

4/21/2016 5:30:00 PM

PROJECT GENERAL NOTES

- ALL WORK SHALL COMPLY WITH CURRENT FEDERAL, STATE, AND LOCAL CODES AND ORDINANCES AS WELL AS THE CONSTRUCTION DOCUMENTS. CONTRACTOR SHALL REPORT ANY CONFLICTS TO THE ENGINEER AS SOON AS THEY ARE DISCOVERED.
- THE COMPLETE INSTALLATION SHALL BE IN ACCORDANCE WITH THE A.D.A.G. (AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES)
- THE CONTRACTOR SHALL REVIEW THE DRAWINGS AND SPECIFICATIONS PRIOR TO BIDDING, JOB AND DURING CONSTRUCTION. EXCEPT AS OTHERWISE NOTED, THE CONTRACTOR SHALL PROVIDE ALL EQUIPMENT, MATERIALS, AND LABOR FOR A COMPLETE PROJECT AS SHOWN IN THE DRAWINGS AND SPECIFICATIONS. DRAWINGS AND SPECIFICATIONS CARRY EQUAL IMPORTANCE AND ITEMS LISTED IN EITHER SHALL BE FURNISHED AS IF LISTED IN BOTH. ALSO REVIEW DETAILS AND RISER DIAGRAMS FOR ADDITIONAL ITEMS/INSTRUCTIONS WHETHER SPECIFICALLY REFERRED TO ON PLANS OR NOT.
- THE CONTRACTOR MUST VISIT THE SITE TO FAMILIARIZE HIMSELF WITH THE EXISTING SITE CONDITIONS WHICH WILL BE AFFECTED DURING CONSTRUCTION PRIOR TO SUBMITTING HIS BID PROPOSAL. INCLUDING THE EXTENT OF DEMOLITION AND CONFLICTS WITH PLANS. DRAWINGS ARE DIAGRAMATIC IN NATURE AND SHOW THE GENERAL INSTALLATION OF EQUIPMENT AND MATERIALS IN RELATIONSHIP TO STRUCTURE AND OTHER TRADES. THEY MAY NOT SHOW EVERY REQUIRED OFFSET, FITTING, ETC. CONTRACTOR SHALL FIELD VERIFY ACTUAL JOB CONDITIONS AND COORDINATE WORK WITH OTHER TRADES PRIOR TO BIDDING, JOB AND PRIOR TO ORDERING EQUIPMENT, FABRICATION OF MATERIALS, OR STARTING WORK. CONTRACTOR SHALL NOT SCALE THE DRAWINGS.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE ALL ITEMS THAT AFFECT OTHER DISCIPLINES WITH THE CORRESPONDING CONTRACTOR AND THE GENERAL CONTRACTOR IF EQUIPMENT, MATERIALS, ETC. OTHER THAN THOSE SCHEDULED AND SPECIFIED (PENDING PRE-APPROVAL) ARE FURNISHED.
- CHANGE ORDERS WILL NOT BE GRANTED DUE TO LACK OF COORDINATION WITH JOB CONDITIONS AND/OR OTHER CONTRACTORS.
- EXISTING EQUIPMENT, DUCTWORK, AND PIPING SIZES AND LOCATIONS ARE SHOWN FOR REFERENCE ONLY. ADJUST EXACT INSTALLATION AND CONNECTION OF NEW ITEMS ACCORDING TO ACTUAL CONDITIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR STORAGE OF RELOCATED EQUIPMENT AND MATERIALS DURING CONSTRUCTION. ITEMS DAMAGED DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- UPON COMPLETION OF THE PROJECT THE CONTRACTOR SHALL PROVIDE AS-BUILT DRAWINGS TO THE OWNER, ARCHITECT, AND ENGINEER SHOWING EQUIPMENT, ETC. THAT DIFFERS FROM CONSTRUCTION DOCUMENTS AS THEY ARE ACTUALLY INSTALLED.
- THE RESPONSIBILITY OF EACH CONTRACTOR IS NOT LIMITED TO THEIR SPECIFIC DISCIPLINE'S DRAWING SHEETS. REFER TO OTHER DISCIPLINE'S DRAWING SHEETS AS REQUIRED FOR ADDITIONAL INFORMATION/INSTRUCTIONS.
- FIRE STOP ALL PENETRATIONS THROUGH RATED WALLS. SLEEVE IN ENTIRETY WITH APPROPRIATE SLEEVE MATERIAL.

