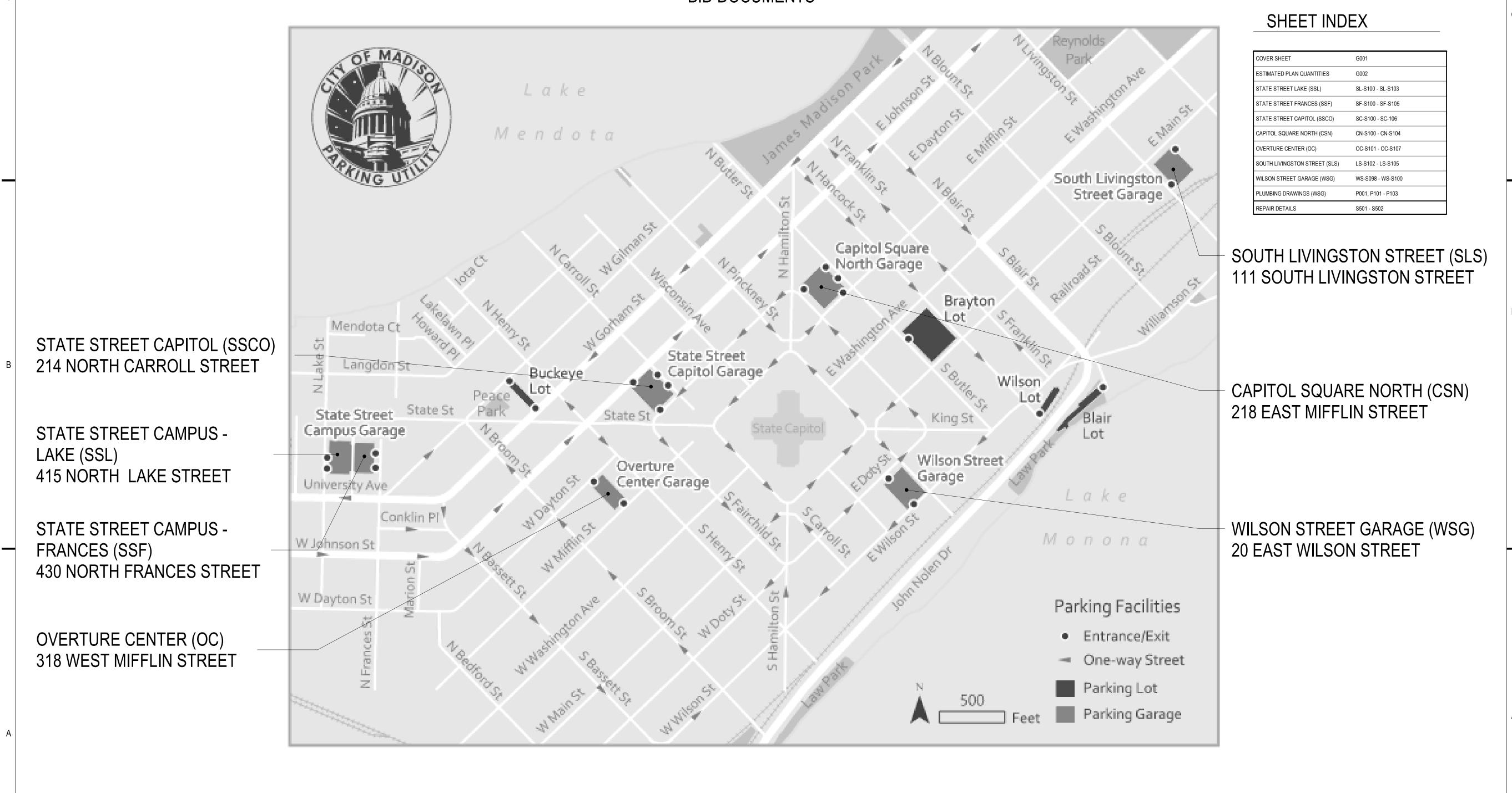
CITY OF MADISON

2023 PARKING GARAGE MAINTENANCE
MADISON, WISCONSIN
CITY OF MADISON CONTRACT NO. 9317
BID DOCUMENTS



GREF

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CLIENT:

PROJECT TITLE:

2023 PARKING GARAGE MAINTENANCE

ISSUE:

1 04/03/2023 BID DOCUMENTS

PROJECT INFORMATION:

PROJECT NUMBER: 2022-5014.02

DATE:

DRAWN BY:

CHECKED BY:

APPROVED BY: DFW

SCALE: AS NOTED

SHEET TITLE:

04/03/2023

COVER SHEET

SHEET NUMBER:

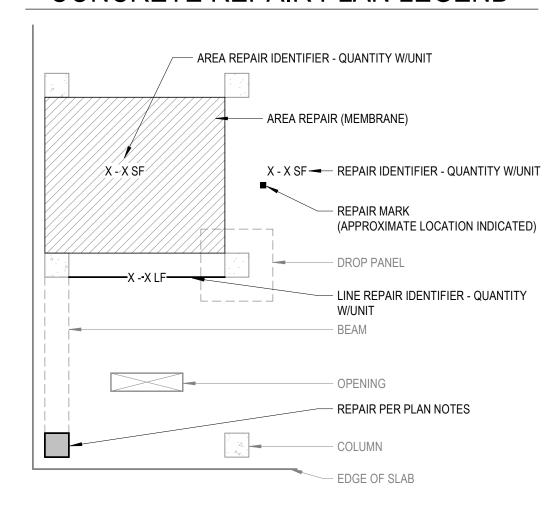
G001

4/6/2023 10:48:18 AM

ESTIMATED PLAN QUANTITIES

PAY ITEM	X - X UNIT DESCRIPTION	DETAIL REFERENCE(S)	UNITS	SSL QTY	SSF QTY	SSCO	CSN	OC OTV	SLS	WSG QTY	TOTAL
1	FULL-SYSTEM MEMBRANE INSTALLATION OR REPLACEMENT	N/A	SF	0	0	QTY 0	QTY 0	QTY 0	QTY 0	1680	QTY 1680
2	CONCRETE VERTICAL SURFACE REPAIR	A3/S501 A4/S501	SF	19	10	14	45	8	3	9	108
3	CONCRETE TOPSIDE SURFACE SPALL REPAIR	B4/S501	SF	5	4	32	90	0	0	0	131
4	CONCRETE OVERHEAD SURFACE SPALL REPAIR	C1/S501	SF	15	5	12	0	9	0	0	41
5	CONCRETE BEAM SPALL REPAIR	B1/S501	SF	0	0	0	14	0	0	0	14
6	FULL-DEPTH SLAB SPALL REPAIR	A1/S501	SF	5	0	0	0	0	0	0	5
7	CONCRETE JOIST SPALL REPAIR	C4/S501	SF	10	0	0	0	0	0	0	10
8	CONCRETE STAIR SPALL REPAIR	B3/S501	SF	0	0	6	0	7	0	0	13
9	CLEANING AND PAINTING OF EXPOSED REBAR	N/A	LF	102	5	0	48	0	0	0	155
10	EPOXY INJECTION OF TOPPING SLABS	N/A	SF	0	0	480	0	0	0	0	480
11	CONCRETE SLAB CRACK REPAIR: ROUT AND SEAL	A4/S502	LF	0	34	0	100	7	0	0	141
12	CONCRETE SLAB CRACK REPAIR: ROUT WITH SLOT AND SEAL (WSG)	A3/S502	LF	0	0	0	0	0	0	1500	1500
13	CONCRETE SLAB CRACK REPAIR: CUT SLOT AND PATCH (SLS)	A2/S502	LF	0	0	0	0	0	284	0	284
14	CMU CRACK/MORTAR JOINT REPAIR	N/A	LF	2	0	11	0	25	0	0	38
15	SILANE SEALER APPLICATION (SSCO)	N/A	SF	0	0	301500	0	0	0	0	301500
16	REPLACE EXISTING OR INSTALL NEW COMPRESSION SEAL JOINT	N/A	LF	0	0	0	44	0	0	0	44
17	REPLACE EXISITING FLANGE-TYPE JOINT	N/A	LF	0	0	70	0	0	0	0	70
18	REMOVE AND REPLACE EXISTING OR INSTALL NEW SEALANT JOINT	N/A	LF	0	0	37	27	0	63	0	127
19	REMOVE AND REPLACE EXISTING SEALANT AT PRECAST DOUBLE TEES (SSF)	N/A	LF	0	982	0	0	0	0	0	982
20	PRECAST SHEAR CONNECTOR REPAIR (SSF)	C4/S502	EACH	0	40	0	0	0	0	0	40
21	BRICK MASONRY REPAIR/REPLACEMENT (CSN)	N/A	SF	0	0	0	10	0	0	0	10
22	BRICK MASONRY SEALING (CSN)	N/A	LS	0	0	0	1	0	0	0	1
23	STEEL BARRIER REPAIRS (CSN)	B2/S502	EACH	0	0	0	2	0	0	0	2
24	SITE PLANTER REPAIR (CSN)	N/A	LS	0	0	0	1	0	0	0	1
25	PAINT EXISTING ROOF-LEVEL STEEL BARRIERS (CSN)	N/A	LS	0	0	0	1	0	0	0	1
26	CLEAN, PAINT, AND RESHEATHE BARRIER CABLES (CSN)	B4/S502	LF	0	0	0	0	2800	0	0	2800
27	CONCRETE DEMOLITION WITH CLEANING AND PAINTING OF REBAR	N/A	SF	20	0	0	0	0	0	0	20
28	INSTALL NEW FLOOR DRAIN	A5 / P001	EACH	0	0	0	0	0	0	7	7

CONCRETE REPAIR PLAN LEGEND



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Madison, Wisconsin 53703

PROJECT TITLE:

2023 PARKING GARAGE MAINTENANCE

ISSUE:

1 04/03/2023 BID DOCUMENTS

PROJECT INFORMATION:

04/03/2023

PROJECT NUMBER: 2022-5014.03

DATE:

DRAWN BY:

CHECKED BY:

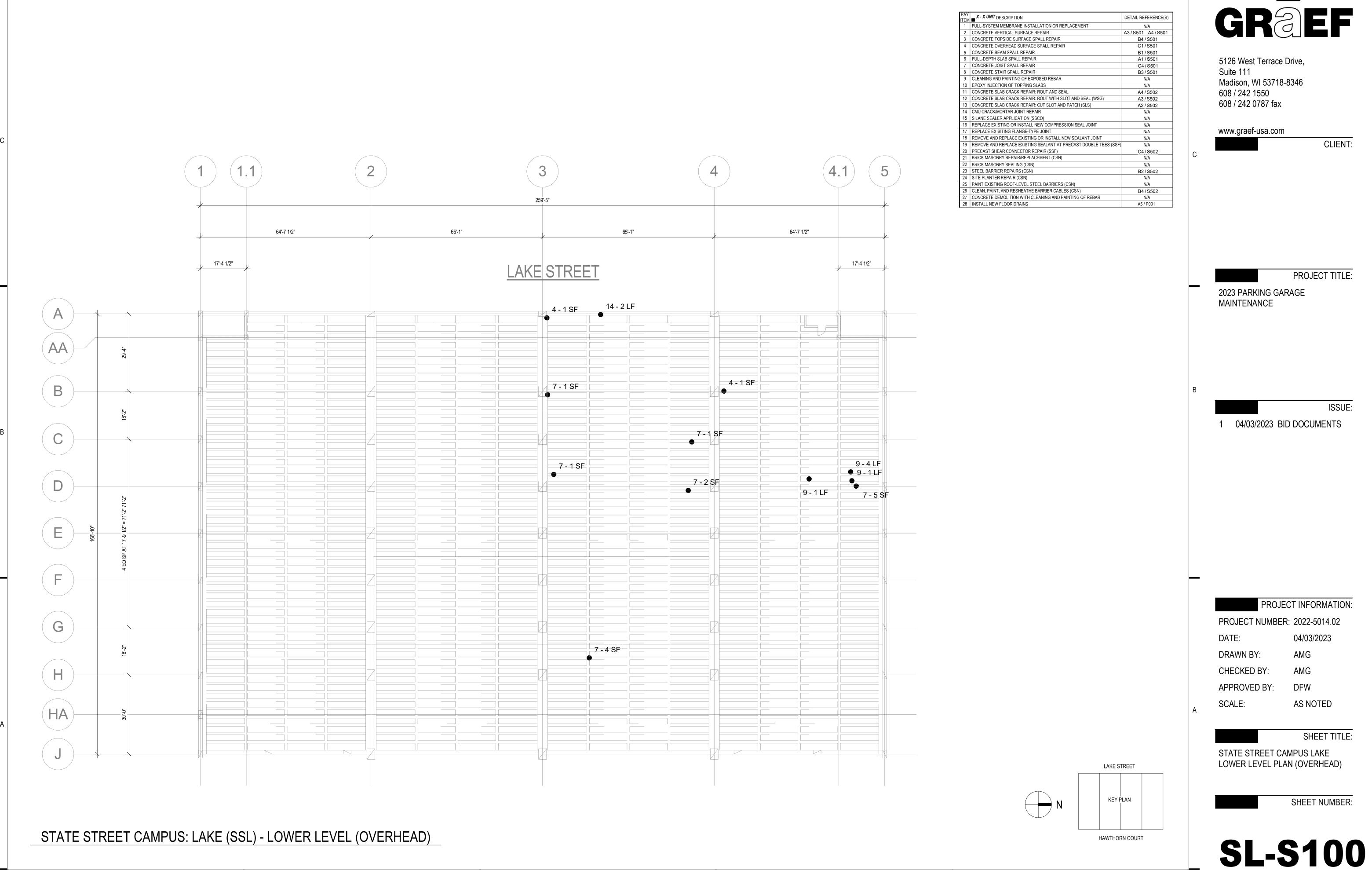
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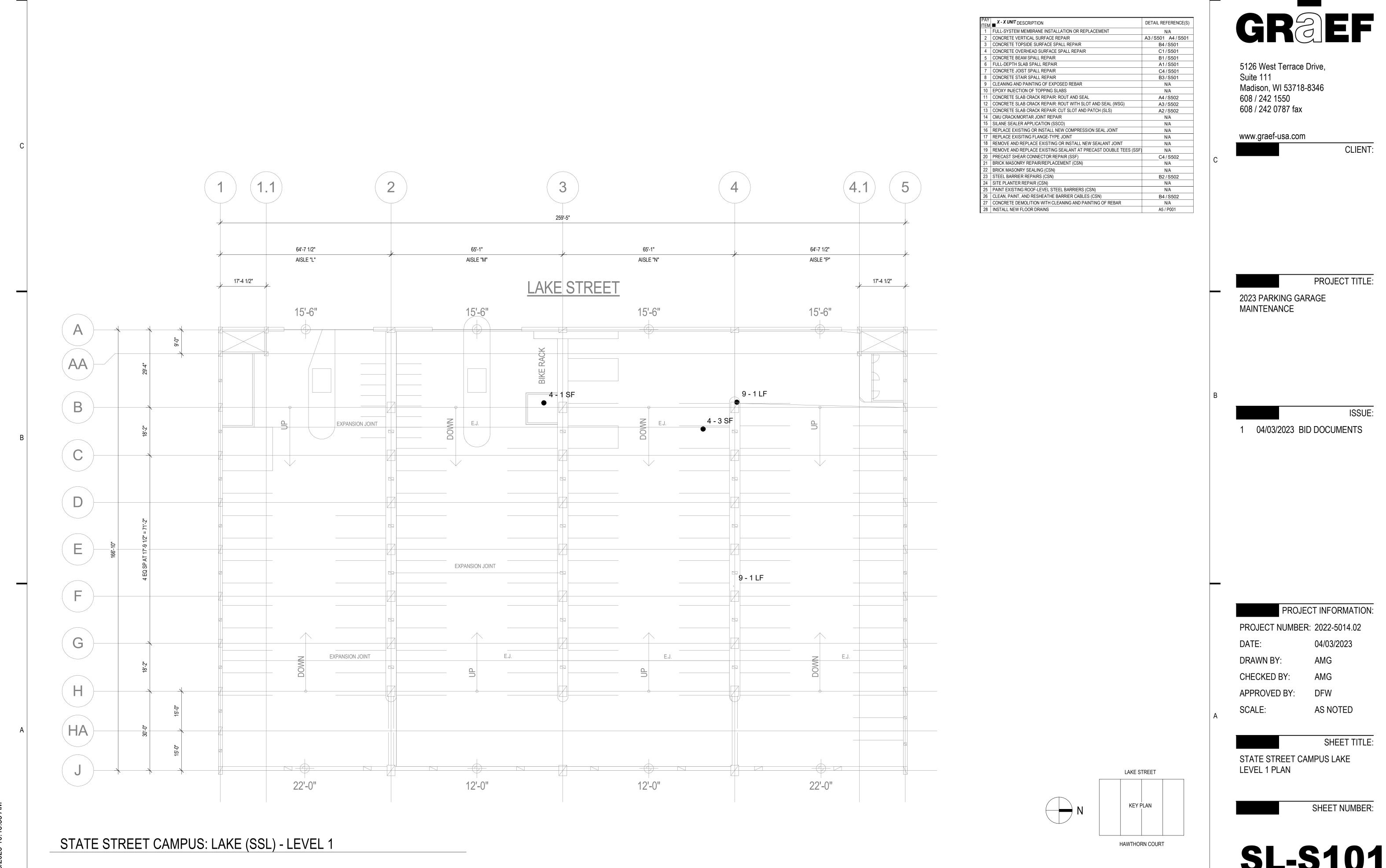
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ESTIMATED PLAN QUANTITIES

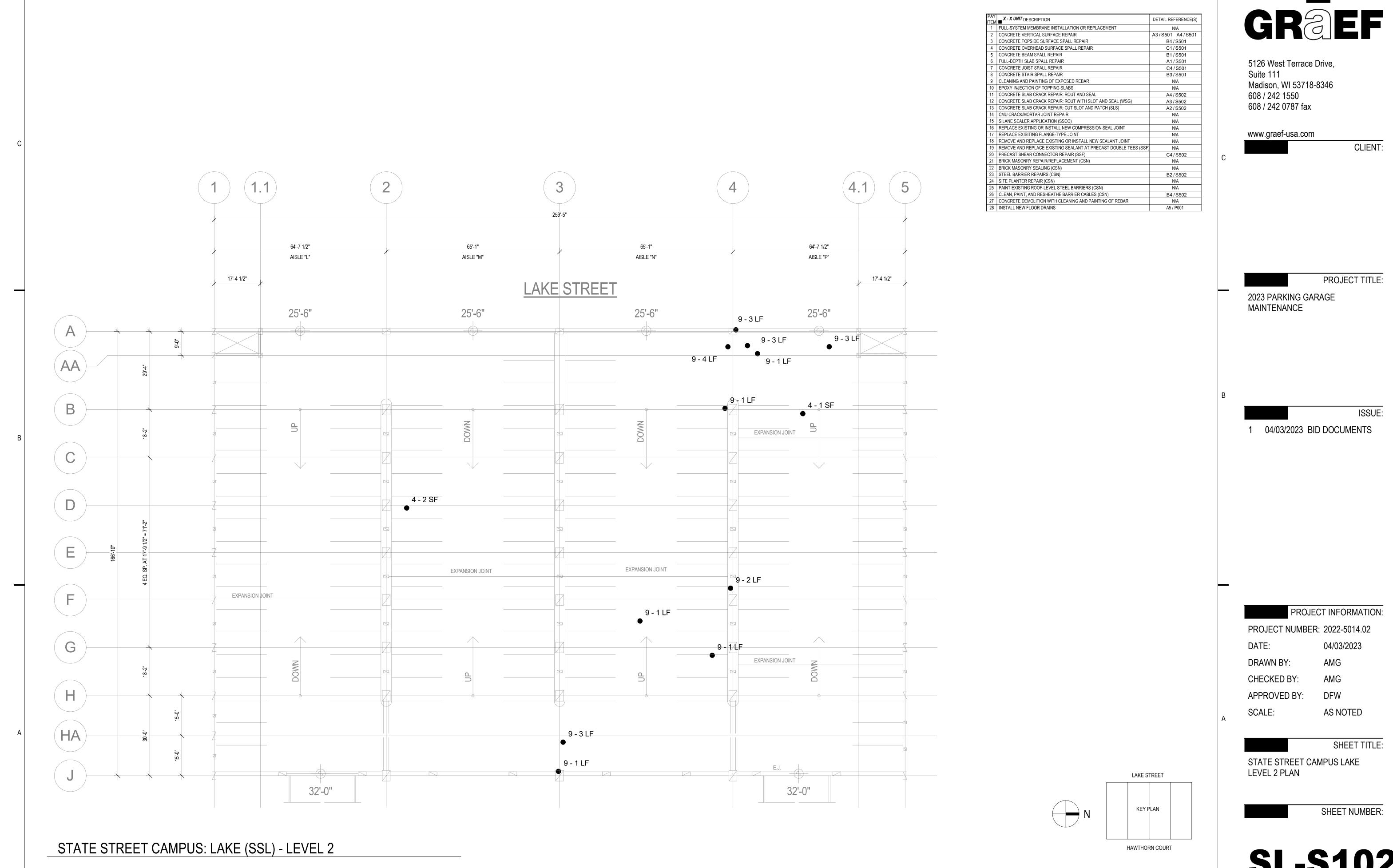
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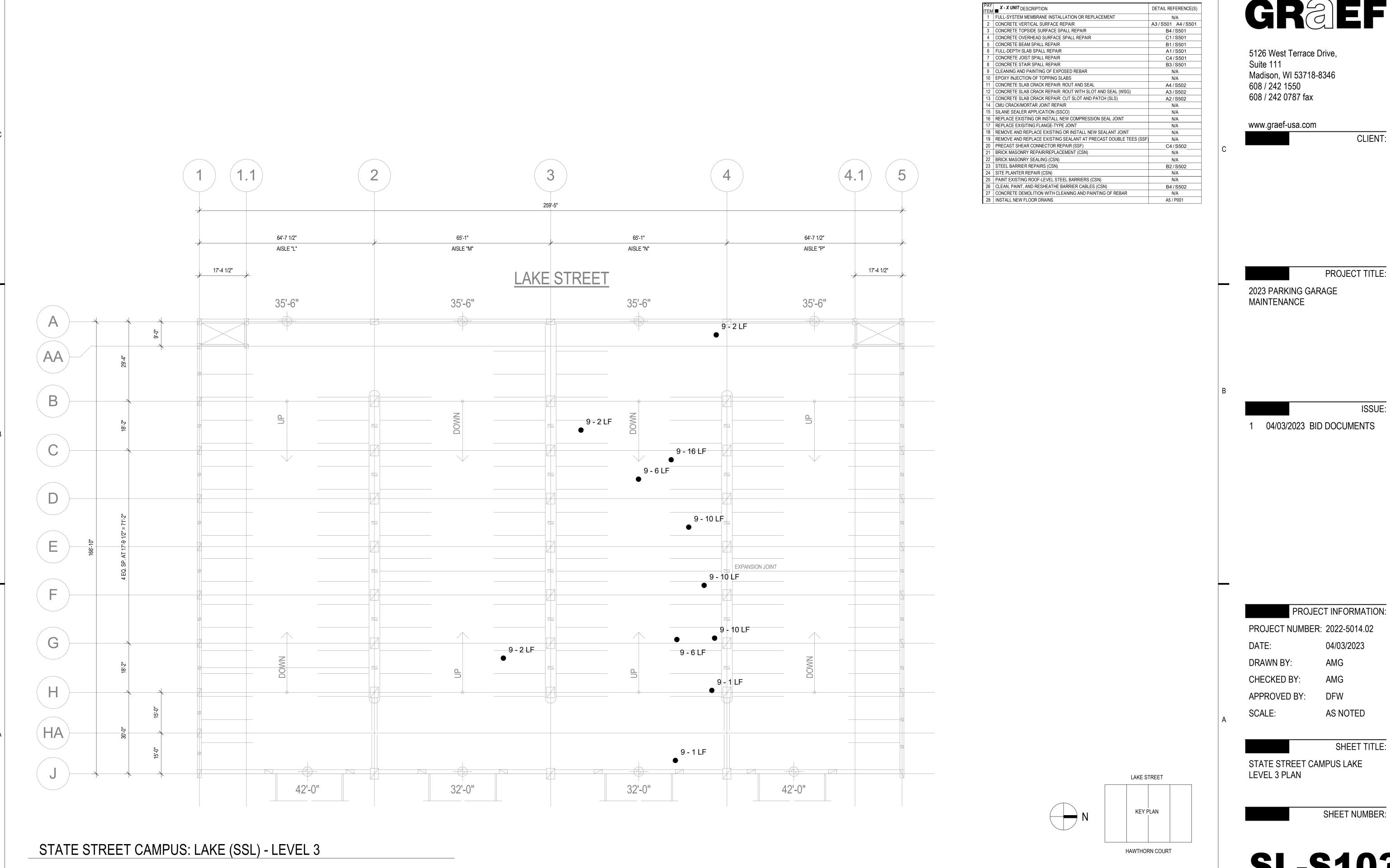




