CITY OF MADISON

2024 PARKING GARAGE MAINTENANCE MADISON, WISCONSIN CITY OF MADISON CONTRACT NO. 9493 BID DOCUMENTS

CAPITOL SQUARE NORTH (CSN) 218 EAST MIFFLIN STREET Lake Mendota South Livingston Street Garage Capitol Square State Street Langdon St Capitol Garage Buckeye State Street State St Campus Garage Wilson Street Garage Overture Center Garage University Ave Lake Conklin PI Мопопа W Johnson St WILSON STREET GARAGE (WSG) W Dayton St Parking Facilities 20 EAST WILSON STREET Entrance/Exit → One-way Street Parking Lot Parking Garage

SOUTH LIVINGSTON STREET (SLS) 111 SOUTH LIVINGSTON STREET

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SC-S101	STATE STREET CAPITOL LEVEL 1 PLAN
SC-S102	STATE STREET CAPITOL LEVEL 2 PLAN
SC-S103	STATE STREET CAPITOL LEVEL 3 PLAN
SC-S104	STATE STREET CAPITOL LEVEL 4 PLAN
SC-S105	STATE STREET CAPITOL LEVEL 5 PLAN
SC-S106	STATE STREET CAPITOL LEVEL 6 PLAN
CN-S100	CAPITOL SQUARE NORTH LOWER LEVEL PLAN
CN-S101	CAPITOL SQUARE NORTH LEVEL 1 PLAN
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CN-S104	CAPITOL SQUARE NORTH LEVEL 4 PLAN
LS-S101	SOUTH LIVINGSTON STREET LEVEL 1 PLAN
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WS-S098	WILSON STREET LOWER LEVEL 2 PLAN
WS-S099	WILSON STREET LOWER LEVEL 1 PLAN
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P-001	PLUMBING SYMBOLS, SCHEDULES, & ABBREVIATIONS
P-002	LEVEL U2 PLUMBING PLAN - SANITARY & VENT
P-003	LEVEL U1 PLUMBING PLAN - SANITARY & VENT
P-004	LEVEL U0 PLUMBING PLAN - SANITARY & VENT
S501	DETAILS

GREF

5126 West Terrace Drive, Suite 111 Madison, WI 53718-8346 608 / 242 1550 608 / 242 0787 fax

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Madison Municipal Building 215 Martin Luthing King Blvd Suite 109

Madison, Wisconsin 53703

PROJECT TITLE:

2024 PARKING GARAGE MAINTENANCE

ISSUE:

1 12/08/2023 BID DOCUMENTS

PROJECT INFORMATION:

PROJECT NUMBER: 2023-5008.02

DATE:

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12/08/2023

COVER SHEET

SHEET NUMBER:

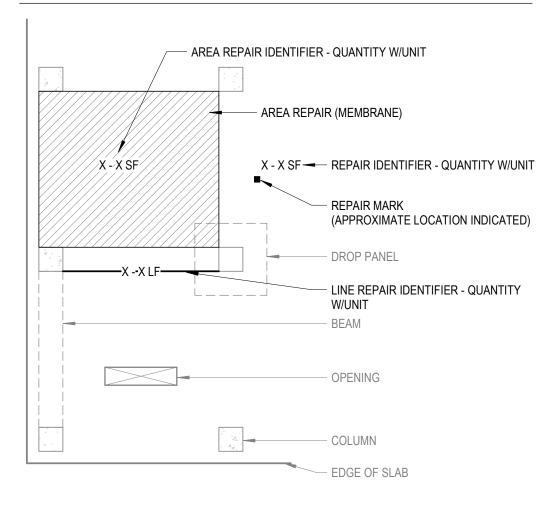
G001

STATE STREET CAPITOL (SSCO) 214 NORTH CARROLL STREET

ESTIMATED PLAN QUANTITIES

PAY ITEM	X - X UNII DESCRIPTION	DETAIL REFERENCE(S)	UNITS	SSCO QTY	CSN QTY	SLS QTY	WSG QTY	TOTAI QTY
1	CONCRETE TOPSIDE SURFACE SPALL REPAIR	B4 / S501	SF	50	125	0	95	270
2	CONCRETE OVERHEAD SURFACE SPALL REPAIR	C4 / S501	SF	100	15	0	0	115
3	CONCRETE VERTICAL SURFACE REPAIR	A3/S501 A4/S501	SF	35	115	0	0	150
4	CONCRETE BEAM SPALL REPAIR	B3/S501	SF	10	10	0	0	20
5	FULL-SYSTEM MEMBRANE INSTALLATION OR REPLACEMENT	N/A	SF	0	19500	0	1560	21060
6	CONCRETE SLAB CRACK REPAIR: ROUT AND SEAL	B2/S501	LF	0	250	0	0	250
7	CONCRETE SLAB CRACK REPAIR: ROUT WITH SLOT AND SEAL (WSG)	A2/S501	LF	0	0	0	1500	1500
8	CMU CRACK/MORTAR JOINT REPAIR	N/A	LF	0	550	0	0	550
9	CMU REPLACEMENT	N/A	SF	0	30	0	0	30
10	SILANE SEALER APPLICATION (SSCO)	N/A	SF	301500	0	0	0	30150
11	REMOVE AND REPLACE EXISTING OR INSTALL NEW SEALANT JOINT	N/A	LF	600	600	0	300	1500
12	STEEL BARRIER REPAIRS (CSN)	B1/S501	EACH	0	2	0	0	2
13	REFASTEN EXISTING STAIR TREADS/COVER PLATES	N/A	EACH	10	10	0	0	20
14	INSTALL NEW PRECAST WALL/PANEL CONNECTION	SEE PLAN	EACH	2	0	4	0	6
15	INSTALL NEW FLOOR DRAINS	A5 / P001	FACH	0	0	0	7	7

CONCRETE REPAIR PLAN LEGEND



ABBREVIATIONS

```
1WAY ONE-WAY
                                   LD BRG LOAD-BEARING
                                          LONG DIMENSION HORIZONTAL
       ANCHOR BOLT
                                   LDV
                                          LONG DIMENSION VERTICAL
ADDL
       ADDITIONAL
                                          LIVE LOAD
ADDM
       ADDENDUM
                                          LONG LEG BACK TO BACK
                                          LONG LEG HORIZONTAL
       AIR HANDLING UNIT
                                          LONG LEG VERTICAL
       ALTERNATE
APPROX APPROXIMATE
                                   LVL
                                           LAMINATED VENEER LUMBER
                                   LVR
       AS REQUIRED
                                          LOUVER
ARCH
       ARCHITECT
                                           MOMENT
       BASE PLATE
                                           MAXIMUM
                                    MBR
                                           MEMBER
       BACK TO BACK
                                           MOMENT CONNECTION
       BOTTOM CHORD
                                    MD
                                           METAL DECK
       BOTH FACES
       BOTTOM FACE
                                    MECH
                                          MECHANICAL
                                          MEZZANINE
                                    MEZZ
       BOTTOM OF __ (REFER TO TOP OF __)
                                          MANUFACTURER
       BOTTOM
                                    MFR REC MANUFACTURER'S RECOMMENDATION
BRDG
       BRIDGING
                                    MID
                                          MIDDLE
BRG PL
       BEARING PLATE
                                          MINIMUM
                                          MISCELLANEOUS
       BOTH SIDES
BSMT
       BASEMENT
                                           MONOLITHIC
       BOTH WAYS
                                           MASONRY OPENING
                                           METAL
                                          MULTIPLE
       CHANNEL
C TO C CENTER TO CENTER
                                           NORTH
CANTIL
       CANTILEVER
                                           NEAR FACE
       CAST-IN-PLACE
       CONSTRUCTION JOINT
                                           NOT IN CONTRACT
       CONTROL JOINT
                                          NON-LOAD-BEARING
                                    NO
       CENTER LINE
                                           NUMBER
       CONCRETE MASONRY UNIT
                                           NOMINAL
CMU
COL
                                           NEAR SIDE
       COLUMN
CONC
                                    NTS
                                          NOT TO SCALE
       CONCRETE
CONN
       CONNECT
                                   OC
OD
OF
CONSTR CONSTRUCTION
       CONTINUE/CONTINUOUS
                                          OUTSIDE DIAMETER
CONT
CONTR CONTRACTOR
                                          OUTSIDE FACE
CPRS
       COMPRESSIBLE
                                    OPNG
                                          OPENING
CTRL
       CONTROL
                                    OPH
                                          OPPOSITE HAND
                                    OPP
OPT
       CUBIC
                                          OPPOSITE
       CUBIC FEET
                                          OPTIONAL
                                    0/0
       CUBIC INCH
                                          OUT TO OUT
CU YD
       CUBIC YARD
                                           PRECAST CONCRETE
       DEEP
                                   PCF
                                          POUNDS PER CUBIC FOOT
       DEPTH
                                          PLATE
      DECK BEARING ELEVATION
                                          POUNDS PER LINEAR FOOT
DBE
       DOUBLE
                                    PLYWD PLYWOOD
DEG
       DEGREE
                                    PRCST PRECAST
DET
       DETAIL
                                    PRELIM PRELIMINARY
DEMO
       DEMOLITION
                                    PS CONC PRESTRESSED CONCRETE
       DIAMETER
                                   PSF POUNDS PER SQUARE FOOT
                                          POUNDS PER SQUARE INCH
       DIAGONAL
       DIMENSION
                                          POST-TENSIONED
       DIRECTION
                                          PRESSURE TREATED
       DEAD LOAD
                                   PT CONC POST-TENSIONED CONCRETE
DWG
       DRAWING
                                    QTY
                                          QUANTITY
       EACH END
                                          ROOF DRAIN
       EACH FACE
                                    REF
                                           REFERENCE
       EXPANSION JOINT
                                           REINFORCE
       ELEVATION
                                    REQD
                                           REQUIRED
       ELECTRIC
                                    REV
                                          REVISION
       ELEVATOR
                                           ROUGH SAWN
       ENGINEER
                                          ROOF TOP UNIT
EOD
       EDGE OF DECK
       EDGE OF GRATING
                                          SOUTH
EOS
                                    SCHED SCHEDULE
       EDGE OF SLAB
EQ
       EQUAL
                                   SCHEM SCHEMATIC
EQL SP EQUALLY SPACED
                                    SE STRUCTURAL ENGINEER
EQUIP EQUIPMENT
                                    SECT SECTION
                                          SQUARE FOOT (FEET)
EQUIV EQUIVALENT
                                   SF
                                    SHT
EW
      EACH WAY
                                           SHEET
EXC EXCAVATE
                                    SIM
                                           SIMILAR
EXIST, (E) EXISTING
                                          SLAB
EXP EXPANSION
                                          SHORT LEG BACK TO BACK
                                    SLBB
EXP BT EXPANSION BOLT
                                    SP
                                          SUMP PIT
EXT EXTERIOR
                                    SPCL
                                          SPECIAL
                                    SPEC
                                          SPECIFICATION
FD
       FLOOR DRAIN
                                    SQ
                                          SQUARE
FDTN
       FOUNDATION
                                    SQ IN SQUARE INCH
       FAR FACE
                                    SQ YD SQUARE YARD
FLR
                                    STD STANDARD
      FLOOR
                                    STIF STIFFENER
FR
       FRAME
FS
       FAR SIDE
                                    STL JST STEEL JOIST
FSTNR FASTENER
                                    STRUC STRUCTURAL
       FEET
                                    SYMM SYMMETRICAL
FTG
       FOOTING
FUT
                                    T&B
                                          TOP AND BOTTOM
      FUTURE
                                          THROUGH BOLT
GA
       GAGE
                                          TOP CHORD
GALV GALVANIZED
                                          TOP ELEVATION MATCHES JOIST
                                    TEMJ
       GENERAL CONTRACTOR
                                    TEMP
                                           TEMPORARY
GLU LAM GLUE LAMINATED WOOD
                                    THK
                                          THICKNESS
GR BM GRADE BEAM
                                    THRU
                                           THROUGH
GRTG GRATING
                                    TOB
                                          TOP OF BEAM
                                    TOC
                                          TOP OF CONCRETE
       HIGH
                                    TOD
                                          TOP OF DECK
HDR
     HEADER
                                    TOF
                                          TOP OF FOUNDATION
HGR
      HANGER
                                          TOP OF GRATING
                                    TOP
                                          TOP OF PIER
HORIZ, H HORIZONTAL
                                    TOS
                                          TOP OF STEEL
HS HIGH STRENGTH
                                    TOW TOP OF WALL
HSKPG HOUSEKEEPING
                                    TS
      HEIGHT
                                          TUBE STEEL
                                    TYP TYPICAL
       MOMENT OF INERTIA
                                    UNO UNLESS NOTED OTHERWISE
       INSIDE DIAMETER
       INSIDE FACE
INFO INFORMATION
INT
                                    VERT, V VERTICAL
       INTERIOR
                                          VERIFY IN FIELD
JST JOIST
                                           WEST
JST BRG JOIST BEARING
                                           WIDE
                                           WITH
       KNEE BRACE
                                           WITHOUT
       THOUSAND POUNDS
                                    WBL
                                           WOOD BLOCKING
       KIPS PER LINEAR FOOT
                                    WD
                                           WOOD
       KNOCK OUT PANEL
                                    WF
                                           WIDE FLANGE
KSF
       KIPS PER SQUARE FOOT
                                    WP
                                           WORK POINT
       KIPS PER SQUARE INCH
KSI
                                           WEIGHT
       KEYWAY
                                          WELDED WIRE FABRIC
                                          WELDED WIRE MESH
       ANGLE
```



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PROJECT TITLE:

2024 PARKING GARAGE MAINTENANCE

ISSUE:

1 12/08/2023 BID DOCUMENTS

PROJECT INFORMATION

AMG

12/08/2023

PROJECT NUMBER: 2023-5008.02

DATE:

DRAWN BY:

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APPROVED BY:

AS NOTED SCALE:

