HARDENING NATIONAL 25kW DIESEL



SHEET DESCRIPTION

TITLE SHEET

GENERAL NOTES

OVERALL SITE PLAN

EQUIPMENT LAYOUT PLAN

DETAILS AND SPECIFICATIONS

DETAILS AND SPECIFICATIONS III

DETAILS AND SPECIFICATIONS IV

GENERAL ELECTRICAL NOTES

EQUIPMENT ELEVATION

D-2 DETAILS AND SPECIFICATIONS II

T-1

D-1

D-3

E-3

SITE NUMBER: SV00924A

SITE NAME: VY398 FRAZIER PARK PUD

SITE TYPE: WATER TANK MOUNT

CITY: FRAZIER PARK COUNTY: KERN COUNTY

JURISDICTION: KERN COUNTY

PROJECT SUMMARY

SITE ADDRESS 4022 NORTH END DR. FRAZIER PARK, CA 93225

PROPERTY OWNER CONTACT

FRAZIER PARK PUB UTILITY DIST 4020 PARK DRIVE, P.O. BOX 1525 FRAZIER PARK, CA 93225

APPLICANT:

T-MOBILE WEST LLC 4100 GUARDIAN ST., SUITE 101 SIMI VALLEY CA 93063

REPRESENTATIVE: T-MOBILE PROJECT MANAGER: PROJECT MANAGER: CONSTRUCTION MANAGER:

CONSTRUCTION COORDINATOR:

APN: 259-073-01-00-1

LYNDA McCLUNG RICHARD RICE KINDRA ROBERTS KINDRA ROBERTS MICHELLE RAFFOUL

BUILDING SUMMARY

OCCUPANCY CLASSIFICATION: U (UNMANNED TELECOMMUNICATIONS FACILITY) PROPERTY TYPE: GOVERNMENT/PUBLIC USE LAND USE: GOVERNMENTAL/PUBLIC USE (GENERAL)

CONSULTING TEAM

SAC/ZONING/PERMITTING:

SYNERGY A DIVISION OF ADVANTAGE ENGINEERS, LLC 7543 WOODLEY AVENUE VAN NUYS, CA 91406 JILLIANNE NEWCOMER (951) 382-2523 jnewcomer@networkconnex.com E-MAIL:

ARCHITECTURAL/ENGINEERING: SYNERGY A DIVISION OF

ADVANTAGE ENGINEERS, LLC. 7543 WOODLEY AVENUE VAN NUYS, CA 91406 LESZEK KRASUSKI, P.E. (818) 590-6317 lkrasuski@networkconnex.com

STRUCTURAL ENGINEERING: SYNERGY A DIVISION OF ADVANTAGE ENGINEERS, LLC. 7543 WOODLEY AVENUE VAN NUYS. CA 91406 LESZEK KRASUSKI, P.E. (818) 590 - 6317

lkrasuski@networkconnex.com

DATE

LATITUDE / LONGITUDE

34.82629° LAT: 34° 49′ 34.6″ N LONG: 118° 57' 11.3" W LONG: -118.95313°

UTILITY PURVEYOR

POWER: COMPANY: -

TELCO: COMPANY: -

SIGNATURE

PROJECT DESCRIPTION

THE PROJECT ENTAILS:

T-MOBILE PROPOSED TO MODIFY (E) WIRELESS TELECOMMUNICATIONS SITE

- REMOVE (E) GENERATOR, DELTA POWERGEN 7500
- REMOVE (E) PROPANE TANK AND (E) CONCRETE PAD
- 3. INSTALL (1) GENERATOR, GENERAC 25 KW DIESEL GENERATOR WITH TANK ON (N) CONCRETE SLAB
- INSTALL (1) AUTOMATIC TRANSFER SWITCH
- REMOVE ALL ELECTRICAL CONDUIT AND PROPANE PIPES ASSOCIATED WITH DELTA POWERGEN 7500

LEGAL DESCRIPTION

BLOCK: 3 BRIEF DESCRIPTION: CITY FMP 5, BLOCK 3, LOT PTN

APPROVAL

PRINT NAME

THE FOLLOWING PARTIES HEREBY APPROVE AND ACCEPT THESE DOCUMENTS AND AUTHORIZE THE CONTRACTOR TO PROCEED WITH THE CONSTRUCTION DESCRIBED HEREIN. ALL CONSTRUCTION DOCUMENTS ARE SUBJECT TO REVIEW BY THE LOCAL BUILDING DEPARTMENT AND ANY CHANGES AND MODIFICATIONS THEY MAY IMPOSE.

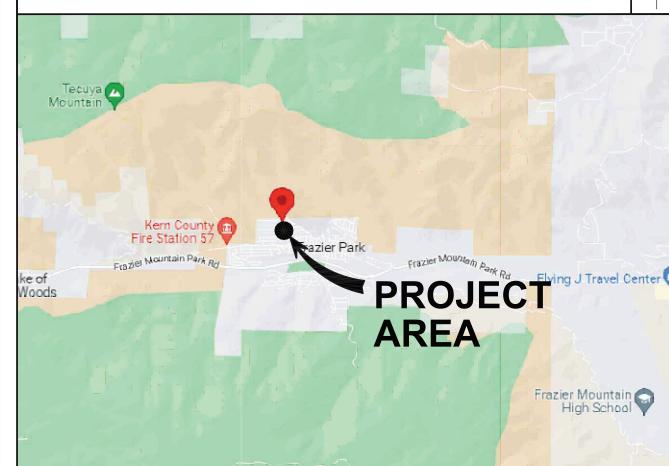
LANDLORD:	 	
ZONING MGR:	 	
DEVELOP. MGR:	 	
CONST. MGR:	 	
PROJECT MGR:	 	
SR. RF ENGINEER:		
RF ENGINEER:	 	
OPERATIONS:	 	
SAC REP.:	 	
UTILITIES:	 	
RFAL FSTATE MGR		

THE FACILITY IS UNMANNED AND NOT FOR CONTINUOUS HUMAN HABITATION.

- CALIFORNIA BUILDING CODES 2019

- 6. ANSI / TIA-222-H-2017
- 7. LOCAL BUILDING CODES
- 10. ASCE 7-16
- 12. STEEL CONSTRUCTION MANUAL, 15TH EDITION

GENERAL LOCATION MAP



VICINITY MAP



ACCESSIBILITY REQUIREMENTS

SINGLE LINE DIAGRAM, PANEL SCHEDULE & EQUIPMENT LAYOUT PLAN

GROUNDING PLAN, GROUNDING DETAILS & ATS DETAIL

DRAWING INDEX

BBREVIATIONS, SPECIFICATIONS & SYMBOLS

SENERAL STRUCTURAL NOTES AND TYPICAL DETAILS

HANDICAPPED ACCESS IS NOT REQUIRED PER CBC 2019, SECTION 1103.2.7 (LIMITED ACCESS SPACES) SECTION 1103.2.9 (EQUIPMENT SPACES)

CODE COMPLIANCE

- CALIFORNIA ADMINISTRATIVE CODE (INCL. TITLES 24 & 25) 2019
- CALIFORNIA ELECTRICAL CODES 2019
- CALIFORNIA MECHANICAL CODES 2019
- CALIFORNA PLUMBING CODES 2019
- 8. CITY / COUNTY ORDINANCES
- 9. CALIFORNIA FIRE CODE 2019 EDITION
- 11. ACL 318-14

DRIVING DIRECTION

FROM T-MOBILE OFFICE: 4100 GUARDIAN ST., SUITE 101 SIMI VALLEY CA 93063 HEAD NORTHEAST TOWARD GUARDIAN ST. TURN LEFT TOWARD GUARDIAN ST. TURN LEFT ONTO GUARDIAN ST. TURN RIGHT ONTO TAPO CANYON RD. TURN RIGHT TO MERGE ONTO CA-118 E. MERGE ONTO CA-118 E. TAKE EXIT 40 FOR BALBOA BLVD. USE THE LEFT 2 LANES TO TURN LEFT ONTO BALBOA BLVD. TURN LEFT ONTO BALBOA RD. USE ANY LANE TO TURN LEFT ONTO SAN FERNANDO RD. CONTINUE ONTO THE OLD RD. KEEP RIGHT TO STAY ON THE OLD RD. CONTINUE STRAIGHT ONTO CALGROVE BLVD. TURN LEFT ONTO THE INTERSTATE 5 N RAMP TO SACRAMENTO. MERGE ONTO I-5 N. TAKE EXIT 205 FOR FRAZIER MOUNTAIN PARK RD. TURN LEFT ONTO FRAZIER MOUNTAIN PARK RD. TURN RIGHT ONTO MONTEREY TRAIL. TURN LEFT ONTO MT PINOS WAY. TURN RIGHT ONTO ELM TRAIL. SLIGHT RIGHT ONTO N END DR. TURN RIGHT ONTO N SUMMIT DR. DESTINATION WILL BE ON THE RIGHT.

T - Mobile -Stick Together *

4100 GUARDIAN ST., SUITE 101 SIMI VALLEY, CA 93063

=PROJECT INFORMATION:= (HARDENING NATIONAL - 25kW DIESEL

> SV00924A VY398 FRAZIER PARK PUD

> > 4022 NORTH END DR. FRAZIER PARK, CA 93225 KERN COUNTY

=CURRENT ISSUE DATE:=

10/24/22

=ISSUED FOR:=

CONSTRUCTION

	[=REV.:=	—DATE:—	DESCRIPTION:E	3Y:
		Â	10/24/22	90% CD, ISSUED FOR REVIEW	/HE
1 1					

-PLANS PREPARED BY:



7543 Woodley Ave., #201, Van Nuys, CA 91406 Office: (818) 840-0808 Fax: (818) 840-0708

=CONSULTANT:



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SHEET TITLE:

TITLE SHEET

=SHEET NUMBER:====

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=REVISION:=

SV00924A

ROOFING & WATERPROOFING NOTES

- 1. CONTRACTOR SHALL CONTACT THE BUILDING OWNER TO DETERMINE IF ROOF IS UNDER WARRANTY. CONTRACTOR SHALL GUARANTEE THAT ANY AND ALL NEW ROOFING WORK MEETS THE SPECIFICATION OF ANY EXISTING ROOFING WARRANTIES SUCH THAT THE WARRANTY IS NOT MADE INVALID AS A RESULT OF THIS WORK. IF IT IS DETERMINED THAT THE ARCHITECT'S DETAILING IS INADEQUATE OR IMPROPER OR IF ANY OTHER DISCREPANCY IS FOUND, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT AND THE CLIENT PROJECT MANAGER IN WRITING. ULTIMATELY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH THE ORIGINAL ROOF MANUFACTURER'S SPECIFICATIONS.
- 2. CONTRACTOR SHALL USE METHODS AND MATERIALS SIMILAR AND COMPATIBLE WITH EXISTING MATERIALS & CONDITIONS FOR ROOF PATCHING, NEW PENETRATIONS, ETC.
- 3. THE CONTRACTOR SHALL PROPERLY SEAL ALL NEW ROOF & BUILDING ENVELOPE PENETRATIONS SUCH THAT THE INTEGRITY OF THE ORIGINAL BUILDING ASSEMBLY AND ALL APPLICABLE WARRANTIES ARE MAINTAINED.
- 4. IF IT DEEMED NECESSARY TO REMOVE EXISTING FINISHED AND/OR MATERIALS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR RECONSTRUCTING FINISHES AND MATERIALS TO LINE-NEW CONDITIONS. CONTRACTOR SHALL MAINTAIN THE ORIGINAL COLORS, TEXTURES & FINISHES UNLESS SPECIFICALLY NOTED TO THE CONTRARY OR APPROVED 'T-MOBILE CONSTRUCTION MANAGER IN ADVANCE.
- 5. AT THE CLIENT CONSTRUCTION MANAGER'S DISCRETION, THE CONTRACTOR SHALL PROVIDE ROOFTOP WALKPADS TO ALL NEW EQUIPMENT INCLUDING ANTENNAS AND BTS UNITS AND ALONG COAX CABLE ROUTING. ON CONVENTIONAL ROOFING, THE WALK PADS SHALL BE "DUCK BOARDS" AS MANUFACTURED BY APC OR EQUAL. ON SPECIAL ROOFING SYSTEMS SUCH AS SINGLE MEMBRANE ROOFS WILL REQUIRE A SPECIFIC PRODUCT AS NOTED ON PLANS OR AS REQUIRED BY NOTES 1 & 2 ABOVE.

PENETRATION AT FIRE RATED ASSEMBLIES NOTES

- 1. AT THE CLIENT PROJECT MANAGER'S DIRECTION, THE CONTRACTOR SHALL PROVIDE "HILTI" HIGH PERFORMANCE FIRESTOP SYSTEM #FS601 AT ALL FIRE RATED PENETRATIONS INSTALLED PER MANUFACTURER'S LATEST INSTALLATION SPECIFICATIONS.
- 2. ALL PENETRATIONS THROUGH FIRE RATED ASSEMBLIES SHALL BE CONSTRUCTED SO AS TO MAINTAIN AN EQUAL OR GREATER FIRE RATING.

GENERAL NOTES

- 1. THE LATEST EDITION OF THE AMERICAN INSTITUTE OF ARCHITECTS DOCUMENT A201 "GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION" ARE INCLUDED IN THESE SPECIFICATIONS AS IF COMPLETELY REPRODUCED HEREIN.
- 2. THESE NOTES SHALL BE CONSIDERED A PART OF THE WRITTEN SPECIFICATION.
- 3. THIS FACILITY IS AN UNOCCUPIED TELECOMMUNICATIONS SITE AND IS EXEMPT FROM DISABLED ACCESS REQUIREMENTS.
- 4. PRIOR TO THE SUBMISSION OF BIDS, THE CONTRACTORS PARTICIPATING SHALL VISIT THE JOB SITE AND FAMILIARIZE THEMSELVES WITH ALL FIELD CONDITIONS AFFECTING THE PROPOSED PROJECT INCLUDING DEMOLITION, ELECTRICAL, MECHANICAL AND STRUCTURAL INSTALLATIONS, AS WELL AS WITH THE CONSTRUCTION AND CONTRACT DOCUMENTS AND SHALL CONFIRM THAT THE PROJECT CAN BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH THE CONSTRUCTION. SHOULD ANY ERRORS, OMISSION, OR DISCREPANCIES BE FOUND, THE GENERAL CONTRACTOR SHALL IMMEDIATELY NOTIFY SYNERGY AND THE PROJECT ARCHITECT / ENGINEER IN WRITING. IN THE EVENT OF DISCREPANCIES FOUND, THE GENERAL CONTRACTOR SHALL IMMEDIATELY NOTIFY SYNERGY AND THE PROJECT ARCHITECT / ENGINEER IN WRITING. IN THE EVENT OF DISCREPANCIES THE CONTRACTOR SHALL INCLUDE THE MORE COSTLY OR EXTENSIVE WORK IN THE BID, UNLESS SPECIFICALLY DIRECTED OTHERWISE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTING ANY ERROR, OMISSION, OR INCONSISTENCY AFTER THE START OF THE CONSTRUCTION WHICH HAS NOT BEEN BROUGHT TO THE ATTENTION OF THE PROJECT ARCHITECT / ENGINEER AND SHALL INCUR ANY EXPENSES TO RECTIFY THE SITUATION. THE MEANS OF CORRECTING ANY ERROR SHALL FIRST BE APPROVED BY THE PROJECT ARCHITECT / ENGINEER.
- 5. THE CONTRACTOR SHALL INCLUDE IN THE BID ALL MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE THE WORK AS INDICATED OR IMPLIED BY THESE DRAWINGS.
- 6. THE CONTRACTOR SHALL PROVIDE CONTINUOUS SUPERVISION WHILE ANY SUBCONTRACTORS OR WORKERS ARE ON THE SITE AND SHALL SUPERVISE AND DIRECT ALL WORK, USING THE BEST SKILLS AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, PROCEDURES AND SEQUENCES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
- 7. WORKMANSHIP THROUGHOUT SHALL BE OF THE BEST QUALITY OF THE TRADE INVOLVED, AND SHALL MEET OR EXCEED THE FOLLOWING MINIMUM REFERENCE STANDARDS FOR QUALITY AND PROFESSIONAL CONSTRUCTION PRACTICE:
 - NCRA NATIONAL ROOFING CONTRACTORS ASSOCIATION
 O' HARE INTERNATIONAL CENTER
 10255 W. HIGGENS ROAD, SUITE 600
 ROSEMONT, IL 60018
 - SMACNA SHEET METAL AND AIR CONDITIONING CONTRACTORS
 NATIONAL ASSOCIATION
 4201 LAFAYETTE CENTER DRIVE
 CHANTILLY, VA 20151
 - IILP INTERNATIONAL INSTITUTE FOR LATH AND PLASTER
 P.O. BOX 1663
 LAFAYETTE, CA 94549
- 8. INSTALL ALL EQUIPMENT AND MATERIALS PER THE LATEST EDITION OF THE MANUFACTURER'S INSTALLATION SPECIFICATIONS UNLESS SPECIFICALLY OTHERWISE INDICATED, OR WHERE LOCAL CODES OR REGULATIONS PRECEDENCE.
- 9. THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL GIVE ALL NOTICES AND SHALL COMPLY WITH ALL APPLICABLE LOCAL CODES, REGULATIONS, LAWS AND ORDINANCES AS WELL AS STATE DEPARTMENT OF INDUSTRIAL REGULATIONS AND DIVISION OF INDUSTRIAL SAFETY (OSHA) REQUIREMENTS.
- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR AND SHALL REMEDY ALL FAULTY, INFERIOR, AND/OR IMPROPER MATERIALS, DAMAGED GOODS, AND/OR FAULTY WORKMANSHIP FOR ONE (1) YEAR AFTER THE PROJECT IS COMPLETE AND ACCEPTED UNDER THIS CONTRACT; UNLESS NOTED OTHERWISE IN THE CONTRACT BETWEEN THE OWNER AND CONTRACTOR. EXCEPTION: THE ROOFING SUBCONTRACTOR SHALL FURNISH A MAINTENANCE AGREEMENT FOR ALL WORK DONE, COSIGNED BY THE GENERAL CONTRACTOR, TO MAINTAIN THE ROOFING IN A WATER TIGHT CONDITION FOR A PERIOD OF TWO (2) YEARS STARTING AFTER THE DATE OF SUBSTANTIAL COMPLETION OF THE PROJECT, UNLESS OTHERWISE WRITTEN IN THE CONTRACT BETWEEN THE OWNER AND THE CONTRACTOR.

