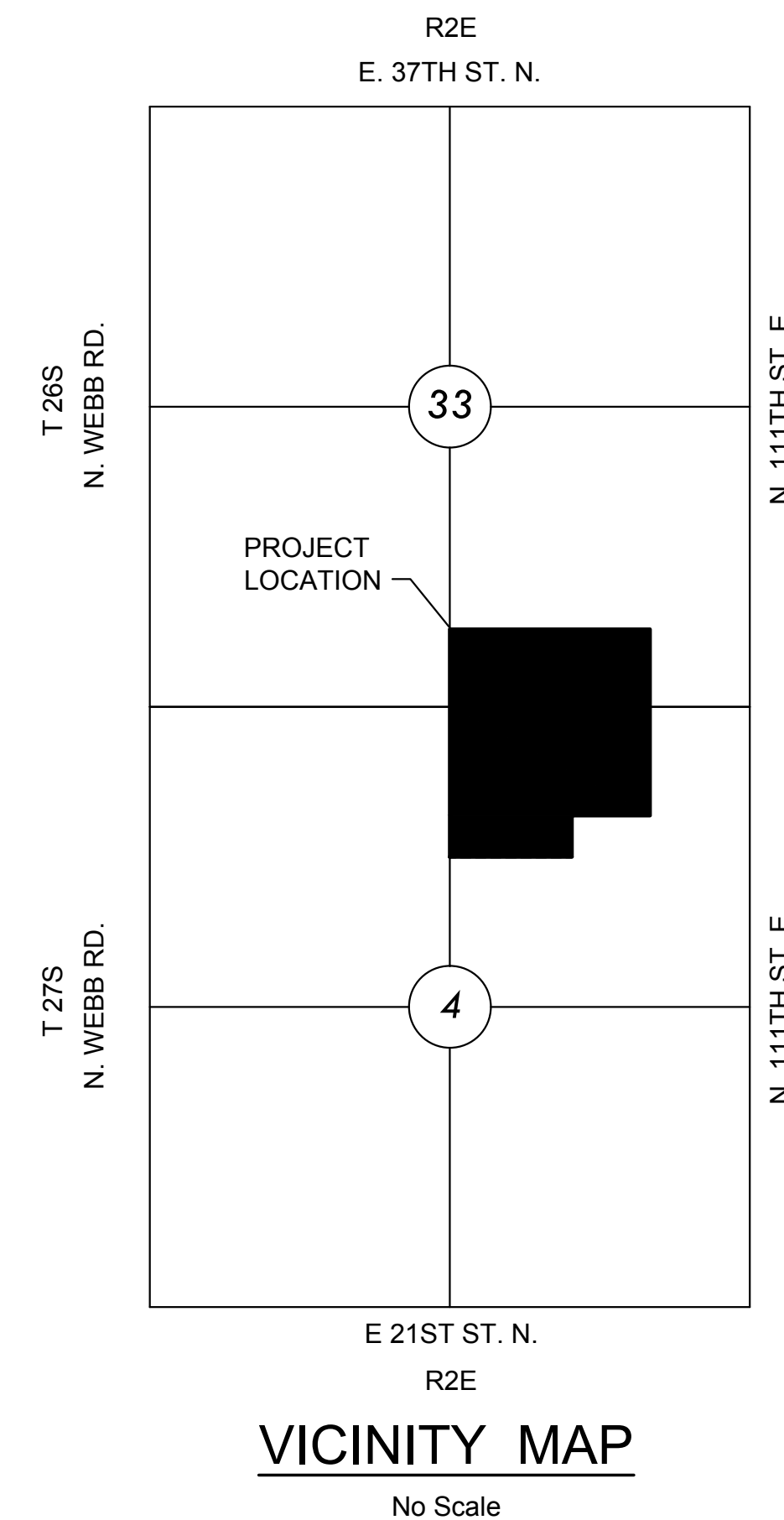
