materials, labor, tools, equipment and incidentals necessary to complete this work in accordance with the contract.

BID ITEM 90160 – WATER MAIN BYPASS

DESCRIPTION

Furnish, install, maintain and remove all temporary bypass pipe; pipe fittings; service lines; hardware; water supply connection backflow preventers and reduced pressure zone devices; water quality tests; temporary hydrants; flushes; sampling taps; disinfections; ramping or burial at road crossings, sidewalks and driveways; preparation and distribution of service interruption notices; restoration; and furnishing all labor, material and equipment necessary to complete work.

Any Madison Water Utility charges associated with the installation, use and removal of the reduced pressure zone (RPZ) valve and water usage will be waived for all work included in this contract. Any use of City of Madison water will still require request and notification procedures indicated in the City of Madison Standard Specifications for Public Works Construction.

The contractor must submit a written plan for water main bypass to Pete Holmgren of the Water Utility at pholmgren@madisonwater.org prior to the start work letter being issued.

MATERIALS

- **Temporary Bypass Service Materials:**

All materials furnished for use as temporary bypass pipe, service hose, connections and related appurtenances that come into contact with drinking water are to be certified for compliance with ANSI/NSF Standard 61 by an ANSI approved third-party certification program or laboratory. All materials shall be fully adequate to withstand the required water pressure and all other conditions of use, and shall provide adequate water tightness before being put into service. All previously used materials may only have been used in potable water applications.

All materials for use as main temporary bypass lines, service lines, connections and related appurtenances shall have a minimum working pressure rating of 200 psi and be made of materials that will not have an adverse effect on the taste or odor of the water.

The main temporary bypass line must be at least 6-inch diameter. Use hose or piping that is hydraulically equivalent to the service size for all services.

Temporary fire hydrants shall consist of a 4 inch by 4 inch tee or 4 inch 90° bend, with a butterfly valve connected to the end of the tee or bend, and an operating nut to control the valve. Temporary fire hydrants shall be equipped with a 4-1/2 inch diameter National Standard threaded nozzle with hydrant cap installed.

CONSTRUCTION

- **Temporary Water Service:**

Submit a proposed Temporary Water Service plan depicting the proposed components, configuration/locations, protection measures, proposed disinfection methods, and contact information for the Contractor's representative(s) responsible for routine maintenance and emergency response. The Temporary Water Service Plan must be approved by the Engineer before installing any section of the temporary distribution piping.

The temporary bypass system shall maintain a continuous supply of water to all affected customers for the duration of time that the existing main is out-of-service for rehabilitation. The temporary bypass system shall be maintained in a safe and operative condition at all times. For protection of the work and the public, flashers and barricades shall be installed at apt locations and as directed by the Engineer. The flashers and barricades shall be in proper operating condition. Temporary water piping shall be protected from freezing weather at all times.

The work is to be in conformance with the requirements of the Standard Specifications, Provisions and AWWA C602 Cement Mortar Lining of Water Pipelines in Place – 4 In. and Larger, Section 4.6 Temporary Bypass to Customers.

- **Notification Requirements for Service Interruptions:**

The notice to affected customers shall include the delivery of a door-hanger or similar pamphlet which indicates the date and time of the planned service interruption and, as applicable, the proposed location of temporary service connection and the proposed route of the temporary service line & main bypass line. Include contact information for the Contractor's field representative and the Engineer.

Whenever possible, make connections to the customer's water service line on a day and at a time that is convenient to the customer. Make satisfactory arrangements with the customer so that stop and waste valves shall be accessible at all times. Immediately prior to individual service work, attempt to notify the customer again to verify that all water use has been stopped. Do not interrupt any customer's service until certain that all labor, material and equipment necessary to perform the work are present at the work site. Bear all responsibility for any loss or damage arising out of the failure of any such customer to receive the specified notice of a planned interruption of service.

Emergency Shutdowns and Notifications:

In the event of a break on a water main, service, bypass pipe, temporary service or other failure of a Madison Water Utility facility, whether the result of Contractor's activities or other unrelated matters, act in accordance with the following procedure:

1. Immediately notify Madison Water Utility's 24-hour Operator at (608) 266-4667 and inform them of the situation, the affected area, estimated duration, and if there is a need for an immediate water main shutdown.
2. The Contractor is NOT to operate any valves unless directly authorized to do so by a Madison Water Utility representative.
3. Notify all residents affected by the emergency service interruption.

• **Temporary Bypass Water System Set-Up:**

Disinfect the hydrant standpipe prior to connecting the bypass pipe to the hydrant by pouring 1 quart of commercially available bleach (solution containing approximately 5% sodium hypochlorite) into the hydrant. The hydrant shall be filled with clean water and let stand for a minimum of 20 minutes. The hydrant shall then be flushed and the bypass pipe connected to it. All hydrant nozzles shall be capped when not in use.

Whenever possible, install a compliant double-valved tee directly on the 4½-inch hydrant nozzle. One branch of tee shall be used for the temporary bypass connection, and other shall be left without bypass attachments for fire department use. Support, as necessary, all appurtenances attached to hydrant.

All temporary water service connections to hydrants shall be made in such a manner that if it becomes necessary, they can be easily removed so that the hydrant can be used for firefighting purposes, with minimum effort.

When a connection cannot be made on a hydrant, a bulkhead connection may be required. Install compatible bulkheads (temporary line caps) on the existing water main in place of a solid cap or plug fitting to keep the section of the existing water main pressurized and capable of supplying a continuous flow of water. The bulkheads shall be fitted with a compatible outlet fitting so the temporary bypass pipe can be fed through the end of the bulkhead. The coupling shall be slid over the end of the water main, and braced or restrained so that it will support normal operating pressure without leaking.

Temporary valves and hydrants shall be installed on the temporary bypass pipe at all appropriate locations, as designated on an approved Temporary Bypass Service Plan.

Temporary fire hydrants shall be serviceable at all times. Hydrants are subject to inspection at any time by either the Madison Water Utility or the City of Madison Fire Department. If they are found to be unserviceable, immediate correction shall be made.

Completely cover and secure black plastic sheeting around all existing or newly-installed hydrants while they are out-of-service. Maintain the plastic covering until the hydrant is returned to service or removed and salvaged.

Install bypass pipe to minimize or avoid crossing traffic or pedestrian routes whenever possible. Where not possible, provide a ramping system to protect the bypass pipe at each location where pipe

crosses roads or driveways. ADA compliance shall be provided at sidewalk or sidewalk ramp crossings per Article 107 of the Standard Specifications.

Water from the temporary bypass pipes will NOT be allowed for any purpose other than to supply the bypass pipes. Water for filling water tanks, or any other purpose other than supplying water to bypass pipes must be obtained from a hydrant with a Madison Water Utility approved backflow preventer installed per Section 107.11 of the Standard Specifications and these Special Provisions.

- **Bypass System Disinfection:**

All bypass pipes shall be properly disinfected and yield a safe-water sample prior to connecting any customers to the temporary bypass system.

As part of the Temporary Water Service plan described in these Special Provisions, include the proposed disinfection, flushing, and applicable customer notification procedures required for the proposed temporary bypass system. These procedures shall be in accordance with AWWA C651 – Disinfecting Water Mains.

Properly dispose of any highly-chlorinated water in accordance with Article 703 of the Standard Specifications. Sampling and testing are to be done according to the Standard Specifications.

- **Temporary Customer Service Lines:**

After completing the temporary bypass disinfection per these Special Provisions, thoroughly flush piping to be used for temporary services with potable water immediately prior to connection to consumer's service. Notify consumers prior to shutting off the service and transfer services to the bypass. Do not transfer services to the bypass earlier than necessary.

- **Return Service Line to New Water Main:**

After completion of the water main rehabilitation, clear the water service lines by back flushing with potable water or as otherwise approved in the disinfection and flushing plan. Disconnect the service bypass pipe, restore the water service line back to normal conditions, and restore water flow. All areas used while providing temporary service shall be properly restored to pre-construction status, or as noted.

After flushing is completed and service lines have been restored to the permanent laterals, remove bypass and all associated materials used for maintenance and ramping. Complete restoration of all areas damaged by temporary bypass pipe and service connections.

- **24-Hour Maintenance:**

Be responsible for maintenance and repair of the temporary bypass system and all associated protective equipment (barricades, flashers, ramps etc.) at all times. Be equipped to make all repairs necessary, at the project site, for the duration of the project.

Designate a permanent company employee to maintain the bypass and services. Supply Madison Water Utility with applicable emergency and after hours phone numbers as part of the proposed Temporary Water Service Plan submittal required in these Special Provisions.

METHOD OF MEASUREMENT

Water Main Bypass is measured as a Lump Sum to include all materials and work performed as described in these Special Provisions.

BASIS OF PAYMENT

Water Main Bypass shall be paid for at a Lump Sum unit price. Lump sum payment shall be full compensation for all temporary water service work as specified.

BID ITEM 90161 – AIR SUPPLY CONNECTION
BID ITEM 90162 - CURB STOP 1-INCH
BID ITEM 90163 - CURB BOX 1-INCH
BID ITEM 90164 - WALL HYDRANT MOUNTED IN CONCRETE
BID ITEM 90165 – WALL HYDRANT MOUNTED IN CABINET
BID ITEM 90166 – WATER PIPE COPPER 1-INCH
BID ITEM 90167 – WATER PIPE COPPER 1 ½ -INCH

DESCRIPTION

This special provision describes furnishing and installing the parks watering system. The parks watering system will be a separate potable water system served from the 8-inch water main. The system includes: water system main, water service laterals and curb stops, air blow out service connections, and wall hydrants with vacuum breakers installed in concrete and in the RPR valve cabinet for the irrigation system. The system main and service laterals shall be furnished and installed in accordance with Part VII of the Standard Specifications.

MATERIALS

Air Supply Connection

The Contractor shall furnish and install a 1-inch brass plug and adapter at the end of a 1-inch copper service lateral inside a water valve box at the proposed location of the air blow out service points shown on the plans. The Contractor shall furnish and install a Bingham and Taylor Standard Valve Box without rods & rings. The water valve box, plug and adapter, tees, fittings, and joint materials and other materials necessary for the construction of the connection as shown in the contract documents shall be furnished and installed by the Contractor as an incidental cost associated with this bid item.

Water Pipe Copper 1-Inch

The Contractor shall furnish and install Type K soft copper tubing, 1-inch in diameter for all the parks watering system service laterals to wall hydrants. Copper pipe, tees, bends, fittings and all other joint materials associated with placing these laterals in accordance with the plans shall be furnished and by the contractor as an incidental cost associated with this bid item.

Water Pipe Copper 1½-Inch

The Contractor shall furnish and install Type K soft copper tubing, 1½-inch in diameter for all the parks watering system main. Copper pipe, tees, bends, fittings and all other joint materials associated with placing these laterals in accordance with the plans shall be furnished and by the contractor as an incidental cost associated with this bid item.

Curb Stop 1-Inch

The Contractor shall furnish and install Mueller H1502-2 curb stops on the 1-inch service laterals at the plan locations.

Curb Box 1-Inch

The Contractor shall furnish and install Bingham and Taylor 94 F curb boxes on the 1-inch service laterals. All concrete brick and block supports as shown on the details shall be furnished and installed by the Contractor as an incidental cost associated with this bid item.

Wall Hydrant Mounted in Concrete

The Contractor shall furnish and install a Woodford Model B74 wall hydrant with the sweat fitting C inlet at all locations shown on the plans where a wall hydrant is to be located in concrete. All pipe, fittings, joint materials, and 2-inch PVC conduit for shear protection shall be furnished and installed by the Contractor as an incidental cost associated with this bid item.

Wall Hydrant Mounted in Cabinet

The Contractor shall furnish and install a Woodford Model B74 wall hydrant with the sweat fitting C inlet in the reduced pressure regulator cabinet. The Contractor shall furnish and install a 1-Inch ball valve and flex pipe connector at the end of the 1-inch service lateral inside the reduced pressure regulator valve cabinet between the hose bib and the connection to the reduced pressure regulator valve as shown on the contract document details. All mounting brackets as specified in the details shall be furnished and installed by the Contractor as an incidental cost associated with this bid item. All pipe, fittings, joint materials, ball valve, and a flex connector for shear protection shall be furnished and installed by the Contractor as an incidental cost associated with this bid item.

CONSTRUCTION

The Contractor shall install the parks watering system main, service laterals, curb stops and curb boxes, and wall hydrants in accordance to Article 703 of the Standard Specifications and as hereinafter provided.

The parks watering system main shall be kept at approximately 4 to 5 feet below finish grade although they may vary to avoid utility conflicts, but at no time shall this system be less than 24 inches deep. The main is placed in the same trench as the new storm sewer trunk line for future locating and protection of the parks watering system main. The service laterals are located at various locations and the details of these locations shown on the plans shall be followed. The service lateral casings shall be used in accordance with the details for shear protection on service lateral tubing. All fittings below finish grade shall be schedule 80 brass fittings with flare connections. All above grade joints shall be soldered using silver solder for a stronger union.

All wall hydrants shall be installed with a Hose Connection Vacuum Breaker (ASSE 1011).

METHOD OF MEASUREMENT

Air Supply Connection

Measured by each complete unit, completed in place and accepted in accordance with the contract.

Water Pipe Copper 1-Inch

Measured by length in feet along the centerline of the service lateral at the surface, from the center of the parks watering system main to the center of the wall or light base in which the wall hydrant is installed or to the center of the drinking fountain.

Water Pipe Copper 1½-Inch

Measured by length in feet along the centerline of the system main at the surface, from the Air Supply Connection to the end of the system main, terminating at either a plug, or the center of the RPR cabinet.

Curb Stop 1-Inch

Curb Box 1-Inch

Measured by each complete unit, completed in place and accepted in accordance with the contract.

Wall Hydrant Mounted in Concrete

Wall Hydrant Mounted in Cabinet

Measured by each complete unit, completed in place and accepted in accordance with the contract.

BASIS OF PAYMENT

The Contractor shall be paid for the measured quantity at the contract unit price. Payment is full compensation for furnishing and installing pipe, curb stops, curb boxes, wall hydrants, fittings, joint materials; for excavating and backfilling of trenches; for disposing of excess materials; and for all labor, tools, equipment, and incidentals necessary to complete the work.

BID ITEM 90168 – DRINKING FOUNTAIN

DESCRIPTION

This special provision describes furnishing and installing drinking fountains as shown on the plans and as herein provided.

MATERIALS

The Contractor shall furnish the following in accordance to the Standard Specifications and the following:

Drinking fountain: Most Dependable Fountains MDF 440SMSS or Approved Equal; ADA accessible;
Color: powdercoat black.

Required Options:

- Stainless steel (SS) Surface Carrier option
- Attached Jug Filler
- Seasonal covers (2)
- Recessed hose bib with locked cover

Waste line and surface drain: 1-1/2" and 4-inch schedule 40 PVC pipe and associated fittings, wyes, and connection materials.

Surface drain: 4-inch cast iron surface drain cover, ADA compliant.

Stainless steel fasteners per manufacturer recommendations for surface mounting of fountain.

Type K soft copper tubing, 1-inch in diameter for service line.

CONSTRUCTION

Examine areas to receive drinking fountain for compliance with requirements and conditions affecting installation and performance. Proceed with installation only after unsatisfactory conditions have been corrected.

Surface mount to concrete pavement in locations shown on plans and in coordination with water supply and waste lines. Install per manufacturer's written instructions.

METHOD OF MEASUREMENT

Drinking Fountains shall be measured by the unit, each, installed and accepted in place.

BASIS OF PAYMENT

This item, measured as provided above, will be paid for at the contract unit each, which price shall be payment in full for furnishing and installing drinking fountains; for furnishing and installing waste lines, service lines, and surface drains; and for furnishing all labor, tools, equipment and incidentals necessary to complete this item of work.

BID ITEM 90169 – FURNISH AND INSTALL WATER METER VAULT CASTING LID

DESCRIPTION

This special provision describes furnishing and installing Water Meter Vault Casting in accordance to Department of Facilities Development Specifications Section 33 30 00. and as herein provided.

MATERIALS

The Contractor shall furnish the following in accordance to the Standard Specifications and the following:

All manhole castings shall be heavy duty iron conforming to ASTM A48, Class 20 and rated for AASHTO H-20 loading. Provide water-tight, gasketed, self-sealing, non-rocking lids with concealed pickhole.

Water Meter Vault Casting Lid

Neenah Foundry R5900-0084 lid or approved equal.

METHOD OF MEASUREMENT

Water Meter Vault Casting Lid shall be measured by the unit, each, installed and accepted in place.

BASIS OF PAYMENT

This item, measured as provided above, will be paid for at the contract unit each, which price shall be payment in full for furnishing and installing the water meter vault casting lid and for furnishing all labor, tools, equipment and incidentals necessary to complete this item of work.

BID ITEM 90200 – 6-INCH CONCRETE SIDEWALK

DESCRIPTION

This work shall consist of adjusting UW castings in accordance with the Department of Facilities Development Specifications Section 03 30 00.

METHOD OF MEASUREMENT

6-Inch Concrete Sidewalk shall be measured by the square foot installed and accepted.

BASIS OF PAYMENT

6-Inch Concrete Sidewalk, measured as stated above, is full compensation for providing all materials, including concrete, joint fillers, joint sealers, and expansion joints; for excavating and preparing the foundation; backfilling and disposing of surplus material; for placing, finishing, protecting, and curing; and restoring the work site.

BID ITEM 90201 – C1 CONCRETE SIDEWALK 7-INCH

DESCRIPTION

This work shall be in accordance with the requirements of Part 3 of the Standard Specifications, except as herein after amended.

Mockups: Mockups shall be completed by the Contractor to demonstrate the techniques and quality of workmanship required to produce the desired finished product. The mockup area shall be 10-foot by 10-foot.

The mockups shall be done at a location within the City of Madison Metropolitan area. Location shall be verified with the Engineer. The Contractor will give the Engineer a minimum 48-hour notice prior to the test pour. Mockups shall be completed on separate days.

MATERIALS

The concrete mix design shall be as follows per cubic yard:

Cement: 575 lbs
Fine Aggregate: 950 lbs
Upper Canadian Black Granite (½ x ¾) or Starlite Black Granite (9/16 x 3/16): 752.5 lbs
Colonial Red Granite (9/16 x 3/16): 1397.5 lbs

Sieve Analysis

Upper Canadian Black Granite

Sieve Size	% Passing
9/16"	100%
0.53"	98.5%
7/16"	84.7%
5/8"	65.8%
¼"	14.2%
#4	1.0%

Starlite Black Granite

Sieve Size	% Passing
9/16"	98%
3/8"	66%
3/16"	12%
#8	0%

Colonial Red Granite

Sieve Size	% Passing
9/16"	98.0%
3/8"	67.0%
#4	13.0%
#8	3.0%
#16	<1.0%

CONSTRUCTION

Placing and Finishing Concrete. Conform to Part 3 of the Standard Specifications for the concrete. The Engineer will check and approve the foundation, forms and reinforcement if required, before placing the concrete. Place the concrete on a moist foundation, deposit it to the required depth, and consolidate sufficiently to bring the mortar to the surface, then strike-off and finish to a true and even surface. Before mortar sets, spray the surface with water and brush or lightly broom the surface to expose the aggregate. Before performing the final surface finish, check the sidewalk surface with a 10-foot straightedge, and correct all areas that vary ¼-inch from the testing edge by adding or removing concrete while the concrete is still plastic.

METHOD OF MEASUREMENT

C1 Concrete Sidewalk 7-Inch shall be measured by the square foot installed and accepted.

BASIS OF PAYMENT

C1 Concrete Sidewalk 7-Inch, measured as stated above, is full compensation for providing all materials, including concrete, bar steel reinforcement HS, joint fillers, joint sealers, and expansion joints; for excavating and preparing the foundation; backfilling and disposing of surplus material; for placing, finishing, protecting, and curing; and restoring the work site.

BID ITEM 90202 – COLORED CONCRETE SIDEWALK 7-INCH

DESCRIPTION

This work shall be in accordance with the requirements of Part 3 of the Standard Specifications, except as herein after amended.

Contractor shall provide 12"x12" samples of a minimum of 6 colors in the french grey to warm grey color family to the Landscape Architect for initial approval. Provide five samples of each color in 2, 3, 4, 5, and 6% color saturation. Allow a minimum of two weeks to obtain written approval from the City before confirming concrete mix order.

Mockups: After initial color approval, cast mockups of full-size sections of integrally colored concrete pavement to demonstrate typical joints, surface finish, texture, color, and standard of workmanship. For accurate color, the quantity of concrete mixed to produce the sample should not be less than 3 cubic yards (not less than 1/3 the capacity of the mixing drum on the ready mix truck) and should always be in full cubic yard increments. Excess material shall be discarded according to local regulations. Build mockups in the location and of the size indicated directed by the City Engineer. Notify the city seven days in advance of dates and times when mockups will be constructed. Obtain City's written approval of mockups before starting construction.

Maintain approved mockups during construction in an undisturbed condition as a standard for judging the completed pavement. Approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

A separate design mix shall be provided for all areas to receive integrally colored concrete. Integrally colored concrete mix(es) shall not contain fly ash. Consider admixture recommendations for concrete mix design, however, mix design must also conform to the standard specifications. Submit the concrete mix design to the City of Madison for review.

Excess concrete material from mockups can be used elsewhere per the Engineers approval if the mix design meets the standard requirements of the secondary use.

MATERIALS

Contractor shall provide suggested manufacturer for Architect/Engineer approval. Integral-mix colored admixture shall conform to the requirements of ACI 303.1, ASTM C979, ASTM C494 and ASSHTO M194. Admixture shall be a single-component, colored, water-reducing, set-controlling admixture containing no calcium chloride with coloring agents that are lime-proof and ultra-violet resistant. The admixture shall be factory formulated and packaged in cubic yard dosage increments, not multiple additives and pigments added separately into the mix.

Color: Shall be selected by architect from manufacturer's full color range and shall be in the grey color family. Raw pigments are not an equivalent and may not be substituted.

All surfaces shall be cured uniformly. The concrete shall never be covered with plastic sheeting.

Curing compound shall comply with ASTM C309 and be of same manufacturer as colored admixture, for use with integrally colored concrete. All placing, finishing, curing, joint sealing, and patching shall be in accordance with the admixture manufacturer's recommendations.

CONSTRUCTION

Finishing Concrete. Concrete surface finish shall be a medium broom finish perpendicular to the direction of pedestrian traffic.

Color Pigment. Add color pigment to concrete mixture according to manufacturer's written instructions and to result in hardened concrete color consistent with approved mockup.

METHOD OF MEASUREMENT

Colored Concrete Sidewalk 7-Inch shall be measured by the square foot installed and accepted.

BASIS OF PAYMENT

Colored Concrete Sidewalk 7-Inch, measured as stated above, is full compensation for providing all materials, including concrete, joint fillers, joint sealers, and expansion joints; for excavating and preparing the foundation; backfilling and disposing of surplus material; for placing, finishing, protecting, and curing; and restoring the work site.

BID ITEM 90203 – CONCRETE SIDEWALK 7-INCH REINFORCED

DESCRIPTION

This work shall be in accordance with the requirements of Part 3 of the Standard Specifications, except as herein after amended.

MATERIALS

The concrete mix design shall be the same as the bid item "7-Inch Concrete Sidewalk and Drive," Bid Item 30302.

CONSTRUCTION

Placing and Finishing Concrete. The Placing and Finishing Concrete shall be the same as the bid item "7-Inch Concrete Sidewalk and Drive," Bid Item 30302.

Reinforcement. Epoxy Coated Bar Steel Reinforcement is required and shall be placed as specified in the plans.

METHOD OF MEASUREMENT

Concrete Sidewalk 7-Inch Reinforced shall be measured by the square foot installed and accepted.

BASIS OF PAYMENT

Concrete Sidewalk 7-Inch Reinforced, measured as stated above, is full compensation for providing all materials, including concrete, bar steel reinforcement HS, joint fillers, joint sealers, and expansion joints; for excavating and preparing the foundation; backfilling and disposing of surplus material; for placing, finishing, protecting, and curing; and restoring the work site.

BID ITEM 90204 – CONCRETE STRUCTURAL SLAB 8-INCH

DESCRIPTION

This work shall be in accordance with the requirements of Part 3 of the Standard Specifications and Section of the 505 State of Wisconsin Standard Specifications except as herein after amended.

MATERIALS

The concrete mix design shall be the same as the bid item "7-Inch Concrete Sidewalk and Drive," Bid Item 30302.

CONSTRUCTION

Placing and Finishing Concrete. The Placing and Finishing Concrete shall be the same as the bid item "7-Inch Concrete Sidewalk and Drive," Bid Item 30302.

Reinforcement. Epoxy Coated Bar Steel Reinforcement is required and shall be placed as specified in the plans.

METHOD OF MEASUREMENT

Concrete Structural Slab 8-Inch shall be measured by the square foot installed and accepted.

BASIS OF PAYMENT

Concrete Structural Slab 8-Inch, measured as stated above, is full compensation for providing all materials, including concrete, bar steel reinforcement HS, joint fillers, joint sealers, and expansion joints; for excavating and preparing the foundation; backfilling and disposing of surplus material; for placing, finishing, protecting, and curing; and restoring the work site.

BID ITEM 90205 – COLORED CONCRETE STRUCTURAL SLAB 8-INCH

DESCRIPTION

This work shall be in accordance with the requirements of Part 3 of the Standard Specifications and Section of the 505 State of Wisconsin Standard Specifications except as herein after amended.

Contractor shall provide 12"x12" samples of a minimum of 6 colors in the french grey to warm grey color family to the Landscape Architect for initial approval. Provide five samples of each color in 2, 3, 4, 5, and 6% color saturation. Allow a minimum of two weeks to obtain written approval from the City before confirming concrete mix order.

Mockups: After initial color approval, cast mockups of full-size sections of integrally colored concrete pavement to demonstrate typical joints, surface finish, texture, color, and standard of workmanship. For accurate color, the quantity of concrete mixed to produce the sample should not be less than 3 cubic yards (not less than 1/3 the capacity of the mixing drum on the ready mix truck) and should always be in full cubic yard increments. Excess material shall be discarded according to local regulations. Build mockups in the location and of the size indicated directed by the City Engineer. Notify the city seven days in advance of dates and times when mockups will be constructed. Obtain City's written approval of mockups before starting construction.

Maintain approved mockups during construction in an undisturbed condition as a standard for judging the completed pavement. Approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

All surfaces shall be cured uniformly. The concrete shall never be covered with plastic sheeting.

Excess concrete material from mockups can be used elsewhere per the Engineers approval if the mix design meets the standard requirements of the secondary use.

MATERIALS

Contractor shall provide suggested manufacturer for Architect/Engineer approval. Integral-mix colored admixture shall conform to the requirements of ACI 303.1, ASTM C979, ASTM C494 and ASSHTO M194. Admixture shall be a single-component, colored, water-reducing, set-controlling admixture containing no calcium chloride with coloring agents that are lime-proof and ultra-violet resistant. The admixture shall be factory formulated and packaged in cubic yard dosage increments, not multiple additives and pigments added separately into the mix.

Color: Shall be selected by architect from manufacturer's full color range and shall be in the grey color family. Raw pigments are not an equivalent and may not be substituted.

All surfaces shall be cured uniformly. The concrete shall never be covered with plastic sheeting.

Curing compound shall comply with ASTM C309 and be of same manufacturer as colored admixture, for use with integrally colored concrete. All placing, finishing, curing, joint sealing, and patching shall be in accordance with the admixture manufacturer's recommendations.

CONSTRUCTION

Finishing Concrete. Concrete surface finish shall be a medium broom finish perpendicular to the direction of pedestrian traffic.

Reinforcement. Epoxy Coated Bar Steel Reinforcement is required and shall be placed as specified in the plans.

Color Pigment. Add color pigment to concrete mixture according to manufacturer's written instructions and to result in hardened concrete color consistent with approved mockup.

METHOD OF MEASUREMENT

Colored Concrete Structural Slab 8-Inch shall be measured by the square foot installed and accepted.

BASIS OF PAYMENT

Colored Concrete Structural Slab 8-Inch, measured as stated above, is full compensation for providing all materials, including concrete, bar steel reinforcement HS, joint fillers, joint sealers, and expansion joints; for excavating and preparing the foundation; backfilling and disposing of surplus material; for placing, finishing, protecting, and curing; and restoring the work site.

BID ITEM 90206 – CARDBOARD VOID FORM

DESCRIPTION

The work shall consist of furnishing and installing cardboard void forms to create a temporary support for the placement of structural concrete slabs over expansive soils in accordance with Section 602 of the State of Wisconsin Standard Specifications, the plan details, and as herein provided.

MATERIALS

Cardboard Void Form shall be four inches thick with a minimum work load strength of 1000 psf. The composition of the material shall be corrugated paper material with a moisture resistant exterior, and having an interior fabrication of a uniform, cellular configuration, composed of non-wax impregnated components. Cardboard Void Form shall be Sure Void Products, Inc, Void Forms International, LTD, or approved equal.

CONSTRUCTION

Prepare ground surface on an even plane. Install Cardboard Void Form in accordance with manufacturer's recommendations. Protect forms from moisture before concrete placement. Tape joints to prevent water absorption. Protect forms from puncture and other damage during concrete placement.

METHOD OF MEASUREMENT

Cardboard Void Forms will be measured in square feet of surface area acceptably completed.

BASIS OF PAYMENT

Cardboard Void Forms, measured as provided above, will be paid for at the contract unit, which price shall be payment in full for furnishing all materials, labor, tools, equipment and incidentals necessary to complete this item of work.

BID ITEM 90207 – REINFORCED CONCRETE SIDEWALK BAND

DESCRIPTION

This work shall be in accordance with the requirements of Part 3 of the Standard Specifications except as shown on as hereinafter amended.

CONSTRUCTION

Reinforcement. Epoxy Coated Bar Steel Reinforcement is required and shall be placed as specified in the plans.

METHOD OF MEASUREMENT

Reinforced Concrete Sidewalk Band shall be measured by the square foot installed and accepted.

BASIS OF PAYMENT

Reinforced Concrete Sidewalk Band, measured as stated above, is full compensation for providing all materials, including concrete, bar steel reinforcement HS, joint fillers, joint sealers, and expansion joints; for excavating and preparing the foundation; backfilling and disposing of surplus material; for placing, finishing, protecting, and curing; and restoring the work site.

BID ITEM 90208 –CONCRETE SIDEWALK BAND

DESCRIPTION

This work shall consist of placing new concrete sidewalk band. All work shall be in accordance with Article 303 of Standard Specifications.

METHOD OF MEASUREMENT

Concrete Sidewalk Band will be measured by the square foot completed and accepted.

BASIS OF PAYMENT

Concrete Sidewalk Band measured as provided above, is full compensation for providing all materials, including concrete, joint fillers, joint sealers, and expansion joints; for preparing the foundation; backfilling and disposing of surplus material; for placing, finishing, protecting, and curing; and restoring the work site.

BID ITEM 90209 – GRANITE PAVERS

DESCRIPTION

This work shall consist of the furnishing and installing modular pavers over concrete sub-slab and asphalt setting bed as shown on the plans and as herein provided.

MATERIALS

Pavers shall be 8" x 8" x 2" deep. Dimensional tolerance 1/16". Pavers shall be sawn granite pavers with diamond 100 finish to produce a highly slip resistant surface. Surface finish shall be approved by the city. Provide four different colors (colors in parenthesis are as provided by Cold Spring Granite Co. and

are intended to establish color palette), 1) white-light grey, (Iridian) - 2) reddish blend (Carnelian) 3) dark grey (Charcoal Black) 4) grayish green (Mountain Green). Provide equal quantities of each color paver.

Contractor shall provide a sample of pavers in each color for approval of size, dimensional consistency and surface finish to the City for approval. Provide four full size samples of each paver color. Allow a minimum of two weeks to obtain written approval from the City before confirming paver order.

Asphalt setting bed shall comply with Standard Specifications, and as follows: Coarse to fine sand aggregates, 7% Asphalt content, 82 Lbs./sq. yd., $\frac{3}{4}$ " thick.

Neoprene-Modified asphalt adhesive:

Mastic: (asphalt adhesive: Karnak #230 2%Neo-asphalt, or as approved by Engineer)	
Solids (base)	75 + 1%
Lbs./Gal.	8-8.5 lbs.
Solvent	Varsol (over 100 deg. F. flash)

Base: (2% neoprene, 10% fibers, 88% asphalt)	
Melting point – ASTM D-36	200 deg. F. Minimum
Penetration – 77 deg. F 100 gram load	
5 second (.1 m.m.)	23-27
Ductility – ASTM D-133-44	

Concrete sub-slab shall comply with Standard Specification for 7-Inch Concrete Sidewalk.

Joint filler shall be polymeric sand. Contractor shall provide application instructions and sample for approval by Engineer prior to installation. Apply per manufacturer instructions.

CONSTRUCTION

Place $\frac{3}{4}$ " deep control bars directly over the concrete sub-slab. Adjust to proper grade. Set two bars parallel to each other approximately 11 feet apart to serve as guides for a striking board 12 ft. in length. The depth control bars shall be set carefully to bring the pavers when laid to proper grade.

Place asphalt setting bed between control bars. Pull this bed with the striking board over the bars several times. After each passage, low porous spots shall be showered with fresh asphalt material to produce a smooth, firm and even setting bed. Carefully fill depressions that remain after removing the depth control bars.

The setting bed shall be rolled to a nominal depth of $\frac{3}{4}$ " while still hot. The thickness shall be adjusted so that the pavers will be at the required finished grade.

A coating of 2% neoprene-modified asphalt adhesive shall be applied over the top surface of the asphalt setting bed. Squeegee or trowel over top surface. Trowel serrations shall not exceed $\frac{1}{16}$ " in height.

Lay pavers in a running bond pattern, the axis of the grid shall be perpendicular to State Street or the dominant street length for non-State Street intersections. Placement of pavers by color shall be **random mix of four colors except where noted on plan**. Provide a sample panel of not less than 100 square feet. Obtain city review and approval of the sample panel. The approved sample panel shall serve as a standard for installation, color distribution and workmanship. The sample panel may be part of the finished construction.

Cut and shape pavers with a masonry saw to fit smaller spaces. Cut and shape pavers around other fixed objects. Note that these objects may be round forms of small diameters and other non-rectangular shapes. In all cases, joints shall not exceed $\frac{1}{8}$ ". To obtain smooth even surface, cover pavers with $\frac{1}{2}$ " plywood or other sheathing and roll with roller to level paver surface. After final compaction, surface shall be flush with adjacent surfaces, true to grade, and shall not vary by more than $\frac{1}{4}$ " when tested with a 10'

straight edge in any location. Polymeric sand mixture shall be placed directly into joints until completely filled. All openings over 3/16" shall be filled. Remove excess material and clean surface.

METHOD OF MEASUREMENT

Pavers shall be measured by the square foot, installed and accepted in place.

BASIS OF PAYMENT

This item, measured as provided above, will be paid for at the contract unit price square foot, which price shall be payment in full for furnishing, installing pavers including subgrade preparation, concrete sub-slab, asphalt setting bed; and for furnishing all labor, tools, equipment and incidentals necessary to complete this item of work.

BID ITEM 90210 – CONCRETE MASONRY FOOTING

DESCRIPTION

This work shall be in accordance with the requirements of Section 504 and 505 of State of Wisconsin Standard Specifications, except as herein after amended.

The Contractor shall submit shop drawings for all reinforcement including: bending steel, radii, and bar overlap for approval by the engineer.

CONSTRUCTION

Reinforcement. Epoxy Coated Bar Steel Reinforcement is required and shall be placed as specified in the plans.

METHOD OF MEASUREMENT

Concrete Masonry Footing shall be measured by the cubic yard, installed and accepted in place.

BASIS OF PAYMENT

Concrete Masonry Footing measured as provided above, is full compensation for preparing the foundation; providing, transporting, and placing all materials, including concrete, joint fillers, joint sealers, expansion joints, forms, falsework, placing, finishing, curing, protecting, heating, reinforcement, backfilling and disposing of surplus material; and restoring the work site.

BID ITEM 90211 – CONCRETE MASONRY WALLS

DESCRIPTION

This work shall be in accordance with the requirements of Section 504 and 505 of the State of Wisconsin Standard Specifications, except as herein after amended.

The Contractor shall submit shop drawings for all reinforcement including: bending steel, radii, and bar overlap for approval by the engineer.

CONSTRUCTION

Finishing Concrete. Finishing shall be as detailed in the plans.

Reinforcement. Epoxy Coated Bar Steel Reinforcement is required and shall be placed as specified in the plans.

METHOD OF MEASUREMENT

Concrete Masonry Walls shall be measured by the cubic yard, installed and accepted in place.

BASIS OF PAYMENT

Concrete Masonry Walls measured as provided above, is full compensation for preparing the foundation; providing, transporting, and placing all materials, including concrete, joint fillers, joint sealers, expansion joints, forms, falsework, placing, finishing, curing, protecting, heating, reinforcement, backfilling and disposing of surplus material; and restoring the work site.

BID ITEM 90212 – CONCRETE MASONRY WALLS COLORED

DESCRIPTION

This work shall be in accordance with the requirements of Section 504 and 505 of State of Wisconsin Standard Specifications, except as herein after amended.

The Contractor shall submit shop drawings for all reinforcement including: bending steel, radii, and bar overlap for approval by the engineer.

Contractor shall provide 12"x12" samples of a minimum of 6 colors in the french grey to warm grey color family to the Landscape Architect for initial approval. Provide five samples of each color in 2, 3, 4, 5, and 6% color saturation. Allow a minimum of two weeks to obtain written approval from the City before confirming concrete mix order.

For accurate color, the quantity of concrete mixed to produce the sample should not be less than 3 cubic yards (not less than 1/3 the capacity of the mixing drum on the ready mix truck) and should always be in full cubic yard increments. Excess material shall be discarded according to local regulations.

Mockups: After initial color approval, cast mockups to comply with the following requirements using materials as indicated to complete the work:

- Build mockup of integrally colored concrete approximately a minimum of 3-feet long by 3-feet tall of full thickness to demonstrate surface finish, texture, color, and standard of workmanship.
- Build mockups in the location indicated directed by the City Engineer.
- Notify the city seven days in advance of dates and times when mockups will be constructed. Obtain City's written approval of mockups before starting construction.

Maintain approved mockups during construction in an undisturbed condition as a standard for judging the completed pavement. Approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

A separate design mix shall be provided for all areas to receive integrally colored concrete. Integrally colored concrete mix(es) shall not contain fly ash. Consider admixture recommendations for concrete mix design, however, mix design must also conform to the standard specifications. Submit the concrete mix design to the City of Madison for review.

Excess concrete material from mockups can be used elsewhere per the Engineers approval if the mix design meets the standard requirements of the secondary use.

MATERIALS

Contractor shall provide suggested manufacturer for Architect/Engineer approval. Integral-mix colored admixture shall conform to the requirements of ACI 303.1, ASTM C979, ASTM C494 and ASSHTO M194. Admixture shall be a single-component, colored, water-reducing, set-controlling admixture containing no calcium chloride with coloring agents that are lime-proof and ultra-violet resistant. The admixture shall be

factory formulated and packaged in cubic yard dosage increments, not multiple additives and pigments added separately into the mix.

Color: Shall be selected by architect from manufacturer's full color range and shall be in the grey color family. Raw pigments are not an equivalent and may not be substituted.

Curing compound shall comply with ASTM C309 and be of same manufacturer as colored admixture, for use with integrally colored concrete. All placing, finishing, curing, joint sealing, and patching shall be in accordance with the admixture manufacturer's recommendations.

CONSTRUCTION

Color Pigment: Add color pigment to concrete mixture according to manufacturer's written instructions and to result in hardened concrete color consistent with approved mockup

Finishing Concrete. Finishing shall be as detailed in the plans or as selected and approved by mockups and initial sample submittals.

Reinforcement. Epoxy Coated Bar Steel Reinforcement is required and shall be placed as specified in the plans.

METHOD OF MEASUREMENT

Concrete Masonry Walls shall be measured by the cubic yard, installed and accepted in place.

BASIS OF PAYMENT

Concrete Masonry Walls Colored measured as provided above, is full compensation for preparing the foundation; providing, transporting, and placing all materials, including concrete, joint fillers, joint sealers, expansion joints, forms, falsework, placing, finishing, curing, protecting, heating, reinforcement, backfilling and disposing of surplus material; and restoring the work site.

BID ITEM 90213 – CONCRETE MASONRY SIDEWALK REINFORCED

DESCRIPTION

This work shall be in accordance with the requirements of Section 504 and 505 of State of Wisconsin Standard Specifications, except as herein after amended.

MATERIALS

The concrete mix design shall be the same as the bid item "7-Inch Concrete Sidewalk & Drive," Bid Item 30302.

CONSTRUCTION

Finishing Concrete. Finishing Concrete shall be the same as the bid item "7-Inch Concrete Sidewalk & Drive," Bid Item 30302.

Reinforcement. Epoxy Coated Bar Steel Reinforcement is required and shall be placed as specified in the plans.

METHOD OF MEASUREMENT

Concrete Masonry Sidewalk Reinforced shall be measured by the square foot installed and accepted.

METHOD OF MEASUREMENT

Concrete Masonry Sidewalk Reinforced shall be measured by the square foot, installed and accepted in place.

BASIS OF PAYMENT

Concrete Masonry Sidewalk Reinforced measured as provided above, is full compensation for preparing the foundation; providing, transporting, and placing all materials, including concrete, joint fillers, joint sealers, expansion joints, forms, falsework, placing, finishing, curing, protecting, heating, reinforcement, backfilling and disposing of surplus material; and restoring the work site.

BID ITEM 90214 – CONCRETE GUTTER 24-INCH

DESCRIPTION

This work shall consist of placing Concrete Gutter 24-Inch. All work shall be in accordance with Article 302 of Standard Specifications.

6-Inch curb located adjacent to the Concrete Gutter 24-Inch is incidental and included in this work.

METHOD OF MEASUREMENT

Concrete Gutter 24-Inch will be measured by the linear foot completed and accepted.

BASIS OF PAYMENT

Concrete Gutter 24-Inch measured as provided above, is full compensation for all foundation excavation and preparation; for providing all materials, including concrete, joint fillers, joint sealers, and expansion joints; for placing, finishing, protecting, and curing; for sawing joints; and for disposing of surplus excavation material, and restoring the work site.

BID ITEM 90215 –CONCRETE CURB 12-INCH

DESCRIPTION

This work shall consist of placing Concrete Curb 12-Inch. All work shall be in accordance with Article 302 of Standard Specifications.

METHOD OF MEASUREMENT

Concrete Curb 12-Inch shall be measured by the linear foot installed and accepted.

BASIS OF PAYMENT

Concrete Curb 12-Inch measured as provided above, is full compensation for all foundation excavation and preparation; for providing all materials, including concrete, joint fillers, joint sealers, and expansion joints; for placing, finishing, protecting, and curing; for sawing joints; and for disposing of surplus excavation material, and restoring the work site.

BID ITEM 90216 –CONCRETE MOW EDGE REINFORCED

DESCRIPTION

This work shall be in accordance with the requirements of Part 3 of the Standard Specifications except as shown on as hereinafter amended.

CONSTRUCTION

Reinforcement. Bar Steel Reinforcement is required and shall be placed as specified in the plans.

METHOD OF MEASUREMENT

Concrete Mow Edge Reinforced shall be measured by the square foot installed and accepted.

BASIS OF PAYMENT

Concrete Mow Edge Reinforced, measured as stated above, is full compensation for providing all materials, including concrete, bar steel reinforcement HS, joint fillers, joint sealers, and expansion joints; for excavating and preparing the foundation; backfilling and disposing of surplus material; for placing, finishing, protecting, and curing; and restoring the work site.

BID ITEM 90217 –LIMESTONE PAVER MOW EDGE

DESCRIPTION

This work shall be in accordance with the requirements of Part 3 of the Standard Specifications, except as herein after amended. This work shall consist of the furnishing and installing the limestone paver mow edge as shown on the plans and as herein provided.

MATERIALS

ST-01 limestone supplied by Vetter Quarra Stone Co, Madison, WI (608) 246-8803; Contact Tyce Shirley. Ph: 608-246-8803. email: tshirley@quarrastone.com

Finished pavers shall be 3 "thick x 18" deep x 18" long, with medium tapestry finish on top face and sawn finishes on the remainder of surfaces. Glacier Buff color with sawn finish on all surfaces.

Alternate stone sources and suppliers must be submitted and approved a minimum of one week before project bid date. Limestone paver mow edge shall be sourced to match the Limestone Veneer.

Joint filler shall be polymeric sand. Contractor shall provide application instructions and sample for approval by Engineer prior to installation.

Contractor shall submit full range samples for approval.

CONSTRUCTION

Limestone paver units shall be delivered in good condition free from shipping damage. Protect from damage after delivery to construction staging area and/or site. At all times, handle units to prevent damage; chipped, cracked, or otherwise damaged units will be replaced at no additional cost to the Owner.

Examine areas to receive paver edge for compliance with requirements and conditions affecting installation and performance of the work.

Proceed with installation only after unsatisfactory conditions have been corrected.

Protect structures, utilities, pavements, and other facilities and turf areas, planting beds, and existing plants from damage caused by stonework operations.

Install as indicated on drawings, with joints between adjacent stones cut on the radius where required and fitting tight. Maximum joint width is 1/8"; maximum lippage between stones is 1/8". Polymeric sand mixture shall be placed directly into joints until completely filled. Remove excess material and clean surface. Apply per manufacturer instructions.

METHOD OF MEASUREMENT

Concrete Paver Mow Edge shall be measured by the linear foot installed and accepted.

BASIS OF PAYMENT

Concrete Paver Mow Edge, measured as stated above, is full compensation for furnishing and installing limestone pavers, including excavation and preparation of compacted aggregate base, setting pavers in place on compacted aggregate base, and disposing of surplus material.

BID ITEM 90218 – PAVED SURFACE TEMPORARY

DESCRIPTION

This work shall include all work, materials, labor and incidentals necessary to construct a 2" minimum thick HMA pavement or 4" minimum concrete pavement suitable for use as a temporary pedestrian or motor vehicle access during the construction and meeting ADA accessibility standards. The Contractor shall determine if additional depth needed to ensure an ADA safe surface remains for the duration the patch is needed. Preparation for the temporary pavement is included with this item including excavation or fill as needed. The Contractor shall provide a 4" pipe at the flowline of the curb and gutter wherever the temporary pavement prevents flow. The minimum usable width of the temporary pavement shall be 8'. The Contractor shall provide a protective layer between the existing pavement and curb and the temporary pavement. The Contractor shall be responsible for maintaining the temporary pavement and all components with no additional compensation.

Removal and disposal of the Paved Surface Temporary and all related components, upon no longer needing the surface, shall be incidental to this item. Restoration of the areas of the Paved Surface Temporary will be paid for under respective bid items.

METHOD OF MEASUREMENT

Paved Surface Temporary shall be measured by the square foot.

BASIS OF PAYMENT

Paved Surface Temporary shall be measured as described above shall be full payment for all work, materials and incidentals required to complete the work in accordance with the description.

BID ITEM 90219 – CONCRETE STEPS

DESCRIPTION

This work shall be in accordance with the requirements of Part 3 of the Standard Specifications except consist of installing cast in place Concrete Steps as shown in the plan details and as hereinafter amended.

CONSTRUCTION

Apply a water-based, siloxane/silane water repellant sealer 20 days after the steps have been poured or as recommended by the manufacturer. Prevent traffic from using the surface for 20 days following the application or as recommended by the manufacturer.

METHOD OF MEASUREMENT

Concrete Steps shall be measured by the square foot installed and accepted.

BASIS OF PAYMENT

Concrete Steps, measured as stated above, is full compensation for providing all materials, including concrete, joint fillers, joint sealers, and expansion joints; for excavating and preparing the foundation; backfilling and disposing of surplus material; for placing, finishing, protecting, and curing the concrete; and restoring the work site.

BID ITEM 90220 – LIMESTONE VENEER

DESCRIPTION

This work shall consist of the furnishing and installing limestone veneer on cast-in-place concrete cheek walls as shown on the plans and as herein provided.

MATERIALS

ST-01 limestone supplied by Vetter Quarra Stone Co, Madison, WI (608) 246-8803; Contact Tyce Shirley. Ph: 608-246-8803. email: tshirley@quarrastone.com
3" thick, Glacier Buff color with medium tapestry finish on front face and sawn finish on remainder of surfaces.

Alternate stone sources and suppliers must be submitted and approved a minimum of one week before project bid date.

Contractor shall submit full range samples for approval.

Mortar of type recommended by stone supplier.

Stainless steel flashing, type 304, .016" thick.

Flexible EPDM flashing, 40 mil thickness

CONSTRUCTION

Limestone veneer units shall be delivered in good condition free from shipping damage. Protect from damage after delivery to construction staging area and/or site. At all times, handle units to prevent damage; chipped, cracked, or otherwise damaged units will be replaced at no additional cost to the Owner.

Examine areas to receive limestone veneer for compliance with requirements and conditions affecting installation and performance of the work.

Proceed with installation only after unsatisfactory conditions have been corrected.

Protect structures, utilities, pavements, and other facilities and turf areas, planting beds, and existing plants from damage caused by stonework operations.

Perform necessary field cutting and trimming as stone is set using power saws. Cut lines straight and true, with edges eased slightly to prevent snipping.

Set stone to comply with requirements indicated on Drawings. Install in pattern indicated, with anchorage indicated or necessary to secure stone masonry in place. Set stone accurately in locations indicated with edges and faces aligned according to established relationships and indicated tolerances.

For vertical lines and surfaces, do not exceed 1/4 inch in 10 feet, 3/8 inch in 20 feet, or 1/2 inch in 40 feet or more. For external corners and other conspicuous lines, do not exceed 1/4 inch in 20 feet or 1/2 inch in 40 feet or more.

For bed joints and other conspicuous lines, do not exceed 1/4 inch in 20 feet or 1/2 inch in 40 feet or more.

Maintain uniform joint widths of not less than 3/8 inch or more than 1/2 inch at widest points.

Install flashing at veneer ledges or other obstructions to downward flow of water in wall. At concrete backing, extend flashing through stone masonry, turned up a minimum of 8 inches and insert in reglet. Extend flashing 1/2 inch beyond masonry face at exterior, and turn flashing down to form a drip. Exposed metal flashing edges shall be hemmed.

Rake out joints for pointing with mortar to depth of not less than 1/2 inch before setting mortar has hardened. Rake joints to uniform depths with square bottoms and clean sides. Point stone joints by placing and compacting pointing mortar in layers of not more than 3/8 inch deep. Compact each layer thoroughly and allow to it become thumbprint hard before applying next layer.

Tool joints, when pointing mortar is thumbprint hard, with a smooth jointing tool to produce smooth, flat face recessed 1/4 inch below edges of stone (raked joint).

Remove and replace stone veneer of the following description: Broken, chipped, stained, or otherwise damaged stone; defective joints; veneer not matching approved samples and mockups or not complying with other requirements indicated.

Replace in a manner that results in stone veneer matching approved samples and mockups, complying with other requirements, and showing no evidence of replacement.

Clean stone as work progresses. Remove mortar fins and smears before tooling joints. After mortar is thoroughly set and cured, clean by removing large mortar particles by hand with wooden paddles and nonmetallic scrape hoes or chisels. Finish final cleaning by bucket and brush hand-cleaning method described in BIA Technical Note No. 20, Revised II, using job-mixed detergent solution.

METHOD OF MEASUREMENT

Limestone veneer shall be measured by the square face-foot installed and accepted.

BASIS OF PAYMENT

Limestone veneer, measured as stated above, is full compensation for furnishing and installing limestone veneer, including finishing of stone and all anchors, mortars, flashing, and weeps, cleaning and disposal of excess materials.

BID ITEM 90221 – PRECAST CONCRETE CAP FOR SEAT WALL

DESCRIPTION

This work shall consist of the fabrication and installation of precast concrete cap units on cast-in-place concrete seat wall as shown on the Drawings and as herein provided; including shaping and finishing as detailed, and delivery and installation on-site. This work shall also include fabrication, finishing, and installation of skate deterrents. Guarantee all materials, workmanship and installation for a period of one year from the date of acceptance.

The Contractor shall review, approve and submit shop drawings, samples, and product data with reasonable promptness and in such sequence as to cause no delay in the work or in the work of the Owner or any separate Contractor.

By approving and submitting shop drawings, samples, and product data, the Contractor represents that he has determined and verified all materials, field measurements and field construction criteria related

thereto, or will do so, and that he has checked and coordinated the information contained within such submittals with the requirements of the work and of the contract documents.

The Contractor shall not be relieved of responsibility for any deviation from the requirements of the contract documents by the Architect/Engineer's approval of shop drawings, samples, and product data unless the Contractor has given written approval to the specific deviation. The Contractor shall not be relieved from responsibility for errors or omissions in the shop drawings, product data or samples by the Architect/Engineer's approval thereof.

The Contractor shall direct specific attention, in writing or on resubmitted shop drawings, product data or samples, to revisions other than those requested by the Architect/Engineer on previous submittals.

No portion of the work requiring submission of a shop drawing shall be commenced until the submittal has been approved by the Architect/Engineer.

Contractors shall submit six prints of all shop drawings every time a submission is made until final approval is received.

Drawings submitted shall be marked with the name of the project, numbered consecutively and bear the stamp of approval of the Contractor as evidence that the drawings have been checked by the Contractor. Any drawings submitted without this stamp of approval will not be considered and will be returned to the Contractor for resubmission.

Precast concrete samples representing the manufacturer's standard beige color range and standard finishes shall be submitted for final selection by A/E.

MATERIALS

Precast concrete: Portland Cement, ASTM C-150 specifications for portland cement; type I/II, gray or white. Eight-day compressive strength shall be 4,000 – 6,000 psi.

All aggregates shall meet ASTM C-33 specifications cleaned and properly graded to size. Aggregates shall be blended by manufacturer to meet project requirements.

Coloring pigments used shall be inorganic, resistant to alkalinity and used per manufacturer's recommendations. Color range shall be beige, to be selected from manufacturer's standard colors. The finish shall be acid wash.

Reinforcement shall be epoxy coated and conform to ACI and manufacturer's design. Reinforce precast with deformed rods or wire, or both, as recommended by precast manufacturer.

Manufactured units shall conform to shop drawings, with a 1/8" tolerance in dimension. All exposed edges shall have minimum 1/8" chamfer to prevent chipping. All precast concrete finished surfaces to be sealed with a sealer approved by manufacturer.

Caulks and Sealants: polyurethane or acrylic sealant. Color to be selected by Landscape Architect from standard color pallet.

Sealer: Colorless, pure acrylic water-repellent penetrating sealer. Sealer to maintain natural look of concrete surface with no glaze or gloss, darkening, or color change.

Stainless steel dowels: type 304; size and locations as shown on Drawings.

Sand-Cement Mortar: Portland cement, ASTM C 150/C 150M, Type I, and clean, natural sand, ASTM C 144. Mix at ratio of 1 part cement to 4 parts sand, by volume, with minimum water required for placement.

Skate Deterrent: type 304 stainless steel plate, 1/4" thick, with #4 brushed/satin finish. Exposed edges of deterrents shall be ground smooth to eliminate all burrs and sharp edges.

CONSTRUCTION

Take care during delivery, storage, and handling to ensure that precast concrete cap units are not damaged. Avoid scratches, abrasions, and marking with foreign substances.

Examine areas and conditions, with Installer present, for compliance with requirements for correct and level finished grade, mounting surfaces, installation tolerances, and other conditions affecting performance. Proceed with installation only after unsatisfactory conditions have been corrected.

Install level, plumb, true, positioned, and securely anchored at locations indicated on Drawings. Alignment of precast units should be straight and true to all dimensions with a minimum variation of 1/8" in length, height or width.

Units may be field-cut to fit irregular end conditions. All exposed ends shall have an as-cast finish and NOT show field-cut saw marks. Field cuts abutting curved cast-in-place walls shall have a maximum tolerance of 1/2".

Set precast cap units accurately on seat wall as shown on Drawings. Mortar cap units to top of cast-in-place wall. Install two stainless steel alignment dowels per cap unit and epoxy in place.

Install stainless steel skate deterrent at each unit joint and as shown on Drawings; 2-part epoxy in place.

Fill joints with manufacturer approved caulk and backer rod.

After completing installation, inspect components. Remove spots, dirt, and debris. Repair damaged finishes to match original finish or replace component. Remove excess materials from the site.

METHOD OF MEASUREMENT

Precast concrete cap shall be measured by the linear foot along the front face of the concrete, installed and accepted in place.

BASIS OF PAYMENT

This item, measured as provided above, will be paid for at the contract unit price, which price shall be payment in full for fabricating and installing precast concrete caps with skate deterrents; and for furnishing all labor, tools, equipment and incidentals necessary to complete this item of work.

BID ITEM 90222 – PRECAST CONCRETE CAP FOR SINGLE TERRACE SEATING

DESCRIPTION

This work shall consist of the fabrication and installation of precast concrete cap units on single terrace seating as shown on the Drawings and as herein provided; including shaping and finishing as detailed, and delivery and installation on-site. This work shall also include fabrication, finishing, and installation of skate deterrents. Guarantee all materials, workmanship and installation for a period of one year from the date of acceptance.

The Contractor shall review, approve and submit shop drawings, samples, and product data with reasonable promptness and in such sequence as to cause no delay in the work or in the work of the Owner or any separate Contractor.

By approving and submitting shop drawings, samples, and product data, the Contractor represents that he has determined and verified all materials, field measurements and field construction criteria related thereto, or will do so, and that he has checked and coordinated the information contained within such submittals with the requirements of the work and of the contract documents.

The Contractor shall not be relieved of responsibility for any deviation from the requirements of the contract documents by the Architect/Engineer's approval of shop drawings, samples, and product data unless the Contractor has given written approval to the specific deviation. The Contractor shall not be relieved from responsibility for errors or omissions in the shop drawings, product data or samples by the Architect/Engineer's approval thereof.

The Contractor shall direct specific attention, in writing or on resubmitted shop drawings, product data or samples, to revisions other than those requested by the Architect/Engineer on previous submittals.

No portion of the work requiring submission of a shop drawing shall be commenced until the submittal has been approved by the Architect/Engineer.

Contractors shall submit six prints of all shop drawings every time a submission is made until final approval is received.

Drawings submitted shall be marked with the name of the project, numbered consecutively and bear the stamp of approval of the Contractor as evidence that the drawings have been checked by the Contractor. Any drawings submitted without this stamp of approval will not be considered and will be returned to the Contractor for resubmission.

Precast concrete samples representing the manufacturer's standard beige color range and standard finishes shall be submitted for final selection by A/E.

MATERIALS

Precast concrete: Portland Cement, ASTM C-150 specifications for portland cement; type I/II, gray or white. Eight-day compressive strength shall be 4,000 – 6,000 psi.

All aggregates shall meet ASTM C-33 specifications cleaned and properly graded to size. Aggregates shall be blended by manufacturer to meet project requirements.

Coloring pigments used shall be inorganic, resistant to alkalinity and used per manufacturer's recommendations. Color range shall be beige, to be selected from manufacturer's standard colors. The finish shall be acid wash.

Reinforcement shall be epoxy coated and conform to ACI and manufacturer's design. Reinforce precast with deformed rods or wire, or both, as recommended by precast manufacturer.

Manufactured units shall conform to shop drawings, with a 1/8" tolerance in dimension. All exposed edges shall have minimum 1/8" chamfer to prevent chipping. All precast concrete finished surfaces to be sealed with a sealer approved by manufacturer.

Caulks and Sealants: polyurethane or acrylic sealant. Color to be selected by Architect from standard color pallet.

Sealer: Colorless, pure acrylic water-repellent penetrating sealer. Sealer to maintain natural look of concrete surface with no glaze or gloss, darkening, or color change.

Stainless steel dowels: type 304; size and locations as shown on Drawings.

Sand-Cement Mortar: Portland cement, ASTM C 150/C 150M, Type I, and clean, natural sand, ASTM C 144. Mix at ratio of 1 part cement to 4 parts sand, by volume, with minimum water required for placement.

Skate deterrent: type 304 stainless steel plate, 1/4" thick, with #4 brushed/satin finish. Exposed edges of deterrents shall be ground smooth to eliminate all burs and sharp edges.

CONSTRUCTION

Take care during delivery, storage, and handling to ensure that precast concrete cap units are not damaged. Avoid scratches, abrasions, and marking with foreign substances.

Examine areas and conditions, with Installer present, for compliance with requirements for correct and level finished grade, mounting surfaces, installation tolerances, and other conditions affecting performance. Proceed with installation only after unsatisfactory conditions have been corrected.

Install level, plumb, true, positioned, and securely anchored at locations indicated on Drawings. Alignment of precast units should be straight and true to all dimensions with a minimum variation of 1/8" in length, height or width.

Units may be field-cut to fit irregular end conditions. All exposed ends shall have an as-cast finish and NOT show field-cut saw marks. Field cuts abutting curved cast-in-place walls shall have a maximum tolerance of 1/2".

Set precast concrete cap units accurately on seat wall as shown on Drawings. Mortar cap units to top of cast-in-place concrete wall. Install two stainless steel alignment dowels per cap unit and epoxy in place.

Install stainless steel skate deterrent at each unit joint and as shown on Drawings; 2-part epoxy in place.

Fill joints with manufacturer approved caulk and backer rod.

After completing installation, inspect components. Remove spots, dirt, and debris. Repair damaged finishes to match original finish or replace component. Remove excess materials from the site.

METHOD OF MEASUREMENT

Single terrace precast concrete cap shall be measured by the linear foot along the front face of the concrete, installed and accepted in place.

BASIS OF PAYMENT

This item, measured as provided above, will be paid for at the contract unit price, which price shall be payment in full for fabricating and installing precast concrete caps with skate deterrents; and for furnishing all labor, tools, equipment and incidentals necessary to complete this item of work.

BID ITEM 90223 – PRECAST CONCRETE CAP FOR DOUBLE TERRACE SEATING

DESCRIPTION

This work shall consist of the fabrication and installation of precast concrete cap units on double terrace seating as shown on the Drawings and as herein provided; including shaping and finishing as detailed, and delivery and installation on-site. This work shall also include fabrication, finishing, and installation of skate deterrents. Guarantee all materials, workmanship and installation for a period of one year from the date of acceptance.

The Contractor shall review, approve and submit shop drawings, samples, and product data with reasonable promptness and in such sequence as to cause no delay in the work or in the work of the Owner or any separate Contractor.

By approving and submitting shop drawings, samples, and product data, the Contractor represents that he has determined and verified all materials, field measurements and field construction criteria related thereto, or will do so, and that he has checked and coordinated the information contained within such submittals with the requirements of the work and of the contract documents.

The Contractor shall not be relieved of responsibility for any deviation from the requirements of the contract documents by the Architect/Engineer's approval of shop drawings, samples, and product data unless the Contractor has given written approval to the specific deviation. The Contractor shall not be relieved from responsibility for errors or omissions in the shop drawings, product data or samples by the Architect/Engineer's approval thereof.

The Contractor shall direct specific attention, in writing or on resubmitted shop drawings, product data or samples, to revisions other than those requested by the Architect/Engineer on previous submittals.

No portion of the work requiring submission of a shop drawing shall be commenced until the submittal has been approved by the Architect/Engineer.

Contractors shall submit six prints of all shop drawings every time a submission is made until final approval is received.

Drawings submitted shall be marked with the name of the project, numbered consecutively and bear the stamp of approval of the Contractor as evidence that the drawings have been checked by the Contractor. Any drawings submitted without this stamp of approval will not be considered and will be returned to the Contractor for resubmission.

Precast concrete samples representing the manufacturer's standard beige color range and standard finishes shall be submitted for final selection by A/E.

MATERIALS

Precast concrete: Portland Cement, ASTM C-150 specifications for portland cement; type I/II, gray or white. Eight-day compressive strength shall be 4,000 – 6,000 psi.

All aggregates shall meet ASTM C-33 specifications cleaned and properly graded to size. Aggregates shall be blended by manufacturer to meet project requirements.

Coloring pigments used shall be inorganic, resistant to alkalinity and used per manufacturer's recommendations. Color range shall be beige, to be selected from manufacturer's standard colors. The finish shall be acid wash.

Reinforcement shall be epoxy coated and conform to ACI and manufacturer's design. Reinforce precast with deformed rods or wire, or both, as recommended by precast manufacturer.

Manufactured units shall conform to shop drawings, with a 1/8" tolerance in dimension. All exposed edges shall have minimum 1/8" chamfer to prevent chipping. All precast concrete finished surfaces to be sealed with a sealer approved by manufacturer.

Caulks and Sealants: polyurethane or acrylic sealant. Color to be selected by Landscape Architect from standard color pallet.

Sealer: Colorless, pure acrylic water-repellent penetrating sealer. Sealer to maintain natural look of concrete surface with no glaze or gloss, darkening, or color change.

Stainless steel dowels: type 304; size and locations as shown on Drawings.

Sand-Cement Mortar: Portland cement, ASTM C 150/C 150M, Type I, and clean, natural sand, ASTM C 144. Mix at ratio of 1 part cement to 4 parts sand, by volume, with minimum water required for placement.

Skate deterrent: type 304 stainless steel plate, 1/4" thick, with #4 brushed/satin finish. Exposed edges of deterrents shall be rounded to 1/16".

CONSTRUCTION

Take care during delivery, storage, and handling to ensure that precast concrete cap units are not damaged. Avoid scratches, abrasions, and marking with foreign substances.

Examine areas and conditions, with Installer present, for compliance with requirements for correct and level finished grade, mounting surfaces, installation tolerances, and other conditions affecting performance. Proceed with installation only after unsatisfactory conditions have been corrected.

Install level, plumb, true, positioned, and securely anchored at locations indicated on Drawings. Alignment of precast units should be straight and true to all dimensions with a minimum variation of 1/8" in length, height or width.

Units may be field-cut to fit irregular end conditions. All exposed ends shall have an as-cast finish and NOT show field-cut saw marks. Field cuts abutting curved cast-in-place walls shall have a maximum tolerance of 1/2".

Set precast concrete cap units accurately on double terrace seat wall as shown on Drawings. Mortar cap units to top of cast-in-place concrete wall. Install two stainless steel alignment dowels per cap unit and epoxy in place.

Install stainless steel skate deterrent at each unit joint and as shown on Drawings; 2-part epoxy in place.

Fill joints with approved caulk and backer rod.

After completing installation, inspect components. Remove spots, dirt, and debris. Repair damaged finishes to match original finish or replace component. Remove excess materials from the site.

METHOD OF MEASUREMENT

Double terrace precast concrete cap shall be measured by the linear foot along the front face of the concrete of the bottom terrace, installed and accepted in place.

BASIS OF PAYMENT

This item, measured as provided above, will be paid for at the contract unit price, which price shall be payment in full for fabricating and installing precast concrete caps with skate deterrents; and for furnishing all labor, tools, equipment and incidentals necessary to complete this item of work.

BID ITEM 90224 – WOOD SURFACE FOR SEAT WALL

DESCRIPTION

This work shall consist of the fabrication and installation of wood seating surface on cast-in-place concrete seat wall as shown on the Drawings and as herein provided; including shaping and finishing as detailed, and delivery and installation on-site. Guarantee all materials, workmanship and installation for a period of one year from the date of acceptance.

The Contractor shall review, approve and submit shop drawings and product data with reasonable promptness and in such sequence as to cause no delay in the work or in the work of the Owner or any separate Contractor.

By approving and submitting shop drawings, the Contractor represents that he has determined and verified all materials, field measurements and field construction criteria related thereto, or will do so, and that he has checked and coordinated the information contained within such submittals with the requirements of the work and of the contract documents.

The Contractor shall not be relieved of responsibility for any deviation from the requirements of the contract documents by the Engineer's approval of shop drawings unless the Contractor has given written

approval to the specific deviation. The Contractor shall not be relieved from responsibility for errors or omissions in the shop drawings, product data or samples by the Engineer's approval thereof.

The Contractor shall direct specific attention, in writing or on resubmitted shop drawings, product data or samples, to revisions other than those requested by the Engineer on previous submittals.

No portion of the work requiring submission of a shop drawing shall be commenced until the submittal has been approved by the Engineer.

Contractors shall submit six prints of all shop drawings every time a submission is made until final approval is received.

Drawings submitted shall be marked with the name of the project, numbered consecutively and bear the stamp of approval of the Contractor as evidence that the drawings have been checked by the Contractor. Any drawings submitted without this stamp of approval will not be considered and will be returned to the Contractor for resubmission.

MATERIALS

Black locust wood slats and bottom rail supplied by 'Midwest Black Locust' (www.midwestblacklocust.com, (832-800-4625), or approved equal.

Wood slats: kiln dried, 6/4, S1E, with radius edge as shown on Drawings.

Bottom rail: kiln dried. Milled and shaped as shown on Drawings. 6'-0" min length.

Concealed Decking Fasteners Simpson Strong Tie EB-TY (<http://www.strongtie.com/products/fasteners/eb-ty.html>), (800) 999-5099 with stainless steel self-tapping screws, or approved equal.

1"x1"(O.D.)x.120"wall 304 stainless steel tube mounting rails, fasteners, and neoprene shims as shown on Drawings.

1/4"x2 1/4" Stainless Steel Tapcon Hex-Head masonry fastener or approved equal.

CONSTRUCTION

Take care during delivery, storage, and handling to ensure that wood product is not damaged. Avoid scratches, abrasions, and marking with foreign substances.

Examine areas and conditions, with Installer present, for compliance with requirements for correct and level finished grade, mounting surfaces, installation tolerances, and other conditions affecting performance. Proceed with installation only after unsatisfactory conditions have been corrected.

Preassemble items in the shop to greatest extent possible. Disassemble units only as necessary for shipping and handling limitations. Use connections that maintain structural value of joined pieces. Clearly mark units for reassembly and coordinated installation.

Complete field fabrication or assembly of wood surface where required. Install level, plumb, true, positioned, and securely anchored at locations indicated on Drawings. Fasten mounting rails to concrete wall with stainless steel anchors as indicated; fasten wood decking to metal frame sleeper assembly with concealed decking fasteners per manufacturer's instructions. Space wood decking 3/32" or as directed by the concealed fasteners manufacturer.

Include fabrication and erection of all metal work complete, including all required shapes, clip angles, bolts, hangers and accessories to complete metals work. Grind off sharp areas of exposed metals including sheared edges. Except as amended herein, materials and workmanship shall be in accordance with each applicable and appropriate standard practice issued by National Association of Architectural Metal Manufacturers.

Fabricate structural steel connections, parts and accessories in accordance with current edition of Specifications and Code of Standard Practice adopted by AISC. Metals shall be made with structural properties to safely sustain and withstand stresses and strains to which normally subjected, true to detail, clean, straight, with sharply defined profiles, lines and angles and unless otherwise noted, with smooth finished surfaces.

After completing installation, inspect components. Remove spots, dirt, and debris. Repair damaged finishes to match original finish or replace component. Remove excess materials from the site.

METHOD OF MEASUREMENT

Wood surface shall be measured by the linear foot along the front face of the wood, installed and accepted in place.

BASIS OF PAYMENT

This item, measured as provided above, will be paid for at the contract unit price, which price shall be payment in full for fabricating and installing wood surface; and for furnishing all labor, tools, equipment and incidentals necessary to complete this item of work.

BID ITEM 90225 – WOOD DECKING AT LEAF BASE

DESCRIPTION

This work shall consist of the fabrication and installation of wood decking on cast-in-place concrete walls and flatwork as shown on the Drawings and as herein provided; including shaping and finishing as detailed, and delivery and installation on-site. Guarantee all materials, workmanship and installation for a period of one year from the date of acceptance.

The Contractor shall review, approve and submit shop drawings and product data with reasonable promptness and in such sequence as to cause no delay in the work or in the work of the Owner or any separate Contractor.

By approving and submitting shop drawings, the Contractor represents that he has determined and verified all materials, structural integrity, field measurements and field construction criteria related thereto, or will do so, and that he has checked and coordinated the information contained within such submittals with the requirements of the work and of the contract documents.

The Contractor shall not be relieved of responsibility for any deviation from the requirements of the contract documents by the Engineer's approval of shop drawings unless the Contractor has given written approval to the specific deviation. The Contractor shall not be relieved from responsibility for errors or omissions in the shop drawings, product data or samples by the Engineer's approval thereof.

The Contractor shall direct specific attention, in writing or on resubmitted shop drawings, product data or samples, to revisions other than those requested by the Engineer on previous submittals.

No portion of the work requiring submission of a shop drawing shall be commenced until the submittal has been approved by the Engineer.

Contractors shall submit six prints of all shop drawings every time a submission is made until final approval is received.

Drawings submitted shall be marked with the name of the project, numbered consecutively and bear the stamp of approval of the Contractor as evidence that the drawings have been checked by the Contractor. Any drawings submitted without this stamp of approval will not be considered and will be returned to the Contractor for resubmission.

MATERIALS

Black locust wood decking supplied by Midwest Black Locust (www.midwestblacklocust.com, (832-800-4625), or approved equal. Kiln dried, 5/4, S1S, with radius edge as shown on Drawings.

Concealed Decking Fasteners Simpson Strong Tie EB-TY (<http://www.strongtie.com/products/fasteners/eb-ty.html>), (800) 999-5099. with stainless steel self-tapping screws, or approved equal.

1"x1"(O.D.)x.120"wall 304 stainless steel tube mounting rails, stainless steel fasteners, and neoprene shims of type and size shown on Drawings.

¼"x2 ¼" Stainless Steel Tapcon Hex-Head masonry fastener or approved equal.

Concrete paving, woven wire mesh, and aggregate base as shown on Drawings.

CONSTRUCTION

Take care during delivery, storage, and handling to ensure that wood product is not damaged. Avoid scratches, abrasions, and marking with foreign substances.

Examine areas and conditions, with Installer present, for compliance with requirements for correct and level finished grade, mounting surfaces, installation tolerances, and other conditions affecting performance. Proceed with installation only after unsatisfactory conditions have been corrected.

Complete field fabrication or assembly of wood decking and mounting rails where required and as indicated on Drawings.

Install level, plumb, true, positioned, and securely anchored at locations indicated on Drawings. Fasten mounting rails to concrete wall with stainless steel anchors as indicated; fasten wood decking to metal frame sleeper assembly with concealed decking fasteners per manufacturer's instructions. Space wood decking 3/32" or as directed by the concealed fasteners manufacturer.

Do cutting, fitting, drilling, welding, tapping, etc., as may be required to complete this work and to join or accommodate work of other trades. Welding shall be in accordance with code of American Welding Society. Before welding, clean surfaces of loose scale, rust, paint or other foreign matter and properly align. After welding, brush welds with wire brushes. Welds shall show uniform section, smoothness of weld metal, weather edges without overlaps and freedom from porosity and clinkers. Where necessary to achieve smooth connections, joints shall be dressed smooth. All welding shall be done by certified welders.

Include fabrication and erection of all metal work complete, including all required shapes, clip angles, bolts, hangers and accessories to complete metals work. Grind off sharp areas of exposed metals including sheared edges. Except as amended herein, materials and workmanship shall be in accordance with each applicable and appropriate standard practice issued by National Association of Architectural Metal Manufacturers.