ELECTRICAL GENERAL NOTES

- GENERAL:**
- DATA AND CONTROLS SYSTEMS EQUIPMENT, WIRING, AND RACEWAYS ARE PART OF THE WORK.
- COORDINATION WITH OTHER TRADES:**
- CONTRACTOR SHALL VERIFY ALL EQUIPMENT LOCATIONS WITH ARCHITECTURAL, MECHANICAL, AND CIVIL PLANS, ELEVATIONS AND REVIEWED SHOP DRAWINGS PRIOR TO MAKING THE ACTUAL ELECTRICAL INSTALLATION.
 - ELECTRICAL CONTRACTOR SHALL VERIFY TOTAL CONNECT LOAD/HP WITH MECHANICAL AND ALL OTHER CONTRACTORS PRIOR TO WIRING OF ALL EQUIPMENT. MAKE ANY CHANGES TO OVERCURRENT DEVICES OR FEED SIZE PER THE NATIONAL ELECTRICAL CODE, APPLICABLE VERSION.
 - ALL TEMPERATURE CONTROL WIRING SHALL BE FURNISHED AND INSTALLED BY OTHERS. INSTALL CONDUIT FOR CABLE IN EXPOSED AREAS. REFER TO MECHANICAL PLANS AND SPECIFICATIONS AND THE TEMPERATURE CONTROLS CONTRACTOR FOR EXACT LOCATION OF MECHANICAL EQUIPMENT AND THERMOSTAT LOCATIONS.
- CONDUIT AND WIRE:**
- ALL POWER WIRING OF ALL SYSTEMS SHALL BE COPPER WITH INSULATED GROUND WIRE IN STEEL CONDUIT AND STEEL BOXES UNLESS SPECIFICALLY NOTED OTHERWISE.
 - RACEWAYS SHALL BE ROUTED OVERHEAD UNLESS OTHERWISE NOTED ON THE DRAWINGS. UNDERSLAB RACEWAYS ARE ALLOWED FOR PANEL FEEDERS ONLY UNLESS OTHERWISE NOTED ON THE DRAWINGS. ALL PANEL BOARD BRANCH CIRCUITS SHALL BE ROUTED OVERHEAD WHERE POSSIBLE.
 - ALL CONNECTIONS TO EQUIPMENT SUBJECT TO MOVEMENT OR VIBRATIONS SHALL BE LIQUID TIGHT FLEXIBLE METAL CONDUIT, NOT LESS THAN 12" IN LENGTH, NOR GREATER THAN 36" IN LENGTH.
 - MULTIPLE CIRCUITS ON THE SAME PHASE SHALL NOT BE COMBINED IN A SINGLE RACEWAY UNLESS OTHERWISE SHOWN ON THE CONTRACT DRAWINGS. SINGLE PHASE BRANCH CIRCUIT HOME RUNS MAY BE COMBINED AT THE CONTRACTOR'S DISCRETION NOT GREATER THAN THREE CIRCUITS CONSISTING OF (3) PHASE CONDUCTORS, (3) NEUTRAL CONDUCTORS, AND GROUNDING CONDUCTOR.
 - THE MINIMUM WIRE SIZE SHALL BE #12 FOR ALL POWER CIRCUITS. EACH CIRCUIT SHALL HAVE A SEPARATE AND DEDICATED NEUTRAL FROM THE PANEL. SEE BRANCH CIRCUIT VOLTAGE DROP TABLE FOR SIZING OF CONDUCTORS.
 - THE MINIMUM CONDUIT SIZE IS 0.75".
 - REFER TO THE ARCHITECTURAL DRAWINGS FOR LOCATIONS OF BUILDING EXPANSION JOINTS. ALL CONDUITS CROSSING EXPANSION JOINTS SHALL BE INSTALLED WITH EXPANSION FITTINGS, UNLESS THE CONDUIT IS BELOW SLAB IN THE DENSE GRADE AGGREGATE. EXPANSION FITTINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE NEC, AND MANUFACTURER'S WRITTEN RECOMMENDATIONS.
 - ALL EXPOSED CONDUIT SHALL BE INSTALLED PARALLEL OR PERPENDICULAR, AND SHALL BE RIGID GALVANIZED UNLESS OTHERWISE NOTED.
 - EXTERIOR EXPOSED CONDUIT RUNS WILL NOT BE PERMITTED.
 - UNDER-SLAB CONDUIT SHALL NOT BE IN THE SLAB, BUT BELOW IT IN THE DENSE GRADE AGGREGATE, AND PARALLEL TO THE SLAB. ALL CONDUIT UNDER GROUND SHALL BE A MINIMUM OF 1". THIS APPLIES FOR BOTH LINE VOLTAGE, DATA, AND CONTROLS. ALL BENDS UNDERGROUND, HORIZONTAL OR VERTICAL, SHALL BE RIGID GALVANIZED STEEL, NO EXCEPTION.
 - MAINTAIN MAXIMUM SPACE BETWEEN LOW VOLTAGE CABLES WITH METAL CONDUCTORS AND SOURCES OF INTERFERENCE INCLUDING: POWER WIRING, ALL LIGHT FIXTURES, AND ESPECIALLY MOTORS AND TRANSFORMERS. ELECTRICAL INTERFERENCE IS REDUCED BY DISTANCE FROM SOURCES.
- DEVICES AND BOXES:**
- WHERE SEVERAL DEVICES ARE GANGED TOGETHER, THE COVERPLATE SHALL BE OF THE GANGED STYLE FOR THE NUMBER OF DEVICES USED.
 - RECEPTACLES SHALL NOT BE WIRED TO THE LOAD SIDE OF A GFCI RECEPTACLE.
 - WEATHERPROOF WHILE IN USE RECEPTACLE COVERS SHALL BE METAL, AND PAINTABLE UNLESS OTHERWISE NOTED.
- ELECTRICAL-OTHER:**
- ALL PANELS SHALL BE PANELBOARD CONSTRUCTION WITH BOLT ON BREAKERS. TANDEM BREAKERS SHALL NOT BE USED.

