

Tom Wandrie
Deputy Director Inspections, Acting Building Official

Field Issues



PLANNING & DEVELOPMENT
PRESERVE
SHAPE
BUILD 



Keys to Success



- Generally, program has been successful
- Use approved field set for construction
- Make sure contractor gets full size print from EPR





Field Changes

- Discuss with inspector in advance
- Self-Cert stamps on all sheets
- Peer review on structural and electrical (if required)
- NOT meant for unlimited value engineering
- Stamped City approvals are required on plan revisions submitted to the City for Plan Review approval

MANDATORY FIELD CHANGE OR REVISIONS (LPSC or RPSC#: and LSCA or RSCA#:)

SELF-CERTIFIED BY:

Insert name of Self-Certified Professional)

Date

• Plans were prepared by or under the direct supervision of the Self-Certified Professional

• Plans are complete

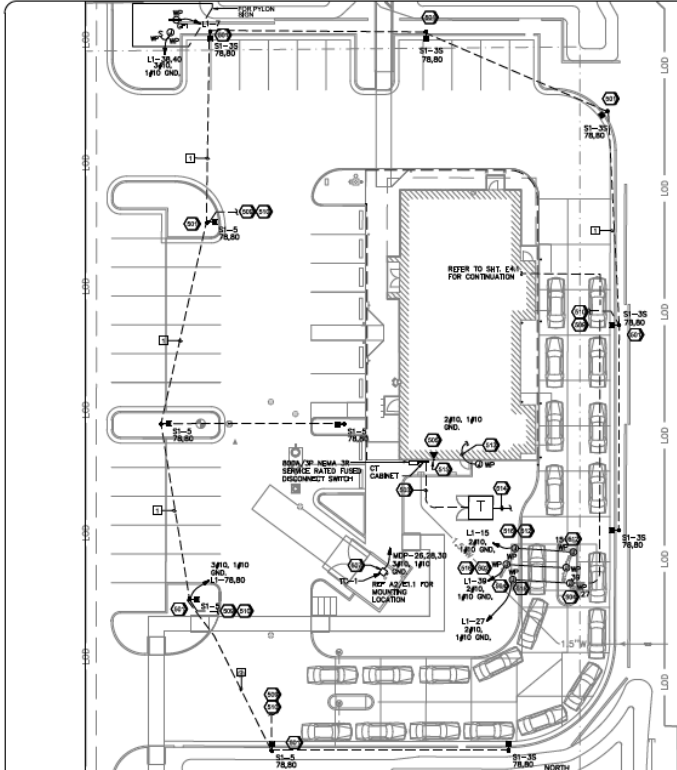
The plans are, as of the date of submission, in compliance with City of Phoenix building, civil, site, and zoning codes, ordinances and all other applicable laws.

Field Changes

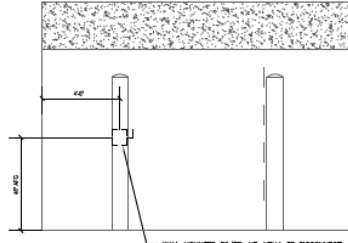


PLANNING & DEVELOPMENT
**PRESERVE
SHAPE
BUILD**

City of Phoenix Plan #: 2303988-LPSC Date: 07/27/23



1 ELECTRICAL SITE PLAN
SCALE: 1/16" = 1'-0"



A2 SERVICE YARD WALL
N.T.S.
WALL MOUNTED 30/30 NF NEMA 3R DISCONNECT SWITCH (ROUND BOLLARD) FOR FUTURE TRASH COMPACTOR. PROVIDE 3" CLEARANCE IN FRONT OF DISCONNECT.