Fabricate structural steel connections, parts and accessories in accordance with current edition of Specifications and Code of Standard Practice adopted by AISC. Metals shall be made with structural properties to safely sustain and withstand stresses and strains to which normally subjected, true to detail, clean, straight, with sharply defined profiles, lines and angles and unless otherwise noted, with smooth finished surfaces.

After completing installation, inspect components. Remove spots, dirt, and debris. Repair damaged finishes to match original finish or replace component. Remove excess materials from the site.

METHOD OF MEASUREMENT

Wood decking shall be measured by the square foot installed and accepted in place.

BASIS OF PAYMENT

This item, measured as provided above, will be paid for at the contract unit price per square foot, which price shall be payment in full for fabricating and installing wood decking; and for furnishing all labor, tools, equipment and incidentals necessary to complete this item of work.

BID ITEM 90226 – CANTILEVER WOOD SEAT

DESCRIPTION

This work shall consist of the fabrication and installation of cantilevered wood seat on cast-in-place concrete walls as shown on the Drawings and as herein provided; including shaping and finishing as detailed, and delivery and installation on-site. Guarantee all materials, workmanship and installation for a period of one year from the date of acceptance.

The Contractor shall review, approve and submit shop drawings and product data with reasonable promptness and in such sequence as to cause no delay in the work or in the work of the Owner or any separate Contractor.

By approving and submitting shop drawings, the Contractor represents that he has determined and verified all materials, structural integrity, field measurements and field construction criteria related thereto, or will do so, and that he has checked and coordinated the information contained within such submittals with the requirements of the work and of the contract documents.

The Contractor shall not be relieved of responsibility for any deviation from the requirements of the contract documents by the Engineer's approval of shop drawings unless the Contractor has given written approval to the specific deviation. The Contractor shall not be relieved from responsibility for errors or omissions in the shop drawings, product data or samples by the Engineer's approval thereof.

The Contractor shall direct specific attention, in writing or on resubmitted shop drawings, product data or samples, to revisions other than those requested by the Engineer on previous submittals.

No portion of the work requiring submission of a shop drawing shall be commenced until the submittal has been approved by the Engineer.

Contractors shall submit six prints of all shop drawings every time a submission is made until final approval is received.

Drawings submitted shall be marked with the name of the project, numbered consecutively and bear the stamp of approval of the Contractor as evidence that the drawings have been checked by the Contractor. Any drawings submitted without this stamp of approval will not be considered and will be returned to the Contractor for resubmission.

MATERIALS

Black locust wood slats and bottom rail supplied by 'Midwest Black Locust' (www.midwestblacklocust.com, (832-800-4625), or approved equal.

Wood slats: kiln dried, 6/4, S1E, with radius edge as shown on Drawings.

Bottom rail: kiln dried. Milled and shaped as shown on Drawings. 4'-0" min length members.

304 Stainless steel square channel mounting rails; 2"x2"(O.D.)x.250" wall,

Stainless steel plate support, stainless steel fasteners, and neoprene spacers of type and size shown on Drawings.

304/316 Stainless steel square end caps. Satin finish. 2"x2" I.D.

3" Stainless Steel metal-to-wood self-tapping screws. Stainless steel cap over hex washer head and integrated washer.

1/2" galvanized steel threaded rod with S.S. nuts & washers.

CONSTRUCTION

Take care during delivery, storage, and handling to ensure that wood product is not damaged. Avoid scratches, abrasions, and marking with foreign substances.

Examine areas and conditions, with Installer present, for compliance with requirements for correct and level finished grade, mounting surfaces, installation tolerances, and other conditions affecting performance. Proceed with installation only after unsatisfactory conditions have been corrected.

Preassemble items in the shop to greatest extent possible. Disassemble units only as necessary for shipping and handling limitations. Use connections that maintain structural value of joined pieces. Clearly mark units for reassembly and coordinated installation.

Complete field fabrication or assembly of cantilevered wood seat where required and as indicated on Drawings.

Install level, plumb, true, positioned, and securely anchored at locations indicated on Drawings. Fasten mounting rails to stainless steel support bracket with stainless steel fasteners as indicated. Fasten bracket assembly to concrete wall with stainless steel anchors as indicated; fasten wood seat to bracket assembly with stainless steel fasteners as indicated.

Do cutting, fitting, drilling, welding, tapping, etc., as may be required to complete this work and to join or accommodate work of other trades. Welding shall be in accordance with code of American Welding Society. Before welding, clean surfaces of loose scale, rust, paint or other foreign matter and properly align. After welding, brush welds with wire brushes. Welds shall show uniform section, smoothness of weld metal, weather edges without overlaps and freedom from porosity and clinkers. Where necessary to achieve smooth connections, joints shall be dressed smooth. All welding shall be done by certified welders.

Include fabrication and erection of all metal work complete, including all required shapes, clip angles, bolts, hangers and accessories to complete metals work. Grind off sharp areas of exposed metals including sheared edges. Except as amended herein, materials and workmanship shall be in accordance with each applicable and appropriate standard practice issued by National Association of Architectural Metal Manufacturers.

Fabricate structural steel connections, parts and accessories in accordance with current edition of Specifications and Code of Standard Practice adopted by AISC. Metals shall be made with structural properties to safely sustain and withstand stresses and strains to which normally subjected, true to detail, clean, straight, with sharply defined profiles, lines and angles and unless otherwise noted, with smooth finished surfaces.

After completing installation, inspect components. Remove spots, dirt, and debris. Repair damaged finishes to match original finish or replace component. Remove excess materials from the site.

METHOD OF MEASUREMENT

Cantilevered wood seat shall be measured by the linear foot along the front face of the seat, installed and accepted in place.

BASIS OF PAYMENT

This item, measured as provided above, will be paid for at the contract unit price, which price shall be payment in full for fabricating and installing wood seat; and for furnishing all labor, tools, equipment and incidentals necessary to complete this item of work.

BID ITEM 90227 – PRECAST CONCRETE CAP FOR VENEER WALL

DESCRIPTION

This work shall consist of the fabrication and installation of precast concrete cap units on veneer wall as shown on the Drawings and as herein provided; including shaping and finishing as detailed, and delivery and installation on-site. Guarantee all materials, workmanship and installation for a period of one year from the date of acceptance.

The Contractor shall review, approve and submit shop drawings, samples, and product data with reasonable promptness and in such sequence as to cause no delay in the work or in the work of the Owner or any separate Contractor.

By approving and submitting shop drawings, samples, and product data, the Contractor represents that he has determined and verified all materials, field measurements and field construction criteria related thereto, or will do so, and that he has checked and coordinated the information contained within such submittals with the requirements of the work and of the contract documents.

The Contractor shall not be relieved of responsibility for any deviation from the requirements of the contract documents by the Architect/Engineer's approval of shop drawings, samples, and product data unless the Contractor has given written approval to the specific deviation. The Contractor shall not be relieved from responsibility for errors or omissions in the shop drawings, product data or samples by the Architect/Engineer's approval thereof.

The Contractor shall direct specific attention, in writing or on resubmitted shop drawings, product data or samples, to revisions other than those requested by the Architect/Engineer on previous submittals.

No portion of the work requiring submission of a shop drawing shall be commenced until the submittal has been approved by the Architect/Engineer.

Contractors shall submit six prints of all shop drawings every time a submission is made until final approval is received.

Drawings submitted shall be marked with the name of the project, numbered consecutively and bear the stamp of approval of the Contractor as evidence that the drawings have been checked by the Contractor. Any drawings submitted without this stamp of approval will not be considered and will be returned to the Contractor for resubmission.

Precast concrete samples representing the manufacturer's standard beige color range and standard finishes shall be submitted for final selection by A/E.

MATERIALS

Precast concrete: portland Cement, ASTM C-150 specifications for portland cement; type I/II, gray or white. Eight-day compressive strength shall be 4,000 – 6,000 psi.

All aggregates shall meet ASTM C-33 specifications cleaned and properly graded to size. Aggregates shall be blended by manufacturer to meet project requirements.

Coloring pigments used shall be inorganic, resistant to alkalinity and used per manufacturer's recommendations. Color range shall be beige, to be selected from manufacturer's standard colors. The finish shall be acid wash.

Reinforcement shall be epoxy coated and conform to ACI and manufacturer's design. Reinforce precast with deformed rods or wire, or both, as recommended by precast manufacturer.

Manufactured units shall conform to shop drawings, with a 1/8" tolerance in dimension. All exposed edges shall have minimum 1/8" chamfer to prevent chipping. All precast concrete finished surfaces to be sealed with a sealer approved by manufacturer.

Caulks and Sealants: polyurethane or acrylic sealant. Color to be selected by Architect from standard color pallet.

Sealer: Colorless, pure acrylic water-repellent penetrating sealer. Sealer to maintain natural look of concrete surface with no glaze or gloss, darkening, or color change.

Stainless steel dowels: type 304; size and locations as shown on Drawings.

EDPM sheet flashing product made from ethylene-propylene-diene terpolymer, complying with ASTM D 4637, 0.040 inch thick.

Sand-Cement Mortar: Portland cement, ASTM C 150/C 150M, Type I, and clean, natural sand, ASTM C 144. Mix at ratio of 1 part cement to 4 parts sand, by volume, with minimum water required for placement.

CONSTRUCTION

Take care during delivery, storage, and handling to ensure that precast concrete cap units are not damaged. Avoid scratches, abrasions, and marking with foreign substances.

Examine areas and conditions, with Installer present, for compliance with requirements for correct and level finished grade, mounting surfaces, installation tolerances, and other conditions affecting performance. Proceed with installation only after unsatisfactory conditions have been corrected.

Install cap units level, plumb, true, positioned, and securely anchored at locations indicated on Drawings. Alignment of precast units should be straight and true to all dimensions with a minimum variation of 1/8" in length, height or width.

Set precast cap units accurately on cast-in-place veneer wall as shown on Drawings. Install through wall EDPM flashing. Install two stainless steel alignment dowels per cap unit and epoxy in place.

Fill joints with manufacturer approved caulk and backer rod.

After completing installation, inspect components. Remove spots, dirt, and debris. Repair damaged finishes to match original finish or replace component. Remove excess materials from the site.

METHOD OF MEASUREMENT

Precast concrete cap shall be measured by the linear foot along the front face of the concrete, installed and accepted in place.

BASIS OF PAYMENT

This item, measured as provided above, will be paid for at the contract unit price, which price shall be payment in full for fabricating and installing precast concrete caps; and for furnishing all labor, tools, equipment and incidentals necessary to complete this item of work.

BID ITEM 90228 – EXTERIOR HANDRAILS

DESCRIPTION

This work shall consist of the fabrication and installation of exterior handrails as shown on the plans and as herein provided; including shaping and finishing as detailed, and delivery and installation on-site. Guarantee all materials, workmanship and installation for a period of one year from the date of acceptance.

MATERIALS

Steel pipe, ASTM A 53/A 53M, Type F or Type S, Grade A, Schedule 40; hot dip galvanized with baked-enamel, powder-coat finish: baked, polyester, powder-coat finish complying with finish-manufacturer's written instructions for surface preparation, including pretreatment, application, baking, and minimum dry film thickness.

Color: UW Madison standard black.

Steel bar, $\frac{3}{4}$ " thick, ASTM A36.

Recycled Content of Steel Products: Postconsumer recycled content plus one-half of preconsumer recycled content not less than 25 percent.

Structural Performance: Railings, including attachment to building construction, shall withstand the effects of gravity loads and the following loads and stresses within limits and under conditions indicated:

Uniform load of 50 lbf/ ft. (0.73 kN/m) applied in any direction.

Concentrated load of 200 lbf (0.89 kN) applied in any direction.

Uniform and concentrated loads need not be assumed to act concurrently.

The Contractor shall review, approve and submit shop drawings and product data with reasonable promptness and in such sequence as to cause no delay in the work or in the work of the Owner or any separate Contractor.

By approving and submitting shop drawings, the Contractor represents that he has determined and verified all materials, field measurements and field construction criteria related thereto, or will do so, and that he has checked and coordinated the information contained within such submittals with the requirements of the work and of the contract documents.

The Contractor shall not be relieved of responsibility for any deviation from the requirements of the contract documents by the Engineer's approval of shop drawings unless the Contractor has given written approval to the specific deviation. The Contractor shall not be relieved from responsibility for errors or omissions in the shop drawings, product data or samples by the Engineer's approval thereof.

The Contractor shall direct specific attention, in writing or on resubmitted shop drawings, product data or samples, to revisions other than those requested by the Engineer on previous submittals.

No portion of the work requiring submission of a shop drawing shall be commenced until the submittal has been approved by the Engineer.

Contractors shall submit six prints of all shop drawings every time a submission is made until final approval is received.

Drawings submitted shall be marked with the name of the project, numbered consecutively and bear the stamp of approval of the Contractor as evidence that the drawings have been checked by the Contractor. Any drawings submitted without this stamp of approval will not be considered and will be returned to the Contractor for resubmission.

CONSTRUCTION

Fabricate railings to comply with requirements indicated for design, dimensions, member sizes and spacing, details, finish, and anchorage, but not less than that required to support structural loads.

Shop-assemble railings to greatest extent possible to minimize field splicing and assembly. Disassemble units only as necessary for shipping and handling limitations. Clearly mark units for reassembly and coordinated installation. Use connections that maintain structural value of joined pieces.

Cut, drill, and punch metals cleanly and accurately. Remove burrs and ease edges to a radius of approximately 1/32 inch (1 mm) unless otherwise indicated. Remove sharp or rough areas on exposed surfaces.

Form work true to line and level with accurate angles and surfaces.

Fabricate connections that are exposed to weather in a manner that excludes water. Provide weep holes where water may accumulate.

Fabricate railings with welded connections unless otherwise indicated. Cope components at connections to provide close fit, or use fittings designed for this purpose. Weld all around at connections, including at fittings. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals. Obtain fusion without undercut or overlap. Remove flux immediately. At exposed connections, finish exposed surfaces smooth and blended so no roughness shows after finishing and welded surface matches contours of adjoining surfaces.

Form Changes in Direction by radius bends of radius indicated. For changes in direction made by bending, use jigs to produce uniform curvature for each repetitive configuration required. Maintain cross section of member throughout entire bend without buckling, twisting, cracking, or otherwise deforming exposed surfaces of components.

Brackets, Flanges, Fittings, and Anchors: Provide type 304 stainless steel wall brackets, flanges, miscellaneous fittings, and anchors to interconnect railing members to other work unless otherwise indicated.

Hot-dip galvanize steel railings after fabrication. Comply with ASTM A 123/A 123M for hot-dip galvanized railings. Do not quench or apply post galvanizing treatments that might interfere with paint adhesion. Comply with ASTM D7803 for surface preparation of galvanized surfaces prior to powder coating.

Fill vent and drain holes that are exposed in the finished Work, unless indicated to remain as weep holes, by plugging with zinc solder and filing off smooth.

Perform cutting, drilling, and fitting required for installing railings. Set railings accurately in location, alignment, and elevation; measured from established lines and levels and free of rack.

Set posts plumb within a tolerance of 1/16 inch in 3 feet. Align rails so variations from level for horizontal members and variations from parallel with rake of steps and ramps for sloping members do not exceed 1/4 inch in 12 feet.

Wherever an anchor plate touches the concrete, a plastic shim shall be placed so the metal will not touch the concrete directly.

Anchor to in-place construction as shown on drawings.

Immediately after erection, clean field welds, bolted connections, and abraded areas of shop paint, and paint exposed areas with the same material as used for shop painting to comply with SSPC-PA 1

requirements for touching up shop-painted surfaces. Apply by brush or spray to provide a minimum 2.0-mil dry film thickness.

Protect finishes of railings from damage during construction period with temporary protective coverings approved by railing manufacturer. Remove protective coverings at time of Substantial Completion.

METHOD OF MEASUREMENT

Handrails shall be measured by the linear foot, installed and accepted in place.

BASIS OF PAYMENT

This item, measured as provided above, is full compensation for fabricating and installing handrails; and for furnishing all labor, tools, equipment and incidentals necessary to complete this item of work.

BID ITEM 90229 – CUT LIMESTONE BLOCK WALL

DESCRIPTION

This work shall consist of the furnishing and installing the cut stone block wall as shown on the plans and as herein provided.

MATERIALS

ST-01 limestone supplied by Vetter Quarra Stone Co, Madison, WI (608) 246-8803; Contact Tyce Shirley. Ph: 608-246-8803. email: tshirley@quarrastone.com

Finished block shall be 18" wide x 24" high x 48" long, with medium tapestry finish on top and front faces and sawn finish on bottom, ends and back of blocks. End pieces shall have medium tapestry finish top, front, and end faces. Finished blocks shall have chamfered edge as shown on Drawings.

Alternate stone sources and suppliers must be submitted and approved a minimum of one week before project bid date.

Contractor shall submit full range samples for approval.

CONSTRUCTION

Limestone blocks shall be delivered in good condition free from shipping damage. Protect from damage after delivery to construction staging area and/or site. At all times, handle units to prevent damage; chipped, cracked, or otherwise damaged units will be replaced at no additional cost to the Owner.

Examine areas to receive stonework for compliance with requirements and conditions affecting installation and performance of all stonework. Proceed with installation only after unsatisfactory conditions have been corrected.

Protect structures, utilities, pavements, and other facilities and turf areas, planting beds, and existing plants from damage caused by stonework operations.

Install as indicated on drawings, with joints between adjacent stones cut on the radius and fitting tight. Maximum joint width is 3/8"; maximum lippage between stones is 1/8".

Remove and replace any stone products that are broken, chipped, stained, spalling, or otherwise damaged.

Backfill Cut Limestone Block Wall with clear stone per Working Drawings. Remove dust, dirt, and debris from Cut Limestone Block Wall and adjacent concrete sidewalk. Remove any and all surplus and waste

material including excess subsoil, unsuitable soil, trash, stone, mulches, accessories and debris and legally dispose of them off Owner's property.

METHOD OF MEASUREMENT

Cut Limestone Block Wall shall be measured by the linear foot installed and accepted.

BASIS OF PAYMENT

Cut Limestone Block Wall, measured as stated above, is full compensation for furnishing limestone block materials, setting blocks in place on compacted aggregate base, back-filling with clear stone aggregate, and disposing of surplus material.

BID ITEM 90230 – TREE GRATE

DESCRIPTION

This work shall consist of furnishing and installing tree grates as shown on the plans and as herein provided.

MATERIALS

Tree grates shall be cast iron per ASTM A48 class 35b or better. Standard finish is raw cast grey iron. Tree grate shall be 72" diameter round tree grate, ADA compliant, provide with angle frame and rebar. Casting shall be R 8871-B1 Neenah Foundry Co. P.O. Box 729, 2121 Brooks Ave. Neenah, WI 54957, 920-725-7000. Mulch shall be washed stone, 1 ½" diameter, free of fines and organic matter.

CONSTRUCTION

Install tree grates according to manufacturer's instructions and as shown on the details to provide installation on a true, flat plane. Provide 3" depth of washed stone for the entire area of the tree grate.

The Contractor shall fill/plug the center tree hole of all grates that do not have trees in areas that are open to pedestrians as a result of the tree plantings not occurring until November. The surface shall be level with the surface of the tree grate. The Contractor shall support the center of the tree grate for those that do not have trees to prevent them from being broken. Unsupported grates broken before tree planting occurs shall be the responsibility of the Contractor to replace.

METHOD OF MEASUREMENT

Tree grates shall be measured by the unit, each, installed and accepted in place.

BASIS OF PAYMENT

This item, measured as provided above, will be paid for at the contract unit price each, which price shall be payment in full for furnishing, installing tree grates and washed stone; and for furnishing all labor, tools, equipment and incidentals necessary to complete this item of work.

BID ITEM 90231 – 'SIENNA' FREEMAN MAPLE 3 ½" B&B
BID ITEM 90232 – 'AUTUMN GOLD' GINKGO 3 ½" B&B
BID ITEM 90233 – 'SKYLINE' HONEYLOCUST 3 ½" B&B
BID ITEM 90234 – 'ESPRESSO' KENTUCKY COFFEE TREE 3 ½" B&B
BID ITEM 90235 – EXCLAMATION LONDON PLANETREE 3 ½" B&B
BID ITEM 90236 – 'NEW HORIZON' ELM 3 ½" B&B

DESCRIPTION

This work shall be in accordance with the requirements of Article 209 of the City of Madison standard specifications for public works construct, except as stated herein.

Trees shall be 3 ½ inch caliper, 14 to 16 feet, trunk free of branches 7 to 9 feet. (Type 1 according to American Standard for Nursery Stock (ANSI Z60.1-2004)). Trees shall be secured by Contractor by June 1, 2014 to ensure correct species and sizes are available at time of planting. Trees shall be planted between September 1, 2014 and October 1, 2014. Contact City Forestry to coordinate planting installation (Dean Kahl, 608-266-4891).

BID ITEM 90237 – ‘AUTUMN BRILLIANCE’ SERVICEBERRY 3” B&B

BID ITEM 90238 – ‘ADAMS’ CRABAPPLE 3” B&B

BID ITEM 90239 – ‘ACCOLADE’ FLOWERING CHERRY 3” B&B

BID ITEM 90240 – ‘CLEVELAND SELECT’ CALLERY PEAR 3” B&B

BID ITEM 90241 – PEKING LILAC 3” B&B

DESCRIPTION

This work shall be in accordance with the requirements of Article 209 of the City of Madison standard specifications for public works construct, except as stated herein.

Trees shall be 3 inch caliper. All trees except ‘Autumn Brilliance’ Serviceberry shall be single stem and trunk free of branches 4 to 6 feet. ‘Autumn Brilliance’ Serviceberry shall be multi-stem with no overlapping leaders. Trees shall be secured by Contractor by June 1, 2014 to assure correct species and sizes are available at time of planting. Trees shall be planted between September 1, 2014 and October 1, 2014.

BID ITEM 90242 – PERENNIALS & GRASSES

DESCRIPTION

This work shall be in accordance with the requirements of Article 209 of the City of Madison standard specifications for public works construct, except as stated herein.

Perennials shall be two-year old plants and 1 gallon size at time of planting. They shall be planted in the fall season between September 1, 2014 and October 31, 2014 or the spring season between April 15 and May 31, 2015.

During the first two months of establishment, the automatic irrigation system will be scheduled to water the plants the equivalent of one inch of rainfall, twice per week during each week where rainfall does not exceed one inch total. After the two month establishment period, the automatic irrigation system will be scheduled to water the plants the equivalent of one inch of rainfall, once per week during weeks where rainfall does not exceed one inch. Each week shall be considered Saturday through Friday.

Any replacement perennial needed after October 31, 2014 shall be replaced the following spring between April 15 and May 31 2015.

If perennial plantings do not occur until the spring of 2015, the planting beds shall be covered with 2” shredded bark mulch between November 1 and November 15, and shall remain throughout the winter months until spring planting.

BID ITEM 90243 – SHRUBS

DESCRIPTION

This work shall be in accordance with the requirements of Article 209 of the City of Madison standard specifications for public works construct, except as stated herein.

Shrubs shall be 18-24" spread at time of planting. They shall be planted in the fall season between September and October 31, 2014 or the spring season between April 15 and May 31, 2015.

During the first two months of establishment, the automatic irrigation system will be scheduled to water the plants the equivalent of one-half inch of rainfall, twice per week during each week where rainfall does not exceed one inch total. After the two month establishment period, the automatic irrigation system will be scheduled to water the plants the equivalent of one inch of rainfall once per week during weeks where rainfall does not exceed one inch.

Any replacement shrub needed after October 1, 2014 shall be replaced the following spring between April 15 and May 31 2015.

If shrub plantings do not occur until the spring of 2015, the planting beds shall be covered with 3" shredded bark mulch between November 1 and November 15 and shall remain throughout the winter months until spring planting.

BID ITEM 90244 – GROUNDCOVERS

This work shall be in accordance with the requirements of Article 209 of the City of Madison standard specifications for public works construct, except as stated herein.

Groundcovers shall be one-year old plants and 3¹/₄" size at time of planting. They shall be planted in the fall season between September 1, 2014 and October 31, 2014 or the spring season between April 15 and May 31, 2015.

During the first two months of establishment, the automatic irrigation system will be scheduled to water the plants the equivalent of one inch of rainfall, twice per week during each week where rainfall does not exceed one inch total. After the two month establishment period, the automatic irrigation system will be scheduled to water the plants the equivalent of one inch of rainfall, once per week during weeks where rainfall does not exceed one inch. Each week shall be considered Saturday through Friday.

Any replacement groundcover needed after October 31, 2014 shall be replaced the following spring between April 15 and May 31, 2015.

If groundcover plantings will not occur until the spring of 2015, the planting beds shall be covered with 2" shredded bark mulch between November 1 and November 15, 2014 and shall remain throughout the winter months until spring planting.

BID ITEM 90245 – BULBS

This work shall be in accordance with the requirements of Article 209 of the City of Madison standard specifications for public works construct, except as stated herein.

Bulbs shall be planted in the fall season between September 1, 2014 and October 31, 2014.

Drive bulb planting holes through mulch using a bulb planter, hand trowel, or power auger. Plant bulb such that its basal plate faces downward (pointy end up) then cover with soil and mulch. Loosen soil 2" below bulb planting. Bulbs shall be planted in 6" deep holes (approximately 4" soil above top of bulb). Backfill with Planting Soil Mixture.

During the first two months of establishment, the automatic irrigation system will be scheduled to water the plants the equivalent of one inch of rainfall, twice per week during each week where rainfall does not exceed one inch total. After the two month establishment period, the automatic irrigation system will be scheduled to water the plants the equivalent of one inch of rainfall, once per week during weeks where rainfall does not exceed one inch. Each week shall be considered Saturday through Friday.

Bulb planting beds shall be covered with 2" shredded bark mulch.

BID ITEM 90246 – PLANTING SOIL MIXTURE

DESCRIPTION

This work shall consist of the furnishing and installing topsoil backfill as shown on the plans, in utility trenches under structural slab and as herein provided.

MATERIALS

Planting Soil Mixture shall be composed of 2 parts topsoil, 1 part organic compost and 1 part sand mixed 2:1:1 by volume per the State of Wisconsin Standard Specifications 632.2.3.4. Contractor shall provide sample of mixture for approval to the Engineer. Soil tests shall be performed in accordance with NR 151 regulations and the results of these tests shall be submitted to the appropriate city and campus representatives for approval prior to installation. Final Planting Soil Mixture shall have a pH between 6.5 and 7.5. Soil Planting

Sand: Clean, washed, natural or manufactured, and free of toxic materials.

Organic soil amendments acceptable as part of a planting soil mixture include:

1. Leaf Compost: Double shredded, aged, leaf compost conforming to WDRN specification S100.
2. Compost: Well-composted, stable, and weed-free organic matter, pH range of 5.5 to 8; moisture content 35 to 55 percent by weight; 100 percent passing through 3/4-inch sieve; soluble salt content of 5 to 10 decisiemens/m; not exceeding 0.5 percent inert contaminants and free of substances toxic to plantings; and as follows:
 - a. Organic Matter Content: 50 to 60 percent of dry weight.
3. Compost meeting Wisconsin DNR specification S100.
 - a. Compost is a mixture that consists largely of aerobically decayed organic waste. This specification outlines the minimum material requirements for compost intended to be used in accordance with the criteria of the Wisconsin Department of Natural Resources (WDNR) Stormwater Management technical standards. Compost meeting this specification is appropriate for use for compaction mitigation and as the component of an engineered soil mixtures and planting soil mixtures.
 - b. The following material requirement shall be met:
 - 1) Particle Size: 98% of the compost shall pass through a 0.75-inch screen.
 - 2) Physical Contaminants: Less than 1% combined glass, metal and plastic.
 - 3) Organic Matter/Ash Content: At least 40% organic matter, less than 60% ash content.
 - 4) Carbon to Nitrogen Ratio: 10-20:1 C:N ratio.
 - 5) pH: Between 6 and 8.
 - 6) Soluble Salts: Electrical conductivity below 10 dS m⁻¹ (mmhos cm⁻¹).
 - 7) Moisture Content: Between 35% and 50% by weight.
 - 8) Maturity: The compost shall be resistant to further decomposition and free of compounds such as ammonia and organic acids, in concentrations toxic to plant growth.
 - 9) Residual Seeds and Pathogens: Pathogens and noxious seeds shall be minimized.
 - 10) Pathogens: The compost shall meet the Class A requirements for pathogens as specified in s. NR 204.07(6)(a), Wis. Adm. Code.
 - 11) Other Chemical Contaminants: The compost shall meet the high quality pollutant concentrations as specified in s. NR 204.07(5)(c), Wis. Adm. Code.

Mycorrhizal Inoculant: CPR #1 Mycorrhizal Root Inoculant from BioGreen LLC, 30937 Gilmer Road, Volo, IL; *847) 740-9637, or approved equal. Rates, method(s), and timing of application shall be per BioGreen's written instructions for this specific site.

Other inorganic Soil Amendments:

- 1) Lime: ASTM C 602, agricultural liming material containing a minimum of 80 percent calcium carbonate equivalent and as follows:
Class: O, with a minimum of 95 percent passing through No. 8 sieve and a minimum of 55 percent passing through No. 60 sieve.
Provide lime in form of ground dolomitic limestone.
- 2) Application amounts of lime will be governed by the recommendations of the independent testing firm's soil test(s).
- 3) Sulfur: Granular, biodegradable, and containing a minimum of 90 percent sulfur, with a minimum of 99 percent passing through No. 6 sieve and a maximum of 10 percent passing through No. 40 sieve. Application amounts of sulfur will be governed by the recommendations of the independent testing firm's soil test(s).

CONSTRUCTION

Thoroughly blend planting soil mix off-site before spreading. Any adjustments to pH, nutrient content, or soil texture class shall be performed at this stage and pre-blended before spreading.

In Planting Soil Mixture backfill locations, over excavate areas to receive topsoil backfill to a minimum depth of 26" for trees, 18" for shrubs, groundcovers & perennials, and 12" for turf lawn **or as indicated in Working Drawings**. Remove all material to this depth.

Before installation of soil takes place, the subgrade shall be deep tilled, ripped or fractured at minimum 12 inches deep. Backfill the area in 8" lifts. Lightly compact each lift enough to be able to withstand foot traffic without causing a footprint more than 1" deep, or enough to support the void form material for the structural slab.

In locations where utility trenches or other excavation go under the structural slab and are not included in the topsoil trench locations the top 26" shall be backfilled with planting soil mixture. Additional excavation is not required to get the full depth of soil if the additional excavation will disturb existing tree roots.

Planting soil mixture backfill will also be used in the planter areas.

Fertilizers and inorganic soil amendments shall be applied only as recommended by the soil tests or as outlined in Sections "Sodding" and in accordance with the requirements of Section 629.3.1 of the Standard Specifications for Highway Construction and in accordance with all local regulations.

METHOD OF MEASUREMENT

Topsoil backfill will be measured on the basis of Cubic Yard, lightly compacted in place.

BASIS OF PAYMENT

This item, measured as provided above, will be paid for at the contract unit price cubic yard, which price shall be payment in full for furnishing, installing topsoil backfill, all soil amendments, excavating and removing existing material, and for furnishing all labor, tools, equipment and incidentals necessary to complete this item of work.

BID ITEM 90247 – BENCH, 6-FOOT

DESCRIPTION

This work shall consist of the furnishing and installing benches as shown on the plans and as herein provided.

MATERIALS

Benches shall be 72" length as indicated, black color to match "signal black" RAL9004. Acceptable product manufacturers are: #SC3005-BS-48 or #SC3005-BS-72, Landscape Forms, 15108 Chestnut Circle Burnsville, MN 55306, (800) 521-2546, and Overture Bench 4' or 6', Thomas Steele, 2700 Laura Lane, Middleton, WI 53562, (608) 831-9040.

CONSTRUCTION

Install benches with stainless steel bolt and anchor system according to manufacturer's instructions in locations shown on the plans.

METHOD OF MEASUREMENT

Benches shall be measured by the unit, each, installed and accepted in place.

BASIS OF PAYMENT

This item, measured as provided above, will be paid for at the contract unit price each, which price shall be payment in full for furnishing, installing benches; and for furnishing all labor, tools, equipment and incidentals necessary to complete this item of work.

BID ITEM 90248 – BIKE RACK, 4 STALL-SINGLE SIDED

BID ITEM 90249 – BIKE RACK, 5 STALL-SINGLE SIDED

BID ITEM 90250 – BIKE RACK, 6 STALL-SINGLE SIDED

DESCRIPTION

This work shall consist of the furnishing and installing bike racks as shown on the plans and as herein provided.

MATERIALS

Bike racks shall be bike capacity, single sided as indicated. Capacity to be determined by the number of looped down brackets; the end supports shall not count as locations to calculate capacity. Black color, to match "signal black" RAL9004. Acceptable racks are: Dero Bike Rack Company, Campus Rack, 221 Arthur Avenue SE, Minneapolis, MN 55414, (888) 337-6729, and Overture Bike Rack, Tomas Steele, 2700 Laura Lane, Middleton, WI 53562, (608) 831-9040.

CONSTRUCTION

Install bike racks with stainless steel bolt and anchor system according to manufacturer's instructions in locations shown on the plans.

METHOD OF MEASUREMENT

Bike racks shall be measured by the unit, each, installed and accepted in place.

BASIS OF PAYMENT

This item, measured as provided above, will be paid for at the contract unit price each, which price shall be payment in full for furnishing, installing bike racks; and for furnishing all labor, tools, equipment and incidentals necessary to complete this item of work.

BID ITEM 90251 – TRASH RECEPTACLE

BID ITEM 90252 – RECYCLING RECEPTACLE

DESCRIPTION

This work shall consist of the furnishing and installing trash containers as shown on the plans and as herein provided.

MATERIALS

Trash containers shall have lock option, black color to match "signal black" RAL9004. Acceptable product and manufactures are: #SC5002-24-40, Landscape Forms, 15108 Chestnut Circle Burnsville, MN 55306, (800) 521-2546, and Overture Trash Receptacle, Thomas Steele, 2700 Laura Lane, Middleton, WI 53562, (608) 831-9040. Trash Containers are arranged in groups of three. Within each group, all trash containers shall be black color to match "signal black" RAL9004, for the body of the Trash Container. Within each group, two of the Trash Containers shall have matching black tops, top loading. One trash container shall have a blue top, RAL5002, side loading, with a recycling symbol, submit options to Engineer. Submit color and symbol to the City for review and approval.

CONSTRUCTION

Install trash containers with stainless steel bolt and anchor system according to manufacturer's instructions in locations shown on the plans.

METHOD OF MEASUREMENT

Trash containers shall be measured by the unit, each, installed and accepted in place.

BASIS OF PAYMENT

This item, measured as provided above, will be paid for at the contract unit price each, which price shall be payment in full for furnishing, installing trash containers; and for furnishing all labor, tools, equipment and incidentals necessary to complete this item of work.

BID ITEM 90253 – SOLAR TRASH COMPACTOR

DESCRIPTION

This work shall consist of the furnishing and installing solar trash compactors as shown on the plans and as herein provided.

MATERIALS

BigBelly Compactor by BigBelly Solar, BigBellySolar.com; (888) 820-0300, or approved equal; mixed waste configuration. Color: Polyester TGIC Signal Black RAL9004 or as selected by Landscape Architect from submitted manufacturer's standard color range.

CONSTRUCTION

Examine areas to receive solar compactor for compliance with requirements and conditions affecting installation and performance. Proceed with installation only after unsatisfactory conditions have been corrected. Review final locations with owner's representative prior to installation.

Surface mount to concrete pavement in locations shown on plans. Install per manufacturer's written instructions.

METHOD OF MEASUREMENT

Solar trash compactor shall be measured by the unit, each, installed and accepted in place.

BASIS OF PAYMENT

This item, measured as provided above, will be paid for at the contract unit each, which price shall be payment in full for furnishing and installing solar trash compactor; and for furnishing all labor, tools, equipment and incidentals necessary to complete this item of work.

BID ITEM 90254 – 33" HEIGHT TABLE

BID ITEM 90255 – 42" HEIGHT TABLE

DESCRIPTION

This work shall consist of the fabrication and installation of metal tables as shown on the plans and as herein provided; including shaping and finishing as detailed, and delivery and installation on-site. Guarantee all materials, workmanship and installation for a period of one year from the date of acceptance.

The Contractor shall review, approve and submit shop drawings, product data, and samples with reasonable promptness and in such sequence as to cause no delay in the work or in the work of the Owner or any separate Contractor.

Submitted samples shall consist of two (2) 6" x 8" panels of each material and thickness indicated to verify full range of color, texture and pattern.

By approving and submitting shop drawings, the Contractor represents that he has determined and verified all materials, structural integrity, field measurements and field construction criteria related thereto, or will do so, and that he has checked and coordinated the information contained within such submittals with the requirements of the work and of the contract documents.

The Contractor shall not be relieved of responsibility for any deviation from the requirements of the contract documents by the Engineer's approval of shop drawings unless the Contractor has given written approval to the specific deviation. The Contractor shall not be relieved from responsibility for errors or omissions in the shop drawings, product data or samples by the Engineer's approval thereof.

The Contractor shall direct specific attention, in writing or on resubmitted shop drawings, product data or samples, to revisions other than those requested by the Engineer on previous submittals.

No portion of the work requiring submission of a shop drawing shall be commenced until the submittal has been approved by the Engineer.

Contractors shall submit six prints of all shop drawings every time a submission is made until final approval is received.

Drawings submitted shall be marked with the name of the project, numbered consecutively and bear the stamp of approval of the Contractor as evidence that the drawings have been checked by the Contractor. Any drawings submitted without this stamp of approval will not be considered and will be returned to the Contractor for resubmission.

MATERIALS

Cor-ten weathering steel, ASTM A588, size and thickness as shown on drawings.

Stainless steel plate, ASTM 240, type 316, with #4 brushed finish in one uniform direction; fabricated to size as shown on drawings.

Stainless steel anchors of type and size shown on Drawings.

CONSTRUCTION

Take care during delivery, storage, and handling to ensure that factory finishes are not damaged. Avoid scratches, abrasions, and marking with foreign substances.

Examine areas and conditions, with Installer present, for compliance with requirements for correct and level finished grade, mounting surfaces, installation tolerances, and other conditions affecting performance.

Proceed with installation only after unsatisfactory conditions have been corrected.

Preassemble items in the shop to greatest extent possible. Disassemble units only as necessary for shipping and handling limitations. Use connections that maintain structural value of joined pieces. Clearly mark units for reassembly and coordinated installation.

Cut and drill metals cleanly and accurately. Remove burrs and ease edges to a radius of approximately 1/32 inch unless otherwise indicated. Remove sharp or rough areas on exposed surfaces. Form exposed work with accurate angles and surfaces and straight edges.

Weld corners and seams continuously. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals. Obtain fusion without undercut or overlap. Remove welding flux immediately. At exposed connections, finish exposed welds and surfaces smooth and blended so no roughness shows after finishing. Weld Cor-ten complying with AWS D1.1 special requirements for welding weathering steel.

Complete field fabrication or assembly of steel elements where required.

Install level, plumb, true, positioned, and securely anchored at locations indicated on Drawings. Fasten to concrete pavement with type 316 stainless steel anchor bolts as indicated.

After completing installation, inspect components. Remove spots, dirt, and debris. Repair damaged finishes to match original finish or replace component. Remove excess materials from the site.

METHOD OF MEASUREMENT

Tables shall be measured by the unit, each, installed and accepted in place.

BASIS OF PAYMENT

This item, measured as provided above, will be paid for at the contract unit each, which price shall be payment in full for fabricating and installing tables; and for furnishing all labor, tools, equipment and incidentals necessary to complete this item of work.

BID ITEM 90256 – MOVEABLE TABLE

BID ITEM 90257 – MOVEABLE CHAIR

DESCRIPTION

This work shall consist of the furnishing and installing of moveable tables and chairs as shown on the plans and as herein provided.

MATERIALS

Parc Centre table from Landscape Forms, landscapeforms.com, (800) 430-6209; 24" round with freestanding base and adjustable levelers; manufacturer's standard black powdercoat finish.

Parc Centre chair from Landscape Forms, landscapeforms.com, (800) 430-6209; without arms; manufacturer's standard black powdercoat finish.

CONSTRUCTION

Examine areas to receive moveable tables and chairs for compliance with requirements and conditions affecting installation and performance. Review locations of tables and chairs with owner's representative prior to final placement.

Deliver to project site and locate as directed by the owner's representative.

METHOD OF MEASUREMENT

Moveable tables and chairs shall be measured by the unit, each, located and accepted in place.

BASIS OF PAYMENT

This item, measured as provided above, will be paid for at the contract unit each, which price shall be payment in full for furnishing and locating moveable tables and chairs; and for furnishing all labor, equipment and incidentals necessary to complete this item of work.

BID ITEM 90258 – DUAL BASE BINOCULARS

DESCRIPTION

This work shall consist of the furnishing and installing the dual base binoculars as shown on the plans and as herein provided.

MATERIALS

HDC SC Mk2 non-coin operated 10 x 40 binoculars mounted on HDC SeeCoast Dual Base B; Heritage Design Consulting LTD; Dr. John Veverka, 5010 Delray Dr., Lansing, MI 48910; <http://www.heritagedestination.com/coinoperatedtelescopes.aspx> or approved equal.

Color: Manufacturer's standard powdercoat Profile Gray.

CONSTRUCTION

Examine areas to receive binoculars for compliance with requirements and conditions affecting installation and performance. Proceed with installation only after unsatisfactory conditions have been corrected. Review final locations with owner's representative prior to installation.

Surface mount to concrete pavement in locations shown on plans. Install per manufacturer's written instructions.

METHOD OF MEASUREMENT

Dual base binoculars shall be measured by the unit, each, installed and accepted in place.

BASIS OF PAYMENT

This item, measured as provided above, will be paid for at the contract unit each, which price shall be payment in full for furnishing and installing dual base binoculars; and for furnishing all labor, tools, equipment and incidentals necessary to complete this item of work.

BID ITEM 90259 – ELECTRICAL KIOSK

DESCRIPTION

This work shall consist of the furnishing and installing kiosks as shown on the plans and as herein provided; including, structural and electrical design of kiosk, reinforced concrete foundations, anchor systems, and attachments as shown and as required, submittal of shop drawings for approval, submittal of materials and finished samples for approval, off-site fabrication of kiosks, on-site construction of

foundations, and complete installation of kiosks on site. Guarantee all materials, workmanship and installation for a period of one year from the date of acceptance.

The Contractor shall review, approve and submit, with reasonable promptness and in such sequence as to cause no delay in the work or in the work of the Owner or any separate Contractor, all shop drawings, product data and samples required by the contract documents.

By approving and submitting shop drawings, product data and samples, the Contractor represents that he has determined and verified all materials, field measurements and field construction criteria related thereto, or will do so, and that he has checked and coordinated the information contained within such submittals with the requirements of the work and of the contract documents.

The Contractor shall not be relieved of responsibility for any deviation from the requirements of the contract documents by the Engineer's approval of shop drawings, product data or samples unless the Contractor has given written approval to the specific deviation. The Contractor shall not be relieved from responsibility for errors or omissions in the shop drawings, product data or samples by the Engineer's approval thereof.

The Contractor shall direct specific attention, in writing or on resubmitted shop drawings, product data or samples, to revisions other than those requested by the Engineer on previous submittals.

No portion of the work requiring submission of a shop drawing, product data or sample shall be commenced until the submittal has been approved by the Engineer.

Contractors shall submit six blue line prints of all shop and setting drawings every time a submission is made until final approval is received.

Drawings submitted shall be marked with the name of the project, numbered consecutively and bear the stamp of approval of the Contractor as evidence that the drawings have been checked by the Contractor. Any drawings submitted without this stamp of approval will not be considered and will be returned to the Contractor for resubmission.

Samples shall be of sufficient size to **clearly** illustrate full range of color, texture and pattern.

Submittal Schedule

<u>Work Element</u>	<u>Submittal Required</u>	<u>Comments</u>
Foundation	Shop Drawings	
Kiosks	Shop Drawings	
Painting- metals	Samples	

MATERIALS

Welding Electrodes and Filler Materials: Type and alloy of filler metal and electrodes as recommended by producer of the metal to be welded and as required for color match, strength and compatibility in the fabricated items.

Exposed Fasteners: Shall be of basic metal and alloy, matching finishing color and texture as the metal being fastened, unless otherwise indicated. Unless otherwise shown Phillips flat-head screws shall be used for exposed fasteners where exposed fasteners are required.

Anchors and Inserts: Either furnish inserts to be set into concrete or masonry work to applicable trades, or provide other anchoring devices as required for the installation of graphic items. Provide toothed steel of lead shield expansion bolt devices for drilled-in-place anchors. Provide galvanized or cadmium-coated anchors and inserts for exterior installation. Provide units with exposed surfaces matching the texture and finish of the metal item being anchored.

Reinforced Concrete: Concrete: 3000 psi, compressive strength at twenty-eight days. Approximately 150 lbs/cu. Ft. (2400 Kg/cu.M.) density. Reinforcing: ASTM A615, Grade 60, No. 4 minimum, unless otherwise shown.

Aluminum: Extrusions: Shapes and thicknesses as shown and as required to fulfill requirements, but not less than 1/8" thick, unless otherwise shown. Suitable alloy and temper for extruding with adequate structural characteristics and suitable for finishing as specified. Sheets and Plates: Sized and minimum gages as shown and as required to fulfill performance requirements. Suitable alloy and temper for forming and fabricating requirements with adequate temper and structural characteristics and suitable for finishing as specified unless otherwise specified alloy #5052 H32 shall be used. Bars, Rods and Wire: ASTM B211.

Paint for metals: Matthews acrylic polyurethane enamel unless otherwise specified.
Hardness, KHM.....10
Flexibility 1/8" Mandrel.....no cracks
Impact resistance, direct – one week.....165 in. lbs.
Gloss retention (weatherometer)
1600 hrs @ 20 degrees.....88%
1600 hrs @ 60 degrees.....97%
Salt spray, 2000 hrs.no effect

Colors: Color A shall match "White Aluminum" RAL 9006
Color B shall match "Signal Black" RAL 9004
Color C shall match "Window Grey" RAL 4070

Roofing: roof material shall be Kalwall Kalcurve, custom insulated translucent sandwich panel system.

Translucent faces shall be manufactured from glass fiber reinforced thermoset resins specifically for architectural use. Thermoplastic (e.g. polycarbonate, acrylic) faces are not acceptable.

The full thickness of the exterior face shall not change color more than 3.0 CIE Units DELTA E by ASTM D-2244 after five (5) years outdoor South Florida weathering at 5 degrees facing south, determined by the average of at least three (3) white samples with and without a protective film or coating to ensure long-term color stability. Color stability shall be unaffected by abrasion or scratching.

The exterior face shall have a permanent glass erosion barrier embedded beneath the surface to provide long-term resistance to reinforcing fiber exposure. Sacrificial surface films or coatings are not acceptable erosion barriers. Exterior face surface loss shall not exceed .7 mils and 40 mgs when tested in accordance with ASTM D-4060-90 employing CS17 abrasive wheels at a head load of 500 grams for 1000 cycles.

Appearance - Exterior face sheets shall be smooth, .070" thick and Aqua in color. Interior face sheets shall be .070" thick and Aqua in color. Faces shall not vary more than $\pm 10\%$ in thickness and be uniform in color.

Strength - The exterior face sheet shall be uniform in strength, impenetrable by hand held pencil and repel an impact equal to 70 ft. lbs. without fracture or tear when impacted by a 3-1/4" diameter, 5 lb. free-falling ball per UL 972.

Panels shall incorporate an aluminum I-beam grid core of 6063-T6 or 6005-T5 with provisions for mechanical interlocking of muntin-mullion and perimeter. Width of I-beam shall be no less than 7/16". The I-beam grid shall be machined to tolerances of not greater than $\pm .002$ ".

The laminate adhesive shall be heat and pressure resin type engineered for structural sandwich panel use, with minimum 25-years field use. Adhesive shall pass testing requirements specified by the International Conference of Building Officials "Acceptance Criteria for Sandwich Panel Adhesives".

Minimum tensile strength shall be 750 PSI when the panel assembly is tested by ASTM C-297 after two (2) exposures to six (6) cycles each of the aging conditions prescribed by ASTM D-1037.

Minimum shear strength of the panel adhesive by ASTM D-1002 after exposure to five (5) separate conditions:

50% Relative Humidity at 73° F: 540 PSI

182° F: 100 PSI

Accelerated Aging by ASTM D-1037 at room temperature: 800 PSI

Accelerated Aging by ASTM D-1037 at 182° F: 250 PSI

500-Hour Oxygen Bomb by ASTM D-572: 1400 PSI

Panels shall have a thickness of 2-3/4" with a "U" factor by NFRC certified laboratory of .53, light transmission of 20%.

Translucent panels shall be a true sandwich panel of flat fiberglass sheets bonded to a grid core of mechanically interlocking (thermally broken) aluminum I-beams. Panels shall be laminated under a controlled process of heat and pressure, and deflect no more than 1.9" at 30 psf in 10' span without a supporting frame by ASTM E-72.

Grid pattern shall be custom as shown on the details.

The adhesive bonding line shall be straight, cover the entire width of the I-beam and have a neat, sharp edge.

Closure system shall be extruded 6063-T6 and 6063-T5 aluminum clamp-tite screw type. Curved closure systems may be roll formed. All battens and perimeter closures to be supplied with 300 series stainless steel screws.

Finish of all exposed aluminum shall be manufacturer's custom which meets the performance requirements of AAMA 2604. Color to be selected from manufacturer's standards.

Sealing tape shall be manufacturer's standard pre-applied to closure system at the factory under controlled conditions.

Lighting: Lighting shall be incorporated as required to illuminate message. Placement shall be such as to prevent bright 'hot' spots or dim spots and result in a bright even illumination.

Outside glazing: 3/16" Lexan, clear polycarbonate.

Provide an unpainted cork board with extruded clear aluminum frame to the full size of the back panel of the kiosk display case for each display case. Provide hardware and attachments to mount and remove cork board. Provide a durable storage case for the cork board for when the cork board will not be mounted in the display case.

Provide locks and keys for all doors and cases. Locks shall smoothly operate at least three closure/locking points to insure that doors will remain firmly closed. Locks for main doors shall be differently keyed from display cases. The cylinders for the locks shall fit into the City of Madison Parks Department Master Key System as follows: Schlage Cylinders, 6-pin, c-series key ways. The Contractor shall contact Tom Skaife, Parks Facility Maintenance Supervisor at 608-267-4937 to have locks keyed at time of installation. A master key for all locks shall also be provided. Provide five clearly labeled copies of each key type to the City.

Hinges: Furnish hinges that meet the manufacturer's specifications for the size and weight of the doors. Include the hinge and hinge specifications with the kiosk shop drawing submittal.

CONSTRUCTION

Overall appearance shall be clean and free of exposed fasteners except those that are necessary for access panels where required for service and maintenance.

Thermal movement: Design, fabricate and install component parts to provide for expansion and contraction over a temperature range for the material of 150 degrees F (83.3 degrees C), without buckling, sealant joint failure, glass breakage, undue stress on members or anchors and other detrimental effects.

Flatness of graphic faces: Faces shall have no visual distortion when viewed in the installed position. All faces shall be of such flatness that when measured, the maximum slope of the surface at any point, measured from the nominal plan of the surface, shall not exceed 2.0%.

Wind loading: Design and fabricate all exterior structures to withstand a minimum wind loading of 40 psf or greater.

Protect exposed finished by covering with adhesive paper or other suitable covering where adhesive is not appropriate for finish material; apply covering prior to shipment from the fabricating or finishing shop. Covering shall not adversely affect finish. Remove protective coverings when there is no longer any danger of damage to the graphics work from other work yet to be performed.

Form work to the required shapes and sizes, with true curves, lines and angles. Provide necessary rebates, lugs and brackets for assembly of units. Use concealed fasteners wherever possible.

Items shall be shop fabricated so far as practicable. Joints shall be fastened flush to conceal reinforcement, or welded where thickness of section permits.

Contact surfaces of connected members shall be so assembled that joints will be tight and practically unnoticeable.

Wrought work shall be level and straight. Members shall have sharp lines and smooth surfaces. Square turns and corners shall be sharp. Curves shall be true.

Holes for bolts and screws shall be drilled. Fastenings shall be concealed where possible. Exposed ends and edges shall be milled smooth, with corners slightly rounded. Joints exposed to weather shall be formed to exclude water.

Parts to receive hardware shall be countersunk. Plates for mounting hardware shall be riveted or welded in place.

Finishing – Polyurethane Enamel:

Typical finish shall consist of a filler/primer seal coat, properly applied to the aluminum surface with the required etching and coatings to manufacturer's specifications. Filler/sealer coat shall then be coated with at least two coats of a premium acrylic polyurethane gloss or semi-gloss enamel, in colors selected by the customer.

Finish coats shall be smooth and even, free from hot spots, brush or roller marks and other imperfections.

Construct foundation per approved shop drawings.

All wiring routed through the foundation shall be placed in heavy wall conduit.

Cutting, Fitting, and Placement: Perform all cutting, drilling and fitting required for installation. Set the work accurately in location, alignment and elevation, plumb, level and true, measured from established lines and levels. Provide temporary bracing or anchors as required. Form tight joints with exposed

connections accurately fitted with uniform reveals and spaces for sealant and joint fillers. Where cutting, welding and grinding are required for proper fitting and jointing of the work, restore finishes which cannot be completely restored in the field.

METHOD OF MEASUREMENT

Electrical Kiosk shall be measured by the unit, each, installed and accepted in place.

BASIS OF PAYMENT

This item, measured as provided above, will be paid for at the contract unit price each, which price shall be payment in full for furnishing, reinforced concrete foundation, installing kiosks, and for furnishing all labor, tools, equipment and incidentals necessary to complete this item of work.

BID ITEM 90260 – POSTING KIOSK

DESCRIPTION

This work shall consist of furnishing and installing posting kiosks as shown on the plans and as herein provided.

MATERIALS

The Contractor shall furnish Custom Arcus Totem – 900 Series Posting Kiosks for the City of Madison State Street corridor as manufactured by Forms & Surfaces, 30 Pine Street, Pittsburgh, PA 15223. The Contractor is responsible for assembling the unit prior to installation. The Contractor shall also furnish and install the State Street logo. The State Street Logo shall be a _____.

CONSTRUCTION

Install the Posting Kiosk with stainless steel bolt and anchor system according to manufacturer's specifications in locations shown on the plans. The kiosk shall be installed level and aluminum shims shall be used between the inner support tube and adjustable outer tube to prevent the Posting Kiosk from swaying. Two to four shims per leg may be necessary, placed near the top and bottom of the inner tube.

METHOD OF MEASUREMENT

Posting Kiosk will be measured by the unit, each, assembled, installed and accepted in place.

BASIS OF PAYMENT

This item, measured as provided above, will be paid for at the contract unit price each, which price shall be payment in full for furnishing the posting kiosk; for assembly and installation; for furnishing installation hardware; and for furnishing all labor, tools, equipment and incidentals necessary to complete this item of work.

BID ITEM 90261 – GRANITE STREET FORMS TYPE G

BID ITEM 90262 – GRANITE STREET FORMS TYPE J

BID ITEM 90263 – GRANITE STREET FORMS TYPE G ETCHED

BID ITEM 90264 – GRANITE STREET FORMS TYPE J ETCHED

DESCRIPTION

This work shall consist of the furnishing and installing of granite street forms as shown on the plans and as herein provided; including, shaping, etching, and finishing as detailed, pre-drilling for installation, and delivery and installation on-site. Guarantee all materials, workmanship and installation for a period of one year from the date of acceptance.

The Contractor shall review, approve and submit, with reasonable promptness and in such sequence as to cause no delay in the work or in the work of the Owner or any separate Contractor, all shop drawings, product data and samples required by the contract documents.

By approving and submitting shop drawings, product data and samples, the Contractor represents that he has determined and verified all materials, field measurements and field construction criteria related thereto, or will do so, and that he has checked and coordinated the information contained within such submittals with the requirements of the work and of the contract documents.

The Contractor shall not be relieved of responsibility for any deviation from the requirements of the contract documents by the Engineer's approval of shop drawings, product data or samples unless the Contractor has given written approval to the specific deviation. The Contractor shall not be relieved from responsibility for errors or omissions in the shop drawings, product data or samples by the Engineer's approval thereof.

The Contractor shall direct specific attention, in writing or on resubmitted shop drawings, product data or samples, to revisions other than those requested by the Engineer on previous submittals.

No portion of the work requiring submission of a shop drawing, product data or sample shall be commenced until the submittal has been approved by the Engineer.

Contractors shall submit six blue line prints of all shop and setting drawings every time a submission is made until final approval is received.

Drawings submitted shall be marked with the name of the project, numbered consecutively and bear the stamp of approval of the Contractor as evidence that the drawings have been checked by the Contractor. Any drawings submitted without this stamp of approval will not be considered and will be returned to the Contractor for resubmission.

Samples shall be of sufficient size to clearly illustrate full range of color, texture and pattern. Granite Street form Type J shall be 2 of reddish blend (Camelion) - one etched, one not; and 2 of Charcoal Grey, both etched as provided by Cold Spring Granite Co. or equal. Granite Street form Type G shall be 3 black-very dark grey, (Mesabi Black)- two etched, one not; and 1 Charcoal Grey and etched as provided by Cold Spring Granite Co. or equal.

Submittal Schedule

<u>Work Element</u>	<u>Submittal Required</u>
Granite Street forms – Including etched quotes (each type)	Shop Drawings
Granite (each color)	Samples
Granite finishing (each finish)	Samples

MATERIALS

The Contractor shall furnish and install solid granite, cut and shaped to the forms indicated; three quarter inch diameter threaded stainless steel rods for mounting on-site; stainless steel plate for mounting pedestals; and foams and adhesives as recommended by the stone supplier for stainless steel attachments.

CONSTRUCTION

Cut, shape, etch text, and finish granite street forms off-site. Note that the top surface of each stone shall have a 1/2" bevel. Six of the Granite Street Forms shall be etched with quotes. The etchings for the six stones shall be a Garamond semi-bold font, height 3/4" and 1/2" in the smooth finished face surface. The etchings shall be 1/32" deep.

Install threaded rods into each form in locations indicated. Provide a cardboard setting template for each stone to serve as a guide for drilling setting holes on-site.

Deliver forms to site. Protect forms from damage during delivery and installation on-site. Chipped and fractured stones will be rejected. Stones with damage to finished surfaces will be rejected. Engineer will determine final location and orientation for forms. Use cardboard setting templates to locate setting holes. Carefully place forms. Provide a self-expanding foam in each setting hole to prevent water/ice from entering hole.

METHOD OF MEASUREMENT

Granite Street form (Type) shall be measured by the unit, each, installed and accepted in place.

BASIS OF PAYMENT

Granite Street form (Type), measured as provided above, will be paid for at the contract unit price each, which price shall be payment in full for cutting, shaping, and finishing forms; for installing on-site; and for furnishing all labor, tools, equipment and incidentals necessary to complete this item of work.

BID ITEM 90265 – LEAF-FOUNDATION

DESCRIPTION

This work shall be in accordance with the requirements of Section 504 and 505 of the State of Wisconsin Standard Specifications, except as herein after amended.

Foundation – includes forming and pouring a concrete foundation with reinforcing steel and stainless steel anchor bolts for the LEAF sculpture.

REFERENCES

American Concrete Institute (ACI): ACI 117, ACI 301, ACI 304, ACI 305, ACI 306, ACI 315, ACI 318

American Society for Testing and Materials (ASTM): ASTM A615, ASTM C33, ASTM C150,

American Welding Society (AWS): AWS A5.1, AWS D1.4

Concrete Reinforcing Steel Institute (CRSI)

SUBMITTALS

The Contractor shall submit shop drawings for all reinforcement including: bending steel, radii, and bar overlap for approval by the engineer.

The Contractor shall submit concrete mix designs, material specifications, and compressive strength test reports.

MATERIALS

Ready Mixed Concrete shall meet the requirements of ASTM C94.

Portland Cement shall conform with ASTM C150 Type I or II.

Aggregates shall conform with ASTM C33.

Water shall be potable.

Admixtures:

Water Reducing shall conform with ASTM C494

Air Entraining shall conform with ASTM C260

Flyash shall conform with ASTM C618, Class C

Other Admixtures as approved by the Engineer

Reinforcing Steel shall conform with ASTM A615 Grade 60

Anchor bolts: Stainless Steel threaded rod shall conform with ASTM F593

Non-Shrink Grout shall be premixed containing non-metallic aggregates with a minimum design strength of 6,000psi. Grout shall not contain gypsum.

Concrete forms tailored to design specs, concrete, rebar, stainless steel threaded anchor bolts, joint fillers and sealers

MIX DESIGN

Footing and Pier shall have a minimum 28 day compressive strength of 4,000psi using a maximum aggregate size of 1 ½", with 4% +/- 1.5 air entraining, and a maximum water/cement ratio of 0.50.

CONSTRUCTION

Placing Concrete. Place concrete in accordance with ACI 304. Use vibrators for thorough consolidation of concrete.

Reinforcement. Steel Reinforcement shall be placed as specified in the plans.

Finishing Concrete. Finishing shall be as detailed in the plans.

Provision for electrical. Plastic or sheet metal electrical conduit will be stubbed through the foundation to provide a connection to the main electric kiosk (power source- 120V).

METHOD OF MEASUREMENT

Leaf-Foundation shall be measured by the cubic yard, installed and accepted in place.

BASIS OF PAYMENT

Leaf-Foundation measured as provided above, is full compensation for preparing the foundation; providing, transporting, and placing all materials, including concrete, joint fillers, joint sealers, expansion joints, forms, falsework, placing, finishing, curing, protecting, heating, reinforcement, backfilling and disposing of surplus material; and restoring the work site.

BID ITEM 90266 – LEAF SCULPTURE

DESCRIPTION

LEAF Sculpture – includes fabricating and assembling the LEAF in the shop, including LED lighting; disassembling for transport; transporting to the site; assembling, then final welding onsite.

MATERIALS

Laser cut and assembled brushed 316 Stainless steel sheet per construction drawings.

Stainless steel shapes conforming with AISI 302.

Stainless steel threaded anchor bolts conforming with ASTM F593.

Welding shall comply with AWS D1.6

CONSTRUCTION

The LEAF fabricator will work out shop drawings with the artist and submit them to the engineer for approval.

Approved Fabricators are:

GenMet

262-238-7000

www.genmet.com

Eric Isbister EricI@genmet.com

Design Fugitives

414-377-3977

designfugitives.com

Paul Mattek mattek@designfugitives.com

Sign Effectz
signeffectz.com
414-264-5504
Rick Rossetti rickr@signeffectz.com

Flux Design
414-906-1990
thinkflux.com
andre.saint-louis@thinkflux.com

The LEAF fabricator will cut the stainless steel parts by laser and other means, shape the components, weld the sections and develop an assembly plan tested in the shop. The artist will provide vector files for cutting and work with the fabricator to create the final finish on the metal.

The LEAF fabricator shall work with the electrician to insert the proper lighting fixtures into the LEAF assembly in shop, provide the necessary structural features such as access panel, and coordinate the onsite installation.

Upon a trial assembling in shop and disassembling, the LEAF fabricator will ship the major sections (8) to the sight, weld and install on site.

The LEAF fabricator shall be responsible for providing the base plate and anchor bolts. The LEAF fabricator should also provide provisions for installing lighting components specified within the sculpture in the shop and provide structural accommodations to electrical (120V) on site including an access panel and mounting of the LED power supply stored within the base.

METHOD OF MEASUREMENT

Leaf Sculpture shall be measured as a Lump Sum to include all materials and work performed as described in these special provisions.

BASIS OF PAYMENT

Leaf Sculpture shall be paid for at a Lump Sum unit price. Lump Sum payment shall be full compensation for all fabrication, assembly, and installation as specified.

BID ITEM 90267 – LEAF-ELECTRICAL

DESCRIPTION

This item consists of furnishing and installing LED power supply, light fixtures, installing those components that are internal or external parts of the LEAF sculpture in shop and and providing the final wiring and wire hook up to the LED lighting.

MATERIALS

The Contractor shall furnish lighting fixtures - Nora NUTP3 Series 24V RGB LED Tape Light, cables, connectors, end caps, controllers, regulators per lighting design spec sheet. Additionally the contractor will furnish all clips, gang boxes, stainless steel crews, waterproof cord grips, silicon filled wire connectors, wire, conduit and installation tools and supplies.

CONSTRUCTION

The Contractor shall install the tape light, connectors and cables as can be fitted into the sculpture in shop (to be coordinated with the LEAF fabricator) before shipment to site. On site the electrical contractor shall make all connections with power supply and programming components.

METHOD OF MEASUREMENT

Leaf-Electrical shall be measured as a Lump Sum to include all materials and work performed as described in these special provisions.

BASIS OF PAYMENT

Leaf-Electrical, shall be paid for at a Lump Sum unit price. Lump Sum payment shall be full compensation for furnishing all materials, including light fixtures, drivers, clips, stainless steel crews, gang boxes, waterproof cord grips, silicon filled wire connectors, wire, and conduit; for installing wire in the conduit; for making connections as required and testing installed wire system; and for all labor, tools, equipment, and incidentals necessary to complete this item of work in accordance with the contract.

BID ITEM 90269 – IRRIGATION SYSTEM AND APPURTENANCES

DESCRIPTION

This special provision describes furnishing and installing a planter irrigation system. The irrigation system shall include an irrigation system controller, electronic remote control valves, valve boxes, pop-up spray heads with nozzles, irrigation main and lateral piping, conduit for electric wiring and water pipe sleeving, and electrical wire and connections.

The plans and details for the planter irrigation services have been prepared using Rain Bird Landscape Irrigation Products information and they are intended to provide the bidder with a description of the work and quantities. It is the contractor's responsibility to coordinate the material selection, sizes, jointing and connection details all as necessary to carry out the intent of the plans and specifications for the work.

All water and electrical lines, connections, and joints required to completely install and operate the irrigation services shall be furnished and installed by the contractor as an incidental cost associated with this bid item. The intent of the plans and special provisions are to be used for bidding purposes and are intended to irrigate the entire planter and landscape areas. The Contractor shall be responsible to verify the pressure of the water before installation of the nozzles to verify adequate coverage of the intended areas.

The Contractor shall field adjust piping and irrigation head placement as needed to avoid trees and existing utilities. The Contractor shall hand dig and adjust piping and head placement to avoid damage to tree roots on trees designated to remain in the plans.

The Contractor shall provide the Engineer with an as-built drawing showing all components of the system.

MATERIALS

The materials included in this item shall be all those required to completely install the planter irrigation system. Materials shall be furnished in accordance with the City of Madison Standard Specifications for Public Works Construction, 2014 edition and as hereinafter provided.

Irrigation System Mainline Pipe: 1-inch diameter Class 200 PVC Pipe

Irrigation System Lateral Line Pipe: 1-inch diameter HD100 PE Pipe

Irrigation System Pipe Sleeve: 2-inch diameter Schedule 80 PVC conduit

Electric Valve: Rain Bird 100-PGA

Controller: Rain Bird ESP Modular Series 4 Station Controller

Valve Box: Rain Bird VB STD Valve Box with Black Cover

Rain Bird Model 1812-SAM PRS-P30 12" Spray head Part Circle

Rain Bird Model 1812-SAM PRS-P30 12" Spray head Full Circle

Rain Bird MPR Nozzles

16 AWG, single conductor, direct bury rated electric wire

Electrical connectors: 3M DBY/R-6 splice kits

Electrical cable sleeve: 2-inch diameter PVC (Schedule 40 and 80) conduit.

Proprietary names are being used to call out the kind and quality of materials. The bidder may furnish equal or better materials from those listed

CONSTRUCTION

The Contractor shall install a service connection, including an air blow out service point, from the proposed 8-inch water main system to the RPR backflow preventer installed with this contract. The service and RPR backflow preventer details and information are found elsewhere in the plans and special provisions. An additional air blow out service point is required downstream of the RPR valve. From the air blow out service point, excavate trenches and install the irrigation system main, electronic valves, lateral piping, sleeving, wiring, and spray heads and backfill as shown in the plan and plan details. The Contractor shall test the system at operating pressure for 4 hours minimum and inspect the system for leaks. Repair any leaks and retest the system after the required cure time for the repairs. The Contractor shall verify the system distribution covers the entire intended planted area.

Install the mainline PVC pipe from the air blow out service point to the three electronic control valves and corresponding irrigation zones. The mainline PVC shall be installed a minimum of 30-inches below finish grade and shall be sleeved under all paved surfaces and walls. PVC pipe and fitting connections shall be secured using gluing methods.

The irrigation system is divided into three irrigation zones. Install Rain Bird 100-PGA Electric Valves for each zone at the plan locations. The PVC mainline shall be brought up to the valve box grade on the backside of the proposed seat walls using pipe fittings. Install the electric valves in accordance to the manufacturer's instructions.

From the electric valves, install the HD100 PE lateral line pipe through each of the three irrigation zones as shown in the plans and plan details. The lateral line pipe shall be installed at a minimum of 20 inches below finish grade in the planter areas and a minimum of 30 inches below finish grade below paved surfaces and walls. The plan requires sleeves through the foundations of planter and seat walls in the Confluence area. The irrigation contractor shall coordinate installation of these sleeves with the construction of the cast in place walls and footings. Within each planter area, install the spray heads and spray head nozzles as shown in the plan details and recommended by the manufacturer.

Install a Rain Bird ESP Modular Series 4 Station Controller in the Electric Kiosk located at Station 1153+06. The electrical contractor shall provide a separate circuit and power to the controller (incidental to Electric for Kiosk bid item). Install the Controller in accordance with the manufacturer's instructions. Install electric wire in 2-inch conduit from the controller to each Rain Bird 100-PGA Electric Valve in the valve boxes. The electrical conduit shall be buried a minimum of 30 inches below finished grade. Schedule 80 conduit shall be used below paved surfaces and walls, Schedule 40 conduit may be used in planter areas. A single hot and neutral conductor is required for each electric valve. An extra wire set shall be pulled to the valve box for zone 3 and coiled with enough extra wire to connect to the valve at zone 3. This wire set is a spare.

All conduit, electrical, and pipe connections and joints necessary to completely install and operate the planter irrigation services shall be furnished and installed by the contractor as an incidental cost associated with this bid item.

MEASUREMENT

The installation of the planter irrigation system described above and as shown in the Parks Watering Plans shall be measured, as one unit and payment shall be made upon the completed system, in place, and accepted in accordance with the contract. The start of the irrigation system for measurement purposes shall be from the air blow out service point downstream of the RPR valve.

BASIS OF PAYMENT

Payment is full compensation for furnishing and installing the materials required to complete the irrigation system; for excavating and disposing of excess material; for backfilling; for testing, repairing, and

adjusting the system; and for furnishing all labor, tools, equipment, and incidentals necessary to complete the work.

BID ITEM 90270 – REDUCED PRESSURE REGULATOR

BID ITEM 90271 – REDUCED PRESSURE REGULATOR CABINET

DESCRIPTION

This special provision describes furnishing and installing a reduced pressure regulator backflow preventer and enclosure cabinet with a hose bib connection.

MATERIALS

Reduced Pressure Regulator

The Contractor shall furnish a 2-Inch, Watts Model 909QT Reduced Pressure Regulator with flange connections on both ends. The Reduced Pressure Regulator (RPR) assembly shall be plumbed using 2-inch Type K copper tubing in accordance with the Standard Specifications. All joints shall be sweated connections except a spool piece, which shall be sweated on one end and flanged on the other. 2-Inch Ball Valves shall be furnished and installed as shown in the plan details. All joints shall be furnished and installed by the contractor as an incidental cost associated with this bid item.

Reduced Pressure Regulator Cabinet

The Contractor shall furnish a 3/16-inch stainless steel cabinet as detailed in the plans and sized to meet the clearances to the RPR noted in the plans and these special provisions. The stainless steel cabinet shall include the stainless steel lid, stainless steel piano hinge, stainless steel hasp and padlock, and a stainless steel hydrant mounting bracket as shown on the plan details. The cabinet lid shall be finished with a Black Locust wood slat top as shown in the plan details. The Black Locust wood shall meet the specifications of Bid Item 90224 Wood Surface For Seat Wall. The cabinet shall be mounted to the concrete foundation using 4-inch stainless steel expansion anchors as detailed in the plans.

The Contractor shall furnish Crushed Aggregate Base Course in accordance with Article 401 of the Standard Specifications and Clear Stone in accordance with Article 202 of the Standard Specifications. The Contractor shall furnish concrete and epoxy coated reinforcing steel for the foundation in accordance with Article 301 of the Standard Specifications and these Special Provisions.

CONSTRUCTION

The Reduced Pressure Regulator (RPR) shall be installed according to the details shown on the plans. The Contractor shall be responsible to install the RPR Cabinet and maintain the following minimum clearances: 12 inches between the finish grade of the concrete foundation and clear stone fill and the RPR, a minimum of 6 inches of clearance from the enclosure ends to both ends of the RPR and associated pipe and fittings, and a minimum of 12 inches of clearance from both sides of the RPR and the cabinet. Dielectric unions shall be provided at all unions of dissimilar materials. All soldered connections shall be made with silver solder for a stronger union.

The Contractor shall construct the foundation for the cabinet in accordance to the plan details and in accordance with Article 302 of the Standard Specifications.

METHOD OF MEASUREMENT

Reduced Pressure Regulator

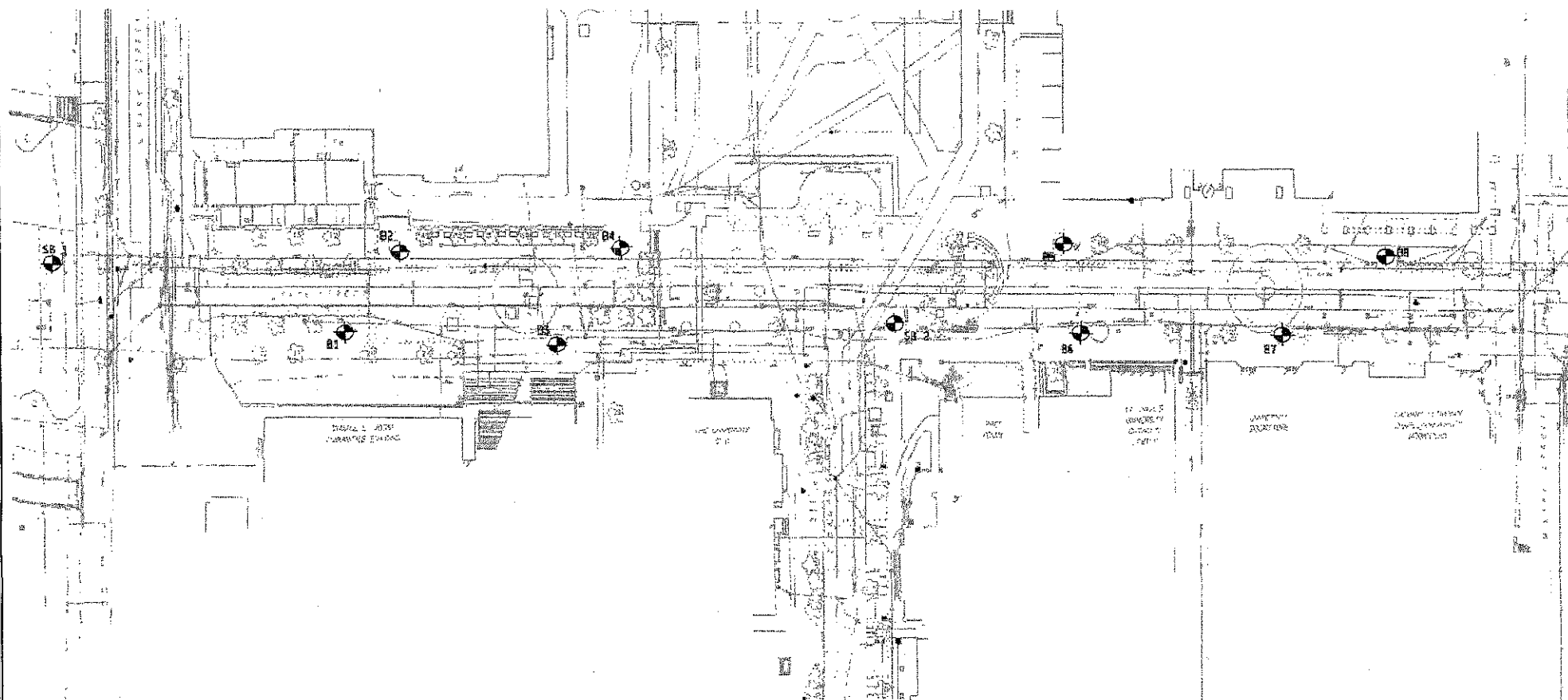
The Reduced Pressure Regulator shall be measured as a completed unit and paid for by the completed in-place unit accepted in accordance with the contract. The bid item will be measured for payment from the 90 degree fitting at the end of the 1 ½ inch copper service lateral through the RPR unit and to the air blow out service point downstream of the RPR unit.