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SHEET NUMBER

ESTIMATED PLAN QUANTITIES

G002

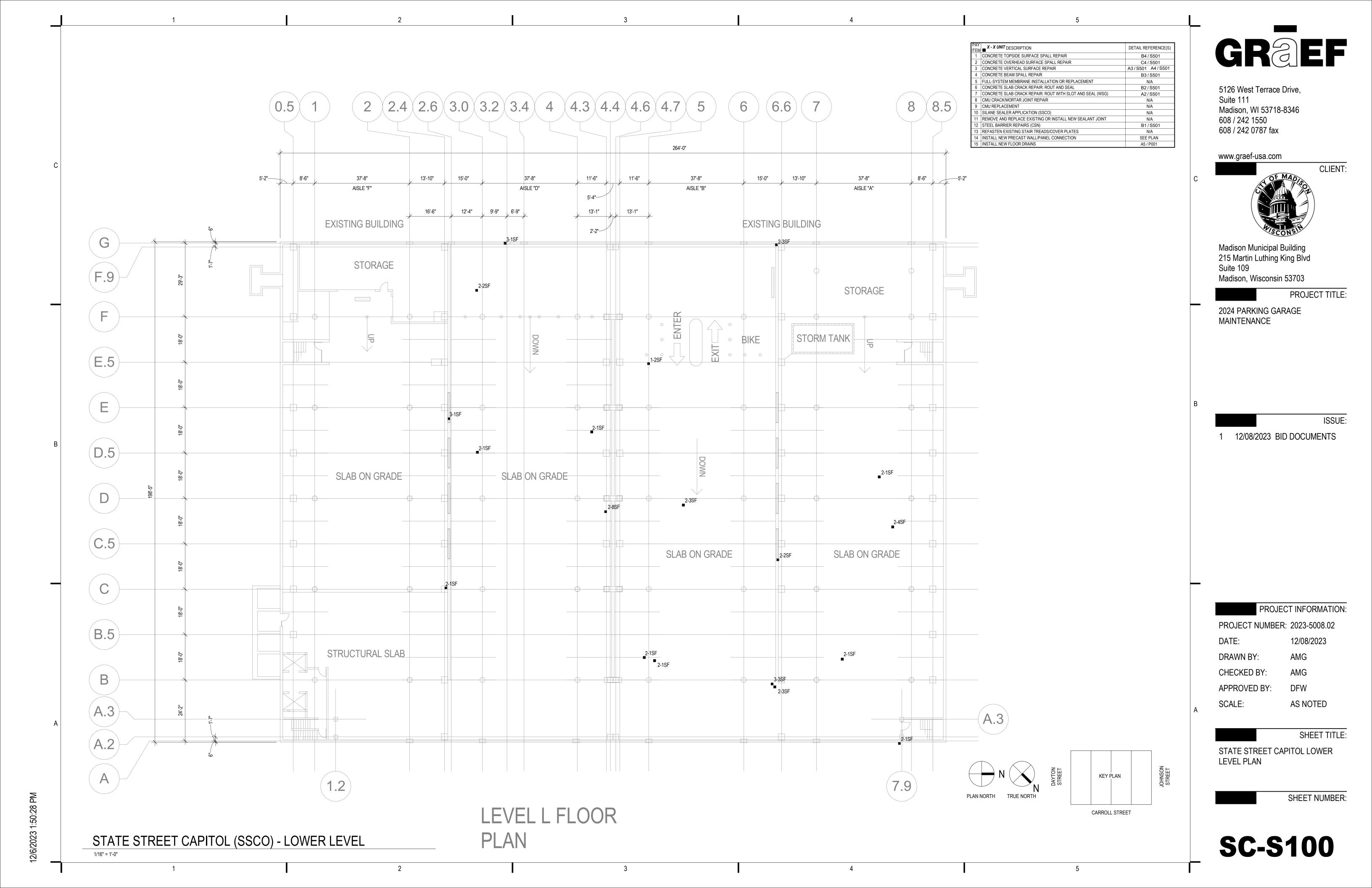
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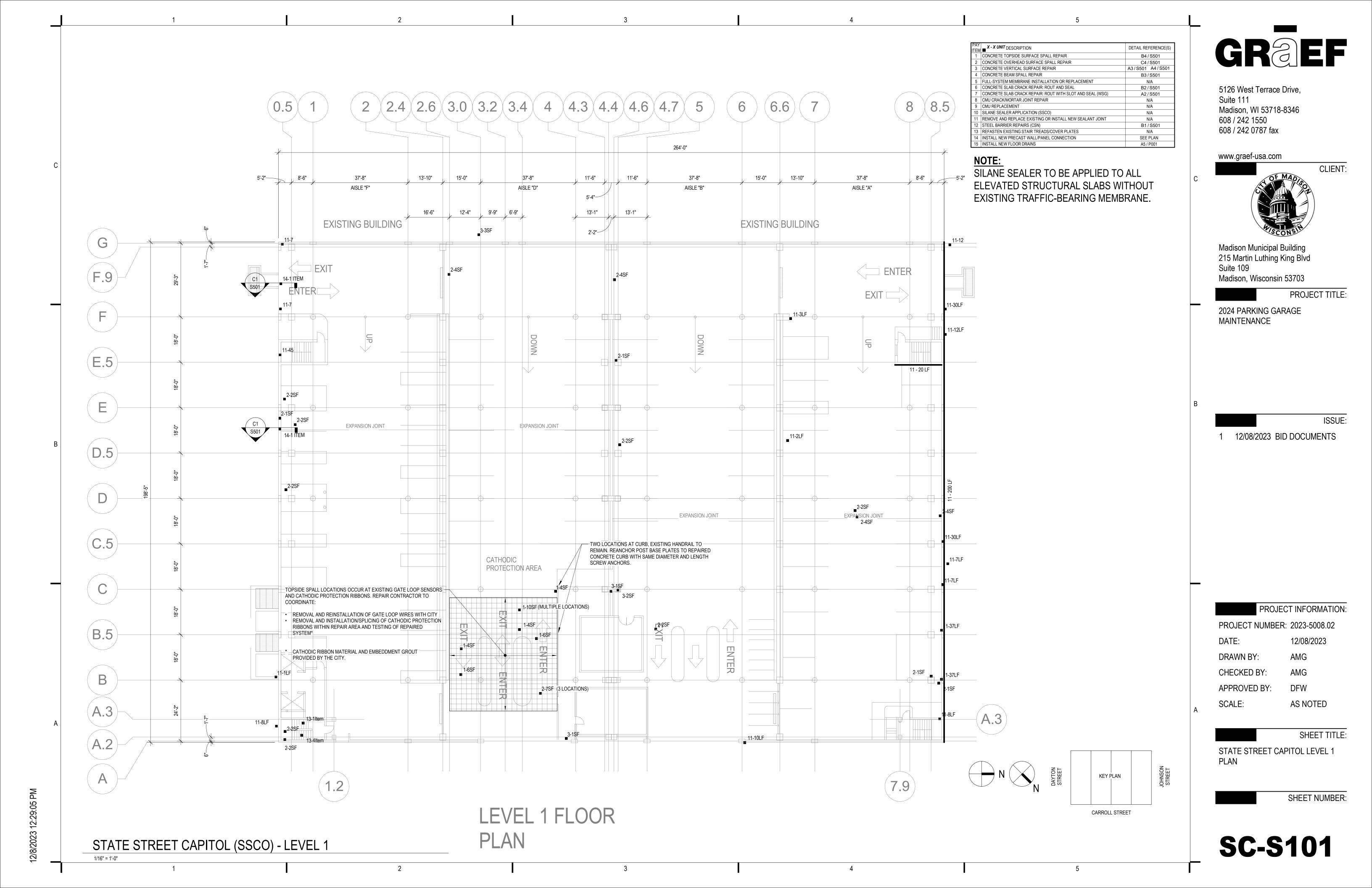
YD YARD