GENERAL NOTES (CONTINUATION)

- 11. THE GENERAL CONTRACTOR MUST PERFORM WORK DURING PROPERTY OWNER'S PREFERRED HOURS TO AVOID DISRUPTION OF NORMAL ACTIVITY.
- 12. ALL EXPOSED METAL SHEET SHALL BE HOT-DIPPED GALVANIZED.
- 13. PROVIDE A PORTABLE FIRE EXTINGUISHER WITH A RATING OF NOT LESS THAN 2-A OR 2-A10BC WITHIN 75 FEET TRAVEL DISTANCE TO ALL PORTIONS OF THE PROJECT AREA CONSTRUCTION.
- 14. THE GOVERNING AGENCIES, CODE AUTHORITIES, AND BUILDING INSPECTORS SHALL PROVIDE THE MINIMUM STANDARDS FOR CONSTRUCTION TECHNIQUES, MATERIALS, AND FINISHES USED THROUGHOUT THE PROJECT TRADE STANDARDS AND/OR PUBLISHED MANUFACTURERS SPECIFICATIONS MEETING OR EXCEEDING DESIGN REQUIREMENTS SHALL BE USED FOR INSTALLATION.
- 15. PRIOR TO STARTING CONSTRUCTION OF THE CONTRACTOR HAS THE RESPONSIBILITY TO LOCATE ALL EXISTING UTILITIES, AND TO PROTECT THEM FROM DAMAGE. THE CONTRACTOR OR SUBCONTRACTOR SHALL BEAR THE EXPENSE OF REPAIRING OR REPLACING ANY DAMAGE TO THE UTILITIES CAUSED DURING THE EXECUTION OF THE WORK.
- 16. A COPY OF THE APPROVED PLANS SHALL BE KEPT IN A PLACE SPECIFIED BY THE GOVERNING AGENCY, AND BY LAW SHALL BE AVAILABLE FOR INSPECTION AT ALL TIMES.
- 17. IT IS THE CONTRACTORS RESPONSIBILITY TO ENSURE ALL CONSTRUCTION SETS REFLECT THE SAME INFORMATION AS THE APPROVED PLANS. THE CONTRACTOR SHALL ALSO MAINTAIN ONE SET OF PLANS AT THE SITE FOR THE PURPOSE OF DOCUMENTING ALL AS-BUILT CHANGES, REVISIONS, ADDENDUMS, OR CHANGE ORDERS. THE CONTRACTOR SHALL FORWARD THE AS-BUILT DRAWINGS TO THE ARCHITECT/ENGINEER AND THE LANDLORD/LESSOR AT THE CONCLUSION OF THE PROJECT.
- 18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE SECURITY OF THE SITE FROM THE START TO THE COMPLETION OF THE PROJECT. THE CONTRACTOR SHALL MAINTAIN ACCESS TO THE SITE AT ALL TIMES FOR THE LANDLORD/LESSOR PERSONNEL.
- 19. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING TEMPORARY POWER, WATER AND TOILET FACILITIES.
- 20. ALL CONSTRUCTION PHASES OF THE PROJECT SHALL CONFORM TO THE CURRENT GOVERNING CODES.
- 21. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL SAFETY PRECAUTIONS AND REGULATIONS DURING THE WORK. THE ENGINEER WILL NOT ADVISE OR PROVIDE DIRECTION AS TO SAFETY PRECAUTIONS AND PROGRAMS.
- 22. THE CONTRACTOR SHALL SUPERVISE AND COORDINATE ALL WORK, USING PROFESSIONAL KNOWLEDGE AND SKILLS. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, PROCEDURES, SEQUENCING AND COORDINATING ALL PORTIONS OF THE WORK.
- 23. THE CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN AND PAY FOR ALL PERMITS, LICENSES AND/OR INSPECTIONS TO COMPLETE THE PROJECT. BUILDING PERMIT APPLICATIONS SHALL BE FILED BY THE OWNER OR THE REPRESENTATIVE. CONTRACTOR SHALL OBTAIN THE PERMIT AND MAKE FINAL PAYMENT OF THE SAID DOCUMENT.
- 24. ALL DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE UNLESS OTHERWISE NOTED.
- 25. THE CONTRACTOR SHALL PROVIDE THE FIRE MARSHALL APPROVED MATERIALS TO FILL/SEAL PENETRATIONS THROUGH THE FIRE RATE ASSEMBLIES.
- 26. NEW CONSTRUCTION ADDED TO EXISTING CONSTRUCTION SHALL BE MATCHED IN FORM, TEXTURE, MATERIAL AND PAINT COLOR EXCEPT AS NOTED IN THE PLANS.
- 27. WHERE SPECIFIED, MATERIALS TESTING SHALL BE TO THE LATEST STANDARDS AVAILABLE AS REQUIRED BY THE LOCAL GOVERNING AGENCY RESPONSIBLE FOR RECORDING THE RESULTS.
- 28. ALL GENERAL NOTES AND STANDARD DETAILS ARE THE MINIMUM REQUIREMENTS TO BE USED IN CONDITIONS WHICH ARE NOT SPECIFICALLY SHOWN OTHERWISE.
- SHALL BE LEFT IN A CLEAN/SWEPT CONDITION AT ALL TIMES.

 30. ALL SYMBOLS AND ABBREVIATIONS ARE CONSIDERED CONSTRUCTION INDUSTRY

STANDARDS. IF A CONTRACTOR HAS A QUESTING REGARDING THEIR EXACT MEANING THE

29. ALL DEBRIS AND REFUSE IS TO BE REMOVED FROM THE PROJECT DAILY. PREMISES

- ARCHITECT/ENGINEER SHALL BE NOTIFIED FOR CLARIFICATIONS.

 31. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR THE METHODS, TECHNIQUES AND
- SEQUENCES OF PROCEDURES TO PERFORM THE WORK. THE SUPERVISION OF THE WORK IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- 32. CONTRACTORS SHALL BID WALK THE PROJECT TO ASCERTAIN CONDITIONS WHICH MAY ADVERSELY AFFECT THE WORK OR COST THEREOF.
- 33. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS, THE DIMENSIONS, ELEVATIONS, ETC. NECESSARY FOR THE PROPER CONSTRUCTION AND ALIGNMENT OF THE NEW WORK TO THE EXISTING WORK. THE CONTRACTOR SHALL MAKE ALL MEASUREMENTS NECESSARY FOR THE FABRICATION AND ERECTION OF STRUCTURAL MEMBERS. ANY DISCREPANCY SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK AND MATERIALS INCLUDING THOSE FURNISHED BY THE SUBCONTRACTOR(S).
- 34. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTILITIES WHETHER SHOWN HEREON OR NOT, AND TO PROTECT THEM FROM DAMAGE. THE CONTRACTOR SHALL BEAR ALL EXPENSE OF REPAIR OR REPLACEMENT IN CONJUNCTION WITH THE EXECUTION OF THIS WORK. GENERAL CONTRACTOR SHALL NOTIFY THE ENGINEER AND ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES FOUND WITHIN THE CONTRACT DOCUMENTS, PRIOR TO STARTING WORK.
- 35. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES WHERE ENCOUNTERED IN WORK, SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF WORK, SHALL BE RELOCATED AS DIRECTED BY ENGINEERS. EXTREME CAUTION SHOULD BE USED BY THE CONTRACTOR WHEN EXCAVATING OR PIER DRILLING AROUND OR NEAR UTILITIES.
- 36. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF WORK, SHALL BE REMOVED AND SHALL BE CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF WORK, SUBJECT TO THE APPROVAL OF THE ENGINEER.
- 37. NO CHANGES ARE TO BE MADE TO THESE PLANS WITHOUT THE KNOWLEDGE AND WRITTEN CONSENT OF THE ARCHITECT/ENGINEER. UNAUTHORIZED CHANGES RENDER THESE DRAWINGS VOID.
- 38. ANY REFERENCES TO THE WORDS APPROVED, OR APPROVAL IN THESE DOCUMENTS SHALL BE HERE DEFINED TO MEAN GENERAL ACCEPTANCE OR REVIEW AND SHALL NOT RELIEVE THE CONTRACTOR AND/OR HIS SUBCONTRACTORS OF ANY LIABILITY IN FURNISHING THE REQUIRED MATERIALS OR LABOR SPECIFIED.

GENERAL NOTES (CONTINUATION)

- 39. A PRE—CONSTRUCTION CONFERENCE OF REPRESENTATIVES FROM AFFECTED AGENCIES SHALL BE HELD ON THE JOB AT LEAST ONE (1) WEEK PRIOR TO BEGINNING CONSTRUCTION.
- 40. DRAWINGS ARE NOT TO BE SCALED UNDER ANY CIRCUMSTANCES, WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALE, AND THIS SET OF PLANS IS INTENDED TO BE USED FOR DIAGRAMMATIC PURPOSES ONLY, UNLESS NOTED OTHERWISE. CONTRACTOR SHALL PROVIDE FIELD MEASUREMENTS AS NECESSARY TO COMPLETE ALL WORKS AND THE GENERAL CONTRACTOR'S SCOPE OF WORK SHALL INCLUDE FURNISHING ALL MATERIALS, EQUIPMENT, LABOR, AND ANYTHING ELSE DEEMED NECESSARY TO COMPLETE INSTALLATIONS AS DESCRIBED HEREIN. SYNERGY IS NOT RESPONSIBLE FOR ANY ERRORS RESULTING FROM THIS PRACTICE WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALE SHOWN ON PLANS.
- 41. DETAILS INCLUDED HEREIN ARE INTENDED TO SHOW END RESULT OF DESIGN. MINOR MODIFICATIONS MAY BE REQUIRED TO SUIT JOB CONDITIONS OR SITUATIONS, AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF THE SCOPE OF WORK.

SITE PREPARATION NOTES

- 1. THE PREPARATION OF THE SITE FOR CONSTRUCTION SHALL INCLUDE THE REMOVAL OF ALL BROKEN CONCRETE, TREE TRUNKS AND ANY OTHER DEBRIS THAT MIGHT DAMAGE THE FOOTINGS OF THE NEW STRUCTURE.
- 2. BACKFILL ALL TRENCHES WITH CLEAN, STERILE SOIL HAVING A SAND EQUIVALENT OF 30% OR GREATER. BACKFILL IN 8 INCH LAYERS, MOISTURE CONDITIONED AND PROPERLY COMPACTED. ADEQUATE DRAINAGE SHALL BE PROVIDED SUCH THAT NO PONDING OCCURS.
- 3. ALL FOUNDATION FOOTINGS SHALL EXTEND INTO AND BEAR AGAINST NATURAL UNDISTURBED SOIL OR APPROVED COMPACTED FILL. FOOTINGS SHALL EXTEND INTO SOIL DEPTH AS INDICATED IN PLANS.
- 4. SHOULD ANY LOOSE FILL, EXPANSIVE SOIL, GROUND WATER OR ANY OTHER UNEXPECTED CONDITIONS BE ENCOUNTERED DURING THE EXCAVATION FOR THE NEW FOUNDATION, THE ARCHITECT/ENGINEER SHALL BE NOTIFIED AND ALL FOUNDATION WORK SHALL CEASE IMMEDIATELY.
- 5. WITHIN AN AREA A MINIMUM OF 5 FEET BEYOND THE BUILDING LIMITS, EXCAVATE A MINIMUM OF 4 INCHES OF EXISTING SOIL. REMOVE ALL ORGANICS, PAVEMENT, ROOTS, DEBRIS AND OTHERWISE UNSUITABLE MATERIAL.
- 6. THE SURFACE OF THE EXPOSED SUBGRADE SHALL BE INSPECTED BY PROBING OR TESTING TO CHECK FOR POCKETS OF SOFT OR UNSUITABLE MATERIAL. EXCAVATE UNSUITABLE SOIL AS DIRECTED BY THE GEOTECHNICAL ENGINEER/TESTING AGENCY.
- 7. PROOF ROLL THE SURFACE OF THE EXPOSED SUBGRADE WITH A LOADED TANDEM AXLE DUMP TRUCK. REMOVE ALL SOILS WHICH PUMP OR DO NOT COMPACT PROPERLY AS DIRECTED BY THE GEOTECHNICAL ENGINEER/TESTING AGENCY.
- 8. FILL ALL EXCAVATED AREAS WITH APPROVED CONTROLLED FILL. PLACE IN 8 INCHES LOOSE LIFTS AND THE MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D698. COMPACT TO A MINIMUM OF 90% RELATIVE COMPACTION
- 9. ANY STRUCTURAL DRAWINGS HERE IN REPRESENT THE FINISHED STRUCTURE. THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY GUYING AND BRACING REQUIRED TO ERECT AND HOLD THE STRUCTURE IN PROPER ALIGNMENT UNTIL ALL STRUCTURAL WORK AND CONNECTIONS HAVE BEEN COMPLETED. THE INVESTIGATION, DESIGN, SAFETY, ADEQUACY AND INSPECTION OF ERECTION BRACING, SHORING, TEMPORARY SUPPORTS, ETC. IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- 10. THE ARCHITECT/ENGINEER IS NOT RESPONSIBLE FOR COMPLICATIONS, DAMAGES, INJURY, OR DEATH ARISING OUT OF ANY KIND OF NEGLIGENCE PRIOR TO COMPLETION OF THE FINISHED STRUCTURE.
- 11. PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL PROTECT ALL AREAS FROM DAMAGE WHICH MAY OCCUR DURING CONSTRUCTION. ANY DAMAGE TO NEW OR EXISTING SURFACES, STRUCTURES OR EQUIPMENT SHALL BE IMMEDIATELY REPAIRED OR REPLACED TO THE SATISFACTION OF THE PROPERTY OWNER. THE CONTRACTOR SHALL BEAR THE EXPENSE OF REPAIRING OR REPLACING ANY DAMAGED AREAS.
- 12. WHEN REQUIRED STORAGE OF MATERIALS OCCURS, MATERIAL SHALL BE EVENLY DISTRIBUTED OVER THE FLOOR OR ROOF SO AS NOT TO EXCEED THE DESIGNED LIVE LOADS FOR THE STRUCTURE. TEMPORARY SHORING OR BRACING SHALL BE PROVIDED WHERE THE STRUCTURE OR SOIL HAS NOT ATTAINED THE DESIGN STRENGTH FOR THE CONDITIONS PRESENT.
- 13. PRIOR TO PROCEEDING WITH ANY WORK WITHIN AN EXISTING FACILITY, THE CONTRACTOR SHALL BE FAMILIAR HIMSELF WITH EXISTING STRUCTURAL AND OTHER CONDITIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ALL NECESSARY BRACING, SHORING AND OTHER SAFEGUARDS TO MAINTAIN ALL PARTS OF THE EXISTING WORK IN A SAFE CONDITION DURING THE PROCESS OF DEMOLITION AND CONSTRUCTION AND TO PROTECT FROM DAMAGE THOSE PORTIONS OF THE EXISTING WORK WHICH ARE TO REMAIN.

SHOP DRAWING REVIEW

1. REVIEW BY THE ARCHITECT/ENGINEER IS FOR GENERAL COMPLIANCE WITH THE DESIGN CONCEPT AND THE CONTRACT DOCUMENTS. MARKINGS OR COMMENTS SHALL NOT BE CONSTRUED AS RELIEVING THE CONTRACTOR FROM COMPLIANCE WITH THE PROJECT PLANS AND SPECIFICATIONS, NOR DEPARTURES THERE FROM. THE CONTRACTOR REMAINS RESPONSIBLE FOR DETAILS AND ACCURACY, FOR CONFIRMING AND CORRELATING ALL QUANTITIES AND DIMENSIONS, FOR SELECTION FABRICATION PROCESSES.

LANDLORD/LESSOR NOTES

- 1. A PRECONSTRUCTION CONFERENCE OF REPRESENTATIVES FROM APPLICABLE AGENCIES SHALL BE HELD ON SITE AT LEAST ONCE PRIOR TO BEGINNING CONSTRUCTION AT WHICH TIME A CONSTRUCTION SCHEDULE AND 24-HOUR CONTACT INFORMATION SHALL BE PROVIDED TO LANDLORD/LESSOR.
- 2. CONTRACTOR SHALL MAINTAIN ACCESS TO THE SITE AT ALL TIMES FOR LANDLORD/LESSOR PERSONNEL. OPEN TRENCHES SHALL BE PROPERLY PLATED AT THE END OF EACH WORKING DAY TO ALLOW FOR 24—HOUR LANDLORD/LESSOR ACCESS TO THE SITE.
- 3. THE CONTRACTOR AND CELL CARRIER SHALL BE RESPONSIBLE FOR ANY DAMAGE DUE TO CONSTRUCTION ACTIVITIES TO THE EXISTING SITE AND SHALL RETURN DAMAGED FACILITIES TO EXISTING CONDITION OR BETTER AT NO COST TO THE LANDLORD/LESSOR.
- 4. THE CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT (DIG ALERT) AT LEAST TWO (2) WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION AT 1-800-422-4133.
- 5. ALL NEW AND EXISTING FACILITIES OWNED BY THE REPRESENTED CELLULAR CARRIER SHALL BE PROPERLY TAGGED IDENTIFYING THE OWNER'S NAME AND 24—HOUR PHONE NUMBER
- 6. THE CONTRACTOR IS RESPONSIBLE TO ENSURE THE SITE IS SECURE DURING BOTH WORKING AND NON-WORKING HOURS.

ACCESSIBILITY EXCEPTION NOTES

- 1. SECTION 1103.2.7: LIMITED ACCESS SPACES SPACES NOT CUSTOMARILY OCCUPIED AND ACCESSED ONLY BY LADDERS, CATWALKS, CRAWL SPACES, FREIGHT ELEVATORS OR VERY NARROW PASSAGEWAYS SHALL NOT BE REQUIRED TO COMPLY WITH THESE REQUIREMENTS OR TO BE ON AN ACCESSIBLE ROUTE.
- 2. SECTION 1103.2.9: EQUIPMENT SPACES SPACES FREQUENTED ONLY BY SERVICE PERSONNEL FOR MAINTENANCE, REPAIR OR OCCASIONAL MONITORING OF EQUIPMENT SHALL NOT BE REQUIRED TO COMPLY WITH THIS REQUIREMENT OR TO BE ON AN ACCESSIBLE ROUTE. MACHINERY SPACES INCLUDE, BUT ARE NOT LIMITED TO, ELEVATOR PITS OR ELEVATOR PENTHOUSES; MECHANICAL. ELECTRICAL OR COMMUNICATIONS EQUIPMENT ROOMS; PIPING OR EQUIPMENT CATWALKS; WATER OR SEWAGE TREATMENT PUMP ROOMS AND STATIONS; ELECTRIC SUBSTATIONS AND TRANSFORMER VAULTS; AND HIGHWAY AND TUNNEL FACILITIES.

GENERAL RF NOTES

- 1. ALL ANTENNAS AND ANTENNA CABLE SHALL BE FURNISHED BY THE CELL CARRIER AND INSTALLED BY ANTENNA INSTALLATION CONTRACTOR.
- 2. PRIOR TO INSTALLATION OF ANTENNAS THE CONTRACTOR SHALL VERIFY THAT THE AZIMUTH AND DIMENSIONS SHOWN ON THE PLANS MATCH ACTUAL FIELD CONDITIONS.
- 3. ANTENNA INSTALLATION CONTRACTOR SHALL PROVIDE ALL CONDUIT, CABLE TRAYS, GROUND KITS, CLAMPS, GROUNDS, ETC., FOR COMPLETE INSTALLATION OF ANTENNAS AND CABLES SHOWN AND INTENDED AS REQUIRED FOR A COMPLETE OPERATING SYSTEM IN ACCORDANCE WITH T-MOBILE WIRELESS STANDARDS.
- 4. ANTENNA CONDUIT SHALL INCLUDE FACTORY-MADE LARGE RADIUS SWEEPS AT ALL CHANGES IN DIRECTION. SWEEP RADIUS SHALL BE AS REQUIRED TO MEET COAX MANUFACTURER'S MINIMUM BENDING RADIUS.
- 5. ALL UNDERGROUND CONDUIT SHALL BE SCHEDULE 40 PVC WITH STEEL BENDS. ALL EXPOSED CONDUIT ABOVE GRADE LEVEL SHALL BE IMC OR RIGID GALVANIZED. ALL EXPOSED CONDUIT PROTECTED IN A BUILDING OR ON A ROOF SHALL BE EMT OR UV STABILIZED, PAINTED, SCHEDULE 80 PVC.
- 6. IN HIGH TRAFFIC AREAS OR WHERE SUSCEPTIBLE TO DAMAGE CONTRACTOR SHALL PROVIDE FORMED 14 GA GALVANIZED SHEET METAL COVER OVER COAXIAL CABLE ROUTES. WHERE CABLE IS RUN ON THE WALL, ATTACH UNISTRUT TO WALL AND COVER WITH 14 GA GALVANIZED FORMED SHEET METAL COVER OR MATERIAL AS DIRECTED BY T-MOBILE WIRELESS PROJECT MANAGER.
- 7. VERIFY ROUTE AND LENGTH OF CABLE PRIOR TO CUTTING. ADJUST INDICATED ROUTE AS REQUIRED TO CLEAR EXISTING OBSTRUCTIONS AND MAINTAIN REQUIRED CLEARANCE FROM EXISTING EQUIPMENT AND FACILITIES.
- 8. MAXIMUM LENGTH OF 7/8 INCH COAXIAL CABLE SHALL BE 140 FEET. MAXIMUM LENGTH OF 1-5/8 INCH COAXIAL CABLE SHALL BE 240 FEET.
- 9. VERIFY MODEL NUMBERS OF ANTENNAS WITH T-MOBILE WIRELESS SERVICES.
- 10. THE CONTRACTOR SHALL PROVIDE TESTING OF ANTENNAS AND SHALL PROVIDE DOCUMENTATION TO THE CELL CARIER PROJECT MANAGER.
- 11. INSTALL EMBOSSED ALUMINUM IDENTIFICATION TAGS AT THE END OF THE MAIN COAXIAL CABLE RUNS, ALONG WITH THE END OF THE JUMPER CABLE LOCATED WITHIN THE PLINTH SECTION OF THE BTS UNIT.