Reduced Pressure Regulator Cabinet

The Reduced Pressure Regulator Cabinet shall be measured as a completed unit and paid for by the completed in-place unit accepted in accordance with the contract.

BASIS OF PAYMENT

The Contractor shall be paid for the measured quantity at the contract unit price. Payment is full compensation for furnishing and installing RPR backflow preventor, copper pipe, fittings, valves, stainless steel cabinet, wood seat surface, hardware, clear stone, crushed aggregate base course, and concrete; for excavating, forming, pouring, and curing foundations; for backfilling, finish grading, and disposing of excess material; and for all labor, tools, equipment, and incidentals necessary to complete the work.



Legend



Denotes Boring Location (approximate)



Scale: Reduced

Notes

1. Soil Borings performed by Soil Essentials in January 2014

Date:

1/2014

Job No.

C13064-42

CGC, Inc.

SOIL BORING LOCATION MAP

700 – 800 Block State Street

Madison, Wisconsin



LOG OF TEST BORING

Project 700-800 Block State Street
 Location Madison, Wisconsin

Boring No. B1
 Surface Elevation (ft) 866.6
 Job No. C13064-42
 Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES				
No.	Rec (in.)	Moist	N	Depth (ft)		qu (qa) (tsf)	W	LL	PL	LI
1	12	M	17*		FILL: Wood Chips to 0.2 ft Dark Brown Silt (Topsoil) to 1 ft					
2	12	M	8		Brown Silt with Trace to Little Sand and Clay to 5.5 ft					
3	12	M	12		Stiff to Very Stiff, Brown and Gray (Mottled) Lean CLAY, Trace Sand (CL)	(2.0)				
4	12	M	9							
5	.8	M	49		Dense, Gray-Brown Fine to Coarse SAND, Trace to Little Silt and Gravel, Scattered Cobbles (SP/SP-SM)					
					End of Boring at 15 ft					
					Borehole backfilled with bentonite chips					
					*Sample 1 partially frozen					

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling ☒ NW Upon Completion of Drilling _____
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

Start 1/16/14 End 1/16/14
 Driller SE Chief DAP Rig 7822DT
 Logger CRJ Editor ESF
 Drill Method 2.25" HSA; Autohammer

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project 700-800 Block State Street
 Location Madison, Wisconsin

Boring No. B2
 Surface Elevation (ft) 865.4
 Job No. C13064-42
 Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES				
No.	TYPE	Rec (in.)	Moist	N		qu (qa) (tsf)	w	LL	PL	LI
					6 in. Concrete Pavement/9 in. Base Course					
1		10	M	23*	FILL: Very Loose, Yellow-Brown Fine to Medium Sand, Trace Silt and Gravel to 5.5 ft					
2		14	M/W	2	Very Soft, Brown Lean Clay to 8 ft					
3		14	M	3		(<0.25)				
4		16	M	9	Stiff, Brown (Mottled) Lean CLAY (CL)	(1.5)				
					Medium Dense, Brown Fine to Medium SAND, Some Silt and Gravel, Scattered Cobbles and Boulders (SM)					
5		10	M	18						
					End of Boring at 15 ft					
					Borehole backfilled with bentonite chips and asphalt patch					
					*Sample 1 frozen					

WATER LEVEL OBSERVATIONS

While Drilling ∇ NW Upon Completion of Drilling _____
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

GENERAL NOTES

Start 1/16/14 End 1/16/14
 Driller SE Chief DAP Rig 7822DT
 Logger DAP Editor ESF
 Drill Method 2.25" HSA; Autohammer

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.








LOG OF TEST BORING

Project 700-800 Block State Street
 Location Madison, Wisconsin

Boring No. B3
 Surface Elevation (ft) 865.4
 Job No. C13064-42
 Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES					
No.	TYPE	Rec (in.)	Moist	N		Depth (ft)	qu (qa) (tsf)	W	LL	PL	LI
						 9 in. Concrete Pavement					
1		6	M	100/8"		 FILL: Loose, Tan Fine Sand, Trace to Little Silt and Gravel to 3.5 ft					
2		13	M	4		Medium to Stiff, Brown Lean Clay to 5.5 ft	(1.0)				
3		7	M	7		 Medium to Stiff, Brown (Mottled) Lean CLAY, Trace Sand (CL)	(1.0)				
4		10	M	16		 Medium Dense, Brown Fine to Coarse SAND, Trace to Little Silt and Gravel (SP/SP-SM)					
5		14	M	12		 Medium Dense, Brown Fine to Medium SAND, Some Silt and Gravel, Scattered Cobbles & Boulders (SM)					
						End of Boring at 15 ft					
						Borehole backfilled with bentonite chips and asphalt patch					
						*Sample 1 frozen					

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling ∇ NW Upon Completion of Drilling _____
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

Start 1/16/14 End 1/16/14
 Driller SE Chief DAP Rig 7822DT
 Logger DAP Editor ESF
 Drill Method 2.25" HSA; Autohammer

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project 700-800 Block State Street
Location Madison, Wisconsin

Boring No. B4
Surface Elevation (ft) 865.3
Job No. C13064-42
Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES				
No.	Rec (in.)	Moist	N	Depth (ft)		qu (qa) (tsf)	W	LL	PL	LI
					5 in. Concrete Pavement/7 in. Base Course					
1	9	M	52*		FILL: Light Brown and Tan Fine to Medium Sand, Little to Some Silt and Gravel to 3 ft					
2	8	M	12		Stiff, Gray Clay with Organics and Wood Chips to 5.5 ft	(1.25)				
3	10	M	9		Very Stiff, Gray and Brown (Mottled) Lean Clay, Trace Sand (CL)	(3.0)				
4	14	M	9			(2.75)				
					Medium Dense, Brown Sandy Silt (ML)					
5	17	M	12							
					End of Boring at 15 ft					
					Borehole backfilled with bentonite chips and asphalt patch					
					*Sample 1 frozen					

WATER LEVEL OBSERVATIONS

While Drilling ☒ NW Upon Completion of Drilling _____
Time After Drilling _____
Depth to Water _____
Depth to Cave in _____

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

GENERAL NOTES

Start 1/16/14 End 1/16/14
Driller SE Chief DAP Rig 7822DT
Logger DAP Editor ESF
Drill Method 2.25" HSA; Autohammer






LOG OF TEST BORING

Project 700-800 Block State Street
Location Madison, Wisconsin

Boring No. B5
Surface Elevation (ft) 860.9
Job No. C13064-42
Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

SAMPLE					VISUAL CLASSIFICATION and Remarks		SOIL PROPERTIES				
No.	TYPE	Rec (in.)	Moist	N			Depth (ft)	qu (qa) (tsf)	W	LL	PL
						 5 in. Concrete Pavement/11 in. Base Course  FILL: Mixed Brown Silty Sand, Sandy Silt, Gravel and Clay to 2.5 ft Very Stiff, Brown and Gray (Mottled) Lean Clay to 7 ft Brown Sandy Silt/Silty Fine Sand to 12 ft					
1		10	M	34*							
2		12	M	7			(2.25)				
3		14	M	11			(1.75)				
4		14	M	21							
						 Medium Dense, Brown Fine to Medium SAND, Some Silt and Gravel, Scattered Cobbles and Boulders (SM)					
5		14	M	13							
						End of Boring at 15 ft Borehole backfilled with bentonite chips and asphalt patch *Sample 1 frozen					

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling ☒ NW Upon Completion of Drilling _____
Time After Drilling _____
Depth to Water _____
Depth to Cave in _____

Start 1/16/14 End 1/16/14
Driller SE Chief DAP Rig 7822DT
Logger CRJ Editor ESF
Drill Method 2.25" HSA; Autohammer

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project 700-800 Block State Street
 Location Madison, Wisconsin

Boring No. B6
 Surface Elevation (ft) 861.4
 Job No. C13064-42
 Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES				
No.	TYPE	Rec (in.)	Moist	N		qu (qa) (tsf)	W	LL	PL	LI
					6 in. Concrete Pavement/8 in. Base Course					
1		10	M	17*	FILL: Yellow-Brown Fine to Medium Sand, Trace to Little Silt and Gravel to 3 ft					
2		9	M	6	Stiff, Brown Lean Clay to 5.5 ft	(1.5)				
3		10	M	6	Loose to Dense, Brown Fine to Medium SAND, Some Silt and Gravel, Scattered Cobbles and Boulders (SM) (Possible Fill to 8 ft)					
4		17	M	13						
5		14	M	36						
					End of Boring at 15 ft					
					Borehole backfilled with bentonite chips and asphalt patch					
					*Sample 1 partially frozen					

WATER LEVEL OBSERVATIONS

While Drilling ☒ NW Upon Completion of Drilling _____
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

GENERAL NOTES

Start 1/16/14 End 1/16/14
 Driller SE Chief DAP Rig 7822DT
 Logger CRJ Editor ESF
 Drill Method 2.25" HSA; Autohammer

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project 700-800 Block State Street
Location Madison, Wisconsin

Boring No. B7
Surface Elevation (ft) 861.1
Job No. C13064-42
Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES				
No.	Rec (in.)	Moist	N	Depth (ft)		qu (qa) (tsf)	W	LL	PL	LI
					4 in. Concrete Pavement/5 in. Base Course					
1	10	M	42*		FILL: Brown Silty Sand, Some Gravel, Trace to Little Clay					
2	10	M	8		Stiff to Very Stiff, Gray-Brown (Mottled) Lean Clay, Trace Sand (CL)	(2.0)				
3	14	M	19		Medium Dense, Brown Sandy SILT (ML)					
4	10	M	24		Medium Dense, Brown Fine to Medium SAND, Some Silt and Gravel, Scattered Cobbles and Boulders (SM)					
5	12	M	13		End of Boring at 15 ft					
					Borehole backfilled with bentonite chips and asphalt patch					
					*Sample 1 frozen					

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling ☒ NW Upon Completion of Drilling _____
Time After Drilling _____
Depth to Water _____
Depth to Cave in _____

Start 1/16/14 End 1/16/14
Driller SE Chief DAP Rig 7822DT
Logger CRJ Editor ESF
Drill Method 2.25" HSA; Autohammer

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project 700-800 Block State Street

Location Madison, Wisconsin

Boring No. B8

Surface Elevation (ft) 860.8

Job No. C13064-42

Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES				
No.	DEPTH (ft)	Rec (in.)	Moist	N		qu (qa) (tsf)	W	LL	PL	LI
					4 in. Concrete Pavement/9 in. Base Course					
1		5	M	17*	FILL: Loose to Very Loose, Brown Silty Sand with Gravel to 5 ft					
2		8	M	4						
3		6	M	9	Stiff to Very Stiff Brown Sandy Clay to 8 ft	(2.0)				
4		12	M	10	Loose to Medium Dense, Brown Fine to Medium SAND, Some Silt and Gravel, Scattered Cobbles and Boulders (SM)					
5		15	M	18						
					End of Boring at 15 ft					
					Borehole backfilled with bentonite chips and asphalt patch					
					*Sample 1 partially frozen					

WATER LEVEL OBSERVATIONS

While Drilling ∇ NW Upon Completion of Drilling _____
Time After Drilling _____
Depth to Water _____
Depth to Cave in _____

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

GENERAL NOTES

Start 1/16/14 End 1/16/14
Driller SE Chief DAP Rig 7822DT
Logger CRJ Editor ESF
Drill Method 2.25" HSA; Autohammer



LOG OF TEST BORING

Project 700-800 Block State Street
 Location Madison, Wisconsin

Boring No. **SB-1**
 Surface Elevation (ft) 879.8
 Job No. **C13064-42**
 Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES				
No.	TYPE	Rec (in.)	Moist	N		qu (qa) (tsf)	W	LL	PL	LI
1		10	M	11	FILL: Dark Brown Silt (Topsoil) to 1.25 ft Medium Dense, Brown Silt, Trace Clay to 3 ft Loose, Brown Silty Fine Sand, Some Gravel to 6 ft					
2		13	M	7						
3		10	M	5						
4		14	M	5	Mixed Loose Brown Silty Sand with Gravel/Stiff, Brown Clay to 12'	(1.75)				
						(1.25)				
5		9	M	8	Loose to Dense, Light Brown Silty Fine SAND to Sandy SILT, Trace Gravel (SM/ML)					
6		13	M	31						
					End of Boring at 20 ft					
					Borehole backfilled with bentonite chips and covered with topsoil					
					Frost noted to near 1 ft					

WATER LEVEL OBSERVATIONS					GENERAL NOTES				
While Drilling	<input checked="" type="checkbox"/> NW	Upon Completion of Drilling			Start	1/16/14	End	1/16/14	
Time After Drilling					Driller	SE	Chief	DAP	Rig 7822DT
Depth to Water					Logger	DAP	Editor	ESF	
Depth to Cave in					Drill Method	2.25" HSA; Autohammer			
The stratification lines represent the approximate boundary between soil types and the transition may be gradual.									






LOG OF TEST BORING

Project 700-800 Block State Street
Location Madison, Wisconsin

Boring No. **SB-2**
Surface Elevation (ft) 863.6
Job No. C13064-42
Sheet 1 of 1

2921 Perry Street, Madison, WI 53713 (608) 288-4100, FAX (608) 288-7887

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES				
No.	TYPE	Rec (in.)	Moist	N	Depth (ft)	qu (qa) (tsf)	W	LL	PL	LI
					 5 in. Concrete Pavement/6 in. Base Course					
1		3	M	100/6"	 FILL: Loose, Brown Silty Fine to Medium SAND, Some Gravel, Scattered Cobbles to 8 ft					
2		8	M	6						
3		11	M	5						
4		5	M	1/18"						
					Very Loose, Dark Gray-Brown Silty Sand, Trace Clay to 13 ft					
5		9	M	5	 Loose to Medium Dense, Brown Fine to Medium SAND, Some Silt and Gravel, Scattered Cobbles and Boulders (SM)					
6		12	M	10						
					End of Boring at 20 ft.					
					Borehole backfilled with bentonite chips and asphalt patch					
					*Sample 1 frozen					

WATER LEVEL OBSERVATIONS

While Drilling ☒ NW Upon Completion of Drilling _____
Time After Drilling _____
Depth to Water _____
Depth to Cave in _____

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

GENERAL NOTES

Start 1/16/14 End 1/16/14
Driller SE Chief DAP Rig 7822DT
Logger DAP Editor ESF
Drill Method 2.25" HSA; Autohammer



Department of Public Works
Engineering Division
Robert F. Phillips, P.E., City Engineer

City-County Building, Room 115
210 Martin Luther King, Jr. Boulevard
Madison, Wisconsin 53703
Phone: (608) 266-4751
Fax: (608) 264-9275
engineering@cityofmadison.com
www.cityofmadison.com/engineering

Assistant City Engineer
Michael R. Dailey, P.E.

Principal Engineers
Christina M. Bachmann, P.E.
John S. Fahrney, P.E.
Gregory T. Fries, P.E.
Christopher J. Petykowski, P.E.

Facilities & Sustainability
Jeanne E. Hoffman, Manager

Operations Manager
Kathleen M. Cryan

Mapping Section Manager
Eric T. Pederson, P.S.

Financial Manager
Steven B. Danner-Rivers

Hydrogeologist
Brynn Bemis

March 24, 2014

NOTICE OF ADDENDUM
ADDENDUM NO. 1
CONTRACT NO. 7206

STATE STREET RECONSTRUCTION
ASSESSMENT DISTRICT 2014

Revise and amend the contract document(s) for the above project as stated in this addendum, otherwise, the original document shall remain in effect.

BID PLANS:

REMOVE

Remove Sheets SD2 through SD9 (LEAF Sculpture & LEAF Lighting details)

INSERT

Insert Sheet S45 (New 3/19/14) – Details for Cast-In-Place Concrete Wall construction surrounding LEAF foundation

Insert Sheet W10 (New 3/21/14) – Detail for BID ITEM 90272 WATER METER PIT ACCESS RELOCATION

REPLACE

Replace Sheet 2 (Revised 3/21/14) – General Notes, updated MG&E contact and alignment overview.

Replace Sheet P7 (Revised 3/18/14) – Updated granite paver pattern detail.

Replace Sheet P8 (Revised 3/24/14) – Updated opening size for pedestrian light and tree grate in tree pit slab.

Replace Sheet SG1 (Revised 3/21/14) – Updated grades & added notes for tree protection & water meter pit access relocation.

Replace Sheet S4 (Revised 3/21/14) – Added callouts for Seat Wall with Precast Cap in planter condition.

Replace Sheet S11 (Revised 3/21/14) – Added detail for the Sidewalk Drain installation.

Replace Sheet S19 (Revised 3/21/14) – Remove clear stone & plant mix from back of wall along Library Mall

Replace Sheet S21 (Revised 3/20/14) – Modified detail for wood cantilever seating.

Replace Sheet S25 (Revised 3/18/14) – Updated Wood Decking @ LEAF Base detail – matched shape of

LEAF base.

Replace Sheet S26 (Revised 3/21/14) – Added detail for Seat Wall with Precast Cap in planter condition.

Replace Sheet PL1 (Revised 3/19/14) – Added limits for Bark Mulch item.

Replace Sheet PL2 (Revised 3/19/14) – Added limits for Bark Mulch item.

Replace Sheet PL6 (Revised 3/18/14) – Updated planting detail – added depth of mulch (3”).

Replace Sheet PL7 (Revised 3/18/14) – Updated tree planting detail – added Geotextile Fabric Type DF.

Replace Sheet STM11 (Revised 3/20/14) – Add remove sewer access structure.

Replace Sheet STM14 (Revised 3/20/14) – Add remove sewer access structure.

Replace Sheet STM 15 (Revised 3/21/14) – Add casting type for Fitch Court inlet (structure 10.2).

Replace Sheet W7 (Revised 3/21/14) – Add call out for WATER METER PIT ACCESS RELOCATION item.

BID SPECIFICATIONS:

REMOVE

Remove BID ITEM: 90169 FURNISH AND INSTALL WATER METER VAULT CASTING LID

Remove BID ITEM: 90266 LEAF SCULPTURE

Remove BID ITEM: 90267 LEAF ELECTRICAL

INSERT

Insert into Section 105.12 COOPERATION BY THE CONTRACTOR

The University Book Store, 711 State Street, has plans to complete entrance and building modifications to their store on State Street. This work may include excavation, mortared stone wall removal, cast in place concrete wall, cast in place concrete stair, and railing construction. The limits of this work are approximately Station 1157+70 RT to 1158+20 RT and will require access to Lake Street. The Contractor shall coordinate the work efforts and construction staging with The University Book Store and their contractor.

The approved final plans for this contract include the LEAF sculpture as developed by Jill Sebastian and engineered by Pierce Engineers. The sculpture is estimated to be 35' in height and up to 35' in width and will be constructed of stainless steel. The LEAF sculpture's concrete foundation will be constructed with this contract, including providing electrical service through the foundation to the location of the LEAF sculpture base. The LEAF fabricator will supply the required anchor bolts. The Contractor shall coordinate delivery of the anchor bolts to meet the Contractor's schedule for completing the foundation. The LEAF sculpture, including lighting elements, will be fabricated and installed under a separate contract. The Contractor shall notify the LEAF installation contractor when the project site is available for installation of the LEAF. The installation will require equipment capable of erecting the LEAF sculpture to its estimated height of 35'. Maintenance of pedestrian walkways is required during installation of the LEAF thus the Contractor shall coordinate schedules when contract work is sufficiently complete to maintain traffic in other locations. The LEAF shall be installed prior to November 1, 2014.

Insert into Section 301.4 EXPANSION JOINT FILLER:

Expansion joint filler material shall be gun grade Sonolastic NP 1 urethane as manufactured by Sonneborn or an approved equal. The color shall match the adjoining work and shall be approved by the Engineer.

Insert BID ITEM: 90272 WATER METER PIT ACCESS RELOCATION

DESCRIPTION

This special provision describes removing and sealing off the existing manhole access point on the northeast corner of the water meter pit and installing a new manhole access point in the southeast corner. Removal shall be performed according to the State of Wisconsin Standard Specifications, Section 204, Removing or Abandoning Miscellaneous Structures

MATERIALS

Furnish materials conforming to the following sections of the State of Wisconsin Standard Specifications:

<i>Concrete.</i>	<i>Section 611</i>
<i>Bar Steel Reinforcement HS.</i>	<i>Section 505</i>
<i>Rubberized Membrane Waterproofing.</i>	<i>Section 516</i>
<i>Structure Backfill.</i>	<i>Section 210</i>

Furnish a Neenah Foundry R-1916-K or an approved equal.

Furnish all other materials conforming to the City of Madison standard specifications.

CONSTRUCTION

Remove the existing northeast access point down to the construction joint at the top of the top slab and close the opening with a concrete cap as shown on the plans. Sawcut and remove the top slab to provide room for construction of the new southeast access point. Reconstruct the top slab as shown in the plans and as hereinafter described. Sawcut the bottom of the top slab at the removal joint ½" deep and chip clean to provide a straight edge to patch any irregular breakout areas. Salvage existing bar steel for incorporation into the new top slab.

Construction shall be in accordance with the pertinent sections of the standard specifications as listed for each material.

Remove, salvage, and replace conduits, wires, and lights as needed to remove and replace the top slab as shown on the plans. Relocate the light switch so that it is accessible from the new access point. If any new lighting fixtures or switches are installed they must be armored and explosive proof per City of Madison Standard Detail Drawing 7.06 (a-c) on the City of Madison's website: <http://www.cityofmadison.com/business/PW/specs.cfm>.

Install steps at the new access location in accordance with the City of Madison standard manhole steps.

Install and seal the Neenah Foundry R-1916-K or an approved equal at the location as specified in the plans and in accordance to the City of Madison Standard Detail Drawings 7.06 (a-c), and the manufacturer's installation instructions.

All excavated areas around and above the water meter pit shall be backfilled with structure backfill or other granular material as approved by the engineer. Do not backfill until top slab has reached its 28-day strength.

METHOD OF MEASUREMENT

Water Meter Pit Access Relocation shall be measured as a single lump sum unit acceptably completed.

BASIS OF PAYMENT

Water Meter Pit Access Relocation, measured as stated above, is full compensation for providing all labor and materials including structure backfill, concrete, bar steel reinforcement HS, anchors, rubberized membrane waterproofing, access door and hardware, drainage piping, conduit, light fixtures, switches, manhole steps, sawcuts, removal work, and disposal of all removal material; for all excavating and backfilling; for placing, finishing, protecting, and curing; and for restoring the work site.

Insert BID ITEM: 90273 SHREDDDED BARK MULCH:

DESCRITPION

This work shall be in accordance with the requirements of Article 209 of the City of Madison standard specifications for public works construct, except as stated herein.

MATERIALS

3" of Shredded Hardwood Bark Mulch shall cover the entirety of the tree root ball area, planting bed area or as shown in the working drawings. Bark shall be free from deleterious materials. The bark size range shall be 3 inches maximum, 1/2 inch minimum. The color shall be the parent material's natural color and not dyed. Submit sample to Landscape Architect for approval prior to installation.

CONSTRUCTION

Apply 3-inch average thickness of organic mulch over whole surface of planting area, and finish level with adjacent finish grades. Do not place mulch within 3 inches of trunks or stems of woody plant material. Mulch shall not cover plant material root flares. Place mulch around the base of herbaceous perennials, vines, and groundcovers per working drawings. Back-rake mulch beds to provide a uniform smooth coverage.

Remove surplus mulch material, trash and debris and legally dispose of them off the Owner's property.

METHOD OF MEASUREMENT

Mulching shall be measured by the square yard installed and accepted.

BASIS OF PAYMENT

Shredded Bark Mulching, measured as provided above, will be paid for at the contract unit price per square yard of mulch coverage which price shall be full compensation for furnishing and placing shredded bark mulch; and for all labor, equipment, tools and incidentals necessary to complete the work in accordance with the contract.

Insert BID ITEM: 90274 UNDERDRAIN 6-INCH

DESCRIPTION

This work shall consist of furnishing and installing 6-inch underdrain in accordance with the Section 201 of the Standard Specifications.

METHOD OF MEASUREMENT

Underdrain 6-Inch will be measured by the linear foot installed and accepted.

BASIS OF PAYMENT

Underdrain 6-Inch, measured as provided above, will be paid for at the contract unit price, which price shall be payment for furnishing and installing underdrain pipe, pipe fittings and pipe connections; and all materials, equipment, labor, disposal of excess materials, and incidentals necessary to complete this item of work.

Insert BID ITEM: 90275 GEOTEXTILE FABRIC TYPE DF

DESCRIPTION

This work shall consist of furnishing and installing Geotextile Fabric, Type DF in accordance with Section 645 of the State of Wisconsin Standard Specifications.

METHOD OF MEASUREMENT

Geotextile Fabric Type DF will be measured by the square yard installed and accepted.

BASIS OF PAYMENT

Geotextile Fabric Type DF, measured as provided above, will be paid for at the contract unit price, which price shall be payment for furnishing and installing the fabric, and for all equipment, labor, disposal of excess materials, and incidentals necessary to complete the work.

MODIFY

Modify SECTION 107.7 MAINTENENANCE OF TRAFFIC

Replace Park Street – Stage 2B description to match the calendar days allowed in ARTICLE 109 PROSECUTION AND PROGRESS as follows:

Park Street - Stage 2B

Close Park Street to through traffic and close the west sidewalk on Park Street. Close the north sidewalk on Bascom Mall. Park Street may be closed for a maximum of ~~70~~ 60 calendar days. The Contractor shall not close Park Street prior to May 19, 2014 and shall reopen Park Street prior to August 22, 2014.

Modify BID ITEM 90033 – STORM SEWER TAP BOX CULVERT SPECIAL

MATERIALS

Add:

- *Furnish R-1550 -0054 casting frame and lid in accordance with Section 507.2 of the Standard Specifications*

Modify BID ITEM 90036 – SIDEWALK DRAIN

METHOD OF MEASUREMENT

Revise: ~~Trench~~ Sidewalk Drain shall be measured by linear foot as installed in the field.

BASIS OF PAYMENT

Revise: ~~Trench~~ Sidewalk Drain shall be measured as described above which shall be full compensation for all work and materials; including concrete, reinforcement, PVC pipe, pipe taps, concrete casting, and incidentals to complete the work as described above.

Modify BID ITEM 90219 CONCRETE STEPS

CONSTRUCTION

Revise: Apply a water-based, siloxane/silane penetrating water repellant sealer 20 days after the steps have been poured or as recommended by the manufacturer.

BASIS OF PAYMENT

Revise: Concrete Steps, measured as stated above, is full compensation for providing all materials, including concrete, joint fillers, joint sealers, penetrating water repellant sealer, and expansion joints; for excavating and preparing the foundation; backfilling and disposing of surplus material; for placing, finishing, protecting, and curing the concrete; and restoring the work site.

Modify BID ITEM 90226 – CANTILEVER WOOD SEAT

MATERIALS

Revise: Black locust wood slats and bottom nose supplied by 'Midwest Black Locust' (www.midwestblacklocust.com, (832-800-4625), or approved equal.

Wood slats: kiln dried, 6/4, S1E, with radius edge as shown on Drawings.

Delete: Bottom rail: kiln dried. Milled and shaped as shown on Drawings. 4'-0" min length members.

Add: Bottom nose: kiln dried. Milled and shaped to fit tongue & groove with wood slats above and as shown on Drawings.

Add: 3/8" x 1.5" Black Locust Lath. Air-dried; Clear & straight grain; Free of knots, checks, and other imperfections.

Add: Exterior-Grade Waterproof Wood Glue. ASTM D-4236. TiteBond III or approved equal.

Modify BID ITEM 90230 – TREE GRATE

Revise:

MATERIALS

Tree grates shall be cast iron per ASTM A48 class 35b or better. Standard finish is raw cast grey iron. Tree grate shall be 60" diameter round tree grate, ADA compliant. Furnish angle frame and rebar. Casting shall be R-8871 from Neenah Foundry Co. P.O. Box 729, 2121 Brooks Ave. Neenah, WI 54957, 920-725-7000. Mulch shall be washed stone, 1 1/2" diameter, free of fines and organic matter. Furnish geotextile fabric type DF.

Revise:

CONSTRUCTION

Install tree grates according to manufacturer's instructions and as shown on the details to provide installation on a true, flat plane. Provide 3" depth of washed stone for the entire area of the tree grate. Separate the washed stone from the planting soil mixture with Geotextile Fabric Type DF.

The Contractor shall fill/plug the center tree hole of all grates that do not have trees in areas that are open to pedestrians as a result of the tree plantings not occurring until after opening the street to pedestrian traffic. The surface shall be level with the surface of the tree grate. The Contractor shall support the center of the tree grate for those that do not have trees to prevent them from being broken. Unsupported grates broken before tree planting occurs shall be the responsibility of the Contractor to replace.

Revise:

BASIS OF PAYMENT

This item, measured as provided above, will be paid for at the contract unit price each, which price shall be payment in full for furnishing, installing tree grates, geotextile fabric type DF, and washed stone; and for furnishing all labor, tools, equipment and incidentals necessary to complete this item of work.

Modify BID ITEM 90260 POSTING KIOSK

MATERIALS

Revise:

The State Street Logo shall be a routed aluminum disc with powder coat finish. The lettering and logos shall raised 1/8 inch from the background face.

BID ESTIMATE:

Action	Bid Item	Description	Original Quantity	New Quantity
REMOVE	20130	UNDERDRAIN	2,100 LF	0 LF
ADD	20217	CLEAR STONE	0 Ton	335 Ton
MODIFY	20311	REMOVE SEWER ACCESS STRUCTURE	10 Each	15 Each
REMOVE	90169	FURNISH AND INSTALL WATER METER VAULT CASTING LID	1 Each	0 Each

REMOVE	90266	LEAF SCULPTURE	1 LS	0 LS
REMOVE	90267	LEAF ELECTRICAL	1 LS	0 LS
ADD	90272	WATER METER PIT ACCESS RELOCATION	0 LS	1 LS
ADD	90273	SHREDDED BARK MULCH	0 SY	712 SY
ADD	90274	UNDERDRAIN 6-INCH	0 LF	2,100 LF
ADD	90275	GEOTEXTILE FABRIC TYPE DF	0 SY	1,650 SY

BID CLARIFICATION:**SHEET S21- CIRCULAR SEATING NODE PLAN ENLARGEMENT**

Paver soldier course units can be flat on the inner and outer edge. The other two sides should be cut on an angle to form the radius. Each soldier course unit will be cut on two sides.

BID ITEM 90225 WOOD DECKING AT LEAF BASE

Minimum length for wood decking is 8 feet (unless cut per design detail). Minimum width is 3 ½ inch.

BID ITEMS 90037 & 90038

It is anticipated that the existing castings be salvaged for reuse for both of these items. The link to Department of Facilities Development Specifications Section 33 40 00 is as follows:

http://www.doa.state.wi.us/dsf/mastspec_new.asp?locid=4

Colored Concrete Samples: It is the designer's intent that the supplier of the colored concrete will furnish pre-made samples from the color admixture supplier (or concrete supplier) in the quantity and size indicated in the specs (6 colors at 5 color saturations each). The City of Madison and Landscape Architect will select the color from these samples and then the Contractor will produce the mock up samples of the work using the selected color with a minimum batch size of 3 CY.

ALL SHEETS

-The Bid Plans show the LEAF sculpture for information purposes only. The LEAF sculpture's concrete foundation will be constructed with this contract, including providing electrical service through the foundation to the location of the LEAF sculpture base. The LEAF sculpture, including lighting elements, will be fabricated and installed under a separate contract. Coordination with the fabrication and installation Contractor is required.

Please acknowledge this addendum on page E1 of the contract documents and/or in Section E: Bidder's Acknowledgement on Bid Express.

Electronic version of these documents can be found on the Bid Express web site at:

<http://www.bidexpress.com>

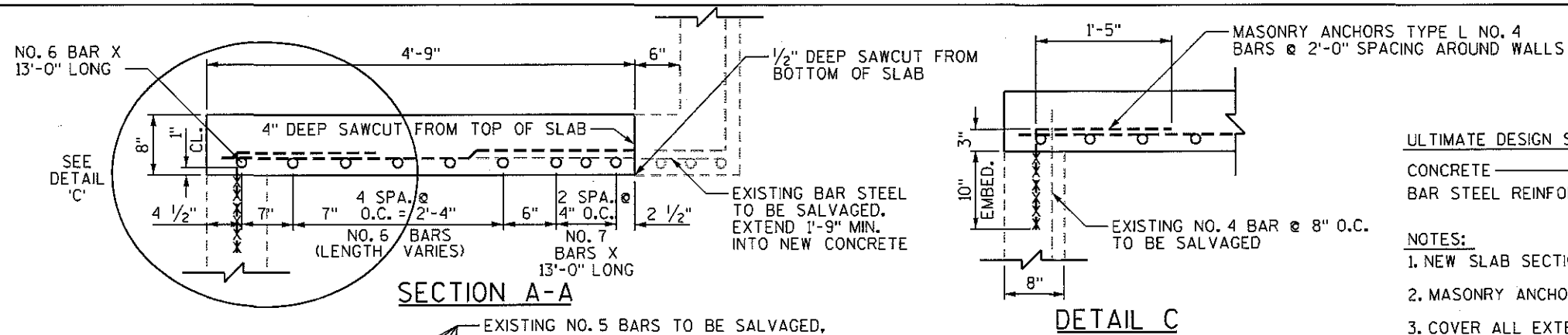
March 24, 2014

Page 9

If you are unable to download plan revisions associated with the addendum, please contact the Engineering office at 608-266-4751 receive the material by another route.

A handwritten signature in black ink, appearing to read "Robert Phillips". The signature is stylized with large, flowing loops.

Robert F. Phillips, P.E., City Engineer



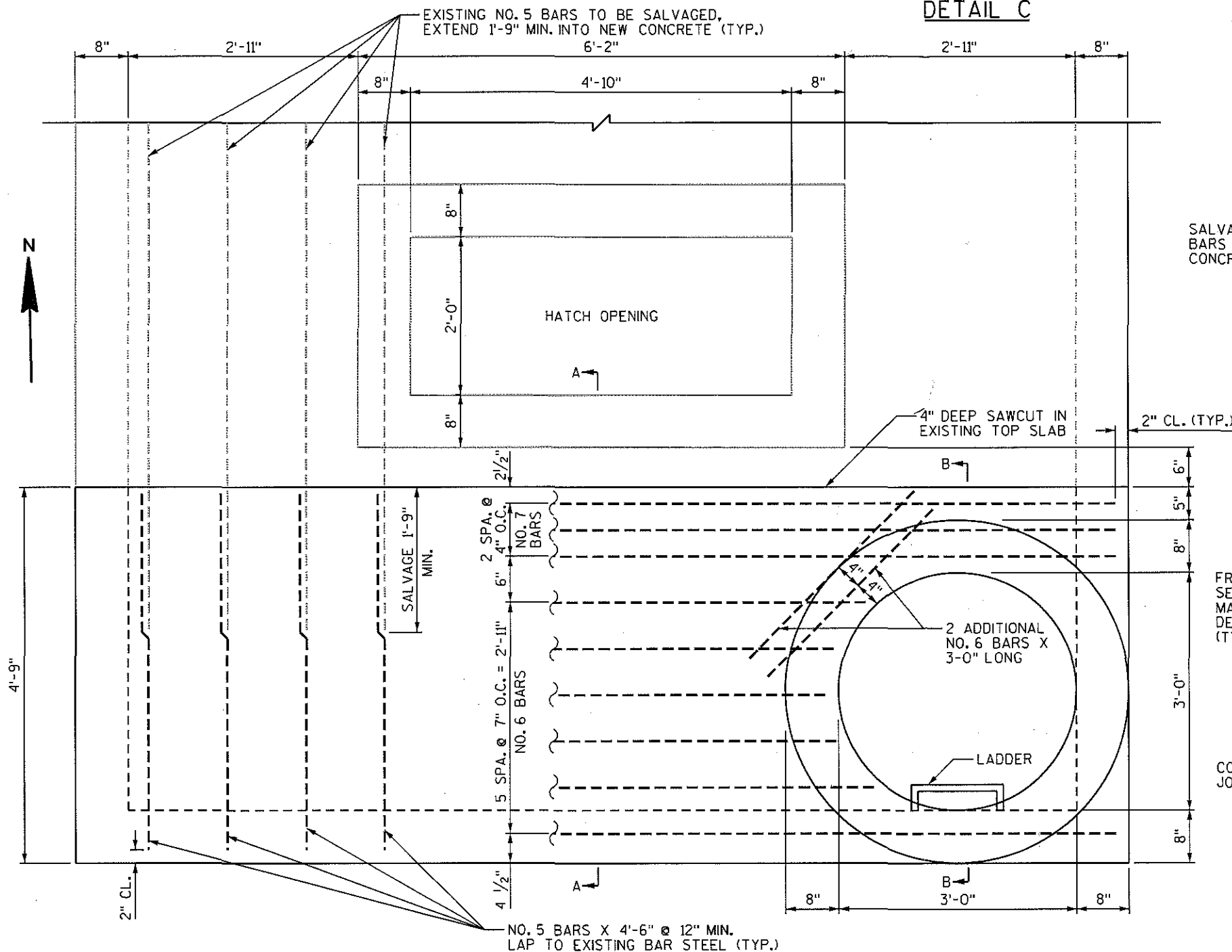
ULTIMATE DESIGN STRESSES:

CONCRETE _____ $f'_c = 3,500$ P.S.I.
BAR STEEL REINFORCEMENT HS _____ $f_y = 60,000$ P.S.I.

NOTES:

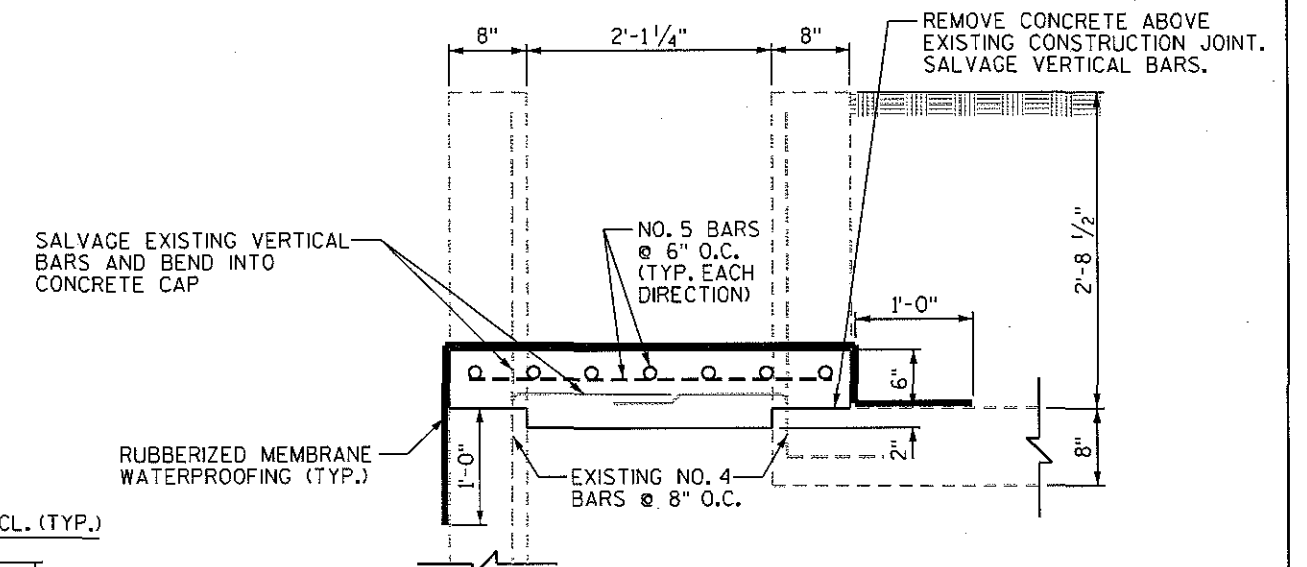
1. NEW SLAB SECTION WAS DESIGNED FOR A MAXIMUM WHEEL LOAD OF 6,000 LBS.
2. MASONRY ANCHORS TYPE L NO. 4 BARS SHALL DEVELOP A MINIMUM PULLOUT CAPACITY OF 12 KIPS.
3. COVER ALL EXTERNAL SURFACES OF NEW CONCRETE WITH RUBBERIZED MEMBERANE WATERPROOFING. EXTEND TO 1'-0" BELOW THE CONSTRUCTION JOINT AT THE TOP OF THE WALLS AND EXTEND TO 2'-0" BEYOND THE CONSTRUCTION JOINT IN THE TOP SLAB.

DETAIL C

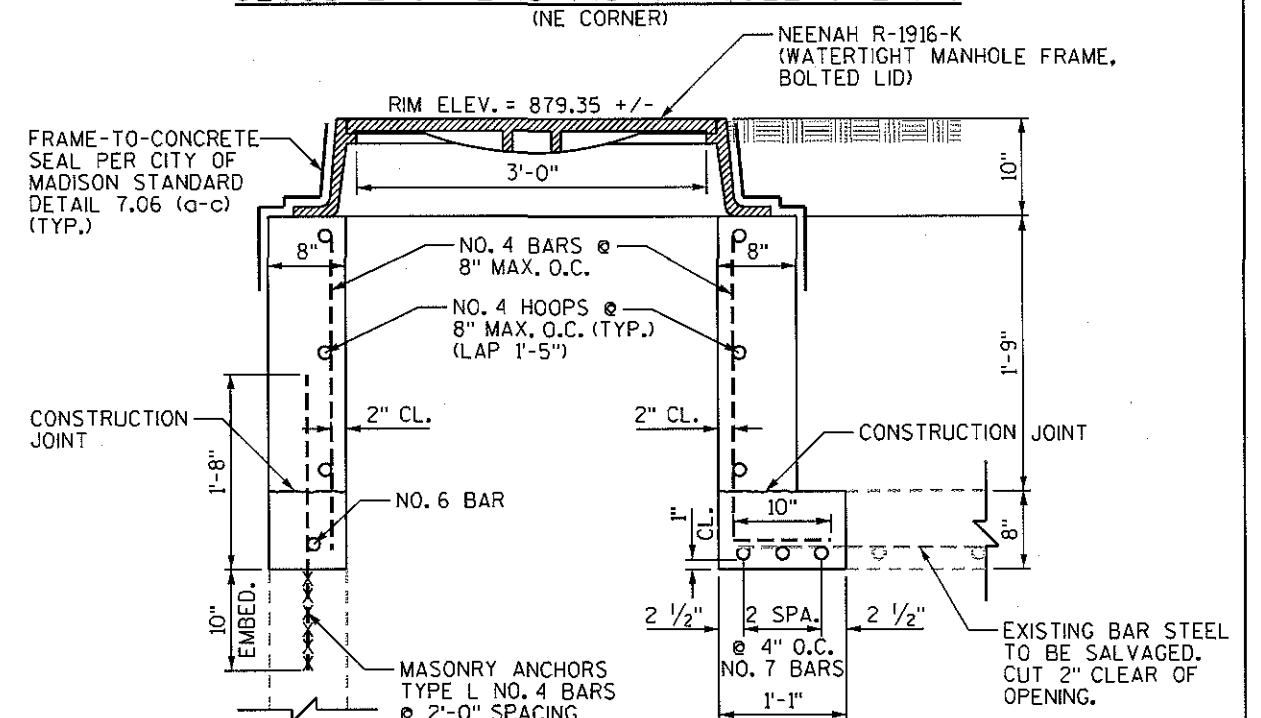


TOP SLAB PLAN VIEW

WATER METER PIT DETAILS
SCALE: NONE BASCOM MALL



CLOSURE OF EXISTING MANHOLE OPENING



SECTION B-B THRU ACCESS POINT

ESTIMATE OF MATERIALS SUPPLIED BY CONTRACTOR:

* ESTIMATE OF MATERIALS IS FOR INFORMATION ONLY. ENGINEER DOES NOT GUARANTEE ACCURACY OF MATERIAL TAKE-OFF.
 * ESTIMATE OF MATERIALS SHOWN ON THIS PAGE DOES NOT INCLUDE QUANTITIES FOR WATER UTILITY LISTED ON SHEET W9.

- 30-FT - 6-IN PIPE
- 200-FT - 8-IN PIPE
- 1 - 6-IN VALVE & BOX
- 3 - 8-IN VALVE & BOX
- 1 - 8-IN X 6-IN TEE
- 1 - 8-IN X 8-IN TEE
- 4 - 8-IN 90° BEND
- 16-FT - 2-IN STYROFOAM INSULATION

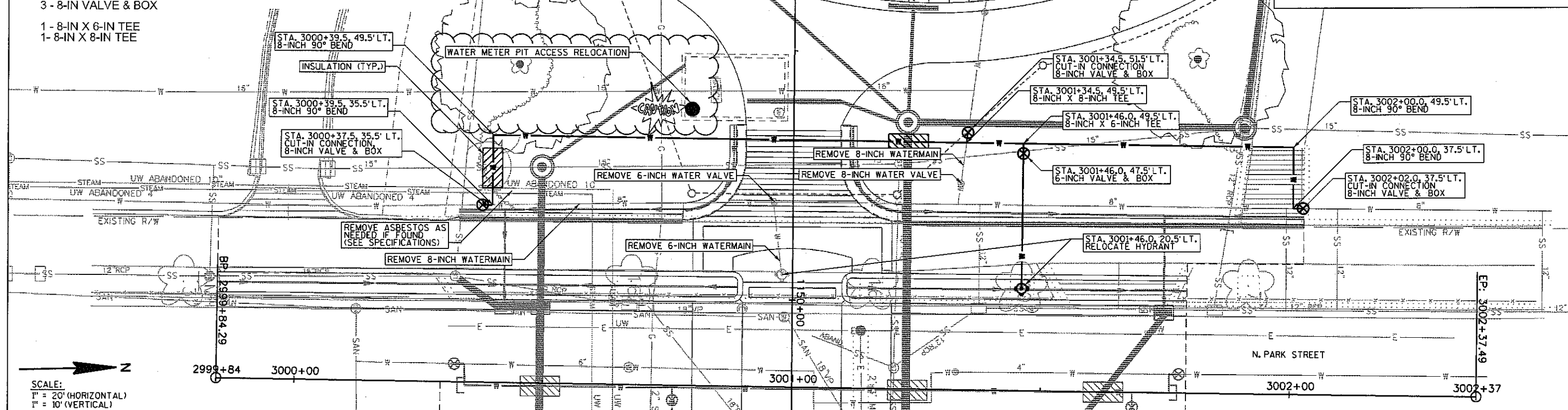
STATE STREET 700 / 800 BLOCKS
 PROJECT NO. 53W1193

SHEET NO.
 W7

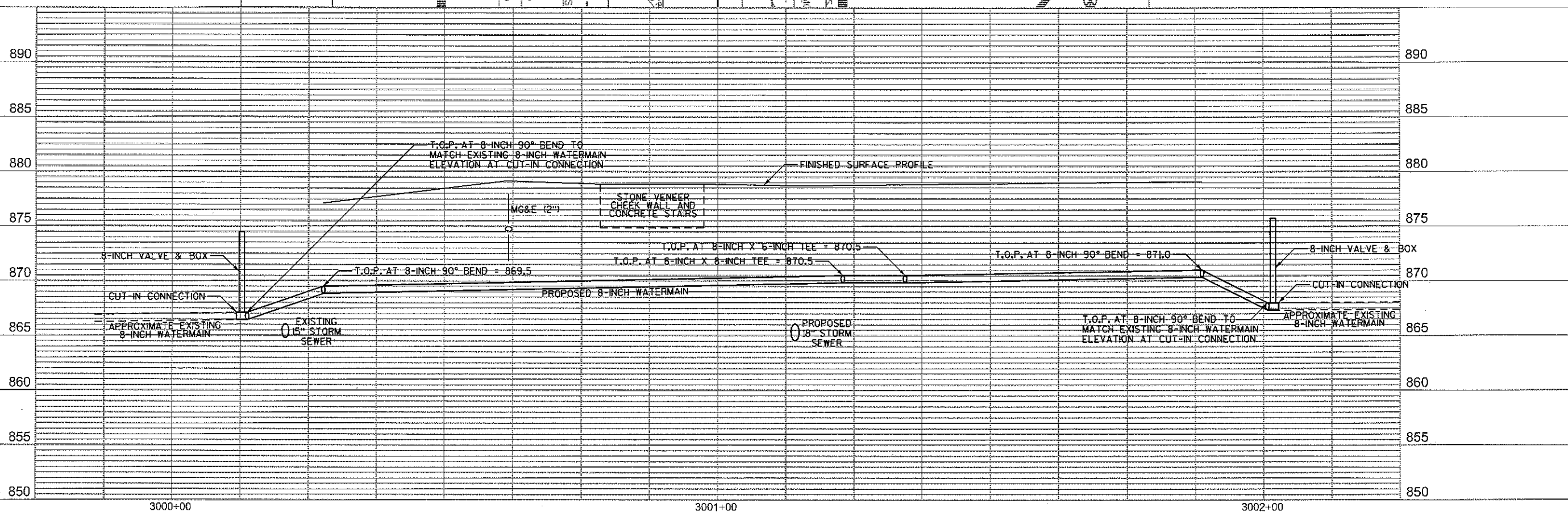
WATERMAIN PLAN AND PROFILE
 (BASCOM MALL)

STATE STREET CITY OF MADISON

Revised 3/21/14 - Added 'Water Meter Pit Access Relocation' note



SCALE:
 1" = 20' (HORIZONTAL)
 1" = 10' (VERTICAL)



STORM SEWER SCHEDULE

ALIGNMENT CODES:

'S' = STATE STREET
'P' = PARK STREET

Revised 3/21/14 - Added Casting
Type for Structure 10.2 and clarified
top of casting elevations.

STATE STREET 700 / 800 BLOCKS
PROJECT NO. 53W1193

SHEET NO.
STM15

STORM SEWER SCHEDULE

STATE STREET

CITY OF MADISON

STRUCTURES

STRUC. NO.	STATION	LOCATION (OFFSET)	TYPE	TOP OF CASTING	E.I.	DEPTH	NOTES
1.0	1150'S+28.5	RT-5.00	4'X4' SAS	870.16	863.55	6.61	FP, R1550-0054
1.1	3001'P+23.1	RT-17.40	4'X4' SAS	869.63	863.69	5.94	LP, R3067-7004-R
1.2	3000'P+49.6	RT-19.90	4'X4' SAS	869.22	863.69	5.53	R3067-7004-R
2.0	1150'S+61.5	LT-5.00	4'X4' SAS	869.36	862.15	7.21	R1550-0054
2.1	1150'S+61.5	RT-30.50	H INLET	869.22	865.05	4.17	LP, R3067-CQ
3.0	1151'S+66.0	LT-5.00	4'X4' SAS	865.48	859.18	6.30	R1550-0054
3.1	1151'S+66.0	LT-11.25	H INLET	865.38	860.08	5.30	FP, LP, R3067-CQ
3.2	1151'S+57.9	LT-30.10	H INLET	865.89	860.18	5.71	LP, R1878-B7G
3.3	1151'S+66.0	RT-11.25	H INLET	865.38	861.26	4.12	LP, R3067-CQ
3.4	1151'S+73.0	RT-30.50	H INLET	866.35	861.36	4.99	LP, R1878-B7G
4.0	1152'S+58.0	LT-5.00	4'X4' SAS	865.03	858.90	6.13	FP, R1550-0054
4.1	1152'S+58.0	LT-11.25	H INLET	864.93	860.94	3.99	FP, LP, R3067-CQ
4.2	1152'S+58.0	RT-11.25	H INLET	864.93	860.98	3.95	LP, R3067-CQ
5.0	1152'S+92.5	LT-5.00	4'X4' SAS	865.04	858.80	6.24	FP, R1550-0054
6.0	1153'S+73.1	LT-5.00	4'X4' SAS	863.64	856.75	6.89	FP, R1550-0054
6.1	1153'S+84.3	LT-27.20	H INLET	863.30	859.80	3.50	R3067-CQ
6.2	1153'S+73.1	RT-9.97	H INLET	863.24	859.75	3.49	LP, R3067-CQ
6.3	1153'S+82.4	RT-13.74	H INLET	863.38	859.80	3.58	LP, R3067-CQ
7.0	1154'S+38.7	LT-5.00	4'X4' SAS	862.79	856.55	6.24	FP, R1550-0054
7.1	1154'S+41.7	RT-25.90	4'X4' SAS	863.08	858.45	4.63	R1550-0054
7.2	1154'S+24.1	RT-24.81	H INLET	863.16	858.79	4.37	R3067-CQ
7.3	1154'S+65.9	RT-25.91	H INLET	862.88	859.35	3.53	LP, R3067-CQ
8.0	1155'S+01.6	LT-5.00	4'X4' SAS	862.53	856.37	6.16	R1550-0054
8.1	1155'S+01.6	LT-21.43	H INLET	862.23	858.46	3.77	R3067-CQ
8.2	1154'S+95.1	LT-21.43	H INLET	862.25	858.51	3.74	R3067-CQ
9.0	1155'S+86.0	LT-5.00	4'X4' SAS	860.50	856.13	4.37	FP, R1550-0054
9.1	1155'S+86.0	LT-11.25	H INLET	860.40	857.59	2.81	FP, LP, R3067-CQ
9.2	1155'S+76.0	LT-11.25	H INLET	860.66	857.64	3.02	FP, R3067-CQ
9.3	1155'S+86.0	RT-11.25	H INLET	860.80	857.63	3.17	LP, R3067-CQ
10.0	1157'S+14.0	RT-29.00	3'X3' SAS	861.19	856.50	4.69	R1550-0054
10.1	1156'S+71.5	RT-29.00	3'X3' SAS	861.22	856.71	4.51	R1550-0054
10.2	1156'S+71.5	RT-147.90	H INLET	861.90	857.80	4.10	FP, LP, R3067-7009
10.3	-	RT-34.67	SIDEWALK DRAIN	861.27	859.85	1.42	R4990-CX-P, BOLTED (10-FOOT LENGTH)
11.0	1157'S+14.0	LT-5.00	4'X4' SAS	860.33	855.78	4.55	FP, R1550-0054
11.1	1157'S+14.0	LT-11.25	H INLET	860.22	857.24	2.98	FP, LP, R3067-CQ
11.2	1157'S+14.0	RT-11.25	H INLET	860.62	856.41	4.21	LP, R3067-CQ
12.0	1158'S+02.0	LT-5.00	4'X4' SAS	860.42	855.53	4.89	FP, R1550-0054
12.1	1158'S+02.0	LT-11.25	H INLET	860.50	856.99	3.51	FP, LP, R3067-CQ
12.2	1158'S+02.0	RT-11.25	H INLET	860.20	857.03	3.17	LP, R3067-CQ
12.3	1157'S+92.0	RT-11.25	H INLET	860.34	857.08	3.26	R3067-CQ
13.0	3000'P+49.4	LT-15.30	H INLET	869.86	864.02	5.84	LP, R-3067C TYPE L
13.1	3000'P+42.1	LT-15.20	H INLET	869.77	864.30	5.47	LP, R-3067C TYPE L
13.2	3000'P+49.2	LT-43.40	4' DIA. SAS	876.31	864.80	11.51	R-1550 - UW
13.3	3000'P+39.6	RT-20.60	H INLET	869.22	864.74	4.48	R3067-7004-R
13.4	-	-	SIDEWALK DRAIN	DNA	NA	DNA	R4990-CX-P, BOLTED (45-FOOT LENGTH)
14.1	1148'S+75.6	RT-56.60	H INLET	885.50	881.50	4.00	R1878-B7G-A
15.0	1149'S+64.1	LT-23.00	4' DIA. SAS	879.25	864.55	14.70	R-1550 - UW
15.1	3001'P+90.3	LT-53.30	4' DIA. SAS	880.35	877.42	2.93	R-1550 - UW
15.2	3001'P+98.4	LT-122.80	H INLET	888.85	885.00	3.85	R1878-B7G-A
15.3	-	-	SIDEWALK DRAIN	DNA	DNA	DNA	R4990-CX-A, BOLTED (10-FOOT LENGTH)
15.4	-	-	SIDEWALK DRAIN	DNA	DNA	DNA	R4990-CX-A, BOLTED (10-FOOT LENGTH)
15.5	-	-	SIDEWALK DRAIN	DNA	DNA	DNA	R4990-CX-Q, BOLTED (20-FOOT LENGTH)
15.6	-	-	SIDEWALK DRAIN	DNA	DNA	DNA	R4990-CX-P, BOLTED (80-FOOT LENGTH)
16.0	3001'P+50.0	RT-17.20	H INLET	869.80	864.94	4.86	R3067-7004-R
16.1	3001'P+74.6	LT-16.00	H INLET	870.30	865.35	4.95	R-3067C TYPE L

ADJUST STRUCTURES

ID NO.	STATION	LOCATION (OFFSET)	TOP OF CASTING	TYPE
AS 4750-008	3000'P+32.4	LT-21.00	871.87	EX. SAS

STANDARD NOTES:

- ABBREVIATIONS: AE = APRON ENDWALL; RCP = REINFORCED CONCRETE PIPE; HERCP = HORIZONTAL ELLIPTICAL REINFORCED CONCRETE PIPE; DNA = DOES NOT APPLY; SAS = SEWER ACCESS STRUCTURE; LP = LOW POINT INLET STRUCTURE; FP = FIELD POURED STRUCTURE; TR = TOP OF CONCRETE ROOF; NCM = NO CROWN MATCH FOR PIPES

APPROXIMATE DISCHARGE GIVEN ADJUSTED TO PIPE SLOPE IN THE FIELD.
- TOP OF CASTING ELEVATION GIVEN IS THE FINAL SURFACE/PAVEMENT GRADE FOR R-1550 CASTINGS, FLOWLINE/PAVEMENT GRADE FOR THE R-3067 CASTINGS SINCE THESE GRATES ARE FLAT ACROSS THE TOP AND FLAG/FLANGE ELEVATION FOR THE R-3067-7004-R CASTINGS.
- TOP OF CONCRETE ROOF (TR) IS 2' BELOW TOP OF CASTING UNLESS OTHERWISE NOTED.
- ALL REINFORCED CONCRETE PIPES TO BE CLASS III UNLESS OTHERWISE NOTED.
- SURVEYOR TO CONFIRM THAT ALL INLET STATION / OFFSETS LINE UP WITH PROPOSED CURB AND GUTTER.
- ALL STRUCTURES CALLED OUT AS FIELD POURED SHALL BE FIELD POURED. ALL OTHER STRUCTURES (NOT INDICATED AS FIELD POURED) SHALL BE SUBMITTED TO CITY ENGINEERING FOR APPROVAL IF PRECAST STRUCTURES ARE PREFERRED. CONTACT GREG FRIES OF CITY ENGINEERING AT (608) 267-1199 FOR PRECAST APPROVALS, OR FAX SHOP DRAWINGS TO (608) 264-9275.

SPECIFIC NOTES:

- R-1550-UW = NEEHAH R-1550 FRAME WITH TYPE B LID, NON-ROCKING, SELF SEALING, WITH CONCEALED PICKHOLE. STANDARD TEXT "STORM" CAST INTO THE TOP

UTILITY LINE OPENING SCHEDULE

ID NO.	STATION	LOCATION (OFFSET)	TYPE	NOTES
ULO 1	1150'S+40.5	RT-1.00	CHILLED WATER	
ULO 2	1150'S+32.5	LT-14.50	BURIED ELECTRIC	
ULO 3	1150'S+32.0	RT-28.50	GAS	3000'P+71.7, RT-15.00
ULO 4	1152'S+98.0	RT-29.00	GAS	
ULO 5	1153'S+77.0	LT-15.00	BURIED ELECTRIC	
ULO 6	1154'S+09.0	LT-5.00	TELEPHONE & BURIED ELECTRIC	UW ELECTRIC & SIGNAL
ULO 7	1154'S+44.0	LT-5.00	BURIED ELECTRIC	
ULO 8	1154'S+27.5	RT-24.50	GAS	
ULO 9	1155'S+01.5	LT-15.00	BURIED ELECTRIC	
ULO 10	1155'S+01.5	LT-2.00	GAS	
ULO 11	1155'S+86.0	LT-2.00	GAS	
ULO 12	1156'S+63.0	LT-2.00	GAS & BURIED ELECTRIC	
ULO 13	1157'S+14.0	LT-2.00	GAS	
ULO 14	1158'S+02.0	LT-1.00	GAS	
ULO 15	3000'P+49.5	RT-22.50	CHILLED WATER & GAS	
ULO 16	3000'P+39.5	RT-22.50	CHILLED WATER & GAS	
ULO 17	3000'P+49.5	LT-11.00	BURIED ELECTRIC	
ULO 18	3001'P+23.0	RT-21.50	CHILLED WATER	1150'S+39.0, LT-23.50
ULO 19	3001'P+23.0	LT-11.50	BURIED ELECTRIC	1150'S+06.0, LT-23.00
ULO 20	3001'P+19.5	LT-59.00	WATER	1149'S+58.0, LT-19.20
ULO 21	3001'P+50.0	RT-21.00	CHILLED WATER	
ULO 22	3001'P+72.0	LT-11.50	BURIED ELECTRIC	
ULO 23	3001'P+35.0	LT-53.50	WATER	1149'S+64.0, LT-35.50
ULO 24	1150'S+61.5	LT-14.00	BURIED ELECTRIC	
ULO 25	1151'S+65.5	LT-13.50	BURIED ELECTRIC	
ULO 26	1151'S+73.0	RT-32.00	GAS	
ULO 27	1152'S+92.5	LT-14.50	BURIED ELECTRIC	
ULO 28	1153'S+64.0	LT-5.00	STEAM	UW STEAM BOX
ULO 29	1154'S+41.7	RT-25.90	BURIED ELECTRIC	
ULO 30	1153'S+92.0	LT-5.00	BURIED ELECTRIC	UW DUCTBANK
ULO 31	1154'S+32.0	LT-5.00	BURIED ELECTRIC	UW DUCTBANK
RACM 1	1150'S+35.0	RT-38.00	ABANDONED STEAM	3000'P+62.0, RT-17.50
RACM 2	1155'S+86.0	RT-27.00	ABANDONED STEAM	
RACM 3	1156'S+75.0	RT-27.00	ABANDONED STEAM	
RACM 4	1156'S+68.5	RT-147.00	ABANDONED STEAM	

PLOT SCALE:

PLOT NAME:

REV. DATE:

ORIGINATOR: CITY OF MADISON, STREETS DIVISION

STORM REMOVAL SCHEDULE

ALIGNMENT CODES:

'S' = STATE STREET
'P' = PARK STREET

REMOVE STORM STRUCTURES

ID NO.	STRUCTURE	STATION	LOCATION (OFFSET)	TYPE
R-1	DNE	1149'S+72.4	LT-21.40	SAS
R-2	AS 4749-001	1150'S+13.5	LT-20.50	SAS
R-3	IN 4750-009	3000'P+70.4	LT-15.80	DOUBLE INLET
R-4	IN 4749-002	3001'P+37.5	LT-16.50	INLET
R-5	AS 4750-001	1150'S+31.9	RT-4.30	SAS
R-6	DNE	1150'S+36.5	LT-19.00	INLET
R-7	IN 4750-003	1150'S+62.9	RT-29.80	INLET
R-8	DNE	3000'P+56.6	RT-20.70	DOUBLE INLET
R-9	DNE	1150'S+61.6	LT-19.40	CATCHBASIN
R-10	IN 4749-016	1151'S+87.4	LT-20.00	CATCHBASIN
R-11	DNE	1152'S+56.7	LT-0.80	CATCHBASIN
R-12	UW 4750-013	1153'S+02.5	RT-24.20	SAS
R-13	AS 4750-080	1153'S+29.1	RT-24.00	SAS
R-14	DNE	1153'S+14.0	LT-19.10	CATCHBASIN
R-15	DNE	1153'S+42.0	RT-13.00	CATCHBASIN
R-16	DNE	1153'S+75.5	LT-3.30	CATCHBASIN
R-17	AS 4750-002	1154'S+02.0	RT-4.90	SAS
R-18	AS 4850-147	1154'S+40.8	RT-6.70	SAS
R-19	AS 4850-148	1154'S+41.7	RT-25.90	SAS
R-20	AS 4849-065	1154'S+58.6	LT-19.00	SAS
R-21	DNE	1154'S+75.3	LT-64.60	CATCHBASIN
R-22	DNE	1154'S+27.6	LT-63.90	CATCHBASIN
R-23	AS 4850-016	1154'S+58.2	RT-5.00	SAS
R-24	UW 4850-024	1154'S+99.4	RT-7.90	CATCHBASIN
R-25	UW 4849-047	1155'S+21.7	LT-0.90	CATCHBASIN
R-26	UW 4846-046	1155'S+40.3	LT-10.90	CATCHBASIN
R-27	UW 4850-023	1155'S+71.9	RT-17.20	CATCHBASIN
R-28	DNE	1155'S+77.5	LT-23.20	CATCHBASIN
R-29	UW 4849-045	1156'S+34.8	LT-4.90	CATCHBASIN
R-30	DNE	1156'S+68.6	RT-38.60	INLET
R-31	DNE	1156'S+77.1	LT-5.00	CATCHBASIN
R-32	UW 4849-044	1157'S+12.4	LT-4.70	CATCHBASIN
R-33	UW 4849-043	1157'S+59.7	LT-4.50	CATCHBASIN
R-34	DNE	1158'S+35.9	LT-15.10	CATCHBASIN
R-35	DNE	1158'S+36.0	RT-20.20	CATCHBASIN
R-36	IN 4749-004	3001'P+90.3	LT-58.30	INLET
R-37	DNE	1149'S+73.8	LT-12.20	SAS

ABANDON INLET

ID NO.	STRUCTURE	STATION	LOCATION (OFFSET)
AI-1	DNE	1155'S+50.0	LT-49.00

ABANDON STORM SEWER PIPE

ID NO.	ABANDON FROM	ABANDON TO	SIZE	TYPE	LENGTH	NOTES
AB-1	AS 4849-065	AS 4849-031	15"	RCP	5'	REMOVE AS CLOSE AS POSSIBLE TO AS 4849-031
AB-2	DNE	IN 4749-003	12"	RCP	15'	

STORM SEWER PIPE REMOVALS

ID NO.	REMOVE FROM	REMOVE TO	SIZE	TYPE	LENGTH
RP-1	DNE	AS 4749-001	15"	PVC	41
RP-2	AS 4749-001	DNE	15"	RCP	48
RP-3	AS 4749-001	IN 4749-002	12"	RCP	21
RP-4	AS 4749-001	18' SW of AS 4749-001	12"	RCP	18
RP-5	AS 4750-001	DNE	18"	RCP	23
RP-6	AS 4750-001	IN 4750-009	18"	RCP	43
RP-7	AS 4750-001	DNE	18"	RCP	44
RP-8	AS 4750-001	AS 4750-002	24"	RCP	370
RP-9	DNE	DNE	15"	RCP	252
RP-10	IN 4750-003	Tap 26' N of IN 4750-003	12"	RCP	26
RP-11	Tap at Sta. 1151+58, 19' LT.	12' N of Tap	4"	PVC	12
RP-12	IN 4749-016	Tap 12' S of IN 4749-016	12"	RCP	12
RP-13	DNE	Tap 6' S of Catchbasin	12"	RCP	6
RP-14	DNE	AS 4849-065	15"	RCP	145
RP-15	DNE	Tap 8' N of Catchbasin	6"	PVC	8
RP-16	DNE	Tap 8' S of Catchbasin	6"	PVC	8
RP-17	AS 4750-002	AS 4850-016	14" x 23"	HERCP	56
RP-18	AS 4750-002	AS 4850-147	14" x 23"	HERCP	39
RP-19	AS 4850-147	AS 4850-016	18"	PVC	17
RP-20	AS 4850-147	AS 4850-148	15"	PVC	19
RP-21	AS 4850-148	AS 4750-080	12"	RCP	113
RP-22	AS 4750-080	UW 4750-013	12"	RCP	27
RP-23	UW 4750-013	UW 4750-011	12"	RCP	18
RP-24	AS 4849-065	AB-1	15"	RCP	409
RP-25	AS 4850-016	9' NW of IN 4850-020	12"	CMP	23
RP-26	AS 4850-016	TP 4850-022	30"	RCP	413
RP-27	Tap at Sta. 1154+77, 19' LT.	DNE	12"	RCP	46
RP-28	DNE	DNE	8"	RCP	48
RP-29	UW 4850-024	Tap 3' N of UW 4850-024	12"	RCP	3
RP-30	UW 4849-047	Tap 6' S of UW 4849-047	12"	RCP	6
RP-31	UW 4846-046	Tap 16' S of UW 4846-046	12"	RCP	16
RP-32	UW 4850-023	Tap 12' N of UW 4850-023	12"	RCP	12
RP-33	DNE	Tap 5' S of Catchbasin	12"	RCP	5
RP-34	UW 4849-045	Tap 10' S of UW 4849-045	12"	RCP	10
RP-35	DNE	Tap 34' N of Catchbasin	12"	RCP	34
RP-36	DNE	Tap 11' S of Catchbasin	12"	RCP	11
RP-37	UW 4849-044	Tap 11' S of UW 4849-044	12"	RCP	11
RP-38	UW 4849-043	Tap 10' S of UW 4849-043	12"	RCP	10
RP-39	DNE	Tap 21' S of Catchbasin	12"	RCP	21
RP-40	DNE	Tap 14' N of Catchbasin	12"	RCP	14
RP-41	IN 4750-009	AS 4750-008	15"	RCP	36
RP-42	Connection at Sta. 3000+49, 43' LT.	DNE	15"	RCP	72
RP-43	DNE	IN 4749-004	15"	RCP	70
RP-44	IN 4749-002	Connection at Sta. 3001+65, 16' LT.	12"	RCP	28
RP-45	IN 4749-004	AB-2	12"	RCP	22

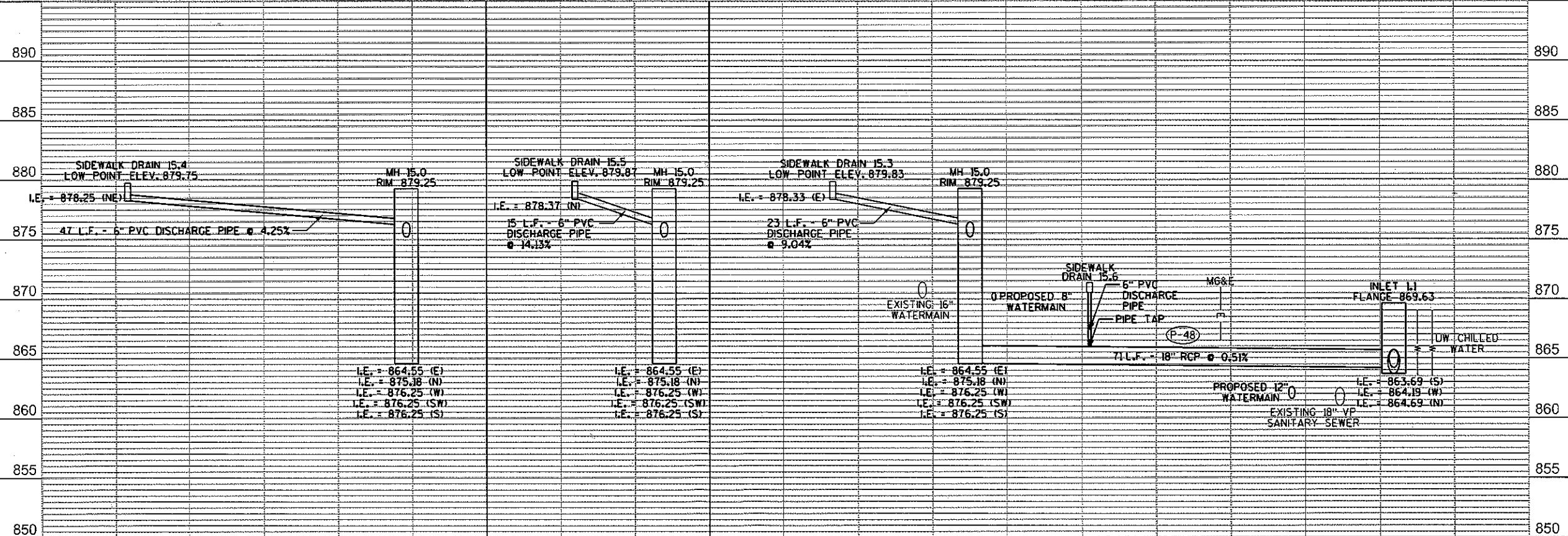
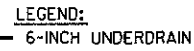
STATE STREET 700 / 800 BLOCKS
PROJECT NO. 53W1193