ELECTRICAL SYMBOL LIST

ABBR.	DESCRIPTION	MOUNTING OR AS INDICATED	
LIGHTING	A	FLUORESCENT LIGHT FIXTURE WITH LETTER DESIGNATION	SURFACE OR RECESSED
	A	FLUORESCENT LIGHT FIXTURE W/ EM POWER W/ LETTER DESIGNATION	SURFACE OR RECESSED
	A	LIGHT FIXTURE WITH LETTER DESIGNATION	WALL, SURFACE, OR SUSPENDED
	A	LIGHT FIXTURE WITH EMERGENCY POWER WITH LETTER DESIGNATION	WALL, SURFACE, OR SUSPENDED
	A	LIGHT FIXTURE WITH LETTER DESIGNATION	SURFACE OR RECESSED
	EM A	LIGHT FIXTURE WITH EMERGENCY POWER WITH LETTER DESIGNATION	SURFACE OR RECESSED
	A	LIGHT FIXTURE WITH LETTER DESIGNATION	WALL
	EM A	LIGHT FIXTURE WITH EMERGENCY POWER WITH LETTER DESIGNATION	WALL
	XA	COMBINATION EXIT & EMERGENCY LIGHT WITH LETTER DESIG.	WALL
	XA	EXIT LIGHT WITH LETTER DESIG. (SHADE INDICATES FACE DIRECTION)	WALL - 6" ABOVE DOOR
	A	EMERGENCY LIGHT FIXTURE WITH LETTER DESIGNATION	WALL - 12" BFC
	\$	SINGLE POLE SWITCH	WALL - 44" AFF
	\$ 3	THREE-WAY SWITCH	WALL - 44" AFF
	\$ 4	FOUR-WAY SWITCH	WALL - 44" AFF
	\$ P	SWITCH WITH PILOT LIGHT	WALL - 44" AFF
\$ K	KEY SWITCH	WALL - 44" AFF	
\$ T	TIME SWITCH (SET FOR 30 MIN.)	WALL - 44" AFF	
\$ M	HORSE POWER RATED TOGGLE SWITCH	-	
\$ D	DIMMER SWITCH	WALL - 44" AFF	
a.b.c...	SWITCHING SCHEME	-	
WIRING DEVICES	#	MOTION DETECTOR (TYPE #)	WALL - 44" AFF
	#	PIR OCCUPANCY DETECTOR W/POWER PACK (TYPE #)	CEILING
	#	ULTRA SONIC SENSOR (TYPE #)	CEILING
		SINGLE RECEPTACLE (SAME RATING AS CIRCUIT)	WALL - 18" AFF
		ISOLATED GROUND DUPLEX RECEPTACLE	WALL - 18" AFF
		DUPLEX RECEPTACLE (20 AMP)	WALL - 18" AFF
		CEILING MOUNTED RECEPTACLE	CEILING
		TAMPER-RESISTANT DUPLEX RECEPTACLE (20 AMP)	WALL - 18" AFF
		QUAD-PLEX RECEPTACLE	WALL - 18" AFF
		SWITCHED DUPLEX RECEPTACLE	WALL - 18" AFF
		GFI DUPLEX RECEPTACLE (20 AMP)	WALL - 18" AFF
		GFI QUAD RECEPTACLE	WALL - 18" AFF
		SPECIAL OUTLET (SEE SCHEDULE)	WALL, FLOOR
		TELEPHONE OUTLET	WALL, FLOOR
		DATA OUTLET	WALL - 18" AFF
	COMBINATION DATA AND DATA OUTLET	WALL - 18" AFF	
	CLOCK OUTLET	WALL	
	CABLE T.V. OUTLET	AS NOTED	
	CONTROLLER	WALL - 48" AFF	
	THERMOSTAT	48" AFF (SEE MECH. DWGS.)	
	JUNCTION BOX	AS NOTED	
POWER DISTRIBUTION		PULL BOX	WALL - 48" AFF
		SAFETY SWITCH (NON-FUSED)	6'-0" AFF TO TOP
		SAFETY SWITCH (FUSED)	6'-0" AFF TO TOP
		TOGGLE DISCONNECT SWITCH	WALL
		COMBINATION STARTER	WALL
		EMERGENCY STOP-MUSHROOM HEAD MAINTAINED PUSH BUTTON	44" AFF OR AFG
		MOTOR	AS NOTED
		ELECTRICAL PANELBOARD (SURFACE MTD.)	48" AFF TO CENTER