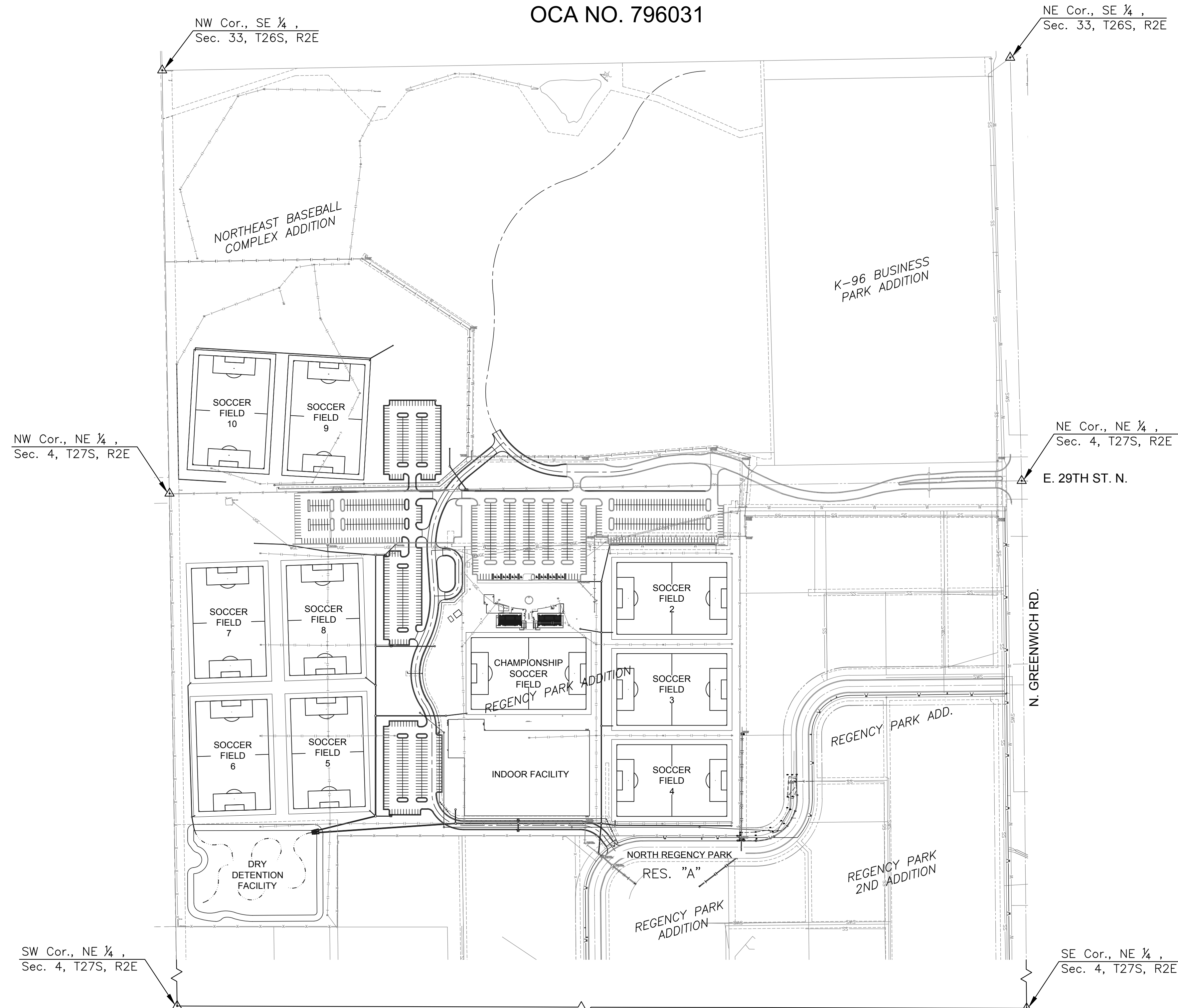


