

ISFA - GUARANTEED RATE STADIUM - WASTE AND VENT PIPING PHASE X

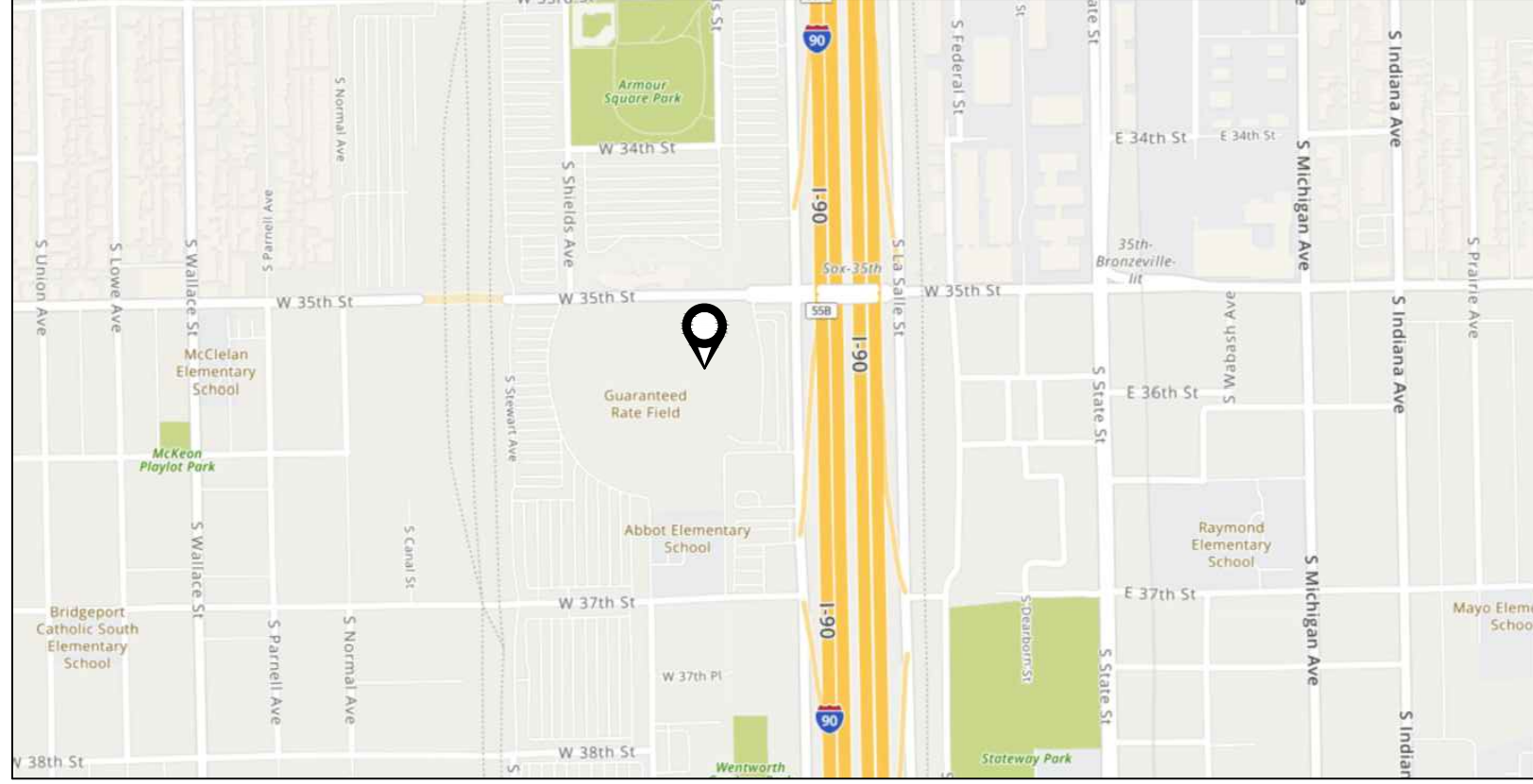
333 W 35TH STREET
CHICAGO, ILLINOIS 60616

ABBREVIATIONS

ACW	AUTOMATIC CLOTHES WASHER	KW	KITCHEN WASTE OR KILOWATT
AD	AREA DRAIN	L/LAV	LAVATORY
AF	ABOVE FINISHED FLOOR	LS	LAB SINK
AMP	AMPERE	LT	LAUNDRY TUB
ANB	ACID NEUTRALIZING BASIN	MB	MOP BASIN
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	MC	MECHANICAL CONTRACTOR
AP	ACCESS PANEL	MSS	MANUFACTURERS STANDARDIZATION SOCIETY
ASME	AMERICAN SOCIETY OF MECHANICAL ENGINEERS	NC	NEW CONNECTION OR NORMALLY CLOSED
ASSE	AMERICAN SOCIETY OF SAFETY ENGINEERS	NIC	NOT IN CONTRACT
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	NPS	NOMINAL PIPE SIZE
AV	ACID/CHEMICAL VENT	NPW	NON POTABLE WATER
AVTR	ACID/CHEMICAL VENT THRU ROOF	NO	NORMALLY OPEN
BASC	BUILDING AUTOMATION SYSTEMS CONTRACTOR	NSF	NATIONAL SCIENCE FOUNDATION
BFP	BACKFLOW PREVENTER	NTS	NOT TO SCALE
BOP	BOTTOM OF PIPE	OD	OVERFLOW DRAIN
BT	BATH TUB	OSD	OPEN SITE DRAIN
CA	COMPRESSED AIR	OSAY	OUTSIDE STEM AND YOKE
CI	CAST IRON	P	PUMP
CISPI	CAST IRON SOIL PIPE INSTITUTE	PA	PIPE ANCHOR
CIG	CEILING	PC	PLUMBING CONTRACTOR
CO	CLEANOUT	PD	PUMP DISCHARGE
CON	CONNECTION	PDI	PLUMBING & DRAINAGE INSTITUTE
CW	DOMESTIC COLD WATER	PE	PROFESSIONAL ENGINEER
DHW	DOMESTIC HOT WATER	PH	PHASE
DHWR	DOMESTIC HOT WATER RETURN	PV	POST INDICATOR VALVE
DTW	DOMESTIC TEMPERED WATER	PM	PARTS PER MILLION
DBCV	DOUBLE CHECK VALVE	PRV	PRESSURE REDUCING VALVE
DCV	DUAL CHECK VALVE	PS	PLUMBING STACK
DDCV	DOUBLE CHECK DETECTOR ASSEMBLY	PSI	POUNDS PER SQUARE INCH
DDCV	DOUBLE DETECTOR CHECK VALVE	RD	RECIRCULATION PUMP
DF	DRINKING FOUNTAIN	RD	ROOF DRAIN
DFU	DRAINAGE FIXTURE UNIT	RH	ROOF HYDRANT
DIA	DIAMETER	ROB	ROD OUT BASIN
DN	DOWN	RPIA	REDUCED PRESSURE DETECTOR ASSEMBLY
DS	DOWNSPOUT	RPM	REVOLUTIONS PER MINUTE
DSN	DOWNSPOUT NOZZLE	RPZ	REDUCED PRESSURE ZONE BACKFLOW PREVENTER
DT	DRAIN TILE	S/SAN	SANITARY WASTE
DW	DISHWASHER	SC	SITE UTILITY CONTRACTOR
DWH	DOMESTIC WATER HEATER	SE	SEWAGE EJECTOR
DWS	DOMESTIC WATER SOFTENER	SH	SHOWER
EC	ELECTRICAL CONTRACTOR	SI	SOLIDS INTERCEPTOR
EEW	EMERGENCY EYE AND FACE WASH	SK	SINK
EPDM	ETHYLENE PROPYLENE DIENE MONOMER	SP	SUMP PUMP
ET	EXPANSION TANK	SQ	SQUARE FEET
ESH	EMERGENCY SHOWER	SS	SERVICE SINK
ESP	ELEVATOR SUMP PUMP	S.S.	STAINLESS STEEL
ETR	EXISTING TO REMAIN	ST	STORM
EWC	ELECTRIC WATER COOLER	SST	SECONDARY STORM (OVERFLOW)
EWI	ELECTRIC WATER HEATER	TR	THRUST BLOCK
FCO	FLOOR CLEANOUT	TD	TRENCH DRAIN
FD	FLOOR DRAIN	TMV	THERMOSTATIC MIXING VALVE
FOG	FATS, OILS AND GREASE	TPRV	TEMPERATURE AND PRESSURE REDUCING VALVE
FPS	FEET PER SECOND	TYP	TYPICAL
FS	FLOOR SINK	UR	URNAL
FT	FEET	V	VENT
G	NATURAL GAS	VB	VACUUM BREAKER
GC	GENERAL CONTRACTOR	VTR	VENT THRU ROOF
GCO	GROUND CLEANOUT	W	WASTE
GI	GREASE INTERCEPTOR	WC	WATER CLOSET
GPD	GALLONS PER DAY	WCO	WALL CLEANOUT
GPH	GALLONS PER HOUR	WF	WASH FOUNTAIN
GPM	GALLONS PER MINUTE	WH	WALL HYDRANT
GT	GREASE TRAP	WHA	WATER HAMMER ARRESTOR
GW	GARAGE WASTE	WSB	WALL SUPPLY BOX
HB	HOSE BIBB	WSFU	WATER SUPPLY FIXTURE UNITS
HD	HEAD	YCO	YARD CLEANOUT
HP	HORSEPOWER	YH	YARD HYDRANT
HX	HEAT EXCHANGER		
IE	INVERT ELEVATION		
IR	ICE MACHINE/REFRIGERATOR WALL BOX		
KS	KITCHEN STACK		
KEC	KITCHEN EQUIPMENT CONTRACTOR		
KED	KITCHEN EQUIPMENT DESIGNER		

NOTE: NOT ALL ABBREVIATIONS LISTED ABOVE MAY BE USED OR APPEAR IN THESE DRAWINGS.

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1 LOCATION MAP
SCALE: NO SCALE

PLUMBING SYMBOLS	
PIPING	
	NEW PIPING
	EXISTING PIPING TO REMAIN
	EXISTING PIPING TO BE DEMOLISHED
	COLD WATER SUPPLY
	HOT WATER SUPPLY
	HOT WATER RETURN
	VENT PIPING
	AIR CHAMBER/WATER HAMMER ARRESTOR
	BACKFLOW PREVENTER
	BALL VALVE
	BALANCING VALVE
	BUTTERFLY VALVE
	CHECK VALVE
	DIRECTION OF FLOW
	DIRECTION OF PIPE PITCH, DOWN
	FLEXIBLE PIPE CONNECTOR (OR CONNECTION)
	GATE VALVE
	PIPE ANCHOR
	PIPE BREAK
	PIPE CAP
	PIPE DROP/RISE
	PIPE ELBOW, 45° HORIZONTAL
	PIPE ELBOW, 90° HORIZONTAL
	PIPE ELBOW, DOWN AND 90° HORIZONTAL
	PIPE ELBOW, TURNED DOWN
	PIPE ELBOW, TURNED UP
	PIPE REDUCER/INCREASER
	PIPE TEE, DOWN
	PIPE TEE, FOUR-WAY, HORIZONTAL
	PIPE TEE, HORIZONTAL
	PIPE TEE, TOP CONNECTION, 45° OR 90° ELBOW
	PIPE TEE, UP
	PIPE UNION
	PRESSURE GAUGE
	PRESSURE REDUCING/REGULATING VALVE
	PUMP
	THERMOSTATIC MIXING VALVE
	THERMOMETER
GENERAL	
	EQUIPMENT TAG
	RISER TYPE
	RISER TAG
	FLOOR DRAIN
	POINT OF CONNECTION OF NEW TO EXISTING WORK
	POINT OF DEMOLITION TO EXISTING WORK
NOTE: NOT ALL SYMBOLS LISTED ABOVE MAY BE USED OR APPEAR IN THESE DRAWINGS.	

PROJECT SCOPE OF WORK

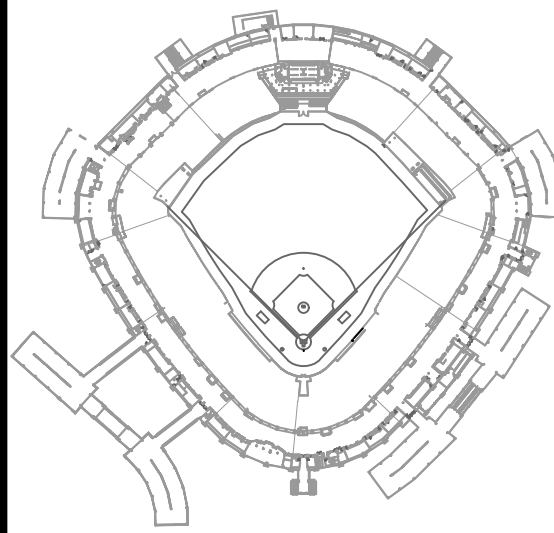
- DEMOLITION OF EXISTING ORIGINAL SANITARY AND VENT PIPING. INSTALLATION OF NEW CAST IRON PIPING IN LOCATIONS IDENTIFIED ON PLANS.
- REPLACEMENT OF PIPING, VALVES, AND OTHER PIPING ACCESSORIES BETWEEN THE DOMESTIC WATER HEATERS AND THE DOMESTIC HOT WATER STORAGE TANKS IN MECHANICAL ROOM 1.14.4.
- REPLACEMENT OF DUPLEX SEWAGE EJECTOR SUMP PUMPS AND RECONFIGURATION OF SUMP PIT COVER AND DISCHARGE PIPING IN WHITE SOX CLUBHOUSE STORAGE ROOM 1.38.5.
- DISASSEMBLY, REPAIR AND REPLACEMENT OF COMPONENTS, AND REASSEMBLY OF AREA DRAINS THROUGHOUT THE 100 LEVEL AND 500 LEVEL CONCOURSES.
- REPLACEMENT OF ELECTRIC WATER HEATERS CONNECTED TO RESTROOMS SERVING THE SUITES ON LEVELS 200, 300, AND 400.
- REPLACEMENT OF LAVATORY FAUCETS IN RESTROOMS SERVING THE SUITES ON LEVELS 200, 300, AND 400.
- EXPOXY LINING OF FLOOR SINKS AND FLOOR DRAINS IN CONCESSIONS STANDS LOCATED THROUGHOUT THE 100 AND 500 LEVEL CONCOURSES.



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KEY PLAN



ISSUE/REVISION:

REV.	DATE	DESCRIPTION
-	12/09/21	ISSUE FOR BID

PROJECT:

GUARANTEED RATE FIELD -
WASTE AND VENT PIPING
PHASE X

333 W 35TH STREET,
CHICAGO, ILLINOIS 60616

DRAWING TITLE:

PLUMBING TITLE SHEET

DESIGNED BY: DA

CHECKED BY: MS

PROJECT NO: 21275

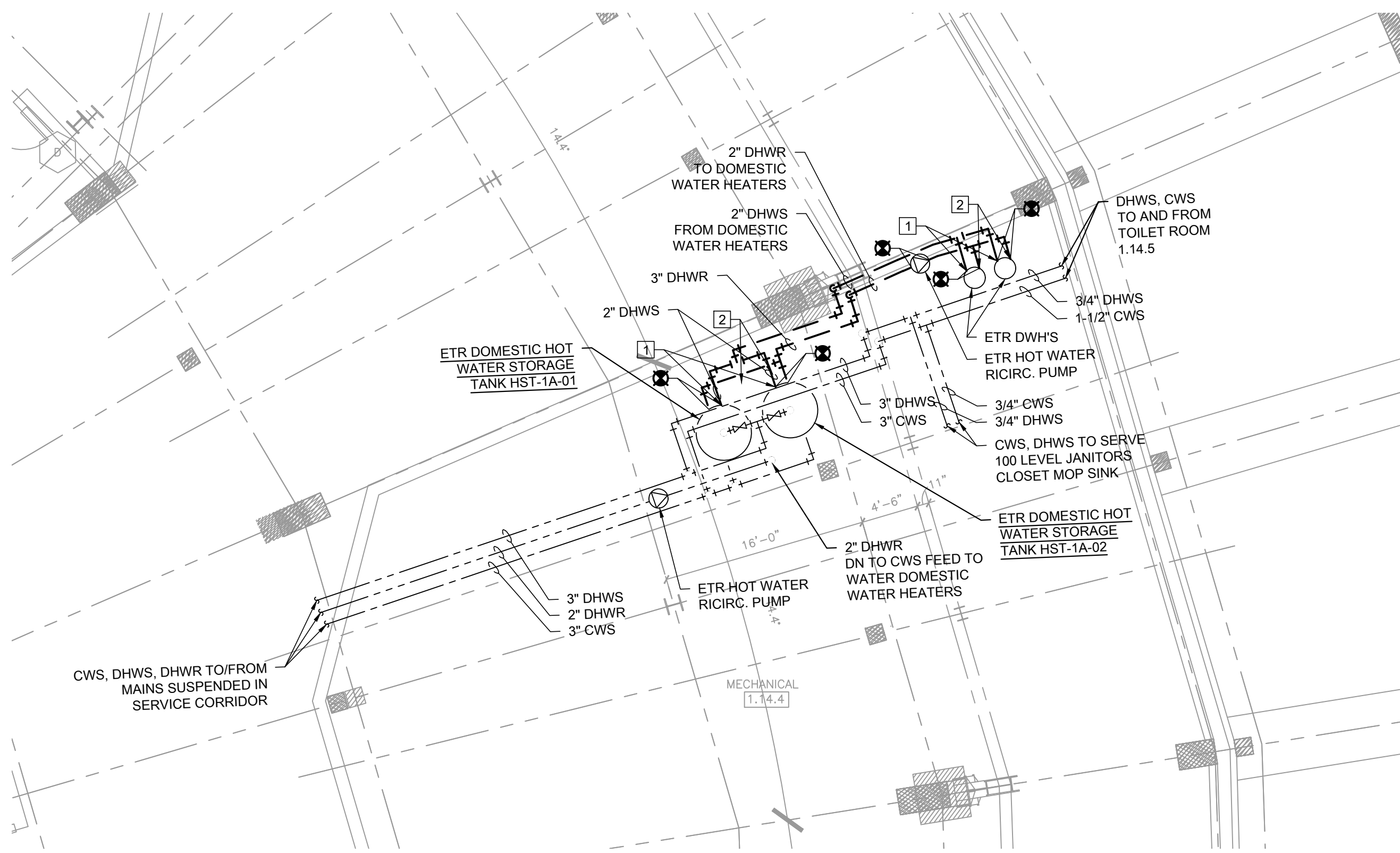
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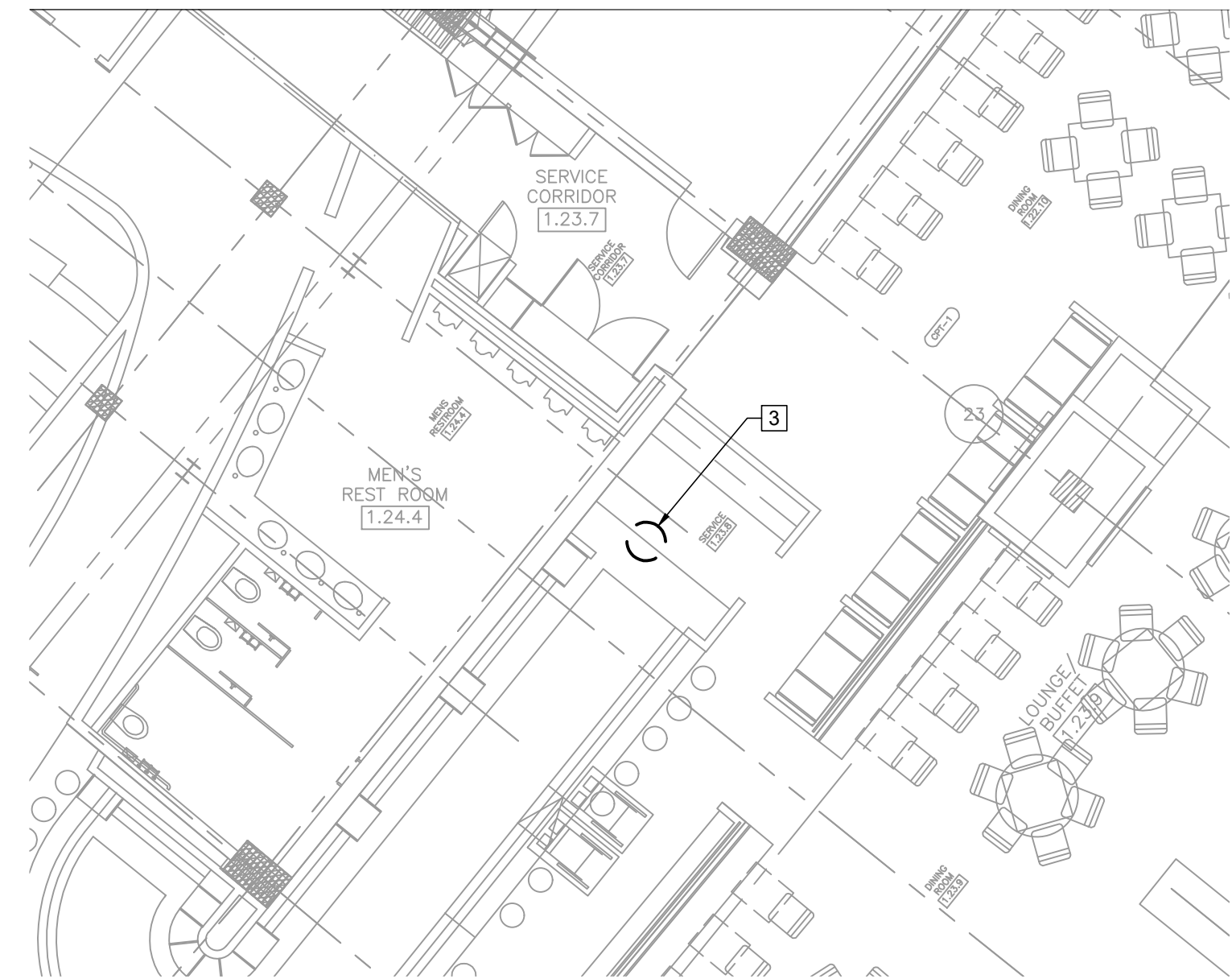
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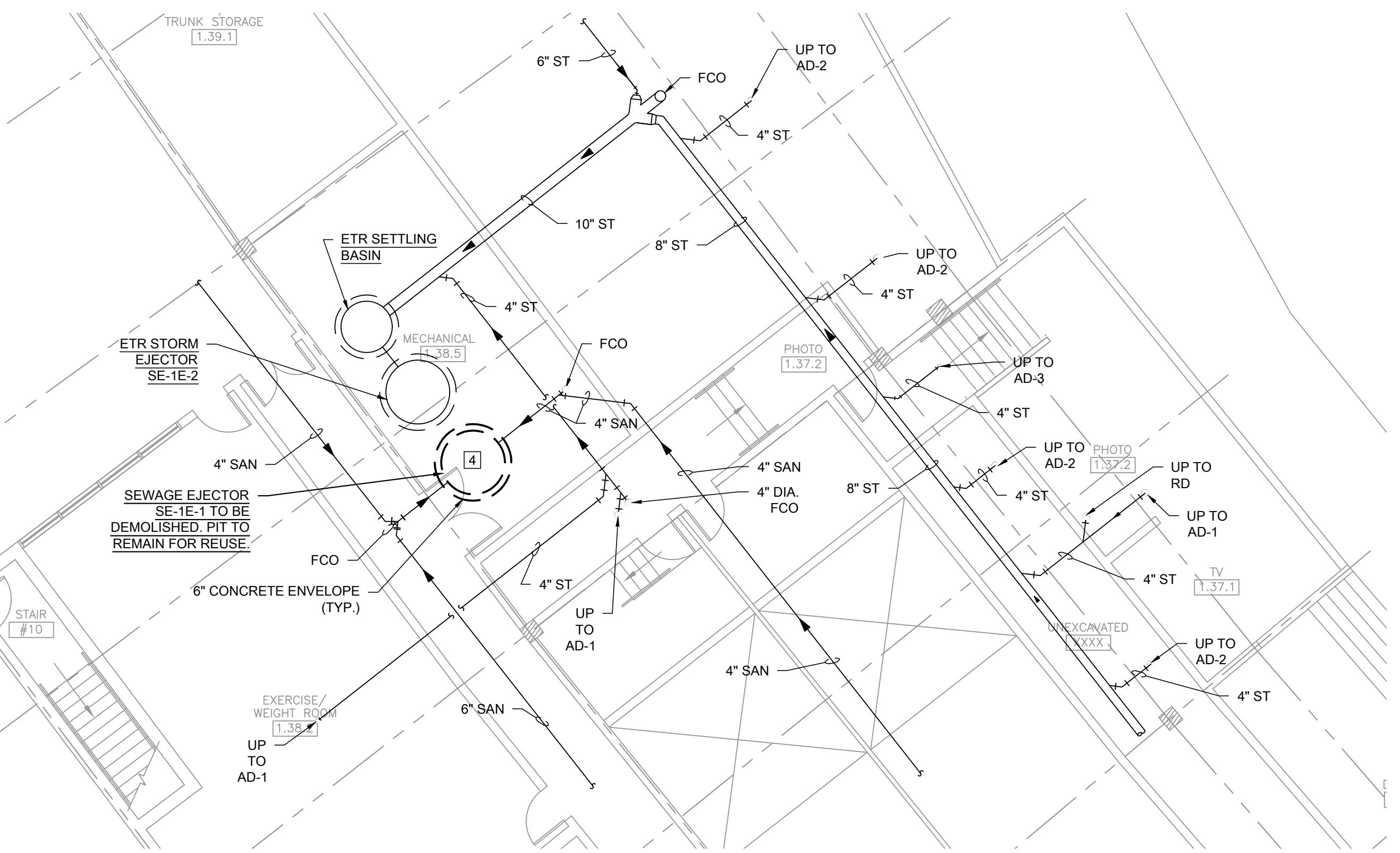
P0.01



1 PLUMBING DEMOLITION PLAN - SERVICE LEVEL - CENTRAL WATER HEATERS



2 PLUMBING DEMOLITION PLAN - SERVICE LEVEL - SCOUTS LOUNGE



3 PLUMBING DEMOLITION PLAN - SERVICE LEVEL - SEWAGE EJECTOR

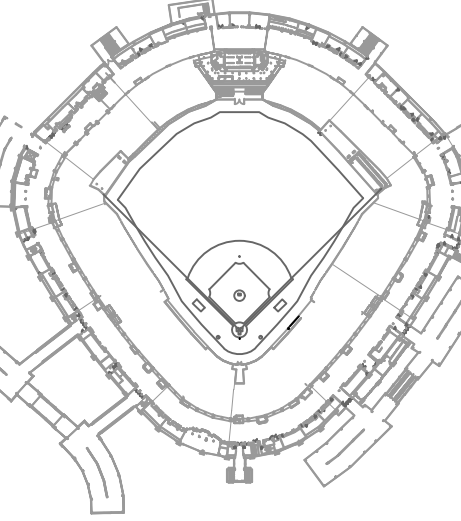
- KEYED PLUMBING DEMOLITION SHEET NOTES**
- DISCONNECT AND DEMOLISH HOT WATER SUPPLY PIPING BETWEEN EXISTING TO REMAIN DOMESTIC WATER HEATERS AND EXISTING TO REMAIN DOMESTIC HOT WATER STORAGE TANKS. SYSTEM SUPPLIES SERVICE LEVEL AND COMMERCIAL KITCHENS THROUGHOUT THE FACILITY. CONTRACTOR SHALL COORDINATE SHUT DOWN OF THIS SYSTEM WITH CHICAGO WHITE SOX (CWS) PLUMBING DEPARTMENT AND ISFA.
 - DISCONNECT AND DEMOLISH HOT WATER RETURN PIPING BETWEEN EXISTING TO REMAIN DOMESTIC WATER HEATERS AND EXISTING TO REMAIN DOMESTIC HOT WATER STORAGE TANKS.
 - DISCONNECT AND DEMOLISH EXISTING STORAGE TANK WATER HEATER SERVING SCOUTS LOUNGE BAR. WATER HEATER IS LOCATED ON A STRUCTURAL PLATFORM HIGH ABOVE THE ACCESSIBLE CEILING. EXACT LOCATION OF WATER HEATER, PIPING CONNECTIONS, AND ISOLATION VALVES COULD NOT BE SURVEYED DUE TO EXISTING REMODELING PROJECT IN THAT AREA. CONTRACTOR SHALL FIELD VERIFY CONDITIONS PRIOR TO SUBMISSION OF BID.
 - DISCONNECT AND DEMOLISH EXISTING SUMP PUMPS, PIT COVER, AND DISCHARGE PIPING. COORDINATE FOR DEMOLITION AND REMOVAL OF WALL MOUNTED CONTROLLER.



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PROJECT:
GUARANTEED RATE FIELD -
WASTE AND VENT PIPING
PHASE X
333 W 35TH STREET,
CHICAGO, ILLINOIS 60616

DRAWING TITLE:
PLUMBING DEMOLITION PLAN
- SERVICE LEVEL

DESIGNED BY:	DA
CHECKED BY:	MS
PROJECT NO:	21275
SCALE:	1/8" = 1'-0"
SHEET NO.	

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MATCH LINE

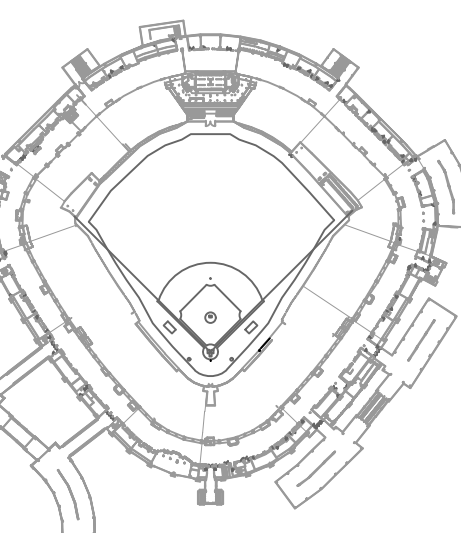
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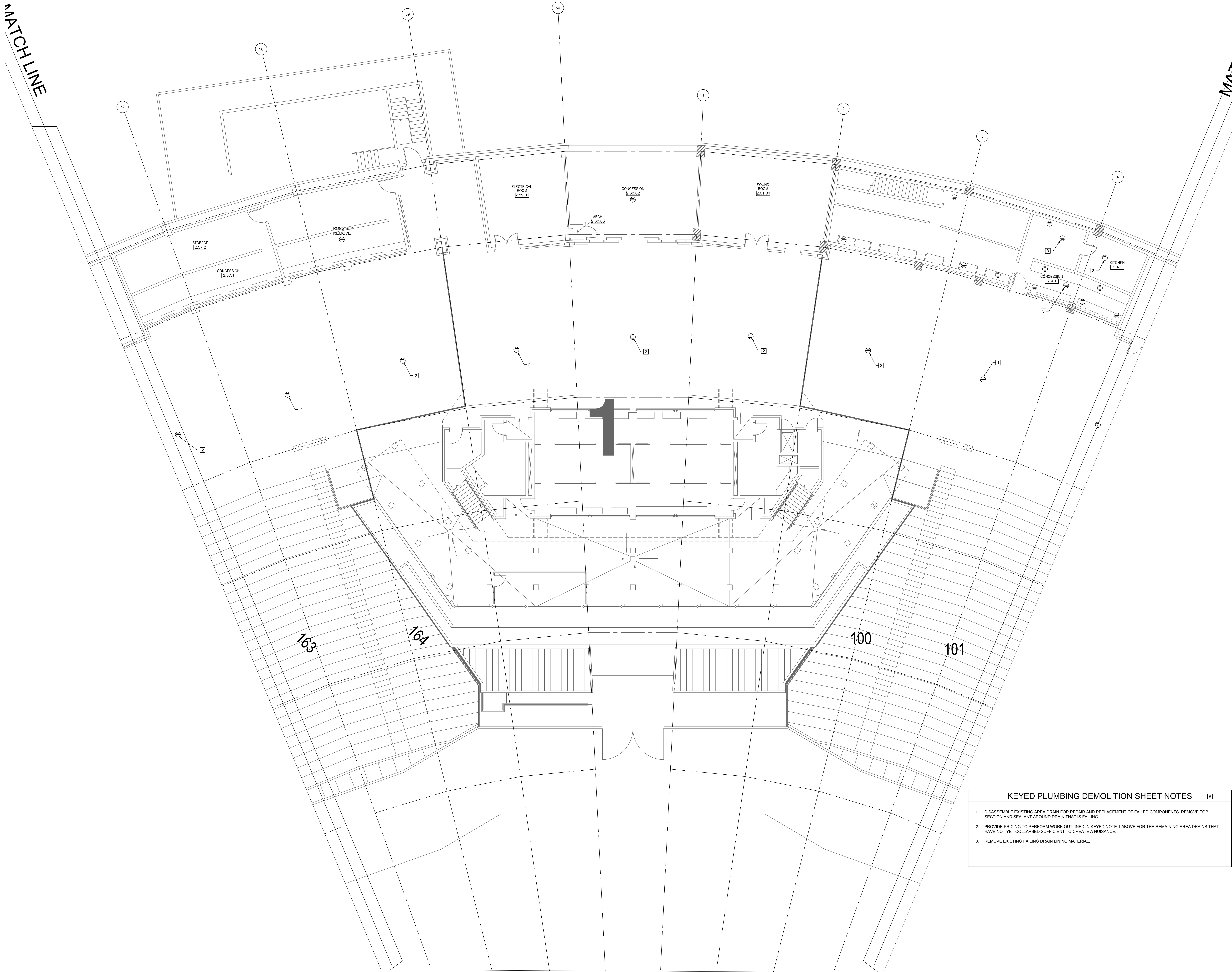
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WASTE AND VENT PIPING
PHASE X
333 W 35TH STREET,
CHICAGO, ILLINOIS 60616

DRAWING TITLE:
PLUMBING DEMOLITION PLAN
- LEVEL 100 SECTION 1
ENLARGED PLAN

DESIGNED BY: DA
CHECKED BY: MS
PROJECT NO: 21275
SCALE: 1/8" = 1'-0"
SHEET NO.

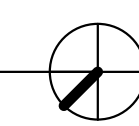
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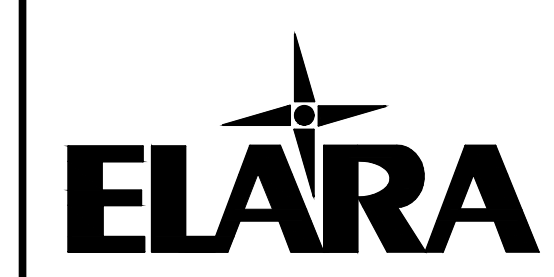
1 PLUMBING DEMOLITION PLAN - LEVEL 100 SECTION 1 ENLARGED PLAN
SCALE: 1/8" = 1'-0"

1 PLUMBING DEMOLITION PLAN - LEVEL 100 SECTION 2 ENLARGED PLAN

SCALE: 1/8" = 1'-0"



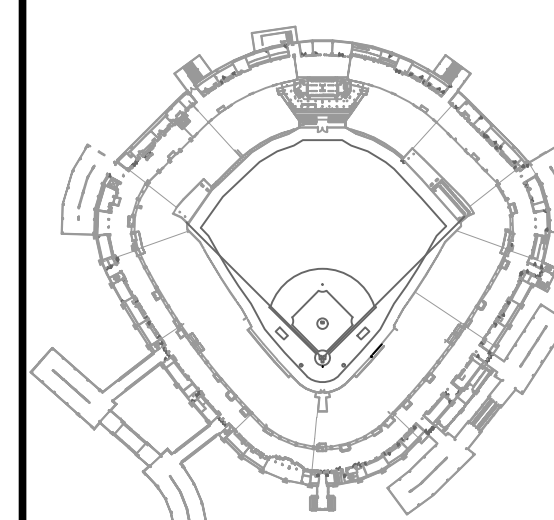
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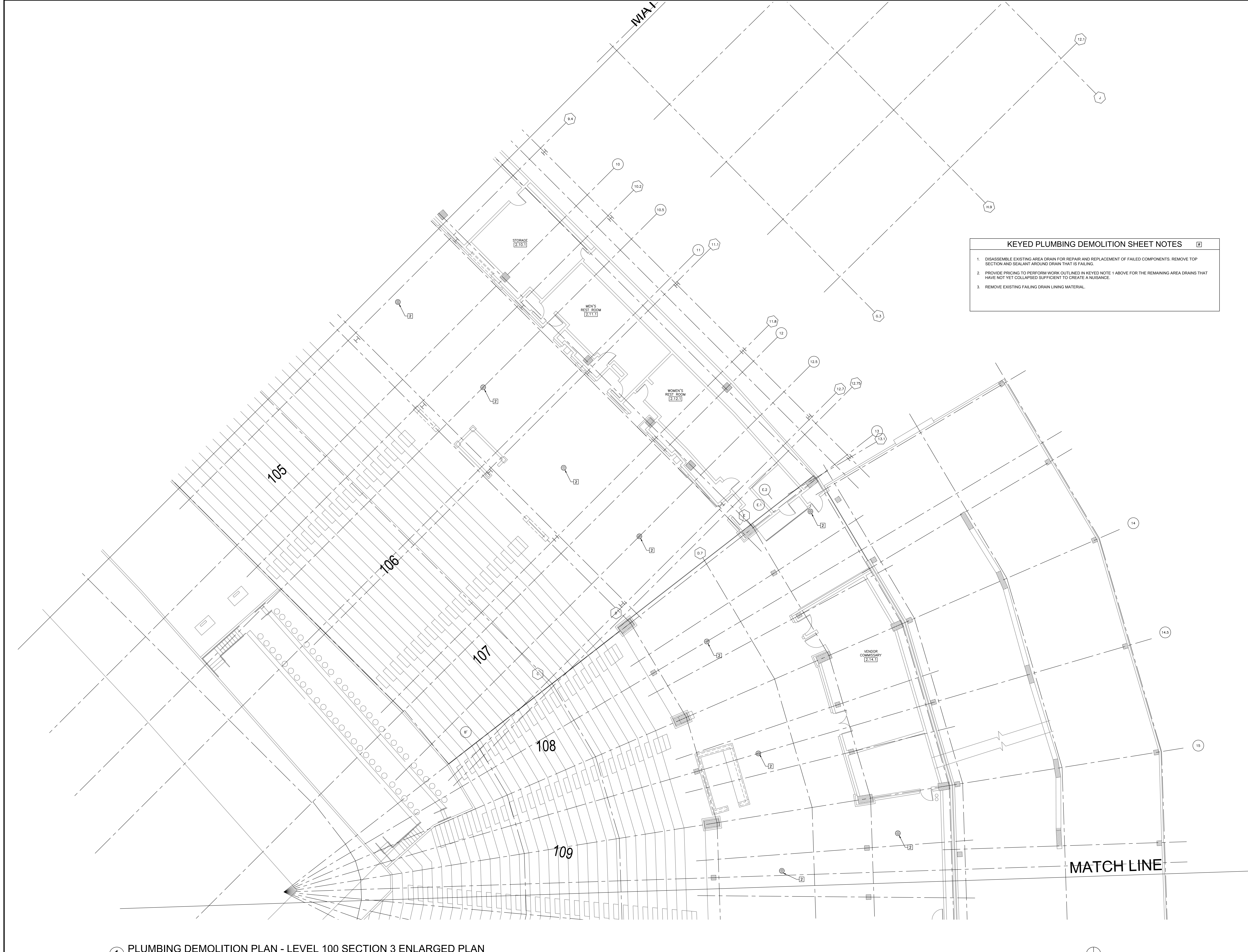
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PHASE X
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CHICAGO, ILLINOIS 60616

DRAWING TITLE:
PLUMBING DEMOLITION PLAN
- LEVEL 100 SECTION 2
ENLARGED PLAN

DESIGNED BY: DA
CHECKED BY: MS
PROJECT NO: 21275
SCALE: 1/8" = 1'-0"
SHEET NO.

PD1.15



- KEYED PLUMBING DEMOLITION SHEET NOTES**
1. DISASSEMBLE EXISTING AREA DRAIN FOR REPAIR AND REPLACEMENT OF FAILED COMPONENTS. REMOVE TOP SECTION AND SEALANT AROUND DRAIN THAT IS FAILING.
 2. PROVIDE PRICING TO PERFORM WORK OUTLINED IN KEYED NOTE 1 ABOVE FOR THE REMAINING AREA DRAINS THAT HAVE NOT YET COLLAPSED SUFFICIENT TO CREATE A NUISANCE.
 3. REMOVE EXISTING FAILING DRAIN LINING MATERIAL.

1 PLUMBING DEMOLITION PLAN - LEVEL 100 SECTION 3 ENLARGED PLAN

SCALE: 1/8" = 1'-0"

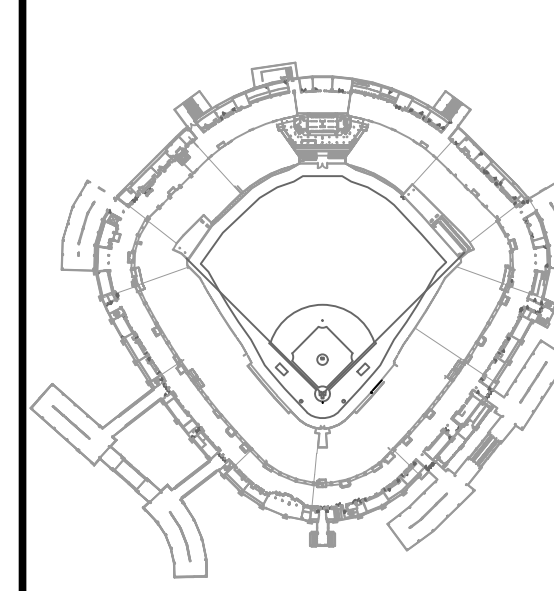
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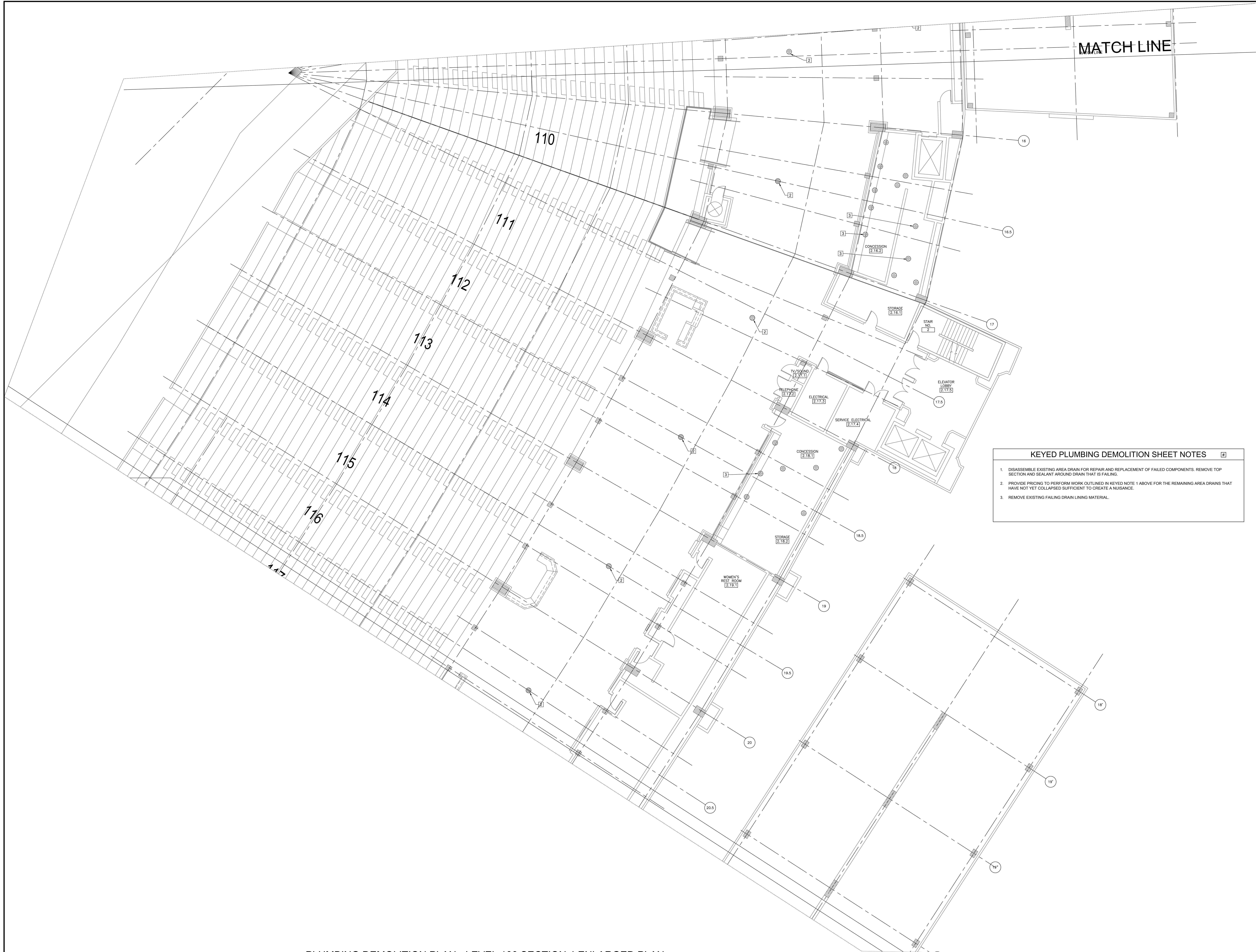
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CHICAGO, ILLINOIS 60616

DRAWING TITLE:
PLUMBING DEMOLITION PLAN
- LEVEL 100 SECTION 3
ENLARGED PLAN

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SCALE: 1/8" = 1'-0"
SHEET NO.

PD1.16



1 PLUMBING DEMOLITION PLAN - LEVEL 100 SECTION 4 ENLARGED PLAN
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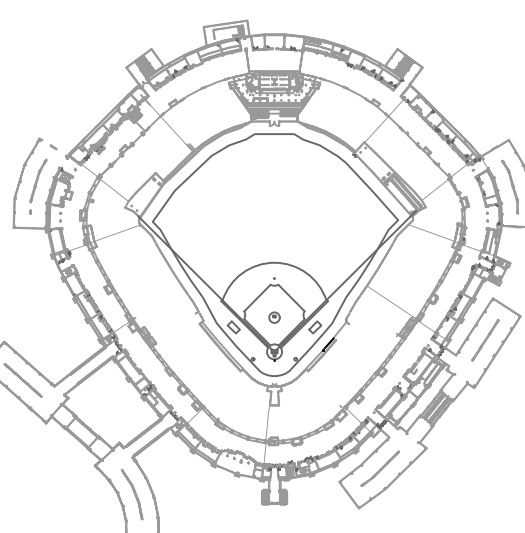
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DRAWING TITLE:
PLUMBING DEMOLITION PLAN
- LEVEL 100 SECTION 4
ENLARGED PLAN

DESIGNED BY: DA

CHECKED BY: MS

PROJECT NO: 21275

SCALE: 1/8" = 1'-0"

SHEET NO.