SHEET NO.
STM14

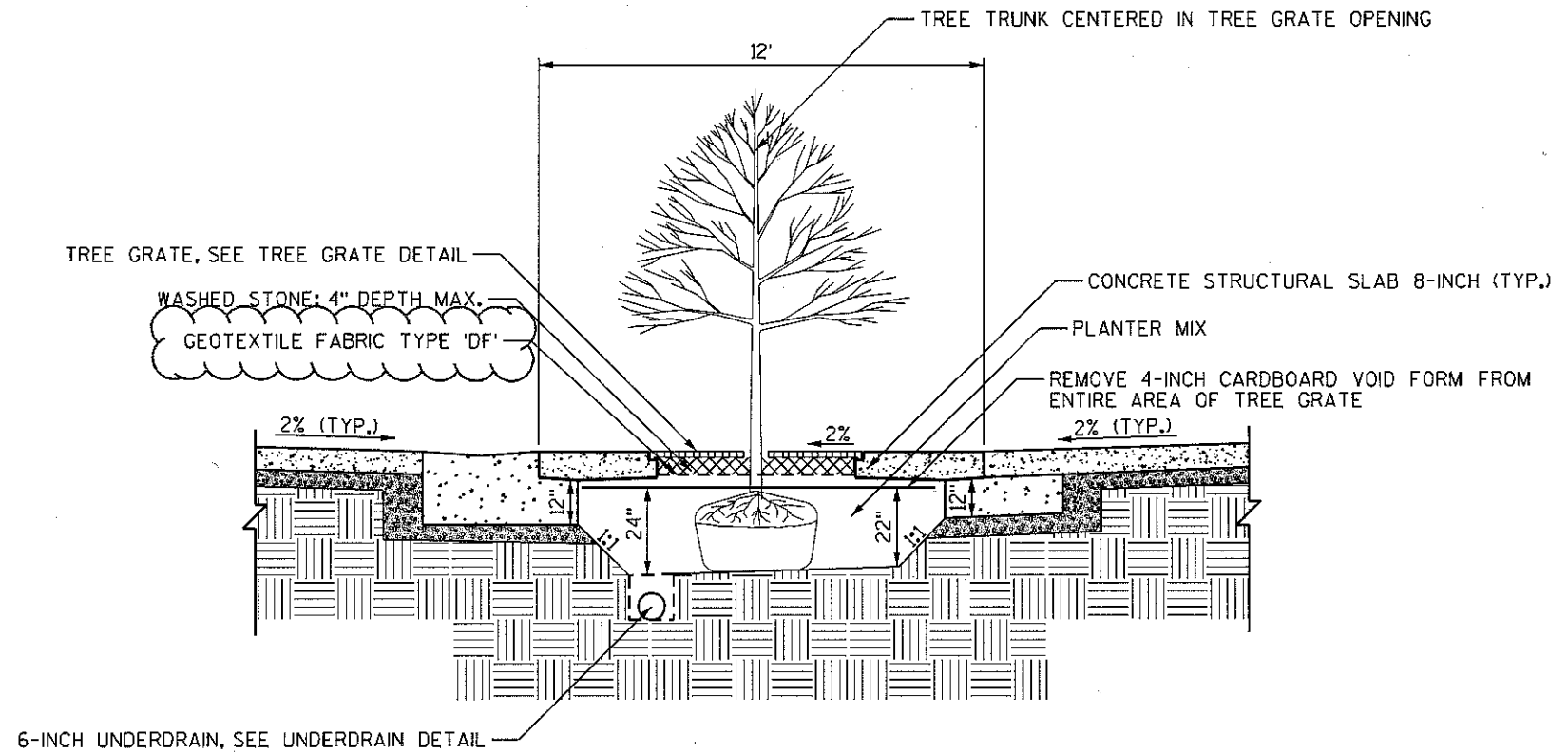
STORM SEWER REMOVAL SCHEDULE

STATE STREET CITY OF MADISON

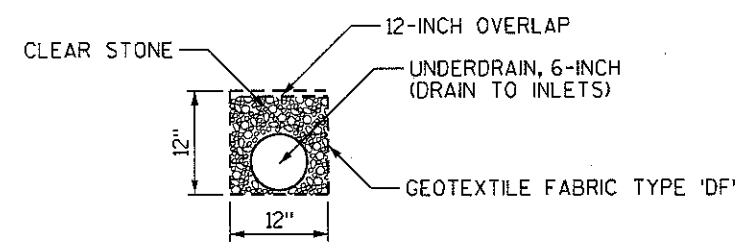
Revised 3/20/14 - Added Sewer
Access Structure Removal



Revised 3/18/14 - Added Geotextile Fabric



TREE PLANTING - TREE GRATE CONDITION
SCALE: NONE



UNDERDRAIN DETAIL
SCALE: NONE

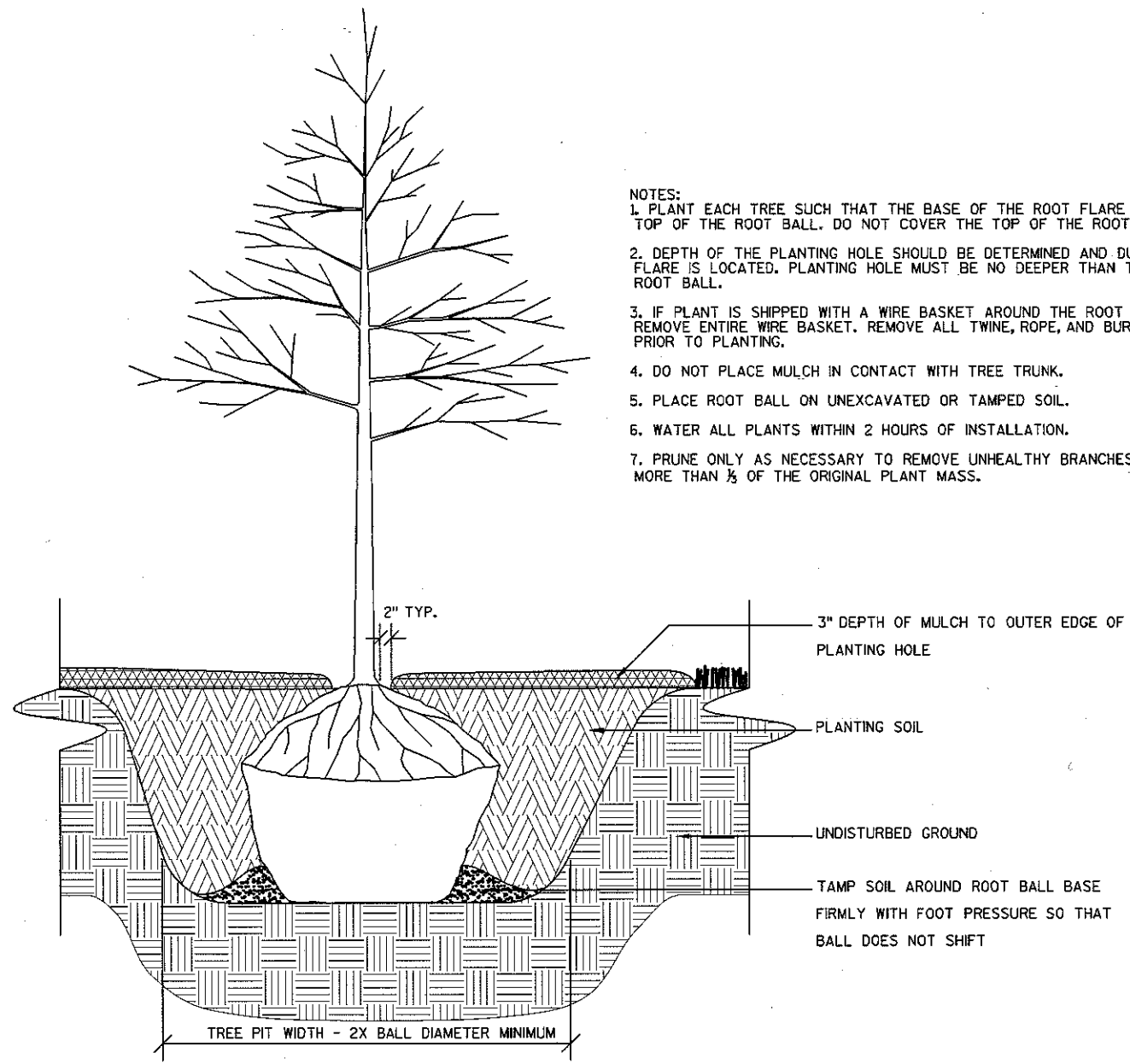
PLOT SCALE:

PLOT NAME:

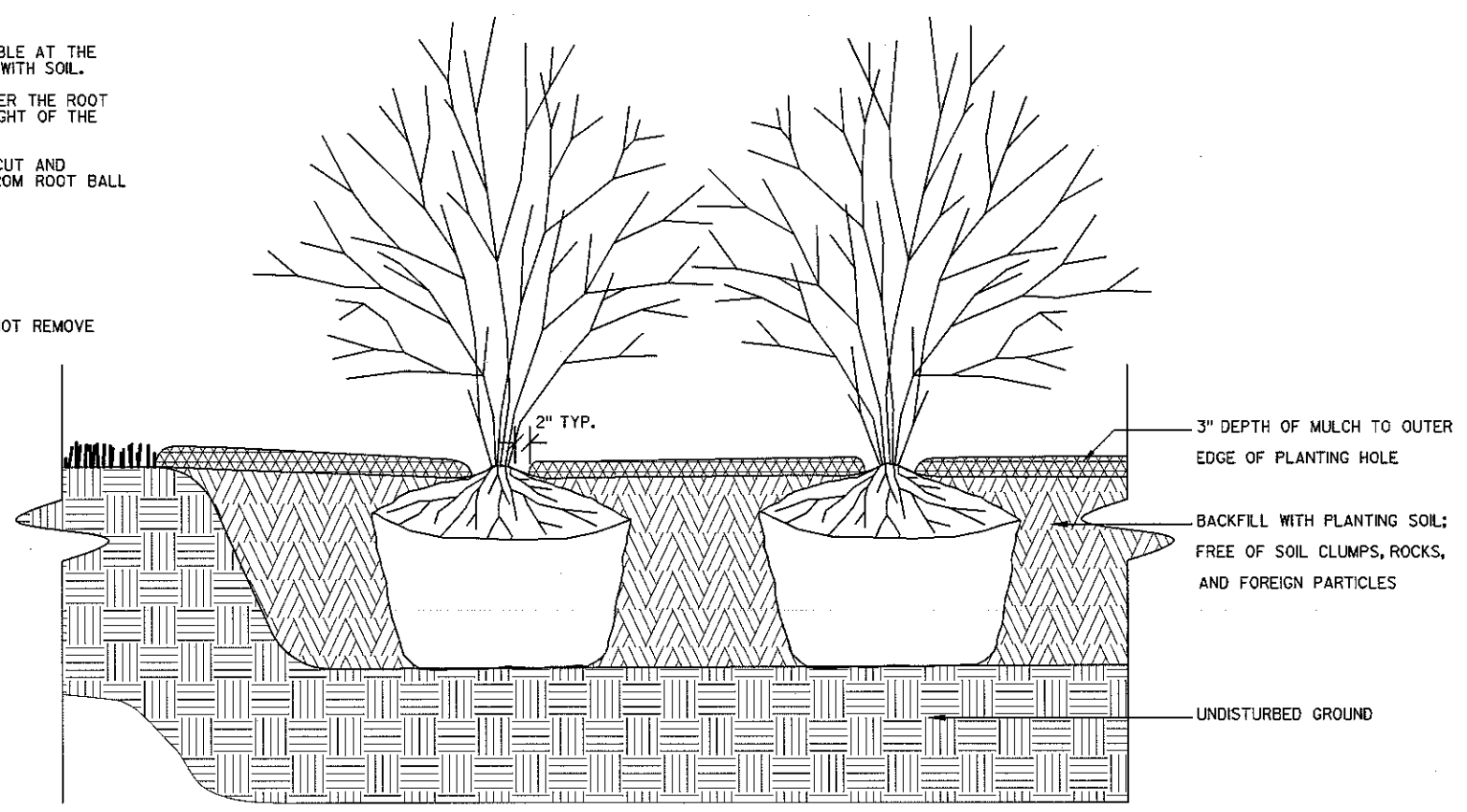
REV. DATE:

ORIGINATOR: CITY OF MADISON, STREETS DIVISION

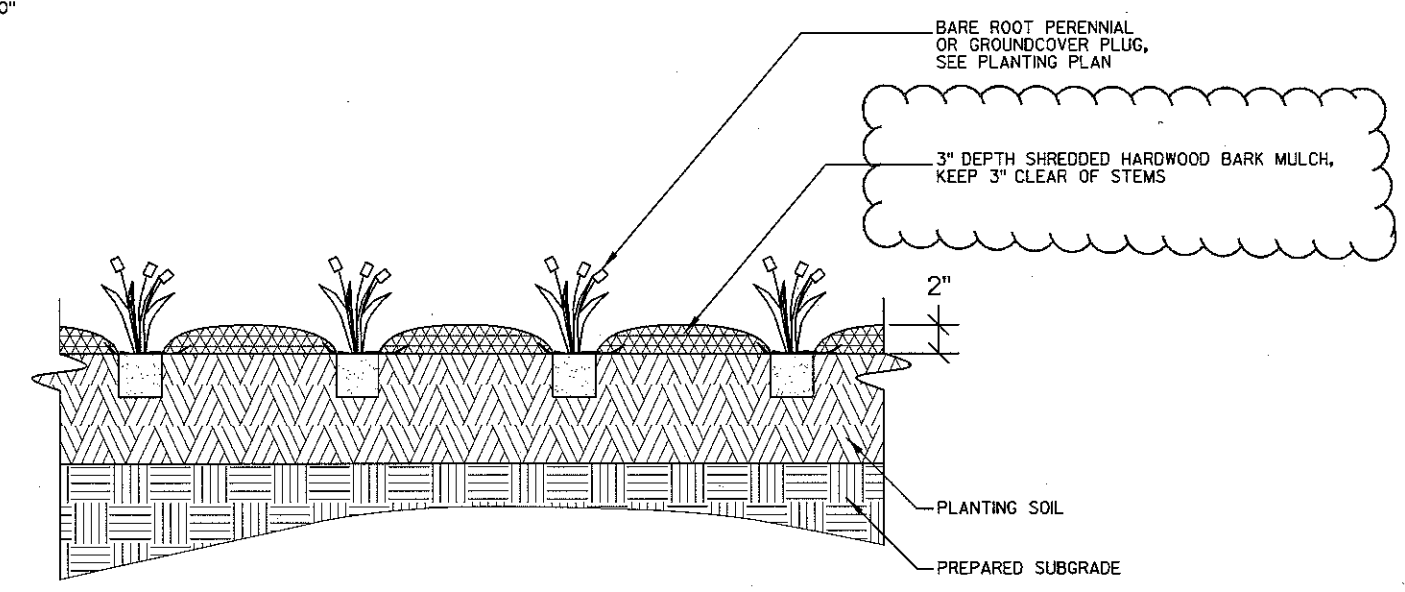
- NOTES:
1. PLANT EACH TREE SUCH THAT THE BASE OF THE ROOT FLARE IS VISIBLE AT THE TOP OF THE ROOT BALL. DO NOT COVER THE TOP OF THE ROOT BALL WITH SOIL.
 2. DEPTH OF THE PLANTING HOLE SHOULD BE DETERMINED AND DUG AFTER THE ROOT FLARE IS LOCATED. PLANTING HOLE MUST BE NO DEEPER THAN THE HEIGHT OF THE ROOT BALL.
 3. IF PLANT IS SHIPPED WITH A WIRE BASKET AROUND THE ROOT BALL, CUT AND REMOVE ENTIRE WIRE BASKET. REMOVE ALL TWINE, ROPE, AND BURLAP FROM ROOT BALL PRIOR TO PLANTING.
 4. DO NOT PLACE MULCH IN CONTACT WITH TREE TRUNK.
 5. PLACE ROOT BALL ON UNEXCAVATED OR TAMPED SOIL.
 6. WATER ALL PLANTS WITHIN 2 HOURS OF INSTALLATION.
 7. PRUNE ONLY AS NECESSARY TO REMOVE UNHEALTHY BRANCHES. DO NOT REMOVE MORE THAN 1/3 OF THE ORIGINAL PLANT MASS.



1 TREE PLANTING
PL6 1"=1'-0"



2 SHRUB PLANTING
PL6 1"=1'-0"



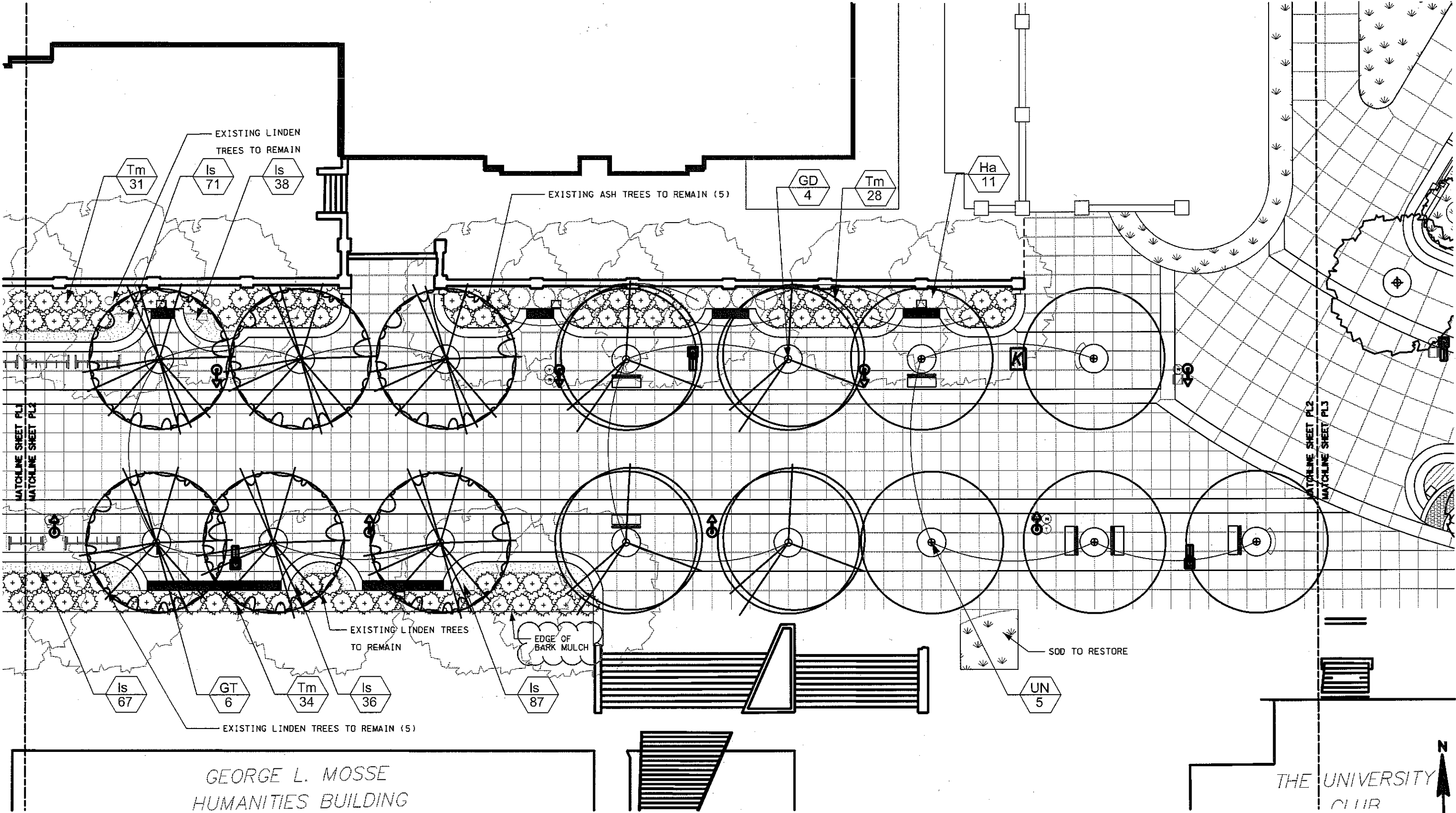
3 PERENNIAL PLANTING
PL6 1"=1'-0"

PLOT SCALE: _____

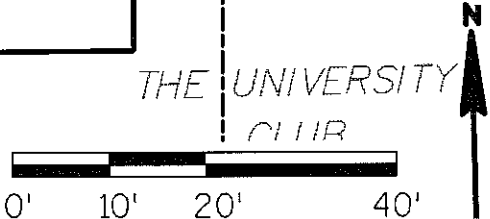
PLOT NAME: _____

REV. DATE: _____

ORIGINATOR: CITY OF MADISON, STREETS DIVISION



1 PLANTING PLAN - 800 BLOCK
1"=20' @ 11X17



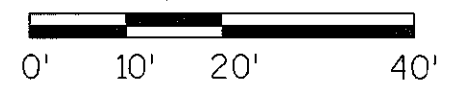
ORIGINATOR: CITY OF MADISON, STREETS DIVISION

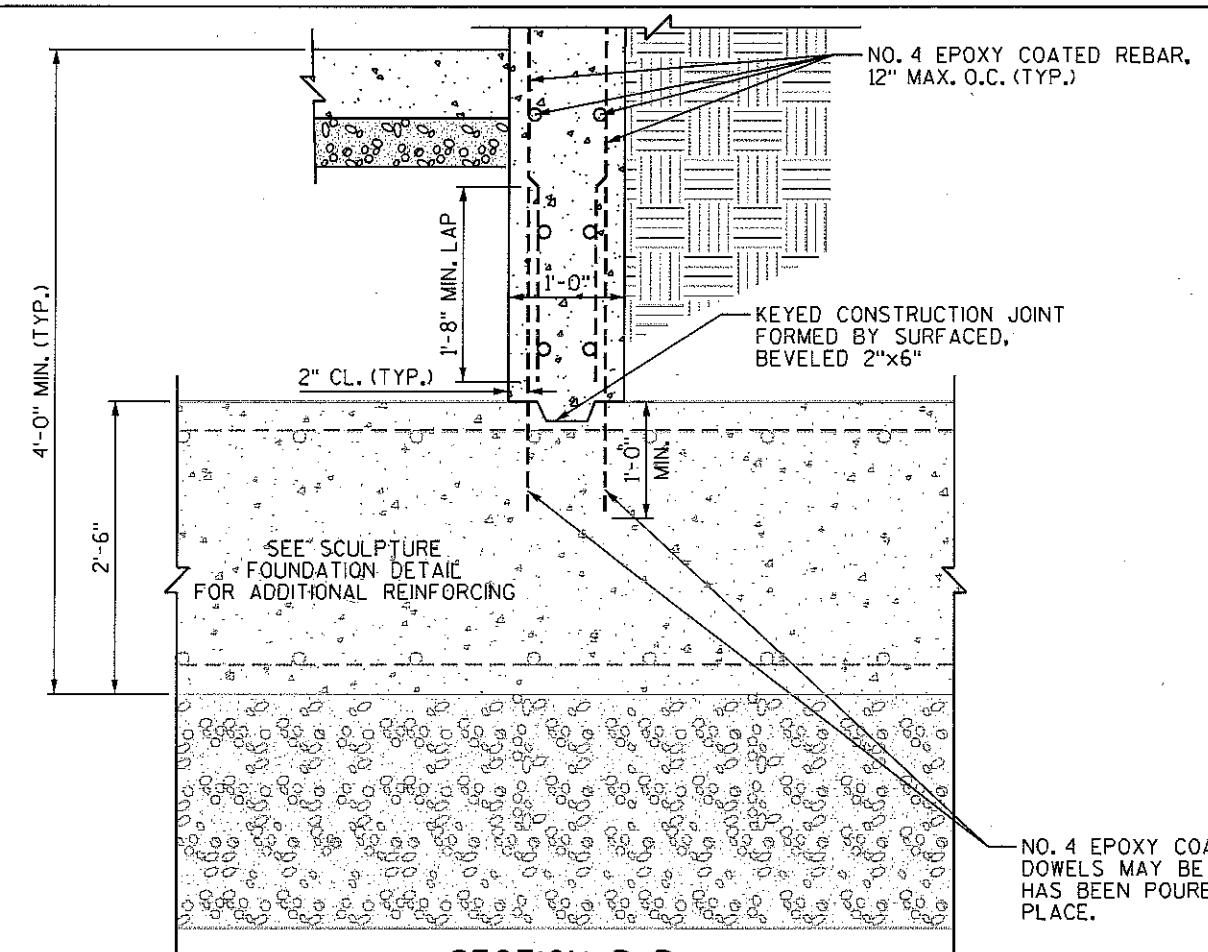
REV. DATE: _____

PLOT NAME: _____

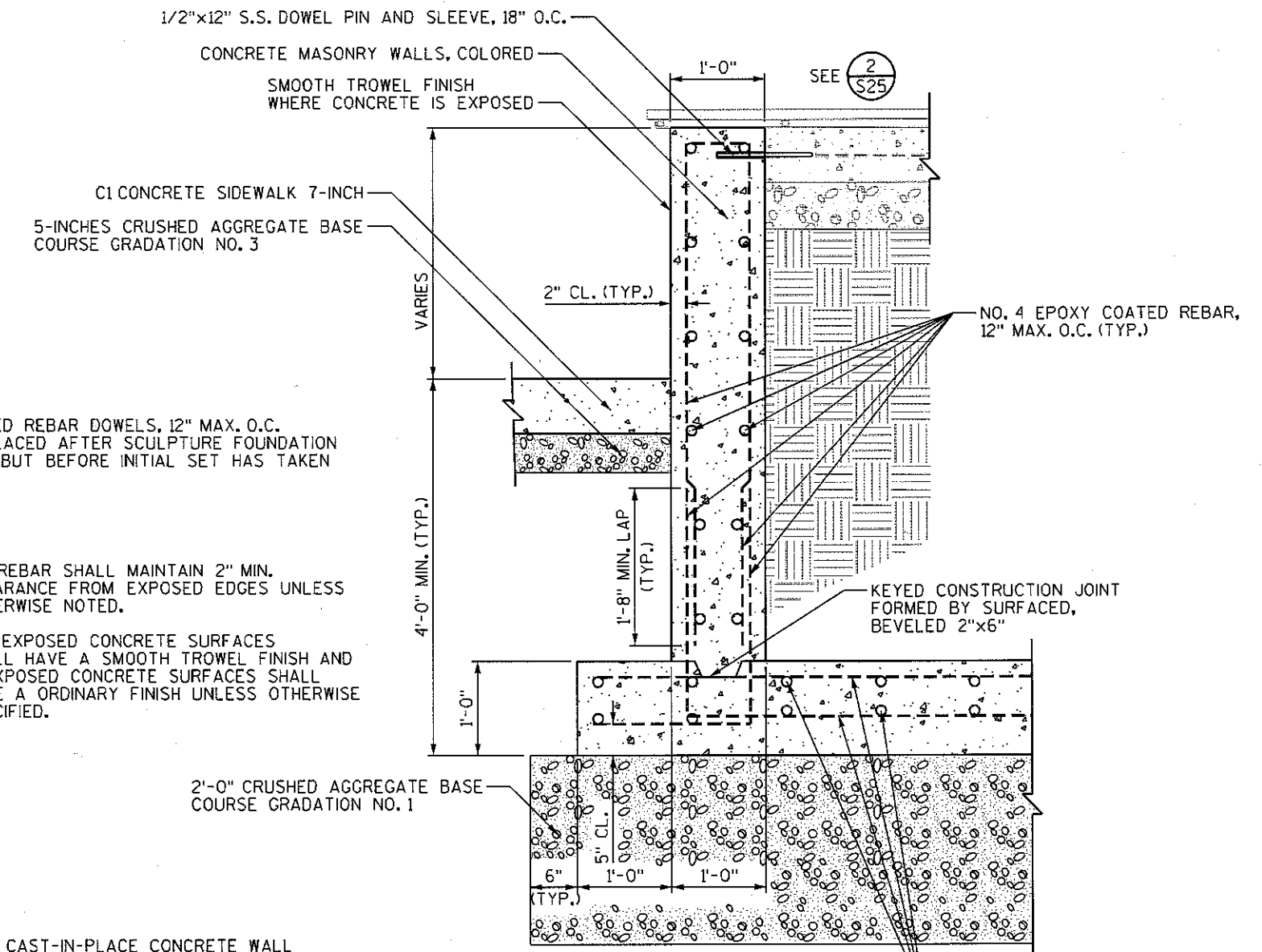
PLOT SCALE: _____

STATE STREET CITY OF MADISON



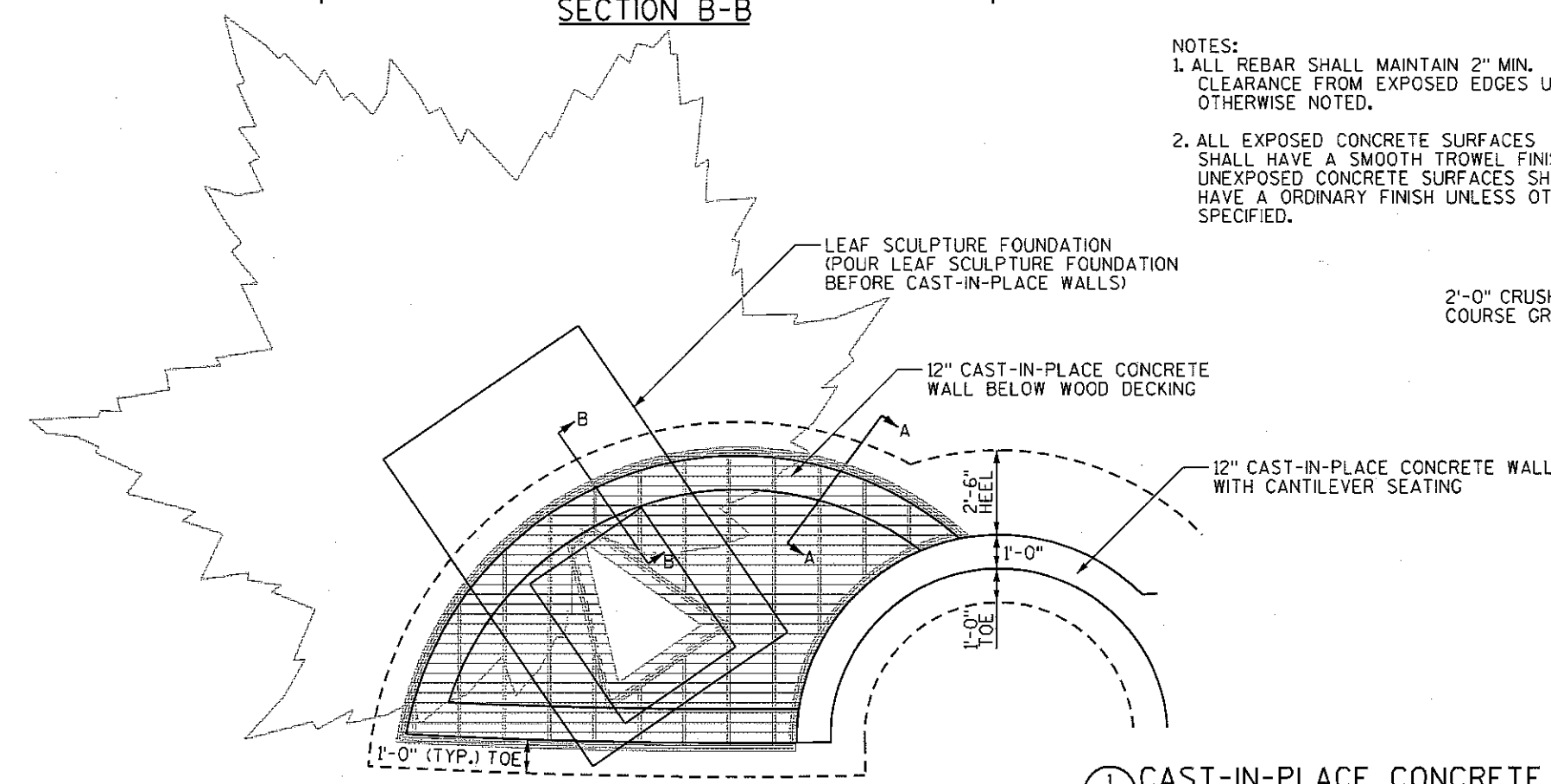


SECTION B-B



SECTION A-A

- NOTES:
1. ALL REBAR SHALL MAINTAIN 2" MIN. CLEARANCE FROM EXPOSED EDGES UNLESS OTHERWISE NOTED.
 2. ALL EXPOSED CONCRETE SURFACES SHALL HAVE A SMOOTH TROWEL FINISH AND UNEXPOSED CONCRETE SURFACES SHALL HAVE A ORDINARY FINISH UNLESS OTHERWISE SPECIFIED.



PLAN VIEW

1 CAST-IN-PLACE CONCRETE WALL AROUND LEAF SCULPTURE FOUNDATION DETAIL
S45 SCALE: NONE

PLOT SCALE:

PLOT NAME:

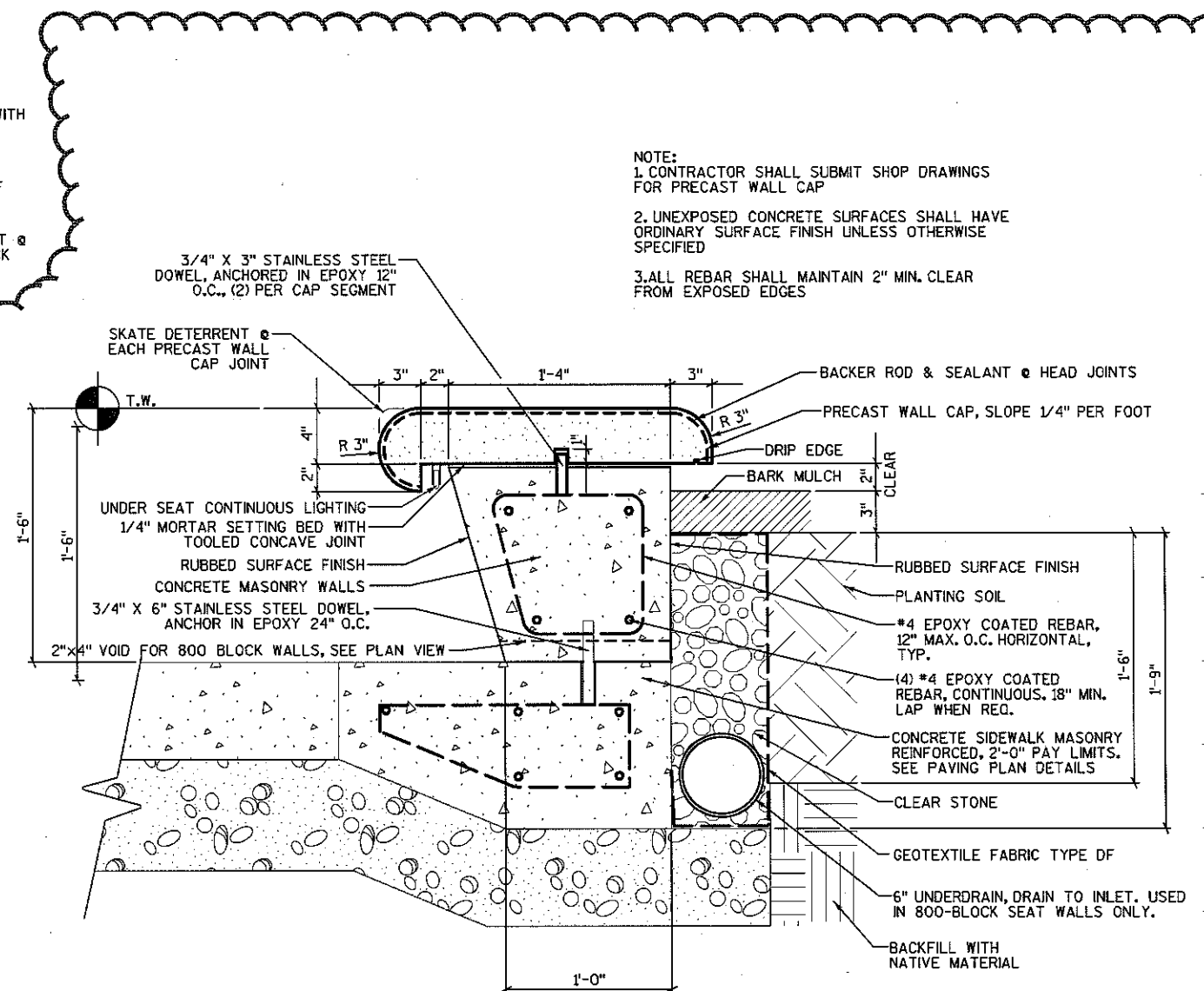
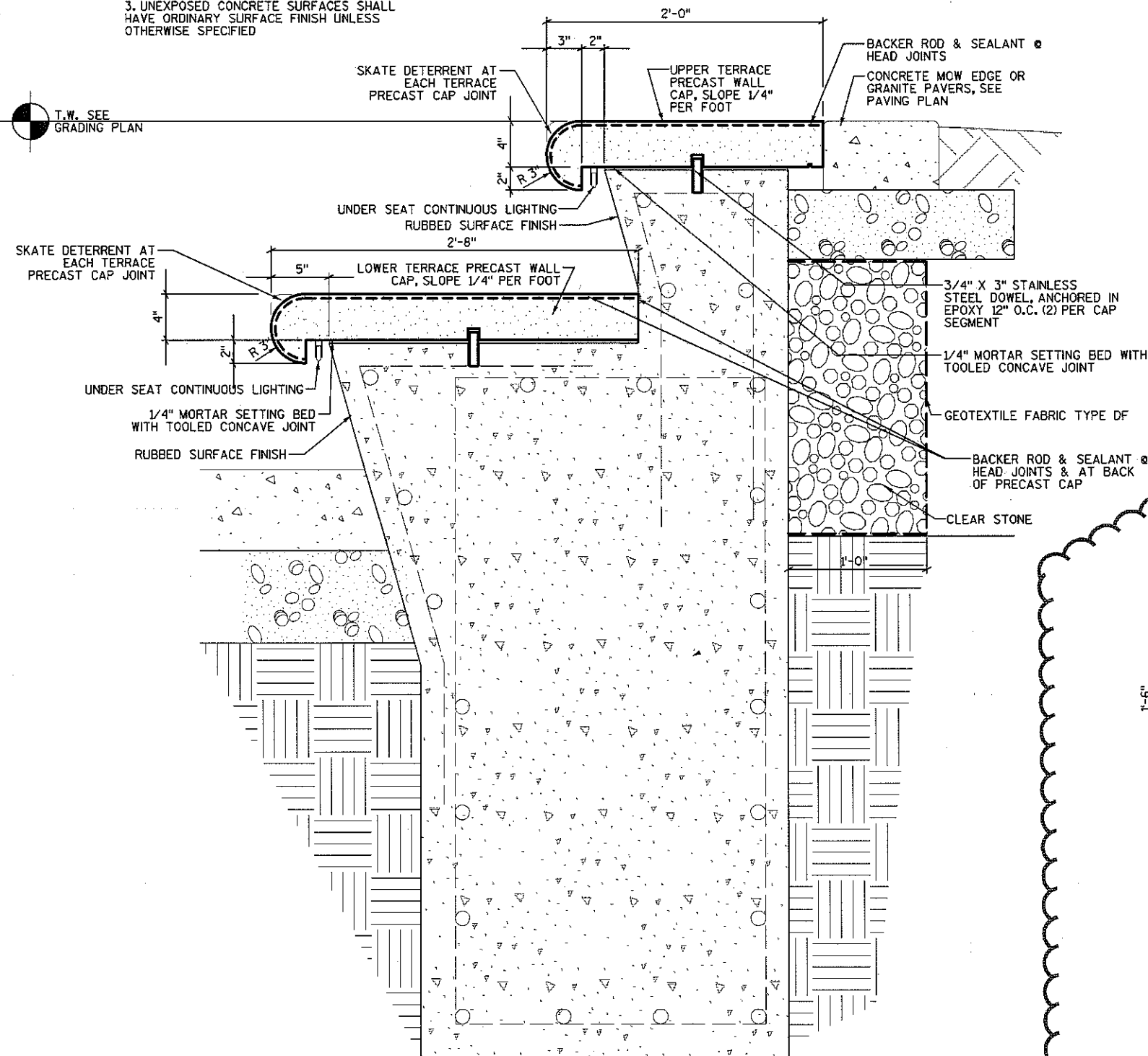
REV. DATE:

ORIGINATOR: CITY OF MADISON, STREET'S DIVISION

- NOTE:
1. SEE WALL DETAIL FOR WALL DIMENSIONS & REINFORCING
2. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR PRECAST WALL CAP
3. UNEXPOSED CONCRETE SURFACES SHALL HAVE ORDINARY SURFACE FINISH UNLESS OTHERWISE SPECIFIED

REVISED 3/21/14: Added detail for Planter Seat Walls for planter areas in the 700 Block.

STATE STREET 700 / 800 BLOCKS
PROJECT NO. 53W1193
SHEET NO. S26
STREETSCAPE & WALL DETAILS
STATE STREET CITY OF MADISON



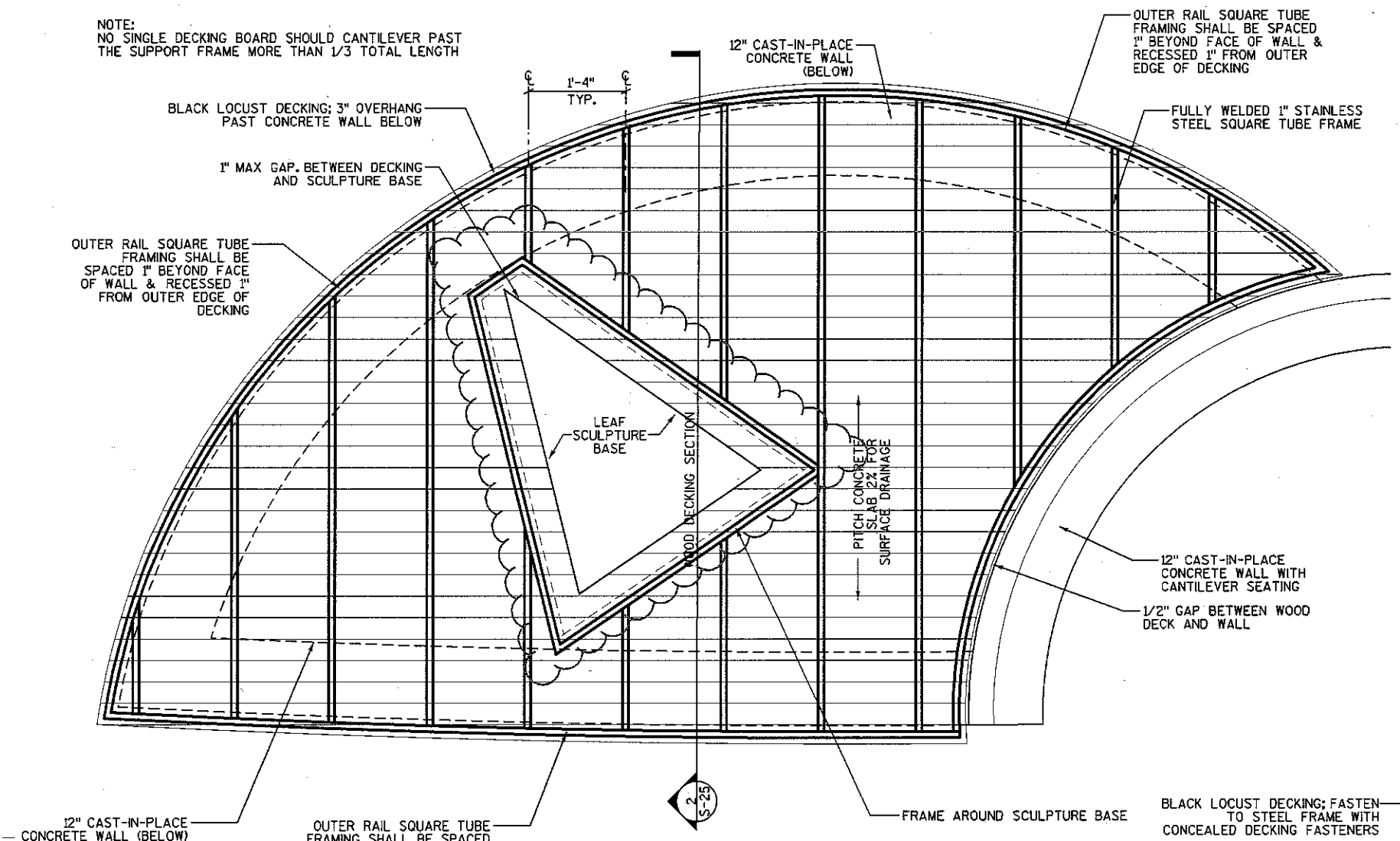
- NOTE:
1. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR PRECAST WALL CAP
2. UNEXPOSED CONCRETE SURFACES SHALL HAVE ORDINARY SURFACE FINISH UNLESS OTHERWISE SPECIFIED
3. ALL REBAR SHALL MAINTAIN 2" MIN. CLEAR FROM EXPOSED EDGES

1 DOUBLE TERRACE SEATING @ LIBRARY MALL LAWN
S-26 1"=1'-0"

2 PLANTER SEAT WALL WITH PRECAST CAP
S-26 1"=1'-0"

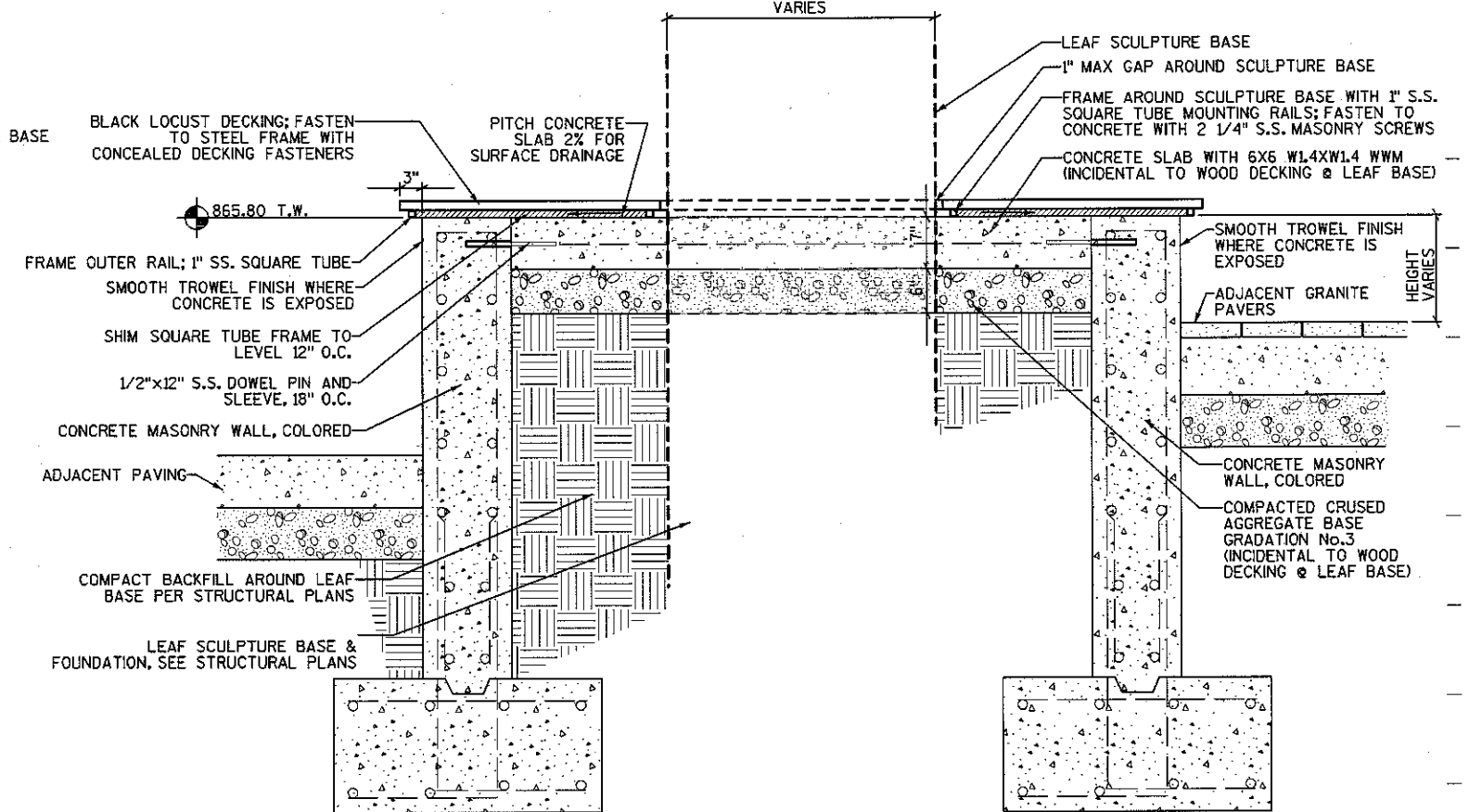
Revised 3/18/14 - Updated Leaf Sculpture Base Shape

NOTE:
NO SINGLE DECKING BOARD SHOULD CANTILEVER PAST THE SUPPORT FRAME MORE THAN 1/3 TOTAL LENGTH



1 WOOD DECKING @ LEAF BASE PLAN ENLARGEMENT
S-25 1/2"=1'-0"

NOTE:
1. NEOPRENE SPACERS SHALL SEPARATE METAL FRAME ASSEMBLY FROM DIRECT CONTACT WITH CONCRETE SURFACES
2. UNEXPOSED CONCRETE SURFACES SHALL HAVE ORDINARY SURFACE FINISH UNLESS OTHERWISE SPECIFIED

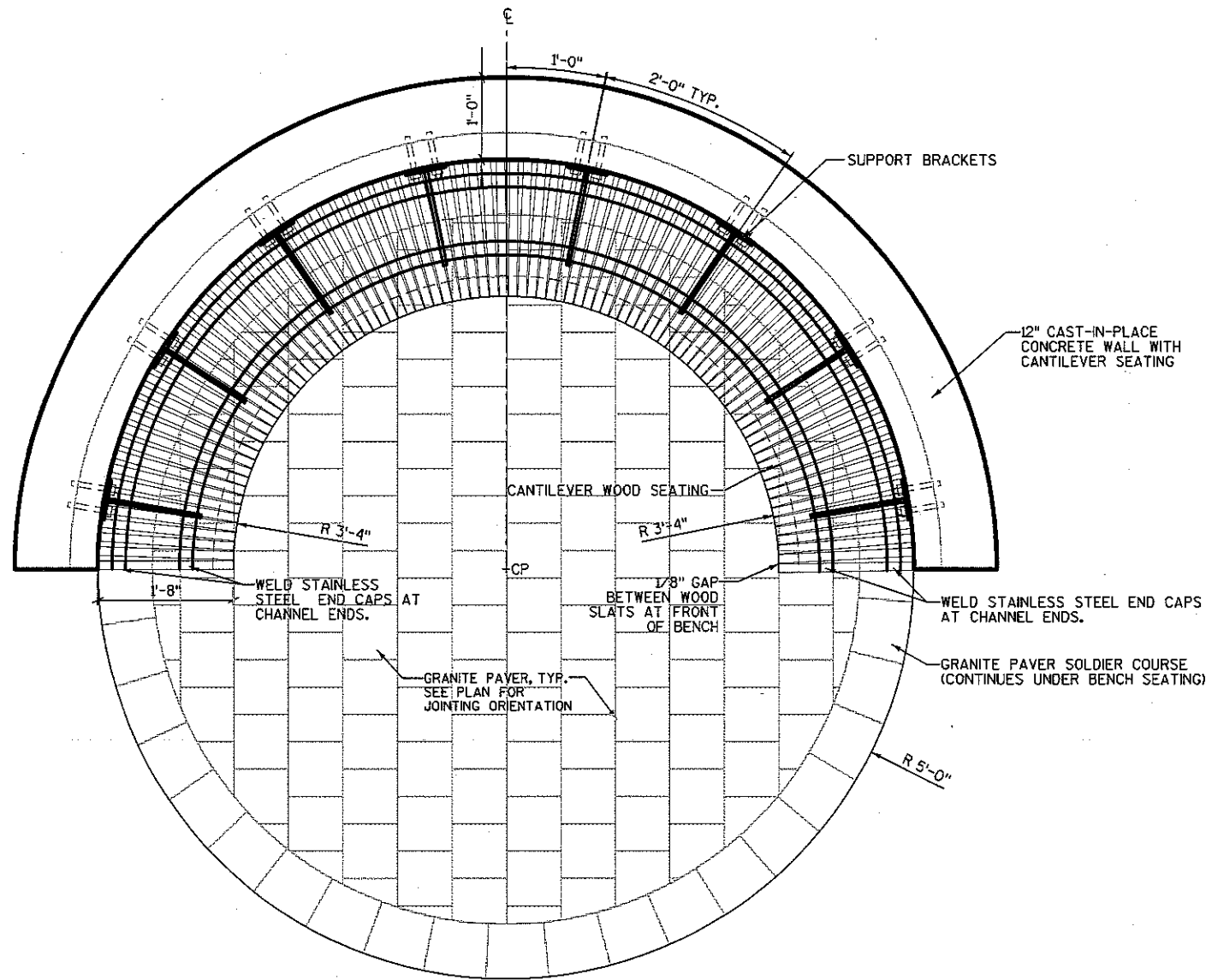


2 WOOD DECKING SECTION @ LEAF BASE
S-25 1/2"=1'-0"

PLOT SCALE: _____ PLOT NAME: _____ REV. DATE: _____ ORIGINATOR: CITY OF MADISON, STREETS DIVISION

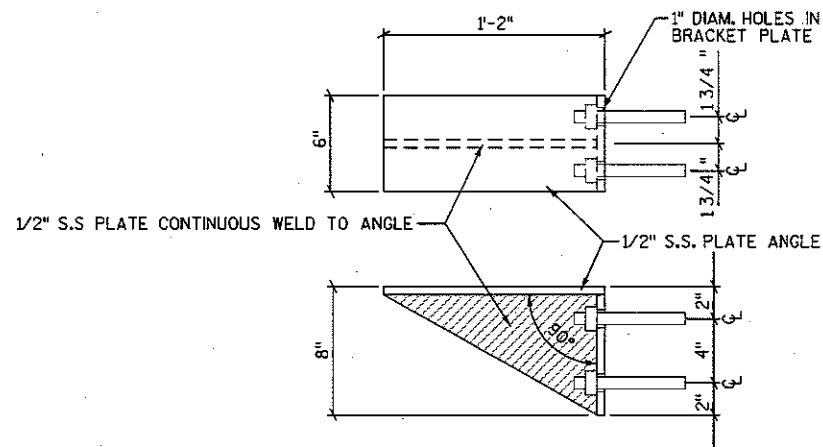
Revised 3/20/14 - Modified
detail for bottom rail of wood
seat.

- NOTES:
1. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR APPROVAL OF ALL METAL BRACKET ASSEMBLIES
 2. GRIND SMOOTH ALL EXPOSED EDGES OF METAL FRAME AND BRACKET COMPONENTS
 3. UNEXPOSED CONCRETE SURFACES SHALL HAVE ORDINARY SURFACE FINISH UNLESS OTHERWISE SPECIFIED

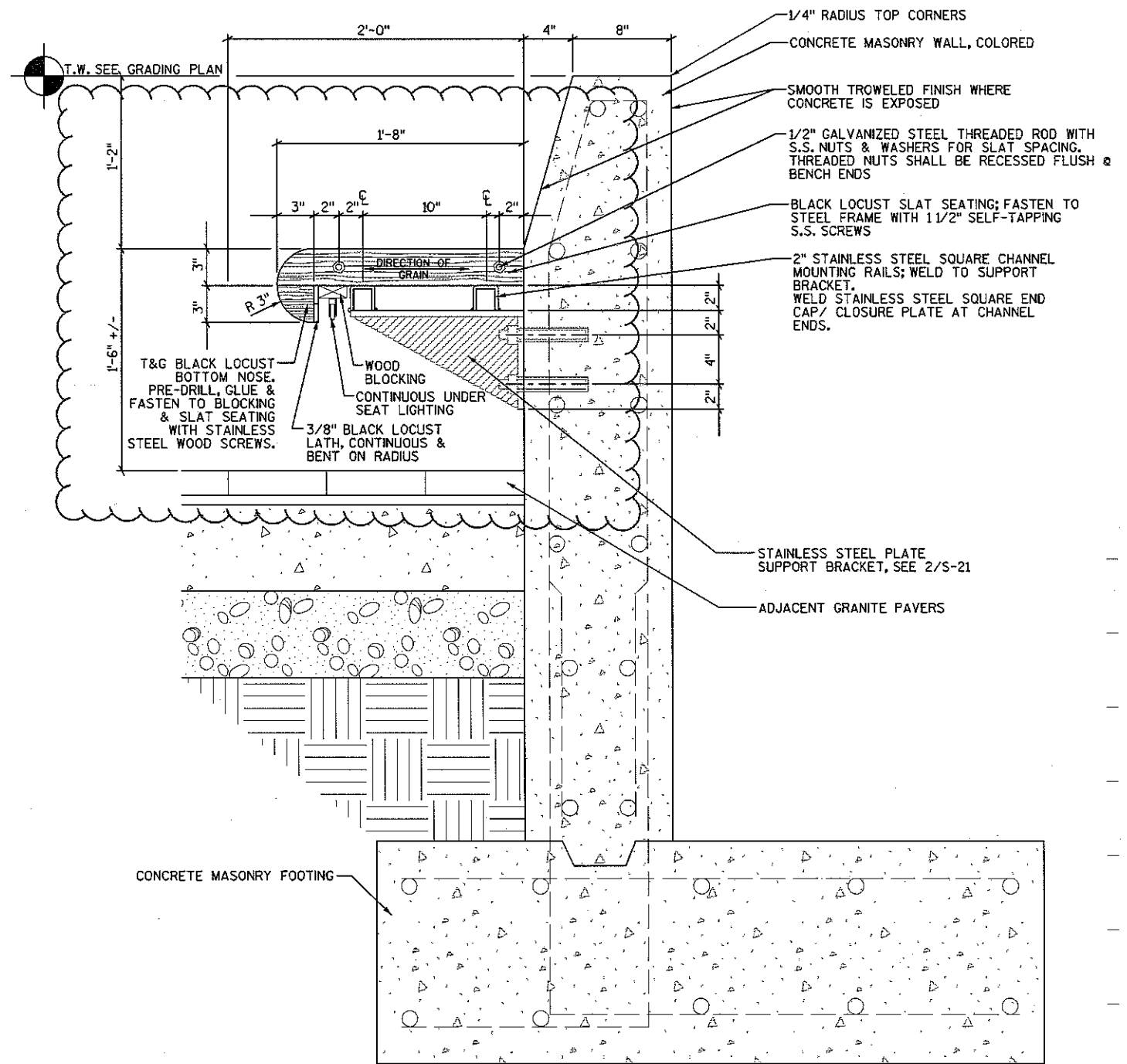


1 CIRCULAR SEATING NODE PLAN ENLARGEMENT
S-21 1/2"=1'-0"

- NOTES:
1. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR APPROVAL
 2. GRIND SMOOTH ALL EXPOSED BRACKET EDGES



2 CANTILEVER MOUNTING BRACKET
S-21 1/2"=1'-0"

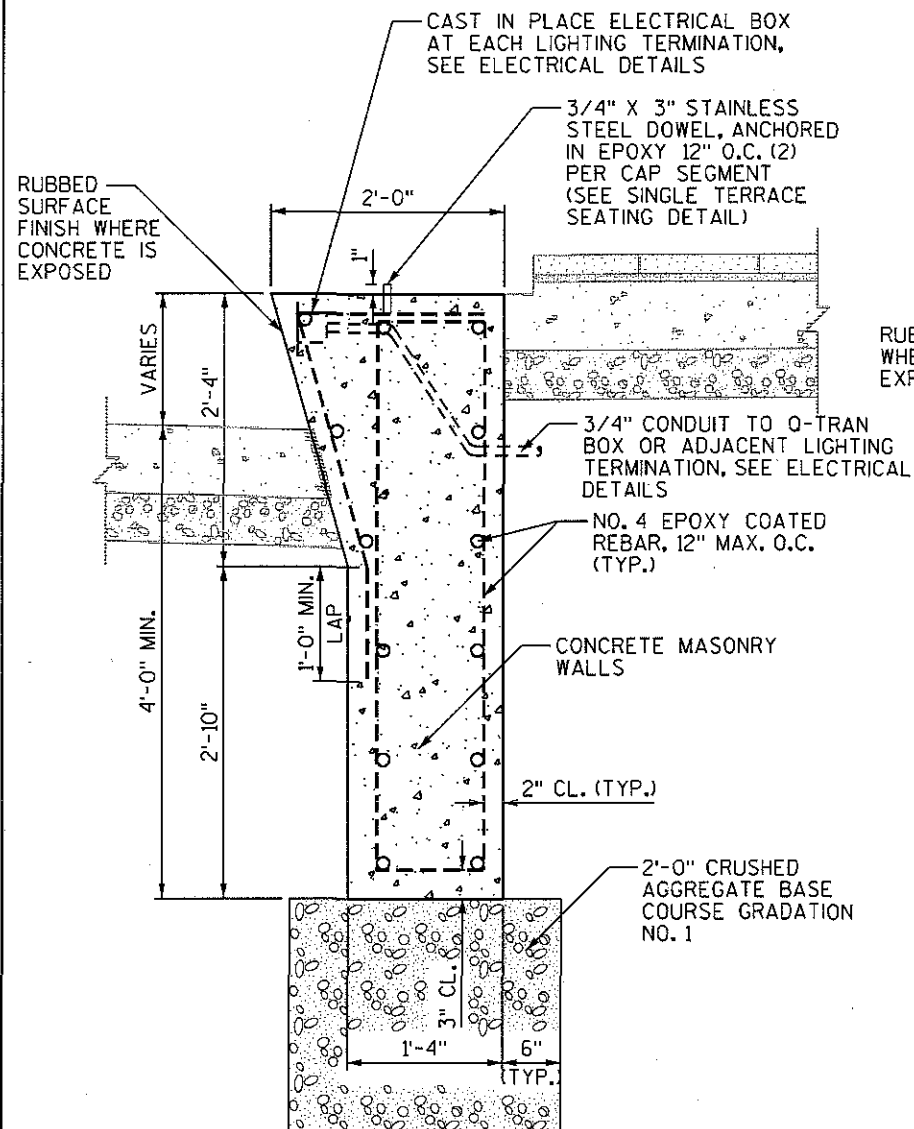


3 CAST-IN-PLACE CONCRETE WALL WITH CANTILEVER SEATING
S-21 1"=1'-0"

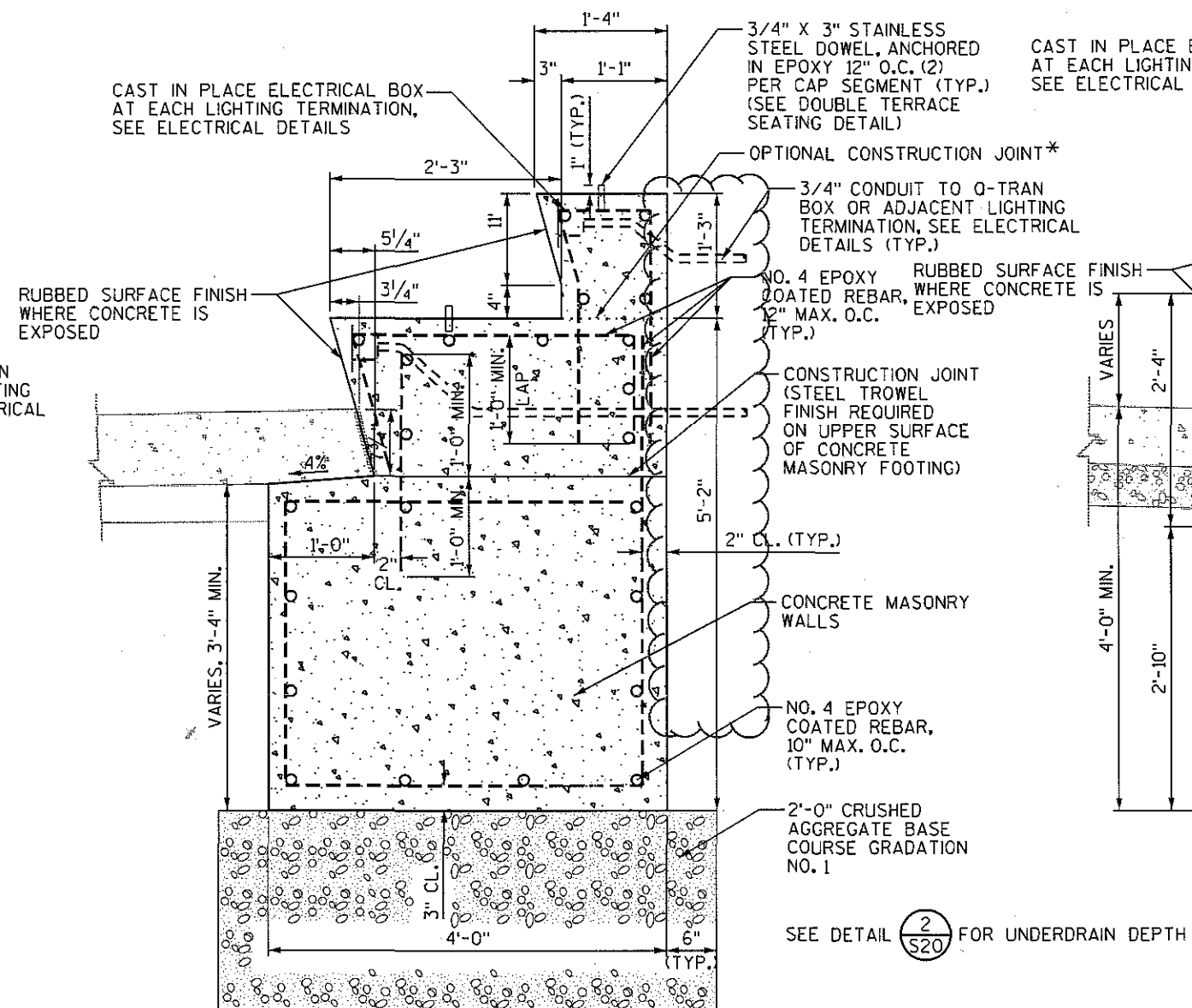
Revised 3/21/14 - Removed Clear Stone
and Planter Mix

- NOTES:
1. ALL REBAR SHALL MAINTAIN 2" MIN. CLEARANCE FROM EXPOSED EDGES UNLESS OTHERWISE NOTED.
 2. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR PRECAST WALL CAPS.
 3. PROVIDE SLEEVES FOR IRRIGATION AND ELECTRICAL ITEMS AS SHOWN ON THE PARKS WATERING AND ELECTRICAL PLAN SHEETS.
 4. UNEXPOSED CONCRETE SURFACES SHALL HAVE ORDINARY FINISH UNLESS OTHERWISE SPECIFIED.

FORM FOOTING FOR DOUBLE TERRACE SEAT WALL AROUND
EXISTING ELECTRICAL VAULTS AT LIBRARY MALL LAWN.
ADJUST POSITION OF EPOXY COATED BAR STEEL REINFORCEMENT
AROUND ELECTRICAL VAULTS TO PROVIDE 2" MINIMUM CLEARANCE.
IF REINFORCEMENT IS CUT OR DAMAGED, COAT CUT OR DAMAGED
SURFACES WITH EPOXY IN ACCORDANCE WITH SUBSECTION 505.2.4.2
OF THE LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR
HIGHWAY AND STRUCTURE CONSTRUCTION OF THE STATE OF WISCONSIN,
DEPARTMENT OF TRANSPORTATION.

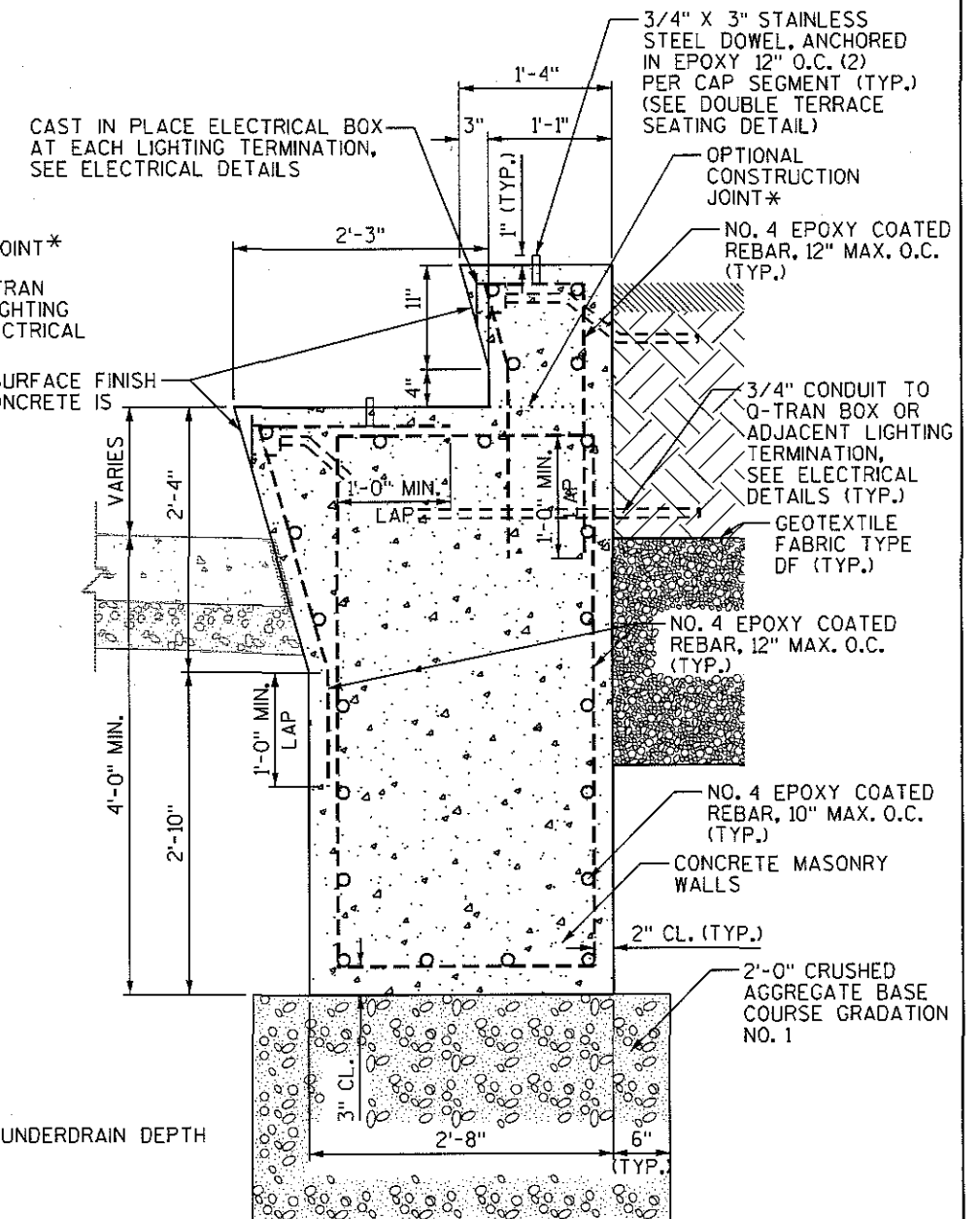


1 SINGLE TERRACE SEATING WALL DETAIL
S19 SCALE: NONE



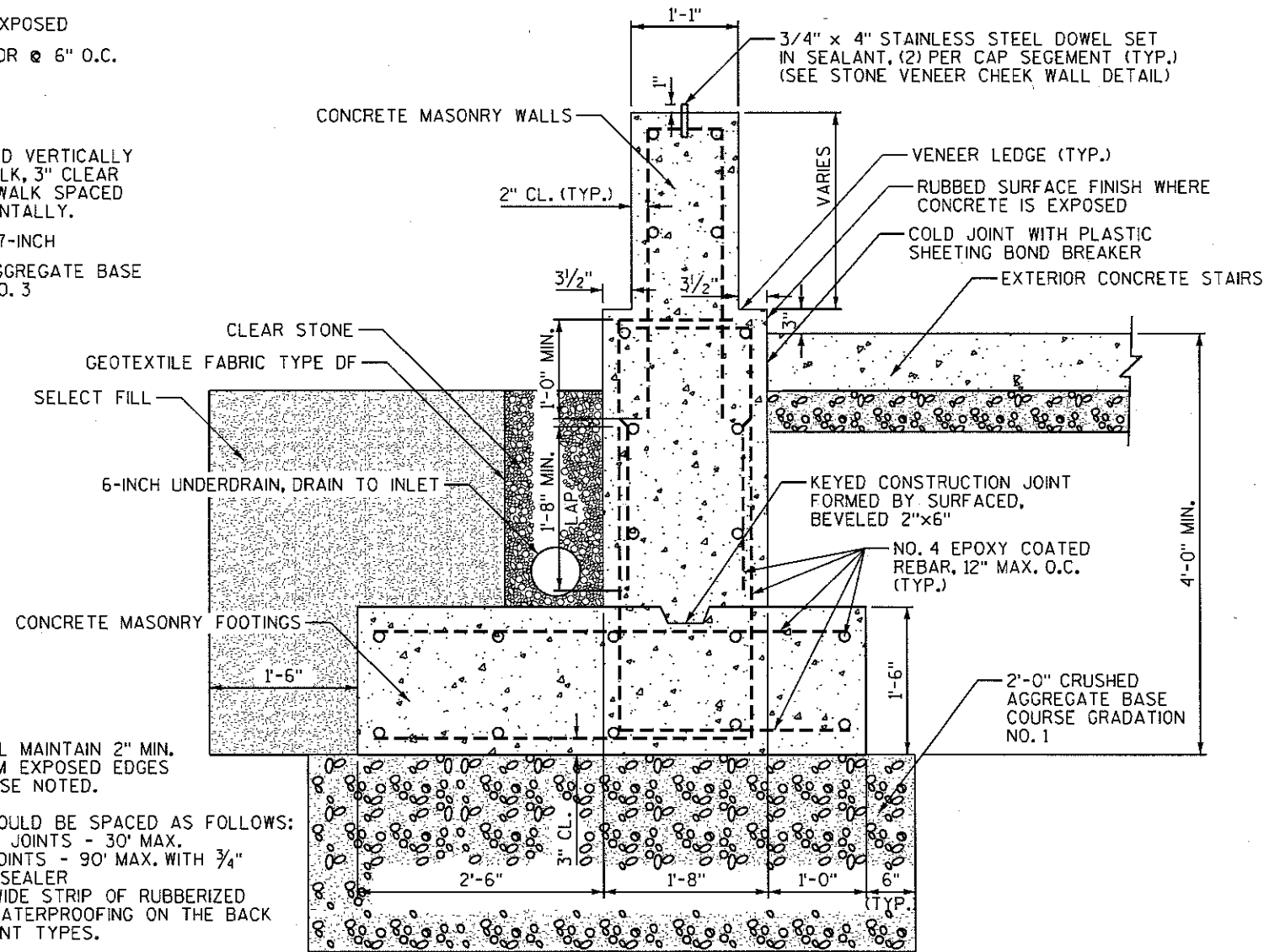
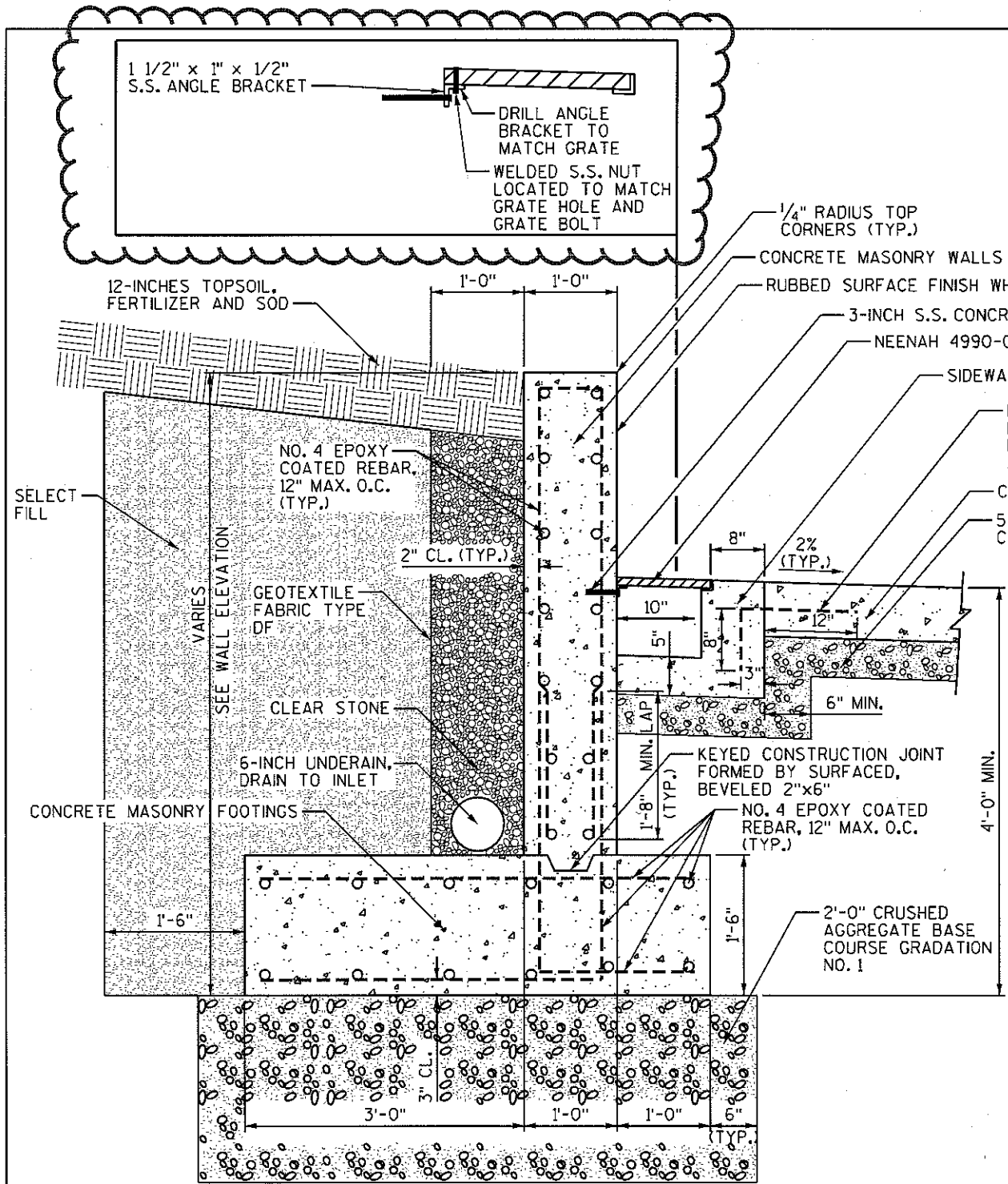
* LEAVE UPPER SURFACE OF FIRST POUR ROUGH (BROOM FINISH).
DO NOT APPLY LIQUID CURING COMPOUND TO CONSTRUCTION JOINT
AREA. CURING WITH IMPERVIOUS SHEETING REQUIRED.