SITE PLANS FOR  
**STRYKER SPORTS**  
**PHASE 5 - SPORTS FIELD LIGHTING**

PROJECT NO. 472-85380  
 AN ADDITION TO THE CITY OF WICHITA, SEDGWICK COUNTY, KANSAS  
 GARY JANZEN, P.E. - CITY ENGINEER

OCA NO. 796031



PHASE 5 - SPORTS FIELD LIGHTING  
**STRYKER SPORTS**  
 WICHITA, KANSAS



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COVERSHEET

PROJECT NO.	1701010567	
DATE	04-25-18	
SCALE	AS NOTED	
DESIGNED	DRAWN	CHECKED
CNG	ECW	JRBW
NO.	REVISION	DATE
0	ISSUE FOR CONSTRUCTION	04-25-18

SHEET LIST

SHEET NO.	DESCRIPTION
CV-1	COVERSHEET
01	ELECTRICAL COVERSHEET
02	ELECTRICAL SITE PLAN - AREA A
03	ELECTRICAL SITE PLAN - AREA B
04	ELECTRICAL SITE PLAN - AREA C
05	ELECTRICAL SITE PLAN - AREA D
06	ELECTRICAL DETAILS
07	ELECTRICAL SCHEDULES

J:\PROJECTS\2017\1701010567\_COW\_STRYKER\_170567 CAD\SH1510 BLOG ME\SPORTS LIGHTING PACKAGE\CV-1 - COVERSHEET.DWG

SHEET NO. CV-1

### 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.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 DIAGRAMMATIC 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, FIXTURES, DEVICES, AND CIRCUITS 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, FIXTURES, DEVICES, CIRCUITS, ETC. THAT DIFFERS FROM CONSTRUCTION DOCUMENTS AS THEY ARE ACTUALLY INSTALLED.

### ELECTRICAL GENERAL NOTES

- A. COORDINATION WITH OTHER TRADES:**
- ELECTRICAL CONTRACTOR SHALL VERIFY TOTAL CONNECTED LOAD OF SPORTS LIGHTING PRIOR TO WIRING OF ALL EQUIPMENT. MAKE ANY CHANGES TO OVERCURRENT DEVICES OR FEED SIZE PER THE NATIONAL ELECTRICAL CODE, APPLICABLE VERSION.
- B. CONDUIT AND WIRE:**
- ALL POWER WIRING OF ALL SYSTEMS SHALL BE COPPER WITH INSULATED GROUND WIRE IN CONDUIT AND BOXES UNLESS SPECIFICALLY NOTED OTHERWISE.
  - 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 #10 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".
  - ALL EXPOSED CONDUIT SHALL BE INSTALLED PARALLEL OR PERPENDICULAR, AND SHALL BE RIGID GALVANIZED UNLESS OTHERWISE NOTED.
  - ALL CONDUIT UNDER GROUND SHALL BE A MINIMUM OF 1". 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.
  - ALL BELOW GRADE ELBOWS SHALL BE RGS.
- C. ELECTRICAL-OTHER:**
- ALL PANELS SHALL BE PANELBOARD CONSTRUCTION WITH BOLT ON BREAKERS. TANDEM BREAKERS SHALL NOT BE USED.

### ABBREVIATIONS

	DESCRIPTION		DESCRIPTION
A	AMPERES	KW	KILOWATT
AD	AREA DRAIN	LTG	LIGHTING
AFF	ABOVE FINISHED FLOOR	MC	MECHANICAL CONTRACTOR
AFG	ABOVE FINISHED GRADE	MCA	MINIMUM CIRCUIT AMPACITY
AIC	AMPERES INTERRUPTING CAPACITY (K IS *1000)	MCOP	MAXIMUM OVERCURRENT PROTECTION
ATS	AUTOMATIC TRANSFER SWITCH	MCP	MOTOR CIRCUIT PROTECTOR (MAGNETIC TRIP)
BFC	BELOW FINISHED CEILING	MFS	MAXIMUM FUSE SIZE
BFG	BELOW FINISHED GRADE	(N)	NEW
C	CONDUIT	NC	NORMALLY CLOSED
CB	CIRCUIT BREAKER	NL	NIGHT LIGHT
CT	MOUNTED 6" ABOVE COUNTER TOP	NO	NORMALLY OPEN
DN	DOWN	NTS	NOT TO SCALE
(E)	EXISTING	OC	OVERCURRENT PROTECTION
EC	ELECTRICAL CONTRACTOR	P	POLE
EM	INDICATES DEVICE ON EMERGENCY CIRCUIT OR WITH AN EMERGENCY BATTERY	PH	PHASE
FD	FIRE DAMPER	RLA	RUNNING LOAD AMPS
FLA	FULL LOAD AMPS	SR	SAFETY RECEPTACLE
FP	FIRE PROTECTION	T-STAT	THERMOSTAT
FPC	FIRE PROTECTION CONTRACTOR	TCC	TEMPERATURE CONTROLS CONTRACTOR
FPI	FINS PER INCH	TP	TAMPER PROOF / SAFETY OUTLET OR COVERS
FPM	FEET PER MINUTE	TYP	TYPICAL
FPS	FEET PER SECOND	UCT	MOUNTED UNDER COUNTER WITHIN 12" OF TOP
FSD	FIRE/SMOKE DAMPER	UON	UNLESS OTHERWISE NOTED
GC	GENERAL CONTRACTOR	V	VOLTS
GFI/GFCI	GROUND FAULT INTERRUPTER	VFD	VARIABLE FREQUENCY DRIVE
GND	GROUND	W	WIRE
HOA	HAND-OFF-AUTO SELECTOR SWITCH	WP	WEATHER PROOF
HP	HORSE POWER	WPI	WP IN SERVICE (WITH PLUG INSERTED)
IG	ISOLATED GROUND	WR	WEATHER RESISTANT TYPE DEVICE
J-BOX	JUNCTION BOX		