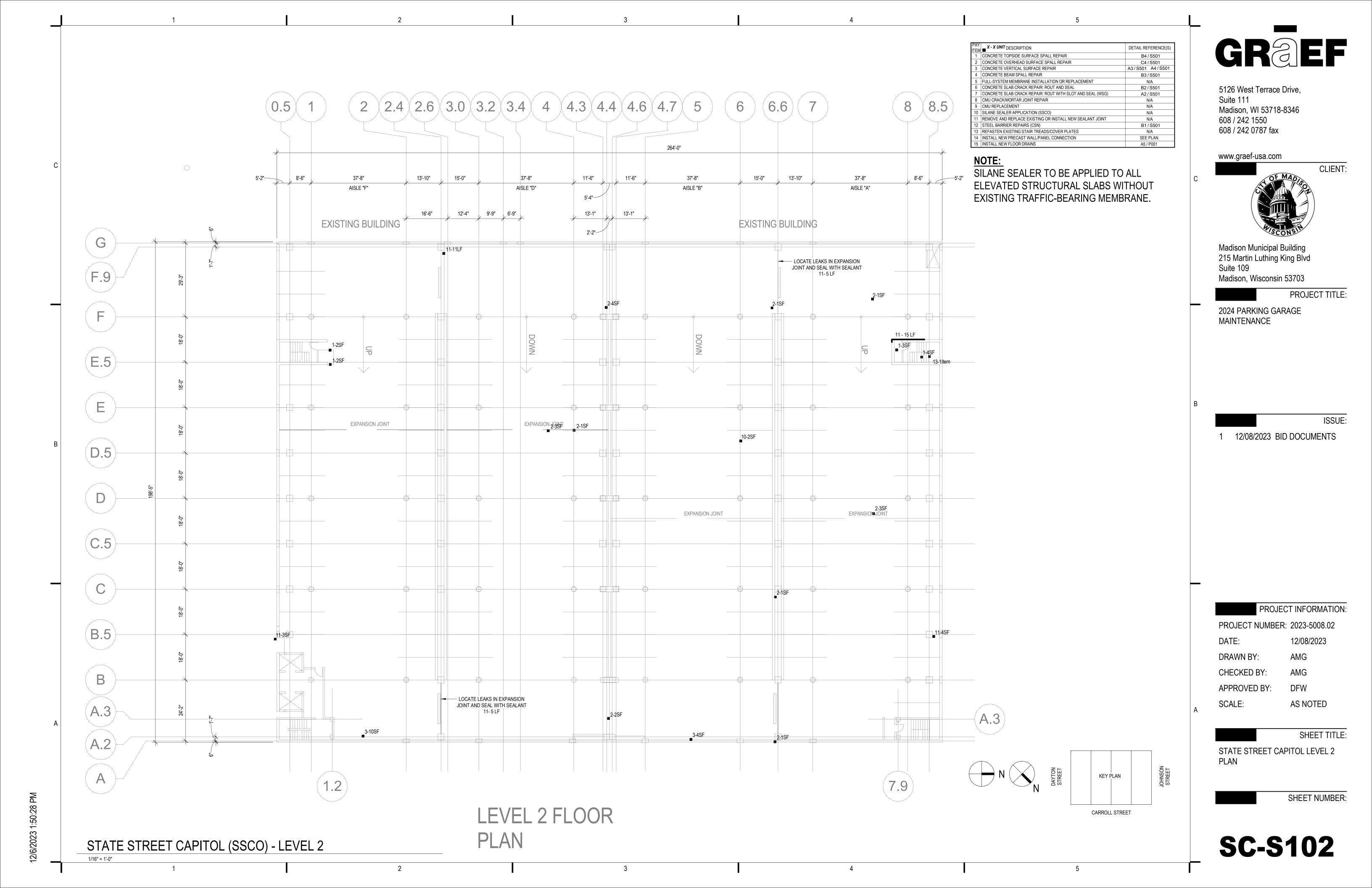
POUND

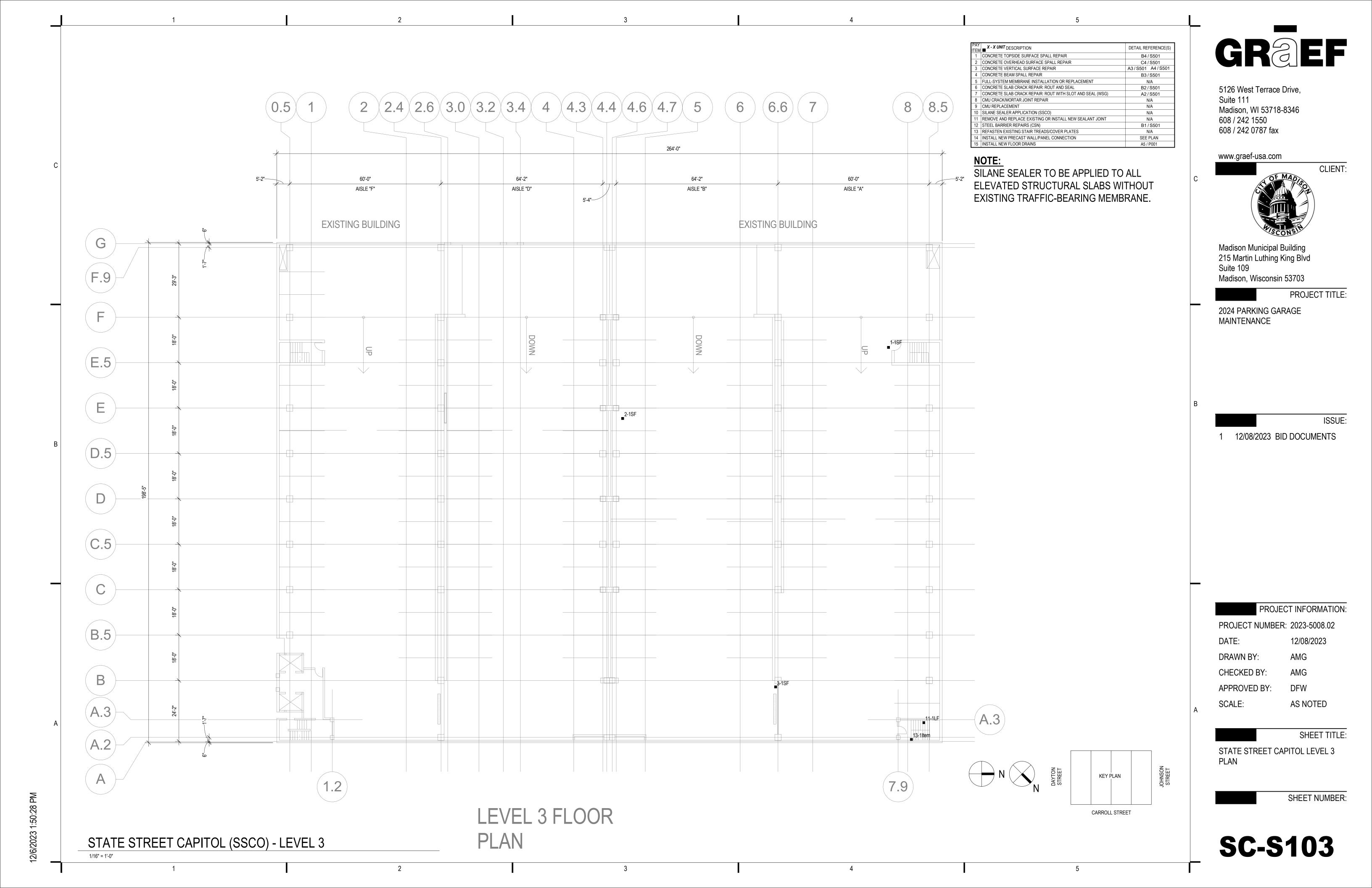
LATERAL

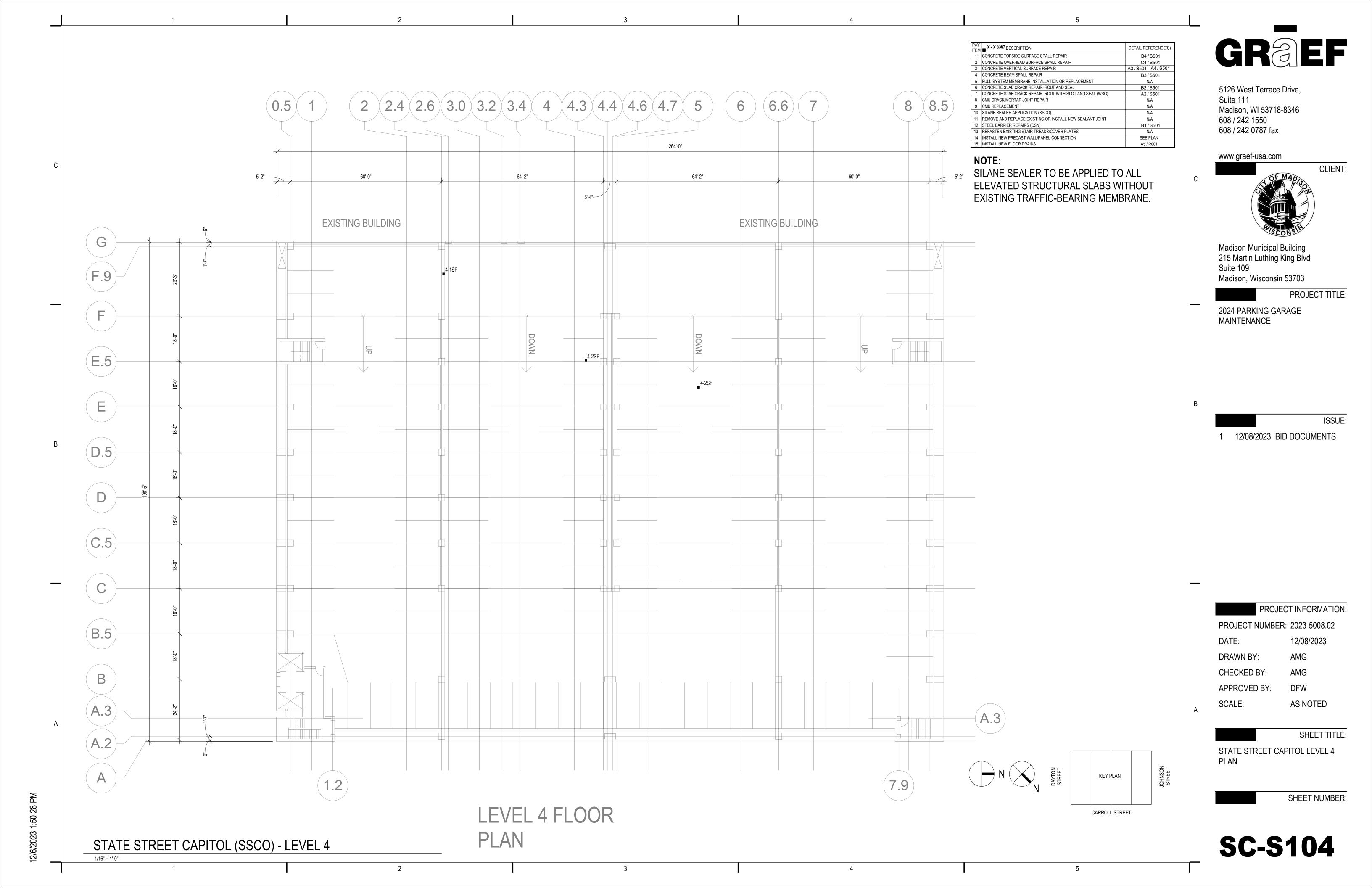
LB

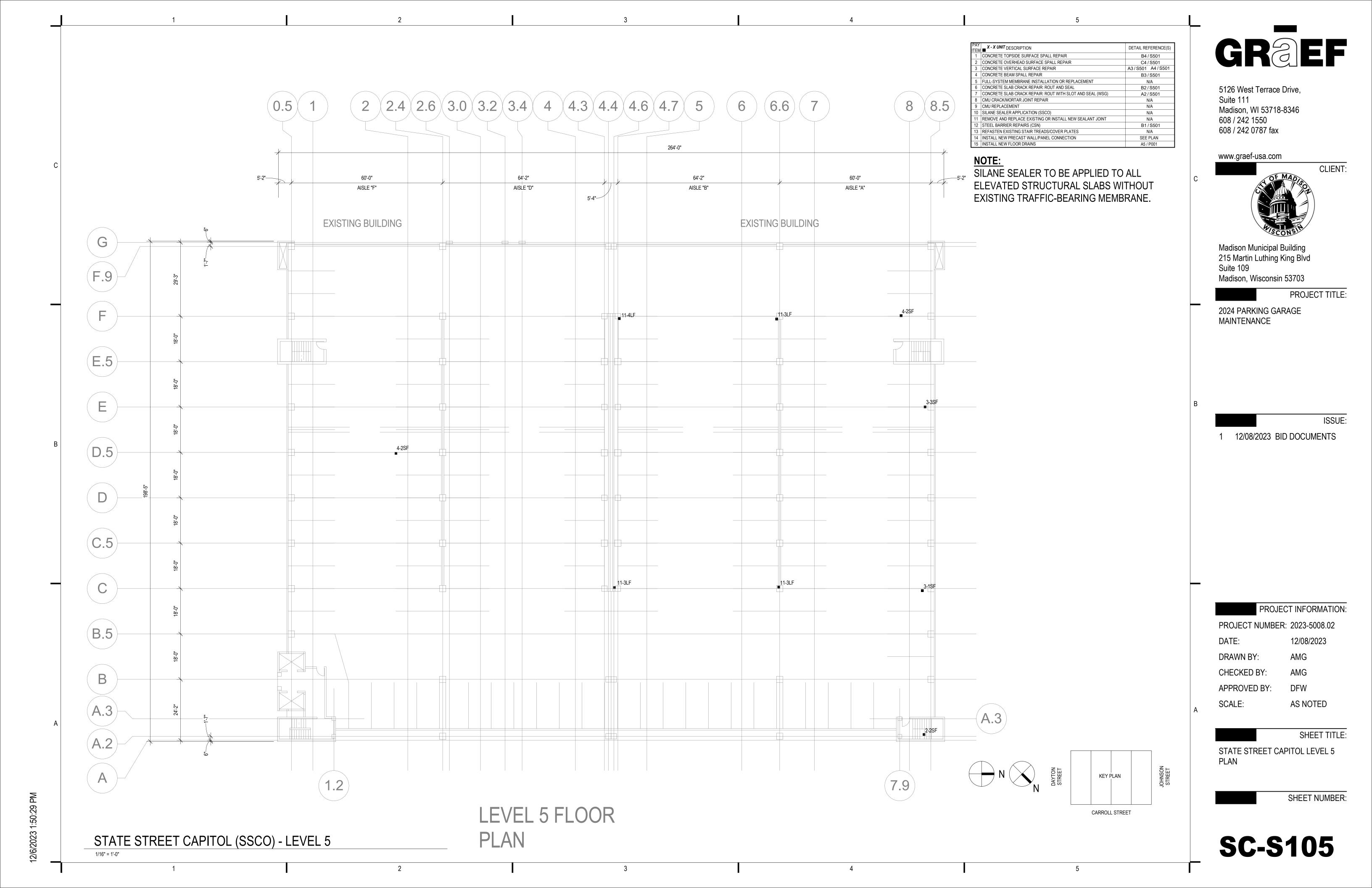


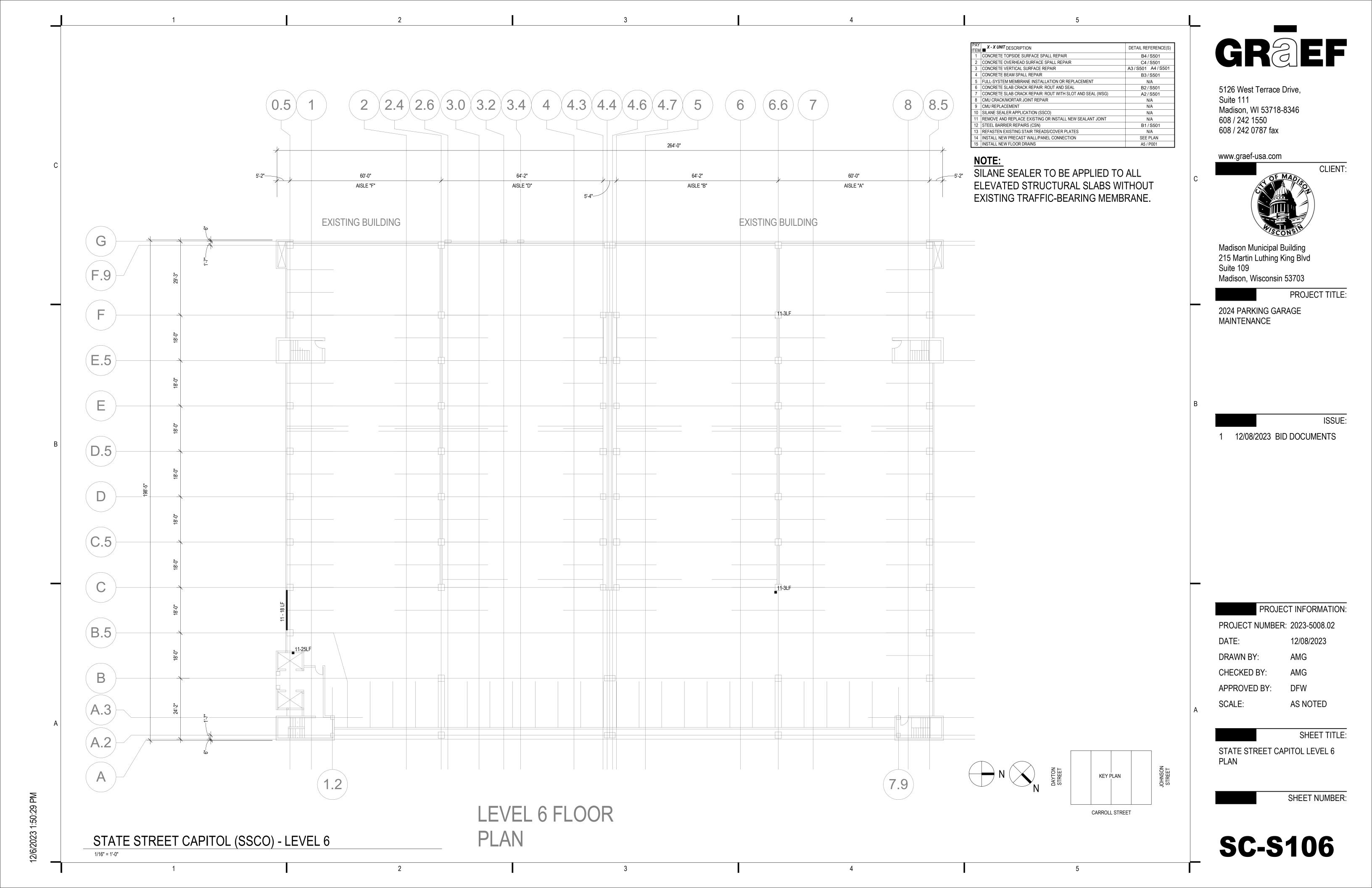


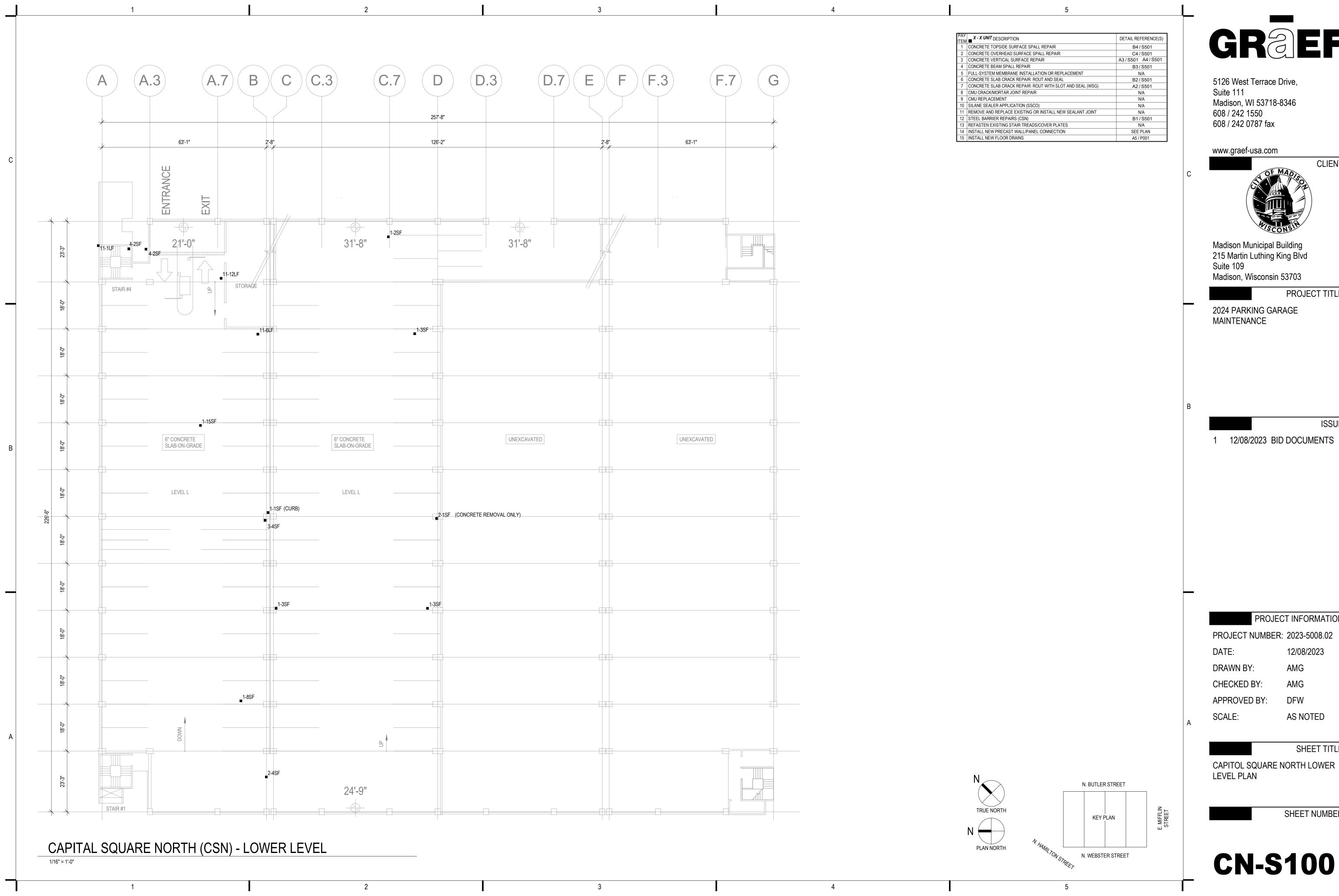












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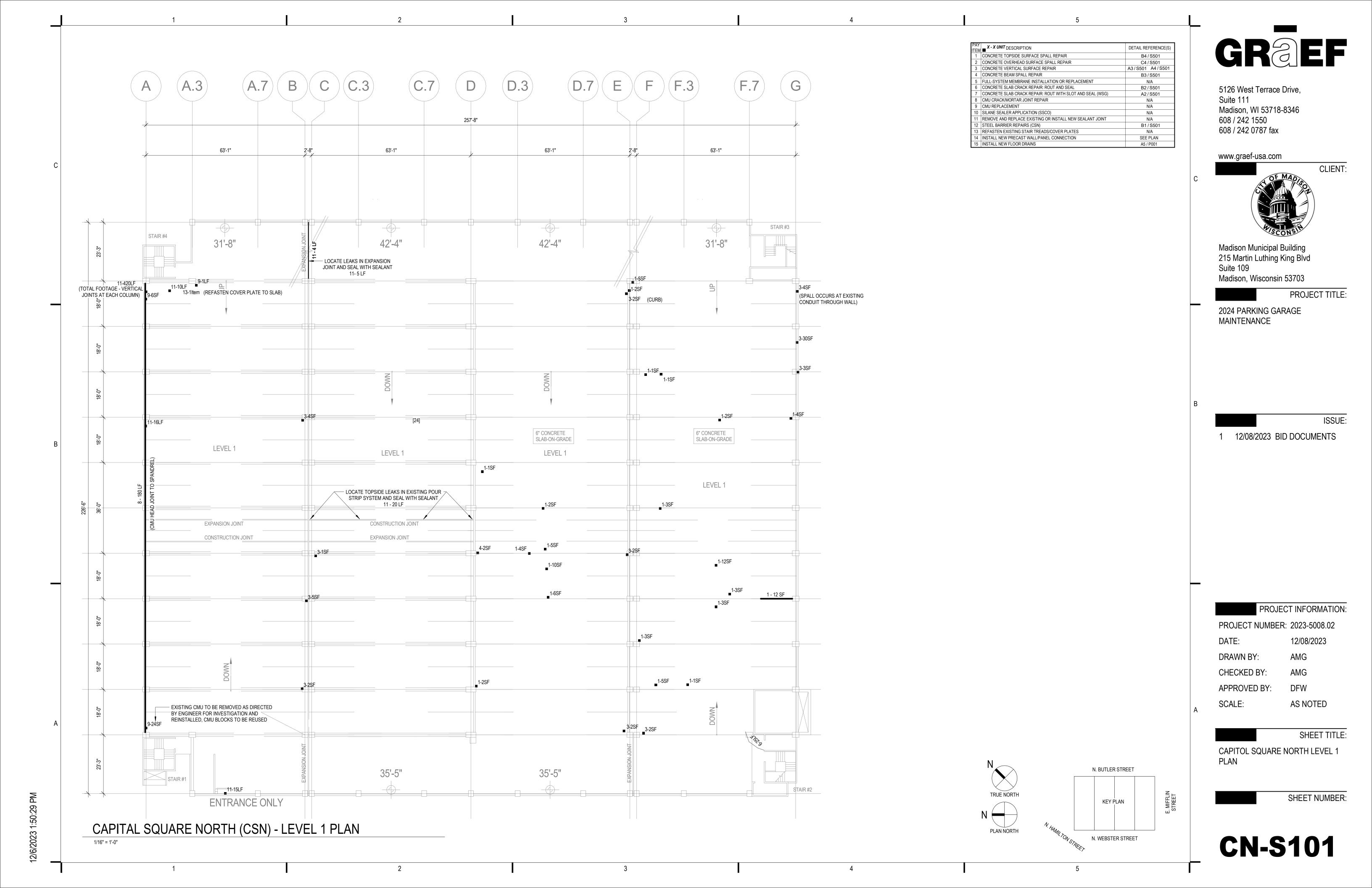