PD1.17

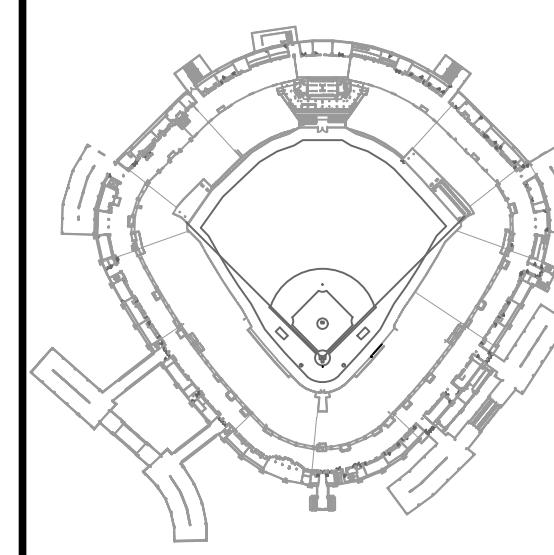


1 PLUMBING DEMOLITION PLAN - LEVEL 100 SECTION 5 ENLARGED PLAN
SCALE: 1/8" = 1'-0"

- KEYED PLUMBING DEMOLITION SHEET NOTES**
1. DISASSEMBLE EXISTING AREA DRAIN FOR REPAIR AND REPLACEMENT OF FAILED COMPONENTS. REMOVE TOP SECTION AND SEALANT AROUND DRAIN THAT IS FAILING.
 2. PROVIDE PRICING TO PERFORM WORK OUTLINED IN KEYED NOTE 1 ABOVE FOR THE REMAINING AREA DRAINS THAT HAVE NOT YET COLLAPSED SUFFICIENT TO CREATE A NUISANCE.
 3. REMOVE EXISTING FAILING DRAIN LINING MATERIAL.



KEY PLAN

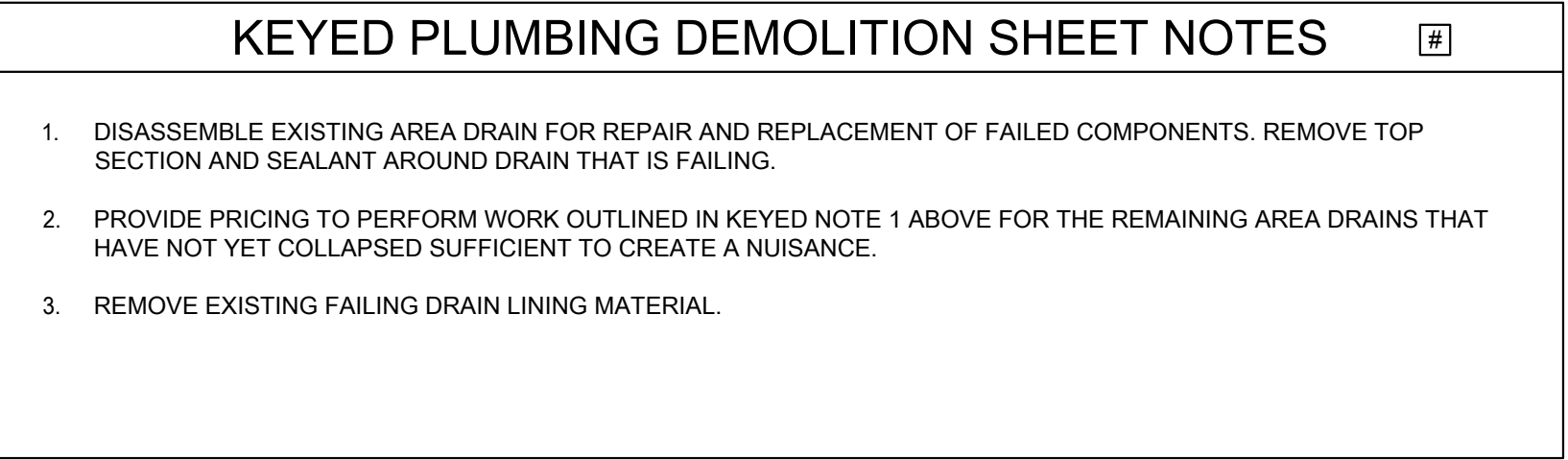


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DRAWING TITLE:
PLUMBING DEMOLITION PLAN
- LEVEL 100 SECTION 5
ENLARGED PLAN

DESIGNED BY:	DA
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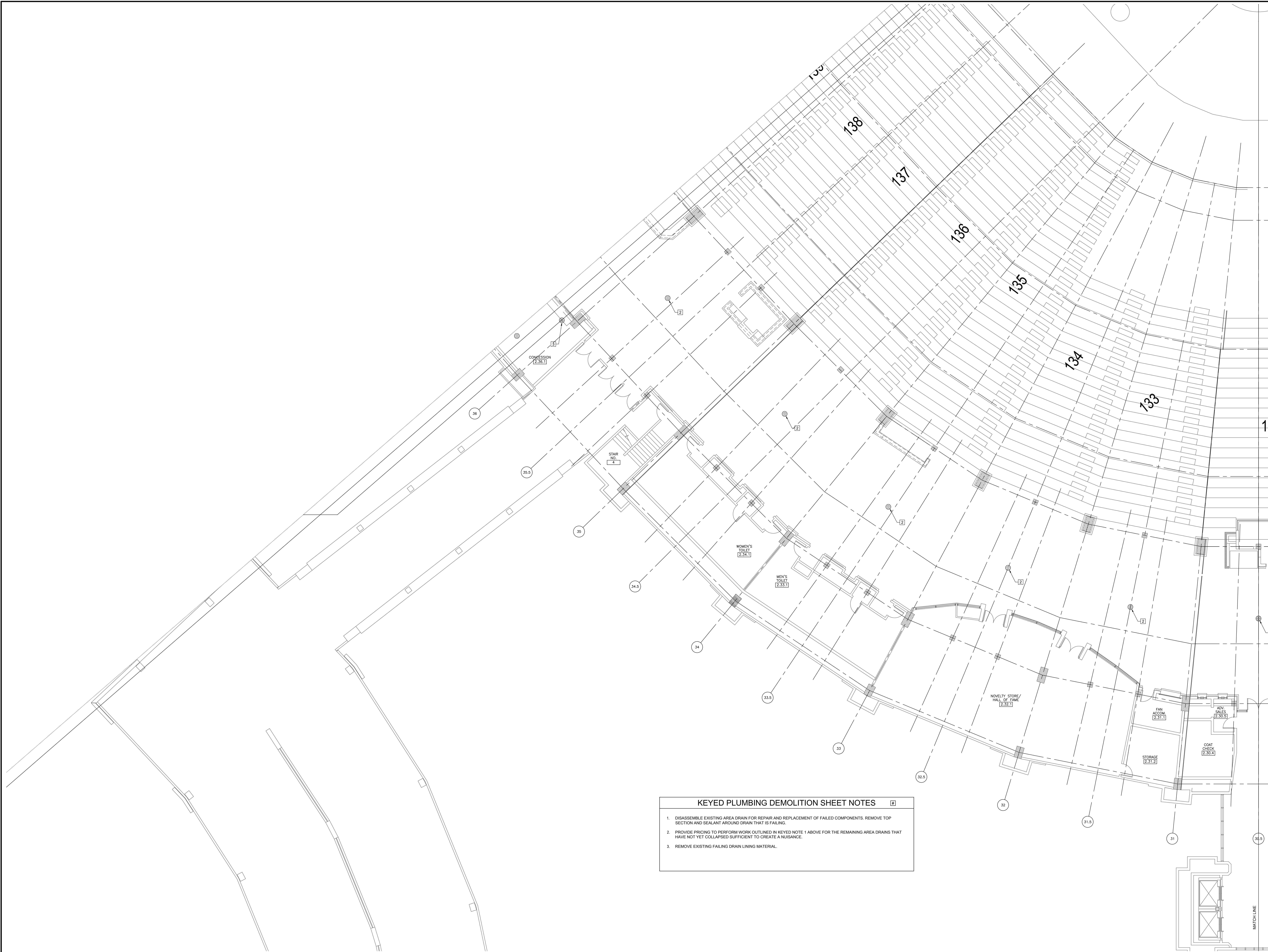
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PD1.19



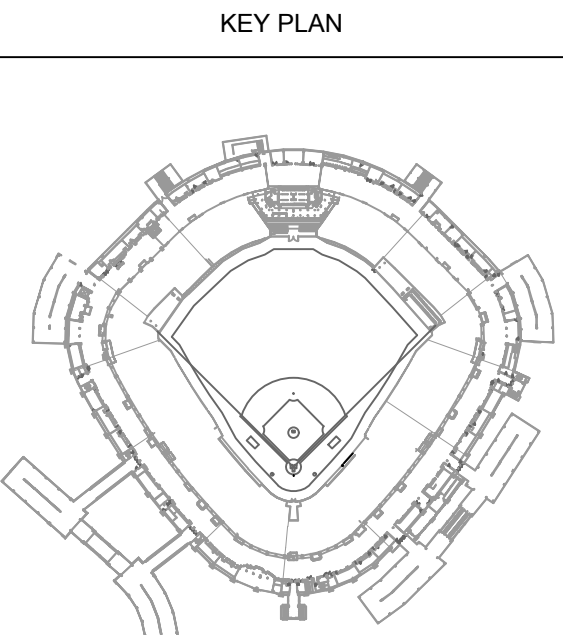
1 PLUMBING DEMOLITION PLAN - LEVEL 100 SECTION 7 ENLARGED PLAN
SCALE: 1/8" = 1'-0"

- KEYED PLUMBING DEMOLITION SHEET NOTES**
1. DISASSEMBLE EXISTING AREA DRAIN FOR REPAIR AND REPLACEMENT OF FAILED COMPONENTS. REMOVE TOP SECTION AND REINSTATE AROUND DRAIN THAT IS FAILING.
 2. PROVIDE PRICING TO PERFORM WORK OUTLINED IN KEYED NOTE 1 ABOVE FOR THE REMAINING AREA DRAINS THAT HAVE NOT YET COLLAPSED SUFFICIENT TO CREATE A NUISANCE.
 3. REMOVE EXISTING FAILING DRAIN LINING MATERIAL.

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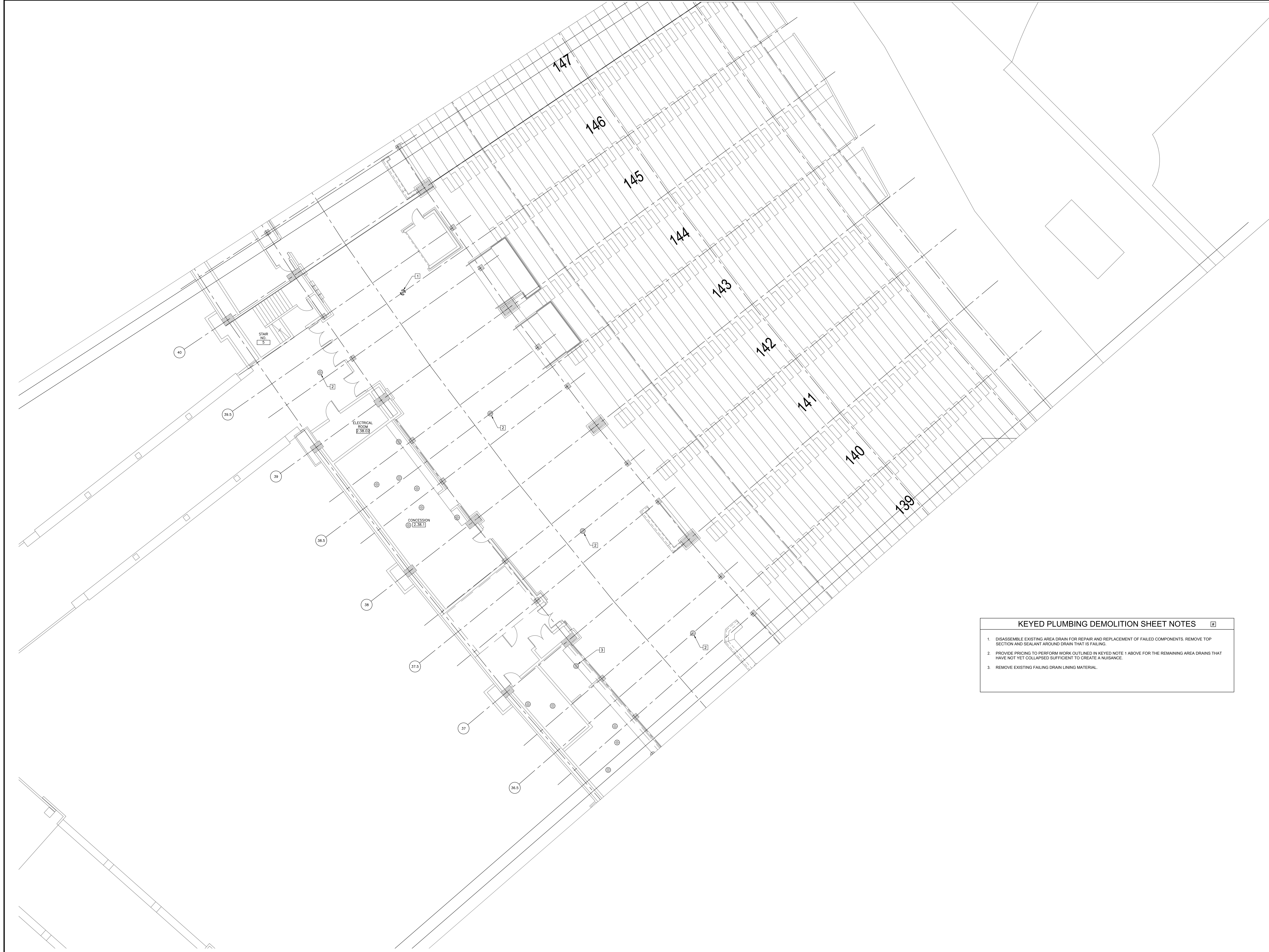
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DRAWING TITLE:
PLUMBING DEMOLITION PLAN
- LEVEL 100 SECTION 7
ENLARGED PLAN

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SHEET NO.

PD1.20



1 PLUMBING NEW WORK PLAN - LEVEL 100 SECTION 8 ENLARGED PLAN

SCALE: 1/8" = 1'-0"

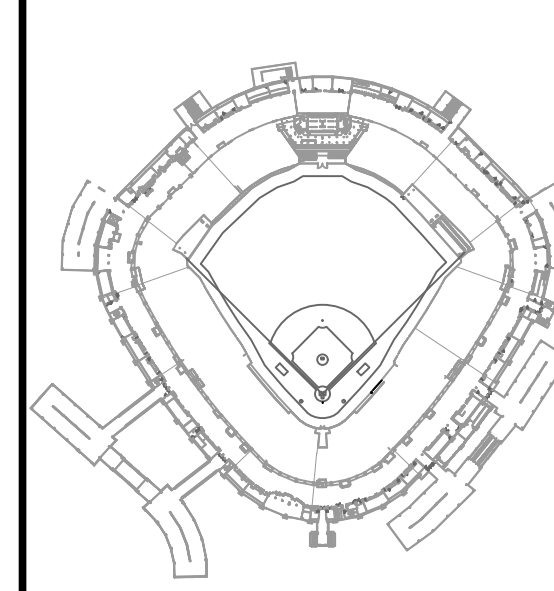
- KEYED PLUMBING DEMOLITION SHEET NOTES
1. DISASSEMBLE EXISTING AREA DRAIN FOR REPAIR AND REPLACEMENT OF FAILED COMPONENTS. REMOVE TOP SECTION AND SEALANT AROUND DRAIN THAT IS FAILING.
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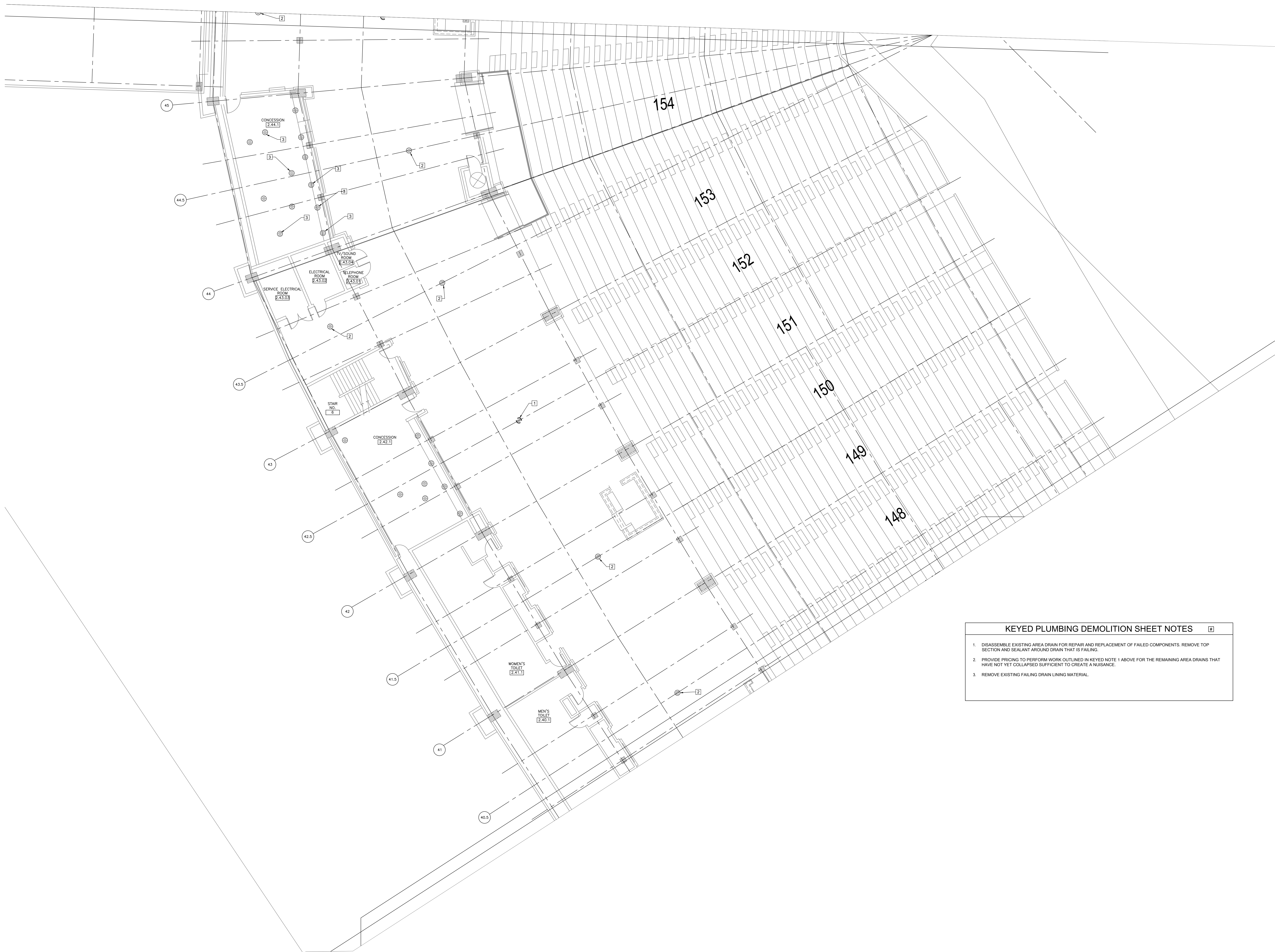
PROJECT:
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DRAWING TITLE:
PLUMBING DEMOLITION PLAN
- LEVEL 100 SECTION 8
ENLARGED PLAN

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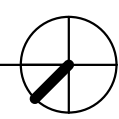
PD1.21



- KEYED PLUMBING DEMOLITION SHEET NOTES**
1. DISASSEMBLE EXISTING AREA DRAIN FOR REPAIR AND REPLACEMENT OF FAILED COMPONENTS. REMOVE TOP SECTION AND SEALANT AROUND DRAIN THAT IS FAILING.
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 3. REMOVE EXISTING FAILING DRAIN LINING MATERIAL.

1 PLUMBING DEMOLITION PLAN - SECTION 9 ENLARGED PLAN

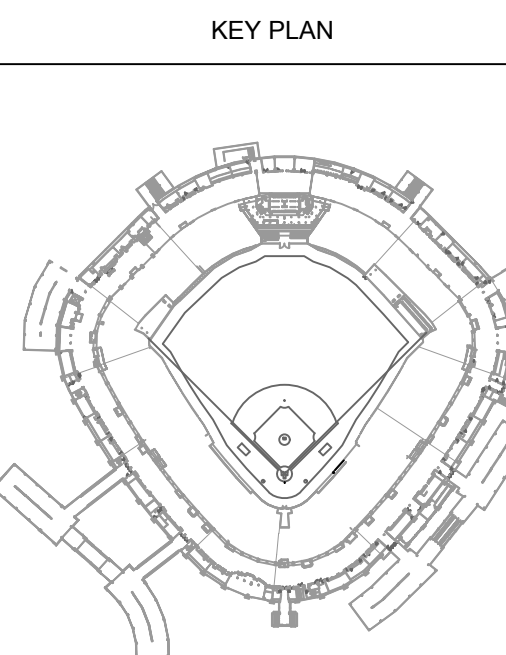
SCALE: 1/8" = 1'-0"



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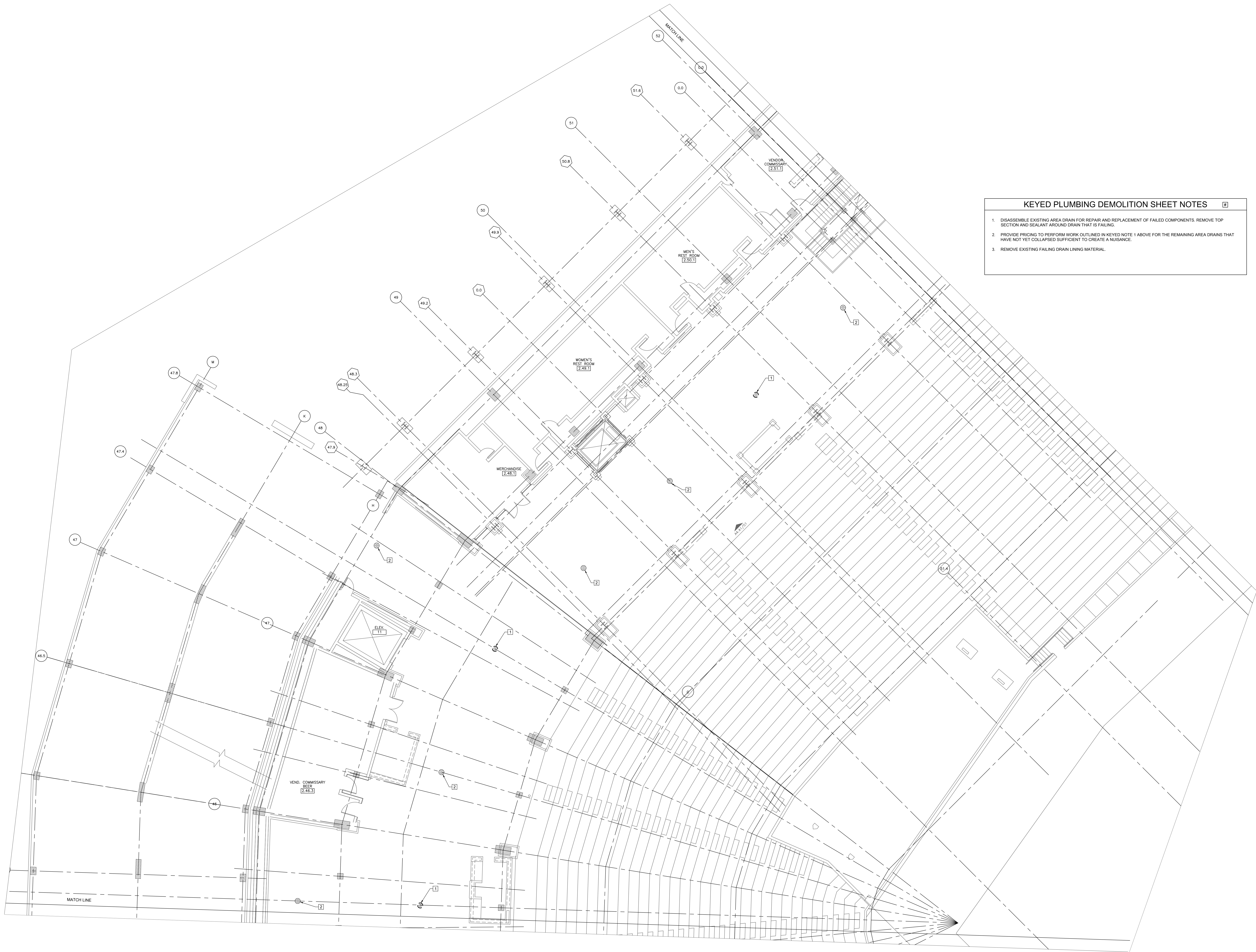
PROJECT:
GUARANTEED RATE FIELD -
WASTE AND VENT PIPING
PHASE X
333 W 35TH STREET,
CHICAGO, ILLINOIS 60616

DRAWING TITLE:
PLUMBING DEMOLITION PLAN
- LEVEL 100 SECTION 9
ENLARGED PLAN

DESIGNED BY: DA
CHECKED BY: MS
PROJECT NO: 21275
SCALE: 1/8" = 1'-0"

SHEET NO.

PD1.22

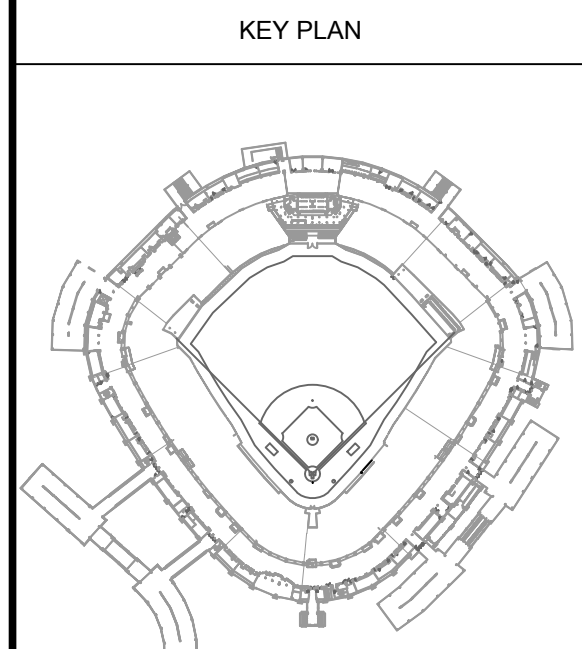


- KEYED PLUMBING DEMOLITION SHEET NOTES**
1. DISASSEMBLE EXISTING AREA DRAIN FOR REPAIR AND REPLACEMENT OF FAILED COMPONENTS. REMOVE TOP SECTION AND SEALANT AROUND DRAIN THAT IS FAILING.
 2. PROVIDE PRICING TO PERFORM WORK OUTLINED IN KEYED NOTE 1 ABOVE FOR THE REMAINING AREA DRAINS THAT HAVE NOT YET COLLAPSED SUFFICIENT TO CREATE A NUISANCE.
 3. REMOVE EXISTING FAILING DRAIN LINING MATERIAL.

1 PLUMBING NEW WORK PLAN - LEVEL 100 SECTION 10 ENLARGED PLAN

SCALE: 1/8" = 1'-0"

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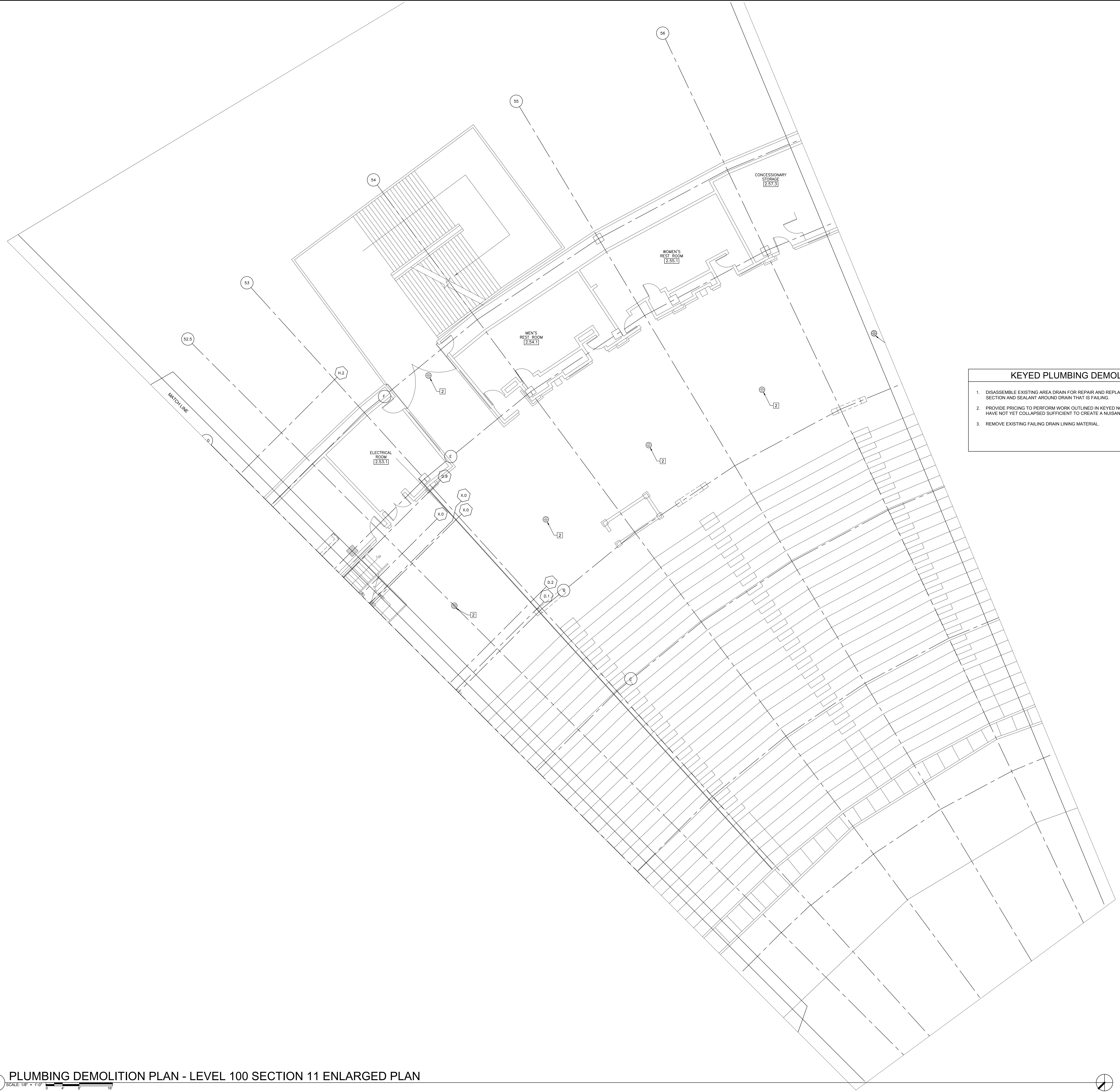


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REV.	DATE	DESCRIPTION
1	12/09/21	ISSUED FOR BID

PROJECT:
GUARANTEED RATE FIELD -
WASTE AND VENT PIPING
PHASE X
333 W 35TH STREET,
CHICAGO, ILLINOIS 60616

DRAWING TITLE:
PLUMBING DEMOLITION PLAN
- LEVEL 100 SECTION 10
ENLARGED PLAN

DESIGNED BY: DA
CHECKED BY: MS
PROJECT NO: 21275
SCALE: 1/8" = 1'-0"
SHEET NO.



KEYED PLUMBING DEMOLITION SHEET NOTES

1. DISASSEMBLE EXISTING AREA DRAIN FOR REPAIR AND REPLACEMENT OF FAILED COMPONENTS. REMOVE TOP SECTION AND SEALANT AROUND DRAIN THAT IS FAILING.
2. PROVIDE PRICING TO PERFORM WORK OUTLINED IN KEYED NOTE 1 ABOVE FOR THE REMAINING AREA DRAINS THAT HAVE NOT YET COLLAPSED SUFFICIENT TO CREATE A NUISANCE.
3. REMOVE EXISTING FAILING DRAIN LINING MATERIAL.

1 PLUMBING DEMOLITION PLAN - LEVEL 100 SECTION 11 ENLARGED PLAN

SCALE: 1/8" = 1'-0"

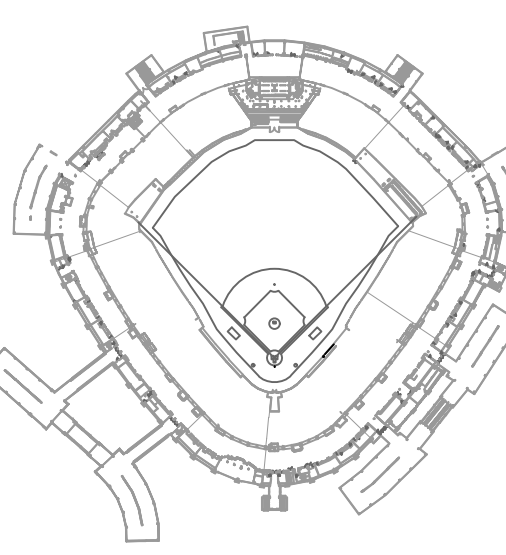
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KEY PLAN



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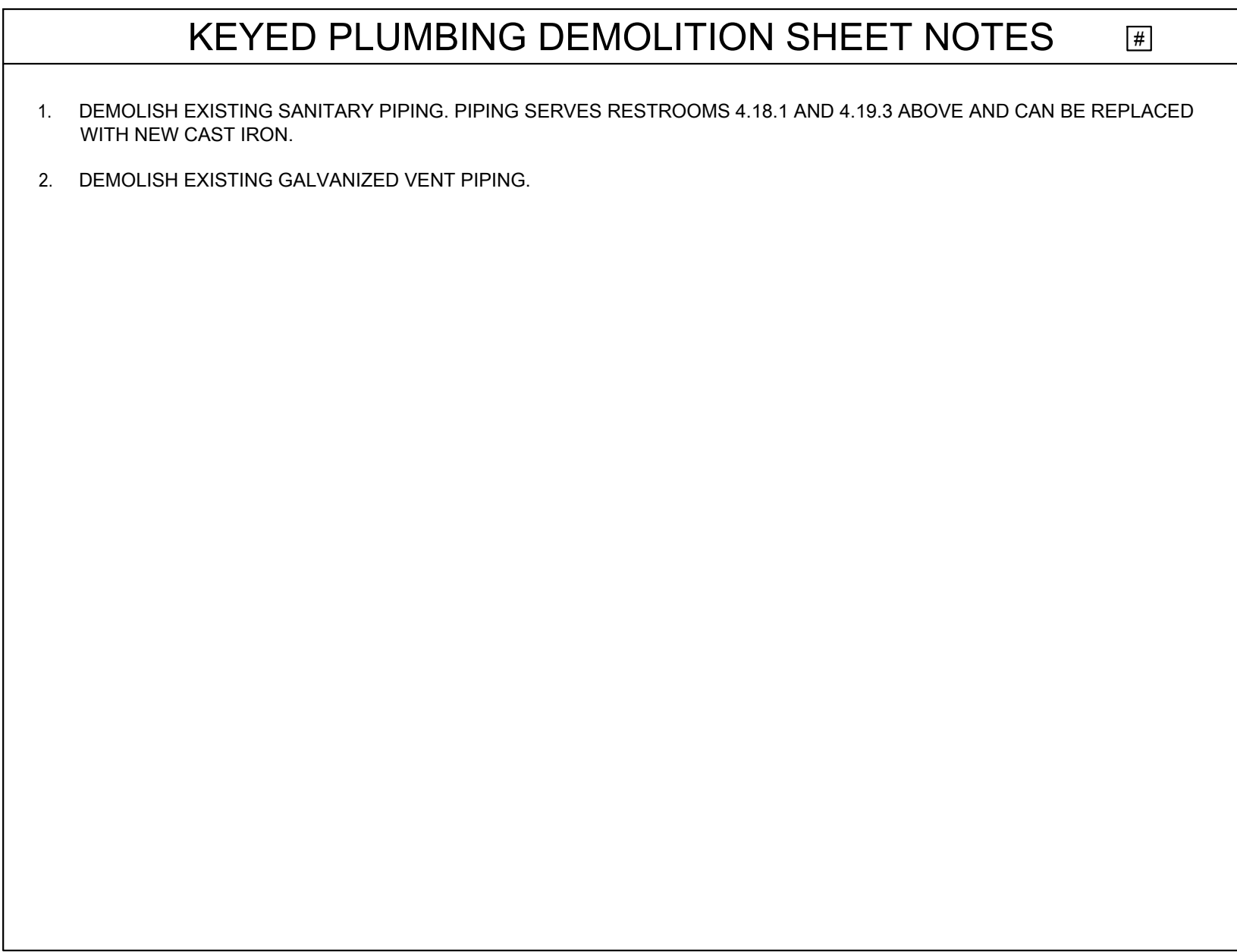
REV.	DATE	DESCRIPTION
1	12/09/21	ISSUE FOR BID

PROJECT:
GUARANTEED RATE FIELD -
WASTE AND VENT PIPING
PHASE X
333 W 35TH STREET,
CHICAGO, ILLINOIS 60616

DRAWING TITLE:
PLUMBING DEMOLITION PLAN
- LEVEL 100 SECTION 11
ENLARGED PLAN

DESIGNED BY: DA
CHECKED BY: MS
PROJECT NO: 21275
SCALE: 1/8" = 1'-0"
SHEET NO.

PD1.24

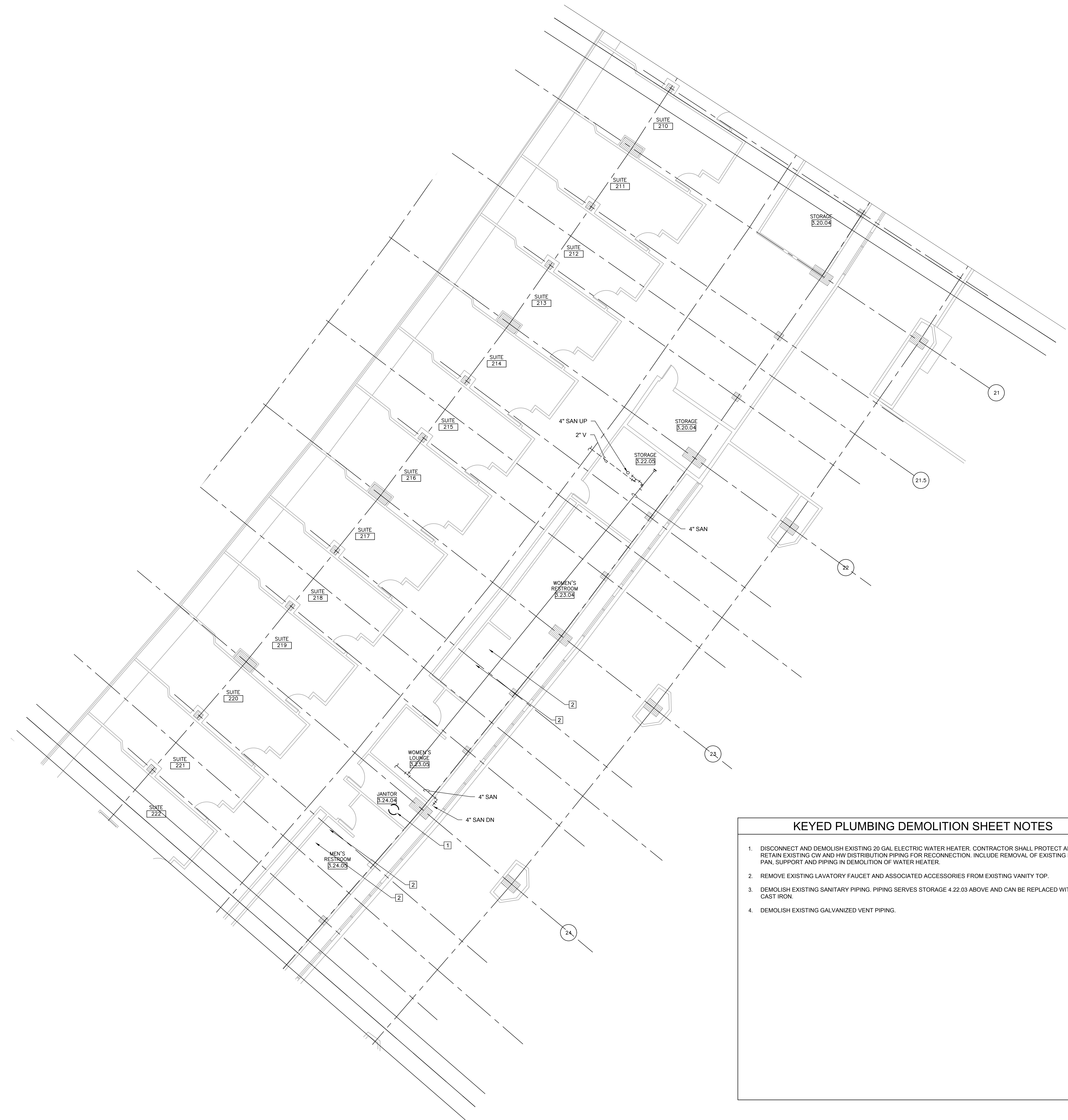


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PD1.26



KEYED PLUMBING DEMOLITION SHEET NOTES

1.

DISCONNECT AND DEMOLISH EXISTING 20 GAL ELECTRIC WATER HEATER. CONTRACTOR SHALL PROTECT AND RETAIN EXISTING CW AND HW DISTRIBUTION PIPING FOR RECONNECTION. INCLUDE REMOVAL OF EXISTING DRAIN PAN, SUPPORT AND PIPING IN DEMOLITION OF WATER HEATER.

2.

REMOVE EXISTING LAVATORY FAUCET AND ASSOCIATED ACCESSORIES FROM EXISTING VANITY TOP.

3.

DEMOLISH EXISTING SANITARY PIPING. PIPING SERVES STORAGE 4.22.03 ABOVE AND CAN BE REPLACED WITH NEW CAST IRON.

4.

DEMOLISH EXISTING GALVANIZED VENT PIPING.

1 PLUMBING DEMOLITION PLAN - LEVEL 200 SECTION 5 ENLARGED PLAN

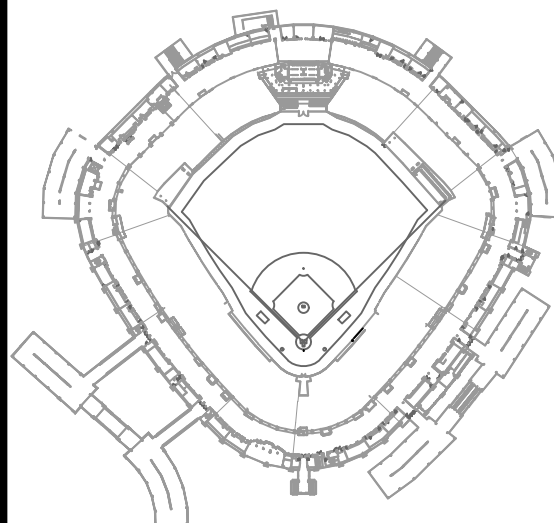
SCALE: 1/8" = 1'-0"



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KEY PLAN



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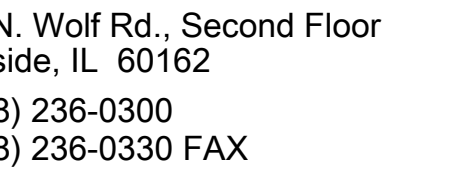
REV.	DATE	DESCRIPTION
1	12/09/21	ISSUE FOR BID

PROJECT:
GUARANTEED RATE FIELD -
WASTE AND VENT PIPING
PHASE X
333 W 35TH STREET,
CHICAGO, ILLINOIS 60616

DRAWING TITLE:
PLUMBING DEMOLITION PLAN
- LEVEL 200 SECTION 5
ENLARGED PLAN

DESIGNED BY:	DA
CHECKED BY:	MS
PROJECT NO:	21275
SCALE:	1/8" = 1'-0"

SHEET NO.



1 PLUMBING DEMOLITION

SCALE: 1/8" = 1'-0"



1. INSTALL NEW LAVATORY FAUCET L-1 IN EXISTING RESTROOM LAVATORY VANITY.

A detailed key plan of the stadium, showing the diamond, bases, pitcher's mound, and surrounding seating areas. The plan is oriented with home plate at the bottom. The seating areas are labeled with numbers 1 through 10, corresponding to the seating chart provided. The plan also shows the location of the press box, scoreboard, and other facilities.

REVISION:

[illegible]

ECT:

WARRANTED RATE FIELD -
DATE AND VENT PIPING
SEE X

35TH STREET,
GO, ILLINOIS 60616

PROJECT TITLE:
 BUILDING DEMOLITION PLAN
 LEVEL 200 SECTION 8
 TARGETED PLAN

APPROVED BY: DA

WORKED BY: MS

ECT NO: 21275

$$1/8" = 1'-0"$$

NO.

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PD1.30



PD1.31



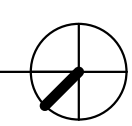
SHEET NO.

REVISED DEMOLITION WORK SHEET NOTES	
1.	DISCONNECT AND DEMOLISH EXISTING 30 GAL. ELECTRIC WATER HEATER. CONTRACTOR SHALL PROTECT AND RETAIN EXISTING ON AND HW DISTRIBUTION PIPING FOR RECONNECTION. INCLUDE REMOVAL OF EXISTING DRAIN PAN, SUPPORT AND PIPING IN DEMOLITION OF WATER HEATER.
2.	REMOVE EXISTING LAVATORY FAUCET AND ASSOCIATED ACCESSORIES FROM EXISTING VANTY TOP.
3.	DEMOLISH EXISTING SANITARY PIPING. PIPING SERVES STORAGE 4.22.03 ABOVE AND CAN BE REPLACED WITH NEW CAST IRON.
4.	DEMOLISH EXISTING GALVANIZED VENT PIPING.



- KEYED PLUMBING DEMOLITION SHEET NOTES**
1. DISCONNECT AND DEMOLISH EXISTING ELECTRIC WATER HEATER. CONTRACTOR SHALL PROTECT AND RETAIN EXISTING CMV AND HVM DISTRIBUTION PIPING FOR RECONNECTION. INCLUDE REMOVAL OF EXISTING DRAIN PAN, SUPPORT AND PIPING IN DEMOLITION OF WATER HEATER.
 2. REMOVE EXISTING LAVATORY FAUCET AND ASSOCIATED ACCESSORIES FROM EXISTING VANITY TOP.

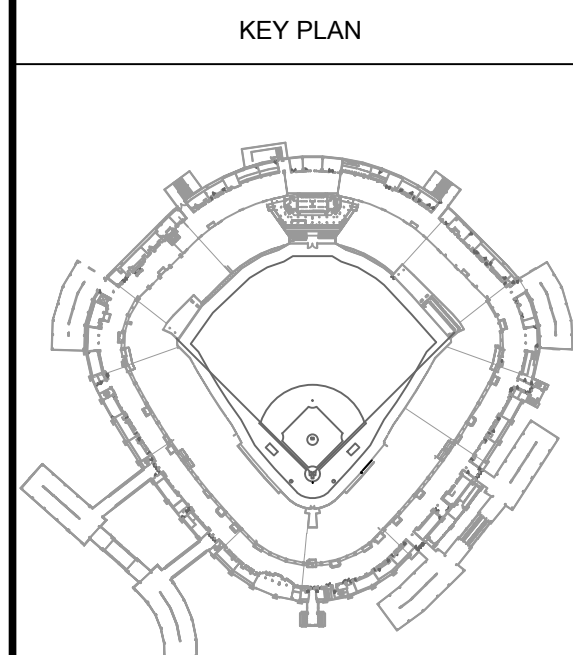
1 PLUMBING DEMOLITION PLAN - LEVEL 400 SECTION 4 ENLARGED PLAN
SCALE: 1/8" = 1'-0"
0 4 8 16



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PROJECT:
GUARANTEED RATE FIELD -
WASTE AND VENT PIPING
PHASE X
333 W 35TH STREET,
CHICAGO, ILLINOIS 60616

DRAWING TITLE:
PLUMBING DEMOLITION PLAN
- LEVEL 400 SECTION 4
ENLARGED PLAN

DESIGNED BY: DA
CHECKED BY: MS
PROJECT NO: 21275
SCALE: 1/8" = 1'-0"
SHEET NO.