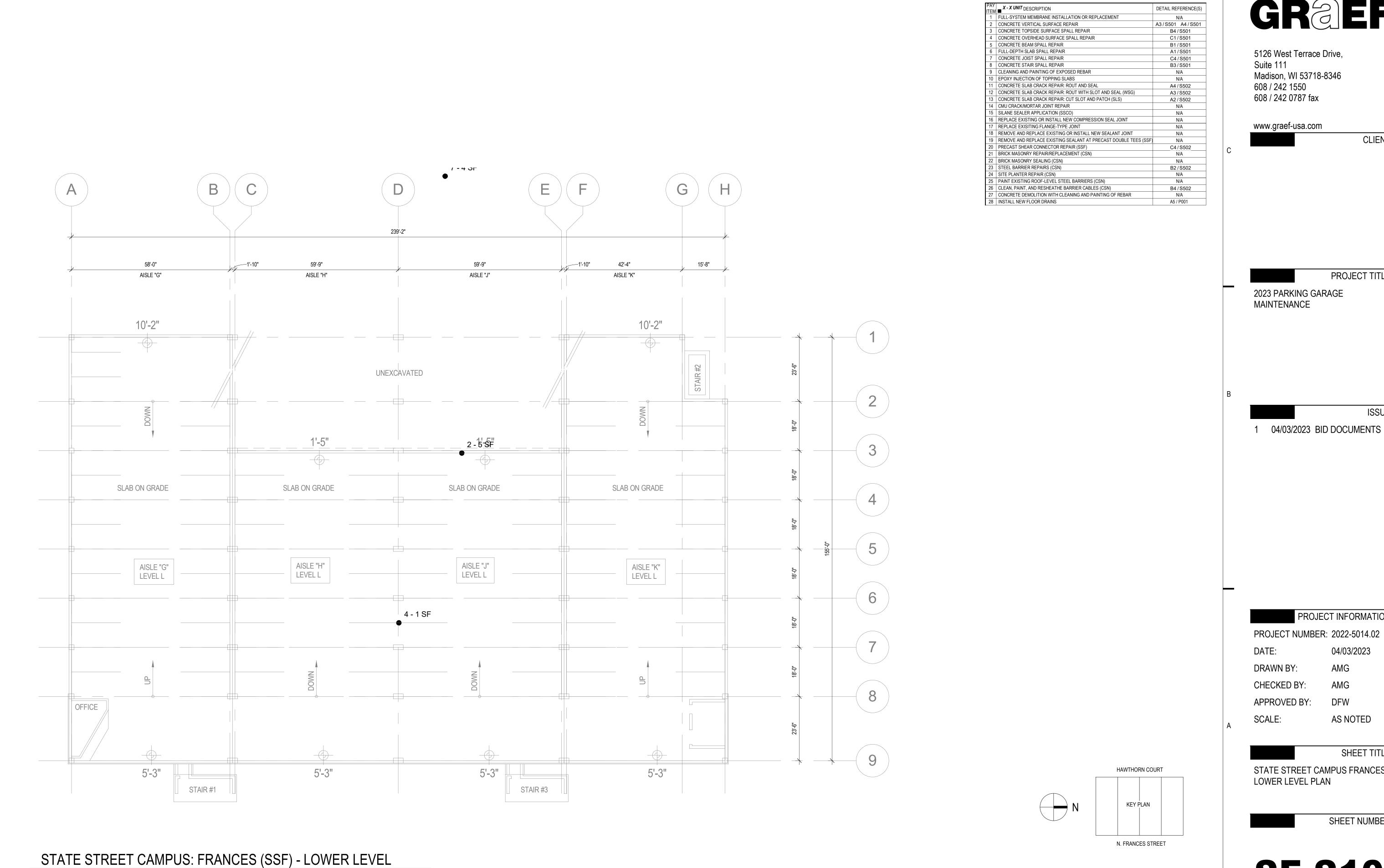
SL-S101



SL-S102



SL-S103



Madison, WI 53718-8346

CLIENT:

PROJECT TITLE:

2023 PARKING GARAGE

ISSUE:

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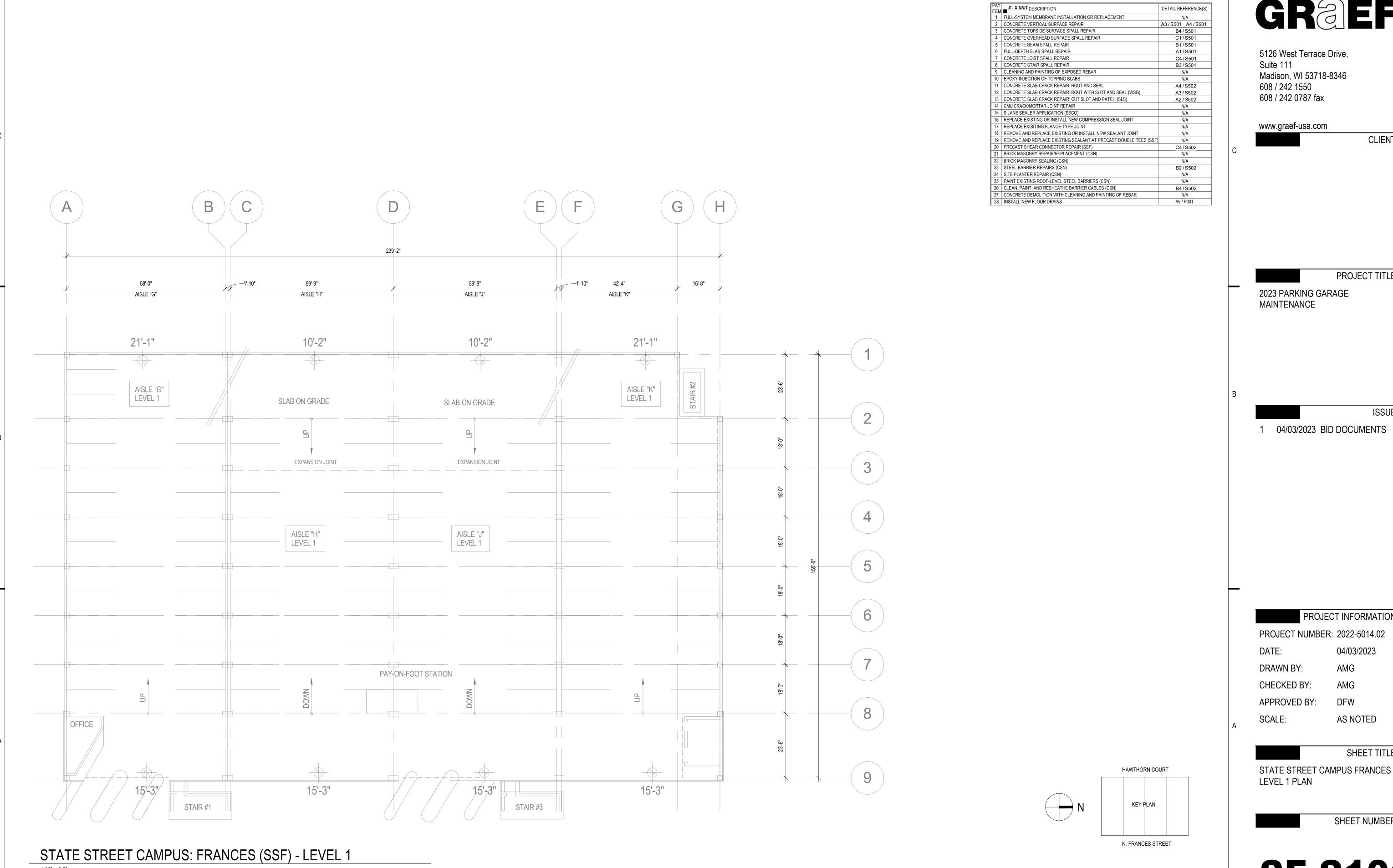
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SHEET TITLE:

STATE STREET CAMPUS FRANCES

LOWER LEVEL PLAN

SHEET NUMBER:



CLIENT:

PROJECT TITLE:

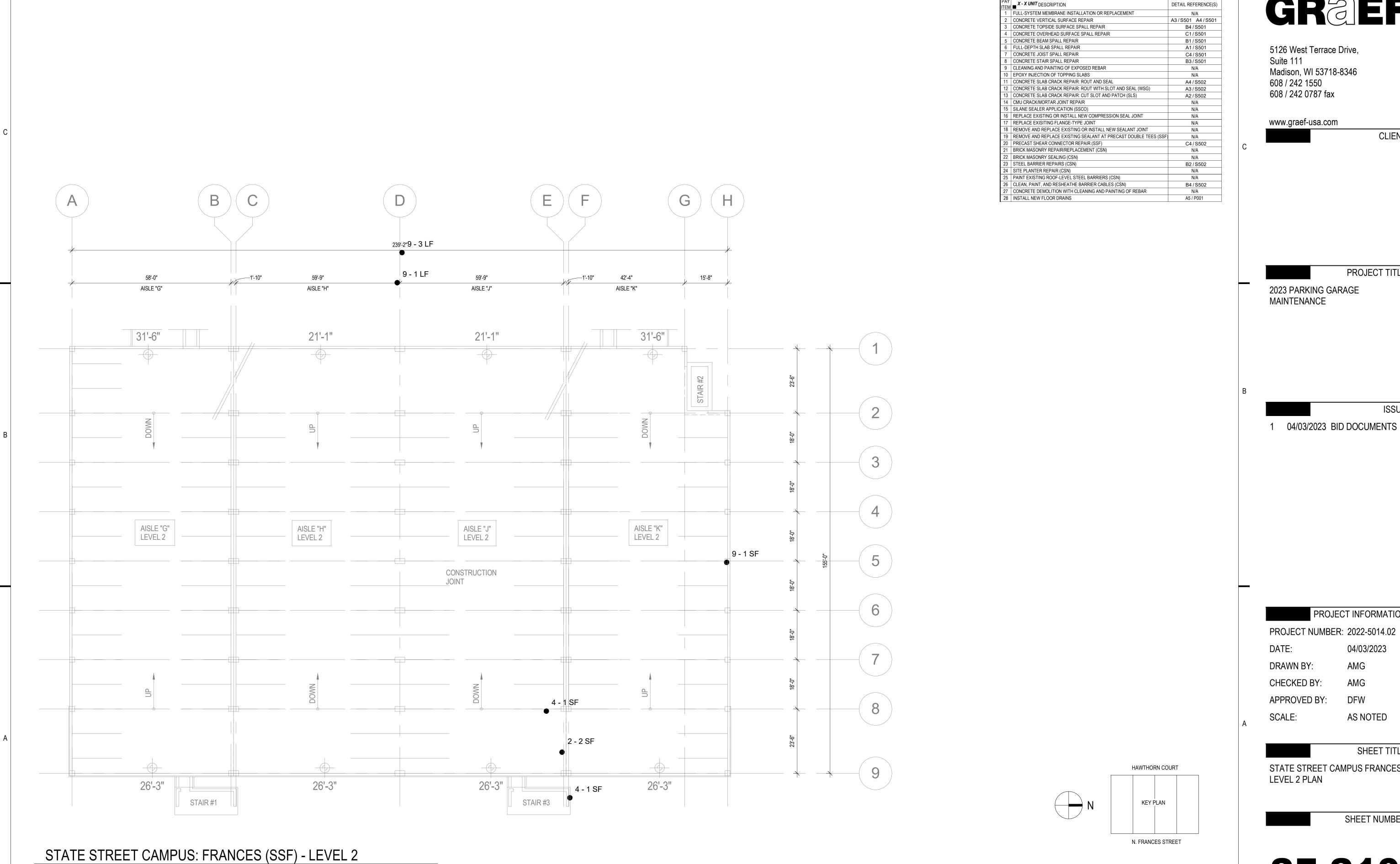
ISSUE:

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PROJECT NUMBER: 2022-5014.02

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Madison, WI 53718-8346

CLIENT:

PROJECT TITLE:

ISSUE:

PROJECT INFORMATION:

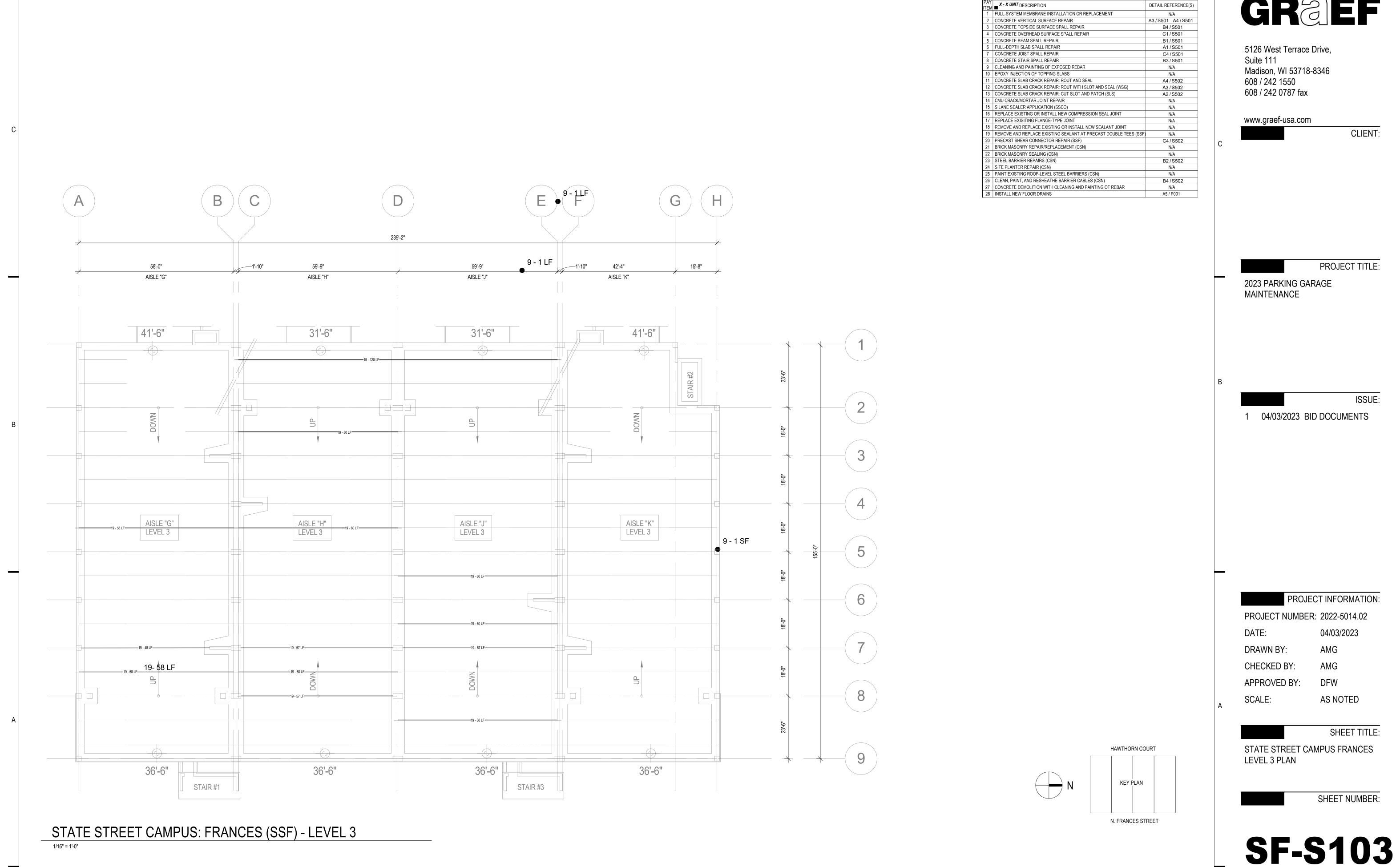
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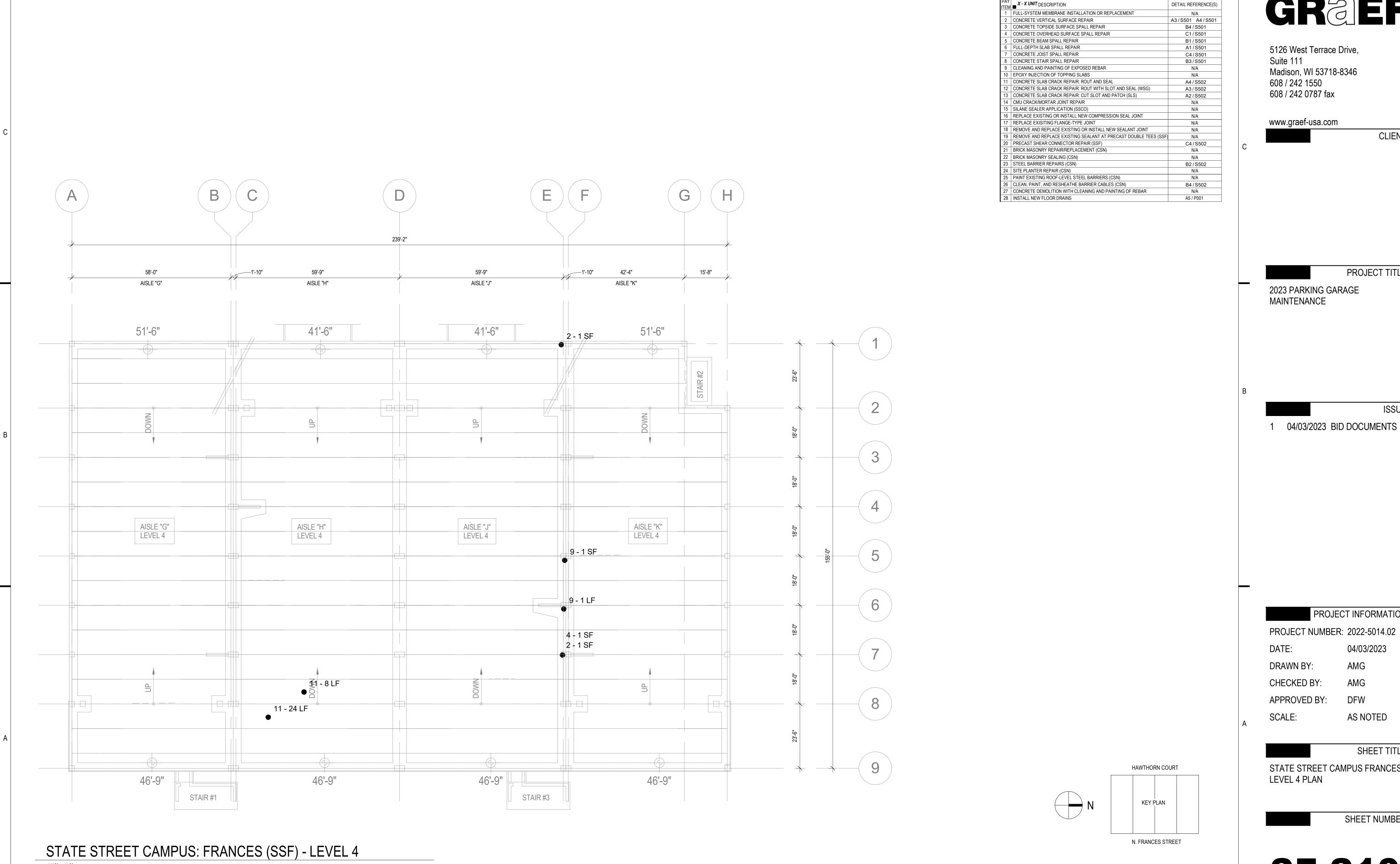
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STATE STREET CAMPUS FRANCES

SHEET NUMBER:





Madison, WI 53718-8346

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PROJECT TITLE:

ISSUE:

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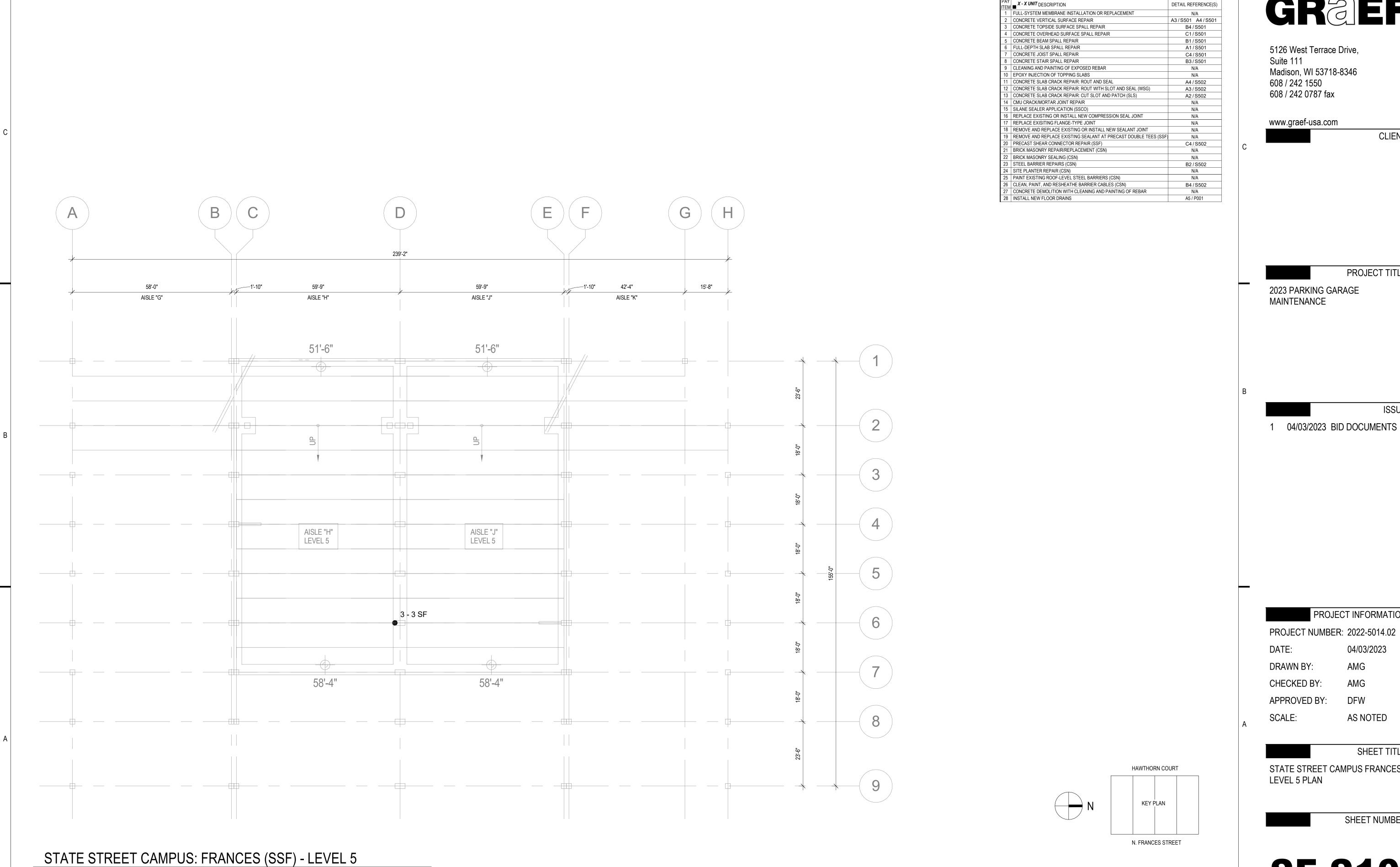
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STATE STREET CAMPUS FRANCES