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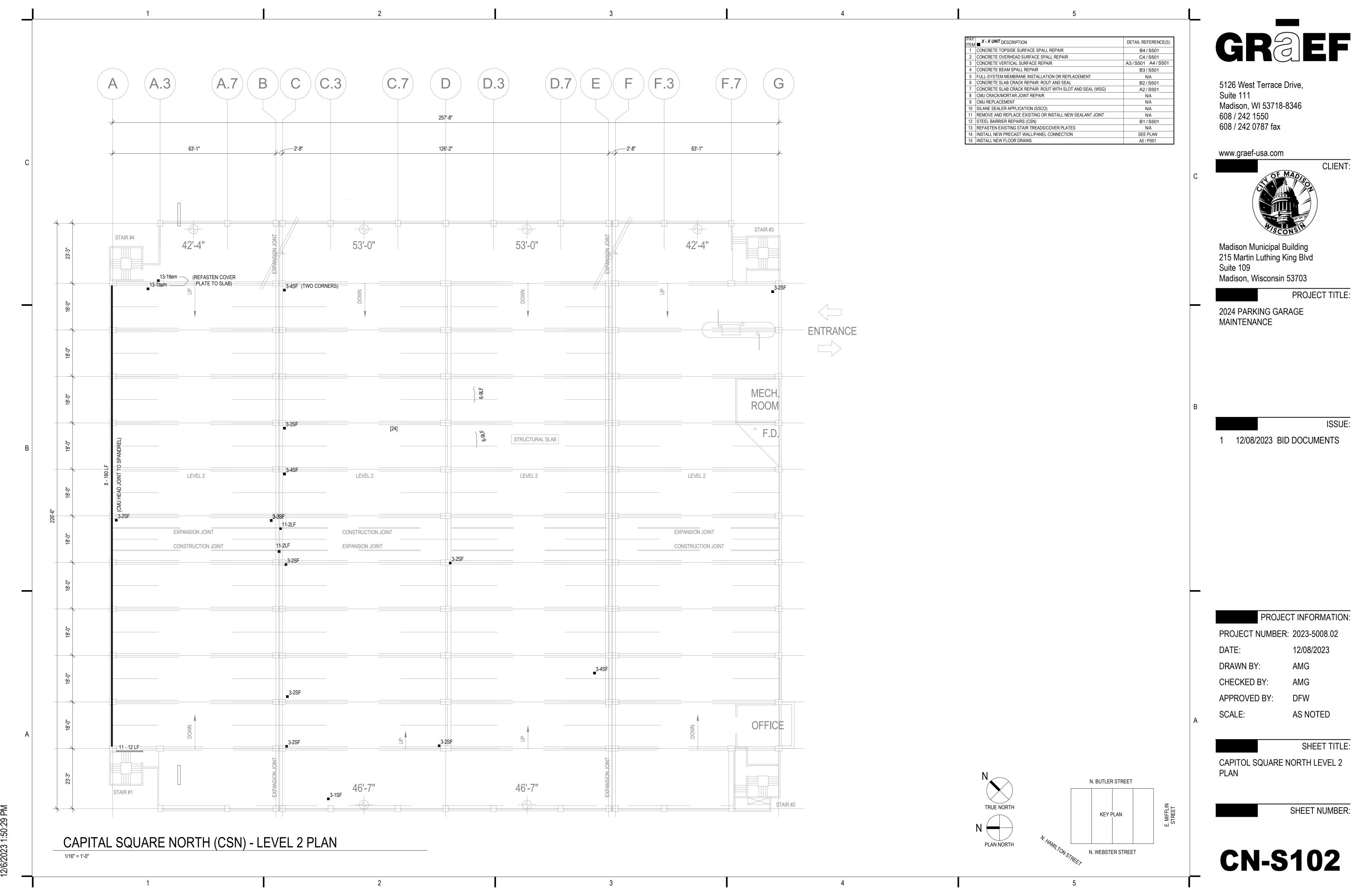
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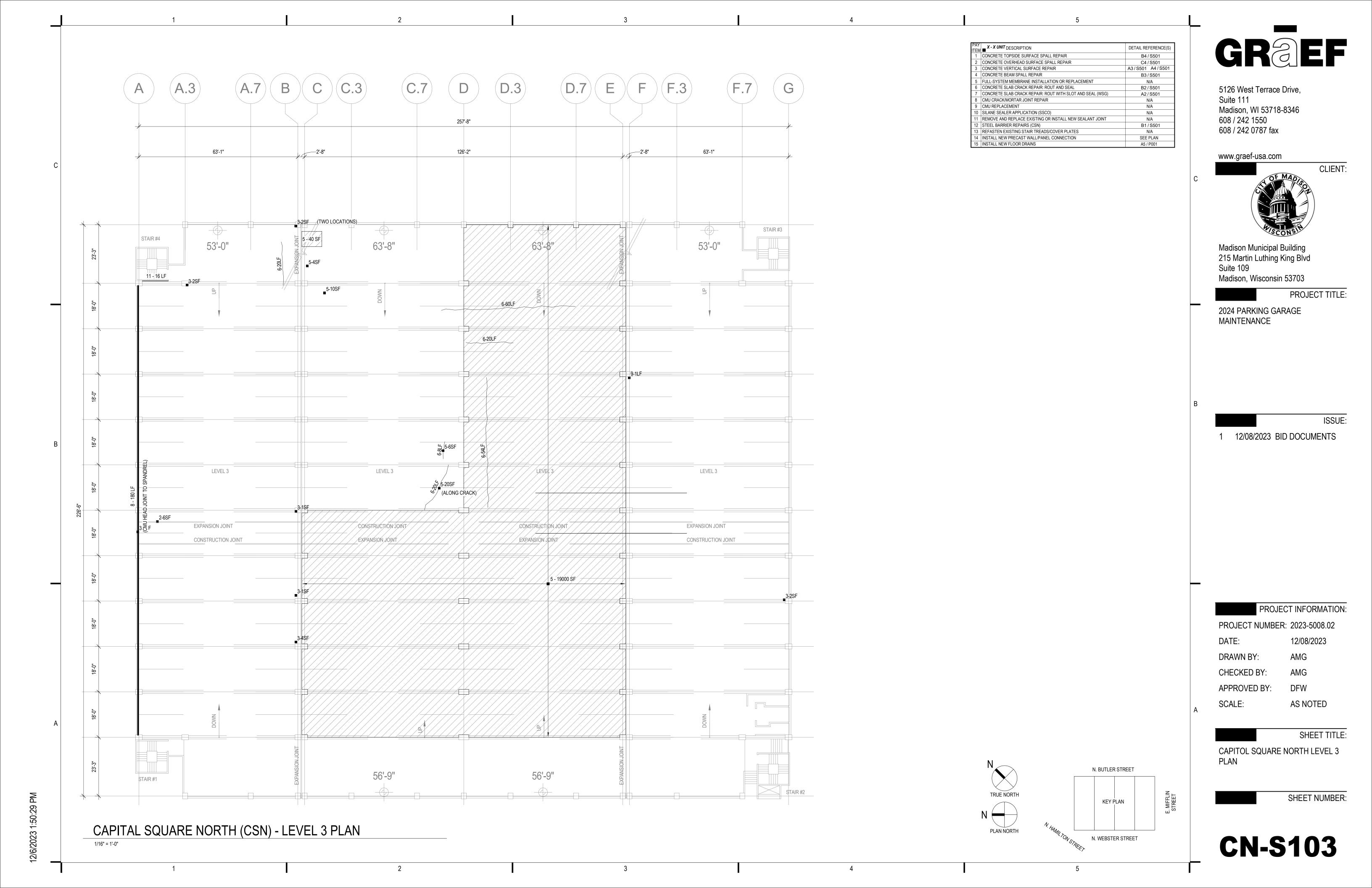
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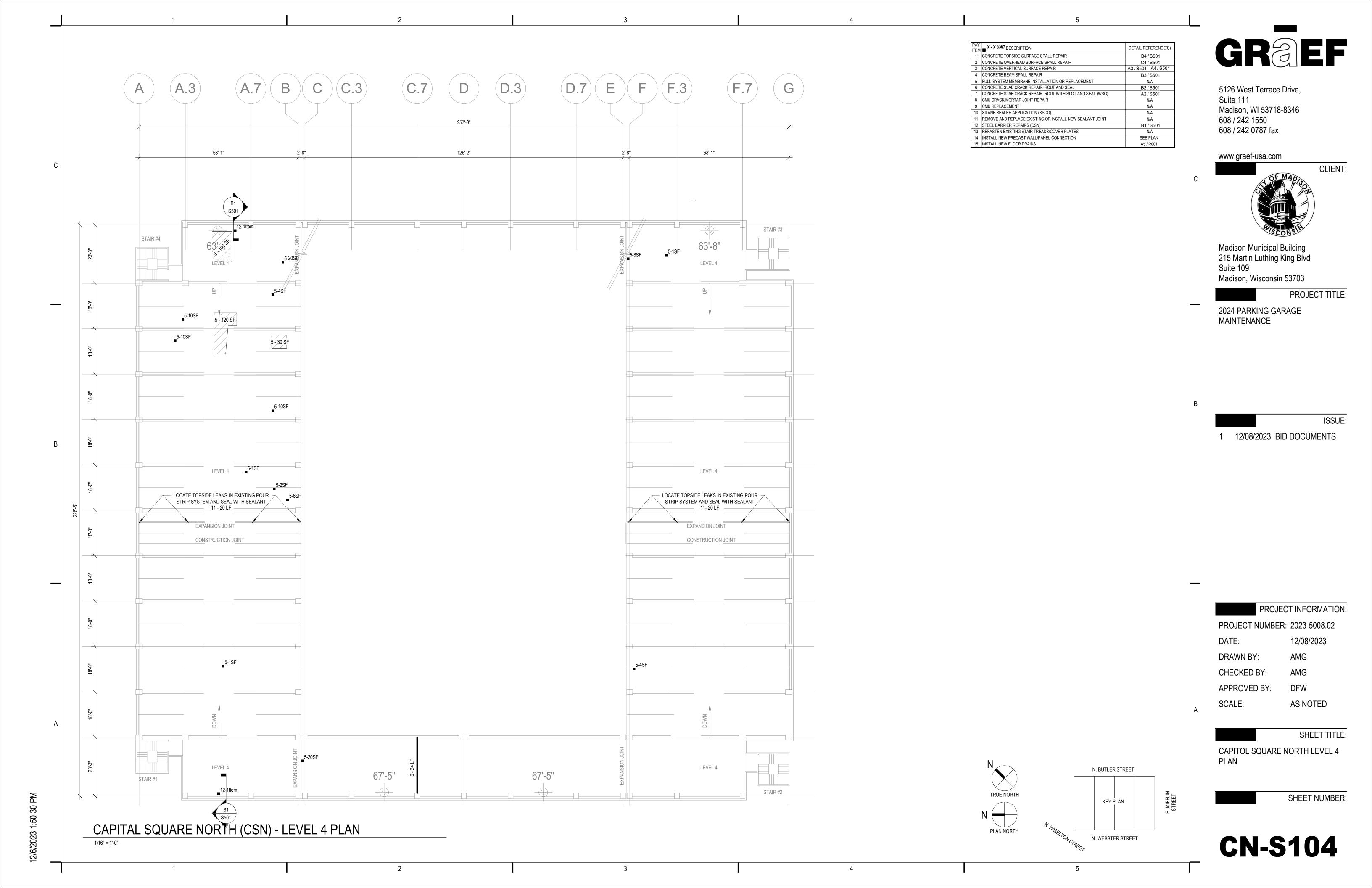
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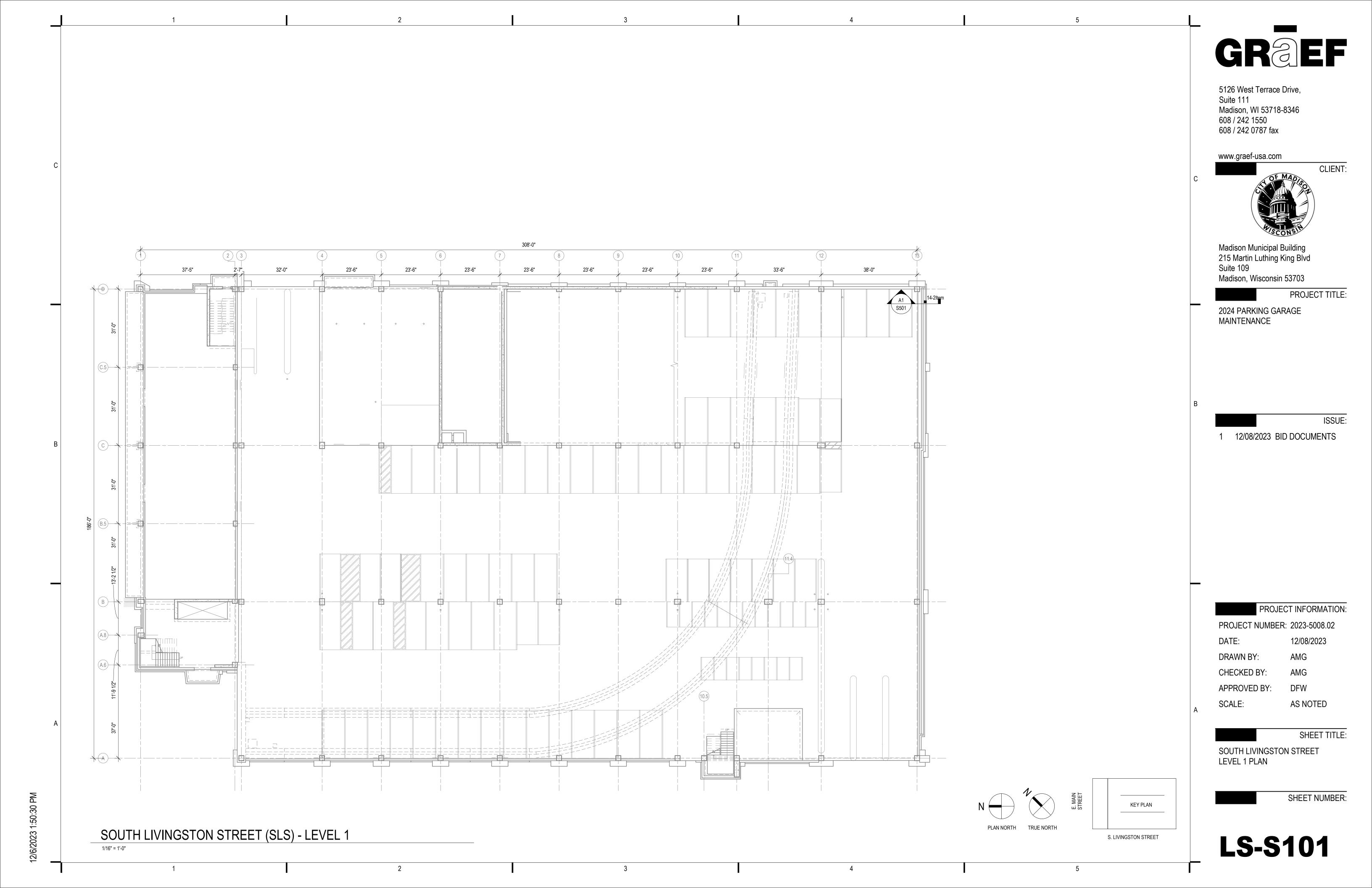