T - Mobile * Stick Together *

4100 GUARDIAN ST., SUITE 101 SIMI VALLEY, CA 93063

(HARDENING NATIONAL - 25kW DIESEL)

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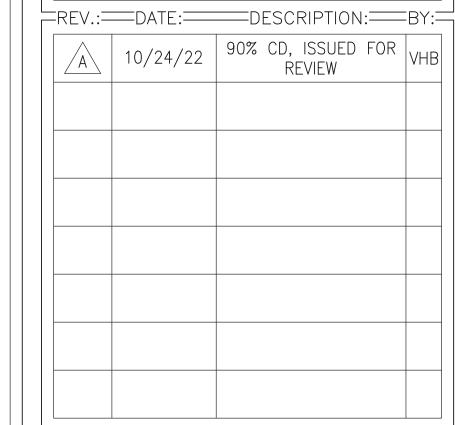
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CONSTRUCTION



PLANS PREPARED BY:



7543 Woodley Ave., #201, Van Nuys, CA 91406 Office: (818) 840-0808 Fax: (818) 840-0708

=CONSULTANT:=



7543 Woodley Ave., #201, Van Nuys, CA 91406 Office: (818) 840-0808 Fax: (818) 840-0708

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GENERAL NOTES

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NOTE:

CONTRACTOR TO FIELD VERIFY ALL (E) CONSTRUCTION CONDITIONS BEFORE SUBMITTAL OF FINAL BIDS, START OF CONSTRUCTION AND OR FABRICATION.

ABBREVIATIONS

AB AC A.C. ADJ A.F.F. ARCH	ANCHOR BOLT ASPHALTIC CONCRETE AIR CONDITIONING ADJUSTABLE ABOVE FINISH FLOOR ARCHITECTURAL	LAM LBS LT LA LNA	LAMINATED POUNDS LIGHT LIGHTNING ARRESTOR LOW NOISE AMPLIFIER
APPROX. A.G.L. A.M.S.L. BD	APPROXIMATELY ABOVE GRADE LEVEL ABOVE MEAN SEA LEVEL BOARD	MFR MAT MAX MECH MIN	MANUFACTURER MATERIAL MAXIMUM MECHANICAL MINIMUM
BLDG BLKG BOT BSMT BTS	BUILDING BLOCKING BOTTOM BASEMENT BASE TRANPGEIVER STATION	MISC ML MO MS MTD MTL	MISCELLANEOUS METAL LATH MASONRY OPENING MACHINE SCREW MOUNTED METAL
C CEM CL CLG CLR	COURSE(S) CEMENT CHAIN LINK CEILING CLEAR	(N) NIC NO NTS	NEW NOT IN CONTRACT NUMBER NOT TO SCALE
COL CONC CONST CONT CORR	COLUMN CONCRETE CONSTRUCTION CONTINUOUS CORRIDOR	OA O.C. OPNG OPP	OVERALL ON CENTER OPENING OPPOSITE
DIA DBL DEPT DEMO	DIAMETER DOUBLE DEPARTMENT DEMOLITION	PARTN PL PLAS PLYWD POC PROP PT	PARTITION PLATE PLASTER PLYWOOD POINT OF CONNECTION PROPERTY PRESSURE TREATED
DIM DN DR DTL DWG	DIMENSION DOWN DOOR DETAIL DRAWING EXISTING	R REQD RD RM RMS RO	RISER REQUIRED ROOF DRAIN ROOM ROOMS ROUGH OPENING
(E) EA ELEC ELEV EQUIP EXP EXT	EACH ELECTRIC ELEVATION EQUIPMENT EXPANSION EXTERIOR	SC SCHED SECT SHT SIM	SOLID CORE SCHEDULE SECTION SHEET SIMILAR
FA FB FF FH FIN FLR FOS FS	FIRE ALARM FLAT BAR FINISH FLOOR FLAT HEAD FINISH(ED) FLOOR FACE OF STUDS FINISH SURFACE	SPECS SS STL STOR STRUCT SUSP SW SWBO	SPECIFICATIONS STAINLESS STEEL STEEL STORAGE STRUCTURAL SUSPENDED SWITCH SWITCHBOARD
FT FTG FW F.G. FUT	FOOT, FEET FOOTING FINISH WALL FINISH GRADE FUTURE	THK TI TMA TOS TS TYP	THICK TENANT IMPROVEMENT TOWER MOUNTED AMPLIFIER TOP OF SURFACE TUBE STEEL TYPICAL
GA GALV GL	GAUGE GALVANIZED GLASS	UNO	UNLESS NOTED OTHERWISE
GR GYP GFCI GND	GRADE GYPSUM GROUND FAULT CIRCUIT INTERRUPT GROUND	VERT V.I.F.	VINYL COMPOSITION TILE VERTICAL VERIFY IN FIELD
HC HDW HTR HM HORIZ HR	HOLLOW CORE HARDWARE HEATER HOLLOW METAL HORIZONTAL HOUR	W/ WD WR WT	WITH WOOD WATER RESISTANT WEIGHT
HT HV	HEIGHT HIGH VOLTAGE	XFMR @	TRANSFORMER AT
ID INS INT	INSIDE DIMENSION INSULATION INTERIOR	C Q	CHANNEL CENTERLINE
JT	JOINT		ANGLE

SYMBOLS - SECTION NUMBER BUILDING SECTION — PROPERTY LINE — SHEET NUMBER ———— WOOD FENCE — DETAIL NUMBER DETAIL REFERENCE ---- x ---- X ---- CHAIN LINK FENCE ─ SHEET NUMBER POWER SERVICE TELCO SERVICE CROSS SECTION ➤ SHEET NUMBER —— G—— G—— GROUNDING 1) DOOR NUMBER 101 AREA AND/OR ROOM NUMBER MECHANICAL UNIT

PROPERTY LINE

PAINTING SPECIFICATIONS

- A. GENERAL
- 1. ALL PAINT PRODUCT LINE SHALL BE SHERWIN WILLIAMS UNLESS SPECIFICALLY NOTED OTHERWISE.
- 2. CONTRACTOR SHALL PREPARE ALL SURFACES AND APPLY ALL FINISHES PER LATEST EDITION OF MANUFACTURER'S SPECIFICATIONS.
- 3. COMPLY WITH MANUFACTURER'S WRITTEN INSTRUCTIONS REGARDING SUFFICIENT DRYING TIME BETWEEN COATS WITH PROVISIONS AS RECOMMENDED BY MANUFACTURER FOR EXISTING WEATHER CONDITIONS.
- 4. FINISH COLOR AND TEXTURE OF ALL PAINTED SURFACES SHALL MATCH ADJACENT SURFACES UNLESS OTHERWISE NOTED.
- 5. ALL PAINT MATERIAL DATA SHEET SHALL BE PROVIDED TO THE CELL CARRIER CONSTRUCTION MANAGER.
- 6. PREPARE PREVIOUSLY PAINTED SURFACES BY LIGHT SANDING WITH 400 GRIT SANDPAPER AND NON-HYDROCARBON WASH. PREPARE GALVANIZED SURFACES BY ACID ETCH OR SOLVENT CLEANING IN ACCORDANCE WITH SSPC-SP1.
- 7. FURNISH DROP CLOTHES, SHIELDS, MASKING AND PROTECTIVE METHODS TO PREVENT SPRAY OR DROPPING FROM DAMAGING ADJACENT SURFACES AND FACILITIES.
- 8. APPLY PAINT BY AIRLESS SPRAY, SANDING LIGHTLY BETWEEN EACH SUCCEEDING ENAMEL COAT ON FLAT SURFACES. APPLY MATERIAL TO ACHIEVE A COATING NO THINNER THAN THE DRY FILM THICKNESS
- 9. APPLY BLOCK FILTER TO CONCRETE BLOCK CONSTRUCTION AT A RATE TO ENSURE COMPLETE COVERAGE WITH PORES COMPLETELY FILLED.
- 10. CONTRACTOR SHALL CORRECT RUNS, SAGS, MISSES AND OTHER DEFECTS INCLUDING INADEQUATE COVERAGE AS DIRECTED BY THE T-MOBILE WIRELESS CONSTRUCTION MANAGER. REPAINT AS NECESSARY TO ACHIEVE SURFACES WHICH ARE SMOOTH, EVENLY COATED WITH UNIFORM SHEEN AND FREE FROM BLEMISHES.
- B. PAINTING SCOPE
- 1. PAINT THE FOLLOWING MATERIALS AND SYSTEMS CHECKED BELOW WITH THE COATING SYSTEM INDICATED.

PAINTING SCOPE				
SURFACE TO BE PAINTED	COATING SYSTEM	PAINT	DO NOT PAINT	N/A
BTS UNIT				
ALL EQUIPMENT & CABINETS OTHER THAN THE BTS UNIT				
ANTENNA COVERS, TILT BRACKETS, MOUNTING BRACKETS AND ASSOCIATED HARDWARE, CABLE AND CABLE COVERS EXPOSED TO VIEW, EXPOSED CONDUIT AND HANGERS, ETC.				
FLASHING UNITS, METAL TRIM AND OTHER METAL SURFACES				
STUCCO, CONCRETE BLOCK AND CEMENTIOUS TYPE FINISH SYSTEMS.				
PLYWOOD, LUMBER AND WOOD TRIM INCLUDING THE BACK SIDE OF ALL SCREEN WALLS				
DRYWALL				
CONCRETE POLES				
METAL POLES AND METAL POLE STAND-OFF				

C. COATING SYSTEM SPECIFICATIONS

- 1. DTM ACRYLIC COATING (SERIES B66) BY SHERWIN WILLIAMS CO. 1 MIL DFT PER COAT APPLIED IN TWO (2) COATS OVER DTM BONDING PRIMER (B66A50).
- 2. 100% ACRYLIC, LATEX COATING EQUIVALENT TO A-100 (SERIES A-82) BY SHERWIN WILLIAMS CO. 1 MIL DFT PER COAT APPLIED IN TWO (2) COATS OVER SPECIFIED PRIMER PAINT & PRIMER.

D. ANTENNAS

PRIMER - KEM AQUA E61-W525

TOPCOAT - COROTHANE II B65W200/B60V22

COAXIAL JUMPER CABLES

PRIMER - AS REQUIRED FOR ADHESION. APPLY ONE (1) COAT OF KEM AQUA WATER REDUCIBLE PRIMER E61W25 REDUCED 25%

TOPCOAT - TWO (2) COATS COROTHANE II POLYURETHANE B65W200/B60V2

RAW STEEL

PRIMER - KEM BOND HS B50WZ4, DMT ACRYLIC PRIMER

TOPCOAT - TWO (2) COATS COROTHANE II POLYURETHANE B65W200/B60V2

GALVANIZED METAL

ACID ETCH WITH COMMERCIAL ETCH OR VINEGAR PRIMER COAT AND FINISH COAT (GALVITE HIGH SOLIDS OR DTM PRIMER/FINISH)

STAINLESS STEEL PRIMER - OTM WASH PRIMER, B71Y1

TOPCOAT - TWO (2) COATS COROTHANE II POLYURETHANE B65W200/B60V2

PRE-PRIMED STEEL

TOUCH UP ANY RUST OR UN-PRIMED STEEL WITH KEM BOND HS, SSOWZ4

ALUMINUM AND COPPER

PRIMER - DTM WASH PRIMER, B71Y1

TOPCOAT - TWO (2) COATS COROTHANE II POLYURETHANE B65W200/B60V2

CONCRETE MASONRY

PRIMER - PRO MAR EXTERIOR BLOCK FILLER

TOPCOAT - TWO (2) COATS A-100 LATEX HOUSE & TRIM, SHEEN TO MATCH

CONCRETE STUCCO (EXISTING)

TWO (2) COATS A-100 LATEX HOUSE & TRIM, SHEEN TO MATCH

STUCCO

PRIMER PRO MAR MASONRY CONDITIONER B-46-W21000 - SUPERPAINT A-80 SERIES A-89 SATIN A-84 GLOSS

WOOD A-100 EXTERIOR ALKYD WOOD PRIMER Y-24W20

TOPCOAT - TWO (2) COATS A-100 LATEX HOUSE & TRIM SHEEN TO MATCH ADJACENT SURFACES

FIELD CUTS/DAMAGE (PRIOR TO PRIME & PAINT)

FIRST & SECOND COAT - CUPRINOL CLEAR WOOD PRESERVATIVE #158-0356 ALL PENETRATIONS INTO FINISHED CLU-LAMS SHALL BE CAULKED WITH "SIKAFLEX" SEALANT

STEEL TOUCH UP

STEEL THAT HAS BEEN WELDED, CUT OR SCRATCHED IN THE FIELD SHALL BE TOUCHED UP WITH COLD GALVANIZED PAINT



4100 GUARDIAN ST., SUITE 101 SIMI VALLEY, CA 93063

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SV00924A VY398 FRAZIER PARK PUD

4022 NORTH END DR. FRAZIER PARK, CA 93225 KERN COUNTY

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CONSTRUCTION

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	Â	10/24/22	90% CD, ISSUED FOR REVIEW	VHB

HPLANS PREPARED BY:



7543 Woodley Ave., #201, Van Nuys, CA 91406 Office: (818) 840-0808 Fax: (818) 840-0708

=CONSULTANT:=



7543 Woodley Ave., #201, Van Nuys, CA 91406 Office: (818) 840-0808 Fax: (818) 840-0708

DRAWN	BY:	—СНК.:—	APV.:
	VHB	LK	LK

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'_SHEET TITLE:_

ABBREVIATIONS, SPECIFICATIONS & SYMBOLS

=SHEET NUMBER:=====

=REVISION:=

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SV00924A

JOINT

GENERAL NOTES

- 1. ALL CONSTRUCTION AND WORKMANSHIP SHALL CONFORM TO THE DRAWINGS AND CURRENT GOVERNING CODES AND SPECIFICATIONS.
- 2. THE GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AT THE JOB SITE AND SHALL BE RESPONSIBLE FOR COORDINATING THE WORK OF ALL TRADES AND CONDITIONS OF ALL WORK AND MATERIALS INCLUDING THOSE FURNISHED BY SUBCONTRACTORS. ANY DISCREPANCIES SHALL BE CALLED TO THE ATTENTION OF THE STRUCTURAL ENGINEER IMMEDIATELY AND SHALL BE RESOLVED BEFORE PROCEEDING WITH THE WORK.
- STRUCTURAL DRAWINGS SHALL WORK IN CONJUNCTION WITH ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS.
- 4. DESIGN. MATERIALS. EQUIPMENT, AND PRODUCTS OTHER THAN THOSE DESCRIBED OR INDICATED ON THE DRAWINGS MAY BE CONSIDERED FOR USE PROVIDED PRIOR APPROVAL IS OBTAINED FROM THE STRUCTURAL ENGINEER.
- 5. ALL CONDITIONS SHOWN OR NOTED AS EXISTING ARE BASED ON THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE NO WARRANTY IS IMPLIED TO THEIR ACCURACY. CONTRACTOR SHALL FIELD VERIFY ALL CONDITIONS. CONDITIONS BECOME APPARENT THAT DIFFER FROM THE CONDITIONS SHOWN, THEY SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE PROFESSIONAL ENGINEER. PROFESSIONAL ENGINEER WILL THEN PREPARE ADDITIONAL DRAWINGS AS MAY BE NEEDED TO ACCOMMODATE THE CONDITIONS AS BROUGHT TO THEIR ATTENTION.
- 6. MECHANICAL EQUIPMENT MUST BE FIRMLY ATTACHED TO THE STRUCTURE. ISOLATORS, FASTENERS, AND OTHER ELEMENTS PROVIDING STABILITY FOR MECHANICAL EQUIPMENT SHALL BE CAPABLE OF TRANSMITTING CODE REQUIRED LOADS, BUT IN NO EVENT LESS THAN A SHEAR LOAD EQUIVALENT TO 0.45 TIMES THE OPERATING WEIGHT OF THE EQUIPMENT.
- 7. WATERPROOFING: SEE ARCHITECTURAL DRAWINGS
- 8. THE FOUNDATION DESIGN IS BASED ON THE LATEST ADOPTED EDITION OF THE CALIFORNIA BUILDING CODE TABLE 1806.2. ALLOWABLE SOIL BEARING VALUE IS 1500.
- 9. THE NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS.
- 10. TYPICAL DETAILS MAY NOT NECESSARILY BE CUT ON PLANS, BUT APPLY UNLESS NOTED OTHERWISE.

CONCRETE

- 1. ALL POURED-IN-PLACE CONCRETE SHALL HAVE AN ULTIMATE COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS. UNLESS OTHERWISE NOTED, CEMENT TO BE TYPE-8 FROM TESTED STOCK PER ASTM C150.
- 2. CONCRETE FORM TOLERANCES SHALL BE WITHIN THE STANDARDS SET BY THE AMERICAN CONCRETE INSTITUTE.
- 3. ALL REINFORCING STEEL, ANCHOR BOLTS, DOWELS OR OTHER INSERTS SHALL BE SECURED IN POSITION AND INSPECTED BY THE LOCAL BUILDING DEPARTMENT INSPECTOR PRIOR TO THE POURING OF ANY CONCRETE.
- 4. NO PIPES OR DUCTS SHALL BE PLACED IN STRUCTURAL CONCRETE UNLESS SPECIFICALLY DETAILED. REFER TO ARCHITECTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS FOR LOCATIONS.
- 5. FORM EXPOSED CORNERS OF COLUMNS, BEAMS, WALLS, ETC. WITH 3/4 INCH CHAMFERS UNLESS DETAILED OTHERWISE.
- 6. PROVIDE LIGHT BROOM FINISH ON ALL EXPOSED CONCRETE UNLESS NOTED OTHERWISE.

STRUCTURAL STEEL

- 1. THE LABOR, MATERIALS AND EXECUTION REQUIRED FOR ALL CONCRETE WORK AS INDICATED ON THE DRAWINGS SHALL BE IN ACCORDANCE WITH THOSE APPLICABLE PORTIONS OF CHAPTER 22 OF THE LATEST ADOPTED EDITION OF THE CALIFORNIA BUILDING CODE.
- 2. STRUCTURAL STEEL NOT ENCASED IN CONCRETE SHALL BE SHOP PAINTED WITH TNEMEC99 METAL PRIMER OR APPROVED EQUIVALENT.
- UNLESS NOTED OTHERWISE, ALL BOLTS SHALL BE ASTM A307. THIS INCLUDES EXPANSION/ADHESIVE ANCHORS. BOLTED CONNECTIONS SHALL CONFORM TO AISC SPECIFICATIONS UNLESS NOTED OTHERWISE ON THE DRAWINGS.
- 4. UNLESS NOTED OTHERWISE ALL WELDS PER THE LATEST EDITIONS OF THE AWS STANDARDS SHALL CONFORM TO AISC SPECIFICATIONS. WELDING SHALL BE PERFORMED BY WELDERS HOLDING VALID CERTIFICATES AND HAVING CURRENT EXPERIENCE IN THE TYPE OF WELD SHOWN ON THE DRAWINGS OR NOTES. THESE DRAWINGS DO NOT DISTINGUISH BETWEEN SHOP AND FIELD WELDS.
- 5. CONTRACTOR IS PERMITTED TO CUT AND WELD ANTENNA SUPPORT ASSEMBLY ARMS AS NECESSARY TO MEET THE LENGTH REQUIREMENTS IN THE FIELD. WELDS SHALL CONSIST OF A 3/16 INCH FILLET ALL THE WAY AROUND FOR 1/4 INCH THICK STEEL OR LESS AND 3/8 INCH FILLET WELD FOR STEEL 1/2 INCH THICK OR LESS. CONTRACTOR SHALL RESTORE CORROSION BARRIER WITH AN APPROVED PAINT IN ACCORDANCE WITH BS 729:1971 AND PREN 1029.