SHEET NUMBER:



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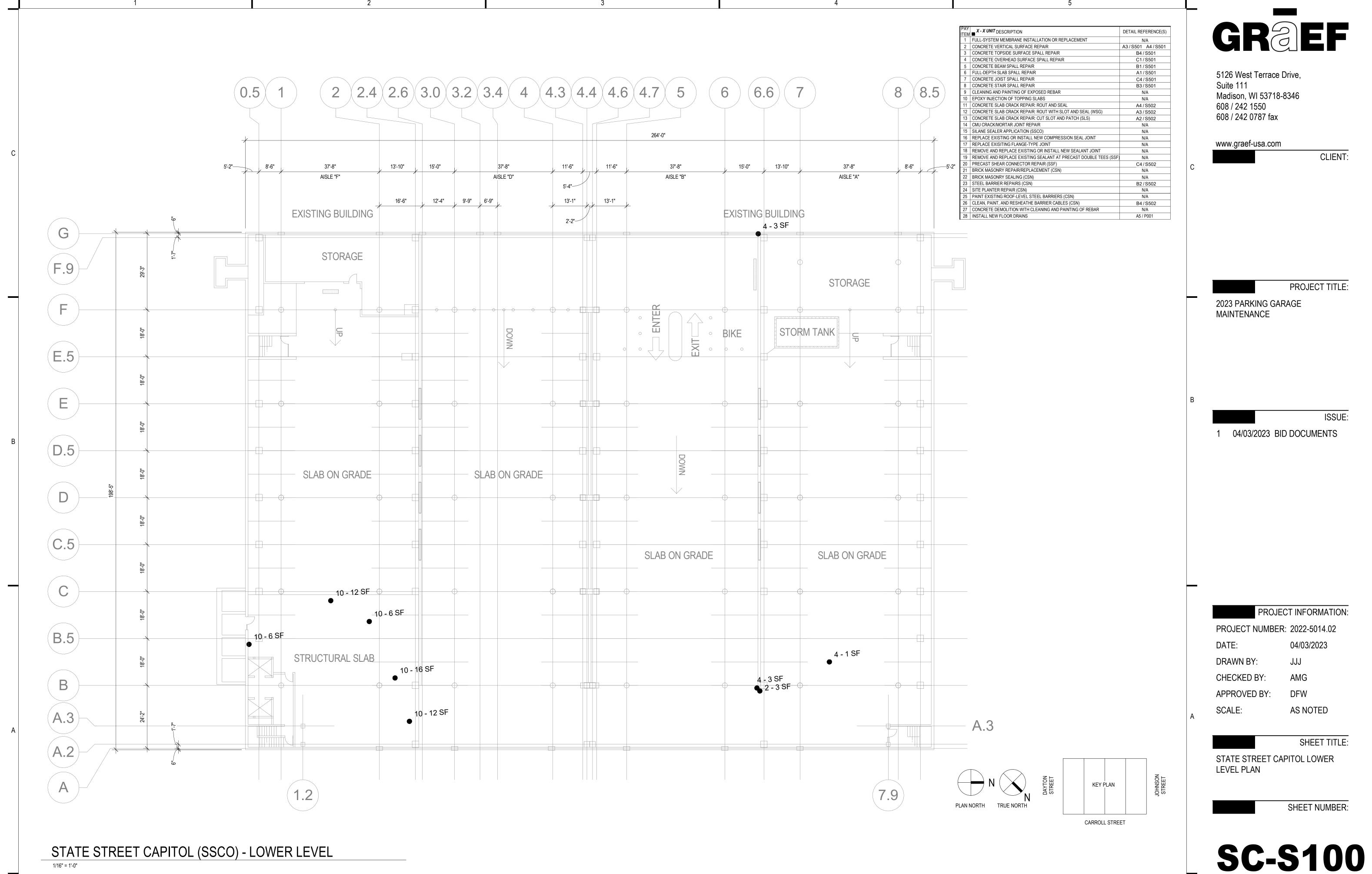
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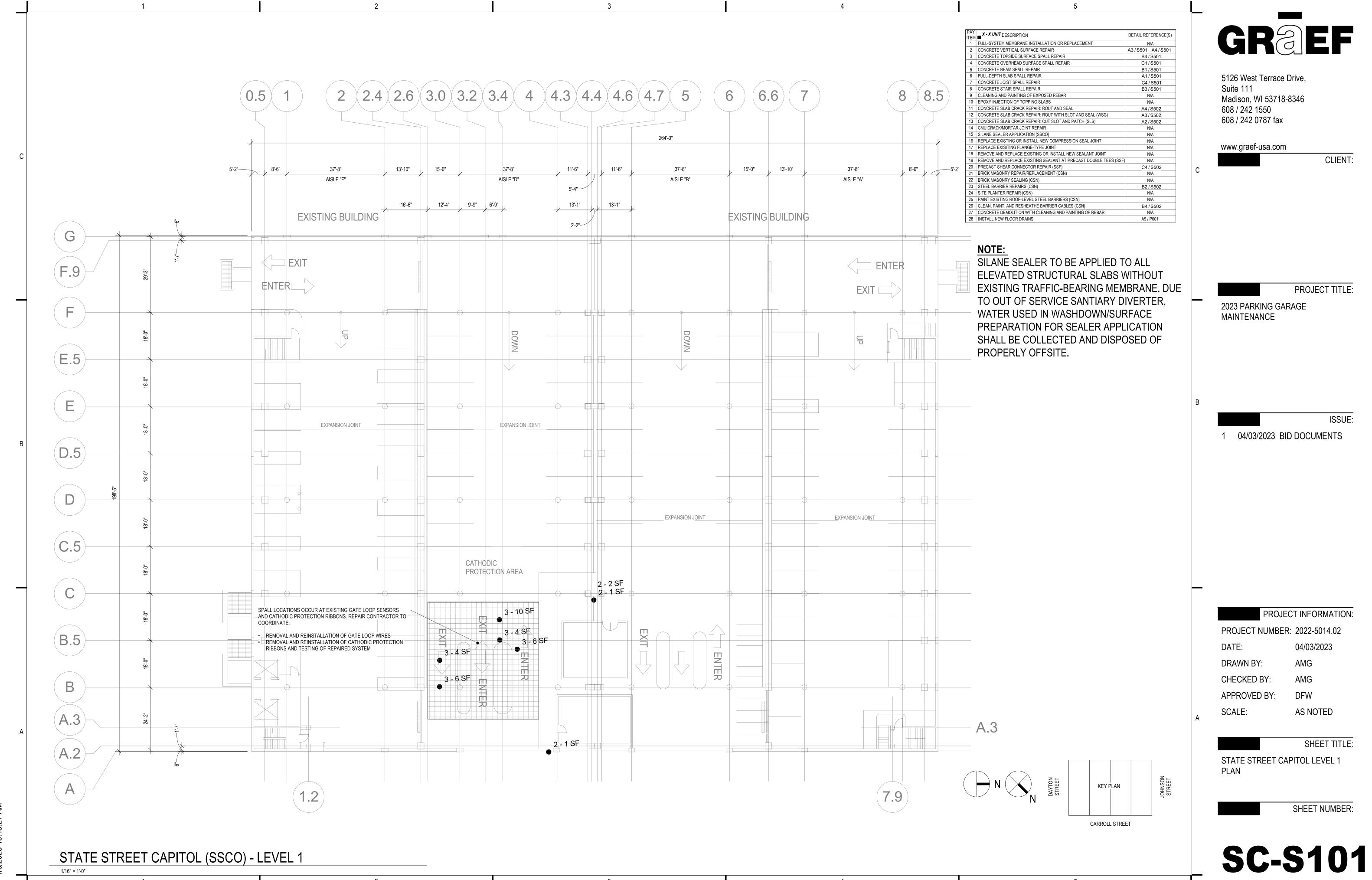
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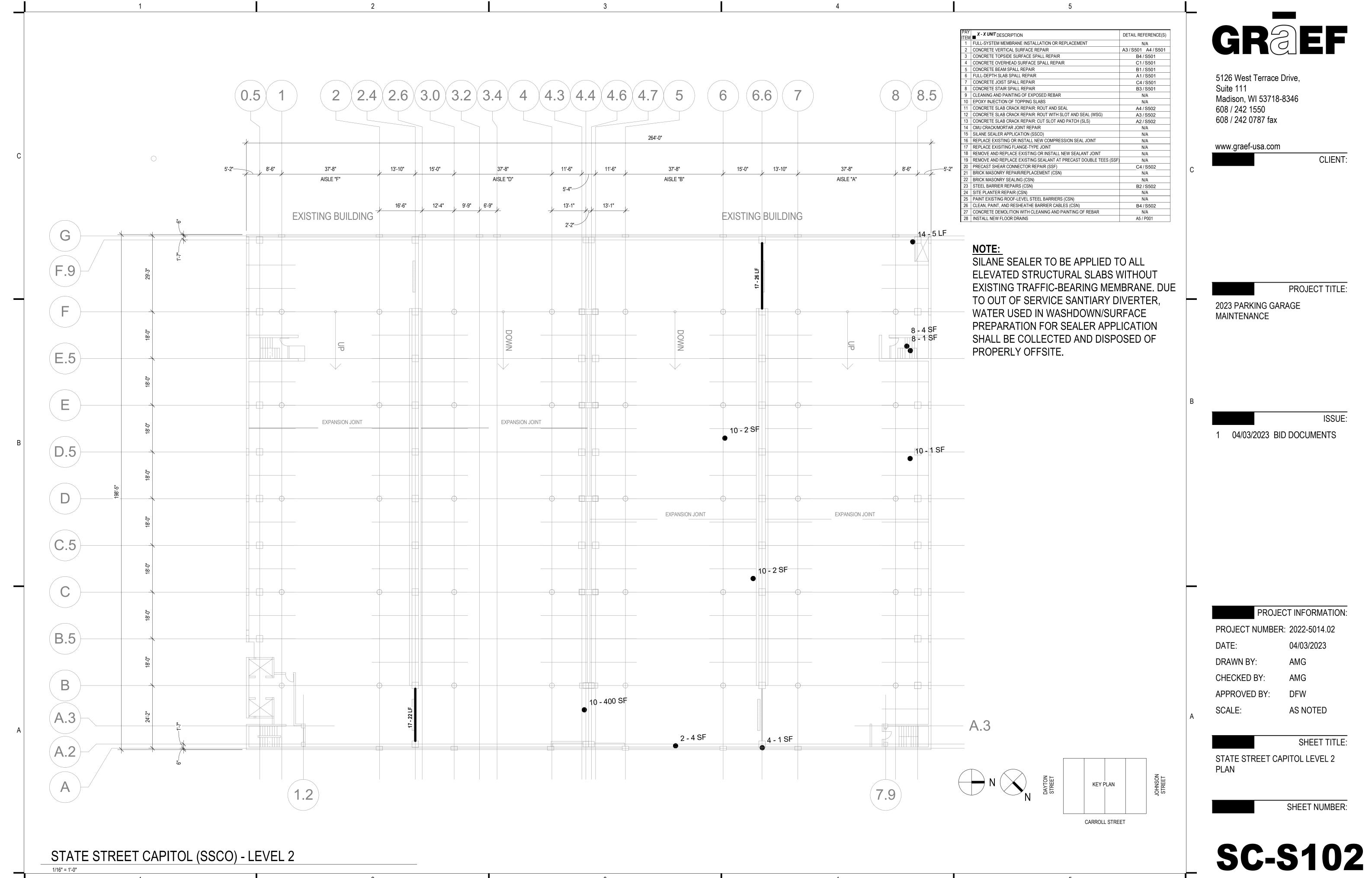
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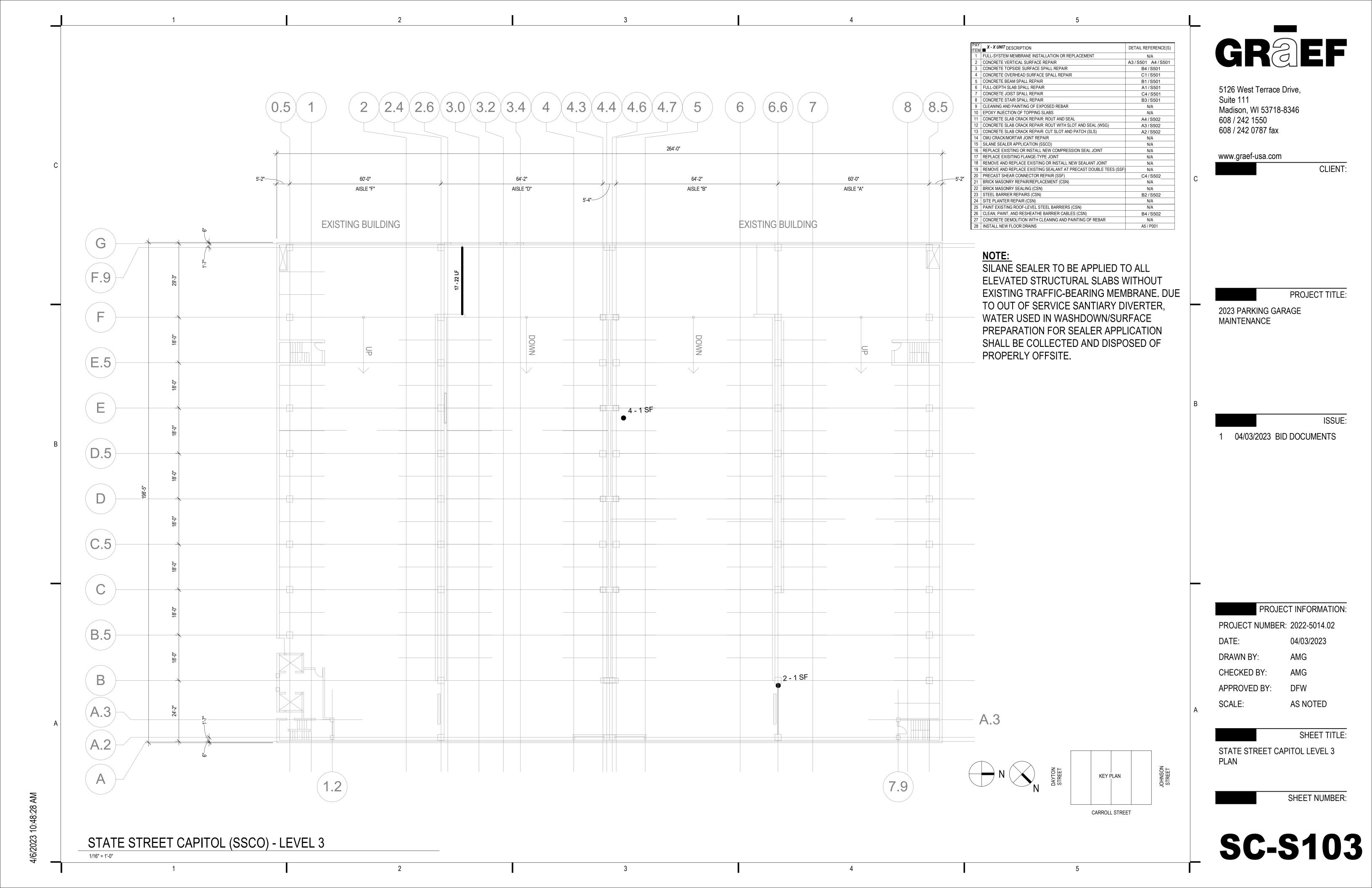
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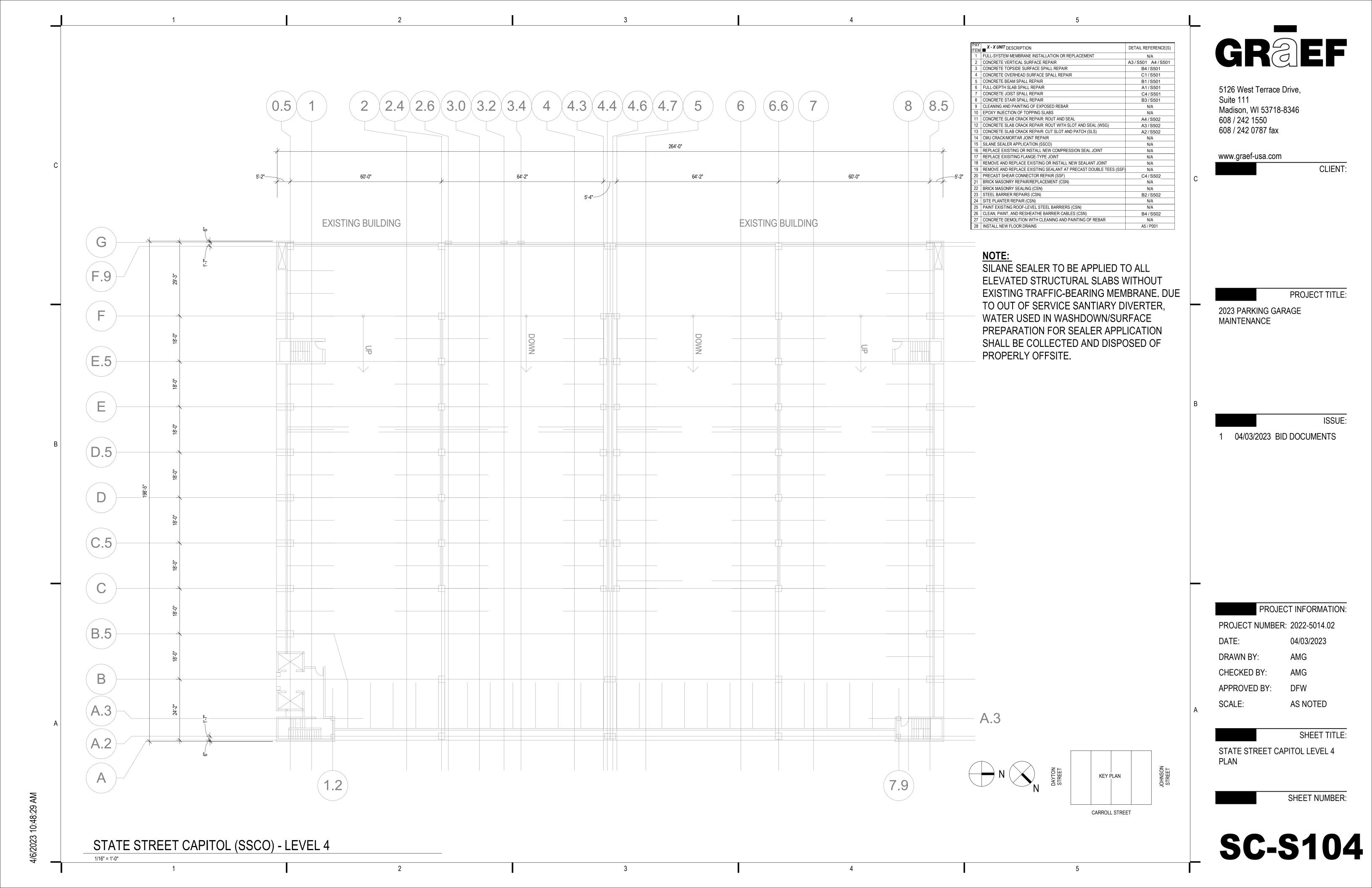
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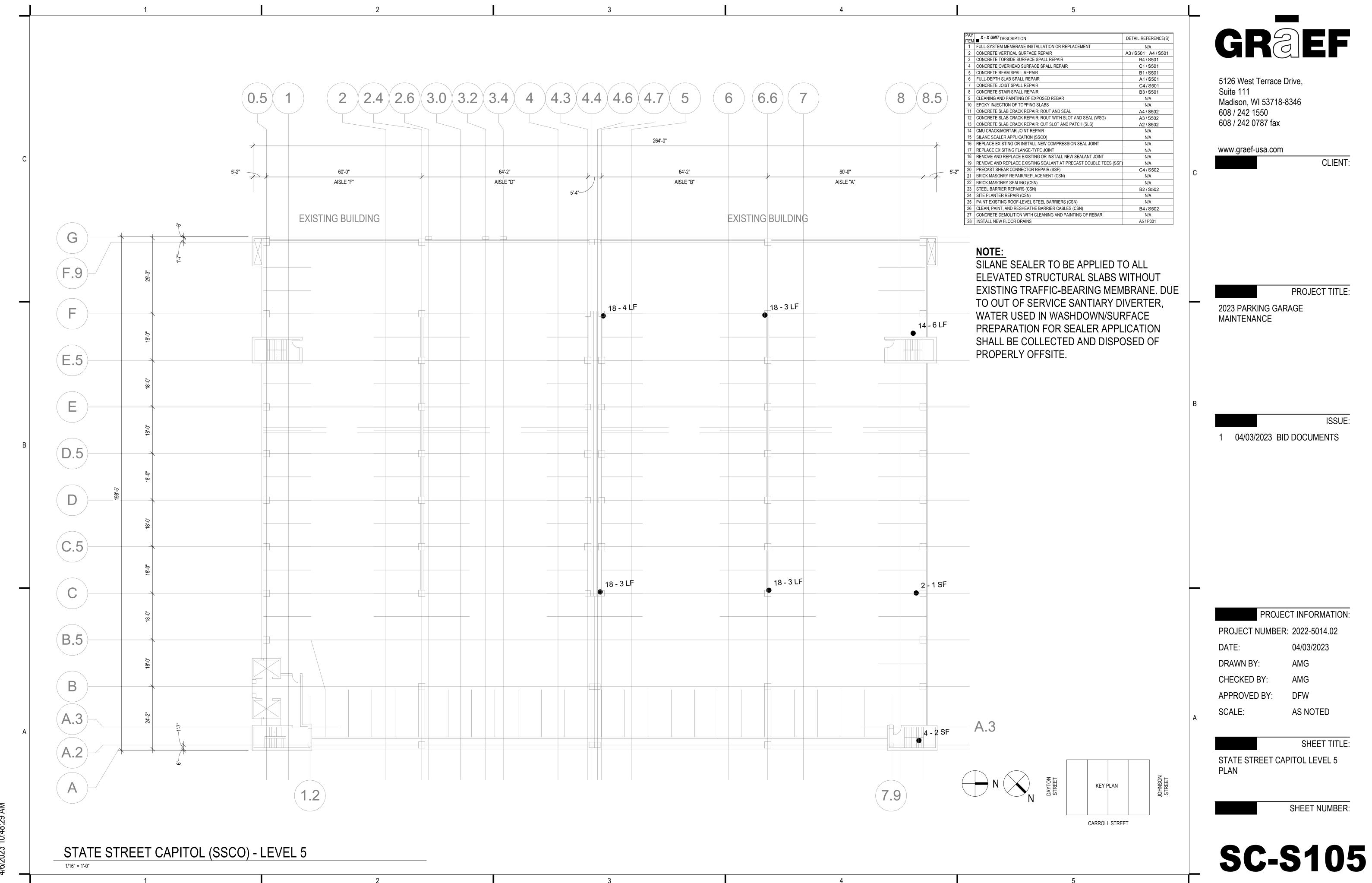