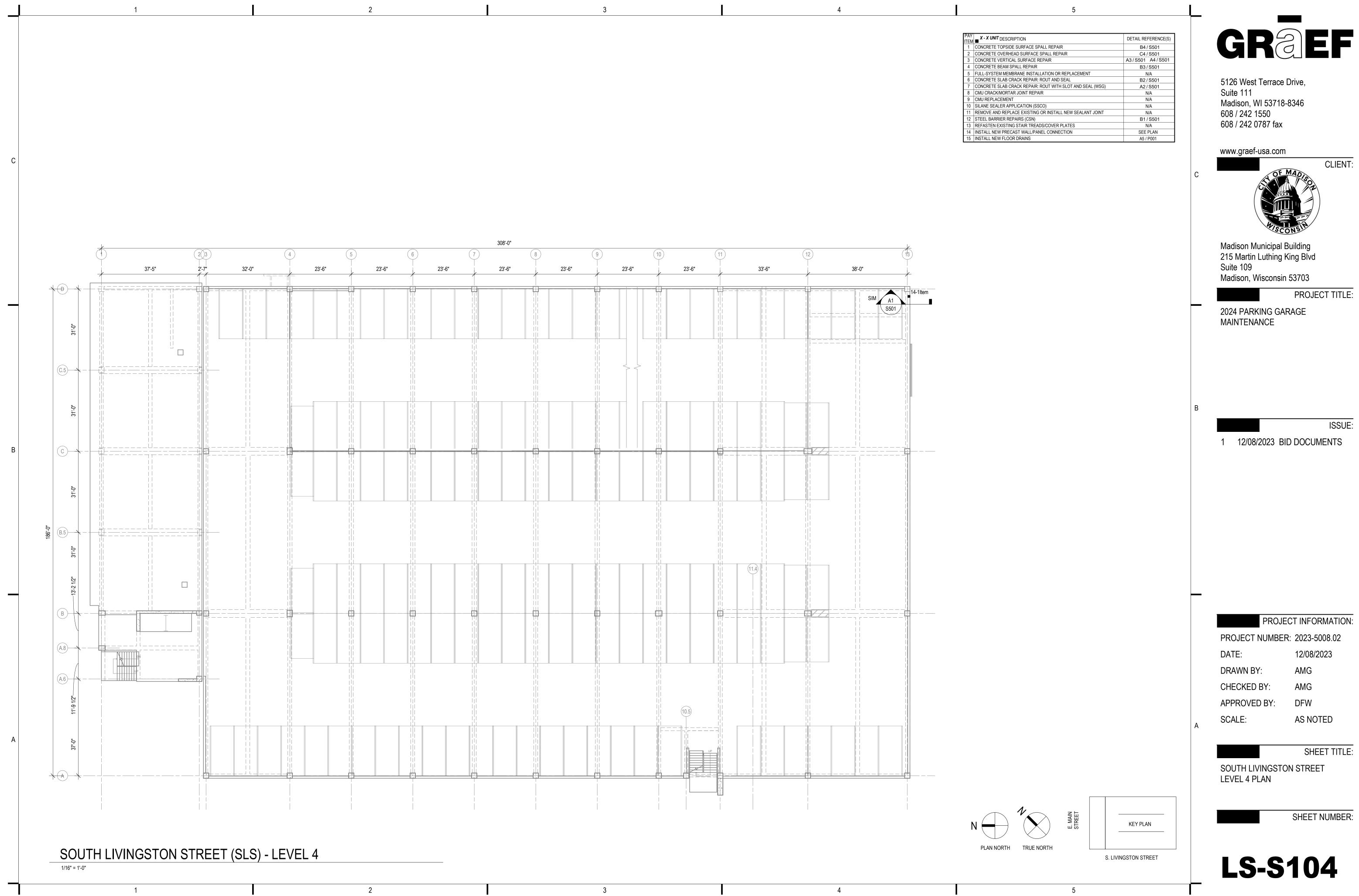


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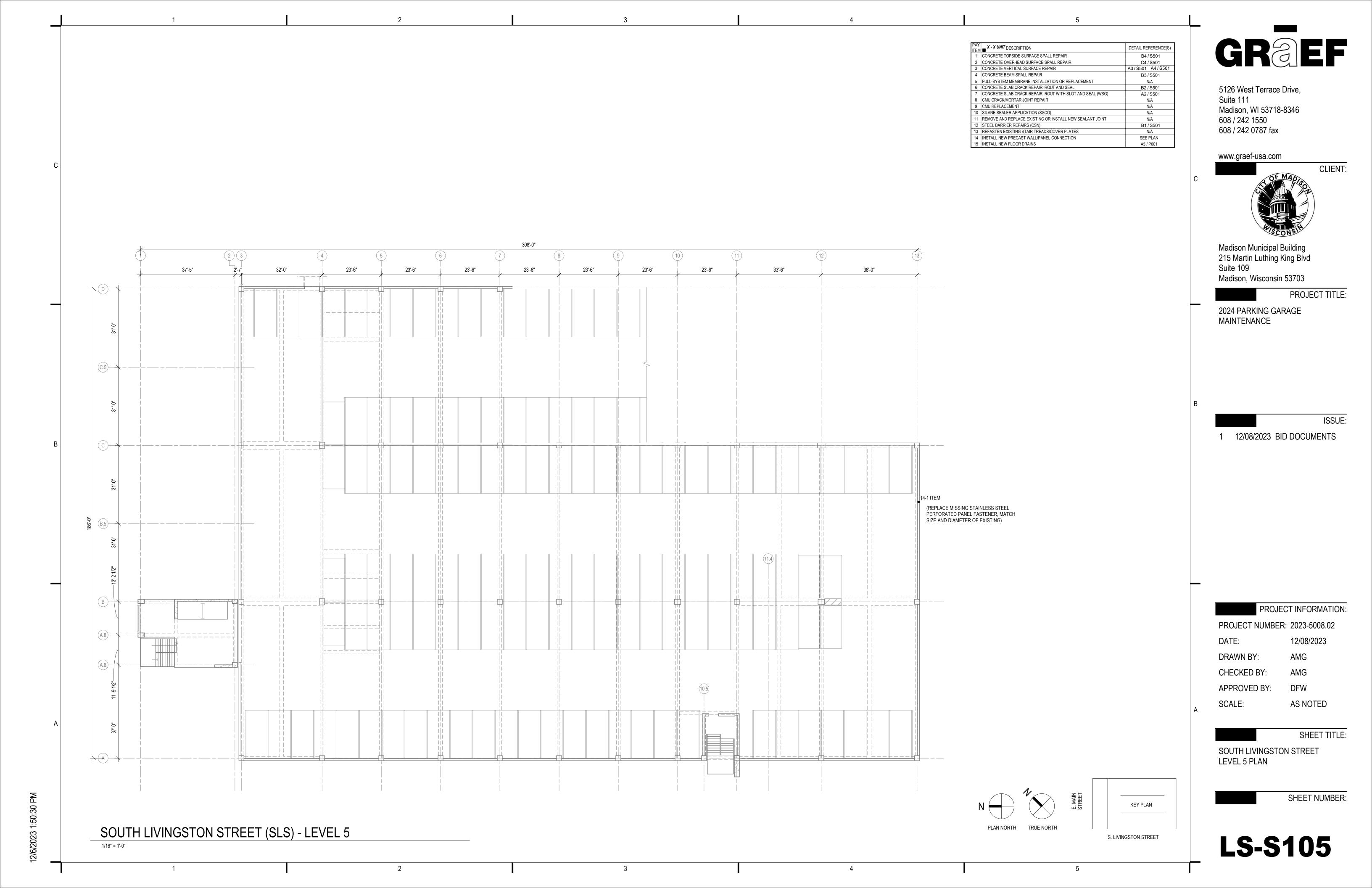






12/6/2023 1:50:30 PM

ISSUE:



X - X UNIT DESCRIPTION DETAIL REFERENCE(S) SHEET KEYNOTES CONCRETE TOPSIDE SURFACE SPALL REPAIR B4 / S501 CONCRETE OVERHEAD SURFACE SPALL REPAIR C4 / S501 CONCRETE VERTICAL SURFACE REPAIR A3/S501 A4/S501 01 NEW FLOOR DRAIN(S) WITH LOCALIZED RESLOPING OF CONCRETE - LOCATION OF DRAIN(S) AND CONCRETE BEAM SPALL REPAIR B3/S501 EXTENTS OF RESLOPING TO BE DETERMINED BY THE ENGINEER. CONCRETE WORK BY REPAIR FULL-SYSTEM MEMBRANE INSTALLATION OR REPLACEMENT
CONCRETE SLAB CRACK REPAIR: ROUT AND SEAL CONTRACTOR PER PAY ITEM 1 WHERE NOTED ON PLAN, PLUMBING WORK BY PLUMBING 5126 West Terrace Drive, B2/S501 SUBCONTRACTOR. REFER TO PLUMBING SHEETS FOR ADDITIONAL INFORMATION. LOCATE EXISTING CONCRETE SLAB CRACK REPAIR: ROUT WITH SLOT AND SEAL (WSG) AND AVOID REINFORCING IN CONCRETE SLAB BY GPR SCANNING, ENGINEER TO APPROVE ALL A2/S501 Suite 111 8 CMU CRACK/MORTAR JOINT REPAIR PENETRATIONS PRIOR TO CORING. 9 CMU REPLACEMENT 10 SILANE SEALER APPLICATION (SSCO) 1 REMOVE AND REPLACE EXISTING OR INSTALL NEW SEALANT JOINT 608 / 242 1550 2 STEEL BARRIER REPAIRS (CSN) B1/S501 608 / 242 0787 fax 3 REFASTEN EXISTING STAIR TREADS/COVER PLATES 4 INSTALL NEW PRECAST WALL/PANEL CONNECTION SEE PLAN 15 INSTALL NEW FLOOR DRAINS A5 / P001 www.graef-usa.com Suite 109 Madison, Wisconsin 53703 2024 PARKING GARAGE MAINTENANCE 1 12/08/2023 BID DOCUMENTS 12/08/2023 DATE: CRACK ROUTING AND SEALING TO BE FOCUSED IN NOTED REGION.
ADDITIONAL QUANTITY LOCATED AS DIRECTED BY ENGINEER
7 - 1500 LF DRAWN BY: CHECKED BY: APPROVED BY: SCALE: S. PINCKNEY STREET KEY PLAN WILSON STREET (WSG) - LOWER LEVEL 2 PLAN

GREF

Madison, WI 53718-8346

CLIENT:

Madison Municipal Building 215 Martin Luthing King Blvd

PROJECT TITLE:

ISSUE:

PROJECT INFORMATION:

PROJECT NUMBER: 2023-5008.02

AS NOTED

SHEET TITLE:

WILSON STREET LOWER LEVEL 2

SHEET NUMBER:

WS-S098

AY X - X UNIT DESCRIPTION DETAIL REFERENCE(S) SHEET KEYNOTES CONCRETE TOPSIDE SURFACE SPALL REPAIR B4 / S501 CONCRETE OVERHEAD SURFACE SPALL REPAIR C4 / S501 CONCRETE VERTICAL SURFACE REPAIR A3/S501 A4/S501 01 NEW FLOOR DRAIN(S) WITH LOCALIZED RESLOPING OF CONCRETE - LOCATION OF DRAIN(S) AND CONCRETE BEAM SPALL REPAIR B3/S501 EXTENTS OF RESLOPING TO BE DETERMINED BY THE ENGINEER. CONCRETE WORK BY REPAIR FULL-SYSTEM MEMBRANE INSTALLATION OR REPLACEMENT
CONCRETE SLAB CRACK REPAIR: ROUT AND SEAL CONTRACTOR PER PAY ITEM 1 WHERE NOTED ON PLAN, PLUMBING WORK BY PLUMBING B2/S501 SUBCONTRACTOR. REFER TO PLUMBING SHEETS FOR ADDITIONAL INFORMATION. LOCATE EXISTING CONCRETE SLAB CRACK REPAIR: ROUT WITH SLOT AND SEAL (WSG) AND AVOID REINFORCING IN CONCRETE SLAB BY GPR SCANNING, ENGINEER TO APPROVE ALL A2/S501 8 CMU CRACK/MORTAR JOINT REPAIR PENETRATIONS PRIOR TO CORING. 9 CMU REPLACEMENT 10 SILANE SEALER APPLICATION (SSCO) 1 REMOVE AND REPLACE EXISTING OR INSTALL NEW SEALANT JOINT 2 STEEL BARRIER REPAIRS (CSN) B1/S501 3 REFASTEN EXISTING STAIR TREADS/COVER PLATES 4 INSTALL NEW PRECAST WALL/PANEL CONNECTION SEE PLAN 15 INSTALL NEW FLOOR DRAINS A5 / P001 DATE: DRAWN BY: APPROVED BY: SCALE: PLAN S. PINCKNEY STREET E. WILSON STREET KEY PLAN WILSON STREET (WSG) - LOWER LEVEL 1 PLAN PLAN NORTH TRUE NORTH

GREF

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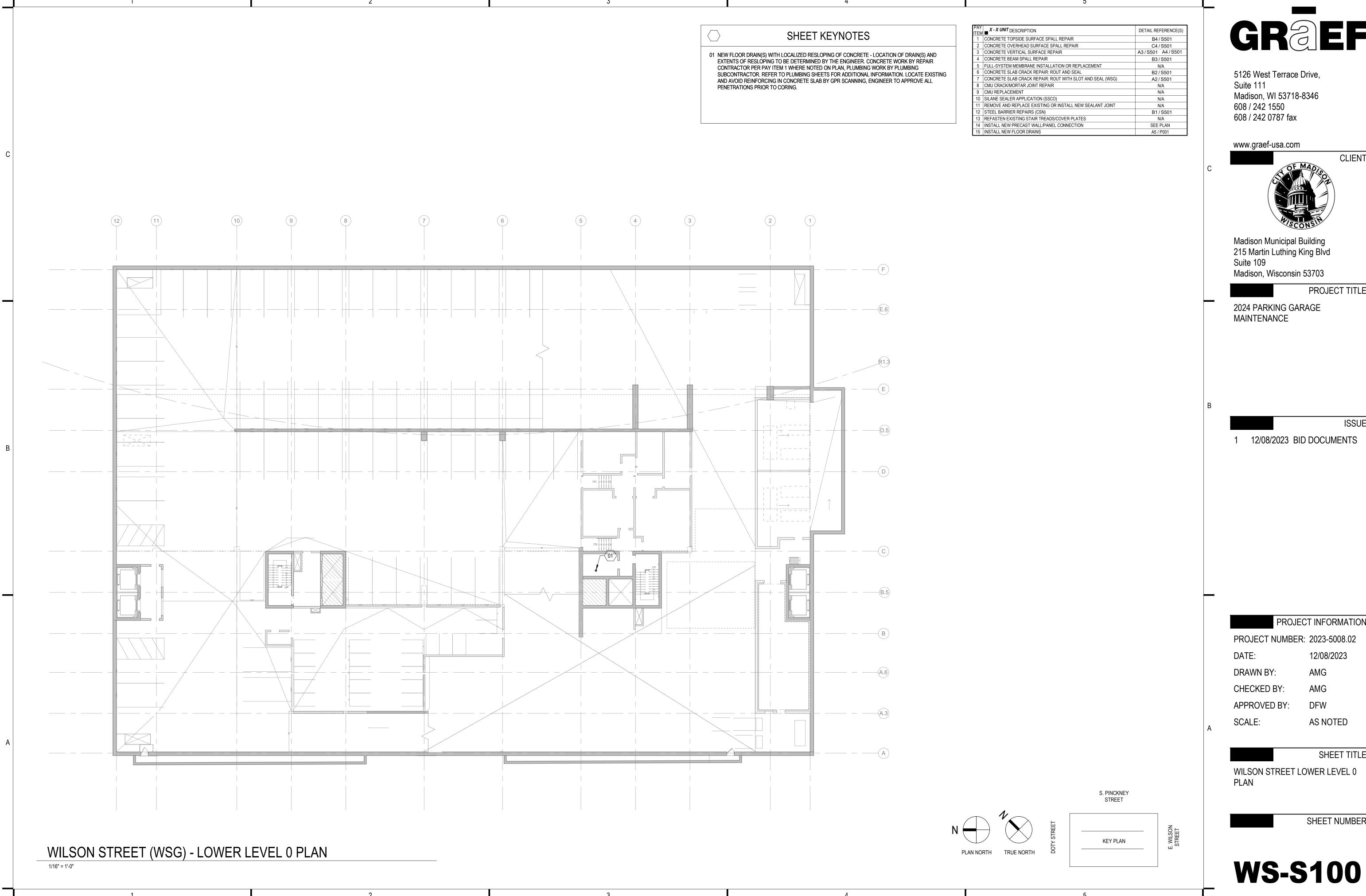
AS NOTED

SHEET TITLE:

WILSON STREET LOWER LEVEL 1

SHEET NUMBER:

WS-S099



GREF

CLIENT:

PROJECT TITLE:

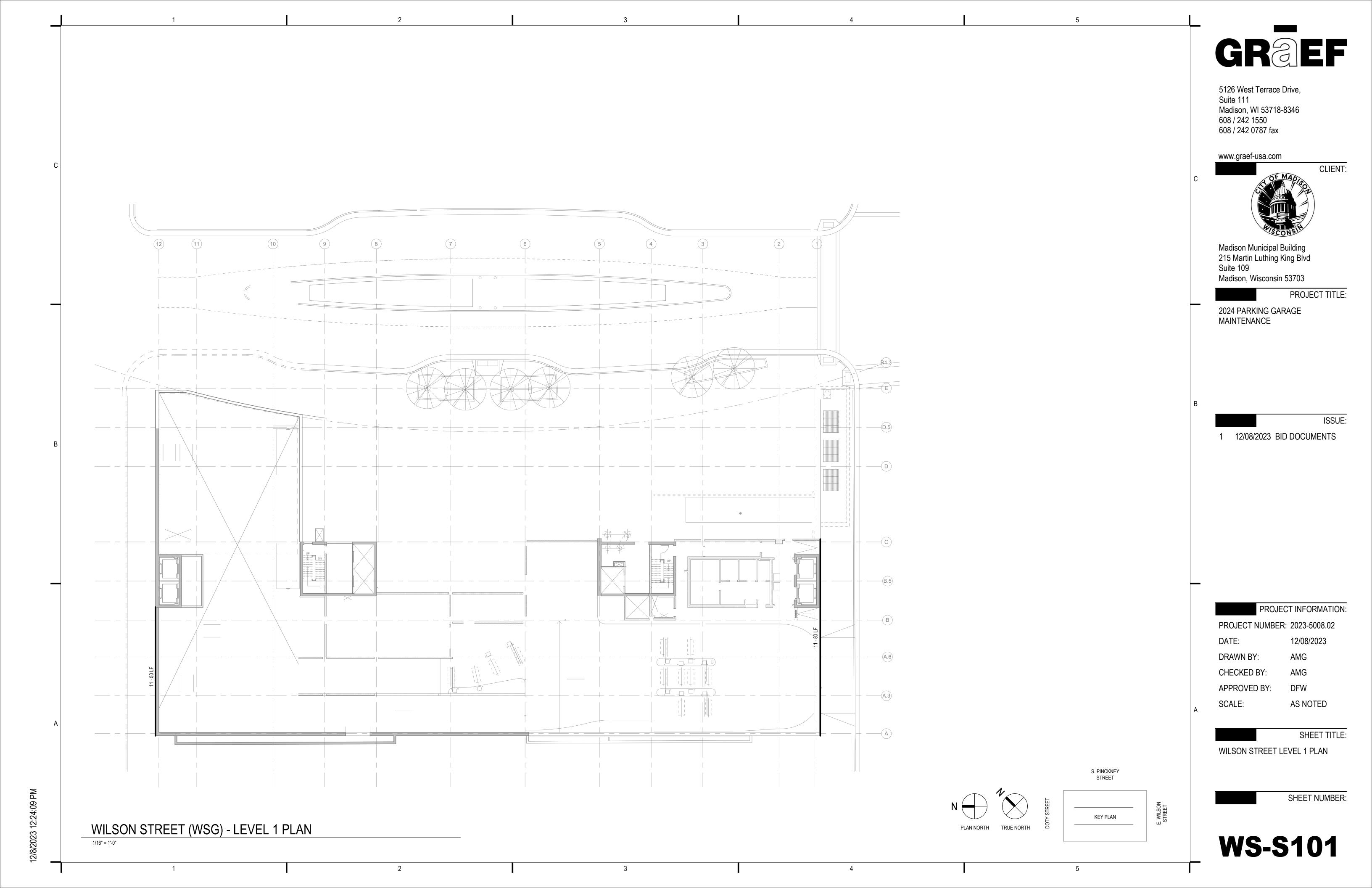
ISSUE:

PROJECT INFORMATION:

AS NOTED

SHEET TITLE:

SHEET NUMBER:



NOTE: NOT ALL SYMBOLS AND ABBREVIATIONS INDICATED HERE ARE USED IN THE DRAWINGS AND MAY NOT APPLY TO THIS PROJECT. ADDITIONAL SYMBOLS MAY BE INDICATED IN THE DRAWINGS.

PLUMBING ABBREVIATIONS ACCESS PANEL E/EX - EXISTING M - METER RD ROOF DRAIN AREA DRAIN EEW - EMERGENCY EYE WASH MAX - MAXIMUM ROUGH-IN AFF ABOVE FINISHED FLOOR ESEW - EMERGENCY SHOWER / EYE WASH STATION MB MOP BASIN REVERSE OSMOSES AFG ABOVE FINISHED GRADE RCP - RECIRCULATION PUMP ELEV - ELEVATION MECH MECHANICAL ACID NEUTRALIZING BASIN ANB EOD - EMERGENCY OVERFLOW DRAIN PIPING MEP MECHANICAL, ELECTRICAL, AND PIPING RPM REVOLUTIONS PER MINUTE ARCH REDUCED PRESSURE ZONE VALE ARCHITECTURAL EQUIP EQUIPMENT MEZZ MEZZANINE RPZ EXT - EXPANSION TANK MFR - MANUFACTURER RV RELIEF VALVE **BELOW SLAB** EWC - ELECTRIC WATER COOLER MH - MANHOLE ROOF HYDRANT BFP BACKFLOW PREVENTER - ELECTRIC WATER HEATER MINIMUM OR MINUTES SINK BLDG BUII DING - MISCELLANEOUS SANITARY PIPING SAN BOP **BOTTOM OF PIPE** MS MOP SINK F - FAHRENHEIT BOT SCH SCHEDULE BOTTOM FCO - FLOOR CLEANOUT SD SITE DRAIN BV BALL VALVE NOT APPLICABLE FD - FLOOR DRAIN SEWAGE EJECTOR BWV BACKWATER VALVE - NORMALLY CLOSED N.C. FIRE DEPARTMENT CONNECTION SQUARE FOOT NIC NOT IN CONTRACT FUME HOOD FH CLG SHOWER NO NUMBER FS - FLOOR SINK SLOPE CO CLEANOUT NORMALLY OPEN - FEET SUMP PUMP COL - COLUMN NPCW - NON POTABLE COLD WATER FIXTURE UNITS SP - STANDPIPE CONC CONCRETE NPHW - NON POTABLE HOT WATER FV - FLUSH VALVE SPEC - SPECIFICATION CONN CONNECTION NPHWR - NON POTABLE HOT WATER RETURN CTR SS SERVICE SINK CENTER NPS - NOMINAL PIPE SIZE - GALLON STD STANDARD COPPER NTS - NOT TO SCALE - GRADE OR GROUND CLEANOUT STM - STORM PIPING CHECK VALVE - GREASE INTERCEPTOR OIL BASIN VENT CW COLD WATER GPH GALLONS PER HOUR TEMPERATURE AND PRESSURE T&P OC CWFU COLD WATER FIXTURE UNITS ON CENTER - GALLONS PER MINUTE GPM TD TRENCH DRAIN CHLORINATED POLYVINYL CHLORIDE OUTSIDE DIAMETER CPVC GATE VALVE TEMP TEMPERATURE - OPEN HUB DRAIN TH THERMOMETER DCV DOUBLE CHECK VALVE OUTSIDE SCREW AND YOKE HOSE BIBB TMV THERMOSTATIC MIXING VALVE DCW DOMESTIC COLD WATER OI OIL INTERCEPTOR - HUB DRAIN DD - TOP OF FOOTING DECK DRAIN ORD - EMERGENCY OVERFLOW ROOF DRAIN - HOUR TOP DET TOP OF PIPE DETAIL HOSE STATION TOS - TOP OF SLAB PRESSURE BALANCING VALVE DF DRINKING FOUNTAIN HOT WATER - PLUMBING CONTRACTOR TYP - TYPICAL DFU DRAINAGE FIXTURE UNITS - HOT WATER FIXTURE UNITS DHW DOMESTIC HOT WATER PG PRESSURE GAUGE HWR HOT WATER RETURN U/UR - URINAL DHWR DOMESTIC HOT WATER RETURN PH PHASE HYD - HYDRAULIC - VENT PITCH PITCHES UP OR DOWN DEIONIZED WATER - HEAT EXCHANGER DIAMETER POST INDICATOR VALVE VIF - VERIFY IN FIELD DOWN - PLUMBING VTR - VENT THROUGH ROOF INSIDE DIAMETER DOWNSPOUT POC - POINT OF CONNECTION INVERT ELEVATION WTR - WATER DRAIN TILE PRESS - PRESSURE ICE MACHINE W - WASTE DTW DOMESTIC TEMPERED WATER PRESSURE RELIEF VALVE INCHES WHA - WATER HAMMER ARRESTOR POUNDS PER SQUARE FOOT DRAIN VALVE INSUL - INSULATION WH WALL HYDRANT - POUNDS PER SQUARE INCH DW DISHWASHER PSI INDIRECT WASTE - POUNDS PER SQUARE INCH ABSOLUTE WCO - WALL CLEANOUT DWG DRAWING WC WATER CLOSET - DOMESTIC WATER HEATER DWH PSIG POUNDS PER SQUARE INCH GAUGE KW - KITCHEN WASTE WF WASH FOUNTAIN - POLYVINYL CHLORIDE LAVATORY WM WASHING MACHINE LITERS PER MINUTE WOB - WALL OUTLET BOX QUANTITY LAB SINK WSFU - WATER SUPPLY FIXTURE UNITS LAUNDRY TUB