<u>STRUCTURAL STEEL (CONTINUED)</u>

- MATERIAL CONFORMANCE:
 - A. WIDE FLANGE STEEL SECTIONS PER ASTM A572 OR A992 WITH FY =
 - B. PIPES SECTIONS PER ASTM A501 WITH FY = 36 KSI C. TUBE STEEL SECTIONS PER ASTM A500 WITH FY = 46 KSI
 - D. COLD FORMED STEEL PER ASTM A653 WITH FY = 50 KSI E. WELDING ELECTRODES PER AWS CODE, E70XX UNLESS NOTED
 - OTHERWISE ON PLANS F. ALL OTHER MISCELLANEOUS STEEL SHALL BE ASTM A36 WITH FY = 36 KSI UNLESS NOTED OTHERWISE ON THE PLANS

ADHESIVE / MECHANICAL ANCHORS

- 1. ALL POST-INSTALLED ANCHORS SHALL BE PER SIMPSON OR HILTI MANUFACTURING AS INDICATED ON THE PLANS.
- MECHANICAL ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING APPROVAL CODES:

FOR HILTI KWIK BOLT TZ2 ANCHORS, INSTALLATION SHALL COMPLY WITH ICC-ES ESR-4561 FOR ANCHORS TO MASONRY AND ICC-ES ESR-4266 FOR ANCHORAGE TO CONCRETE.

ADHESIVE ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING APPROVAL CODES:

FOR SIMPSON SET-XP EPOXY ANCHORS, INSTALLATION SHALL BE IN ACCORDANCE WITH ICC-ES ESR-2508 FOR ANCHORAGE TO CONCRETE. IAPMO UES ER-265 AND LARR 25965 FOR ANCHORAGE TO MASONRY.

FOR HILTI HIT-HY 200 EPOXY ANCHORS. INSTALLATION SHALL BE IN ACCORDANCE WITH ICC ESR-3187 FOR ANCHORAGE TO CONCRETE.

3. ALLOW A MINIMUM OF 72 HOURS AFTER NEW CONCRETE IS PLACED PRIOR TO LOCATING MECHANICAL OR ADHESIVE ANCHORS. ALL MECHANICAL/ADHESIVE ANCHORS REQUIRE SPECIAL STRUCTURAL INSPECTION PER THE BUILDING CODE.

SPECIAL STRUCTURAL INSPECTION - STRUCTURAL ONLY

1. SPECIAL STRUCTURAL INSPECTION IS TO BE PROVIDED FOR THE ITEMS LISTED BELOW IN ADDITION TO THE INSPECTIONS CONDUCTED BY THE BUILDING JURISDICTION. SPECIAL STRUCTURAL INSPECTION IS REQUIRED FOR THE FOLLOWING

VERIFICATION AND	INSPECTION	TYPE	REFERENCE
STANDARD			
INSPECTION	CONTINUOUS	PERIODIC	

STEEL CONSTRUCTION

WELDING	
AT FLOOR AND ROOF	AWS D1.3
DECK WELDS FOR REINFORCING STEEL FOR STRUCTURAL STEEL	AWS D1.4, ACI 318
HIGH STRENGTH BOLTING	X AISC 360-16, 2014

ACI 318

CONCRETE C	CONSTRUCTION
CONCILL	01131110011011
REINEOF	RCING STEEL
	VOHVO SIEEE

ACI 318 POST-INSTALLED ANCHORS X ACI 318

USE OF REQUIRED DESIGN MIX

TMS 402 AND 602/ MASONRY CONSTRUCTION ACI 530

REINFORCING STEEL GROUT PLACEMENT CLEANOUTS PRIOR TO CLOSURE POST-INSTALLED ANCHORS

- 2. THE SPECIAL INSPECTOR SHALL OBSERVE THE WORK ASSIGNED TO BE CERTAIN THAT IT CONFORMS TO THE APPROVED DESIGN DRAWINGS AND SPECIFICATIONS. THE SPECIAL INSPECTOR IS NOT AUTHORIZED TO APPROVE DEVIATIONS FROM THE DESIGN DRAWINGS OR SPECIFICATIONS AND ALL DEVIATIONS MUST BE APPROVED BY THE ENGINEER OF RECORD PRIOR TO PROCEEDING WITH THE WORK. ALL REQUESTS FOR DEVIATIONS SHALL BE INITIATED BY THE CONTRACTOR VIA A WRITTEN REQUEST FOR INFORMATION.
- THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL AND TO THE ENGINEER 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 IS RESPONSIBLE FOR PROVIDING THE SPECIAL INSPECTOR ACCESS TO ALL ITEMS REQUIRING SPECIAL INSPECTION. INSPECTOR IS NOT AUTHORIZED TO OPERATE CONTRACTOR'S EQUIPMENT.
- 5. FOR ADDITIONAL INFORMATION ON SPECIAL STRUCTURAL INSPECTIONS, CONTACT THE ENGINEER OF RECORD PRIOR TO START OF CONSTRUCTION.

MASONRY

GENERAL:

HOLLOW CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C90. MEDIUM WEIGHT, GRADE N, F'M = 2,000 PSI, RUNNING BOND, MORTAR TYPE S, 2,000 PSI. GROUT 2,000 PSI. MECHANICALLY VIBRATE GROUT IMMEDIATELY AFTER POURING AND AGAIN 5 TO 10 MINUTES LATER. PROVIDE CLEANOUTS IF GROUT LIFT EXCEEDS 5'-0" IN BLOCK WALLS. MAXIMUM GROUT LIFT SHALL BE 6'-0". WHEN APPROVED BY THE STRUCTURAL ENGINEER AND BUILDING OFFICIAL, GROUT LIFTS MAY BE GREATER THAN 6'-0" IF IT CAN BE DEMONSTRATED BY CONTRACTOR THAT THE GROUT SPACES CAN BE PROPERLY FILLED. FILL CELLS SOLIDLY WITH GROUT IN LIFTS AND STOP POURS 1 1/2" BELOW THE TOP OF A COURSE TO FORM A KEY AT POUR POINTS. UNLESS NOTED OTHERWISE ON THE PLANS, PLACE CONTROL JOINTS IN MASONRY WALLS SUCH THAT NO STRAIGHT RUNS OF WALL EXCEEDS 24'-0". CONTROL JOINTS SHALL NOT OCCUR AT WALL CORNERS, INTERSECTIONS, ENDS, WITHIN 24" OF CONCENTRATED POINTS OF BEARING OR JAMBS, OR OVER OPENINGS UNLESS SPECIFICALLY SHOWN ON THE STRUCTURAL DRAWINGS. ALL MASONRY BELOW FINISHED FLOOR OR GRADE SHALL BE GROUTED SOLID.

VERTICAL REINFORCING:

1 #5 IN CENTER OF GROUT AT CENTER OF WALL, CONTINUOUS FULL HEIGHT OF WALL AT ALL CORNERS, INTERSECTIONS, WALL ENDS, BEAM BEARINGS, JAMBS, EACH SIDE OF CONTROL JOINTS AND AT INTERVALS NOT TO EXCEED 48" O.C. UNLESS NOTED OTHERWISE. TIE AT 8'-0" VERTICALLY, WITH SINGLE WIRE LOOP TIE BY A.A. WIRE PRODUCTS COMPANY. DOWEL VERTICAL REINFORCING TO FOUNDATION WITH DOWELS TO MATCH VERTICAL REINFORCING.

HORIZONTAL REINFORCING:

2 #5 IN MINIMUM 8" DEEP GROUTED CONTINUOUS BOND BEAM AT ELEVATED FRAMING ASSEMBLIES. 1 #5 IN MINIMUM 8" DEEP GROUTED CONTINUOUS BOND BEAM AT TOP OF PARAPETS AND FREESTANDING WALLS. PLACE THESE BARS CONTINUOUS THRU CONTROL JOINTS PER TYPICAL DETAIL. TO MAINTAIN BOND BEAM CONTINUITY, INSTALL BENT BARS PER TYPICAL DETAILS TO MATCH HORIZONTAL BOND BEAM REINFORCING AT CORNERS AND INTERSECTIONS. STANDARD WEIGHT (NO. 9 GAGE WIRE) DUR-O-WAL OR DUR-O-WIRE (OR EQUIVALENT) LADDER TYPE JOINT REINFORCEMENT AT 16" O.C.

LAP SPLICES FOR VERTICAL AND HORIZONTAL REINFORCING SHALL BE PER TYPICAL DETAIL. DO NOT SPLICE WITHIN 8'-0" OF CONTROL JOINTS. LAP HORIZONTAL LADDER TYPE JOINT REINFORCING 12" MINIMUM.

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

REINFORCING STEEL

- 1. REINFORCING STEEL SHALL CONFORM TO ASTM A-615 GRADE 60 U.N.O.
- 2. BARS SHALL BE CLEAN OF MUD, OIL, OR OTHER COATINGS LIKELY TO IMPAIR BONDING.
- 3. ALL REINFORCING SHALL BE SECURED IN PLACE PRIOR TO PLACING CONCRETE OR GROUTING MASONRY. 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 IS NOT AN
- ACCEPTABLE MOISTURE/CORROSION PROTECTION. 4. REINFORCING STEEL SHALL BE SPLICED AS SHOWN OR NOTED. SPLICES AT OTHER LOCATIONS SHALL BE REVIEWED BY THE STRUCTURAL ENGINEER. ALL VERTICAL WALL REINFORCEMENT SHALL BE CONTINUOUS BETWEEN SPLICE LOCATIONS SHOWN IN THE DRAWINGS.
- 5. ALL GRADE 60 REINFORCING TO BE WELDED SHALL BE ASTM A706. 6. CLEAR CONCRETE COVERAGE IS AS FOLLOWS:
 - CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH 3" EXPOSED TO EARTH OR WEATHER

#6 OR LARGER		2"
#5 AND SMALLER		1-1/2"
COLUMNS (TO TIES)		1-1/2"
BEAMS (TO STIRRUPS)		1-1/2"
FLAT SLABS		3/4"
WALLS	SEE SCHEDULE AND OR	DETAILS

NOTES:

- UNLESS NOTED ON PLANS OR DETAILS.
- EXPANSION OR ADHESIVE BOLTS USED IN MASONRY SHALL HAVE I.C.B.O. APPROVAL
- 3. AT "ANCHORS" USE 3/16" FILLET WELD
- THICKNESS OF DRY PACK DOES NOT APPLY TOWARDS EMBEDMENT

DOLLY LATE EDGE CLEANANCES TEN THE
FOLLOWING — TYP U.N.O.
3/4" DIA. OR LESS 1-1/4"
7/8" DIA 1 1/2"
1" DIA 1 3/4"
1 1/8" DIA 2"
1 1/4" DIA 2 1/4"
OVER 1 1/4" DIA $$ 1 75 \sqrt{DIA}

1. PROVIDE ANCHORS, ANCHOR BOLTS AND EXPANSION BOLTS PER THIS SCHEDULE

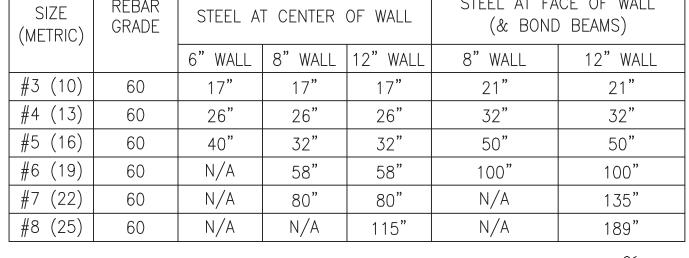
ALL OTHER PER LATEST EDITION OF ACI 318

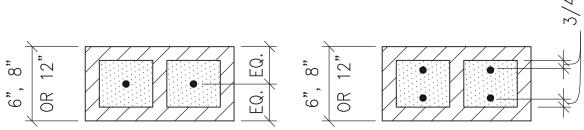
- IN MASONRY.
- 5. BOLT/PLATE EDGE CLEARANCES PER THE
 - UVER 1 1/4 DIA. ---- 1./5XDIA.

		CLASS B TENSION SPLICE LENGTHS					COMP BARS	
CONC PSI	f'c = 3	,000 PSI	f'c = 4	,000 PSI	f'c = 5	,000 PSI	$f'c = \le 3,000$	
BAR LOCATION SIZE (METRIC)	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"	29"	15"	12"
#5 (16)	39"	51"	31"	40"	28"	36"	19"	14"
#6 (19)	47"	61"	37"	48"	33"	43"	23"	17"
#7 (22)	69"	89"	54"	70"	49"	63"	26"	20"
#8 (25)	78"	102"	62"	80"	55"	72"	30"	23"
#9 (29)	88"	115"	70"	91"	63"	81"	34"	25"
#10 (32)	99"	129"	79"	102"	70"	91"	84"	28"
#11 (36)	110"	143"	87"	113"	78"	101"	42"	31"

- 1. TOP BARS ARE ANY HORIZONTAL BARS PLACED SO THAT MORE THAN 12" OF FRESH CONCRETE IS CAST IN THE MEMBER BELOW THE REINFORCEMENT
- 2. 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 (\leq 2DB), OR IF CLEAR COVER IS LESS THAN THE BAR DIAMETER
- 4. THIS TABLE IS BASED ON NORMAL WEIGHT CONCRETE.
- 5. FOR ADDITIONAL INFORMATION, SEE G.S.N., PLANS, SCHEDULES AND DETAILS.

$I \land D$		ם ווום:		DEIN		CINIC ST	⁻⊏⊏ı L	SCALE:	
	LAP SCHEDULE FOR REINFORCING STEEL N.T.S.								
MASONRY LAP SPLICE LENGTH									
	REBAR SIZE (METRIC)	ZE REBAR STEEL AT CENTER OF WALL STEEL AT FACE OF W				-			
	,		6" WALL	8" WALL	12" WALL	8" WALL	12" WALI	-	
	#3 (10)	60	17"	17"	17"	21"	21"		
	#4 (13)	60	26"	26"	26"	32"	32"		



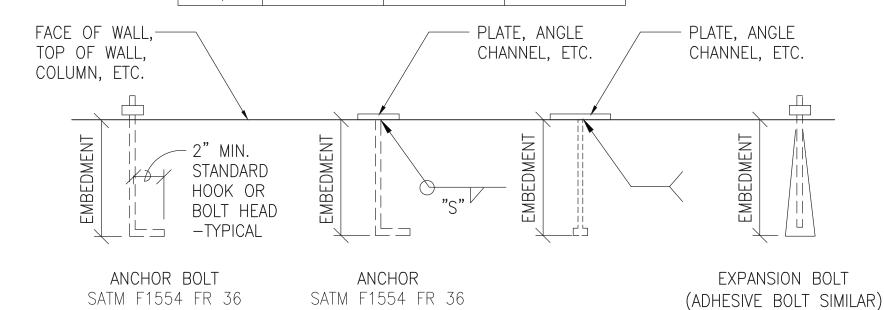


- 1. LAPS APPLY TO BOTH VERTICAL AND HORIZONTAL REINFORCING 2. PROVIDE BENT BARS TO MATCH HORIZONTAL BOND BEAM REINFORCING, AT
- CORNERS AND WALL INTERSECTION TO MAINTAIN BOND BEAM CONTINUITY. DO NOT SPLICE HORIZONTAL BARS WITHIN 8'-0" OF CONTROL JOINTS.
- 4. FOR LADDER TYPE HORIZONTAL REINFORCING, SEE G.S.N.
- 5. LAP LENGTHS HAVE BEEN CALCULATED FOR BOTH WORKING STRESS AND ULTIMATE STRENGTH DESIGN. WORST CASE VALUES HAVE BEEN USED.

WORKING STRESS OR ULTIMATE STRENGTH MASONRY LAP SPICES FOR REINFORCING STEEL - I.B.C.

SCALE: LAP SPLICES FOR REINFORCING STEEL N.T.S.

BOLT DIAMETER	VERTICAL BOLT EMBEDMENT LENGTH	HORIZONTAL BOLT EMBEDMENT LENGTH	HEADED STUD FILLET WELD SIZE, "S"
1/2"	6"	4"	1/4"
5/8"	6"	4"	5/16"
3/4"	7"	5"	5/16"
7/8"	8"	6"	5/16"
1"	9"	7"	3/8"
1-1/8"	10"	8"	_
1-1/4"	11"	9"	_



TYPICAL ANCHOR. ANCHOR BOLT, AND EXPANSION BOLT SCHEDULE AND BOLT/PLATE EDGE CLEARANCE

Stick Together * 4100 GUARDIAN ST., SUITE 101 SIMI VALLEY, CA 93063

=PROJECT INFORMATION:=

SV00924A VY398 FRAZIER PARK PUD

(HARDENING NATIONAL - 25kW DIESEL

4022 NORTH END DR. FRAZIER PARK, CA 93225 KERN COUNTY

=CURRENT ISSUE DATE:=

=ISSUED FOR:=

CONSTRUCTION

=REV.:==DATE:===DESCRIPTION:==BY:= 90% CD, ISSUED FOR VHR 10/24/22 REVIEW

=PLANS PREPARED BY:=



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=CONSULTANT:=



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LK =LICENSURE:=



=SHEET TITLE:

GENERAL STRUCTURAL NOTES AND TYPICAL **DETAILS**

=SHEET NUMBER:=

SCALE:

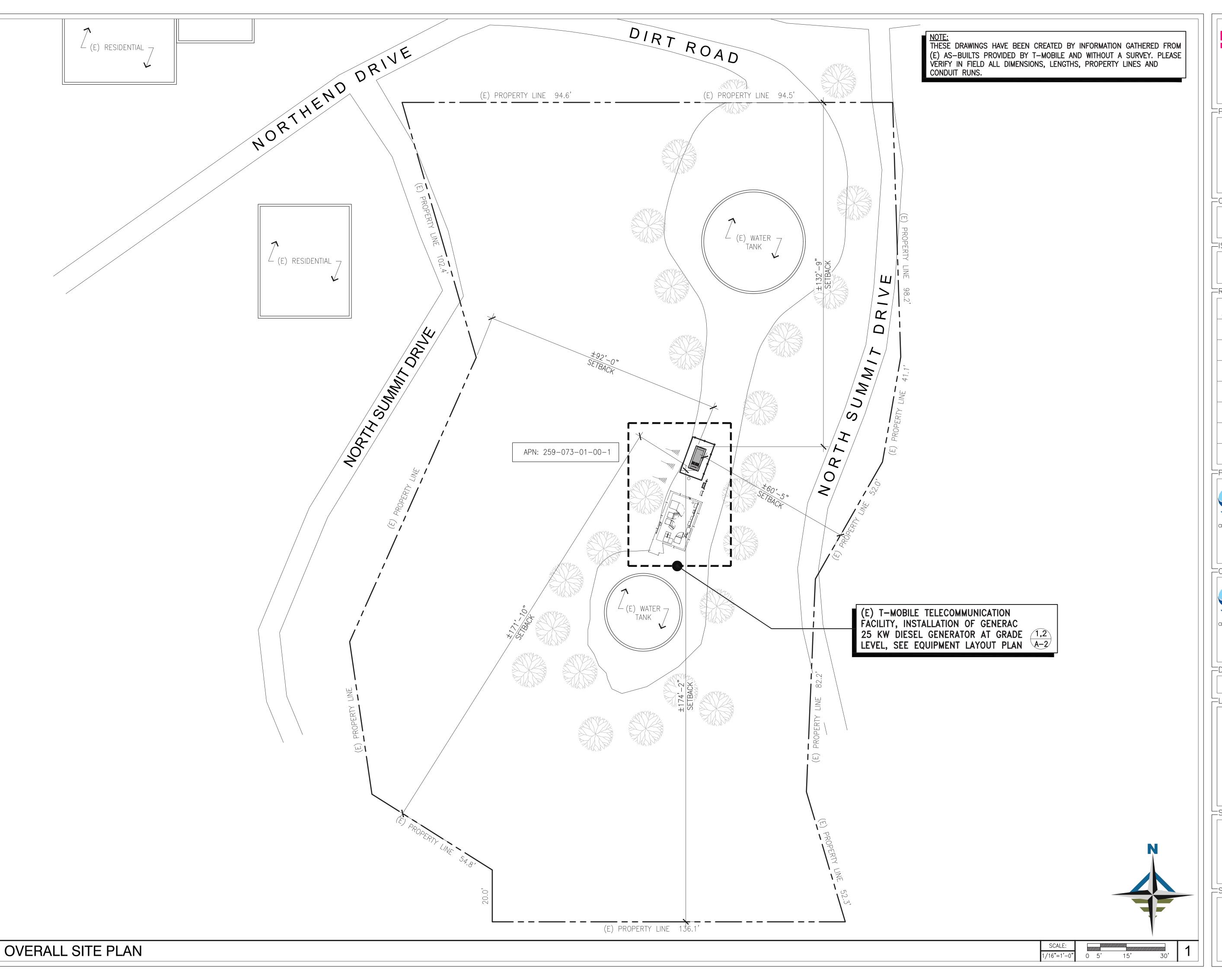
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A SV00924A