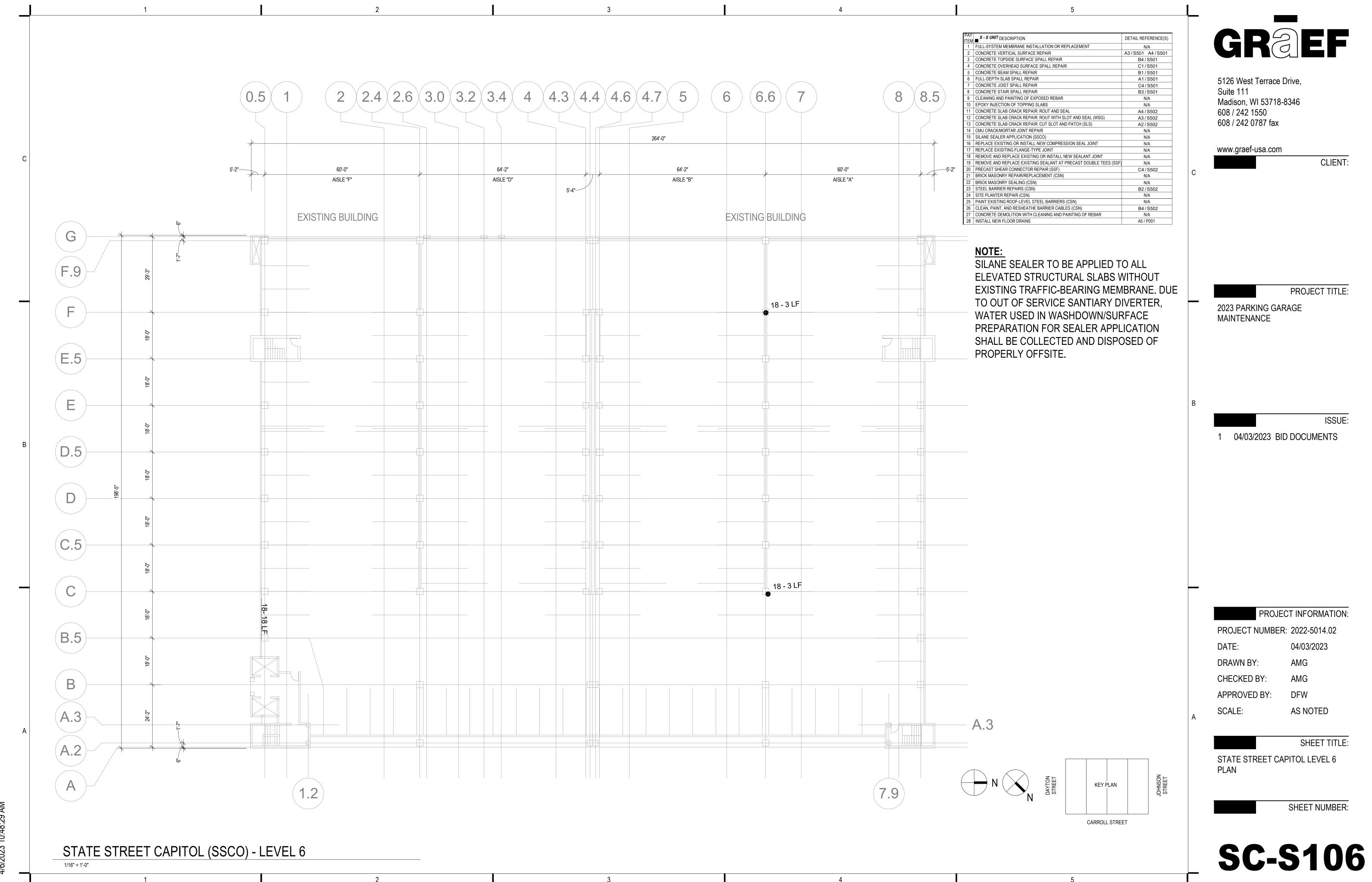


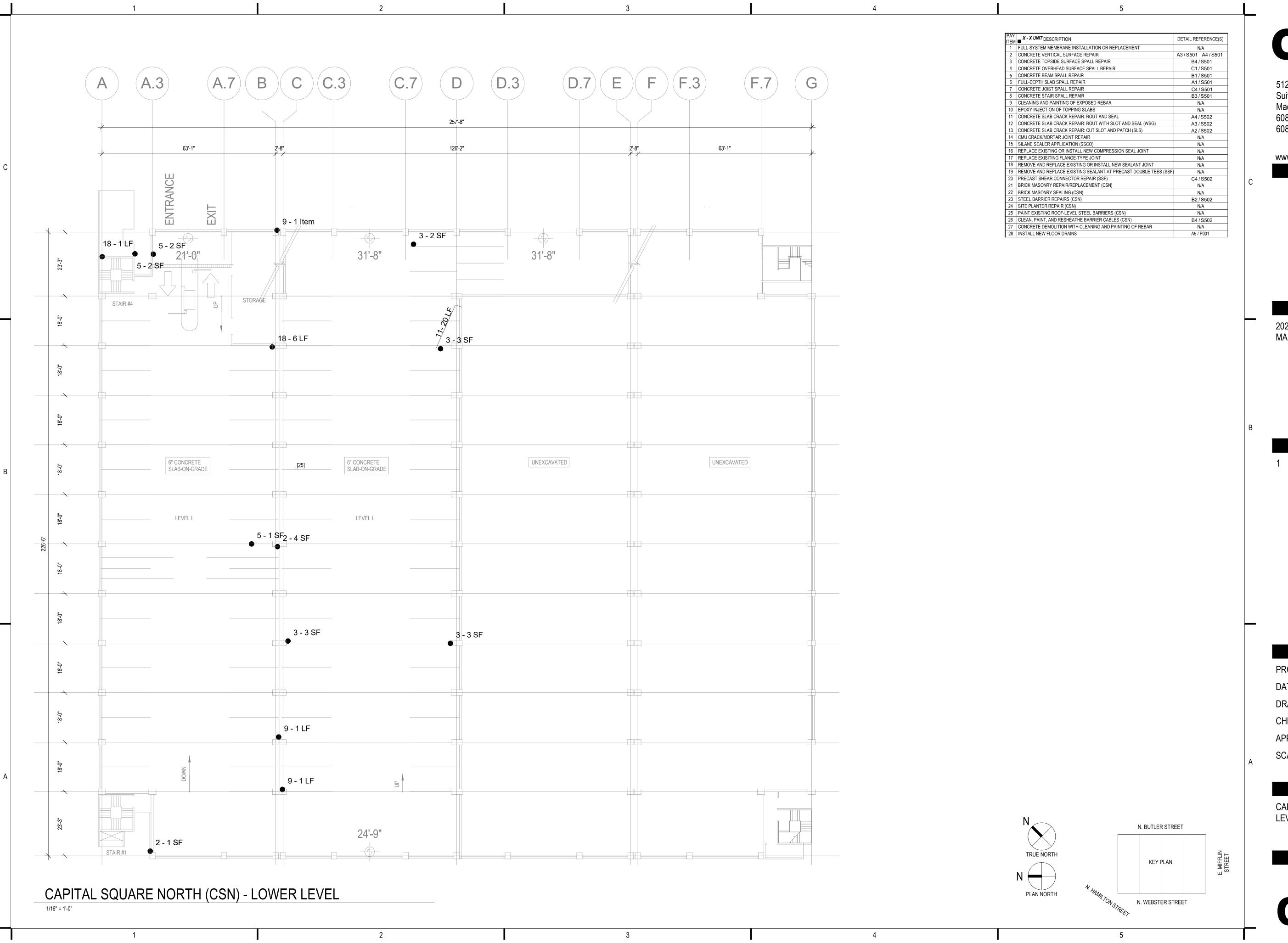












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2023 PARKING GARAGE MAINTENANCE

ISSUE:

1 04/03/2023 BID DOCUMENTS

PROJECT INFORMATION:

04/03/2023

PROJECT NUMBER: 2022-5014.02

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DRAWN BY: AMG

CHECKED BY:

APPROVED BY: DFW

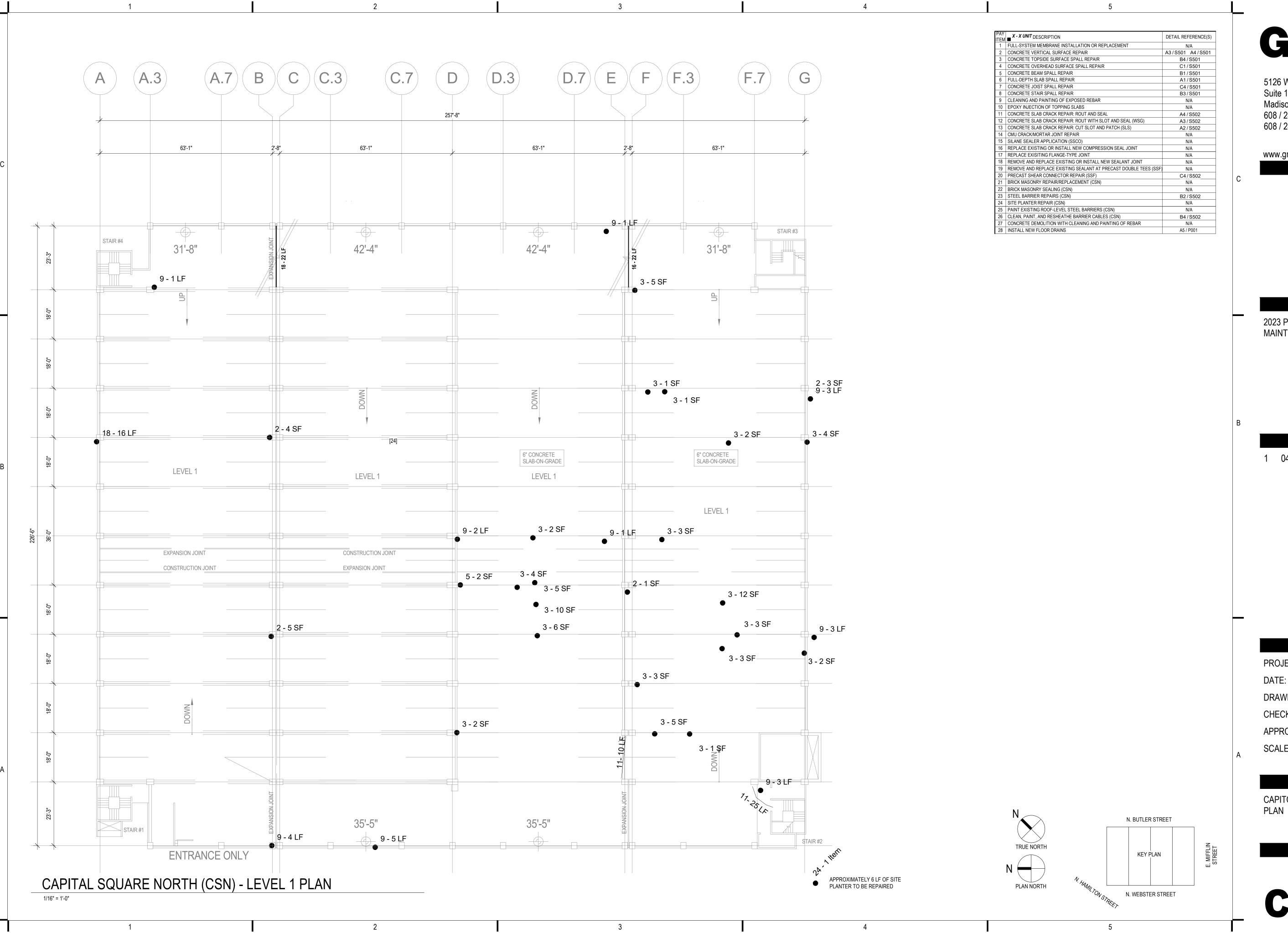
SCALE: AS NOTED

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OHEET HILE.

CAPITOL SQUARE NORTH LOWER LEVEL PLAN

SHEET NUMBER:



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PROJECT NUMBER: 2022-5014.02

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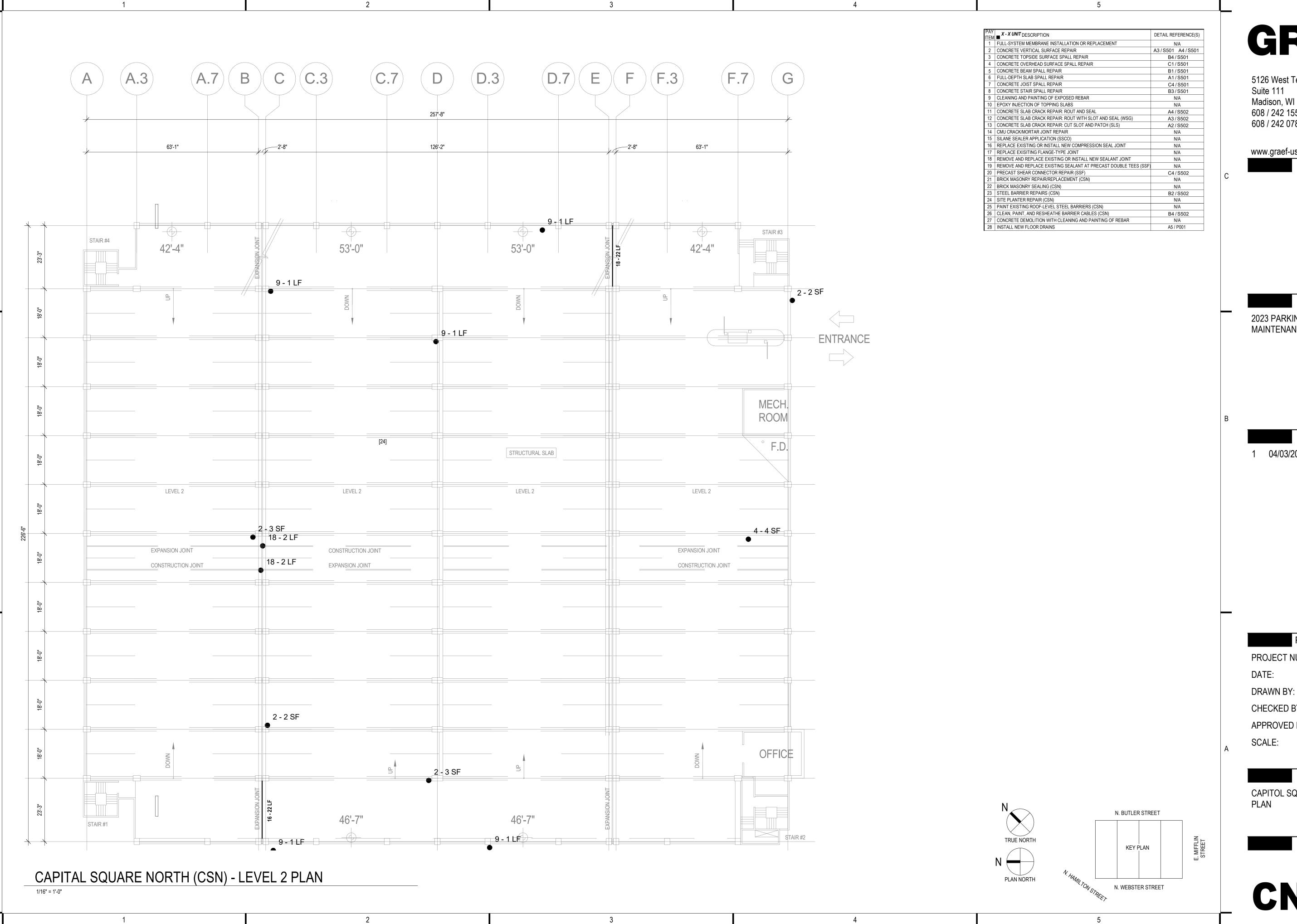
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CAPITOL SQUARE NORTH LEVEL 1

SHEET NUMBER:



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ISSUE:

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PROJECT INFORMATION:

04/03/2023

PROJECT NUMBER: 2022-5014.02

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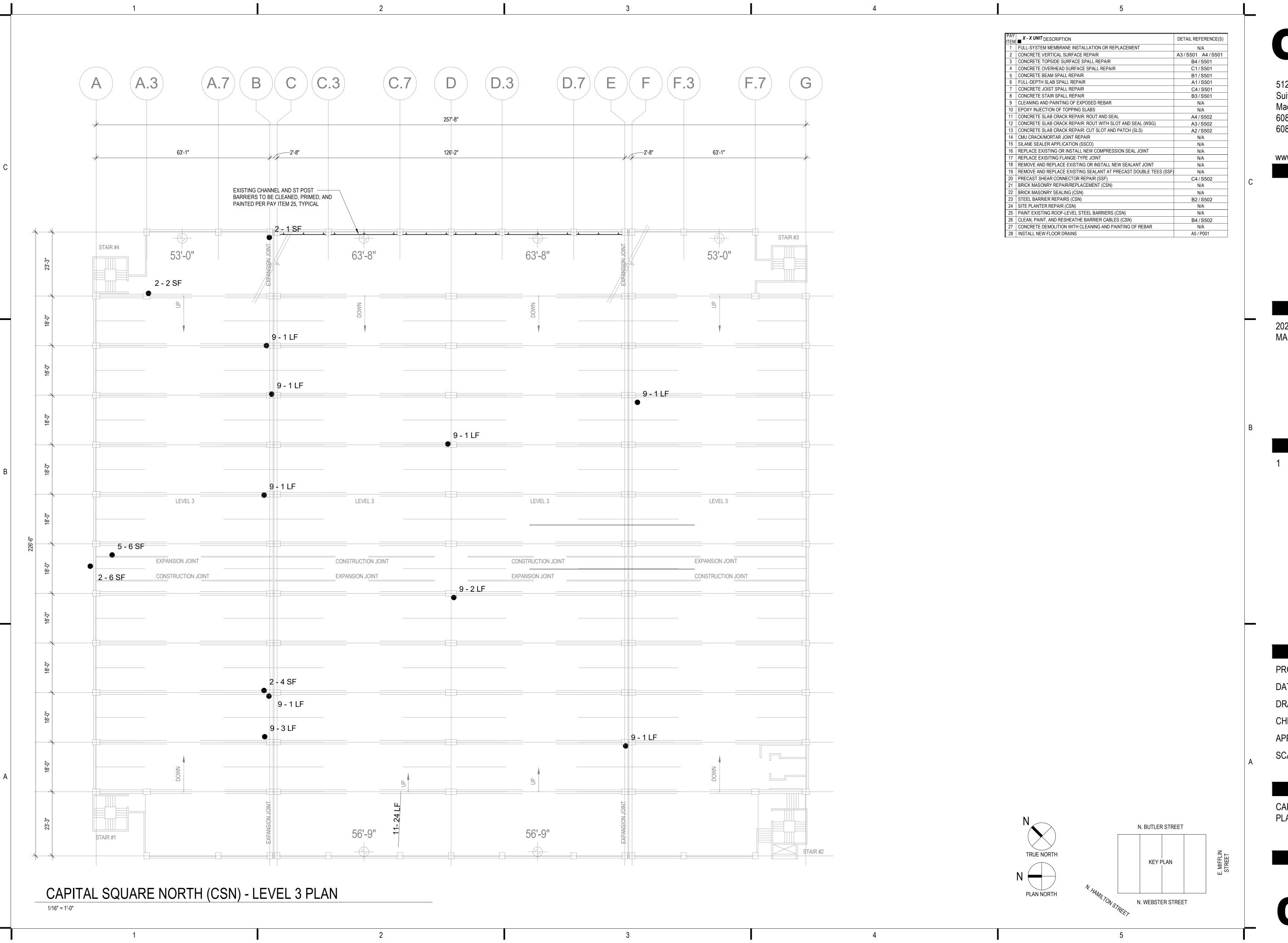
APPROVED BY:

SHEET TITLE:

AS NOTED

CAPITOL SQUARE NORTH LEVEL 2

SHEET NUMBER:



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PROJECT TITLE:

2023 PARKING GARAGE MAINTENANCE

ISSUE:

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PROJECT INFORMATION:

04/03/2023

PROJECT NUMBER: 2022-5014.02

ATE:

DRAWN BY: AMG

CHECKED BY:

APPROVED BY: DFW

SCALE: AS NOTED

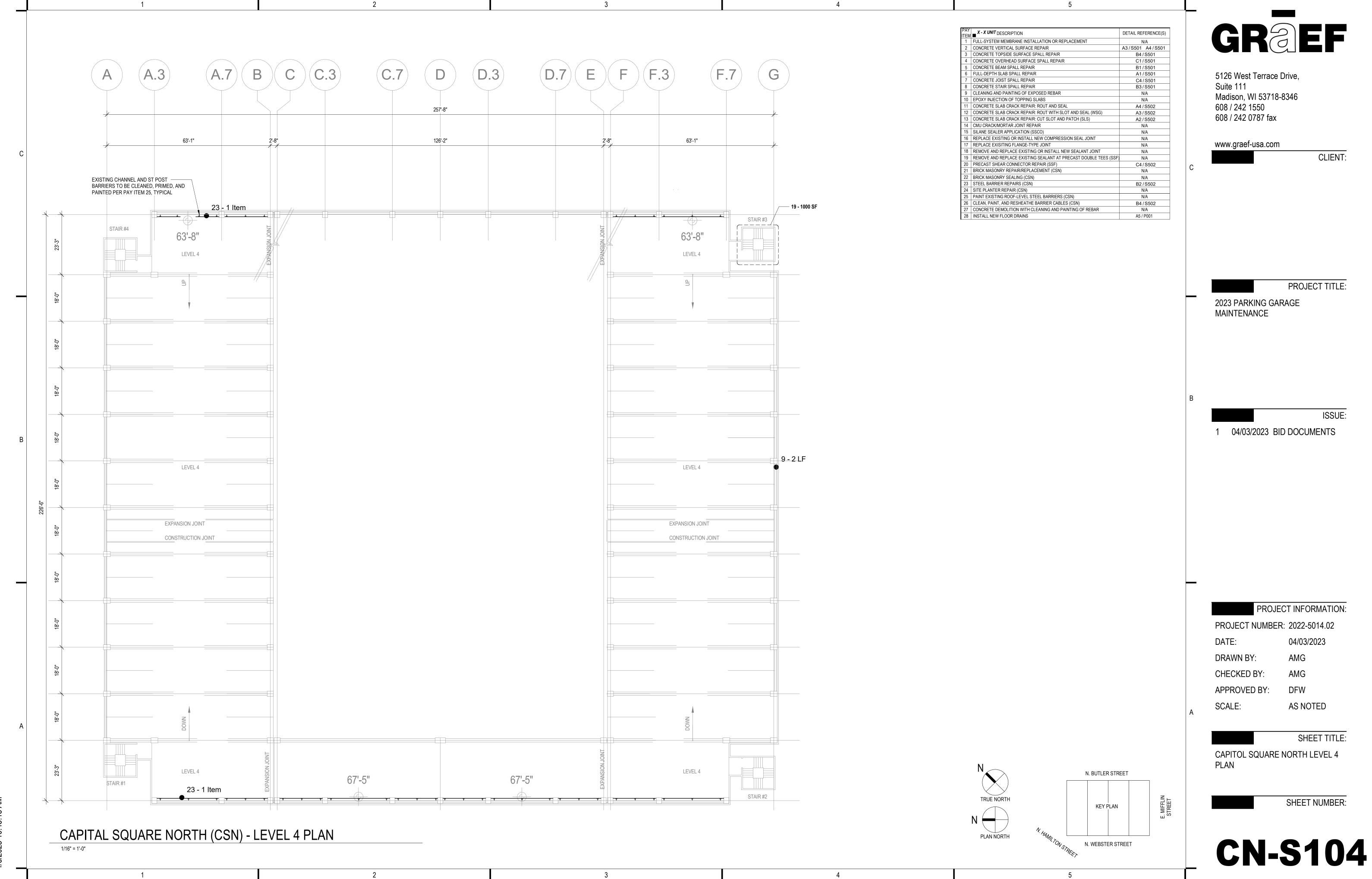
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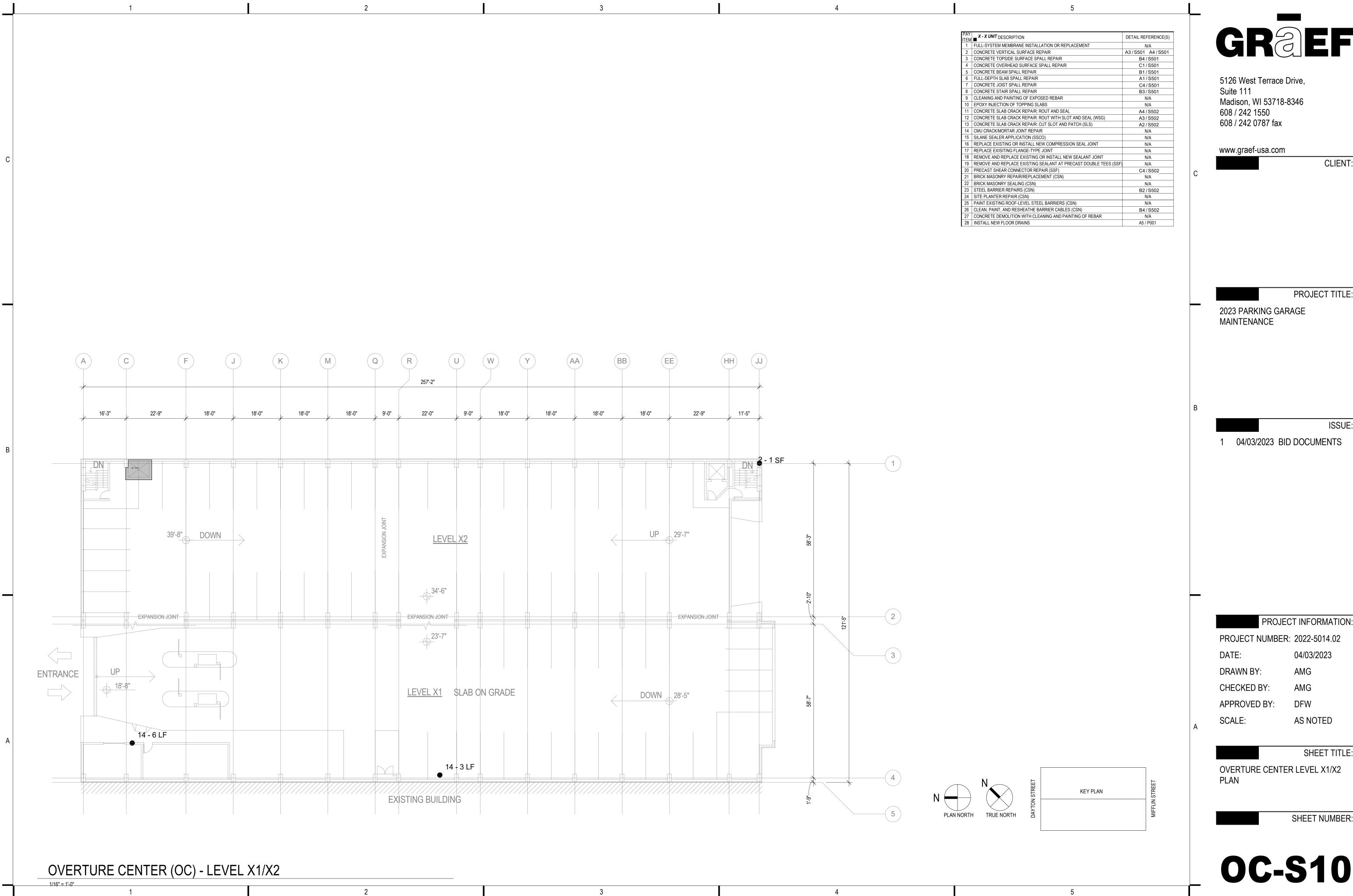
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CAPITOL SQUARE NORTH LEVEL 3