**ABBREVIATION SCHEDULE NOTES:**  
 1. SOME MAY NOT BE USED IN THIS SET OF PLANS.  
 2. ABBREVIATIONS MAY BE WITH OR WITHOUT PERIODS.

### ELECTRICAL SYMBOL LIST

	SYMBOL	DESCRIPTION	MOUNTING OR AS INDICATED
LIGHTING		LIGHT FIXTURE WITH LETTER DESIGNATION	SURFACE OR RECESSED
		LIGHT FIXTURE W/EM POWER W/LETTER DESIGN.	SURFACE OR RECESSED
		LIGHT FIXTURE WITH LETTER DESIGNATION	WALL,SURFACE,SUSPENDED
		LIGHT FIXTURE WITH EMERGENCY POWER W/LETTER DESIGN.	WALL,SURFACE,SUSPENDED
		LIGHT FIXTURE WITH LETTER DESIGNATION	RECESSED OR SURFACE
		LIGHT FIXTURE WITH EM POWER WITH LETTER DESIGNATION	RECESSED OR SURFACE
		LIGHT FIXTURE WITH LETTER DESIGNATION	WALL
		LIGHT FIXTURE WITH EM POWER WITH LETTER DESIGNATION	WALL
		EXIT LIGHT W/LTR. DESIGN. (SHADE INDICATES FACE DIRECTION)	CEILING
		EXIT LIGHT W/LTR. DESIGN. (SHADE INDICATES FACE DIRECTION)	WALL - 6" ABOVE DOOR
WIRING DEVICES		EMERGENCY LIGHT FIXTURE WITH LETTER DESIGNATION	WALL - 12" BELOW CLG
		SINGLE POLE SWITCH	WALL - 48" AFF TO TOP
		THREE-WAY SWITCH	WALL - 48" AFF TO TOP
		FOUR-WAY SWITCH	WALL - 48" AFF TO TOP
		SWITCH WITH PILOT LIGHT	WALL - 48" AFF TO TOP
		KEY SWITCH	WALL - 48" AFF TO TOP
		TIME SWITCH (SET FOR 30 MINUTES)	WALL - 48" AFF TO TOP
		DIMMER SWITCH	WALL - 48" AFF TO TOP
		SWITCHING SCHEME	-
		MOTION DETECTOR (TYPE #)	WALL - 48" AFF TO TOP
		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
		TAMPER-RESISTANT DUPLEX RECEPTACLE (20 AMP)	WALL - 18" AFF
		EMERGENCY 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	
POWER DISTRIBUTION		TELEPHONE OUTLET	WALL - 18" AFF
		DATA OUTLET	WALL - 18" AFF
		COMBINATION DATA AND TELEPHONE OUTLET	WALL - 18" AFF
		CLOCK OUTLET	WALL
		CABLE T.V. OUTLET	AS NOTED
		CONTROLLER	WALL - 48" AFF
		CONNECT TO EXISTING	AS NOTED
		JUNCTION BOX	AS NOTED
		PULL BOX	WALL
		SAFETY SWITCH (NON-FUSED)	6'-0" AFF TO TOP
		SAFETY SWITCH (FUSED)	6'-0" AFF TO TOP
		TOGGLE DISCONNECT SWITCH	WALL
		COMBINATION STARTER	WALL
		STARTER	WALL
		EMERGENCY STOP-MUSHROOM HEAD MAINTAINED PUSH BUTTON	44" AFF OR AFG
	MOTOR	AS NOTED	
	ELECTRICAL PANELBOARD (SURFACE MTD.)	48" AFF TO CENTER UON	
	ELECTRICAL PANELBOARD (FLUSH MTD.)	48" AFF TO CENTER UON	
	TELEPHONE TERMINAL BOARD (SURFACE MTD.)	NOTE 2	
	ELECTRICAL UTILITY METER	AS NOTED	