PD1.44



1 PLUMBING DEMOLITION PLAN - LEVEL 400 SECTION 5 ENLARGED PLAN

SCALE: 1/8" = 1'-0"

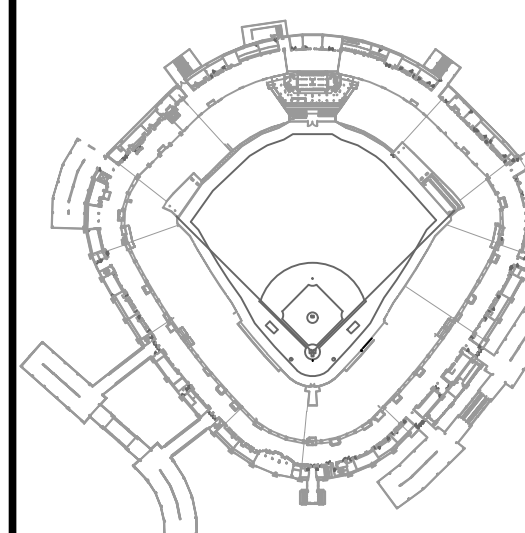
- KEYED PLUMBING DEMOLITION SHEET NOTES**
1. DISCONNECT AND DEMOLISH EXISTING ELECTRIC WATER HEATER. CONTRACTOR SHALL PROTECT AND RETAIN EXISTING CW AND HW DISTRIBUTION PIPING FOR RECONNECTION. INCLUDE REMOVAL OF EXISTING DRAIN PAN, SUPPORT AND PIPING IN DEMOLITION OF WATER HEATER.
 2. REMOVE EXISTING LAVATORY FAUCET AND ASSOCIATED ACCESSORIES FROM EXISTING VANITY TOP.



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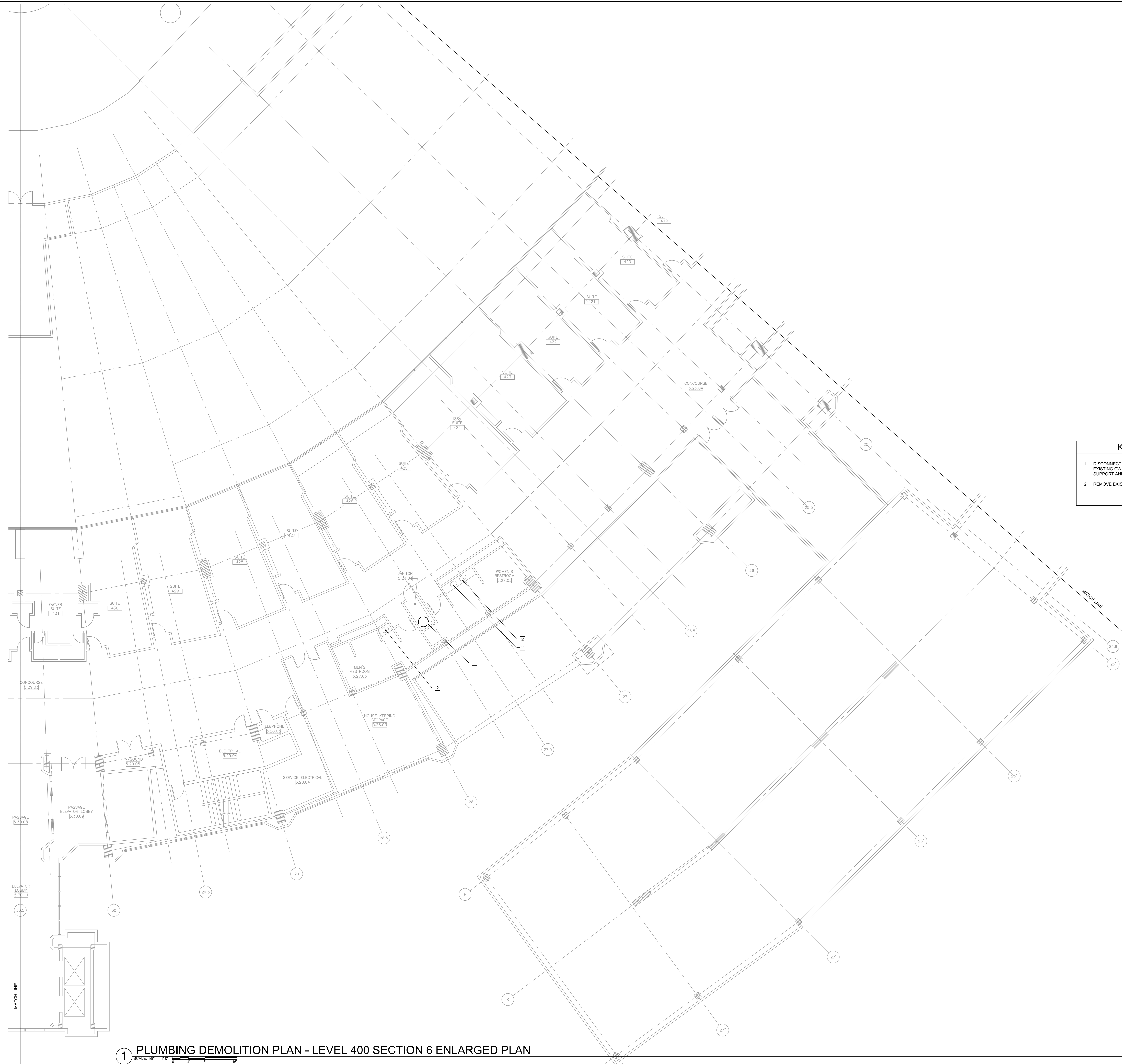
PROJECT:
GUARANTEED RATE FIELD -
WASTE AND VENT PIPING
PHASE X
333 W 35TH STREET,
CHICAGO, ILLINOIS 60616

DRAWING TITLE:
PLUMBING DEMOLITION PLAN
- LEVEL 400 SECTION 5
ENLARGED PLAN

DESIGNED BY:	DA
CHECKED BY:	MS
PROJECT NO:	21275
SCALE:	1/8" = 1'-0"
SHEET NO.	

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PD1.45



1 PLUMBING DEMOLITION PLAN - LEVEL 400 SECTION 6 ENLARGED PLAN

SCALE: 1/8" = 1'-0"

KEYED PLUMBING DEMOLITION SHEET NOTES

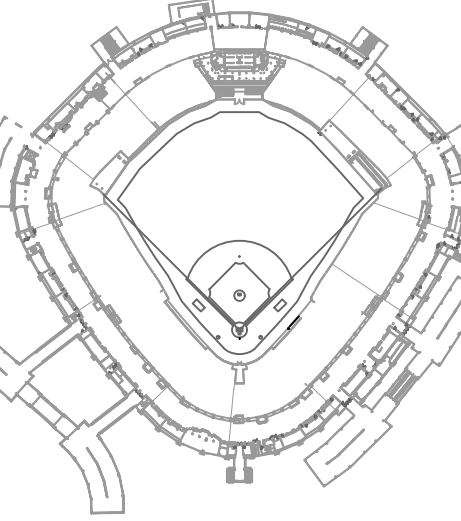
1. DISCONNECT AND DEMOLISH EXISTING ELECTRIC WATER HEATER. CONTRACTOR SHALL PROTECT AND RETAIN EXISTING CW AND HW DISTRIBUTION PIPING FOR RECONNECTION. INCLUDE REMOVAL OF EXISTING DRAIN PAN, SUPPORT AND PIPING IN DEMOLITION OF WATER HEATER.
2. REMOVE EXISTING LAVATORY FAUCET AND ASSOCIATED ACCESSORIES FROM EXISTING VANITY TOP.



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PROJECT:
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PHASE X
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DRAWING TITLE:
PLUMBING DEMOLITION PLAN
- LEVEL 400 SECTION 6
ENLARGED PLAN

DESIGNED BY:	DA
CHECKED BY:	MS
PROJECT NO:	21275
SCALE:	1/8" = 1'-0"
SHEET NO.	

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PD1.46



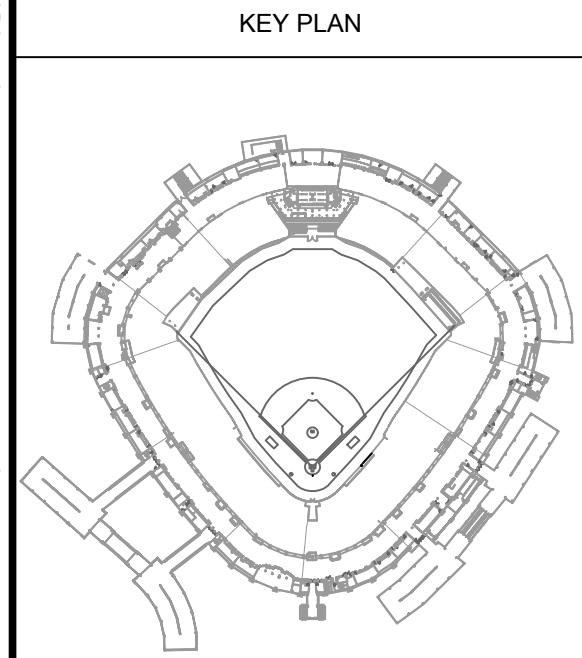
1 PLUMBING DEMOLITION PLAN - LEVEL 400 SECTION 7 ENLARGED PLAN

SCALE: 1/8" = 1'-0"

- KEYED PLUMBING DEMOLITION SHEET NOTES
1. DISCONNECT AND DEMOLISH EXISTING ELECTRIC WATER HEATER. CONTRACTOR SHALL PROTECT AND RETAIN EXISTING CIV AND HW DISTRIBUTION PIPING FOR RECONNECTION. INCLUDE REMOVAL OF EXISTING DRAIN PAN, SUPPORT AND PIPING IN DEMOLITION OF WATER HEATER.
 2. REMOVE EXISTING LAVATORY FAUCET AND ASSOCIATED ACCESSORIES FROM EXISTING VANITY TOP.

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PHASE X
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DRAWING TITLE:
PLUMBING DEMOLITION PLAN
- LEVEL 400 SECTION 7
ENLARGED PLAN

DESIGNED BY: DA
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PROJECT NO: 21275
SCALE: 1/8" = 1'-0"
SHEET NO.

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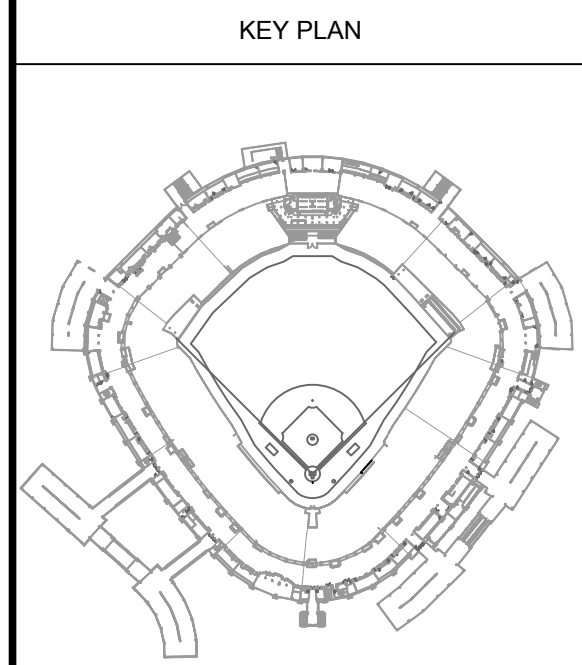
PD1.47



1 PLUMBING DEMOLITION PLAN - LEVEL 400 SECTION 8 ENLARGED PLAN

SCALE: 1/8" = 1'-0"

- KEYED PLUMBING DEMOLITION SHEET NOTES
1. DISCONNECT AND DEMOLISH EXISTING ELECTRIC WATER HEATER. CONTRACTOR SHALL PROTECT AND RETAIN EXISTING CW AND HW DISTRIBUTION PIPING FOR RECONNECTION. INCLUDE REMOVAL OF EXISTING DRAIN PAN, SUPPORT AND PIPING IN DEMOLITION OF WATER HEATER.
 2. REMOVE EXISTING LAVATORY FAUCET AND ASSOCIATED ACCESSORIES FROM EXISTING VANITY TOP.

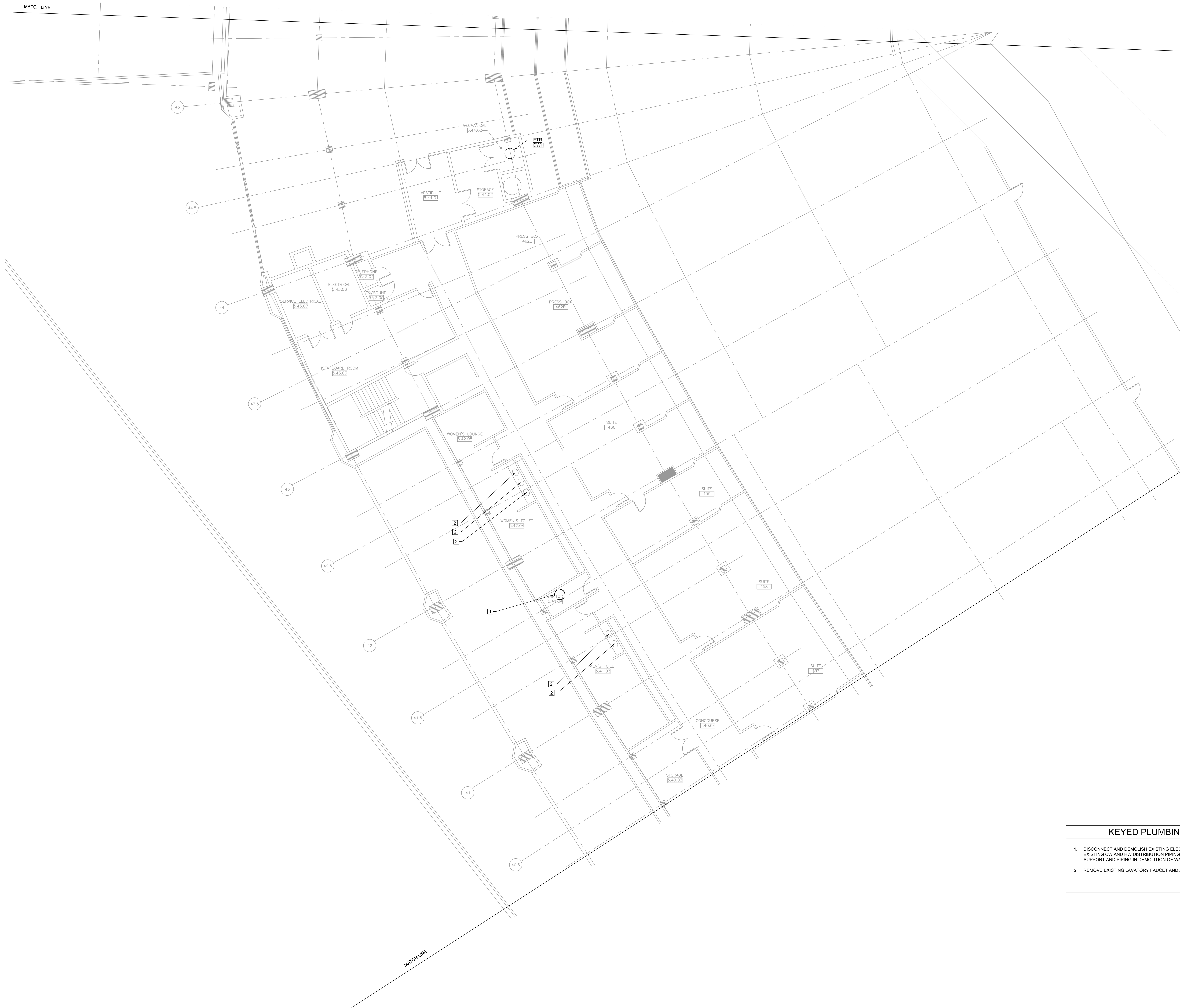


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PROJECT:
GUARANTEED RATE FIELD -
WASTE AND VENT PIPING
PHASE X
333 W 35TH STREET,
CHICAGO, ILLINOIS 60616

DRAWING TITLE:
PLUMBING DEMOLITION PLAN
- LEVEL 400 SECTION 8
ENLARGED PLAN

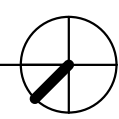
DESIGNED BY:	DA
CHECKED BY:	MS
PROJECT NO:	21275
SCALE:	1/8" = 1'-0"
SHEET NO.	



- KEYED PLUMBING DEMOLITION SHEET NOTES**
1. DISCONNECT AND DEMOLISH EXISTING ELECTRIC WATER HEATER. CONTRACTOR SHALL PROTECT AND RETAIN EXISTING CW AND HW DISTRIBUTION PIPING FOR RECONNECTION. INCLUDE REMOVAL OF EXISTING DRAIN PAN, SUPPORT AND PIPING IN DEMOLITION OF WATER HEATER.
 2. REMOVE EXISTING LAVATORY FAUCET AND ASSOCIATED ACCESSORIES FROM EXISTING VANITY TOP.

1 PLUMBING DEMOLITION PLAN - LEVEL 400 SECTION 9 ENLARGED PLAN

SCALE: 1/8" = 1'-0"



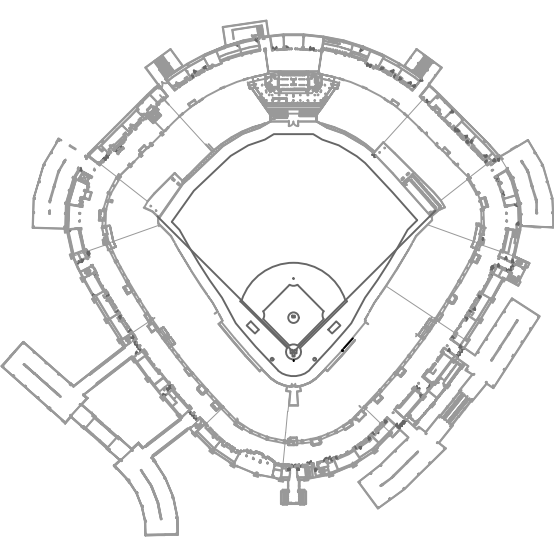
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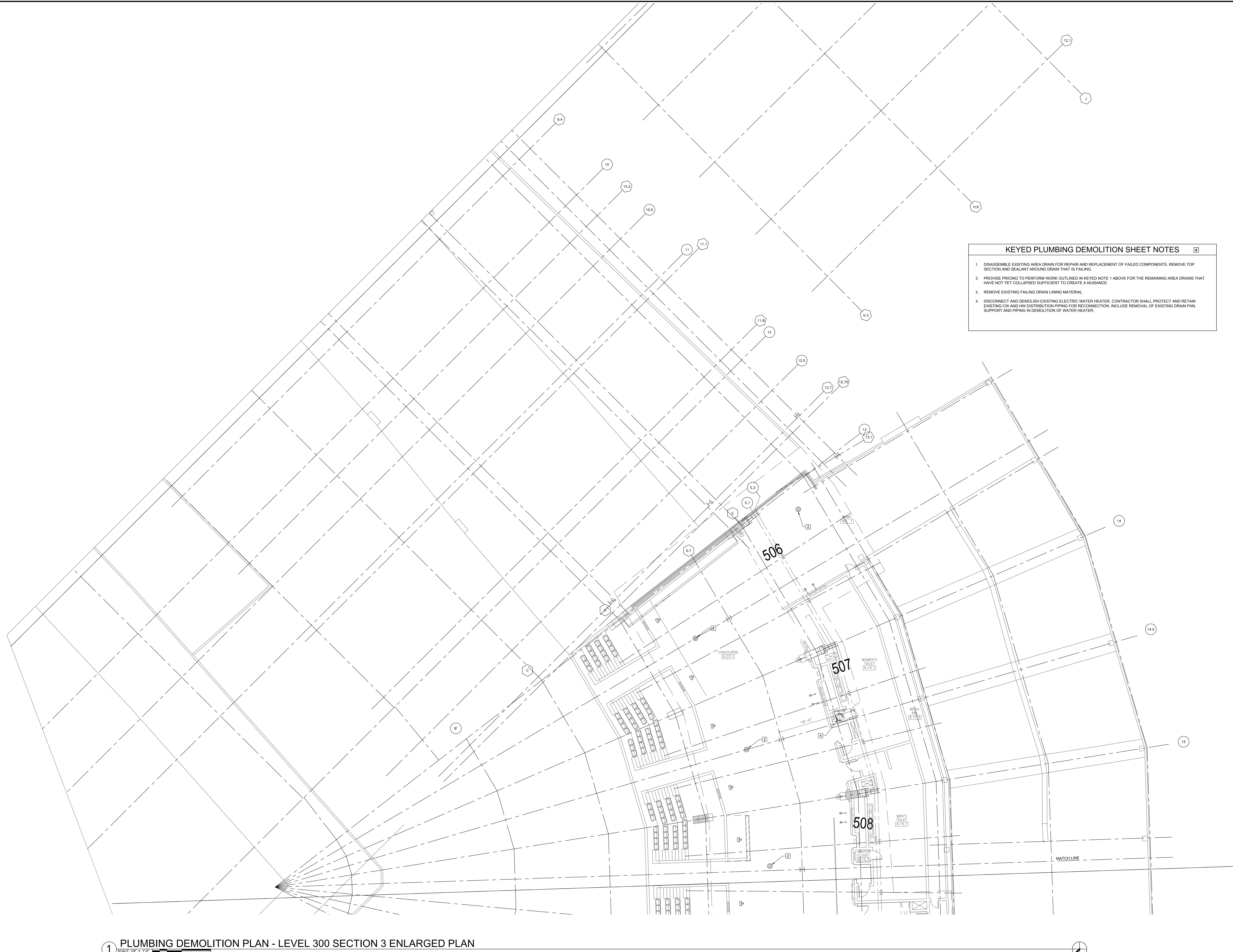
PROJECT:
GUARANTEED RATE FIELD -
WASTE AND VENT PIPING
PHASE X

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CHICAGO, ILLINOIS 60616

DRAWING TITLE:
PLUMBING DEMOLITION PLAN
- LEVEL 400 SECTION 9
ENLARGED PLAN

DESIGNED BY: DA
CHECKED BY: MS
PROJECT NO: 21275
SCALE: 1/8" = 1'-0"
SHEET NO.

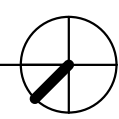
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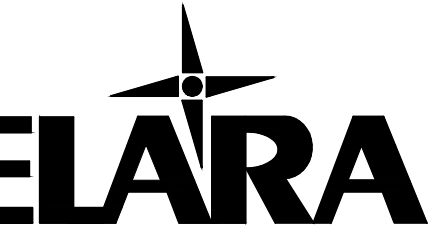
- KEYED PLUMBING DEMOLITION SHEET NOTES**
1. DISASSEMBLE EXISTING AREA DRAIN FOR REPAIR AND REPLACEMENT OF FAILED COMPONENTS. REMOVE TOP SECTION AND SEALANT AROUND DRAIN THAT IS FAILING.
 2. PROVIDE PRICING TO PERFORM WORK OUTLINED IN KEYED NOTE 1 ABOVE FOR THE REMAINING AREA DRAINS THAT HAVE NOT YET COLLAPSED SUFFICIENT TO CREATE A NUISANCE.
 3. REMOVE EXISTING FAILING DRAIN LINING MATERIAL.
 4. DISCONNECT AND DEMOLISH EXISTING ELECTRIC WATER HEATER. CONTRACTOR SHALL PROTECT AND RETAIN EXISTING CW AND HW DISTRIBUTION PIPING FOR RECONNECTION. INCLUDE REMOVAL OF EXISTING DRAIN PAN, SUPPORT AND PIPING IN DEMOLITION OF WATER HEATER.

1 PLUMBING DEMOLITION PLAN - LEVEL 300 SECTION 3 ENLARGED PLAN

SCALE: 1/8" = 1'-0"



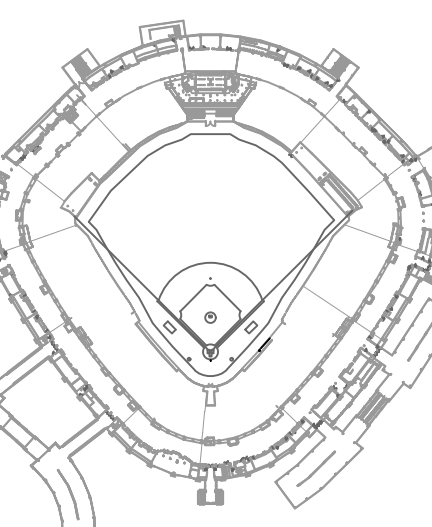
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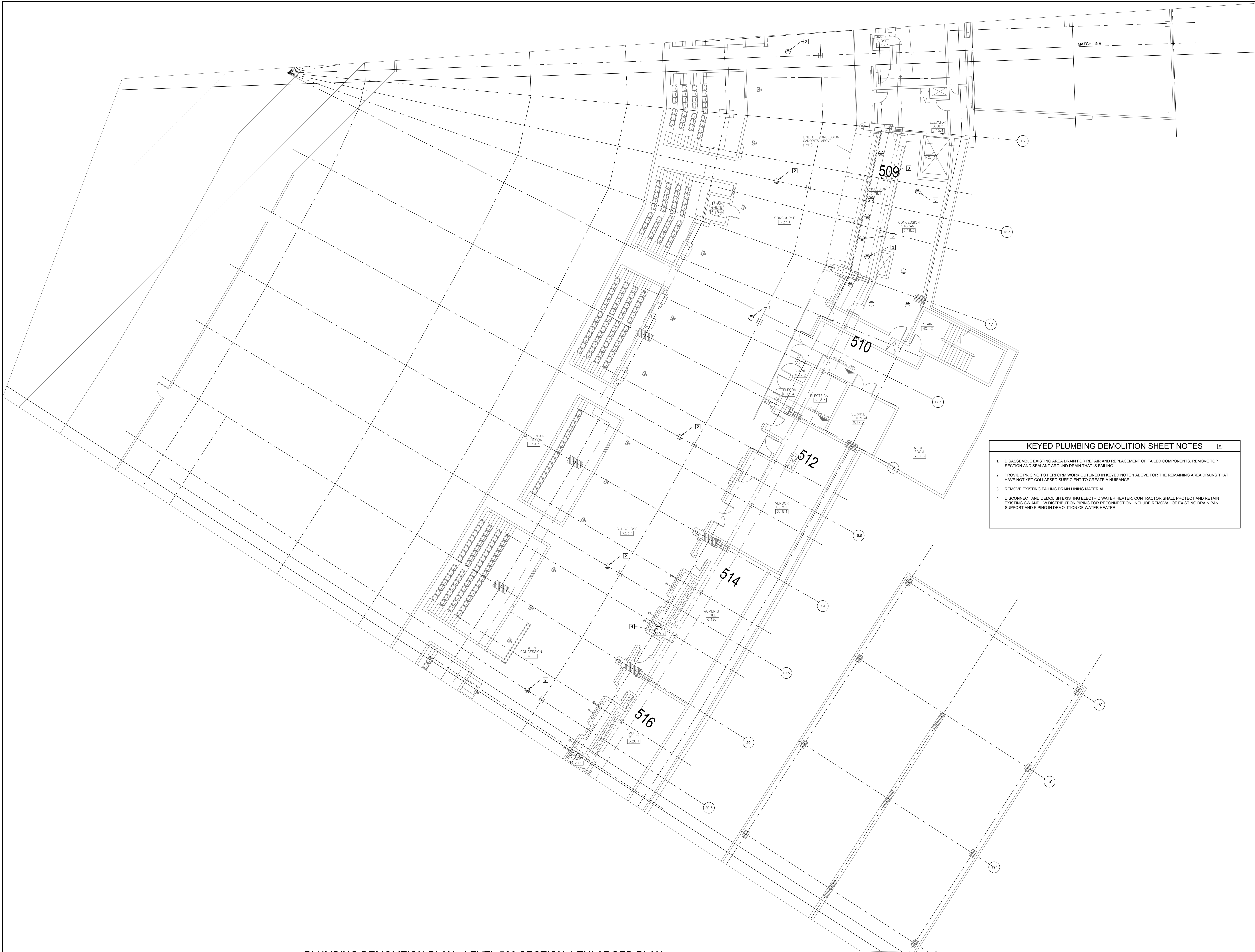
PROJECT:
GUARANTEED RATE FIELD -
WASTE AND VENT PIPING
PHASE X

333 W 35TH STREET,
CHICAGO, ILLINOIS 60616

DRAWING TITLE:
PLUMBING DEMOLITION PLAN
- LEVEL 500 SECTION 3
ENLARGED

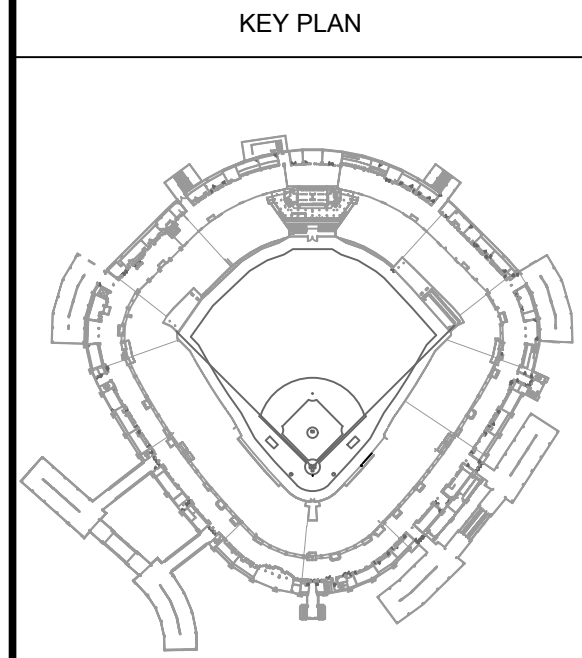
DESIGNED BY: DA
CHECKED BY: MS
PROJECT NO: 21275
SCALE: 1/8" = 1'-0"
SHEET NO.

PD1.52



1 PLUMBING DEMOLITION PLAN - LEVEL 500 SECTION 4 ENLARGED PLAN
SCALE: 1/8" = 1'-0"

- KEYED PLUMBING DEMOLITION SHEET NOTES**
1. DISASSEMBLE EXISTING AREA DRAIN FOR REPAIR AND REPLACEMENT OF FAILED COMPONENTS. REMOVE TOP SECTION AND SEALANT AROUND DRAIN THAT IS FAILING.
 2. PROVIDE PRICING TO PERFORM WORK OUTLINED IN KEYED NOTE 1 ABOVE FOR THE REMAINING AREA DRAINS THAT HAVE NOT YET COLLAPSED SUFFICIENT TO CREATE A NUISANCE.
 3. REMOVE EXISTING FAILING DRAIN LINING MATERIAL.
 4. DISCONNECT AND DEMOLISH EXISTING ELECTRIC WATER HEATER. CONTRACTOR SHALL PROTECT AND RETAIN EXISTING CMV AND HAV DISTRIBUTION PIPING FOR RECONNECTION. INCLUDE REMOVAL OF EXISTING DRAIN PAN, SUPPORT AND PIPING IN DEMOLITION OF WATER HEATER.



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GUARANTEED RATE FIELD -
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PHASE X
333 W 35TH STREET,
CHICAGO, ILLINOIS 60616

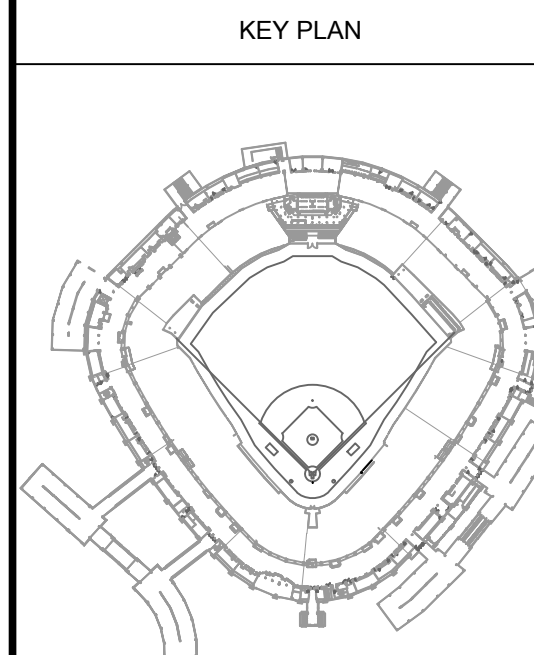
DRAWING TITLE:
PLUMBING DEMOLITION PLAN
- LEVEL 500 SECTION 4
ENLARGED

DESIGNED BY:	DA
CHECKED BY:	MS
PROJECT NO:	21275
SCALE:	1/8" = 1'-0"
SHEET NO.	



1 PLUMBING DEMOLITION PLAN - LEVEL 500 SECTION 5 ENLARGED PLAN
SCALE: 1/8" = 1'-0"

- KEYED PLUMBING DEMOLITION SHEET NOTES**
1. DISASSEMBLE EXISTING AREA DRAIN FOR REPAIR AND REPLACEMENT OF FAILED COMPONENTS. REMOVE TOP SECTION AND SEALANT AROUND DRAIN THAT IS FAILING.
 2. PROVIDE PRICING TO PERFORM WORK OUTLINED IN KEYED NOTE 1 ABOVE FOR THE REMAINING AREA DRAINS THAT HAVE NOT YET COLLAPSED SUFFICIENT TO CREATE A NUISANCE.
 3. REMOVE EXISTING FAILING DRAIN LINING MATERIAL.

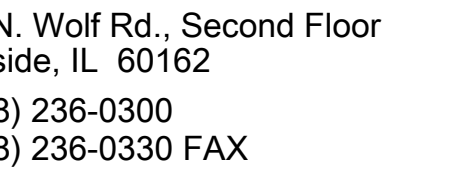


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PROJECT:
GUARANTEED RATE FIELD -
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PHASE X
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CHICAGO, ILLINOIS 60616

DRAWING TITLE:
PLUMBING DEMOLITION PLAN
- LEVEL 500 SECTION 5
ENLARGED

DESIGNED BY: DA
CHECKED BY: MS
PROJECT NO: 21275
SCALE: 1/8" = 1'-0"
SHEET NO.



1. DISASSEMBLE EXISTING AREA DRAIN FOR REPAIR AND REPLACEMENT OF FAILED COMPONENTS. REMOVE TOP SECTION AND SEALANT AROUND DRAIN THAT IS FAILING.
2. PROVIDE PRICING TO PERFORM WORK OUTLINED IN KEY NOTE 1 ABOVE FOR THE REMAINING AREA DRAINS THAT HAVE NOT YET COLLAPSED SUFFICIENT TO CREATE A NUISANCE.
3. REMOVE EXISTING FAILING DRAIN LINING MATERIAL.
4. DISCONNECT AND DEMOLISH EXISTING ELECTRIC WATER HEATER. CONTRACTOR SHALL PROTECT AND RETAIN EXISTING 6" AND 8" HW DISTRIBUTION PIPING FOR RECONSTRUCTION. INCLUDE REMOVAL OF EXISTING DRAIN PAN SUPPORT AND PIPING IN DEMOLITION OF WATER HEATER.

DATE	DESCRIPTION
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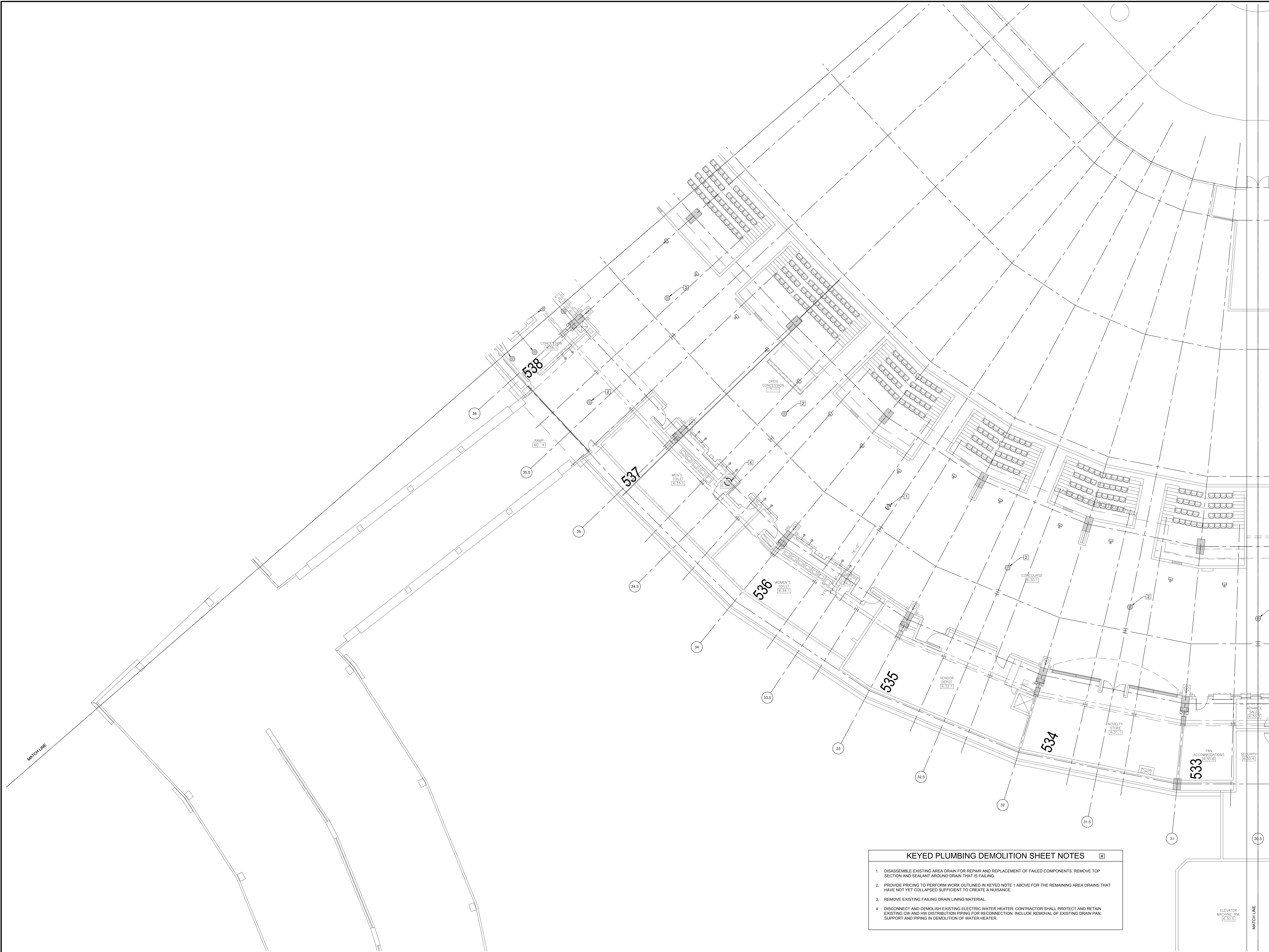
35TH STREET,
GO, ILLINOIS 60616

$$1/8" = 1'-0"$$

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PD1.55



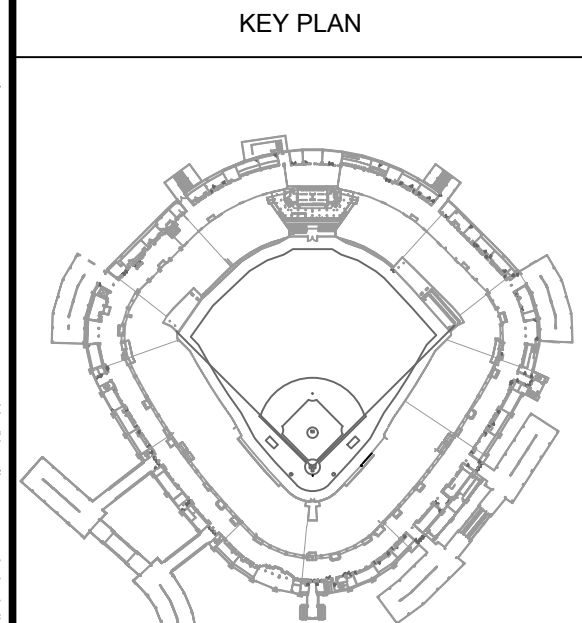
1 PLUMBING DEMOLITION PLAN - LEVEL 500 SECTION 7 ENLARGED PLAN

- KEYED PLUMBING DEMOLITION SHEET NOTES**
1. DISASSEMBLE EXISTING AREA DRAIN FOR REPAIR AND REPLACEMENT OF FAILED COMPONENTS. REMOVE TOP SECTION AND SEALANT AROUND DRAIN THAT IS FAILING.
 2. PROVIDE PRICING TO PERFORM WORK OUTLINED IN KEYED NOTE 1 ABOVE FOR THE REMAINING AREA DRAINS THAT HAVE NOT YET COLLAPSED SUFFICIENT TO CREATE A NUISANCE.
 3. REMOVE EXISTING FAILING DRAIN LINING MATERIAL.
 4. DISCONNECT AND DEMOLISH EXISTING ELECTRIC WATER HEATER. CONTRACTOR SHALL PROTECT AND RETAIN EXISTING CW AND HW DISTRIBUTION PIPING FOR RECONNECTION. INCLUDE REMOVAL OF EXISTING DRAIN PAN, SUPPORT AND PIPING IN DEMOLITION OF WATER HEATER.

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FACILITIES AUTHORITY



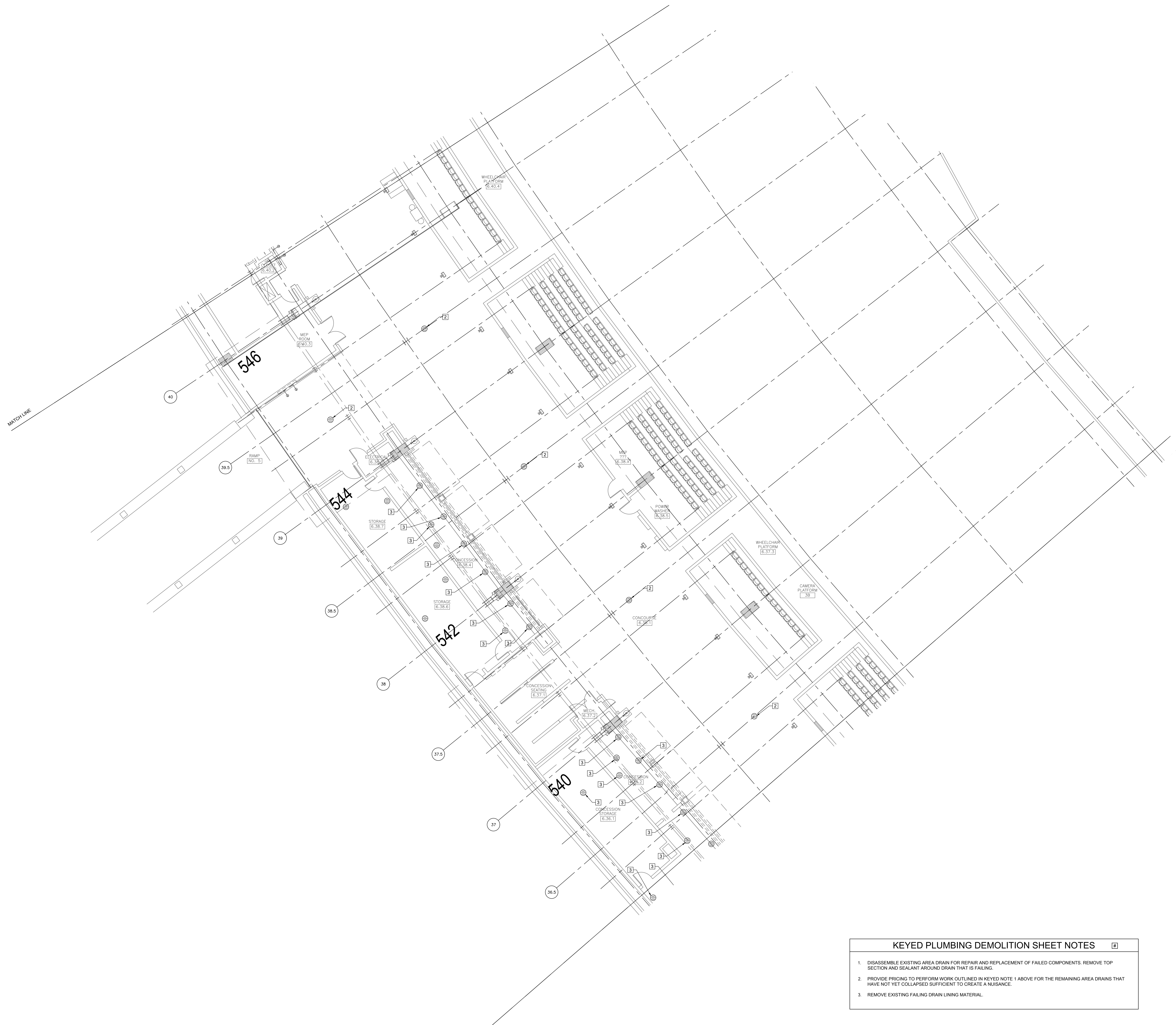
ISSUE/REVISION:		
REV.	DATE	DESCRIPTION
1	12/09/21	ISSUE FOR BID

PROJECT:
GUARANTEED RATE FIELD -
WASTE AND VENT PIPING
PHASE X
333 W 35TH STREET,
CHICAGO, ILLINOIS 60616

DRAWING TITLE:
PLUMBING DEMOLITION PLAN
- LEVEL 500 SECTION 7
ENLARGED

DESIGNED BY: DA
CHECKED BY: MS
PROJECT NO: 21275
SCALE: 1/8" = 1'-0"
SHEET NO.

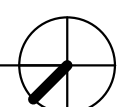
PD1.56



- KEYED PLUMBING DEMOLITION SHEET NOTES**
1. DISASSEMBLE EXISTING AREA DRAIN FOR REPAIR AND REPLACEMENT OF FAILED COMPONENTS. REMOVE TOP SECTION AND SEALANT AROUND DRAIN THAT IS FAILING.
 2. PROVIDE PRICING TO PERFORM WORK OUTLINED IN KEYED NOTE 1 ABOVE FOR THE REMAINING AREA DRAINS THAT HAVE NOT YET COLLAPSED SUFFICIENT TO CREATE A NUISANCE.
 3. REMOVE EXISTING FAILING DRAIN LINING MATERIAL.