LW - LAUNDRY WASTE OR LAB WASTE

			PLUMBING SYMBOLS		
№ —	ANGLE VALVE (AV)	0	FLOOR DRAIN	o	RISER UP (ELBOW)
<u></u>	AQUASTAT		FLOOR SINK	Ø	ROOF DRAIN
-XXX-	BACKFLOW PREVENTER (BFP or RPZ)	-	FLOW DIRECTION ARROW	-171-	SANITARY TEE
- -	BALANCING VALVE (BV)	<u>-</u> -	FLOW SWITCH (FS)	− Ō−	SOLENOID VALVE (SV)
<u> </u>	BALL VALVE	→ >>-	GATE VALVE (GV)	+>+-	STRAINER
	BRANCH, BOTTOM CONNECTION	- □•	GLOBE VALVE (GLV)	+++-	TEE BRANCH
	BRANCH, TOP CONNECTION	T	HOSE BIBB OR WALL HYDRANT	T	TEMPERATURE TRANSMITTER
$\neg \vdash$	BUTTERFLY VALVE (BFV)	0	HUB DRAIN	<u> </u>	THERMOMETER
—]	CAP ON END OF PIPE	9	PRESSURE GAUGE WITH VALVE (PG)		THERMOSTATIC MIXING VALVE
	CHECK VALVE (CV)	### PSI	PRESSURE-REDUCING VALVE (PRV)	-#	UNION (SCREWED)
—— co	CLEANOUT PLUG (CO)	P S	PRESSURE SWITCH (PS)	X" WCO ア	WALL CLEANOUT WITH SIZE (WCO)
-+₹!-	DOUBLE SANITARY TEE	P	PRESSURE TRANSMITTER	_ "A"	WATER HAMMER ARRESTER (WHA) WITH PDI SIZING
∞ <u></u>	DRAIN WITH P-TRAP		RECIRCULATION PUMP	- M	WATER METER (WM)
0	FLOOR/GRADE CLEANOUT (FCO/GCO)	G	RISER DOWN (ELBOW)		WYE & 1/8TH BEND

	DESIGN CRITERIA
APPLICABLE CODES	2015 WISCONSIN PLUMBING CODE 2. 2015 INTERNATIONAL BUILDING CODE WITH LOCAL AMENDMENTS 3. 2013 ASME A17.1 SAFETY CODE FOR ELEVATORS AND ESCALATORS

	VIEW	LOCAT	TON LI	EGENE)	
D1	D2	D3	D4	D5	D6	
C1	C2	С3	C4	C5	C6	
B1	B2	В3	В4	B5	В6	
A1	A2	A3	A4	A5	A6	

GENERAL SYMBOLS

	#	REVISION CLOUD WITH TAG	S 123.00'	INVERT ELEVATION
	####	VIEW CALLOUT (ENLARGED PLANS)	\(\rightarrow	ELEVATION MARKER
	####	SECTION VIEW	•	POINT OF CONNECTION (POC)
	-	STACK REFERENCE		POINT OF DISCONNECTION
] _	# ####	VIEW REFERENCE (DETAIL TAGS)	(#)	PLAN KEYED NOTE
		ISOMETRIC TAG	TAG ——●	PIPE TAG
		PIPING, EQUIPMENT, DEVICES	S, ETC. TO BE DEMOLISHE	ED .
		EXISTING PIPING OR EQUIPM	ENT TO REMAIN	
		NEW PIPING OR EQUIPMENT		

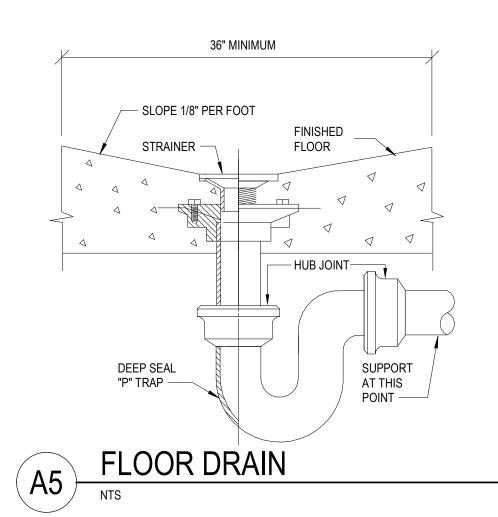
	PLUMBING SYSTEM	ABBREVIAT	IONS
DCW	DOMESTIC COLD WATER	ROCW	REVERSE OSMOSIS / DIONIZED COLD WATER
DHW	DOMESTIC HOT WATER	ROHW	REVERSE OSMOSIS / DIONIZED HOT WATER
DHWR —	DOMESTIC HOT WATER RETURN	V	SANITARY VENT
DTW	DOMESTIC TEMPERED WATER (80°F)	SAN	SANITARY SEWER
DTWR	DOMESTIC TEMPERED WATER RETURN	ST	STORM SEWER
PCW	PROCESS COLD WATER (SOFTENED)	PV	PROCESS VENT
PHW	PROCESS HOT WATER (SOFTENED)	PSAN	PROCESS SANITARY
PHWR	PROCESS HOT WATER RETURN (SOFTENED)		

DRAIN AND CLEANOUT SCHEDULE									
TAG	MANUFACTURER	MODEL NO.	SERVICE	BODY MATERIAL	STRAINER SIZE [IN] FINISH		OUTLET SIZE [IN]	DESCRIPTION	NOTES
AD-1	JR SMITH	2140-B	P-Sanitary	CAST IRON	5	CAST IRON	3"	HEAVY DUTY ROUND FLOOR DRAIN WITH SEDIMENT BUCKET	

PLUMBING GENERAL NOTES

- REFERENCE THE SPECIFICATIONS FOR MATERIAL AND EQUIPMENT INSTALLATION STANDARDS.
- 2. VERIFY ALL MEASUREMENTS, PIPE SIZES, PIPE LOCATIONS, ELEVATIONS, ETC. AT SITES.
- 3. THE PLUMBING INSTALLATION SHALL COMPLY WITH ALL STATE AND LOCAL CODES.
- UTILITIES AND SERVICES INDICATED ARE TAKEN FROM VARIOUS OLD AND NEW SURVEYS, AS-BUILT RECORDS AND FIELD INVESTIGATIONS. UNFORESEEN CONDITIONS MAY EXIST AND NEW WORK MAY NOT BE FIELD LOCATED EXACTLY AS SHOWN ON DRAWINGS. COOPERATION WITH OTHER TRADES IN ROUTING AND BURIAL DEPTHS, AS DETERMINED DURING CONSTRUCTION, WILL BE NECESSARY.
- . INVERT ELEVATIONS IN THIS SET ARE REFERENCED TO BUILDING FIRST FLOOR DATUM.
- 6. DRAWINGS OF ALL OTHER TRADES SHALL BE REVIEWED. COORDINATE THE INSTALLATION AND SCHEDULING OF THE WORK WITH OTHER TRADES TO PREVENT INTERFERENCE WITH THEIR RESPECTIVE INSTALLATION.
- FIELD VERIFY EXISTING INSTALLATIONS. MODIFY EXISTING PLUMBING SYSTEMS, WHICH ARE TO REMAIN ACTIVE, TO FACILITATE RECONNECTION AND EXTENSION OF THE NEW WORK.
- NOTIFY OWNER AT LEAST 24 HOURS PRIOR TO INTERRUPTING EXISTING SERVICE. SCHEDULE DISCONNECTION AND TIE-INS TO MINIMIZE DISRUPTION OF SERVICES. SERVICES ARE NOT TO BE LEFT DISRUPTED DURING NON-NORMAL CONTRACTOR WORKING HOURS.
- PIPE ROUTING SHOWN IS DIAGRAMMATIC AND IS NOT INTENDED TO INDICATE EXACT ROUTING. CONTRACTOR SHALL PROVIDE ANY ADDITIONAL OFFSETS AND FITTINGS REQUIRED FOR PROPER INSTALLATION AND TO MAINTAIN CLEARANCES. VERIFY STRUCTURAL, MECHANICAL AND ELECTRICAL INSTALLATIONS AND OTHER POTENTIAL OBSTRUCTIONS AND ROUTE PIPING TO AVOID INTERFERENCES.
- 10. PLUMBING CONTRACTOR SHALL SURVEY EXISTING UNDERGROUND STORM BUILDING DRAINS PRIOR TO NEW CONNECTIONS TO EXISTING PIPING. VERIFY ELEVATIONS. TURN TWO COPIES OF VIDEO OVER TO OWNER FOR HIS RECORDS. PLUMBING CONTRACTOR SHALL MARKUP A SET OF PRINTS WITH EXISTING DRAIN LOCATIONS AND TURN OVER TO ENGINEER AND INCLUDE ON RECORD DRAWINGS. REFER TO PROJECT SPECIFICATIONS FOR MORE INFORMATION.
- 11. PROVIDE ALL OFFSETS AND FITTINGS AND MAKE CONNECTION TO SITE UTILITIES.
- 12. CONFLICT BETWEEN DRAWINGS AND SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO BID OPENING. THE ENGINEER RESERVES THE RIGHT TO FINAL DECISION.
- 13. CONCEAL PIPING ABOVE CEILINGS, WITHIN WALLS OR CHASES EXCEPT IN MECHANICAL ROOMS OR AS SPECIFICALLY NOTED.
- 14. PROVIDE ACCESS PANELS FOR ALL VALVES CONCEALED IN WALLS OR ABOVE NON-ACCESSIBLE CEILINGS.
- 15. SLEEVE AND/OR FIRESTOP ALL PENETRATIONS THROUGH RATED WALLS, CEILINGS, AND FLOORS WITH U/L LISTED ASSEMBLIES. FIRESTOP ASSEMBLIES SHALL BE EQUAL TO OR EXCEED THE RATING OF THE WALL, CEILING OR FLOOR. SEE ARCHITECTURAL DRAWINGS FOR FINAL FINISHES.
- 16. FLASH AND COUNTER-FLASH ROOF PENETRATIONS.
- 17. PROVIDE FOUNDATION PAD PENETRATION SLEEVES. ALLOW 1" MINIMUM CLEARANCE BETWEEN SLEEVE INSIDE SURFACE AND PIPE EXTERIOR.
- 18. SEE ARCHITECTURAL DRAWINGS FOR FIXTURE LOCATIONS AND MOUNTING HEIGHTS.
- 19. PROVIDE AN AIR GAP, WHEN REQUIRED BY CODE, SERVING INDIVIDUAL FIXTURES, DEVICES, APPLIANCES AND APPARATUS.
- 20. ALL EXPOSED PIPE AND FITTINGS IN FINISHED AREAS SHALL BE CHROME PLATED.
- 21. PROVIDE CLEANOUTS IN ACCORDANCE WITH ALL STATE AND LOCAL CODES. INSTALL CLEANOUTS WITH COVER FLUSH TO FINISH SURFACE.
- 22. COORDINATE EXACT FLOOR DRAIN LOCATIONS WITH ARCHITECTURAL DRAWINGS. SET FLOOR DRAINS BELOW FINISHED FLOOR TO ALLOW FOR FLOOR SLOPING TO THE DRAIN.
- 23. IT IS THE INTENT OF THESE DRAWINGS THAT A COMPLETE WORKING SYSTEM PROPERLY TESTED, WILL BE OPERATIONAL UPON COMPLETION OF
- 24. COORDINATE PIPING WITH ALL ELECTRICAL EQUIPMENT (PANELS, TRANSFORMERS, ETC.) PRIOR TO ANY INSTALLATION. DO NOT ROUTE ANY PIPING OVER ANY ELECTRICAL PANELS UNDER ANY CIRCUMSTANCES. ANY PIPING RUN OVER PANELS SHALL BE RE-ROUTED AT NO ADDITIONAL COST.
- 25. PROVIDE SANITARY WASTE, VENT, DOMESTIC WATER, ETC. ROUGH-IN AND MAKE FINAL CONNECTIONS (TO INCLUDE PROVIDING ALL NECESSARY RELATED)
- STOPS, VALVES, TRAPS, ETC. AND MAKE READY FOR USE) TO ALL EQUIPMENT, WHETHER FURNISHED BY THIS CONTRACTOR OR FURNISHED BY OTHERS. 26. UNLESS NOTED OTHERWISE, ALL PIPING 3" AND LARGER SHALL BE INSTALLED AT A SLOPE OF 1/8" PER FOOT AND PIPING 2" AND SMALLER AT 1/4" PER
- FOOT.