- SYMBOLS LIST NOTES:**
- ALL MOUNTINGS APPLY UNLESS OTHERWISE NOTED.
  - TTB SHALL BE MINIMUM VOID FREE, A/C 3/4" PLYWOOD WITH A FACE SHOWING, KILN DRIED WITH MAXIMUM 15% MOISTURE CONTENT, SECURELY ATTACHED TO WALL FRAMING MEMBERS, WITH FIRE RETARDANT COATING, OR INTUMESCENT WHITE PAINT. COVER WALL WITH TTB PLYWOOD FROM FLOOR TO 8' AFF.
  - 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.

### LINETYPES LEGEND

- EXISTING/REFERENCE      ————— WORK TO BE DONE  
 - - - - - EXISTING TO BE DEMOLISHED

### ELECTRICAL CONTACTS

ELECTRICAL:	ELECTRICAL UTILITY:
COLE GARDNER EMAIL: CGARDNER@MKEC.COM PHONE: 316.684.9600x1259	WESTAR ENERGY - SHANE PRICE PHONE: 316.261.6315
MULTICON:	CROSSLAND CONSTRUCTION:
MITCH PINKHAM EMAIL: MP@MULTICON.BUILD PHONE: 316.644.3025	CHAD STONE EMAIL: CSTONE@CROSSLAND.COM PHONE: 316.942.9090
NATIONAL BUILDERS:	
STEVEN GARDNER EMAIL: SGARDNER@NATIONALBUILDERSINC.COM PHONE: 316.729.7445	

### CODE INFORMATION

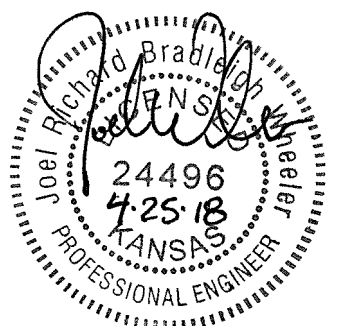
ELECTRICAL:  
 2017 NATIONAL ELECTRICAL CODE

J:\PROJECTS\2017\17101010567\_COW\_STRYKER\_170567\_CAD\SHIT\10 BLOG MEPS\SPORTS LIGHTING PACK\GEE\170567-06-001 ELECTRICAL COVERSHEET.DWG