1 PLUMBING DEMOLITION PLAN - LEVEL 400 SECTION 8 ENLARGED PLAN

SCALE: 1/8" = 1'-0"



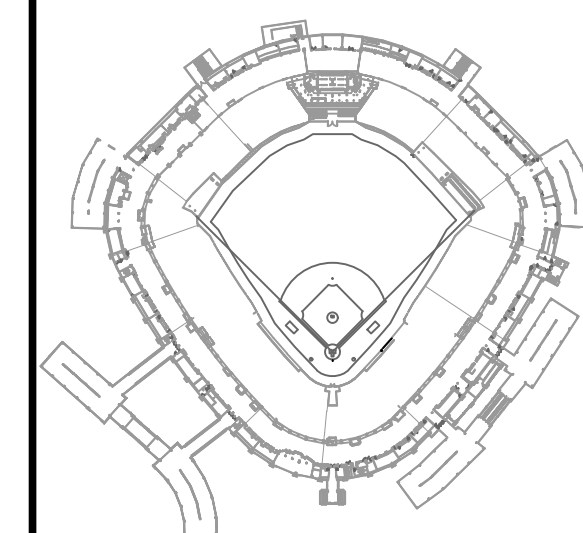
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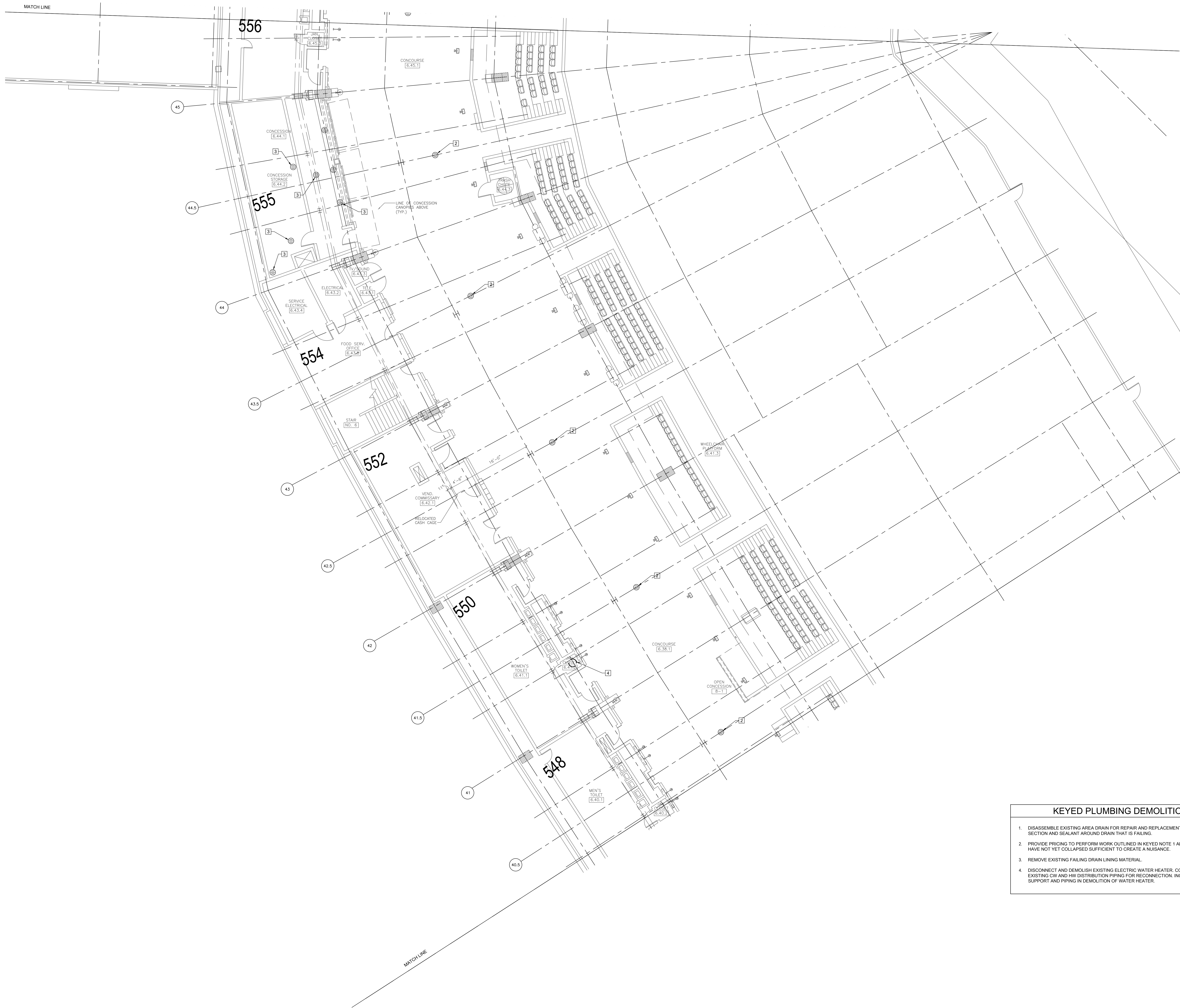
REV.	DATE	DESCRIPTION
1	12/09/21	ISSUE FOR BID

PROJECT:
GUARANTEED RATE FIELD -
WASTE AND VENT PIPING
PHASE X
333 W 35TH STREET,
CHICAGO, ILLINOIS 60616

DRAWING TITLE:
PLUMBING DEMOLITION PLAN
- LEVEL 500 SECTION 8
ENLARGED

DESIGNED BY: DA
CHECKED BY: MS
PROJECT NO: 21275
SCALE: 1/8" = 1'-0"
SHEET NO:

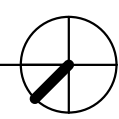
PD1.57



- KEYED PLUMBING DEMOLITION SHEET NOTES**
1. DISASSEMBLE EXISTING AREA DRAIN FOR REPAIR AND REPLACEMENT OF FAILED COMPONENTS. REMOVE TOP SECTION AND SEALANT AROUND DRAIN THAT IS FAILING.
 2. PROVIDE PRICING TO PERFORM WORK OUTLINED IN KEYED NOTE 1 ABOVE FOR THE REMAINING AREA DRAINS THAT HAVE NOT YET COLLAPSED SUFFICIENT TO CREATE A NUISANCE.
 3. REMOVE EXISTING FAILING DRAIN LINING MATERIAL.
 4. DISCONNECT AND DEMOLISH EXISTING ELECTRIC WATER HEATER. CONTRACTOR SHALL PROTECT AND RETAIN EXISTING CW AND HW DISTRIBUTION PIPING FOR RECONNECTION. INCLUDE REMOVAL OF EXISTING DRAIN PAN, SUPPORT AND PIPING IN DEMOLITION OF WATER HEATER.

1 PLUMBING DEMOLITION PLAN - LEVEL 200 SECTION 9 ENLARGED PLAN

SCALE: 1/8" = 1'-0"



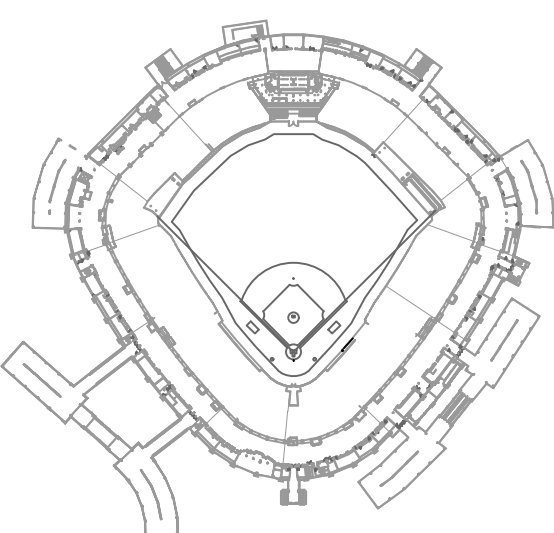
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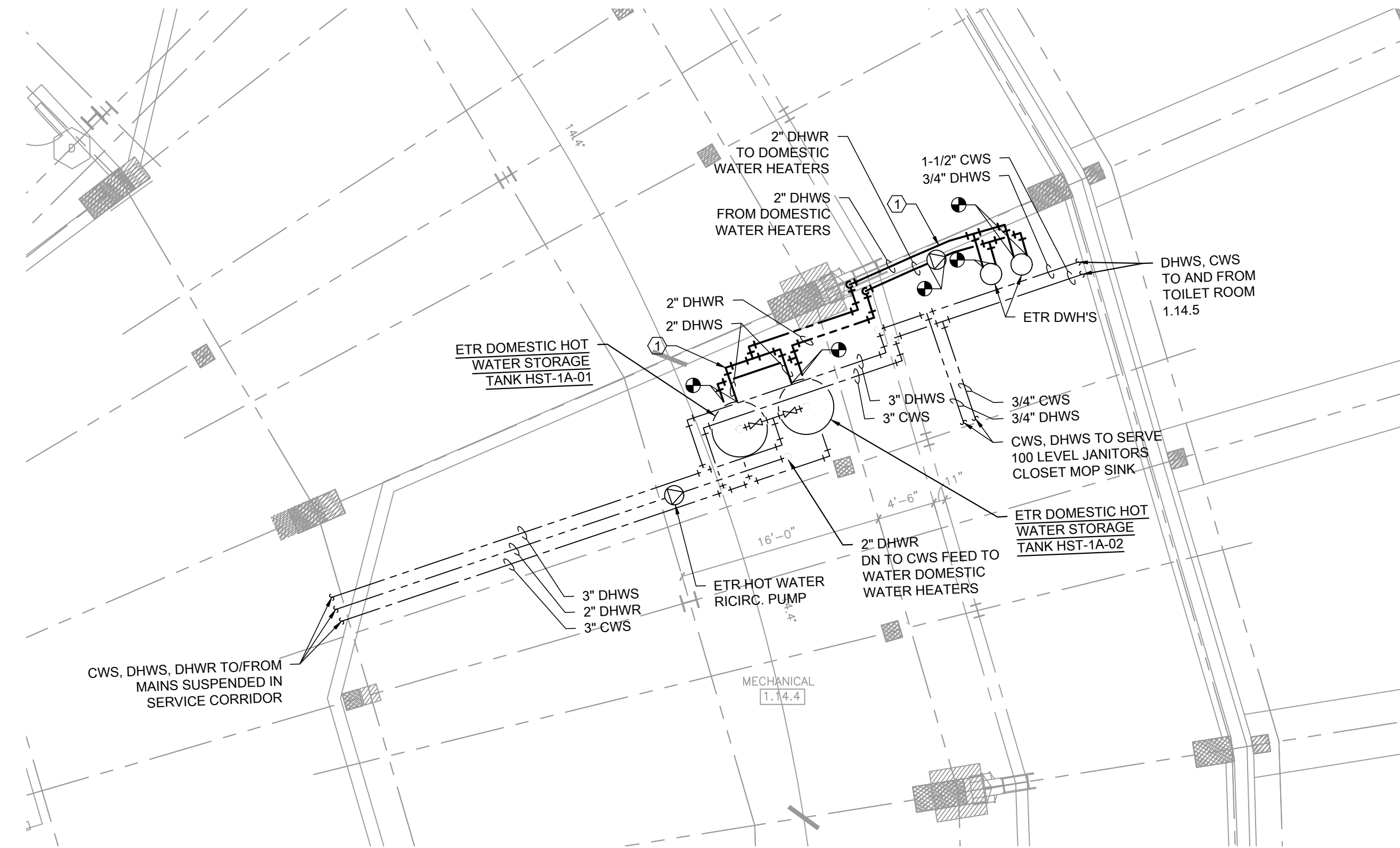
PROJECT:
GUARANTEED RATE FIELD -
WASTE AND VENT PIPING
PHASE X
333 W 35TH STREET,
CHICAGO, ILLINOIS 60616

DRAWING TITLE:
PLUMBING DEMOLITION PLAN
- LEVEL 200 SECTION 9
ENLARGED

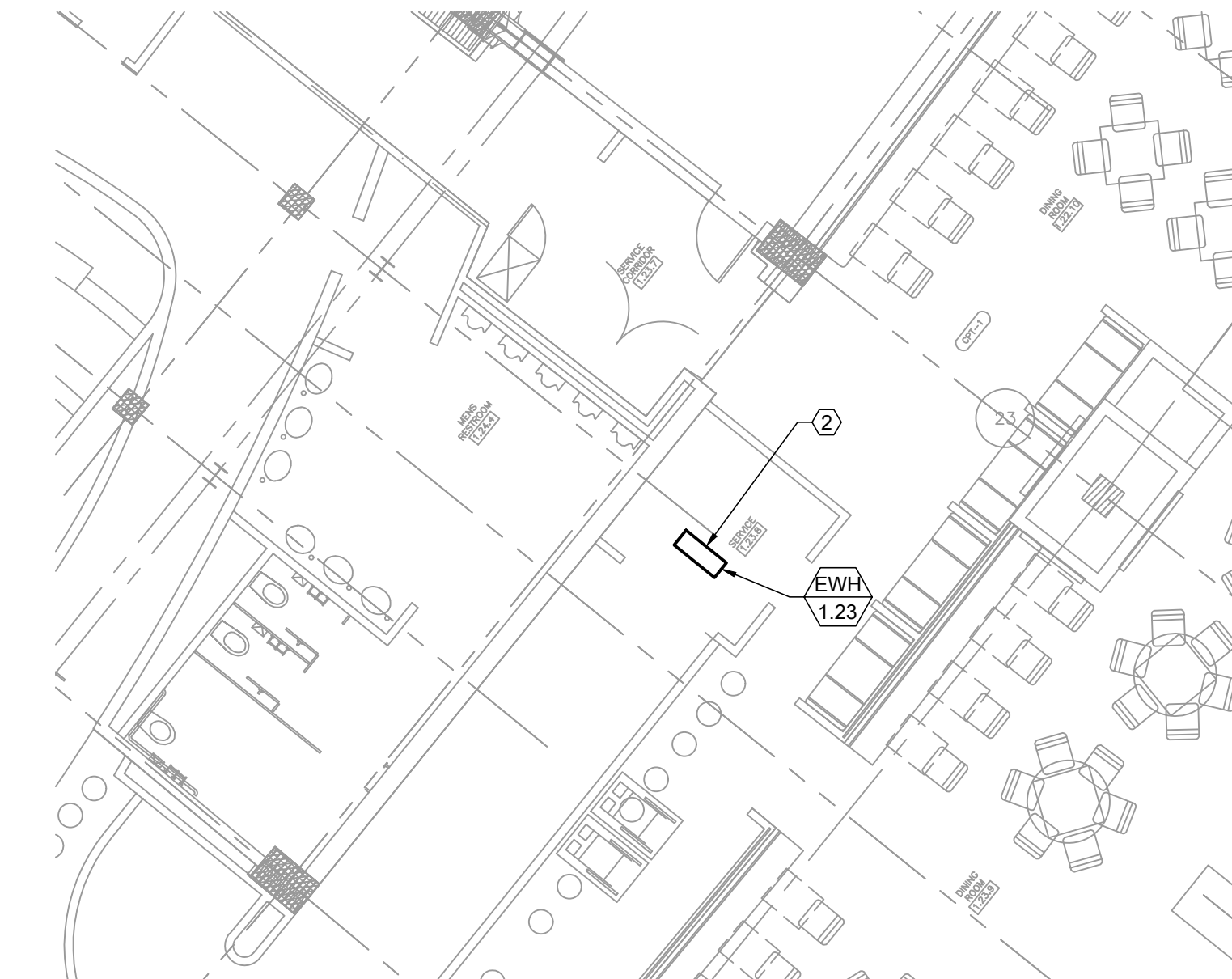
DESIGNED BY: DA
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PROJECT NO: 21275
SCALE: 1/8" = 1'-0"

SHEET NO.

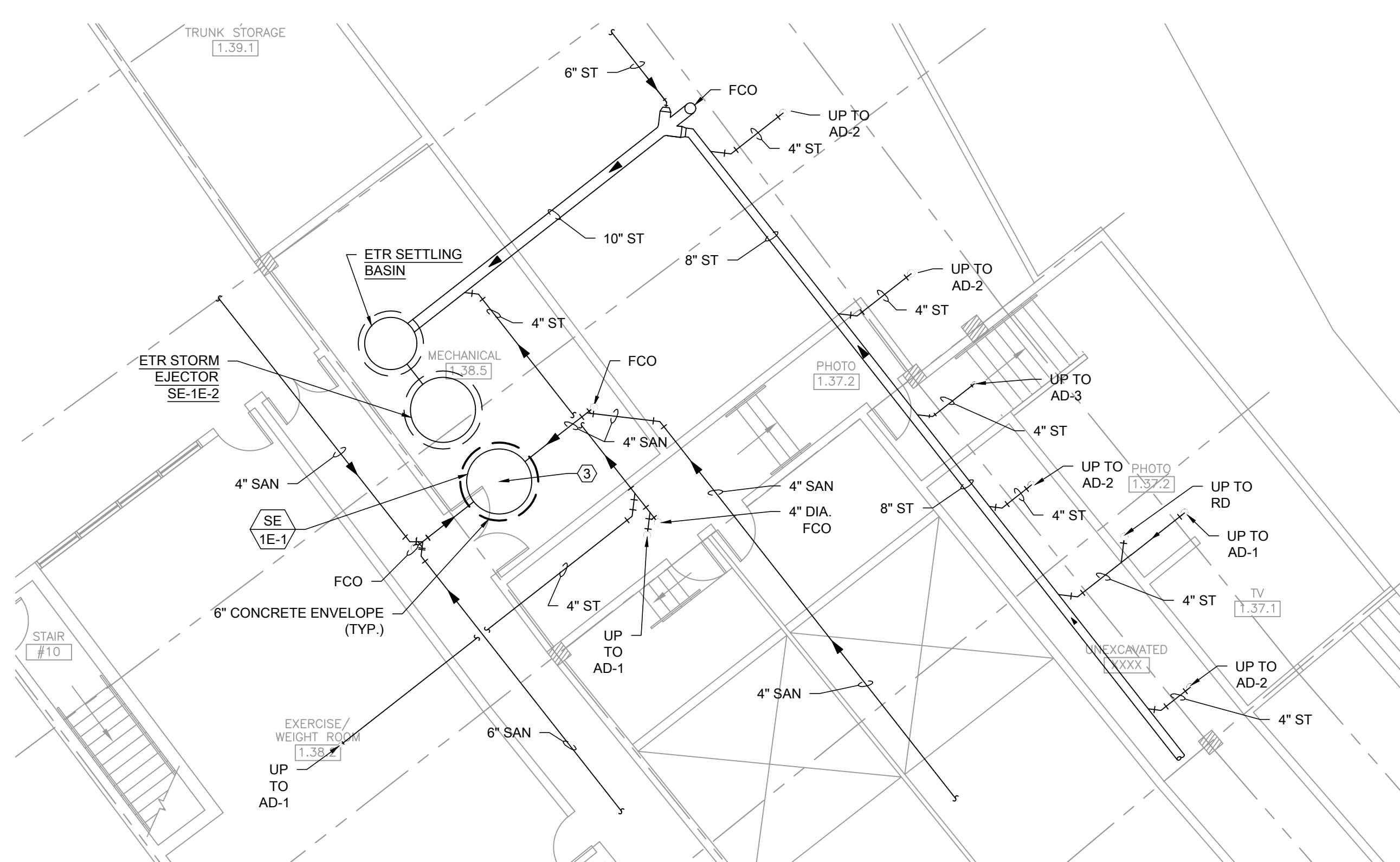
PD1.58



1 PLUMBING NEW WORK PLAN - SERVICE LEVEL - CENTRAL WATER HEATERS



2 PLUMBING NEW WORK PLAN - SERVICE LEVEL - SCOUTS LOUNGE



3 PLUMBING NEW WORK PLAN - SERVICE LEVEL - SEWAGE EJECTOR

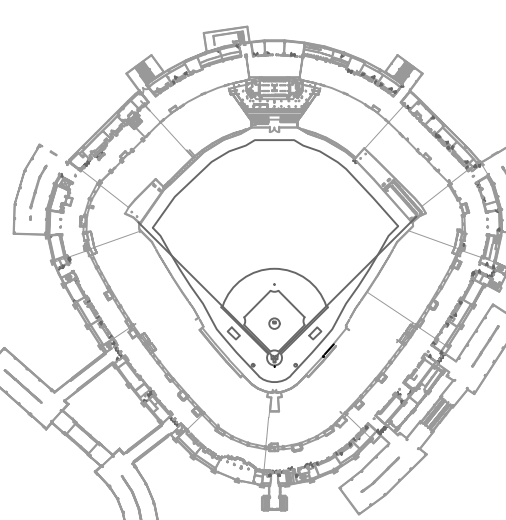
- KEYED PLUMBING NEW WORK SHEET NOTES
- FURNISH AND INSTALL NEW DOMESTIC HOT WATER PIPING BETWEEN EXISTING DOMESTIC WATER HEATERS AND EXISTING STORAGE TANKS. REFER TO SCHEMATIC PIPING DIAGRAM ON DRAWING P2.01. NEW PIPING, VALVES, AND CONNECTED ACCESSORIES SHALL UTILIZE MATERIALS RATED FOR 180° F WATER TEMPERATURE AND 300# PRESSURE CLASS. PIPING SHALL BE FLUSHED PRIOR TO FINAL CONNECTION AND FILL. ALL COMPONENTS SHALL BE NSF #1 COMPLIANT FOR POTABLE WATER.
 - FURNISH AND INSTALL NEW INSTANTANEOUS WATER HEATER ABOVE ACCESSIBLE CEILING. CONTRACTOR SHALL CONSTRUCT A SUPPORT FRAME SUITABLE FOR CARRYING THE WEIGHT OF THE WATER HEATER, CONNECTED PIPING, AND WATER AND SUPPORT IT INDEPENDENTLY FROM THE STRUCTURE ABOVE. FRAME SHALL BE LOCATED SO AS TO ALLOW HEATER TO BE MOUNTED JUST ABOVE AND SERVICEABLE FROM AN OPEN CEILING TILE.
 - FURNISH AND INSTALL NEW DUPLEX SEWAGE EJECTOR PUMP SE-1E-1 SERVING CLUBHOUSE RESTROOMS. PROVIDE WITH TRACK SYSTEM FOR LIFTING PUMPS OUT OF BASIN AND A NEW LID FOR IMPROVED MAINTENANCE. MOUNT NEW CONTROLLER IN SPACE CREATED BY DEMOLITION OF PREVIOUS CONTROLLER.



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GUARANTEED RATE FIELD -
WASTE AND VENT PIPING
PHASE X

333 W 35TH STREET,
CHICAGO, ILLINOIS 60616

DRAWING TITLE:

PLUMBING NEW WORK PLAN -
SERVICE LEVEL

DESIGNED BY: DA

CHECKED BY: MS

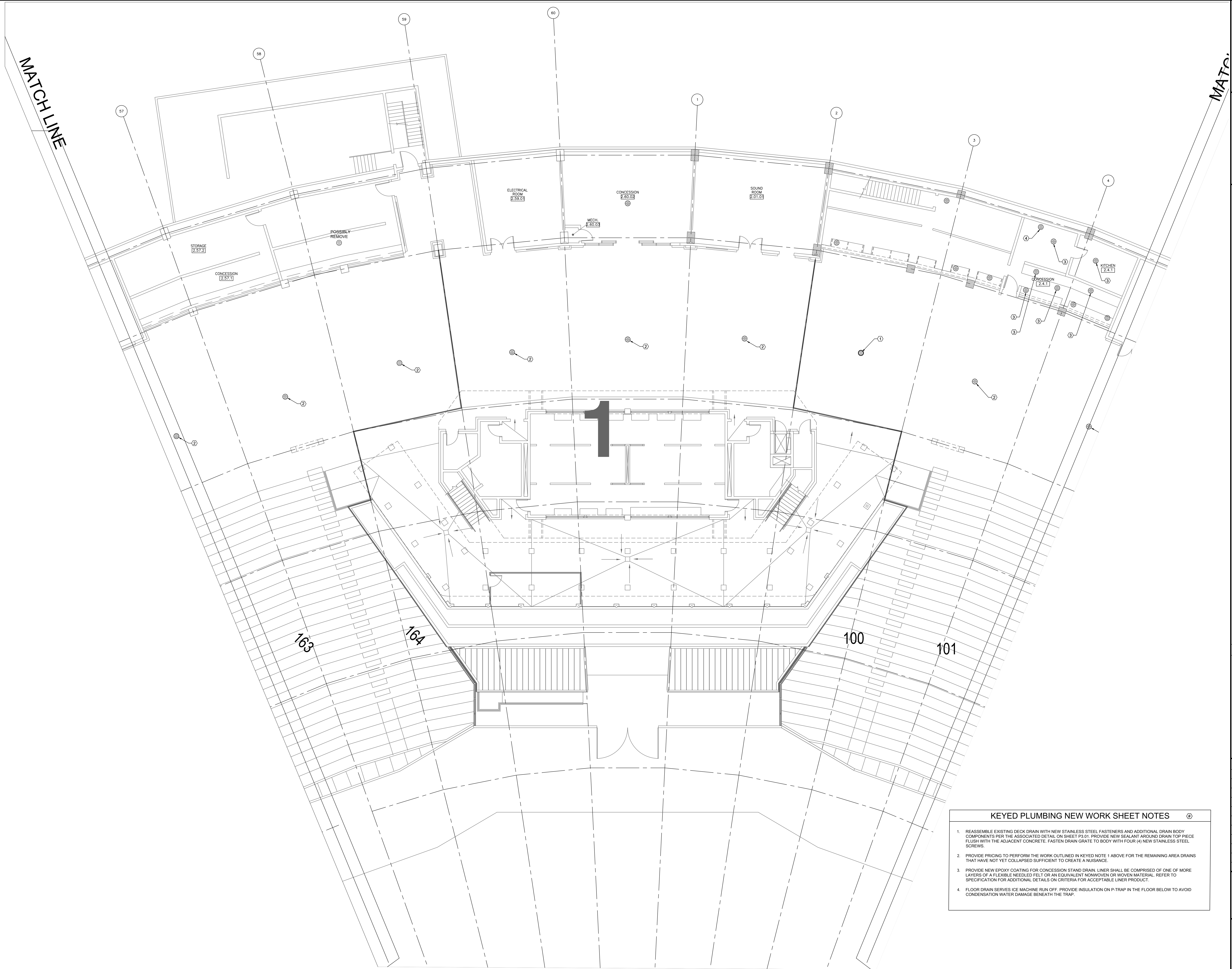
PROJECT NO: 21275

SCALE: 1/8" = 1'-0"

SHEET NO.

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P1.01



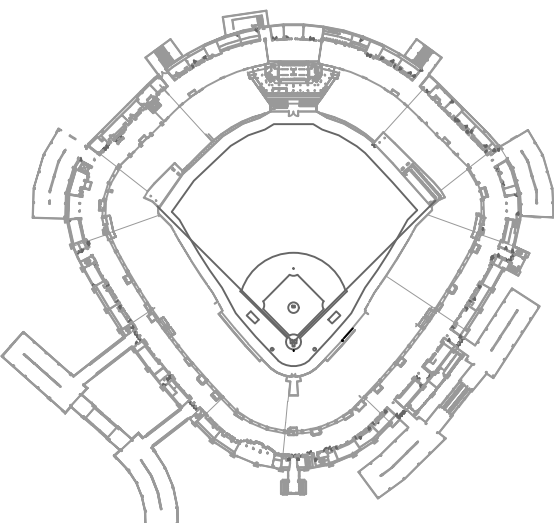
1 PLUMBING NEW WORK PLAN - LEVEL 100 SECTION 1 ENLARGED PLAN

SCALE: 1/8" = 1'-0"

- KEYED PLUMBING NEW WORK SHEET NOTES**
1. REASSEMBLE EXISTING DECK DRAIN WITH NEW STAINLESS STEEL FASTENERS AND ADDITIONAL DRAIN BODY COMPONENTS PER THE ASSOCIATED DETAIL ON SHEET P3.01. PROVIDE NEW SEALANT AROUND DRAIN TOP PIECE FLUSH WITH THE ADJACENT CONCRETE. FASTEN DRAIN GRATE TO BODY WITH FOUR (4) NEW STAINLESS STEEL SCREWS.
 2. PROVIDE PRICING TO PERFORM THE WORK OUTLINED IN KEYED NOTE 1 ABOVE FOR THE REMAINING AREA DRAINS THAT HAVE NOT YET COLLAPSED SUFFICIENT TO CREATE A NUISANCE.
 3. PROVIDE NEW EPOXY COATING FOR CONCESSION STAND DRAIN. LINER SHALL BE COMPRISED OF ONE OF MORE LAYERS OF A FLEXIBLE NEEDED FELT OR AN EQUIVALENT NONWOVEN OR WOVEN MATERIAL. REFER TO SPECIFICATION FOR ADDITIONAL DETAILS ON CRITERIA FOR ACCEPTABLE LINER PRODUCT.
 4. FLOOR DRAIN SERVES ICE MACHINE RUN OFF. PROVIDE INSULATION ON P-TRAP IN THE FLOOR BELOW TO AVOID CONDENSATION WATER DAMAGE BENEATH THE TRAP.



KEY PLAN



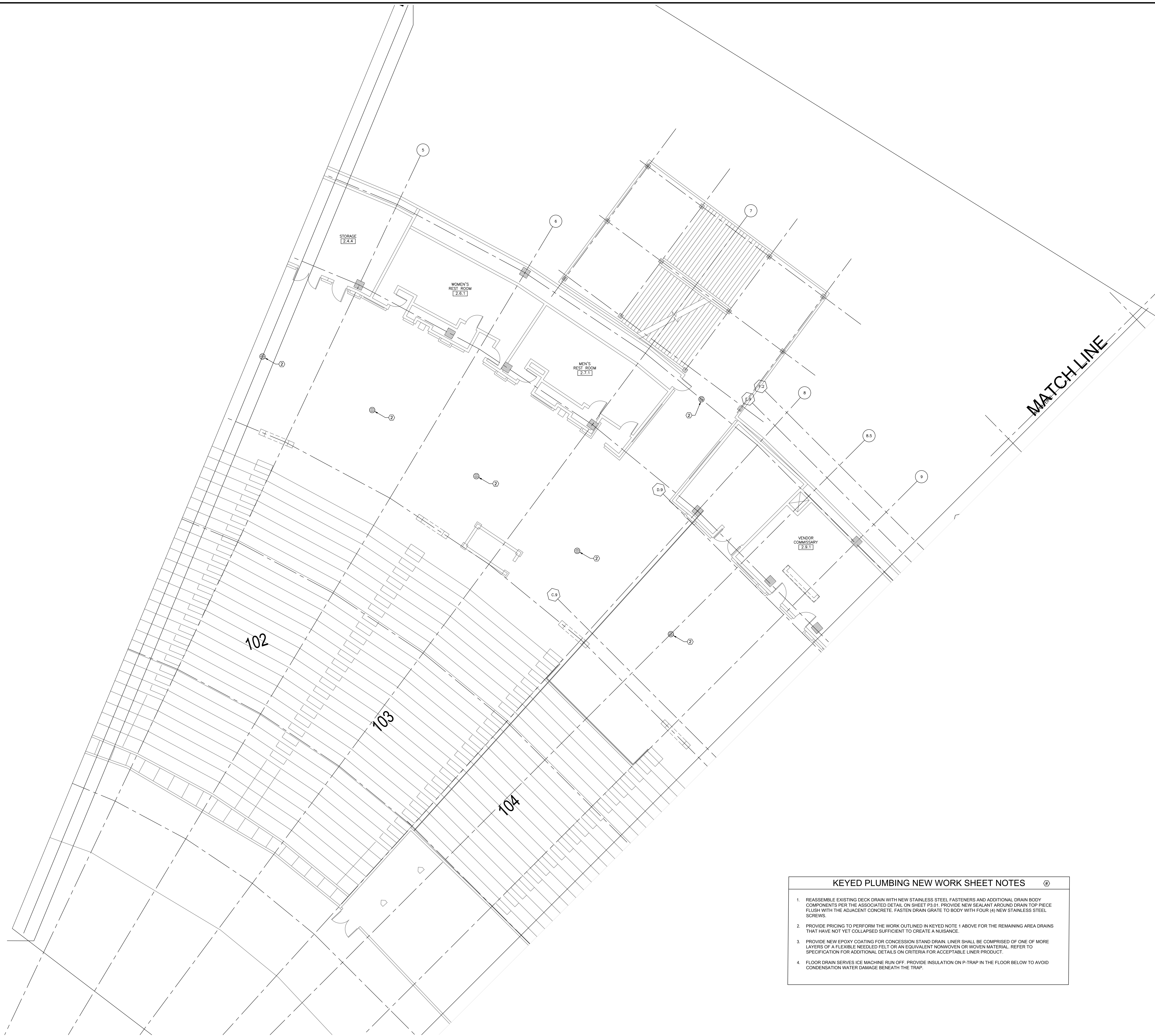
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1	12/09/21	ISSUED FOR BID

PROJECT:
GUARANTEED RATE FIELD -
WASTE AND VENT PIPING
PHASE X
333 W 35TH STREET,
CHICAGO, ILLINOIS 60616

DRAWING TITLE:
PLUMBING NEW WORK PLAN -
LEVEL 100 SECTION 1
ENLARGED PLAN

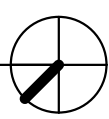
DESIGNED BY: DA
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PROJECT NO: 21275
SCALE: 1/8" = 1'-0"
SHEET NO.



- KEYED PLUMBING NEW WORK SHEET NOTES** ⑥
1. REASSEMBLE EXISTING DECK DRAIN WITH NEW STAINLESS STEEL FASTENERS AND ADDITIONAL DRAIN BODY COMPONENTS PER THE ASSOCIATED DETAIL ON SHEET P3.01. PROVIDE NEW SEALANT AROUND DRAIN TOP PIECE FLUSH WITH THE ADJACENT CONCRETE. FASTEN DRAIN GRATE TO BODY WITH FOUR (4) NEW STAINLESS STEEL SCREWS.
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 4. FLOOR DRAIN SERVES ICE MACHINE RUN OFF. PROVIDE INSULATION ON P-TRAP IN THE FLOOR BELOW TO AVOID CONDENSATION WATER DAMAGE BENEATH THE TRAP.

1 PLUMBING NEW WORK PLAN - LEVEL 100 SECTION 2 ENLARGED PLAN

SCALE: 1/8" = 1'-0"



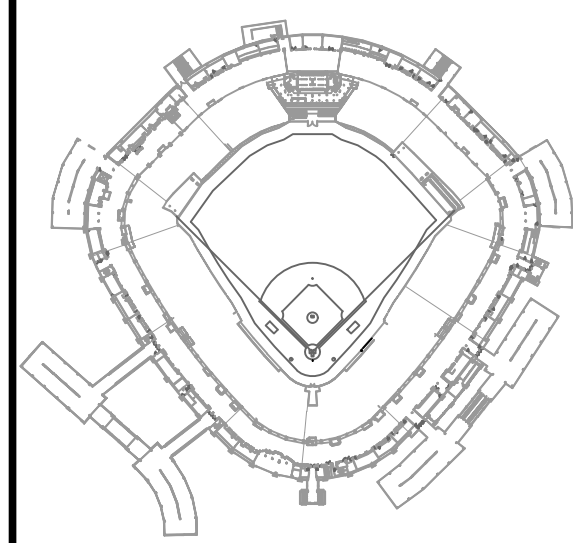
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PROJECT:

GUARANTEED RATE FIELD -
WASTE AND VENT PIPING
PHASE X

333 W 35TH STREET,
CHICAGO, ILLINOIS 60616

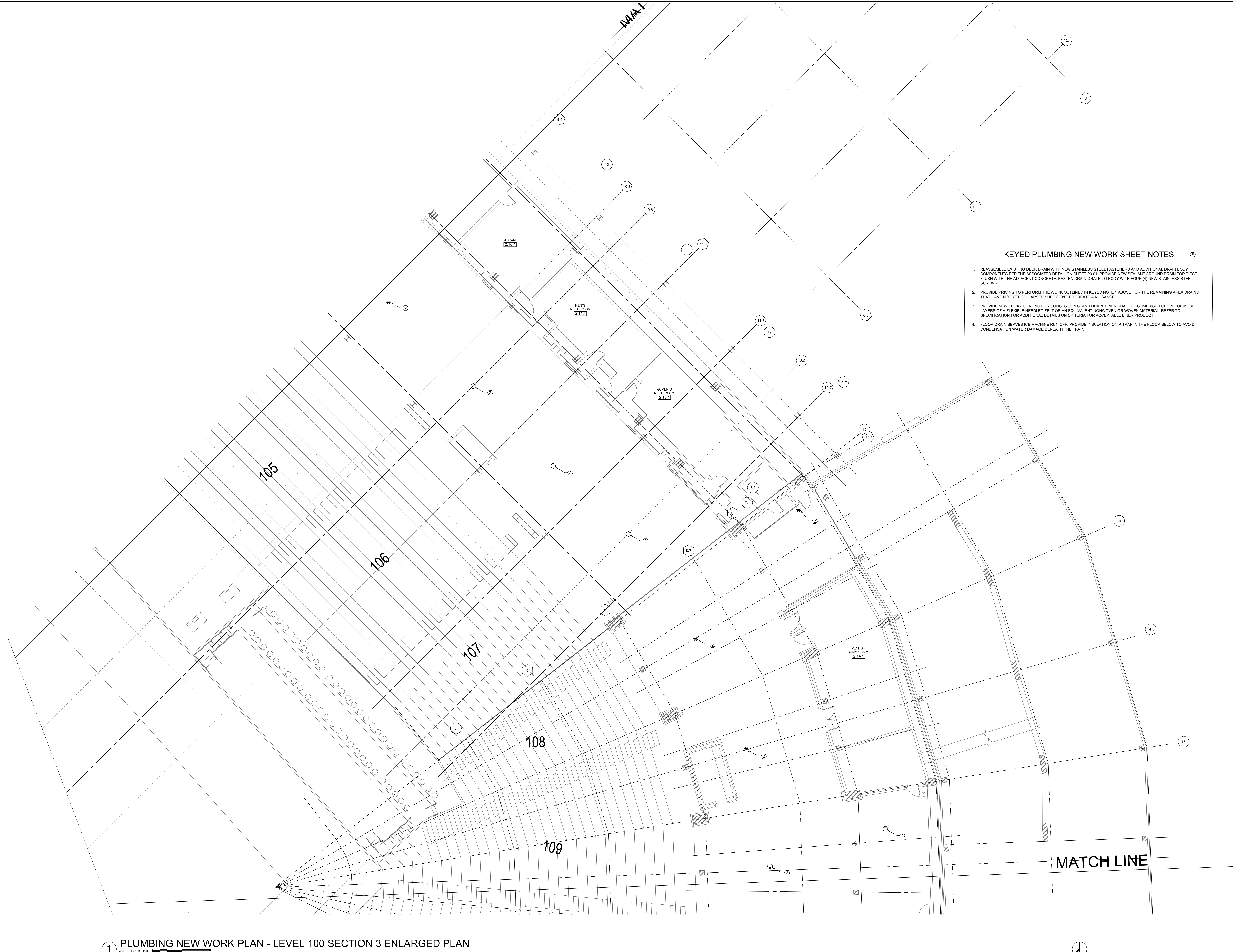
DRAWING TITLE:

PLUMBING NEW WORK PLAN -
LEVEL 100 SECTION 2
ENLARGED PLAN

DESIGNED BY: DA
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PROJECT NO: 21275
SCALE: 1/8" = 1'-0"

SHEET NO.

P1.15

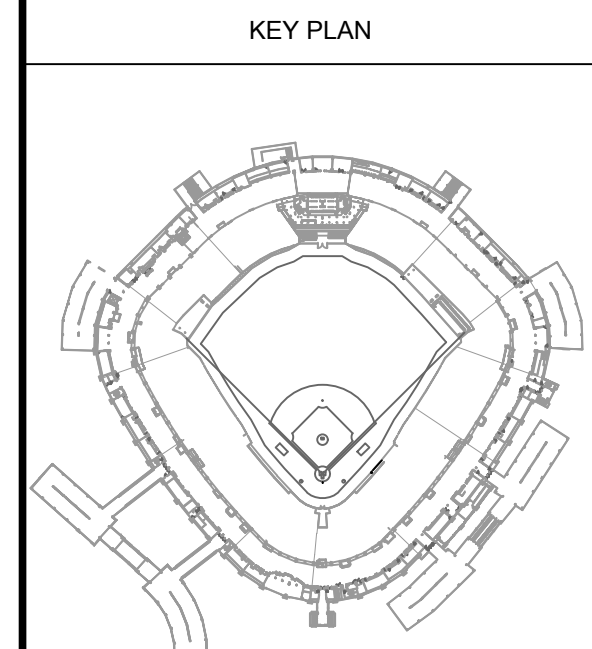


- KEYED PLUMBING NEW WORK SHEET NOTES**
1. REASSEMBLE EXISTING DECK DRAIN WITH NEW STAINLESS STEEL FASTENERS AND ADDITIONAL DRAIN BODY COMPONENTS PER THE ASSOCIATED DETAIL ON SHEET P3.01. PROVIDE NEW SEALANT AROUND DRAIN TOP PIECE FLUSH WITH THE ADJACENT CONCRETE. FASTEN DRAIN GRATE TO BODY WITH FOUR (4) NEW STAINLESS STEEL SCREWS.
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 4. FLOOR DRAIN SERVES ICE MACHINE RUN OFF. PROVIDE INSULATION ON P-TRAP IN THE FLOOR BELOW TO AVOID CONDENSATION WATER DAMAGE BENEATH THE TRAP.

1 PLUMBING NEW WORK PLAN - LEVEL 100 SECTION 3 ENLARGED PLAN

SCALE: 1/8" = 1'-0"

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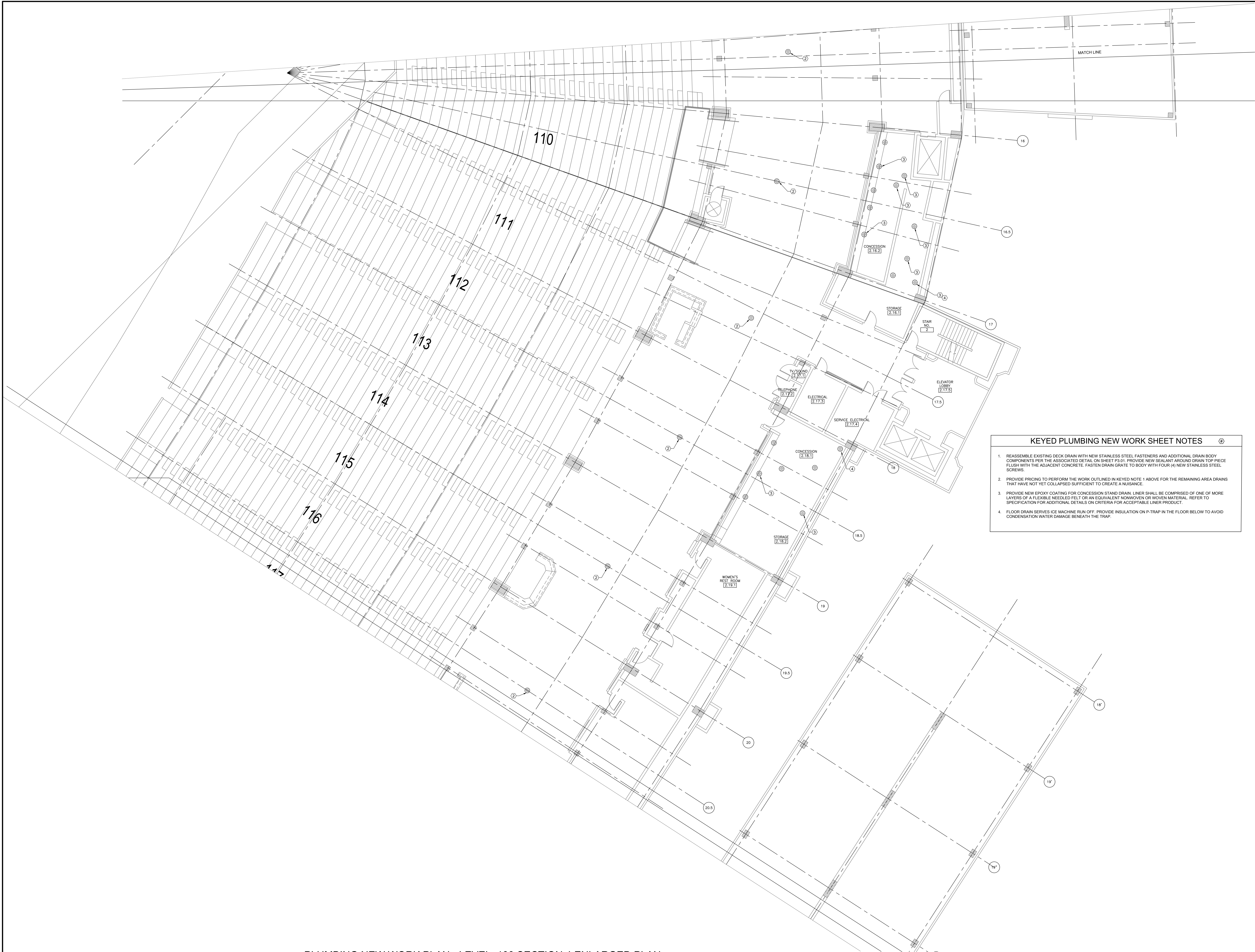


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PROJECT:
GUARANTEED RATE FIELD -
WASTE AND VENT PIPING
PHASE X
333 W 35TH STREET,
CHICAGO, ILLINOIS 60616

DRAWING TITLE:
PLUMBING NEW WORK PLAN -
LEVEL 100 SECTION 3
ENLARGED PLAN

DESIGNED BY:	DA
CHECKED BY:	MS
PROJECT NO:	21275
SCALE:	1/8" = 1'-0"
SHEET NO.	

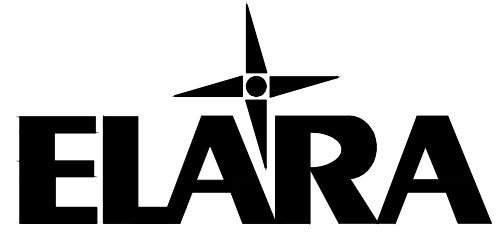


- KEYED PLUMBING NEW WORK SHEET NOTES**
1. REASSEMBLE EXISTING DECK DRAIN WITH NEW STAINLESS STEEL FASTENERS AND ADDITIONAL DRAIN BODY COMPONENTS PER THE ASSOCIATED DETAIL ON SHEET P3.01. PROVIDE NEW SEALANT AROUND DRAIN TOP PIECE FLUSH WITH THE ADJACENT CONCRETE. FASTEN DRAIN GRATE TO BODY WITH FOUR (4) NEW STAINLESS STEEL SCREWS.
 2. PROVIDE PRICING TO PERFORM THE WORK OUTLINED IN KEYED NOTE 1 ABOVE FOR THE REMAINING AREA DRAINS THAT HAVE NOT YET COLLAPSED SUFFICIENT TO CREATE A NUISANCE.
 3. PROVIDE NEW EPOXY COATING FOR CONCESSION STAND DRAIN. LINER SHALL BE COMPRISED OF ONE OF MORE LAYERS OF A FLEXIBLE NEEDLED FELT OR AN EQUIVALENT NONWOVEN OR WOVEN MATERIAL. REFER TO SPECIFICATION FOR ADDITIONAL DETAILS ON CRITERIA FOR ACCEPTABLE LINER PRODUCT.
 4. FLOOR DRAIN SERVES ICE MACHINE RUN OFF. PROVIDE INSULATION ON P-TRAP IN THE FLOOR BELOW TO AVOID CONDENSATION WATER DAMAGE BENEATH THE TRAP.

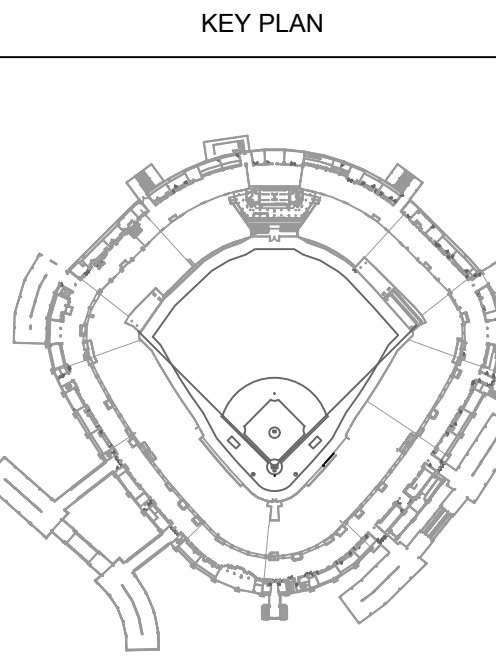
1 PLUMBING NEW WORK PLAN - LEVEL 100 SECTION 4 ENLARGED PLAN

SCALE: 1/8" = 1'-0"

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PROJECT:
GUARANTEED RATE FIELD -
WASTE AND VENT PIPING
PHASE X
333 W 35TH STREET,
CHICAGO, ILLINOIS 60616

DRAWING TITLE:
PLUMBING NEW WORK PLAN -
LEVEL 100 SECTION 4
ENLARGED PLAN

DESIGNED BY: DA
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PROJECT NO: 21275
SCALE: 1/8" = 1'-0"
SHEET NO.

