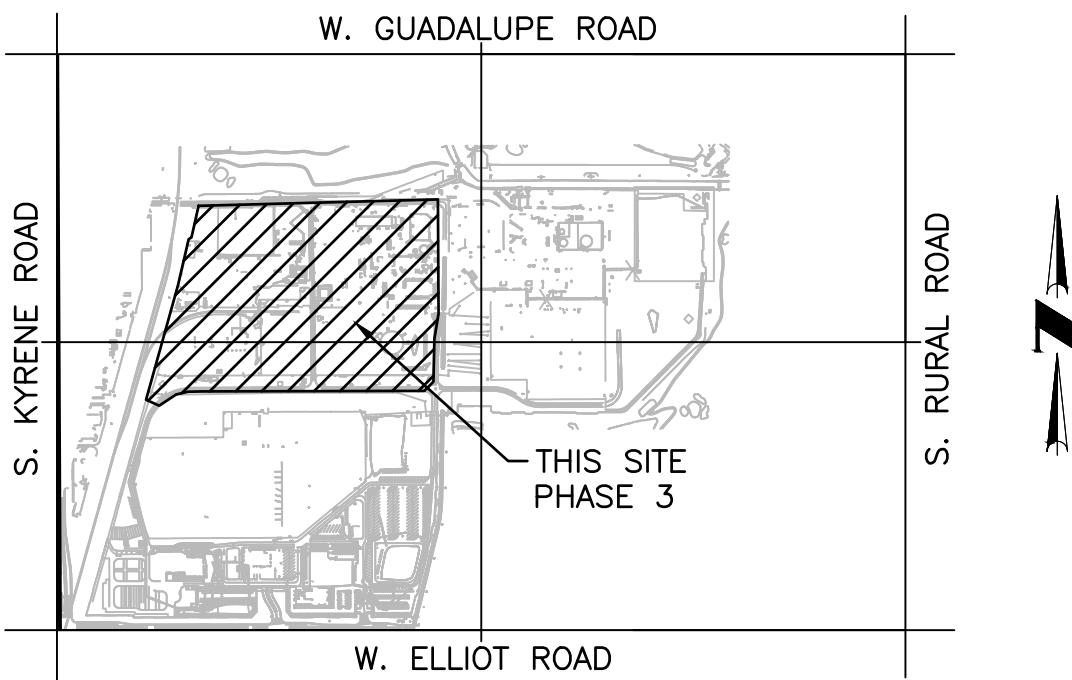
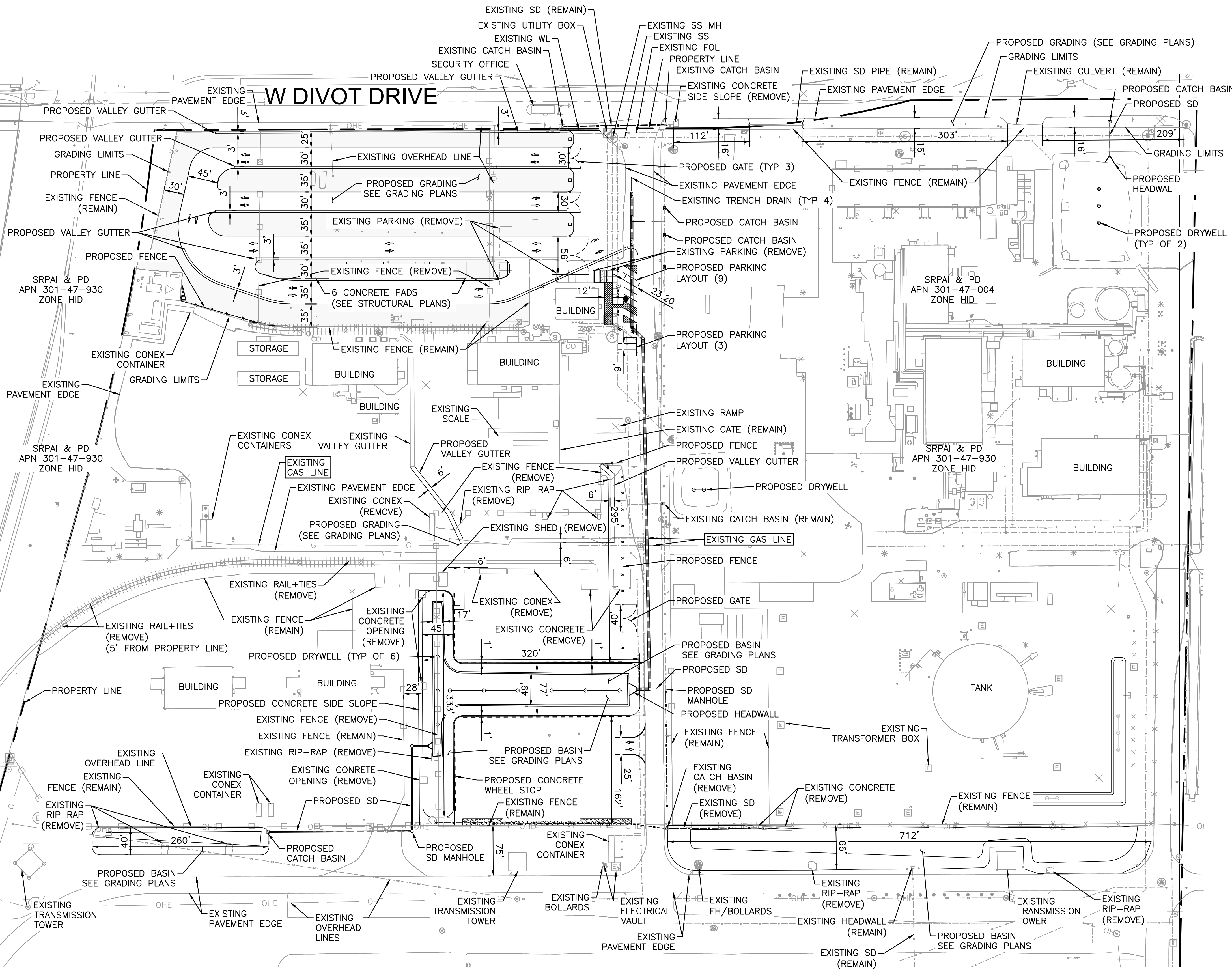


SITE PLAN/HORIZONTAL CONTROL PLAN

SRP TEMPE SERVICE CENTER-PHASE 3

A PORTION OF LAND LOCATED IN THE SOUTHWEST QUARTER OF SECTION 10,
TOWNSHIP 1 SOUTH, RANGE 4 EAST, OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA



VICINITY MAP
(NOT-TO-SCALE)

OWNER

SALT RIVER PROJECT (SRP)
TEMPE SERVICE CENTER
470 W ELLIOT RD
TEMPE, ARIZONA 85283
CONTACT: TY BREWSTER
PHONE: 602-236-4087
EMAIL: TY.BREWSTER@SRPNET.COM

ENGINEER

COE & VAN LOO CONSULTANTS, INC.
4550 NORTH 12TH STREET
PHOENIX, ARIZONA 85014
PHONE: (602) 805-7543
FAX: (602) 264-0928
CONTACT: NICHOLAS MAXWELL P.E.
EMAIL: NMAXWELL@CVLCI.COM

SHEET INDEX

SHEET	DESCRIPTION
C101	SITE PLAN/HORIZONTAL CONTROL SHEET
C201	DEMOLITION SHEET
C302-C306	GRADING & DRAINAGE SHEETS
E000	ELECTRICAL LEGENDS & NOTES
E101	ELECTRICAL DEMOLITION PLAN
E201-E206	ELECTRICAL PHOTOMETRIC SITE PLAN
E301	ELECTRICAL POWER PLAN
E600	ELECTRICAL ONE-LINE DIAGRAM
E900-E901	ELECTRICAL SCHEDULES
S1.0	STRUCTURAL PLAN

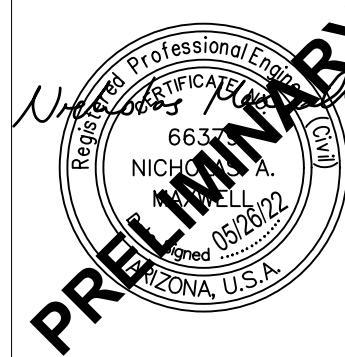
CONTRACTOR

SDB CONTRACTING SERVICES
1001 S. EDWARD DRIVE, TEMPE AZ
CONTACT: TIM RAYBURN
EMAIL: TIM.RAYBURN@SDB.COM
PHONE: 480-317-5712

LEGEND

●	FOUND BRASS CAP FLUSH	⊕	FIRE HYDRANT
⊠	FOUND BRASS CAP IN HAND HOLE	⊗	WATER VALVE
●PK	FOUND PK-NAIL	Ⓜ	MANHOLE WATER
Ⓢ	MANHOLE (GENERIC)	⊠	WATER METER
⊕	POWER POLE	⊕WVA	WATER VALVE ASSEMBLY
⊕	POLE STREET LIGHT	E-	STUB OUT
⊠	ELECTRIC CABINET	⊕	SIGN
⊠	JUNCTION BOX	— UGE —	UNDERGROUND ELECTRICAL LINE
Ⓢ	MANHOLE ELECTRIC	— G —	UNDERGROUND GAS LINE
⊠	TELEPHONE JUNCTION BOX	— OHE —	OVERHEAD ELECTRIC LINE
Ⓢ	MANHOLE SANITARY SEWER	— X —	BARBED WIRE FENCE
○CO	CLEANOUT	— □ —	WALL
●	DRYWELL	— —	BOLLARD

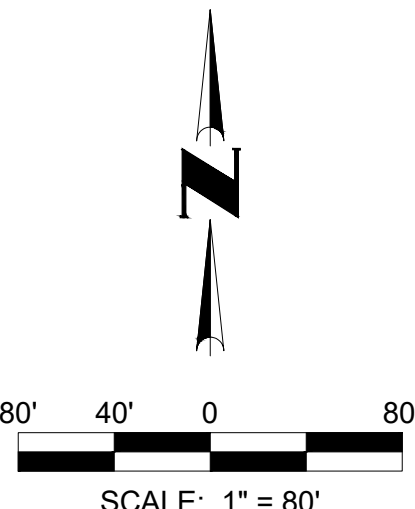
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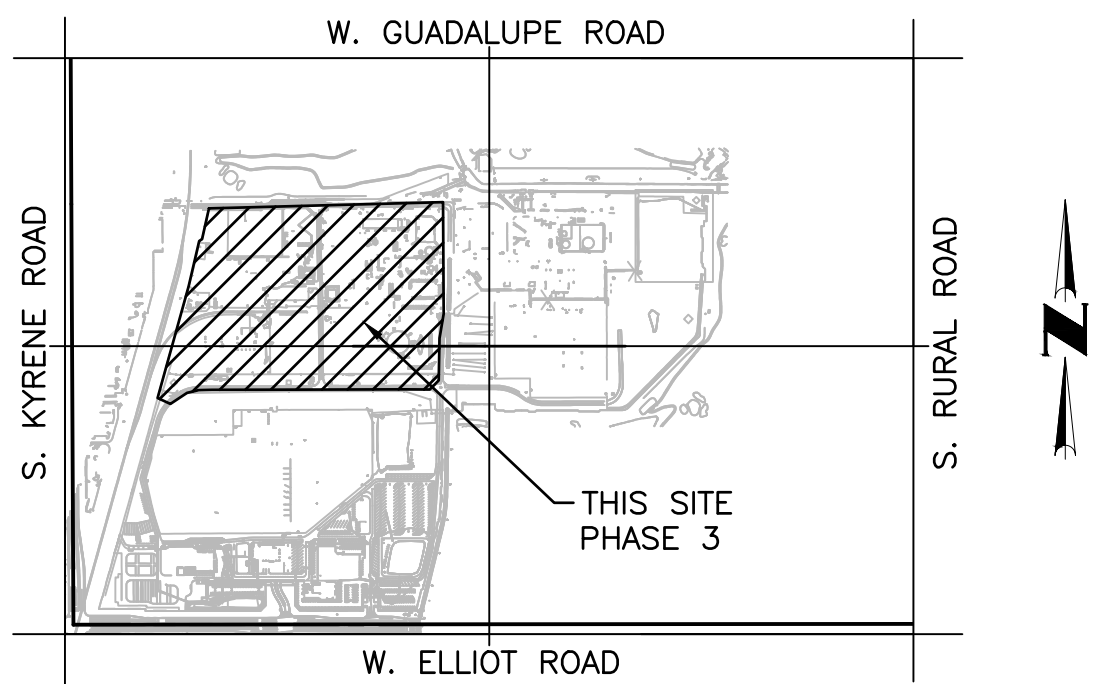


SRP SALT RIVER PROJECT
FACILITIES SERVICES PHOENIX, ARIZONA

SRP TEMPE SERVICE CENTER PH3
GRADING & DRAINAGE PLAN
CIVIL
HORIZONTAL CONTROL PLAN

SCALE: As indicated DATE: 05/26/2022	DESIGNED BY: MB CHECKED BY: NM	SHEET# C101
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VICINITY MAP
(NOT-TO-SCALE)

DEMOLITION PLAN

SRP TEMPE SERVICE CENTER-PHASE 3

A PORTION OF LAND LOCATED IN THE SOUTHWEST QUARTER OF SECTION 10,
TOWNSHIP 1 SOUTH, RANGE 4 EAST, OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA

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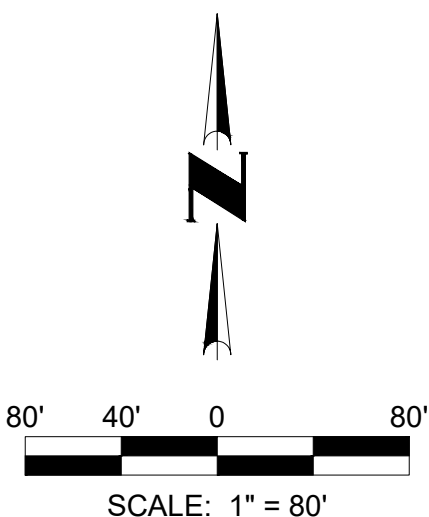
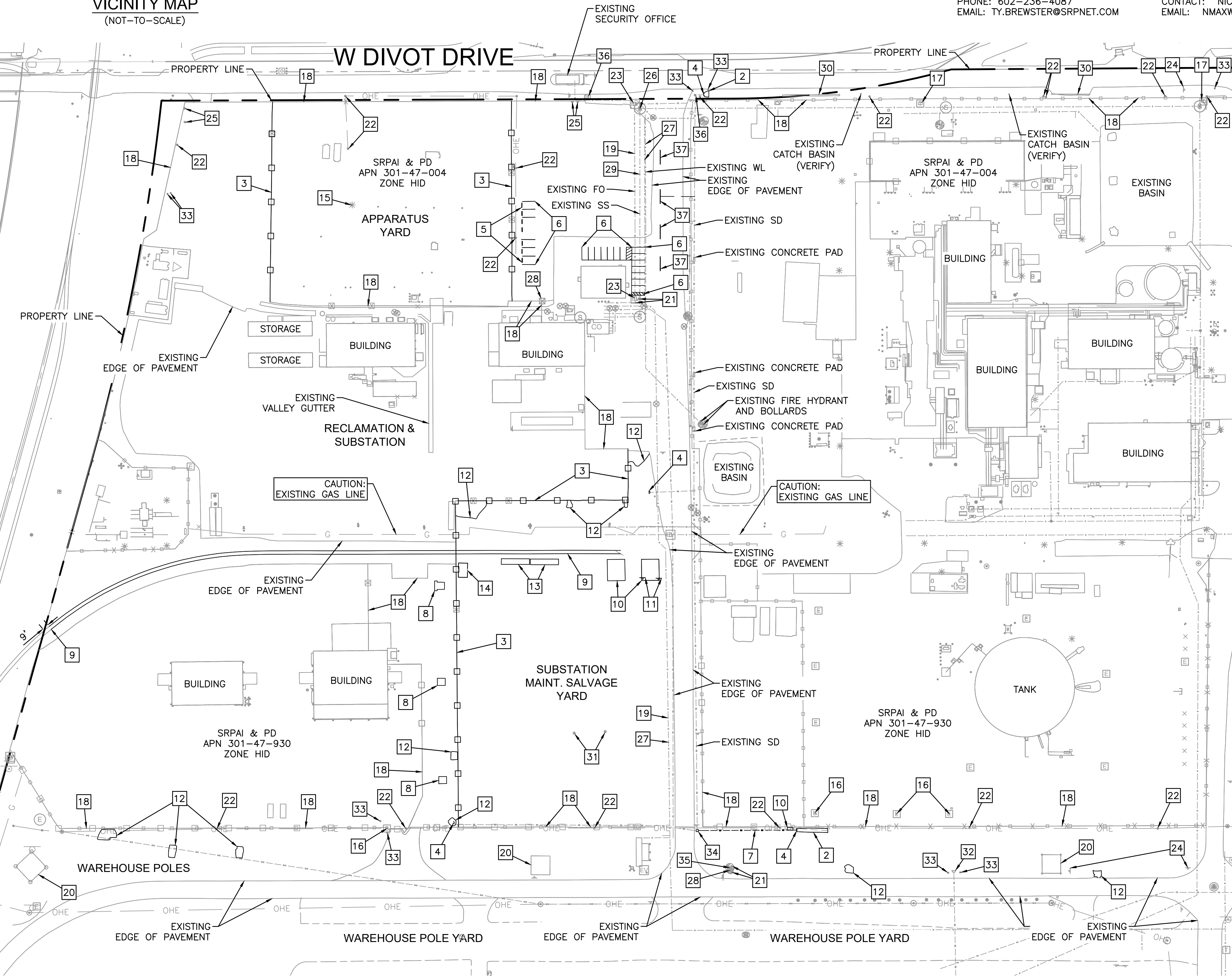
SDB CONTRACTING SERVICES
1001 S. EDWARD DRIVE, TEMPE AZ
CONTACT: TIM RAYBURN
EMAIL: TIM.RAYBURN@SDB.COM
PHONE: 480-317-5712

DEMOLITION NOTES



1. SAWCUT AND REMOVE EXISTING PAVEMENT.
2. REMOVE EXISTING CONCRETE CHANNEL.
3. REMOVE EXISTING CHAIN LINK FENCE.
4. REMOVE EXISTING HEADWALL. DO NOT REMOVE HEADWALL UNTIL NEW BASIN AND PIPE IS INSTALLED.
5. REMOVE PARKING STOPS.
6. OBLITERATE EXISTING PARKING STRIPING.
7. REMOVE 138LF OF EXISTING SD FROM MANHOLE TO REMOVED HEADWALL.
8. REMOVE EXISTING CONCRETE OPENING.
9. REMOVE EXISTING RAILROAD TRACKS AND TIES TO EAST.
10. REMOVE EXISTING CONCRETE PAD.
11. REMOVE EXISTING SIGN.
12. REMOVE EXISTING RIP-RAP.
13. RELOCATE EXISTING CONEX CONTAINERS.
14. RELOCATE EXISTING STORAGE SHED.
15. PROTECT EXISTING STREETLIGHT. SEE ELECTRICAL PLANS.
16. PROTECT EXISTING ELECTRICAL JUNCTION BOX. SEE ELECTRICAL PLANS.
17. PROTECT EXISTING TELEPHONE JUNCTION BOX.
18. PROTECT EXISTING FENCE.
19. PROTECT EXISTING FIBER OPTICS CABLE.
20. PROTECT EXISTING TRANSMISSION TOWER
21. PROTECT EXISTING BOLLARDS.
22. PROTECT EXISTING POWER POLE. SEE ELECTRICAL PLANS.
23. PROTECT EXISTING ELECTRICAL VAULT. SEE ELECTRICAL PLANS.
24. PROTECT EXISTING SIGN.
25. PROTECT EXISTING ELECTRICAL TRANSFORMER. SEE ELECTRICAL PLANS.
26. PROTECT EXISTING SANITARY SEWER MANHOLE.
27. PROTECT EXISTING WATER LINE.
28. PROTECT EXISTING WATER VALVE.
29. PROTECT EXISTING SANITARY SEWER LINE.
30. PROTECT EXISTING PIPE.
31. PROTECT EXISTING UTILITY MANHOLE.
32. PROTECT EXISTING HEADWALL.
33. PROTECT EXISTING FLEXIBLE POST.
34. REMOVE EXISTING CATCH BASIN.
35. PROTECT EXISTING FIRE HYDRANT.
36. PROTECT EXISTING CATCH BASIN.
37. REMOVE EXISTING TRENCH DRAIN.