=REVISION:=

GENERAL STRUCTURAL NOTES

ANCHOR / BOLT SCHEDULE





4100 GUARDIAN ST., SUITE 101 SIMI VALLEY, CA 93063

PROJECT INFORMATION: (HARDENING NATIONAL - 25kW DIESEL)

SV00924A VY398 FRAZIER PARK PUD

> 4022 NORTH END DR. FRAZIER PARK, CA 93225 KERN COUNTY

CURRENT ISSUE DATE:

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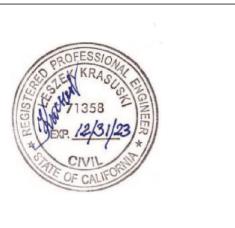
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OVERALL SITE PLAN

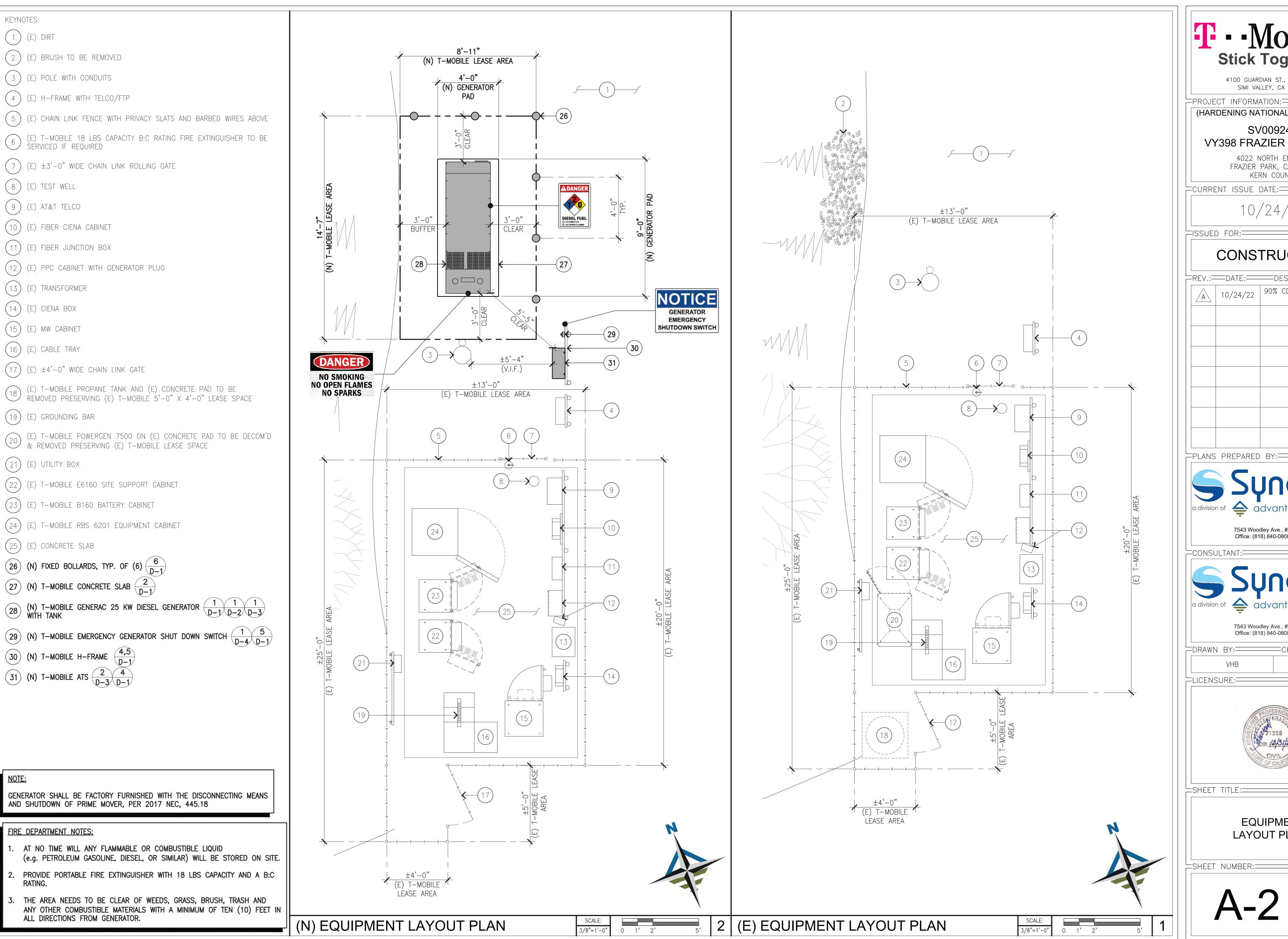
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SV00924A

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T - Mobile -Stick Together *

4100 GUARDIAN ST., SUITE 101 SIMI VALLEY, CA 93063

(HARDENING NATIONAL - 25kW DIESEL)

SV00924A VY398 FRAZIER PARK PUD

> 4022 NORTH END DR. FRAZIER PARK, CA 93225 KERN COUNTY

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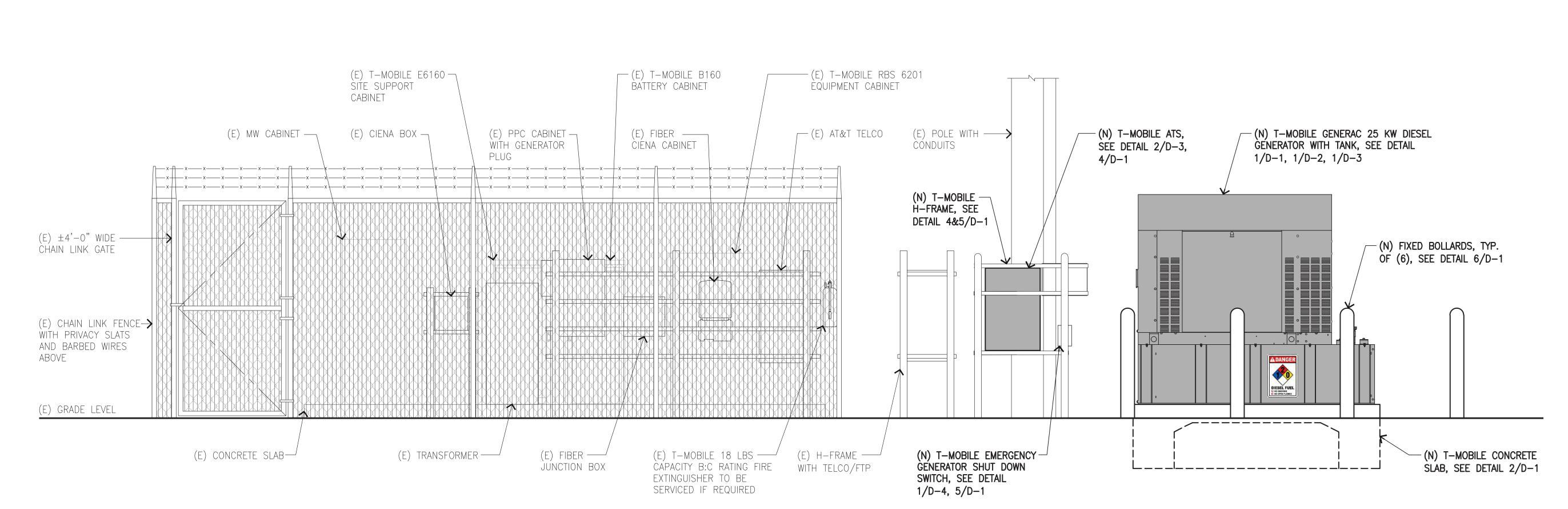


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EQUIPMENT LAYOUT PLANS

SV00924A

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PROPOSED SOUTHEAST ELEVATION



SIMI VALLEY, CA 93063 =PROJECT INFORMATION:=

(HARDENING NATIONAL - 25kW DIESEL)

SV00924A VY398 FRAZIER PARK PUD

> 4022 NORTH END DR. FRAZIER PARK, CA 93225 KERN COUNTY

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		VHB	LK	LK

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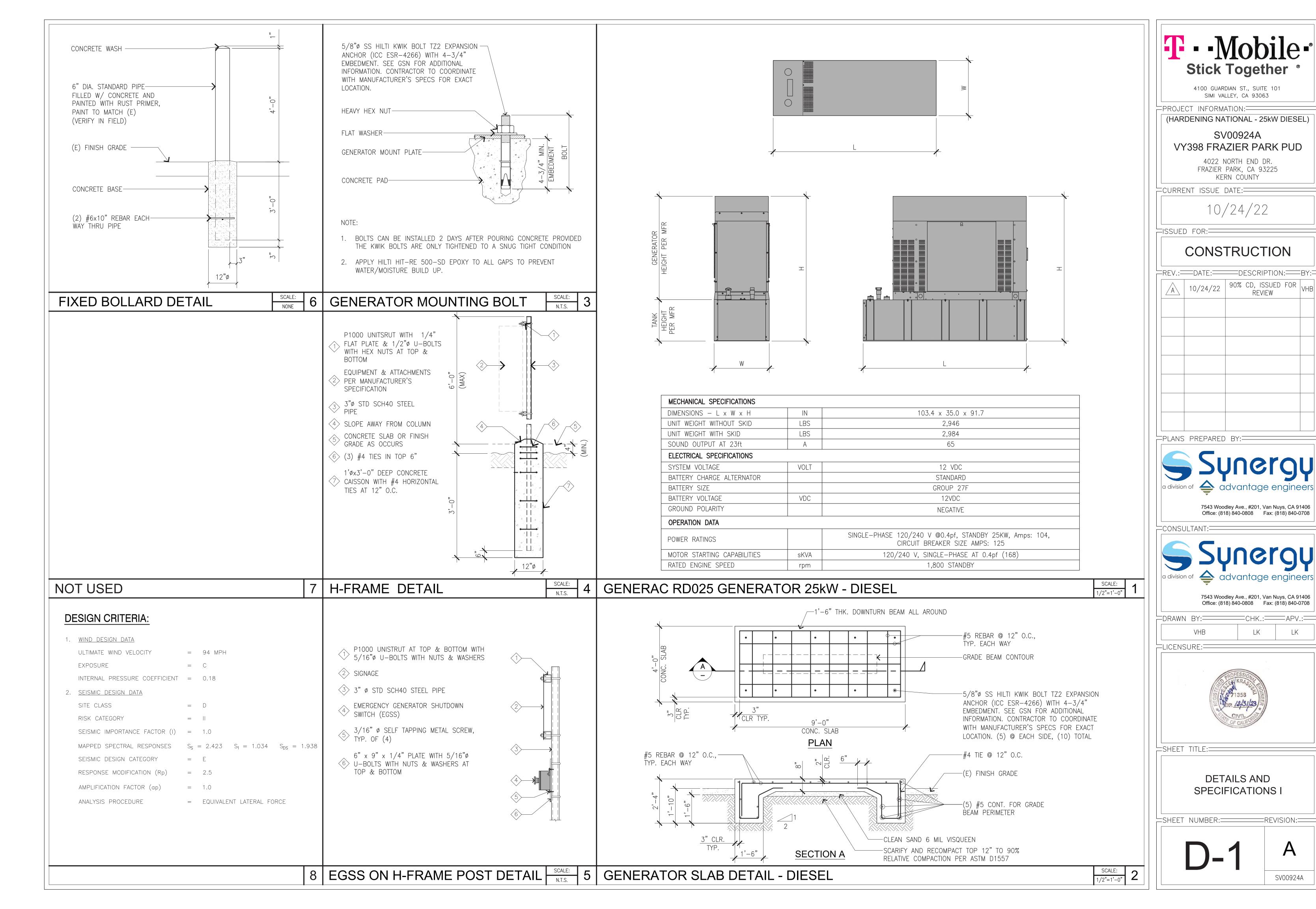
EQUIPMENT ELEVATION

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SV00924A

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REVIEW



GENERAC INDUSTRIAL

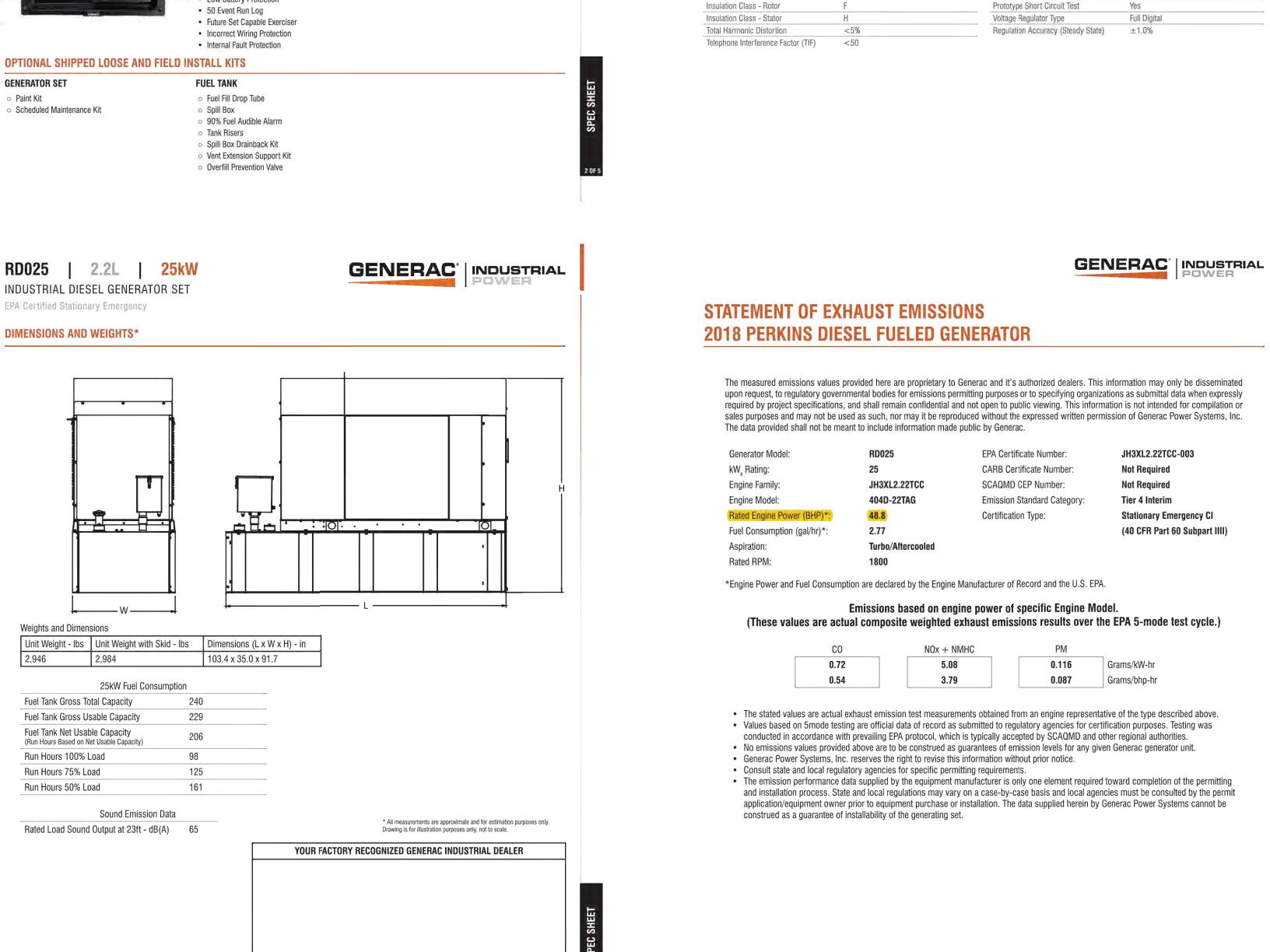
Model Numbers



Specification characteristics may change without notice. Dimensions and weights are for preliminary purposes only. Please consult a Generac Power Systems Industrial Dealer for detailed installation drawings

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RD025 | 2.2L |

EPA Certified Stationary Emergency

ENGINE SPECIFICATIONS

EPA Emission Compliance

Displacement - in3 (L)

Bore - in (mm)

Stroke - in (mm)

Compression Ratio

Intake Air Method

Piston Type

Crankshaft Type

Engine Block Type

Engine Governing

Lubrication System

Crankcase Capacity - L (qts)

ALTERNATOR SPECIFICATIONS

Generac Power Systems, Inc. | P.O. Box 8 | Waukesha, WI 53187

Oil Pump Type Oil Filter Type

Standard Model

Field Type

Frequency Regulation (Steady State)

General

Cylinder #

INDUSTRIAL DIESEL GENERATOR SET

APPLICATION AND ENGINEERING DATA

25kW

Stationary Emergenc

Turbocharged/Aftercoc

Full Flow Spin-On Canister

135.2 (2.216)

3.30 (84.0)

3.94 (100.0)

Aluminum Alloy

Cast Iron OHV

Aluminum

±0.25%

10.6 (11.2)

Rotating

Stick Together *

4100 GUARDIAN ST., SUITE 101 SIMI VALLEY, CA 93063

=PROJECT INFORMATION:=

(HARDENING NATIONAL - 25kW DIESEL

SV00924A VY398 FRAZIER PARK PUD

4022 NORTH END DR. FRAZIER PARK, CA 93225 KERN COUNTY

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SHEET TITLE:

DETAILS AND SPECIFICATIONS II

SHEET NUMBER: =REVISION:=

SV00924A

GENERATOR SPECIFICATIONS

RD025 | 2.2L | 25kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

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GENERAC INDUSTRIAL

Pre-Lubed, Self-Sealing

Ultra Low Sulfur Diesel Fuel

Mechanical Engine Driven Gear

18.0 (457.2)

Mechanical

7.94 (0.31) ID

4.76 (0.19) ID

Standard

Group 27F

Sealed Ball

Flexible Disc

12 VDC

Cooling System

Cooling System Type

Fan Speed (RPM)

Fuel System

Fuel Specification

Fuel Pump Type

Fuel Supply Line mm (in)

Fuel Return Line mm (in)

Fuel Filtering (microns)

System Voltage Battery Charger Alternator

Battery Size

Battery Voltage

Ground Polarity

Standard Excitation

Engine Electrical System

Injector Type

Fan Diameter - mm (in)

Fan Type

Rev. A 08/01/18

Doc No. 1000004141





Models: RXSC100A3

RXSW100A3

RXSW150A3 RXSC200A3

RXSW200A3

Service and Non-Service Rated Automatic Transfer Switches

100-200 Amps, Single Phase

Automatic Transfer Switches

GENERAC®

All timing and sensing functions originate in the generator controller.

* When used in conjunction with units utilizing Evolution™ controls

Utility Voltage Drop-out	<65%				
Timer to Generator Start	10 Second Factory Set, Adjustable Between 2 - 1,500 Seconds by a Qualified Dealer*				
Engine Warmup Delay	5 Seconds				
Standby Voltage Sensor	65% for 5 Seconds				
Utility Voltage Pickup	>80%				
Re-transfer Time Delay	15 Seconds				
Engine Cooldown Timer	60 Seconds				
Exerciser	Nexus™: 12 Minutes Weekly Evolution™: 5 to 12 Minutes Adjustable, Weekly/Bi-weekly/Monthly				
The Transfer Switch can be Operated Manually Without Power Ap	pplied				

fications					
Model	RXSC100A3	RXSW100A3	RXSW150A3	RXSC200A3	RXSW200A3
Amps	100	100	150	200	200
Voltage	120/240, 1ø	120/240, 1ø	120/240, 1ø	120/240, 1ø	120/240, 1ø
Load Transition Type (Automatic)	Open Transition	Open Transition Service Rated	Open Transition Service Rated	Open Transition	Open Transition Service Rated
Enclosure Type	NEMA/UL 3R	NEMA/UL 3R	NEMA/UL 3R	NEMA/UL 3R	NEMA/UL 3R
UL Rating	UL/CUL	UL	UL	UL/CUL	UL
Withstand Rating (Amps)	10,000	10,000	22,000	10,000	22,000
Lug Range	2/0 -	#14		250 MCM - #6	





GENERAC*

Description

Generac Automatic Transfer Switches are designed for use with single phase generators that utilize an Evolution™ or Nexus™ Controller. The 100 and 200 amp open transition switches are available in single phase in both service equipment rated and non-service equipment rated configurations. The 150 amp open transition switch is only available in a service rated equipment configuration.