GENERAL NOTES

- REFER TO SHEET E31 AND E32 FOR ELECTRICAL SYMBOLS, ABBREVIATIONS, AND GENERAL NOTES.
- CIRCUIT SIGNAGE TO NEW BUILDING AS SHOWN.
- ELECTRICAL CONTRACTOR SHALL VERIFY ALL POWER AND TELEPHONE REQUIREMENTS AND EQUIPMENT PRIOR TO INSTALLATION.
- ELECTRICAL CONTRACTOR TO VERIFY UNDERGROUND SERVICE REQUIREMENTS WITH POWER CO.
- SIGNAGE TO BE INSTALLED BY SIGN CONTRACTOR. VERIFY EXACT LOCATIONS, LOADS AND WIRING REQUIREMENTS PRIOR TO INSTALLATION.
- ELECTRICAL CONTRACTOR SHALL PROVIDE ALL CONDUIT, WIRING AND CONNECTIONS FOR SIGNAGE AND PARKING LOT LIGHTS. (COORDINATE EXACT LOCATIONS).
- ELECTRICAL CONTRACTOR SHALL VERIFY ALL REQUIREMENTS WITH GENERAL CONTRACTOR.
- UNDERGROUND CONDUIT INSTALLATIONS SHALL COMPLY WITH NEC ARTICLE 300.6.
- EXTERIOR LIGHTING AND SIGN LIGHTING SHALL BE CONTROLLED VIA THE CLOCK AND PHOTOCELL. REFER TO SHEET E3-3 FOR LIGHTING CONTROL WIRING DIAGRAM.
- ALL WORK SHALL BE PERFORMED IN STRICT COMPLIANCE WITH THE NEC AS WELL AS ALL APPLICABLE FEDERAL, STATE, AND LOCAL REQUIREMENTS. WHERE CONFLICTS ARISE, THE MOST STRINGENT REQUIREMENT SHALL TAKE PRECEDENCE.
- ALL UNDERGROUND CONDUIT RUNS SHALL BE ROUTED CLEAR OF UNDERGROUND DETECTOR.
- ALL EXTERIOR LIGHT POLES, FLAGPOLE LIGHTS, SIGNAGE AND EXTERIOR MENU BOARDS SHALL ROUTE THROUGH THE LIGHTING CONTROL PANEL.

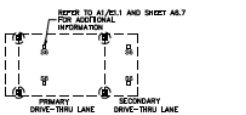
KEYED NOTES

- 501 AREA LIGHTS WITH POLE AND BASE.
- 502 EXTERIOR MENU BOARD. PROVIDE 1" C FROM MENU BOARD TO PANEL 17.
- 503 ELECTRICAL UNDERGROUND SECONDARY SERVICE ENTRANCE CONDUITS TO BUILDING FROM TRANSFORMER BY E.S. HE USE ONE-LINE DIAGRAM. COORDINATE ELECTRIC SERVICE ROUTING WITH UTILITY COMPANY.
- 504 PROVIDE 1" C WITH PULLSTRING FOR DRIVE-THRU COMMUNICATION DATA TO DRIVE-THRU HEADSET SYSTEM RE-E3.1.
- 505 PROVIDE 1" C WITH PULLSTRING TO PROPERTY LINE FOR LT COMMUNICATION CABLE. ROUTE LINE TO BUILDING AT THIS LOCATION. COORDINATE COMMUNICATION SERVICE WITH UTILITY. RE-E3.1.
- 507 TRASH COMPACTOR BY OTHERS. PROVIDE 30A/240V/2P/NF/NEMA 3R DISCONNECT SWITCH WITH 3/8" Ø 1" Ø 1" TO PANEL. MOP STOP UP AGAINST SERVICE YARD WALL. RE. A2/1.
- 508 PROVIDE 3/4" DUFFY CONDUIT WITH PULL WIRE FOR POINT MOUNTED WIRELESS ACCESS POINT (MAP). VERIFY LOCATIONS WITH OWNER PRIOR TO INSTALLATION. WIRE CONDUIT FROM SITE LIGHTING POLE TO MANAGER OFFICE. TOTAL CONDUIT RUN FROM BUILDING ENTRY TO MAP NOT TO EXCEED 250'-0". RE. A1/E3.1.
- 510 PROVIDE 3/4" DUFFY CONDUIT WITH PULL WIRE FOR POINT MOUNTED SECURITY. VERIFY LOCATIONS WITH OWNER PRIOR TO INSTALLATION. WIRE CONDUIT FROM SITE LIGHTING POLE TO MANAGER OFFICE. TOTAL CONDUIT RUN FROM BUILDING ENTRY TO SECURITY CAMERA NOT TO EXCEED 250'-0". RE. A1/E3.1.
- 512 REFER TO 82/AB.7 FOR TYPE-F LIGHT ROTURE. CANOPY DETAIL.
- 513 2" C TO SPINNAKER CONTROL BOX. RE. A1/E3.1.
- 514 UNDERGROUND PRIMARY ELECTRICAL SERVICE TO TRANSFORMER.
- 515 REFER TO E31 FOR SITE CONDUIT ENTRIES.
- 516 REFER Ø10 WIRE IN 3/4" NONMETALLIC CONDUIT 24" BELOW FINISHED GRADE OR FOR 300.5. VERIFY EXACT ROUTING PRIOR TO INSTALLATION. TRUCK, BACKFILL AND REPAIR LANGUAGE/HANDSCALE AS REQUIRED.