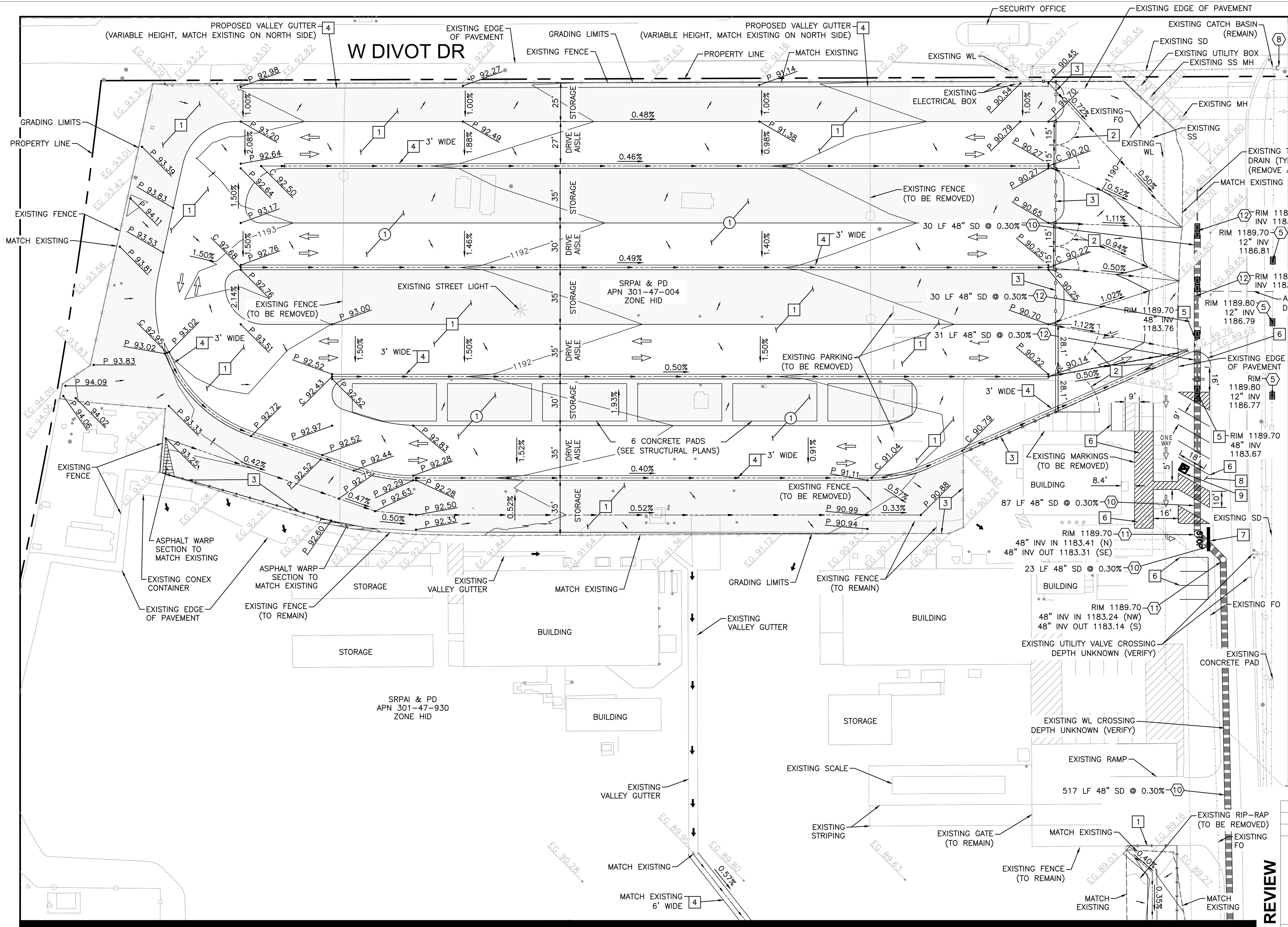
LEGEND

- FOUND BRASS CAP FLUSH
- FOUND BRASS CAP IN HAND HOLE
- FOUND PK-NAIL
- MANHOLE (GENERIC)
- POWER POLE
- POLE STREET LIGHT
- ELECTRIC CABINET
- JUNCTION BOX
- MANHOLE ELECTRIC
- TELEPHONE JUNCTION BOX
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- CLEANOUT
- DRYWELL
- FIRE HYDRANT
- WATER VALVE
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- WATER METER
- WATER VALVE ASSEMBLY
- STUB OUT
- SIGN
- UGE UNDERGROUND ELECTRICAL LINE
- G UNDERGROUND GAS LINE
- OHE OVERHEAD ELECTRIC LINE
- X BARBED WIRE FENCE
- WALL
- BOLLARD



ISSUED FOR 100% REVIEW

 CELEBRATING 60 YEARS 4550 NORTH 12TH STREET PHOENIX, ARIZONA 85014 TELEPHONE: 602.264.6831 WWW.CVLCI.COM	 PRELIMINARY
 SALT RIVER PROJECT FACILITIES SERVICES PHOENIX, ARIZONA	
SRP TEMPE SERVICE CENTER PH3 GRADING & DRAINAGE PLAN CIVIL DEMOLITION PLAN	
SCALE: As indicated DATE: 05/26/2022	DESIGNED BY: MB CHECKED BY: NM
SHEET# C201	

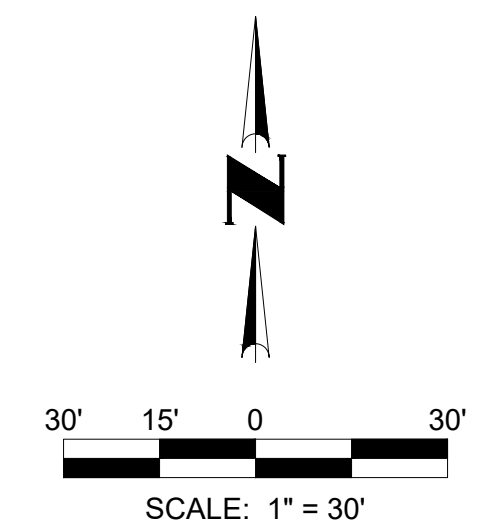


MATCH SHEET C304

MATCH SHEET C305

- PAVING CONSTRUCTION NOTES**
1. INSTALL 12" LIME TREATED AB BASE WITH 3/8" OR 1/2" CHIP SEAL PER SRP SECTION 321216-ASPHALT PAVING AND PER GEOTECHNICAL REPORT PREPARED FOR THIS PROJECT.
 2. INSTALL SWINGING GATES, 10" ROUND POST, BURIED 4" BELOW GRADE IN CONCRETE. GATE NEEDS TO SWING BOTH WAYS. GATE STOPS REQUIRED WITH RELEASE LATCHES AND PAD LOCK LATCHES WHEN CLOSED. WIRE IS HEAVY DUTY GAUGE WIRE PER SRP SPECS.
 3. INSTALL 6' CHAIN LINK FENCE PER M.A.G. STD. DTL. 160. NO BARBED WIRE.
 4. INSTALL VALLEY GUTTER PER M.A.G. STD. DTL. 240, WIDTH PER PLAN.
 5. INSTALL CONCRETE SIDE SLOPES PER SRP SECTION 033000-CAST-IN-PLACE CONCRETE AND PER GEOTECHNICAL REPORT PREPARED FOR THIS PROJECT.
 6. PROPOSED 4" SOLID WHITE MARKING.
 7. PROPOSED 24" SOLID WHITE MARKING.
 8. INSTALL ADA PARKING SPACE.
 9. INSTALL ADA MARKING PER ADA DESIGN STANDARDS.
 10. INSTALL 6' LONG CONCRETE WHEEL STOP.
- STORM DRAIN CONSTRUCTION NOTES**
1. INSTALL HEADWALL PER M.A.G. STD. DTL. 501
 2. INSTALL 48" DIAMETER STORM DRAIN MANHOLE WITH 30" FRAME AND COVER PER M.A.G. STD. DTL. 520 AND 522.
 3. INSTALL STORM DRAIN EQUILIZER PER TORRENT DRYWELL DETAILS.
 4. INSTALL MAXWELL PLUS DRYWELL PER TORRENT RESOURCES DETAIL
 5. INSTALL CATCH BASIN PER M.A.G. STD. DTL. 535 TYPE F SINGLE SUMP (UNLESS OTHERWISE SPECIFIED PER PLAN).
 6. INSTALL 18" RCP CLASS III AND TRENCH PER M.A.G. STD. DTL. 200-1.
 7. INSTALL CONCRETE SIDE SLOPES.
 8. CAP AND PLUG EXISTING STORM DRAIN PIPE.
 9. REMOVE EXISTING HEADWALL.
 10. INSTALL HDPE PIPE, SMOOTH INTERIOR WATER TIGHT STORM DRAIN-ADS N-12 OR APPROVED EQUAL SIZE AND SLOPE PER THIS SHEET, BACKFILLED IN ACCORDANCE WITH M.A.G. STD. SPEC. 601 & 618 AND C.O.P. DTL. P1200. REPLACE EXISTING PAVEMENT IN KIND.
 11. INSTALL 60" DIAMETER STORM DRAIN MANHOLE WITH 30" FRAME AND COVER PER M.A.G. STD. DTL. 521 AND 522.
 12. INSTALL DOUBLE CATCH BASIN PER M.A.G. STD. DTL. 538 TYPE H SINGLE SUMP (UNLESS OTHERWISE SPECIFIED PER PLAN).
- GRADING CONSTRUCTION NOTES**
1. EARTHWORK PER SRP SECTION 312000-EARTH MOVING

MATCH SHEET C303



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4550 NORTH 12TH STREET
PHOENIX, ARIZONA 85014
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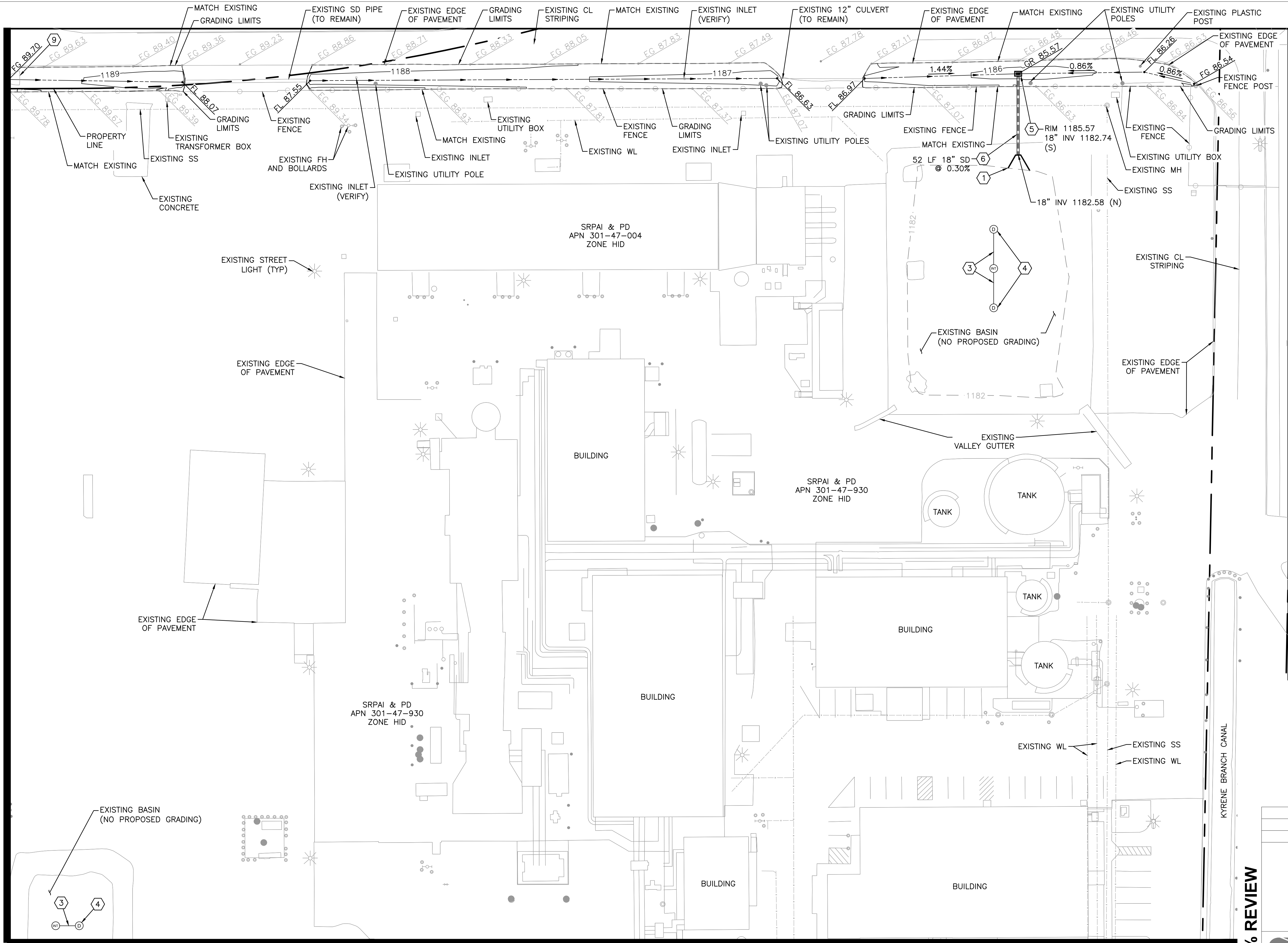


SALT RIVER PROJECT
FACILITIES SERVICES PHOENIX, ARIZONA

SRP TEMPE SERVICE CENTER PH3
GRADING & DRAINAGE PLAN
CIVIL
GRADING & DRAINAGE PLANS

SCALE: As indicated DATE: 05/26/2022	DESIGNED BY: MB CHECKED BY: NM	SHEET# C302
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MATCH SHEET C302



PAVING CONSTRUCTION NOTES

1. INSTALL 12" LIME TREATED AB BASE WITH 3/8" OR 1/2" CHIP SEAL PER SRP SECTION 321216-ASPHALT PAVING AND PER GEOTECHNICAL REPORT PREPARED FOR THIS PROJECT.
2. INSTALL SWINGING GATES, 10" ROUND POST, BURIED 4" BELOW GRADE, IN CONCRETE. GATE NEEDS TO SWING BOTH WAYS. GATE STOPS REQUIRED WITH RELEASE LATCHES AND PAD LOCK LATCHES WHEN CLOSED. WIRE IS HEAVY DUTY GAUGE WIRE PER SRP SPECS.
3. INSTALL 6' CHAIN LINK FENCE PER M.A.G. STD. DTL. 160. NO BARBED WIRE.
4. INSTALL VALLEY GUTTER PER M.A.G. STD. DTL. 240, WIDTH PER PLAN.
5. INSTALL CONCRETE SIDE SLOPES PER SRP SECTION 033000-CAST-IN-PLACE CONCRETE AND PER GEOTECHNICAL REPORT PREPARED FOR THIS PROJECT.
6. PROPOSED 4" SOLID WHITE MARKING.
7. PROPOSED 24" SOLID WHITE MARKING.
8. INSTALL ADA PARKING SPACE.
9. INSTALL ADA MARKING PER ADA DESIGN STANDARDS.
10. INSTALL 6' LONG CONCRETE WHEEL STOP.

STORM DRAIN CONSTRUCTION NOTES

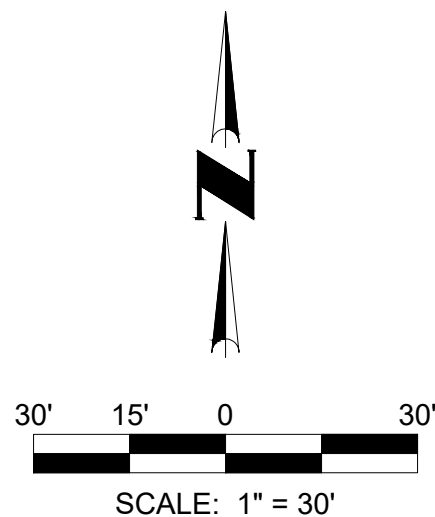
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2. INSTALL 48" DIAMETER STORM DRAIN MANHOLE WITH 30" FRAME AND COVER PER M.A.G. STD. DTL. 520 AND 522.
3. INSTALL STORM DRAIN EQUILIZER PER TORRENT DRYWELL DETAILS.
4. INSTALL MAXWELL PLUS DRYWELL PER TORRENT RESOURCES DETAIL
5. INSTALL CATCH BASIN PER M.A.G. STD. DTL. 535 TYPE F SINGLE SUMP (UNLESS OTHERWISE SPECIFIED PER PLAN).
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11. INSTALL 60" DIAMETER STORM DRAIN MANHOLE WITH 30" FRAME AND COVER PER M.A.G. STD. DTL. 521 AND 522.
12. INSTALL DOUBLE CATCH BASIN PER M.A.G. STD. DTL. 538 TYPE H SINGLE SUMP (UNLESS OTHERWISE SPECIFIED PER PLAN).

GRADING CONSTRUCTION NOTES

1. EARTHWORK PER SRP SECTION 312000-EARTH MOVING

MATCH SHEET C305

MATCH SHEET C306



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CELEBRATING 60 YEARS
4550 NORTH 12TH STREET
PHOENIX, ARIZONA 85014
TELEPHONE: 602.264.6831
WWW.CVLCI.COM

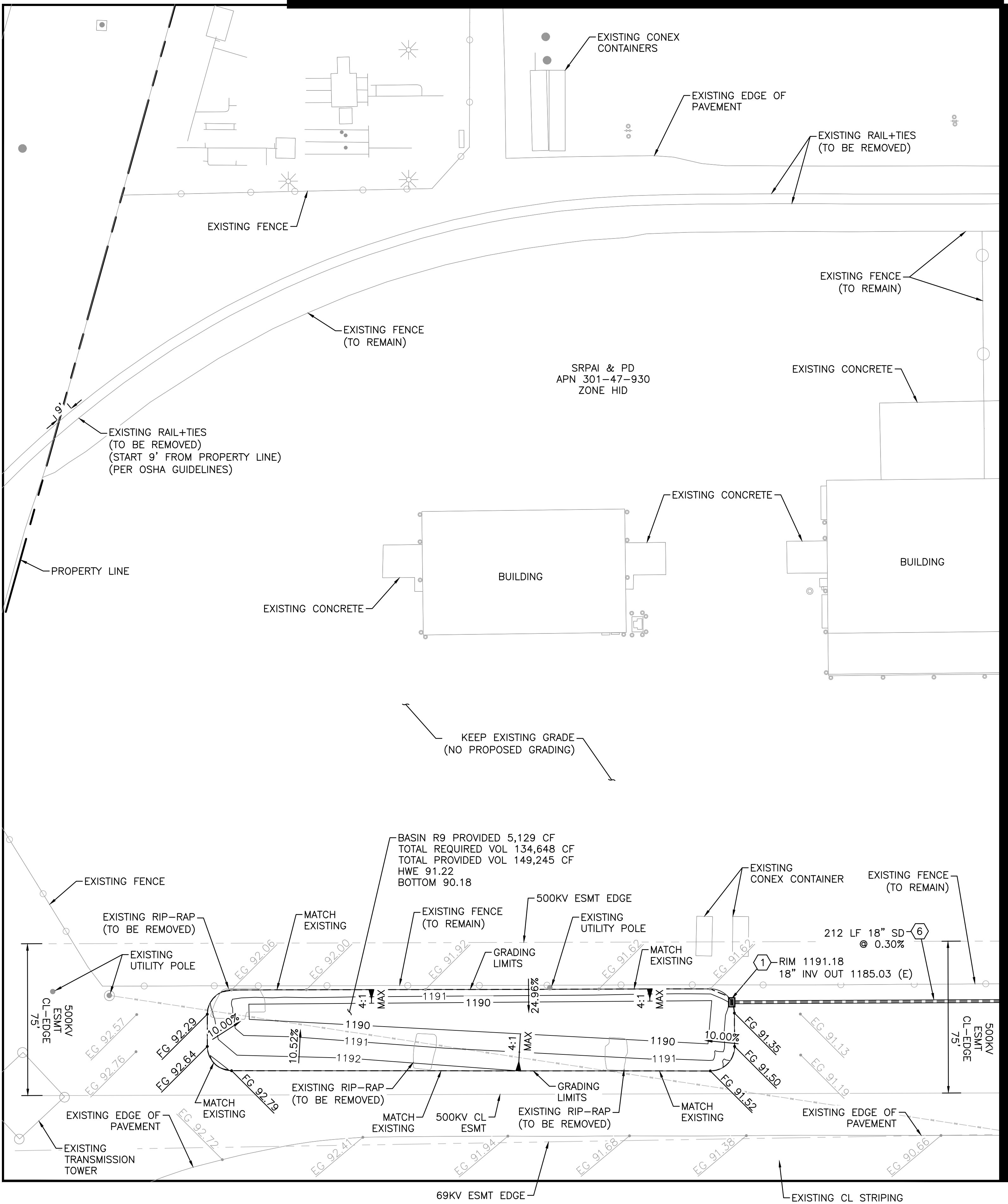
PRELIMINARY

SALT RIVER PROJECT
FACILITIES SERVICES PHOENIX, ARIZONA

SRP TEMPE SERVICE CENTER PH3
GRADING & DRAINAGE PLAN
CIVIL
GRADING & DRAINAGE PLANS

SCALE: As indicated DATE: 05/26/2022	DESIGNED BY: MB CHECKED BY: NM	SHEET# C303
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MATCH SHEET C302



MATCH SHEET C305

PAVING CONSTRUCTION NOTES

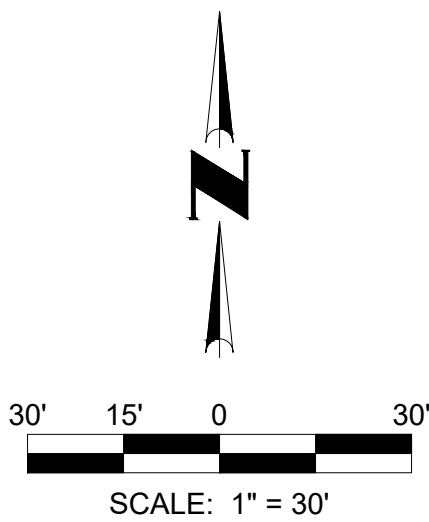
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6. PROPOSED 4" SOLID WHITE MARKING.
7. PROPOSED 24" SOLID WHITE MARKING.
8. INSTALL ADA PARKING SPACE.
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STORM DRAIN CONSTRUCTION NOTES



1. INSTALL HEADWALL PER M.A.G. STD. DTL. 501
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11. INSTALL 60" DIAMETER STORM DRAIN MANHOLE WITH 30" FRAME AND COVER PER M.A.G. STD. DTL. 521 AND 522.
12. INSTALL DOUBLE CATCH BASIN PER M.A.G. STD. DTL. 538 TYPE H SINGLE SUMP (UNLESS OTHERWISE SPECIFIED PER PLAN).