2 DOUBLE TERRACE SEAT WALL WITH
519 STRUCTURAL SLAB SUPPORT DETAIL
SCALE: NONE



3 DOUBLE TERRACE SEATING WALL DETAIL
S19 SCALE: NONE

REVISED 3/21/14: Added angle bracket detail for installing angle bracket to CIP concrete wall



- NOTES:
1. ALL REBAR SHALL MAINTAIN 2" MIN. CLEARANCE FROM EXPOSED EDGES UNLESS OTHERWISE NOTED.
 2. WALL JOINTS SHOULD BE SPACED AS FOLLOWS:
 - CONTRACTION JOINTS - 30' MAX.
 - EXPANSION JOINTS - 90' MAX. WITH 3/4" FILLER AND SEALER
 - USE AN 18" WIDE STRIP OF RUBBERIZED MEMBRANE WATERPROOFING ON THE BACK OF BOTH JOINT TYPES.
 3. COLOR OF JOINT SEALER TO BE VERIFIED BY ENGINEER.
 4. ALL EXPOSED CONCRETE SURFACES SHALL HAVE A RUBBED FINISH AND UNEXPOSED CONCRETE SURFACES SHALL HAVE A ORDINARY FINISH UNLESS OTHERWISE SPECIFIED.

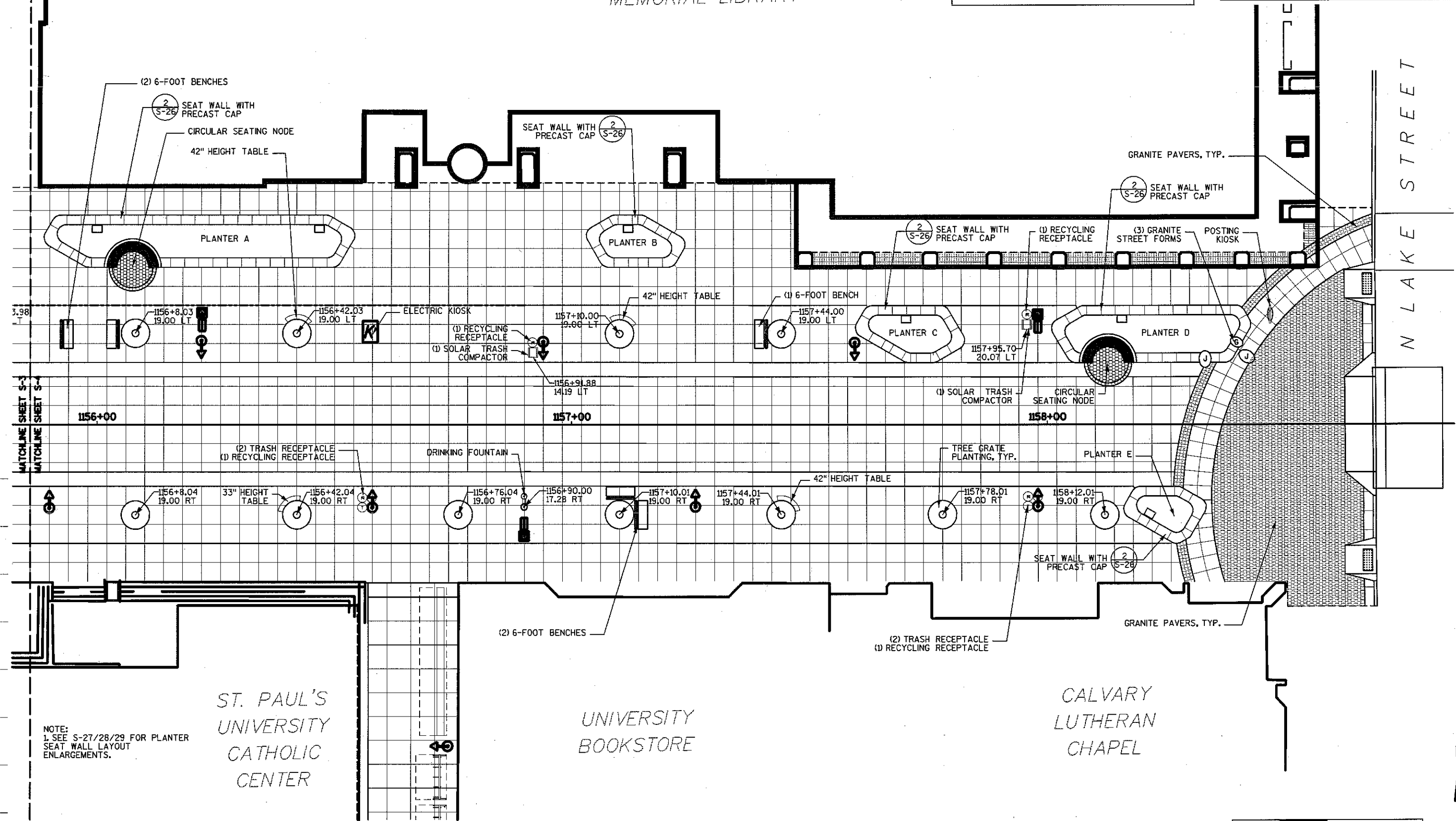
1 CAST-IN-PLACE CONCRETE RETAINING WALL @ BASCOM MALL
S11 SCALE: NONE

2 STONE VENEER CHEEK WALL DETAIL B
S11 SCALE: NONE

ORIGINATOR: CITY OF MADISON, STREET'S DIVISION

REVISED 3/21/14: Added call outs for
Seat Wall with Precast Cap details for
Planters A - E.

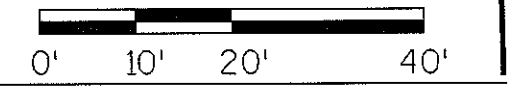
MEMORIAL LIBRARY



1
S-4

STREETSCAPE PLAN - 700 BLOCK

1"=20' @ 11X17



PLOT SCALE: _____

PLOT NAME: _____

REV. DATE: _____

ORIGINATOR: CITY OF MADISON, STREETS DIVISION

SHEET NO.
SG1

STATE STREET CITY OF MADISON

WISCONSIN HISTORICAL SOCIETY

STATE STREET 700/800 BLOCKS
PROJECT NO. 53W1193

SHEET NO. SG1

SITE GRADING PLAN

STATE STREET CITY OF MADISON

Revised 3/21/14 - Updated Grades and Notes

WISCONSIN HISTORICAL SOCIETY

BP: 1148+51.94

1148+52

1149+00

1150+00

1151+00

1152+50

1153+00

1154+00

1155+00

1156+00

1157+00

1158+00

1159+00

1160+00

1161+00

1162+00

1163+00

1164+00

1165+00

1166+00

1167+00

1168+00

1169+00

1170+00

1171+00

1172+00

1173+00

1174+00

1175+00

1176+00

1177+00

1178+00

1179+00

1180+00

1181+00

1182+00

1183+00

1184+00

1185+00

1186+00

1187+00

1188+00

1189+00

1190+00

1191+00

1192+00

1193+00

1194+00

1195+00

1196+00

1197+00

1198+00

1199+00

1200+00

1201+00

1202+00

1203+00

1204+00

1205+00

1206+00

1207+00

1208+00

1209+00

1210+00

1211+00

1212+00

1213+00

1214+00

1215+00

1216+00

1217+00

1218+00

1219+00

1220+00

1221+00

1222+00

1223+00

1224+00

1225+00

1226+00

1227+00

1228+00

1229+00

1230+00

1231+00

1232+00

1233+00

1234+00

1235+00

1236+00

1237+00

1238+00

1239+00

1240+00

1241+00

1242+00

1243+00

1244+00

1245+00

1246+00

1247+00

1248+00

1249+00

1250+00

1251+00

1252+00

1253+00

1254+00

1255+00

1256+00

1257+00

1258+00

1259+00

1260+00

1261+00

1262+00

1263+00

1264+00

1265+00

1266+00

1267+00

1268+00

1269+00

1270+00

1271+00

1272+00

1273+00

1274+00

1275+00

1276+00

1277+00

1278+00

1279+00

1280+00

1281+00

1282+00

1283+00

1284+00

1285+00

1286+00

1287+00

1288+00

1289+00

1290+00

1291+00

1292+00

1293+00

1294+00

1295+00

1296+00

1297+00

1298+00

1299+00

1300+00

1301+00

1302+00

1303+00

1304+00

1305+00

1306+00

1307+00

1308+00

1309+00

1310+00

1311+00

1312+00

1313+00

1314+00

1315+00

1316+00

1317+00

1318+00

1319+00

1320+00

1321+00

1322+00

1323+00

1324+00

1325+00

1326+00

1327+00

1328+00

1329+00

1330+00

1331+00

1332+00

1333+00

1334+00

1335+00

1336+00

1337+00

1338+00

1339+00

1340+00

1341+00

1342+00

1343+00

1344+00

1345+00

1346+00

1347+00

1348+00

1349+00

1350+00

1351+00

1352+00

1353+00

1354+00

1355+00

1356+00

1357+00

1358+00

1359+00

1360+00

1361+00

1362+00

1363+00

1364+00

1365+00

1366+00

1367+00

1368+00

1369+00

1370+00

1371+00

1372+00

1373+00

1374+00

1375+00

1376+00

1377+00

1378+00

1379+00

1380+00

1381+00

1382+00

1383+00

1384+00

1385+00

1386+00

1387+00

1388+00

1389+00

1390+00

1391+00

1392+00

1393+00

1394+00

1395+00

1396+00

1397+00

1398+00

1399+00

1400+00

1401+00

1402+00

1403+00

1404+00

1405+00

1406+00

1407+00

1408+00

1409+00

1410+00

1411+00

1412+00

1413+00

1414+00

1415+00

1416+00

1417+00

1418+00

1419+00

1420+00

1421+00

1422+00

1423+00

1424+00

1425+00

1426+00

1427+00

1428+00

1429+00

1430+00

1431+00

1432+00

1433+00

1434+00

1435+00

1436+00

1437+00

1438+00

1439+00

1440+00

1441+00

1442+00

1443+00

1444+00

1445+00

144

PLOT NAME:

REV. DATE:

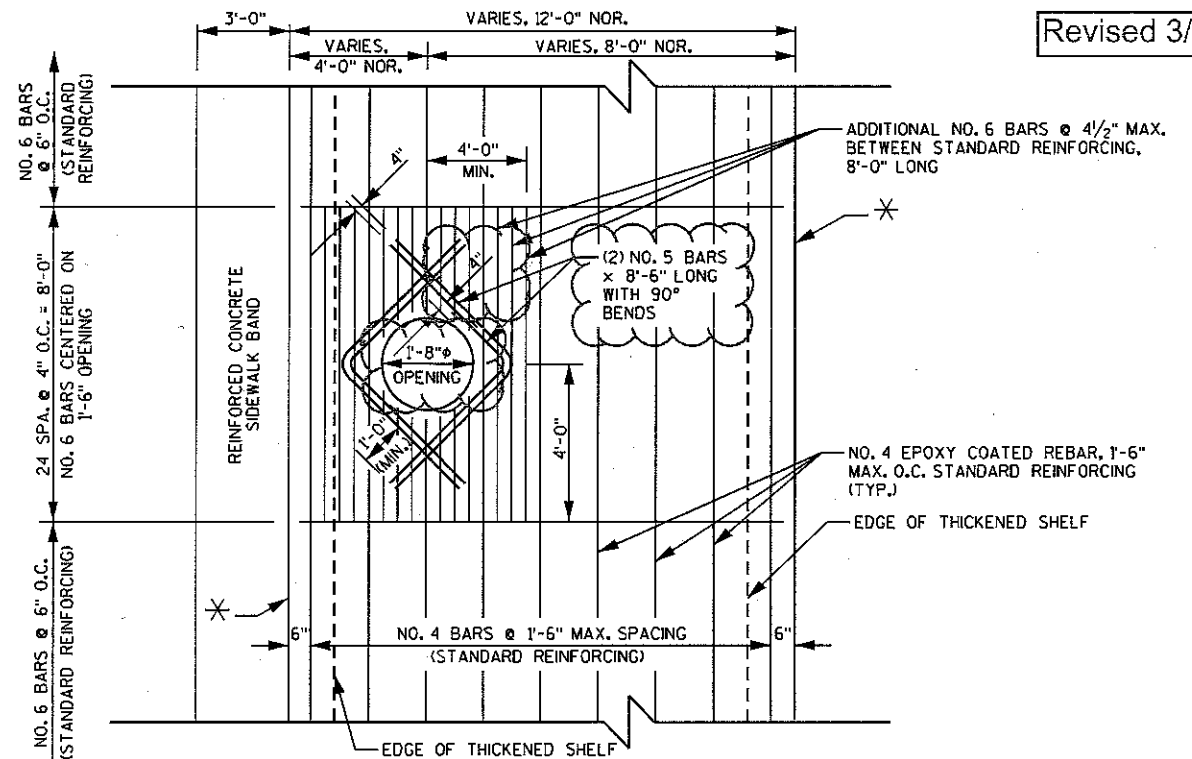
ORIGINATOR: CITY OF MADISON, STREETS DIVISION

FILE NAME: P:\370\373\00373018\CADD\Planshts\Paving Plans\Paving Grades_01.dgn

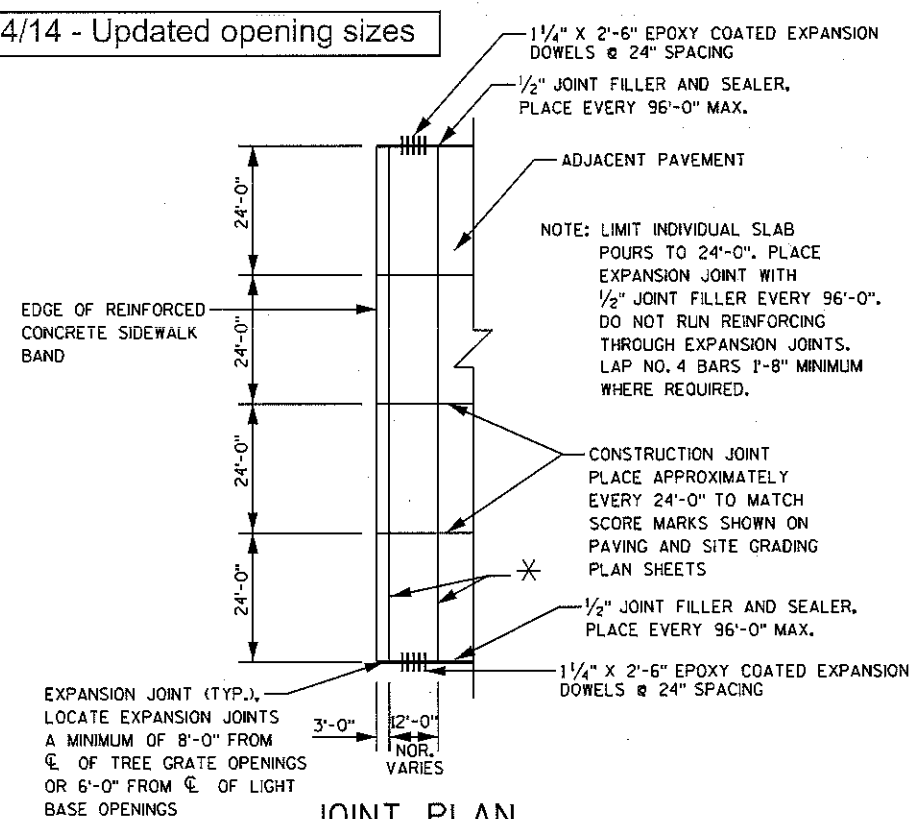
DATE: 3/21/2014

Paving Grades_01.dgn 3/21/2014 9:42:39 AM jkurten

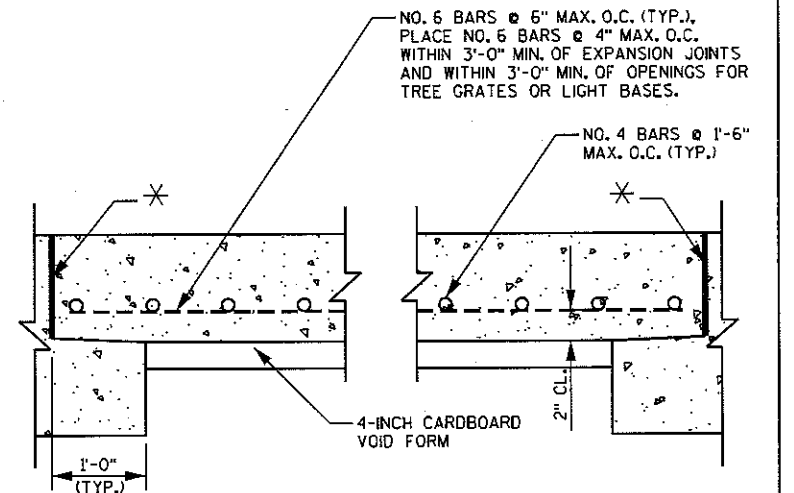
Revised 3/24/14 - Updated opening sizes



REINFORCEMENT PLAN - PEDESTRIAN LIGHT BASE OPENINGS

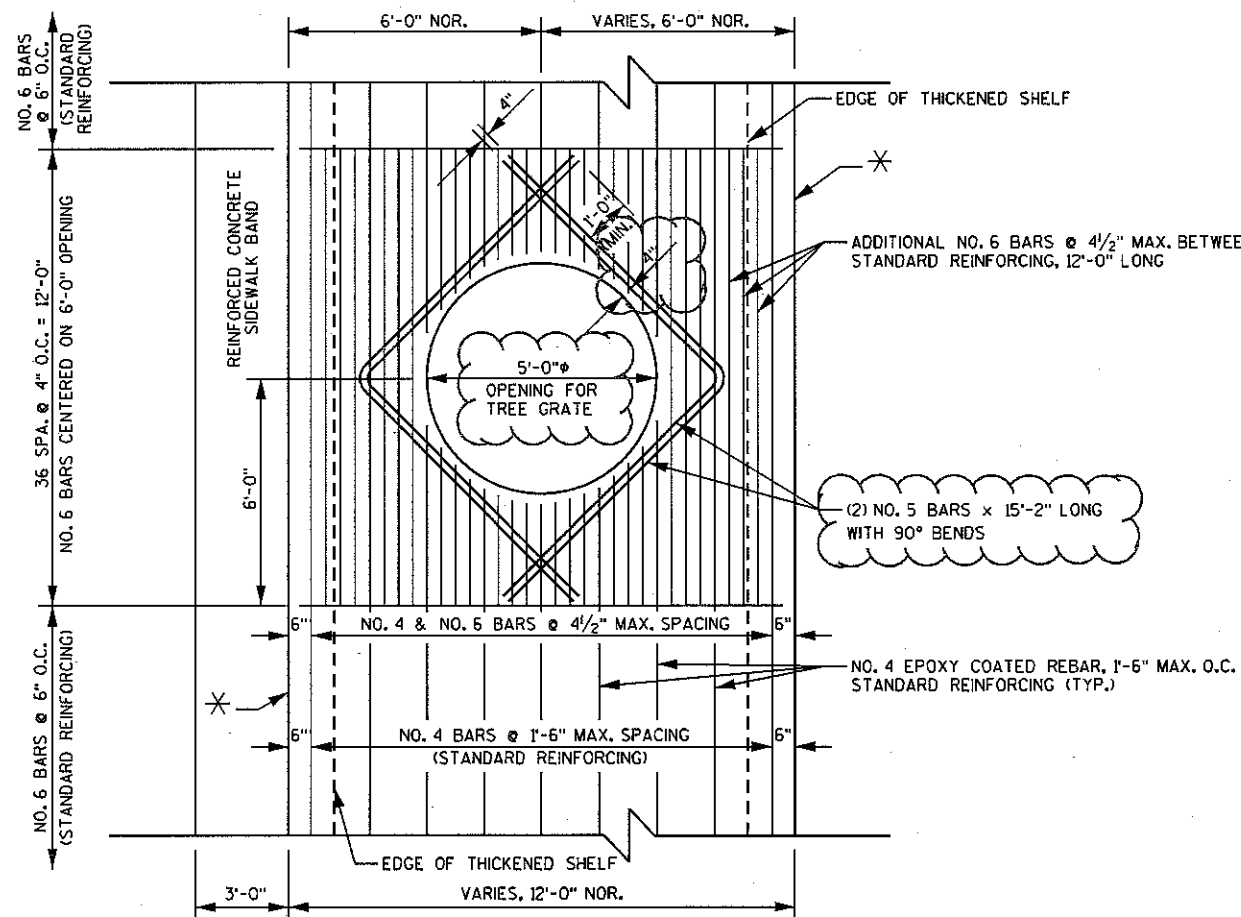


JOINT PLAN



TYPICAL SECTION THRU
CONCRETE STRUCTURAL SLAB 8-INCH

SEE PAVING PLANS FOR LOCATIONS OF COLORED
AND NON COLORED STRUCTURAL SLABS

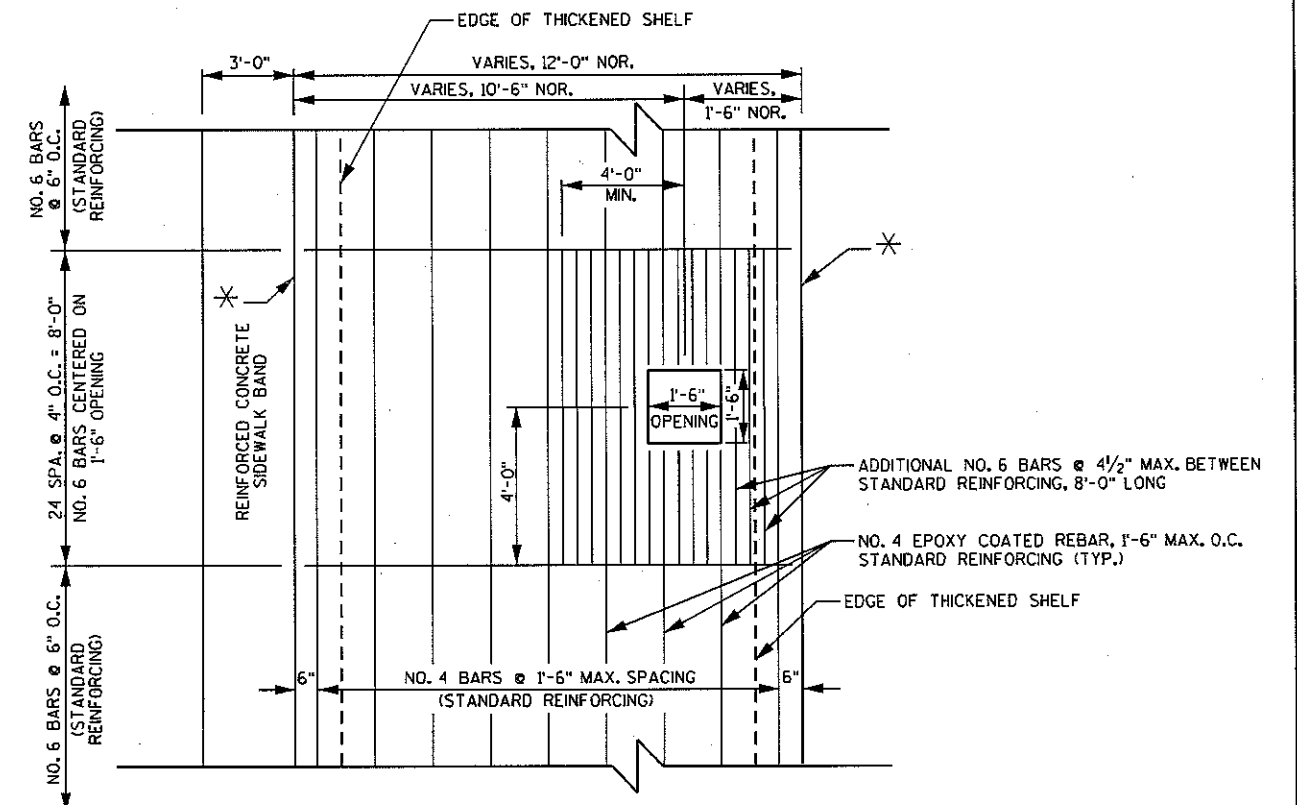


REINFORCEMENT PLAN - TREE OPENINGS

* 1/2" JOINT FILLER AND SEALER.

NOTES:
1. COLOR OF JOINT SEALER TO BE DETERMINED BY ENGINEER.

2. CUT REINFORCEMENT AT OPENING AND HOLD 2" CLEAR. COAT ENDS OF REINFORCEMENT WITH EPOXY IN ACCORDANCE WITH SUBSECTION 505.2.4.2 OF THE LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION OF THE STATE OF WISCONSIN, DEPARTMENT OF TRANSPORTATION.



REINFORCEMENT PLAN - AREA LIGHT BASE OPENINGS

CONCRETE STRUCTURAL SLAB 8-INCH
SCALE: NONE

Revised 3/18/14 - Updated Pattern

STATE STREET 700 / 800 BLOCKS
PROJECT NO. 53W1193

SHEET NO.
P7

PAVING PLAN DETAILS

STATE STREET

CITY OF MADISON

BACK OF CONC.

4'-0"

2'-0"

4'-0"

4'-0"

4'-0"

4'-0"

4'-0"

25% RED
(TYPICAL PROPORTION)

100%
RED

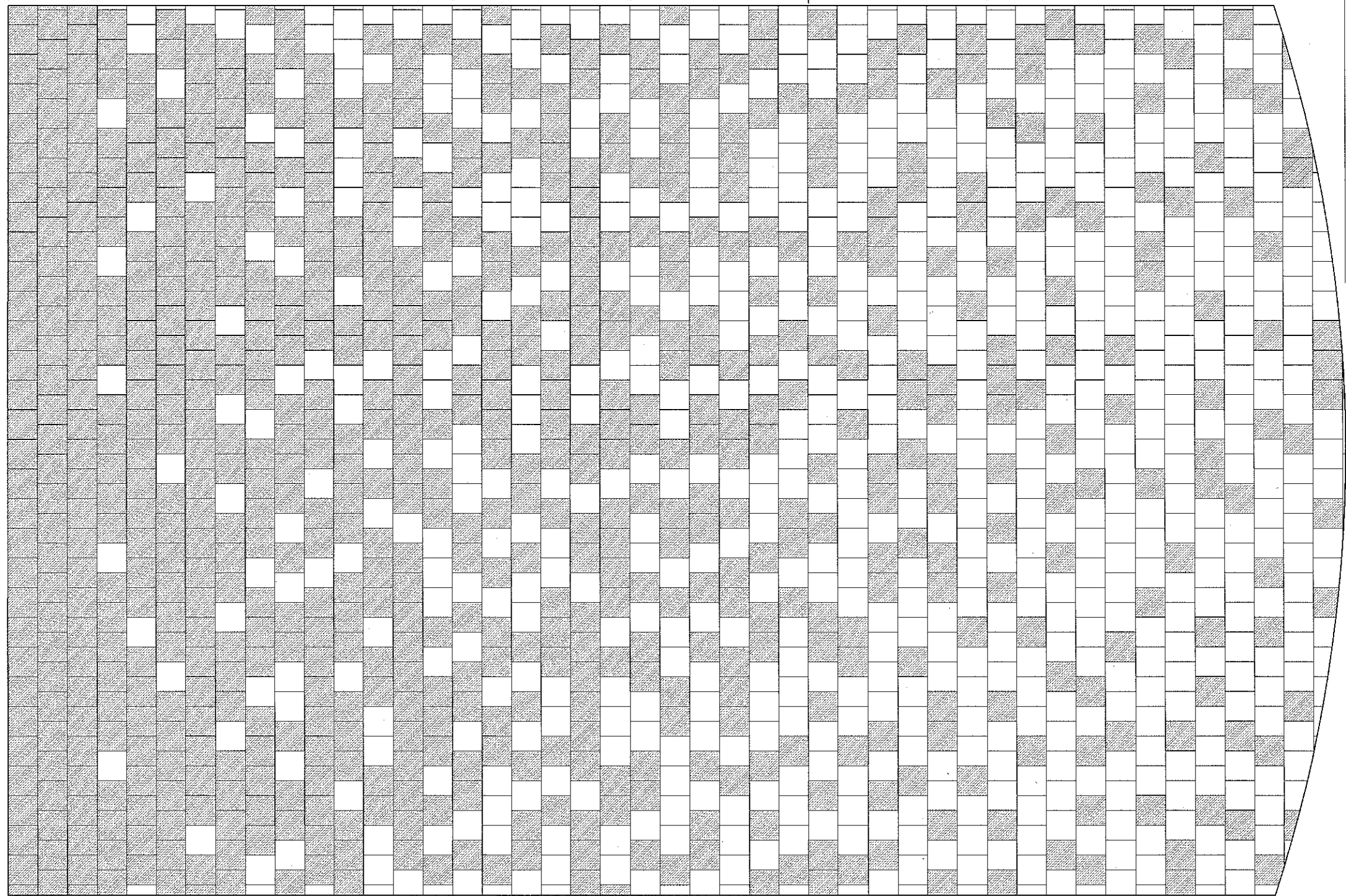
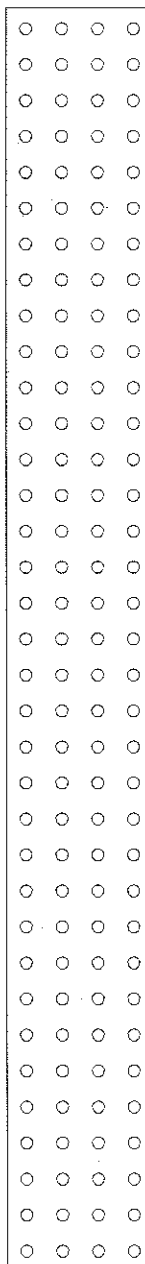
85% RED

70% RED

55% RED

40% RED

35% RED



P7
3/8"=1'-0"

PARK STREET GRANITE PAVER FADE PATTERN

PLOT SCALE: _____

PLOT NAME: _____

REV. DATE: _____

ORIGINATOR: CITY OF MADISON, STREET'S DIVISION

GENERAL NOTES

ELEVATIONS SHOWN ON THIS PLAN ARE BASED ON NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88), AS PROVIDED BY THE CITY OF MADISON.

WHEN THE QUANTITY OF THE ITEMS OF BASE OR SURFACE COURSE IS MEASURED FOR PAYMENT BY THE TON OR CUBIC YARD, THE DEPTH OR THICKNESS OF THE COURSE SHOWN ON THE PLANS IS APPROXIMATE, AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER OR AS DETAILED IN THE PLANS.

ALL LENGTHS ARE IN FEET EXCEPT AS SHOWN.

STORM SEWER LENGTHS ARE TO CENTER OF STRUCTURES.

INLET OFFSETS GIVEN TO CENTER OF STRUCTURE.

ELEVATIONS SHOWN ON THE STORM SEWER SHEETS ARE AT THE CENTER OF STRUCTURE. A MINIMUM 4 INCHES OF ADJUSTMENT RINGS REQUIRED EXCEPT AS NOTED ON STORM SEWER DETAILS.

MISCELLANEOUS REMOVAL ITEMS REQUIRING RESTORATION OF CONCRETE OR ASPHALTIC CONCRETE DRIVEWAYS, SIDEWALKS, OR SIDE STREETS SHALL BE REMOVED TO AN EXISTING JOINT OR SAWED AS DETERMINED BY THE ENGINEER, OR AS SHOWN ON THE PLANS.

EARTHWORK WASTE MATERIAL SHOWN ON THE EARTHWORK SUMMARY SHALL BE HAULED FROM THE PROJECT, EXCEPT AS DIRECTED BY ENGINEER.

RADIUS DIMENSIONS FOR THE CURB AND GUTTER ARE TO THE FACE OF CURB.

THE CLEAR ZONE BEHIND CURB AND GUTTER IS 2 FEET FROM THE FACE OF THE CURB.

THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE AREA THAT ARE NOT SHOWN. THE CONTRACTOR SHALL NOTIFY DIGGERS HOTLINE AND ALL OTHER UTILITIES IN THE VICINITY OF THE PROJECT TO LOCATE THEIR FACILITIES AT LEAST 3 WORKING DAYS PRIOR TO BEGINNING WORK.

NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT APPROVAL OF THE ENGINEER.

PRIOR TO ORDERING DRAINAGE PIPES, THE CONTRACTOR SHALL VERIFY RELATED DRAINAGE INFORMATION IN THE PLANS AND RESOLVE ALL CONFLICT VERIFICATIONS, BY WAY OF ULO'S, WITH THE ENGINEER.

ALL FRAMES AND GRATES ON EXISTING STRUCTURES SHALL BE DELIVERED TO 1602 EMIL STREET, ENGINEERING SERVICES. CONTRACTOR SHALL CALL 266-4430 TO MAKE ARRANGEMENTS FOR SAID DELIVERY. THE CONTRACTOR WILL BE RESPONSIBLE FOR UNLOADING THE FRAMES AND GRATES AT EMIL STREET.

THE LIMITS OF PAVEMENT AND SIDEWALK REMOVAL ARE APPROXIMATE AND SHALL BE VERIFIED IN THE FIELD BY THE ENGINEER.

EXPANSION JOINTS ARE TO BE CONSTRUCTED AT ALL RADIUS POINTS IN CURB AND GUTTER OR AT LOCATIONS SHOWN ON THE PLAN.

SAWING OF CONCRETE SIDEWALK SHALL BE INCIDENTAL TO THE BID ITEM OF REMOVE CONCRETE SIDEWALK AND DRIVE.

REMOVAL OF TEMPORARY ASPHALT SHALL BE INCIDENTAL TO THE TEMPORARY PAVEMENT ITEM.

EPOXY COATED PAVEMENT TIES AND DOWEL BARS ARE INCIDENTAL TO THE ADJACENT CONCRETE BID ITEMS.

PROOF ROLLING OF SUBBASE IS REQUIRED BEFORE PLACEMENT OF BASE COURSE & IS INCIDENTAL TO EXCAVATION CUT. PROOF ROLLING SHALL BE WITNESSED BY THE ENGINEER.

ALL CURB AND GUTTER REMOVAL SHALL BE TO AN EXISTING JOINT AS DIRECTED BY THE ENGINEER.

ALL ASPHALT REMOVAL SHALL BE PAID AS EXCAVATION CUT UNLESS PAID FOR UNDER ANOTHER BID ITEM.

THE REMOVAL OF ALL BRICK AND GRANITE PAVERS AND THEIR CONCRETE BASES SHALL BE PAID FOR AS REMOVE CONCRETE SIDEWALK AND DRIVE.

ALL CITY OF MADISON CONDUIT SHALL BE MAINTAINED UNLESS DIRECTED OTHERWISE BY THE ENGINEER.

ALL WORK PERFORMED ON UW PROPERTY SHALL BE CONSTRUCTED PER UW TECHNICAL GUIDELINES AND STATE DFD STANDARD SPECIFICATIONS. CONTRACTOR SHALL INFORM THE UW-MADISON CIVIL ENGINEER WHEN AND WHAT WORK WILL BE PERFORMED ON UW PROPERTY FOR CONSTRUCTION OBSERVATION.

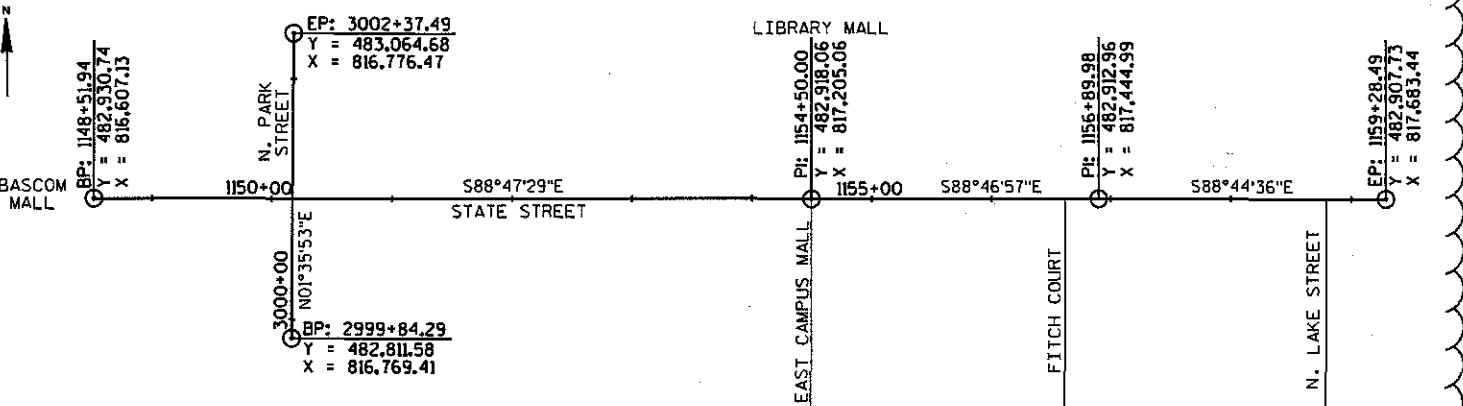
ULTIMATE DESIGN STRESSES

CONCRETE MASONRY WALLS &
CONCRETE MASONRY WALLS COLORED $f_c = 3,500$ P.S.I.

CONCRETE STRUCTURAL SLAB 8-INCH &
COLORED CONCRETE STRUCTURAL SLAB 8-INCH $f_c = 4,000$ P.S.I.

ALIGNMENT OVERVIEW

SCALE: NONE



DESIGN CONTACTS

MSA PROFESSIONAL SERVICES
ATTN: JASON DIPIAZZA, P.E.
2901 INTERNATIONAL LANE, SUITE 300
MADISON, WI 53704
PHONE: (608) 242-6640
FAX: (608) 242-5664
EMAIL: jdipiazza@msa-ps.com

CITY OF MADISON
ATTN: CHRIS PETYKOWSKI, P.E.
CITY-COUNTY BUILDING, ROOM 115
210 MARTIN LUTHER KING, JR. BLVD.
MADISON, WI 53703
PHONE: (608) 267-8678
FAX: (608) 264-9275
EMAIL: cpetykowski@cityofmadison.com

UNIVERSITY OF WISCONSIN-MADISON
FACILITIES, PLANNING & MANAGEMENT
ATTN: GARY BROWN
610 WALNUT STREET, SUITE 919
MADISON, WI 53726
PHONE: (608) 263-3023
FAX: (608) 265-3139
EMAIL: gbrown@fpm.wisc.edu

UTILITY CONTACTS

STORM SEWER:
CITY OF MADISON
ATTN: GREG FRIES
CITY-COUNTY BUILDING, ROOM 115
210 MARTIN LUTHER KING, JR. BLVD
MADISON, WI 53703
PHONE: (608) 267-1199
EMAIL: gfries@cityofmadison.com

SANITARY SEWER,
CITY OF MADISON
ATTN: MARK MODER
CITY-COUNTY BUILDING, ROOM 115
210 MARTIN LUTHER KING, JR. BLVD
MADISON, WI 53703
PHONE: (608) 261-9250
EMAIL: mmoder@cityofmadison.com

WATERMAIN:
MADISON WATER UTILITY
ATTN: PETE HOLMGREN
119 EAST OLIN AVE
MADISON, WI 53713
PHONE: (608) 261-5530
EMAIL: pholmgren@madisonwater.org

STREET LIGHTING
CITY OF MADISON
ATTN: BRIAN SMITH
CITY-COUNTY BUILDING, ROOM 110
215 MARTIN LUTHER KING, JR. BLVD
MADISON, WI 53703
PHONE: (608) 261-9625
EMAIL: bsmith@cityofmadison.com

ELECTRIC
MADISON GAS & ELECTRIC
ATTN: MARK BOHM
133 S. BLAIR STREET
P.O. BOX 1231
MADISON, WI 53703
PHONE: (608) 252-4730
EMAIL: mbohm@mge.com

GAS:
MADISON GAS & ELECTRIC
ATTN: SHAUN ENDRES
P.O. BOX 1231
MADISON, WI 53701
PHONE: (608) 252-7224
CELL: (608) 516-7913
EMAIL: sendres@mge.com
ATTN: MIKE SAVAGE
PHONE: (608) 252-7069
CELL: (608) 235-2345
EMAIL: msavage@mge.com

TELEPHONE & FIBER OPTICS:
AT&T
ATTN: CAROL ANASON
316 W. WASHINGTON AVENUE
MADISON, WI 53703
PHONE: (608) 252-2385
EMAIL: ca2624@att.com

CITY OF MADISON PARKS:
MALL MAINTENANCE SUPERVISOR
ATTN: TOM SKAIFE
CITY-COUNTY BUILDING, ROOM 104
210 MARTIN LUTHER KINGS, JR. BLVD.
MADISON, WI 53703
PHONE: (608) 266-6031
EMAIL: tskaife@cityofmadison.com

UW-MADISON UTILITIES:
PLUMBING/WATER
ATTN: MARCELLA OTTER
30 N. MILLS STREET, ROOM 210
MADISON, WI 53715
PHONE: (608) 265-3967
CELL: (608) 444-4373
EMAIL: motter@fpm.wisc.edu

UW-MADISON UTILITIES:
ELECTRICAL
ATTN: RICK WERRE
PHONE: (608) 263-3089
CELL: (608) 576-3386
EMAIL: rwerre@fpm.wisc.edu

UW-MADISON UTILITIES:
STEAM TUNNELS
ATTN: JEFF POLLEI
PHONE: (608) 225-0502
EMAIL: jpollei@fpm.wisc.edu
ATTN: KEVIN CORCORAN
PHONE: (608) 444-4371
EMAIL: kcorcoran@fpm.wisc.edu



Dial 811 or (800) 242-8511

www.DiggersHotline.com

**DENOTES UTILITIES THAT ARE NOT
DIGGERS HOTLINE MEMBERS

STATE STREET 700 / 800 BLOCKS
PROJECT NO. 53W1193

SHEET NO.
2

GENERAL NOTES AND UTILITIES

STATE STREET CITY OF MADISON

Revised 3/21/14 - Updated Contact
Information and Alignment Overview

STANDARD ABBREVIATIONS

AC	ACRES
AEW	APRON ENDWALL
AH	AHEAD
ALUM.	ALUMINUM
A.P.	ACCESS POINT
ASPH	ASPHALT
BK	BACK
BLK	BLOCK
BOC	BACK OF CURB
BOW	BACK OF SIDEWALK
BM	BENCHMARK
CABC	CRUSHED AGGREGATE BASE COURSE
CL	CLEAR
A.	CENTRAL ANGLE or DELTA
CONC	CONCRETE
CSM	CERTIFIED SURVEY MAP
CTH	COUNTY TRUNK HIGHWAY
CY	CUBIC YARD
D	DEGREE OF CURVE
DIA	DIAMETER
E	EAST
EB	EASTBOUND
EBS	EXCAVATION BELOW SUBGRADE
EOP	EDGE OF PAVEMENT
ET AL	AND OTHERS
EXIST or	EX. EXISTING
EW	END WALL
FOC	FACE OF CURB
FT	FOOT
FT2	SQUARE FEET
GN	GRID NORTH
GV	GAS VALVE
HB	HOSE BIB
HERCP	HORIZONTAL ELLIPTICAL REINFORCED CONCRETE PIPE
IE	INVERT ELEVATION
IN	INCH
IP	IRON PIPE
L	LENGTH
L	LENGTH OF CURVE
LC	LONG CHORD
LCB	LONG CHORD BEARING
LF	LINEAR FEET
LS	LUMP SUM
LT	LEFT
MH	MANHOLE
MI	MILE
MON	MONUMENT
N	NORTH
NB	NORTHBOUND
NO	NUMBER
O.C.	ON CENTER
P	PIPE
PT	POINT
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
PT	POINT OF TANGENCY
PL	PROPERTY LINE
POB	POINT OF BEGINNING
R	RADIUS
RP	REMOVE PIPE
R	RANGE
RCP	REINFORCED CONCRETE PIPE
RL or R/L	REFERENCE LINE
REQ'D	REQUIRED
RT	RIGHT
R/W	RIGHT-OF-WAY
RD	ROAD
S	SOUTH
SB	SOUTHBOUND
SO	SQUARE
SAN	SANITARY SEWER
SAS	SEWER ACCESS STRUCTURE
SEC	SECTION
STD	STANDARD
STH	STATE TRUNK HIGHWAY
STM	STORM SEWER
STA	STATION
STR	STRUCTURE
SY	SQUARE YARD
T	TANGENT
TAN	TANGENT
TEMP	TEMPORARY
TLE	TEMPORARY LIMITED EASEMENT
TYP	TYPICAL
T or TN	TOWN
W	WEST
WB	WESTBOUND
WM	WATERMAIN
X	EAST GRID COORDINATE
Y	NORTH GRID COORDINATE

PLOT SCALE:

PLOT NAME:

REV. DATE:

ORIGINATOR: CITY OF MADISON, STREETS DIVISION

ESTIMATE OF MATERIALS SUPPLIED BY CONTRACTOR:

* ESTIMATE OF MATERIALS IS FOR INFORMATION ONLY. ENGINEER DOES NOT GUARANTEE ACCURACY OF MATERIAL TAKE-OFF.
* ESTIMATE OF MATERIALS SHOWN ON THIS PAGE DOES NOT INCLUDE QUANTITIES FOR WATER UTILITY LISTED ON SHEET W9.

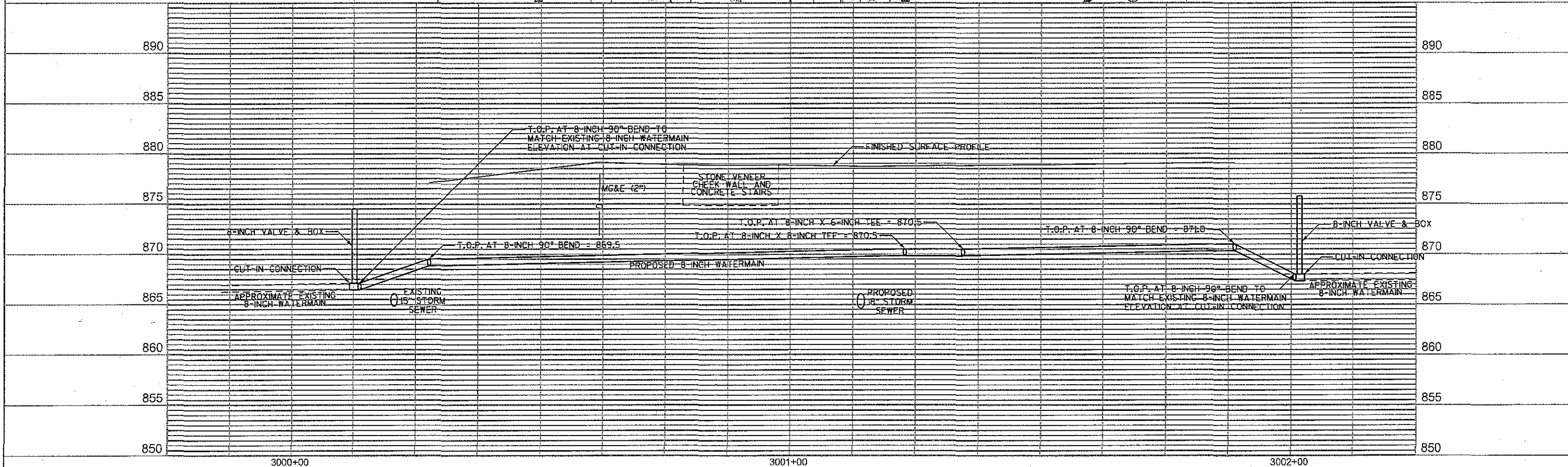
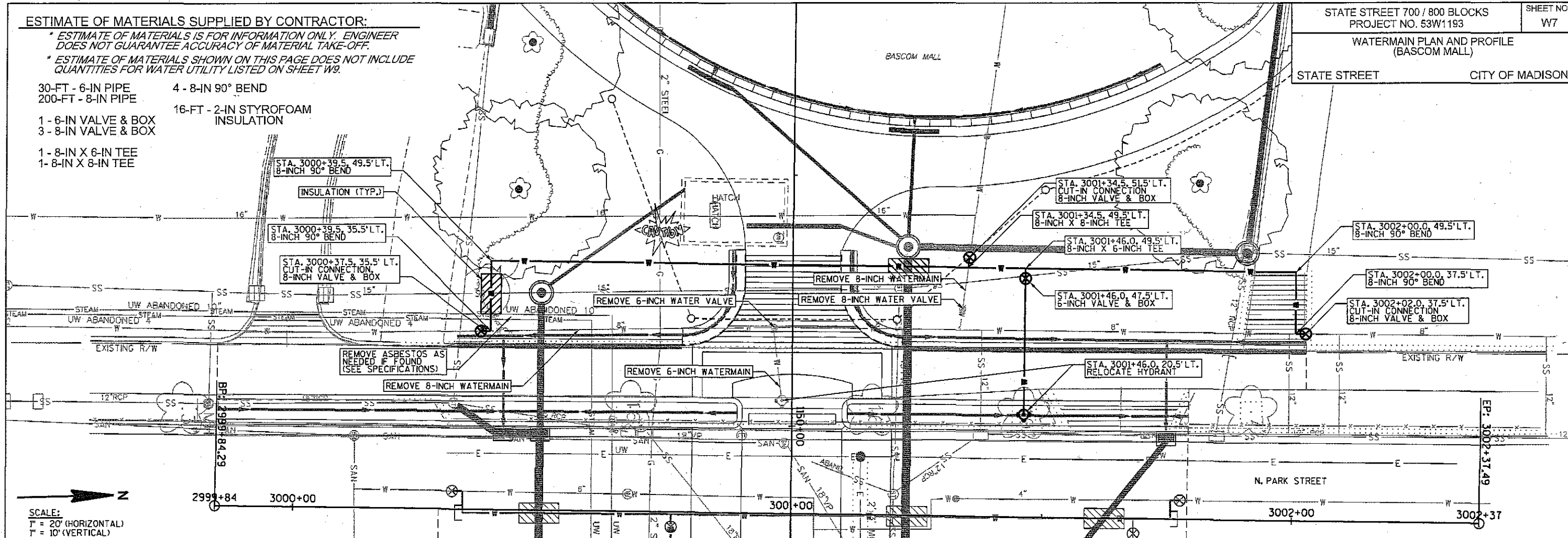
- 30-FT - 6-IN PIPE
- 200-FT - 8-IN PIPE
- 1 - 6-IN VALVE & BOX
- 3 - 8-IN VALVE & BOX
- 1 - 8-IN X 6-IN TEE
- 1 - 8-IN X 8-IN TEE
- 4 - 8-IN 90° BEND
- 16-FT - 2-IN STYROFOAM INSULATION

STATE STREET 700 / 800 BLOCKS
PROJECT NO. 53W1193

SHEET NO.
W7

WATERMAIN PLAN AND PROFILE
(BASCOM MALL)

STATE STREET CITY OF MADISON



STORM SEWER SCHEDULE

ALIGNMENT T CODES:

'S'= STATE STREET
'P'= PARK STREET

STATE STREET 700 / 800 BLOCKS
PROJECT NO. 53W1193

SHEET NO.
STM15

STORM SEWER SCHEDULE

STATE STREET

CITY OF MADISON

STRUCTURES

STRUC. NO.	STATION	LOCATION (OFFSET)	TYPE	TOP OF CASTING	EL	DEPTH	NOTES
1.0	1150'S+28.5	RT-5.00	4'X4' SAS	870.16	863.55	6.61	FP; R1550-0054
1.1	3001'P+23.1	RT-17.40	4'X4' SAS	869.63	863.69	5.94	LP; R3067-7004-R
1.2	3000'P+49.5	RT-19.90	4'X4' SAS	869.22	863.69	5.53	R3067-7004-R
2.0	1150'S+61.5	LT-5.00	4'X4' SAS	869.36	862.15	7.21	R1550-0054
2.1	1150'S+61.5	RT-30.50	H INLET	869.22	865.05	4.17	LP; R3067-CQ
3.0	1151'S+66.0	LT-5.00	4'X4' SAS	865.48	859.18	6.30	R1550-0054
3.1	1151'S+66.0	LT-11.25	H INLET	865.38	860.08	5.30	FP; LP; R3067-CQ
3.2	1151'S+67.9	LT-30.10	H INLET	865.89	860.18	5.71	LP; R1878-B7G
3.3	1151'S+66.0	RT-11.25	H INLET	865.38	861.26	4.12	LP; R3067-CQ
3.4	1151'S+73.0	RT-30.50	H INLET	866.35	861.35	4.99	LP; R1878-B7G
4.0	1152'S+58.0	LT-5.00	4'X4' SAS	865.03	858.90	6.13	FP; R1550-0054
4.1	1152'S+58.0	LT-11.25	H INLET	864.93	860.94	3.99	FP; LP; R3067-CQ
4.2	1152'S+58.0	RT-11.25	H INLET	864.93	860.98	3.95	LP; R3067-CQ
5.0	1152'S+92.5	LT-5.00	4'X4' SAS	865.04	858.30	6.24	FP; R1550-0054
6.0	1153'S+73.1	LT-5.00	4'X4' SAS	863.64	856.75	6.89	FP; R1550-0054
6.1	1153'S+84.3	LT-27.20	H INLET	863.30	859.80	3.50	R3067-CQ
6.2	1153'S+73.1	RT-9.97	H INLET	863.24	859.75	3.49	LP; R3067-CQ
6.3	1153'S+82.4	RT-13.74	H INLET	863.38	859.80	3.58	LP; R3067-CQ
7.0	1154'S+38.7	LT-5.00	4'X4' SAS	862.79	856.55	6.24	FP; R1550-0054
7.1	1154'S+41.7	RT-25.90	4'X4' SAS	863.08	858.45	4.63	R1550-0054
7.2	1154'S+24.1	RT-24.81	H INLET	863.16	858.79	4.37	R3067-CQ
7.3	1154'S+65.9	RT-25.91	H INLET	862.68	859.35	3.53	LP; R3067-CQ
8.0	1155'S+01.6	LT-5.00	4'X4' SAS	862.53	855.37	6.16	R1550-0054
8.1	1155'S+01.6	LT-21.43	H INLET	862.23	858.45	3.77	R3067-CQ
8.2	1154'S+95.1	LT-21.43	H INLET	862.25	858.51	3.74	R3067-CQ
9.0	1155'S+86.0	LT-5.00	4'X4' SAS	860.50	856.13	4.37	FP; R1550-0054
9.1	1155'S+86.0	LT-11.25	H INLET	860.40	857.59	2.81	FP; LP; R3067-CQ
9.2	1155'S+76.0	LT-11.25	H INLET	860.66	857.64	3.02	FP; R3067-CQ
9.3	1155'S+86.0	RT-11.25	H INLET	860.80	857.63	3.17	LP; R3067-CQ
10.0	1157'S+14.0	RT-29.00	3'X3' SAS	861.19	856.50	4.69	R1550-0054
10.1	1156'S+71.5	RT-29.00	3'X3' SAS	861.22	856.71	4.51	R1550-0054
10.2	1156'S+71.5	RT-147.90	H INLET	861.90	857.80	4.10	FP; LP
10.3	-	RT-34.67	SIDEWALK DRAIN	861.27	859.85	1.42	R4990-CX-P, BOLTED (10-FOOT LENGTH)
11.0	1157'S+14.0	LT-5.00	4'X4' SAS	860.33	855.78	4.55	FP; R1550-0054
11.1	1157'S+14.0	LT-11.25	H INLET	860.22	857.24	2.98	FP; LP; R3067-CQ
11.2	1157'S+14.0	RT-11.25	H INLET	860.62	856.41	4.21	LP; R3067-CQ
12.0	1158'S+02.0	LT-5.00	4'X4' SAS	860.42	855.53	4.89	FP; R1550-0054
12.1	1158'S+02.0	LT-11.25	H INLET	860.50	856.99	3.51	FP; LP; R3067-CQ
12.2	1158'S+02.0	RT-11.25	H INLET	860.20	857.03	3.17	LP; R3067-CQ
12.3	1157'S+92.0	RT-11.25	H INLET	860.34	857.08	3.26	R3067-CQ
13.0	3000'P+49.4	LT-15.30	H INLET	869.86	864.02	5.84	LP; R-3067C TYPE L
13.1	3000'P+42.1	LT-15.20	H INLET	869.77	864.30	5.47	LP; R-3067C TYPE L
13.2	3000'P+49.2	LT-43.40	4' DIA. SAS	876.31	864.80	11.51	R-1550 - UW
13.3	3000'P+39.6	RT-20.60	H INLET	869.22	864.74	4.48	R3067-7004-R
13.4	-	-	SIDEWALK DRAIN	DNA	NA	DNA	R4990-CX-P, BOLTED (45-FOOT LENGTH)
14.1	1148'S+75.6	RT-56.60	H INLET	885.50	881.50	4.00	R1878-B7G-A
15.0	1149'S+64.1	LT-23.00	4' DIA. SAS	879.25	864.55	14.70	R-1550 - UW
15.1	3001'P+90.3	LT-53.30	4' DIA. SAS	880.35	877.42	2.93	R-1550 - UW
15.2	3001'P+98.4	LT-122.80	H INLET	888.85	885.00	3.85	R1878-B7G-A
15.3	-	-	SIDEWALK DRAIN	DNA	DNA	DNA	R4990-CX-A, BOLTED (10-FOOT LENGTH)
15.4	-	-	SIDEWALK DRAIN	DNA	DNA	DNA	R4990-CX-A, BOLTED (10-FOOT LENGTH)
15.5	-	-	SIDEWALK DRAIN	DNA	DNA	DNA	R4990-CX-Q, BOLTED (20-FOOT LENGTH)
15.6	-	-	SIDEWALK DRAIN	DNA	DNA	DNA	R4990-CX-P, BOLTED (80-FOOT LENGTH)
16.0	3001'P+50.0	RT-17.20	H INLET	869.80	864.94	4.86	R3067-7004-R
16.1	3001'P+74.6	LT-16.00	H INLET	870.30	865.35	4.95	R-3067C TYPE L

ADJUST STRUCTURES

ID NO.	STATION	LOCATION (OFFSET)	TOP OF CASTING	TYPE
AS 4750-008	3000'P+32.4	LT-21.00	871.87	EX. SAS

STANDARD NOTES:

- ABBREVIATIONS: AE = APRON ENDWALL; RCP = REINFORCED CONCRETE PIPE; HERCP = HORIZONTAL ELLIPTICAL REINFORCED CONCRETE PIPE; DNA = DOES NOT APPLY; SAS = SEWER ACCESS STRUCTURE; LP = LOW POINT INLET STRUCTURE; FP = FIELD POURED STRUCTURE; TR = TOP OF CONCRETE ROOF; NCM = NO CROWN MATCH FOR PIPES
- APPROXIMATED DISCHARGE EL. GIVEN, ADJUST EL. AND PIPE SLOPE IN THE FIELD.
- TOP OF CASTING GRADE GIVEN IS THE TOP OF CURB FOR INLET STRUCTURES AND THE FLOWLINE OF THE CLOSED CASTING FOR SAS's.

- TOP OF CONCRETE ROOF (TR) IS 1.25' BELOW TOP OF CASTING UNLESS OTHERWISE NOTED.
- ALL REINFORCED CONCRETE PIPES TO BE CLASS III UNLESS OTHERWISE NOTED.
- SURVEY OR TO CONFIRM THAT ALL INLET STATION / OFFSET'S LINE UP WITH PROPOSED CURB AND GUTTER.
- ALL STRUCTURES CALLED OUT AS FIELD POURED SHALL BE FIELD POURED. ALL OTHER STRUCTURES (NOT INDICATED AS FIELD POURED) SHALL BE SUBMITTED TO CITY ENGINEERING FOR APPROVAL IF PRECAST STRUCTURES ARE PREFERRED. CONTACT GREG FRIES OF CITY ENGINEERING AT (608) 267-1199 FOR PRECAST APPROVALS, OR FAX SHOP DRAWINGS TO (608) 264-9275.

SPECIFIC NOTES:

- R-1550-UW = NEENAH R-1550 FRAME WITH TYPE B LID, NON-ROCKING, SELF SEALING, WITH CONCEALED PICKHOLE. STANDARD TEXT "STORM" CAST INTO THE TOP

UTILITY LINE OPENING SCHEDULE

ID NO.	STATION	LOCATION (OFFSET)	TYPE	NOTES
ULO 1	1150'S+40.5	RT-1.00	CHILLED WATER	
ULO 2	1150'S+32.5	LT-14.50	BURIED ELECTRIC	
ULO 3	1150'S+32.0	RT-28.50	GAS	3000'P+71.7, RT-15.00
ULO 4	1152'S+88.0	RT-29.00	GAS	
ULO 5	1153'S+77.0	LT-15.00	BURIED ELECTRIC	
ULO 6	1154'S+09.0	LT-5.00	TELEPHONE & BURIED ELECTRIC	UW ELECTRIC & SIGNAL
ULO 7	1154'S+44.0	LT-5.00	BURIED ELECTRIC	
ULO 8	1154'S+27.5	RT-24.50	GAS	
ULO 9	1155'S+01.5	LT-15.00	BURIED ELECTRIC	
ULO 10	1155'S+01.5	LT-2.00	GAS	
ULO 11	1155'S+86.0	LT-2.00	GAS	
ULO 12	1156'S+63.0	LT-2.00	GAS & BURIED ELECTRIC	
ULO 13	1157'S+14.0	LT-2.00	GAS	
ULO 14	1158'S+02.0	LT-1.00	GAS	
ULO 15	3000'P+49.5	RT-22.50	CHILLED WATER & GAS	
ULO 16	3000'P+39.5	RT-22.50	CHILLED WATER & GAS	
ULO 17	3000'P+49.5	LT-11.00	BURIED ELECTRIC	
ULO 18	3001'P+23.0	RT-21.50	CHILLED WATER	1150'S+39.0, LT-23.50
ULO 19	3001'P+23.0	LT-11.50	BURIED ELECTRIC	1150'S+06.0, LT-23.00
ULO 20	3001'P+19.5	LT-59.00	WATER	1149'S+58.0, LT-19.20
ULO 21	3001'P+50.0	RT-21.00	CHILLED WATER	
ULO 22	3001'P+72.0	LT-11.50	BURIED ELECTRIC	
ULO 23	3001'P+35.0	LT-53.50	WATER	1149'S+64.0, LT-35.50
ULO 24	1150'S+61.5	LT-14.00	BURIED ELECTRIC	
ULO 25	1151'S+65.5	LT-13.50	BURIED ELECTRIC	
ULO 26	1151'S+73.0	RT-32.00	GAS	
ULO 27	1152'S+92.5	LT-14.50	BURIED ELECTRIC	
ULO 28	1153'S+64.0	LT-5.00	STEAM	UW STEAM BOX
ULO 29	1154'S+41.7	RT-25.90	BURIED ELECTRIC	
ULO 30	1153'S+92.0	LT-5.00	BURIED ELECTRIC	UW DUCT BANK
ULO 31	1154'S+32.0	LT-5.00	BURIED ELECTRIC	UW DUCT BANK
RACM 1	1150'S+35.0	RT-38.00	ABANDONED STEAM	3000'P+62.0, RT-17.50
RACM 2	1155'S+86.0	RT-27.00	ABANDONED STEAM	
RACM 3	1156'S+75.0	RT-27.00	ABANDONED STEAM	
RACM 4	1156'S+68.5	RT-147.00	ABANDONED STEAM	

STORM SEWER REMOVAL SCHEDULE

STATE STREET

CITY OF MADISON

STORM REMOVAL SCHEDULE

ALIGNMENT CODES:

'S' = STATE STREET
'P' = PARK STREET

REMOVE STORM STRUCTURES

ID NO.	STRUCTURE	STATION	LOCATION (OFFSET)	TYPE
R-1	DNE	1149'S'+72.4	LT-21.40	SAS
R-2	AS 4749-001	1150'S'+13.5	LT-20.50	SAS
R-3	IN 4750-009	3000'P'+70.4	LT-15.80	DOUBLE INLET
R-4	IN 4749-002	3001'P'+37.5	LT-16.50	INLET
R-5	AS 4750-001	1150'S'+31.9	RT-4.30	SAS
R-6	DNE	1150'S'+36.5	LT-19.00	INLET
R-7	IN 4750-003	1150'S'+62.9	RT-29.80	INLET
R-8	DNE	3000'P'+56.6	RT-20.70	DOUBLE INLET
R-9	DNE	1150'S'+61.6	LT-19.40	CATCHBASIN
R-10	IN 4749-016	1151'S'+87.4	LT-20.00	CATCHBASIN
R-11	DNE	1152'S'+56.7	LT-0.80	CATCHBASIN
R-12	UW 4750-013	1153'S'+02.5	RT-24.20	SAS
R-13	AS 4750-080	1153'S'+29.1	RT-24.00	SAS
R-14	DNE	1153'S'+14.0	LT-19.10	CATCHBASIN
R-15	DNE	1153'S'+42.0	RT-13.00	CATCHBASIN
R-16	DNE	1153'S'+75.5	LT-3.30	CATCHBASIN
R-17	AS 4750-002	1154'S'+02.0	RT-4.90	SAS
R-18	AS 4850-147	1154'S'+40.8	RT-6.70	SAS
R-19	AS 4850-148	1154'S'+41.7	RT-25.90	SAS
R-20	AS 4849-065	1154'S'+58.6	LT-19.00	SAS
R-21	DNE	1154'S'+75.3	LT-64.60	CATCHBASIN
R-22	DNE	1154'S'+27.6	LT-63.90	CATCHBASIN
R-23	AS 4850-016	1154'S'+58.2	RT-5.00	SAS
R-24	UW 4850-024	1154'S'+99.4	RT-7.90	CATCHBASIN
R-25	UW 4849-047	1155'S'+21.7	LT-0.90	CATCHBASIN
R-26	UW 4846-046	1155'S'+40.3	LT-10.90	CATCHBASIN
R-27	UW 4850-023	1155'S'+71.9	RT-17.20	CATCHBASIN
R-28	DNE	1155'S'+77.5	LT-23.20	CATCHBASIN
R-29	UW 4849-045	1156'S'+34.8	LT-4.90	CATCHBASIN
R-30	DNE	1156'S'+68.6	RT-38.60	INLET
R-31	DNE	1156'S'+77.1	LT-5.00	CATCHBASIN
R-32	UW 4849-044	1157'S'+12.4	LT-4.70	CATCHBASIN
R-33	UW 4849-043	1157'S'+59.7	LT-4.50	CATCHBASIN
R-34	DNE	1158'S'+35.9	LT-15.10	CATCHBASIN
R-35	DNE	1158'S'+36.0	RT-20.20	CATCHBASIN
R-36	IN 4749-004	3001'P'+90.3	LT-53.30	INLET

ABANDON INLET

ID NO.	STRUCTURE	STATION	LOCATION (OFFSET)
AI-1	DNE	1155'S'+50.0	LT-49.00

ABANDON STORM SEWER PIPE

ID NO.	ABANDON FROM	ABANDON TO	SIZE	TYPE	LENGTH	NOTES
AB-1	AS 4849-065	AS 4849-031	15"	RCP	5'	REMOVE AS CLOSE AS POSSIBLE TO AS 4849-031
AB-2	DNE	IN 4749-003	12"	RCP	15'	

STORM SEWER PIPE REMOVALS

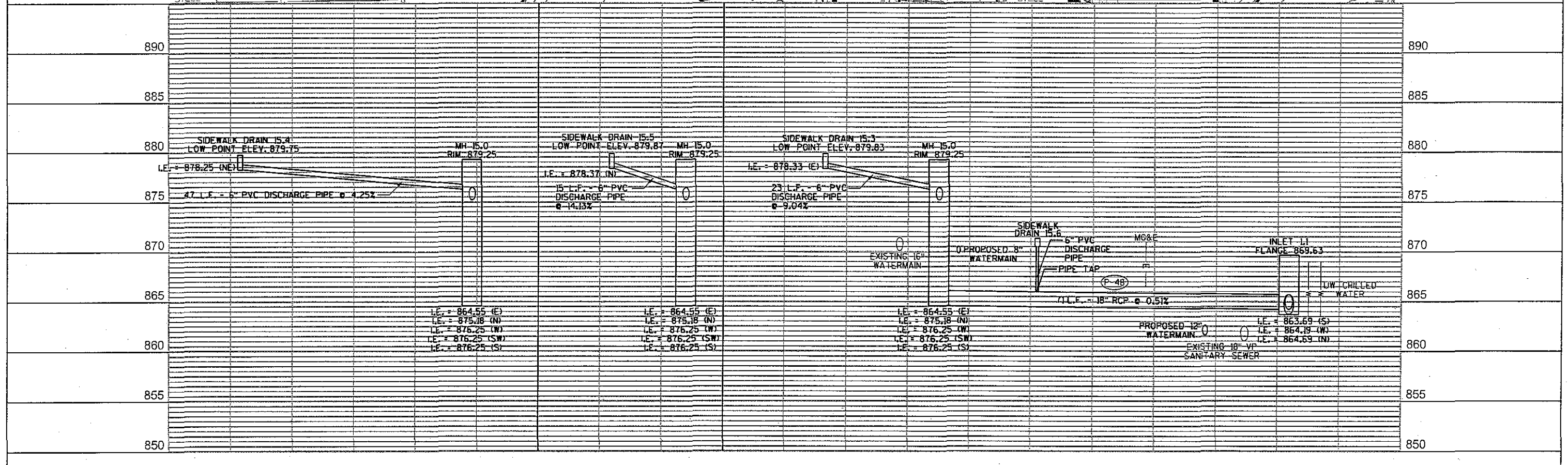
ID NO.	REMOVE FROM	REMOVE TO	SIZE	TYPE	LENGTH
RP-1	DNE	AS 4749-001	15"	PVC	41
RP-2	AS 4749-001	DNE	15"	RCP	48
RP-3	AS 4749-001	IN 4749-002	12"	RCP	21
RP-4	AS 4749-001	18' SW of AS 4749-001	12"	RCP	18
RP-5	AS 4750-001	DNE	18"	RCP	23
RP-6	AS 4750-001	IN 4750-008	18"	RCP	43
RP-7	AS 4750-001	DNE	18"	RCP	44
RP-8	AS 4750-001	AS 4750-002	24"	RCP	370
RP-9	DNE	DNE	15"	RCP	252
RP-10	IN 4750-003	Tap 26' N of IN 4750-003	12"	RCP	26
RP-11	Tap at Sta. 1151+58, 19' LT.	12' N of Tap	4"	PVC	12
RP-12	IN 4749-016	Tap 12' S of IN 4749-016	12"	RCP	12
RP-13	DNE	Tap 6' S of Catchbasin	12"	RCP	6
RP-14	DNE	AS 4849-065	15"	RCP	145
RP-15	DNE	Tap 8' N of Catchbasin	6"	PVC	8
RP-16	DNE	Tap 8' S of Catchbasin	6"	PVC	8
RP-17	AS 4750-002	AS 4850-016	14" x 23"	HERCOP	56
RP-18	AS 4750-002	AS 4850-147	14" x 23"	HERCOP	39
RP-19	AS 4850-147	AS 4850-016	18"	PVC	17
RP-20	AS 4850-147	AS 4850-148	15"	PVC	19
RP-21	AS 4850-148	AS 4750-080	12"	RCP	113
RP-22	AS 4750-080	UW 4750-013	12"	RCP	27
RP-23	UW 4750-013	UW 4750-011	12"	RCP	18
RP-24	AS 4849-065	AB-1	15"	RCP	409
RP-25	AS 4850-016	9' NW of IN 4850-020	12"	OMP	23
RP-26	AS 4850-016	TP 4850-022	30"	RCP	413
RP-27	Tap at Sta. 1154+77, 19' LT.	DNE	12"	RCP	46
RP-28	DNE	DNE	8"	RCP	48
RP-29	UW 4850-024	Tap 3' N of UW 4850-024	12"	RCP	3
RP-30	UW 4849-047	Tap 6' S of UW 4849-047	12"	RCP	6
RP-31	UW 4846-046	Tap 16' S of UW 4846-046	12"	RCP	16
RP-32	UW 4850-023	Tap 12' N of UW 4850-023	12"	RCP	12
RP-33	DNE	Tap 5' S of Catchbasin	12"	RCP	5
RP-34	UW 4849-045	Tap 10' S of UW 4849-045	12"	RCP	10
RP-35	DNE	Tap 34' N of Catchbasin	12"	RCP	34
RP-36	DNE	Tap 11' S of Catchbasin	12"	RCP	11
RP-37	UW 4849-044	Tap 11' S of UW 4849-044	12"	RCP	11
RP-38	UW 4849-043	Tap 10' S of UW 4849-043	12"	RCP	10
RP-39	DNE	Tap 21' S of Catchbasin	12"	RCP	21
RP-40	DNE	Tap 14' N of Catchbasin	12"	RCP	14
RP-41	IN 4750-009	AS 4750-008	15"	RCP	36
RP-42	Connection at Sta. 3000+49, 43' LT.	DNE	15"	RCP	72
RP-43	DNE	IN 4749-004	15"	RCP	70
RP-44	IN 4749-002	Connection at Sta. 3001+65, 16' LT.	12"	RCP	28
RP-45	IN 4749-004	AB-2	12"	RCP	22