Wichita, KS • 316-684-9600

PHASE 5 - SPORTS FIELD LIGHTING  
**STRYKER SPORTS**  
 WICHITA, KANSAS



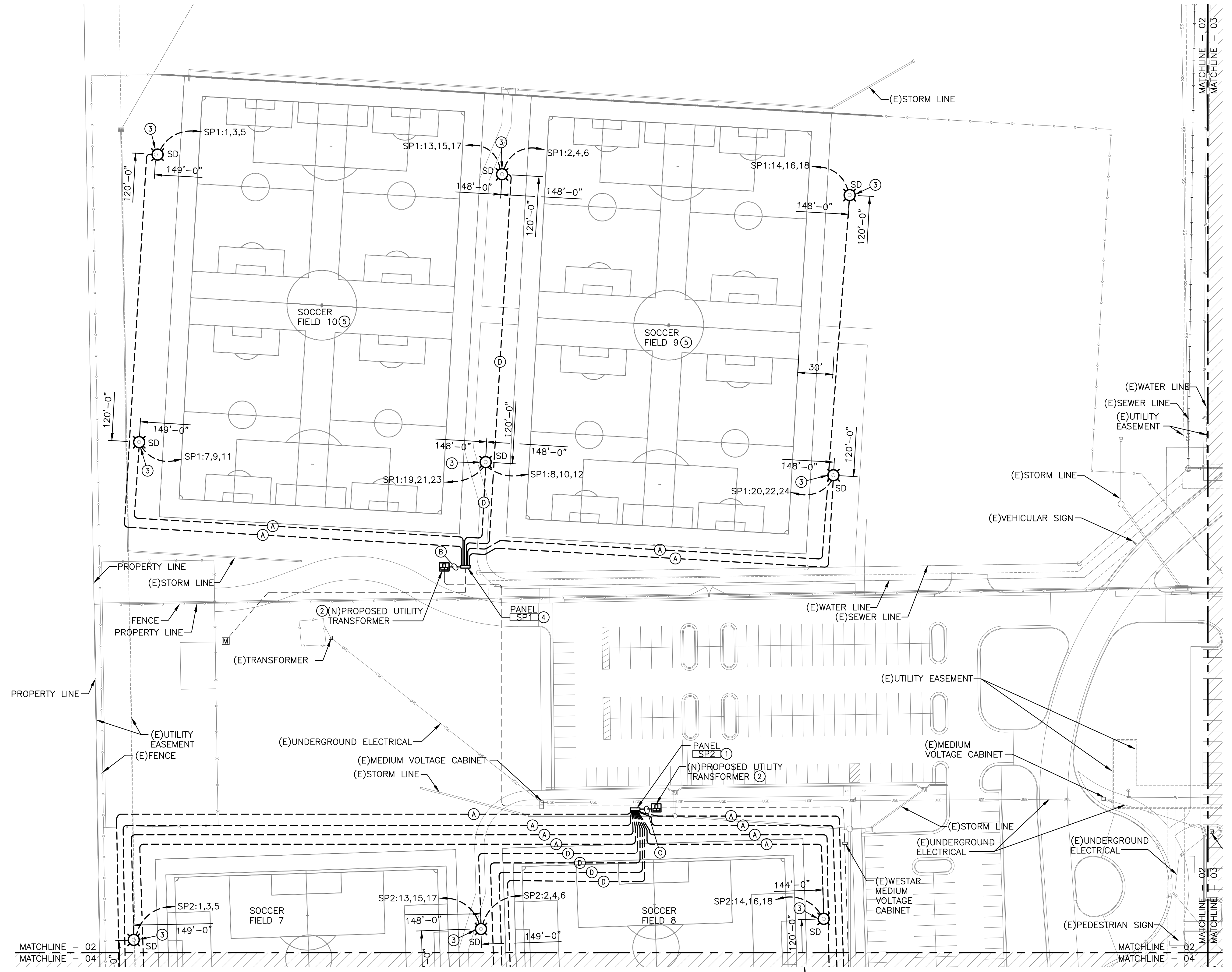
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### ELECTRICAL COVERSHEET

PROJECT NO.	1701010567	
DATE	04-25-18	
SCALE	N.T.S.	
DESIGNED	DRAWN	CHECKED
CNG	ECW	JRBW
0	ISSUED FOR CONST.	04-25-18
NO.	REVISION	DATE

SHEET NO.

FIXTURE LEGEND	
	SPORTS LIGHTING
HATCH LEGEND	
	AREA NOT COVERED ON THIS SHEET.



- ### GENERAL NOTES
- EXISTING CONDITIONS SHOWN ON THE DRAWINGS WERE TAKEN FROM ORIGINAL DOCUMENTS AND FIELD OBSERVATIONS. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF EXISTING CONDITIONS. E.C. SHALL VISIT THE JOBSITE PRIOR TO BID AND VERIFY ALL EXISTING CONDITIONS.
  - UPON COMPLETION OF PROJECT, E.C. SHALL PROVIDE A FULL TYPED AND UPDATED PANEL DIRECTORY FOR EACH PANELBOARD AFFECTED BY THE SCOPE OF THIS PROJECT.
  - FEEDER ROUTING INDICATED ON THE DRAWINGS DOES NOT INDICATE NEC CODE REQUIRED PULL BOXES. E.C. SHALL BE RESPONSIBLE FOR LOCATING AND INSTALLING REQUIRED PULL BOXES FOR EACH FEEDER.
  - PROVIDE AND INSTALL 12"x12"x12" TIER 22 IN-GRADE OPEN BOTTOM QUARTZITE BOX OR EQUAL ADJACENT TO ALL SPORTS LIGHTING POLES ON FIELDS 7-10. ROUTE CONDUCTORS THROUGH BOXES PRIOR TO ENTERING POLE BASE.