GRADING CONSTRUCTION NOTES

1. EARTHWORK PER SRP SECTION 312000-EARTH MOVING



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SRP TEMPE SERVICE CENTER PH3		
GRADING & DRAINAGE PLAN		
CIVIL		
GRADING & DRAINAGE PLANS		
SCALE: As indicated DATE: 05/26/2022	DESIGNED BY: MB CHECKED BY: NM	SHEET# C304

MATCH SHEET C303



- ## STORM DRAIN CONSTRUCTION NOTES
1. INSTALL HEADWALL PER M.A.G. STD. DTL. 501
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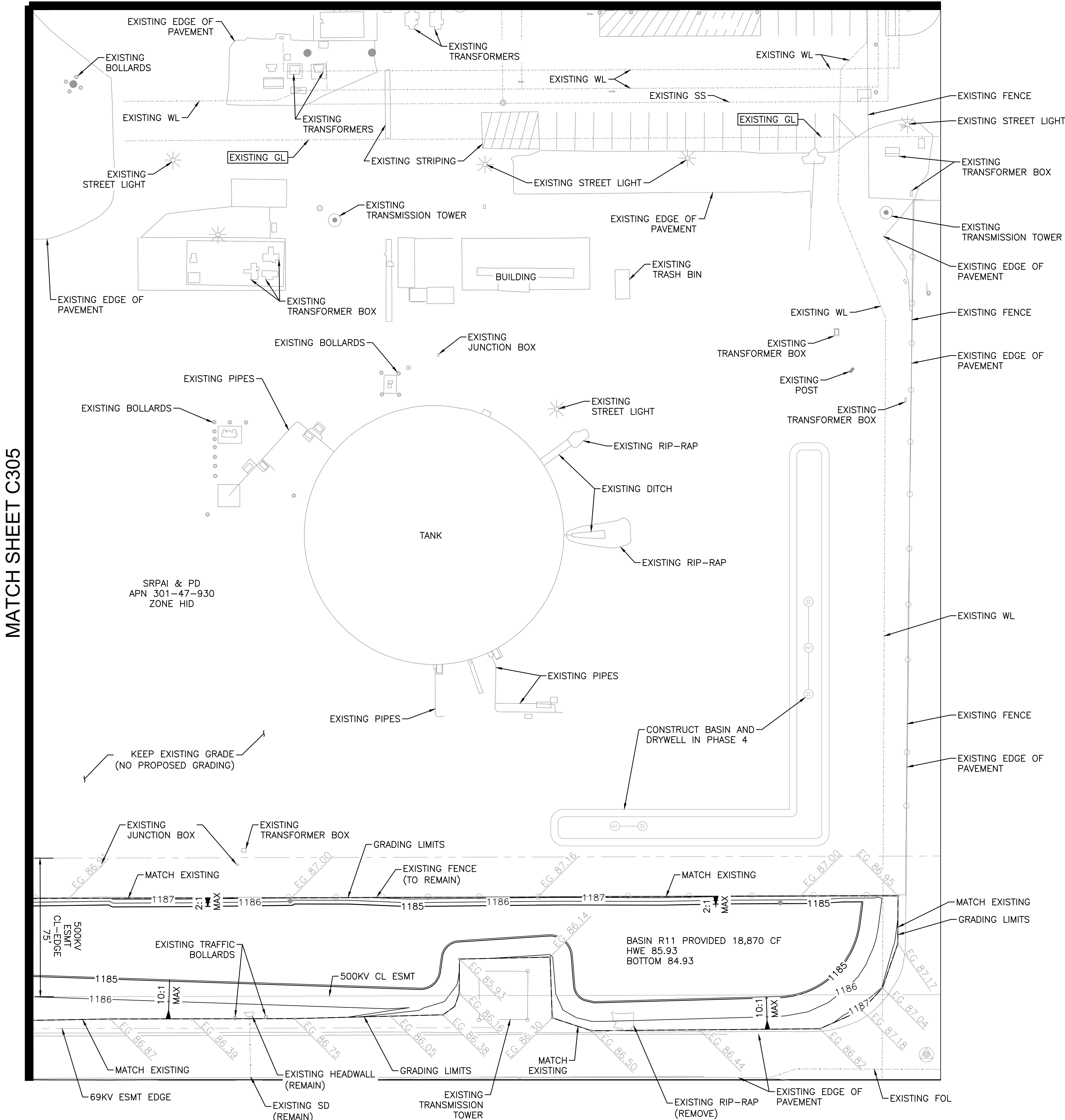
CVL
CONSULTANTS
CELEBRATING 60 YEARS
4550 NORTH 12TH STREET
PHOENIX, ARIZONA 85014
TELEPHONE: 602.264.683
WWW.CVLCI.COM

SRP SALT RIVER PROJECT
FACILITIES SERVICES PHOENIX, ARIZONA

SRP TEMPE SERVICE CENTER PH3
GRADING & DRAINAGE PLAN
CIVIL
GRADING & DRAINAGE PLANS

SCALE: As indicated	DESIGNED BY: MB	SHEET # C305
DATE: 05/20/2020	CHECKED BY: NM	

MATCH SHEET C303



PAVING CONSTRUCTION NOTES

1. INSTALL 12" LIME TREATED AB BASE WITH 3/8" OR 1/2" CHIP SEAL PER SRP SECTION 321216-ASPHALT PAVING AND PER GEOTECHNICAL REPORT PREPARED FOR THIS PROJECT.
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6. PROPOSED 4" SOLID WHITE MARKING.
7. PROPOSED 24" SOLID WHITE MARKING.
8. INSTALL ADA PARKING SPACE.
9. INSTALL ADA MARKING PER ADA DESIGN STANDARDS.
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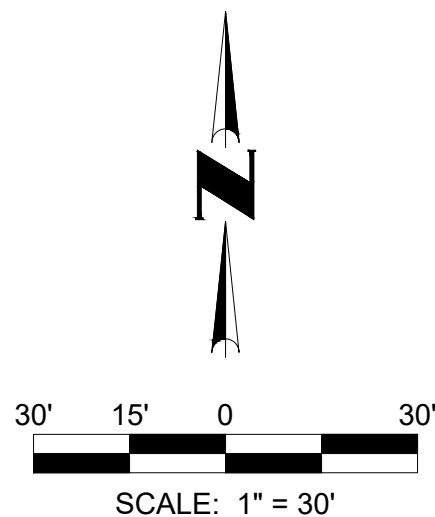
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10. INSTALL HDPE PIPE, SMOOTH INTERIOR WATER TIGHT STORM DRAIN-ADS N-12 OR APPROVED EQUAL SIZE AND SLOPE PER THIS SHEET. BACKFILLED IN ACCORDANCE WITH M.A.G. STD. SPEC. 601 & 618 AND C.O.P. DTL. P1200. REPLACE EXISTING PAVEMENT IN KIND.
11. INSTALL 60" DIAMETER STORM DRAIN MANHOLE WITH 30" FRAME AND COVER PER M.A.G. STD. DTL. 521 AND 522.
12. INSTALL DOUBLE CATCH BASIN PER M.A.G. STD. DTL. 538 TYPE H SINGLE SUMP (UNLESS OTHERWISE SPECIFIED PER PLAN).

GRADING CONSTRUCTION NOTES

1. EARTHWORK PER SRP SECTION 312000-EARTH MOVING

MATCH SHEET C305



ISSUED FOR 100% REVIEW

CELEBRATING 60 YEARS
4550 NORTH 12TH STREET
PHOENIX, ARIZONA 85014
TELEPHONE: 602.264.6831
WWW.CVLCL.COM

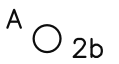


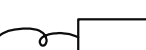





























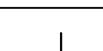
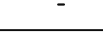
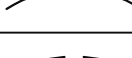
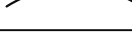

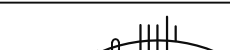
Professional Engineer
NICHOLAS L. NICHOLS
6637
05/26/22
ARIZONA U.S.A.

SALT RIVER PROJECT
FACILITIES SERVICES PHOENIX, ARIZONA

SRP TEMPE SERVICE CENTER PH3
GRADING & DRAINAGE PLAN
CIVIL
GRADING & DRAINAGE PLANS

SCALE: As indicated DATE: 05/26/2022	DESIGNED BY: MB CHECKED BY: NM	SHEET# C306
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ELECTRICAL SYMBOLS	
SYMBOL	DESCRIPTION
	FIXTURE, CEILING OUTLET: SUBSCRIPTS: A = LIGHTING FIXTURE – TYPE (TYPICAL FOR 2 = CIRCUIT NUMBER ALL FIXTURES) b = SWITCH DESIGNATION
	FIXTURE, WALL OUTLET
	FLUORESCENT FIXTURE, SURFACE OR FLUSH OUTLET, HARD CEILING
	FLUORESCENT FIXTURE, W/FLEX TO J-BOX, LAY-IN CEILING
	FLUORESCENT STRIP OR INDUSTRIAL TYPE FIXTURE
	EXIT LIGHT W/DIRECTION ARROW
	FIXTURE, CEILING OUTLET, EMERGENCY LIGHT (EM) OR NIGHT LIGHT (NL)
	FLUORESCENT EMERGENCY LIGHT (EM); AND/OR FLUORESCENT NIGHT LIGHT (NL)
	PARKING LOT FIXTURE, POLE MOUNTED
	DUPLEX RECEPTACLE OUTLET @ +18" A.F.F. U.N.O.
	DOUBLE DUPLEX RECEPTACLE OUTLET @ +18" A.F.F. U.N.O.
	DUPLEX RECEPTACLE OUTLET, HALF SWITCHED @ +18" A.F.F. U.N.O.
	DUPLEX RECEPTACLE OUTLET GFCI @ +18" A.F.F. U.N.O.
	SPECIAL PURPOSE RECEPTACLE OUTLET; (#-# DENOTES NEMA CONFIGURATION)
	SAME AS ABOVE, FLOOR MOUNTED
	SAME AS ABOVE, CEILING MOUNTED
	SWITCH, +48" A.F.F. UNLESS NOTED OTHERWISE. LOWERCASE SUBSCRIPT DENOTES CIRCUITING (TYPICAL FOR ALL SWITCH TYPES). LETTER/NUMBER INDICATES: 2 – DOUBLE POLE SWITCH K – KEY OPERATED 3 – THREE WAY SWITCH M – MOTOR RATED 4 – FOUR WAY SWITCH MC – MOMENTARY D – DIMMER CONTACT F – SINGLE POLE SWITCH MS – MOTION SENSOR WITH FUSE HOLDER S – MOTOR SPEED
	MOTION SENSOR, CEILING (360 DEGREES)
	MOTOR, (# DENOTES HORSE POWER)
	SAFETY DISCONNECT SWITCH; FUSIBLE (30/3 = 30A 3 POLE)
	SAFETY DISCONNECT SWITCH; NON-FUSIBLE
	PANELBOARD
	JUNCTION BOX OR PULL BOX
	VOICE @ 18" A.F.F. U.N.O., PROVIDE 3/4" CONDUIT WITH PULLSTRING TO ACCESSIBLE CEILING SPACE
	DATA @ 18" A.F.F. U.N.O., PROVIDE 3/4" CONDUIT WITH PULLSTRING TO ACCESSIBLE CEILING SPACE
	VOICE DATA COMMUNICATION @ 18" A.F.F. U.N.O. PROVIDE 3/4" CONDUIT WITH PULLSTRING TO ACCESSIBLE CEILING SPACE
	SAME AS ABOVE, FLOOR MOUNTED
	SAME AS ABOVE, CEILING MOUNTED
	TELEVISION @ 18" A.F.F. U.N.O. PROVIDE 3/4" CONDUIT WITH PULLSTRING TO ACCESSIBLE CEILING SPACE
	DISCONNECT SWITCH RATED AS NOTED
	FUSE RATED AS NOTED
	CIRCUIT BREAKER RATED AS NOTED
	GROUND CONNECTION
	CONDUIT CONCEALED IN WALLS OR CEILING
	UNDERGROUND CONDUIT
	CROSS HATCHES INDICATE NUMBER OF CONDUCTORS IN CONDUIT. CONDUCTORS ARE #12 AWG MINIMUM UNLESS NOTED OTHERWISE. SHORT CROSS HATCHES INDICATES INSULATED PHASE WIRE, LONG CROSS HATCH INDICATES NEUTRAL CONDUCTOR, 1/2 CROSS HATCH INDICATES GROUND WIRE.
	HOMERUN TO PANEL 'A'; CIRCUITS 1, 3, AND 5. CONDUCTOR SIZES INDICATED ON HOMERUN SHALL BE THE MINIMUM SIZE FOR THE ENTIRE CIRCUIT UP TO CONNECTION OF LAST LOAD
	EQUIPMENT NUMBER DESIGNATION (EF-1) SEE EQUIPMENT SCHEDULES
	DETAIL NUMBER ON PAGE
	DETAIL CALLOUT—SEE DETAIL ON PAGE INDICATED

ELECTRICAL ABBREVIATIONS

A AMP	AMPERE
AFF	ABOVE FINISHED FLOOR
AWG	AMERICAN WIRE GAUGE
C	CONDUIT
CB	CIRCUIT BREAKER
CKT	CIRCUIT
(D),DEMO	DEMOLISH
(E),EXIST	EXISTING
EM	EMERGENCY
EMT	ELEC METALLIC TUBING
(F),FUT	FUTURE
FA	FIRE ALARM
FACP	FIRE ALARM CONTROL PANEL
FMC	FULL LOAD AMPERES
FLA	FLEXIBLE METALLIC CONDUIT
FU	FUSED
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GRND	GROUND
HP	HORSEPOWER
HVAC	HEATING VENTILATION AND AIR CONDITIONING
J,J-BOX	JUNCTION BOX
KCMIL	1000 CIRCULAR MIL
kV	KILOVOLT
KV	KILOVOLT-AMPERE
LFMC	LIQUIDTIGHT FLEXIBLE METALLIC CONDUIT
LTG	LIGHTING
MCB	MAIN CIRCUIT BREAKER
MLO	MAIN LUGS ONLY
(N)	NEW
N/A	NOT APPLICABLE
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NF	NON FUSED
NIC	NOT IN CONTRACT
NL	NIGHT LIGHT
NTS	NOT TO SCALE
OFCI	OWNER FURNISHED, CONTRACTOR INSTALLED
PC	PHOTO CELL
PH	PHASE
PNL	PANEL
(R),RELO	RELOCATE
RCP	RECEPTACLE
RM	ROOM
RIG	RIGID METALLIC CONDUIT
RMC	RIGID NONMETALLIC CONDUIT
RNC	RIGID NONMETALLIC CONDUIT
SES	SERVICE ENTRANCE SUBSTATION
SPEC	SPECIFICATION
SW	SWITCH
SWBD	SWITCHBOARD
SWGR	SWITCHGEAR
TC	TIME CLOCK
TMB	TELEPHONE MOUNTING BOARD
TYP	TYPICAL
UG	UNDERGROUND
UNO	UNLESS NOTED OTHERWISE
V	VOLT
VA	VOLT-AMPERE
VP	VANDAL PROOF
W	WATT
WP	WEATHERPROOF
XFMR	TRANSFORMER

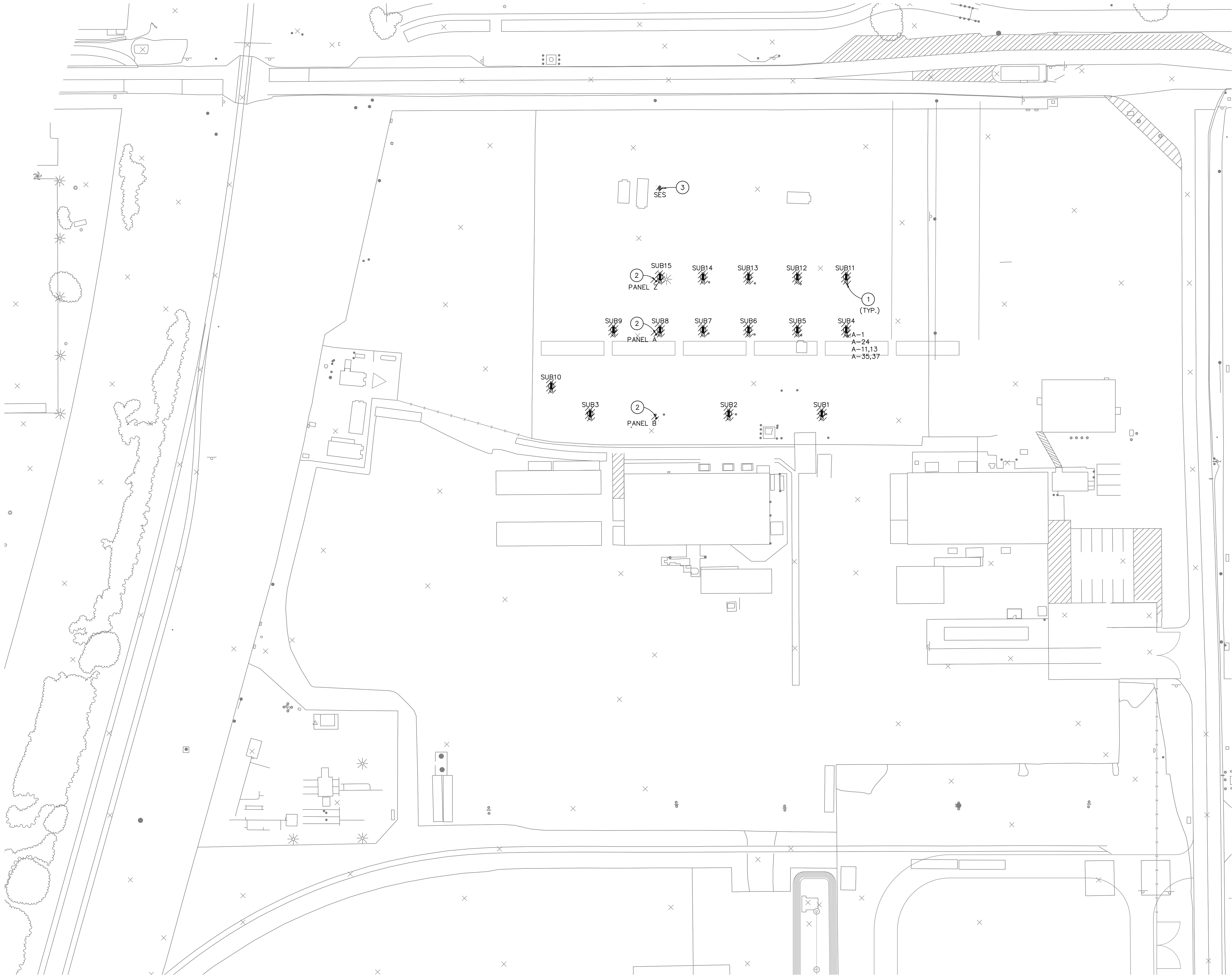
GENERAL NOTES

- A. THE ELECTRICAL INSTALLATION SHALL CONFORM TO THE 2017 EDITION OF THE NATIONAL ELECTRIC CODE AND ALL LOCAL, STATE AND FEDERAL CODES.
- B. CONDUIT LAYOUTS SHOWN ON THE PLANS ARE DIAGRAMMATIC AND DO NOT INDICATE THE ROUTING REQUIRED. THE CONTRACTOR SHALL ROUTE CONDUITS AS REQUIRED BY THE CONDITIONS OF THE PROJECT.
- C. WHERE SIZE IS NOT INDICATED ON THE PLAN, CONDUCTORS SHALL BE MINIMUM #12 AWG WITH #12 AWG GROUND WIRE IN 3/4" CONDUIT.
- D. ALL CONDUITS SHALL CONTAIN A CODE SIZE EQUIPMENT GROUND CONDUCTOR.
- E. ALL CONDUCTORS SHALL BE COPPER THHN/THWN OR XHHW RATED FOR 90 DEGREES CELSIUS.
- F. CONTRACTOR TO PERMANENTLY MARK ON JUNCTION BOX COVER, RECEPTACLE COVER PLATE, AND LIGHTING CONTROL DEVICE COVER PLATE WITH THE PANEL NAME AND CIRCUIT NUMBER.
- G. ALL EXTERIOR DEVICES/LIGHTING FIXTURES SHALL BE WEATHERPROOF.
- H. UNLESS SPECIFICALLY NOTED OTHERWISE, THE ELECTRICAL CONTRACTOR SHALL PROVIDE FINAL CONNECTIONS TO ALL UTILIZATION EQUIPMENT SHOWN ON THE PLANS. VERIFY FINAL CONNECTION AND PROVIDE APPROPRIATE WIRING METHOD.
- I. PRIOR TO TRENCHING IN ANY AREA, THE ELECTRICAL CONTRACTOR SHALL CONTACT ELECTRICAL, COMMUNICATIONS, CABLE TV, GAS AND WATER (BLUE STAKE) AND HAVE ALL UTILITIES IN THE AREA IDENTIFIED. DAMAGE TO ANY UNDERGROUND STRUCTURE SHALL BE REPAIRED BY THE CONTRACTOR AT NO COST TO THE PROJECT.
- J. EACH MULTIWIRE BRANCH CIRCUIT SHALL BE PROVIDED WITH A MEANS THAT WILL SIMULTANEOUSLY DISCONNECT ALL UNGROUNDED CONDUCTORS IN THE PANELBOARD.
- K. THE UNGROUNDED AND GROUNDED CONDUCTORS OF EACH MULTIWIRE BRANCH CIRCUIT SHALL BE GROUPED BY WIRE TIES OR SIMILAR MEANS IN AT LEAST ONE LOCATION WITHIN THE PANELBOARD.
- L. ALL EXPOSED CONDUIT SHALL BE RMC OR IMC.
- M. ALL FLEXIBLE CONNECTION SHALL BE LFMC.
- N. CONTRACTOR SHALL VISIT THE SITE AND FIELD VERIFY LOCATIONS OF ALL ELECTRICAL EQUIPMENT AND FAMILIARIZE WITH THE PROJECT PRIOR TO THE BID.
- O. ALL EXISTING SYSTEMS ARE TO REMAIN IN OPERATION DURING CONSTRUCTION. COORDINATE ALL SYSTEM SHUTDOWNS WITH OWNER.
- P. PROVIDE ALL DEMOLITION WORK INCLUDING REMOVAL AND DISPOSAL OF ALL MATERIALS. COORDINATE WITH OWNER FOR SALVAGE INSTRUCTIONS.
- Q. ELECTRICAL CONTRACTOR SHALL POSITIVELY IDENTIFY ALL CIRCUITS FEEDING ALL ELECTRICAL DEVICES AND LIGHTING BEFORE DE-ENERGIZING THE CIRCUITS.
- R. REMOVE EXISTING ELECTRICAL DEVICES SHOWN TO BE REMOVED. REMOVE WIRE AND CONDUIT BACK TO SOURCE. PROVIDE CONTINUATION OF CIRCUIT WHERE REQUIRED.
- S. DEVICE LOCATION SHOWN ON THE PLANS ARE APPROXIMATE. VERIFY EXACT LOCATIONS IN FIELD.
- T. DISCONNECT AND REMOVE ALL ABANDONED ELECTRICAL EQUIPMENT SUCH AS CONDUITS, WIRING, SUPPORTS, CLAMPS, STRAPS, BOXES, ETC.

REV. NO.	DATE	DESCRIPTION			BY
 <p>AZPE ARIZONA PINNACLE ENGINEERING 2222 W. Pinnacle Peak Road, Suite 290 (623) 594-9049 Project: 21176</p>			<p>PRELIMINARY NOT FOR CONSTRUCTION</p>		
		<p>SALT RIVER PROJECT FACILITIES SERVICES PHOENIX, ARIZONA</p>			
<p align="center">SRP TSC</p> <p align="center">ELECTRICAL SITE WORK, PHASE-3</p> <p align="center">ELECTRICAL LEGENDS & NOTES</p>					
SCALE: AS NOTED		DRAWN BY:AM		SHEET #	
FILENAME:		DESIGNED BY:SW		E000	
PROJECT: -		DATE: 05/26/2022			

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- KEY NOTES**
- EXISTING CONCRETE BOLLARD MOUNTED RECEPTACLE TO BE REMOVED. DISCONNECT AND REMOVE ALL BRANCH CIRCUITS BACK TO PANEL. REFER TO DEMO ONE-LINE DIAGRAM ON SHEET E600.
 - EXISTING PANELBOARD TO BE REMOVED, DISCONNECT AND REMOVE MAIN FEEDER. VERIFY AND DISCONNECT ALL BRANCH CIRCUITS. REMOVE GUTTER, RECEPTACLE AND UNISTRUT STAND. REFER TO DEMO ONE-LINE DIAGRAM ON SHEET E600.
 - EXISTING WOODEN POLE MOUNTED UTILITY TRANSFORMER AND SES TO BE REMOVED. COORDINATE REMOVAL OF PRIMARY FEEDER AND WOODEN POLE WITH SRP PROJECT MANAGER. REFER TO DEMO ONE-LINE DIAGRAM ON SHEET E600.