GENERAC

Standard Features

Service rated (RTSW) Generac Automatic Transfer Switches are housed in an aluminum NEMA/UL Type 3R enclosure*, with electrostatically applied and baked powder paint. The Heavy Duty Generac Contactor is a UL recognized device, designed for years of service. The controller at the generator handles all the timing, sensing, exercising functions, and transfer commands. All switches are covered by a five year limited warranty. * Non-service rated (RTSC) switches are housed in a steel enclosure.

Load Management Technology

Through the use of the integrated Smart A/C Module (SACM), these switches have the capability to manage up to four individual HVAC (24 VAC controlled) loads with no additional hardware. When used in tandem with external Smart Management Modules, a total of eight more loads can be managed, providing the most installation efficient power management options available.

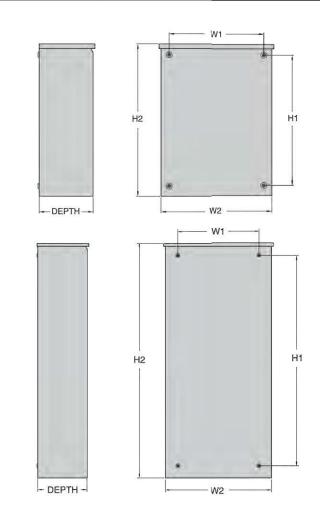




100-200 Amps, Single Phase

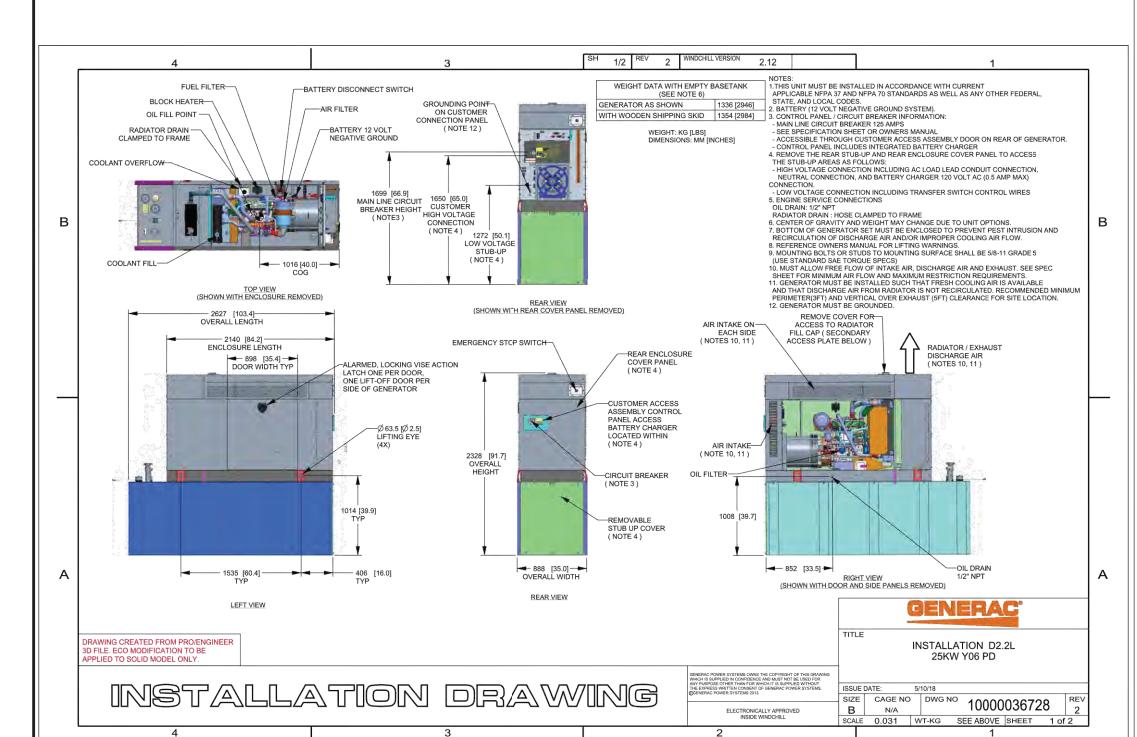
200 Amps, Single	Phase			Automatic Tra	ansfer Switches
nsions					
d	DVCC100A2	DVCW100A2	DVCW1E0A2	DAGGOUUS	DVCW200A2

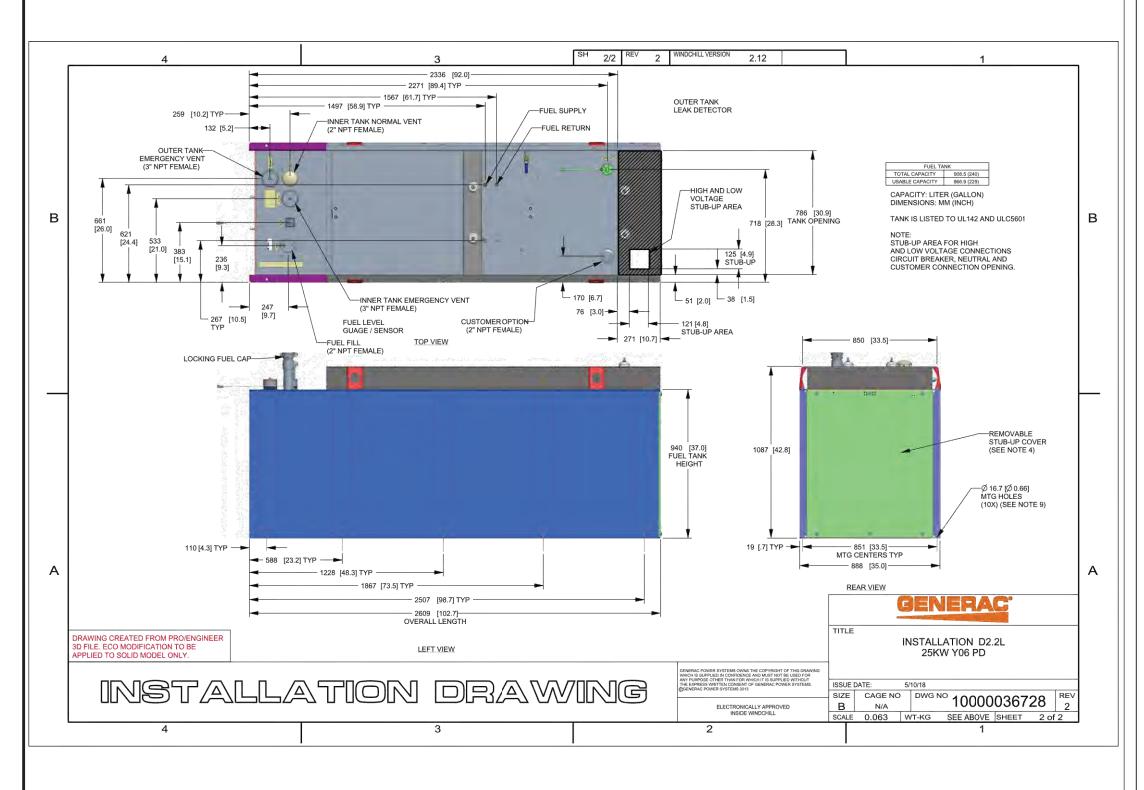
Model		RXSC100A3	RXSW100A3	RXSW150A3	RXSC200A3	RXSW200A3	
Height - in (mm)	H1	17.2 (437.9)	17.2 (437.9)	26.8 (679.4)	17.2 (437.9)	26.8 (679.4)	
rieight - iii (iiiiii)	H2	20.0 (508.0)	20.0 (508.0)	30.0 (672.0)	20.0 (508.0)	30.0 (672.0)	
Width - in (mm)	W1	12.5 (317.5)	12.5 (317.5)	10.5 (266.7)	12.5 (317.5)	10.5 (266.7)	
widir - iii (iiiii)	W2	14.6 (370.8)	14.6 (370.8)	13.5 (342.9)	14.6 (370.8)	13.5 (342.9)	
Depth - in (mm)		7.1 (180.1)	7.1 (180.1)	6.3 (160.1)	7.1 (180.1)	6.3 (160.1)	
Weight - Ibs (kg)		20.0 (9.1)	22.5 (10.2)	39.0 (17.7)	20.0 (9.1)	39.0 (17.7)	





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SIMI VALLEY, CA 93063

(HARDENING NATIONAL - 25kW DIESEL

SV00924A VY398 FRAZIER PARK PUD

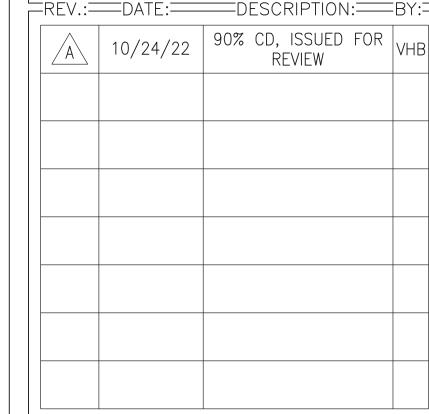
> 4022 NORTH END DR. FRAZIER PARK, CA 93225 KERN COUNTY

-CURRENT ISSUE DATE:—

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HPLANS PREPARED BY:



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=CONSULTANT:=

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SHEET TITLE:=

DETAILS AND SPECIFICATIONS III

=SHEET NUMBER:==

A SV00924A

=REVISION:=

PUSH BUTTON EMERGENCY GENERATOR STOP SWITCH

Description:

Yellow nonmetallic NEMA 4X enclosure. Accepts one to three contact blocks. Labeled EMERGENCY GENERATOR STOP and PUSH BUTTON. Red operator is labeled PULL TO RESET.

Electrical Characteristics:

Contact blocks (normally open P/N PILNOCB and/or closed P/N PILNCCB)* Sold Separately Screw and captive clamp terminals. Min: 1 X 24 AWG Max: 2 X 16 AWG 600 Vac @ 1.2 Amp 250 Vdc at 0.27Amp 120 Vdc @ 0.55 Amp

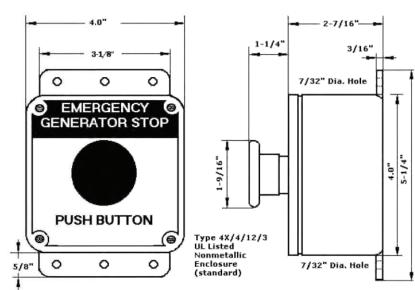
Specification:

PUSH BUTTON EMERGENCY GENERATOR STOP P/N GS120 uses a single push button operating mode. Using a maintained (push-pull) red

40mm mushroom operator hot stamped <u>PULL TO RESET</u> on the mushroom face. The operating mode reverses the nominal state of the installed contact blocks such that type contact blocks remain open/closed when the operator is pressed or pulled to reset. Contact blocks are not included and must be ordered as an option.

P/N GS120





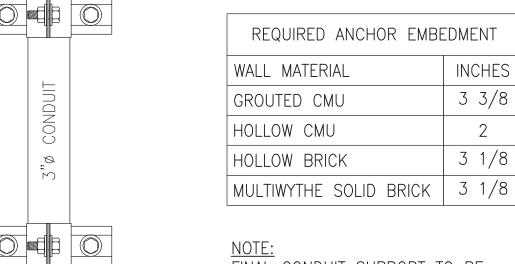


Phone (386)274-2079 Phone (800)383-2078

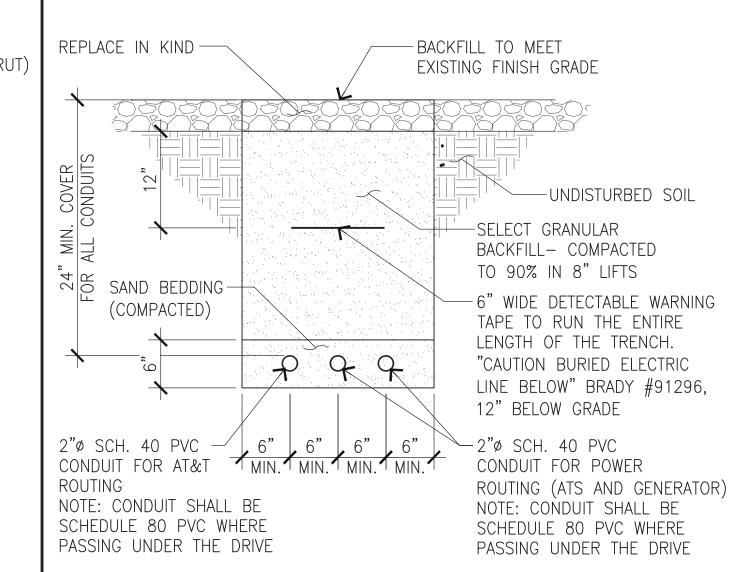
Fax (386)274-2279 Fax (800)475-2279

EMERGENCY GENERATOR SHUTDOWN SWITCH

- WALL -3/8"ø HILTI HAS ROD W/ HIT-HY70 (TYP 2 PER UNISTRUT) - UNISTRUT P1000 OR EQUIVALENT - 3"ø CONDUIT - UNISTRUT PIPE CLAMP OR EQUIVALENT (SIZED FOR CONDUIT OR PIPE DIAMETERS) <u>PLAN</u> REQUIRED ANCHOR EMBEDMENT



FINAL CONDUIT SUPPORT TO BE DETERMINED BASED ON EXISTING FIELD COMMONS.





4100 GUARDIAN ST., SUITE 101 SIMI VALLEY, CA 93063

=PROJECT INFORMATION:=

(HARDENING NATIONAL - 25kW DIESEL)

SV00924A VY398 FRAZIER PARK PUD

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└PLANS PREPARED BY:──



7543 Woodley Ave., #201, Van Nuys, CA 91406 Office: (818) 840-0808 Fax: (818) 840-0708

片CONSULTANT:=

SCALE:

NTS



7543 Woodley Ave., #201, Van Nuys, CA 91406 Office: (818) 840-0808 Fax: (818) 840-0708

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DETAILS AND SPECIFICATIONS IV

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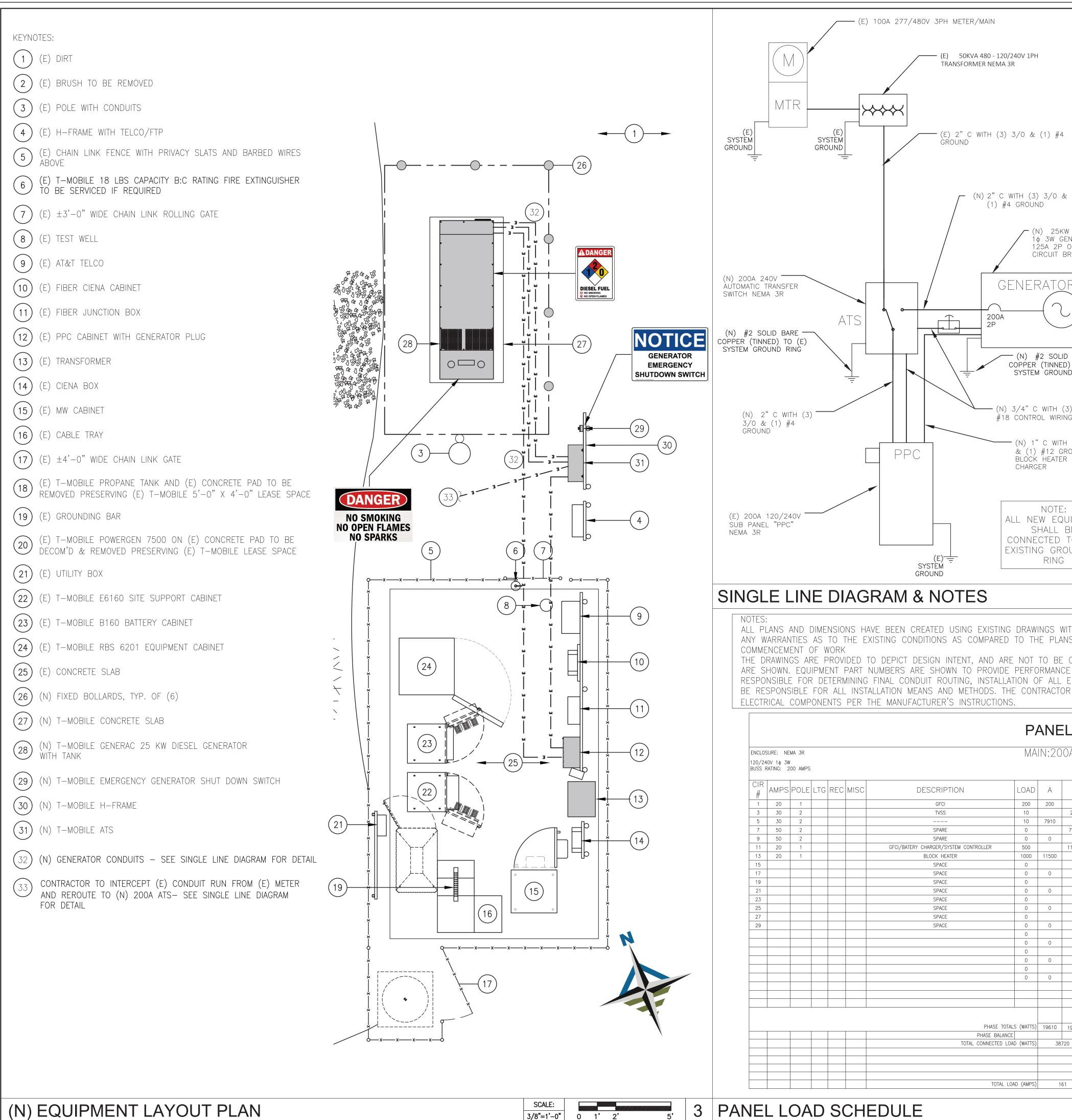
SV00924A

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SCALE: N.T.S. 4 CONDUIT PIPE SURFACE MOUNT | SCALE: | 3 OPEN TRENCHING DETAIL NOT USED

ELEVATION



ELECTRICAL NOTES:

GOVERNING AUTHORITY.

1: CONTRACTOR SHALL INSPECT THE EXISTING CONDITIONS PRIOR TO SUBMITTING BID. ANY QUESTIONS ARISING DURING THE BID PERIOD IN REGARDS TO THE CONTRACTORS FUNCTIONS, THE SCOPE OF WORK OR ANY OTHER ISSUE RELATED TO THIS PROJECT SHALL BE BROUGHT UP DURING THE BID PERIOD WITH THE PROJECT MANAGER FOR CLARIFICATION, NOT AFTER THE CONTRACT HAS BEEN AWARDED.

2: LOCATION OF EQUIPMENT, CONDUIT AND DEVISES SHOWN ON THE DRAWINGS ARE APPROXIMATE AND SHALL BE COORDINATED WITH ACTUAL FIELD CONDITIONS PRIOR TO

3: PROVIDE PULL BOXES AND/OR JUNCTION BOXES WHERE SHOWN OR AS REQUIRED THE

4: ALL CONDUIT BENDS SHALL BE MADE IN ACCORDANCE WITH NEC CHAPTER 9, TABLE 2. NO RIGHT ANGLE DEVISE/FITTING OTHER THAN STANDARD ELBOWS WITH 12" MIN. INSIDE SWEEPS FOR ALL CONDUITS 2" OR LARGER.

5: ALL CONDUIT TERMINATIONS SHALL BE PROVIDED WITH PLASTIC THROAT INSULATING GROUND BUSHINGS.