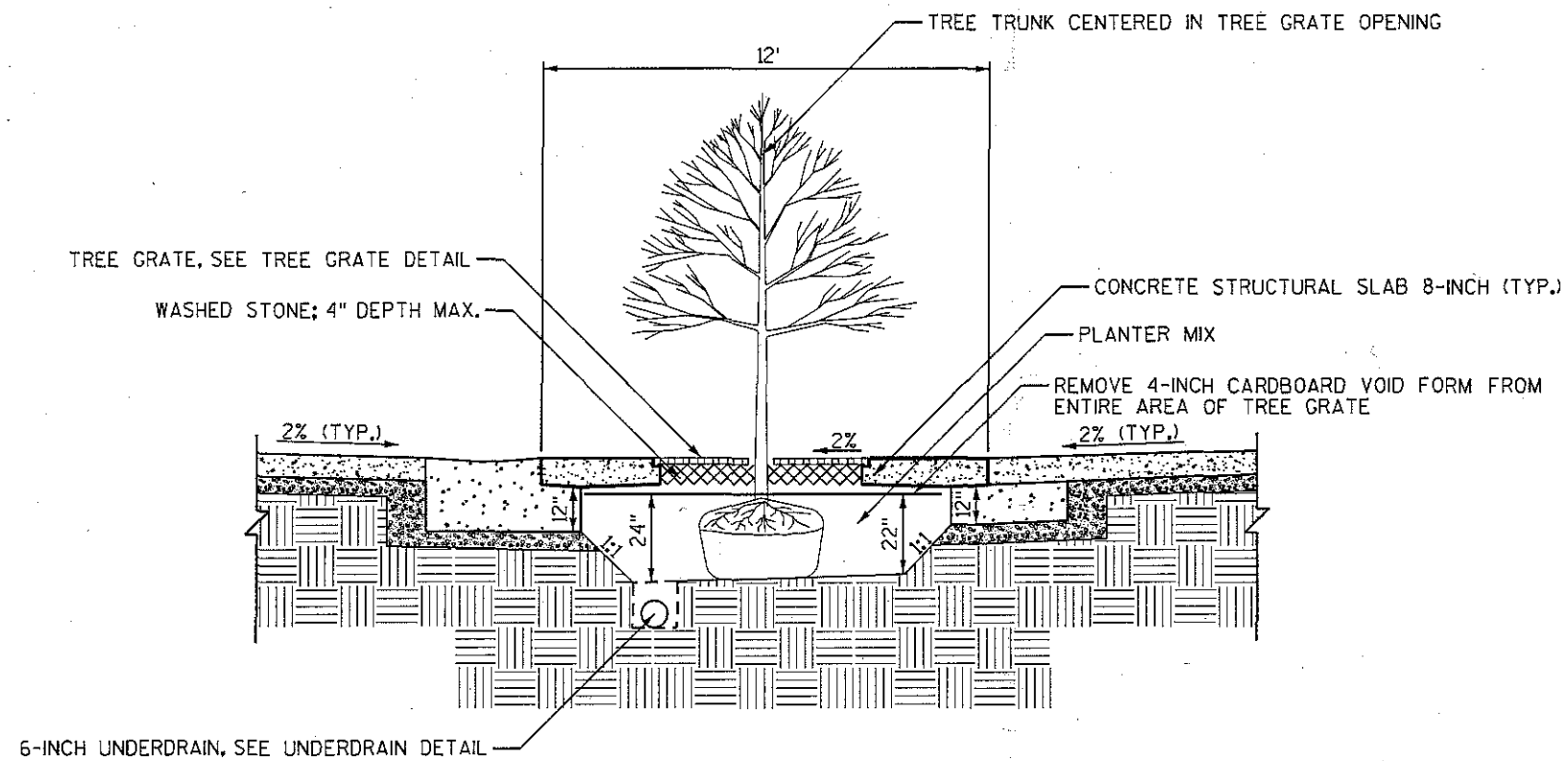
STATE STREET CITY OF MADISON

EXISTING R/W

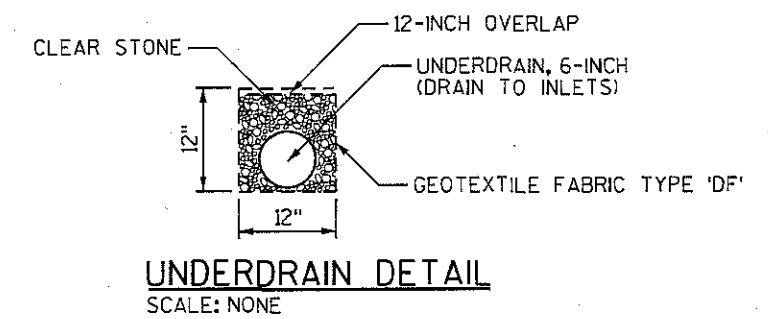
STATE STREET

SCALE:
1" = 20' (HORIZONTAL)
1" = 10' (VERTICAL)





TREE PLANTING - TREE GRATE CONDITION
SCALE: NONE



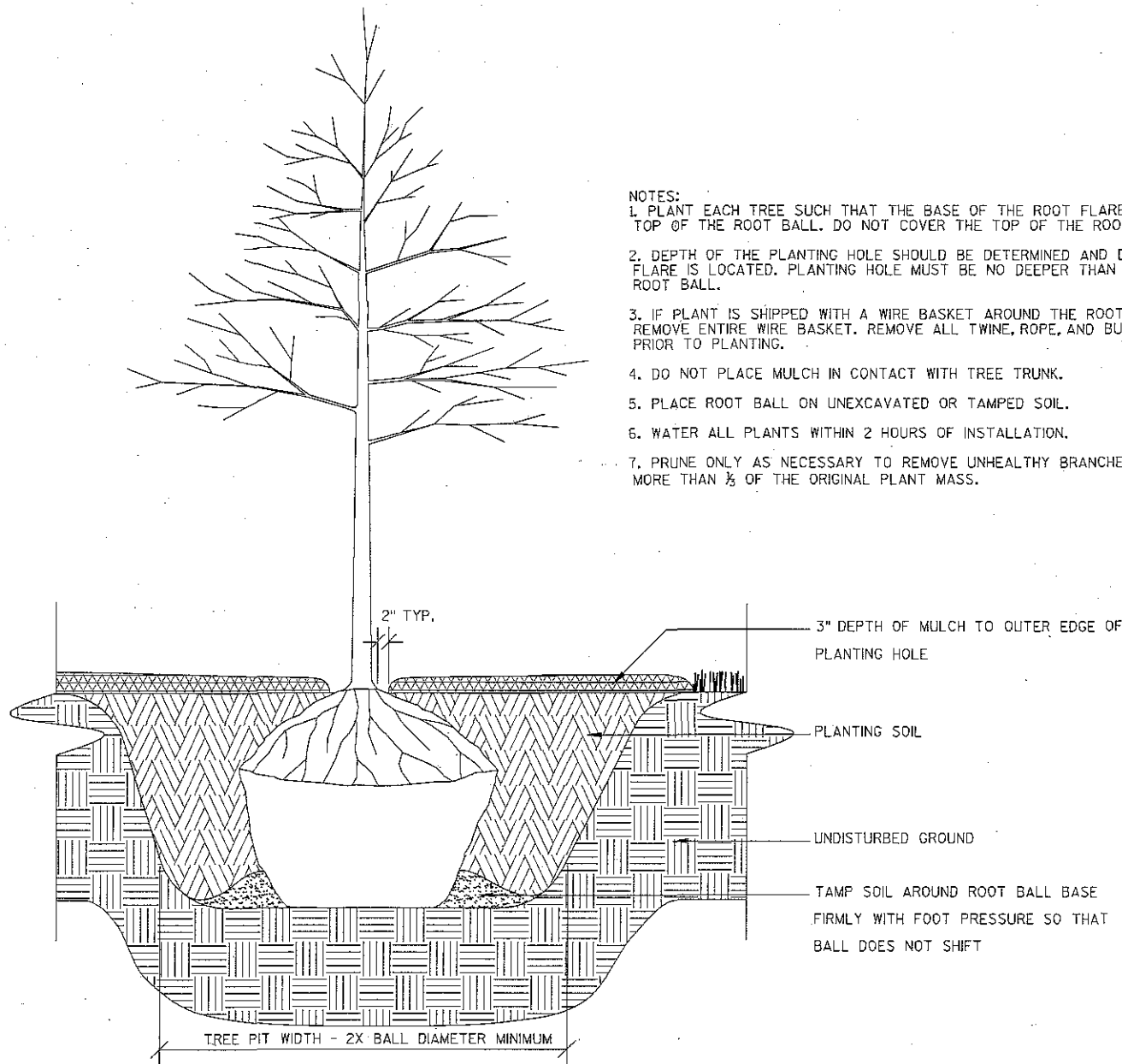
PLOT SCALE:

PLOT NAME:

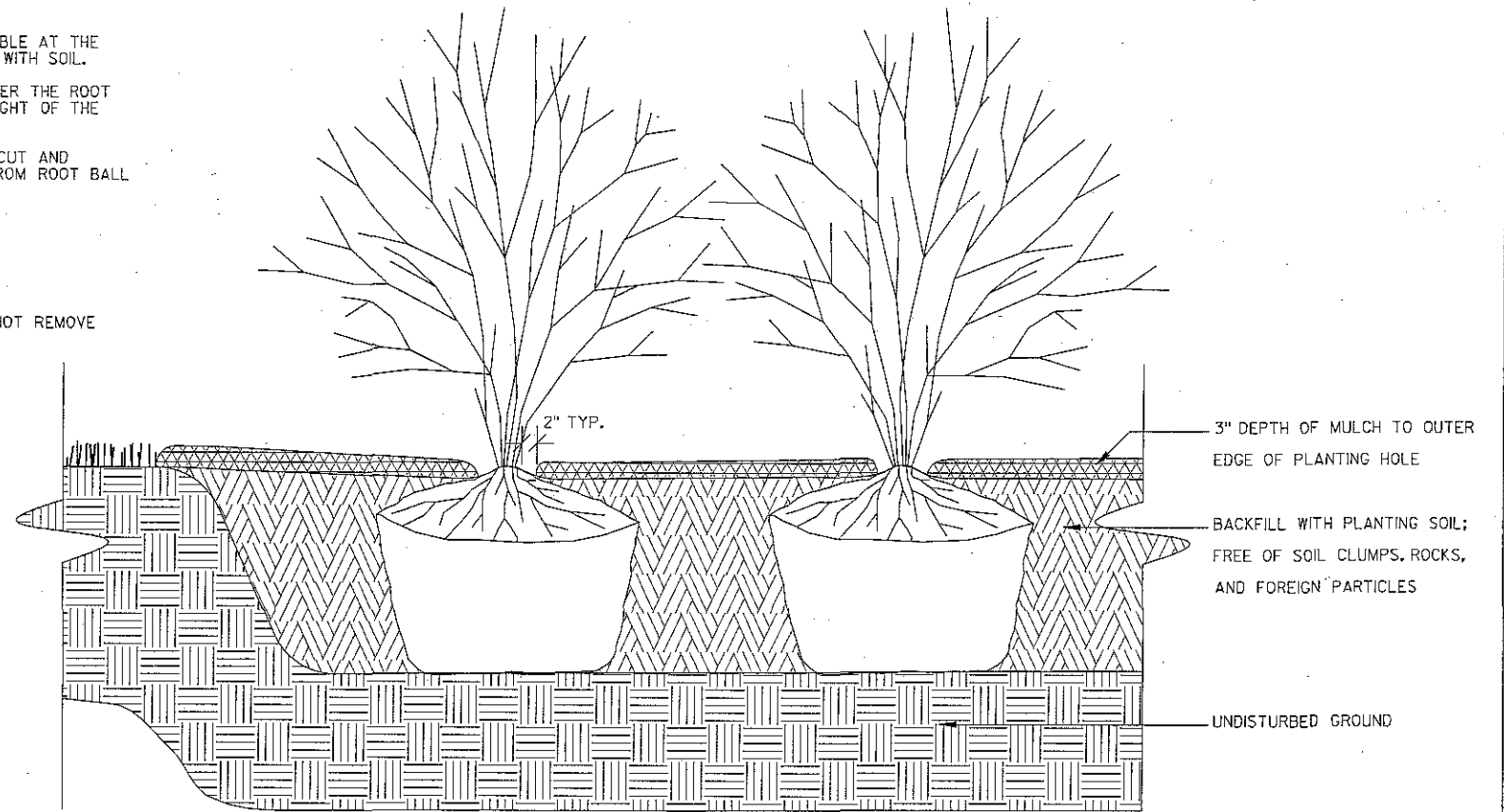
REV. DATE:

ORIGINATOR: CITY OF MADISON, STREET'S DIVISION

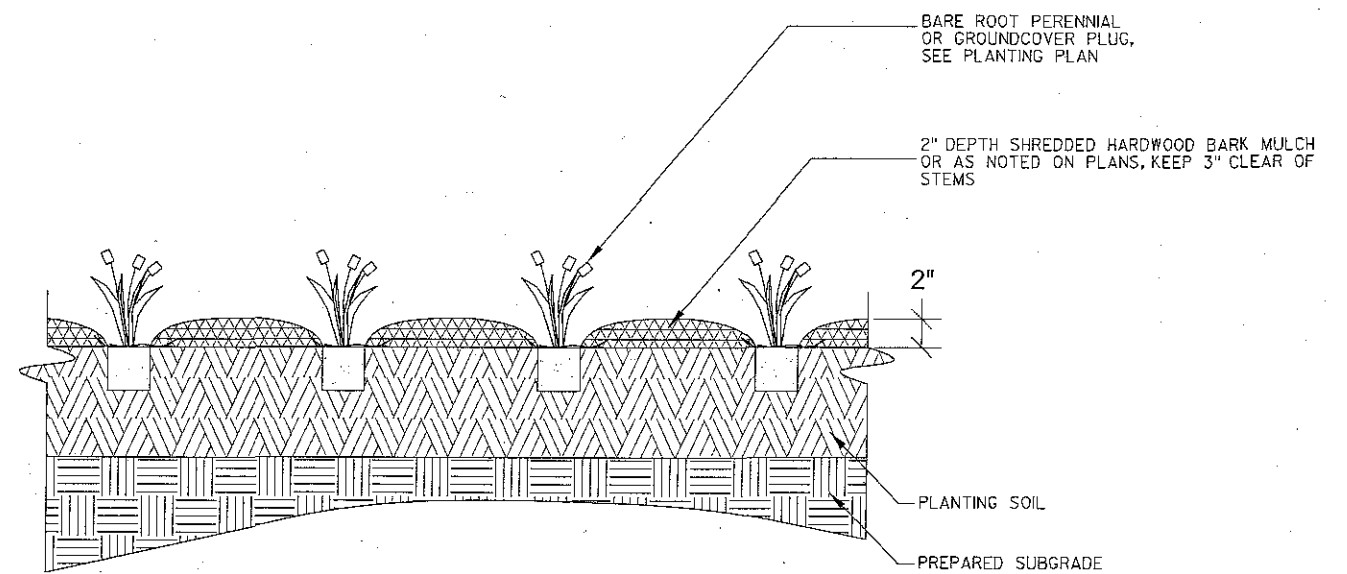
- NOTES:
1. PLANT EACH TREE SUCH THAT THE BASE OF THE ROOT FLARE IS VISIBLE AT THE TOP OF THE ROOT BALL. DO NOT COVER THE TOP OF THE ROOT BALL WITH SOIL.
 2. DEPTH OF THE PLANTING HOLE SHOULD BE DETERMINED AND DUG AFTER THE ROOT FLARE IS LOCATED. PLANTING HOLE MUST BE NO DEEPER THAN THE HEIGHT OF THE ROOT BALL.
 3. IF PLANT IS SHIPPED WITH A WIRE BASKET AROUND THE ROOT BALL, CUT AND REMOVE ENTIRE WIRE BASKET. REMOVE ALL TWINE, ROPE, AND BURLAP FROM ROOT BALL PRIOR TO PLANTING.
 4. DO NOT PLACE MULCH IN CONTACT WITH TREE TRUNK.
 5. PLACE ROOT BALL ON UNEXCAVATED OR TAMPED SOIL.
 6. WATER ALL PLANTS WITHIN 2 HOURS OF INSTALLATION.
 7. PRUNE ONLY AS NECESSARY TO REMOVE UNHEALTHY BRANCHES. DO NOT REMOVE MORE THAN $\frac{1}{3}$ OF THE ORIGINAL PLANT MASS.



1 TREE PLANTING
PL6 1"=1'-0"



2 SHRUB PLANTING
PL6 1"=1'-0"



3 PERENNIAL PLANTING
PL6 1"=1'-0"

PLOT SCALE:

PLOT NAME:

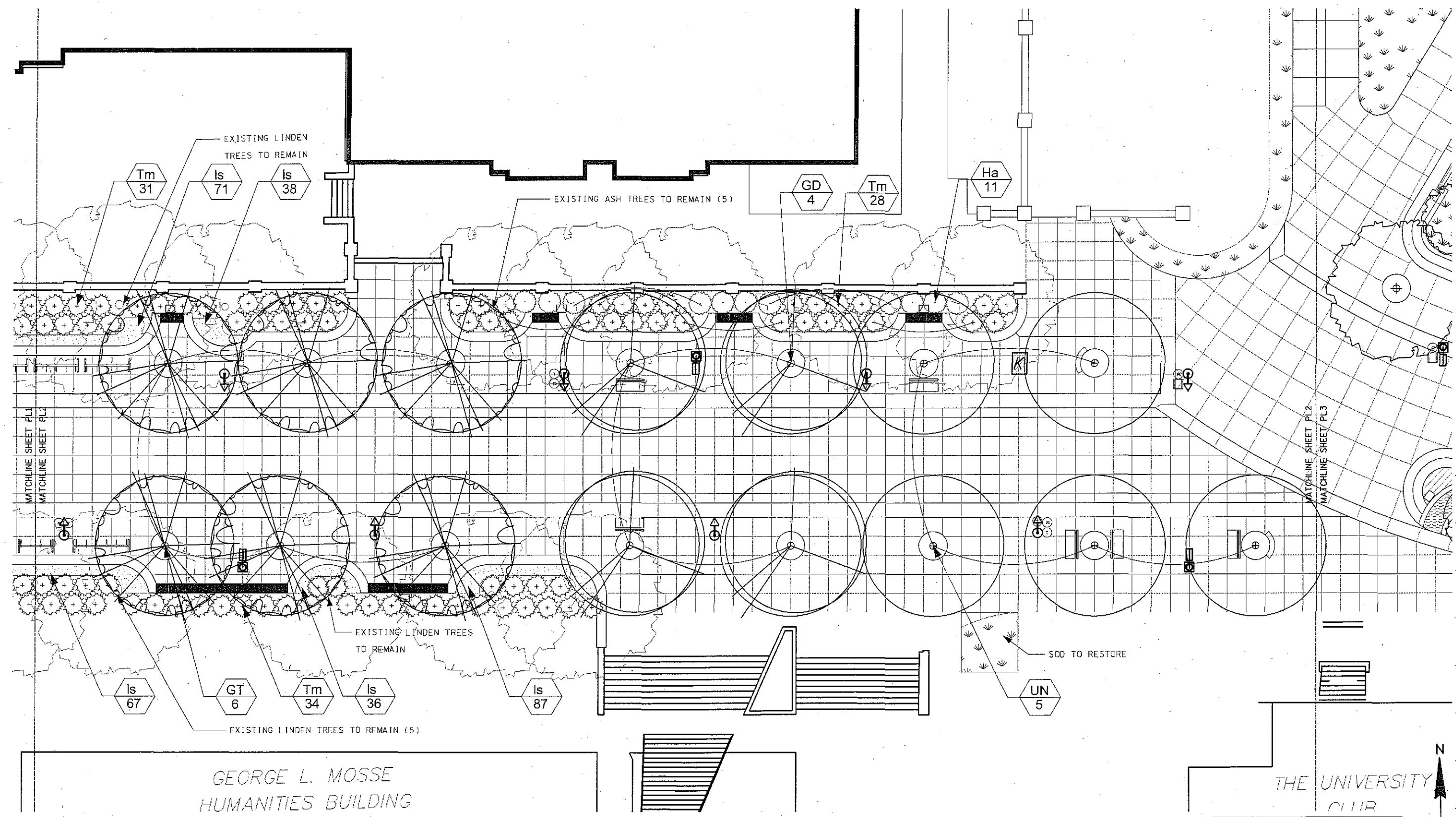
REV. DATE:

ORIGINATOR: CITY OF MADISON, STREETS DIVISION

PLANTING PLAN

STATE STREET

CITY OF MADISON



GEORGE L. MOSSE
HUMANITIES BUILDING

THE UNIVERSITY
CLUB



1 PLANTING PLAN - 800 BLOCK
PL2 1"=20' @ 11X17

PLOT SCALE:

PLOT NAME:

REV. DATE:

ORIGINATOR: CITY OF MADISON, STREET'S DIVISION

PLOT SCALE: _____

PLOT NAME: _____

REV. DATE: _____

ORIGINATOR: CITY OF MADISON, STREETS DIVISION

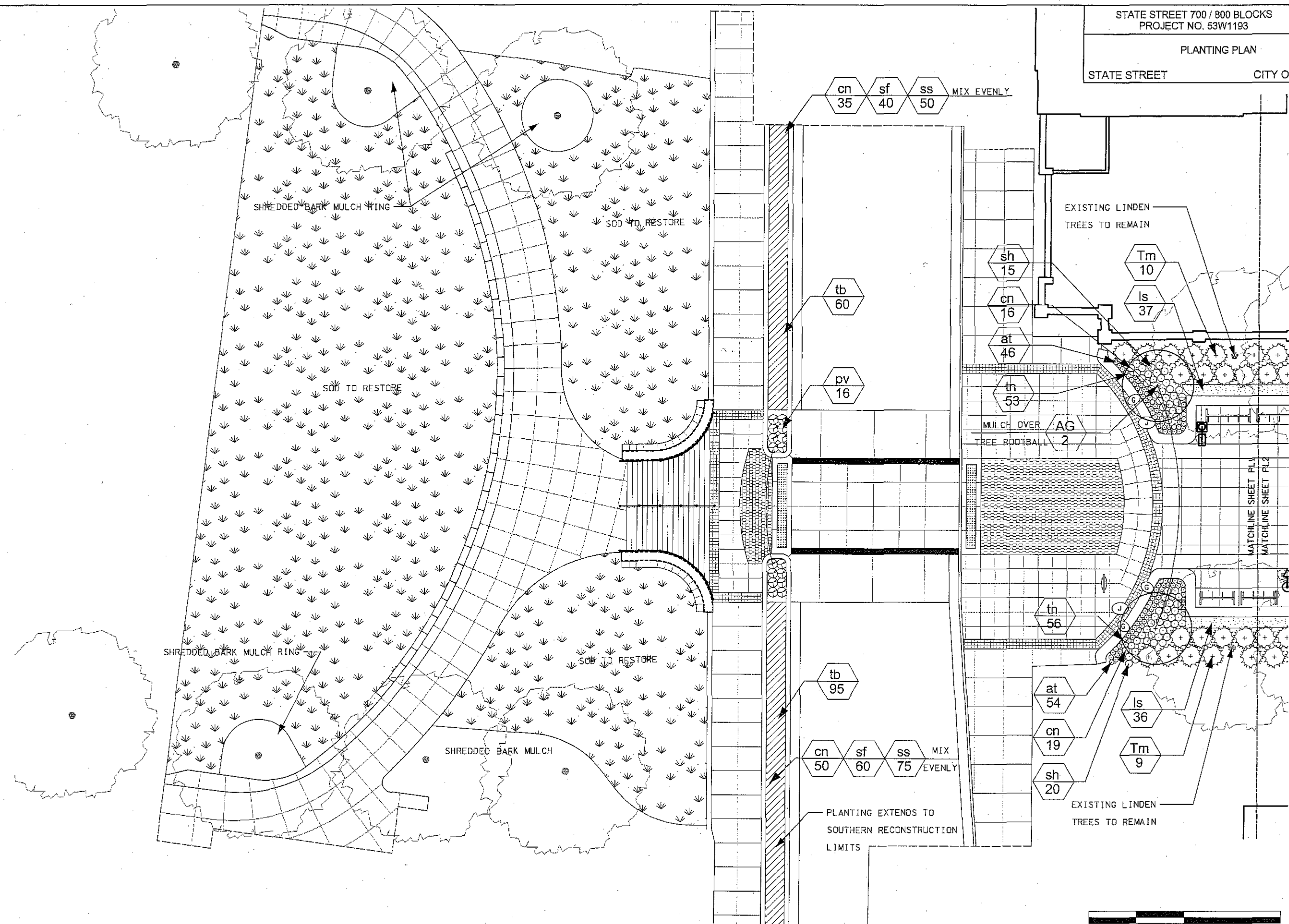
STATE STREET 700 / 800 BLOCKS
PROJECT NO. 53W1193

SHEET NO.
PL1

PLANTING PLAN

STATE STREET

CITY OF MADISON

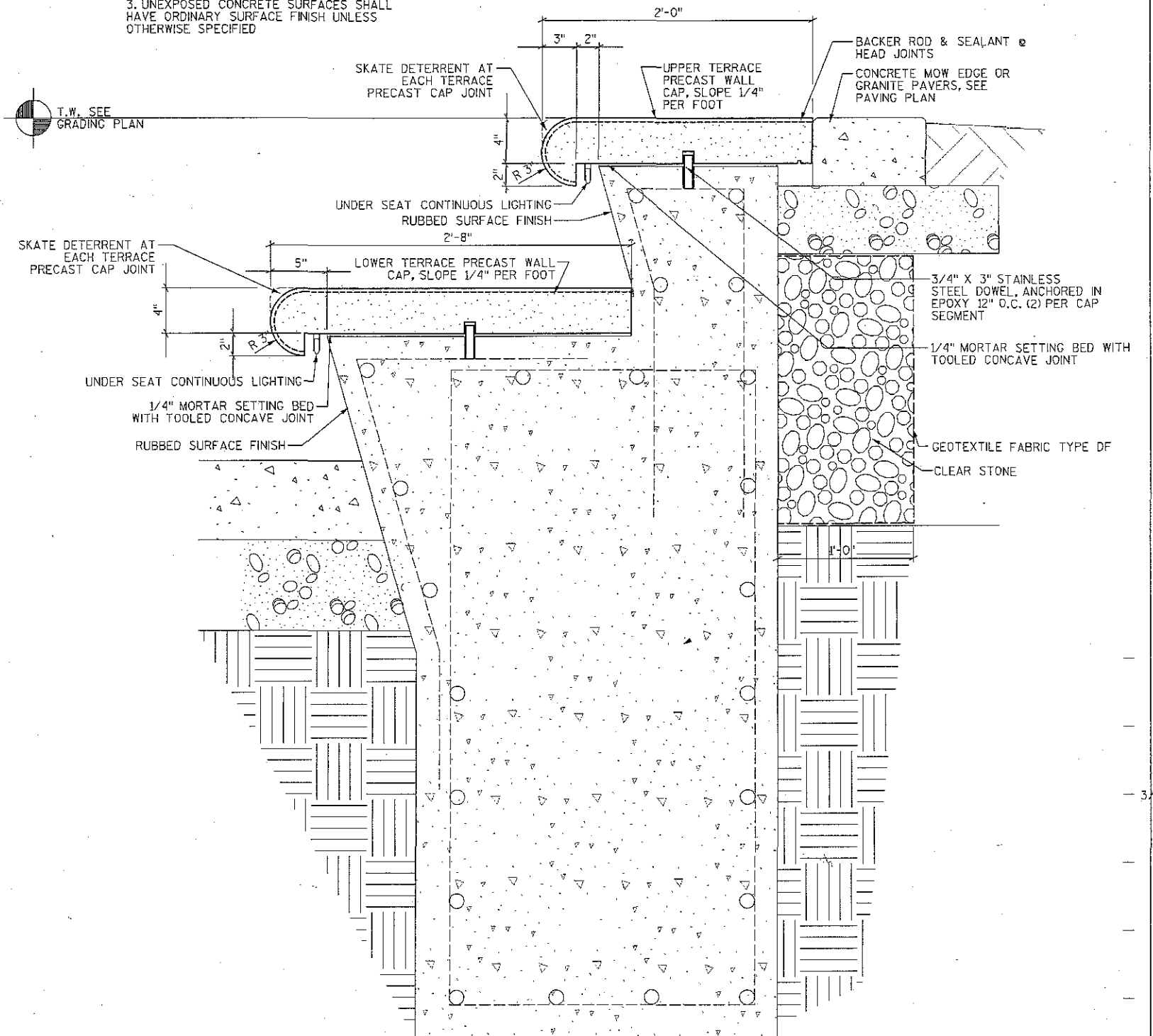


1 PL1 PLANTING PLAN - BASCOM HILL/ PARK STREET
1"=20' @ 11X17

FILE NAME: \$\$...designfile...\$\$

DATE: \$\$...plottingdate...\$\$

- NOTE:
1. SEE WALL DETAIL FOR WALL DIMENSIONS & REINFORCING
2. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR PRECAST WALL CAP
3. UNEXPOSED CONCRETE SURFACES SHALL HAVE ORDINARY SURFACE FINISH UNLESS OTHERWISE SPECIFIED



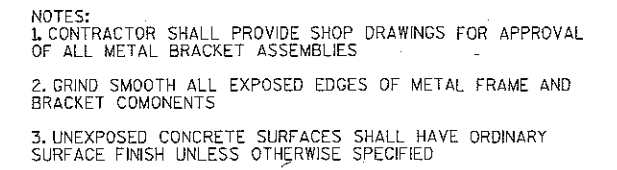
1
S-26 DOUBLE TERRACE SEATING @ LIBRARY MALL LAWN
1"=1'-0"

PLOT SCALE:

PLOT NAME:

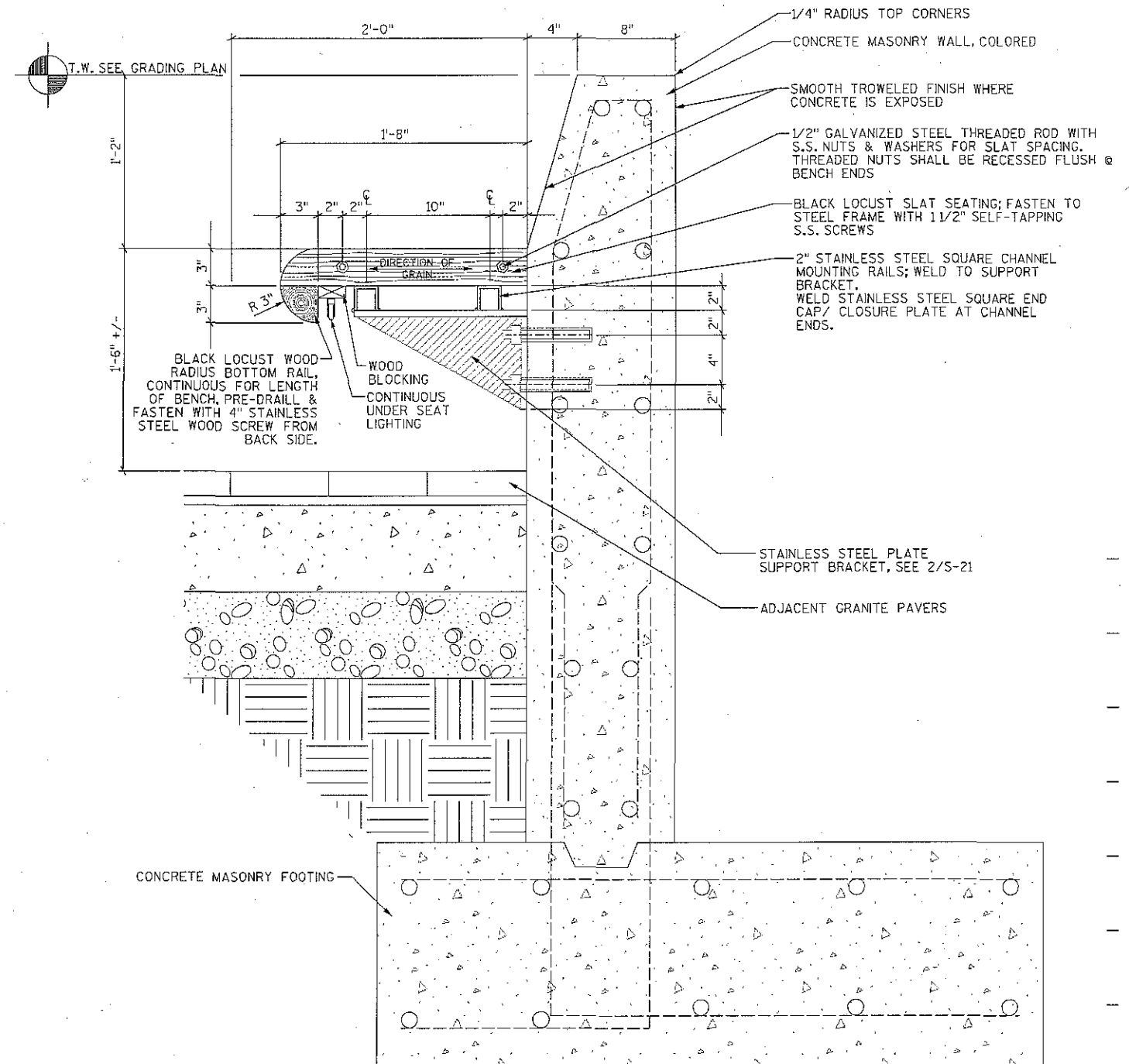
REV. DATE:

ORIGINATOR: CITY OF MADISON, STREETS DIVISION



NOTES:

1. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR APPROVAL
2. GRIND SMOOTH ALL EXPOSED BRACKET EDGES

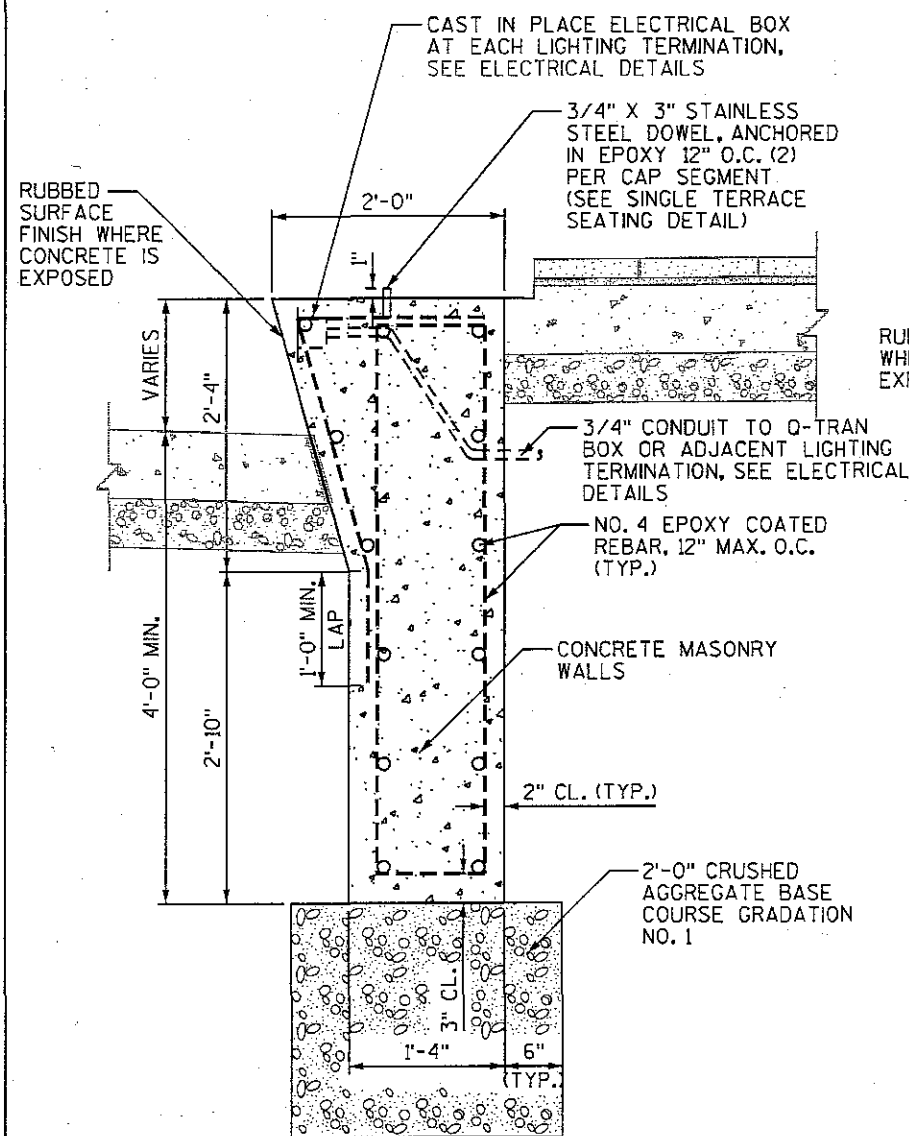


3
5-21 CAST-IN-PLACE CONCRETE WALL WITH CANTILEVER SEATING
1"=1'-0"

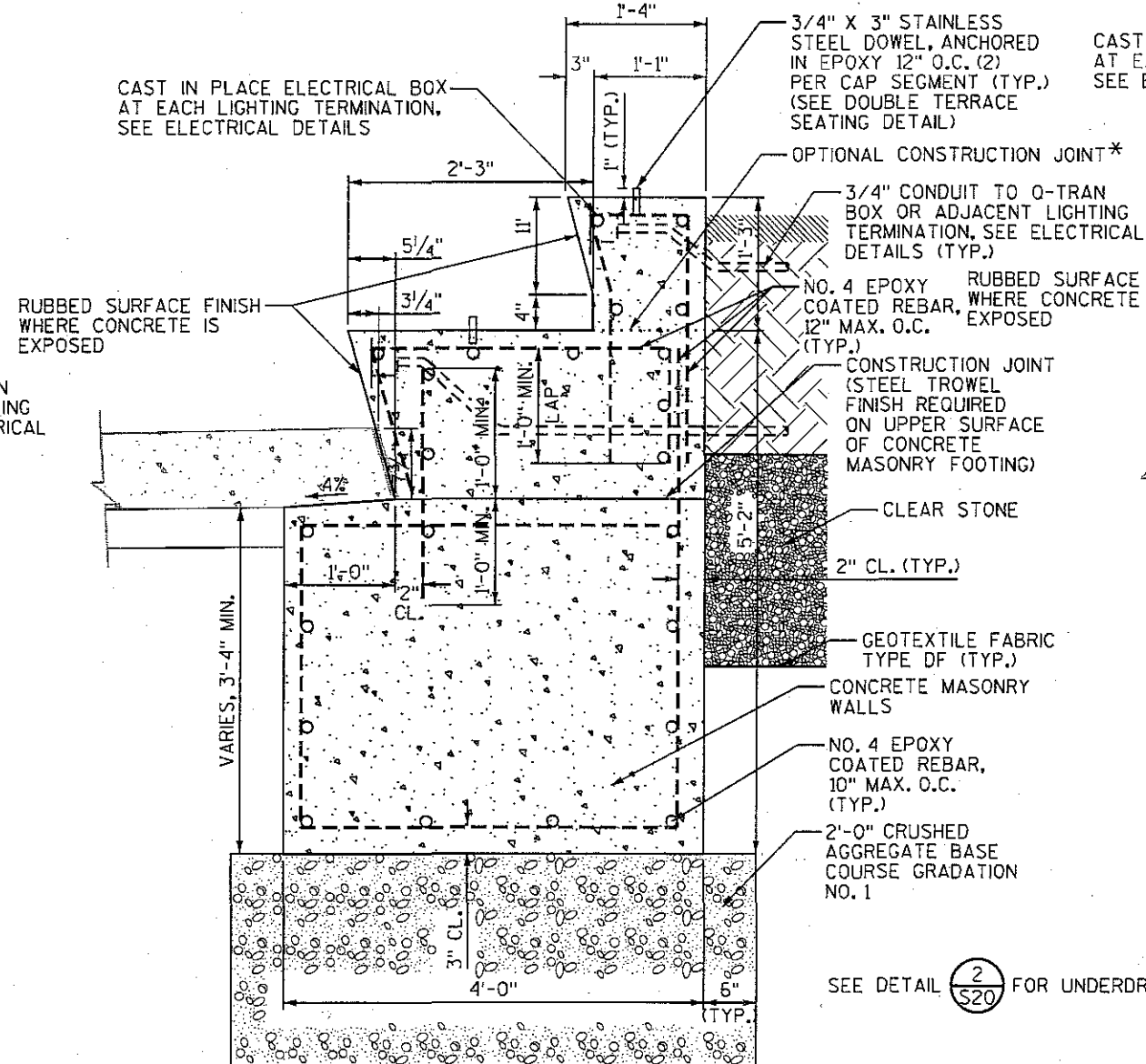
NOTES:

1. ALL REBAR SHALL MAINTAIN 2" MIN. CLEARANCE FROM EXPOSED EDGES UNLESS OTHERWISE NOTED.
2. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR PRECAST WALL CAPS.
3. PROVIDE SLEEVES FOR IRRIGATION AND ELECTRICAL ITEMS AS SHOWN ON THE PARKS WATERING AND ELECTRICAL PLAN SHEETS.
4. UNEXPOSED CONCRETE SURFACES SHALL HAVE ORDINARY FINISH UNLESS OTHERWISE SPECIFIED.

FORM FOOTING FOR DOUBLE TERRACE SEAT WALL AROUND EXISTING ELECTRICAL VAULTS AT LIBRARY MALL LAWN. ADJUST POSITION OF EPOXY COATED BAR STEEL REINFORCEMENT AROUND ELECTRICAL VAULTS TO PROVIDE 2" MINIMUM CLEARANCE. IF REINFORCEMENT IS CUT OR DAMAGED, COAT CUT OR DAMAGED SURFACES WITH EPOXY IN ACCORDANCE WITH SUBSECTION 505.2.4.2 OF THE LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION OF THE STATE OF WISCONSIN, DEPARTMENT OF TRANSPORTATION.

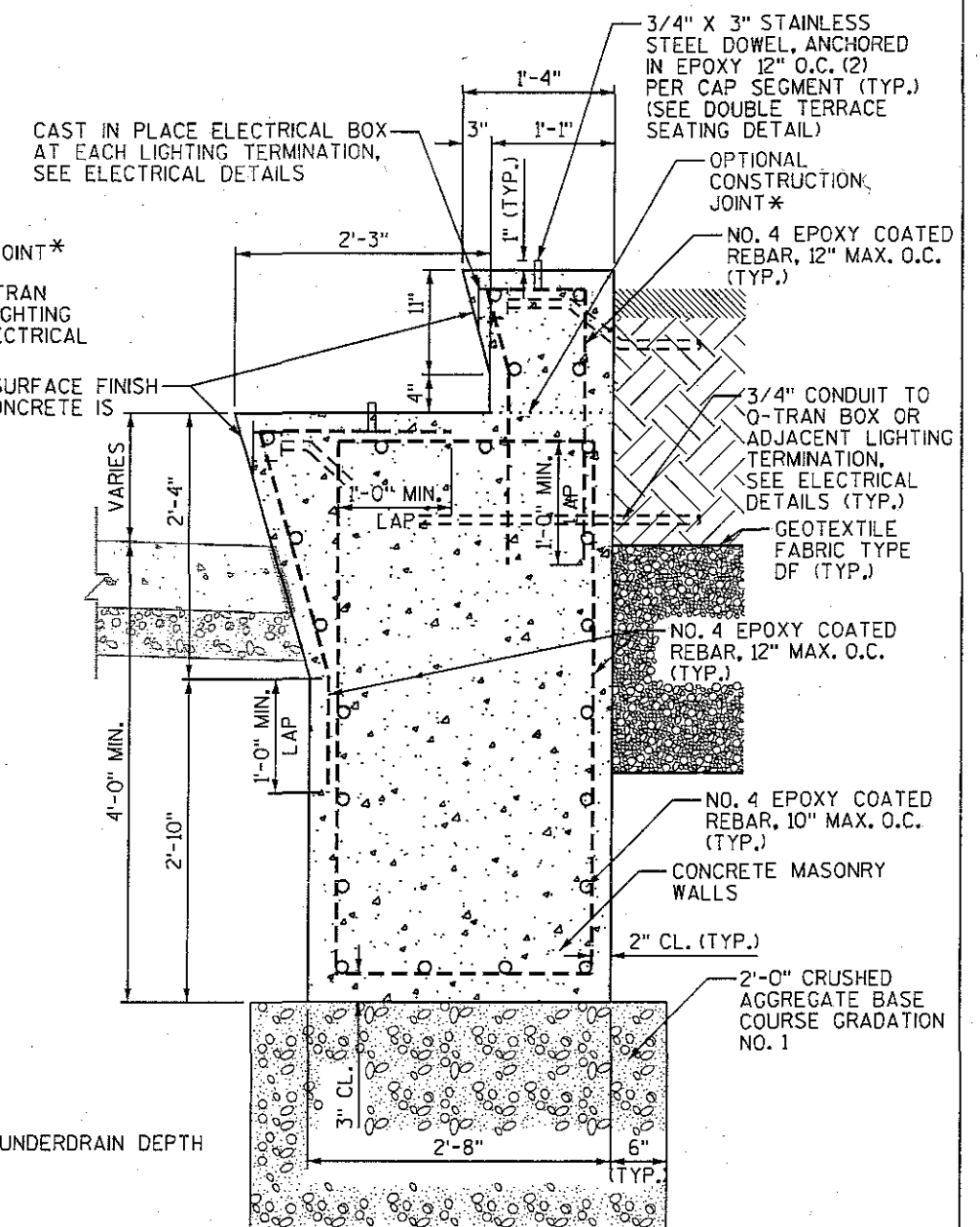


1 SINGLE TERRACE SEATING WALL DETAIL
S19 SCALE: NONE

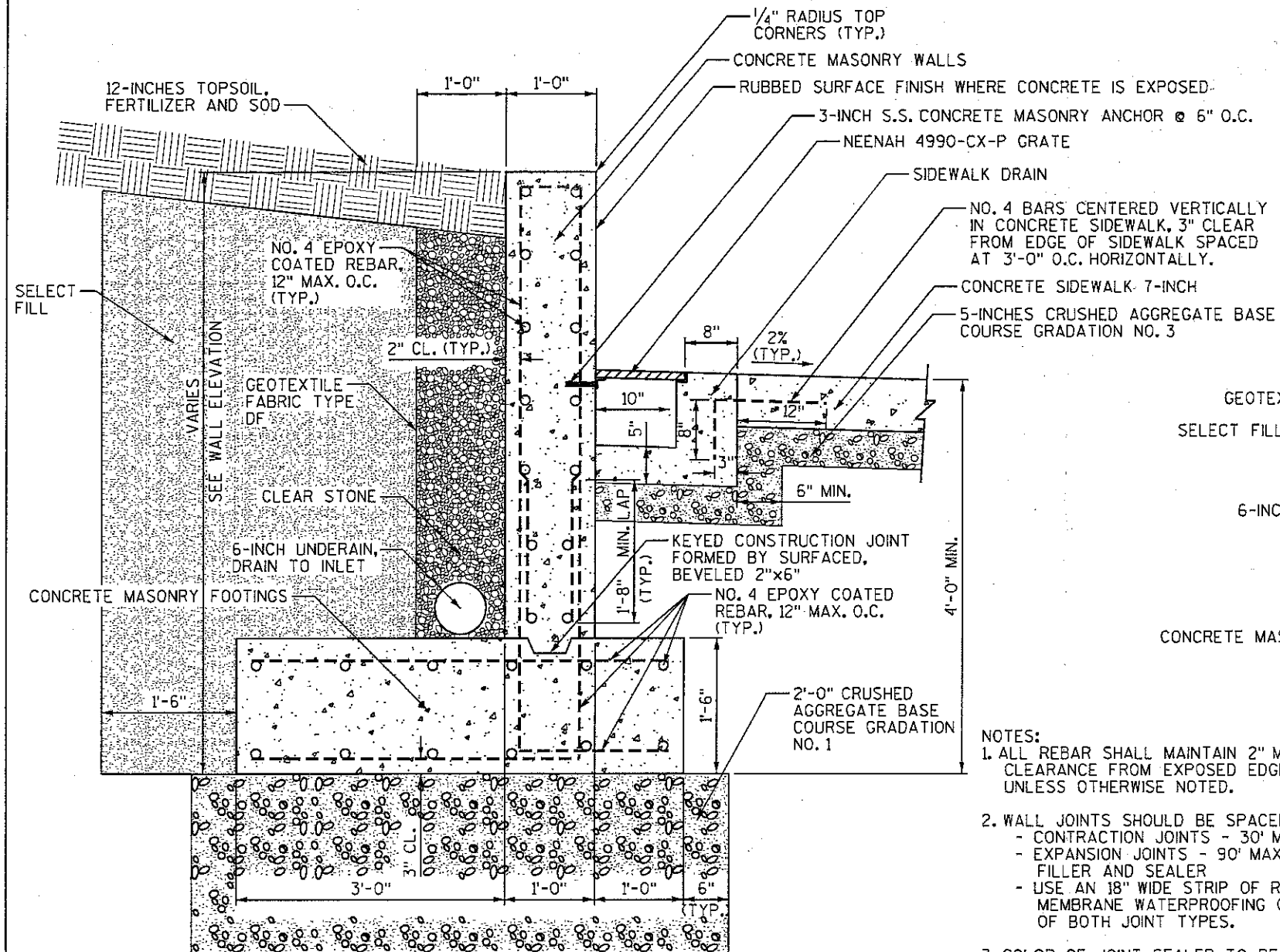


* LEAVE UPPER SURFACE OF FIRST POUR ROUGH (BROOM FINISH). DO NOT APPLY LIQUID CURING COMPOUND TO CONSTRUCTION JOINT AREA. CURING WITH IMPERVIOUS SHEETING REQUIRED.

2 DOUBLE TERRACE SEAT WALL WITH
STRUCTURAL SLAB SUPPORT DETAIL
S19 SCALE: NONE

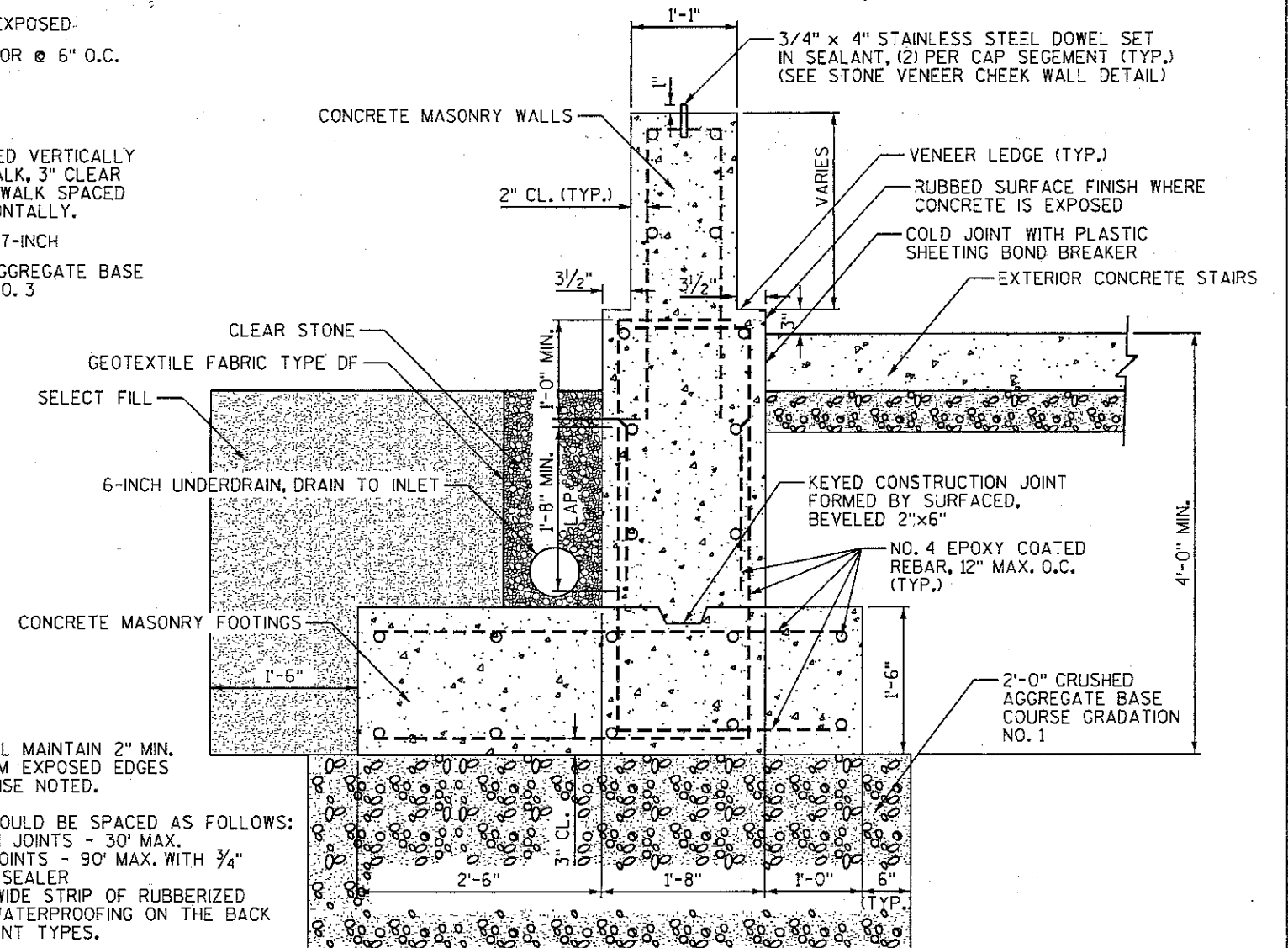


3 DOUBLE TERRACE SEATING WALL DETAIL
S19 SCALE: NONE



- NOTES:
1. ALL REBAR SHALL MAINTAIN 2" MIN. CLEARANCE FROM EXPOSED EDGES UNLESS OTHERWISE NOTED.
 2. WALL JOINTS SHOULD BE SPACED AS FOLLOWS:
 - CONTRACTION JOINTS - 30' MAX.
 - EXPANSION JOINTS - 90' MAX. WITH $\frac{3}{4}$ " FILLER AND SEALER
 - USE AN 18" WIDE STRIP OF RUBBERIZED MEMBRANE WATERPROOFING ON THE BACK OF BOTH JOINT TYPES.
 3. COLOR OF JOINT SEALER TO BE VERIFIED BY ENGINEER.
 4. ALL EXPOSED CONCRETE SURFACES SHALL HAVE A RUBBED FINISH AND UNEXPOSED CONCRETE SURFACES SHALL HAVE A ORDINARY FINISH UNLESS OTHERWISE SPECIFIED.

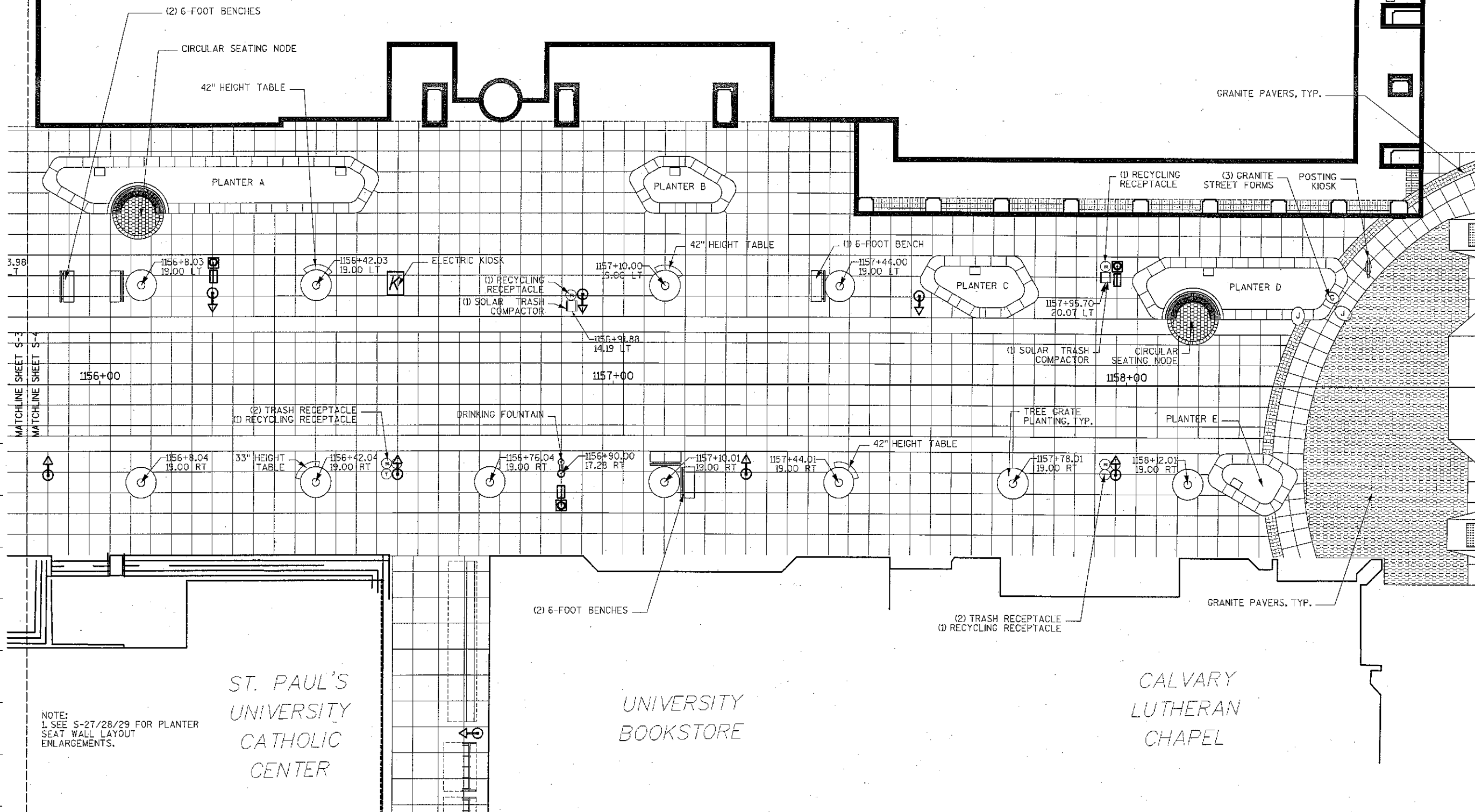
1 CAST-IN-PLACE CONCRETE RETAINING WALL @ BASCOM MALL
S11 SCALE: NONE



2 STONE VENEER CHEEK WALL DETAIL B
S11 SCALE: NONE

MEMORIAL LIBRARY

N LAKE STREET



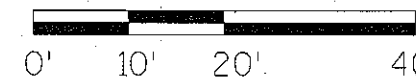
NOTE:
1. SEE S-27/28/29 FOR PLANTER
SEAT WALL LAYOUT
ENLARGEMENTS.

ST. PAUL'S
UNIVERSITY
CATHOLIC
CENTER

UNIVERSITY
BOOKSTORE

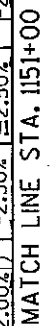
CALVARY
LUTHERAN
CHAPEL

STREETSCAPE PLAN - 700 BLOCK
1"=20' @ 11X17



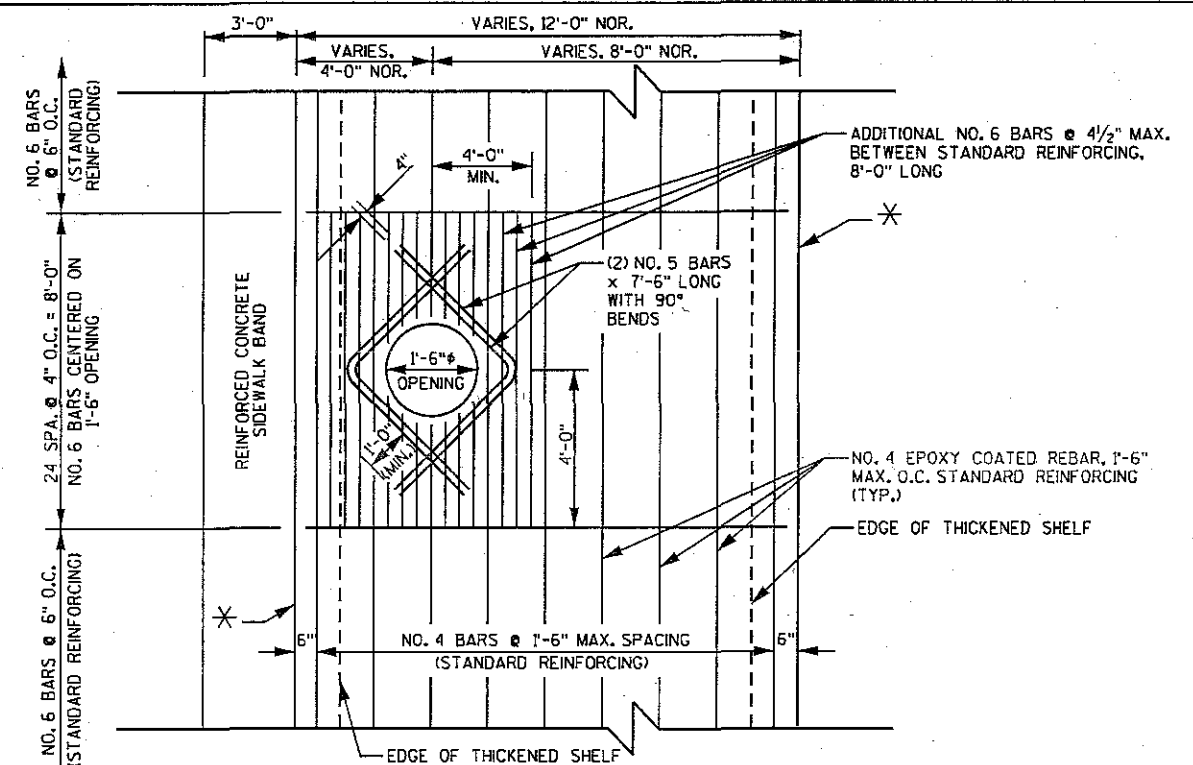
CITY OF MADISON

N. PARK STREET

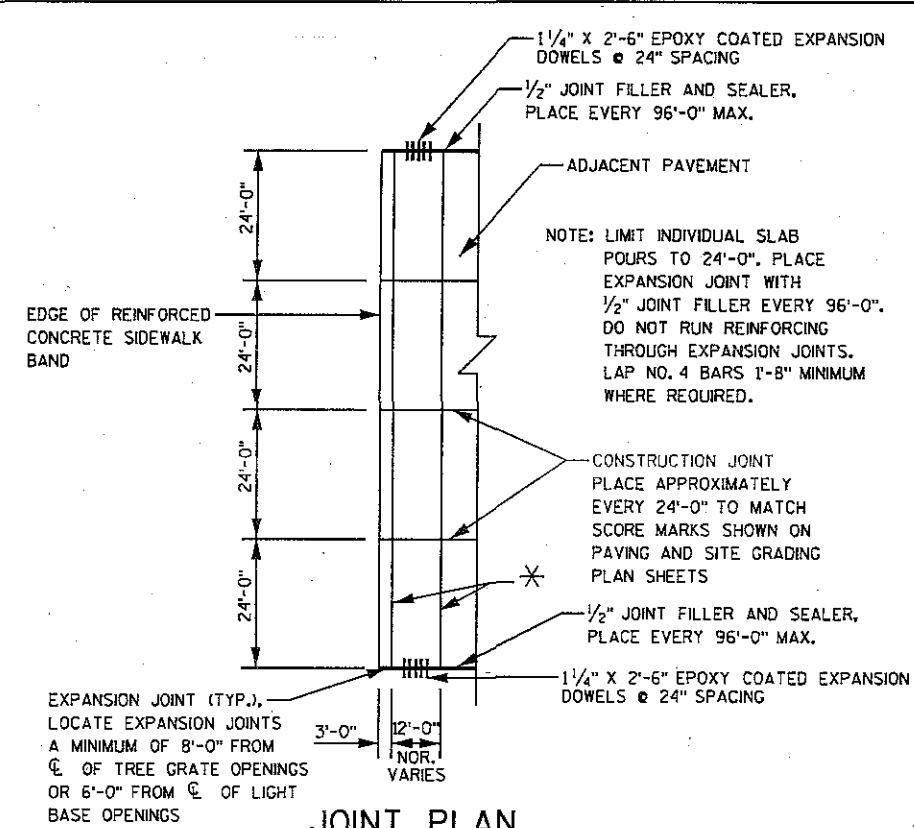


N

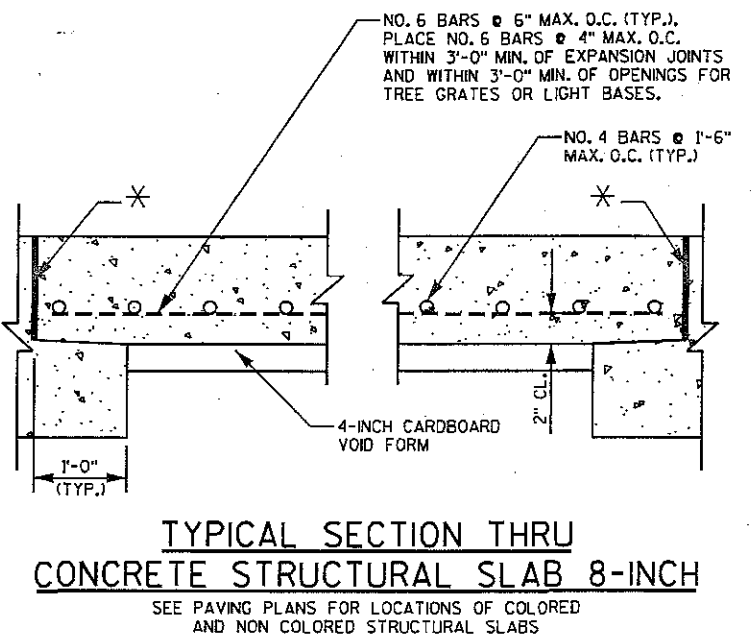
SCALE: 1" = 20'



REINFORCEMENT PLAN - PEDESTRIAN LIGHT BASE OPENINGS

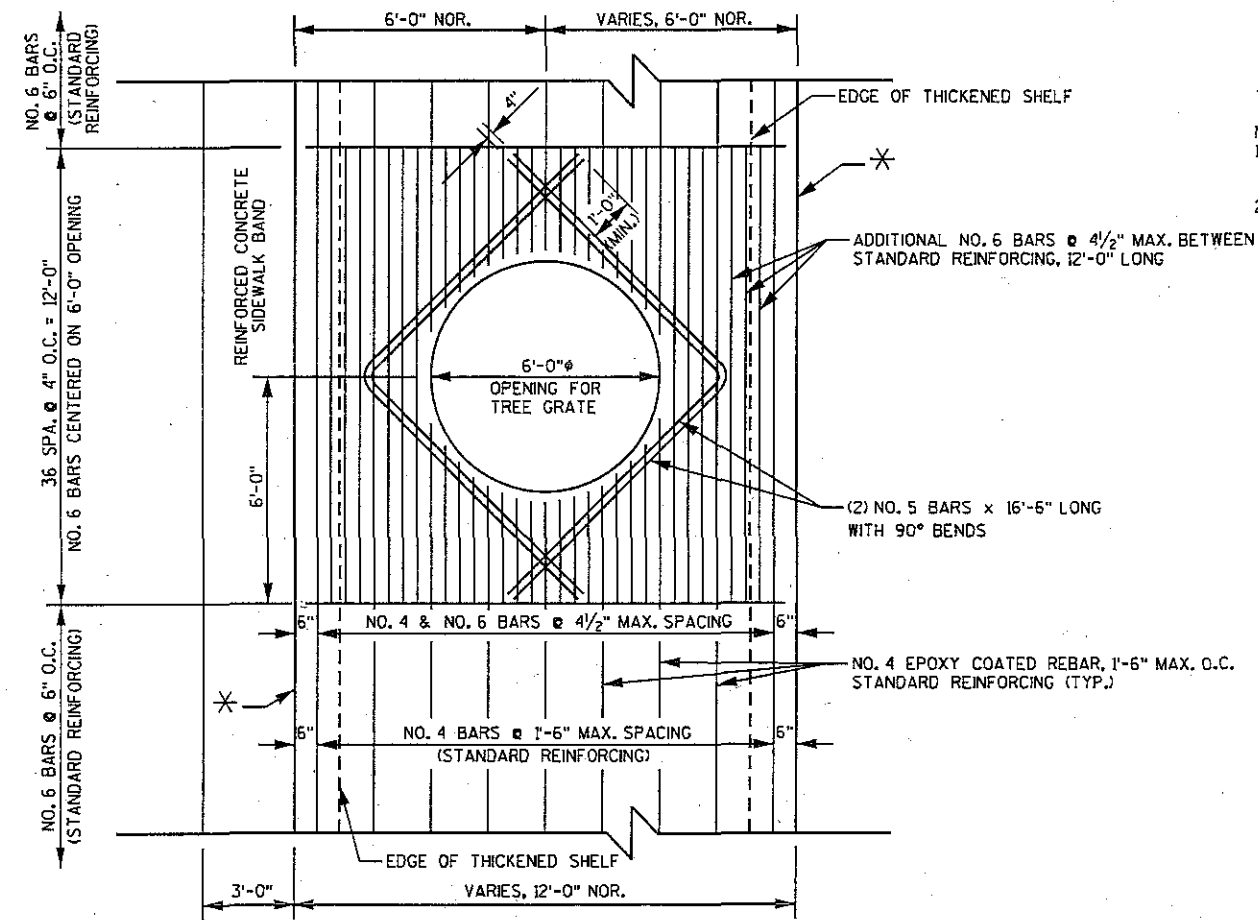


JOINT PLAN



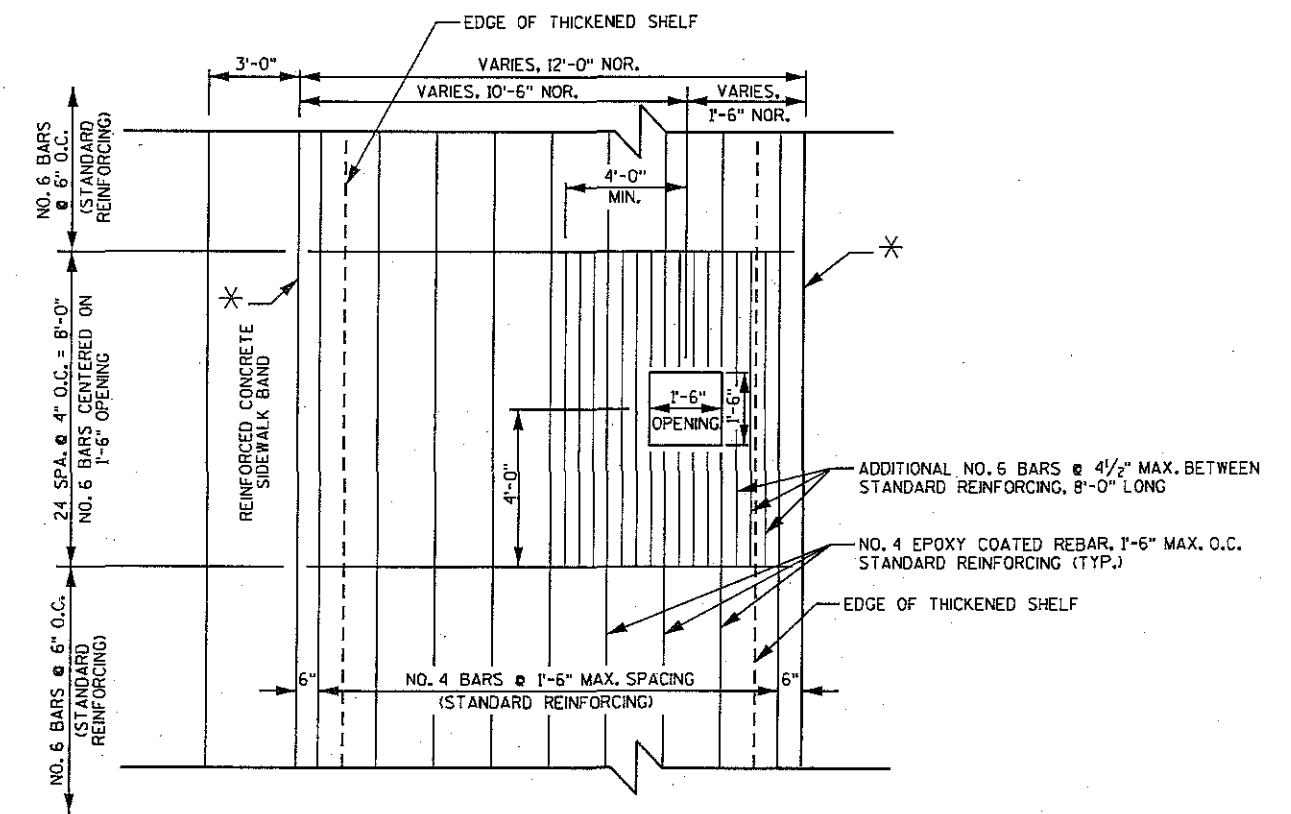
TYPICAL SECTION THRU
CONCRETE STRUCTURAL SLAB 8-INCH

SEE PAVING PLANS FOR LOCATIONS OF COLORED
AND NON COLORED STRUCTURAL SLABS



REINFORCEMENT PLAN - TREE OPENINGS

- NOTES:
1. COLOR OF JOINT SEALER TO BE DETERMINED BY ENGINEER.
 2. CUT REINFORCEMENT AT OPENING AND HOLD 2" CLEAR. COAT ENDS OF REINFORCEMENT WITH EPOXY IN ACCORDANCE WITH SUBSECTION 505.2.4.2 OF THE LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION OF THE STATE OF WISCONSIN, DEPARTMENT OF TRANSPORTATION.