REV. NO.	DATE	DESCRIPTION	BY



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2222 W. Pinnacle Peak Road, Suite 290
(623) 594-9049 Project: 21176

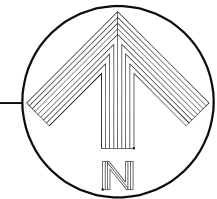
SRP SALT RIVER PROJECT
FACILITIES SERVICES PHOENIX, ARIZONA

SRP TSC
ELECTRICAL SITE WORK, PHASE-3
ELECTRICAL DEMOLITION PLAN

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FILENAME:	DESIGNED BY:SW	E101
PROJECT: —	DATE: 05/26/2022	

ELECTRICAL DEMOLITION PLAN

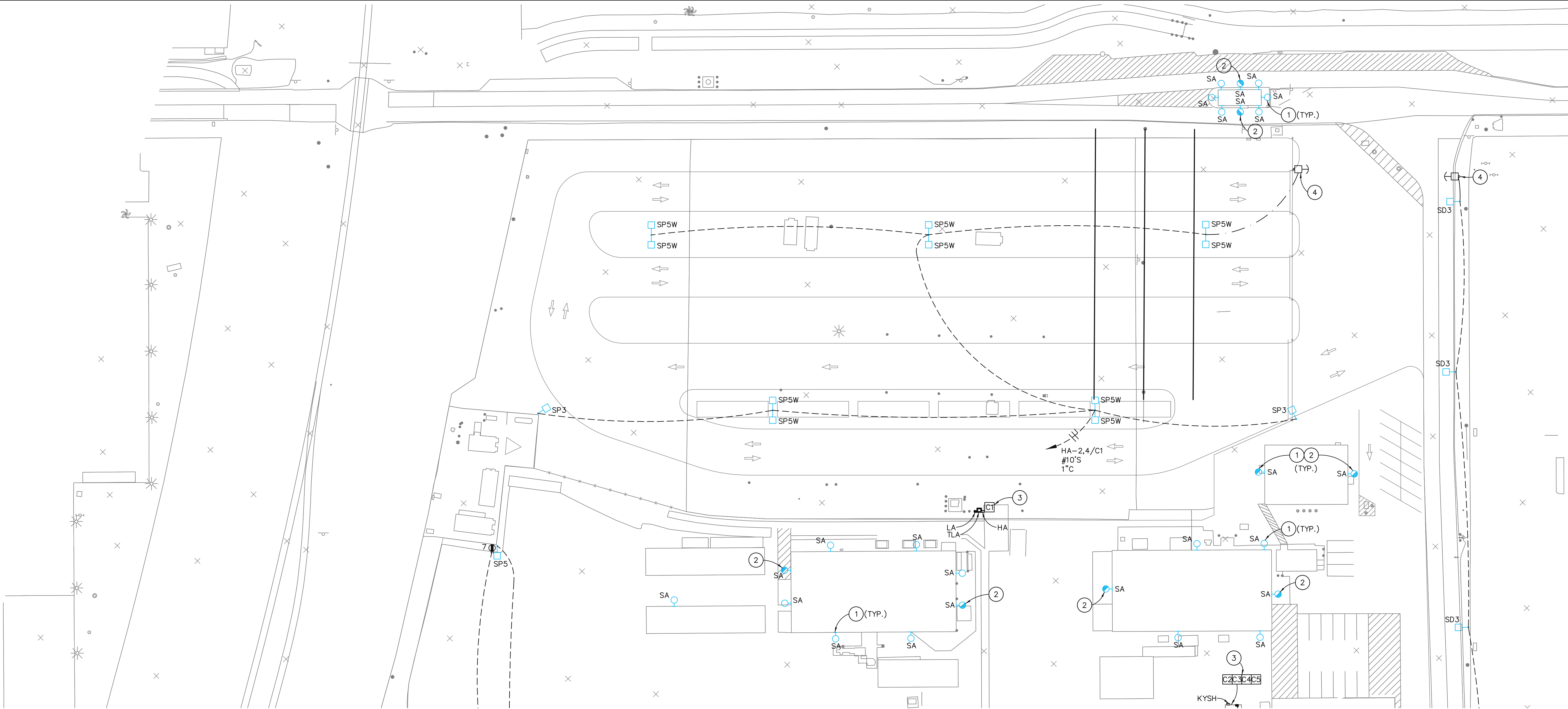
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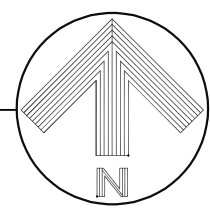
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SITE LIGHTING PLAN - APPARATUS YARD


SCALE: 1"=40'-0"



KEY NOTES

1. REPLACE EXISTING WALL MOUNTED FIXTURES WITH NEW AS SHOWN. CONNECT TO EXISTING LIGHTING CIRCUIT. ELECTRICAL CONTRACTOR SHALL VERIFY VOLTAGE OF EXISTING FIXTURE PRIOR TO PURCHASE OF NEW.
2. PROVIDE NEW 100W EMERGENCY LIGHT INVERTER. ELECTRICAL CONTRACTOR TO VERIFY VOLTAGE OF EXISTING LIGHTING CIRCUIT PRIOR TO PURCHASE.
3. PROVIDE LIGHTING CONTACTOR RATED FOR OUTDOOR USE WITH 30AMP CONTACTS AND 120V COIL. REFER TO CONTACTOR DETAIL 4/E900.
4. PROVIDE REMOTE PUSH-BUTTON FOR LIGHTING TIMER CONTROLLER CONTROL. MOUNT TO 6" PIPE BOLLARD. REFER TO DETAIL 5/E900. LOCATION TO BE MARKED PER SIGN DETAIL 6/E900.

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2222 W. Pinnacle Peak Road, Suite 290 (623) 594-9049 Project: 21176			
		PHOENIX, ARIZONA	
SRP TSC ELECTRICAL SITE WORK, PHASE-3 SITE LIGHTING PLAN			
SCALE: AS NOTED	DRAWN BY:AM	SHEET #	
FILENAME:	DESIGNED BY:SW	E201	
PROJECT: —	DATE: 05/26/2022		

KEY NOTES

1. REPLACE EXISTING WALL MOUNTED FIXTURES WITH NEW AS SHOWN. CONNECT TO EXISTING LIGHTING CIRCUIT. ELECTRICAL CONTRACTOR SHALL VERIFY VOLTAGE OF EXISTING FIXTURE PRIOR TO PURCHASE OF NEW.
2. PROVIDE NEW 100W EMERGENCY LIGHT INVERTER. ELECTRICAL CONTRACTOR TO VERIFY VOLTAGE OF EXISTING LIGHTING CIRCUIT PRIOR TO PURCHASE.
3. PROVIDE LIGHTING CONTACTOR AND 120V COIL. REFER TO CONTRACTOR DETAIL 4/E900.
4. PROVIDE REMOTE PUSH-BUTTON FOR LIGHTING TIMER CONTROLLER CONTROL. MOUNT TO 6" PIPE BOLLARD, REFER TO DETAIL 5/E900. LOCATION TO BE MARKED PER SIGN DETAIL 6/E900.

REV. NO.	DATE	DESCRIPTION	BY



SRP TSC ELECTRICAL SITE WORK, PHASE-3 SITE LIGHTING PLAN

SCALE: AS NOTED	DRAWN BY:AM	SHEET # E202
FILENAME:	DESIGNED BY:SW	
PROJECT: -	DATE: 05/26/2022	

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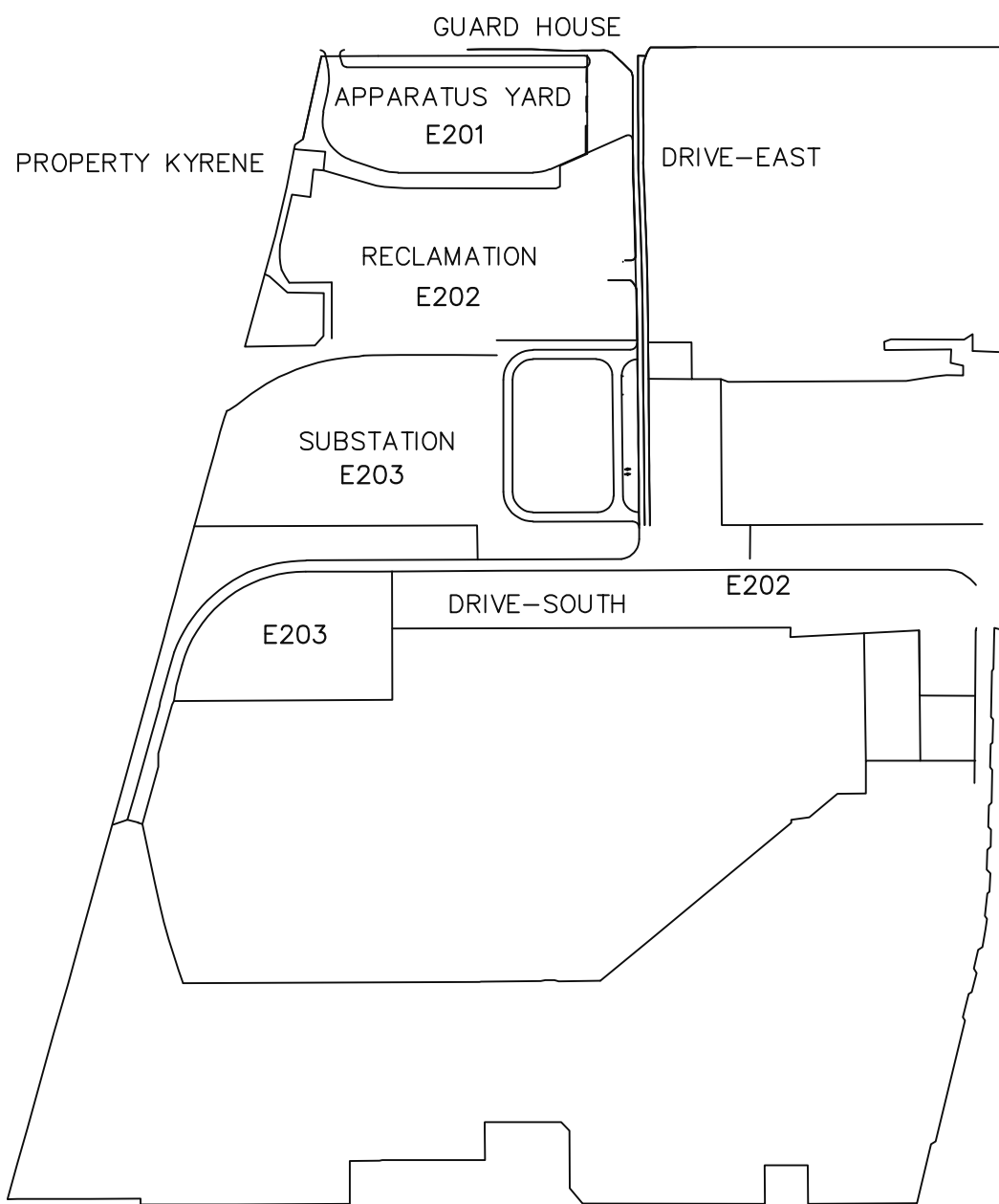
1. REPLACE EXISTING WALL MOUNTED FIXTURES WITH NEW AS SHOWN. CONNECT TO EXISTING LIGHTING CIRCUIT. ELECTRICAL CONTRACTOR SHALL VERIFY VOLTAGE OF EXISTING FIXTURE PRIOR TO PURCHASE OF NEW.
2. PROVIDE NEW 100W EMERGENCY LIGHT INVERTER. ELECTRICAL CONTRACTOR TO VERIFY VOLTAGE OF EXISTING LIGHTING CIRCUIT PRIOR TO PURCHASE.
3. PROVIDE LIGHTING CONTROLLER AND 120V COIL FOR OUTDOOR USE WITH 30 AMP BREAKER AND 120V COIL. REFER TO CONTRACTOR DETAIL 4/E900.
4. PROVIDE REMOTE PUSH-BUTTON FOR LIGHTING TIMER CONTROLLER CONTROL MOUNT TO 1" PIPE BOLLARD. REFER TO DETAIL 5/E900. LOCATION TO BE MARKED PER SIGN DETAIL 6/E900.
5. DISCONNECT AND REMOVE EXISTING FLOOD LIGHT AND EXISTING WOODEN POLE, RETURN TO SRP STOCK PILE, COORDINATE WITH SRP PROJECT MANAGER FOR EXACT INSTRUCTIONS.

 <p>AZPE ARIZONA PINNACLE ENGINEERING</p> <p>2222 W. Pinnacle Peak Road, Suite 290 (623) 594-9049 Project: 21176</p>	<p>PRELIMINARY NOT FOR CONSTRUCTION</p>	
 <p>SALT RIVER PROJECT FACILITIES SERVICES</p> <p>SRP TSC ELECTRICAL SITE WORK, PHASE-3 SITE LIGHTING PLAN</p>	<p>PHOENIX, ARIZONA</p>	
<p>SCALE: AS NOTED</p> <p>FILENAME:</p> <p>PROJECT: —</p>	<p>DRAWN BY:AM</p> <p>DESIGNED BY:SW</p> <p>DATE: 05/26/2022</p>	<p>SHEET #</p> <p>E203</p>

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PHOTOMETRIC SITE PLAN - APPARATUS YARD

SCALE: 1"=40'-0"



SHEET LEGEND

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
APPARATUS YARD	+	2.5 fc	9.2 fc	0.5 fc	18.4:1	5.0:1
DRIVE-EAST	+	1.7 fc	3.5 fc	0.2 fc	17.5:1	8.5:1
DRIVE-SOUTH	+	1.4 fc	7.6 fc	0.0 fc	N/A	N/A
GUARD HOUSE	+	4.3 fc	20.8 fc	0.2 fc	104.0:1	21.5:1
PROPERTY KYRENE	+	0.9 fc	3.8 fc	0.1 fc	38.0:1	9.0:1
RECLAMATION	+	1.9 fc	8.6 fc	0.2 fc	43.0:1	9.5:1
SUBSTATION	+	2.1 fc	17.9 fc	0.2 fc	89.5:1	10.5:1

Schedule								
Symbol	Label	Manufacturer	Catalog Number	Description	Number Lamps	Lumens Per Lamp	Light Loss Factor	Wattage
	SA	Lithonia Lighting	DSXW1 LED 20C 1000 40K T4M MVOLT	DSXW1 LED WITH (2) 10 LED LIGHT ENGINES, TYPE T4M OPTIC, 4000K, 1000mA.	1	7420	0.9	73.2
	SP3	Lithonia Lighting	DSX2 LED P8 40K T3M MVOLT	DSX2 LED P8 40K T3M MVOLT	1	47777	0.9	431
	SA4	Lithonia Lighting	DSX2 LED P6 40K T4M MVOLT	DSX2 LED P6 40K T4M MVOLT	1	39925	0.9	343
	SP5	Lithonia Lighting	DSX2 LED P8 40K T5M MVOLT	DSX2 LED P8 40K T5M MVOLT	1	51064	0.9	431
	SP5 W	Lithonia Lighting	DSX2 LED P8 40K T5W MVOLT	DSX2 LED P8 40K T5W MVOLT	1	50729	0.9	862
	SPF	Lithonia Lighting	DSX2 LED P8 40K TFTM MVOLT	DSX2 LED P8 40K TFTM MVOLT	1	49183	0.9	431
	SD3	Lithonia Lighting	DSX2 LED P2 40K T3M MVOLT	DSX2 LED P2 40K T3M MVOLT	1	23365	0.9	185

100% REVIEW SET

REV. NO.

DATE

DESCRIPTION

BY

2222 W. Pinnacle Peak Road, Suite 290
(623) 594-9049
Project: 21176

PRELIMINARY
NOT FOR
CONSTRUCTION

FACILITIES SERVICES PHOENIX, ARIZONA

SRP TSC
ELECTRICAL SITE WORK, PHASE-3
PHOTOMETRIC
SITE PLAN

SCALE: AS NOTED

DRAWN BY:AM

SHEET #

FILENAME:

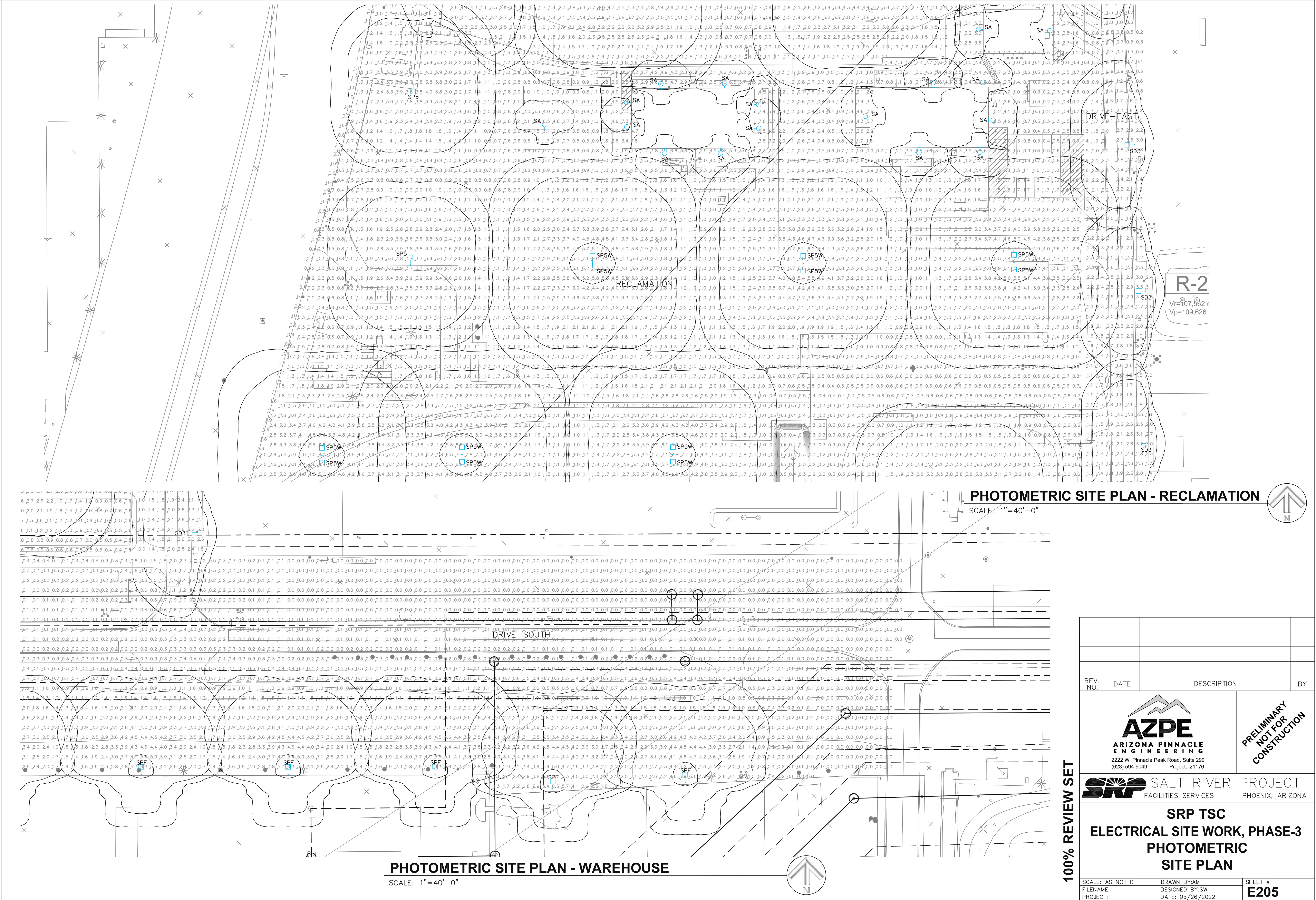
DESIGNED BY:SW

E204

PROJECT: —

DATE: 05/26/2022

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PHOTOMETRIC SITE PLAN - RECLAMATION

SCALE: 1"=40'-0"

REV. NO.	DATE	DESCRIPTION	BY



ARIZONA PINNACLE ENGINEERING
2222 W. Pinnacle Peak Road, Suite 200
(602) 594-9049 Project: 21176