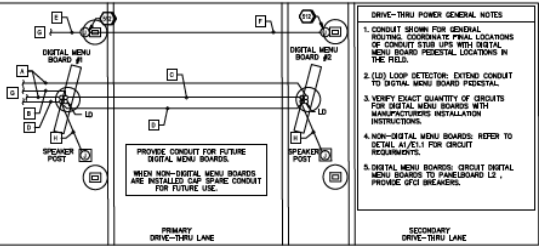
UNDERGROUND CONDUIT SCHEDULE			
#	CIRCUIT	WIRE SIZE	CONDUIT SIZE
1	L1-78.80	2 - Ø10 THWN	Ø10 3/4"

NOTE:
CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION AND SCHEDULING WITH POWER AND TELEPHONE UTILITY COMPANIES INCLUDING PROVIDING (3) COMPLETE SETS OF DRAWINGS TO EACH COMPANY. ALL WORK SHALL BE INSTALLED PER EACH UTILITY COMPANIES FINAL DESIGN DRAWINGS.

CONDUIT ROUTING NOTE
CONDUIT ROUTING IS CONCEPTUAL AND SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL COORDINATE FIELD VERIFY BEST ROUTING METHOD WITH OWNER/ARCHITECT PRIOR TO TRENCHING.



A3 DRIVE-THRU LARGE CANOPY LIGHTING
N.T.S.



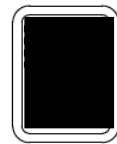
A4 DRIVE-THRU MENU BOARD POWER PLAN
N.T.S.

- DRIVE-THRU POWER GENERAL NOTES**
1. CONDUIT SHOWN FOR GENERAL ROUTING. COORDINATE FINAL LOCATIONS OF CONDUIT STUB UPS WITH DIGITAL MENU BOARD FOOTPRINT LOCATIONS IN THE FIELD.
 2. USE LOOP DETECTOR. EXTEND CONDUIT TO DIGITAL MENU BOARD FOOTPRINT.
 3. VERIFY EXACT QUANTITY OF CIRCUITS FOR DIGITAL MENU BOARDS WITH MANUFACTURERS INSTALLATION INSTRUCTIONS.
 4. NON-DIGITAL MENU BOARDS: REFER TO DETAIL A1/E3.1 FOR CIRCUIT REQUIREMENTS.
 5. DIGITAL MENU BOARDS: CIRCUIT DIGITAL MENU BOARDS TO PANELBOARD L2. PROVIDE GFCI BREAKERS.
1. PROVIDE (1) 2" C WITH PULL STRING TO EACH DIGITAL MENU BOARD FOOTPRINT FOR DATA.
 2. PROVIDE (2) Ø10 & (1) Ø10 ØND IN 1" C TO PANELBOARD L2 FOR POWER TO DIGITAL MENU BOARD #2.
 3. PROVIDE SEPARATE (2) Ø10 & (1) Ø10 ØND IN 1" C TO PANELBOARD L2 FOR POWER TO DIGITAL MENU BOARD #1. DIGITAL MENU BOARD #1 AND #2 SHALL BE GROUNDED SEPARATELY.
 4. PROVIDE (1) 1" C WITH PULL STRING FOR DRIVE-THRU COMMUNICATION DATA TO HEADSET SYSTEM. RE. A1/E3.1.
 5. PROVIDE (2) Ø10 & (1) Ø10 ØND IN 1" C FOR CANOPY LIGHTING. RE. A1/E3.1 FOR CIRCUIT REQUIREMENTS.
 6. VERIFY CANOPY TYPE ON A3.7. EXTEND (2) Ø10 & (1) Ø10 ØND IN 1" C FOR CANOPY LIGHTS. WHEN ARCHITECTURAL PLANS SPECIFY TWO SEPARATE DRIVE-THRU CANOPIES.
 7. RE. A1/E3.1 FOR CONDUIT ENTRY INTO BUILDING.
 8. VERIFY LOCATION OF DRIVE-THRU MICROPHONE. WHEN MICROPHONE IS LOCATED IN THE SPEAKER POST EXTEND 1" C WITH PULL STRING TO SPEAKER POST. WHEN MICROPHONE IS LOCATED INTERNAL TO DIGITAL MENUBOARD THIS CONDUIT CAN BE OMITTED.