- SYMBOLS LIST NOTES:**
- SOME MAY NOT BE USED IN THIS SET OF PLANS.
 - ABBREVIATIONS MAY BE WITH OR WITHOUT PERIODS.
 - ALL MOUNTINGS APPLY UNLESS OTHERWISE NOTED.
 - LIGHT FIXTURE CAPITAL LETTER DESIGNATIONS KEY TO MATCHING ENTRIES IN THE LIGHTING FIXTURE SCHEDULE.
 - LIGHT FIXTURE SMALL CASE LETTER DESIGNATIONS (IF SHOWN) REPRESENT SWITCHING REQUIREMENTS.
 - ALL MOUNTING HEIGHTS SHALL BE TO CENTERLINE OF DEVICE U.O.N.

ABBREVIATIONS

ABBREVIATIONS	DESCRIPTION	ABBREVIATIONS	DESCRIPTION
A	AMPERES	HP	HORSE POWER
AV	AUDIO/VISUAL	IG	ISOLATED GROUND
AFF	ABOVE FINISHED FLOOR	IP	INTERNET PROTOCOL
AFG	ABOVE FINISHED GRADE	J-BOX	JUNCTION BOX
AHJ	AUTHORITIES HAVING JURISDICTION	LTG	LIGHTING
ATS	AUTOMATIC TRANSFER SWITCH	MAX	MAXIMUM
BFC	BELOW FINISHED CEILING	MC	MECHANICAL CONTRACTOR
BFG	BELOW FINISHED GRADE	MCA	MINIMUM CIRCUIT AMPACITY
C	CONDUIT	MIN	MINIMUM
CB	CIRCUIT BREAKER	MOCP	MAXIMUM OVERCURRENT PROTECTION
CLG	CEILING	(N)	NEW
CT	MOUNTED 6" ABOVE COUNTER TOP	NL	NIGHT LIGHT
DN	DOWN	NO	NORMALLY OPEN
(E)	EXISTING	NTS	NOT TO SCALE
EC	ELECTRICAL CONTRACTOR	P	POLE
EM	INDICATES DEVICE ON EMERGENCY CIRCUIT OR WITH AN EMERGENCY BATTERY	SPD	SURGE PROTECTIVE DEVICE
FLA	FULL LOAD AMPS	TCC	TEMPERATURE CONTROLS CONTRACTOR
FVNR	FULL VOLTAGE NON-REVERSING	TP	TAMPER PROOF OUTLET COVERS
FVR	FULL VOLTAGE REVERSING	TR	TAMPER RESISTANT DEVICE
FWD	FORWARD	Typ	TYPICAL
FPC	FIRE PROTECTION CONTRACTOR	UCT	MOUNTED UNDER COUNTER TOP
GC	GENERAL CONTRACTOR	UON	UNLESS OTHERWISE NOTED
GEC	GROUNDING ELECTRODE CONDUCTOR	V	VOLTS
GFI/GFCI	GROUND FAULT INTERRUPTER	WP	WEATHER PROOF
G/GND	GROUND	WPI	WP IN SERVICE (WITH PLUG IN SERVICE)
		WR	WEATHER RESISTANT TYPE DEVICE