**PRELIMINARY
NOT FOR
CONSTRUCTION**

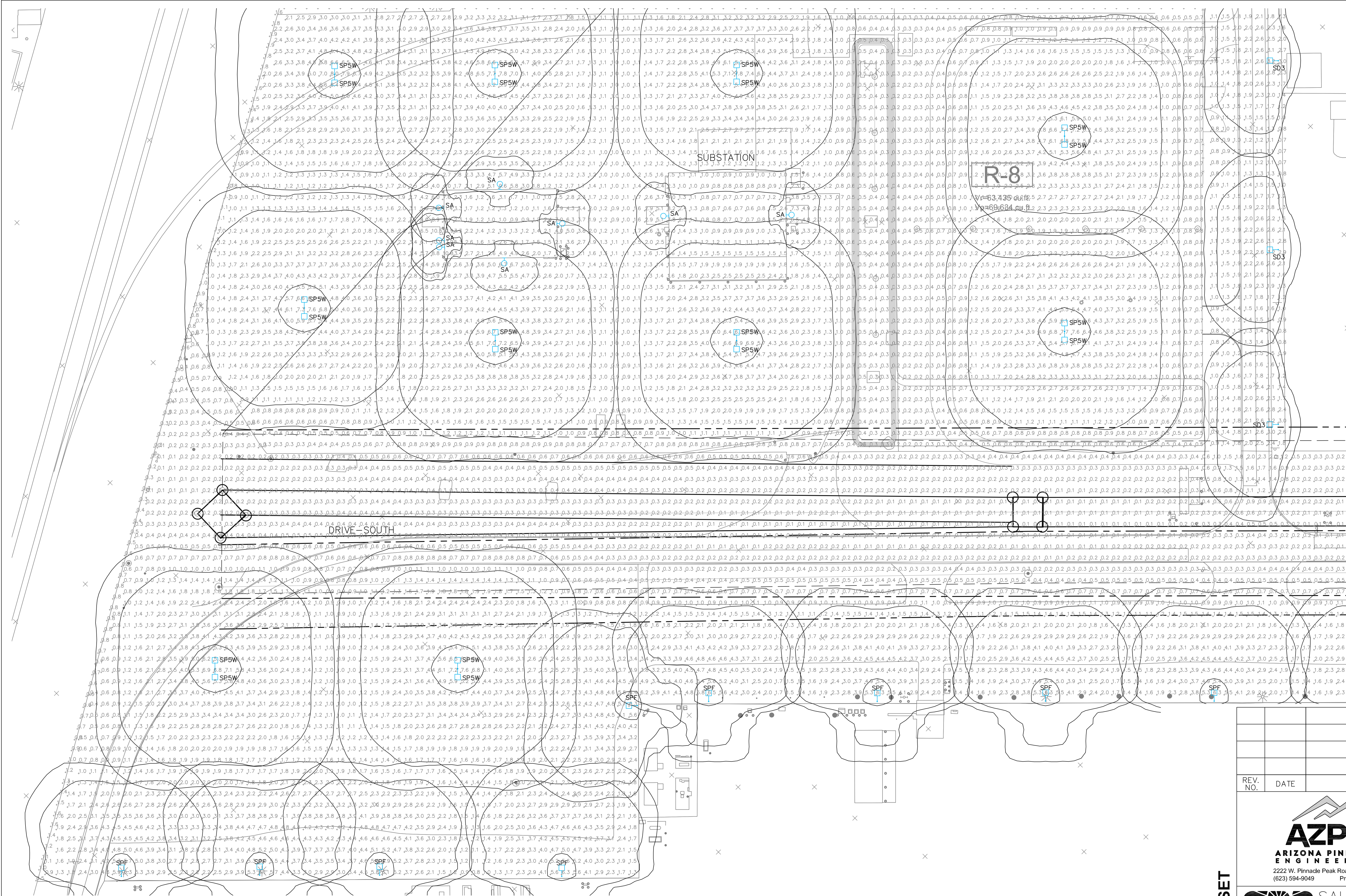


SALT RIVER PROJECT
FACILITIES SERVICES PHOENIX, ARIZONA

SRP TSC
ELECTRICAL SITE WORK, PHASE-3
PHOTOMETRIC SITE PLAN

SCALE: AS NOTED	DRAWN BY:AM	SHEET #
FILENAME:	DESIGNED BY:SW	E205
PROJECT: —	DATE: 05/26/2022	

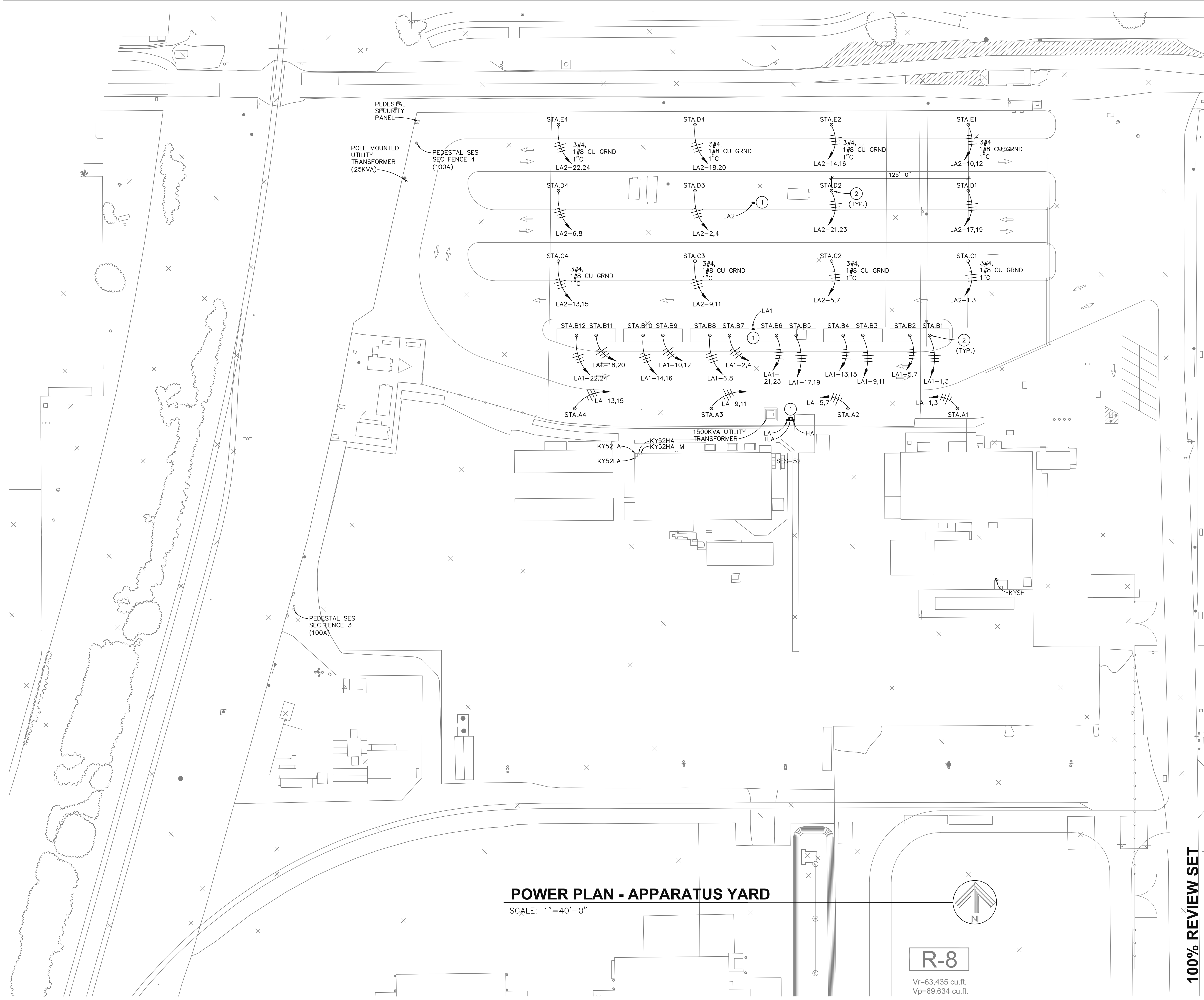
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REV. NO.	DATE	DESCRIPTION	BY									
<div><div><p>AZPE ARIZONA PINNACLE ENGINEERING 2222 W. Pinnacle Peak Road, Suite 290 (623) 594-9049 Project: 21176</p></div><div><p>PRELIMINARY NOT FOR CONSTRUCTION</p></div></div>												
<div><div><p>SALT RIVER PROJECT FACILITIES SERVICES</p></div><div><p>PHOENIX, ARIZONA</p></div></div>												
<div><div><p>SRP TSC</p><p>ELECTRICAL SITE WORK, PHASE-3</p><p>PHOTOMETRIC</p><p>SITE PLAN</p></div><div><table><tr><td>SCALE: AS NOTED</td><td>DRAWN BY:AM</td><td>SHEET #</td></tr><tr><td>FILENAME:</td><td>DESIGNED BY:SW</td><td>E206</td></tr><tr><td>PROJECT: —</td><td>DATE: 05/26/2022</td><td></td></tr></table></div></div>				SCALE: AS NOTED	DRAWN BY:AM	SHEET #	FILENAME:	DESIGNED BY:SW	E206	PROJECT: —	DATE: 05/26/2022	
SCALE: AS NOTED	DRAWN BY:AM	SHEET #										
FILENAME:	DESIGNED BY:SW	E206										
PROJECT: —	DATE: 05/26/2022											

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KEY NOTES

1. PROVIDE NEW ELECTRICAL PANELS/TRANSFORMER. MOUNT ON UNISTRUT STAND.
2. PROVIDE 6"Ø STEEL PIPE BOLLARD WITH A 50AMP, 120/208V/1Ø WEATHERPROOF RECEPTACLE. PROVIDE BRANCH CIRCUIT WITH 3Ø6, 1Ø10 CU GROUND IN A 1" CONDUIT UNLESS NOTED OTHERWISE.

POWER PLAN - APPARATUS YARD

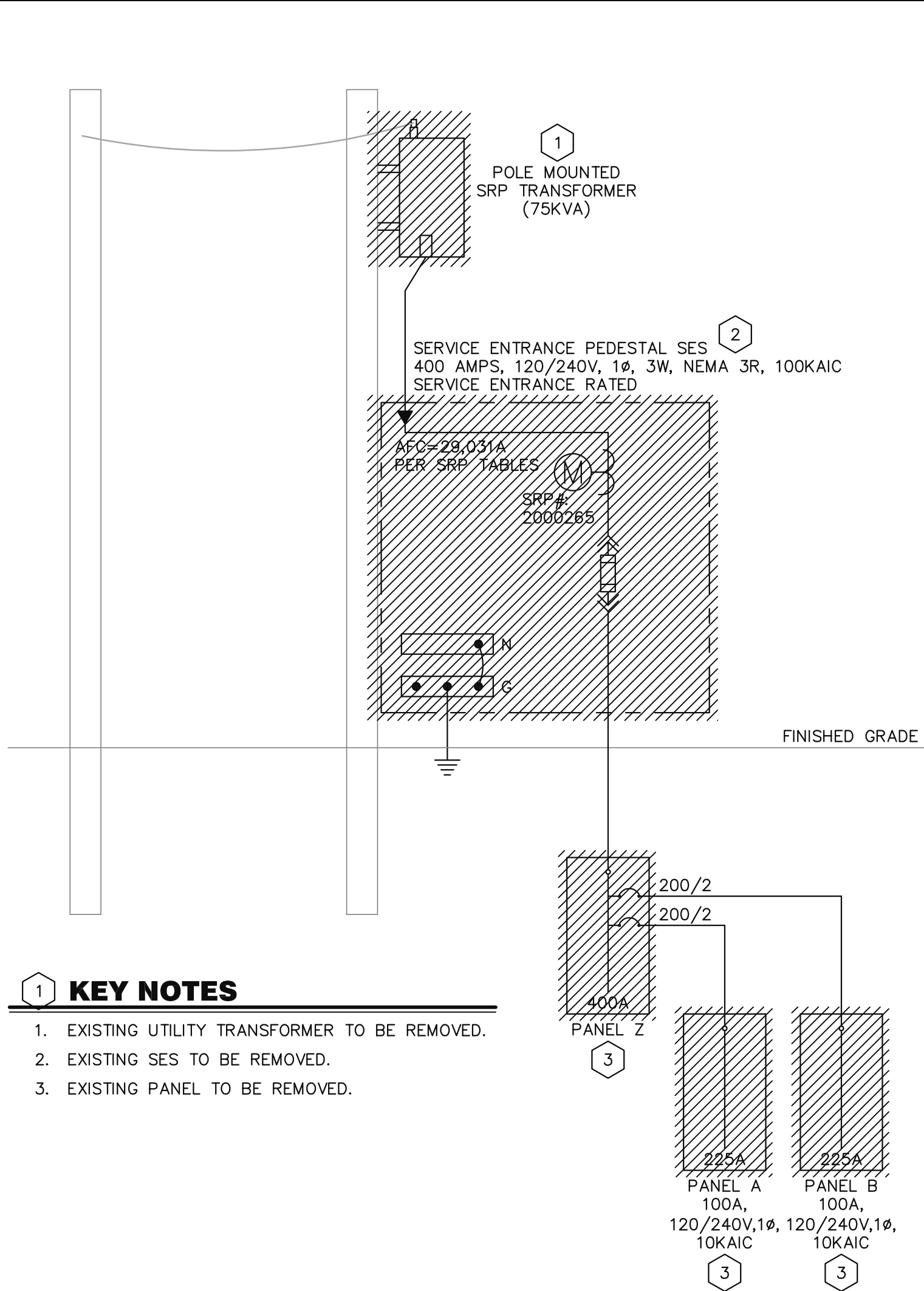
SCALE: 1"=40'-0"

REV. NO.	DATE	DESCRIPTION	BY
 2222 W. Pinnacle Peak Road, Suite 290 (623) 594-9049 Project: 21176		PRELIMINARY NOT FOR CONSTRUCTION	
 SALT RIVER PROJECT FACILITIES SERVICES PHOENIX, ARIZONA			
SRP TSC ELECTRICAL SITE WORK, PHASE-3 POWER PLAN			
SCALE: AS NOTED		SHEET #	
FILENAME:		E301	
PROJECT: —		DATE: 05/26/2022	

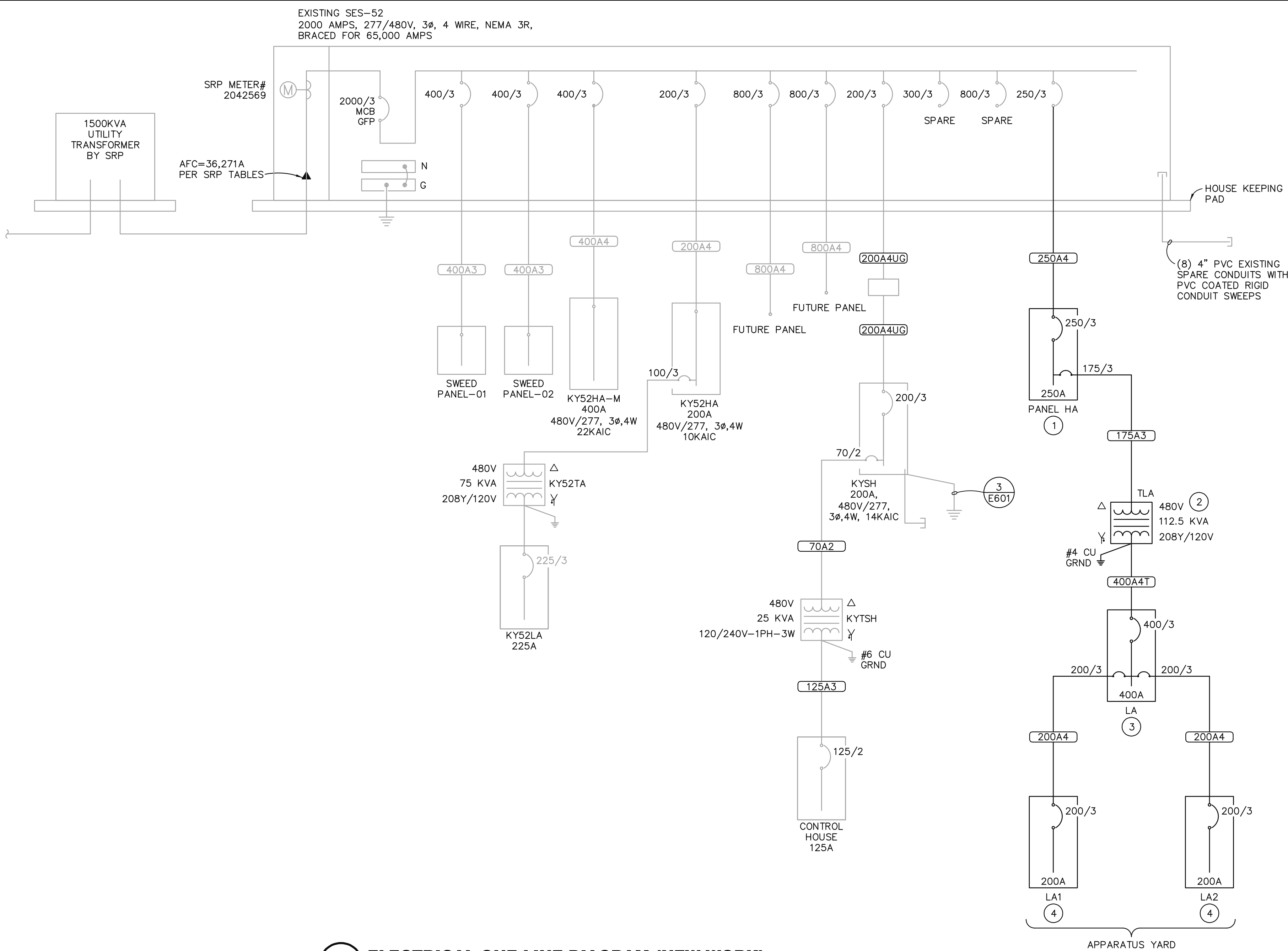
100% REVIEW SET

R-8
Vr=63,435 cu.ft.
Vp=69,634 cu.ft.

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2 ELECTRICAL ONE-LINE DIAGRAM (DEMO WORK)
NTS



1 ELECTRICAL ONE-LINE DIAGRAM (NEW WORK)
NTS

KEY NOTES

1. PROVIDE NEW 250A MAIN CIRCUIT BREAKER, 277/480V, 3Ø, 4W, 14KAIC RATED PANELBOARD IN NEMA 3R ENCLOSURE.
2. PROVIDE NEW 112.5KVA TRANSFORMER IN NEMA 3R ENCLOSURE.
3. PROVIDE NEW 400A MAIN CIRCUIT BREAKER, 120/208V, 3Ø, 4W, 10KAIC RATED PANELBOARD IN NEMA 3R ENCLOSURE.
4. PROVIDE NEW 200A MAIN CIRCUIT BREAKER, 120/208V, 3Ø, 4W, 10KAIC RATED PANELBOARD IN NEMA 3R ENCLOSURE.

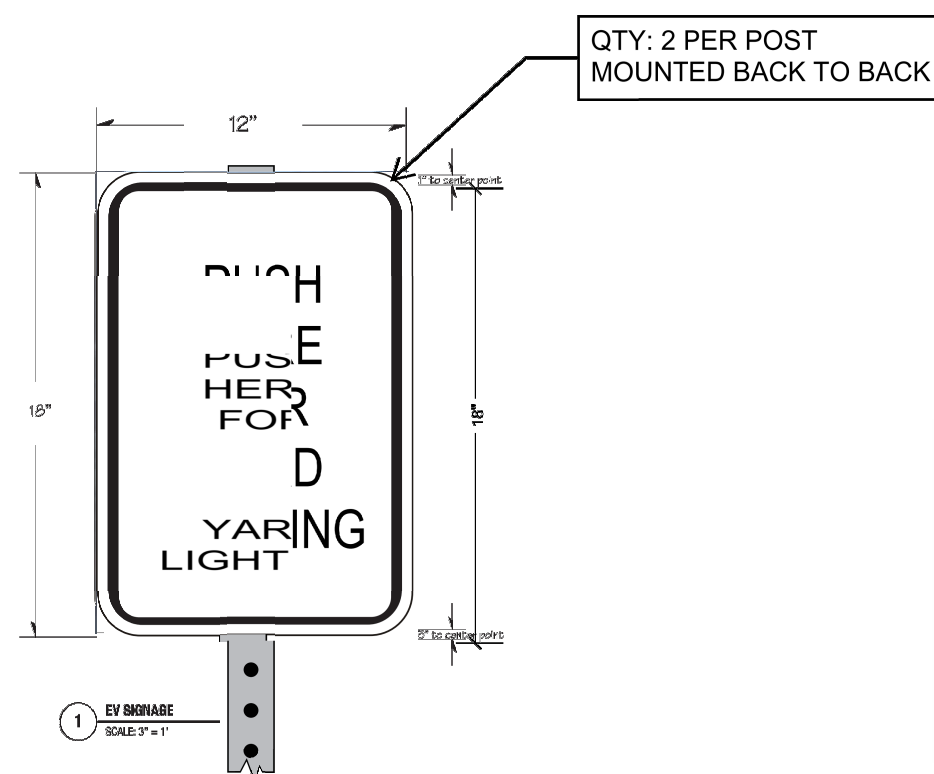
CONDUIT AND FEEDER SCHEDULE					
* MARK	CONDUIT		CONDUCTORS EACH CONDUIT		
	QTY	SIZE	QTY	SIZE	GROUND
400A4	1	3 1/2"	4	600KCMIL	#2
400A3	1	3 1/2"	3	600KCMIL	#2
400A4T	2	2"	4	#3/0	#1/0
250A4	1	2 1/2"	4	250KCMIL	#4
225A3	1	2"	3	#4/0	#4
200A4V	1	2 1/2"	4	#4/0	#4
200A4	1	2"	4	#3/0	#6
200A3	1	2"	3	#3/0	#6
175A3	1	2"	3	#2/0	#6
100A4	1	1 1/2"	4	#1	#8

- NOTES:
1. MV – MEDIUM VOLTAGE CONDUCTORS SHALL BE COPPER, TYPE MV–105, 105 DEGREE C, 133% WITH COPPER TAPE SHIELD. MV FEEDERS SHALL HAVE 600V COPPER EQUIPMENT GROUNDS.
 2. ALL OTHER CONDUCTORS ARE COPPER, 600V, XHHW–2 OR THWN–2 EXCEPT WHERE NOTED.
 3. MC – METAL CLAD CABLE
 4. PMC – METAL CLAD CABLE WITH PVC JACKET
 5. BD – BUSDUCT TO BE THE SAME MANUFACTURER AS SWITCHGEAR.

REV. NO.	DATE	DESCRIPTION	BY
<div><div><p>2222 W. Pinnacle Peak Road, Suite 290 (623) 594-9049 Project: 21176</p></div><div><p>PRELIMINARY NOT FOR CONSTRUCTION</p></div></div>			
<div><div><p>SALT RIVER PROJECT FACILITIES SERVICES PHOENIX, ARIZONA</p></div><div><p>SRP TSC ELECTRICAL SITE WORK, PHASE-3 ELECTRICAL ONE-LINE DIAGRAM</p></div></div>			
SCALE: AS NOTED	DRAWN BY:AM	SHEET #	
FILENAME:	DESIGNED BY:SW	E600	
PROJECT: –	DATE: 05/26/2022		

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SIGN FACE

1. See see picture
2. J/I r/mes Aluminum Sign Blank Clead with 3m Reflective
Fasteners: (2) 1/2 EGO
Nue 1/16"x2 5/8" w/ 5/16-18 Alum Tamper Proof

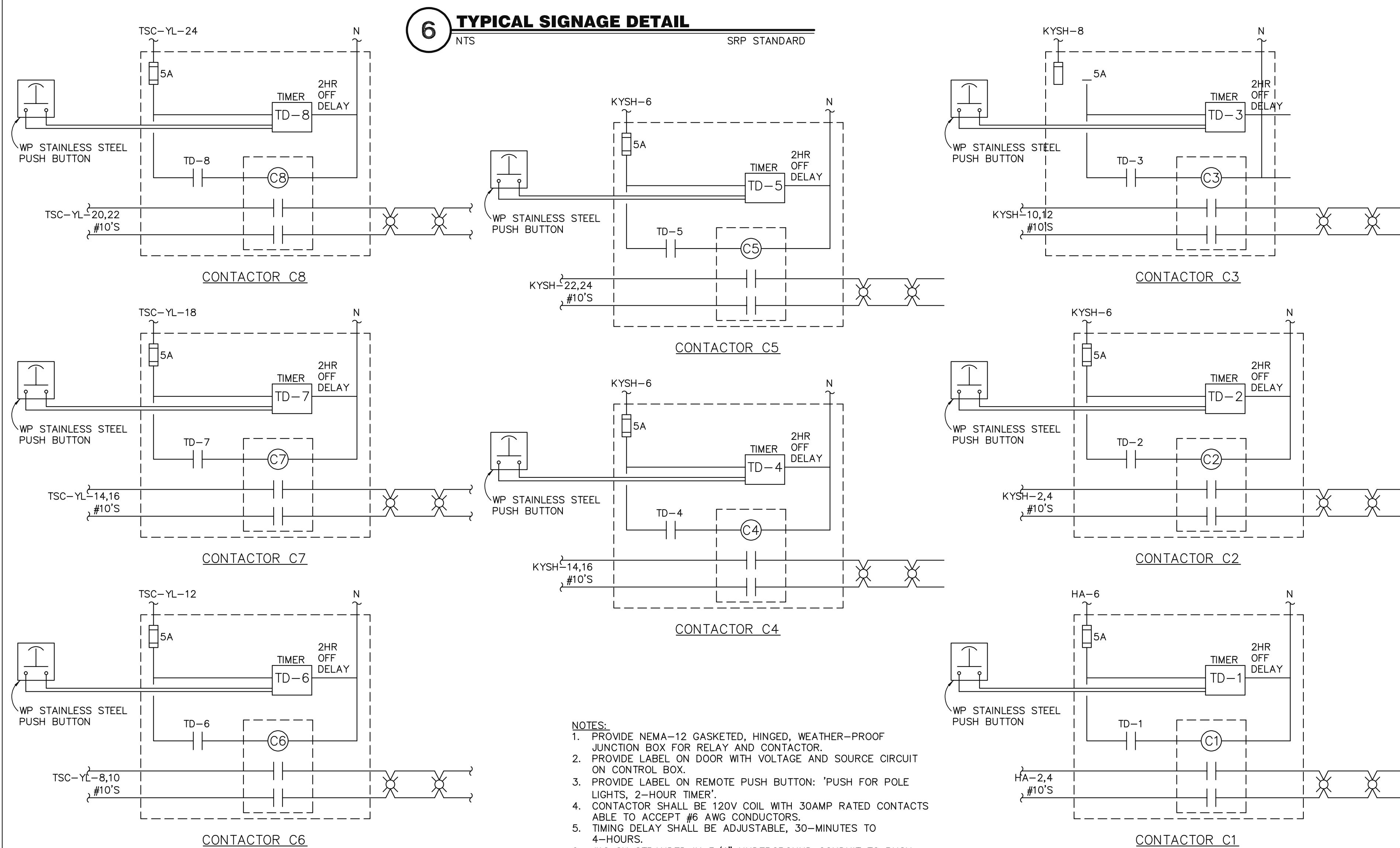
COLORS: Highways
Font Height: 1 1/2 inch only
Font: Helvetica Neue Lt 67 Mid Cn

4. SIGN POST: mate 502-CF
Steel Telespar with break-away post
Useful as
5. MOUNTING Metal banding with (2) 5/16" bolts with tamper-proof for attachments.
Top & Bottom :
Core-Drilling No Floor or Exc. Cement
See Size & Dim Get into round
6. pad Embedment
Hole diment: (2) Quikrete 50lb.