PLAN

SHEET NUMBER:





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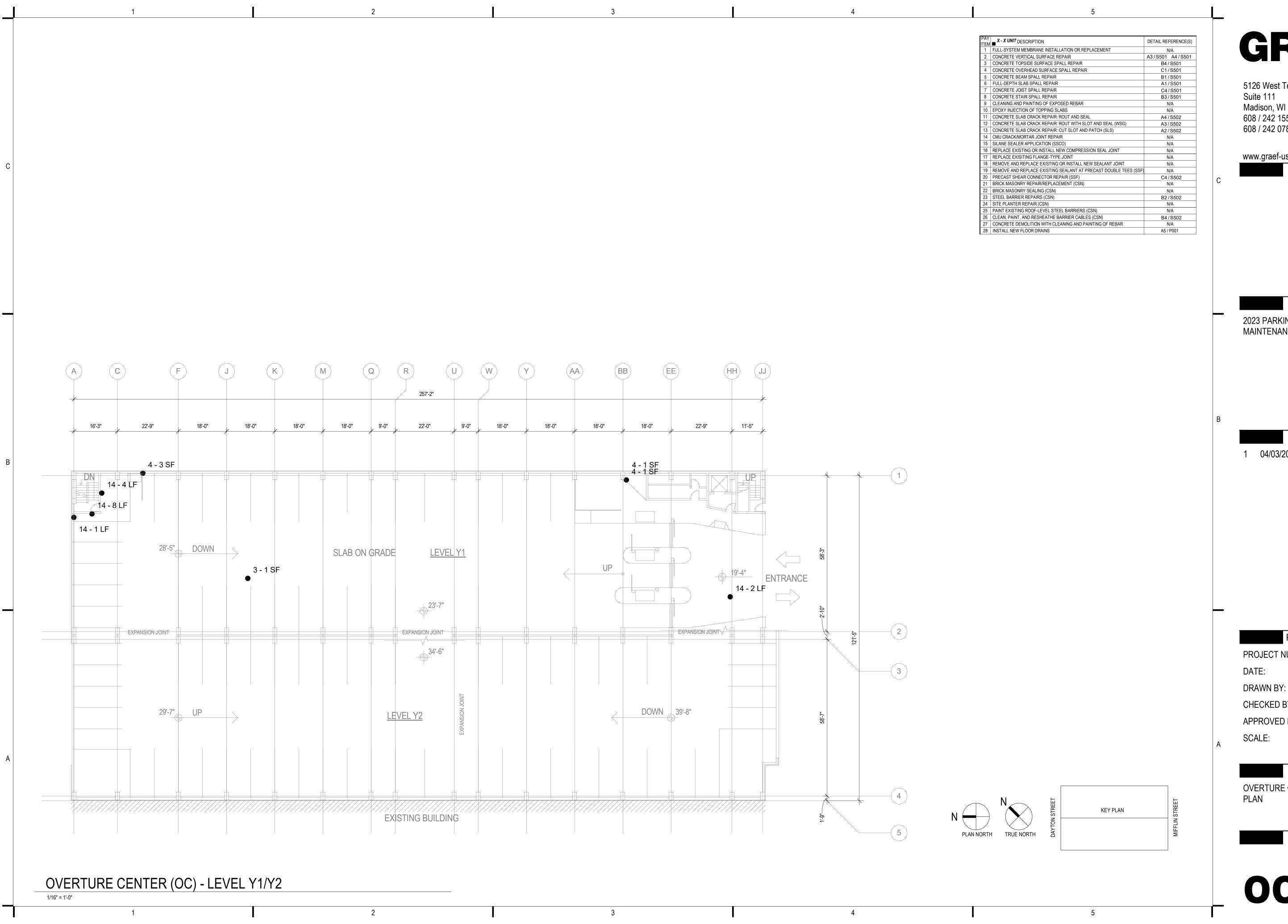
PROJECT TITLE:

ISSUE:

PROJECT INFORMATION:

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OVERTURE CENTER LEVEL X1/X2



4/6/2023 10:48:22 AM

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ISSUE:

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PROJECT NUMBER: 2022-5014.02

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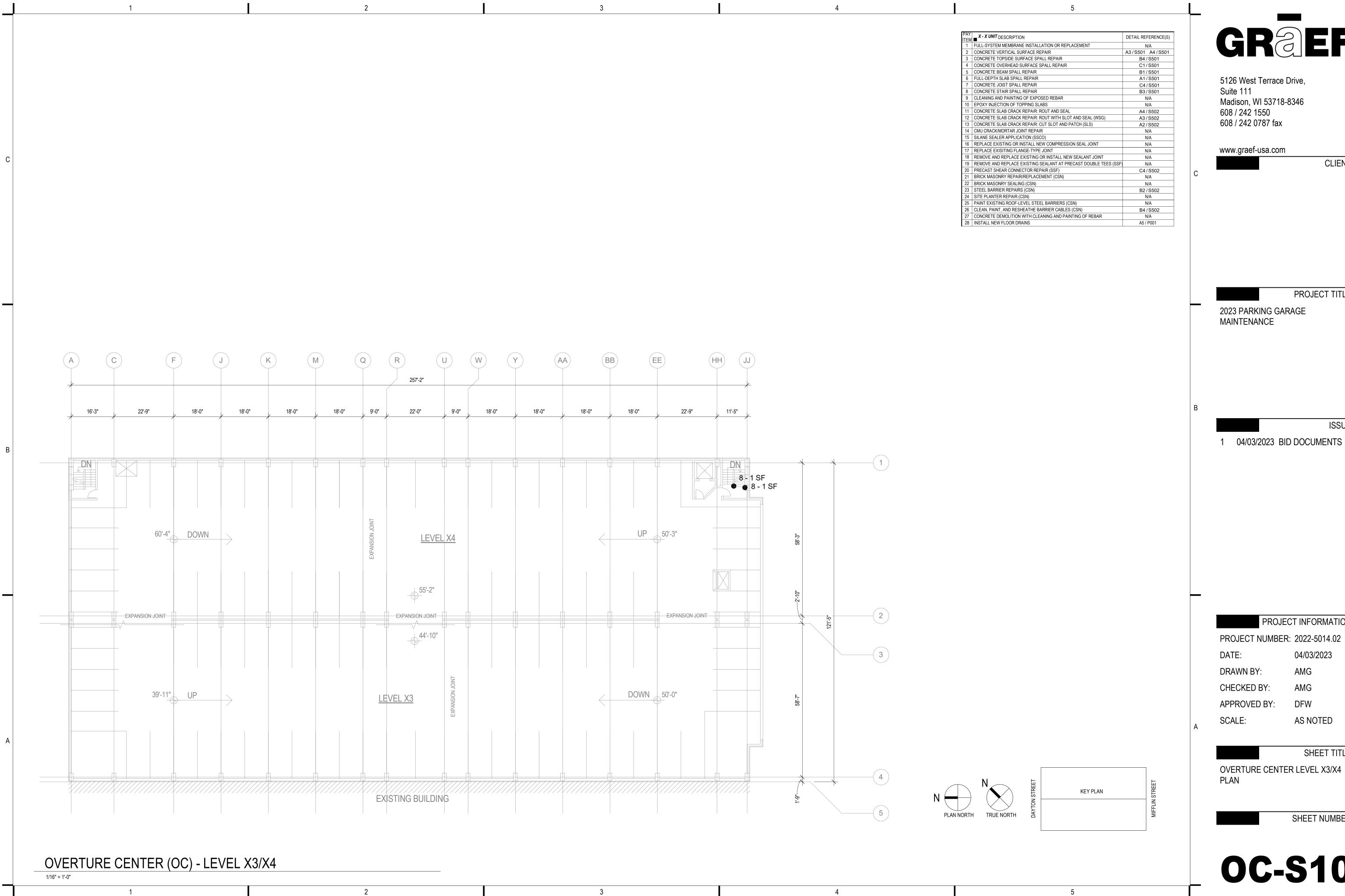
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04/03/2023

OVERTURE CENTER LEVEL Y1/Y2

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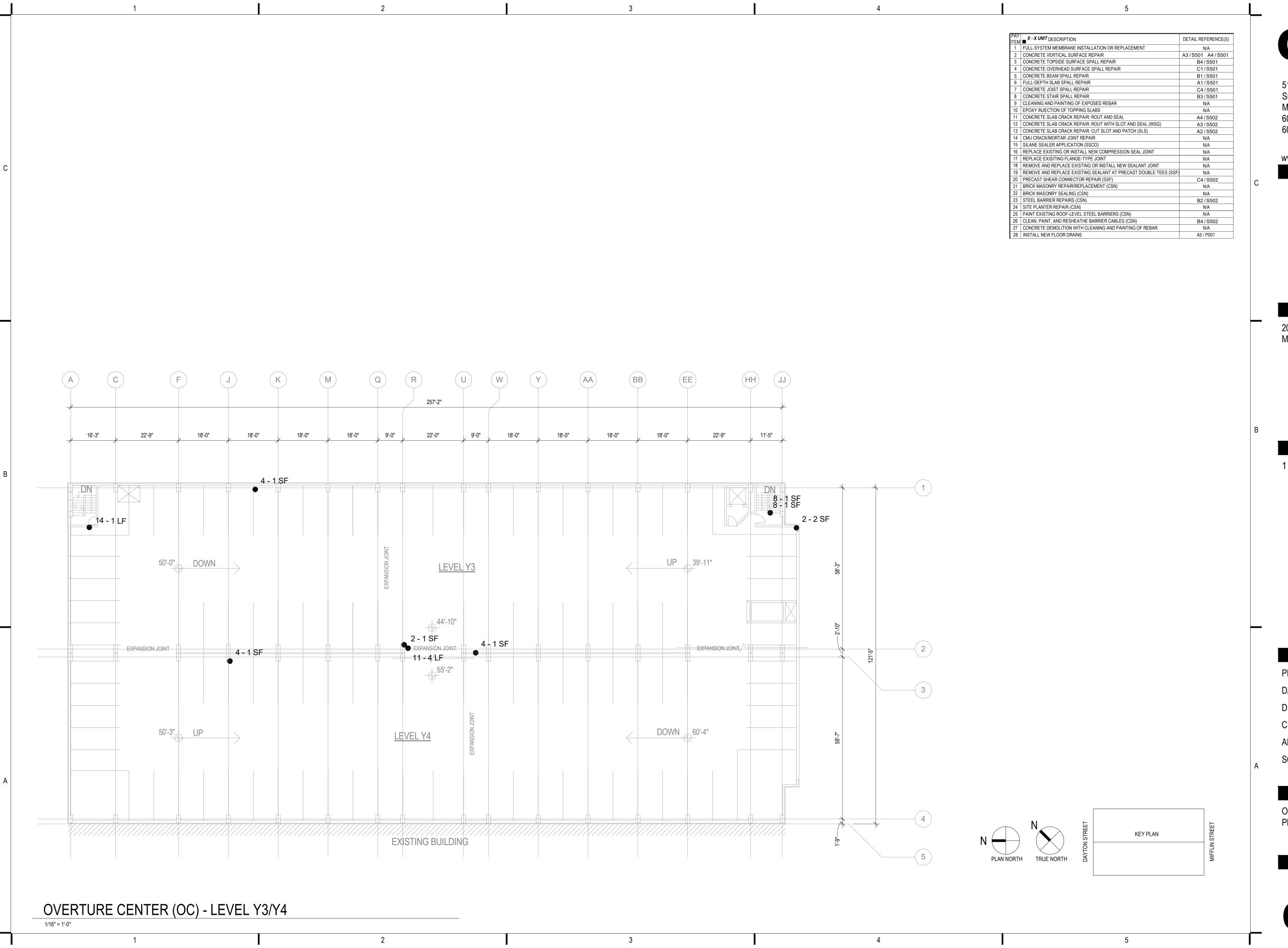
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PROJECT NUMBER: 2022-5014.02

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PROJECT INFORMATION:

04/03/2023

PROJECT NUMBER: 2022-5014.02

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AS NOTED SCALE:

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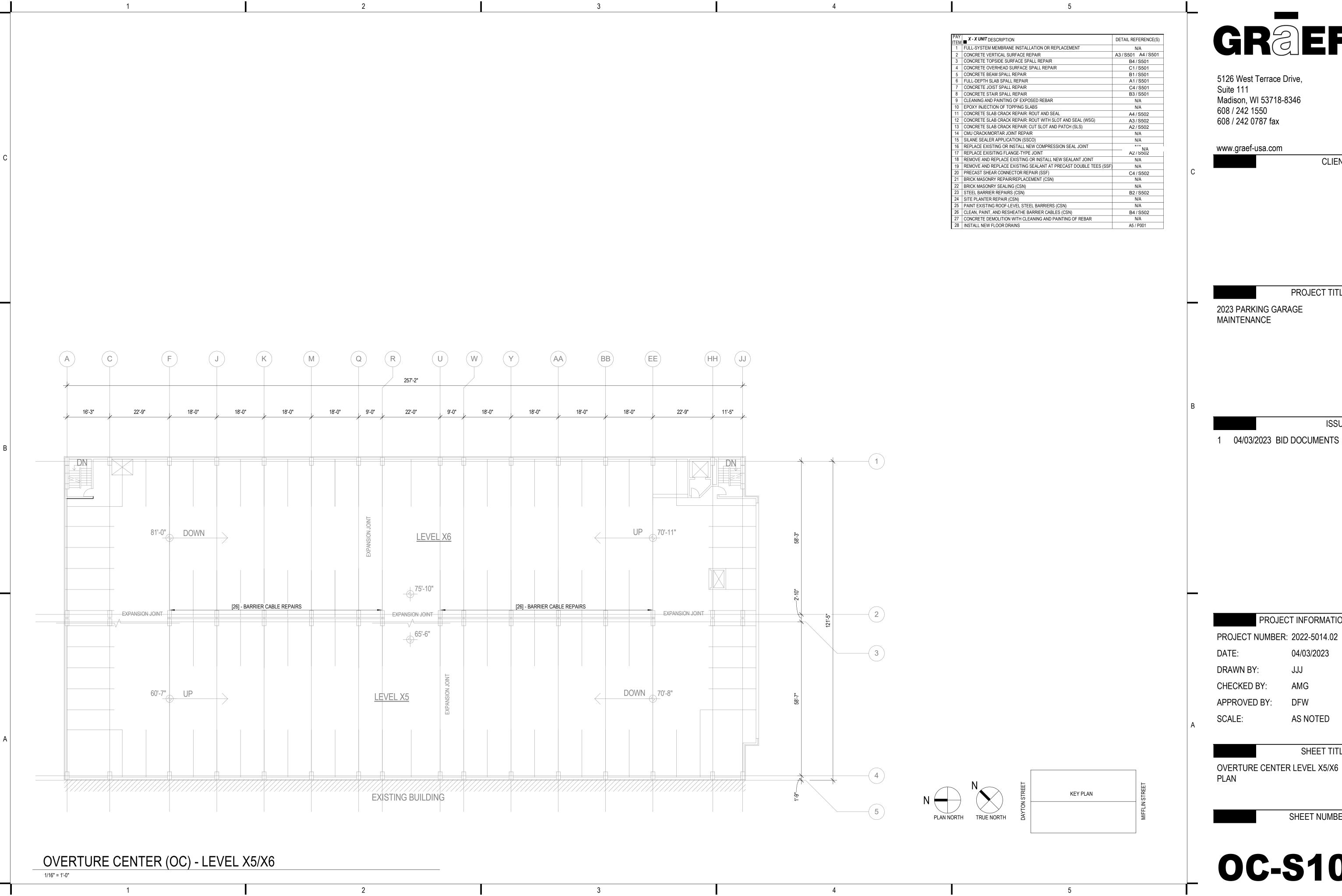
OVERTURE CENTER LEVEL Y3/Y4

PLAN

SHEET NUMBER:

OC-S104

4/6/2023 10:48:23 AM



CLIENT:

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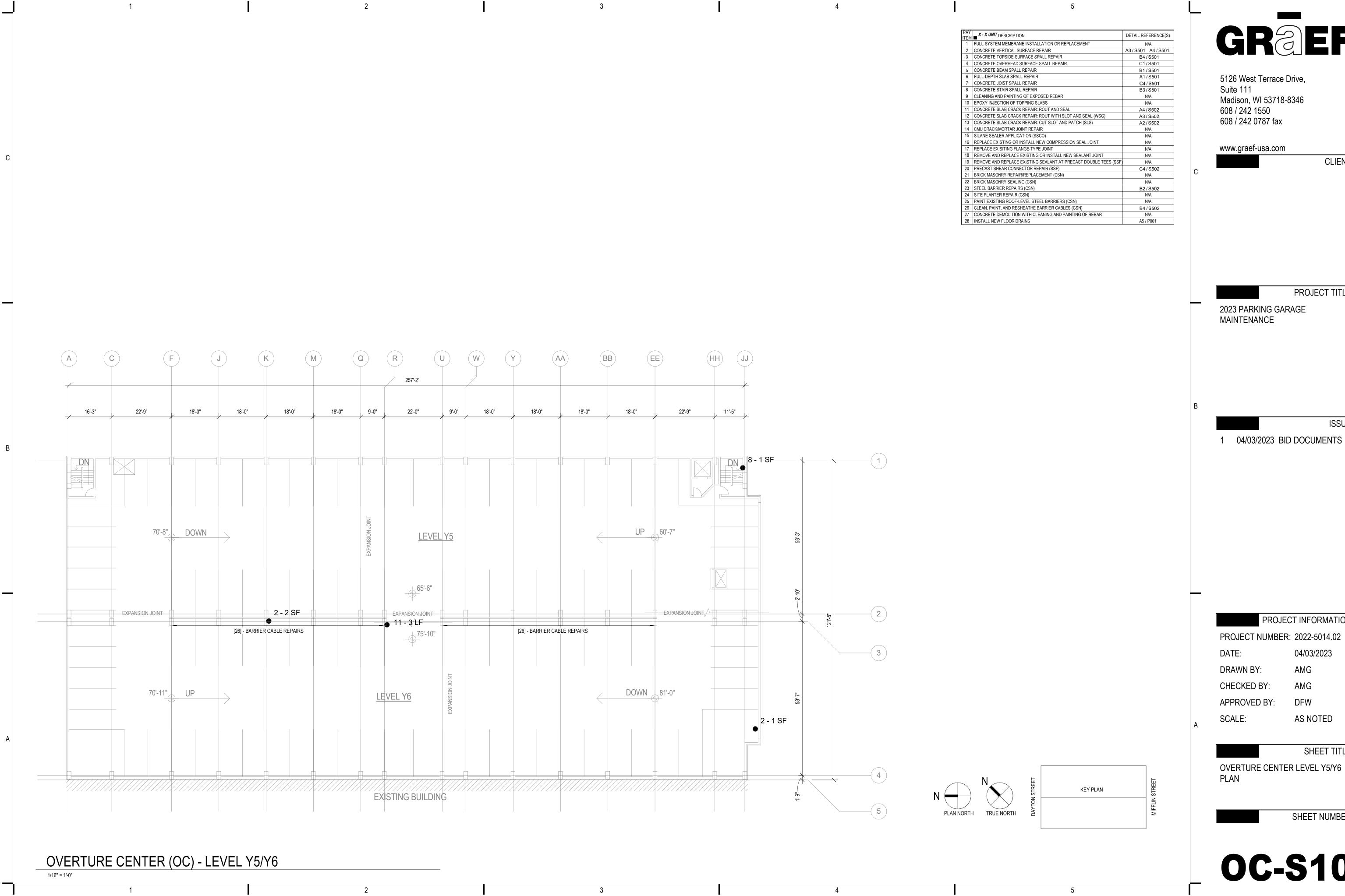
ISSUE:

PROJECT INFORMATION:

AS NOTED

SHEET TITLE:

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GREF

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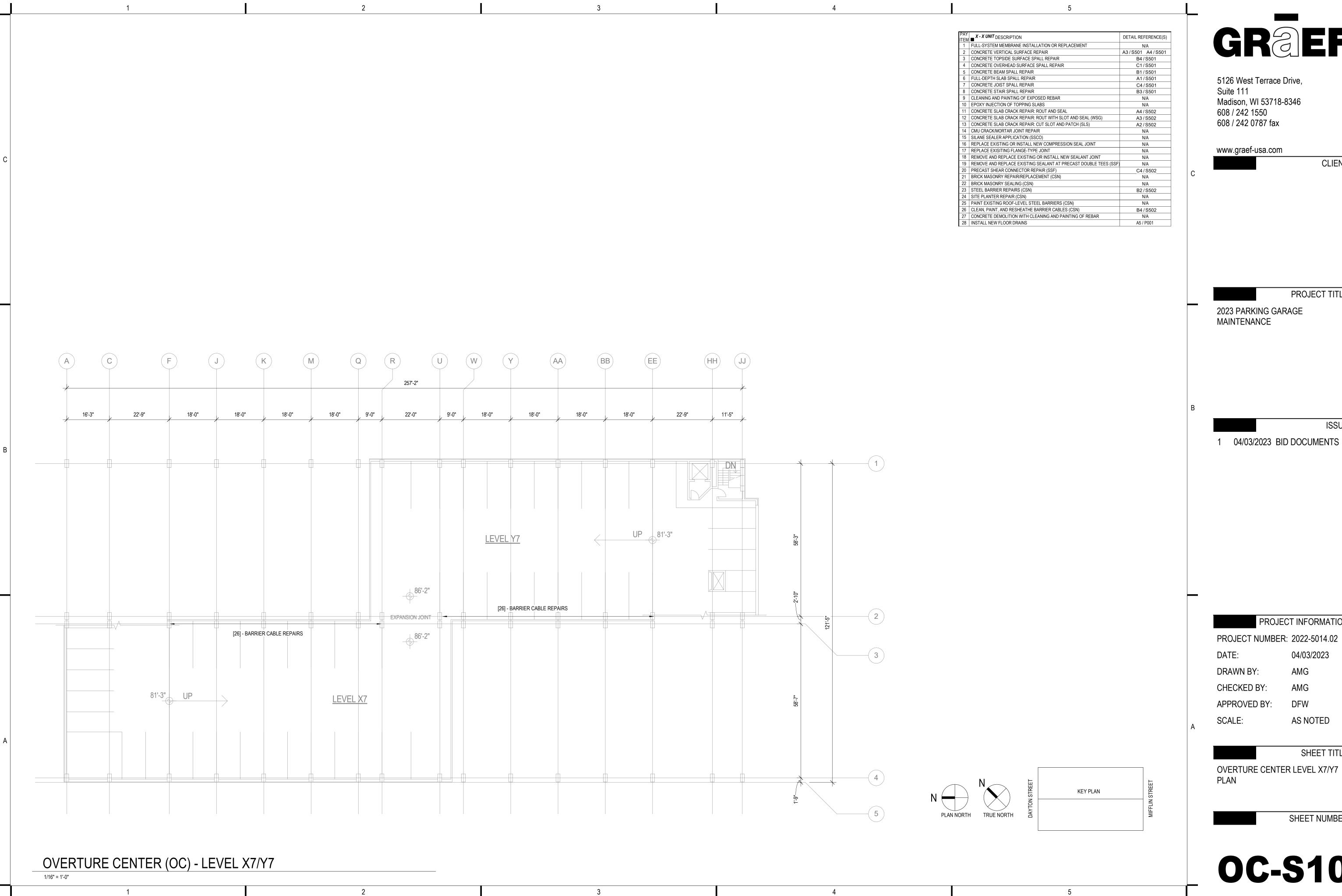
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PROJECT INFORMATION:

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OVERTURE CENTER LEVEL Y5/Y6

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GREF

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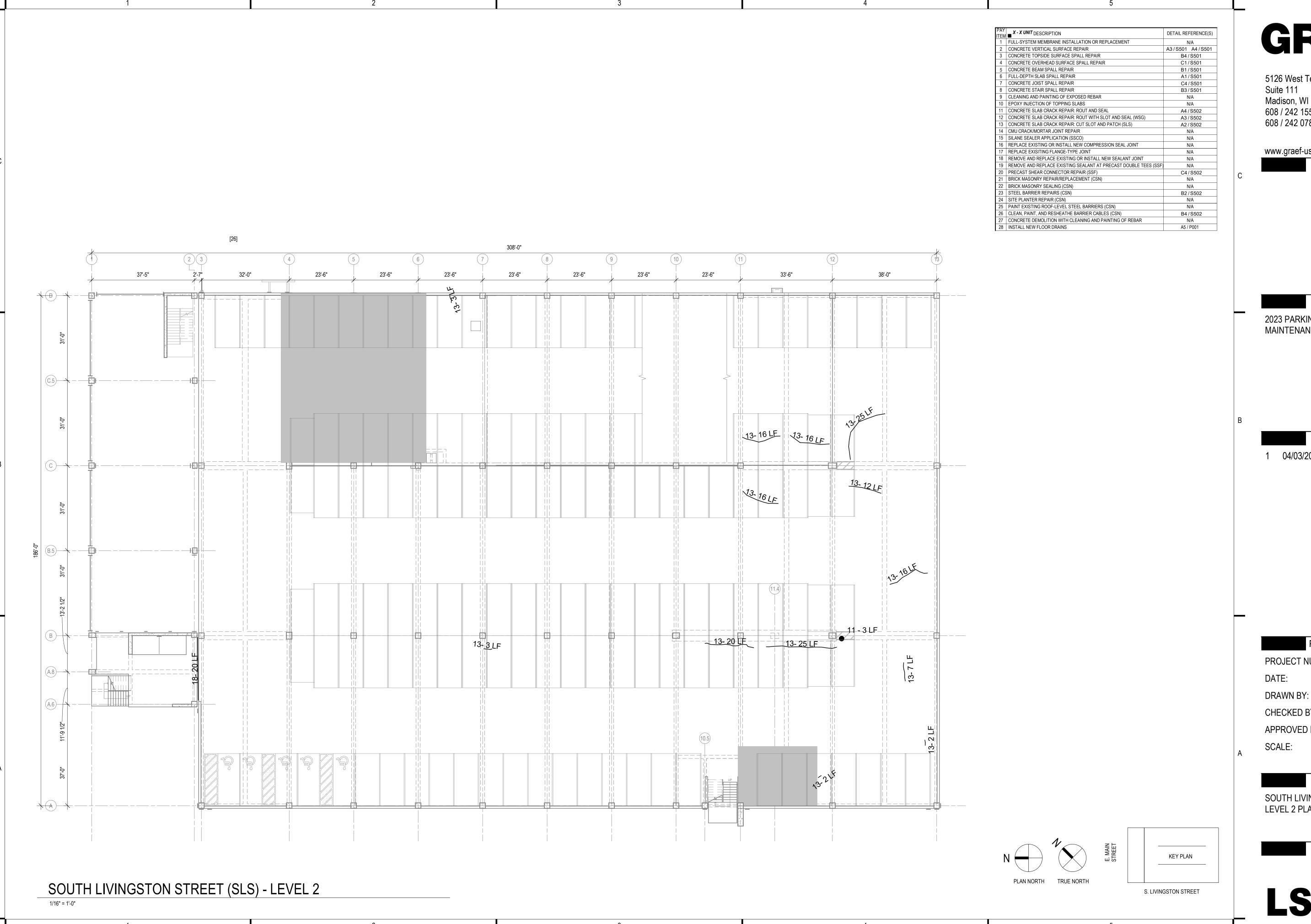
ISSUE:

PROJECT INFORMATION:

SHEET TITLE:

OVERTURE CENTER LEVEL X7/Y7

SHEET NUMBER:



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2023 PARKING GARAGE MAINTENANCE

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PROJECT INFORMATION:

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PROJECT NUMBER: 2022-5014.02

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APPROVED BY:

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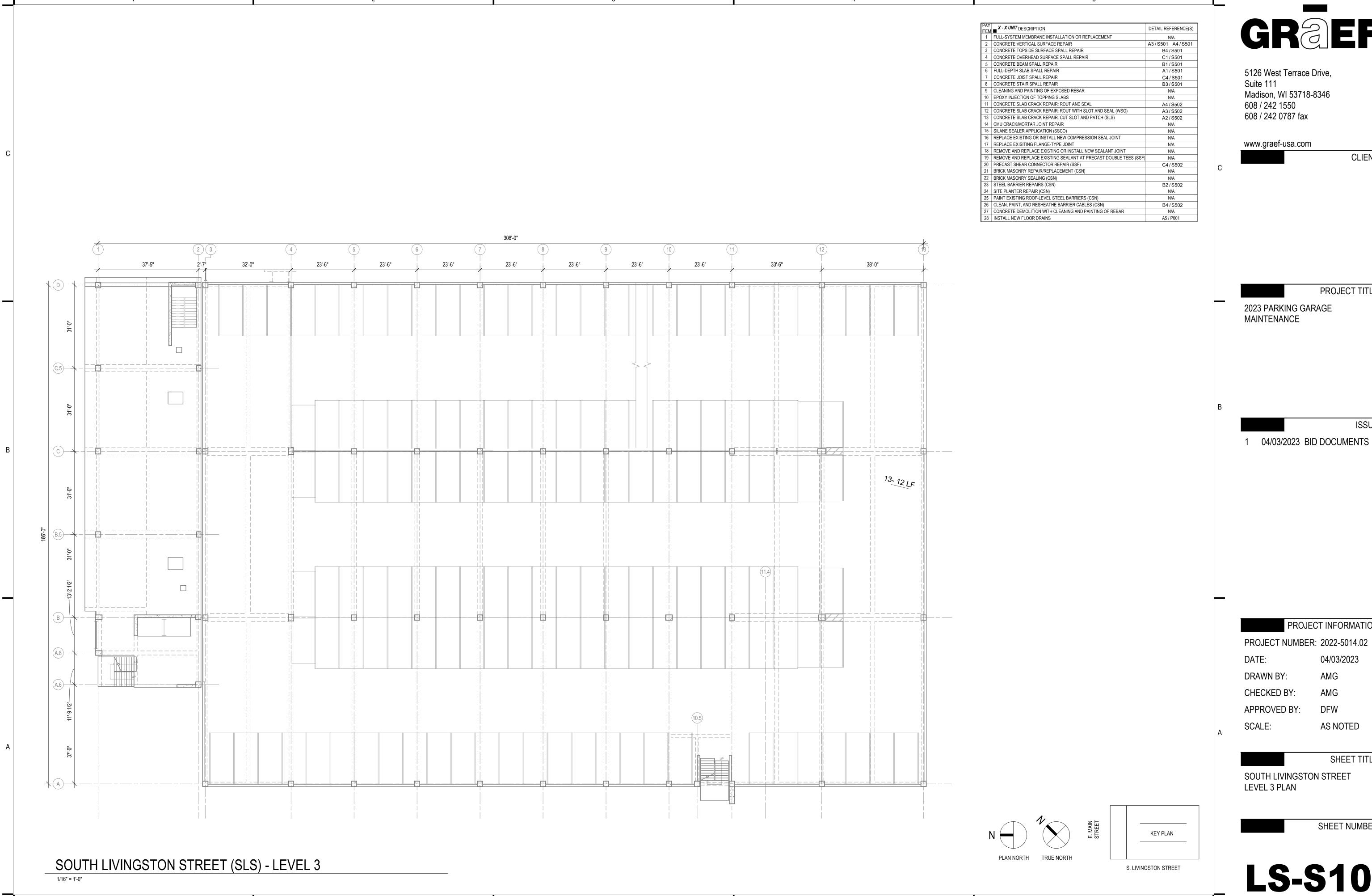
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SOUTH LIVINGSTON STREET

LEVEL 2 PLAN

SHEET NUMBER:

LS-S102



CLIENT:

PROJECT TITLE:

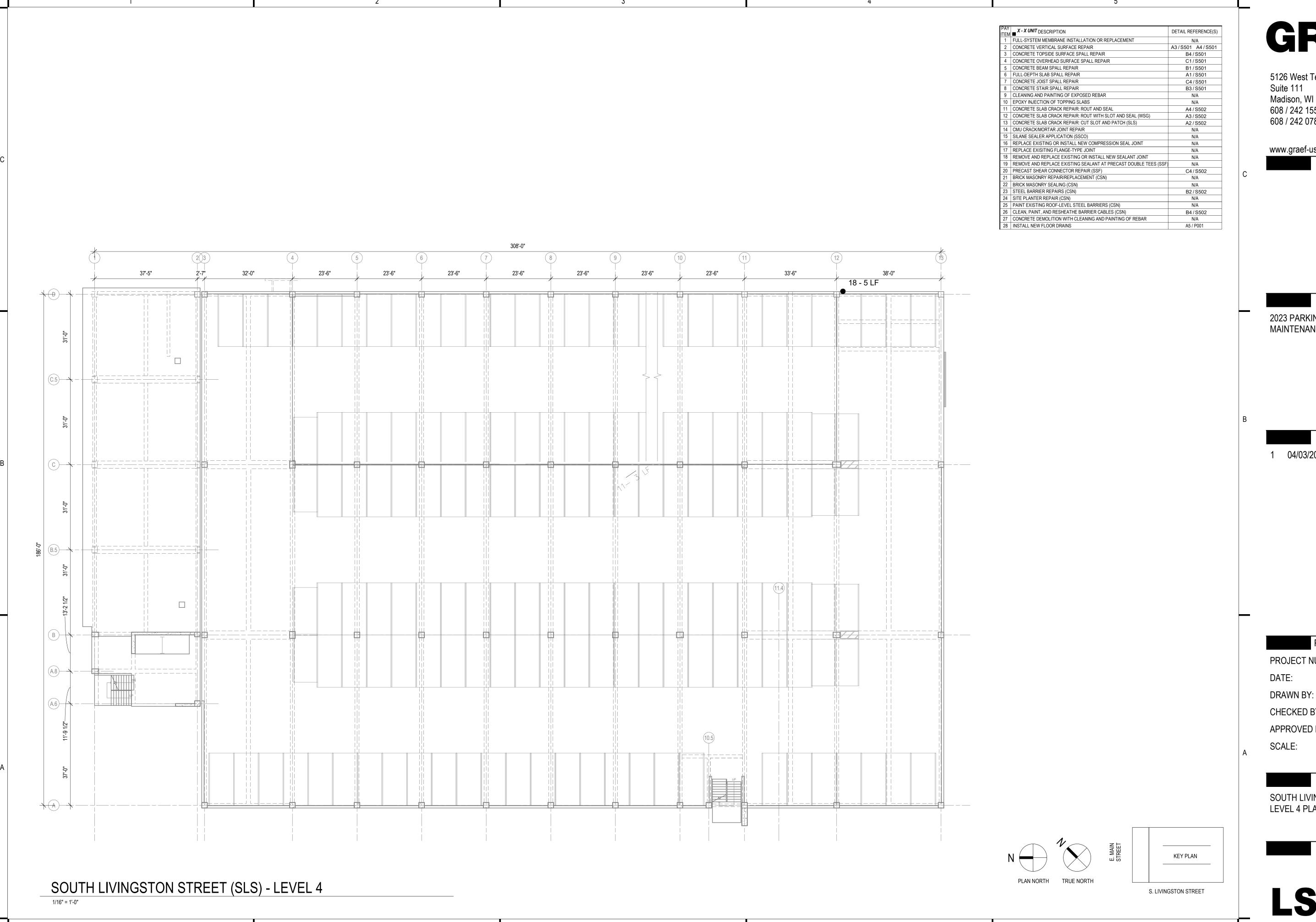
ISSUE:

PROJECT INFORMATION:

SHEET TITLE:

SHEET NUMBER:

LS-S103



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2023 PARKING GARAGE MAINTENANCE

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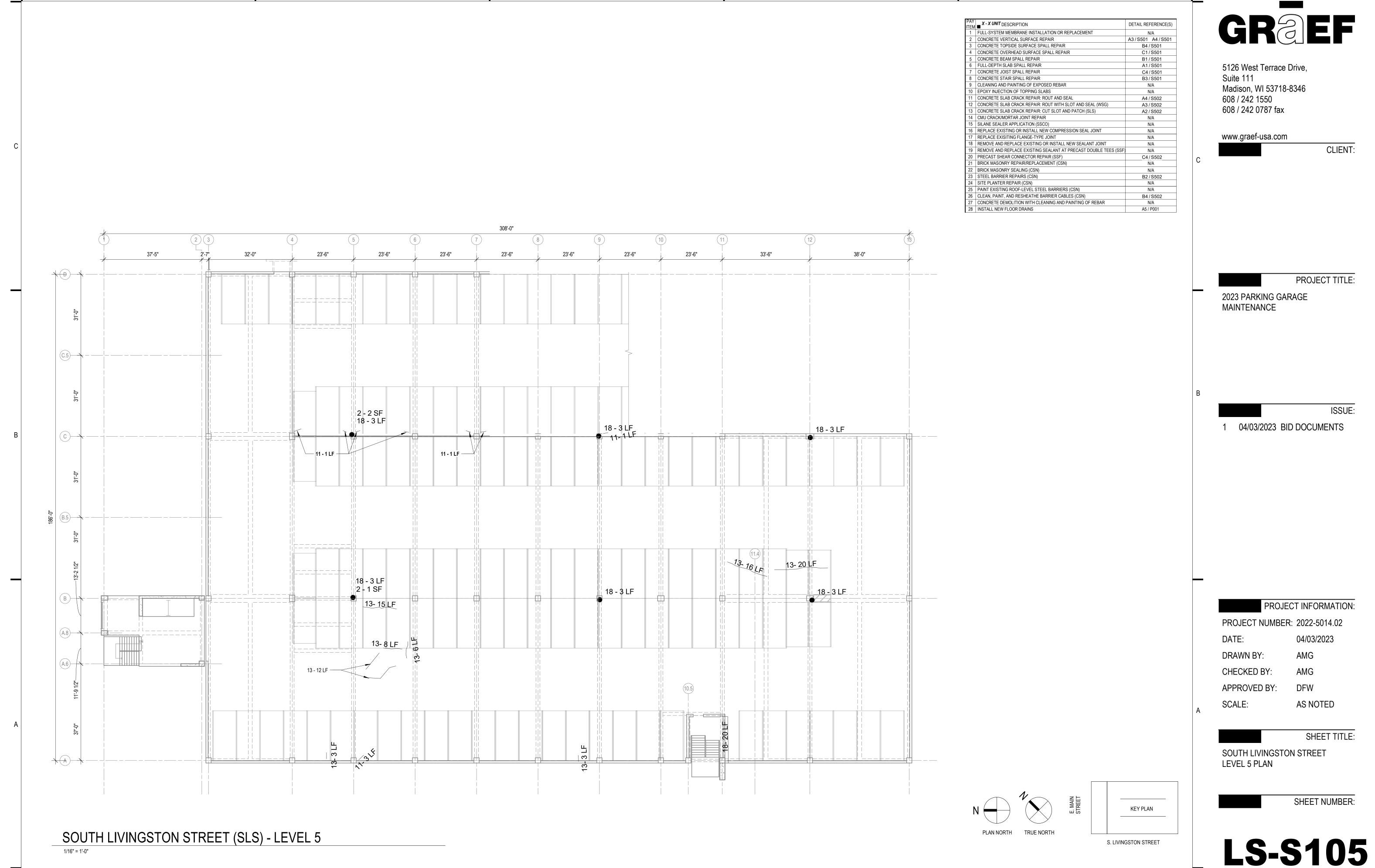
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SOUTH LIVINGSTON STREET

LEVEL 4 PLAN

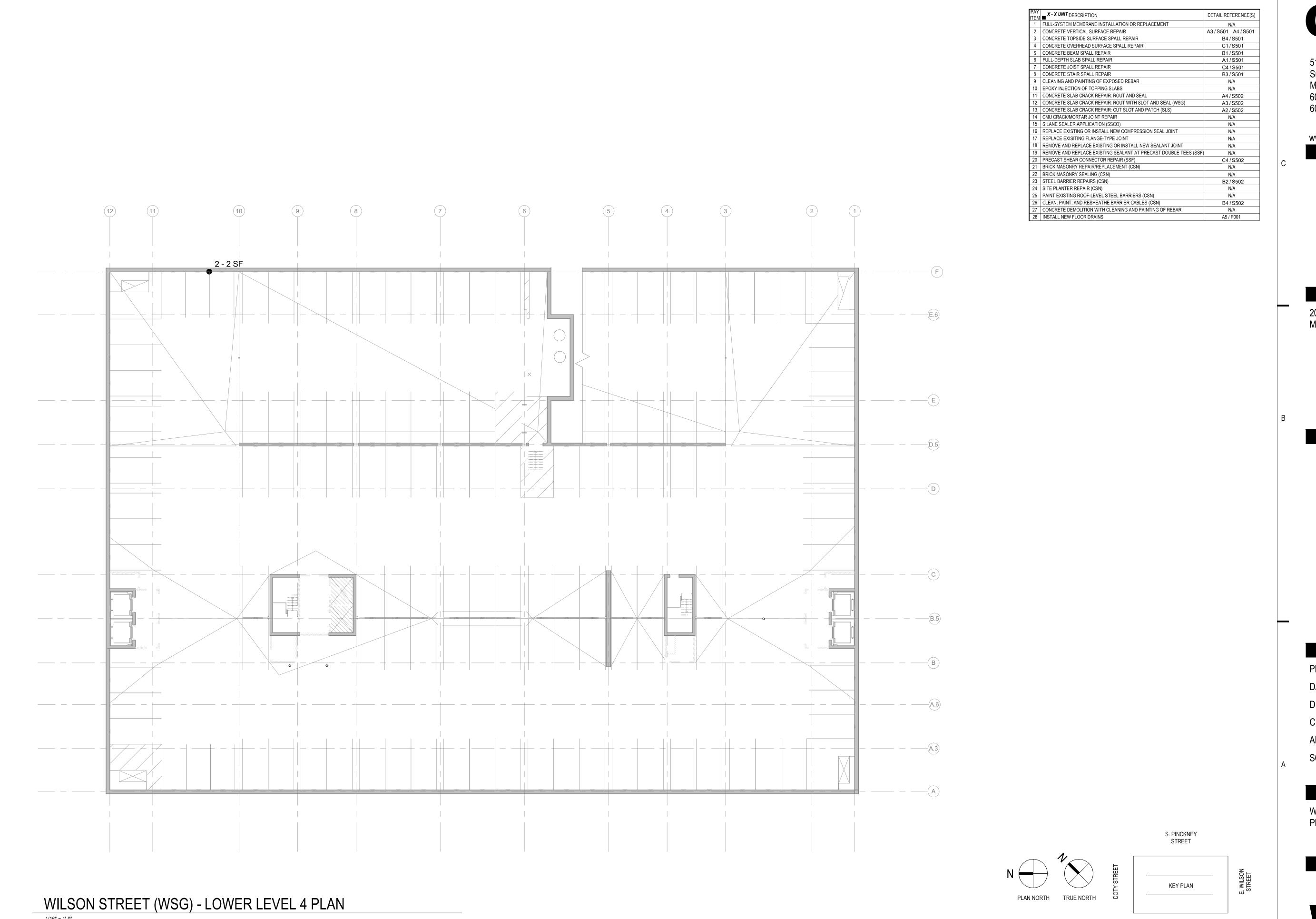
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ISSUE:



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DRAWN BY: Author

CHECKED BY:

APPROVED BY: Approver

SCALE: AS NOTED

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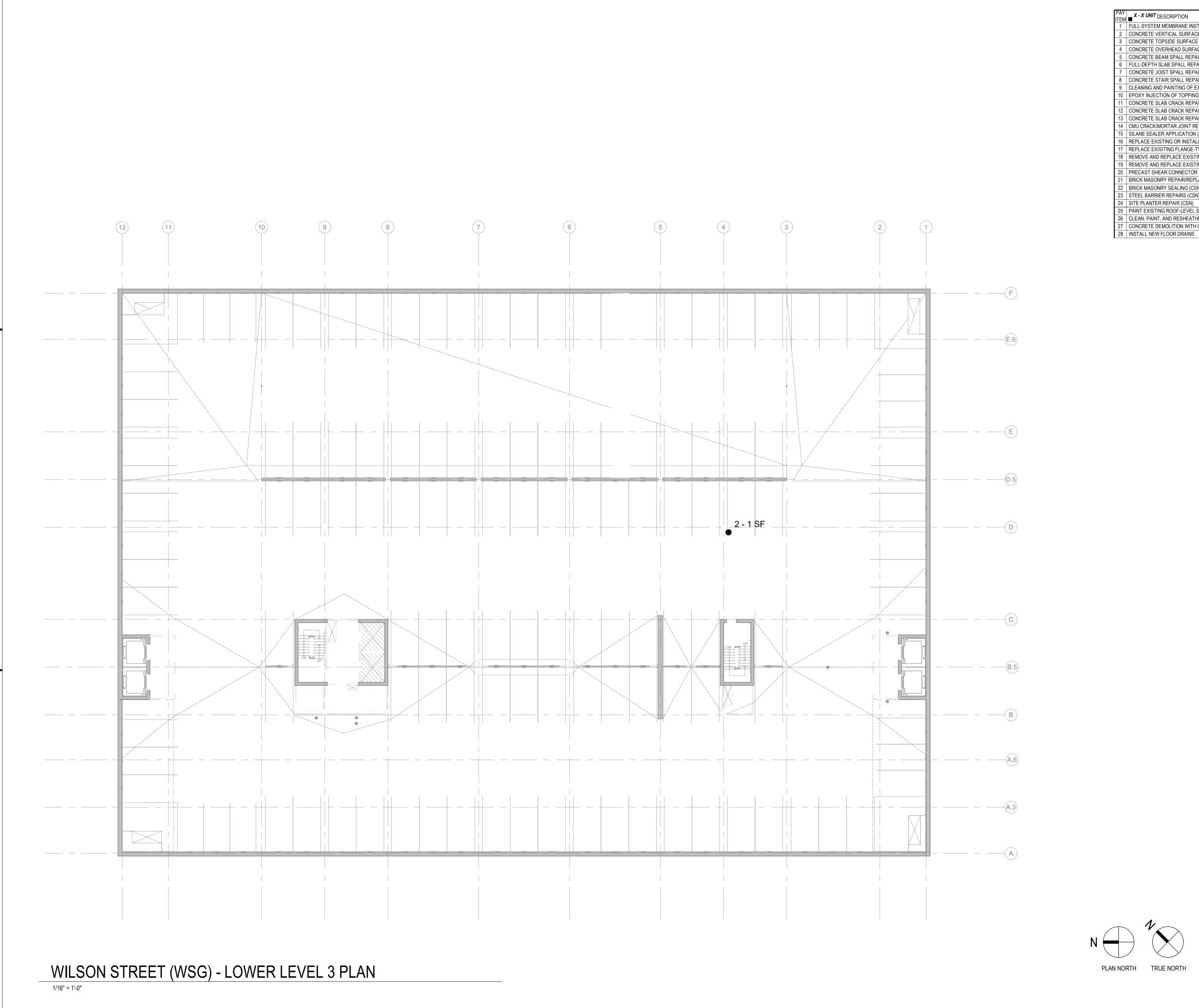
WILSON STREET LOWER LEVEL 4

PLAN

SHEET NUMBER:

WS-S096

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X - X UNIT DESCRIPTION DETAIL REFERENCE(S) FULL-SYSTEM MEMBRANE INSTALLATION OR REPLACEMENT N/A A3/S501 A4/S501 CONCRETE VERTICAL SURFACE REPAIR CONCRETE TOPSIDE SURFACE SPALL REPAIR B4 / S501 CONCRETE OVERHEAD SURFACE SPALL REPAIR C1/S501 CONCRETE BEAM SPALL REPAIR B1/S501 FULL-DEPTH SLAB SPALL REPAIR A1/S501 CONCRETE JOIST SPALL REPAIR C4/S501 3 CONCRETE STAIR SPALL REPAIR B3/S501 CLEANING AND PAINTING OF EXPOSED REBAR 0 EPOXY INJECTION OF TOPPING SLABS 1 CONCRETE SLAB CRACK REPAIR: ROUT AND SEAL A4/S502 2 CONCRETE SLAB CRACK REPAIR: ROUT WITH SLOT AND SEAL (WSG) A3/S502 3 CONCRETE SLAB CRACK REPAIR: CUT SLOT AND PATCH (SLS) A2 / S502 14 CMU CRACK/MORTAR JOINT REPAIR 15 SILANE SEALER APPLICATION (SSCO) 16 REPLACE EXISTING OR INSTALL NEW COMPRESSION SEAL JOINT 7 REPLACE EXISITING FLANGE-TYPE JOINT 18 REMOVE AND REPLACE EXISTING OR INSTALL NEW SEALANT JOINT 19 REMOVE AND REPLACE EXISTING SEALANT AT PRECAST DOUBLE TEES (SSI 20 PRECAST SHEAR CONNECTOR REPAIR (SSF) C4/S502 BRICK MASONRY REPAIR/REPLACEMENT (CSN) 22 BRICK MASONRY SEALING (CSN) 23 STEEL BARRIER REPAIRS (CSN) B2/S502 24 SITE PLANTER REPAIR (CSN) 25 PAINT EXISTING ROOF-LEVEL STEEL BARRIERS (CSN) 26 CLEAN, PAINT, AND RESHEATHE BARRIER CABLES (CSN) B4/S502 27 CONCRETE DEMOLITION WITH CLEANING AND PAINTING OF REBAR A5 / P001

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2023 PARKING GARAGE MAINTENANCE

ISSUE:

PROJECT INFORMATION:

04/03/2023

Author

PROJECT NUMBER: 2022-5014.02

DRAWN BY:

CHECKED BY: Checker

APPROVED BY: Approver

SCALE:

SHEET TITLE:

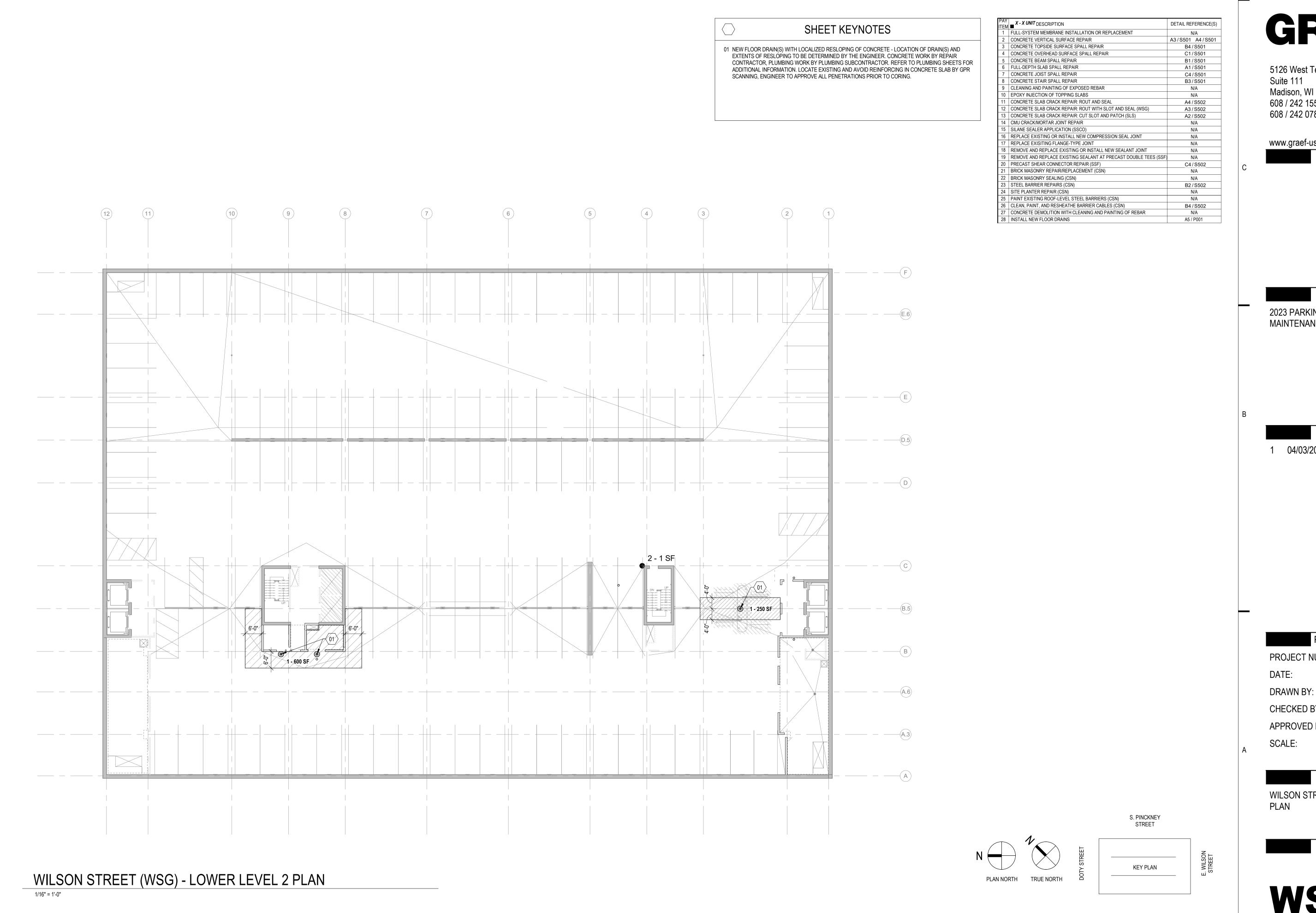
AS NOTED

WILSON STREET LOWER LEVEL 3

S. PINCKNEY STREET

KEY PLAN

SHEET NUMBER:



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2023 PARKING GARAGE MAINTENANCE

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1 04/03/2023 BID DOCUMENTS

PROJECT INFORMATION:

04/03/2023

PROJECT NUMBER: 2022-5014.02

CHECKED BY:

APPROVED BY:

AS NOTED SCALE:

SHEET TITLE:

WILSON STREET LOWER LEVEL 2

SHEET NUMBER:

X-X UNIT DESCRIPTION DETAIL REFERENCE(S) SHEET KEYNOTES FULL-SYSTEM MEMBRANE INSTALLATION OR REPLACEMENT N/A A3 / S501 A4 / S501 CONCRETE VERTICAL SURFACE REPAIR CONCRETE TOPSIDE SURFACE SPALL REPAIR B4/S501 01 NEW FLOOR DRAIN(S) WITH LOCALIZED RESLOPING OF CONCRETE - LOCATION OF DRAIN(S) AND CONCRETE OVERHEAD SURFACE SPALL REPAIR C1/S501 EXTENTS OF RESLOPING TO BE DETERMINED BY THE ENGINEER. CONCRETE WORK BY REPAIR CONCRETE BEAM SPALL REPAIR B1/S501 CONTRACTOR, PLUMBING WORK BY PLUMBING SUBCONTRACTOR. REFER TO PLUMBING SHEETS FOR FULL-DEPTH SLAB SPALL REPAIR A1/S501 ADDITIONAL INFORMATION. LOCATE EXISTING AND AVOID REINFORCING IN CONCRETE SLAB BY GPR CONCRETE JOIST SPALL REPAIR C4/S501 SCANNING, ENGINEER TO APPROVE ALL PENETRATIONS PRIOR TO CORING. CONCRETE STAIR SPALL REPAIR B3/S501 CLEANING AND PAINTING OF EXPOSED REBAR 0 EPOXY INJECTION OF TOPPING SLABS 1 CONCRETE SLAB CRACK REPAIR: ROUT AND SEAL A4/S502 CONCRETE SLAB CRACK REPAIR: ROUT WITH SLOT AND SEAL (WSG) A3/S502 CONCRETE SLAB CRACK REPAIR: CUT SLOT AND PATCH (SLS) A2/S502 4 CMU CRACK/MORTAR JOINT REPAIR 5 SILANE SEALER APPLICATION (SSCO) 16 REPLACE EXISTING OR INSTALL NEW COMPRESSION SEAL JOINT 7 REPLACE EXISITING FLANGE-TYPE JOINT 18 REMOVE AND REPLACE EXISTING OR INSTALL NEW SEALANT JOINT 19 REMOVE AND REPLACE EXISTING SEALANT AT PRECAST DOUBLE TEES (SSI PRECAST SHEAR CONNECTOR REPAIR (SSF) C4/S502 1 BRICK MASONRY REPAIR/REPLACEMENT (CSN) 22 BRICK MASONRY SEALING (CSN) 23 STEEL BARRIER REPAIRS (CSN) B2/S502 24 SITE PLANTER REPAIR (CSN) 25 PAINT EXISTING ROOF-LEVEL STEEL BARRIERS (CSN) 26 CLEAN, PAINT, AND RESHEATHE BARRIER CABLES (CSN) B4/S502 CONCRETE DEMOLITION WITH CLEANING AND PAINTING OF REBAR 28 INSTALL NEW FLOOR DRAINS A5 / P001 MAINTENANCE 6'-0"-1 - 650 SF DATE: DRAWN BY: CHECKED BY: SCALE: PLAN S. PINCKNEY STREET E. WILSON STREET KEY PLAN WILSON STREET (WSG) - LOWER LEVEL 1 PLAN PLAN NORTH TRUE NORTH

GREF

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

www.graef-usa.com

CLIENT:

PROJECT TITLE:

2023 PARKING GARAGE

ISSUE:

1 04/03/2023 BID DOCUMENTS

PROJECT INFORMATION:

04/03/2023

PROJECT NUMBER: 2022-5014.02

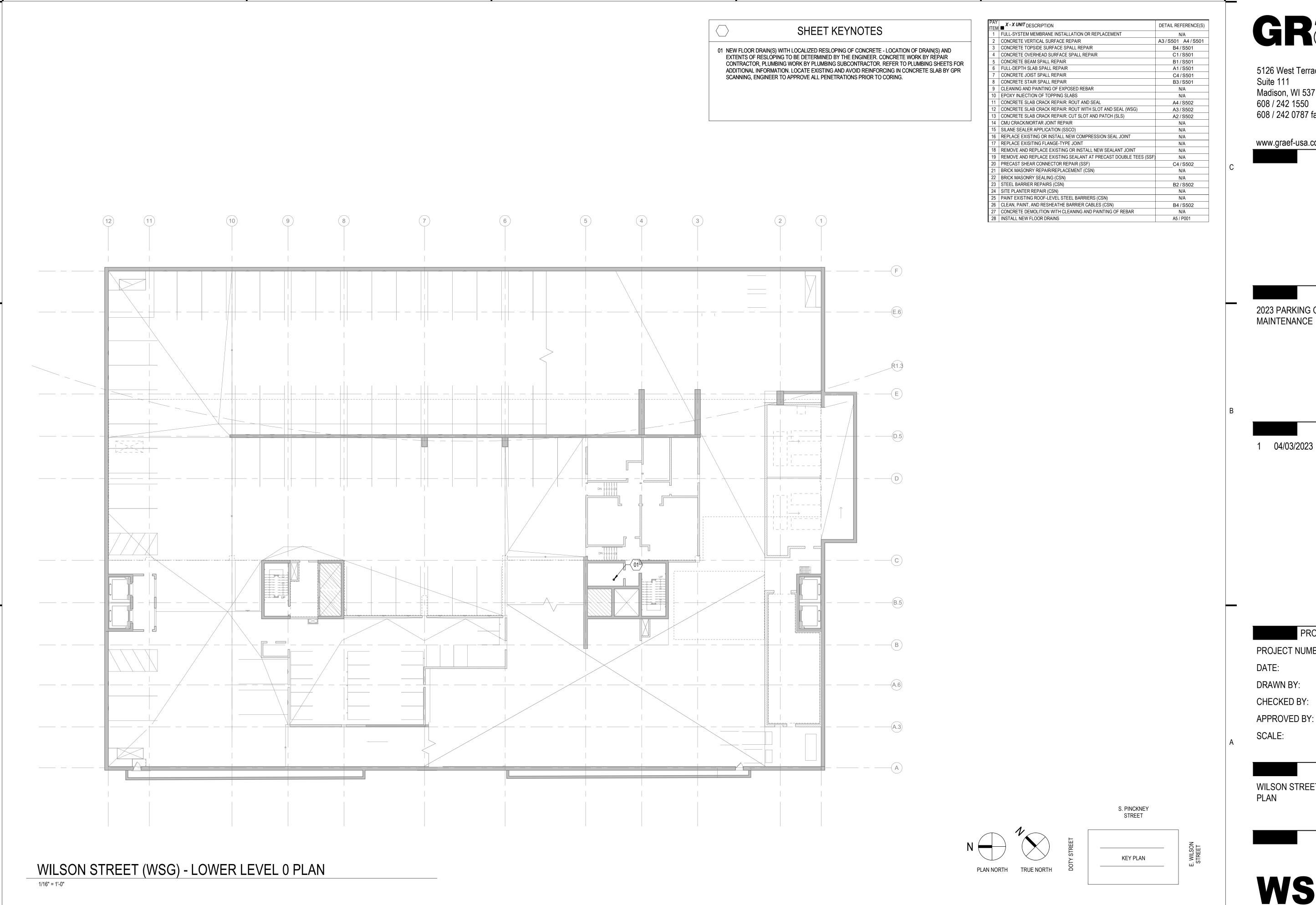
APPROVED BY:

AS NOTED

SHEET TITLE:

WILSON STREET LOWER LEVEL 1

SHEET NUMBER:



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CLIENT:

PROJECT TITLE:

2023 PARKING GARAGE MAINTENANCE

ISSUE:

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PROJECT INFORMATION:

04/03/2023

PROJECT NUMBER: 2022-5014.02

AS NOTED

SHEET TITLE:

WILSON STREET LOWER LEVEL 0

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 - EMERGENCY OVERFLOW DRAIN PIPING ANB ACID NEUTRALIZING BASIN EOD 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 FLOOR DRAIN FD SEWAGE EJECTOR BWV BACKWATER VALVE - NORMALLY CLOSED N.C. FIRE DEPARTMENT CONNECTION SQUARE FOOT NIC NOT IN CONTRACT FH - FUME HOOD 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 GAL - 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 THERMOSTATIC MIXING VALVE TMV 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 PITCH PITCHES UP OR DOWN - VENT 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								
I	ANGLE VALVE (AV)	Ø	FLOOR DRAIN	o	RISER UP (ELBOW)				
<u></u>	AQUASTAT		FLOOR SINK	0	ROOF DRAIN				
$\Rightarrow \Rightarrow \Rightarrow$	BACKFLOW PREVENTER (BFP or RPZ)	—	FLOW DIRECTION ARROW	<u> </u>	SANITARY TEE				
- ₹	BALANCING VALVE (BV)	<u> </u>	FLOW SWITCH (FS)	− Ō−	SOLENOID VALVE (SV)				
	BALL VALVE	→ >>	GATE VALVE (GV)	+>+	STRAINER				
	BRANCH, BOTTOM CONNECTION		GLOBE VALVE (GLV)	+++-	TEE BRANCH				
	BRANCH, TOP CONNECTION	Ŧ	HOSE BIBB OR WALL HYDRANT	T	TEMPERATURE TRANSMITTER				
$\neg \vdash$	BUTTERFLY VALVE (BFV)	©	HUB DRAIN	<u> </u>	THERMOMETER				
—]	CAP ON END OF PIPE	9	PRESSURE GAUGE WITH VALVE (PG)	- ₩-	THERMOSTATIC MIXING VALVE				
<u></u>	CHECK VALVE (CV)	### PSI	PRESSURE-REDUCING VALVE (PRV)	-	UNION (SCREWED)				
—— co	CLEANOUT PLUG (CO)	p PS	PRESSURE SWITCH (PS)	x" wco ア	WALL CLEANOUT WITH SIZE (WCO)				
<u>-+₹</u>	DOUBLE SANITARY TEE	P	PRESSURE TRANSMITTER	_ "A"	WATER HAMMER ARRESTER (WHA) WITH PDI SIZING				
∞—	DRAIN WITH P-TRAP		RECIRCULATION PUMP	-[M]	WATER METER (WM)				
0	FLOOR/GRADE CLEANOUT (FCO/GCO)	c	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 LOCATION LEGEND									
	D1	D2	D3	D4	D5	D6			
	C1	C2	С3	C4	C5	C6			
	B1	B2	В3	B4	B5	В6			
	A1	A2	A3	A4	A5	A6			

GENERAL SYMBOLS

INVERT ELEVATION

	REVISION CLOUD WITH TAG	123.00'	INVERTIBLE VALUE
####	VIEW CALLOUT (ENLARGED PLANS)	+	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		

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)		

PLUMBING SYSTEM ABBREVIATIONS

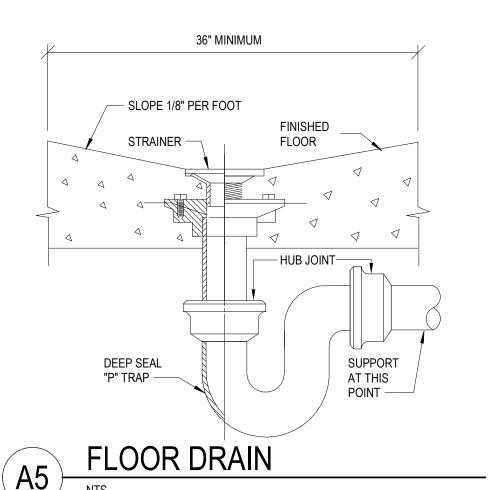
	-—	(501 121)	iLD)							
				DRA	IN AND (CLEANC	OUT SCH	HEDULE		
2	MANUFACTURE		TURER MODEL NO. S		BODY	STRA	INER	OUTLET SIZE	DESCRIPTION	NOTES
3 WANUFACTURE		TOKEK WODEL NO.		SERVICE	MATERIAL	SIZE [IN]	FINISH	[IN]	DESCRIPTION	
1	JR SM	HTIN	2140-B	P-Sanitary	CAST IRON	5	CAST IRON	3"	HEAVY DUTY ROUND 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.
- 5. 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

27. PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING AND PATCHING OF HOLES AND OPENINGS IN EXISTING WALLS AND FLOORS

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:

2023 PARKING GARAGE **MAINTENANCE**

ISSUE:

PROJECT INFORMATION:

PROJECT NUMBER: 2022-5014.03

04/03/2023

DRAWN BY:

CHECKED BY:

APPROVED BY:

AS NOTED SCALE:

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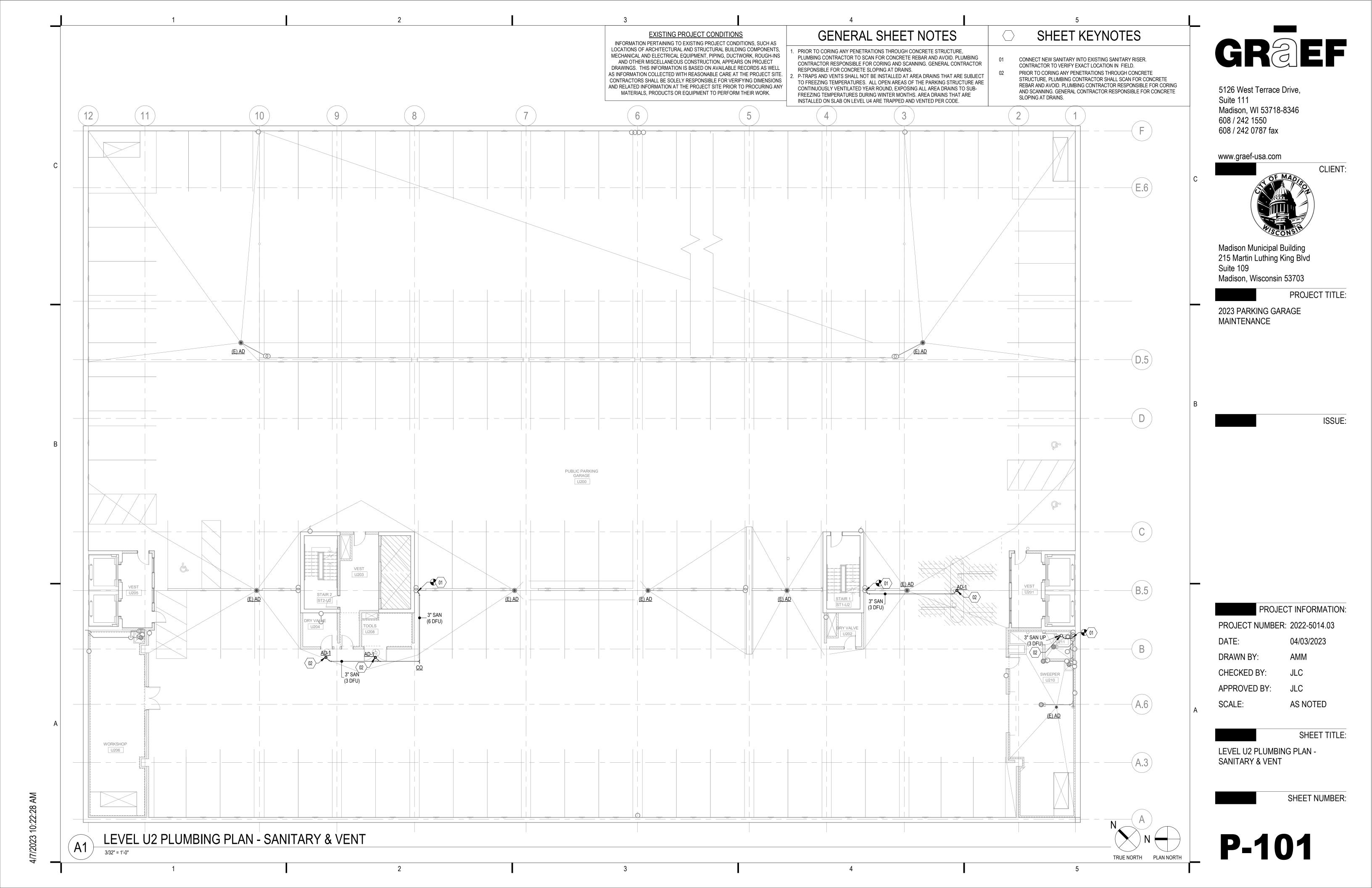
PLUMBING SYMBOLS, SCHEDULES, & ABBREVIATIONS