REINFORCEMENT PLAN - AREA LIGHT BASE OPENINGS

CONCRETE STRUCTURAL SLAB 8-INCH
SCALE: NONE

PLOT SCALE:

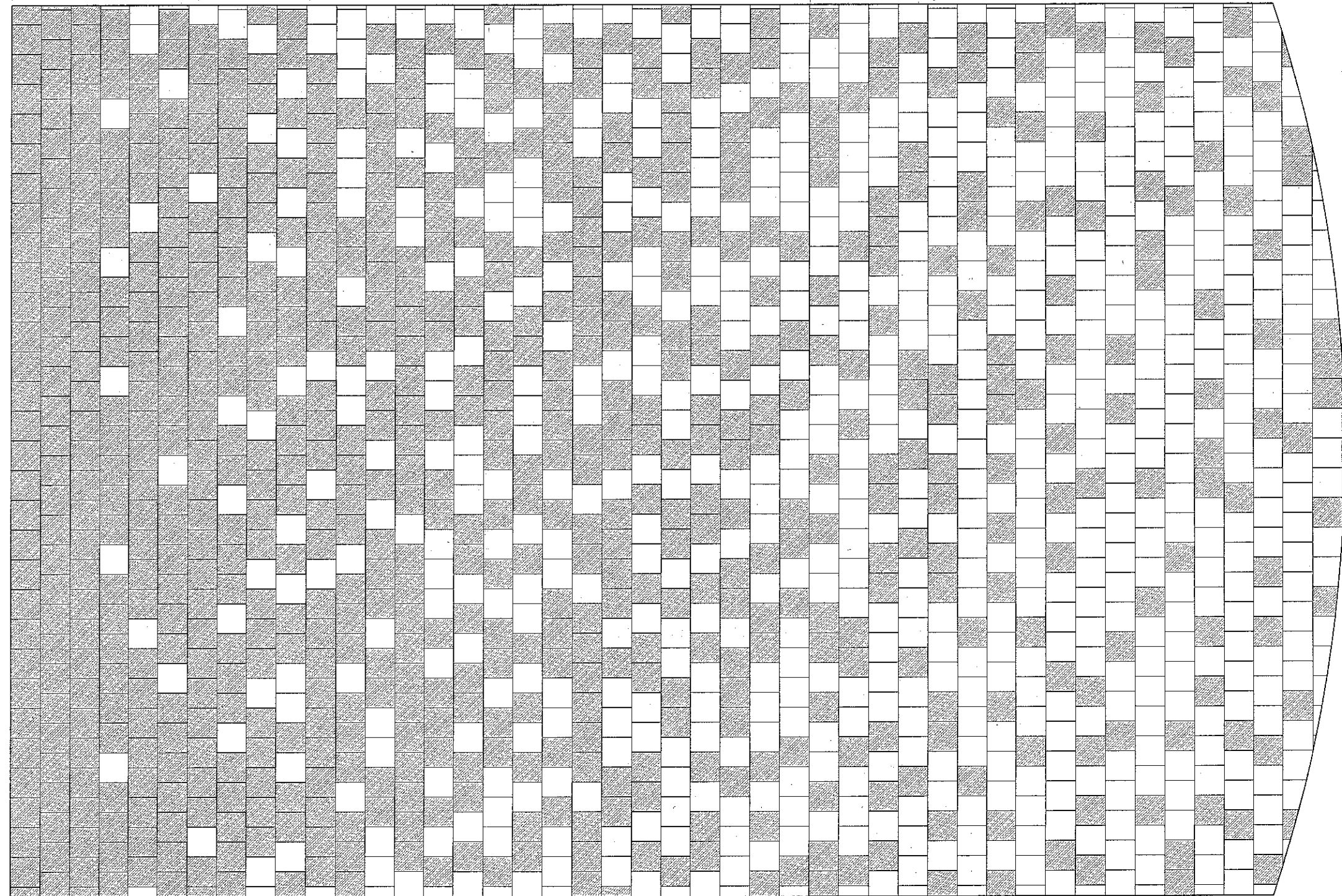
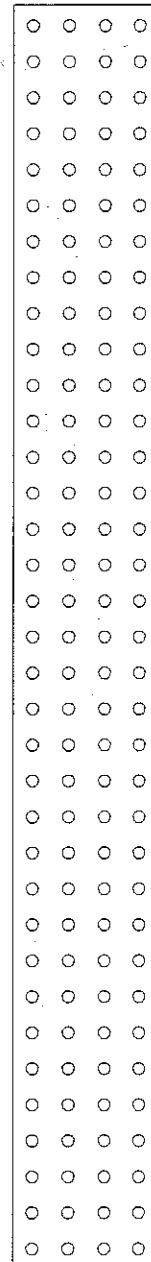
PLOT NAME:

REV. DATE:

ORIGINATOR: CITY OF MADISON, STREETS DIVISION

BACK OF CONC.

4'-0" 2'-0" 4'-0" 4'-0" 4'-0" 4'-0" 4'-0" 25% RED
100% RED 85% RED 70% RED 55% RED 40% RED 35% RED (TYPICAL PROPORTION)



GENERAL NOTES

ELEVATIONS SHOWN ON THIS PLAN ARE BASED ON NORTH AMERICAN VERTICAL DATUM 1988 (NAV88), AS PROVIDED BY THE CITY OF MADISON.

WHEN THE QUANTITY OF THE ITEMS OF BASE OR SURFACE COURSE IS MEASURED FOR PAYMENT BY THE TON OR CUBIC YARD, THE DEPTH OR THICKNESS OF THE COURSE SHOWN ON THE PLANS IS APPROXIMATE, AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER OR AS DETAILED IN THE PLANS.

ALL LENGTHS ARE IN FEET EXCEPT AS SHOWN.

STORM SEWER LENGTHS ARE TO CENTER OF STRUCTURES.

INLET OFFSETS GIVEN TO CENTER OF STRUCTURE.

ELEVATIONS SHOWN ON THE STORM SEWER SHEETS ARE AT THE CENTER OF STRUCTURE. A MINIMUM 4 INCHES OF ADJUSTMENT RINGS REQUIRED EXCEPT AS NOTED ON STORM SEWER DETAILS.

MISCELLANEOUS REMOVAL ITEMS REQUIRING RESTORATION OF CONCRETE OR ASPHALTIC CONCRETE DRIVEWAYS, SIDEWALKS, OR SIDE STREETS SHALL BE REMOVED TO AN EXISTING JOINT OR SAWED AS DETERMINED BY THE ENGINEER, OR AS SHOWN ON THE PLANS.

EARTHWORK WASTE MATERIAL SHOWN ON THE EARTHWORK SUMMARY SHALL BE HAULED FROM THE PROJECT, EXCEPT AS DIRECTED BY ENGINEER.

RADIUS DIMENSIONS FOR THE CURB AND GUTTER ARE TO THE FACE OF CURB.

THE CLEAR ZONE BEHIND CURB AND GUTTER IS 2 FEET FROM THE FACE OF THE CURB.

THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE AREA THAT ARE NOT SHOWN. THE CONTRACTOR SHALL NOTIFY DIGGERS HOTLINE AND ALL OTHER UTILITIES IN THE VICINITY OF THE PROJECT TO LOCATE THEIR FACILITIES AT LEAST 3 WORKING DAYS PRIOR TO BEGINNING WORK.

NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT APPROVAL OF THE ENGINEER.

PRIOR TO ORDERING DRAINAGE PIPES, THE CONTRACTOR SHALL VERIFY RELATED DRAINAGE INFORMATION IN THE PLANS AND RESOLVE ALL CONFLICT VERIFICATIONS, BY WAY OF ULO'S, WITH THE ENGINEER.

ALL FRAMES AND GRATES ON EXISTING STRUCTURES SHALL BE DELIVERED TO 1602 EMIL STREET, ENGINEERING SERVICES. CONTRACTOR SHALL CALL 266-4430 TO MAKE ARRANGEMENTS FOR SAID DELIVERY. THE CONTRACTOR WILL BE RESPONSIBLE FOR UNLOADING THE FRAMES AND GRATES AT EMIL STREET.

THE LIMITS OF PAVEMENT AND SIDEWALK REMOVAL ARE APPROXIMATE AND SHALL BE VERIFIED IN THE FIELD BY THE ENGINEER.

EXPANSION JOINTS ARE TO BE CONSTRUCTED AT ALL RADIUS POINTS IN CURB AND GUTTER OR AT LOCATIONS SHOWN ON THE PLAN.

SAWING OF CONCRETE SIDEWALK SHALL BE INCIDENTAL TO THE BID ITEM OF REMOVE CONCRETE SIDEWALK AND DRIVE.

REMOVAL OF TEMPORARY ASPHALT SHALL BE INCIDENTAL TO THE TEMPORARY PAVEMENT ITEM.

EPOXY COATED PAVEMENT TIES AND DOWEL BARS ARE INCIDENTAL TO THE ADJACENT CONCRETE BID ITEMS.

PROOF ROLLING OF SUBBASE IS REQUIRED BEFORE PLACEMENT OF BASE COURSE & IS INCIDENTAL TO EXCAVATION CUT. PROOF ROLLING SHALL BE WITNESSED BY THE ENGINEER.

ALL CURB AND GUTTER REMOVAL SHALL BE TO AN EXISTING JOINT AS DIRECTED BY THE ENGINEER.

ALL ASPHALT REMOVAL SHALL BE PAID AS EXCAVATION CUT UNLESS PAID FOR UNDER ANOTHER BID ITEM.

THE REMOVAL OF ALL BRICK AND GRANITE PAVERS AND THEIR CONCRETE BASES SHALL BE PAID FOR AS REMOVE CONCRETE SIDEWALK AND DRIVE.

ALL CITY OF MADISON CONDUIT SHALL BE MAINTAINED UNLESS DIRECTED OTHERWISE BY THE ENGINEER

ALL WORK PERFORMED ON UW PROPERTY SHALL BE CONSTRUCTED PER UW TECHNICAL GUIDELINES AND STATE DFD STANDARD SPECIFICATIONS. CONTRACTOR SHALL INFORM THE UW-MADISON CIVIL ENGINEER WHEN AND WHAT WORK WILL BE PERFORMED ON UW PROPERTY FOR CONSTRUCTION OBSERVATION.

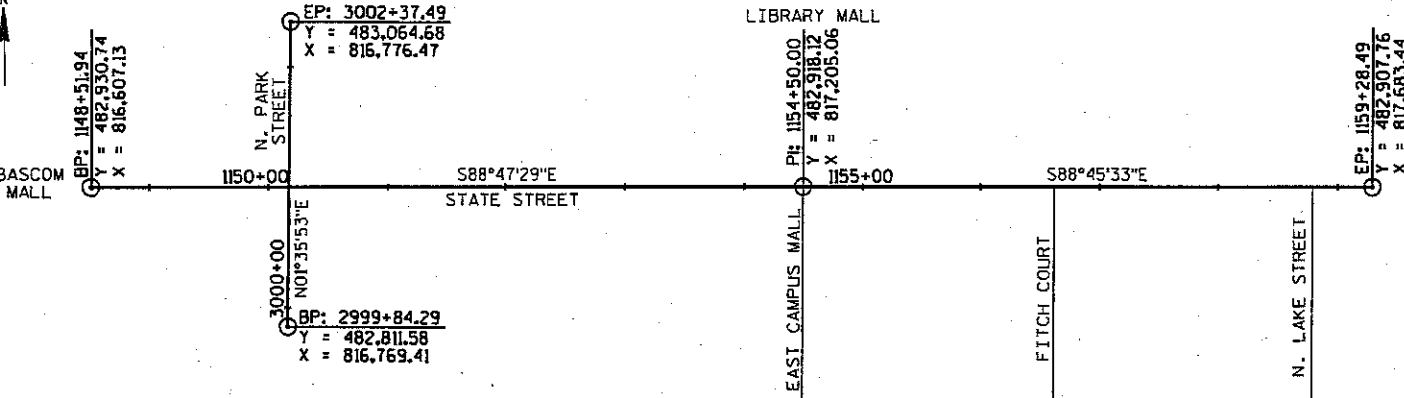
ULTIMATE DESIGN STRESSES

CONCRETE MASONRY WALLS & CONCRETE MASONRY WALLS COLORED $f_c = 3,500$ P.S.I.

CONCRETE STRUCTURAL SLAB 8-INCH & COLORED CONCRETE STRUCTURAL SLAB 8-INCH $f_c = 4,000$ P.S.I.

ALIGNMENT OVERVIEW

SCALE: NONE



DESIGN CONTACTS

MSA PROFESSIONAL SERVICES
ATTN: JASON DIPIAZZA, P.E.
2901 INTERNATIONAL LANE, SUITE 300
MADISON, WI 53704
PHONE: (608) 242-6640
FAX: (608) 242-5664
EMAIL: jdipiazza@msa-ps.com

CITY OF MADISON
ATTN: CHRIS PETYKOWSKI, P.E.
CITY-COUNTY BUILDING, ROOM 115
210 MARTIN LUTHER KING, JR. BLVD.
MADISON, WI 53703
PHONE: (608) 267-8678
FAX: (608) 264-9275
EMAIL: cpetykowski@cityofmadison.com

UNIVERSITY OF WISCONSIN-MADISON
FACILITIES, PLANNING & MANAGEMENT
ATTN: GARY BROWN
610 WALNUT STREET, SUITE 919
MADISON, WI 53726
PHONE: (608) 263-3023
FAX: (608) 265-3139
EMAIL: gbrown@fpm.wisc.edu

UTILITY CONTACTS

STORM SEWER:
CITY OF MADISON
ATTN: GREG FRIES
CITY-COUNTY BUILDING, ROOM 115
210 MARTIN LUTHER KING, JR. BLVD
MADISON, WI 53703
PHONE: (608) 267-1199
EMAIL: gfries@cityofmadison.com

SANITARY SEWER:
CITY OF MADISON
ATTN: MARK MODER
CITY-COUNTY BUILDING, ROOM 115
210 MARTIN LUTHER KING, JR. BLVD
MADISON, WI 53703
PHONE: (608) 261-9250
EMAIL: mmoder@cityofmadison.com

WATERMAIN:
MADISON WATER UTILITY
ATTN: PETE HOLMGREN
119 EAST OLIN AVE
MADISON, WI 53713
PHONE: (608) 261-5530
EMAIL: pholmgren@madisonwater.org

STREET LIGHTING
CITY OF MADISON
ATTN: BRIAN SMITH
CITY-COUNTY BUILDING, ROOM 110
215 MARTIN LUTHER KING, JR. BLVD
MADISON, WI 53703
PHONE: (608) 261-9625
EMAIL: bsmith@cityofmadison.com

ELECTRIC
MADISON GAS & ELECTRIC
ATTN: MARK BOHM
133 S. BLAIR STREET
P.O. BOX 1231
MADISON, WI 53703
PHONE: (608) 252-4730
EMAIL: mbohm@enge.com

GAS:
MADISON GAS & ELECTRIC
ATTN: DON MCCLAIN
P.O. BOX 1231
MADISON, WI 53701
PHONE: (608) 252-5618
EMAIL: dmcclain@enge.com

TELEPHONE & FIBER OPTICS:
AT&T
ATTN: CAROL ANASON
316 W. WASHINGTON AVENUE
MADISON, WI 53703
PHONE: (608) 252-2385
EMAIL: ca2624@att.com

CITY OF MADISON PARKS:
MALL MAINTENANCE SUPERVISOR
ATTN: TOM SKAIFE
CITY-COUNTY BUILDING, ROOM 104
210 MARTIN LUTHER KING, JR. BLVD.
MADISON, WI 53703
PHONE: (608) 266-6031
EMAIL: tskaife@cityofmadison.com

UW-MADISON UTILITIES:
PLUMBING/WATER
ATTN: MARCELLA OTTER
30 N. MILLS STREET, ROOM 210
MADISON, WI 53715
PHONE: (608) 265-3967
CELL: (608) 444-4373
EMAIL: motter@fpm.wisc.edu

UW-MADISON UTILITIES:
STEAM TUNNELS
ATTN: JEFF POLLEI
PHONE: (608) 225-0502
EMAIL: jpollei@fpm.wisc.edu
ATTN: KEVIN CORCORAN
PHONE: (608) 444-4371
EMAIL: kcorcoran@fpm.wisc.edu



Dial 811 or (800) 242-8511
www.DiggersHotline.com

**DENOTES UTILITIES THAT ARE NOT DIGGERS HOTLINE MEMBERS

STATE STREET 700 / 800 BLOCKS
PROJECT NO. 53W1193

SHEET NO.
2

GENERAL NOTES AND UTILITIES

STATE STREET CITY OF MADISON

STANDARD ABBREVIATIONS

AC	ACRES
AEW	APRON ENDWALL
AH	AHEAD
ALUM.	ALUMINUM
A.P.	ACCESS POINT
ASPH	ASPHALT
BK	BACK
BLK	BLOCK
BOC	BACK OF CURB
BOW	BACK OF SIDEWALK
BM	BENCHMARK
CABC	CRUSHED AGGREGATE BASE COURSE
CL	CLEAR
Δ	CENTRAL ANGLE or DELTA
CONC	CONCRETE
CSM	CERTIFIED SURVEY MAP
CTH	COUNTY TRUNK HIGHWAY
CY	CUBIC YARD
D	DEGREE OF CURVE
DIA	DIAMETER
E	EAST
EB	EASTBOUND
EBS	EXCAVATION BELOW SUBGRADE
EOP	EDGE OF PAVEMENT
ET AL	AND OTHERS
EXIST or EX	EXISTING
EW	END WALL
FCC	FACE OF CURB
FT	FOOT
FT2	SQUARE FEET
GN	GRID NORTH
GV	GAS VALVE
HB	HOSE BIB
HERCP	HORIZONTAL ELLIPTICAL REINFORCED CONCRETE PIPE
IE	INVERT ELEVATION
IN	INCH
IP	IRON PIPE
L	LENGTH
L	LENGTH OF CURVE
LC	LONG CHORD
LCB	LONG CHORD BEARING
LF	LINEAR FEET
LS	LUMP SUM
LT	LEFT
MH	MANHOLE
MI	MILE
MON	MONUMENT
N	NORTH
NB	NORTHBOUND
NO	NUMBER
O.C.	ON CENTER
P	PIPE
PT	POINT
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
PT	POINT OF TANGENCY
PL	PROPERTY LINE
POB	POINT OF BEGINNING
RP	RADIUS
R	REMOVE PIPE
RCP	RANGE
R	REINFORCED CONCRETE PIPE
RL or R/L	REFERENCE LINE
REQ'D	REQUIRED
RT	RIGHT
R/W	RIGHT-OF-WAY
RD	ROAD
S	SOUTH
SB	SOUTHBOUND
SO	SQUARE
SAN	SANITARY SEWER
SAS	SEWER ACCESS STRUCTURE
SEC	SECTION
STD	STANDARD
STH	STATE TRUNK HIGHWAY
STM	STORM SEWER
STA	STATION
STR	STRUCTURE
SY	SQUARE YARD
T	TANGENT
TAN	TANGENT
TEMP	TEMPORARY
TLE	TEMPORARY LIMITED EASEMENT
TYP	TYPICAL
T or TN	TOWN
W	WEST
WB	WESTBOUND
WM	WATERMAIN
X	EAST GRID COORDINATE
Y	NORTH GRID COORDINATE

SECTION E: BIDDERS ACKNOWLEDGEMENT

STATE STREET RECONSTRUCTION ASSESSMENT DISTRICT - 2014 CONTRACT NO. 7206

Bidder must state a Unit Price and Total Bid for each item. The Total Bid for each item must be the product of quantity, by Unit Price. The Grand Total must be the sum of the Total Bids for the various items. In case of multiplication errors or addition errors, the Grand Total with corrected multiplication and/or addition shall determine the Grand Total bid for each contract. The Unit Price and Total Bid must be entered numerically in the spaces provided. All words and numbers shall be written in ink.

1. The undersigned having familiarized himself/herself with the Contract documents, including Advertisement for Bids, Instructions to Bidders, Form of Proposal, City of Madison Standard Specifications for Public Works Construction - 2014 Edition thereto, Form of Agreement, Form of Bond, and Addenda issued and attached to the plans and specifications on file in the office of the City Engineer, hereby proposes to provide and furnish all the labor, materials, tools, and expendable equipment necessary to perform and complete in a workmanlike manner the specified construction on this project for the City of Madison; all in accordance with the plans and specifications as prepared by the City Engineer, including Addenda to the Contract Nos. 1 through 1 issued thereto, at the prices for said work as contained in this proposal. (Electronic bids submittals shall acknowledge addendum under Section E and shall not acknowledge here)
2. If awarded the Contract, we will initiate action within seven (7) days after notification or in accordance with the date specified in the contract to begin work and will proceed with diligence to bring the project to full completion within the number of work days allowed in the Contract or by the calendar date stated in the Contract.
3. The undersigned Bidder or Contractor certifies that he/she is not a party to any contract, combination in form of trust or otherwise, or conspiracy in restraint of trade or commerce or any other violation of the anti-trust laws of the State of Wisconsin or of the United States, with respect to this bid or contract or otherwise.
4. I hereby certify that I have met the Bid Bond Requirements as specified in Section 102.5.
(IF BID BOND IS USED, IT SHALL BE SUBMITTED ON THE FORMS PROVIDED BY THE CITY. FAILURE TO DO SO MAY RESULT IN REJECTION OF THE BID).
5. I hereby certify that all statements herein are made on behalf of Speedway Sand & Gravel Inc. (name of corporation, partnership, or person submitting bid) a corporation organized and existing under the laws of the State of Wisconsin a partnership consisting of _____; an individual trading as _____ of the City of _____ State of _____; that I have examined and carefully prepared this Proposal, from the plans and specifications and have checked the same in detail before submitting this Proposal; that I have fully authority to make such statements and submit this Proposal in (its, their) behalf; and that the said statements are true and correct.

SIGNATURE _____

Vice President

TITLE, IF ANY _____

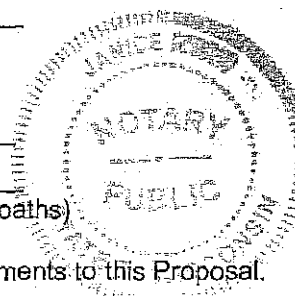
Sworn and subscribed to before me this
26th day of March, 2014

Janice Ryan

(Notary Public or other officer authorized to administer oaths)

My Commission Expires October 22, 2017

Bidders shall not add any conditions or qualifying statements to this Proposal.



Contract 7206 - Speedway Sand & Gravel, Inc.

Section F: Disclosure of Ownership and BVC

Method of Submittal for Disclosure of Ownership and BVC (click in box below to choose) *

I will submit Bid Express fillable online form (Disclosure of Ownership and BVC).

Section F: Disclosure of Ownership and Best Value Contracting

Notice required under Section 15.04(1)(m), Wisconsin Statutes. The statutory authority for the use of this form is prescribed in Sections 66.0903(12)(d), Wisconsin Statutes. The use of this form is mandatory. The penalty for failing to complete this form is prescribed in Section 103.005(12). Personal information you provide may be used for secondary purposes.

(1) On the date a contractor submits a bid to or completes negotiations with a state agency or local governmental unit, on a project subject to Section 66.0903 or 103.49, Wisconsin Statutes, the contractor shall disclose to such state agency or local governmental unit the name of any "other construction business", which the contractor, or a shareholder, officer or partner of the contractor, owns or has owned within the preceding three (3) years.

(2) The term "other construction business" means any business engaged in the erection, construction, remodeling, repairing, demolition, altering or painting and decorating of buildings, structures or facilities. It also means any business engaged in supplying mineral aggregate, or hauling excavated material or spoil as provided by Sections 66.0903(3), 103.49(2) and 103.50(2), Wisconsin Statutes.

(3) This form must ONLY be filed, with the state agency or local governmental unit that will be awarding the contract, if both (A) and (B) are met.

(A) The contractor, or a shareholder, officer or partner of the contractor:

1. Owns at least a 25% interest in the "other construction business", indicated below, on the date the contractor submits a bid or completes negotiations.

2. Or has owned at least a 25% interest in the "other construction business" at any time within the preceding three (3) years.

(B) The Wisconsin Department of Workforce Development (DWD) has determined that the "other construction business" has failed to pay the prevailing wage rate or time and one-half the required hourly basic rate of pay, for hours worked in excess of the prevailing hours of labor, to any employee at any time within the preceding three (3) years.

Other Construction Business

☒ Not Applicable

Contract 7206 – Section F

Name of Business

Street Address or PO Box

City, State and Zip Code

Best Value Contracting

1. The Contractor shall indicate the non-apprenticeable trades used on this contract.

2. Madison General Ordinance (M.G.O.), 33.07(7), does provide for some exemptions from the active apprentice requirement. Apprenticeable trades are those trades considered apprenticeable by the State of Wisconsin. Please check applicable box if you are seeking an exemption.

☐ Contractor has a total skilled workforce of four or less individuals in all apprenticeable trades combined.

☐ No available trade training program; The Contractor has been rejected by the only available trade training program, or there is no trade training program within 90 miles.

☐ Contractor is not using an apprentice due to having a journey worker on layoff status, provided the journey worker was employed by the contractor in the past six months.

☐ First time contractor on City of Madison Public Works contract requests a onetime exemption but intends to comply on all future contracts and is taking steps typical of a "good faith" effort.

☐ Contractor has been in business less than one year.

☐ Contractor doesn't have enough journeyman trade workers to qualify for a trade training program in that respective trade.

3. The Contractor shall indicate on the following section which apprenticeable trades are to be used on this contract. Compliance with active apprenticeship, to the extent required by M.G.O. 33.07(7), shall be satisfied by documentation from an applicable trade training body; an apprenticeship contract with the Wisconsin Department of Workforce Development or a similar agency in another state; or the U.S Department of Labor. This documentation is required prior to the Contractor beginning work on the project site.

☐ The Contractor has reviewed the list and shall not use any apprenticeable trades on this project.

Contract 7206 – Section F

LIST APPRENTICABLE TRADES (check all that apply to your work to be performed on this contract)

- ☐ BRICKLAYER
- ☐ CARPENTER
- ☐ CEMENT MASON / CONCRETE FINISHER
- ☐ CEMENT MASON (HEAVY HIGHWAY)
- ☒ CONSTRUCTION CRAFT LABORER
- ☐ DATA COMMUNICATION INSTALLER
- ☐ ELECTRICIAN
- ☐ ENVIRONMENTAL SYSTEMS TECHNICIAN / HVAC SERVICE TECH/HVAC
INSTALL / SERVICE
- ☐ GLAZIER
- ☒ HEAVY EQUIPMENT OPERATOR / OPERATING ENGINEER
- ☐ INSULATION WORKER (HEAT and FROST)
- ☐ IRON WORKER
- ☐ IRON WORKER (ASSEMBLER, METAL BLDGS)
- ☐ PAINTER and DECORATOR
- ☐ PLASTERER
- ☐ PLUMBER
- ☐ RESIDENTIAL ELECTRICIAN
- ☐ ROOFER and WATER PROOFER
- ☐ SHEET METAL WORKER
- ☐ SPRINKLER FITTER
- ☐ STEAMFITTER
- ☐ STEAMFITTER (REFRIGERATION)
- ☐ STEAMFITTER (SERVICE)
- ☐ TAPER and FINISHER
- ☐ TELECOMMUNICATIONS (VOICE, DATA and VIDEO) INSTALLER-TECHNICIAN
- ☐ TILE SETTER

STATE STREET RECONSTRUCTION ASSESSMENT DISTRICT - 2014
CONTRACT NO. 7206

Small Business Enterprise Compliance Report

This information may be submitted electronically through
Bid Express or submitted with bid in sealed envelope.

Cover Sheet


Prime Bidder Information

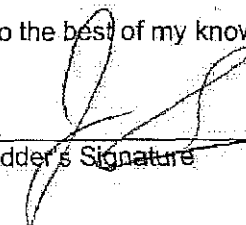
Company: Speedway Sand & Gravel Inc.
Address: 8500 Greenway Blvd Suite 202, Middleton, WI 53562
Telephone Number: 608-836-1071 Fax Number: 608-836-7485
Contact Person/Title: John Czerepinski, Vice President

Prime Bidder Certification

I, John Czerepinski, Vice President of
Name Title
Speedway Sand & Gravel Inc. certify that the information
Company

contained in this SBE Compliance Report is true and correct to the best of my knowledge and belief.


Witness' Signature


Bidder's Signature

March 26, 2014
Date

STATE STREET RECONSTRUCTION ASSESSMENT DISTRICT - 2014
CONTRACT NO. 7206

Speedway Sand & Gravel Inc.			
Item	Quantity	Price	Extension
10701.0 - Traffic Control - LS	1.00	\$3,700.00	\$3,700.00
10711.0 - Type III Barricade - DAYS	1800.00	\$1.00	\$1,800.00
10721.0 - Traffic Control Sign - Portable Changeable Message - DAYS	20.00	\$120.00	\$2,400.00
10802.0 - Root Cutting - Sidewalk - LF	255.00	\$5.00	\$1,275.00
10901.0 - Field Office - LS	1.00	\$9,000.00	\$9,000.00
10911.0 - Mobilization - LS	1.00	\$303,200.00	\$303,200.00
20101.0 - Excavation Cut - CY	4200.00	\$20.00	\$84,000.00
20109.0 - Finish Grading - LS	1.00	\$5,000.00	\$5,000.00
20205.0 - Select Fill - CY	125.00	\$25.00	\$3,125.00
20217.0 - Clear Stone - TON	335.00	\$15.00	\$5,025.00
20221.0 - Topsoil - SY	2105.00	\$7.60	\$15,998.00
20301.0 - Sawcut Concrete Pavement - LF	100.00	\$6.00	\$600.00
20302.0 - Sawcut Concrete Pavement Full Depth - LF	198.00	\$7.50	\$1,485.00
20303.0 - Sawcut Bituminous Pavement - LF	68.00	\$2.50	\$170.00
20322.0 - Remove Concrete Curb and Gutter - LF	180.00	\$5.00	\$900.00
20323.0 - Remove Concrete Sidewalk & Drive - SF	62530.00	\$2.00	\$125,060.00
20324.0 - Remove Concrete Steps - SF	400.00	\$15.00	\$6,000.00
20327.0 - Remove Tree Grate - EACH	2.00	\$150.00	\$300.00
20401.0 - Clearing - ID	355.00	\$26.00	\$9,230.00
20403.0 - Grubbing - ID	365.00	\$35.00	\$12,775.00
20801.0 - Sodding - SY	2350.00	\$5.50	\$12,925.00
21001.0 - Erosion Control Plan and Implementation - LS	1.00	\$500.00	\$500.00
21002.0 - Erosion Control Inspection - EACH	30.00	\$300.00	\$9,000.00
21011.0 - Construction Entrance - EACH	6.00	\$150.00	\$900.00
21013.0 - Street Sweeping - LS	1.00	\$10,000.00	\$10,000.00
21017.0 - Silt Sock (8-Inch) - Complete - LF	325.00	\$6.00	\$1,950.00
21021.0 - Silt Fence - Complete - LF	525.00	\$3.00	\$1,575.00
21031.0 - Inlet Protection Type C - Complete - EACH	6.00	\$50.00	\$300.00
21055.0 - Inlet Protection Type D Hybrid - Complete - EACH	68.00	\$140.00	\$9,520.00
30201.0 - Type 'A' Concrete Curb & Gutter - LF	155.00	\$22.00	\$3,410.00
30302.0 - 7 Inch Concrete Sidewalk & Drive - SF	16160.00	\$5.00	\$80,800.00
30340.0 - Curb Ramp Detectable Warning Field - SF	64.00	\$45.00	\$2,880.00
40101.0 - Crushed Aggregate Base Course, Gradation No. 1 - TON	1475.00	\$15.00	\$22,125.00
40102.0 - Crushed Aggregate Base Course, Gradation No. 2 or No. 3 - TON	2175.00	\$15.00	\$32,625.00
40203.0 - HMA Pavement Type E-3 - TON	145.00	\$91.45	\$13,260.25
40211.0 - Tack Coat - GAL	12.00	\$3.00	\$36.00
40401.0 - 8 Inch Concrete Pavement - SY	190.00	\$65.00	\$12,350.00
60800.0 - Pavement Marking Epoxy, Line, 4-Inch - LF	265.00	\$2.25	\$596.25
60801.0 - Pavement Marking Epoxy, Double Line, 4-Inch - LF	155.00	\$5.50	\$852.50
60804.0 - Pavement Marking Epoxy, Line, 12-Inch - LF	30.00	\$15.00	\$450.00
70041.0 - Relocate Hydrant - EACH	1.00	\$2,500.00	\$2,500.00
70050.0 - Furnish And Install 1-Inch Service Laterals - LF	2.00	\$400.00	\$800.00
70051.0 - Furnish And Install 1 1/2-Inch Service Laterals - LF	4.00	\$450.00	\$1,800.00
90001.0 - Crack and Damage Survey - LS	1.00	\$10,000.00	\$10,000.00
90002.0 - Test Steam Tunnel/Pipe and Steam Vault Appurtenances for Asbestos - EACH	5.00	\$300.00	\$1,500.00
90003.0 - Fence Safety - LF	6900.00	\$4.50	\$31,050.00
90004.0 - Remove Concrete Curb - LF	350.00	\$15.00	\$5,250.00
90005.0 - Remove Concrete Gravity Retaining Walls - LF	195.00	\$22.00	\$4,290.00

STATE STREET RECONSTRUCTION ASSESSMENT DISTRICT - 2014
CONTRACT NO. 7206

Speedway Sand & Gravel Inc.

Item	Quantity	Price	Extension
90006.0 - Remove Combination Retaining Wall - Curb and Gutter - LF	240.00	\$42.25	\$10,140.00
90007.0 - Remove Steel Chain Fence - LF	150.00	\$2.00	\$300.00
90008.0 - Remove Wall Mounted Bench - LF	80.00	\$10.00	\$800.00
90009.0 - Remove Railing - LF	105.00	\$6.00	\$630.00
90010.0 - Remove Concrete Gutter - LF	130.00	\$10.00	\$1,300.00
90011.0 - Remove Drinking Fountain - EACH	1.00	\$800.00	\$800.00
90012.0 - Remove Benches - EACH	14.00	\$150.00	\$2,100.00
90013.0 - Salvage and Haul Concrete Planter Tubs - EACH	2.00	\$900.00	\$1,800.00
90014.0 - Remove Wall Mounted Trash Can - EACH	2.00	\$350.00	\$700.00
90015.0 - Remove Four Pole Kiosk With Lights - EACH	3.00	\$1,500.00	\$4,500.00
90016.0 - Remove Octogonal Kiosk With Lights - EACH	1.00	\$1,500.00	\$1,500.00
90017.0 - Remove Electrical Pedestal - EACH	11.00	\$500.00	\$5,500.00
90018.0 - Remove Kiosk Base - EACH	5.00	\$100.00	\$500.00
90019.0 - Remove Map Kiosk - EACH	2.00	\$250.00	\$500.00
90020.0 - Remove Bike Rack - LS	1.00	\$800.00	\$800.00
90021.0 - Remove Concrete Planter Walls - LS	1.00	\$7,800.00	\$7,800.00
90022.0 - Remove Concrete Fountain - LS	1.00	\$8,000.00	\$8,000.00
90023.0 - Remove Concrete Pulpit - LS	1.00	\$2,500.00	\$2,500.00
90024.0 - Remove Concrete Planter with Tree Grove - LS	1.00	\$9,900.00	\$9,900.00
90025.0 - Remove Terraced Stage and Seating - LS	1.00	\$11,800.00	\$11,800.00
90026.0 - Remove, Salvage, and Deliver Clock Tower and Granite Slabs - LS	1.00	\$9,300.00	\$9,300.00
90027.0 - Remove Clock Tower Foundation - LS	1.00	\$4,000.00	\$4,000.00
90028.0 - Disconnect Pulpit Electrical Service Cabinet - LS	1.00	\$500.00	\$500.00
90029.0 - Remove and Reset Pavers - SF	270.00	\$22.50	\$6,075.00
90100.0 - Pavement Marking Grooved Wet Reflective Tape 6-Inch - LF	70.00	\$24.00	\$1,680.00
90161.0 - Air Supply Connection - EACH	3.00	\$1,275.00	\$3,825.00
90162.0 - Curb Stop 1-Inch - EACH	12.00	\$460.00	\$5,520.00
90163.0 - Curb Box 1-Inch - EACH	12.00	\$510.00	\$6,120.00
90164.0 - Wall Hydrant Mounted in Concrete - EACH	12.00	\$500.00	\$6,000.00
90165.0 - Wall Hydrant Mounted in Cabinet - EACH	1.00	\$450.00	\$450.00
90166.0 - Water Pipe Copper 1-Inch - LF	265.00	\$83.31	\$22,077.15
90167.0 - Water Pipe Copper 1 1/2-Inch - LF	780.00	\$52.32	\$40,809.60
90168.0 - Drinking Fountain - EACH	1.00	\$8,422.00	\$8,422.00
90200.0 - 6 Inch Concrete Sidewalk - SF	6000.00	\$7.00	\$42,000.00
90201.0 - C1 Concrete Sidewalk 7-inch - SF	17750.00	\$15.00	\$266,250.00
90202.0 - Colored Concrete Sidewalk 7-Inch - SF	1880.00	\$10.00	\$18,800.00
90203.0 - Concrete Sidewalk 7-Inch Reinforced - SF	2590.00	\$12.00	\$31,080.00
90204.0 - Concrete Structural Slab 8-Inch - SF	1140.00	\$10.00	\$11,400.00
90205.0 - Colored Concrete Structural Slab 8-Inch - SF	9890.00	\$13.50	\$133,515.00
90206.0 - Cardboard Void Forms - SF	11030.00	\$2.50	\$27,575.00
90207.0 - Reinforced Concrete Sidewalk Band - SF	3100.00	\$23.00	\$71,300.00
90208.0 - Concrete Sidewalk Band - SF	1790.00	\$18.00	\$32,220.00
90209.0 - Granite Pavers - SF	4025.00	\$74.80	\$301,070.00
90210.0 - Concrete Masonry Footing - CY	265.00	\$513.21	\$136,000.65
90211.0 - Concrete Masonry Walls - CY	280.00	\$491.07	\$137,499.60
90212.0 - Concrete Masonry Walls Colored - CY	65.00	\$1,384.62	\$90,000.30
90213.0 - Concrete Masonry Sidewalk Reinforced - SF	1450.00	\$15.00	\$21,750.00
90214.0 - Concrete Gutter 24-Inch - LF	390.00	\$24.00	\$9,360.00

STATE STREET RECONSTRUCTION ASSESSMENT DISTRICT - 2014
CONTRACT NO. 7206

Speedway Sand & Gravel Inc.			
Item	Quantity	Price	Extension
90215.0 - Concrete Curb 12-Inch - LF	38.00	\$40.00	\$1,520.00
90216.0 - Concrete Mow Edge Reinforced - LF	180.00	\$20.00	\$3,600.00
90217.0 - Limestone Paver Mow Edge - LF	50.00	\$218.00	\$10,900.00
90218.0 - Paved Surface Temporary - SF	5000.00	\$3.00	\$15,000.00
90219.0 - Concrete Steps - SF	416.00	\$69.72	\$29,003.52
90220.0 - Limestone Veneer - SF	115.00	\$382.61	\$44,000.15
90221.0 - Precast Concrete Cap For Seat Wall - LF	675.00	\$143.71	\$97,004.25
90222.0 - Precast Concrete Cap For Single Terrace Seating - LF	50.00	\$238.00	\$11,900.00
90223.0 - Precast Concrete Cap For Double Terrace Seating - LF	225.00	\$160.00	\$36,000.00
90224.0 - Wood Surface For Seat Wall - LF	75.00	\$466.67	\$35,000.25
90225.0 - Wood Decking at Leaf Base - SF	90.00	\$156.68	\$14,101.20
90226.0 - Cantilever Wood Seat - LF	130.00	\$1,057.70	\$137,501.00
90227.0 - Precast Concrete Cap For Veneer Wall - LF	50.00	\$320.00	\$16,000.00
90228.0 - Exterior Handrails - LF	48.00	\$325.00	\$15,600.00
90229.0 - Cut Limestone Block Wall - LF	155.00	\$267.00	\$41,385.00
90230.0 - Tree Grate - EACH	33.00	\$1,900.00	\$62,700.00
90231.0 - Sienna' Freeman Maple 3 1/2" B&B - EACH	1.00	\$1,010.00	\$1,010.00
90232.0 - Autumn Gold' Ginko 3 1/2" B&B - EACH	1.00	\$1,090.00	\$1,090.00
90233.0 - Skyline' Honeylocust 3 1/2" B&B - EACH	12.00	\$980.00	\$11,760.00
90234.0 - Espresso' Kentucky Coffee Tree 3 1/2" B&B - EACH	9.00	\$1,080.00	\$9,720.00
90235.0 - Exclamation London Planetree 3 1/2" B&B - EACH	4.00	\$1,450.00	\$5,800.00
90236.0 - New Horizon' Elm 3 1/2" B&B - EACH	7.00	\$910.00	\$6,370.00
90237.0 - Autumn Billiance' Serviceberry 3" B&B - EACH	2.00	\$760.00	\$1,520.00
90238.0 - Adams' Crabapple 3" B&B - EACH	6.00	\$745.00	\$4,470.00
90239.0 - Accolade' Flowering Cherry 3" B&B - EACH	5.00	\$785.00	\$3,925.00
90240.0 - Cleveland Select' Callery Pear 3" B&B - EACH	1.00	\$815.00	\$815.00
90241.0 - Peking Lilac 3" B&B - EACH	7.00	\$845.00	\$5,915.00
90242.0 - Perennials & Grasses - EACH	1079.00	\$20.00	\$21,580.00
90243.0 - Shrubs - EACH	112.00	\$55.00	\$6,160.00
90244.0 - Groundcovers - EACH	372.00	\$20.00	\$7,440.00
90245.0 - Bulbs - EACH	504.00	\$6.00	\$3,024.00
90246.0 - Planting Soil Mixture - CY	800.00	\$65.00	\$52,000.00
90247.0 - Bench, 6-Foot - EACH	11.00	\$1,300.00	\$14,300.00
90248.0 - Bike Rack, 4 Stall - Single Sided - EACH	2.00	\$560.00	\$1,120.00
90249.0 - Bike Rack, 5 Stall - Single Sided - EACH	4.00	\$640.00	\$2,560.00
90250.0 - Bike Rack, 6 Stall - Single Sided - EACH	6.00	\$750.00	\$4,500.00
90251.0 - Trash Receptacles - EACH	14.00	\$991.00	\$13,874.00
90252.0 - Recycling Receptacles - EACH	13.00	\$1,104.00	\$14,352.00
90253.0 - Solar Trash Compactor - EACH	6.00	\$3,595.00	\$21,570.00
90254.0 - 33" Height Table - EACH	2.00	\$2,500.00	\$5,000.00
90255.0 - 42" Height Table - EACH	4.00	\$3,800.00	\$15,200.00
90256.0 - Moveable Table - EACH	10.00	\$733.00	\$7,330.00
90257.0 - Moveable Chair - EACH	30.00	\$330.00	\$9,900.00
90258.0 - Dual Base Binoculars - EACH	1.00	\$7,200.00	\$7,200.00
90259.0 - Electrical Kiosk - EACH	2.00	\$28,100.00	\$56,200.00
90260.0 - Posting Kiosk - EACH	2.00	\$6,750.00	\$13,500.00
90261.0 - Granite Streetforms Type G - EACH	1.00	\$6,400.00	\$6,400.00
90262.0 - Granite Streetforms Type J - EACH	1.00	\$8,000.00	\$8,000.00
90263.0 - Granite Streetforms Type G Etched - EACH	3.00	\$6,000.00	\$18,000.00
90264.0 - Granite Streetforms Type J Etched - EACH	3.00	\$8,000.00	\$24,000.00
90269.0 - Irrigation System And Appurtenances - LS	1.00	\$30,000.00	\$30,000.00

STATE STREET RECONSTRUCTION ASSESSMENT DISTRICT - 2014
CONTRACT NO. 7206

Speedway Sand & Gravel Inc.			
Item	Quantity	Price	Extension
90270.0 - Reduced Pressure Regulator - EACH	1.00	\$4,000.00	\$4,000.00
90271.0 - Reduced Pressure Regulator Cabinet - EACH	1.00	\$9,000.00	\$9,000.00
90272.0 - Water Meter Pit Access Relocation - LS	1.00	\$3,500.00	\$3,500.00
90273.0 - Shredded Bark Mulch - SY	712.00	\$6.75	\$4,806.00
90274.0 - Underdrain 6-Inch - LF	2100.00	\$16.00	\$33,600.00
90275.0 - Geotextile Fabric Type DF - SY	1650.00	\$3.50	\$5,775.00
90265.0 - LEAF - Foundation - CY	10.00	\$550.00	\$5,500.00
20312.0 - Remove Catchbasin - EACH	19.00	\$700.00	\$13,300.00
20313.0 - Remove Inlet - EACH	7.00	\$500.00	\$3,500.00
20333.0 - Abandon Inlet - EACH	1.00	\$350.00	\$350.00
20335.0 - Abandon Sewer Pipe With Slurry - CY	3.00	\$350.00	\$1,050.00
20506.0 - Adjust Sewer Access Casting - EACH	1.00	\$500.00	\$500.00
50211.0 - Select Backfill for Storm Sewer - TF	1896.00	\$0.50	\$948.00
50411.0 - 12-Inch RCP Storm Sewer Pipe - LF	674.00	\$81.73	\$55,086.02
50412.0 - 15-Inch RCP Storm Sewer Pipe - LF	144.00	\$73.55	\$10,591.20
50413.0 - 18-Inch RCP Storm Sewer Pipe - LF	183.00	\$76.19	\$13,942.77
50415.0 - 24-Inch RCP Storm Sewer Pipe - LF	111.00	\$81.57	\$9,054.27
50417.0 - 30-Inch RCP Storm Sewer Pipe - LF	104.00	\$108.59	\$11,293.36
50418.0 - 36-Inch RCP Storm Sewer Pipe - LF	207.00	\$124.69	\$25,810.83
50434.0 - 29 Inch x 45 Inch HERCP Storm Sewer Pipe - LF	499.00	\$145.18	\$72,444.82
50499.0 - Concrete Collar - EACH	1.00	\$700.00	\$700.00
50723.0 - 3' x 3' Storm SAS - EACH	2.00	\$2,800.00	\$5,600.00
50724.0 - 4' x 4' Storm SAS - EACH	14.00	\$3,200.00	\$44,800.00
50741.0 - Type "H" Inlet - EACH	30.00	\$2,100.00	\$63,000.00
50792.0 - Storm Sewer Tap - EACH	3.00	\$900.00	\$2,700.00
50793.0 - Type 1 Private Storm Reconnection - EACH	4.00	\$1,750.00	\$7,000.00
50802.0 - Concrete Supports - EACH	1.00	\$1,800.00	\$1,800.00
90030.0 - Abandon Steam Vault - EACH	1.00	\$2,000.00	\$2,000.00
90033.0 - Storm Sewer Tap Box Culvert Special - EACH	1.00	\$2,000.00	\$2,000.00
90034.0 - 4' DIA Storm Sewer SAS - EACH	3.00	\$1,975.00	\$5,925.00
90035.0 - PVC Storm Sewer Lateral - LF	135.00	\$64.00	\$8,640.00
90036.0 - Sidewalk Drain - LF	175.00	\$178.00	\$31,150.00
90037.0 - Adjust UW Casting - EACH	1.00	\$600.00	\$600.00
90038.0 - Adjust UW Structure - EACH	3.00	\$1,800.00	\$5,400.00
10914.0 - Mobilization for Sanitary Sewer Construction - LS	1.00	\$2,000.00	\$2,000.00
20331.0 - Abandon Sewer Access Structure - EACH	1.00	\$1,400.00	\$1,400.00
20336.0 - Pipe Plugs - EACH	2.00	\$500.00	\$1,000.00
20501.0 - Adjust Sewer Access Structure - EACH	3.00	\$450.00	\$1,350.00
50212.0 - Select Fill For Sanitary Sewer Main - TF	207.00	\$1.00	\$207.00
50301.0 - 8" PVC Sanitary Sewer Pipe SDR-35 - LF	13.00	\$141.84	\$1,843.92
50303.0 - 12" PVC Sanitary Sewer Pipe SDR-35 - LF	10.00	\$683.82	\$6,838.20
50321.0 - 8" PVC Pressure Sanitary Sewer Pipe - LF	131.00	\$175.43	\$22,981.33
50323.0 - 12" PVC Pressure Sanitary Sewer Pipe - LF	40.00	\$351.56	\$14,062.40
50352.0 - 6-Inch Sanitary Sewer Lateral - LF	13.00	\$138.88	\$1,805.44
50357.0 - Compression Coupling - EACH	4.00	\$500.00	\$2,000.00
50361.0 - Wastewater Control - LS	1.00	\$5,000.00	\$5,000.00
50701.0 - Four Foot Diameter SAS - EACH	3.00	\$4,000.00	\$12,000.00
50791.0 - Sanitary Sewer Tap - EACH	7.00	\$1,500.00	\$10,500.00
90070.0 - Adjust SAS Special - EACH	1.00	\$2,000.00	\$2,000.00
90071.0 - Install Casing Pipe - LF	40.00	\$220.00	\$8,800.00
90072.0 - 3' Diameter Sewer Access Structure - EACH	2.00	\$3,900.00	\$7,800.00

STATE STREET RECONSTRUCTION ASSESSMENT DISTRICT - 2014
CONTRACT NO. 7206

Speedway Sand & Gravel Inc.			
Item	Quantity	Price	Extension
10703.0 - Traffic Control For Watermain Installation - LS	1.00	\$4,000.00	\$4,000.00
10913.0 - Mobilization for Watermain Installation - LS	1.00	\$5,000.00	\$5,000.00
70001.0 - Furnish and Install 4-Inch Pipe & Fittings - LF	20.00	\$173.05	\$3,461.00
70005.0 - Furnish and Install 12-Inch Pipe & Fittings - LF	160.00	\$216.68	\$34,668.80
70030.0 - Furnish and Install 4-Inch Water Valve - EACH	1.00	\$1,492.00	\$1,492.00
70040.0 - Furnish and Install Hydrant - EACH	1.00	\$4,387.00	\$4,387.00
70082.0 - Cut off Existing Water Main - EACH	3.00	\$3,000.00	\$9,000.00
70090.0 - Abandon Water Valve Box - EACH	12.00	\$300.00	\$3,600.00
70091.0 - Abandon Hydrant - EACH	1.00	\$750.00	\$750.00
70092.0 - Abandon Water Valve Access Structure - EACH	2.00	\$500.00	\$1,000.00
70104.0 - Adjust Water Valve Box - EACH	4.00	\$250.00	\$1,000.00
70105.0 - Pipe Plug for Watermain Installation - EACH	4.00	\$750.00	\$3,000.00
70107.0 - Removal of Excess Amounts of Boulders - CY	25.00	\$10.00	\$250.00
90160.0 - Watermain Bypass - LS	1.00	\$7,985.00	\$7,985.00
60221.0 - Furnish & Install 3-Inch PVC (Schedule 80) Conduit by "Open-Trench" Method - LF	575.00	\$9.60	\$5,520.00
60229.0 - Furnish & Install 2-Inch PVC (Schedule 80) Conduit by "Open-Trench" Method - LF	1625.00	\$8.53	\$13,861.25
60421.0 - Remove Street Light Base - EACH	37.00	\$400.00	\$14,800.00
60422.0 - Remove Street Light Pole - EACH	37.00	\$265.00	\$9,805.00
60504.0 - Install City-Furnished Pedestrian Street Light Unit - EACH	19.00	\$650.00	\$12,350.00
60602.0 - Install Metered Electrical Service - EACH	2.00	\$1,200.00	\$2,400.00
60704.0 - Construct Electrical Handole Type 3 - EACH	5.00	\$350.00	\$1,750.00
90120.0 - Concrete Bases LB-3 Modified - EACH	19.00	\$780.00	\$14,820.00
90121.0 - Concrete Bases LB-8 Raised - EACH	10.00	\$800.00	\$8,000.00
90122.0 - Concrete Bases LB-SP - EACH	5.00	\$1,450.00	\$7,250.00
90123.0 - Steel Transformer Bases Black Finish - EACH	10.00	\$55.00	\$550.00
90124.0 - Installation of Steel Pole 30-Foot 11 Gauge Black Finish - EACH	10.00	\$560.00	\$5,600.00
90125.0 - Installation of Pedstrian Light Banner and Bracket, Black Finish - EACH	17.00	\$200.00	\$3,400.00
90126.0 - Installation of Area Light Banner and Bracket, Black Finish - EACH	4.00	\$320.00	\$1,280.00
90127.0 - Installation of Temporary Street Light Fixtures & Brackets - EACH	8.00	\$160.00	\$1,280.00
90128.0 - Installation Temporary Wood Poles - EACH	8.00	\$1,400.00	\$11,200.00
90129.0 - Electrical Wire Lighting 12 AWG - LF	6534.00	\$0.63	\$4,116.42
90130.0 - Electrical Wire Lighting 10 AWG - LF	4793.00	\$0.80	\$3,834.40
90131.0 - Electrical Wire Lighting 8 AWG - LF	18290.00	\$0.90	\$16,461.00
90132.0 - Electrical Wire Lighting 6 AWG - LF	3904.00	\$1.20	\$4,684.80
90133.0 - Double Duplex Receptacle In Flush Box - EACH	4.00	\$295.00	\$1,180.00
90134.0 - 208 Volt Receptacle In Flush Box - EACH	2.00	\$285.00	\$570.00
90135.0 - Electrical For Kiosk - EACH	2.00	\$13,850.00	\$27,700.00
90136.0 - LED Power Supply & Vault - EACH	20.00	\$2,158.00	\$43,160.00
90137.0 - LED Under Bench Lighting - LF	1410.00	\$71.00	\$100,110.00
90138.0 - Furnish and Install Bascom Hill Pedestrian Pole Lighting - EACH	5.00	\$5,109.00	\$25,545.00
90139.0 - Furnish and Install 3/4-Inch PVC (Schedule 40) Conduit by "Open Trench" Method - LF	418.00	\$7.00	\$2,926.00

STATE STREET RECONSTRUCTION ASSESSMENT DISTRICT - 2014
CONTRACT NO. 7206

Speedway Sand & Gravel Inc.

Item	Quantity	Price	Extension
60223.0 - Furnish & Install 3-Inch PVC (Schedule 40) Conduit by "Open-Trench" Method - LF	1890.00	\$9.00	\$17,010.00
20311.0 - Remove Sewer Access Structure - EACH	15.00	\$700.00	\$10,500.00
50390.0 - Sewer Electronic Markers - EACH	5.00	\$100.00	\$500.00
20314.0 - Remove Pipe (Water) - LF	4086.00	\$1.00	\$4,086.00
50801.0 - Utility Line Opening (ULO) - EACH	35.00	\$500.00	\$17,500.00
60702.0 - Construct Electrical Handole Type 1 - EACH	21.00	\$700.00	\$14,700.00
60706.0 - Construct Electrical Handole Type 5 - EACH	13.00	\$1,170.00	\$15,210.00
70002.0 - Furnish and Install 6-Inch Pipe & Fittings - LF	90.00	\$146.61	\$13,194.90
70003.0 - Furnish and Install 8-Inch Pipe & Fittings - LF	1400.00	\$135.20	\$189,280.00
70031.0 - Furnish and Install 6-Inch Water Valve - EACH	4.00	\$1,976.00	\$7,904.00
70032.0 - Furnish and Install 8-Inch Water Valve - EACH	12.00	\$2,538.00	\$30,456.00
70070.0 - Select Fill - Sand for Water - LF	1670.00	\$0.10	\$167.00
70080.0 - Cut-In or Connect to Existing Water System - EACH	13.00	\$2,500.00	\$32,500.00
70101.0 - Furnish and Install Styrofoam - LF	160.00	\$15.00	\$2,400.00
90031.0 - Remove and Dispose Steam Tunnel/Pipe and Steam Vault Appurtenances - LF	180.00	\$70.00	\$12,600.00
90032.0 - Remove and Dispose Regulated Asbestos Containing Material Steam Tunnel/Pipe and Steam Vault Appurtenances - LF	180.00	\$40.00	\$7,200.00
CONTRACT TOTALS	Totals		\$4,733,488.80



Department of Public Works
City Engineering Division

608 266 4751

Robert F. Phillips, P.E.
City Engineer

City-County Building, Room 115
210 Martin Luther King, Jr. Boulevard
Madison, Wisconsin 53703
608 264 9275 FAX
1 866 704 2315 Textnet

Principal Engineers
Michael R. Dailey, P.E.
Christina M. Bachmann, P.E.
John S. Fahmy, P.E.
Gregory T. Fries, P.E.

Facilities & Sustainability
Jeanne E. Hoffman, Manager
James C. Whitley, A.I.A.

Operations Manager
Kathleen M. Cryan

GIS Manager
David A. Davis, R.I.S.

Financial Officer
Steven B. Danner-Rivers
Hydrogeologist
Brynn Bernis

BIENNIAL BID BOND

Speedway Sand & Gravel, Inc.

(a corporation of the State of Wisconsin)

(individual), (partnership), (hereinafter referred to as the "Principal") and
Fidelity and Deposit Company of Maryland

a corporation of the State of Maryland (hereinafter referred to as the "Surety") and licensed to do business in the State of Wisconsin, are held and firmly bound unto the City of Madison, Wisconsin (hereinafter referred to as the "City"), in the sum equal to the individual proposal guaranty amounts of the total bid or bids of the Principal herein accepted by the City, for the payment of which the Principal and the Surety hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns.

The condition of this obligation is that the Principal has submitted to the City certain bids for projects from the time period of February 1, 2014 through January 31, 2016

If the Principal is awarded the contract(s) by the City and, within the time and manner required by law after the prescribed forms are presented for its signature, the Principal enters into (a) written contract(s) in accordance with the bid(s), and files with the City its bond(s) guaranteeing faithful performance and payment for all labor and materials, as required by law, or if the City rejects all bids for the work described, then this obligation shall be null and void; otherwise, it shall remain in full force and effect.

In the event the Principal shall fail to execute and deliver the contract(s) or the performance and payment bond(s), all within the time specified or any extension thereof, the Principal and Surety agree jointly and severally to pay to the City within ten (10) calendar days of written demand a total equal to the sum of the individual proposal guaranty amounts of the total bid(s) as liquidated damages.

The Surety, for value received, hereby agrees that the obligations of it and its bond shall be in no way impaired or affected by any extension of time within which the City may accept a bid, and the Surety does hereby waive notice of any such extension.

This bond may be terminated by the Surety upon giving thirty (30) days written notice to the City of its intent to terminate this bond and to be released and discharged therefrom, but such termination shall not operate to relieve or discharge the Surety from any liability already accrued or which shall accrue before the expiration of such thirty (30) day period.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, on the day and year set forth below.

PRINCIPAL

Speedway Sand & Gravel, Inc.

COMPANY NAME

AFFIX SEAL

DATE

11-20-2013

By:

SIGNATURE AND TITLE

John Czerepinski, VP.

SURETY

Fidelity and Deposit Company of Maryland

COMPANY NAME

AFFIX SEAL

11-18-13

DATE

By:

SIGNATURE AND TITLE

Elizabeth Mosca, Attorney-in-Fact

This certifies that I have been duly licensed as an agent for the Surety in Wisconsin under License No. 2530156 for the year 2014, and appointed as attorney in fact with authority to execute this bid bond, which power of attorney has not been revoked.

11-18-13

DATE

Elizabeth Mosca

AGENT

6609 University Ave

ADDRESS

Middleton, WI 53562

CITY, STATE AND ZIP CODE

608-644-8668

TELEPHONE NUMBER

Note to Surety and Principal: Any bid submitted which this bond guarantees may be rejected if the Power of Attorney form showing that the Agent of Surety is currently authorized to execute bonds on behalf of Surety is not attached to this bond.

CERTIFICATE OF BIENNIAL BID BOND

TIME PERIOD - VALID (FROM/TO)
February 1, 2014 through January 31, 2016
NAME OF SURETY
Fidelity and Deposit Company of Maryland
NAME OF CONTRACTOR
Speedway Sand & Gravel, Inc.
CERTIFICATE HOLDER
City of Madison, Wisconsin

This is to certify that a biennial bid bond issued by the above-named Surety is currently on file with the City of Madison.

This certificate is issued as a matter of information and conveys no rights upon the certificate holder and does not amend, extend or alter the coverage of the biennial bid bond.

Cancellation: Should the above policy be cancelled before the expiration date, the issuing Surety will give thirty (30) days written notice to the certificate holder indicated above.


SIGNATURE OF AUTHORIZED CONTRACTOR REPRESENTATIVE

11-20-2013
DATE

**ZURICH AMERICAN INSURANCE COMPANY
COLONIAL AMERICAN CASUALTY AND SURETY COMPANY
FIDELITY AND DEPOSIT COMPANY OF MARYLAND
POWER OF ATTORNEY**

KNOW ALL MEN BY THESE PRESENTS: That the ZURICH AMERICAN INSURANCE COMPANY, a corporation of the State of New York, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, a corporation of the State of Maryland, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND a corporation of the State of Maryland (herein collectively called the "Companies"), by **THOMAS O. MCCLELLAN, Vice President**, in pursuance of authority granted by Article V, Section 8, of the By-Laws of said Companies, which are set forth on the reverse side hereof and are hereby certified to be in full force and effect on the date hereof, do hereby nominate, constitute, and appoint **Ann MAY, Rana R. HUGHEY, Janice CLOOTEN, Michele A. HOLZ and Elizabeth MOSCA, all of Middleton, Wisconsin**, EACH its true and lawful agent and Attorney-in-Fact, to make, execute, seal and deliver, for, and on its behalf as surety, and as its act and deed: **any and all bonds and undertakings**, and the execution of such bonds or undertakings in pursuance of these presents, shall be as binding upon said Companies, as fully and amply, to all intents and purposes, as if they had been duly executed and acknowledged by the regularly elected officers of the ZURICH AMERICAN INSURANCE COMPANY at its office in New York, New York, the regularly elected officers of the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY at its office in Owings Mills, Maryland, and the regularly elected officers of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at its office in Owings Mills, Maryland, in their own proper persons.

The said Vice President does hereby certify that the extract set forth on the reverse side hereof is a true copy of Article V, Section 8, of the By-Laws of said Companies, and is now in force.

IN WITNESS WHEREOF, the said Vice-President has heretunto subscribed his/her names and affixed the Corporate Seals of the said ZURICH AMERICAN INSURANCE COMPANY, COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and FIDELITY AND DEPOSIT COMPANY OF MARYLAND, this 14th day of May, A.D. 2013.

ATTEST:

**ZURICH AMERICAN INSURANCE COMPANY
COLONIAL AMERICAN CASUALTY AND SURETY COMPANY
FIDELITY AND DEPOSIT COMPANY OF MARYLAND**



By: *Eric D. Barnes*
Assistant Secretary
Eric D. Barnes

Thomas O. McClellan
Vice President
Thomas O. McClellan

State of Maryland
City of Baltimore

On this 14th day of May, A.D. 2013, before the subscriber, a Notary Public of the State of Maryland, duly commissioned and qualified, **THOMAS O. MCCLELLAN, Vice President, and ERIC D. BARNES, Assistant Secretary**, of the Companies, to me personally known to be the individuals and officers described in and who executed the preceding instrument, and acknowledged the execution of same, and being by me duly sworn, depose and saith, that he/she is the said officer of the Company aforesaid, and that the seals affixed to the preceding instrument are the Corporate Seals of said Companies, and that the said Corporate Seals and the signature as such officer were duly affixed and subscribed to the said instrument by the authority and direction of the said Corporations.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my Official Seal the day and year first above written.

Constance A. Dunn

Constance A. Dunn, Notary Public
My Commission Expires: July 14, 2015



EXTRACT FROM BY-LAWS OF THE COMPANIES

"Article V, Section 8, Attorneys-in-Fact. The Chief Executive Officer, the President, or any Executive Vice President or Vice President may, by written instrument under the attested corporate seal, appoint attorneys-in-fact with authority to execute bonds, policies, recognizances, stipulations, undertakings, or other like instruments on behalf of the Company, and may authorize any officer or any such attorney-in-fact to affix the corporate seal thereto; and may with or without cause modify or revoke any such appointment or authority at any time."

CERTIFICATE

I, the undersigned, Vice President of the ZURICH AMERICAN INSURANCE COMPANY, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND, do hereby certify that the foregoing Power of Attorney is still in full force and effect on the date of this certificate; and I do further certify that Article V, Section 8, of the By-Laws of the Companies is still in force.

This Power of Attorney and Certificate may be signed by facsimile under and by authority of the following resolution of the Board of Directors of the ZURICH AMERICAN INSURANCE COMPANY at a meeting duly called and held on the 15th day of December 1990.

RESOLVED: "That the signature of the President or a Vice President and the attesting signature of a Secretary or an Assistant Secretary and the Seal of the Company may be affixed by facsimile on any Power of Attorney. Any such Power or any certificate thereof bearing such facsimile signature and seal shall be valid and binding on the Company."

This Power of Attorney and Certificate may be signed by facsimile under and by authority of the following resolution of the Board of Directors of the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY at a meeting duly called and held on the 5th day of May, 1994, and the following resolution of the Board of Directors of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at a meeting duly called and held on the 10th day of May, 1990.

RESOLVED: "That the facsimile or mechanically reproduced seal of the company and facsimile or mechanically reproduced signature of any Vice-President, Secretary, or Assistant Secretary of the Company, whether made heretofore or hereafter, wherever appearing upon a certified copy of any power of attorney issued by the Company, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the corporate seals of the said Companies, this 18 day of NOV., 2013.



Geoffrey Delisia

Geoffrey Delisia, Vice President

SECTION H: AGREEMENT

THIS AGREEMENT made this 30th day of April in the year Two Thousand and Fourteen between **SPEEDWAY SAND & GRAVEL, INC.** hereinafter called the Contractor, and the City of Madison, Wisconsin, hereinafter called the City.

WHEREAS, the Common Council of the said City of Madison under the provisions of a resolution adopted **APRIL 29, 2014**, and by virtue of authority vested in the said Council, has awarded to the Contractor the work of performing certain construction.

NOW, THEREFORE, the Contractor and the City, for the consideration hereinafter named, agree as follows:

1. **Scope of Work.** The Contractor shall, perform the construction, execution and completion of the following listed complete work or improvement in full compliance with the Plans, Specifications, Standard Specifications, Supplemental Specifications, Special Provisions and contract; perform all items of work covered or stipulated in the proposal; perform all altered or extra work; and shall furnish, unless otherwise provided in the contract, all materials, implements, machinery, equipment, tools, supplies, transportation, and labor necessary to the prosecution and completion of the work or improvements:

STATE STREET RECONSTRUCTION ASSESSMENT DISTRICT - 2014 CONTRACT NO. 7206

2. **Completion Date/Contract Time.** Construction work must begin within seven (7) calendar days after the date appearing on mailed written notice to do so shall have been sent to the Contractor and shall be carried on at a rate so as to secure full completion SEE SPECIAL PROVISIONS, the rate of progress and the time of completion being essential conditions of this Agreement.
3. **Contract Price.** The City shall pay to the Contractor at the times, in the manner and on the conditions set forth in said specifications, the sum of **FOUR MILLION SEVEN HUNDRED THIRTY-THREE THOUSAND FOUR HUNDRED EIGHTY-EIGHT DOLLARS AND EIGHTY CENTS (\$4,733,488.80)** being the amount bid by such Contractor and which was awarded to him/her as provided by law.
4. **Wage Rates for Employees of Public Works Contractors**

General and Authorization. The Contractor shall compensate its employees at the prevailing wage rate in accordance with section 66.0903, Wis. Stats., DWD 290 of the Wisconsin Administrative Code and as hereinafter provided unless otherwise noted in Section D: Special Provisions, Subsection 102.10 – Minimum Rate of Wage Scale.

"Public Works" shall include building or work involving the erection, construction, remodeling, repairing or demolition of buildings, parking lots, highways, streets, bridges, sidewalks, street lighting, traffic signals, sanitary sewers, water mains and appurtenances, storm sewers, and the grading and landscaping of public lands.

"Building or work" includes construction activity as distinguished from manufacturing, furnishing of materials, or servicing and maintenance work, except for the delivery of mineral aggregate such as sand, gravel, bituminous asphaltic concrete or stone which is incorporated into the work under contract with the City by depositing the material directly in final place from transporting vehicle.

"Erection, construction, remodeling, repairing" means all types of work done on a particular building or work at the site thereof in the construction or development of the project, including without limitation, erecting, construction, remodeling, repairing, altering, painting, and decorating, the transporting of materials and supplies to or from the building or work done by the employees of the Contractor, Subcontractor, or Agent thereof, and the manufacturing or furnishing of

materials, articles, supplies or equipment on the site of the building or work, by persons employed by the Contractor, Subcontractor, or Agent thereof.

"Employees working on the project" means laborers, workers, and mechanics employed directly upon the site of work.

"Laborers, Workers, and Mechanics" include pre-apprentices, helpers, trainees, learners and properly registered and indentured apprentices but exclude clerical, supervisory, and other personnel not performing manual labor.

Establishment of Wage Rates. The Department of Public Works shall periodically obtain a current schedule of prevailing wage rates from DWD. The schedule shall be used to establish the City of Madison Prevailing Wage Rate Schedule for Public Works Construction (prevailing wage rate). The Department of Public Works may include known increases to the prevailing wage rate which can be documented and are to occur on a future specific date. The prevailing wage rate shall be included in public works contracts subsequently negotiated or solicited by the City. Except for known increases contained within the schedule, the prevailing wage rate shall not change during the contract. The approved wage rate is attached hereto.

Workforce Profile. The Contractor shall, at the time of signature of the contract, notify the City Engineer in writing of the names and classifications of all the employees of the Contractor, Subcontractors, and Agents proposed for the work. In the alternative, the Contractor shall submit in writing the classifications of all the employees of the Contractor, Subcontractors and Agents and the total number of hours estimated in each classification for the work. This workforce profile(s) shall be reviewed by the City Engineer who may, within ten (10) days, object to the workforce profile(s) as not being reflective of that which would be required for the work. The Contractor may request that the workforce profile, or a portion of the workforce profile, be submitted after the signature of the contract but at least ten (10) days prior to the work commencing. Any costs or time loss resulting from modifications to the workforce profile as a result of the City Engineer's objections shall be the responsibility of the Contractor.

Payrolls and Records. The Contractor shall keep weekly payroll records setting forth the name, address, telephone number, classification, wage rate and fringe benefit package of all the employees who work on the contract, including the employees of the Contractor's subcontractors and agents. Such weekly payroll records must include the required information for all City contracts and all other contracts on which the employee worked during the week in which the employee worked on the contract. The Contractor shall also keep records of the individual time each employee worked on the project and for each day of the project. Such records shall also set forth the total number of hours of overtime credited to each such employee for each day and week and the amount of overtime pay received in that week. The records shall set forth the full weekly wages earned by each employee and the actual hourly wage paid to the employee.

The Contractor shall submit the weekly payroll records, including the records of the Contractor's subcontractors and agents, to the City Engineer for every week that work is being done on the contract. The submittal shall be within twenty-one (21) calendar days of the end of the Contractor's weekly pay period.

Employees shall receive the full amounts accrued at the time of the payment, computed at rates not less than those stated in the prevailing wage rate and each employee's rate shall be determined by the work that is done within the trade or occupation classification which should be properly assigned to the employee.

An employee's classification shall not be changed to a classification of a lesser rate during the contract. If, during the term of the contract, an employee works in a higher pay classification than the one which was previously properly assigned to the employee, then that employee shall be considered to be in the higher pay classification for the balance of the contract, receive the appropriate higher rate of pay, and she/he shall not receive a lesser rate during the balance of the

contract. For purposes of clarification, it is noted that there is a distinct difference between working in a different classification with higher pay and doing work within a classification that has varying rates of pay which are determined by the type of work that is done within the classification. For example, the classification "Operating Engineer" provides for different rates of pay for various classes of work and the Employer shall compensate an employee classified as an "Operating Engineer" based on the highest class of work that is done in one day. Therefore, an "Operating Engineer's" rate may vary on a day to day basis depending on the type of work that is done, but it will never be less than the base rate of an "Operating Engineer". Also, as a matter of clarification, it is recognized that an employee may work in a higher paying classification merely by chance and without prior intention, calculation or design. If such is the case and the performance of the work is truly incidental and the occurrence is infrequent, inconsequential and does not serve to undermine the single classification principle herein, then it may not be required that the employee be considered to be in the higher pay classification and receive the higher rate of pay for the duration of the contract. However, the Contractor is not precluded or prevented from paying the higher rate for the limited time that an employee performs work that is outside of the employee's proper classification.

Questions regarding an employee's classification, rate of pay or rate of pay within a classification, shall be resolved by reference to the established practice that predominates in the industry and on which the trade or occupation rate/classification is based. Rate of pay and classification disputes shall be resolved by relying upon practices established by collective bargaining agreements and guidelines used in such determination by appropriate recognized trade unions operating within the City of Madison.

The Contractor, its Subcontractors and Agents shall submit to interrogation regarding compliance with the provisions of this ordinance.

Mulcting of the employees by the Contractor, Subcontractor, and Agents on Public Works contracts, such as by kickbacks or other devices, is prohibited. The normal rate of wage of the employees of the Contractor, Subcontractor, and Agents shall not be reduced or otherwise diminished as a result of payment of the prevailing wage rate on a public works contract.

Hourly contributions. Hourly contributions shall be determined in accordance with the prevailing wage rate and with DWD 290.01(10), Wis. Admin. Code.

Apprentices and Subjourney persons. Apprentices and sub journeypersons performing work on the project shall be compensated in accordance with the prevailing wage rate and with DWD 290.02, and 290.025, respectively, Wis. Admin. Code.

Straight Time Wages. The Contractor may pay straight time wages as determined by the prevailing wage rate and DWD 290.04, Wis. Admin. Code.

Overtime Wages. The Contractor shall pay overtime wages as required by the prevailing wage rate and DWD 290.05, Wis. Admin. Code.

Posting of Wage Rates and Hours. A clearly legible copy of the prevailing wage rate, together with the provisions of Sec. 66.0903(10)(a) and (11)(a), Wis. Stats., shall be kept posted in at least one conspicuous and easily accessible place at the project site by the Contractor and such notice shall remain posted during the full time any laborers, workers or mechanics are employed on the contract.

Evidence of Compliance by Contractor. Upon completion of the contract, the Contractor shall file with the Department of Public Works an affidavit stating:

- a. That the Contractor has complied fully with the provisions and requirements of Sec. 66.0903(3), Wis. Stats., and Chapter DWD 290, Wis. Admin. Code; the Contractor has received evidence of compliance from each of the agents and subcontractors; and the

names and addresses of all of the subcontractors and agents who worked on the contract.

- b. That full and accurate records have been kept, which clearly indicate the name and trade or occupation of every laborer, worker or mechanic employed by the Contractor in connection with work on the project. The records shall show the number of hours worked by each employee and the actual wages paid therefore; where these records will be kept and the name, address and telephone number of the person who will be responsible for keeping them. The records shall be retained and made available for a period of at least three (3) years following the completion of the project of public works and shall not be removed without prior notification to the municipality.