US Dept of Transportation, Manual on Uniform Traffic Control Devices:
<https://mutcd.fhwa.dot.gov/pdfs/2009r1r2/mutcd2009r1r2edition.pdf>

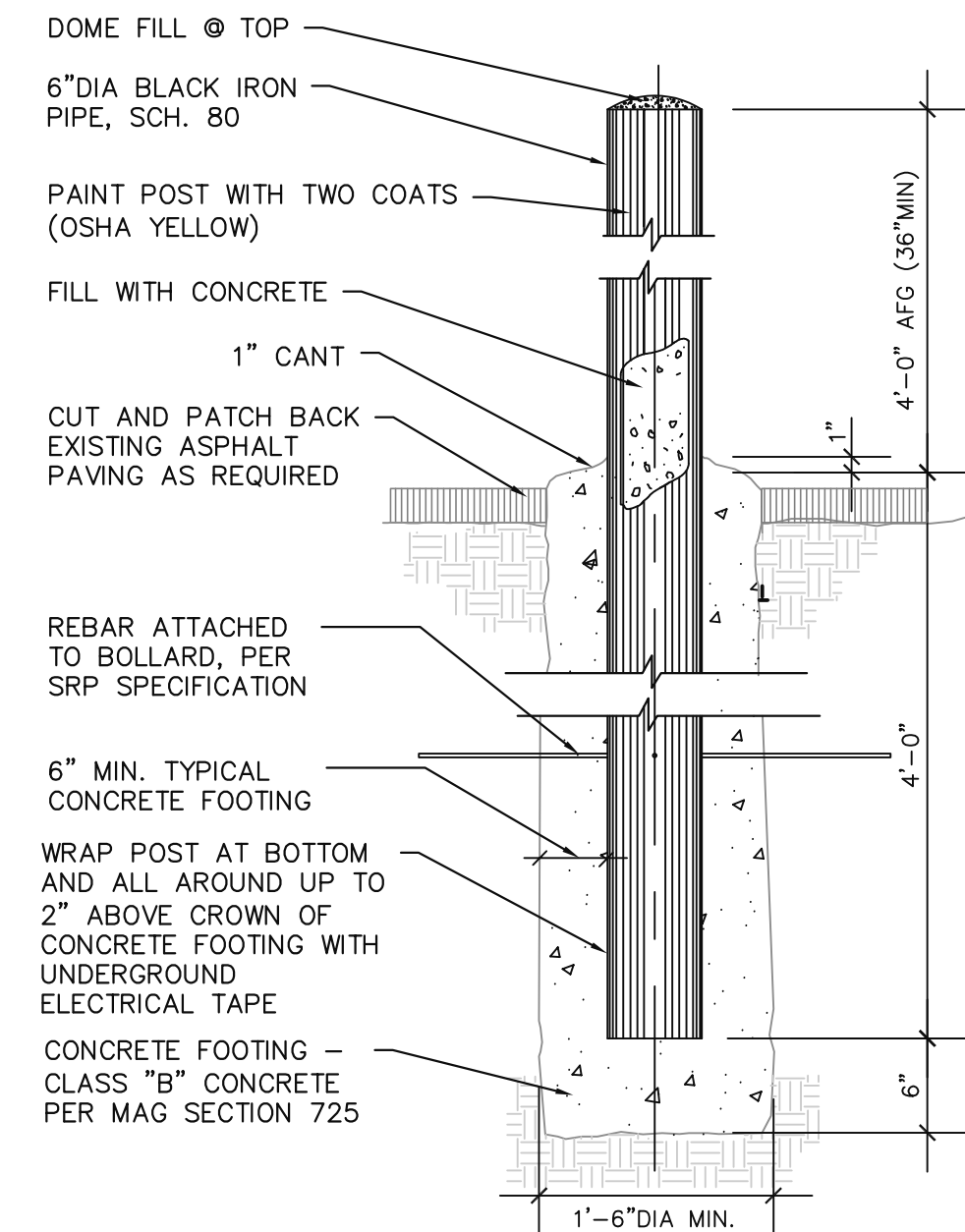


Exterior Traffic signs

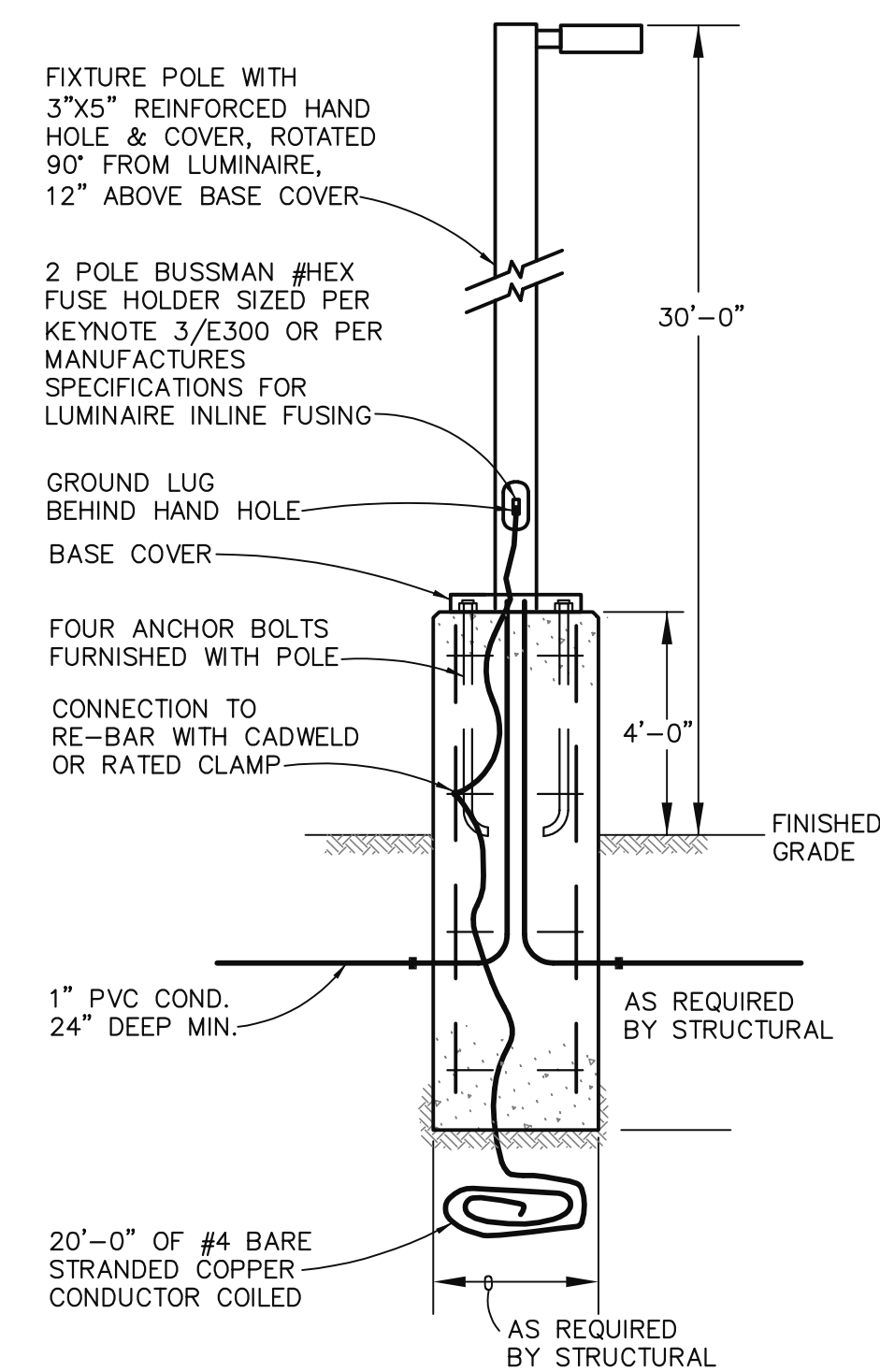


4 LIGHTING CONTACTORS

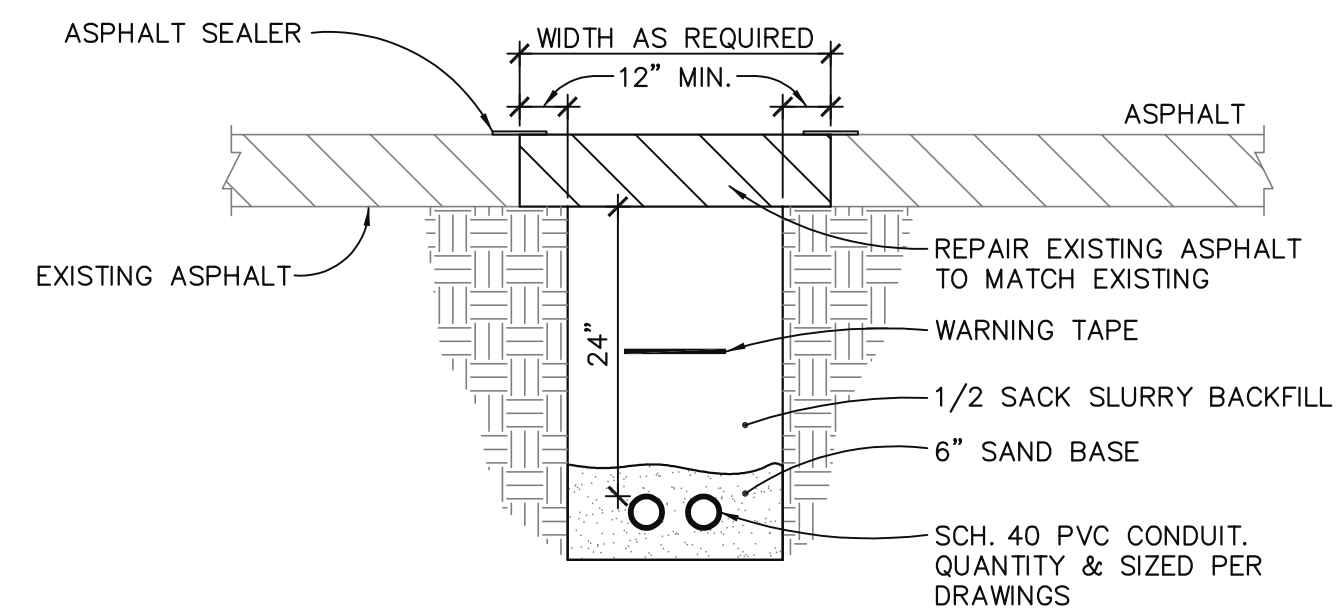
LIGHT FIXTURE SCHEDULE							
MARK	MANUFACTURER	CATALOG NO.	LAMPS		VOLT	MOUNT	REMARKS
			NO.	TYPE			
SA	LITHONIA	DSXW1-LED-20C-1000-40K-T4M-* DBBXD	-	431W LED 4000K	480	POLE	POLE LIGHT FIXTURE WITH TYPE 3 MEDIUM OPTICS, REFER TO DETAIL 3/E900
SP3	LITHONIA	DSX2-LED-P8-40K-T3M-480 SPA-DBBXD	-	431W LED 4000K	480	POLE	POLE LIGHT FIXTURE WITH TYPE 3 MEDIUM OPTICS, REFER TO DETAIL 3/E900
SP5	LITHONIA	DSX2-LED-P8-40K-T5M-480 SPA-DBBXD	-	431W LED 4000K	480	POLE	POLE LIGHT FIXTURE WITH TYPE 5 MEDIUM OPTICS, REFER TO DETAIL 3/E900
SP5W	LITHONIA	DSX2-LED-P8-40K-T5W-* SPA-DBBXD	-	431W LED 4000K	240/480	POLE	POLE LIGHT FIXTURE WITH TYPE 5 WIDE OPTICS, REFER TO DETAIL 3/E900
SPF	LITHONIA	DSX2-LED-P8-40K-TFTM-* SPA-DBBXD	-	431W LED 4000K	240/480	POLE	POLE LIGHT FIXTURE WITH FORWARD THROW OPTICS, REFER TO DETAIL 3/E900
SD3	LITHONIA	DSX2-LED-P2-40K-T3M-480 SPA-DBBXD	-	185W LED 4000K	480	POLE	POLE LIGHT FIXTURE WITH TYPE 3 MEDIUM OPTICS, REFER TO DETAIL 3/E900



5 TYPICAL 6" BOLLARD DETAIL - VEHICLE



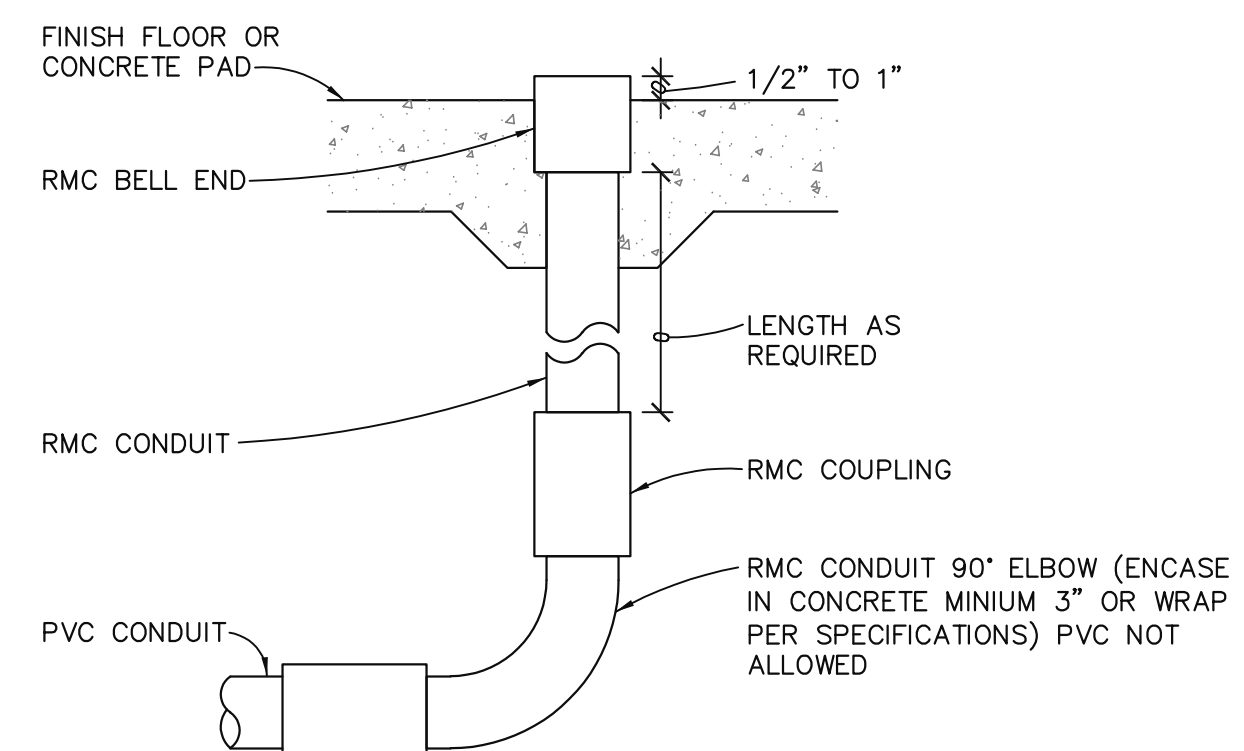
3 LIGHT POLE DETAIL



NOTES:

1. PROVIDE WARNING TAPE AT A DEPTH OF 12" BFG ABOVE CONDUIT BANK.
2. CONTRACTOR SHALL VERIFY ALL CONDUITS AND CONDUIT ROUTING.

1 UNDERGROUND CONDUIT



2 CONDUIT STUB UP TO ELECTRICAL EQUIPMENT

REV. NO.	DATE	DESCRIPTION	BY



**PRELIMINARY
NOT FOR
CONSTRUCTION**



SRP TSC
ELECTRICAL SITE WORK, PHASE-3
ELECTRICAL DETAILS

SCALE: AS NOTED	DRAWN BY:AM	SHEET # E900
FILENAME:	DESIGNED BY:SW	
PROJECT: -	DATE: 05/26/2022	

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PANEL:	LA	DC DEVICE TYPE:	Breaker	ENCLOSURE:	NEMA 3R	MAINS(A):	400A MCB	CONTINUOUS(A):	400			
LOCATION:	APPARATUS YARD	DEVICE FAMILY:	Bolt On	MOUNTING:	Surface	WIRING:	3-Phase 4-Wire	BUS SC RATING(A):	10000			
FED FROM:	TLA SEC			VOLTAGE:	208/120			FAULT CURRENT(A):	6301			
CKT	DESCRIPTION	NOTES	DEMAND CODE	VA	DC AMPS P	PHASE	DC AMPS P	VA	DEMAND CODE	NOTES	DESCRIPTION	CKT
1	STA, A1	APPARATUS YARD	HEATING	1500	50 2	A	50 2	1500				2
3	STA, A2	APPARATUS YARD	HEATING	1500	50 2	B	50 2	1500				4
5	STA, A3	APPARATUS YARD	HEATING	1500	50 2	C	50 2	1500				6
7	STA, A4	APPARATUS YARD	HEATING	1500	50 2	A	50 2	1500				8
9	STA, A4	APPARATUS YARD	HEATING	1500	50 2	B	50 2	1500				10
11	STA, A4	APPARATUS YARD	HEATING	1500	50 2	C	50 2	1500				12
13	STA, A4	APPARATUS YARD	HEATING	1500	50 2	A	50 2	1500				14
15	STA, A4	APPARATUS YARD	HEATING	1500	50 2	B	50 2	1500				16
17	STA, A4	APPARATUS YARD	HEATING	1500	50 2	C	50 2	1500				18
19	STA, A4	APPARATUS YARD	HEATING	1500	50 2	A	50 2	1500				20
21	STA, A4	APPARATUS YARD	HEATING	1500	50 2	B	50 2	1500				22
23	STA, A4	APPARATUS YARD	HEATING	1500	50 2	C	50 2	1500				24
25	STA, A4	APPARATUS YARD	HEATING	1500	50 2	A	50 2	1500				26
27	STA, A4	APPARATUS YARD	HEATING	1500	50 2	B	50 2	1500				28
29	STA, A4	APPARATUS YARD	HEATING	1500	50 2	C	50 2	1500				30
31	STA, A4	APPARATUS YARD	HEATING	1500	50 2	A	50 2	1500				32
33	STA, A4	APPARATUS YARD	HEATING	1500	50 2	B	50 2	1500				34
35	STA, A4	APPARATUS YARD	HEATING	1500	50 2	C	50 2	1500				36
37	F LA1		NONE	12000	200 3	A	200 3	12000	NONE		F LA2	38
39	F LA1		NONE	12000	200 3	B	200 3	12000	NONE		F LA2	40
41	F LA1		NONE	12000	200 3	C	200 3	12000	NONE		F LA2	42
ALL CONNECTED												
TOTAL CONNECTED		KVA	MAX PH AMPS	* PHASE TOTALS		VA	AMPS	BUS TOTALS		KVA		
TOTAL DEMAND		84.00	237.3	* A-N		28500.0	237.3	CONNECTED		84.00		
TOTAL DESIGN		84.00	237.3	* B-N		28500.0	237.3	DEMAND		84.00		
		84.00	237.3	* C-N		27000.0	224.8	DESIGN		84.00		
NEW PANEL												

PANEL:	LA1	DC DEVICE TYPE:	Breaker	ENCLOSURE:	NEMA 3R	MAINS(A):	200A MCB	CONTINUOUS(A):	200			
LOCATION:	APPARATUS YARD	DEVICE FAMILY:	Bolt On	MOUNTING:	Surface	WIRING:	3-Phase 4-Wire	BUS SC RATING(A):	10000			
FED FROM:	LA			VOLTAGE:	208/120			FAULT CURRENT(A):	4142			
CKT	DESCRIPTION	NOTES	DEMAND CODE	VA	DC AMPS P	PHASE	DC AMPS P	VA	DEMAND CODE	NOTES	DESCRIPTION	CKT
1	STA, B1	APPARATUS YARD	HEATING	1500	50 2	A	50 2	1500	HEATING	APPARATUS YARD	STA, B7	2
3	STA, B2	APPARATUS YARD	HEATING	1500	50 2	B	50 2	1500	HEATING	APPARATUS YARD	STA, B8	4
5	STA, B3	APPARATUS YARD	HEATING	1500	50 2	C	50 2	1500	HEATING	APPARATUS YARD	STA, B9	6
7	STA, B4	APPARATUS YARD	HEATING	1500	50 2	A	50 2	1500	HEATING	APPARATUS YARD	STA, B10	8
9	STA, B5	APPARATUS YARD	HEATING	1500	50 2	B	50 2	1500	HEATING	APPARATUS YARD	STA, B11	10
11	STA, B6	APPARATUS YARD	HEATING	1500	50 2	C	50 2	1500	HEATING	APPARATUS YARD	STA, B12	12
13				1500	50 2	A	50 2	1500				14
15				1500	50 2	B	50 2	1500				16
17				1500	50 2	C	50 2	1500				18
19				1500	50 2	A	50 2	1500				20
21				1500	50 2	B	50 2	1500				22
23				1500	50 2	C	50 2	1500				24
25				1500	50 2	A	50 2	1500				26
27				1500	50 2	B	50 2	1500				28
29				1500	50 2	C	50 2	1500				30
31				1500	50 2	A	50 2	1500				32
33				1500	50 2	B	50 2	1500				34
35				1500	50 2	C	50 2	1500				36
37				1500	50 2	A	50 2	1500				38
39				1500	50 2	B	50 2	1500				40
41				1500	50 2	C	50 2	1500				42
ALL CONNECTED												
TOTAL CONNECTED		KVA	MAX PH AMPS	* PHASE TOTALS		VA	AMPS	BUS TOTALS		KVA		
TOTAL DEMAND		36.00	99.9	* A-N		12000.0	99.9	CONNECTED		36.00		
TOTAL DESIGN		36.00	99.9	* B-N		12000.0	99.9	DEMAND		36.00		
		36.00	99.9	* C-N		12000.0	99.9	DESIGN		36.00		
NEW PANEL												