6: ALL WIRE SHALL BE TYPE THHN/THWN-2 COPPER STRANDED, 75° C (167° F), 98% CONDUCTIVITY, MINIMUM #12.

7: ALL WIRES SHALL BE TAGGED AT ALL PULL/JUNCTION/EQUIPMENT BOXES AND CABINETS WITH APPROVED PLASTIC TAGS (ACTION CRAFT, BRADY OR APPROVED EQUAL).

8: ALL MATERIALS SHALL BE LISTED BY A TESTING LABORATORY (UL) APPROVED BY THE LOCAL GOVERNING AUTHORITY.

9: CONDUIT INSTALLATION SHALL BE COORDINATED THIS THE MECHANICAL EQUIPMENT TO AVOID LOCATION CONFLICTS. VERIFY WITH THE MECHANICAL CONTRACTOR AND COMPLT AS

10: ALL PANEL DIRECTORIES SHALL BE TYPED.

11: INSTALL AN EQUIPMENT GROUNDING CONDUCTOR IN ALL CONDUITS PER CODE AND SPECIFICATIONS. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE BONDED AT ALL JUNCTION/PULL BOXES, DISCONNECTS AND EQUIPMENT CABINETS.

12: THE CONTRACTOR SHALL PROVIDE "AS BUILT" DRAWINGS DOCUMENTING ANY/ALL WIRING AND EQUIPMENT CONDITIONS/CHANGES DURING THE COMPLETION OF THIS CONTRACT, SUBMITTED UPON SUBSTANTIAL COMPLETION ALONG WITH PHOTOS AND ALL RELATED

13: ALL PANELS, DISCONNECTS, TRANSFORMERS AND OTHER CONTROLLING EQUIPMENT/DEVISES SHALL HAVE AN ENGRAVED LAMINCOID NAMEPLATE INDICATING EQUIPMENT NAME, FED FROM, CIRCUITS INSTALL ON (NO EXCEPTIONS).

14: PROVIDE CORE DRILLING AS NECESSARY FOR PENETRATIONS THROUGH FLOORS/WALLS IN A BUILDING. DO NOT PENETRATE ANY STRUCTURAL MEMBER WITHOUT WRITTEN APPROVAL FROM THE SUPERVISING STRUCTURAL ENGINEER. ALL SLEEVES AND OTHERS PENETRATIONS THOUGH A FIRE RATED STRUCTURE SHALL BE PACKED/SEALED USING UL PPROVED MATERIALS TO MAINTAIN THE FIRE RATING OF THAT STRUCTURE. FILL/SEALS OF FLOOR PENETRATIONS SHALL PREVENT PASSAGE OF WATER, SMOKE, FIRE AND FÚMES.

15: ELECTRICAL CHARACTERISTICS OF ALL EQUIPMENT (NEW AND EXISTING) SHALL BE FIELD VERIFIED WITH THE OWNERS REPRESENTATIVE AND EQUIPMENT SUPPLIER PRIOR TO INSTALLATION. ALL EQUIPMENT SHALL BE PROPERLY CONNECTED ACCORDING TO THE NAMEPLATE DATA ON THE EQUIPMENT (THE DESIGN OF THESE PLANS ARE BASED ON THE BEST AVAILABLE INFORMATION AT THE TIME OF DESIGN AND SOME CHARACTERISTICS MAY VARY FROM DESIGN AS SHOWN ON THESE DRAWINGS). LOCATION OF ALL OUTLETS, BOXES, ETC. AND THE TYPE OF CONNECTION (PLUG OR HARDWIRED) SHALL BE CONFIRMED WITH OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.

ALL PLANS AND DIMENSIONS HAVE BEEN CREATED USING EXISTING DRAWINGS WITHOUT THE USE OF A SURVEY. EE DOES NOT GUARANTEE ACCURACY OR MAKE ANY WARRANTIES AS TO THE EXISTING CONDITIONS AS COMPARED TO THE PLANS. ALL MEASUREMENTS AND EQUIPMENT SHOULD BE FIELD VERIFIED PRIOR TO

(N) 2" C WITH (3) 3/0 &

GENERATOR

(N) 3/4" C WITH (3)

#18 CONTROL WIRING

CHARGER

(N) #2 SOLID BARE

COPPER (TINNED) TO (E)

-(N) 1" C WITH (3)#12

BLOCK HEATER &

NOTE:

ALL NEW EQUIPMENT

SHALL BE

CONNECTED TO THE

EXISTING GROUNDING RING

& (1) #12 GROUND TO

SYSTEM GROUND RING

(N) 25KW 120/240V

ĺΦ΄ 3W GENSET WITH

125A 2P OUTPUT CIRCUIT BREAKER

(1) #4 GROUND

200A

THE DRAWINGS ARE PROVIDED TO DEPICT DESIGN INTENT, AND ARE NOT TO BE CONSIDERED INSTALLATION DRAWINGS. NOT ALL COMPONENTS OR CONNECTIONS ARE SHOWN. EQUIPMENT PART NUMBERS ARE SHOWN TO PROVIDE PERFORMANCE CRITERIA AND LEVEL OF PRODUCT STANDARDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING FINAL CONDUIT ROUTING, INSTALLATION OF ALL ELECTRICAL EQUIPMENT, COMPONENTS AND MATERIALS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL INSTALLATION MEANS AND METHODS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING, ENERGIZING AND TESTING OF ALL

ENCLOSURE 20/240V BUSS RATIN	E: NEM/					PA	ANE	EL "F	PPC"							
BUSS RATIN		A 3R				MA	IN:20)OA 2	POLE		BRACING	G: 22KAI	C SERIES	RATED MA	AIN/BRANCH	1
		0 AMPS									MOUNTII	NG: SUR	FACE MO	JNT		
CIR AN	MPS F	POLE	REC	MISC	DESCRIPTION	LOAD	А	В	LOAD	DESCRIPTION	MISC	REC	LTG	POLE	AMPS	CIR #
	20	1			GFCI	200	200		0	SPACE						2
3	30	2			TVSS	10		210	200	6160 GFCI				1	20	4
5	30	2				10	7910		7900	RBS 6201				2	100	6
7	50	2			SPARE	0		7900	7900					2	100	8
9	50	2			SPARE	0	0		0	RBS 6160				4		10
11	20	1			GFCI/BATERY CHARGER/SYSTEM CONTROLLER	500		11000	10500					4	125	12
13	20	1			BLOCK HEATER	1000	11500		10500					4	125	14
15					SPACE	0		0	0					4		16
17					SPACE	0	0		0	SPACE						18
19					SPACE	0		0	0	SPACE						20
21					SPACE	0	0		0	SPACE						22
23					SPACE	0		0	0	SPACE						24
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Stick Together *

4100 GUARDIAN ST., SUITE 101 SIMI VALLEY, CA 93063

=PROJECT INFORMATION:=

SV00924A

(HARDENING NATIONAL - 25kW DIESEL)

VY398 FRAZIER PARK PUD 4022 NORTH END DR. FRAZIER PARK, CA 93225

KERN COUNTY

=CURRENT ISSUE DATE:=

10/26/22

=ISSUED FOR:=

CONSTRUCTION

Г	-KEV.:—	—DATE:——	—DESCRIPTION:——I	3Y:—
	1	10/26/22	E SHEETS SUBMITTED FOR REVIEW	RM

=PLANS PREPARED BY:=



7543 Woodley Ave., #201, Van Nuys, CA 91406 Office: (818) 840-0808 Fax: (818) 840-0708

CONSULTANT:

ROB MYERS-ELECTRICAL

RESOURCES

567 SOUTH ALBERTSON AVENUE COVINA, CALIFORNIA, 91723

(626) 252-8950

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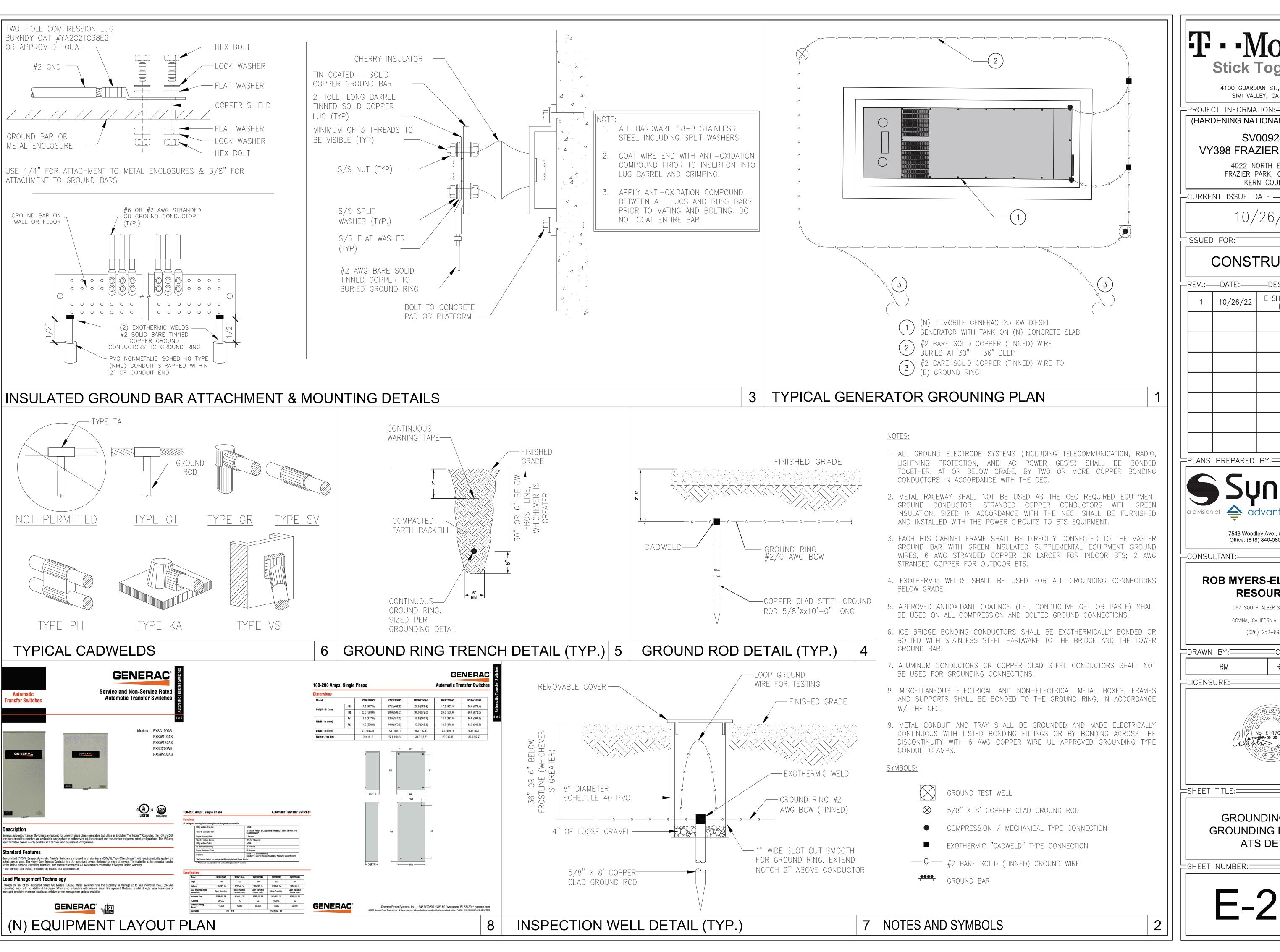
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SINGLE LINE DIAGRAM, PANEL SCHEDULE & EQUIPMENT LAYOUT PLAN

=SHEET NUMBER:= =REVISION:

SV00924A





Stick Together *

4100 GUARDIAN ST., SUITE 101 SIMI VALLEY, CA 93063

(HARDENING NATIONAL - 25kW DIESEL)

SV00924A VY398 FRAZIER PARK PUD

> 4022 NORTH END DR. FRAZIER PARK, CA 93225 KERN COUNTY

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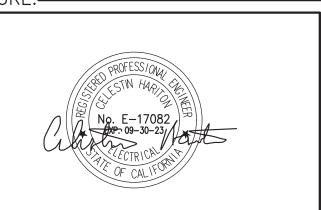
ROB MYERS-ELECTRICAL RESOURCES

567 SOUTH ALBERTSON AVENUE COVINA, CALIFORNIA, 91723

(626) 252-8950

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GROUNDING PLAN, **GROUNDING DETAILS &** ATS DETAIL

SHEET NUMBER:= =REVISION:=

SV00924A

GENERAL ELECTRICAL NOTES & BASIC ELECTRICAL REQUIREMENTS

- 1. THE DRAWINGS ARE PROVIDED TO DEPICT DESIGN INTENT AND ARE NOT TO BE CONSIDERED INSTALLATION DRAWINGS. NOT ALL COMPONENTS OR CONNECTIONS ARE SHOWN. EQUIPMENT PART NUMBERS ARE SHOWN TO PROVIDE PERFORMANCE CRITERIA AND LEVEL OF PRODUCT STANDARDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING FINAL CONDUIT ROUTING, INSTALLATION OF ALL ELECTRICAL EQUIPMENT, COMPONENTS AND MATERIALS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL INSTALLATION MEANS AND METHODS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING, ENERGIZING AND TESTING OF ALL ELECTRICAL COMPONENTS PER THE MANUFACTURER'S INSTRUCTIONS.
- CONTRACTOR SHALL INSPECT THE EXISTING CONDITIONS PRIOR TO SUBMITTING BID. ANY QUESTIONS ARISING DURING THE BID PERIOD IN REGARDS TO THE CONTRACTOR'S FUNCTIONS, THE SCOPE OF WORK, OR ANY OTHER ISSUE RELATED TO THIS PROJECT SHALL BE BROUGHT UP DURING THE BID PERIOD WITH THE ADVANTAGE ENGINEERS PROJECT MANAGER OR CONSTRUCTION MANAGER FOR CLARIFICATION, NOT AFTER THE CONTRACT HAS
- CONTRACTOR SHALL PERFORM ALL VERIFICATION, OBSERVATION, TESTS, AND EXAMINATION WORK PRIOR TO THE ORDERING OF THE ELECTRICAL EQUIPMENT AND THE ACTUAL CONSTRUCTION. CONTRACTOR SHALL ISSUE A WRITTEN NOTICE OF ALL FINDINGS TO THE DESIGN PROFESSIONAL LISTING ANY AND ALL MALFUNCTIONS, FAULTY EQUIPMENT AND DISCREPANCIES.
- THE CONTRACTOR SHALL NOTIFY THE DESIGN PROFESSIONAL, IN WRITING, OF ANY CONFLICTS, ERRORS OR OMISSIONS PRIOR TO THE SUBMISSION OF BIDS OR PERFORMANCE OF WORK. MINOR OMISSIONS OR ERRORS IN THE BID DOCUMENTS SHALL NOT RELIEVE THE CONTRACTOR FROM RESPONSIBILITY FOR THE OVERALL INTENT OF THESE DRAWINGS.
- THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE DESIGN PROFESSIONAL OF ANY UNFORESEEN SITE CONDITIONS THAT MAY IMPACT THE DESIGN.
- THE CONTRACTOR IS IN NO WAY PERMITTED TO MODIFY OR CHANGE THE DESIGN WITHOUT THE EXPRESS, WRITTEN CONSENT OF THE DESIGN PROFESSIONAL. SHOULD THE CONTRACTOR MAKE MODIFICATIONS TO THE DESIGN WITHOUT THE CONSENT OF THE DESIGN PROFESSIONAL, THE CONTRACTOR ASSUMES ALL RESPONSIBILITY AND LIABILITY FOR SUCH
- THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CODES, ORDINANCES, LAWS AND REGULATIONS OF ALL MUNICIPALITIES, UTILITY COMPANIES, THE AUTHORITY HAVING JURISDICTIONS OR OTHER PUBLIC AUTHORITIES.
- ALL ELECTRICAL WORK SHALL CONFORM TO THE CURRENTLY ADOPTED EDITION OF THE
- NATIONAL ELECTRICAL CODE AND OTHER APPLICABLE CODES. 9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS THAT MAY BE REQUIRED BY ANY FEDERAL, STATE, COUNTY OR LOCAL MUNICIPAL
- 10. CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, INSURANCE, EQUIPMENT, INSTALLATION CONSTRUCTION TOOLS, TRANSPORTATION, ETC. FOR A COMPLETE AND PROPERLY OPERATIVE SYSTEM ENERGIZED THROUGHOUT AS INDICATED IN THE CONSTRUCTION DOCUMENTS, AS
- SPECIFIED HEREIN AND/OR AS OTHERWISE REQUIRED. 11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING SITE IMPROVEMENTS PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL REPAIR
- ANY DAMAGE CAUSED AS A RESULT OF CONSTRUCTION OF THIS FACILITY. 12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING OF THE WORK SITE AND REMOVING ALL TRASH AND DEBRIS ON A DAILY BASIS.
- 13. THE SCOPE OF WORK FOR THIS PROJECT SHALL INCLUDE PROVIDING ALL MATERIALS, EQUIPMENT AND LABOR REQUIRED TO COMPLETE THIS PROJECT. ALL EQUIPMENT SHALL BE
- INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. 14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EXCAVATING, DRAINING, TRENCHES,
- BACKFILLING, AND REMOVAL OF EXCESS DIRT. 15. ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND IN PERFECT CONDITION WHEN INSTALLED AND SHALL BE OF THE BEST GRADE AND OF THE SAME MANUFACTURER THROUGHOUT FOR EACH CLASS OR GROUP OF EQUIPMENT. MATERIALS SHALL BE LISTED AND APPROVED BY UNDERWRITER'S LABORATORIES (U.L.) AND SHALL BEAR THE INSPECTION LABEL "J" WHERE SUBJECT TO SUCH APPROVAL. MATERIALS SHALL MEET WITH THE APPROVAL OF ALL GOVERNING BODIES HAVING JURISDICTION AND SHALL BE MANUFACTURED IN ACCORDANCE WITH APPLICABLE STANDARDS ESTABLISHED BY ANSI, NFPA, IBC, IMC, IECC,
- IEC, NEC, IEEE, ASTM, NEMA, U.L. AND NBFU. 16. LOCATION OF EQUIPMENT, CONDUIT AND DEVICES SHOWN ON THE DRAWINGS ARE
- APPROXIMATE AND SHALL BE COORDINATED WITH FIELD CONDITIONS PRIOR TO ROUGH-IN. 17. THE CONDUIT RUNS SHOWN ON THE PLANS ARE APPROXIMATE. EXACT LOCATION AND ROUTING SHALL BE PER EXISTING FIELD CONDITIONS.
- 18. ALL OVERCURRENT DEVICES SHALL HAVE AN INTERRUPTING CURRENT RATING EQUAL TO OR GREATER THAN THE SHORT CIRCUIT CURRENT TO WHICH THEY ARE SUBJECTED: 22,000 AIC MINIMUM FOR MAINS AND 10,000 AIC MINIMUM FOR BRANCH DEVICES. VERIFY AVAILABLE SHORT CIRCUIT CURRENT DOES NOT EXCEED THE RATING OF ELECTRICAL EQUIPMENT.
- 19. ALL NEW INSTALLED ELECTRICAL EQUIPMENT SHALL BE FURNISHED WITH ARC FLASH HAZARD LABELS AS REQUIRED BY THE NEC.
- 20. ALL ELECTRICAL EQUIPMENT, INCLUDING BUT NOT LIMITED TO: DISCONNECT SWITCHES, TRANSFORMERS, PANELBOARDS, POWER PROTECTION CABINET (PPC), AUTOMATIC TRANSFER SWITCH (ATS), MANUAL TRANSFER SWITCH (MTS), POWER TRANSFER LOAD CENTER (PTLC), ETC., SHALL BE LABELED WITH PERMANENT ENGRAVED PLASTIC LABELS. LABELS SHALL INDICATE EQUIPMENT CONTROLLED, BRANCH CIRCUITS INSTALLED ON, AND PANEL FIELD LOCATIONS FED FROM.
- 21. THE CONTRACTOR SHALL PREPARE A COMPLETE SET OF AS-BUILT DRAWINGS, DOCUMENT ALL WIRING EQUIPMENT CONDITIONS, INCLUDING MANUFACTURER'S AND PART NUMBERS FOR PANELBOARDS, TRANSFORMERS, POWER PROTECTION CABINETS (PPC) AND DISCONNECTS, AND CHANGES WHILE COMPLETING THIS CONTRACT. THE AS-BUILT DRAWINGS SHALL BE SUBMITTED TO THE DESIGN PROFESSIONAL AT THE COMPLETION OF THE PROJECT.
- 22. UPON COMPLETION OF WORK, THE CONTRACTOR SHALL THOROUGHLY CLEAN ALL EXPOSED EQUIPMENT, REMOVE DEBRIS, CRATING AND CARTONS AND LEAVE THE INSTALLATION FINISHED AND READY FOR OPERATION.
- 23. THE CONTRACTOR SHALL NOTIFY THE BUILDING OWNER FIVE (5) BUSINESS DAYS PRIOR TO ANY PLANNED POWER OR OTHER SERVICE OUTAGE. THE OWNER SHALL RESERVE THE RIGHT TO REFUSE SUCH OUTAGE AND HAVE IT RESCHEDULED.
- 24. ANY CODE VIOLATIONS DUE TO THE CONTRACTOR'S WORK SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.