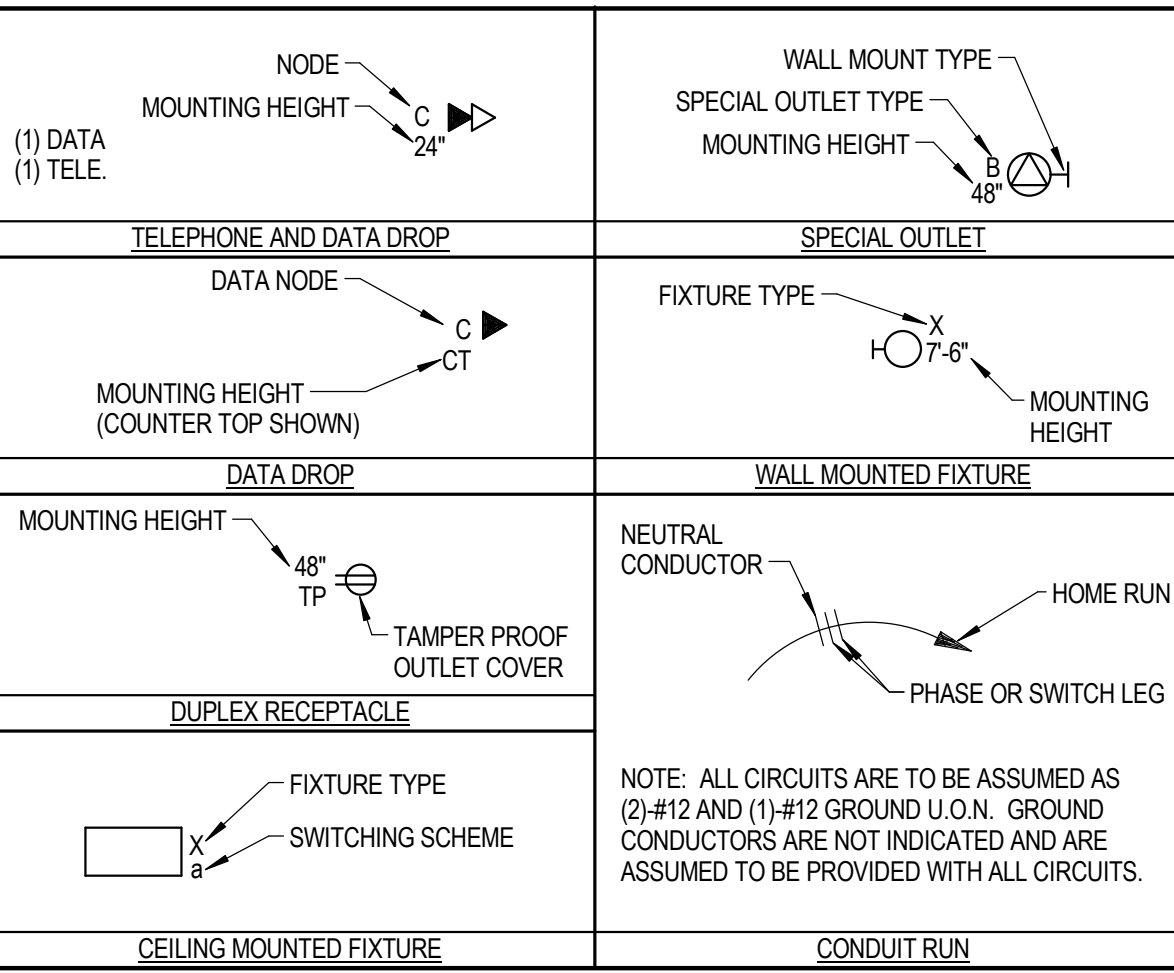
LINETYPES LEGEND

- SOLID LINE: EXISTING/REFERENCE
- DASHED LINE: EXISTING TO BE DEMOLISHED
- DOTTED LINE: WORK TO BE DONE

ELECTRICAL CONTACTS

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CIRCUITING LEGEND



C:\Users\jenanra\Documents\15623 - COW WATER PUMP - MEP - jenanra.rvt



RE-USE WATER PUMP STATION

CITY OF WICHITA, KANSAS TO SERVE SPIRT AEROSYSTEMS

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ELECTRICAL COVERSHEET

PROJECT NO.	468-85112	
DATE	04/18/16	
SCALE	AS NOTED	
DESIGNED	DRAWN	CHECKED
JRBW	JA	JRBW

NO.	ISSUED FOR CONSTRUCTION	04/18/16
REVISION		DATE

SHEET NO.
E1.0