P1.17



- KEYED PLUMBING NEW WORK SHEET NOTES**
1. REASSEMBLE EXISTING DECK DRAIN WITH NEW STAINLESS STEEL FASTENERS AND ADDITIONAL DRAIN BODY COMPONENTS PER THE ASSOCIATED DETAIL ON SHEET P1.01. PROVIDE NEW SEALANT AROUND DRAIN TOP PIECE FLUSH WITH THE ADJACENT CONCRETE. FASTEN DRAIN GRATE TO BODY WITH FOUR (4) NEW STAINLESS STEEL SCREWS.
 2. PROVIDE PRICING TO PERFORM THE WORK OUTLINED IN KEYED NOTE 1 ABOVE FOR THE REMAINING AREA DRAINS THAT HAVE NOT YET COLLAPSED SUFFICIENT TO CREATE A NUISANCE.
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 4. FLOOR DRAIN SERVES ICE MACHINE RUN OFF. PROVIDE INSULATION ON P-TRAP IN THE FLOOR BELOW TO AVOID CONDENSATION WATER DAMAGE BENEATH THE TRAP.

1 PLUMBING NEW WORK PLAN - LEVEL 100 SECTION 5 ENLARGED PLAN

SCALE: 1/8" = 1'-0"

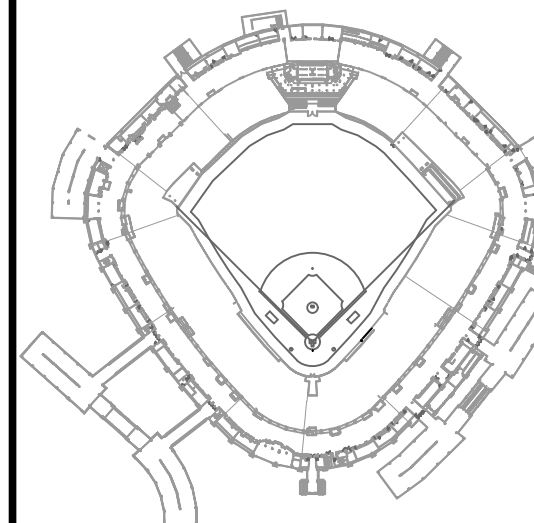
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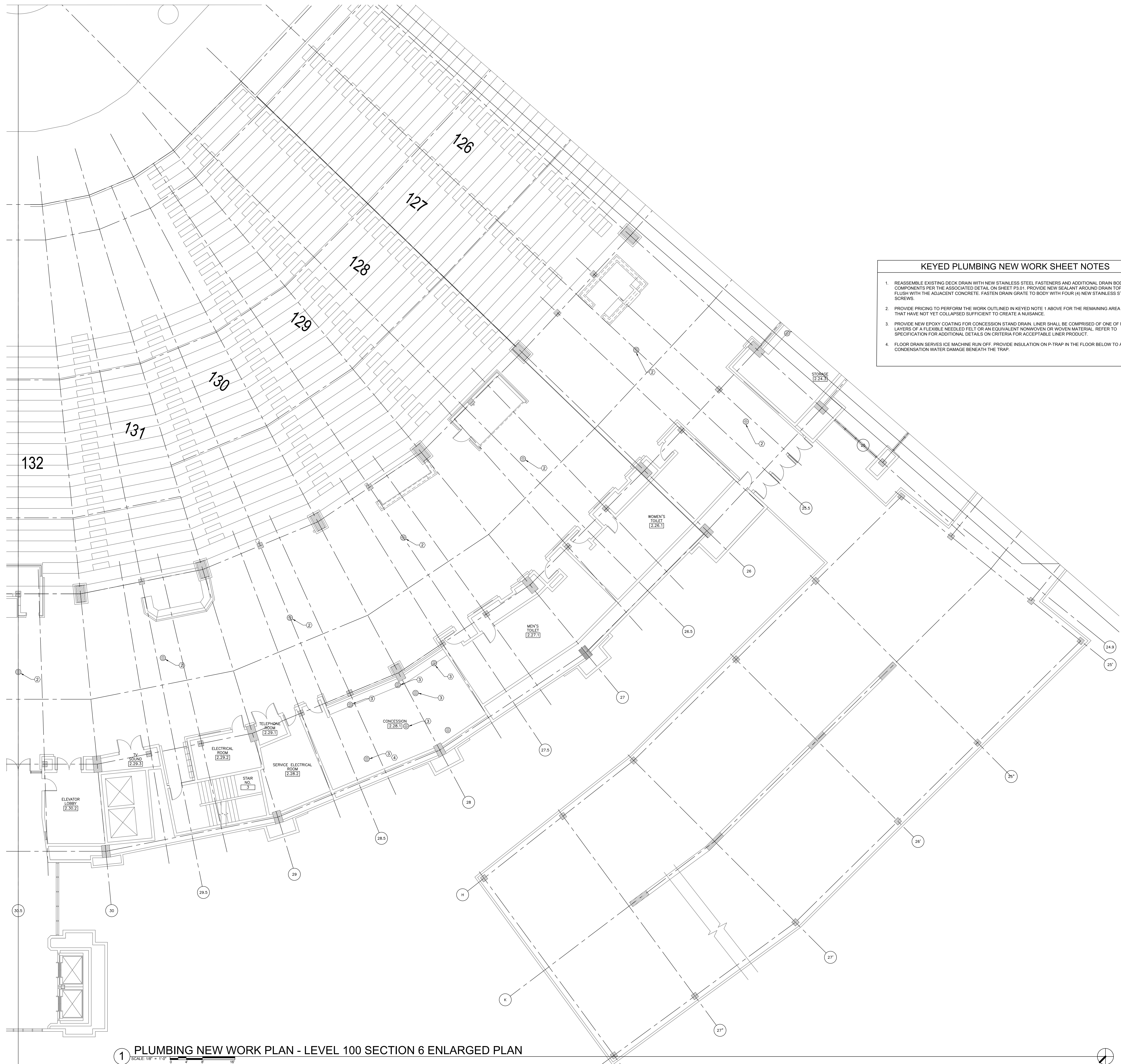
ISSUE/REVISION:

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PROJECT:
GUARANTEED RATE FIELD -
WASTE AND VENT PIPING
PHASE X
333 W 35TH STREET,
CHICAGO, ILLINOIS 60616

DRAWING TITLE:
PLUMBING NEW WORK PLAN -
LEVEL 100 SECTION 5
ENLARGED PLAN

DESIGNED BY: DA
CHECKED BY: MS
PROJECT NO: 21275
SCALE: 1/8" = 1'-0"
SHEET NO.



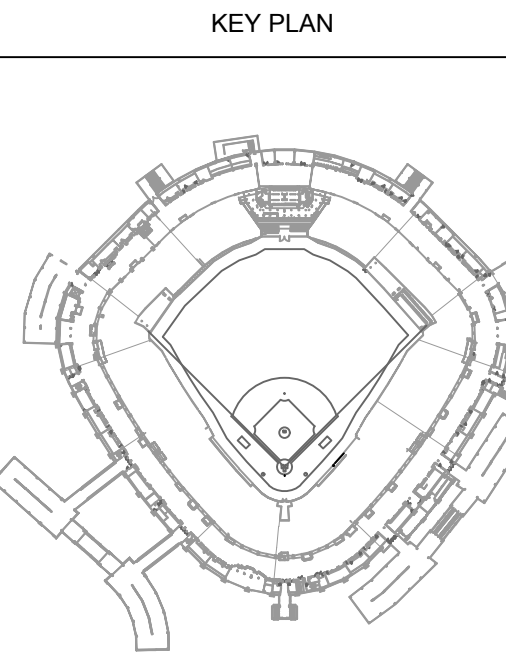
- KEYED PLUMBING NEW WORK SHEET NOTES** Ⓢ
1. REASSEMBLE EXISTING DECK DRAIN WITH NEW STAINLESS STEEL FASTENERS AND ADDITIONAL DRAIN BODY COMPONENTS PER THE ASSOCIATED DETAIL ON SHEET PS.01. PROVIDE NEW SEALANT AROUND DRAIN TOP PIECE FLUSH WITH THE ADJACENT CONCRETE. FASTEN DRAIN GRATE TO BODY WITH FOUR (4) NEW STAINLESS STEEL SCREWS.
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 4. FLOOR DRAIN SERVES ICE MACHINE RUN OFF. PROVIDE INSULATION ON P-TRAP IN THE FLOOR BELOW TO AVOID CONDENSATION WATER DAMAGE BENEATH THE TRAP.

1 PLUMBING NEW WORK PLAN - LEVEL 100 SECTION 6 ENLARGED PLAN
SCALE: 1/8" = 1'-0"

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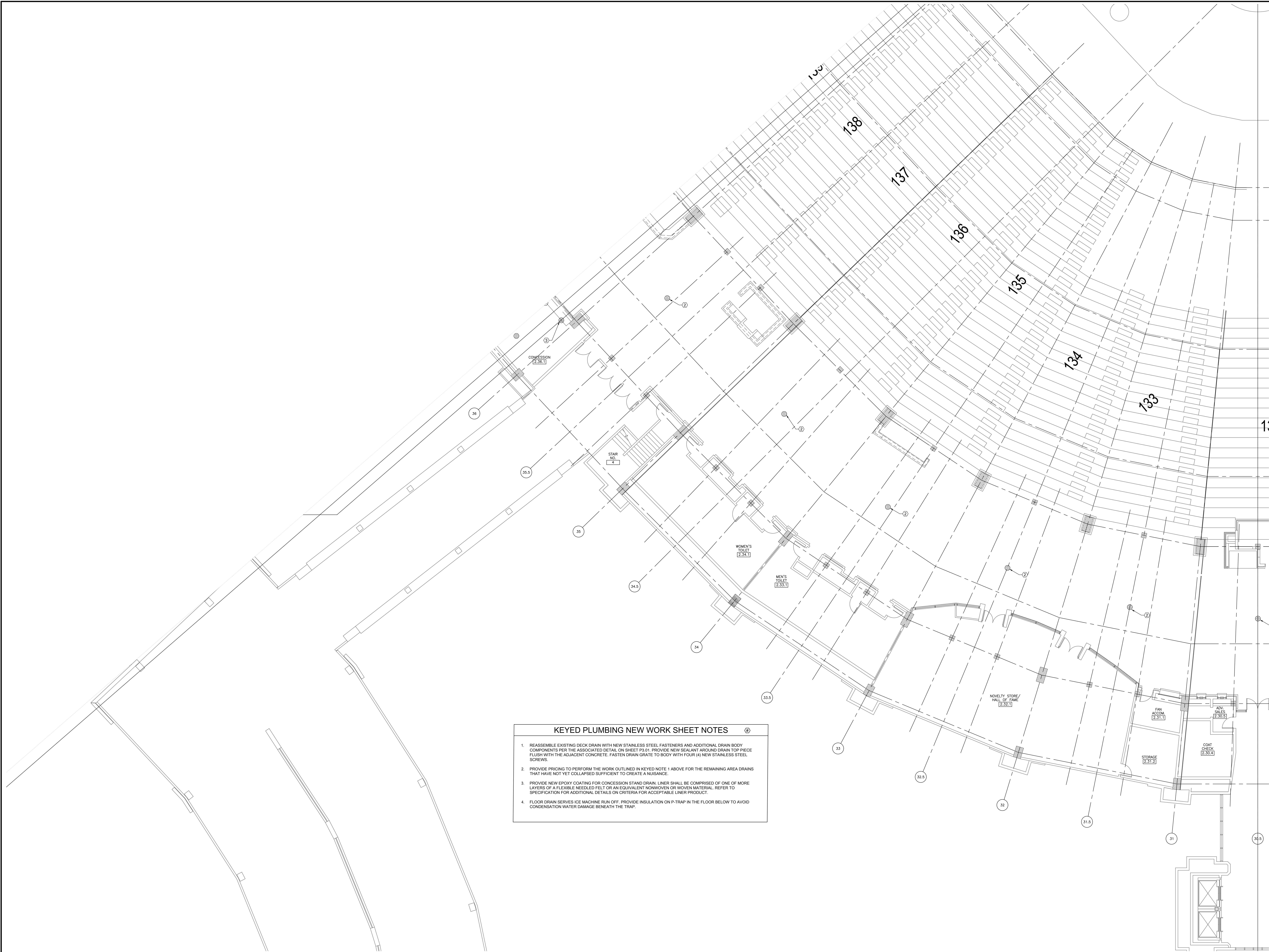


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333 W 35TH STREET,
CHICAGO, ILLINOIS 60616

DRAWING TITLE:
PLUMBING NEW WORK PLAN -
LEVEL 100 SECTION 6
ENLARGED PLAN

DESIGNED BY: DA
CHECKED BY: MS
PROJECT NO: 21275
SCALE: 1/8" = 1'-0"
SHEET NO.



- KEYED PLUMBING NEW WORK SHEET NOTES**
1. REASSEMBLE EXISTING DECK DRAIN WITH NEW STAINLESS STEEL FASTENERS AND ADDITIONAL DRAIN BODY COMPONENTS PER THE ASSOCIATED DETAIL ON SHEET P1.01. PROVIDE NEW SEALANT AROUND DRAIN TOP PIECE FLUSH WITH THE ADJACENT CONCRETE. FASTEN DRAIN GRATE TO BODY WITH FOUR (4) NEW STAINLESS STEEL SCREWS.
 2. PROVIDE PRICING TO PERFORM THE WORK OUTLINED IN KEYED NOTE 1 ABOVE FOR THE REMAINING AREA DRAINS THAT HAVE NOT YET COLLAPSED SUFFICIENT TO CREATE A NUISANCE.
 3. PROVIDE NEW EPOXY COATING FOR CONCESSION STAND DRAIN. LINER SHALL BE COMPRISED OF ONE OF MORE LAYERS OF A FLEXIBLE NEEDLED FELT OR AN EQUIVALENT NONWOVEN OR WOVEN MATERIAL. REFER TO SPECIFICATION FOR ADDITIONAL DETAILS ON CRITERIA FOR ACCEPTABLE LINER PRODUCT.
 4. FLOOR DRAIN SERVES ICE MACHINE RUN OFF. PROVIDE INSULATION ON P-TRAP IN THE FLOOR BELOW TO AVOID CONDENSATION WATER DAMAGE BENEATH THE TRAP.

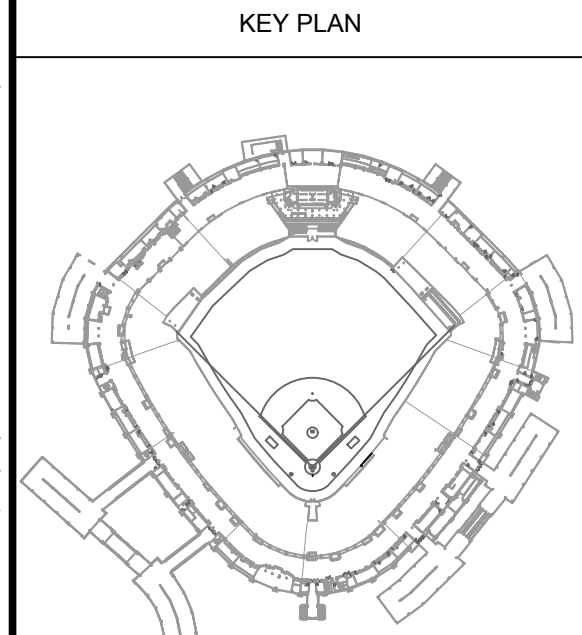
1 PLUMBING NEW WORK PLAN - LEVEL 100 SECTION 6 ENLARGED PLAN

SCALE: 1/8" = 1'-0"

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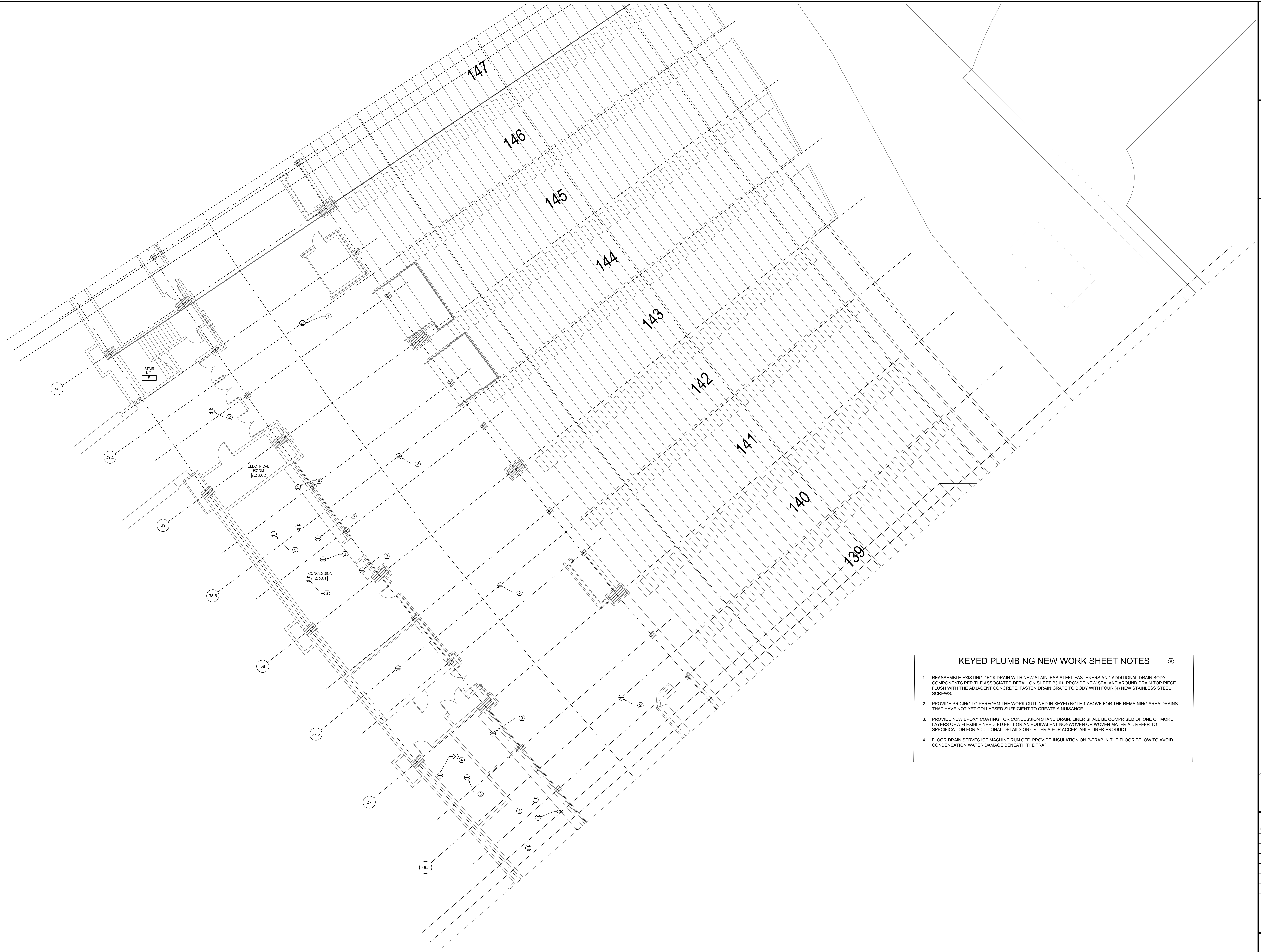


ISSUE/REVISION:		
REV.	DATE	DESCRIPTION
1	12/09/21	ISSUE FOR BID

PROJECT:
GUARANTEED RATE FIELD -
WASTE AND VENT PIPING
PHASE X
333 W 35TH STREET,
CHICAGO, ILLINOIS 60616

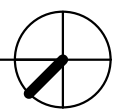
DRAWING TITLE:
PLUMBING NEW WORK PLAN -
LEVEL 100 SECTION 7
ENLARGED PLAN

DESIGNED BY: DA
CHECKED BY: MS
PROJECT NO: 21275
SCALE: 1/8" = 1'-0"
SHEET NO.



1 PLUMBING NEW WORK PLAN - LEVEL 100 SECTION 8 ENLARGED PLAN

SCALE: 1/8" = 1'-0"



KEYED PLUMBING NEW WORK SHEET NOTES

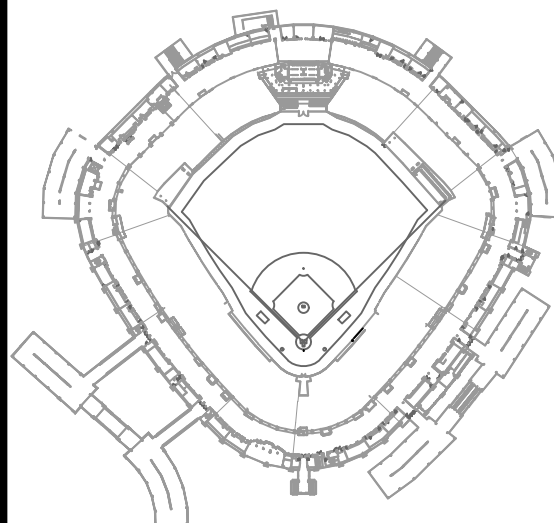
1. REASSEMBLE EXISTING DECK DRAIN WITH NEW STAINLESS STEEL FASTENERS AND ADDITIONAL DRAIN BODY COMPONENTS PER THE ASSOCIATED DETAIL ON SHEET P1.01. PROVIDE NEW SEALANT AROUND DRAIN TOP PIECE FLUSH WITH THE ADJACENT CONCRETE. FASTEN DRAIN GRATE TO BODY WITH FOUR (4) NEW STAINLESS STEEL SCREWS.
2. PROVIDE PRICING TO PERFORM THE WORK OUTLINED IN KEYED NOTE 1 ABOVE FOR THE REMAINING AREA DRAINS THAT HAVE NOT YET COLLAPSED SUFFICIENT TO CREATE A NUISANCE.
3. PROVIDE NEW EPOXY COATING FOR CONCESSION STAND DRAIN. LINER SHALL BE COMPRISED OF ONE OF MORE LAYERS OF A FLEXIBLE NEEDLED FELT OR AN EQUIVALENT NONWOVEN OR WOVEN MATERIAL. REFER TO SPECIFICATION FOR ADDITIONAL DETAILS ON CRITERIA FOR ACCEPTABLE LINER PRODUCT.
4. FLOOR DRAIN SERVES ICE MACHINE RUN OFF. PROVIDE INSULATION ON P-TRAP IN THE FLOOR BELOW TO AVOID CONDENSATION WATER DAMAGE BENEATH THE TRAP.



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GUARANTEED RATE FIELD -
WASTE AND VENT PIPING
PHASE X

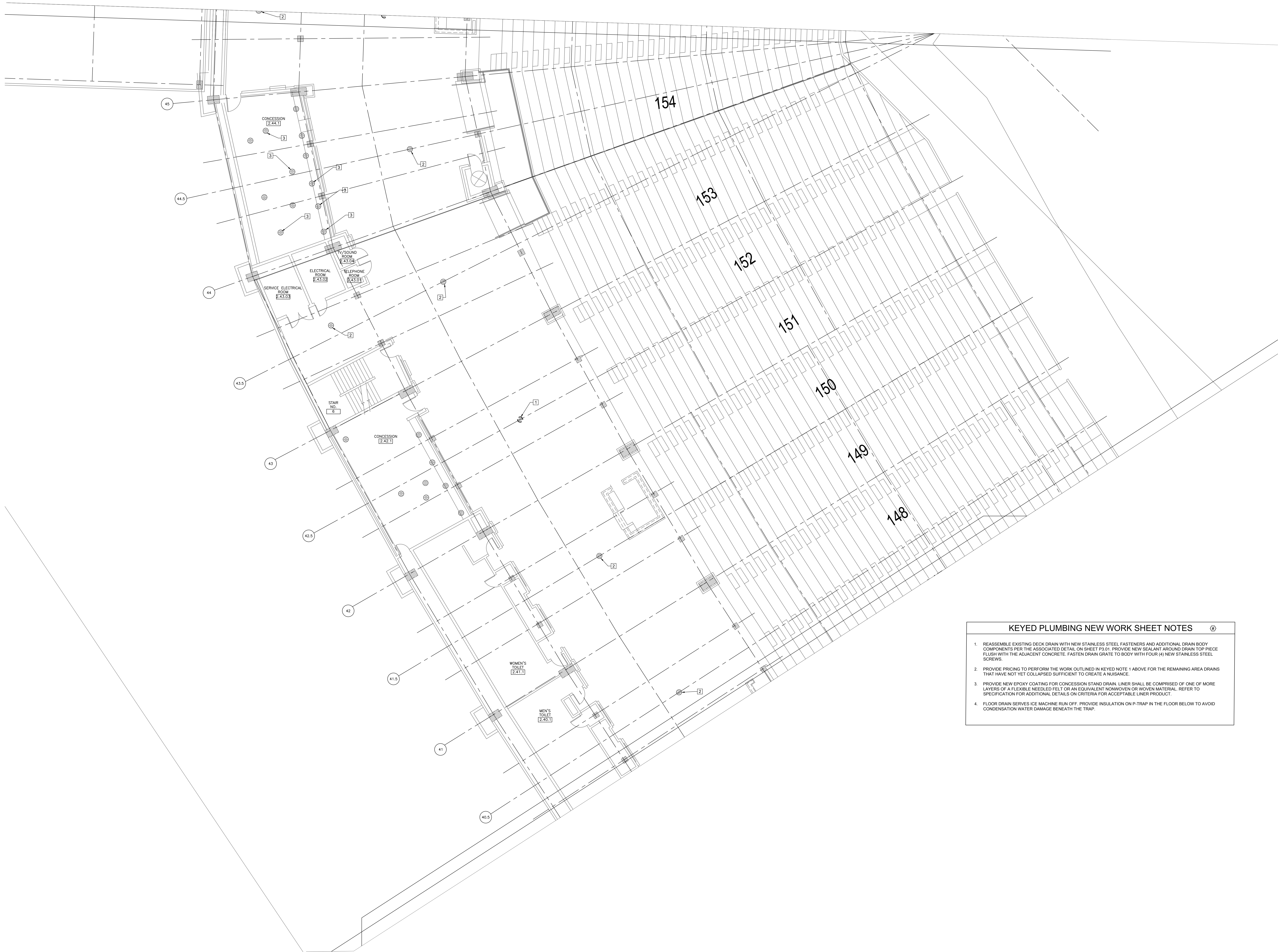
333 W 35TH STREET,
CHICAGO, ILLINOIS 60616

DRAWING TITLE:
PLUMBING NEW WORK PLAN -
LEVEL 100 SECTION 8
ENLARGED PLAN

DESIGNED BY:	DA
CHECKED BY:	MS
PROJECT NO:	21275
SCALE:	1/8" = 1'-0"
SHEET NO.	

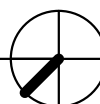
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P1.21

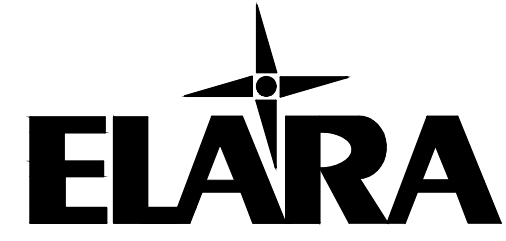


1 PLUMBING NEW WORK PLAN - LEVEL 100 SECTION 9 ENLARGED PLAN

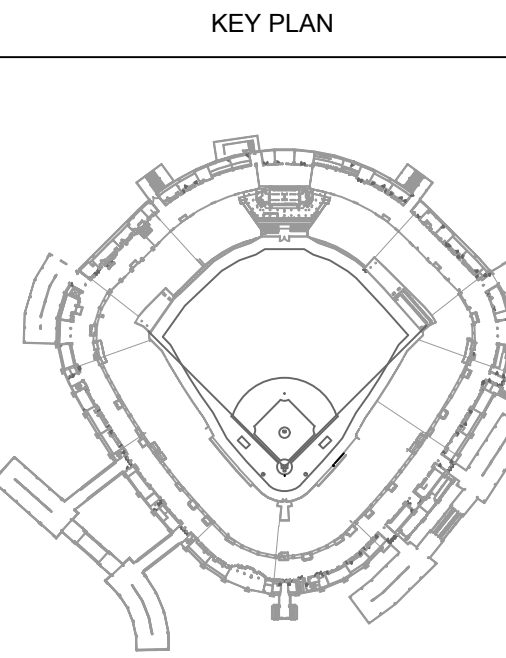
SCALE: 1/8" = 1'-0"



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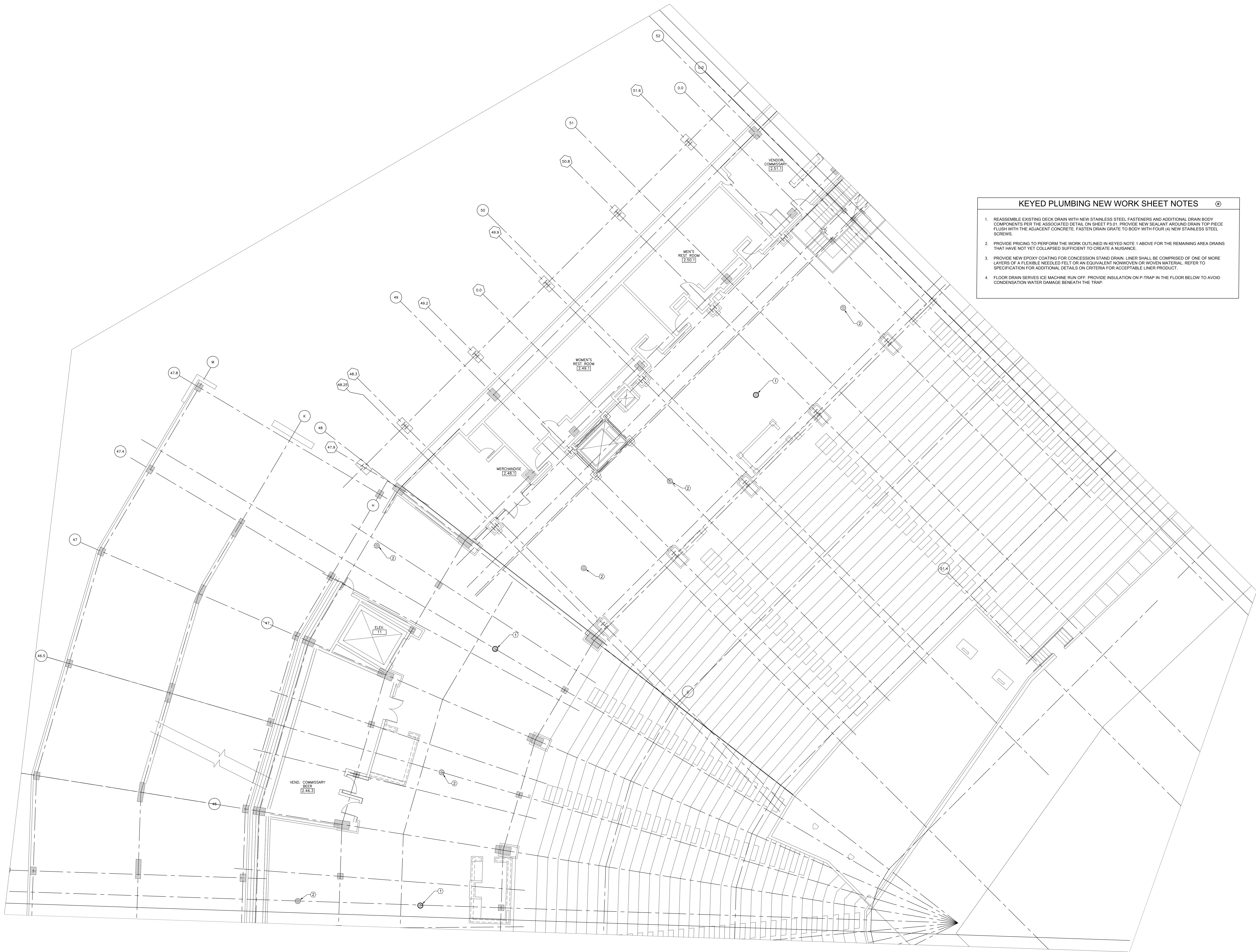
PROJECT:
GUARANTEED RATE FIELD -
WASTE AND VENT PIPING
PHASE X
333 W 35TH STREET,
CHICAGO, ILLINOIS 60616

DRAWING TITLE:
PLUMBING NEW WORK PLAN -
LEVEL 100 SECTION 9
ENLARGED PLAN

DESIGNED BY: DA
CHECKED BY: MS
PROJECT NO: 21275
SCALE: 1/8" = 1'-0"

SHEET NO.

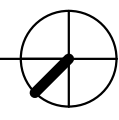
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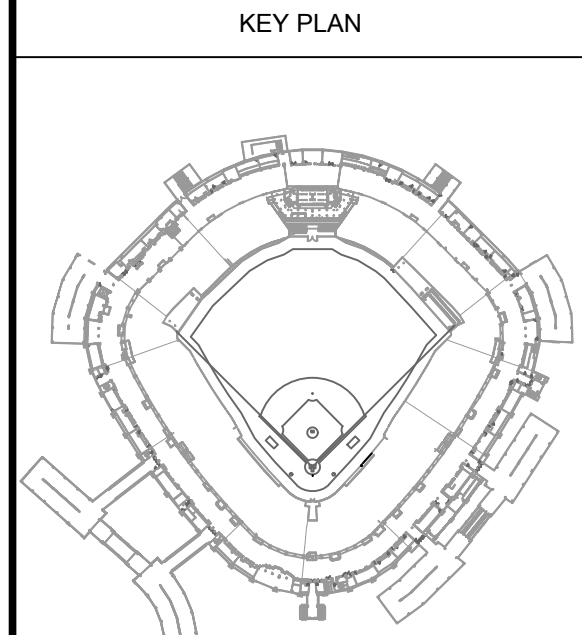
- KEYED PLUMBING NEW WORK SHEET NOTES**
1. REASSEMBLE EXISTING DECK DRAIN WITH NEW STAINLESS STEEL FASTENERS AND ADDITIONAL DRAIN BODY COMPONENTS PER THE ASSOCIATED DETAIL ON SHEET P3.01. PROVIDE NEW SEALANT AROUND DRAIN TOP PIECE FLUSH WITH THE ADJACENT CONCRETE. FASTEN DRAIN GRATE TO BODY WITH FOUR (4) NEW STAINLESS STEEL SCREWS.
 2. PROVIDE PRICING TO PERFORM THE WORK OUTLINED IN KEYED NOTE 1 ABOVE FOR THE REMAINING AREA DRAINS THAT HAVE NOT YET COLLAPSED SUFFICIENT TO CREATE A NUISANCE.
 3. PROVIDE NEW EPOXY COATING FOR CONCESSION STAND DRAIN. LINER SHALL BE COMPRISED OF ONE OF MORE LAYERS OF A FLEXIBLE NEEDED FELT OR AN EQUIVALENT NONWOVEN OR WOVEN MATERIAL. REFER TO SPECIFICATION FOR ADDITIONAL DETAILS ON CRITERIA FOR ACCEPTABLE LINER PRODUCT.
 4. FLOOR DRAIN SERVES ICE MACHINE RUN OFF. PROVIDE INSULATION ON P-TRAP IN THE FLOOR BELOW TO AVOID CONDENSATION WATER DAMAGE BENEATH THE TRAP.

1 PLUMBING NEW WORK PLAN - LEVEL 100 SECTION 10 ENLARGED PLAN

SCALE: 1/8" = 1'-0"



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GUARANTEED RATE FIELD -
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PHASE X
333 W 35TH STREET,
CHICAGO, ILLINOIS 60616

DRAWING TITLE:
PLUMBING NEW WORK PLAN -
LEVEL 100 SECTION 10
ENLARGED PLAN

DESIGNED BY:	DA
CHECKED BY:	MS
PROJECT NO:	21275
SCALE:	1/8" = 1'-0"

SHEET NO.



- KEYED PLUMBING NEW WORK SHEET NOTES**
1. REASSEMBLE EXISTING DECK DRAIN WITH NEW STAINLESS STEEL FASTENERS AND ADDITIONAL DRAIN BODY COMPONENTS PER THE ASSOCIATED DETAIL ON SHEET P3.01. PROVIDE NEW SEALANT AROUND DRAIN TOP-PIECE FLUSH WITH THE ADJACENT CONCRETE. FASTEN DRAIN GRATE TO BODY WITH FOUR (4) NEW STAINLESS STEEL SCREWS.
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 4. FLOOR DRAIN SERVES ICE MACHINE RUN OFF. PROVIDE INSULATION ON P-TRAP IN THE FLOOR BELOW TO AVOID CONDENSATION WATER DAMAGE BENEATH THE TRAP.

1 PLUMBING NEW WORK PLAN - LEVEL 100 SECTION 11 ENLARGED PLAN

SCALE: 1/8" = 1'-0"

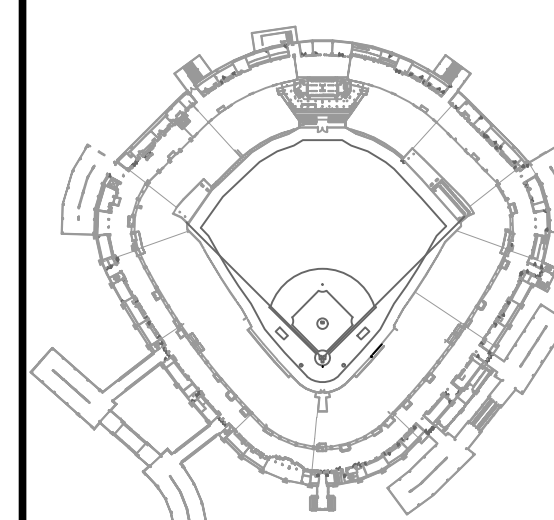
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GUARANTEED RATE FIELD -
WASTE AND VENT PIPING
PHASE X
333 W 35TH STREET,
CHICAGO, ILLINOIS 60616

DRAWING TITLE:
PLUMBING NEW WORK PLAN -
LEVEL 100 SECTION 11
ENLARGED PLAN

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PROJECT NO:	21275
SCALE:	1/8" = 1'-0"
SHEET NO.	



1 PLUMBING NEW WORK PLAN - SERVICE LEVEL SECTION 5 ENLARGED PLAN
SCALE: 1/8" = 1'-0"

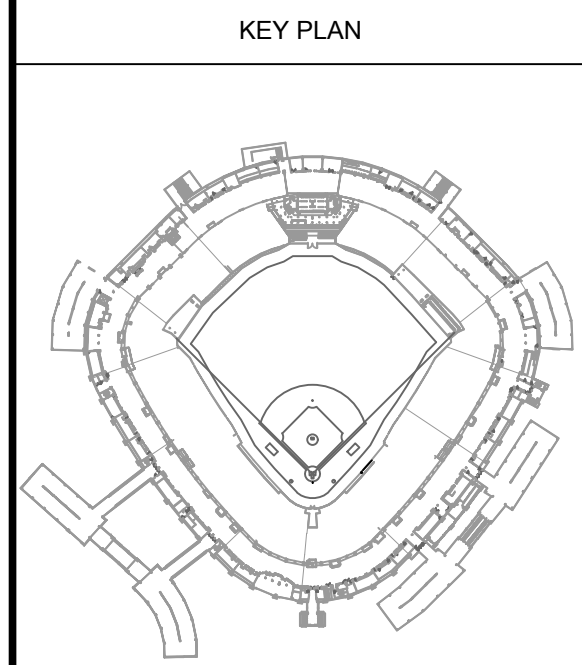
KEYED PLUMBING NEW WORK SHEET NOTES

1.

INSTALL NEW ELECTRIC WATER HEATER. PROVIDE WITH ASSOCIATED EXPANSION TANK. ROUTE RELIEF DRAIN TO ADJACENT MOP BASIN. PROVIDE WITH SECONDARY DRAIN PAN PIPED TO SAME MOP BASIN WITH INDEPENDENT DRAIN PIPE.

2.

INSTALL NEW LAVATORY FAUCET L_1 IN EXISTING RESTROOM LAVATORY VANITY.

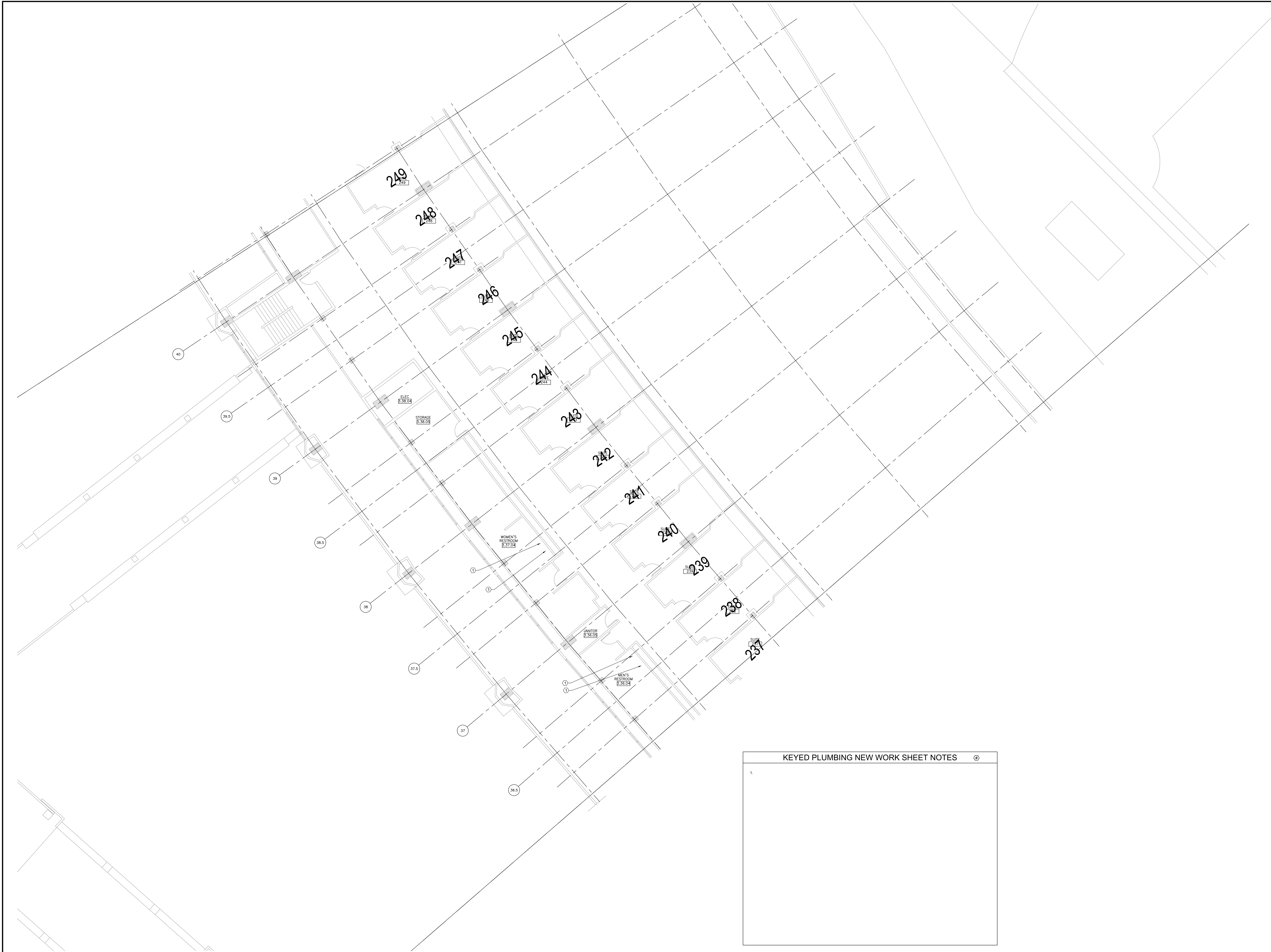


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PROJECT:
GUARANTEED RATE FIELD -
WASTE AND VENT PIPING
PHASE X
333 W 35TH STREET,
CHICAGO, ILLINOIS 60616

DRAWING TITLE:
PLUMBING NEW WORK PLAN -
LEVEL 200 SECTION 5
ENLARGED PLAN

DESIGNED BY:	DA
CHECKED BY:	MS
PROJECT NO.:	21275
SCALE:	1/8" = 1'-0"
SHEET NO.	



1 PLUMBING NEW WORK PLAN - LEVEL 200 SECTION 8 ENLARGED PLAN

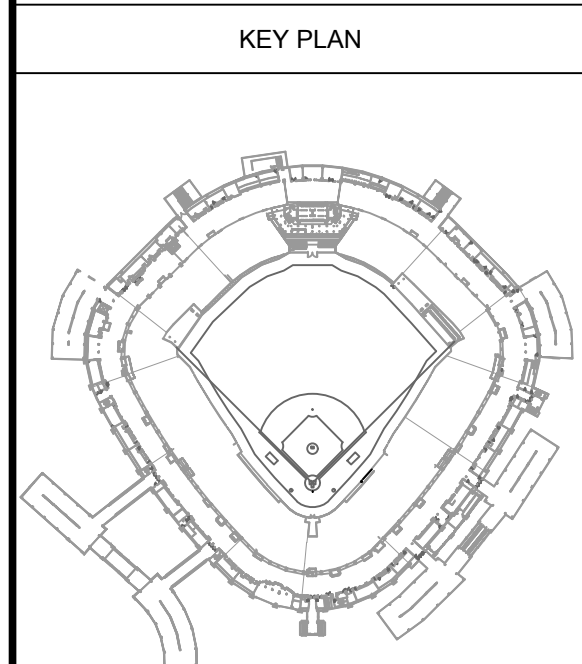
SCALE: 1/8" = 1'-0"

KEYED PLUMBING NEW WORK SHEET NOTES	
1.	

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PROJECT:
GUARANTEED RATE FIELD -
WASTE AND VENT PIPING
PHASE X
333 W 35TH STREET,
CHICAGO, ILLINOIS 60616

DRAWING TITLE:
PLUMBING NEW WORK PLAN -
LEVEL 200 SECTION 8
ENLARGED PLAN

DESIGNED BY: DA
CHECKED BY: MS
PROJECT NO: 21275
SCALE: 1/8" = 1'-0"
SHEET NO.



P1.31



A schematic diagram of a baseball field. It shows the diamond with first, second, third, and home bases. The pitcher's mound is located in the center of the diamond. The outfield is represented by a large, irregular shape surrounding the diamond. The diagram is used to illustrate the layout of the field for the study of player movement and positioning.

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DRAWING TITLE:
 PLUMBING NEW WORK PLAN -
 LEVEL 200 SECTION 9
 ENLARGED PLAN

SIGNED BY:	DA
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PROJECT NO:	21275
SCALE:	1/8" = 1'-0"
SHEET NO.	

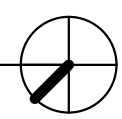
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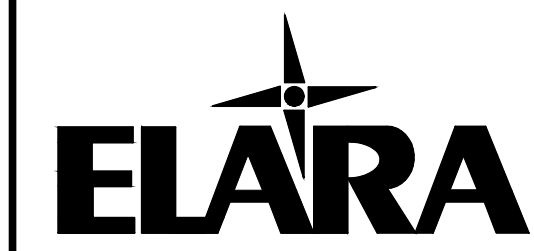
- KEYED PLUMBING NEW WORK SHEET NOTES**
1. INSTALL NEW ELECTRIC WATER HEATER. PROVIDE WITH ASSOCIATED EXPANSION TANK. ROUTE RELIEF DRAIN TO ADJACENT MOP BASIN. PROVIDE WITH SECONDARY DRAIN PAN PIPED TO SAME MOP BASIN WITH INDEPENDENT DRAIN PIPE.
 2. INSTALL NEW LAVATORY FAUCET $\frac{1}{2}$ " IN EXISTING RESTROOM LAVATORY VANITY.