Evidence of Compliance by Agent and Subcontractor. Each agent and subcontractor shall file with the Contractor, upon completion of their portion of the work on the contract an affidavit stating that all the provisions of Sec. 66.0903(3), Wis. Stats., have been fully complied with and that full and accurate records have been kept, which clearly indicate the name and trade or occupation of every laborer, worker or mechanic employed by the Contractor in connection with work on the project. The records shall show the number of hours worked by each employee and the actual wages paid therefore; where these records shall be kept and the name, address and telephone number of the person who shall be responsible for keeping them. The records shall be retained and made available for a period of at least three (3) years following the completion of the project of public works and shall not be removed without prior notification to the municipality.

Failure to Comply with the Prevailing Wage Rate. If the Contractor fails to comply with the prevailing wage rate, she/he shall be in default on the contract.

5. **Affirmative Action.** In the performance of the services under this Agreement the Contractor agrees not to discriminate against any employee or applicant because of race, religion, marital status, age, color, sex, disability, national origin or ancestry, income level or source of income, arrest record or conviction record, less than honorable discharge, physical appearance, sexual orientation, gender identity, political beliefs, or student status. The Contractor further agrees not to discriminate against any subcontractor or person who offers to subcontract on this contract because of race, religion, color, age, disability, sex, sexual orientation, gender identity or national origin.

The Contractor agrees that within thirty (30) days after the effective date of this agreement, the Contractor will provide to the City Affirmative Action Division certain workforce utilization statistics, using a form to be furnished by the City.

If the contract is still in effect, or if the City enters into a new agreement with the Contractor, within one year after the date on which the form was required to be provided, the Contractor will provide updated workforce information using a second form, also to be furnished by the City. The second form will be submitted to the City Affirmative Action Division no later than one year after the date on which the first form was required to be provided.

The Contractor further agrees that, for at least twelve (12) months after the effective date of this contract, it will notify the City Affirmative Action Division of each of its job openings at facilities in Dane County for which applicants not already employees of the Contractor are to be considered. The notice will include a job description, classification, qualifications and application procedures and deadlines. The Contractor agrees to interview and consider candidates referred by the Affirmative Action Division if the candidate meets the minimum qualification standards established by the Contractor, and if the referral is timely. A referral is timely if it is received by the Contractor on or before the date started in the notice.

Articles of Agreement

Article I

The Contractor shall take affirmative action in accordance with the provisions of this contract to insure that applicants are employed, and that employees are treated during employment without regard to race, religion, color, age, marital status, disability, sex, sexual orientation, gender identity or national origin and that the employer shall provide harassment free work environment for the realization of the potential of each employee. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation and selection for training including apprenticeship insofar as it is within the control of the Contractor. The Contractor agrees to post in conspicuous places available to employees and applicants notices to be provided by the City setting out the provisions of the nondiscrimination clauses in this contract.

Article II

The Contractor shall in all solicitations or advertisements for employees placed by or on behalf of the Contractors state that all qualified or qualifiable applicants will be employed without regard to race, religion, color, age, marital status, disability, sex, sexual orientation, gender identity or national origin.

Article III

The Contractor shall send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding a notice to be provided by the City advising the labor union or worker's representative of the Contractor's equal employment opportunity and affirmative action commitments. Such notices shall be posted in conspicuous places available to employees and applicants for employment.

Article V

The Contractor agrees that it will comply with all provisions of the Affirmative Action Ordinance of the City of Madison, including the contract compliance requirements. The Contractor agrees to submit the model affirmative action plan for public works contractors in a form approved by the Affirmative Action Division Manager.

Article VI

The Contractor will maintain records as required by Section 39.02(9)(f) of the Madison General Ordinances and will provide the City Affirmative Action Division with access to such records and to persons who have relevant and necessary information, as provided in Section 39.02(9)(f). The City agrees to keep all such records confidential, except to the extent that public inspection is required by law.

Article VII

In the event of the Contractor's or subcontractor's failure to comply with the Equal Employment Opportunity and Affirmative Action Provisions of this contract or Section 39.03 and 39.02 of the Madison General Ordinances, it is agreed that the City at its option may do any or all of the following:

1. Cancel, terminate or suspend this Contract in whole or in part.
2. Declare the Contractor ineligible for further City contracts until the Affirmative Action requirements are met.

3. Recover on behalf of the City from the prime Contractor 0.5 percent of the contract award price for each week that such party fails or refuses to comply, in the nature of liquidated damages, but not to exceed a total of five percent (5%) of the contract price, or five thousand dollars (\$5,000), whichever is less. Under public works contracts, if a subcontractor is in noncompliance, the City may recover liquidated damages from the prime Contractor in the manner described above. The preceding sentence shall not be construed to prohibit a prime Contractor from recovering the amount of such damage from the non-complying subcontractor.

Article VIII

The Contractor shall include the above provisions of this contract in every subcontract so that such provisions will be binding upon each subcontractor. The Contractor shall take such action with respect to any subcontractor as necessary to enforce such provisions, including sanctions provided for noncompliance.

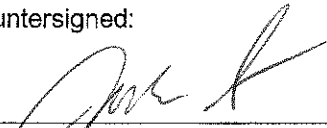

Article IX

The Contractor shall allow the maximum feasible opportunity to small business enterprises to compete for any subcontracts entered into pursuant to this contract. (In federally funded contracts the terms "DBE, MBE and WBE" shall be substituted for the term "small business" in this Article.)

STATE STREET RECONSTRUCTION ASSESSMENT DISTRICT - 2014
CONTRACT NO. 7206


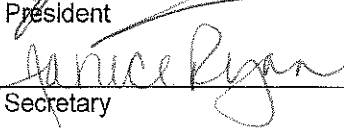
IN WITNESS WHEREOF, the Contractor has hereunto set his/her hand and seal and the City has caused these presents to be sealed with its corporate seal and to be subscribed by its Mayor and City Clerk the day and year first above written.

Countersigned:

 4/30/14
Witness Date
 4/30/14
Witness Date

SPEEDWAY SAND & GRAVEL, INC.

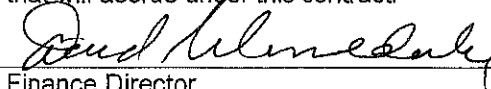
Company Name

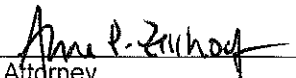
 4/30/14
V. President Date
 4/30/14
Secretary Date

CITY OF MADISON, WISCONSIN

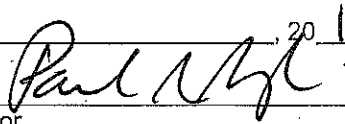
Provisions have been made to pay the liability that will accrue under this contract.

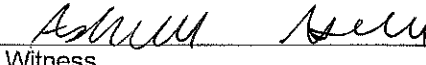
Approved as to form:

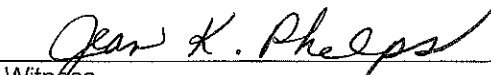

Finance Director

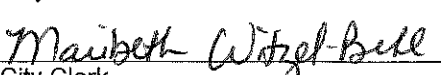
 10x
City Attorney

Signed this 30th day of April

 20 14
Mayor Date


Witness


Witness

 5-5-14
City Clerk Date

SECTION I: PAYMENT AND PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS, that we SPEEDWAY SAND & GRAVEL, INC. as principal, and Fidelity and Deposit Company of Maryland Company of Maryland as surety, are held and firmly bound unto the City of Madison, Wisconsin, in the sum of FOUR MILLION SEVEN HUNDRED THIRTY-THREE THOUSAND FOUR HUNDRED EIGHTY-EIGHT DOLLARS AND EIGHTY CENTS (\$4,733,488.80), lawful money of the United States, for the payment of which sum to the City of Madison, we hereby bind ourselves and our respective executors and administrators firmly by these presents.

The condition of this Bond is such that if the above bounden shall on his/her part fully and faithfully perform all of the terms of the Contract entered into between him/herself and the City of Madison for the construction of:

**STATE STREET RECONSTRUCTION ASSESSMENT DISTRICT - 2014
CONTRACT NO. 7206**

in Madison, Wisconsin, and shall pay all claims for labor performed and material furnished in the prosecution of said work, and save the City harmless from all claims for damages because of negligence in the prosecution of said work, and shall save harmless the said City from all claims for compensation (under Chapter 102, Wisconsin Statutes) of employees and employees of subcontractor, then this Bond is to be void, otherwise of full force, virtue and effect.

Signed and sealed this 30th day of April, 2014

Countersigned:

[Signature]
Witness
[Signature]
Secretary

SPEEDWAY SAND & GRAVEL, INC.

Company Name (Principal)

✓ [Signature] President NA Seal

Approved as to form:

[Signature]
City Attorney

Fidelity and Deposit Company of Maryland

Surety

Seal

☒ Salary Employee ☐ Commission

By

[Signature]
Attorney-in-Fact, Elizabeth Mosca

This certifies that I have been duly licensed as an agent for the above company in Wisconsin under License No. 2530156 for the year 2014, and appointed as attorney-in-fact with authority to execute this payment and performance bond which power of attorney has not been revoked.

April 30, 2014

Date

[Signature]
Agent Signature

**ZURICH AMERICAN INSURANCE COMPANY
COLONIAL AMERICAN CASUALTY AND SURETY COMPANY
FIDELITY AND DEPOSIT COMPANY OF MARYLAND
POWER OF ATTORNEY**

KNOW ALL MEN BY THESE PRESENTS: That the ZURICH AMERICAN INSURANCE COMPANY, a corporation of the State of New York, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, a corporation of the State of Maryland, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND a corporation of the State of Maryland (herein collectively called the "Companies"), by **THOMAS O. MCCLELLAN, Vice President**, in pursuance of authority granted by Article V, Section 8, of the By-Laws of said Companies, which are set forth on the reverse side hereof and are hereby certified to be in full force and effect on the date hereof, do hereby nominate, constitute, and appoint **Ann MAY, Rana R. HUGHEY, Janice CLOOTEN, Michele A. HOLZ and Elizabeth MOSCA, all of Middleton, Wisconsin, EACH** its true and lawful agent and Attorney-in-Fact, to make, execute, seal and deliver, for, and on its behalf as surety, and as its act and deed: **any and all bonds and undertakings**, and the execution of such bonds or undertakings in pursuance of these presents, shall be as binding upon said Companies, as fully and amply, to all intents and purposes, as if they had been duly executed and acknowledged by the regularly elected officers of the ZURICH AMERICAN INSURANCE COMPANY at its office in New York, New York., the regularly elected officers of the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY at its office in Owings Mills, Maryland., and the regularly elected officers of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at its office in Owings Mills, Maryland., in their own proper persons.

The said Vice President does hereby certify that the extract set forth on the reverse side hereof is a true copy of Article V, Section 8, of the By-Laws of said Companies, and is now in force.

IN WITNESS WHEREOF, the said Vice-President has hereunto subscribed his/her names and affixed the Corporate Seals of the said **ZURICH AMERICAN INSURANCE COMPANY, COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and FIDELITY AND DEPOSIT COMPANY OF MARYLAND**, this 14th day of May, A.D. 2013.

ATTEST:

**ZURICH AMERICAN INSURANCE COMPANY
COLONIAL AMERICAN CASUALTY AND SURETY COMPANY
FIDELITY AND DEPOSIT COMPANY OF MARYLAND**



By: *Eric D. Barnes*
Assistant Secretary
Eric D. Barnes

Thomas O. McClellan
Vice President
Thomas O. McClellan

State of Maryland
City of Baltimore

On this 14th day of May, A.D. 2013, before the subscriber, a Notary Public of the State of Maryland, duly commissioned and qualified, **THOMAS O. MCCLELLAN, Vice President, and ERIC D. BARNES, Assistant Secretary**, of the Companies, to me personally known to be the individuals and officers described in and who executed the preceding instrument, and acknowledged the execution of same, and being by me duly sworn, depose and saith, that he/she is the said officer of the Company aforesaid, and that the seals affixed to the preceding instrument are the Corporate Seals of said Companies, and that the said Corporate Seals and the signature as such officer were duly affixed and subscribed to the said instrument by the authority and direction of the said Corporations.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my Official Seal the day and year first above written.

Constance A. Dunn



Constance A. Dunn, Notary Public
My Commission Expires: July 14, 2015

EXTRACT FROM BY-LAWS OF THE COMPANIES

"Article V, Section 8, Attorneys-in-Fact. The Chief Executive Officer, the President, or any Executive Vice President or Vice President may, by written instrument under the attested corporate seal, appoint attorneys-in-fact with authority to execute bonds, policies, recognizances, stipulations, undertakings, or other like instruments on behalf of the Company, and may authorize any officer or any such attorney-in-fact to affix the corporate seal thereto; and may with or without cause modify or revoke any such appointment or authority at any time."

CERTIFICATE

I, the undersigned, Vice President of the ZURICH AMERICAN INSURANCE COMPANY, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND, do hereby certify that the foregoing Power of Attorney is still in full force and effect on the date of this certificate; and I do further certify that Article V, Section 8, of the By-Laws of the Companies is still in force.

This Power of Attorney and Certificate may be signed by facsimile under and by authority of the following resolution of the Board of Directors of the ZURICH AMERICAN INSURANCE COMPANY at a meeting duly called and held on the 15th day of December 1998.

RESOLVED: "That the signature of the President or a Vice President and the attesting signature of a Secretary or an Assistant Secretary and the Seal of the Company may be affixed by facsimile on any Power of Attorney...Any such Power or any certificate thereof bearing such facsimile signature and seal shall be valid and binding on the Company."

This Power of Attorney and Certificate may be signed by facsimile under and by authority of the following resolution of the Board of Directors of the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY at a meeting duly called and held on the 5th day of May, 1994, and the following resolution of the Board of Directors of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at a meeting duly called and held on the 10th day of May, 1990.

RESOLVED: "That the facsimile or mechanically reproduced seal of the company and facsimile or mechanically reproduced signature of any Vice-President, Secretary, or Assistant Secretary of the Company, whether made heretofore or hereafter, wherever appearing upon a certified copy of any power of attorney issued by the Company, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the corporate seals of the said Companies, this 30 day of April, 2014.



Geoffrey Delisio

Geoffrey Delisio, Vice President

SECTION J: PREVAILING WAGE RATES

PREVAILING WAGE RATE DETERMINATION

Issued by the State of Wisconsin
Department of Workforce Development
Pursuant to s. 66.0903, Wis. Stats.
Issued On: 01/06/2014
Amended On: 02/28/2014

DETERMINATION NUMBER: 201400001

EXPIRATION DATE: Prime Contracts MUST Be Awarded or Negotiated On Or Before 12/31/2014. If NOT, You MUST Reapply.

PROJECT NAME: ALL PUBLIC WORKS PROJECTS UNDER SEC 66.0903, STATS - CITY OF MADISON

PROJECT LOCATION: MADISON CITY, DANE COUNTY, WI

CONTRACTING AGENCY: CITY OF MADISON-ENGINEERING

CLASSIFICATION:	Contractors are responsible for correctly classifying their workers. Either call the Department of Workforce Development (DWD) with trade or classification questions or consult DWD's Dictionary of Occupational Classifications & Work Descriptions on the DWD website at: dwd.wisconsin.gov/er/prevailing_wage_rate/Dictionary/dictionary_main.htm .
OVERTIME:	<p>Time and one-half must be paid for all hours worked:</p> <ul style="list-style-type: none">- over 10 hours per day on prevailing wage projects- over 40 hours per calendar week- Saturday and Sunday- on all of the following holidays: January 1; the last Monday in May; July 4; the 1st Monday in September; the 4th Thursday in November; December 25;- The day before if January 1, July 4 or December 25 falls on a Saturday;- The day following if January 1, July 4 or December 25 falls on a Sunday. <p>Apply the time and one-half overtime calculation to whichever is higher between the Hourly Basic Rate listed on this project determination or the employee's regular hourly rate of pay. Add any applicable Premium or DOT Premium to the Hourly Basic Rate before calculating overtime.</p> <p>A DOT Premium (discussed below) may supersede this time and one-half requirement.</p>
FUTURE INCREASE:	When a specific trade or occupation requires a future increase, you MUST add the full hourly increase to the "TOTAL" on the effective date(s) indicated for the specific trade or occupation.
PREMIUM PAY:	If indicated for a specific trade or occupation, the full amount of such pay MUST be added to the "HOURLY BASIC RATE OF PAY" indicated for such trade or occupation, whenever such pay is applicable.
DOT PREMIUM:	This premium only applies to highway and bridge projects owned by the Wisconsin Department of Transportation and to the project type heading "Airport Pavement or State Highway Construction." DO NOT apply the premium calculation under any other project type on this determination.
APPRENTICES:	Pay apprentices a percentage of the applicable journey person's hourly basic rate of pay and hourly fringe benefit contributions specified in this determination. Obtain the appropriate percentage from each apprentice's contract or indenture.
SUBJOURNEY:	Subjourney wage rates may be available for some of the trades or occupations indicated below with the exception of laborers, truck drivers and heavy equipment operators. Any employer interested in using a subjourney classification on this project MUST complete Form ERD-10880 and request the applicable wage rate from the Department of Workforce Development PRIOR to using the subjourney worker on this project.

This document **MUST BE POSTED** by the **CONTRACTING AGENCY** in at least one conspicuous and easily accessible place **on the site of the project**. A local governmental unit may post this document at the place normally used to post public notices if there is no common site on the project. This document **MUST** remain posted during the entire time any worker is employed on the project and **MUST** be physically incorporated into the specifications and all contracts and subcontracts. If you have any questions, please write to the Equal Rights Division, Labor Standards Bureau, P.O. Box 8928, Madison, Wisconsin 53708 or call (608) 266-6861.

The following statutory provisions apply to local governmental unit projects of public works and are set forth below pursuant to the requirements of s. 66.0903(8), Stats.

s. 66.0903 (1) (f) & s. 103.49 (1) (c) "PREVAILING HOURS OF LABOR" for any trade or occupation in any area means 10 hours per day and 40 hours per week and may not include any hours worked on a Saturday or Sunday or on any of the following holidays:

1. January 1.
2. The last Monday in May.
3. July 4.
4. The first Monday in September.
5. The 4th Thursday in November.
6. December 25.
7. The day before if January 1, July 4 or December 25 falls on a Saturday.
8. The day following if January 1, July 4 or December 25 falls on a Sunday.

s. 66.0903 (10) RECORDS; INSPECTION; ENFORCEMENT.

(a) Each contractor, subcontractor, or contractor's or subcontractor's agent performing work on a project of public works that is subject to this section shall keep full and accurate records clearly indicating the name and trade or occupation of every person performing the work described in sub. (4) and an accurate record of the number of hours worked by each of those persons and the actual wages paid for the hours worked.

s. 66.0903 (11) LIABILITY AND PENALTIES.

(a) 1. Any contractor, subcontractor, or contractor's or subcontractor's agent who fails to pay the prevailing wage rate determined by the department under sub. (3) or who pays less than 1.5 times the hourly basic rate of pay for all hours worked in excess of the prevailing hours of labor is liable to any affected employee in the amount of his or her unpaid wages or his or her unpaid overtime compensation and in an additional amount as liquidated damages as provided under subd. 2., 3., whichever is applicable.

2. If the department determines upon inspection under sub. (10) (b) or (c) that a contractor, subcontractor, or contractor's or subcontractor's agent has failed to pay the prevailing wage rate determined by the department under sub. (3) or has paid less than 1.5 times the hourly basic rate of pay for all hours worked in excess of the prevailing hours of labor, the department shall order the contractor to pay to any affected employee the amount of his or her unpaid wages or his or her unpaid overtime compensation and an additional amount equal to 100 percent of the amount of those unpaid wages or that unpaid overtime compensation as liquidated damages within a period specified by the department in the order.

3. In addition to or in lieu of recovering the liability specified in subd. 1. as provided in subd. 2., any employee for and in behalf of that employee and other employees similarly situated may commence an action to recover that liability in any court of competent jurisdiction. If the court finds that a contractor, subcontractor, or contractor's or subcontractor's agent has failed to pay the prevailing wage rate determined by the department under sub. (3) or has paid less than 1.5 times the hourly basic rate of pay for all hours worked in excess of the prevailing hours of labor, the court shall order the contractor, subcontractor, or agent to pay to any affected employee the amount of his or her unpaid wages or his or her unpaid overtime compensation and an additional amount equal to 100 percent of the amount of those unpaid wages or that unpaid overtime compensation as liquidated damages.

5. No employee may be a party plaintiff to an action under subd. 3. unless the employee consents in writing to become a party and the consent is filed in the court in which the action is brought. Notwithstanding s. 814.04 (1), the court shall, in addition to any judgment awarded to the plaintiff, allow reasonable attorney fees and costs to be paid by the defendant.

BUILDING OR HEAVY CONSTRUCTION

Includes sheltered enclosures with walk-in access for the purpose of housing persons, employees, machinery, equipment or supplies and non-sheltered work such as canals, dams, dikes, reservoirs, storage tanks, etc. A sheltered enclosure need not be "habitable" in order to be considered a building. The installation of machinery and/or equipment, both above and below grade level, does not change a project's character as a building. On-site grading, utility work and landscaping are included within this definition. Residential buildings of four (4) stories or less, agricultural buildings, parking lots and driveways are NOT included within this definition.

SKILLED TRADES

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
101	Acoustic Ceiling Tile Installer	30.48	15.90	46.38
102	Boilermaker Future Increase(s): Add \$1.50/hr on 1/01/2015; Add \$1.50/hr. on 01/01/2016	32.05	28.04	60.09
103	Bricklayer, Blocklayer or Stonemason Premium Increase(s): DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	32.01	17.35	49.36
104	Cabinet Installer	30.48	15.90	46.38
105	Carpenter	30.48	15.90	46.38
106	Carpet Layer or Soft Floor Coverer	30.48	15.90	46.38
107	Cement Finisher	31.58	16.13	47.71
108	Drywall Taper or Finisher	24.80	16.60	41.40
109	Electrician Premium Increase(s): DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	34.07	19.25	53.32
110	Elevator Constructor	42.86	23.84	66.70
111	Fence Erector	24.72	0.00	24.72
112	Fire Sprinkler Fitter	36.07	18.73	54.80
113	Glazier	38.03	13.42	51.45
114	Heat or Frost Insulator	33.68	24.31	57.99
115	Insulator (Batt or Blown)	15.00	9.50	24.50
116	Ironworker	31.25	19.46	50.71
117	Lather	30.48	15.90	46.38

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
118	Line Constructor (Electrical)	38.25	17.31	55.56
119	Marble Finisher	26.89	19.18	46.07
120	Marble Mason	32.01	17.35	49.36
121	Metal Building Erector	22.00	10.00	32.00
122	Millwright	32.11	15.95	48.06
123	Overhead Door Installer	20.95	4.94	25.89
124	Painter	24.50	16.60	41.10
125	Pavement Marking Operator	30.00	0.00	30.00
126	Piledriver	30.98	15.90	46.88
127	Pipeline Fuser or Welder (Gas or Utility)	30.79	19.74	50.53
129	Plasterer	31.03	17.71	48.74
130	Plumber Future Increase(s): Add \$1/hr on 6/1/2014.	36.42	16.87	53.29
132	Refrigeration Mechanic	41.60	16.71	58.31
133	Roofer or Waterproofer	29.40	6.25	35.65
134	Sheet Metal Worker	34.45	22.57	57.02
135	Steamfitter Future Increase(s): Add \$1.70/hr on 6/1/2014.	42.95	17.81	60.76
137	Teledata Technician or Installer Premium Increase(s): DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	22.25	12.24	34.49
138	Temperature Control Installer	32.94	18.80	51.74
139	Terrazzo Finisher	26.89	19.18	46.07
140	Terrazzo Mechanic	30.20	18.42	48.62
141	Tile Finisher	23.85	17.18	41.03
142	Tile Setter	29.81	17.18	46.99
143	Tuckpointer, Caulker or Cleaner	35.25	13.15	48.40
144	Underwater Diver (Except on Great Lakes)	34.48	15.90	50.38
146	Well Driller or Pump Installer	25.32	15.65	40.97
147	Siding Installer	25.92	18.04	43.96

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked				
<u>CODE</u>	<u>TRADE OR OCCUPATION</u>	<u>HOURLY BASIC RATE OF PAY</u>	<u>HOURLY FRINGE BENEFITS</u>	<u>TOTAL</u>
		\$	\$	\$
150	Heavy Equipment Operator - ELECTRICAL LINE CONSTRUCTION ONLY	29.16	14.34	43.50
151	Light Equipment Operator -ELECTRICAL LINE CONSTRUCTION ONLY	30.60	14.86	45.46
152	Heavy Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	26.78	13.63	40.41
153	Light Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	24.86	12.97	37.83
154	Groundman - ELECTRICAL LINE CONSTRUCTION ONLY	21.75	12.70	34.45

TRUCK DRIVERS

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked				
<u>CODE</u>	<u>TRADE OR OCCUPATION</u>	<u>HOURLY BASIC RATE OF PAY</u>	<u>HOURLY FRINGE BENEFITS</u>	<u>TOTAL</u>
		\$	\$	\$
201	Single Axle or Two Axle	32.39	18.46	50.85
203	Three or More Axle	18.00	22.88	40.88
204	Articulated, Euclid, Dumptor, Off Road Material Hauler	32.89	18.96	51.85
205	Pavement Marking Vehicle	18.00	22.88	40.88
207	Truck Mechanic	18.00	22.88	40.88

LABORERS

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked				
<u>CODE</u>	<u>TRADE OR OCCUPATION</u>	<u>HOURLY BASIC RATE OF PAY</u>	<u>HOURLY FRINGE BENEFITS</u>	<u>TOTAL</u>
		\$	\$	\$
301	General Laborer Premium Increase(s): Add \$1.00/hr for certified welder; Add \$.25/hr for mason tender	24.21	14.63	38.84
302	Asbestos Abatement Worker	24.36	14.44	38.80
303	Landscaper	21.01	9.37	30.38
310	Gas or Utility Pipeline Laborer (Other Than Sewer and Water)	21.01	13.63	34.64
311	Fiber Optic Laborer (Outside, Other Than Concrete Encased) Premium Increase(s): DOT PREMIUMS: Pay two times the hourly basic rate on New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	18.33	13.65	31.98
314	Railroad Track Laborer	23.46	3.30	26.76
315	Final Construction Clean-Up Worker	16.00	0.00	16.00

**HEAVY EQUIPMENT OPERATORS
SITE PREPARATION, UTILITY OR LANDSCAPING WORK ONLY**

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
501	Air Track, Rotary or Percussion Drilling Machine &/or Hammers, Blaster; Asphalt Milling Machine; Boring Machine (Directional, Horizontal or Vertical); Backhoe (Track Type) Having a Mfg's Rated Capacity of 130,000 Lbs. or Over; Backhoe (Track Type) Having a Mfg's Rated Capacity of Under 130,000 Lbs., Backhoe (Mini, 15,000 Lbs. & Under); Bulldozer or Endloader (Over 40 hp); Compactor (Self-Propelled 85 Ft Total Drum Width & Over, or Tractor Mounted, Towed & Light Equipment); Concrete Batch Plant, Batch Hopper; Concrete Breaker (Large, Auto, Vibratory/Sonic, Manual or Remote); Crane, Shovel, Dragline, Clamshells; Forklift (Machinery Moving or Steel Erection, 25 Ft & Over); Gradall (Cruz-Aire Type); Grader or Motor Patrol; Master Mechanic; Mechanic or Welder; Robotic Tool Carrier (With or Without Attachments); Scraper (Self Propelled or Tractor Drawn) 5 cu yds or More Capacity; Tractor or Truck Mounted Hydraulic Backhoe; Tractor or Truck Mounted Hydraulic Crane (10 Tons or Under); Tractor (Scraper, Dozer, Pusher, Loader); Trencher (Wheel Type or Chain Type Having Over 8 Inch Bucket).	33.42	18.96	52.38
502	Backfiller; Broom or Sweeper; Bulldozer or Endloader (Under 40 hp); Environmental Burner, Forestry Equipment, Timbco, Tree Shear, Tub Grinder, Processor; Jeep Digger; Screed (Milling Machine); Skid Rig; Straddle Carrier or Travel Lift; Stump Chipper; Trencher (Wheel Type or Chain Type Having 8 Inch Bucket & Under).	32.89	18.96	51.85
503	Air Compressor (&/or 400 CFM or Over); Augers (Vertical & Horizontal); Compactor (Self-Propelled 84 Ft Total Drum Width & Under, or Tractor Mounted, Towed & Light Equipment); Crusher, Screening or Wash Plant; Farm or Industrial Type Tractor; Forklift; Generator (&/or 150 KW or Over); Greaser; High Pressure Utility Locating Machine (Daylighting Machine); Mulcher; Oiler; Post Hole Digger or Driver; Pump (3 Inch or Over) or Well Points; Refrigeration Plant or Freeze Machine; Rock, Stone Breaker; Skid Steer Loader (With or Without Attachments); Vibratory Hammer or Extractor, Power Pack.	30.82	18.96	49.78
504	Work Performed on the Great Lakes Including Diver; Wet Tender or Hydraulic Dredge Engineer.	38.80	20.17	58.97
505	Work Performed on the Great Lakes Including Crane or Backhoe Operator; Assistant Hydraulic Dredge Engineer; Hydraulic Dredge Leverman or Diver's Tender; Mechanic or Welder; 70 Ton & Over Tug Operator. Premium Increase(s): Add \$.50/hr for Friction Crane, Lattice Boom or Crane Certification (CCO).	41.65	21.71	63.36
506	Work Performed on the Great Lakes Including Deck Equipment Operator or Machineryman (Maintains Cranes Over 50 Tons or Backhoes 115,000 Lbs. or More); Tug, Launch or Loader, Dozer or Like Equipment When Operated on a Barge, Breakwater Wall, Slip, Dock or Scow, Deck Machinery.	37.10	21.57	58.67

507	Work Performed on the Great Lakes Including Deck Equipment Operator, Machineryman or Fireman (Operates 4 Units or More or Maintains Cranes 50 Tons or Under or Backhoes 115,000 Lbs. or Under); Deck Hand, Deck Engineer or Assistant Tug Operator; Off Road Trucks - Great Lakes ONLY.	34.50	20.04	54.54
-----	---	-------	-------	-------

**HEAVY EQUIPMENT OPERATORS
EXCLUDING SITE PREPARATION, UTILITY, PAVING LANDSCAPING WORK**

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
508	Boring Machine (Directional); Crane, Tower Crane, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of Over 100 Tons, Self-Erecting Tower Crane With a Lifting Capacity of Over 4,000 Lbs., Crane With Boom Dollies; Crane, Tower Crane, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 176 Ft or Over; Master Mechanic. Premium Increase(s): Add \$.50/hr for >200 Ton / Add \$1/hr at 300 Ton / Add \$1.50/hr at 400 Ton / Add \$2/hr at 500 Ton & Over.	35.62	18.96	54.58
509	Backhoe (Track Type) Having a Mfr's Rated Capacity of 130,000 Lbs. or Over; Boring Machine (Horizontal or Vertical); Caisson Rig; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of 100 Tons or Under, Self-Erecting Tower Crane With A Lifting Capacity Of 4,000 Lbs. & Under; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 175 Ft or Under; Pile Driver; Versi Lifts, Tri-Lifts & Gantrys (20,000 Lbs. & Over).	36.35	6.95	43.30
510	Backhoe (Track Type) Having a Mfr.'s Rated Capacity of Under 130,000 Lbs., Backhoe (Mini, 15,000 Lbs. & Under); Concrete Bump Cutter, Grinder, Planing or Grooving Machine; Concrete Laser/Screed; Concrete Paver (Slipform); Concrete Pump (Over 46 Meter), Concrete Conveyor (Rotec or Bidwell Type); Concrete Slipform Placer Curb & Gutter Machine; Concrete Spreader & Distributor; Dredge (NOT Performing Work on the Great Lakes); Forklift (Machinery Moving or Steel Erection, 25 Ft & Over); Gradall (Cruz-Aire Type); Hydro-Blaster (10,000 PSI or Over); Milling Machine; Skid Rig; Traveling Crane (Bridge Type).	33.42	18.96	52.38
511	Air, Track, Rotary or Percussion Drilling Machine &/or Hammers, Blaster; Bulldozer or Endloader (Over 40 hp); Compactor (Self-Propelled 85 Ft Total Drum Width & Over, or Tractor Mounted, Towed & Light Equipment); Concrete Pump (46 Meter & Under), Concrete Conveyor (Rotec or Bidwell Type); Crane (Carry Deck, Mini) or Truck Mounted Hydraulic Crane (10 Tons or Under); Environmental Burner; Gantrys (Under 20,000 Lbs.); Grader or Motor Patrol; High Pressure Utility Locating Machine (Daylighting Machine); Manhoist; Material or Stack Hoist; Mechanic or Welder; Railroad Track Rail Leveling Machine, Tie Placer, Extractor, Tamper, Stone Leveler or Rehabilitation Equipment; Roller (Over 5 Ton); Scraper (Self Propelled or Tractor Drawn) 5 cu yd or More Capacity; Screed (Milling Machine); Sideboom; Straddle Carrier or Travel Lift; Tining or Curing Machine; Tractor (Scraper, Dozer, Pusher, Loader); Tractor or Truck Mounted Hydraulic Backhoe; Tractor or Truck Mounted Hydraulic Crane (10 Tons or Under); Trencher (Wheel Type or Chain Type Having Over 8-Inch Bucket).	32.89	18.96	51.85

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
512	Backfiller; Broom or Sweeper; Bulldozer or Endloader (Under 40 hp); Compactor (Self-Propelled 84 Ft Total Drum Width & Under, or Tractor Mounted, Towed & Light Equipment); Concrete Batch Plant, Batch Hopper; Concrete Breaker (Large, Auto, Vibratory/Sonic, Manual or Remote); Concrete Conveyor System; Concrete Finishing Machine (Road Type); Fireman (Pile Driver & Derrick NOT Performing Work on the Great Lakes); Grout Pump; Hoist (Tugger, Automatic); Industrial Locomotives; Jeep Digger; Lift Slab Machine; Mulcher; Roller (Rubber Tire, 5 Ton or Under); Screw or Gypsum Pumps; Stabilizing or Concrete Mixer (Self-Propelled or 14S or Over); Stump Chipper; Trencher (Wheel Type or Chain Type Having 8-Inch Bucket & Under); Winches & A-Frames.	30.82	18.96	49.78
513	Air Compressor (&/or 400 CFM or Over); Air, Electric or Hydraulic Jacking System; Augers (Vertical & Horizontal); Boatmen (NOT Performing Work on the Great Lakes); Boiler (Temporary Heat); Crusher, Screening or Wash Plant; Elevator; Farm or Industrial Type Tractor; Fireman (Asphalt Plant NOT Performing Work on the Great Lakes); Forklift; Generator (&/or 150 KW or Over); Greaser; Heaters (Mechanical); Loading Machine (Conveyor); Oiler; Post Hole Digger or Driver; Prestress Machine; Pump (3 Inch or Over) or Well Points; Refrigeration Plant or Freeze Machine; Robotic Tool Carrier (With or Without Attachments); Rock, Stone Breaker; Skid Steer Loader (With or Without Attachments); Vibratory Hammer or Extractor, Power Pack.	24.19	17.89	42.08
514	Gas or Utility Pipeline, Except Sewer & Water (Primary Equipment).	36.34	21.14	57.48
515	Gas or Utility Pipeline, Except Sewer & Water (Secondary Equipment). Future Increase(s): Add \$1.60/hr on 06/01/2014; Add \$1.65/hr on 06/01/2015.	32.32	18.55	50.87
516	Fiber Optic Cable Equipment Future Increase(s): Add \$1.75/hr on 02/01/2014.	27.89	17.20	45.09

SEWER, WATER OR TUNNEL CONSTRUCTION

Includes those projects that primarily involve public sewer or water distribution, transmission or collection systems and related tunnel work (excluding buildings).

SKILLED TRADES

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
103	Bricklayer, Blocklayer or Stonemason Premium Increase(s): DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	35.10	18.40	53.50
105	Carpenter Future Increase(s): Add \$1.25/hr on 6/2/2014. Premium Increase(s): DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	33.68	19.81	53.49
107	Cement Finisher Future Increase(s): Add \$1.87 on 6/1/14; Add \$1.87 on 6/1/15; Add \$1.75 on 6/1/16. Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.40/hr when the Wisconsin Department of Transportation or responsible governing agency requires that work be performed at night under artificial illumination with traffic control and the work is completed after sunset and before sunrise.	33.51	16.13	49.64
109	Electrician Premium Increase(s): DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	32.82	22.61	55.43
111	Fence Erector	24.72	0.00	24.72
116	Ironworker	31.25	19.46	50.71
118	Line Constructor (Electrical)	38.25	17.31	55.56
125	Pavement Marking Operator	16.00	7.35	23.35
126	Piledriver	30.98	15.90	46.88
130	Plumber	33.75	14.07	47.82
135	Steamfitter	42.45	16.71	59.16
137	Teledata Technician or Installer	21.89	11.85	33.74

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
143	Tuckpointer, Caulker or Cleaner	35.25	13.15	48.40
144	Underwater Diver (Except on Great Lakes)	38.80	20.17	58.97
146	Well Driller or Pump Installer	25.32	15.65	40.97
150	Heavy Equipment Operator - ELECTRICAL LINE CONSTRUCTION ONLY	29.16	14.34	43.50
151	Light Equipment Operator -ELECTRICAL LINE CONSTRUCTION ONLY	30.60	14.86	45.46
152	Heavy Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	26.78	13.63	40.41
153	Light Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	24.86	12.97	37.83
154	Groundman - ELECTRICAL LINE CONSTRUCTION ONLY	21.75	12.70	34.45

TRUCK DRIVERS

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
201	Single Axle or Two Axle	30.00	15.00	45.00
203	Three or More Axle	16.00	7.35	23.35
204	Articulated, Euclid, Dumptor, Off Road Material Hauler	32.89	18.96	51.85
205	Pavement Marking Vehicle	16.00	7.35	23.35
207	Truck Mechanic	16.00	7.35	23.35

LABORERS

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
301	General Laborer Premium Increase(s): Add \$.20 for blaster, bracer, manhole builder, caulker, bottomman and power tool; Add \$.55 for pipelayer; Add \$1.00 for tunnel work 0-15 lbs. compressed air; Add \$2.00 for over 15-30 lbs. compressed air; Add \$3.00 for over 30 lbs. compressed air.	25.60	14.62	40.22
303	Landscaper	25.28	11.46	36.74
304	Flagperson or Traffic Control Person	24.70	10.72	35.42
311	Fiber Optic Laborer (Outside, Other Than Concrete Encased)	18.31	12.67	30.98
314	Railroad Track Laborer	23.46	3.30	26.76

**HEAVY EQUIPMENT OPERATORS
SEWER, WATER OR TUNNEL WORK**

Fringe Benefits Must Be Paid On All Hours Worked

CODE	TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY \$	HOURLY FRINGE BENEFITS \$	TOTAL \$
521	Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of 130,000 Lbs. or Over; Caisson Rig; Crane, Tower Crane, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 176 Ft or Over; Crane, Tower Crane, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of Over 100 Tons, Self-Erecting Tower Crane With a Lifting Capacity Of Over 4,000 Lbs., Crane With Boom Dollies; Master Mechanic; Pile Driver. Premium Increase(s): Add \$.25/hr for all >45 Ton lifting capacity cranes	34.62	18.96	53.58
522	Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of Under 130,000 Lbs., Backhoe (Mini, 15,000 Lbs. & Under); Boring Machine (Directional); Concrete Bump Cutter, Grinder, Planing or Grooving Machine; Concrete Laser/Screed; Concrete Paver (Slipform); Concrete Pump (Over 46 Meter), Concrete Conveyor (Rotec or Bidwell Type); Concrete Spreader & Distributor; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 175 Ft or Under; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of 100 Tons or Under, Self-Erecting Tower Crane With a Lifting Capacity of 4,000 Lbs. & Under; Dredge (NOT Performing Work on the Great Lakes); Milling Machine; Skid Rig; Telehandler; Traveling Crane (Bridge Type).	33.42	18.96	52.38
523	Air Track, Rotary or Percussion Drilling Machine &/or Hammers, Blaster; Boring Machine (Horizontal or Vertical); Bulldozer or Endloader (Over 40 hp); Crane (Carry Deck, Mini) or Truck Mounted Hydraulic Crane (10 Tons or Under); Concrete Pump (46 Meter & Under), Concrete Conveyor (Rotec or Bidwell Type); Concrete Slipform Placer Curb & Gutter Machine; Gradall (Cruz-Aire Type); Grader or Motor Patrol; Hydro-Blaster (10,000 PSI or Over); Manhoist; Material or Stack Hoist; Mechanic or Welder; Roller (Over 5 Ton); Scraper (Self Propelled or Tractor Drawn) 5 cu yd or More Capacity; Screed (Milling Machine); Sideboom; Straddle Carrier or Travel Lift; Tractor (Scraper, Dozer, Pusher, Loader); Tractor or Truck Mounted Hydraulic Backhoe; Tractor or Truck Mounted Hydraulic Crane (10 Tons or Under); Trencher (Wheel Type or Chain Type Having Over 8-Inch Bucket).	32.89	18.96	51.85

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
524	Backfiller; Broom or Sweeper; Bulldozer or Endloader (Under 40 hp); Compactor (Self-Propelled 85 Ft Total Drum Width & Over, or Tractor Mounted, Towed & Light Equipment); Concrete Batch Plant, Batch Hopper; Concrete Breaker (Large, Auto, Vibratory/Sonic, Manual or Remote); Concrete Conveyor System; Concrete Finishing Machine (Road Type); Environmental Burner; Fireman (Pile Driver & Derrick NOT Performing Work on the Great Lakes); Forestry Equipment, Timbco, Tree Shear, Tub Grinder, Processor; Hoist (Tugger, Automatic); Grout Pump; Jeep Digger; Lift Slab Machine; Mulcher; Power Subgrader; Pump (3 Inch or Over) or Well Points; Robotic Tool Carrier (With or Without Attachments); Roller (Rubber Tire, 5 Ton or Under); Screw or Gypsum Pumps; Stabilizing or Concrete Mixer (Self-Propelled or 14S or Over); Stump Chipper; Tining or Curing Machine; Trencher (Wheel Type or Chain Type Having 8-Inch Bucket & Under); Winches & A-Frames. Future Increase(s): Add \$1.05/hr on 6/2/2014; Add \$1.55/hr on 6/1/2015. Premium Increase(s): Add \$.25/hr for operating tower crane.	35.11	19.45	54.56
525	Air Compressor (&/or 400 CFM or Over); Air, Electric or Hydraulic Jacking System; Augers (Vertical & Horizontal); Compactor (Self-Propelled 84 Ft Total Drum Width & Under, or Tractor Mounted, Towed & Light Equipment); Crusher, Screening or Wash Plant; Farm or Industrial Type Tractor; Fireman (Asphalt Plant NOT Performing Work on the Great Lakes); Generator (&/or 150 KW or Over); Heaters (Mechanical); High Pressure Utility Locating Machine (Daylighting Machine); Loading Machine (Conveyor); Post Hole Digger or Driver; Refrigeration Plant or Freeze Machine; Rock, Stone Breaker; Skid Steer Loader (With or Without Attachments); Vibratory Hammer or Extractor, Power Pack.	30.19	20.94	51.13
526	Boiler (Temporary Heat); Forklift; Greaser; Oiler.	24.19	17.89	42.08
527	Work Performed on the Great Lakes Including Diver; Wet Tender or Hydraulic Dredge Engineer.	38.80	20.17	58.97
528	Work Performed on the Great Lakes Including 70 Ton & Over Tug Operator; Assistant Hydraulic Dredge Engineer; Crane or Backhoe Operator; Hydraulic Dredge Leverman or Diver's Tender; Mechanic or Welder.	38.80	20.17	58.97
529	Work Performed on the Great Lakes Including Deck Equipment Operator or Machineryman (Maintains Cranes Over 50 Tons or Backhoes 115,000 Lbs. or More); Tug, Launch or Loader, Dozer or Like Equipment When Operated on a Barge, Breakwater Wall, Slip, Dock or Scow, Deck Machinery.	34.50	20.04	54.54
530	Work Performed on the Great Lakes Including Deck Equipment Operator; Machineryman or Fireman (Operates 4 Units or More or Maintains Cranes 50 Tons or Under or Backhoes 115,000 Lbs. or Under), Deck Hand, Deck Engineer or Assistant Tug Operator; Off Road Trucks - Great Lakes ONLY.	34.50	20.04	54.54

AIRPORT PAVEMENT OR STATE HIGHWAY CONSTRUCTION

Includes all airport projects (excluding buildings) and all projects awarded by the Wisconsin Department of Transportation (excluding buildings).

SKILLED TRADES

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
103	Bricklayer, Blocklayer or Stonemason	32.01	17.35	49.36
105	Carpenter	30.48	15.90	46.38
107	Cement Finisher Future Increase(s): Add \$1.87 on 6/1/14; Add \$1.87 on 6/1/15; Add \$1.75 on 6/1/16. Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.40/hr when the Wisconsin Department of Transportation or responsible governing agency requires that work be performed at night under artificial illumination with traffic control and the work is completed after sunset and before sunrise.	33.51	16.13	49.64
109	Electrician Premium Increase(s): DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	34.07	19.25	53.32
111	Fence Erector	24.72	0.00	24.72
116	Ironworker	31.25	19.46	50.71
118	Line Constructor (Electrical)	38.25	17.31	55.56
124	Painter	21.87	11.37	33.24
125	Pavement Marking Operator	30.00	0.00	30.00
126	Piledriver	30.98	15.90	46.88
133	Roofer or Waterproofer	29.40	6.25	35.65
137	Teledata Technician or Installer	21.89	11.85	33.74
143	Tuckpointer, Caulker or Cleaner	35.25	13.15	48.40
144	Underwater Diver (Except on Great Lakes)	34.48	15.90	50.38
150	Heavy Equipment Operator - ELECTRICAL LINE CONSTRUCTION ONLY	34.43	15.24	49.67
151	Light Equipment Operator -ELECTRICAL LINE CONSTRUCTION ONLY	35.50	15.89	51.39

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
152	Heavy Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	26.78	13.63	40.41
153	Light Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	24.86	12.97	37.83
154	Groundman - ELECTRICAL LINE CONSTRUCTION ONLY	21.75	12.70	34.45
TRUCK DRIVERS				

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
201	Single Axle or Two Axle	34.22	19.90	54.12
203	Three or More Axle Future Increase(s): Add \$1.30/hr on 6/1/2014. Premium Increase(s): DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	24.52	17.77	42.29
204	Articulated, Euclid, Dumptor, Off Road Material Hauler Future Increase(s): Add \$1.75/hr on 6/1/14); Add \$1.25/hr on 6/1/15); Add \$1.30/hr on 6/1/16); Add \$1.25/hr on 6/1/17. Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http://www.dot.wi.gov/busine ss/civilrights/laborwages/pwc.htm .	29.27	20.40	49.67
205	Pavement Marking Vehicle	23.31	17.13	40.44
206	Shadow or Pilot Vehicle	34.22	19.90	54.12
207	Truck Mechanic	23.31	17.13	40.44

LABORERS

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
301	General Laborer Future Increase(s): Add \$1.60/hr on 6/1/2014. Premium Increase(s): Add \$.10/hr for topman, air tool operator, vibrator or tamper operator (mechanical hand operated), chain saw operator and demolition burning torch laborer; Add \$.15/hr for bituminous worker (raker and luteman), formsetter (curb, sidewalk and pavement) and strike off man; Add \$.20/hr for blaster and powderman; Add \$.25/hr for bottomman; Add \$.35/hr for line and grade specialist; Add \$.45/hr for pipelayer. / DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).	29.32	14.63	43.95
302	Asbestos Abatement Worker	24.36	14.44	38.80
303	Landscaper Future Increase(s): Add \$1.60/hr on 6/1/14. Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).	29.32	14.63	43.95
304	Flagperson or Traffic Control Person Future Increase(s): Add \$1.60/hr on 6/1/2014. Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.25/hr when the Wisconsin Department of Transportation or responsible governing agency requires that work be performed at night under artificial illumination with traffic control and the work is completed after sunset and before sunrise.	25.67	14.63	40.30
311	Fiber Optic Laborer (Outside, Other Than Concrete Encased)	18.31	12.67	30.98
314	Railroad Track Laborer	23.46	3.30	26.76

**HEAVY EQUIPMENT OPERATORS
AIRPORT PAVEMENT OR STATE HIGHWAY CONSTRUCTION**

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
531	Crane, Tower Crane, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 176 Ft or Over; Crane, Tower Crane, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of Over 100 Tons, Self-Erecting Tower Crane With a Lifting Capacity Of Over 4,000 Lbs., Crane With Boom Dollies; Traveling Crane (Bridge Type). Future Increase(s): Add \$1.75/hr on 6/1/2014); Add \$1.25/hr on 6/1/2015); Add \$1.30/hr on 6/1/2016); Add \$1.25/hr on 6/1/2017. Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm .	36.72	20.40	57.12
532	Backhoe (Track Type) Having a Mfr.'s Rated Capacity of 130,000 Lbs. or Over; Caisson Rig; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 175 Ft or Under; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of 100 Tons or Under, Self-Erecting Tower Crane With A Lifting Capacity Of 4,000 Lbs., & Under; Dredge (NOT Performing Work on the Great Lakes); Licensed Boat Pilot (NOT Performing Work on the Great Lakes); Pile Driver. Future Increase(s): Add \$1.75/hr on 6/1/2014); Add \$1.25/hr on 6/1/2015); Add \$1.30/hr on 6/1/2016); Add \$1.25/hr on 6/1/2017. Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm .	36.22	20.40	56.62

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
533	<p>Air Track, Rotary or Percussion Drilling Machine &/or Hammers, Blaster; Asphalt Heater, Planer & Scarifier; Asphalt Milling Machine; Asphalt Screed; Automatic Subgrader (Concrete); Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of Under 130,000 Lbs.; Backhoe (Mini, 15,000 Lbs. & Under); Bituminous (Asphalt) Plant & Paver, Screed; Boatmen (NOT Performing Work on the Great Lakes); Boring Machine (Directional, Horizontal or Vertical); Bridge (Bidwell) Paver; Bulldozer or Endloader; Concrete Batch Plant, Batch Hopper; Concrete Breaker (Large, Auto, Vibratory/Sonic, Manual or Remote); Concrete Bump Cutter, Grinder, Planing or Grooving Machine; Concrete Conveyor System; Concrete Laser/Screed; Concrete Paver (Slipform); Concrete Pump, Concrete Conveyor (Rotec or Bidwell Type); Concrete Slipform Placer Curb & Gutter Machine; Concrete Spreader & Distributor; Crane (Carry Deck, Mini) or Truck Mounted Hydraulic Crane (10 Tons or Under); Crane With a Lifting Capacity of 25 Tons or Under; Forestry Equipment, Timbco, Tree Shear, Tub Grinder, Processor; Gradall (Cruz-Aire Type); Grader or Motor Patrol; Grout Pump; Hydro-Blaster (10,000 PSI or Over); Loading Machine (Conveyor); Material or Stack Hoist; Mechanic or Welder; Milling Machine; Post Hole Digger or Driver; Roller (Over 5 Ton); Scraper (Self Propelled or Tractor Drawn) 5 cu yds or More Capacity; Shoulder Widener; Sideboom; Skid Rig; Stabilizing or Concrete Mixer (Self-Propelled or 14S or Over); Straddle Carrier or Travel Lift; Tractor (Scraper, Dozer, Pusher, Loader); Tractor or Truck Mounted Hydraulic Backhoe; Trencher (Wheel Type or Chain Type); Tube Finisher; Tugger (NOT Performing Work on the Great Lakes); Winches & A-Frames.</p> <p>Future Increase(s): Add \$1.75/hr on 6/1/2014); Add \$1.25/hr on 6/1/2015); Add \$1.30/hr on 6/1/2016); Add \$1.25/hr on 6/1/2017.</p> <p>Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm.</p>	35.72	20.40	56.12

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
534	<p>Belting, Burlap, Texturing Machine; Broom or Sweeper; Compactor (Self-Propelled or Tractor Mounted, Towed & Light Equipment); Concrete Finishing Machine (Road Type); Environmental Burner; Farm or Industrial Type Tractor; Fireman (Asphalt Plant, Pile Driver & Derrick NOT Performing Work on the Great Lakes); Forklift; Greaser; Hoist (Tugger, Automatic); Jeep Digger; Joint Sawyer (Multiple Blade); Launch (NOT Performing Work on the Great Lakes); Lift Slab Machine; Mechanical Float; Mulcher; Power Subgrader; Robotic Tool Carrier (With or Without Attachments); Roller (Rubber Tire, 5 Ton or Under); Self Propelled Chip Spreader; Shouldering Machine; Skid Steer Loader (With or Without Attachments); Telehandler; Tining or Curing Machine.</p> <p>Future Increase(s): Add \$1.75/hr on 6/1/2014); Add \$1.25/hr on 6/1/2015); Add \$1.30/hr on 6/1/2016); Add \$1.25/hr on 6/1/2017.</p> <p>Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm.</p>	35.46	20.40	55.86
535	<p>Air Compressor (&/or 400 CFM or Over); Air, Electric or Hydraulic Jacking System; Augers (Vertical & Horizontal); Automatic Belt Conveyor & Surge Bin; Boiler (Temporary Heat); Concrete Proportioning Plant; Crusher, Screening or Wash Plant; Generator (&/or 150 KW or Over); Heaters (Mechanical); High Pressure Utility Locating Machine (Daylighting Machine); Mudjack; Oiler; Prestress Machine; Pug Mill; Pump (3 Inch or Over) or Well Points; Rock, Stone Breaker; Screed (Milling Machine); Stump Chipper; Tank Car Heaters; Vibratory Hammer or Extractor, Power Pack.</p> <p>Future Increase(s): Add \$1.75/hr on 6/1/2014); Add \$1.25/hr on 6/1/2015); Add \$1.30/hr on 6/1/2016); Add \$1.25/hr on 6/1/2017.</p> <p>Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm.</p>	35.17	20.40	55.57
536	Fiber Optic Cable Equipment.	26.69	16.65	43.34
537	Work Performed on the Great Lakes Including Diver; Wet Tender or Hydraulic Dredge Engineer.	38.80	20.17	58.97
538	Work Performed on the Great Lakes Including 70 Ton & Over Tug Operator; Assistant Hydraulic Dredge Engineer; Crane or Backhoe Operator; Hydraulic Dredge Leverman or Diver's Tender; Mechanic or Welder.	38.80	20.17	58.97

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
<u>CODE</u>	<u>TRADE OR OCCUPATION</u>	\$	\$	\$
539	Work Performed on the Great Lakes Including Deck Equipment Operator or Machineryman (Maintains Cranes Over 50 Tons or Backhoes 115,000 Lbs. or More); Tug, Launch or Loader, Dozer or Like Equipment When Operated on a Barge, Breakwater Wall, Slip, Dock or Scow, Deck Machinery.	34.50	20.04	54.54
540	Work Performed on the Great Lakes Including Deck Equipment Operator, Machineryman or Fireman (Operates 4 Units or More or Maintains Cranes 50 Tons or Under or Backhoes 115,000 Lbs. or Under); Deck Hand, Deck Engineer or Assistant Tug Operator; Off Road Trucks-Great Lakes ONLY.	34.50	20.04	54.54

LOCAL STREET OR MISCELLANEOUS PAVING CONSTRUCTION

Includes roads, streets, alleys, trails, bridges, paths, racetracks, parking lots and driveways (except residential or agricultural), public sidewalks or other similar projects (excluding projects awarded by the Wisconsin Department of Transportation).

SKILLED TRADES

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
103	Bricklayer, Blocklayer or Stonemason	32.01	17.35	49.36
105	Carpenter	32.93	19.93	52.86
107	Cement Finisher	31.48	15.68	47.16
109	Electrician	31.27	22.81	54.08
111	Fence Erector	24.72	0.00	24.72
116	Ironworker	31.25	19.46	50.71
118	Line Constructor (Electrical)	38.25	17.31	55.56
124	Painter	24.50	16.60	41.10
125	Pavement Marking Operator	30.00	0.00	30.00
126	Piledriver	30.98	15.90	46.88
133	Roofer or Waterproofer	29.40	6.25	35.65
137	Teledata Technician or Installer	21.89	11.85	33.74
143	Tuckpointer, Caulker or Cleaner	35.25	13.15	48.40
144	Underwater Diver (Except on Great Lakes)	38.80	20.17	58.97
150	Heavy Equipment Operator - ELECTRICAL LINE CONSTRUCTION ONLY	34.43	15.24	49.67
151	Light Equipment Operator -ELECTRICAL LINE CONSTRUCTION ONLY	30.60	14.86	45.46
152	Heavy Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	26.78	13.63	40.41
153	Light Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	24.86	12.97	37.83
154	Groundman - ELECTRICAL LINE CONSTRUCTION ONLY	21.75	12.70	34.45

TRUCK DRIVERS

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
201	Single Axle or Two Axle	30.00	15.00	45.00

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
203	Three or More Axle	17.00	0.00	17.00
204	Articulated, Euclid, Dumptor, Off Road Material Hauler	32.89	18.96	51.85
205	Pavement Marking Vehicle	17.00	0.00	17.00
206	Shadow or Pilot Vehicle	30.00	15.00	45.00
207	Truck Mechanic	17.00	0.00	17.00

LABORERS

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
301	General Laborer	28.07	13.25	41.32
303	Landscaper Future Increase(s): Add \$1.60/hr on 6/1/14. Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).	29.04	14.63	43.67
304	Flagperson or Traffic Control Person	24.70	10.72	35.42
311	Fiber Optic Laborer (Outside, Other Than Concrete Encased)	18.31	12.67	30.98
314	Railroad Track Laborer	23.46	3.30	26.76

**HEAVY EQUIPMENT OPERATORS
CONCRETE PAVEMENT OR BRIDGE WORK**

Fringe Benefits Must Be Paid On All Hours Worked

<u>CODE</u>	<u>TRADE OR OCCUPATION</u>	<u>HOURLY BASIC RATE OF PAY</u> \$	<u>HOURLY FRINGE BENEFITS</u> \$	<u>TOTAL</u> \$
541	Crane, Tower Crane, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of Over 100 Tons, Self-Erecting Tower Crane With a Lifting Capacity Of Over 4,000 Lbs., Crane With Boom Dollies; Crane, Tower Crane, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 176 Ft or Over; Master Mechanic. Future Increase(s): Add \$1.75/hr on 6/1/2014); Add \$1.25/hr on 6/1/2015); Add \$1.30/hr on 6/1/2016); Add \$1.25/hr on 6/1/2017. Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm .	36.72	20.40	57.12
542	Backhoe (Track Type) Having a Mfr.'s Rated Capacity of 130,000 Lbs. or Over; Caisson Rig; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of 100 Tons or Under, Self-Erecting Tower Crane With a Lifting Capacity of 4,000 Lbs. & Under; Crane, Tower Crane Portable Tower, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 175 Ft or Under; Dredge (NOT Performing Work on the Great Lakes); Licensed Boat Pilot (NOT Performing Work on the Great Lakes); Pile Driver. Future Increase(s): Add \$1.75/hr on 6/1/2014); Add \$1.25/hr on 6/1/2015); Add \$1.30/hr on 6/1/2016); Add \$1.25/hr on 6/1/2017. Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm .	36.22	20.40	56.62

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
543	Air Track, Rotary or Percussion Drilling Machine &/or Hammers, Blaster; Automatic Subgrader (Concrete); Backhoe (Track Type) Having a Mfg'r.'s Rated Capacity of Under 130,000 Lbs.; Backhoe (Mini, 15,000 Lbs. & Under); Boring Machine (Directional, Horizontal or Vertical); Bridge (Bidwell) Paver; Bulldozer or Endloader; Concrete Batch Plant, Batch Hopper; Concrete Breaker (Large, Auto, Vibratory/Sonic, Manual or Remote); Concrete Bump Cutter, Grinder, Planing or Grooving Machine; Concrete Conveyor System; Concrete Laser/Screed; Concrete Paver (Slipform); Concrete Pump, Concrete Conveyor (Rotec or Bidwell Type); Concrete Slipform Placer Curb & Gutter Machine; Concrete Spreader & Distributor; Crane (Carry Deck, Mini) or Truck Mounted Hydraulic Crane (10 Tons or Under); Crane With a Lifting Capacity of 25 Tons or Under; Forestry Equipment, Timbco, Tree Shear, Tub Grinder, Processor; Gradall (Cruz-Aire Type); Grader or Motor Patrol; Grout Pump; Hydro-Blaster (10,000 PSI or Over); Loading Machine (Conveyor); Manhoist; Material or Stack Hoist; Mechanic or Welder; Milling Machine; Post Hole Digger or Driver; Scraper (Self Propelled or Tractor Drawn) 5 cu yds or More Capacity; Shoulder Widener; Sideboom; Skid Rig; Stabilizing or Concrete Mixer (Self-Propelled or 14S or Over); Straddle Carrier or Travel Lift; Tractor (Scraper, Dozer, Pusher, Loader); Tractor or Truck Mounted Hydraulic Backhoe; Trencher (Wheel Type or Chain Type); Tube Finisher; Tugger (NOT Performing Work on the Great Lakes); Winches & A-Frames. Future Increase(s): Add \$1.75/hr on 6/1/2014); Add \$1.25/hr on 6/1/2015); Add \$1.30/hr on 6/1/2016); Add \$1.25/hr on 6/1/2017. Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http://www.dot.wi.gov/busines/civilrights/laborwages/pwc.htm .	35.72	20.40	56.12
544	Backfiller; Belting, Burlap, Texturing Machine; Broom or Sweeper; Compactor (Self-Propelled or Tractor Mounted, Towed & Light Equipment); Concrete Finishing Machine (Road Type); Environmental Burner; Farm or Industrial Type Tractor; Fireman (Pile Driver & Derrick NOT Performing Work on the Great Lakes); Forklift; Greaser; Jeep Digger; Joint Sawyer (Multiple Blade); Launch (NOT Performing Work on the Great Lakes); Lift Slab Machine; Mechanical Float; Mulcher; Power Subgrader; Robotic Tool Carrier (With or Without Attachments); Self Propelled Chip Spreader; Shouldering Machine; Skid Steer Loader (With or Without Attachments); Telehandler; Tining or Curing Machine.	33.96	19.79	53.75
545	Air Compressor (&/or 400 CFM or Over); Air, Electric or Hydraulic Jacking System; Automatic Belt Conveyor & Surge Bin; Boiler (Temporary Heat); Concrete Proportioning Plant; Crusher, Screening or Wash Plant; Generator (&/or 150 KW or Over); Heaters (Mechanical); High Pressure Utility Locating Machine (Daylighting Machine); Mudjack; Oiler; Prestress Machine; Pug Mill; Pump (3 Inch or Over) or Well Points; Rock, Stone Breaker; Screed (Milling Machine); Stump Chipper; Tank Car Heaters; Vibratory Hammer or Extractor, Power Pack.	30.32	18.46	48.78
546	Fiber Optic Cable Equipment.	26.69	16.65	43.34

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
547	Work Performed on the Great Lakes Including Diver; Wet Tender or Hydraulic Dredge Engineer.	38.80	20.17	58.97
548	Work Performed on the Great Lakes Including 70 Ton & Over Tug Operator; Assistant Hydraulic Dredge Engineer; Crane or Backhoe Operator; Hydraulic Dredge Leverman or Diver's Tender; Mechanic or Welder.	38.80	20.17	58.97
549	Work Performed on the Great Lakes Including Deck Equipment Operator or Machineryman (Maintains Cranes Over 50 Tons or Backhoes 115,000 Lbs. or more); Tug, Launch or Loader, Dozer or Like Equipment When Operated on a Barge, Breakwater Wall, Slip, Dock or Scow, Deck Machinery.	34.50	20.04	54.54
550	Work Performed on the Great Lakes Including Deck Equipment Operator; Machineryman or Fireman (Operates 4 Units or More or Maintains Cranes 50 Tons or Under or Backhoes 115,000 Lbs. or Under); Deck Hand, Deck Engineer or Assistant Tug Operator; Off Road Trucks - Great Lakes ONLY.	34.50	20.04	54.54

**HEAVY EQUIPMENT OPERATORS
ASPHALT PAVEMENT OR OTHER WORK**

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
551	Crane, Tower Crane, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of Over 100 Tons, Self Erecting Tower Crane With a Lifting Capacity of Over 4,000 Lbs., Crane With Boom Dollies; Crane, Tower Crane, Pedestal Tower or Derrick, With Boom, Leads and/or Jib Lengths Measuring 176 Ft or Over; Master Mechanic.	35.12	18.46	53.58
552	Backhoe (Track Type) Having a Mfr.'s Rated Capacity of 130,000 Lbs. or Over; Caisson Rig; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of 100 Tons or Under, Self-Erecting Tower Crane With a Lifting Capacity Of 4,000 Lbs. & Under; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 175 Ft or Under; Dredge (NOT Performing Work on the Great Lakes); Licensed Boat Pilot (NOT Performing Work on the Great Lakes); Pile Driver. Future Increase(s): Add \$1.75/hr on 6/1/2014); Add \$1.25/hr on 6/1/2015); Add \$1.30/hr on 6/1/2016); Add \$1.25/hr on 6/1/2017. Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm .	36.22	20.40	56.62

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
553	Air, Track, Rotary or Percussion Drilling Machine &/or Hammers, Blaster; Asphalt Heater, Planer & Scarifier; Asphalt Milling Machine; Asphalt Screed; Backhoe (Track Type) Having a Mfr.'s Rated Capacity of Under 130,000 Lbs.; Backhoe (Mini, 15,000 Lbs. & Under); Bituminous (Asphalt) Plant & Paver, Screed; Boring Machine (Directional, Horizontal or Vertical); Bulldozer or Endloader; Concrete Breaker (Large, Auto, Vibratory/Sonic, Manual or Remote); Concrete Conveyor System; Concrete Laser/Screed; Concrete Slipform Placer Curb & Gutter Machine; Crane (Carry Deck, Mini) or Truck Mounted Hydraulic Crane (10 Tons or Under); Crane With a Lifting Capacity of 25 Tons or Under; Forestry Equipment, Timbco, Tree Shear, Tub Grinder, Processor; Gradall (Cruz-Aire Type); Grader or Motor Patrol; Hydro-Blaster (10,000 PSI or Over); Loading Machine (Conveyor); Manhoist; Material or Stack Hoist; Mechanic or Welder; Milling Machine; Post Hole Digger or Driver; Railroad Track Rail Leveling Machine, Tie Placer, Extractor, Tamper, Stone Leveler or Rehabilitation Equipment; Roller (Over 5 Ton); Scraper (Self Propelled or Tractor Drawn) 5 cu yds or More Capacity; Shoulder Widener; Sideboom; Skid Rig; Stabilizing or Concrete Mixer (Self-Propelled or 14S or Over); Tractor (Scraper, Dozer, Pusher, Loader); Tractor or Truck Mounted Hydraulic Backhoe; Trencher (Wheel Type or Chain Type); Tube Finisher; Tugger (NOT Performing Work on the Great Lakes); Winches & A-Frames.	32.89	18.96	51.85
554	Backfiller; Broom or Sweeper; Compactor (Self-Propelled or Tractor Mounted, Towed & Light Equipment); Concrete Finishing Machine (Road Type); Environmental Burner; Farm or Industrial Type Tractor; Fireman (Asphalt Plant, Pile Driver & Derrick NOT Performing Work on the Great Lakes); Forklift; Greaser; Hoist (Tugger, Automatic); Jeep Digger; Joint Sawyer (Multiple Blade); Launch (NOT Performing Work on the Great Lakes); Lift Slab Machine; Mechanical Float; Mulcher; Power Subgrader; Robotic Tool Carrier (With or Without Attachments); Roller (Rubber Tire, 5 Ton or Under); Self-Propelled Chip Spreader; Shouldering Machine; Skid Steer Loader (With or Without Attachments); Telehandler.	33.67	19.48	53.15
555	Air Compressor (&/or 400 CFM or Over); Air, Electric or Hydraulic Jacking System; Augers (Vertical & Horizontal); Automatic Belt Conveyor & Surge Bin; Boiler (Temporary Heat); Crusher, Screening or Wash Plant; Generator (&/or 150 KW or Over); Heaters (Mechanical); High Pressure Utility Locating Machine (Daylighting Machine); Mudjack; Oiler; Prestress Machine; Pug Mill; Pump (3 Inch or Over) or Well Points; Rock, Stone Breaker; Screed (Milling Machine); Stump Chipper; Tank Car Heaters; Vibratory Hammer or Extractor, Power Pack. Future Increase(s): Add \$1.75/hr on 6/1/2014); Add \$1.25/hr on 6/1/2015); Add \$1.30/hr on 6/1/2016); Add \$1.25/hr on 6/1/2017. Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm .	35.17	20.40	55.57
556	Fiber Optic Cable Equipment.	26.69	16.65	43.34

RESIDENTIAL OR AGRICULTURAL CONSTRUCTION

Includes single family houses or apartment buildings of no more than four (4) stories in height and all buildings, structures or facilities that are primarily used for agricultural or farming purposes, excluding commercial buildings. For classification purposes, the exterior height of a residential building, in terms of stories, is the primary consideration. All incidental items such as site work, driveways, parking lots, private sidewalks, private septic systems or sewer and water laterals connected to a public system and swimming pools are included within this definition. Residential buildings of five (5) stories and above are NOT included within this definition.

SKILLED TRADES

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
101	Acoustic Ceiling Tile Installer Future Increase(s): Add \$1.25/hr on 6/2/2014.	33.68	19.81	53.49
102	Boilermaker	26.00	4.73	30.73
103	Bricklayer, Blocklayer or Stonemason	32.01	13.26	45.27
104	Cabinet Installer	22.00	1.05	23.05
105	Carpenter	30.48	3.24	33.72
106	Carpet Layer or Soft Floor Coverer	23.68	3.20	26.88
107	Cement Finisher	20.93	5.94	26.87
108	Drywall Taper or Finisher	22.50	0.88	23.38
109	Electrician	27.50	7.47	34.97
110	Elevator Constructor	42.86	23.84	66.70
111	Fence Erector	18.52	4.89	23.41
112	Fire Sprinkler Fitter	52.82	5.54	58.36
113	Glazier	38.03	13.42	51.45
114	Heat or Frost Insulator	30.00	0.00	30.00
115	Insulator (Batt or Blown)	19.00	14.33	33.33
116	Ironworker	31.25	19.46	50.71
117	Lather	30.48	3.24	33.72
119	Marble Finisher	26.89	19.18	46.07
120	Marble Mason	32.01	13.26	45.27
121	Metal Building Erector	17.00	3.82	20.82
123	Overhead Door Installer	12.00	0.00	12.00
124	Painter	20.00	4.22	24.22

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
<u>CODE</u>	<u>TRADE OR OCCUPATION</u>	\$	\$	\$
125	Pavement Marking Operator	30.00	0.00	30.00
129	Plasterer	25.00	0.00	25.00
130	Plumber	30.00	10.62	40.62
132	Refrigeration Mechanic	19.75	8.56	28.31
133	Roofer or Waterproofer	17.00	3.72	20.72
134	Sheet Metal Worker	21.03	3.40	24.43
135	Steamfitter	31.72	16.10	47.82
137	Teledata Technician or Installer	24.75	8.09	32.84
138	Temperature Control Installer	22.50	0.70	23.20
139	Terrazzo Finisher	26.89	19.18	46.07
140	Terrazzo Mechanic	30.20	18.42	48.62
141	Tile Finisher	23.77	16.50	40.27
142	Tile Setter	21.00	0.00	21.00
143	Tuckpointer, Caulker or Cleaner	32.50	0.02	32.52
146	Well Driller or Pump Installer	27.60	5.80	33.40
147	Siding Installer	20.18	0.00	20.18

TRUCK DRIVERS

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
<u>CODE</u>	<u>TRADE OR OCCUPATION</u>	\$	\$	\$
201	Single Axle or Two Axle	28.05	4.16	32.21
203	Three or More Axle	18.00	2.37	20.37
205	Pavement Marking Vehicle	18.00	2.37	20.37
207	Truck Mechanic	19.00	1.85	20.85

LABORERS

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
<u>CODE</u>	<u>TRADE OR OCCUPATION</u>	\$	\$	\$
301	General Laborer	18.14	10.16	28.30
302	Asbestos Abatement Worker	17.00	3.86	20.86

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
303	Landscaper	30.00	0.00	30.00
311	Fiber Optic Laborer (Outside, Other Than Concrete Encased)	18.31	12.67	30.98
315	Final Construction Clean-Up Worker	16.00	0.00	16.00

**HEAVY EQUIPMENT OPERATORS
RESIDENTIAL OR AGRICULTURAL CONSTRUCTION**

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
557	Asphalt Heater, Planer & Scarifier; Asphalt Milling Machine; Asphalt Screed; Backhoe (Track Type); Backhoe (Mini, 15,000 Lbs. & Under); Bituminous (Asphalt) Plant & Paver, Screed; Boring Machine (Directional, Horizontal or Vertical); Bulldozer or Endloader; Concrete Breaker (Large, Auto, Vibratory/Sonic, Manual or Remote); Concrete Bump Cutter, Grinder, Planing or Grooving Machine; Concrete Conveyor System; Concrete Laser/Screed; Concrete Paver (Slipform); Concrete Pump, Concrete Conveyor (Rotec or Bidwell Type); Concrete Slipform Placer Curb & Gutter Machine; Concrete Spreader & Distributor; Crane (Carry Deck, Mini) or Truck Mounted Hydraulic Crane (10 Tons or Under); Crane With a Lifting Capacity of 25 Tons or Under; Crane, Shovel, Dragline, Clamshells; Forestry Equipment, Timberco, Tree Shear, Tub Grinder, Processor; Grader or Motor Patrol; Grout Pump; Hydro-Blaster (10,000 PSI or Over); Loading Machine (Conveyor); Manhoist; Material or Stack Hoist; Mechanic or Welder; Milling Machine; Roller (Over 5 Ton); Scraper (Self Propelled or Tractor Drawn) 5 cu yds or More Capacity; Shoulder Widener; Skid Rig; Stabilizing or Concrete Mixer (Self-Propelled or 14S or Over); Tractor (Scraper, Dozer, Pusher, Loader); Tractor or Truck Mounted Hydraulic Backhoe; Tractor or Truck Mounted Hydraulic Crane (10 Tons or Under); Trencher (Wheel Type or Chain Type); Winches & A-Frames.	29.70	20.08	49.78
558	Air Compressor (&/or 400 CFM or Over); Air, Electric or Hydraulic Jacking System; Backfiller; Belting, Burlap, Texturing Machine; Boiler (Temporary Heat); Broom or Sweeper; Compactor (Self-Propelled or Tractor Mounted, Towed & Light Equipment); Concrete Finishing Machine (Road Type); Farm or Industrial Type Tractor; Forklift; Generator (&/or 150 KW or Over); Heaters (Mechanical); High Pressure Utility Locating Machine (Daylighting Machine); Jeep Digger; Lift Slab Machine; Mulcher; Oiler; Post Hole Digger or Driver; Power Subgrader; Pump (3 Inch or Over) or Well Points; Robotic Tool Carrier (With or Without Attachments); Rock, Stone Breaker; Roller (Rubber Tire, 5 Tons or Under); Screed (Milling Machine); Self Propelled Chip Spreader; Shouldering Machine; Skid Steer Loader (With or Without Attachments); Stump Chipper; Telehandler; Vibratory Hammer or Extractor, Power Pack.	29.70	16.00	45.70

***** END OF RATES *****