	PLUMBING SHEET INDEX	
P-001	PLUMBING SYMBOLS, SCHEDULES, & ABBREVIATIONS	
P-101	LEVEL U2 PLUMBING PLAN - SANITARY & VENT	
P-102	LEVEL U1 PLUMBING PLAN - SANITARY & VENT	
P-103	LEVEL U0 PLUMBING PLAN - SANITARY & VENT	



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Madison Municipal Building 215 Martin Luthing King Blvd Suite 109

Madison, Wisconsin 53703

PROJECT TITLE:

2024 PARKING GARAGE **MAINTENANCE**

1 12/08/2023 BID DOCUMENTS

PROJECT INFORMATION:

PROJECT NUMBER: 2023-5008.02

12/08/2023

DRAWN BY:

CHECKED BY:

APPROVED BY:

AS NOTED SCALE:

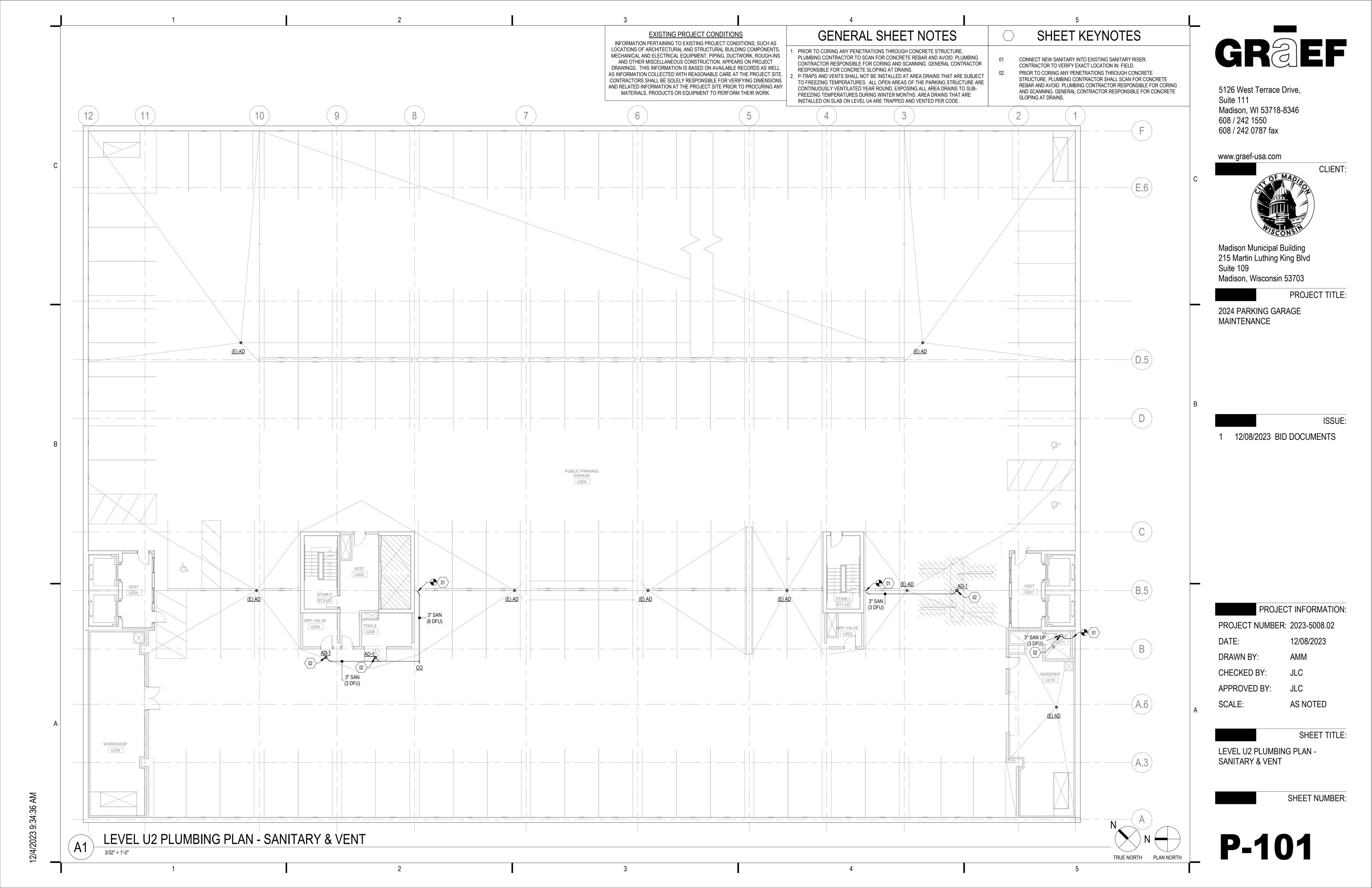
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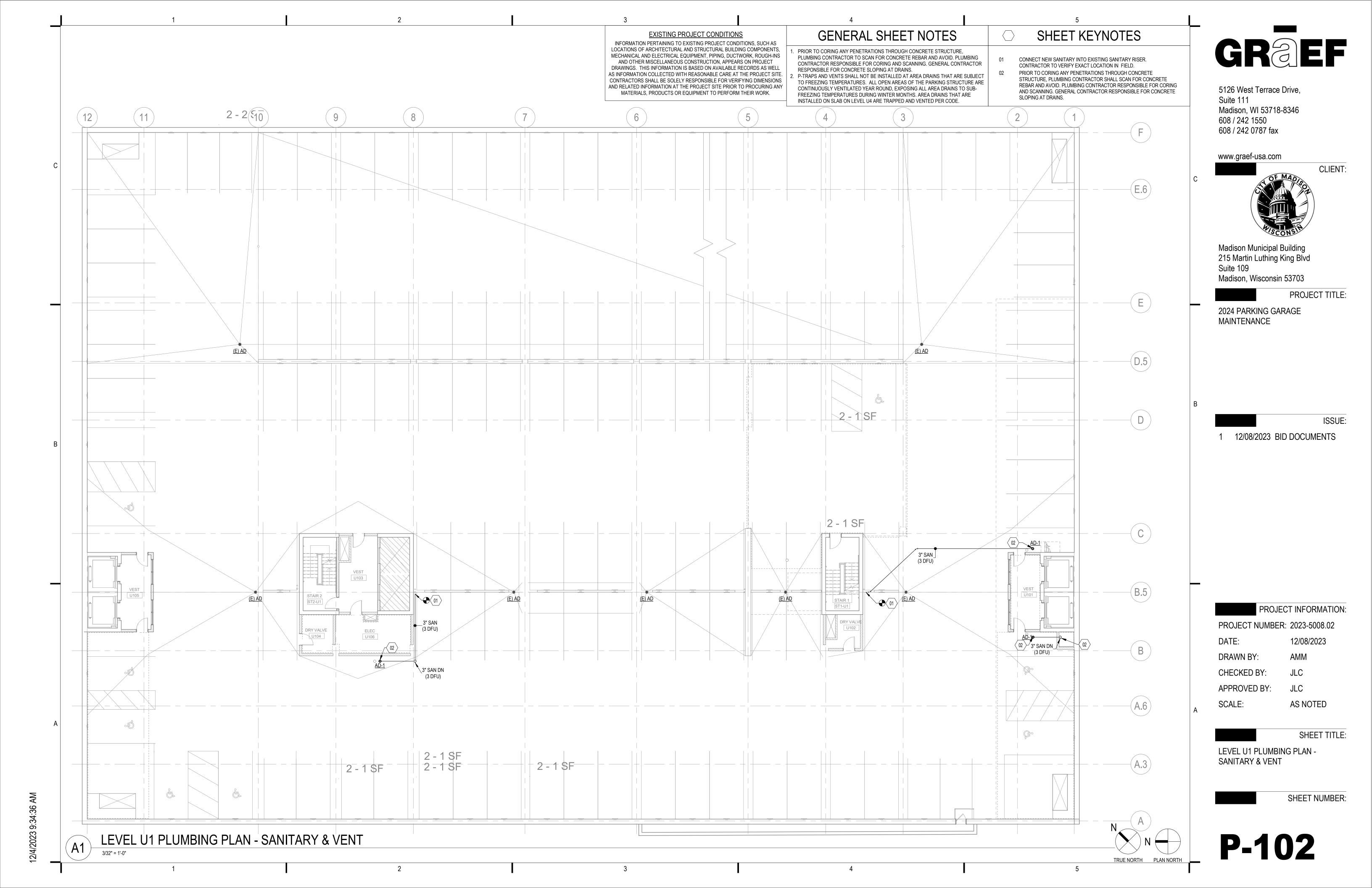
PLUMBING SYMBOLS, SCHEDULES, & ABBREVIATIONS

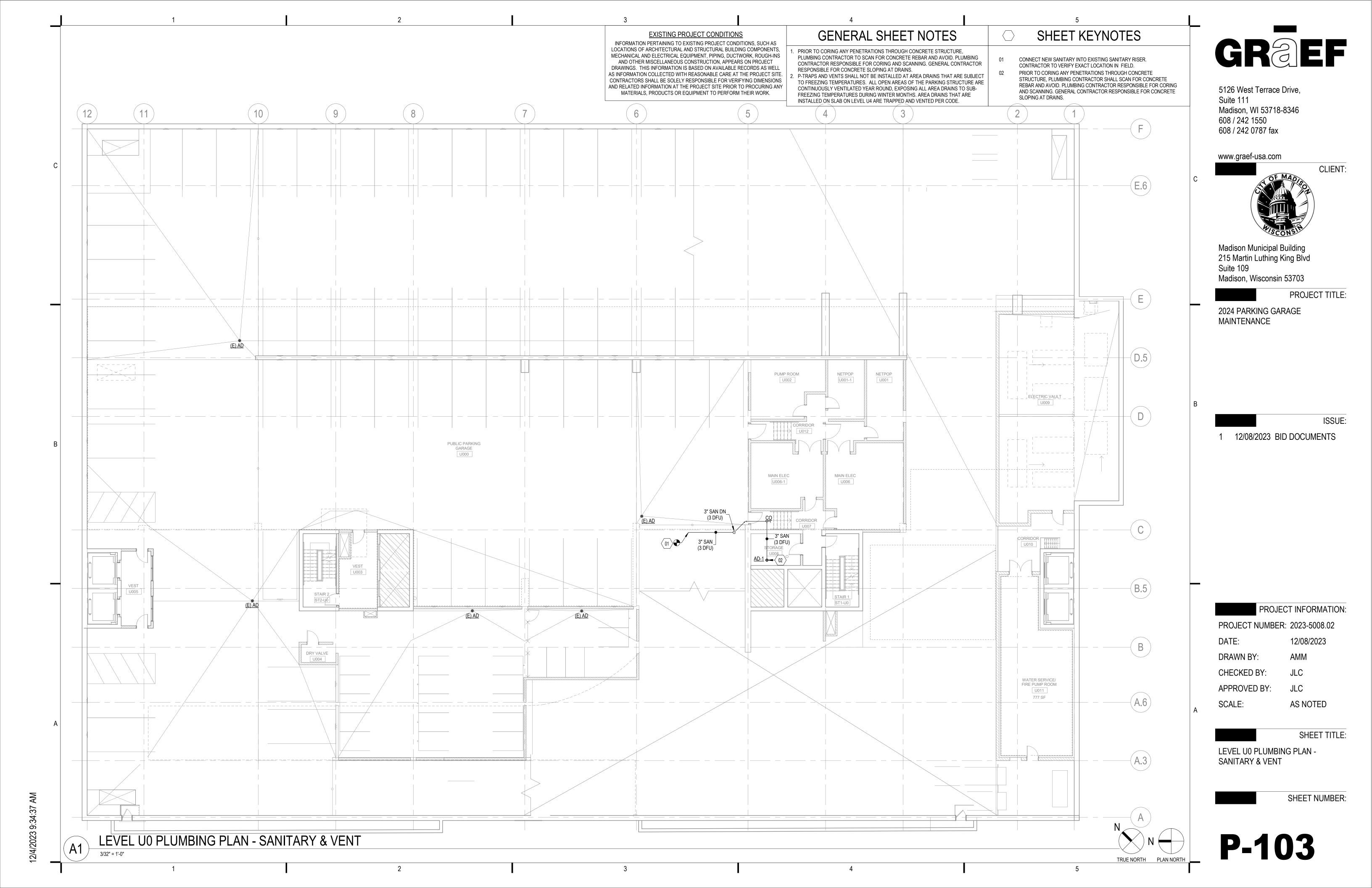
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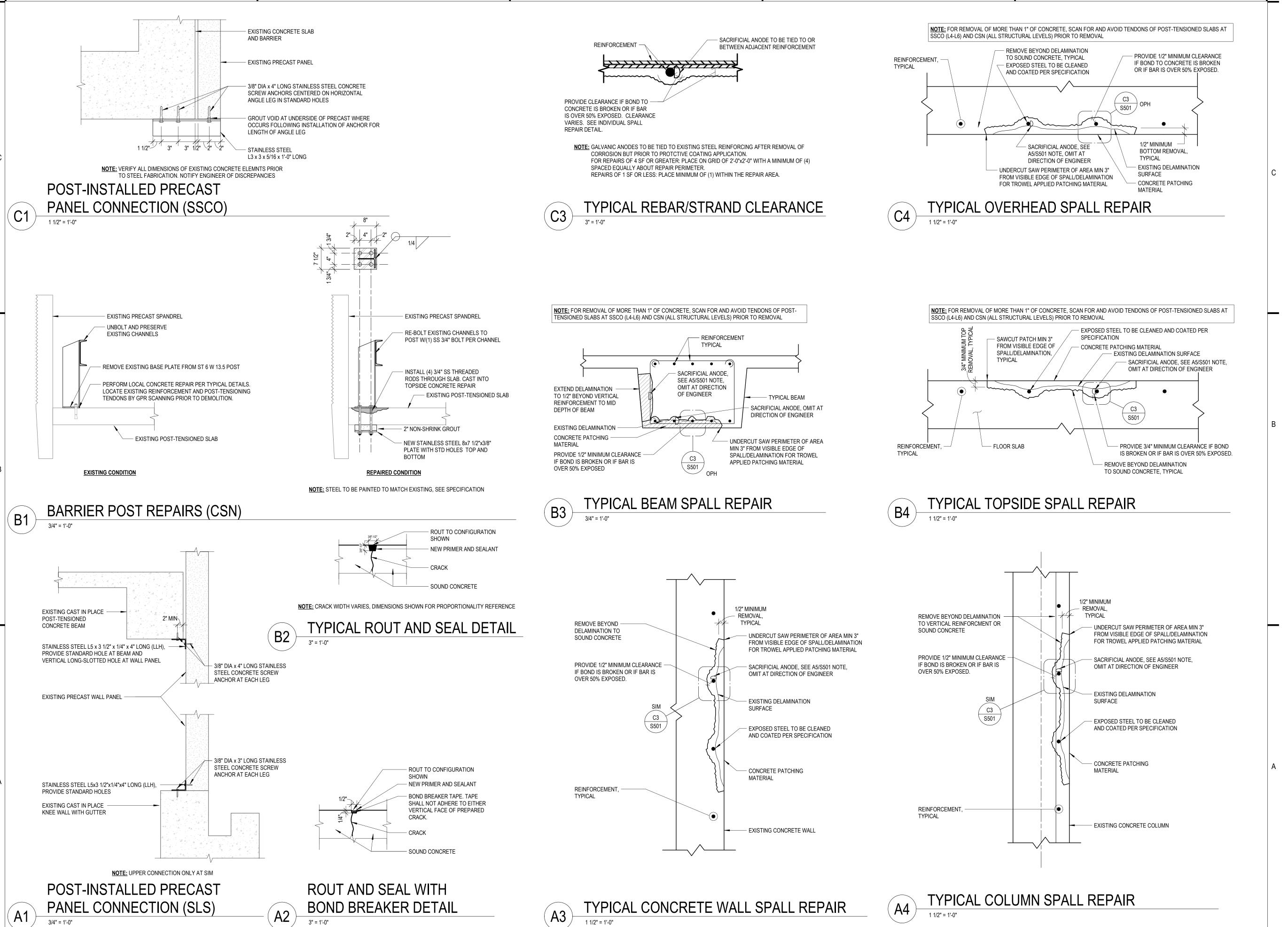
P-001

YH - YARD HYDRANT









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PROJECT TITLE:

2024 PARKING GARAGE MAINTENANCE

ISSUE:

1 12/08/2023 BID DOCUMENTS

PROJECT INFORMATION:

PROJECT NUMBER: 2023-5008.02

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DRAWN BY: CHECKED BY:

CHECKED BY: AMG
APPROVED BY: DFW

SCALE: AS NOTED

SHEET TITLE:

12/08/2023

DETAILS

SHEET NUMBER

S501