1 PLUMBING NEW WORK PLAN - LEVEL 400 SECTION 4 ENLARGED PLAN

SCALE: 1/8" = 1'-0"



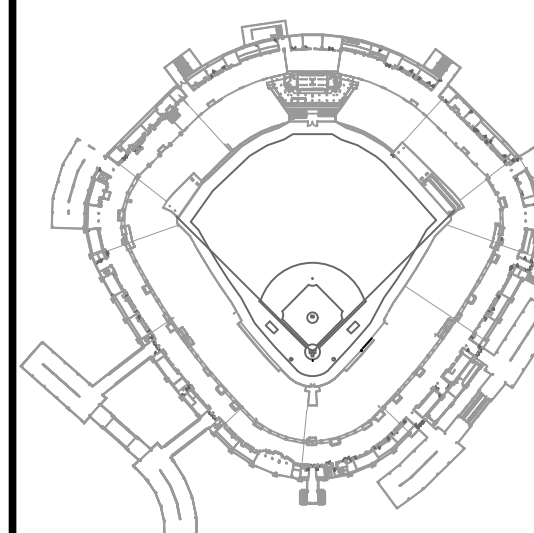
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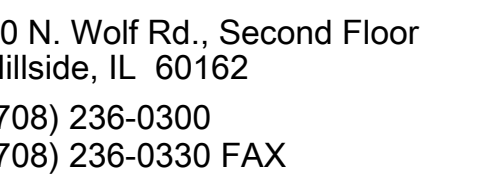
REV.	DATE	DESCRIPTION
1	12/09/21	ISSUE FOR BID

PROJECT:
GUARANTEED RATE FIELD -
WASTE AND VENT PIPING
PHASE X
333 W 35TH STREET,
CHICAGO, ILLINOIS 60616

DRAWING TITLE:
PLUMBING NEW WORK PLAN -
LEVEL 400 SECTION 4
ENLARGED PLAN

DESIGNED BY: DA
CHECKED BY: MS
PROJECT NO: 21275
SCALE: 1/8" = 1'-0"
SHEET NO.

P1.44



1. INSTALL NEW ELECTRIC WATER HEATER . PROVIDE WITH ASSOCIATED EXPANSION TANK. ROUTE RELIEF DRAIN TO ADJACENT MOP BASIN. PROVIDE WITH SECONDARY DRAIN PAN PIPED TO SAME MOP BASIN WITH INDEPENDENT DRAIN PIPE.
2. INSTALL NEW LAVATORY FAUCET L-1 IN EXISTING RESTROOM LAVATORY VANITY.

DATE	DESCRIPTION
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W 35TH STREET,
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SIGNED BY: DA

RECKED BY: MS

PROJECT NO: 21275

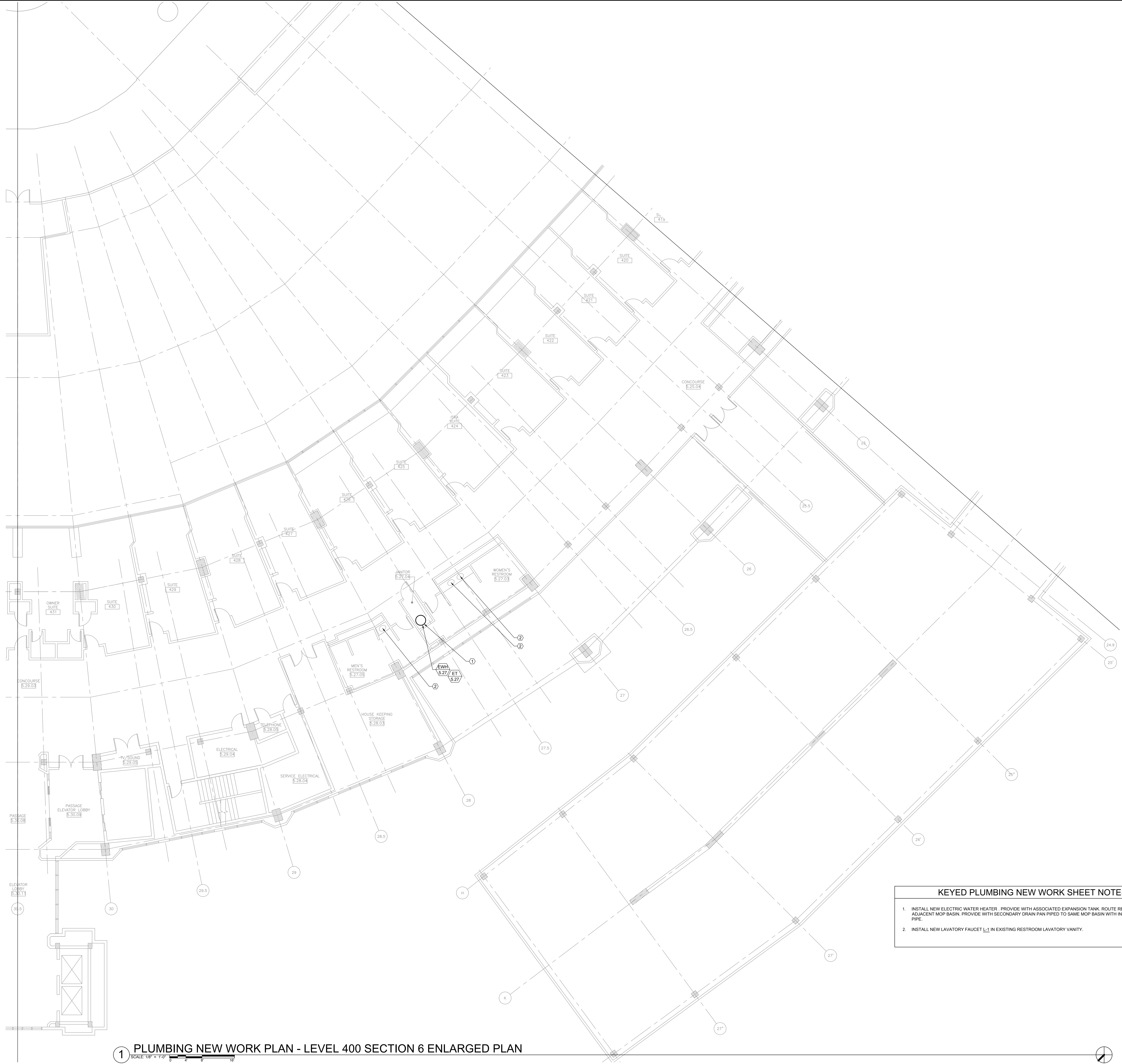
SCALE:	W/O* = 1'-0"
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SHEET NO. _____

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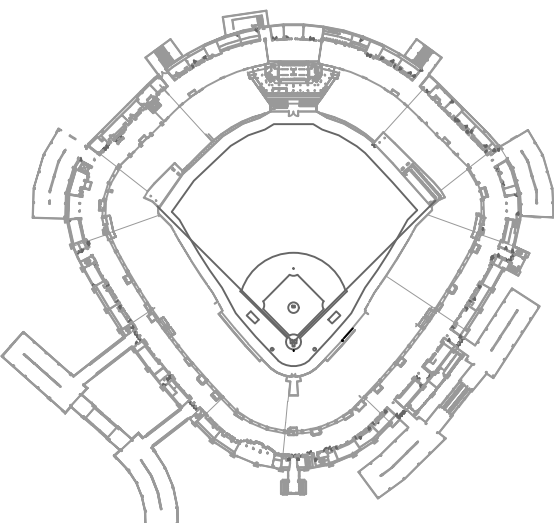
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P1.45



1 PLUMBING NEW WORK PLAN - LEVEL 400 SECTION 6 ENLARGED PLAN
SCALE: 1/8" = 1'-0"

- | KEYED PLUMBING NEW WORK SHEET NOTES | | |
|-------------------------------------|--|--|
| 1. | INSTALL NEW ELECTRIC WATER HEATER - PROVIDE WITH ASSOCIATED EXPANSION TANK, ROUTE RELIEF DRAIN TO ADJACENT MOP BASIN - PROVIDE WITH SECONDARY DRAIN PAN PIPED TO SAME MOP BASIN WITH INDEPENDENT DRAIN PIPE. | |
| 2. | INSTALL NEW LAVATORY FAUCET L-1 IN EXISTING RESTROOM LAVATORY VANITY. | |



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GUARANTEED RATE FIELD -
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PHASE X
333 W 35TH STREET,
CHICAGO, ILLINOIS 60616

DRAWING TITLE:
PLUMBING NEW WORK PLAN -
LEVEL 400 SECTION 6
ENLARGED PLAN

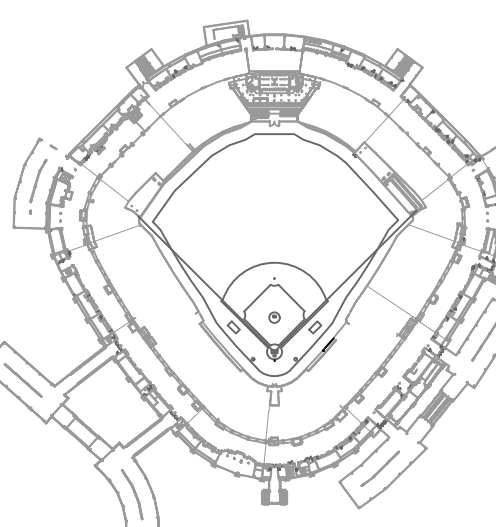
DESIGNED BY:	DA
CHECKED BY:	MS
PROJECT NO:	21275
SCALE:	1/8" = 1'-0"
SHEET NO.	



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GUARANTEED RATE FIELD -
WASTE AND VENT PIPING
PHASE X

333 W 35TH STREET,
CHICAGO, ILLINOIS 60616

DRAWING TITLE:

PLUMBING NEW WORK PLAN -
LEVEL 400 SECTION 7
ENLARGED PLAN

DESIGNED BY:	DA
CHECKED BY:	MS
PROJECT NO:	21275
SCALE:	1/8" = 1'-0"
SHEET NO.	

P1.47

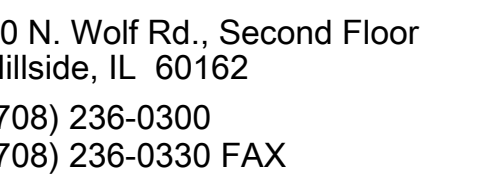
KEYED PLUMBING NEW WORK SHEET NOTES

1. INSTALL NEW ELECTRIC WATER HEATER. PROVIDE WITH ASSOCIATED EXPANSION TANK. ROUTE RELIEF DRAIN TO ADJACENT MOP BASIN. PROVIDE WITH SECONDARY DRAIN PAN PIPED TO SAME MOP BASIN WITH INDEPENDENT DRAIN PIPE.
2. INSTALL NEW LAVATORY FAUCET L-1 IN EXISTING RESTROOM LAVATORY VANITY.

1 PLUMBING NEW WORK PLAN - LEVEL 400 SECTION 7 ENLARGED PLAN

SCALE: 1/8" = 1'-0"

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PROJECT:
GUARANTEED RATE FIELD -
WASTE AND VENT PIPING
PHASE X
14 W 35TH STREET,
CHICAGO, ILLINOIS 60616

DRAWING TITLE:
**PLUMBING NEW WORK PLAN -
 LEVEL 400 SECTION 8
 ENLARGED PLAN**

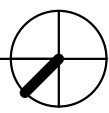
SIGNED BY:	DA
CHECKED BY:	MS
PROJECT NO:	21275
SCALE:	1/8" = 1'-0"
SHEET NO.	

P1.48

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1 PLUMBING NEW WORK PLAN - LEVEL 400 SECTION 8 ENLARGED PLAN
SCALE: 1/8" = 1'-0"



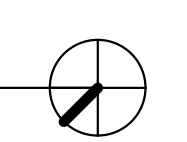
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1 PLUMBING NEW WORK PLAN - LEVEL 400 SECTION 9 ENLARGED PLAN

SCALE: 1/8" = 1'-0"



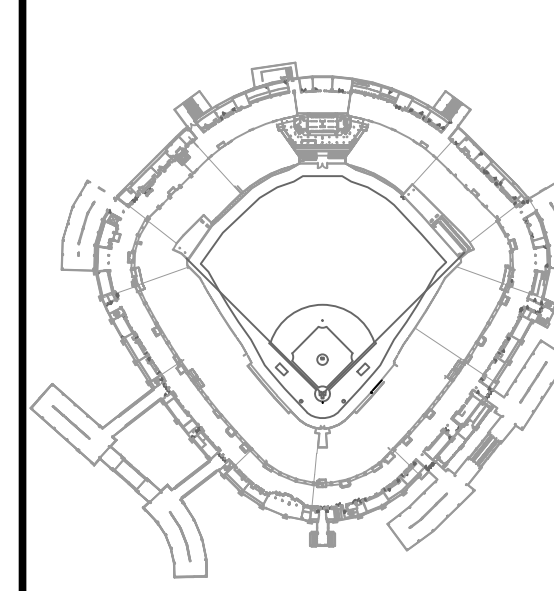
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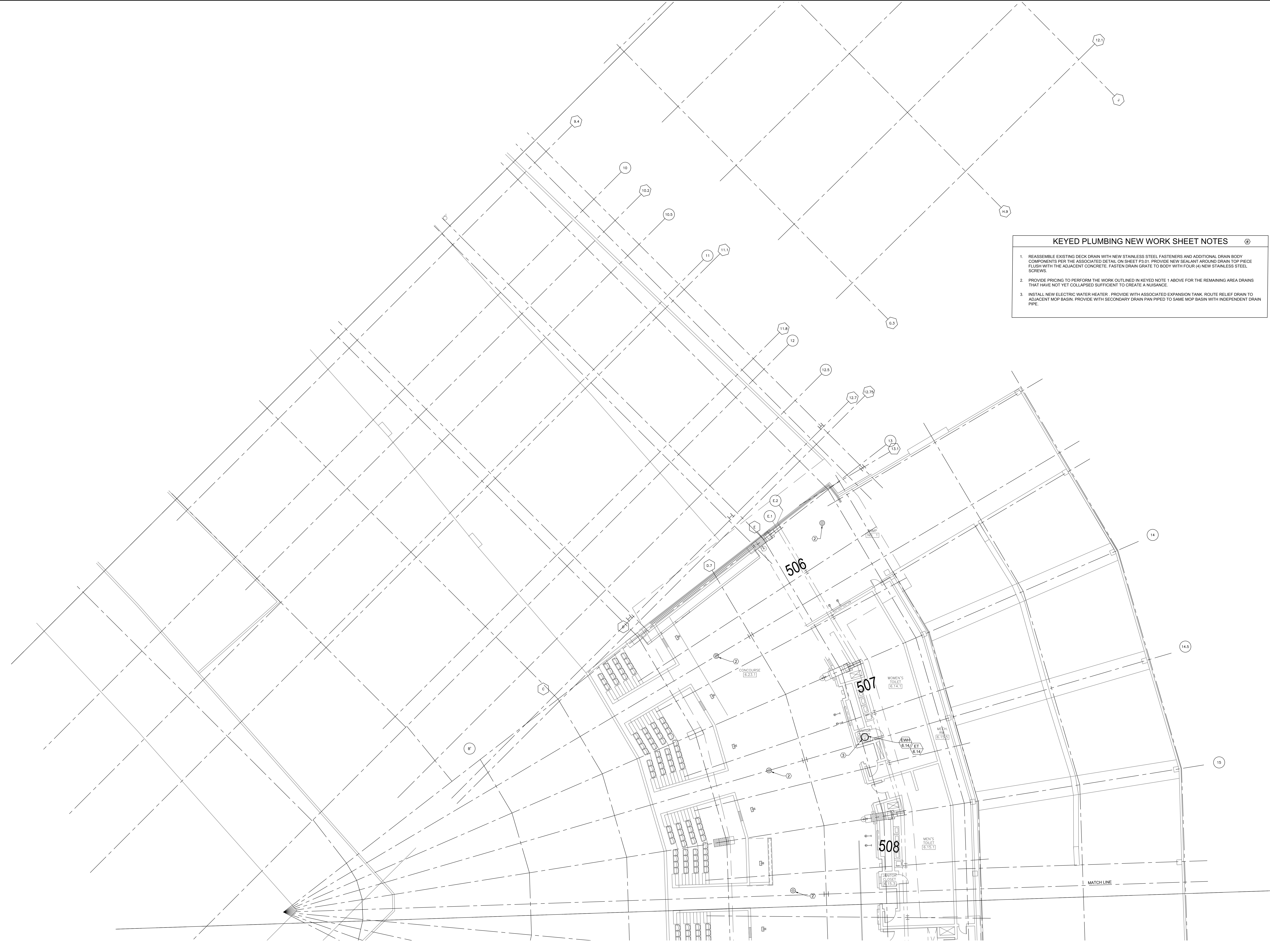
PROJECT:
GUARANTEED RATE FIELD -
WASTE AND VENT PIPING
PHASE X
333 W 35TH STREET,
CHICAGO, ILLINOIS 60616

DRAWING TITLE:
PLUMBING NEW WORK PLAN -
LEVEL 400 SECTION 9
ENLARGED PLAN

DESIGNED BY: DA
CHECKED BY: MS
PROJECT NO: 21275
SCALE: 1/8" = 1'-0"

SHEET NO.

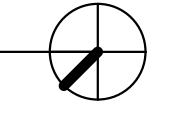
P1.49



- KEYED PLUMBING NEW WORK SHEET NOTES**
1. REASSEMBLE EXISTING DECK DRAIN WITH NEW STAINLESS STEEL FASTENERS AND ADDITIONAL DRAIN BODY COMPONENTS PER THE ASSOCIATED DETAIL ON SHEET P3.01. PROVIDE NEW SEALANT AROUND DRAIN TOP PIECE FLUSH WITH THE ADJACENT CONCRETE. FASTEN DRAIN GRATE TO BODY WITH FOUR (4) NEW STAINLESS STEEL SCREWS.
 2. PROVIDE PRICING TO PERFORM THE WORK OUTLINED IN KEYED NOTE 1 ABOVE FOR THE REMAINING AREA DRAINS THAT HAVE NOT YET COLLAPSED SUFFICIENT TO CREATE A NUISANCE.
 3. INSTALL NEW ELECTRIC WATER HEATER. PROVIDE WITH ASSOCIATED EXPANSION TANK. ROUTE RELIEF DRAIN TO ADJACENT MOP BASIN. PROVIDE WITH SECONDARY DRAIN PAN PIPED TO SAME MOP BASIN WITH INDEPENDENT DRAIN PIPE.

1 PLUMBING NEW WORK PLAN - LEVEL 500 SECTION 3 ENLARGED PLAN

SCALE: 1/8" = 1'-0"



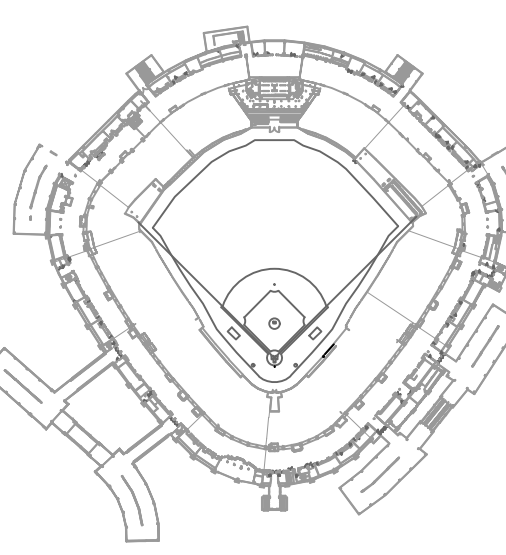
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FACILITIES AUTHORITY



KEY PLAN



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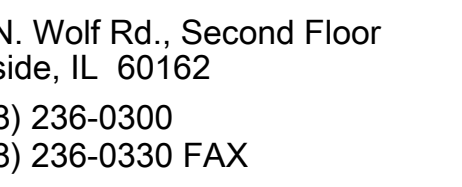
PROJECT:
GUARANTEED RATE FIELD -
WASTE AND VENT PIPING
PHASE X
333 W 35TH STREET,
CHICAGO, ILLINOIS 60616

DRAWING TITLE:
PLUMBING NEW WORK PLAN -
LEVEL 500 SECTION 3
ENLARGED PLAN

DESIGNED BY: DA
CHECKED BY: MS
PROJECT NO: 21275
SCALE: 1/8" = 1'-0"
SHEET NO.

P1.52





DATE	DESCRIPTION

2/9/21	ISSUE FOR BID

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ECT:

GUARANTEED RATE FIELD -
TELEPHONE AND WIRE TAPPING

TE AND VENT PIPING

DL A

35TH STREET,
GO. ILLINOIS 60616

[illegible]

ING TITLE:

IMBING NEW WORK PLAN -

EL 500 SECTION 5
ADDED PLAN

ARGUED PLAN

APPROVED BY: DA

WORKED BY: MS

ECT NO: 21275

ECT NO.	21279
DATE	11/27

$$1/8 = 1/0$$
NO.

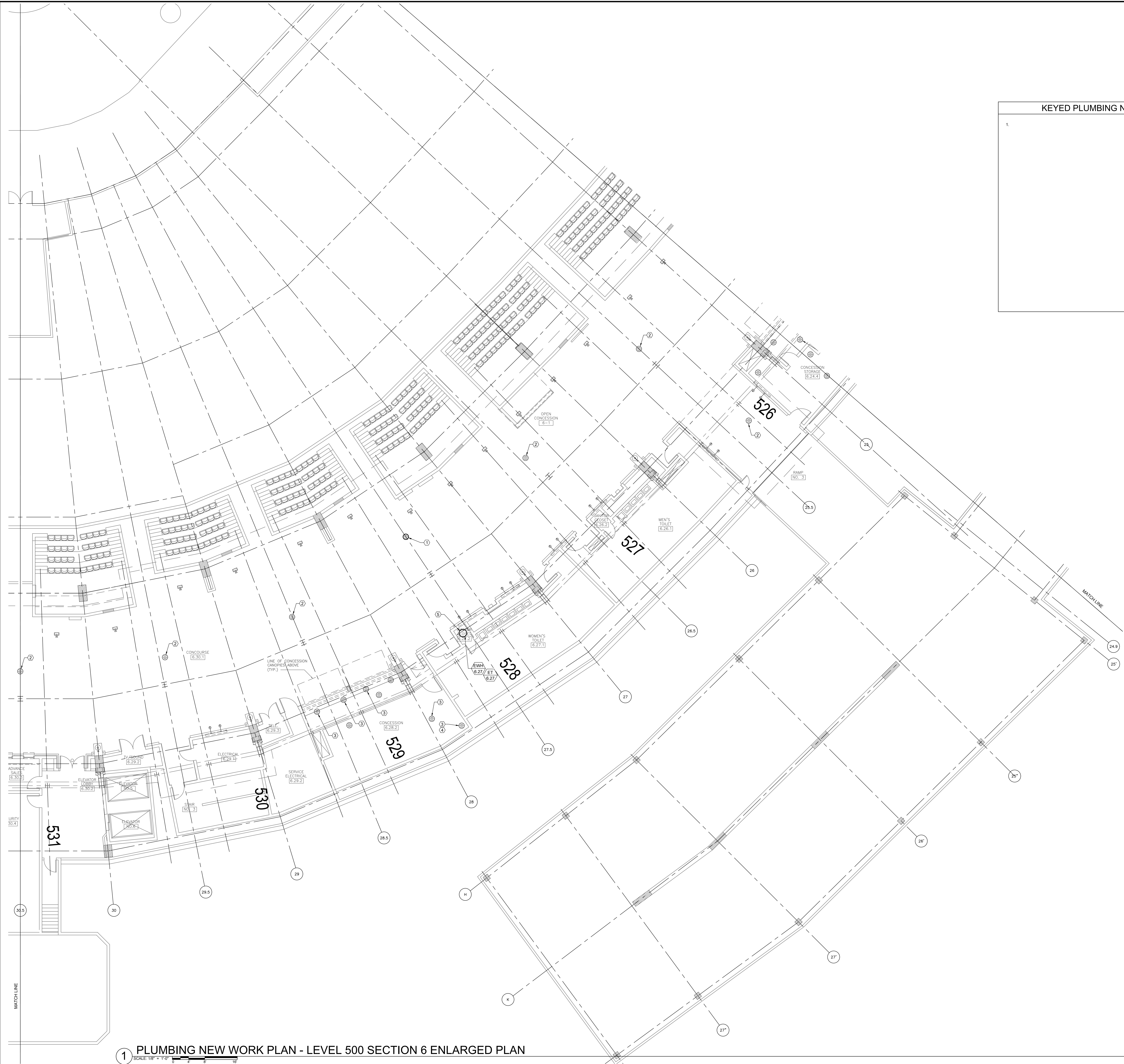
P1.54



1 PLUMBING NEW WORK PLAN - LEVEL 500 SECTION 5 ENLARGED PLAN

12/09/2021 ISSUED FOR BID

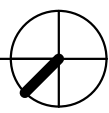
PRELIMINARY - NOT FOR CONSTRUCTION



KEYED PLUMBING NEW WORK SHEET NOTES	
1.	

1 PLUMBING NEW WORK PLAN - LEVEL 500 SECTION 6 ENLARGED PLAN

SCALE: 1/8" = 1'-0"



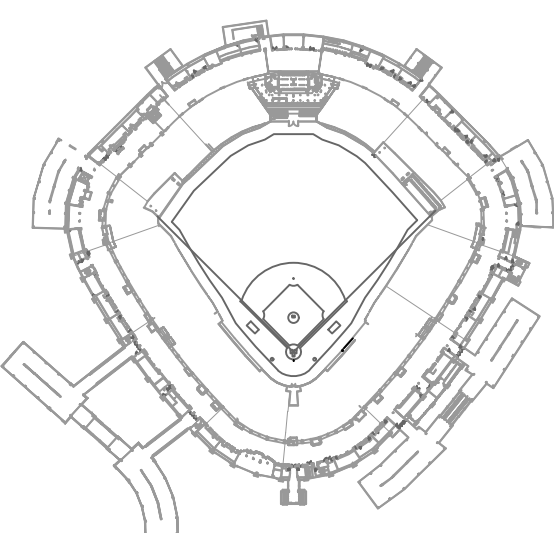
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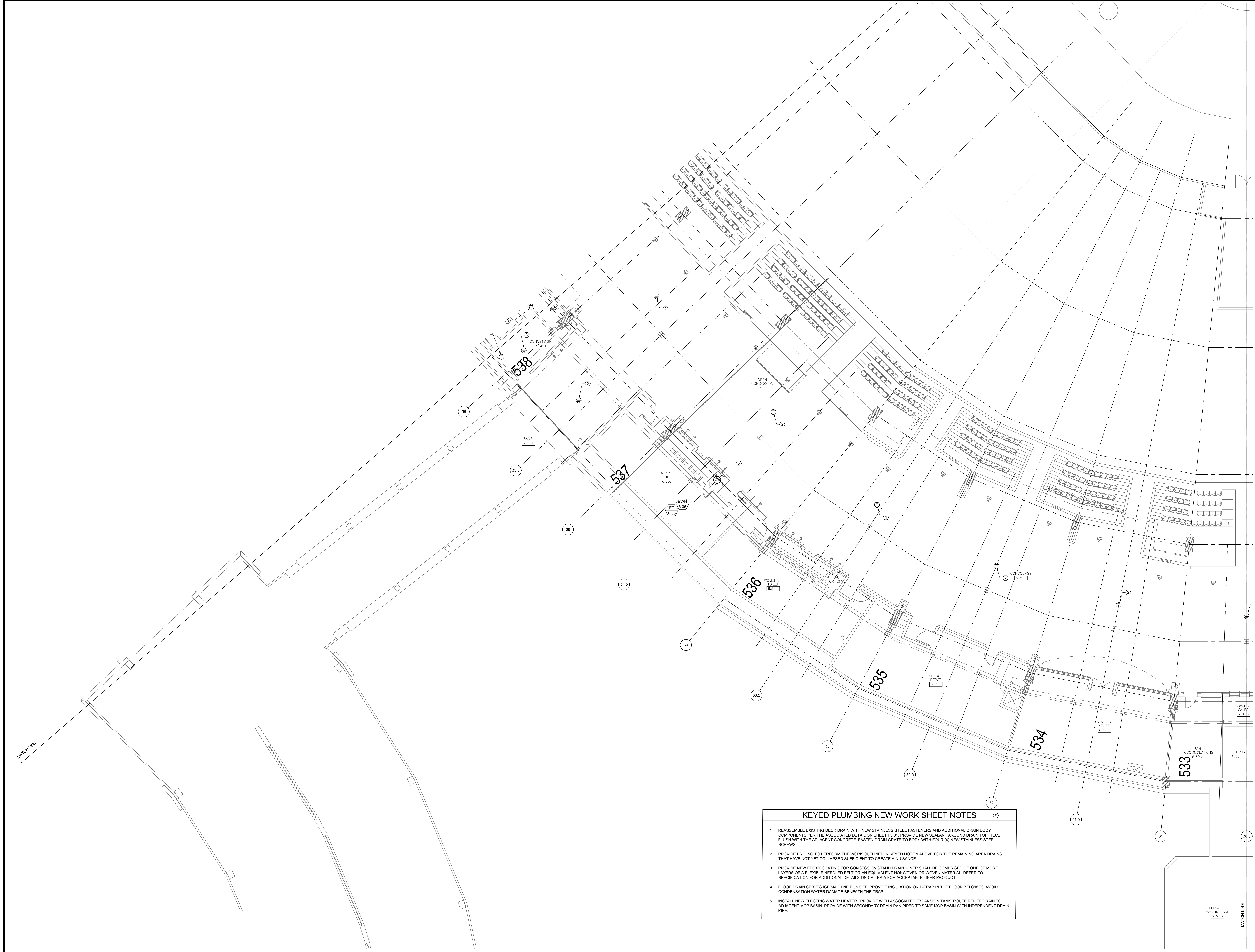
ISSUE/REVISION:

REV.	DATE	DESCRIPTION
1	12/09/21	ISSUE FOR BID

PROJECT:
GUARANTEED RATE FIELD -
WASTE AND VENT PIPING
PHASE X
333 W 35TH STREET,
CHICAGO, ILLINOIS 60616

DRAWING TITLE:
PLUMBING NEW WORK PLAN -
LEVEL 500 SECTION 6
ENLARGED PLAN

DESIGNED BY: DA
CHECKED BY: MS
PROJECT NO: 21275
SCALE: 1/8" = 1'-0"
SHEET NO.



- KEYED PLUMBING NEW WORK SHEET NOTES**
1. REASSEMBLE EXISTING DECK DRAIN WITH NEW STAINLESS STEEL FASTENERS AND ADDITIONAL DRAIN BODY COMPONENTS PER THE ASSOCIATED DETAIL ON SHEET P3.01. PROVIDE NEW SEALANT AROUND DRAIN TOP PIECE FLUSH WITH THE ADJACENT CONCRETE. FASTEN DRAIN GRATE TO BODY WITH FOUR (4) NEW STAINLESS STEEL SCREWS.
 2. PROVIDE PRICING TO PERFORM THE WORK OUTLINED IN KEYED NOTE 1 ABOVE FOR THE REMAINING AREA DRAINS THAT HAVE NOT YET COLLAPSED SUFFICIENT TO CREATE A NUISANCE.
 3. PROVIDE NEW EPOXY COATING FOR CONCESSION STAND DRAIN. LINER SHALL BE COMPRISED OF ONE OF MORE LAYERS OF A FLEXIBLE NEEDED FELT OR AN EQUIVALENT NONWOVEN OR WOVEN MATERIAL. REFER TO SPECIFICATION FOR ADDITIONAL DETAILS ON CRITERIA FOR ACCEPTABLE LINER PRODUCT.
 4. FLOOR DRAIN SERVES ICE MACHINE RUN OFF. PROVIDE INSULATION ON P-TRAP IN THE FLOOR BELOW TO AVOID CONDENSATION WATER DAMAGE BENEATH THE TRAP.
 5. INSTALL NEW ELECTRIC WATER HEATER. PROVIDE WITH ASSOCIATED EXPANSION TANK. ROUTE RELIEF DRAIN TO ADJACENT MOP BASIN. PROVIDE WITH SECONDARY DRAIN PAN PIPED TO SAME MOP BASIN WITH INDEPENDENT DRAIN PIPE.

1 PLUMBING DEMOLITION PLAN - LEVEL 400 SECTION 7 ENLARGED PLAN

SCALE: 1/8" = 1'-0"

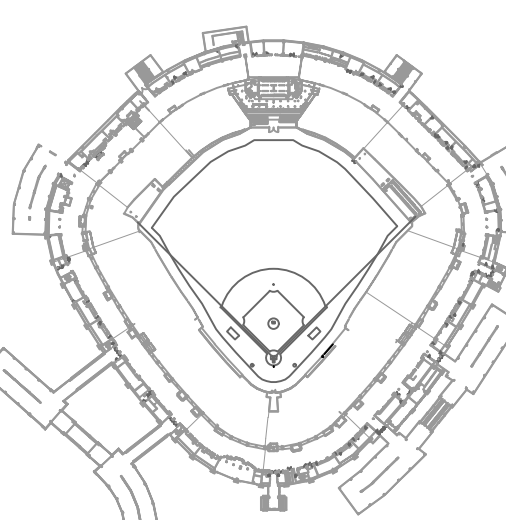
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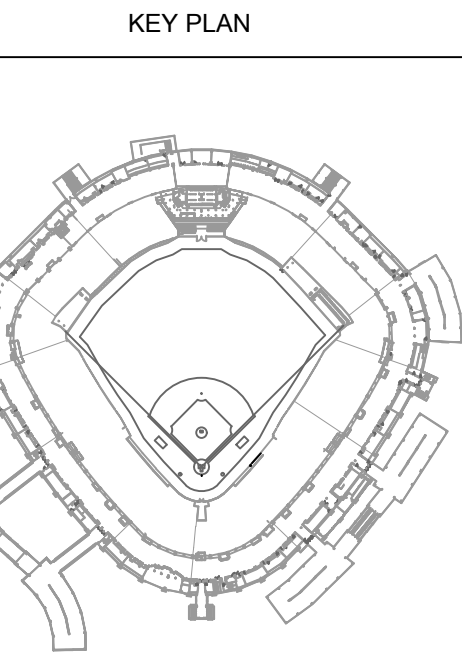
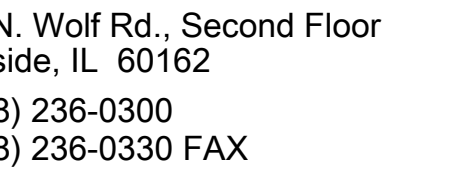
PROJECT:
GUARANTEED RATE FIELD -
WASTE AND VENT PIPING
PHASE X
333 W 35TH STREET,
CHICAGO, ILLINOIS 60616

DRAWING TITLE:
PLUMBING NEW WORK PLAN -
LEVEL 500 SECTION 7
ENLARGED PLAN

DESIGNED BY: DA
CHECKED BY: MS
PROJECT NO: 21275
SCALE: 1/8" = 1'-0"

SHEET NO.

P1.56

[illegible]

35TH STREET,
GO, ILLINOIS 60616

PROJECT TITLE:
 SUBMITTING NEW WORK PLAN -
 FEDERAL 500 SECTION 8
 TARGETED PLAN

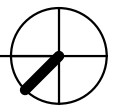
DESIGNED BY:	DA
CHECKED BY:	MS
PROJECT NO:	21275
SCALE:	1/8" = 1'-0"
SHEET NO.	

P1.57

1 PLUMBING NEW W

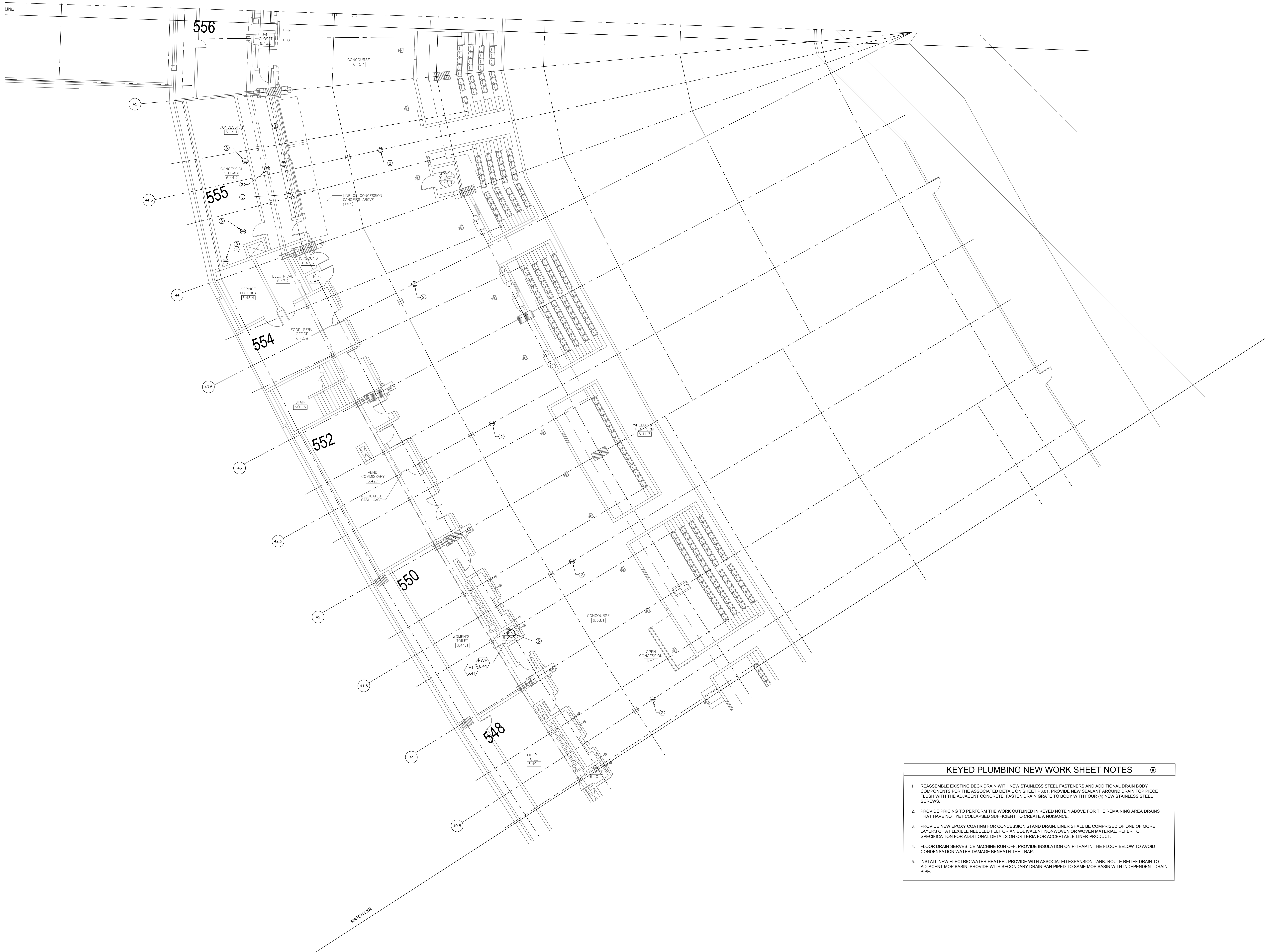
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0 4' 8' 16'



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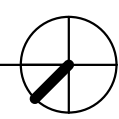
PRELIMINARY - NOT FOR CONSTRUCTION



- KEYED PLUMBING NEW WORK SHEET NOTES**
1. REASSEMBLE EXISTING DECK DRAIN WITH NEW STAINLESS STEEL FASTENERS AND ADDITIONAL DRAIN BODY COMPONENTS PER THE ASSOCIATED DETAIL ON SHEET P3.01. PROVIDE NEW SEALANT AROUND DRAIN TOP PIECE FLUSH WITH THE ADJACENT CONCRETE. FASTEN DRAIN GRATE TO BODY WITH FOUR (4) NEW STAINLESS STEEL SCREWS.
 2. PROVIDE PRICING TO PERFORM THE WORK OUTLINED IN KEYED NOTE 1 ABOVE FOR THE REMAINING AREA DRAINS THAT HAVE NOT YET COLLAPSED SUFFICIENT TO CREATE A NUISANCE.
 3. PROVIDE NEW EPOXY COATING FOR CONCESSION STAND DRAIN. LINER SHALL BE COMPRISED OF ONE OF MORE LAYERS OF A FLEXIBLE NEEDLED FELT OR AN EQUIVALENT NONWOVEN OR WOVEN MATERIAL. REFER TO SPECIFICATION FOR ADDITIONAL DETAILS ON CRITERIA FOR ACCEPTABLE LINER PRODUCT.
 4. FLOOR DRAIN SERVES ICE MACHINE RUN OFF. PROVIDE INSULATION ON P-TRAP IN THE FLOOR BELOW TO AVOID CONDENSATION WATER DAMAGE BENEATH THE TRAP.
 5. INSTALL NEW ELECTRIC WATER HEATER. PROVIDE WITH ASSOCIATED EXPANSION TANK. ROUTE RELIEF DRAIN TO ADJACENT MOP BASIN. PROVIDE WITH SECONDARY DRAIN PAN PIPED TO SAME MOP BASIN WITH INDEPENDENT DRAIN PIPE.

1 PLUMBING NEW WORK PLAN - LEVEL 500 SECTION 9 ENLARGED PLAN

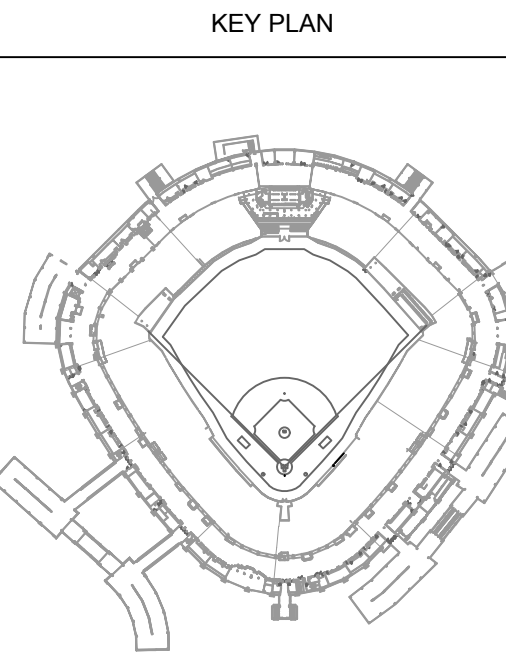
SCALE: 1/8" = 1'-0"



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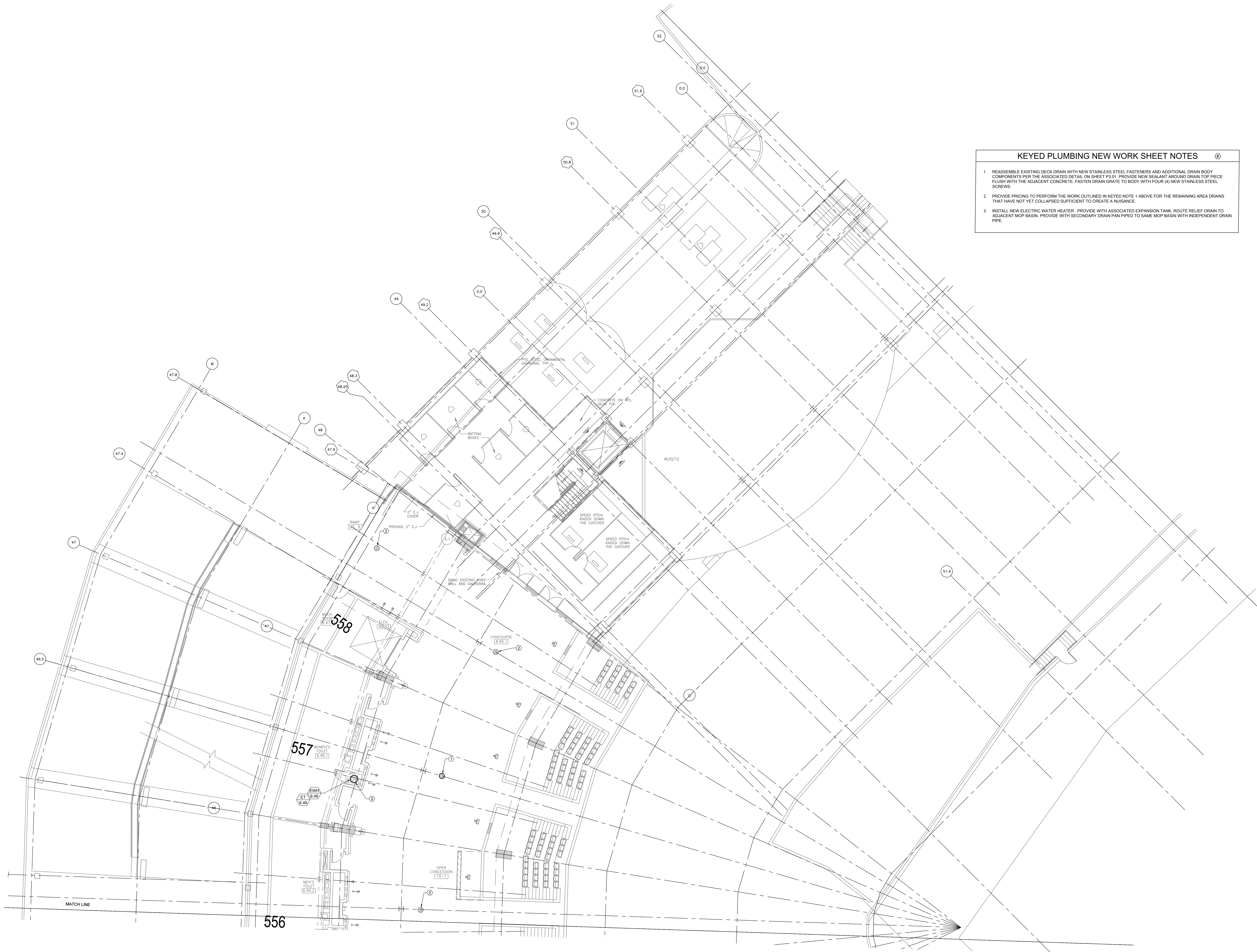
ISSUE/REVISION:		
REV.	DATE	DESCRIPTION
-	12/09/21	ISSUE FOR BID

PROJECT:
GUARANTEED RATE FIELD -
WASTE AND VENT PIPING
PHASE X
333 W 35TH STREET,
CHICAGO, ILLINOIS 60616

DRAWING TITLE:
PLUMBING NEW WORK PLAN -
LEVEL 500 SECTION 9
ENLARGED

DESIGNED BY: DA
CHECKED BY: MS
PROJECT NO: 21275
SCALE: 1/8" = 1'-0"
SHEET NO.

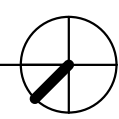
P1.58



- KEYED PLUMBING NEW WORK SHEET NOTES**
1. REASSEMBLE EXISTING DECK DRAIN WITH NEW STAINLESS STEEL FASTENERS AND ADDITIONAL DRAIN BODY COMPONENTS PER THE ASSOCIATED DETAIL ON SHEET P3.01. PROVIDE NEW SEALANT AROUND DRAIN TOP PIECE FLUSH WITH THE ADJACENT CONCRETE. FASTEN DRAIN GRATE TO BODY WITH FOUR (4) NEW STAINLESS STEEL SCREWS.
 2. PROVIDE PRICING TO PERFORM THE WORK OUTLINED IN KEYED NOTE 1 ABOVE FOR THE REMAINING AREA DRAINS THAT HAVE NOT YET COLLAPSED SUFFICIENT TO CREATE A NUISANCE.
 3. INSTALL NEW ELECTRIC WATER HEATER. PROVIDE WITH ASSOCIATED EXPANSION TANK. ROUTE RELIEF DRAIN TO ADJACENT MOP BASIN. PROVIDE WITH SECONDARY DRAIN PAN PIPED TO SAME MOP BASIN WITH INDEPENDENT DRAIN PIPE.