ELECTRICAL SPECIFICATIONS: ELECTRICAL MATERIALS AND EQUIPMENT

CONDUIT

- 1. RIGID GALVANIZED STEEL (RGS) CONDUIT SHALL BE USED FOR EXTERIOR LOCATIONS ABOVE GROUND AND IN UNFINISHED INTERIOR LOCATIONS AND WHERE INDICATED ON THE DRAWINGS. FOR UNDERGROUND RUNS. RIGID CONDUIT AND FITTINGS SHALL BE STEEL, COATED WITH ZINC EXTERIOR AND INTERIOR BY THE HOT DIP GALVANIZING PROCESS. CONDUIT SHALL BE PRODUCED TO ANSI SPECIFICATIONS C80.1, FEDERAL SPECIFICATION WW-C-581 AND SHALL BE LISTED WITH THE UNDERWRITER'S LABORATORIES. FITTINGS SHALL BE THREADED — SET SCREW OR COMPRESSION FITTINGS WILL NOT BE ACCEPTED
- UNDERGROUND CONDUIT SHALL BE POLYVINYLCHLORIDE SCHEDULE 40 (PVC). SCHEDULE 40 PVC SHALL NOT BE PERMITTED ABOVE GRADE. WHERE CONDUIT PASSES UNDER A ROAD OR DRIVE, IT SHALL BE SCHEDULE 80 PVC. SUITABLE FOR DIRECT BURIAL. JOINTS SHALL BE BELLED, AND FLUSH, SOLVENT WELDED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
- EMT OR RIGID GALVANIZED STEEL CONDUIT MAY BE USED IN FINISHED INTERIOR SPACES, CONCEALED IN WALLS AND CEILINGS. EMT SHALL BE MILD STEEL, ELECTRICALLY WELDED, ELECTRO-GALVANIZED OR HOT-DIPPED GALVANIZED AND PRODUCED TO ANSI SPECIFICATION C80.3, FEDERAL SPECIFICATION WW-C-563, AND SHALL BE U.L. LISTED. FITTING SHALL BE METALLIC COMPRESSION. SET SCREW CONNECTIONS ARE NOT PERMITTED.
- 4. LIQUIDTIGHT FLEXIBLE METALLIC CONDUIT SHALL BE USED FOR FINAL CONNECTION TO EQUIPMENT. FITTINGS SHALL BE METALLIC GLAND TYPE COMPRESSION FITTINGS, MAINTAINING THE INTEGRITY OF CONDUIT SYSTEM. SET SCREW CONNECTIONS ARE NOT PERMITTED. MAXIMUM LENGTH OF FLEXIBLE CONDUIT SHALL NOT EXCEED SIX (6) FEET, EXCEPT WHERE PERMITTED BY THE NEC. LFMC SHALL BE PROTECTED AND SUPPORTED AS REQUIRED BY THE
- MINIMUM SIZE CONDUIT SHALL BE 3/4 INCH.
- PROVIDE PULL BOXES AND JUNCTION BOXES WHERE SHOWN OR REQUIRED BY THE NEC.
- PROVIDE VERTICAL CABLE SUPPORTS IN ALL VERTICAL CONDUITS WHERE SHOWN OR REQUIRED BY THE NEC.
- PROVIDE EXPANSION FITTINGS IN CONDUIT WHERE SHOWN OR REQUIRED BY THE NEC. 9. ALL CONDUITS SHALL BE MET WITH BENDS MADE IN ACCORDANCE WITH NEC. NO RIGHT ANGLE DEVICE OTHER THAN STANDARD CONDUIT ELBOWS WITH 12 INCH MINIMUM INSIDE SWEEPS FOR ALL CONDUITS 2 INCH OR LARGER.
- 10. THERE SHALL NOT BE MORE THAN THE EQUIVALENT OF FOUR QUARTER BENDS (360 DEGREES TOTAL) BETWEEN PULL BOXES, CONDUIT BODIES AND BOXES. CONTRACTOR SHALL FURNISH AND INSTALL ANY/ALL JUNCTION BOXES SIZED IN ACCORDANCE WITH THE NEC REQUIREMENTS AS REQUIRED FOR THE INSTALLATION.
- 11. ALL CONDUIT TERMINATIONS SHALL BE PROVIDED WITH PLASTIC THROAT INSULATING GROUND BUSHINGS.
- 12. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL CONDUITS DURING CONSTRUCTION.
- 13. TEMPORARY OPENINGS IN THE CONDUIT SYSTEM SHALL BE PLUGGED OR CAPPED TO PREVENT ENTRANCE OF MOISTURE OR FOREIGN MATTER. CONTRACTOR SHALL REPLACE ANY CONDUITS CONTAINING FOREIGN MATERIALS THAT CANNOT BE REMOVED.
- 14. ALL CONDUITS SHALL BE SWABBED CLEAN BY PULLING AN APPROPRIATELY SIZED MANDREL THROUGH THE CONDUIT BEFORE INSTALLATION OF CONDUCTORS OR CABLES. CONDUIT SHALL BE FREE OF DIRT AND DEBRIS.
- 15. INSTALL PULL STRINGS IN ALL CLEAN EMPTY CONDUITS. IDENTIFY PULL STRINGS AT EACH
- 16. INSTALL 2" HIGHLY VISIBLE AND DETECTABLE TAPE 12" ABOVE ALL UNDERGROUND CONDUIT AND CONDUCTORS, OR AS INDICATED ON THE DRAWINGS.
- 17. CONDUITS SHALL BE INSTALLED IN SUCH A MANNER AS TO ENSURE AGAINST COLLECTION OF TRAPPED CONDENSATION.
- 18. PROVIDE CORE DRILLING AS NECESSARY FOR PENETRATIONS TO ALLOW FOR RACEWAYS AND CABLES TO BE ROUTED THROUGH THE BUILDING. DO NOT PENETRATE STRUCTURAL MEMBERS. SLEEVES AND/OR PENETRATIONS IN FIRE RATED CONSTRUCTION (WALLS AND FLOORS) SHALL BE EFFECTIVELY SEALED WITH FIRE RATED MATERIAL WHICH SHALL MAINTAIN THE FIRE RATING OF THE WALL, FLOOR OR STRUCTURE. FIRE STOPS AT FLOOR PENETRATIONS SHALL PREVENT PASSAGE OF WATER, SMOKE, FIRE AND FUMES. ALL MATERIAL SHALL BE U.L. APPROVED FOR THIS PURPOSE.
- 19. CONDUITS SHALL BE FASTENED SECURELY IN PLACE WITH APPROVED NON-PERFORATED STRAPS AND HANGERS. EXPLOSIVE DEVICES FOR ATTACHING HANGERS TO STRUCTURE ARE NOT PERMITTED. CLOSELY FOLLOW THE LINES OF THE STRUCTURE, MAINTAIN CLOSE PROXIMITY TO THE STRUCTURE AND KEEP CONDUITS IN TIGHT ENVELOPES. CONDUIT SHALL BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER, PARALLEL AND PERPENDICULAR TO THE STRUCTURE WALL AND CEILING LINES. ALL CONDUIT SHALL BE FISHED TO CLEAR OBSTRUCTIONS. ENDS OF CONDUITS SHALL BE TEMPORARILY CAPPED TO PREVENT CONCRETE, PLASTER OR DIRT FROM ENTERING. CONDUITS SHALL BE RIGIDLY CLAMPED TO BOXES BY GALVANIZED MALLEABLE IRON BUSHING ON INSIDE AND GALVANIZED MALLEABLE IRON LOCKNUT ON OUTSIDE AND INSIDE.
- 20. SPARE CONDUITS SHALL BE FURNISHED WITH PULL LINES AND CAPPED WITH FACTORY CAPS.

<u>CONDUCTORS</u>

- 1. CONDUCTORS AND CABLE SHALL BE FLAME—RETARDANT, MOISTURE AND HEAT RESISTANT THERMOPLASTIC, SINGLE CONDUCTOR, COPPER, TYPE THHN/THWN-2, 600 VOLT, OR TYPE XHHW, 600V OR XHHW-2, 600V. SIZE AS INDICATED. #12 AWG SHALL BE THE MINIMUM SIZE CONDUCTOR.
- 2. #10 AWG AND SMALLER CONDUCTORS SHALL BE SOLID AND #8 AWG AND LARGER CONDUCTORS SHALL BE STRANDED
- 3. SOLDERLESS, COMPRESSION—TYPE CONNECTORS SHALL BE USED FOR TERMINATION OF ALL STRANDED CONDUCTORS
- 4. ALL CONDUCTORS SHALL BE TAGGED AT BOTH ENDS OF THE CONDUCTOR, AT ALL PULL BOXES, JUNCTION BOXES, EQUIPMENT AND CABINETS AND SHALL BE IDENTIFIED WITH APPROVED PLASTIC TAGS.
- 5. CONTRACTOR SHALL PROVIDE STRAIN-RELIEF AND CABLE SUPPORTS FOR ALL CABLE ASSEMBLIES, COAX CABLES, AND AISG RET CABLES. CABLE STRAIN-RELIEF & CABLE SUPPORTS SHALL BE APPROVED FOR THE PURPOSE. ZIP TIES OR VELCRO STRAPS ARE NOT

ELECTRICAL SPECIFICATIONS: ELECTRICAL MATERIALS AND EQUIPMENT. CONTINUED

DISCONNECT SWITCHES

- 1. DISCONNECT SWITCHES SHALL BE HEAVY DUTY, FUSIBLE, DEAD FRONT, QUICK—MAKE, QUICK—BREAK, EXTERNALLY OPERABLE, HANDLE LOCKABLE AND INTERLOCK WITH COVER IN CLOSED POSITION, VOLTAGE, AMPERAGE AND NEMA RATING AS INDICATED.
- 2. INSTALL DISCONNECT SWITCHES LEVEL AND PLUMB. CONNECT TO WIRING SYSTEM AND GROUNDING SYSTEM AS INDICATED.
- PROVIDE A WHITE PHENOLIC SIGN WITH 3/4" RED ENGRAVED LETTERING LABELING EACH SERVICE DISCONNECT AS "SERVICE DISCONNECT". IF SOURCE IS HOUSE POWER, INCLUDE LOCATION AND LABEL OF PANEL FEEDING EQUIPMENT. HVAC DISCONNECTS SHALL BE LABELED "HVAC DISCONNECT" AND
- INCLUDE PANEL AND CIRCUIT NUMBER OF CIRCUIT SERVING THE HVAC EQUIPMENT. 4. ALL FUSIBLE DISCONNECTS SHALL BE FURNISHED WITH CLASS RK-1 FUSES, SIZED AS INDICATED.

PANELBOARDS

- 1. RATED FOR USE AT 120/240V, SINGLE PHASE, THREE WIRE PLUS GROUND, OR 120/208V, SINGLE PHASE, THREE WIRE PLUS GROUND OR 120/208V, THREE PHASE, FOUR WIRE PLUS GROUND AS REQUIRED FOR THE INTENDED APPLICATION OR AS INDICATED ON THE DRAWINGS.
- 2. ALUMINUM OR COPPER BUS, RATED FOR 200 AMPERES OR AS INDICATED ON THE DRAWINGS, AND HAVE A SHORT CIRCUIT WITHSTAND RATING OF 22,000 AIC MINIMUM.
- MAIN CIRCUIT BREAKER SHALL BE 200 AMPERES OR AS INDICATED ON THE DRAWINGS AND HAVE A SHORT CIRCUIT RATING OF 22,000 AIC MINIMUM. THE MAIN BREAKER SHALL NOT BE INSTALLED SO AS TO BACKFEED THE PANEL BUS.
- 4. PANEL SHALL HAVE A NUMBER OF BRANCH CIRCUITS AS INDICATED ON THE DRAWINGS. THE MAIN BREAKER SHALL NOT USE ANY OF THESE SPACES.
- BRANCH CIRCUIT BREAKERS SHALL BE PLUG-IN OR BOLT-ON TYPE. BRANCH CIRCUIT BREAKERS SHALL HAVE A MINIMUM RATING OF 10,000 AIC.
- TANDEM BRANCH CIRCUIT BREAKERS ARE NOT PERMITTED.
- PANEL ENCLOSURE SHALL BE NEMA 1 FOR INTERIOR APPLICATIONS OR NEMA 3R FOR EXTERIOR APPLICATIONS OR AS INDICATED ON THE DRAWINGS. DO NOT INSTALL PANEL UPSIDE DOWN.
- 10. WHERE A PANELBOARD IS INSTALLED, AN EXTERNAL SURGE PROTECTION DEVICE MUST ALSO BE INSTALLED ADJACENT AND CONNECTED TO THE PANELBOARD.
- 11. QUALITY PRODUCT CIRCUIT BREAKERS ARE NOT PERMITTED.
- 12. UNUSED BRANCH CIRCUIT SPACES SHALL HAVE PANEL MANUFACTURER'S BLANK SPACE INSERTS INSTALLED. 13. ALL PANEL DIRECTORIES SHALL BE TYPEWRITTEN, NOT HANDWRITTEN.
- 14. PANEL DIRECTORIES SHALL BE UPDATED TO ACCURATELY REFLECT THE FINAL CIRCUITING. 15. ALL UNUSED CIRCUIT BREAKERS SHALL BE SWITCHED OFF AND LABELED "SPARE".

EXTERNALLY MOUNTED SURGE PROTECTION DEVICES

- 1. RATED FOR THE INTENDED APPLICATION AND AS INDICATED ON THE DRAWINGS: 120/240V, SINGLE PHASE, OR 120/208V, SINGLE PHASE, OR 120/208V, THREE PHASE, OR 480/277V, SINGLE PHASE OR
- 480/277V, THREE PHASE. RATÉD FOR 100KA PEAK SURGE CURRENT PER PHASE.
- INDICATOR LEDS FOR NORMAL AND FAULT CONDITION FOR EACH PHASE.
- U.L. LISTED 1449 ENCLOSURE SHALL BE: INTERIOR APPLICATIONS, NEMA 1. EXTERIOR APPLICATIONS: NEMA 3R OR NEMA 4X STAINLESS STEEL.

POWER PROTECTION CABINET (PPC)

- 1. RATED FOR USE AT 120/240V, SINGLE PHASE, THREE WIRE PLUS GROUND OR 120/208V, SINGLE PHASE, THREE WIRE PLUS GROUND OR 120/208V, THREE PHASE, FOUR WIRE PLUS GROUND AS REQUIRED FOR THE INTENDED APPLICATION OR AS INDICATED ON THE DRAWINGS.
- 2. ALUMINUM OR COPPER BUS, RATED FOR 200 AMPERES OR AS INDICATED ON THE DRAWINGS, AND
- HAVE A SHORT CIRCUIT WITHSTAND RATING OF 22,000 AIC MINIMUM. TWO MAIN CIRCUIT BREAKERS. MECHANICALLY INTERLOCKED. THAT ACT AS A MANUAL TRANSFER SWITCH. BREAK BEFORE MAKE. ALLOW FOR A NORMAL AND PORTABLE GENERATOR STANDBY FEEDS. MAIN BREAKERS SHALL BE 200 AMPERES AND HAVE A SHORT CIRCUIT RATING OF 22,000 AIC MINIMUM.
- CONTRACTOR SHALL ENSURE THAT THE MECHANICAL INTERLOCK HAS BEEN INSTALLED. 4. INTERNAL PANEL SHALL HAVE A MINIMUM OF 24 BRANCH CIRCUITS AVAILABLE.
- BRANCH CIRCUIT BREAKERS SHALL BE PLUG-IN OR BOLT-ON. BRANCH CIRCUIT BREAKERS SHALL HAVE A MINIMUM RATING OF 10,000 AIC.
- TANDEM BRANCH CIRCUIT BREAKERS ARE NOT PERMITTED. CLASSIFIED PRODUCT BRANCH CIRCUIT BREAKERS ARE NOT PERMITTED.
- FURNISHED WITH INTERNAL, FACTORY INSTALLED, INTEGRATED SURGE SUPPRESSION.
- 10. FURNISHED WITH STANDBY GENERATOR INLET (RECEPTACLE), REVERSE SERVICE RATED. VOLTAGE AND AMPERAGE AS INDICATED ON THE DRAWINGS. GENERATOR RECEPTACLE SHALL BE FACTORY INSTALLED ON SIDE OF PPC UNLESS SHOWN AS REMOTE MOUNTED ON THE DRAWINGS
- 11. UNUSED BRANCH CIRCUIT BREAKERS SHALL HAVE PANEL MANUFACTURER'S BLANK SPACE INSERTS INSTALLED.
- 12. ENCLOSURE SHALL BE NEMA 1 FOR INTERIOR APPLICATIONS OR NEMA 3R FOR EXTERIOR APPLICATIONS OR AS INDICATED ON THE DRAWINGS.
- 13. IF AN EXISTING PPC IS MISSING THE MECHANICAL INTERLOCK, THE CONTRACTOR SHALL FURNISH AND INSTALL THE CORRECT FACTORY MECHANICAL INTERLOCK ON THE TWO MAIN CIRCUIT BREAKERS.
- 14. ALL PANEL DIRECTORIES SHALL BE TYPEWRITTEN, NOT HANDWRITTEN 15. PANEL DIRECTORIES SHALL BE UPDATED TO ACCURATELY REFLECT THE FINAL CIRCUITING.
- 16. ALL UNUSED CIRCUIT BREAKERS SHALL BE SWITCHED OFF AND LABELED "SPARE".

EXTERIOR COMBINATION GFCI/SWITCH UNIT

- WEATHERPROOF ENCLOSURE WHICH INCLUDES A 120V, 20A GFCI RECEPTACLE AND A 120V, 20A
- TOGGLE SWITCH. "IN-USE" COVER, CORROSION RESISTANT, GALVANIZED STEEL ENCLOSURE. GFCI RECEPTACLE AND LIGHT SWITCH SHALL BE WIRED ON SEPARATE CIRCUITS, UNLESS OTHERWISE
- NOTED ON THE DRAWINGS.
- 4. G.E. # U010S010GRP OR APPROVED EQUAL.

Stick Together

4100 GUARDIAN ST., SUITE 101 SIMI VALLEY, CA 93063

=PROJECT INFORMATION:= (HARDENING NATIONAL - 25kW DIESEL)

SV00924A VY398 FRAZIER PARK PUD

4022 NORTH END DR. FRAZIER PARK, CA 93225 KERN COUNTY

=CURRENT ISSUE DATE:=

=ISSUED FOR:=

CONSTRUCTION

=REV.:==DATE:===DESCRIPTION:==BY:= E SHEETS SUBMITTED FOR REVIEW

=PLANS PREPARED BY:=



7543 Woodley Ave., #201, Van Nuys, CA 91406 Office: (818) 840-0808 Fax: (818) 840-0708

=CONSULTANT:=

ROB MYERS-ELECTRICAL RESOURCES

567 SOUTH ALBERTSON AVENUE COVINA, CALIFORNIA, 91723

(626) 252-8950 ___APV.:= =DRAWN BY: =CHK.:==

RMER CH



SHEET TITLE:

GENERAL ELECTRICAL NOTES

SHEET NUMBER:=

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GENERAL NOTES