NO.	REVISIONS	DATE	BY	APPROVED

PROJECT TITLE:
WHATABURGER PTDM
SVC OF W FEDERAL AVE & 30TH AVE
PHOENIX, AZ



800 CONCRETE PLAZA DR,
SAN ANTONIO, TEXAS,
78247-4000 2P-78247A

SHEET TITLE:
ELECTRICAL
SITE PLAN

UNIT NO:
DATE: 06/06/2023
SCALE: As Indicated
DRAWN BY:
CHECKED BY:

SHEET NO:
E1.1



SELF-CERTIFIED BY: Robert B. Harnett 07/14/2023
Plans were prepared by or under the direct supervision of, or reviewed by the Self-Certified Professional.
Plans are complete.
This date and all of the date of submission, in compliance with City of Phoenix building, code, rules, and zoning codes, ordinances, and all other applicable laws.

ENTIRE SHEET

ARDEBILI Engineering
Project Number: 2303988-LPSC
1000 E. McDowell Blvd., Suite 100, Phoenix, AZ 85004
P: 602.979.1234 | E: ardebili@ardebili.com

City of Phoenix Plan #: 2303988-LPSC Date: 07/27/23

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Observations from the Field

Item most often missed:

Special Inspection Certificates


• Types of Special Inspections Certificates:

- Electrical TRT 00274
- Architectural TRT 00277
- Geotechnical TRT 00275
- Structural TRT 00211
- Mechanical/Plumbing TRT 00276

- Owners can either use the registered design professional in responsible charge (RDPRC) or a designated RDPRC to seal the Special Inspection Form

- Special Inspections Approval List – TRT 00870

<https://www.phoenix.gov/pdd/trt>

 **City of Phoenix**
PLANNING & DEVELOPMENT DEPARTMENT

Special Inspection Certificate
Electrical

POST AT JOB SITE WITH PERMIT
(General Requirements and Instructions on the backside of form)

TO BE COMPLETED BY REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE


Project Name:	Project Address:	Permit No.
		Plan Log No.
Project Owner/Owner's Agent Name:	Mailing Address:	Phone No.
Registered Design Professional of Record Name:	Mailing Address:	Phone No.
Firm Name:	Email Address:	Fax No.

I hereby affirm that I am familiar with the design of this project and have been designated by the Owner/owner(s) Agent as the registered design professional in responsible charge for implementing the Electrical Special Inspections Program required by the City of Phoenix Building Construction Code Sections 110.3.10 and 1704. I have determined that the types of work checked below require Electrical Special Inspection. I understand and agree to inform the project owner, the contractor(s), and the special inspector(s) about all the Electrical Special Inspection Program requirements and limitations, including that the Special Inspector(s) must be independent third-party individual(s) or Registered Design Professional(s) and shall not be the installing contractor(s).

(Seal, Sign, and Date)

Y E S	N O ✓	TYPES OF WORK REQUIRING SPECIAL ELECTRICAL INSPECTION (Attach Supplement if Necessary)	QUALIFIED SPECIAL INSPECTOR NAME AND ID NUMBER
		Ground-Fault Protection Systems	
		Switchboards, Panelboards, Motor Control Centers	
		Transformers	
		Conductors	
		Emergency & Standby Power System(s)	
		Selective Coordination	

All special inspection reports were reviewed and found to be in conformance with the approved construction documents.

Registered Design Professional


In responsible charge _____ Date _____
Signature

Page 1 of 2

For more information or for a copy of this publication in an alternate format, contact Planning & Development at 602-262-7811 voice or TTY use 7-1-1.