1 PLUMBING NEW WORK PLAN - LEVEL 500 SECTION 10 ENLARGED PLAN

SCALE: 1/8" = 1'-0"



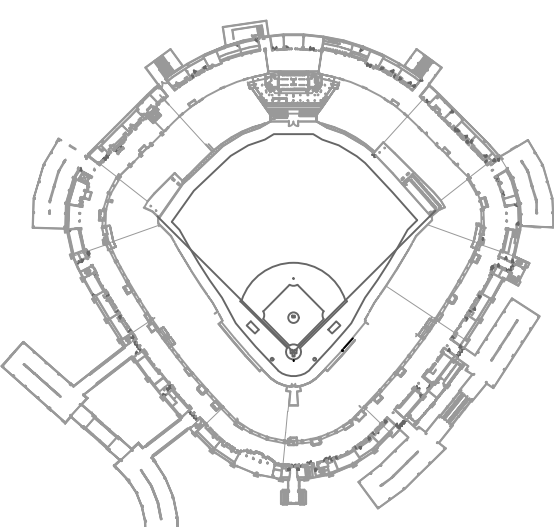
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KEY PLAN



ISSUE/REVISION:

REV.	DATE	DESCRIPTION
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PROJECT:

GUARANTEED RATE FIELD -
WASTE AND VENT PIPING
PHASE X

333 W 35TH STREET,
CHICAGO, ILLINOIS 60616

DRAWING TITLE:

PLUMBING NEW WORK PLAN -
LEVEL 500 SECTION 10
ENLARGED

DESIGNED BY:

DA

CHECKED BY:

MS

PROJECT NO:

21275

SCALE:

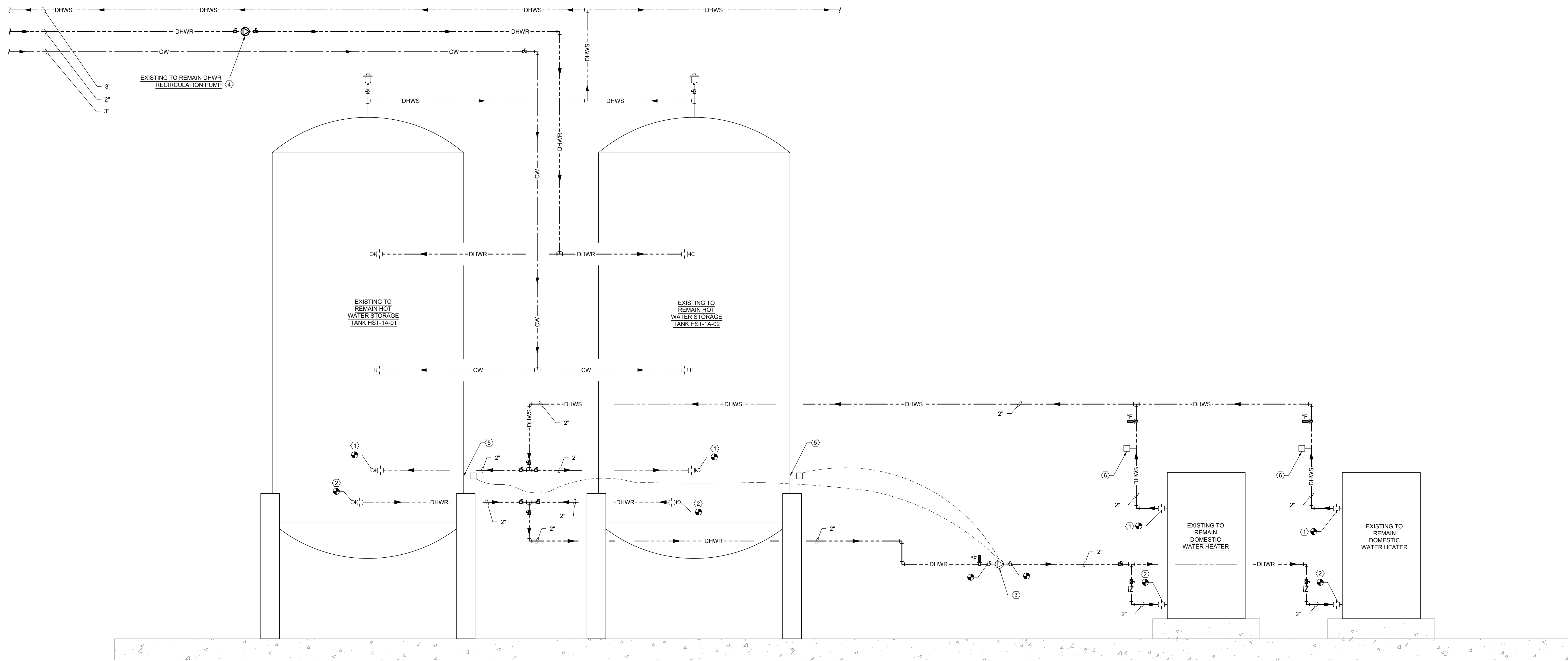
1/8" = 1'-0"

SHEET NO.

P1.59



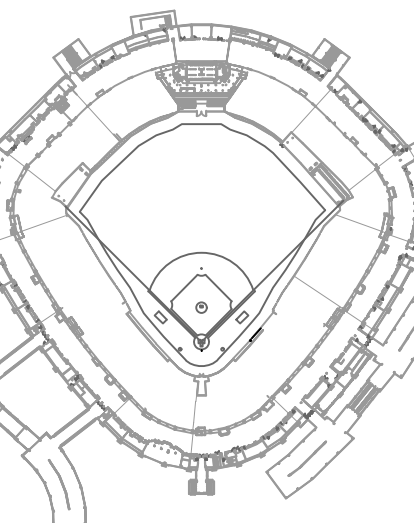
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KEYED PLUMBING NEW WORK SHEET NOTES

- REPLACE ALL DOMESTIC HOT WATER PIPING AND ASSOCIATED ACCESSORIES BETWEEN THE HOT WATER SUPPLY OUTLETS ON THE EXISTING TO REMAIN HOT WATER HEATERS AND THE EXISTING TO REMAIN HOT WATER STORAGE TANKS. WATER HEATERS ARE BOILER TYPE CAPABLE OF A MAXIMUM DISCHARGE WATER TEMPERATURE OF 250°F, WITH THE SYSTEM MAINTAINED AT A 180°F. ALL VALVES SHALL BE 300# CLASS RATED FOR THE MAXIMUM SUPPLY TEMPERATURE OF THE EQUIPMENT. INSULATE PER SPECIFICATIONS.
- REPLACE ALL DOMESTIC HOT WATER PIPING AND ASSOCIATED ACCESSORIES BETWEEN THE INLETS ON THE EXISTING TO REMAIN HOT WATER HEATERS AND THE EXISTING TO REMAIN HOT WATER STORAGE TANKS. ALL VALVES SHALL BE 300# CLASS RATED FOR THE MAXIMUM 250°F SUPPLY TEMPERATURE OF THE EQUIPMENT. INSULATE PER SPECIFICATIONS.
- EXISTING TO REMAIN HOT WATER CIRCULATION PUMP TO REMAIN. PROVIDE PRICING AND LEAD TIME TO PROVIDE IN KIND REPLACEMENT OF PUMP ENSURING THAT NEW PUMP CAN MATCH THE PERFORMANCE OF THE EXISTING PUMP AND IS RATED FOR THE HIGH TEMPERATURE AND PRESSURE OF THE SYSTEM.
EXISTING PUMP INFORMATION:
BELL & GOSSETT E-50, SIZE 1.25AAB 4 125 AB, 75 GPM @ 50 FT HD, SERIAL NO. C317383-01 K12
- EXISTING TO REMAIN HOT WATER CIRCULATION PUMP TO REMAIN. PROVIDE PRICING AND LEAD TIME TO PROVIDE IN KIND REPLACEMENT OF PUMP ENSURING THAT NEW PUMP CAN MATCH THE PERFORMANCE OF THE EXISTING PUMP AND IS RATED FOR THE HIGH TEMPERATURE AND PRESSURE OF THE SYSTEM.
EXISTING PUMP INFORMATION:
BELL & GOSSETT E-50, SIZE 1.25AAB 4 125 AB, 75 GPM @ 50 FT HD, SERIAL NO. C317383-01 K12
- PROVIDE NEW UPDATED CONTROLS FOR MAINTAINING THE DESIRED WATER TEMPERATURE IN THE STORAGE TANKS. INCLUDE NEW AQUASTATS AND AN UPDATED CONTROLLER FOR MAINTAINING 180°F IN THE STORAGE TANK.
- PROVIDE NEW PROOF OF FLOW SWITCHES TO INTERLOCK WITH OPERATION OF EXISTING TO REMAIN WATER HEATERS.

KEY PLAN



ISSUE/REVISION:		
REV.	DATE	DESCRIPTION
1	12/09/21	ISSUE FOR BID

PROJECT:
GUARANTEED RATE FIELD -
WASTE AND VENT PIPING
PHASE X
333 W 35TH STREET,
CHICAGO, ILLINOIS 60616

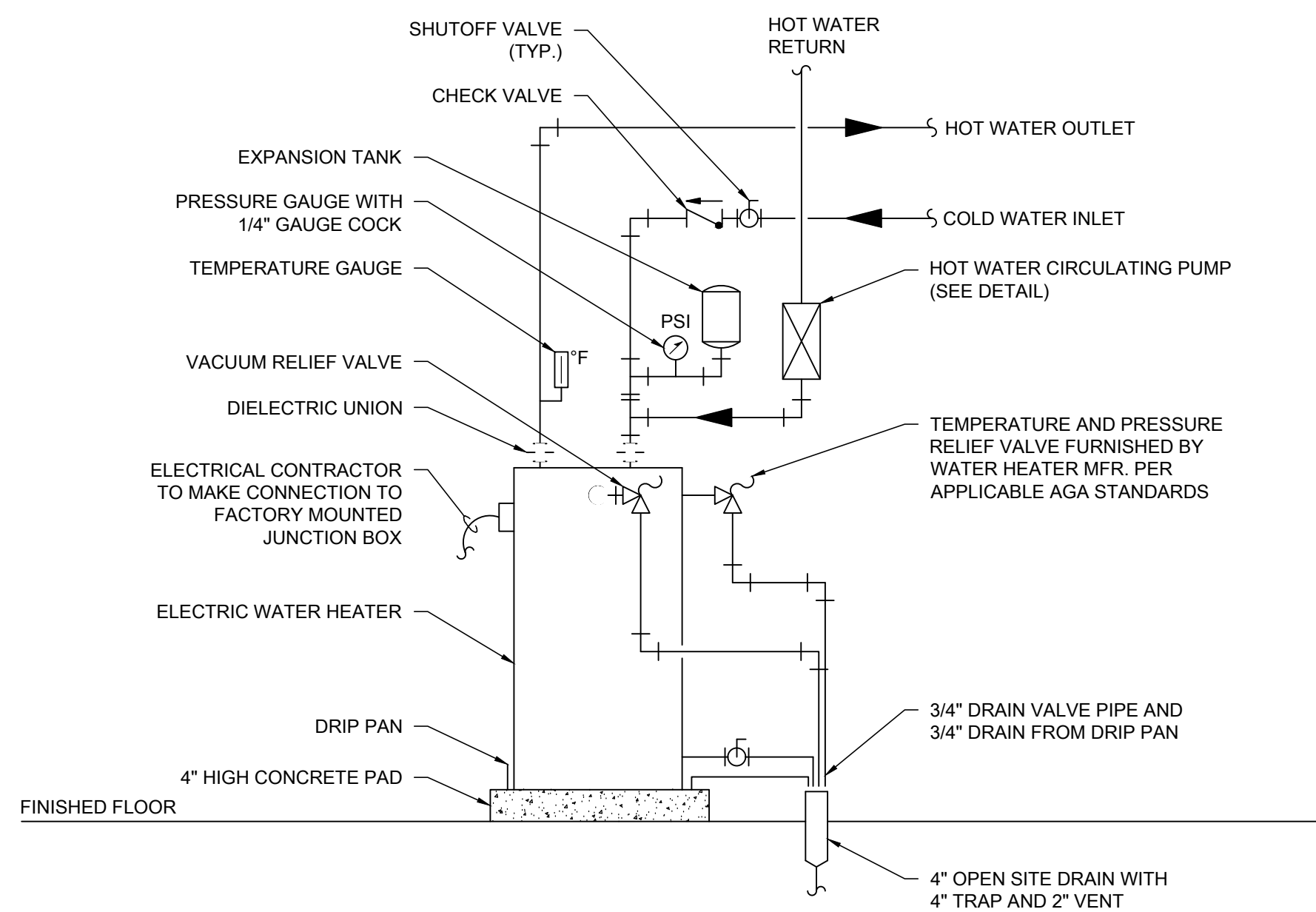
DRAWING TITLE:
PLUMBING RISER DIAGRAM

DESIGNED BY: DA
CHECKED BY: MS
PROJECT NO: 21275
SCALE: NO SCALE

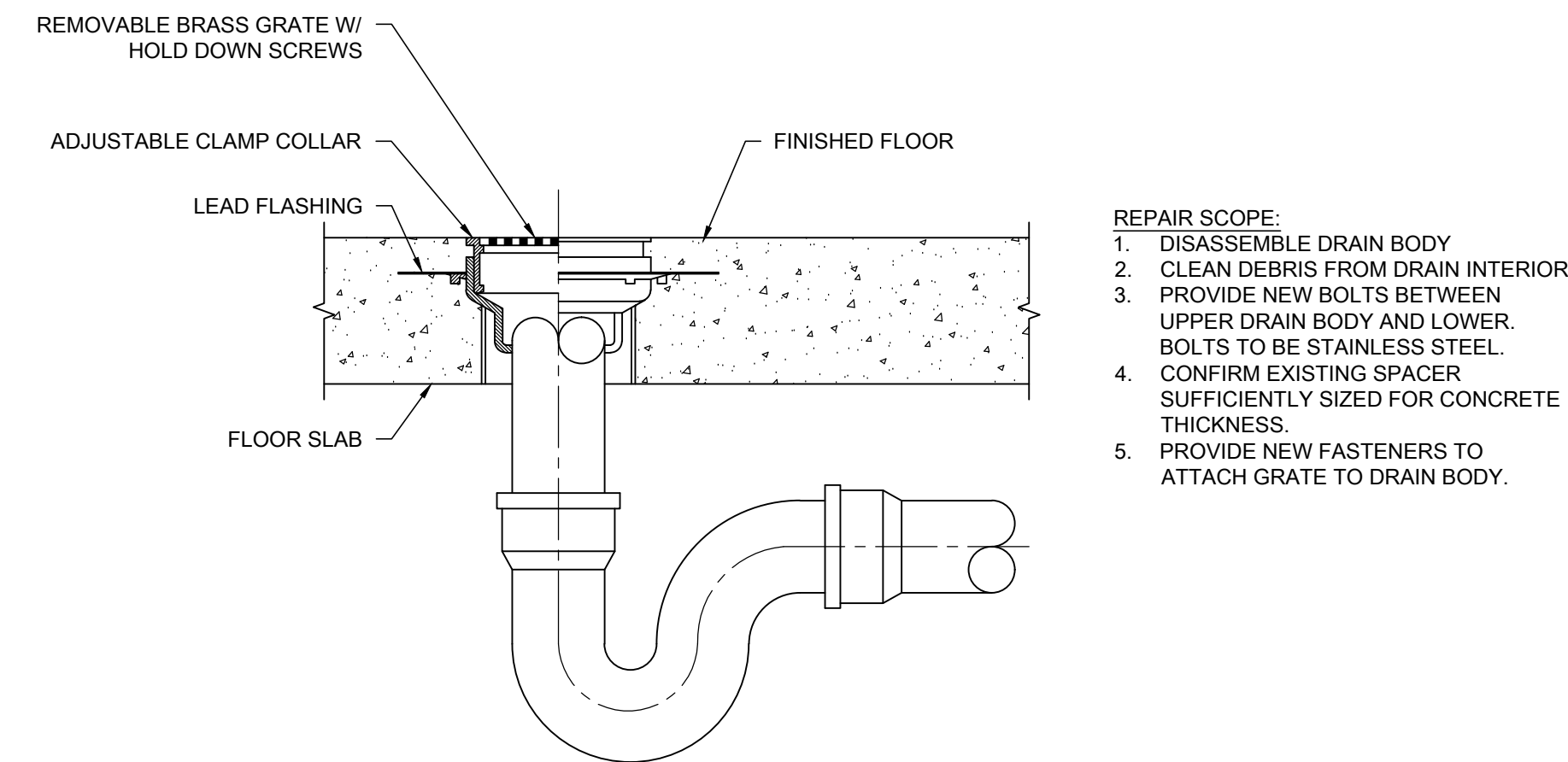
SHEET NO.

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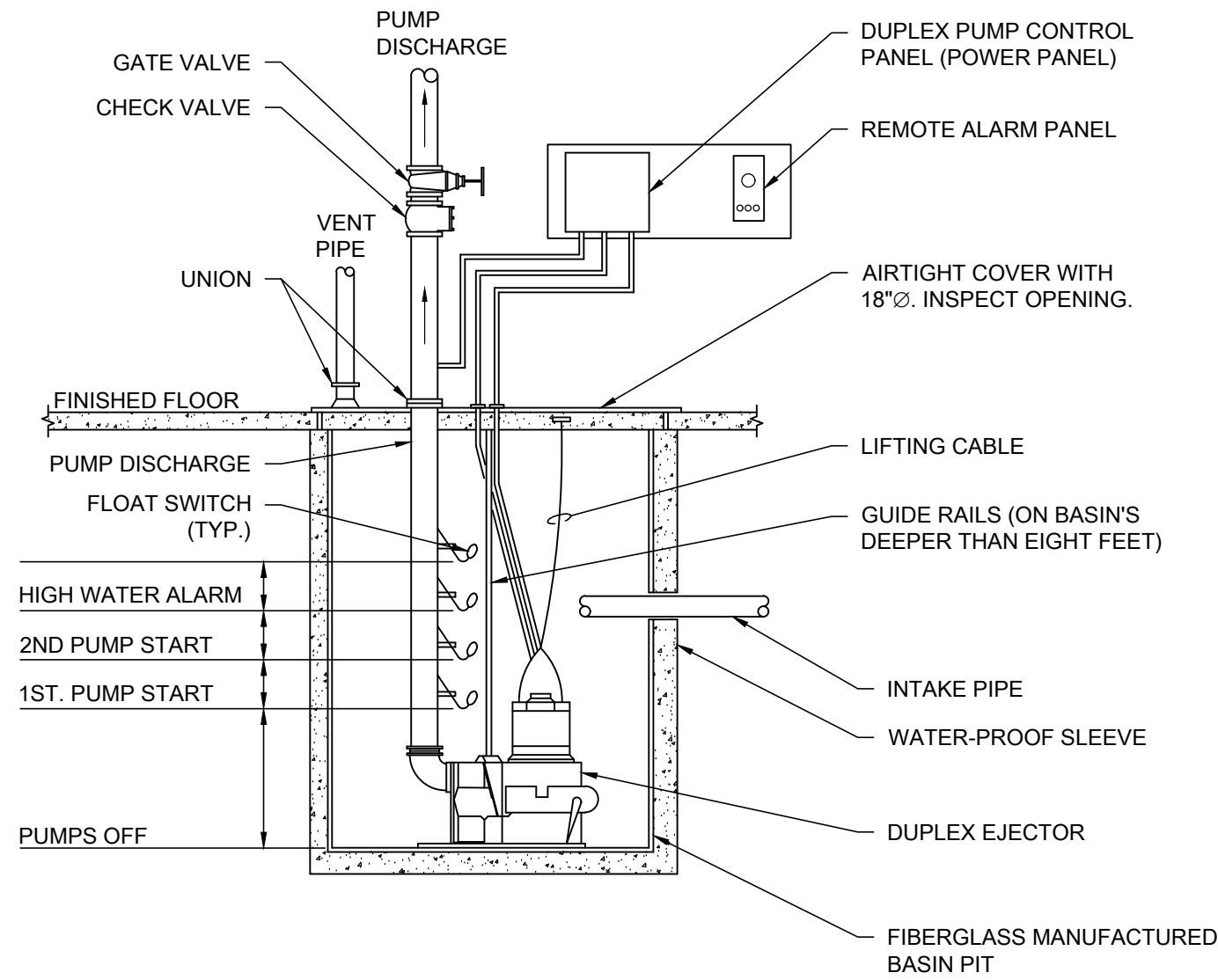
P2.01



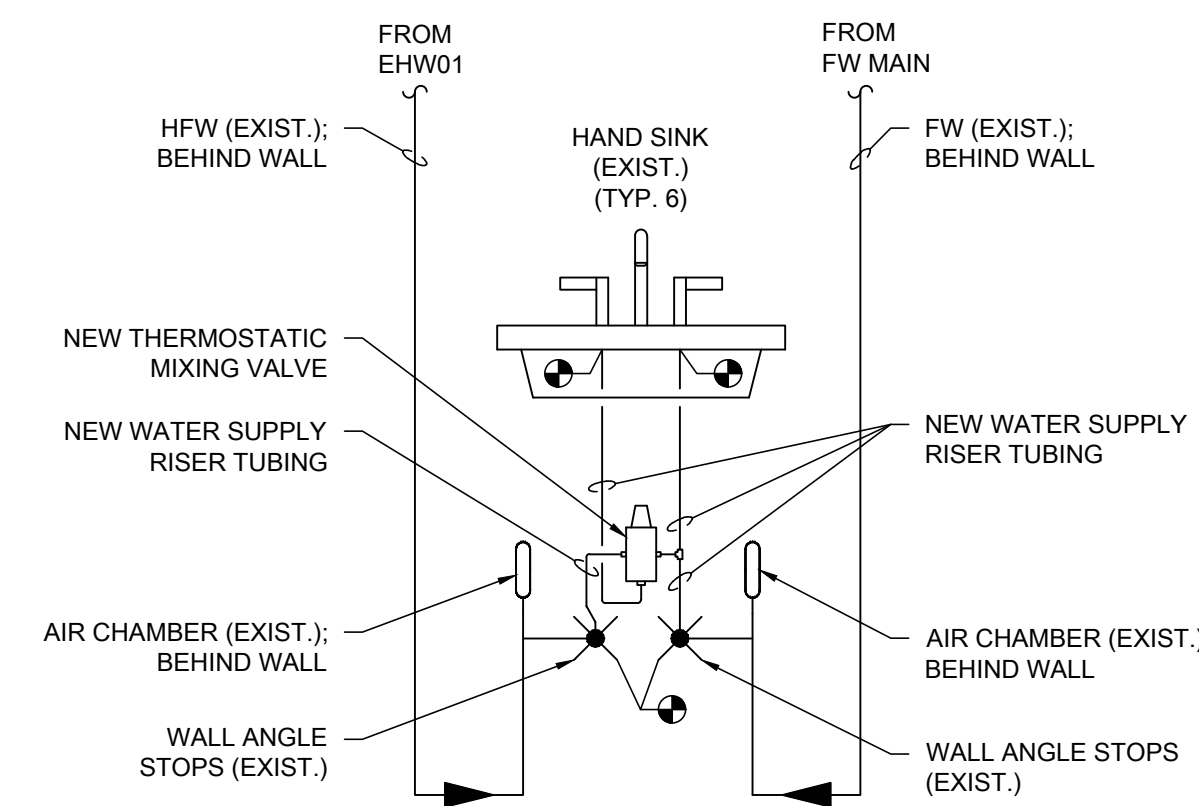
1 ELECTRIC WATER HEATER DETAIL
SCALE: NO SCALE



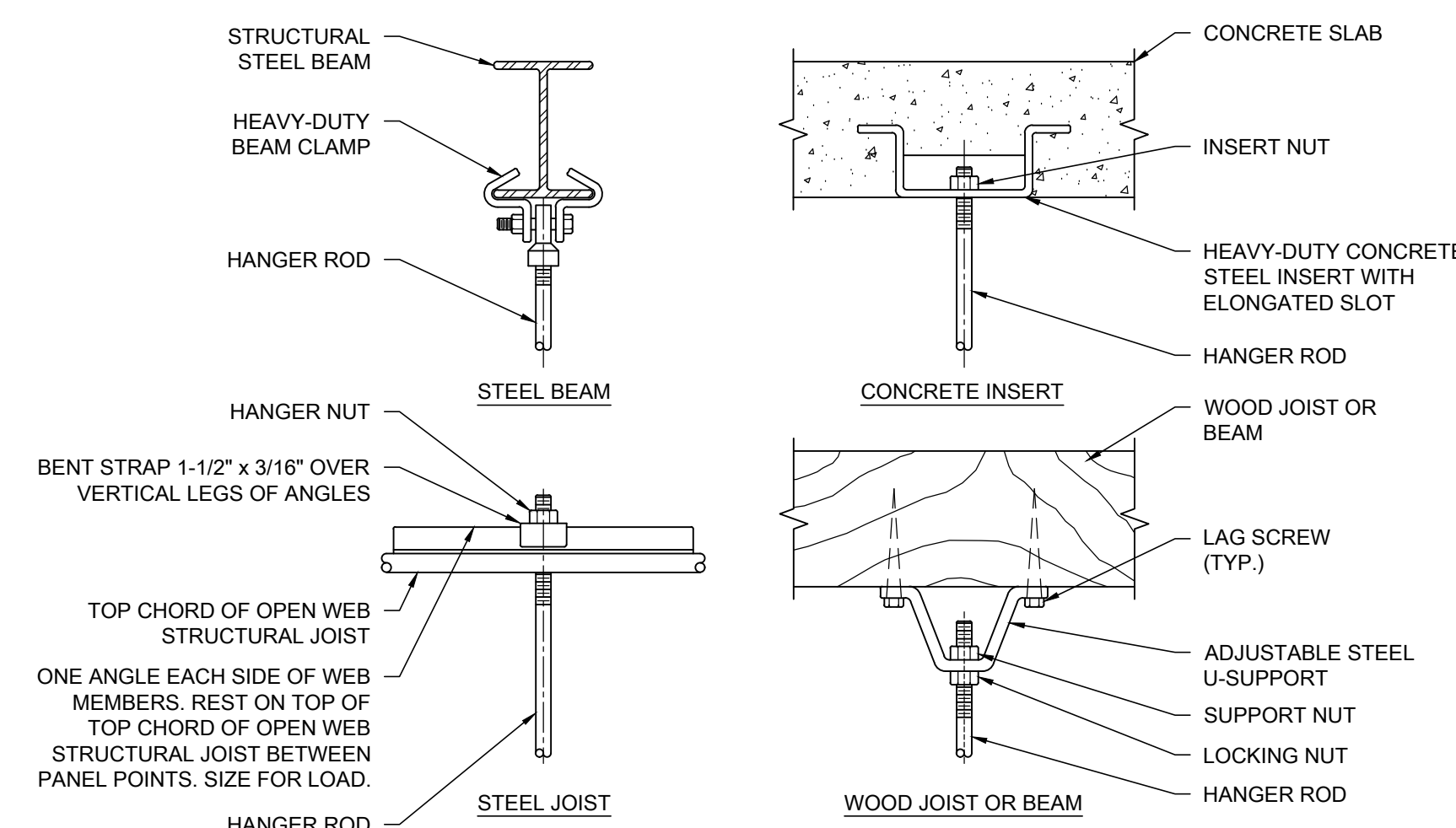
2 DECK DRAIN DETAIL
SCALE: NO SCALE



3 DUPLEX SUBMERSIBLE SEWAGE EJECTOR DETAIL
SCALE: NO SCALE



4 THERMOSTATIC MIXING VALVE DETAIL
SCALE: NO SCALE



PIPE HANGERS AND SUPPORTS (HORIZONTAL STEEL AND COPPER PIPING)		
NOMINAL PIPE SIZE	DISTANCE BETWEEN SUPPORTS	HANGER ROD DIAMETERS
1/2"	6'	3/8"
3/4" TO 1-1/2"	6'	1/2"
2" TO 2-1/2"	10'	1/2"
3" AND 4"	12'	5/8"
6" TO 12"	14'	7/8"

NOTES:

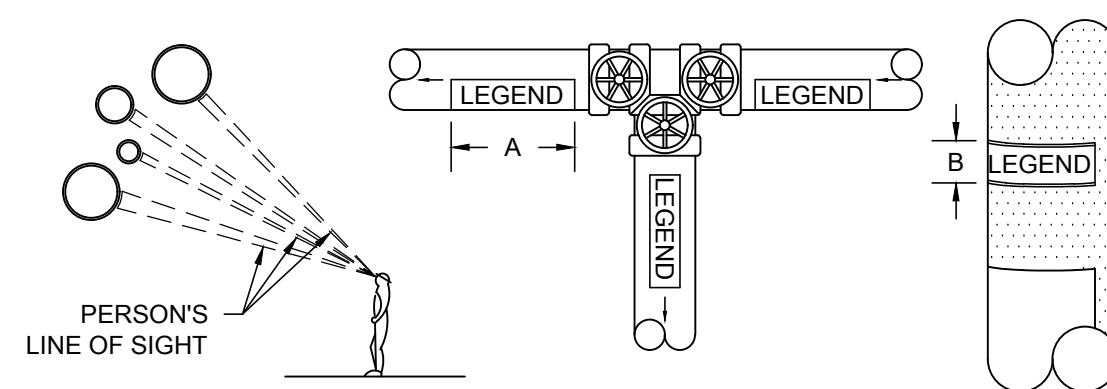
PLACE HANGER WITHIN 1 FOOT OF EACH HORIZONTAL ELBOW, SUPPORT HORIZONTAL SOLID WASTE AND STORM PIPE NEAR EACH HUB, WITH 5 FEET MAXIMUM SPACING BETWEEN HANGERS.

VERTICAL PIPING:

- SUPPORT VERTICAL WATER PIPING AT EVERY FLOOR.
- SUPPORT VERTICAL SOIL PIPE AT EACH FLOOR AT HUB.

WHERE SEVERAL PIPES CAN BE INSTALLED IN PARALLEL AND AT SAME ELEVATION PROVIDE MULTIPLE OR TRAPEZE HANGERS.
WHERE PRACTICAL, SUPPORT RISER PIPING INDEPENDENTLY OF CONNECTED HORIZONTAL PIPING.

5 PIPE HANGER DETAIL
SCALE: NO SCALE



NOTES:

- IDENTIFICATION MARKERS ARE TO BE PLACED ON ALL COVERED AND UNCOVERED PIPES AT 50'-0" INTERVALS, ADJACENT TO ALL VALVES OR BRANCHES, AND LOCATED AT BOTH SIDES OF A WALL/FLOOR PENETRATION. ARROWS OF SAME COLOR SHALL ALSO BE PLACED ON PIPES POINTING AWAY FROM MARKER INDICATING THE DIRECTION OF FLOW.

SIZE OF LEGEND LETTERS		
OUTSIDE DIAMETER OF PIPE OR COVERING	LENGTH OF COLOR FIELD "A"	SIZE OF LETTERS "B"
3/4" TO 1-1/4"	8"	1/2"
1-1/2" TO 2"	8"	3/4"
2-1/2" TO 6"	12"	1-1/4"
8" TO 10"	24"	2-1/2"
OVER 10"	32"	3-1/2"

PLAN TAG	SERVICE	IDENTIFICATION MARKER
SAN	SANITARY	WHITE LETTERING ON GREEN BACKGROUND
V	VENT	WHITE LETTERING ON GREEN BACKGROUND
ST	STORM	WHITE LETTERING ON GREEN BACKGROUND
NP	NON-POTABLE COLD WATER	BLACK LETTERING ON YELLOW BACKGROUND
???	RAINWATER HARVESTED WATER	WHITE LETTERING ON PURPLE BACKGROUND
CW	DOMESTIC COLD WATER	WHITE LETTERING ON GREEN BACKGROUND
HW	DOMESTIC HOT WATER	BLACK LETTERING ON YELLOW BACKGROUND
HWR	DOMESTIC HOT WATER RETURN	BLACK LETTERING ON YELLOW BACKGROUND

6 PIPE IDENTIFICATION DETAIL
SCALE: NO SCALE

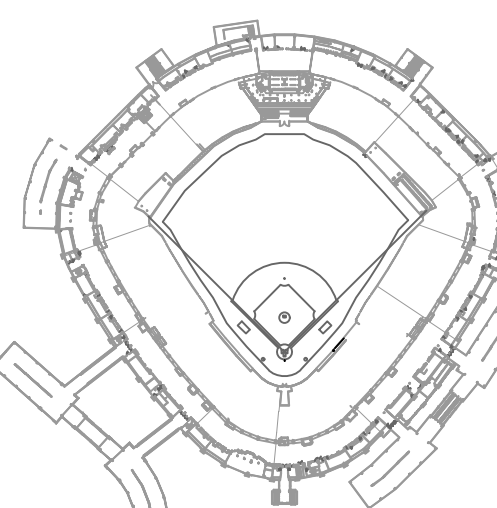
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KEY PLAN



ISSUE/REVISION:

REV.	DATE	DESCRIPTION
-	12/09/21	ISSUE FOR BID

PROJECT:

GUARANTEED RATE FIELD -
WASTE AND VENT PIPING
PHASE X

333 W 35TH STREET,
CHICAGO, ILLINOIS 60616

DRAWING TITLE:

PLUMBING DETAILS

DESIGNED BY:

DA

CHECKED BY:

MS

PROJECT NO:

21275

SCALE:

NO SCALE

SHEET NO.

P3.01

ELECTRIC WATER HEATER SCHEDULE														
EQUIP TAG	LOCATION	TYPE	MANUFACTURER	MODEL NO.	CAPACITY (GALLONS)	KW OUTPUT	ELECTRICAL VPH	AMPS	GPM RECOVERY AT 100°F RISE	GPM AT TEMP. RISE	OPERATIONAL WEIGHT (LBS.)	NOTES		
EW1 1.23	SERVICE 1.23.05	INSTANTANEOUS	EMAX	HAC27240	N/A	27	240	100	N/A	2 @ 80 F RISE	13.75	1, 2-4		
EW1 3.24	JANITOR 3.24.05	STORAGE TANK	A.O. SMITH	DEL-205	20	6.0	2083		24	0.4	73	3-5		
EW1 3.41	JANITOR 3.41.05	STORAGE TANK	A.O. SMITH	DEL-300	30	4.5	2083		18	0.3	100	3-5		
EW1 5.19	JANITOR 5.19.03	STORAGE TANK	A.O. SMITH	DEL-205	20	6.0	2083	17	24	0.4	73	3-5		
EW1 5.24	JANITOR 5.24.04	STORAGE TANK	A.O. SMITH	DEL-205	20	6.0	2083	17	24	0.4	73	3-5		
EW1 5.27	JANITOR 5.27.04	STORAGE TANK	A.O. SMITH	DEL-205	20	6.0	2083	17	24	0.4	73	3-5		
EW1 5.33	JANITOR 5.33.03	STORAGE TANK	A.O. SMITH	DEL-205	20	6.0	2083	17	24	0.4	73	3-5		
EW1 5.41	JANITOR 5.41.04	STORAGE TANK	A.O. SMITH	DEL-205	20	6.0	2083	17	24	0.4	73	3-5		
EW1 6.14	JANITOR 6.14.03	STORAGE TANK	A.O. SMITH	DEL-300	30	9.0	2083	25	36	0.6	73	3-5		
EW1 6.19	JANITOR 6.19.02	STORAGE TANK	A.O. SMITH	DEL-300	30	9.0	2083	25	36	0.6	73	3-5		
EW1 6.27	JANITOR 6.27.02	STORAGE TANK	A.O. SMITH	DEL-300	30	9.0	2083	25	36	0.6	73	3-5		
EW1 6.35	JANITOR 6.35.02	STORAGE TANK	A.O. SMITH	DEL-300	30	9.0	2083	25	36	0.6	73	3-5		
EW1 6.41	JANITOR 6.41.02	STORAGE TANK	A.O. SMITH	DEL-300	30	9.0	2083	25	36	0.6	73	3-5		
EW1 6.46	JANITOR 6.46.02	STORAGE TANK	A.O. SMITH	DEL-300	30	9.0	2083	25	36	0.6	73	3-5		
NOTES:														
1. WALL-MOUNT WATER HEATER ON CONTRACTOR PROVIDED FRAME ABOVE THE CEILING.														
2. PROVIDE PLATFORM TO MOUNT WATER HEATER ON.														
3. PROVIDE CODE COMPLIANT SAFETY DEVICES, VALVE LOCATION, AND DISCHARGE PIPING OF ANY SAFETY DEVICE SHALL BE IN PROXIMITY TO REQUIRED FLOOR DRAIN OR APPROVED RECEPTOR.														
4. PROVIDE THERMAL EXPANSION TANK IN THE COLD WATER SUPPLY FOR WATER HEATER PLANT WITH NO VALVES OR OTHER DEVICES LOCATED BETWEEN THE EXPANSION TANK AND THE HEATER. SEE EXPANSION														
5. PROVIDE WITH STANDARD WARRANTY.														

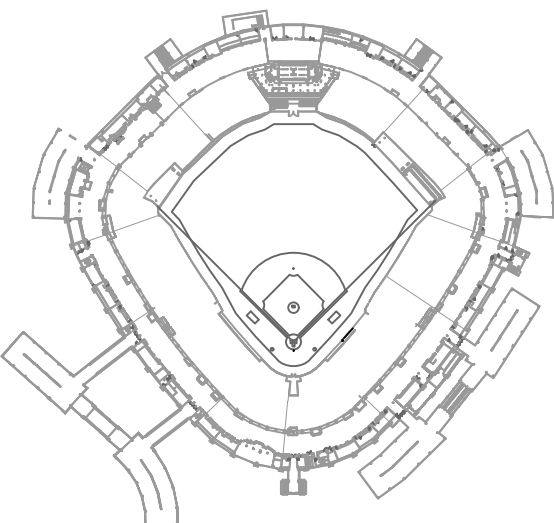
EXPANSION TANK SCHEDULE													
EQUIP. TAG	ABB.	SERVICE	LOCATION	MAXIMUM ACCEPTANCE (GALLONS)	TOTAL VOLUME (GALLONS)	WORKING PRESSURE (PSI)	SIZE (APPROX)	MFR	MODEL	100% FULL WEIGHT (LBS.)	NOTES		
ET	3.24	EW1-3.24	JANITOR 3.24.05	0.9	2	150	13" X 8" DIA.	AMTROL	ST-5	21.6	1-5		
ET	3.41	EW1-3.41	JANITOR 3.41.05	0.9	2	150	13" X 8" DIA.	AMTROL	ST-5	21.6	1-5		
ET	4.19	EW1-4.19	JANITOR 4.19.02	0.9	2	150	13" X 8" DIA.	AMTROL	ST-5	21.6	1-5		
ET	4.23	EW1-4.23	JANITOR 4.23.03	0.9	2	150	13" X 8" DIA.	AMTROL	ST-5	21.6	1-5		
ET	5.19	EW1-5.19	JANITOR 5.19.03	0.9	2	150	13" X 8" DIA.	AMTROL	ST-5	21.6	1-5		
ET	5.24	EW1-5.24	JANITOR 5.24.04	0.9	2	150	13" X 8" DIA.	AMTROL	ST-5	21.6	1-5		
ET	5.27	EW1-5.27	JANITOR 5.27.04	0.9	2	150	13" X 8" DIA.	AMTROL	ST-5	21.6	1-5		
ET	5.33	EW1-5.33	JANITOR 5.33.03	0.9	2	150	13" X 8" DIA.	AMTROL	ST-5	21.6	1-5		
ET	5.41	EW1-5.41	JANITOR 5.41.04	0.9	2	150	13" X 8" DIA.	AMTROL	ST-5	21.6	1-5		
ET	6.14	EW1-6.14	JANITOR 6.14	3.2	4.4	150	15" X 11" DIA.	AMTROL	ST-12	45.6	1-5		
ET	6.19	EW1-6.19	JANITOR 6.19	3.2	4.4	150	15" X 11" DIA.	AMTROL	ST-12	45.6	1-5		
ET	6.27	EW1-6.27	JANITOR 6.27	3.2	4.4	150	15" X 11" DIA.	AMTROL	ST-12	45.6	1-5		
ET	6.35	EW1-6.35	JANITOR 6.35	3.2	4.4	150	15" X 11" DIA.	AMTROL	ST-12	45.6	1-5		
ET	6.41	EW1-6.41	JANITOR 6.41	3.2	4.4	150	15" X 11" DIA.	AMTROL	ST-12	45.6	1-5		
ET	6.46	EW1-6.46	JANITOR 6.46	3.2	4.4	150	15" X 11" DIA.	AMTROL	ST-12	45.6	1-5		
NOTES:													
1. PLUMBING CONTRACTOR SHALL PROPERLY CHARGE EXPANSION TANK PRIOR TO INSTALLATION PER MANUFACTURER GUIDELINES.													
2. SUPPORT INDIVIDUALLY FROM STRUCTURE. DO NOT RELY ON PIPING OR WATER HEATER SUPPORTS.													
3. THERMAL EXPANSION TANK SHALL BE CONNECTED TO THE COLD WATER SUPPLY TO THE WATER HEATER WITH NO VALVES OR OTHER DEVICES LOCATED BETWEEN THE EXPANSION TANK AND THE WATER HEATER.													
4. TANK SHALL BE ASME RATED.													
5. PROVIDE WITH 2-YEAR WARRANTY PARTS AND LABOR.													

SEWAGE EJECTOR PUMP & BASIN SCHEDULE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
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ABB.	NO.		MANUFACTURER	MODEL	TYPE	PUMP QTY	GPM	T.D.H (F.T.)	MOTOR (HP)	VOLTS	PHASE	CYC.	RPM	NON-COVER-LOADING	COATING	OIL SENSING	MANUFACTURER	SIZE	MATERIAL	FLANGE	INLET(S)		OUTLET(S)		MANUFACTURER	THICKNESS	MATERIAL	TOP SIDE FINISH	COATING	ACCESS TYPE / SIZE	NOTES																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
SE	1E-01	CLUBHOUSE RESTROOMS	METROPOLITAN		SUBMERSIBLE DUPLEX	2		3	480	3	60		Y			NO	EXISTING TO REMAIN: 60" I.D. x 19'-0" DEEP										METROPOLITAN																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																

PLUMBING FIXTURE SCHEDULE												
EQUIP. TAG	ABB.	NO.	FIXTURE	TYPE	MANUFACTURER	MODEL NO.	COLOR/MATERIAL	TRAP	CARRIER	MOUNTING HEIGHT	SUPPLY FITTING	STOP VALVE
L	1	LAVATORY FAUCET	SINGLE HOLE SENSOR OPERATED		SYMONS	ULTRASENSE	POLISHED CHROME	N/A	N/A	VANITY TOP	-	-
NOTES:												
1. FIXTURE SHALL BE HANDICAPPED ACCESSIBLE.												
2. PROVIDE WATER-CONSERVING PRESSURE COMPENSATING VANDAL RESISTANT AERATOR FOR FAUCET.												
3. FIXTURE TO UTILIZE BATTERY. BATTERY SHOULD BE ACCESSIBLE WITHOUT COMPLETE DISASSEMBLY OF FAUCET.												
4. PROVIDE CODE COMPLIANT THERMOSTATIC MIXING VALVE FOR ALL PUBLIC LAVATORIES.												
5. PROVIDE 2-YEAR WARRANTY, PARTS, AND LABOR.												



KEY PLAN



ISSUE/REVISION:

REV.	DATE	DESCRIPTION
-	12/09/21	ISSUE FOR BID

PROJECT:

GUARANTEED RATE FIELD - WASTE AND VENT PIPING PHASE X

333 W 35TH STREET, CHICAGO, ILLINOIS 60616

DRAWING TITLE:

PLUMBING SCHEDULES

DESIGNED BY:

DA

CHECKED BY:

MS

PROJECT NO:

21275

SCALE:

NO SCALE

SHEET NO.