PANEL LOCATION: FED FROM:	LA2 APPARATUS YARD LA	DC DEVICE TYPE: DEVICE FAMILY:		Breaker Bolt On	ENCLOSURE: MOUNTING: VOLTAGE:	NEMA 3R Surface 208/120	MAINS(A): WIRING:	200A MCB 3-Phase 4-Wire	CONTINUOUS(A): BUS SC RATING(A): FAULT CURRENT(A):	200 10000 3144		
CKT	DESCRIPTION	NOTES	DEMAND CODE	VA	DC AMPS P	PHASE	DC AMPS P	VA	DEMAND CODE	NOTES	DESCRIPTION	CKT
1	STA, C1	APPARATUS YARD	HEATING	1500	50 2	A	50 2	1500	HEATING	APPARATUS YARD	STA, D3	2
3	STA, C2	APPARATUS YARD	HEATING	1500	50 2	B	50 2	1500	HEATING	APPARATUS YARD	STA, D4	4
5	STA, C3	APPARATUS YARD	HEATING	1500	50 2	C	50 2	1500	HEATING	APPARATUS YARD	STA, E1	6
7	STA, C4	APPARATUS YARD	HEATING	1500	50 2	A	50 2	1500	HEATING	APPARATUS YARD	STA, E2	8
9	STA, D1	APPARATUS YARD	HEATING	1500	50 2	B	50 2	1500	HEATING	APPARATUS YARD	STA, E3	10
11	STA, D2	APPARATUS YARD	HEATING	1500	50 2	C	50 2	1500	HEATING	APPARATUS YARD	STA, E4	12
13	STA, D3	APPARATUS YARD	HEATING	1500	50 2	A	50 2	1500	HEATING	APPARATUS YARD	STA, E4	14
15	STA, D4	APPARATUS YARD	HEATING	1500	50 2	B	50 2	1500	HEATING	APPARATUS YARD	STA, E4	16
17	STA, D5	APPARATUS YARD	HEATING	1500	50 2	C	50 2	1500	HEATING	APPARATUS YARD	STA, E4	18
19	STA, D6	APPARATUS YARD	HEATING	1500	50 2	A	50 2	1500	HEATING	APPARATUS YARD	STA, E4	20
21	STA, D7	APPARATUS YARD	HEATING	1500	50 2	B	50 2	1500	HEATING	APPARATUS YARD	STA, E4	22
23	STA, D8	APPARATUS YARD	HEATING	1500	50 2	C	50 2	1500	HEATING	APPARATUS YARD	STA, E4	24
25	STA, D9	APPARATUS YARD	HEATING	1500	50 2	A	50 2	1500	HEATING	APPARATUS YARD	STA, E4	26
27	STA, D10	APPARATUS YARD	HEATING	1500	50 2	B	50 2	1500	HEATING	APPARATUS YARD	STA, E4	28
29	STA, D11	APPARATUS YARD	HEATING	1500	50 2	C	50 2	1500	HEATING	APPARATUS YARD	STA, E4	30
31	STA, D12	APPARATUS YARD	HEATING	1500	50 2	A	50 2	1500	HEATING	APPARATUS YARD	STA, E4	32
33	STA, D13	APPARATUS YARD	HEATING	1500	50 2	B	50 2	1500	HEATING	APPARATUS YARD	STA, E4	34
35	STA, D14	APPARATUS YARD	HEATING	1500	50 2	C	50 2	1500	HEATING	APPARATUS YARD	STA, E4	36
37	STA, D15	APPARATUS YARD	HEATING	1500	50 2	A	50 2	1500	HEATING	APPARATUS YARD	STA, E4	38
39	STA, D16	APPARATUS YARD	HEATING	1500	50 2	B	50 2	1500	HEATING	APPARATUS YARD	STA, E4	40
41	STA, D17	APPARATUS YARD	HEATING	1500	50 2	C	50 2	1500	HEATING	APPARATUS YARD	STA, E4	42
ALL CONNECTED												
TOTAL CONNECTED		KVA	MAX PH AMPS	* PHASE TOTALS		VA	AMPS	BUS TOTALS		KVA		
TOTAL DEMAND		36.00	99.9	* A-N		12000.0	99.9	CONNECTED		36.00		
TOTAL DESIGN		36.00	99.9	* B-N		12000.0	99.9	DEMAND		36.00		
		36.00	99.9	* C-N		12000.0	99.9	DESIGN		36.00		
NEW PANEL												

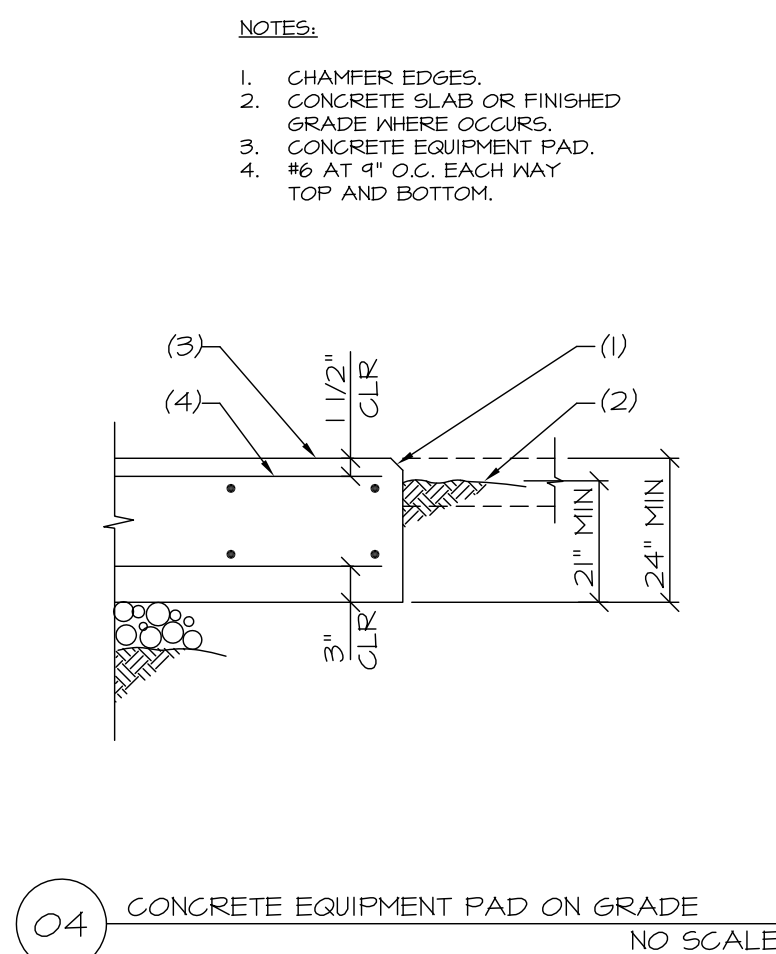
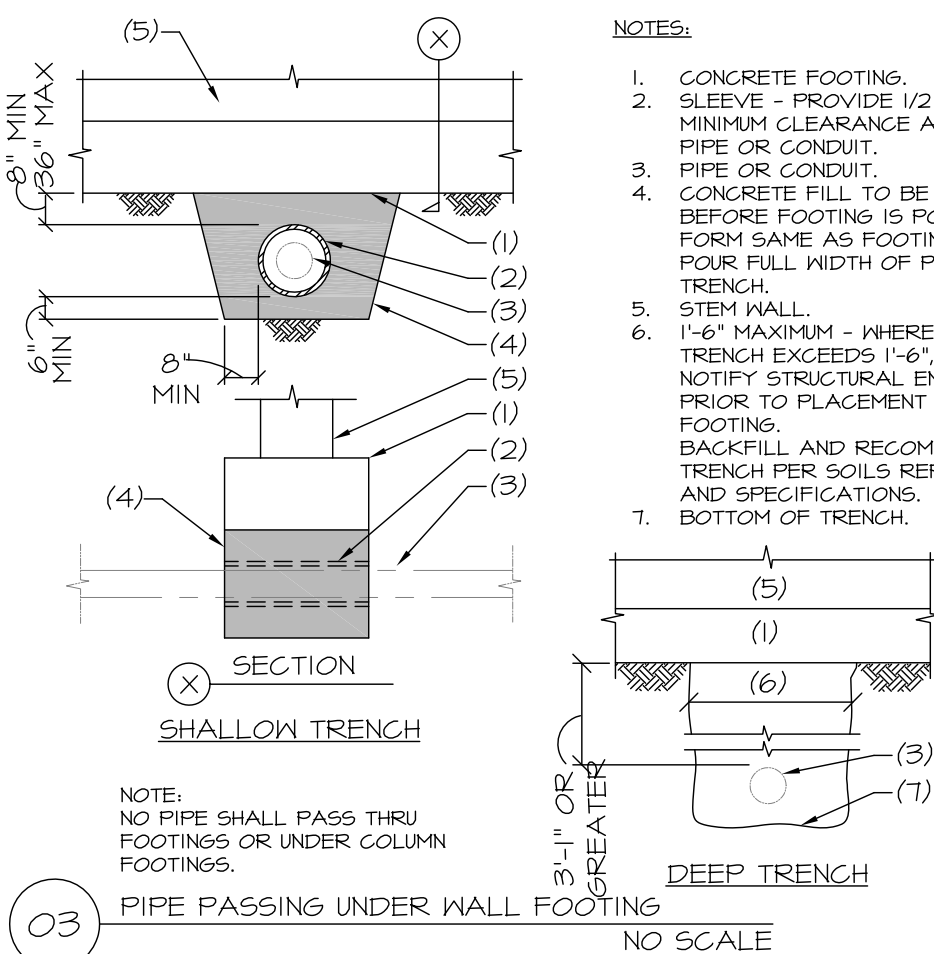
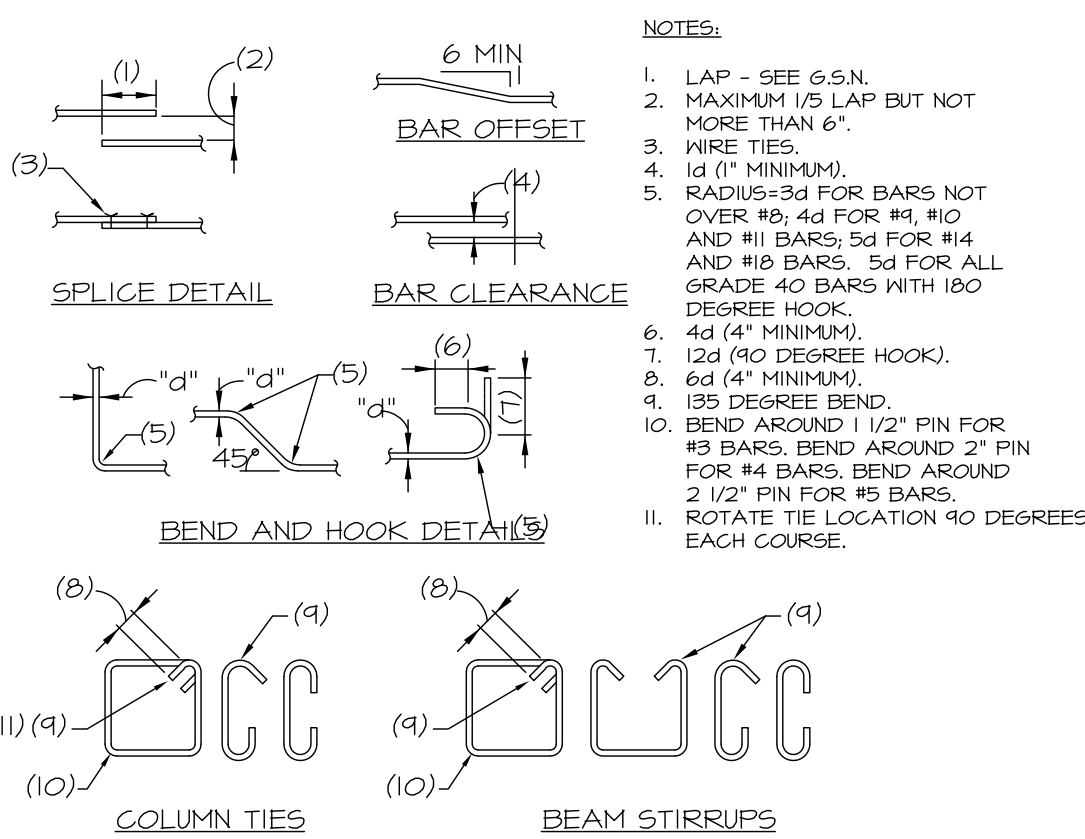
PANEL LOCATION: FED FROM:		HA APPARATUS YARD SES		DC DEVICE TYPE: Breaker Bolt On		ENCLOSURE: MOUNTING: VOLTAGE:		NEMA 3R Surface 480/277		MAINS(A): 250A MCB WIRING: 3-Phase 4-Wire		CONTINUOUS(A): BUS SC RATING(A): FAULT CURRENT(A):		250 14000 22903	
CKT	DESCRIPTION		NOTES		DEMAND CODE		VA	DC AMPS P	PHASE	DC AMPS P	VA	DEMAND CODE	NOTES	DESCRIPTION	CKT
1	SPARE				SPARE		0	20 2	A	20 2	2586	LIGHTING	APPARATUS YARD	POLE LIGHTS	2
3	SPARE				SPARE		0	20 2	B	20 1	2586	GENERAL LOAD	APPARATUS YARD	LTG CTRL C1	4
5	SPARE				SPARE		0	20 2	A	20 2	200				6
7	SPARE				SPARE		0	20 2	B	20 2	0	SPARE		SPARE	8
9	SPARE				SPARE		0	20 2	C	20 2	0	SPARE		SPARE	10
11	SPARE				SPARE		0	20 2	A	20 2	0	SPARE		SPARE	12
13	SPARE				SPARE		0	20 2	B	20 2	0	SPARE		SPARE	14
15	SPARE				SPARE		0	20 2	C	20 2	0	SPARE		SPARE	16
17	SPARE				SPARE		0	20 2	A	20 2	0	SPARE		SPARE	18
19	SPARE				SPARE		0	20 2	B	20 2	0	SPARE		SPARE	20
21	SPARE				SPARE		0	20 2	C	20 2	0	SPARE		SPARE	22
23	SPARE				SPARE		0	20 2	A	20 2	0	SPARE		SPARE	24
25	SPARE				SPARE		0	20 2	B	20 2	0	SPARE		SPARE	26
27	SPARE				SPARE		0	20 2	C	20 2	0	SPARE		SPARE	28
29	SPARE				SPARE		0	20 2	A	20 2	0	SPARE		SPARE	30
31	SPARE				SPARE		0	20 2	B	20 2	0	SPARE		SPARE	32
33	SPARE				SPARE		0	20 2	C	20 2	0	SPARE		SPARE	34
35	SPARE				SPARE		0	20 2	A	20 2	0	SPARE		SPARE	36
37	SPARE				SPARE		0	20 2	B	20 2	0	SPARE		SPARE	38
39	SPARE				SPARE		0	20 2	C	20 2	0	SPARE		SPARE	40
41	SPARE				SPARE		0	20 2	A	20 2	0	SPARE		SPARE	42
43	SPARE				SPARE		0	20 2	B	20 2	0	SPARE		SPARE	44
45	SPARE				SPARE		0	20 2	C	20 2	0	SPARE		SPARE	46
47	SPARE				SPARE		0	20 2	A	20 2	0	SPARE		SPARE	48
49	SPARE				SPARE		0	20 2	B	20 2	0	SPARE		SPARE	50
51	SPARE				SPARE		0	20 2	C	20 2	0	SPARE		SPARE	52
53	SPARE				SPARE		0	20 2	A	20 2	0	SPARE		SPARE	54
55	SPARE				SPARE		0	20 2	B	20 2	0	SPARE		SPARE	56
57	SPARE				SPARE		0	20 2	C	20 2	0	SPARE		SPARE	58
59	SPARE				SPARE		0	20 2	A	20 2	0	SPARE		SPARE	60
61	SPARE				SPARE		0	20 2	B	20 2	0	SPARE		SPARE	62
63	SPARE				SPARE		0	20 2	C	20 2	0	SPARE		SPARE	64
65	SPARE				SPARE		0	20 2	A	20 2	0	SPARE		SPARE	66
67	SPARE				SPARE		0	20 2	B	20 2	0	SPARE		SPARE	68
69	SPARE				SPARE		0	20 2	C	20 2	0	SPARE		SPARE	70
71	SPARE				SPARE		0	20 2	A	20 2	0	SPARE		SPARE	72
73	SPARE				SPARE		0	20 2	B	20 2	0	SPARE		SPARE	74
75	SPARE				SPARE		0	20 2	C	20 2	0	SPARE		SPARE	76
77	SPARE				SPARE		0	20 2	A	20 2	0	SPARE		SPARE	78
79	SPARE				SPARE		0	20 2	B	20 2	0	SPARE		SPARE	80
81	SPARE				SPARE		0	20 2	C	20 2	0	SPARE		SPARE	82
83	SPARE				SPARE		0	20 2	A	20 2	0	SPARE		SPARE	84
85	SPARE				SPARE		0	20 2	B	20 2	0	SPARE		SPARE	86
87	SPARE				SPARE		0	20 2	C	20 2	0	SPARE		SPARE	88
89	SPARE				SPARE		0	20 2	A	20 2	0	SPARE		SPARE	90
91	SPARE				SPARE		0	20 2	B	20 2	0	SPARE		SPARE	92
93	SPARE				SPARE		0	20 2	C	20 2	0	SPARE		SPARE	94
95	SPARE				SPARE		0	20 2	A	20 2	0	SPARE		SPARE	96
97	SPARE				SPARE		0	20 2	B	20 2	0	SPARE		SPARE	98
99	SPARE				SPARE		0	20 2	C	20 2	0	SPARE		SPARE	100
101	SPARE				SPARE		0	20 2	A	20 2	0	SPARE		SPARE	102
103	SPARE				SPARE		0	20 2	B	20 2	0	SPARE		SPARE	104
105	SPARE				SPARE		0	20 2	C	20 2	0	SPARE		SPARE	106
107	SPARE				SPARE		0	20 2	A	20 2	0	SPARE		SPARE	108
109	SPARE				SPARE		0	20 2	B	20 2	0	SPARE		SPARE	110
111	SPARE				SPARE		0	20 2	C	20 2	0	SPARE		SPARE	112
113	SPARE				SPARE		0	20 2	A	20 2	0	SPARE		SPARE	114
115	SPARE				SPARE		0	20 2	B	20 2	0	SPARE		SPARE	116
117	SPARE				SPARE		0	20 2	C	20 2	0	SPARE		SPARE	118
119	SPARE				SPARE		0	20 2	A	20 2	0	SPARE		SPARE	120
121	SPARE				SPARE		0	20 2	B	20 2	0	SPARE		SPARE	122
123	SPARE				SPARE		0	20 2	C	20 2	0	SPARE		SPARE	124
125	SPARE				SPARE		0	20 2	A	20 2	0	SPARE		SPARE	126
127	SPARE				SPARE		0	20 2	B	20 2	0	SPARE		SPARE	128
129	SPARE				SPARE		0	20 2	C	20 2	0	SPARE		SPARE	130
131	SPARE				SPARE		0	20 2	A	20 2	0	SPARE		SPARE	132
133	SPARE				SPARE		0	20 2	B	20 2	0	SPARE		SPARE	134
135	SPARE				SPARE		0	20 2	C	20 2	0	SPARE		SPARE	136
137	SPARE				SPARE		0	20 2	A	20 2	0	SPARE		SPARE	138
139	SPARE				SPARE		0	20 2	B	20 2	0	SPARE		SPARE	140
141	SPARE				SPARE		0	20 2	C	20 2	0	SPARE		SPARE	142
143	SPARE				SPARE		0	20 2	A	20 2	0	SPARE		SPARE	144
145	SPARE				SPARE		0	20 2	B	20 2	0	SPARE		SPARE	146
147	SPARE				SPARE		0	20 2	C	20 2	0	SPARE		SPARE	148
149	SPARE				SPARE		0	20 2	A	20 2	0	SPARE		SPARE	150
151	SPARE				SPARE		0	20 2	B	20 2	0	SPARE		SPARE	152
153	SPARE				SPARE		0	20 2	C	20 2	0	SPARE		SPARE	154
155	SPARE				SPARE		0	20 2	A	20 2	0	SPARE		SPARE	156
157	SPARE				SPARE		0	20 2	B	20 2	0	SPARE		SPARE	158
159	SPARE				SPARE		0	20 2	C	20 2	0	SPARE		SPARE	160
161	SPARE				SPARE		0	20 2	A	20 2	0	SPARE		SPARE	162
163	SPARE				SPARE		0	20 2	B	20 2	0	SPARE		SPARE	164
165	SPARE				SPARE		0	20 2	C	20 2	0	SPARE		SPARE	166
167	SPARE				SPARE		0	20 2	A	20 2	0	SPARE		SPARE	168
169	SPARE				SPARE		0	20 2	B	20 2	0	SPARE		SPARE	170
171	SPARE				SPARE		0	20 2	C	20 2	0	SPARE		SPARE	172
173	SPARE				SPARE		0	20 2	A	20 2	0	SPARE		SPARE	174
175	SPARE				SPARE		0	20 2	B	20 2	0	SPARE		SPARE	176
177	SPARE				SPARE		0	20 2	C	20 2	0	SPARE		SPARE	178
179	SPARE				SPARE		0	20 2	A	20 2	0	SPARE		SPARE	180
181	SPARE				SPARE		0	20 2	B	20 2	0	SPARE		SPARE	182
183	SPARE				SPARE		0	20 2	C	20 2	0	SPARE		SPARE	184
185	SPARE				SPARE		0	20 2	A	20 2	0	SPARE		SPARE	186
187	SPARE				SPARE		0	20 2	B	20 2	0	SPARE		SPARE	188
189	SPARE				SPARE		0	20 2	C	20 2	0	SPARE		SPARE	190
191	SPARE				SPARE		0	20 2	A	20 2	0	SPARE		SPARE	192
193	SPARE				SPARE		0	20 2	B	20 2	0	SPARE		SPARE	194
195	SPARE				SPARE		0	20 2	C	20 2	0	SPARE		SPARE	196
197	SPARE				SPARE		0	20 2	A	20 2	0	SPARE		SPARE	198
199	SPARE				SPARE		0	20 2	B	20 2	0	SPARE		SPARE	200
201	SPARE				SPARE		0	20 2	C	20 2	0	SPARE		SPARE	202
203	SPARE				SPARE		0	20 2	A	20 2	0	SPARE		SPARE	204
205	SPARE				SPARE		0	20 2	B	20 2	0	SPARE		SPARE	206
207	SPARE				SPARE		0	20 2	C	20 2	0	SPARE		SPARE	208
209	SPARE				SPARE		0	20 2	A	20 2	0	SPARE		SPARE	210
211	SPARE				SPARE		0	20 2	B	20 2	0	SPARE		SPARE	212
213	SPARE				SPARE		0	20 2	C	20 2	0	SPARE		SPARE	214
215	SPARE				SPARE		0	20 2	A	20 2	0	SPARE		SPARE	216
217	SPARE				SPARE		0	20 2	B	20 2	0	SPARE		SPARE	218
219	SPARE				SPARE		0	20 2	C	20 2	0	SPARE		SPARE	220
221	SPARE				SPARE		0	20 2	A	20 2	0	SPARE		SPARE	222
223	SPARE				SPARE		0	20 2	B	20 2	0	SPARE		SPARE	224
225	SPARE				SPARE		0	20 2	C	20 2	0	SPARE		SPARE	226
227	SPARE				SPARE		0	20 2	A	20 2	0	SPARE		SPARE	228
229	SPARE				SPARE		0	20 2	B	20 2	0	SPARE		SPARE	230
231	SPARE				SPARE		0	20 2	C	20 2	0	SPARE		SPARE	232
233	SPARE				SPARE		0	20 2	A	20 2	0	SPARE		SPARE	234
235	SPARE				SPARE		0	20 2	B	20 2	0	SPARE		SPARE	236
237	SPARE				SPARE		0	20 2	C	20 2	0	SPARE		SPARE	238
239	SPARE				SPARE		0	20 2	A	20 2	0	SPARE		SPARE	240
241	SPARE				SPARE		0	20 2	B	20 2	0	SPARE		SPARE	242
243	SPARE				SPARE		0	20 2	C	20 2	0	SPARE		SPARE	244