P:\Special Inspection Certificate, Electrical
WebSite_in_pdf_00274

TRT/DOC/00274
Rev. 02/19



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Change of Occupancy

✓ **Sprinklers**



PLANNING & DEVELOPMENT

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Audit Changes

- Construction can generally proceed at risk
- Work with inspectors on proposed changes
- Very important to inform contractor of changes
- Final inspections will be suspended until audit is completed



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Field Desk Organization

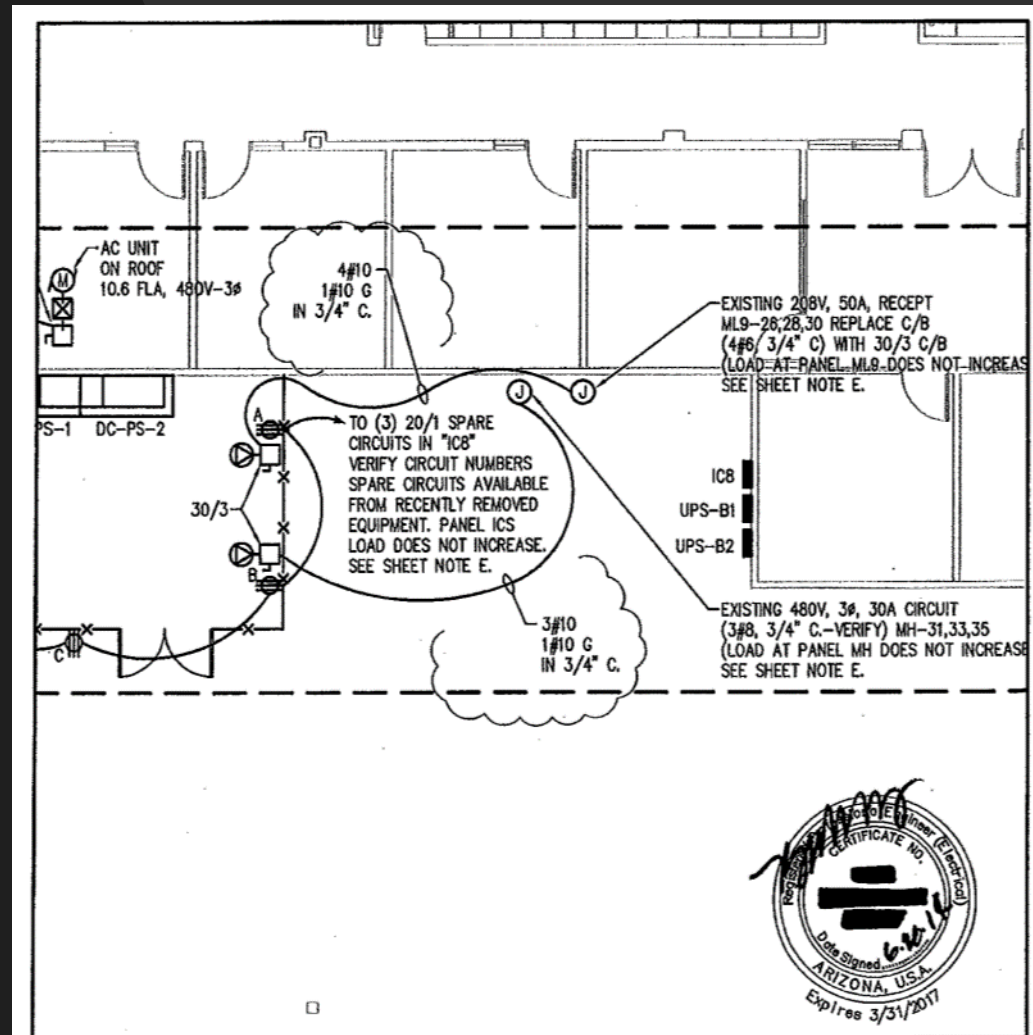


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What items should be easily found at your construction site field desk?

Changes to Field Plan



Good or bad?

Contractor Coordination

Does your contractor know how the
Self-Certification process works?

**Contractor Guide to the Self-
Certification Process**

TRT 00393





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Relaying Information to Contractors



Remember that time is of the essence
Audit correction items should be immediately communicated to the contractor to avoid costly field changes

Pre-Job Conference



- Encouraged for process and code questions
- Should not be used for inspector “plan review”
- Contractor Guide to the Self-Certification Process – TRT 00393

Violations

- Work with inspector on resolution
- Time is critical during construction



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Questions?