12/09/2021 ISSUED FOR BID

PRELIMINARY - NOT FOR CONSTRUCTION

P4.01

I. GENERAL NOTES A. ALL WORK PERFORMED UNDER THIS CONTRACT SHALL BE IN CONFORMANCE WITH ALL GOVERNING NATIONAL, STATE, AND LOCAL CODES HAVING JURISDICTION. B. CONTRACTOR SHALL REVIEW THE ENTIRE SET OF CONTRACT DOCUMENTS INCLUDING, BUT NOT LIMITED TO, ALL ARCHITECTURAL, CIVIL, SITE, LANDSCAPING, STRUCTURAL, MECHANICAL, ELECTRICAL, PLUMBING, AND FIRE PROTECTION DRAWINGS, AS WELL AS ALL SPECIFICATIONS AND INSTRUCTIONS TO BIDDERS. THIS CONTRACTOR SHALL VISIT THE SITE AND MAKE A DETAILED INSPECTION OF THE SPECIFIED WORK TO DEVELOP KNOWLEDGE OF ALL CONDITIONS PERTINENT TO THE COMPLETION OF HIS WORK. THIS CONTRACTOR SHALL FULLY COORDINATE HIS WORK WITH THE WORK PERFORMED BY OTHER TRADES AND/OR CONTRACTORS, AND SHALL MAKE SUCH FIELD ADJUSTMENTS AS ARE REQUIRED TO ACCOMMODATE FIELD CONDITIONS. ALL OF THE ABOVE SHALL BE INCLUDED IN THE SCOPE OF WORK AT NO ADDITIONAL COST TO OWNER. C. SHOULD CONTRACTOR FIND DISCREPANCIES IN, OR OMISSIONS FROM, THE DRAWINGS, SPECIFICATIONS, OR OTHER CONTRACT DOCUMENTS, OR DISCREPANCIES BETWEEN ACTUAL FIELD CONDITIONS AND THOSE REPRESENTED IN THE DRAWINGS, OR CONFLICTS BETWEEN HIS WORK AND THAT OF OTHER TRADES, OR BE IN DOUBT AS TO THE MEANING OF ANY CONTRACT DOCUMENTS, CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER AND THE ENGINEER IN WRITING AND SHALL OBTAIN CLARIFICATION PRIOR TO SUBMITTING ANY BID. LATE NOTICE NOTIFICATION SHALL BE CONSTRUED AS CONTRACTORS REPRESENTATION THAT NO DISCREPANCIES OR CONFLICTS EXIST. CONTRACTOR'S COMPENSATION WILL NOT BE INCREASED AFTER AWARD OF CONTRACT FOR ANY WORK REQUIRED TO COMPLY WITH THIS REQUIREMENT. D. THE DRAWINGS INDICATE DIAGRAMMATICALLY THE INTENT, REQUIREMENTS FOR, AND LOCATION OF THE WORK INCLUDED UNDER THIS CONTRACT. ALL WORK REQUIRED TO AFFECT THE DESIGN, INCLUDING DETAILS NOT SHOWN BUT WHOSE INCLUSION WOULD BE DETERMINED BY THE REQUIREMENT BY A KNOWLEDGEABLE TRADESMAN, BUILDING ENGINEER, OR TECHNICIAN, SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER. E. IT IS THE INTENT OF THESE DOCUMENTS THAT THE CONTRACTOR PROVIDE ALL LABOR, MATERIAL, EQUIPMENT, AND TOOLS FOR THE COMPLETE INSTALLATION OF ALL WORK SHOWN ON THE PLANS AND/OR DESCRIBED HEREIN, INCLUDING ALL DEVICES, CONTROLS, AND APPURTENANCES REQUIRED TO SET THE NEW SYSTEMS INTO OPERATION, UNLESS OTHERWISE NOTED. F. CONTRACTOR SHALL VERIFY ALL MOUNTING, ARRANGEMENTS, HEIGHTS, AND LOCATIONS PRIOR TO ROUGH-IN. ANY MENTION OF A SPECIFIC MOUNTING ARRANGEMENT, WEIGHT, OR LOCATION SHALL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY TO VERIFY SPECIFIC REQUIREMENTS AND BASE HIS WORK ON THEM. THE SAME CARE SHALL BE TAKEN WITH RESPECT TO INFORMATION FURNISHED BY THIS CONTRACTOR TO HIS SUBCONTRACTORS OR TO OTHER CONTRACTORS EMPLOYED BY THE OWNER ON THIS PROJECT. THIS CONTRACTOR SHALL BE FINANCIALLY RESPONSIBLE FOR ANY CHANGE ORDERS NECESSITATED BY INACCURATE OR INCORRECT INFORMATION FURNISHED TO OTHER CONTRACTORS. NO ADDITIONS TO THE CONTRACT AMOUNT WILL BE PERMITTED FOR ITEMS INSTALLED IN WRONG LOCATIONS OR IN CONFLICT WITH OTHER WORK. G. CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING FOR AND OBTAINING ALL APPLICABLE PERMITS. THIS CONTRACTOR SHALL PAY ALL PERMIT FEES, PLAN REVIEW FEES, LICENSE FEES, AND INSPECTIONS APPLICABLE TO HIS WORK, AND TO THE CITY OF CHICAGO. THIS CONTRACTOR SHALL OTHERWISE NOTED. THIS CONTRACTOR SHALL ALSO INCLUDE IN HIS BID ALL FEES ASSOCIATED WITH THE SERVICES OF A PERMIT EXPEDITER AS MAY BE REQUIRED TO MEET THE PROJECT SCHEDULE. H. CONTRACTOR SHALL ESTABLISH SAFE WORKING PROCEDURES FOR THE PROTECTION OF THE WORKMEN IN ALL PHASES OF WORK AND SHALL COMPLY WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL SAFETY LAWS, INCLUDING THE REQUIREMENTS OF OSHA. HE SHALL ALSO TAKE ALL NECESSARY SIGNS, LIGHTS, AND BARRICADES REQUIRED FOR THE SAFETY OF ALL OTHER PERSONS WHO MIGHT COME IN CONTACT WITH THE CONSTRUCTION BEING PERFORMED UNDER THIS CONTRACT. I. ALL PUBLIC AND PRIVATE PROPERTY DAMAGED AS A RESULT OF WORK PERFORMED UNDER THIS CONTRACT SHALL BE REPAIRED AND/OR REPLACED TO MATCH EXISTING CONSTRUCTION BY THIS CONTRACTOR AND TO THE SATISFACTION OF THE OWNER AND AUTHORITIES HAVING JURISDICTION. J. CONTRACTOR SHALL MAKE ALL ARRANGEMENTS WITH THE BUILDING OWNER'S REPRESENTATIVE REGARDING WORKSITE ACCESS, BUILDING RULES, AND REGULATIONS, INCLUDING WORKING HOURS, REFUSE DISPOSAL, DUMPSTER LOCATION, SECURITY, INTERFERENCES OF BUILDING UTILITIES OR FUNCTIONS, OWNERSHIP OF SALVAGED MATERIALS, PARKING, AND ANY OTHER ITEMS DEEMED TO BE OF MUTUAL INTEREST. K. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO STORE AND PROTECT FROM DAMAGE ALL EQUIPMENT AND MATERIALS IN A MANNER THAT WILL MAINTAIN AN ORDERLY AND CLEAN APPEARANCE. DAMAGED EQUIPMENT AND MATERIAL IS SUBJECT TO REJECTION BY THE OWNER'S REPRESENTATIVE. REPLACEMENT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. L. PROVIDE ALL HOLES, SLEEVES, CUTTING, PATCHING, AND SEALING FOR INSTALLATION OF THIS WORK. SEALING SHALL CONFORM TO THE FIRE RATING OF ALL BUILDING ASSEMBLIES. ALL EXTERIOR PENETRATIONS SHALL BE MADE WEATHER TIGHT. M. CONTRACTOR IS RESPONSIBLE FOR LOCATING AND SCANNING OBSTRUCTIONS/REINFORCEMENTS WHERE PENETRATIONS ARE TO BE MADE. ANY DAMAGE RESULTING FROM PENETRATIONS IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE REPAIRED AT NO ADDITIONAL COST TO THE OWNER. N. CONTRACTOR SHALL VERIFY LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO ANY EXCAVATING ACTIVITIES OR UNDERGROUND WORK. PROVIDE SOIL EROSION AND SEDIMENT CONTROL FOR EXCAVATION OF THE AREA ACCORDING TO ALL AUTHORITIES HAVING JURISDICTION. O. CONTRACTOR SHALL NOT MODIFY OR REMOVE ANYTHING FOUND TO BE IN THE PATH OF NEW SYSTEMS TO BE INSTALLED WITHOUT PRIOR APPROVAL BY THE ENGINEER. P. ALL ROOFING WORK SHALL BE BY OWNER APPROVED ROOFING CONTRACTOR(S) TO MAINTAIN ROOF WARRANTIES. THE CONTRACTOR SHALL COORDINATE ALL WORK WITH THE ROOFING CONTRACTOR(S) TO ENSURE WEATHER TIGHT CONSTRUCTION AND TIMELY COMPLETION OF ALL WORK. Q. THE CONTRACTOR IS RESPONSIBLE FOR THE CONTINUOUS CLEANING OF ALL DUST AND DEBRIS RESULTING FROM THEIR WORK. R. CONTRACTOR TO DETERMINE REQUIRED SYSTEM SHUTDOWNS. MAXIMUM DURATION OF SYSTEM SHUTDOWN SHALL BE AT THE DISCRETION OF THE OWNER'S REPRESENTATIVE. SHUTDOWN SHALL BE COORDINATED ON THE JOB SITE WITH THE OWNER'S REPRESENTATIVE. CONTRACTOR SHALL PROVIDE A MINIMUM OF ONE (1) WEEK ADVANCE NOTICE OF SYSTEM SHUTDOWNS. S. CONTRACTOR AND SUB-CONTRACTORS SHALL BE PROPERLY LICENSED, BONDED, AND INSURED AND CAPABLE OF PERFORMING QUALITY WORKMANSHIP OF THEIR TRADE ON THIS PROJECT. T. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, AND SAFETY. U. REMOVAL AND RESTORATION OF FINISHED SURFACES AS REQUIRED TO COMPLETE THIS SCOPE OF WORK IS THE RESPONSIBILITY OF THIS CONTRACTOR. V. CONTRACTOR SHALL COORDINATE USE OF THE BUILDING ELEVATOR(S) AND DELIVERIES WITH THE OWNER. W. MAINTAIN ALL MANUFACTURER RECOMMENDED AND CODE REQUIRED CLEARANCES. X. CONTRACTOR SHALL PROVIDE TRAINING TO THE OPERATING STAFF FOR NEW SYSTEMS AND EQUIPMENT. REFER TO OWNER TRAINING SPECIFICATION SECTION FOR ADDITIONAL INFORMATION. II. GENERAL DEMOLITION NOTES A. ALL WORK SHALL BE PERFORMED IN A CLEAN AND WORKMANLIKE MANNER. CARE SHALL BE EXERCISED TO MINIMIZE ANY INCONVENIENCE OR DISTURBANCE TO OTHER AREAS OF THE BUILDING WHICH ARE TO REMAIN IN OPERATION. B. ALL DEMOLITION AS CALLED FOR ON THE DEMOLITION DRAWINGS SHALL BE UNDER THIS CONTRACTORS WORK. C. CONTRACTOR SHALL VISIT THE BUILDING, BEFORE SUBMITTING HIS BID, TO VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS WHICH MAY AFFECT HIS WORK. NOT ALL EXISTING DUCTWORK, PIPING, EQUIPMENT, ETC. MAY BE INDICATED ON DOCUMENTS. D. THE INTENT OF THE DEMOLITION IS TO REMOVE THE ITEMS IN THEIR ENTIRETY. THIS INCLUDES ALL ASSOCIATED SUPPORT BASES, ANCHORS, HANGERS, CONTROLS, AND CONTROLS. ALL EXISTING CONDUIT EXPOSED IN MECHANICAL ROOMS, PIPING, DUCTWORK, WIRING, ETC. CAP EXISTING SYSTEMS TO REMAIN AT ACTIVE MANS OR OTHER ACTIVE BRANCH LINES. DEAD END LENGTHS SHALL BE CODE COMPLIANT. LABEL ABANDONED CONTROLS, CONDUIT AND WIRE. E. BEFORE STARTING ANY DEMOLITION WORK ON EQUIPMENT WHICH HAS AN ELECTRICAL CONNECTION, THE ELECTRICAL CONTRACTOR SHALL DISCONNECT THE POWER AND REMOVE CONDUIT, WIRING, DISCONNECT SWITCHES, AND STARTERS UNDER THIS CONTRACT. F. CONTRACTOR SHALL BE RESPONSIBLE FOR CONTINUOUS CLEANUP THROUGHOUT THE COURSE OF THE DEMOLITION WORK. G. ALL EQUIPMENT, MATERIAL, ETC. THAT IS DEMOLISHED SHALL BE REMOVED FROM THE BUILDING SITE BY THIS CONTRACTOR IN A PROPER AND LEGAL MANNER. NO ITEM WHICH IS DEMOLISHED MAY BE REUSED UNLESS SPECIFICALLY NOTED. H. ANY CONTROLS HARDWARE OR PROGRAMMING NO LONGER NECESSARY TO ACCOMPLISH THE SEQUENCE OF OPERATIONS SHALL BE DECOMMISSIONED. I. ALL DEMOLITION WORK OF THE EXISTING CONTROLS FOR EQUIPMENT SHOWN ON THE DRAWINGS TO BE DEMOLISHED SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR. THE CONTRACTOR SHALL MODIFY THE EXISTING CONTROLS AS REQUIRED TO ENSURE OPERATION OF EXISTING EQUIPMENT TO REMAIN. ALL EXISTING CONTROLS SHOWN TO BE DEMOLISHED SHALL BE REMOVED AND TURNED OVER TO THE OWNER. III. SHOP DRAWINGS, SUBMITTALS, AND AS-BUILTS A. CONTRACTOR SHALL SUBMIT TO THE ENGINEER COORDINATED SHOP DRAWINGS. SHOP DRAWINGS SHALL BE 1/4" SCALE AND SHALL INDICATE LAYOUT OF EQUIPMENT, CONTROLS, AND WIRING. GRAPHICS, CONTROLS NETWORK ARCHITECTURE, CONTROL POINTS LIST, OPERATING SEQUENCES, CONTROL DEVICES WITH SETTINGS OR ADJUSTABLE RANGES, ETC. SHOP DRAWINGS SHALL INCLUDE ALL PIPE SIZES, PIPE SIZES, CAPACITIES, ELEVATIONS, CLEANOUT LOCATIONS, VALVE LOCATIONS, DRAIN DOWN LOCATIONS, ACCESS PANEL LOCATIONS, FIXTURES, DRAINS, UNDERGROUND COMPONENTS, ETC. CONTRACTOR SHALL PROCEED WITH SITE WORK ONLY AFTER RECEIVING SHOP DRAWINGS MARKED REVIEWED. B. SHOULD CONDITIONS NECESSITATE ANY REARRANGEMENTS, CONTRACTOR SHALL SUBMIT TO THE ENGINEER SHOP DRAWINGS SHOWING SUCH CHANGES. CONTRACTOR SHALL PROCEED WITH SITE WORK ONLY AFTER RECEIVING SHOP DRAWINGS MARKED REVIEWED. C. CONTRACTOR SHALL SUBMIT TO THE ENGINEER MANUFACTURERS' SUBMITTALS FOR ALL EQUIPMENT AND ACCESSORIES. CONTRACTOR SHALL PROCEED WITH PROCUREMENT ONLY AFTER RECEIVING SUBMITTALS MARKED REVIEWED. D. CONTRACTOR SHALL SUBMIT TO THE ENGINEER ONE (1) FULL-SIZE PAPER COPY AND AN ELECTRONIC FILE OF THE AS-BUILT DRAWINGS. RECORD LOCATIONS OF CONTROL COMPONENTS, INCLUDING CONTROL UNITS, GAUGES, AND SENSORS. REVISE SHOP DRAWINGS TO REFLECT ACTUAL INSTALLATION AND OPERATING SEQUENCES. E. CONTRACTOR SHALL SUBMIT TO THE ENGINEER ONE (1) PAPER COPY AND AN ELECTRONIC FILE OF ALL EQUIPMENT INFORMATION, INCLUDING OPERATIONAL AND MAINTENANCE INSTRUCTIONS, PARTS LISTS, SUBMITTALS, AND DESCRIPTIVE LITERATURE. IV. MATERIALS AND EQUIPMENT A. ALL MATERIALS AND EQUIPMENT INSTALLED UNDER THIS CONTRACT SHALL BE NEW, UNLESS OTHERWISE STATED IN THESE CONTRACT DOCUMENTS, AND FREE FROM DEFECTS. B. ALL MATERIALS AND EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS' RECOMMENDATIONS. C. CONTRACTOR IS REQUIRED TO REVIEW ALL DRAWINGS, MATERIALS AND EQUIPMENT SHOWN ON THE SCHEDULES AND DETAILS SHALL BE INCLUDED IN BASE BID. NO MATERIALS OR EQUIPMENT SUBSTITUTIONS WILL BE CONSIDERED AFTER THE AWARD OF CONTRACT. IF CONTRACTOR DESIRES NOT TO SUBSTITUTE MATERIAL OR EQUIPMENT, CONTRACTOR SHALL SUBMIT A WRITTEN EXPLANATION BASE BID A LIST OF SUCH ITEMS INDICATING ITEM, MANUFACTURER, MODEL NUMBER, AND AMOUNT TO BE ADDED TO OR DEDUCTED FROM THE BASE BID. EACH SUCH MATERIAL OR EQUIPMENT SUBSTITUTION ITEM SHALL BE LISTED SEPARATELY. D. CONTRACTOR SHALL BE RESPONSIBLE FOR SCHEDULING THE PURCHASE, DELIVERY, RECEIVING, UNLOADING, UNCRATING, STORING, SETTING IN PLACE, AND PROTECTING OF ALL NEW EQUIPMENT FURNISHED BY THE CONTRACTOR OR PROVIDED TO THE CONTRACTOR BY THE OWNER, AND SHALL SECURE SUCH EQUIPMENT FROM DAMAGE UNTIL TIME OF FINAL ACCEPTANCE BY THE OWNER. E. CONTRACTOR SHALL FURNISH AND INSTALL ALL STRUCTURE, SLEEVES, SHIMS, ETC. REQUIRED TO LEVEL AND SUPPORT EQUIPMENT AND MATERIALS. INSTALL NONMETALLIC NON-SHRINK GROUT FOR LEVELING EQUIPMENT BASES. F. CONTRACTOR SHALL VERIFY ALL PHYSICAL, ELECTRICAL, INGRESS, ETC. REQUIREMENTS FOR ALL EQUIPMENT PRIOR TO ORDERING. G. CONTRACTOR SHALL SUBMIT TO OWNER THE PROPOSED LABEL IDENTIFICATION PRODUCT FOR EACH PIECE OF EQUIPMENT PRIOR TO ORDERING. EQUIPMENT LABEL IDENTIFICATION SHALL CONFORM TO THE FOLLOWING: 1. MATERIAL AND THICKNESS: MULTILAYER, MULTICOLOR, PLASTIC LABELS FOR MECHANICAL ENGRAVING, 1/8 INCH THICK, AND HAVING PREPREDRILLED HOLES FOR ATTACHMENT HARDWARE. 2. LETTER COLOR: WHITE. 3. BACKGROUND COLOR: BLUE. 4. MAXIMUM TEMPERATURE: ABLE TO WITHSTAND TEMPERATURES UP TO 160 DEG F. 5. MINIMUM LABEL SIZE: LENGTH AND WIDTH VARY FOR REQUIRED LABEL CONTENT, BUT NOT LESS THAN 2-1/2 BY 3/4 INCH. 6. MINIMUM LABEL LETTER SIZE: 1/4 INCH FOR NAME OF UNITS IF VIEWING DISTANCE IS LESS THAN 24 INCHES, 1/2 INCH FOR VIEWING DISTANCES UP TO 72 INCHES, AND PROPORTIONATELY LARGER LETTERING FOR GREATER VIEWING DISTANCES. INCLUDE SECONDARY LETTERING TWO-THIRDS TO THREE-FOURTHS THE SIZE OF PRINCIPAL LETTERING. 7. FASTENERS: STAINLESS-STEEL RIVETS OR SELF-TAPPING SCREWS. 8. ADHESIVE: CONTACT-TYPE PERMANENT ADHESIVE, COMPATIBLE WITH LABEL AND WITH SUBSTRATE. H. EQUIPMENT DATA, LABELS, AND OTHER IDENTIFICATION SHALL NOT BE OBSTRUCTED. I. CONTRACTOR SHALL PROVIDE FILTERS, STRAINER SCREENS, ETC. FOR ALL NEW EQUIPMENT DURING CONSTRUCTION. REPLACE FILTERS, STRAINER SCREENS, ETC. WITH FINAL FILTERS, STRAINER SCREENS, ETC. AT COMPLETION OF PROJECT PRIOR TO TEST AND BALANCE. J. ALL EQUIPMENT INCLUDING BUT NOT LIMITED TO WATER HEATERS, PUMPS, PRESSURE REDUCING VALVES, PULSATION DAMPERS, PRESSURE TRANSDUCERS, ETC. SHALL BE PROVIDED WITH AN AIR OIL COVER OR WITH UL508 OVERFLOW SWITCH AND ALARM WHEN MEANS OF WASTE PIPE IS NOT POSSIBLE. K. PROVIDE UNIONS OR FLANGES AT ALL PIPING CONNECTIONS TO EQUIPMENT, CONTROL, VALVES, PRESSURE REDUCING VALVES, BACK FLOW PREVENTION, ETC. ARRANGE CONNECTIONS SO THAT EQUIPMENT SERVED MAY BE REMOVED WITHOUT DISTURBING PIPING OR VALVES. V. OWNER TRAINING A. THE CONTRACTOR SHALL PROVIDE DEMONSTRATION AND TRAINING TO OWNERS PERSONNEL FOR THE OPERATION OF THE EQUIPMENT. THE COURSE OF TRAINING SHALL BE INCLUDED AS PART OF THE BASE BID UNLESS OTHERWISE NOTED. B. ALL EQUIPMENT MANUALS, INSTALLATION OPERATION AND MAINTENANCE MANUALS, ETC. SHALL BE TURNED OVER TO THE OWNER PRIOR TO COMMENCING OWNER DEMONSTRATION AND TRAINING. REFER TO PROJECT CLOSEOUT DOCUMENT REQUIREMENTS FOR ADDITIONAL INFORMATION. C. CONTRACTOR SHALL PROVIDE A MINIMUM OF 12 HOURS OF TRAINING OVER 3 SEPARATE VISITS ON SITE FOR OWNER PERSONNEL. D. OWNER TRAINING SHALL BE CONDUCTED AFTER FUNCTIONAL TESTING IS COMPLETE AS APPROVED BY THE ENGINEER AND (WHERE APPLICABLE) COMMISSIONING AUTHORITY. E. COORDINATE TRAINING WITH OWNER, ENGINEER A COMMISSIONING AUTHORITY. VI. PIPING - POTABLE A. GENERAL 1. COMPLY WITH PROVISIONS OF COPPER DEVELOPMENT ASSOCIATIONS "COPPER TUBE HANDBOOK" ALL POTABLE WATER PIPING AND SYSTEM COMPONENTS SHALL COMPLY WITH ANSI/A118.1 AND ANSI/A118.2. 2. SYSTEM COMPONENTS WHICH REQUIRE OBSERVATION, OPERATION, OR MAINTENANCE, SUCH AS VALVES, GAUGES, CONTROLS, STRAINERS, UNIONS, ETC., SHALL BE READILY ACCESSIBLE. THEY SHALL NOT BE CONCEALED IN CHASSES OR ABOVE CEILINGS WITHOUT PROVISION FOR ACCESS. VALVES WHICH ARE NOT ACCESSIBLE FROM NORMAL WORKING LEVELS SHALL BE INSTALLED WITH CHAIN WHEELS OR EXTENSIONS. 3. INSTALL PIPING TO PERMIT COMPLETE SYSTEM DRAINING. 4. INSTALL INTERIOR AND EXTERIOR PIPING AT RIGHT ANGLES OR PARALLEL TO BUILDING WALLS. DIAGONAL RUNS ARE PROHIBITED, EXCEPT WHERE INDICATED OR APPROVED PRIOR TO INSTALLATION. RUN PIPING IN WALL CHASES, PIPE SHAFTS, HUNG CEILINGS, RECESSES, ETC. AS APPLICABLE. DO NOT RUN SERVICE PIPING IN FLOOR SLAB UNLESS SPECIFICALLY NOTED ON DRAWINGS. PIPING SHALL NOT BE COVERED OR CLOSED UNTIL TESTING IS COMPLETED. 5. INSTALL PIPING TO ALLOW APPLICATION OF INSULATION PLUS 1-INCH CLEARANCE AROUND INSULATION. 6. MECHANICAL FITTINGS WILL NOT BE ALLOWED. MECHANICAL FITTINGS MAY BE BID AS AN ALTERNATE WHERE EXPOSED AND ACCESSIBLE IN MECHANICAL ROOMS. B. UNDERGROUND PIPING 1. 2 INCH NPS AND SMALLER, TYPE "K" PRE-INSULATED SOFT COPPER TUBING, NO JOINTS, ENCLOSED IN PVC SLEEVE WHICH PROVIDES FOR A MINIMUM OF 1" AIR GAP AROUND THE COPPER TUBE AND CONFORMING TO ASTM A 674. 2. 2 INCH NPS AND SMALLER, COPPER PIPING, TYPE K: WROUGHT-COPPER, SOLDER-JOINT PRESSURE FITTINGS, AND SOLDERED JOINTS. 3. 3 INCH NPS (N80) AND LARGER: CLASS 30 CEMENT LINED DUCTILE IRON, MECHANICAL JOINT, DUCTILE-IRON FITTINGS, AND RESTRAINED, GASKETED JOINTS. C. ABOVE-GROUND PIPING 1. ALL PIPE SIZES: ALL PIPING SHALL BE TYPE "L" HARD COPPER PIPING WITH 95S SOLDER JOINT FITTINGS. D. INSULATION 1. FURNISH AND INSTALL ALL NEW PIPING, VALVES, FITTINGS, ETC. AND EXISTING PIPING AS INDICATED ON THE DOCUMENTS WITH FIBERGLASS MOLDED PIPE INSULATION APPLIED WITH AN ALL-SERVICE VAPOR BARRIER JACKET, STAPLED, WITH THE SEAMS, JOINTS, AND STAPLES PAINTED WITH VAPOR-PROOF MASTIC. ALL INSULATION MATERIALS SHALL COMPLY WITH CODE REQUIRED FLAME SPREAD RATINGS. 2. ALL DAMAGED INSULATION (RESULTING FROM IMPLEMENTATION OF THIS PROJECT) ON EXISTING PIPING TO REMAIN SHALL BE REPLACED. 3. MINIMUM INSULATION THICKNESS SHALL BE IN ACCORDANCE WITH THE FOLLOWING SCHEDULE AND ALL APPLICABLE CODES: a. DOMESTIC COLD WATER PIPING: 1" b. DOMESTIC HOT WATER PIPING: 1-1/2" c. DOMESTIC HOT WATER PIPING (1.5 NPS AND LARGER): 2" d. TERTIARY WATER PIPING: 1" 4. VAPOR BARRIER JACKET SHALL HAVE FACTORY-APPLIED VAPOR RETARDER COMPOSED OF A WHITE KRAFT FACING REINFORCED WITH GLASS FIBER YARN AND BONDED TO ALUMINIZED FILM. LAP ADHESIVE SHALL BE COMPATIBLE WITH INSULATION. 5. FURNISH AND INSTALL PVC COVERS FOR ALL VALVES AND ALL PIPE FITTINGS. 6. FURNISH AND INSTALL ALL EXTERIOR INSULATED PIPING WITH 3M VENTUREGLAD PLUS 1579 SERIES' MULTILAYERED ALUMINUM LAMINATE, SELF-ADHESIVE, JACKETING SYSTEM, PROVIDE WITH EMBOSSED FINISH AND COLOR SELECTED BY OWNER. 7. ALL INSULATION SHALL BE APPLIED AFTER SUCCESSFUL PRESSURE TESTING OF PIPE. E. VALVES 1. VALVES SHALL BE INSTALLED AS A MEANS OF ISOLATION FOR ALL EQUIPMENT, INDIVIDUAL FIXTURES, GROUPINGS OF FIXTURES, SEPARATE ROOMS, GROUPINGS OF ROOMS, PORTIONS OF THE SYSTEM AND RISERS, EACH INDIVIDUAL BATHROOM AND KITCHEN SHALL HAVE VALVES AS A MEANS OF ISOLATION. ALL REQUIRED VALVES ARE NOT SHOWN ON FLOOR PLANS OR RISER DIAGRAMS. 2. LOCATIONS WHERE NEW PIPING IS CONNECTED TO EXISTING SHALL BE PROVIDED WITH A NEW VALVE. PIPING THAT IS UNAFFECTED BY THIS PROJECT SHALL BE EXEMPT. 3. MAKE PROVISIONS FOR DRAINING ALL LOW POINTS OF ALL PIPING SYSTEMS WHETHER INDICATED ON THE DRAWINGS OR NOT, USING A BALL VALVE AND THREADED HOSE CONNECTION WITH CAP. DRAINS SHALL NOT BE LESS THAN 3/4". 4. INSTALL ALL VALVES WITH STEMS IN EITHER AN UPRIGHT (PREFERRED) OR HORIZONTAL POSITION. CONTROL VALVES SHALL BE INSTALLED WITH ACTUATOR UPWARD UNLESS NOTED OTHERWISE. OPEN VALVE HANDLE POSITION SHALL BE IN THE DIRECTION OF FLOW. 5. PROVIDE PRESSURE REDUCING VALVES TO NOT EXCEED THE MANUFACTURER RECOMMENDED PRESSURE RATING OF EQUIPMENT OR FIXTURE. 6. ISOLATION VALVES SHALL BE MSS SP-61, RATED FOR ZERO LEAKAGE. 7. BALL VALVES (4 NPS AND SMALLER) a. MSS SP-810 b. 2 PIECE LEAD-FREE BRASS BODY 600W WOG RATED, FULL PORT c. LEAD-FREE FORGED BRASS BALL d. MINIMUM 2-1/4" VALVE EXTENSION OR GREATER TO ALLOW OPERATION OF VALVES WITHOUT BREAKING VAPOR SEALS OR DISTURBING INSULATION e. PTFE SEAT AND PACKING f. LEVER HANDLE g. THREADED ENDS h. ACCEPTABLE MANUFACTURERS: • APOLLO, LEGEND, MILWAUKEE, NIBCO 8. BUTTERFLY VALVES (5 NPS AND LARGER) a. MSS SP-87 b. LUG TYPE WITH CAST IRON OR DUCTILE IRON BODY c. STAINLESS STEEL SHAFT d. PTFE SEAT/SEALS e. TEN POSITION LEVER HANDLE f. FLANGED ENDS g. ACCEPTABLE MANUFACTURERS: • MILWAUKEE OR EQUAL 9. BUTTERFLY VALVES, HIGH PERFORMANCE (5 NPS AND LARGER) a. MSS SP-88 b. LUG TYPE WITH LEAD FREE CARBON STEEL OR STAINLESS STEEL BODY c. STAINLESS STEEL SHAFT d. PTFE SEAT/SEALS e. TEN POSITION LEVER HANDLE f. FLANGED ENDS g. ACCEPTABLE MANUFACTURERS: • MILWAUKEE OR EQUAL 10. SWING CHECK VALVE (2 NPS AND SMALLER) a. MSS SP-80 b. BRONZE BODY, BRONZE TRIM c. COMPOSITION SWING DISC d. THREADED ENDS e. ACCEPTABLE MANUFACTURERS: • APOLLO, NIBCO, MILWAUKEE 11. SPRING LOADED CHECK VALVE (2.5 NPS AND LARGER) a. MSS SP-125 b. DUCTILE IRON BODY, BRONZE OR STAINLESS STEEL TRIM c. SPRING LOADED WAFER AND EPDM SEAT d. FLANGED ENDS e. ACCEPTABLE MANUFACTURERS: • APOLLO, NIBCO, MILWAUKEE 12. BALANCING VALVES (3 NPS AND SMALLER) a. BRASS BODY ASTM B584-B44, BRASS BALL ASTM B16 C30000 b. GLASS AND CARBON FILLED TUBES WITH CARBON STEEL END CAPS c. BRASS WITH EPT CHECK VALVES FOR READOUT VALVES d. EPDM SEAT 10" RING e. SHALL BE DESIGNED TO PRESET BALANCE POINTS FOR PROPORTIONAL SYSTEM BALANCE PRIOR TO SYSTEM START-UP. VALVES TO HAVE MEMORY STOP FEATURE TO ALLOW VALVE TO BE CLOSED FOR SERVICE AND THEN RE-OPENED TO SET POINT WITHOUT DISTURBING THE BALANCE POSITION. f. THREADED CONE AND CONE VALVE g. MAXIMUM WORKING PRESSURE OF 300 PSIG h. ACCEPTABLE MANUFACTURERS: • BELL AND GOSSETT OR EQUAL F. ACCESSORIES 1. STRAINERS (UP TO AND INCLUDING 3") a. THREADED BRASS BODY b. Y PATTERN WITH 20 MESH STAINLESS STEEL PERFORATED SCREEN c. ACCEPTABLE MANUFACTURERS: • KECKLEY, WATTS, APOLLO, NIBCO 2. STRAINERS (4" AND UP) a. FLANGED IRON BODY b. Y PATTERN WITH 20 MESH STAINLESS STEEL PERFORATED SCREEN c. ACCEPTABLE MANUFACTURERS: • KECKLEY, WATTS, APOLLO, NIBCO 3. THERMOMETERS a. SELECT INSTRUMENT RANGE SO THE ORDINARY OPERATING CONDITION IS IN THE MIDDLE AREA OF THE INSTRUMENT SCALE b. STRAIGHT STEM TYPE IN SEPARABLE WELLS c. SWIVEL MOUNTING SET WITH POSITIVE LOCKING DEVICE, TO BE EASILY READ FROM THE FLOOR d. SIZE: 9" SCALE e. ACCEPTABLE MANUFACTURERS: • WATTS, WEISS 4. PRESSURE GAUGES a. SELECT INSTRUMENT RANGE SO THE ORDINARY OPERATING CONDITION IS IN THE MIDDLE AREA OF THE INSTRUMENT SCALE b. 3-1/2" DIAMETER, LIQUID FILLED, DIA. TYPE, PSI SCALE c. FRONT RE-CALIBRATION ADJUSTMENT d. MID SCALE ACROSS THE RANGE, TWO PERCENT e. BLACK SCALE ON WHITE BACKGROUND f. ACCEPTABLE MANUFACTURERS: • WATTS, WEISS 5. PRESSURE GAUGE TAPPINGS a. GAGE COCK: TEE OR LEVER HANDLE, BRASS b. BALL VALVE: BRASS, 1/4" NPT c. PULSATION DAMPER: PRESSURE SNUBBER, BRASS WITH 1/4" CONNECTIONS d. SYNCHRON: STEEL, SCHEDULE 40, 1/4" ANGLE OR STRAIGHT PATTERN e. ACCEPTABLE MANUFACTURERS: • WATTS, WEISS 6. AIR VENTS a. MANUAL, TYPE: 6" OR LESS SHORT VERTICAL SECTIONS OF PIPE WITH ISOLATING BALL VALVE TOP/IRON CHAMBER, WITH 1/4" BRASS NEEDLE VALVE AT TOP OF CHAMBER b. FLOAT TYPE: CAST IRON BODY, CAST IRON COVER, STAINLESS STEEL SEAT AND FLOAT, SUITABLE FOR SYSTEM OPERATING TEMPERATURE AND PRESSURE, WITH ISOLATING BALL VALVE c. ACCEPTABLE MANUFACTURERS: • METRAFLEX OR EQUAL 7. REDUCERS a. IF A REDUCTION IS REQUIRED AT EQUIPMENT OR PIPING ACCESSORY, THE REDUCER SHALL BE INSTALLED ABUTTING THE INLET AND/OR OUTLET OF THE DEVICE b. USE ECCENTRIC REDUCING FITTINGS OR ECCENTRIC REDUCING COUPLINGS WHERE REQUIRED TO PREVENT POCKETING OF AIR AND LIQUID c. WHERE ECCENTRIC REDUCERS ARE USED, THE STRAIGHT SIDE SHOULD BE INSTALLED ON TOP FOR PUMP SUCTION AND ON THE BOTTOM FOR ALL OTHER LINES 8. AIR CHAMBERS a. PROVIDE MINIMUM 12" LONG AIR CHAMBERS FOR HOT AND COLD WATER CONNECTIONS TO ALL SUPPLY FIXTURES. b. PROVIDE MINIMUM 24" LONG AIR CHAMBERS AT THE TOP OF ALL HOT AND COLD WATER RISERS. 9. WATER HAMMER ARRESTORS a. MAINTENANCE FREE PISTON STYLE b. NPT SOLID HEX BRASS ADAPTOR CONNECTION c. POLY LISTED - 1/2" TO 1/2" NPT d. ASSE: 1/2" APPROVED e. FACTORY PRE-CHARGED WITH AIR AND PERMANENTLY SEALED f. COPPER BODY, POLYPROPYLENE PISTON, EPDM O-RING g. PROVIDE ACCESS FOR FUTURE REPLACEMENT. 10. INSTALL AIR VENTS AT HIGH POINTS IN ALL PIPING AND AS REQUIRED FOR SYSTEM VENTING. 11. INSTALL DRAIN VALVES AT LOW POINTS IN PIPING AND AS REQUIRED FOR SYSTEM DRAINAGE. DRAINS SHALL NOT BE LESS THAN 3/4". 12. RELIEF VALVES SHALL BE OF ASME CODE CONSTRUCTION AND MEET OR EXCEED LOCAL CODES AND ORDINANCES. 13. INSTALL UNIONS IN PIPING ADJACENT TO EACH PIECE OF EQUIPMENT HAVING A 4-INCH OR SMALLER PIPE CONNECTION. 14. INSTALL FLANGES IN PIPING ADJACENT TO EACH PIECE OF EQUIPMENT HAVING A 5-INCH OR LARGER PIPE CONNECTION. 15. INSTALL DI-ELECTRIC FITTINGS TO CONNECT PIPING MATERIALS OF DISSIMILAR MATERIALS. G. PIPE LABELING 1. STENCIL TYPE MARKERS WILL NOT BE PERMITTED, ONLY FACTORY MANUFACTURED MARKERS AS FOLLOWS WILL BE ACCEPTABLE: a. FOR INDOOR USE, UTILIZE ADHESIVE PIPE MARKERS - LARGEST SIZE POSSIBLE GIVEN THE PIPE OR INSULATION OUTER DIAMETER, WITH BOTH ENDS SECURED WITH ARROW TAPE OF MATCHING SIZE AND COLOR OR SCHEME. b. FOR OUTDOOR USE, UTILIZE "STRAP AROUND" TYPE SECURED WITH HEAVY DUTY ZIP TIES. 2. IDENTIFICATION MARKERS SHALL BE PLACED ON ALL EXPOSED AND CONCEALED PIPES AT 20'-0" INTERVALS, AT ALL VALVES AND BRANCHES, AND ON BOTH SIDES OF WALLS WHERE PIPES PASS THROUGH ARROWS OF SAME COLOR AS IDENTIFICATION MARKERS SHALL ALSO BE PLACED ON PIPES POINTING AWAY FROM MARKER INDICATING DIRECTION OF FLOW. 3. COORDINATE COLOR SCHEME WITH EXISTING PIPING AND SUBMIT TO ENGINEER PRIOR TO ORDERING. H. VALVE IDENTIFICATION 1. FURNISH AND INSTALL TAGS FOR ALL NEW VALVES. 2. VALVE TAGS SHALL HAVE UNIQUE NUMBERS AND SHALL BE COORDINATED WITH THE ENGINEER PRIOR TO ORDERING. 3. VALVE TAGS SHALL BE BRASS MATERIAL AND SHALL BE FASTENED WITH A STURDY CHAIN. 4. VALVE TAG NUMBERS SHALL BE INDICATED ON THE AS-BUILT DRAWINGS, AS-BUILT DRAWINGS SHALL INCLUDE VALVE SCHEDULE TO BE DISPLAYED WITHIN THE BUILDING. VI. PIPING - WASTE, VENT, AND STORM A. GENERAL 1. COMPLY WITH PROVISIONS OF CAST IRON SOIL PIPE INSTITUTE (CISPI) HANDBOOK, COPPER DEVELOPMENT ASSOCIATIONS "COPPER TUBE HANDBOOK", AND AMERICAN SOCIETY OF TESTING AND MATERIALS (ASTM). 2. SYSTEM COMPONENTS WHICH REQUIRE OBSERVATION, OPERATION, OR MAINTENANCE, SUCH AS VALVES, CLEANOUT DRAINS, EQUIPMENT, CONTROLS, UNIONS, ETC., SHALL BE READILY ACCESSIBLE. THEY SHALL NOT BE CONCEALED IN CHASSES OR ABOVE CEILINGS WITHOUT PROVISION FOR ACCESS. 3. INSTALL PIPING WITH SLOPE TO ALLOW FOR PROPER FUNCTIONALITY. PIPING SHALL BE INSTALLED WITH THE MINIMUM FLOWING SLOPES OR AS DICTATED ON THE DRAWINGS. a. SANITARY, WASTE, AND VENT PIPING • 3" AND SMALLER: 1/4" PER FOOT • 4" AND LARGER: 1/8" PER FOOT • STORM PIPING: • ALL SIZES: 1/8" PER FOOT • KITCHEN WASTE PIPING: • ALL SIZES: 1/4" PER FOOT 4. INSTALL INTERIOR AND EXTERIOR PIPING AT RIGHT ANGLES OR PARALLEL TO BUILDING WALLS. DIAGONAL RUNS ARE PROHIBITED, EXCEPT WHERE INDICATED OR APPROVED PRIOR TO INSTALLATION. RUN PIPING IN WALL CHASES, PIPE SHAFTS, HUNG CEILINGS, RECESSES, ETC. AS APPLICABLE. DO NOT RUN SERVICE PIPING IN FLOOR SLAB UNLESS SPECIFICALLY NOTED ON DRAWINGS. PIPING SHALL NOT BE COVERED OR CLOSED UNTIL TESTING IS COMPLETED. 5. PROVIDE WASTE AND STORM CLEANOUTS AT THE BASE OF RISERS, ENDS OF HORIZONTAL MAINS, CHANGES IN DIRECTION, CODE SPECIFIED INTERVALS OR AS SPECIFIED ON DOCUMENTS. INTENT IS TO ALLOW ALL WASTE AND STORM PIPING TO BE ROODED AFTER INSTALLATION. 6. FOR VENTS PENETRATING ROOFS, PROVIDE 24 INCH SQUARE FLASHING AND TURN VENT FLASHING DOWN INTO VENT PIPE. 7. INSTALL PIPING TO ALLOW APPLICATION OF INSULATION PLUS 1-INCH CLEARANCE AROUND INSULATION. 8. ALL CAST IRON PIPE AND FITTINGS SHALL BE MANUFACTURED IN USA BY A MEMBER OF CISPI. B. UNDERGROUND PIPING 1. ALL PIPE SIZES: HUB-AND-SPIGOT, CAST-IRON SOIL PIPE AND FITTINGS, SERVICE CLASS ASTM A 74 WITH COMPRESSION JOINTS AND ASTM C 364 RUBBER GASKETS. 2. ALL PIPE SIZES: SCHEDULE 40 SOLID-WALL PVC PIPING ASTM D 2686 WITH SCHEDULE 40 PVC SOCKET FITTINGS ASTM D 2686, MADE TO ASTM D 3311, ADHESIVE PRIMER ASTM F 66, AND SOLVENT CEMENT ASTM D 2564, PIPING TO COMPLY WITH NSF 14, INCLUDE MARKING WITH "NSF-DWV" FOR PLASTIC DRAIN, WASTE, AND VENT PIPING AND "NSF-SEWER" FOR PLASTIC SEWER PIPING. 3. SUB-SOIL DRAINAGE: SCHEDULE 40 SOLID-WALL PERFORATED PVC PIPING ASTM D 2686 WITH SCHEDULE 40 PVC SOCKET FITTINGS ASTM D 2686, MADE TO ASTM D 3311, ADHESIVE PRIMER ASTM F 66, AND SOLVENT CEMENT ASTM D 2564 WITH PERMEABLE "SOCK" PIPING TO COMPLY WITH NSF 14, INCLUDE MARKING WITH "NSF-DWV" FOR PLASTIC DRAIN, WASTE, AND VENT PIPING AND "NSF-SEWER" FOR PLASTIC SEWER PIPING. C. COMMISSIONING A. GENERAL 1. THE COMMISSIONING PERFORMED MUST MEET THE REQUIREMENTS OF THE CODES HAVING JURISDICTION. 2. THE CONTRACTOR IS RESPONSIBLE FOR SUBCONTRACTING A REGISTERED DESIGN PROFESSIONAL OR APPROVED AGENT, TO ACT AS THE COMMISSIONING AUTHORITY AND PROVIDE EVIDENCE OF THE COMMISSIONING PROCESS. THE COMMISSIONING AUTHORITY SHALL NOT BE AFFILIATED WITH THE CONTRACTOR AND SHALL BE APPROVED BY THE ENGINEER/OWNER. THE FOLLOWING COMMISSIONING AUTHORITIES ARE PRE-APPROVED: a. GRIMMAN BUTKUS ASSOCIATES b. IMEG c. ILL MECHANICAL d. CYCLOCONE ENERGY GROUP 3. CONTRACTOR IS RESPONSIBLE FOR FURNISHING ALL LABOR AND MATERIALS REQUIRED TO PERFORM COMMISSIONING ON THIS PROJECT. 4. COMMISSIONING AUTHORITY SHALL SUBMIT ALL FUNCTIONAL TESTING PROCEDURES TO THE OWNER AND ENGINEER PRIOR TO FUNCTIONAL TESTING COMMENCING. B. PRIME CONTRACTOR DOCUMENTATION: 1. THE FOLLOWING SHALL BE COMPLETED BY THE PRIME CONTRACTOR AND REPORTS SHALL BE SUBMITTED TO OWNER, ENGINEER, AND COMMISSIONING AUTHORITY PRIOR TO THE START OF FUNCTIONAL TESTING. OWNER, ENGINEER, AND COMMISSIONING AUTHORITY RESERVE THE RIGHT TO DELAY FUNCTIONAL TESTING DUE TO THE INCOMPLETENESS OF ANY OF THE FOLLOWING ITEMS: a. TAB REPORT. b. PRESSURE TESTING. c. LEAKAGE TESTING. d. THERMAL SCANS OF ELECTRICAL EQUIPMENT. e. STARTUP REPORTS. f. DRAIFT OF O&MS. g. CONTROL PANELS AND WIRING ARE LABELED. h. POINT TO POINT CHECKOUT COMPLETED WITH LIST OF OUTSTANDING DEFICIENCIES. i. REMOTE ALARMS AND TESTS HAVE BEEN COMPLETED. j. TRENDS HAS BEEN FULLY CONFIGURED, PROVIDE PROOF ALL TRENDS IS IN PLACE INCLUDING ALL ALARM WIREDS POINTS AND KEY SETPOINTS. k. EQUIPMENT IS OPERATING IN FULL AUTOMATIC OPERATION PER THE SEQUENCES OF OPERATION. CONTRACTOR SHALL PROVIDE WRITTEN CONFIRMATION TO THE OWNER, ENGINEER, AND COMMISSIONING AUTHORITY. PROVIDE WRITTEN EXPLANATION FOR DEVIATIONS FROM THE DESIGNED SEQUENCES OF OPERATION. C. LIGHTING SYSTEMS COMMISSIONING: 1. COMMISSIONING AUTHORITY SHALL CONDUCT LIGHTING CONTROLS FUNCTIONAL TESTING. LIGHTING CONTROLS CONTRACTOR MUST BE PRESENT DURING THIS TESTING. D. COMMISSIONING REPORTS 1. PREPARE PRELIMINARY COMMISSIONING REPORT THAT INCLUDES ISSUES IDENTIFIED DURING TESTING AND ALSO INDICATES WHICH TESTING IS DEFERRED DUE TO WEATHER. 2. FINAL COMMISSIONING REPORT SHALL BE PROVIDED TO THE OWNER WITHIN 90 DAYS OF THE FINAL PERMIT INSPECTION AND SHALL INCLUDE THE FOLLOWING AT A MINIMUM: a. ALL CODE REQUIRED ITEMS. b. PRIME CONTRACTOR DOCUMENTATION PROVIDED IN PREPARATION FOR FUNCTIONAL TESTING. XI. ELECTRICAL WORK A. ALL ELECTRICAL WORK FOR THIS PROJECT SHALL BE FURNISHED AND INSTALLED BY AN ELECTRICAL CONTRACTOR. B. ALL PANEL BOARDS FURNISHED SHALL BE MAIN CIRCUIT BREAKER OR MLO, COPPER BUS WITH BOLT-ON STYLE BREAKERS RATED AT 22KA IC. C. BREAKERS INSTALLED IN EXISTING PANELS SHALL MATCH EXISTING PANEL MANUFACTURER REQUIREMENTS. D. ALL INDOOR CONDUIT SHALL BE TYPE "EMT" WITH GLAND (COMPRESSION) TYPE CONNECTORS AND COUPLINGS. E. ALL OUTDOOR CONDUIT SHALL BE TYPE "IMC" WITH THREADED COUPLINGS OR RIGID METAL CONDUIT. F. FINAL CONNECTION TO ALL MOTORS AND MACHINERY SHALL BE VIA A MIN. 5'-0" LENGTH OF FLEXIBLE CONDUIT. G. EACH PIECE OF MECHANICAL EQUIPMENT REQUIRING ELECTRICAL POWER SHALL HAVE A LOCAL DISCONNECT. H. PRIOR TO OPERATING OR FINAL CONNECTION OF ANY WIRED DEVICE, EACH CABLE RUN (NEW OR EXISTING) SHALL BE MEGGER TESTED WITH NOT LESS THAN A 100VOLT MEGGER. ANY CABLE NOT SHOWN TO BE "CLEAN" SHALL BE REPLACED PRIOR TO ENERGIZING. ALL CABLE SHALL BE STRANDED, COPPER, 60VOLT, TYPE "XHHW" (WET) OR "THHN" (DRY). I. EC SHALL VERIFY ROTATION, MEASURE VOLTAGE AND THE RUNNING AMPERAGE OF EACH SYSTEM OR EQUIPMENT PROVIDED WITH POWER UNDER THIS CONTRACT AND COMPARE WITH THE MANUFACTURER RATING. PROVIDE REPORT TO OWNER AND ENGINEER. J. STARTERS SHALL BE FULL VOLTAGE ACROSS THE LINE WITH CIRCUIT BREAKERS, OVERLOAD HEATERS, AND CONTROL TRANSFORMER. EC SHALL COORDINATE WITH BASC FOR EXACT CONTROLS REQUIREMENTS. STARTER SHALL BE PROVIDED WITH HOAT SWITCH AND RUNNING LIGHTS INDICATING MODE OF OPERATION. XII. TESTING AND CLEANING A. TESTING 1. PRIOR TO ANY TESTING, ALL NEW WATER PIPING SYSTEMS SHALL BE FLUSHED USING WATER. LOW POINT DRAINS SHALL BE OPENED AND THE SYSTEMS PROVIDED TO BE DRAINABLE. 2. SUBJECT TO CLOSED SYSTEMS OPERATING UNDER PRESSURE TO HYDROSTATIC PRESSURE. TESTS THAT IS NOT LESS THAN 80 PSIG AND 15 TIMES THE SYSTEMS WORKING PRESSURE FOR A MINIMUM OF 1 HOUR OR AS SPECIFICALLY INDICATED. TEST PRESSURE SHALL NOT EXCEED MAXIMUM PRESSURE RATING FOR ANY VESSEL, PUMP, VALVE, OR OTHER COMPONENT IN SYSTEM UNDER TEST. 3. ALL OPEN SYSTEMS, SEWERS, ETC., SHALL BE TESTED WITH WATER AT A MINIMUM OF TEN (10) FEET OF HEAD; THE WATER LEVEL SHALL BE MAINTAINED IN THE PORTION BEING TESTED FOR AT LEAST 15 MINUTES. 4. ALL PIPING SYSTEMS SHALL BE TESTED. IF LEAKS OCCUR, THE PIPE OR FITTING SHALL BE REMOVED AND REPLACED AND THE SYSTEM RETESTED. 5. SUBMIT REPORTS WITHIN 48 HOURS OF TEST DATES TO ENGINEER INDICATING TEST DATE, STARTING AND ENDING TEST PRESSURES OR WATER LEVELS, AND DURATION, AS WELL AS CERTIFICATION OF SUCCESSFUL TEST. 6