PANEL LOCATION: KYSH JBOX	TRUCK SCALE HOUSE	DC DEVICE TYPE: Breaker	DEVICE FAMILY: Bolt On	ENCLOSURE MOUNTING: VOLTAGE:	NEMA 3R Surface 480/277	MAINS(A): WIRING: 200A MCB 3-Phase 4-Wire	CONTINUOUS(A): BUS SC RATINGS(A): 14000	200 9119				
CKT	DESCRIPTION	NOTES	DEMAND CODE	VA	DC AMPS P	PHASE	DC AMPS P	VA	DEMAND CODE	NOTES	DESCRIPTION	CKT
1	SPARE		SPARE	0	20 2	A	20 2	1724	LIGHTING	RECLAMATION	POLE LIGHTS	2
3	SPARE		SPARE	0	20 2	B	20 2	1724			LTG CTRL C2	4
5	SPARE		SPARE	0	20 2	A	20 1	200	GENERAL LOAD	RECLAMATION	LTG CTRL C2	6
9	SPARE		SPARE	0	20 2	A	20 1	200	GENERAL LOAD	ROAD	LTG CTRL C3	8
11	SPARE		SPARE	0	20 2	B	20 1	647	LIGHTING	ROAD	POLE LIGHTS	10
13	SPARE		SPARE	0	20 2	C	20 1	647			POLE LIGHTS	12
15	SPARE		SPARE	0	20 2	A	20 2	862	LIGHTING	RETENTION	POLE LIGHTS	14
17	SPARE		SPARE	0	20 2	B	20 1	862			LTG CTRL C4	16
19						A	20 1	200	GENERAL LOAD	RETENTION	LTG CTRL C4	18
21						B	20 1	200	GENERAL LOAD	WH AREA	LTG CTRL C5	20
23						C	20 2	2586	LIGHTING	WH AREA	POLE LIGHTS	22
25						A		2586			POLE LIGHTS	24
27						B						26
29						C						28
31						A						30
33						B						32
35						C						34
37						A						36
39	XFMR KYTSH	PANEL KYSL	SPACE	0	70 2	B						38
41				0	70 2	C						40
42												42
ALL CONNECTED												
TOTAL CONNECTED												
TOTAL DEMAND												
TOTAL DESIGN												
EXISTING PANEL												

CONC PSI BAR LOCATION SIZE (METRIC)	CLASS B TENSION SPLICE LENGTHS						COMP. BARS	
	REGULAR	TOP	REGULAR	TOP	REGULAR	TOP	STD LAP	ENCLOSED W/ SPIRAL TIES
#3 (10)	24"	31"	19"	24"	17"	22"	12"	12"
#4 (13)	32"	41"	25"	32"	22"	24"	15"	12"
#5 (16)	39"	51"	31"	40"	28"	36"	19"	14"
#6 (19)	47"	61"	37"	48"	33"	43"	23"	17"
#7 (22)	64"	84"	54"	70"	44"	63"	26"	20"
#8 (25)	78"	102"	62"	80"	55"	72"	30"	23"
#9 (24)	88"	115"	70"	91"	63"	81"	34"	25"
#10 (32)	99"	129"	79"	102"	70"	91"	36"	28"
#11 (36)	110"	143"	87"	113"	78"	101"	42"	31"

- NOTES:
- TOP BARS ARE ANY HORIZONTAL BARS PLACED SO THAT MORE THAN 12" OF FRESH CONCRETE IS CAST IN THE MEMBER BELOW THE REINFORCEMENT.
 - LAP SPLICES SHALL BE CLASS "B" TENSION LAP SPLICES PER LATEST EDITION OF ACI 318 UNLESS SPECIFICALLY NOTED OTHERWISE ON THE DRAWINGS OR SCHEDULES.
 - CONTACT STRUCTURAL ENGINEER IF CLEAR SPACING OF REINFORCEMENT IS LESS THAN OR EQUAL TO 2 BAR DIAMETERS (2db), OR IF CLEAR COVER IS LESS THAN THE BAR DIAMETER (db).
 - THIS TABLE IS BASED ON NORMAL WEIGHT CONCRETE.
 - FOR ADDITIONAL INFORMATION, SEE G.S.N., PLANS, SCHEDULES AND DETAILS.

01 LAP SCHEDULE FOR REINFORCING STEEL IN CONCRETE
NO SCALE



BUILDING CODE:

2018 EDITION OF THE INTERNATIONAL BUILDING CODE.

LOADS:
EQUIPMENT PAD LIVE LOAD = 430 PSF.

FOUNDATIONS: SOIL REPORT BY WESTERN TECHNOLOGIES, INC., JOB NO. 2121JA218. SPREAD FOOTINGS SHALL BEAR ON FIRM UNDISTURBED SOIL 2'-0" MINIMUM BELOW GRADE. FINISHED GRADE IS DEFINED AS TOP OF PAD AND LOWEST ADJACENT GRADE WITHIN 5 FEET FOR PERIMETER FOOTINGS. ALLOWABLE DESIGN SOIL BEARING VALUE = 1,500 PSF.

REFER TO SOILS REPORT FOR ADDITIONAL INFORMATION PRIOR TO COMMENCEMENT OF EARTHWORK. SOILS ENGINEER SHALL INSPECT FOUNDATION EXCAVATIONS PRIOR TO PLACEMENT OF CONCRETE.

CONCRETE: MINIMUM 28 DAY STRENGTH 3,000 PSI UNLESS NOTED OTHERWISE. USE CLASS A CONCRETE PER SRP SPECIFICATIONS FOR EXPOSURE CATEGORY F2 AND TYPE II CEMENT WITH W/C = 0.50.

FOUNDATIONS (DESIGN BASED ON 2,500 PSI) ----- 4,000 PSI

GENERAL: ALL CAST-IN-PLACE CONCRETE CONSTRUCTION SHALL CONFORM TO THE LATEST EDITION OF THE ACI. MECHANICALLY VIBRATE ALL CONCRETE WHEN PLACED UNLESS NOTED OTHERWISE. FOR CONCRETE WITHOUT PLASTICIZER, MAXIMUM SLUMP 4 1/2" AT POINT OF PLACEMENT U.N.O. IF PLASTICIZER IS USED, A HIGHER FINAL SLUMP MAY BE ALLOWED UPON STRUCTURAL ENGINEER'S APPROVAL.

FOR REINFORCING INFORMATION, SEE REINFORCING SECTION OF G.S.N., PLANS, SCHEDULES AND DETAILS.

UNLESS NOTED OTHERWISE ON THE DRAWINGS, THE EMBEDMENT OF CONDUITS, PIPES, SLEEVES, ETC. OF ANY MATERIAL SHALL NOT BE PERMITTED WITHIN ANY CONCRETE STRUCTURAL ELEMENT WITHOUT THE EXPRESSED APPROVAL OF THE STRUCTURAL ENGINEER.

FLY ASH - IF PERMITTED BY ARCHITECTURAL SPECIFICATIONS, SHALL BE LIMITED TO 25% OF TOTAL CEMENTITIOUS MATERIALS BY WEIGHT. FLY ASH SHALL BE INCLUDED IN THE CALCULATION OF W/C RATIOS SPECIFIED ABOVE. FLY ASH ADDITIVES SHALL NOT BE USED ON SLABS WITH A BURNISHED OR ACID FINISH.

TEST DATA FOR EACH CONCRETE MIX SHALL BE SUBMITTED FOR REVIEW PER CHAPTER 5 OF ACI 318. REFERENCE FIGURE R5.3 FOR SUBMITTAL REQUIREMENTS AND OPTIONS. CONCRETE MIX DESIGNS THAT ARE SUBMITTED WITHOUT THE APPROPRIATE TEST DATA CANNOT BE REVIEWED.

REINFORCING: ALL REINFORCING PER CRSI SPECIFICATIONS AND HANDBOOK. ASTM A615 (Fy = 60 KSI / GRADE 60) DEFORMED BARS FOR ALL BARS #5 AND LARGER (AND FOR ALL CONCRETE WALLS, BEAMS, SLABS AND COLUMN REINFORCING). ASTM A615 (Fy = 40 KSI / GRADE 40) DEFORMED BARS FOR ALL BARS #4 AND SMALLER. WELDED WIRE FABRIC PER ASTM A185. WIRE PER ASTM A82. NO TACK WELDING OF REINFORCING BARS ALLOWED WITHOUT PRIOR REVIEW OF PROCEDURE WITH THE STRUCTURAL ENGINEER. LATEST ACI CODE AND DETAILING MANUAL APPLY. CLEAR CONCRETE COVERAGES AS FOLLOWS:

CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH ----- 3"
EXPOSED TO EARTH OR WEATHER ----- 2"
#6 OR LARGER ----- 2"
#5 AND SMALLER ----- 1 1/2"
ALL OTHER PER LATEST EDITION OF ACI 318

ALL REINFORCING SHALL BE CHAIRED TO ENSURE PROPER CLEARANCES. SUPPORT OF FOUNDATION REINFORCING MUST PROVIDE ISOLATION FROM MOISTURE/CORROSION BY USE OF A PLASTIC OR CONCRETE CHAIR. DUCT-TAPE COVERED REINFORCING IS NOT AN ACCEPTABLE CHAIR.

ALL DIMENSIONS REFERENCED IN DRAWINGS AS "CLEAR" SHALL BE FROM FACE OF STRUCTURE TO EDGE OF REINFORCING, AND SHALL NOT BE LESS THAN STATED, NOR GREATER THAN "CLEAR" DIMENSION PLUS 3/8". ALL OTHERS SHALL BE PLUS OR MINUS 1/4" TYPICAL UNLESS NOTED OTHERWISE.

FIELD BENDING OR STRAIGHTENING OF DEFORMED BARS SHALL BE LIMITED TO #5 BARS AND SMALLER AND SHALL BE FIELD BENT OR STRAIGHTENED ONLY ONCE. ANY BEND SHALL BE LIMITED TO 90 DEGREES. IF FIELD BENDING OR STRAIGHTENING OF #6 BARS OR LARGER IS REQUIRED, OR IF A SECOND BEND IS REQUIRED FOR #5 BARS AND SMALLER, HEAT SHALL BE APPLIED FOR BENDING OR STRAIGHTENING. CONTRACTOR SHALL SUBMIT PROCEDURE FOR APPLYING HEAT TO ENGINEER FOR REVIEW AND APPROVAL PRIOR TO BENDING OR STRAIGHTENING BARS.

LAP SPLICES IN CONCRETE: ALL SPLICE LOCATIONS SUBJECT TO APPROVAL BY THE STRUCTURAL ENGINEER. PROVIDE BENT CORNER BARS TO MATCH AND LAP WITH HORIZONTAL BARS AT ALL CORNERS AND INTERSECTIONS PER TYPICAL DETAILS. REINFORCING BAR SPACING GIVEN ARE MAXIMUM ON CENTERS. DOWEL VERTICAL REINFORCING TO FOUNDATION WITH STANDARD 90-DEGREE HOOKS UNLESS NOTED OTHERWISE. SECURELY TIE ALL BARS IN LOCATION BEFORE PLACING CONCRETE. ONLY WHEN SPECIFICALLY NOTED ON DRAWINGS MAY CONCRETE COLUMN DOWEL EMBEDMENT BE A STANDARD COMPRESSION DOWEL WITH EMBEDMENT LENGTH ACCORDING TO THE LATEST EDITION OF THE ACI 318.

LAP SPLICES, UNLESS NOTED OTHERWISE, SHALL BE CLASS "B" TENSION LAP SPLICES PER LATEST EDITION OF ACI 318. STAGGER SPLICES A MINIMUM OF ONE LAP LENGTH. ONLY WHEN SPECIFICALLY NOTED ON DRAWINGS MAY LAP SPLICES IN CONCRETE COLUMNS BE STANDARD COMPRESSION LAP SPLICES.

SHOP DRAWINGS: SHOP DRAWINGS SHALL BE SUBMITTED FOR ALL STRUCTURAL ITEMS IN ADDITION TO ITEMS REQUIRED BY ARCHITECTURAL SPECIFICATIONS.

THE CONTRACTOR SHALL REVIEW ALL SHOP DRAWINGS PRIOR TO SUBMITTAL. ITEMS NOT IN ACCORDANCE WITH CONTRACT DOCUMENTS SHALL BE FLAGGED UPON CONTRACTOR'S REVIEW. VERIFY ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS AND FIELD CONDITIONS.

MANUFACTURER OR FABRICATOR SHALL CLOUD ANY CHANGES, SUBSTITUTIONS, OR DEVIATIONS FROM CONTRACT DOCUMENTS. ANY OF THE AFOREMENTIONED WHICH ARE NOT CLOUDED OR FLAGGED BY SUBMITTING PARTIES, SHALL NOT BE CONSIDERED APPROVED AFTER ENGINEER'S REVIEW, UNLESS NOTED ACCORDINGLY.

THE ENGINEER HAS THE RIGHT TO APPROVE OR DISAPPROVE ANY CHANGES TO CONTRACT DOCUMENTS AT ANYTIME BEFORE OR AFTER SHOP DRAWING REVIEW.

THE SHOP DRAWINGS DO NOT REPLACE THE CONTRACT DOCUMENTS. ITEMS OMITTED OR SHOWN INCORRECTLY AND ARE NOT FLAGGED BY THE STRUCTURAL ENGINEER OR ARCHITECT SHALL NOT BE CONSIDERED CHANGES TO CONTRACT DOCUMENTS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE ITEMS ARE CONSTRUCTED TO CONTRACT DOCUMENTS.

THE ADEQUACY OF ENGINEERING DESIGNS AND LAYOUT PERFORMED BY OTHERS RESTS WITH THE DESIGNING OR SUBMITTING AUTHORITY. REVIEWING IS INTENDED ONLY AS AN AID TO THE CONTRACTOR IN OBTAINING CORRECT SHOP DRAWINGS. RESPONSIBILITY FOR CORRECTNESS SHALL REST WITH THE CONTRACTOR.

GENERAL NOTES: THE STRUCTURAL CONSTRUCTION DOCUMENTS REPRESENT THE FINISHED STRUCTURE. EXCEPT WHERE NOTED, THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, BRACING, SHORING FOR LOADS DUE TO CONSTRUCTION EQUIPMENT, ETC. THE STRUCTURAL ENGINEER OF RECORD SHALL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S MEANS, METHODS, TECHNIQUES, SEQUENCES FOR PROCEDURE OF CONSTRUCTION, OR THE SAFETY PRECAUTIONS AND THE PROGRAMS INCIDENT THERETO (NOR SHALL OBSERVATION VISITS TO THE SITE INCLUDE INSPECTION OF THESE ITEMS).

WHERE REFERENCE IS MADE TO VARIOUS TEST STANDARDS FOR MATERIALS, SUCH STANDARDS SHALL BE THE LATEST EDITION AND/OR ADDENDA. ANY ENGINEERING DESIGN, PROVIDED BY OTHERS AND SUBMITTED FOR REVIEW, SHALL BEAR THE SEAL OF A REGISTERED ENGINEER RECOGNIZED BY THE BUILDING CODE JURISDICTION OF THIS PROJECT.

NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT, AND/OR AS PROVIDED FOR IN THE CONTRACT DOCUMENTS. WHERE DISCREPANCIES OCCUR BETWEEN PLANS, DETAILS, GENERAL STRUCTURAL NOTES AND SPECIFICATIONS, THE MOST RESTRICTIVE OR GREATER REQUIREMENTS, AS DETERMINED BY THE STRUCTURAL ENGINEER OF RECORD SHALL GOVERN. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS PRIOR TO START OF CONSTRUCTION. RESOLVE ANY DISCREPANCY WITH THE ARCHITECT. ESTABLISH AND VERIFY ALL OPENINGS AND INSERTS FOR ARCHITECTURAL, CIVIL, MECHANICAL, PLUMBING AND ELECTRICAL ITEMS WITH THE APPROPRIATE TRADE DRAWINGS AND SUBCONTRACTORS PRIOR TO CONSTRUCTION.

TYPICAL DETAILS MAY NOT NECESSARILY BE CUT ON PLANS, BUT APPLY UNLESS NOTED OTHERWISE. OPTIONS ARE FOR CONTRACTOR'S CONVENIENCE. IF AN OPTION IS CHOSEN, CONTRACTOR SHALL BE RESPONSIBLE FOR ALL NECESSARY CHANGES, APPROVALS AND THE COORDINATION OF THE WORK WITH ALL RELATED TRADES AND SUPPLIERS.

SPECIAL INSPECTION - STRUCTURAL ONLY: SPECIAL INSPECTION IS TO BE PROVIDED FOR THE ITEMS LISTED BELOW IN ADDITION TO THE INSPECTIONS CONDUCTED BY THE BUILDING JURISDICTION. "SPECIAL STRUCTURAL INSPECTION" SHALL NOT RELIEVE THE OWNER OR THEIR AGENT FROM REQUESTING THE BUILDING JURISDICTION INSPECTIONS REQUIRED BY SECTION 109 OF THE INTERNATIONAL BUILDING CODE. SPECIAL INSPECTION IS REQUIRED PER CHAPTER 17 FOR THE FOLLOWING:

- CONCRETE CONSTRUCTION:
 - NO INSPECTION IS REQUIRED FOR THE PLACEMENT OF FOUNDATION CONCRETE. INSPECTION OF FOUNDATION REINFORCING IS REQUIRED PER SECTION BELOW.
 - REINFORCING STEEL: INSPECTION OF IN-PLACE REINFORCING FOR CONFORMANCE PRIOR TO THE CLOSING OF FORMS OR THE DELIVERY OF CONCRETE TO THE JOBSITE FOR THE CONCRETE FOUNDATIONS AND SLABS ON GRADE.

DUTIES AND RESPONSIBILITIES OF THE SPECIAL INSPECTOR:

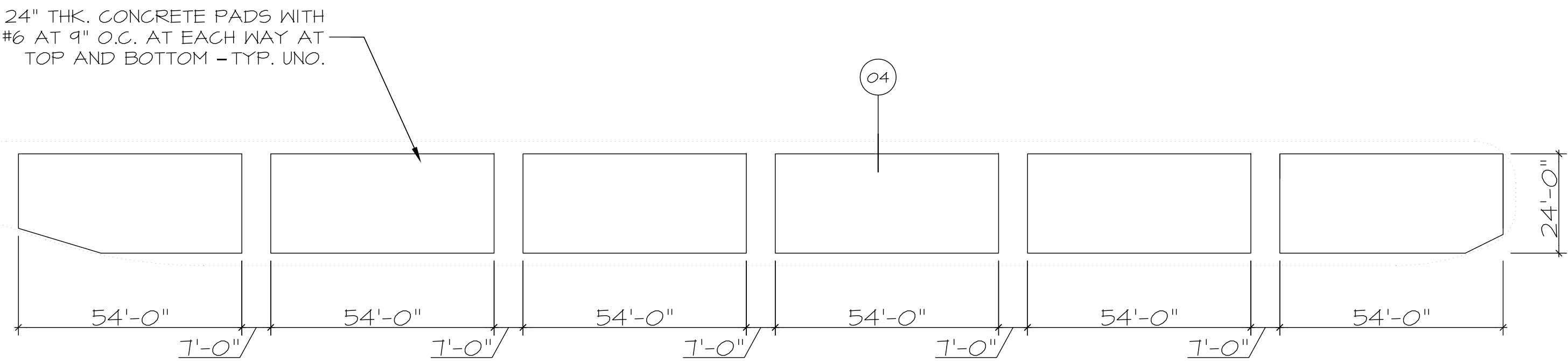
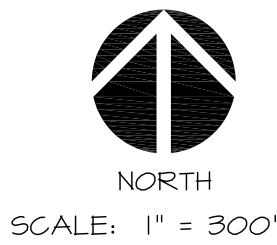
- THE SPECIAL INSPECTOR SHALL OBSERVE THE WORK ASSIGNED TO BE CERTAIN IT CONFORMS TO THE APPROVED DESIGN DRAWINGS AND SPECIFICATION.
- THE SPECIAL INSPECTOR IS NOT AUTHORIZED TO APPROVE DEVIATIONS FROM THE DESIGN DRAWINGS OR SPECIFICATIONS, AND ALL DEVIATIONS MUST BE APPROVED BY THE STRUCTURAL ENGINEER OF RECORD PRIOR TO PROCEEDING WITH THE WORK. ALL REQUESTS FOR DEVIATIONS SHALL BE INITIATED BY THE CONTRACTOR VIA WRITTEN REQUEST FOR INFORMATION (RFI).
- THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL, AND TO THE ENGINEER OR ARCHITECT OF RECORD. ALL DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION, THEN, IF UNCORRECTED, TO THE DESIGN AUTHORITY AND THE BUILDING OFFICIAL.
- CONTRACTOR SHALL PROVIDE THE SPECIAL INSPECTOR ACCESS TO ALL ITEMS REQUIRING SPECIAL INSPECTION. ACCESS SHALL BE PROVIDED BY IN-PLACE LADDERS, SCAFFOLDS, LIFTS AND/OR OTHER EQUIPMENT OPERATED BY THE CONTRACTOR'S PERSONNEL AS REQUIRED FOR SAFE OBSERVATION. INSPECTOR IS NOT RESPONSIBLE OR AUTHORIZED TO OPERATE CONTRACTOR'S EQUIPMENT.
- UPON COMPLETION OF THE ASSIGNED WORK THE ENGINEER OR ARCHITECT SHALL COMPLETE AND SIGN THE APPROPRIATE FORMS CERTIFYING THAT TO THE BEST OF THEIR KNOWLEDGE THE WORK IS IN CONFORMANCE WITH THE APPROVED PLANS AND SPECIFICATIONS, AND THE APPLICABLE WORKMANSHIP PROVISIONS OF THE CODE.

THE SPECIAL INSPECTOR SHALL BE A QUALIFIED PERSON WHO SHALL DEMONSTRATE COMPETENCE, TO THE SATISFACTION OF THE BUILDING OFFICIAL, FOR INSPECTION OF THE PARTICULAR TYPE OF CONSTRUCTION OR OPERATION REQUIRING SPECIAL INSPECTION. THE SPECIAL INSPECTOR SHALL BE CERTIFIED BY A NATIONALLY RECOGNIZED CERTIFICATION AGENCY TO PERFORM THE PARTICULAR TYPE OF CONSTRUCTION OR OPERATION REQUIRING SPECIAL INSPECTION. IF THE SPECIAL INSPECTOR PERFORMING THE ACTUAL SPECIAL INSPECTIONS IS A STATE REGISTERED STRUCTURAL ENGINEER, NO ADDITIONAL CERTIFICATION IS REQUIRED FOR THAT PERSON.

SPECIAL INSPECTIONS SHALL BE PERFORMED UNDER THE DIRECT SUPERVISION OF A STATE REGISTERED PROFESSIONAL ENGINEER WHO IS FAMILIAR WITH THE STRUCTURAL DESIGN OF THIS PROJECT. THE SUPERVISING STRUCTURAL ENGINEER SHALL SEAL THE SPECIAL INSPECTION CERTIFICATE.

FOR SPECIAL STRUCTURAL INSPECTIONS IN THE PHOENIX AREA, CONTACT DESERT FOX, LLC, AT 480-205-2094 OR E-MAIL: YOURPROBLEMSOLVER@DFOXONLINE.COM PRIOR TO CONSTRUCTION.

CONCRETE EQUIPMENT PAD - FOUNDATION PLAN AT APPARATUS BLOCK



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JOB NO: 22-12T

PROJECT MGR: RRD

DRAWN BY: CJD

CHECKED BY: RRD

NO.	REVISION	DATE

SHEET TITLE:
CONCRETE PAD-
STRUCTURAL PLAN, NOTES
AND DETAILS



EXP. 12.31.24

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ISSUE DATE: 05/19/2022