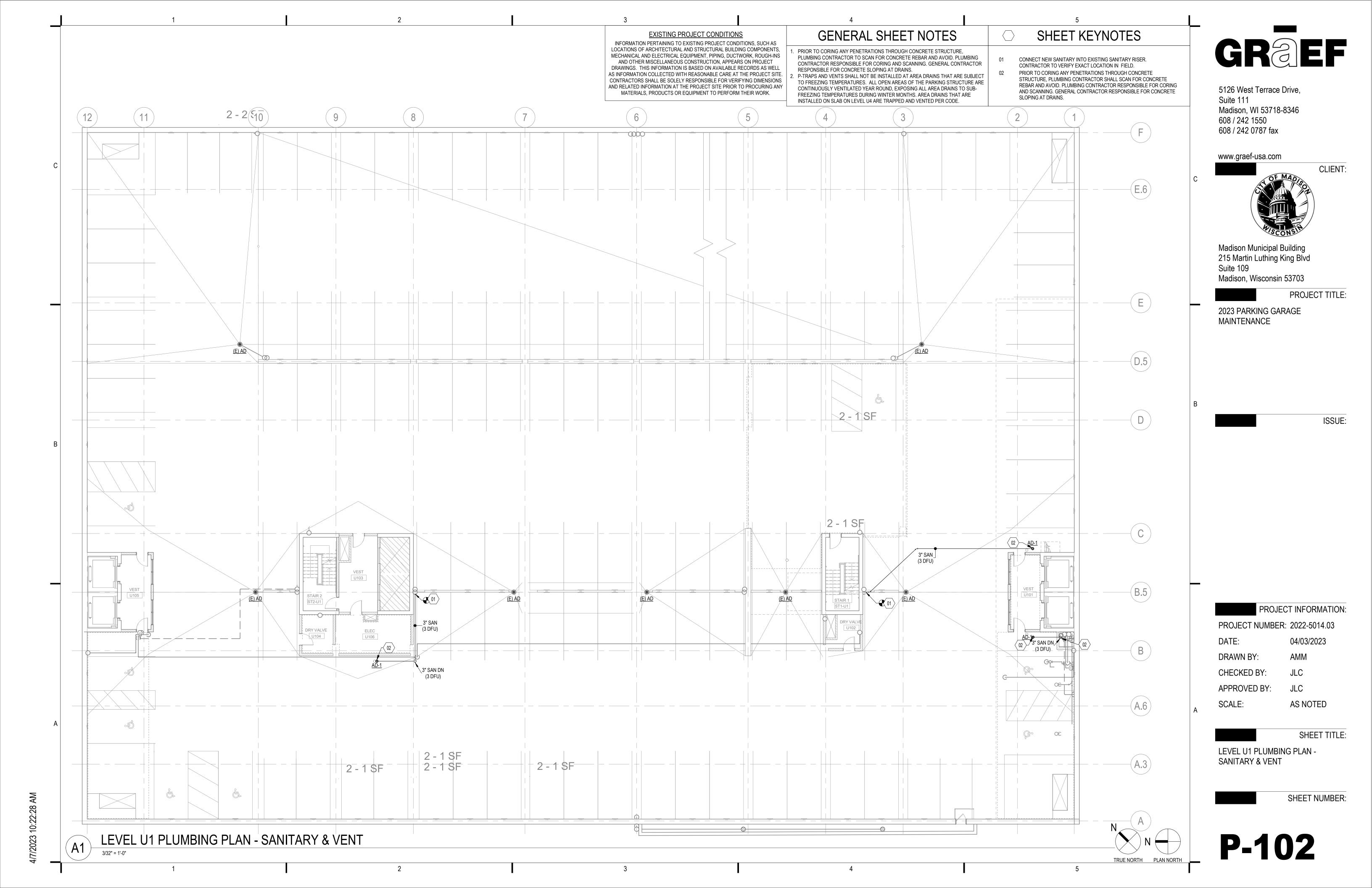
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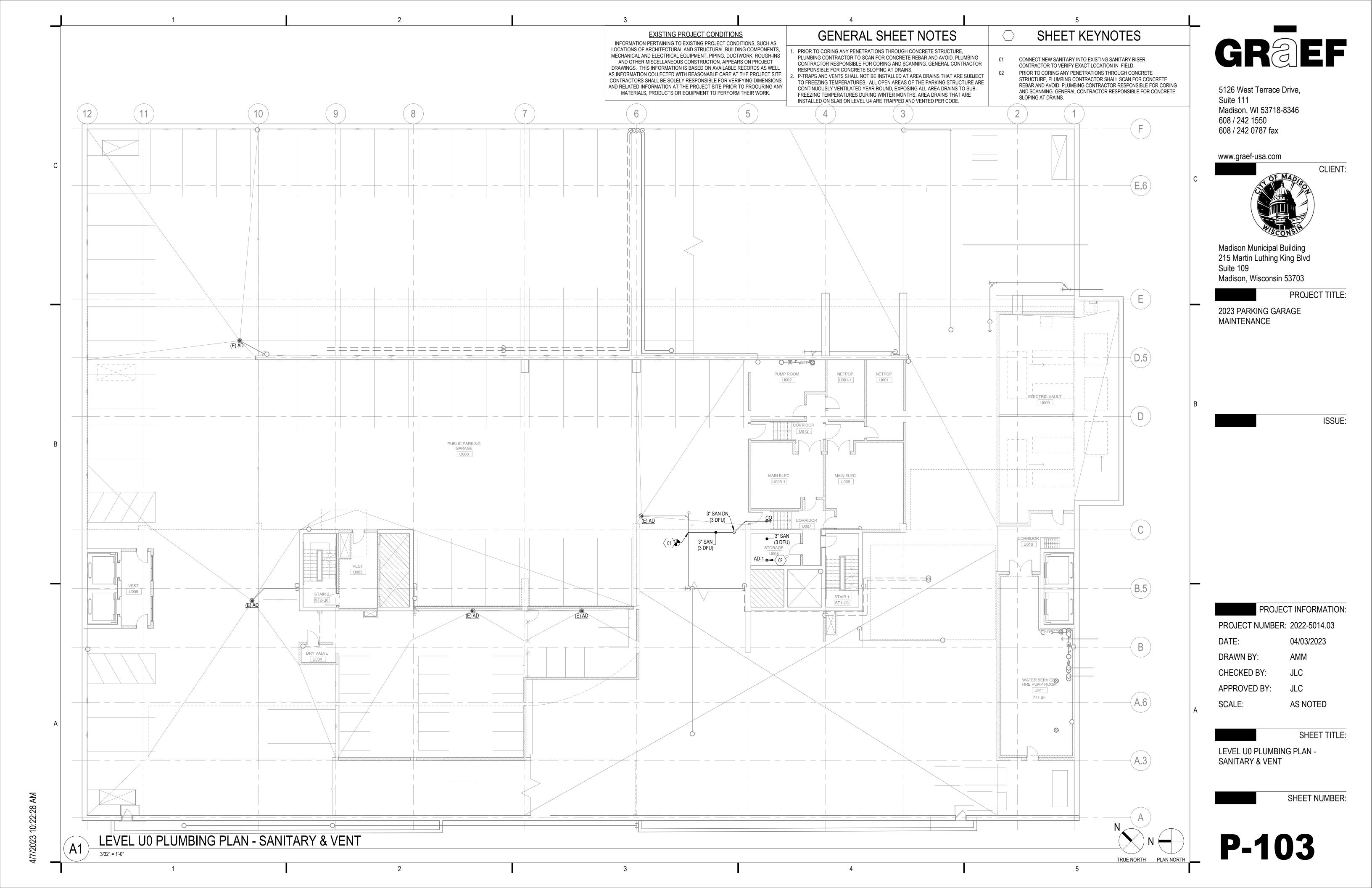
P-001

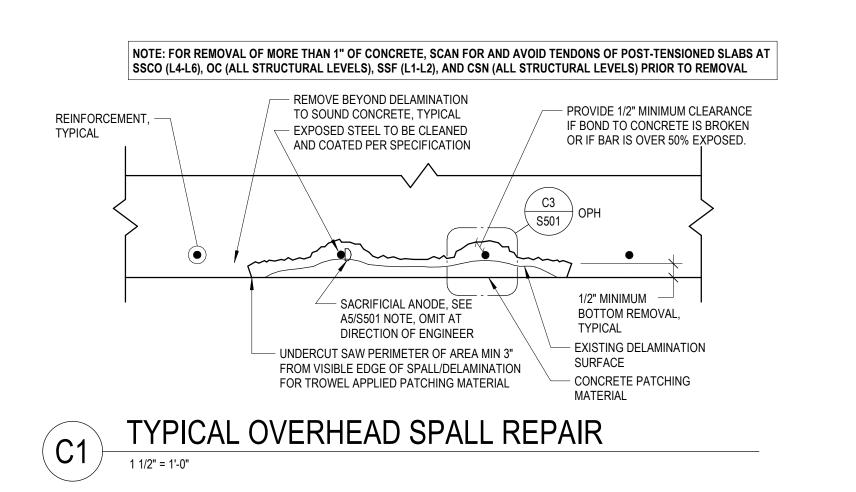
7/2023

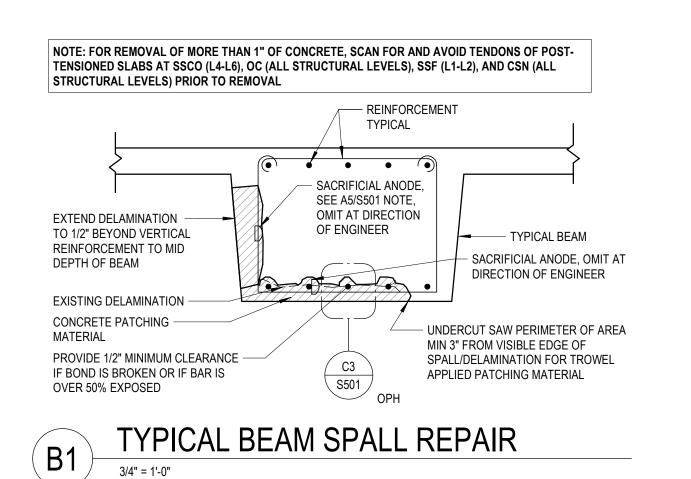
YH - YARD HYDRANT

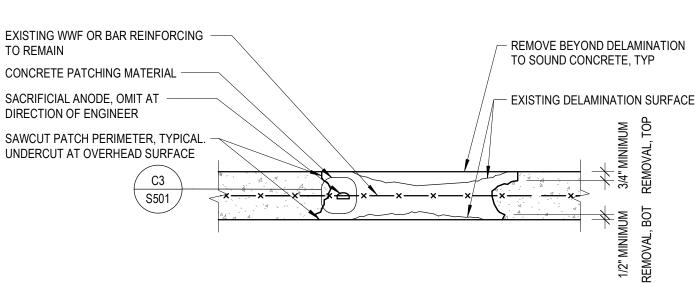












NOTE: ADDITIONAL REINFORCING AND DETAILING TO BE PROVIDED WHERE FULL-DEPTH SPALL OCCURS AS REQUIRED BY ENGINEER



SACRIFICIAL ANODE TO BE TIED TO OR REINFORCEMENT BETWEEN ADJACENT REINFORCEMENT PROVIDE CLEARANCE IF BOND TO CONCRETE IS BROKEN OR IF BAR IS OVER 50% EXPOSED. CLEARANCE VARIES. SEE INDIVIDUAL SPALL REPAIR DETAIL.

NOTES:

1. GALVANIC ANODES TO BE TIED TO EXISTING STEEL REINFORCING AFTER REMOVAL OF CORROSION BUT PRIOR TO PROTCTIVE COATING APPLICATION. FOR REPAIRS OF 4 SF OR GREATER: PLACE ON GRID OF 2'-0"x2'-0" WITH A MINIMUM OF (4) SPACED EQUALLY ABOUT REPAIR PERIMETER.

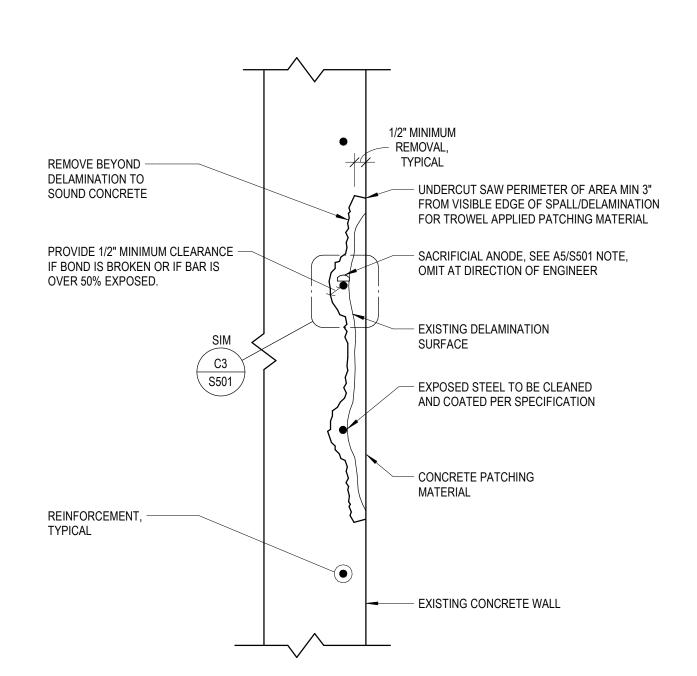
TYPICAL REBAR/STRAND CLEARANCE

REPAIRS OF 1 SF OR LESS: PLACE MINIMUM OF (1) WITHIN THE REPAIR AREA.

- EXISTING STEEL PIPE SAWCUT EDGES 1/2" DEEP TO PREVENT FEATHERING AT PATCH EDGES - SEALANT AT JOINT REMOVE UNSOUND CONCRETE, CLEAN EXPOSED REINFORCING AND COAT WITH PROTECTIVE REBAR REMOVE AND REPLACE NOSING/TREAD AS REQUIRED - GRIT-BLAST OR WIRE-BRUSH EXPOSED STEEL PIPE TO NEAR WHITE METAL CONDITION AND COAT WITH ZRC PRIOR TO CASTING NEW CONCRETE, PER SPECIFICATIONS - #4 Hairpin, Drill and Epoxy 6" into 4" ____ EXISTING CONCRETE NOTES: - EXISTING STAIR, SOUND CONCRETE

1. IF REINFORCEMENT IN THE STAIR IS EPOSED, ADD SACRIFICIAL ANODES AS DIRECTED BY THE ENGINEER AFTER STEEL IS CLEANED BUT PRIOR TO ZINC COATING.

STAIR SPALL REPAIR



TYPICAL CONCRETE WALL SPALL REPAIR

TYPICAL COLUMN SPALL REPAIR

- SAWCUT EDGES 1/2" DEEP SACRIFICIAL ANODE, — 3/4" MIN REMOVAL ALL AROUND BAR, TYP - EXISTING (2) #11 BOTTOM BARS REMOVE UNSOUND CONCRETE, CLEAN EXPOSED REINFORCING AND COAT WITH PROTECTIVE REBAR PRIMER AND REPLACE WITH NEW CONCRETE PER SPECIFICATIONS, TYP

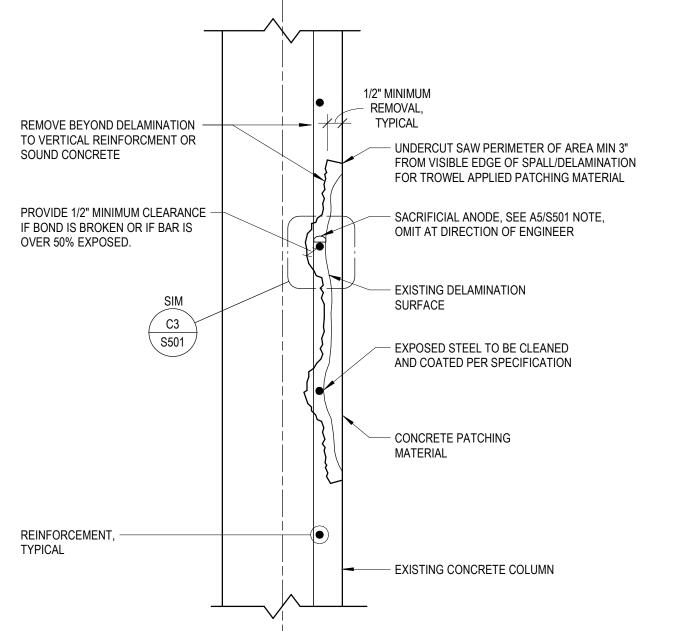
BOTTOM OF JOIST REPAIR

NOTE: FOR REMOVAL OF MORE THAN 1" OF CONCRETE, SCAN FOR AND AVOID TENDONS OF POST-TENSIONED SLABS AT SSCO (L4-L6), OC (ALL STRUCTURAL LEVELS), SSF (L1-L2), AND CSN (ALL STRUCTURAL LEVELS) PRIOR TO REMOVAL EXPOSED STEEL TO BE CLEANED AND COATED PER SPECIFICATION - SAWCUT PATCH MIN 3" FROM VISIBLE EDGE OF - CONCRETE PATCHING MATERIAL SPALL/DELAMINATION, - EXISTING DELAMINATION SURFACE TYPICAL - SACRIFICIAL ANODE, SEE A5/S501 NOTE, OMIT AT DIRECTION OF ENGINEER S501 — FLOOR SLAB REINFORCEMENT - PROVIDE 3/4" MINIMUM CLEARANCE IF BOND IS BROKEN OR IF BAR IS OVER 50% EXPOSED. **TYPICAL**

- REMOVE BEYOND DELAMINATION

TO SOUND CONCRETE, TYPICAL

YPICAL TOPSIDE SPALL REPAIR



DRAWN BY:

PROJECT INFORMATION

04/03/2023

GREEF

CLIENT

PROJECT TITLE:

ISSUE:

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2023 PARKING GARAGE

1 04/03/2023 BID DOCUMENTS

MAINTENANCE

CHECKED BY: APPROVED BY:

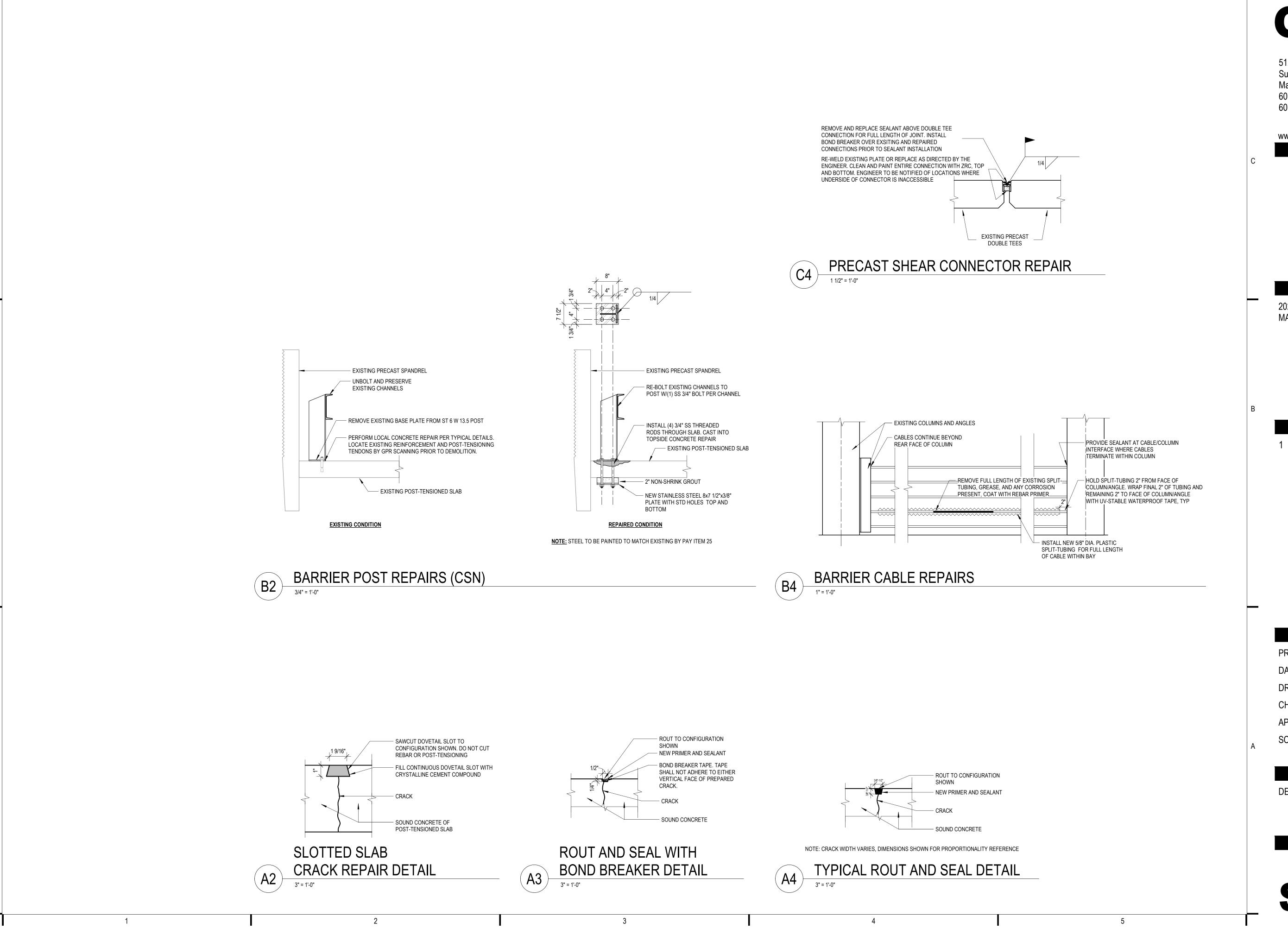
DATE:

AS NOTED SCALE:

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SHEET TITLE: DETAILS

SHEET NUMBER



4/6/2023

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CLIENT:

PROJECT TITLE:

2023 PARKING GARAGE MAINTENANCE

ISSUE:

1 04/03/2023 BID DOCUMENTS

PROJECT INFORMATION:

PROJECT NUMBER: 2022-5014.02

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CHECKED BY:

APPROVED BY: DFW

SCALE:

SHEET TITLE:

AS NOTED

04/03/2023

DETAILS

SHEET NUMBER:

S502