- ### KEYED NOTES
- PROVIDE AND INSTALL PANEL, TRANSFORMER, AND LIGHTING CONTROL PANEL ON STRUT STAND. SEE DETAIL 3/06 FOR PANEL "SP2" ONE-LINE DIAGRAM AND DETAIL 1/06 FOR STRUT STAND.
  - UTILITY TRANSFORMER AND PRIMARY CONDUCTORS PROVIDED BY WESTAR. E.C. SHALL INSTALL BASE FOR TRANSFORMER PER DETAIL 4/06. SEE ONE-LINE DIAGRAM FOR ADDITIONAL WORK DOWNSTREAM OF UTILITY TRANSFORMER.
  - PROVIDE AND INSTALL SPORTS LIGHTING BASE, POLE, FIXTURES, DRIVERS, ETC. PER SPECIFICATIONS.
  - PROVIDE AND INSTALL PANEL, TRANSFORMER, AND LIGHTING CONTROL PANEL ON STRUT STAND. SEE DETAIL 2/06 FOR PANEL "SP1" ONE-LINE DIAGRAM AND DETAIL 1/06 FOR STRUT STAND.
  - BID ALL WORK ASSOCIATED WITH THESE FIELDS AS ADD ALTERNATE #1.

### FEEDER SCHEDULE

Letter	Description
(A)	PROVIDE (3)-#10, (1)-#10 GND IN EXISTING 1" CONDUIT FOR SPORTS LIGHTING POWER.
(B)	PROVIDE (4)-#10, (1)-#3 GND IN EACH OF (2) EXISTING 4" CONDUITS FOR POWER DISTRIBUTION.
(C)	PROVIDE (4)-#30, (1)-#1 GND IN EACH OF (2) EXISTING 4" CONDUITS FOR POWER DISTRIBUTION.
(D)	PROVIDE (3)-#10, (1)-#10 GND IN EACH EXISTING 1" CONDUIT FOR SPORTS LIGHTING POWER. (2) CONDUITS PER POLE.

### CONSTRUCTION SEQUENCE

THE CONTRACTOR SHALL COORDINATE ALL INSTALLATIONS WITH NATIONAL BUILDERS, MULTICON, MKEC, AND THE CITY TO ENSURE PROPER ACCESS TO ALL LOCATIONS IS PROVIDED AND OTHER TRADES ARE NOT AFFECTED BY THIS WORK. ANY DAMAGE TO THE TURF, SUBGRADE, DRAINAGE, UTILITIES, AND GRADING CAUSED DURING THE INSTALLATION OF THE SPORTS LIGHTING SHALL BE CORRECTED TO THE SATISFACTION OF MKEC AND THE CITY PRIOR TO COMPLETION OF THE PROJECT. REFERENCE ALL AVAILABLE GRADING DRAWINGS, GEOTECHNICAL REPORTS, AND CONSTRUCTION PACKAGES FOR ADDITIONAL INFORMATION THAT MAY AFFECT YOUR BID SUCH AS GRADE CHANGES, CONSTRUCTION SEQUENCE OF THE FIELDS, ERECTION OF THE INDOOR FACILITY AND STADIUM IMPROVEMENTS, ETC. THE CONTRACTOR SHALL SUBMIT IN WRITING WITH THEIR BID CONFIRMATION THAT THE INSTALLATION OF ALL SYSTEMS REQUIRED FOR A FULLY OPERATIONAL SPORTS LIGHTING PACKAGE FOR EACH FIELD CAN BE CONSTRUCTED WHILE MAINTAINING A 3' CLEARANCE FROM THE EDGE OF ANY PLAYING FIELD. ANY CRANES USED SHALL BE A TRACK TYPE TO BETTER DISTRIBUTE THE WEIGHT OVER A LARGER AREA.

**DRIVER REQUIREMENTS:**  
DRIVERS FOR ALL NEW SPORTS LIGHTING SHALL BE CAPABLE OF OPERATING WITHIN A VOLTAGE RANGE OF 347V-480V. IF DRIVERS ARE NOT CAPABLE OF OPERATING WITHIN THIS RANGE THE MANUFACTURER MUST INCLUDE IN THEIR BID PRICE ANY INCREASE IN CONDUCTOR SIZE TO DECREASE VOLTAGE DROP SO IT IS WITHIN THE RANGE OF THE PROVIDED DRIVER.

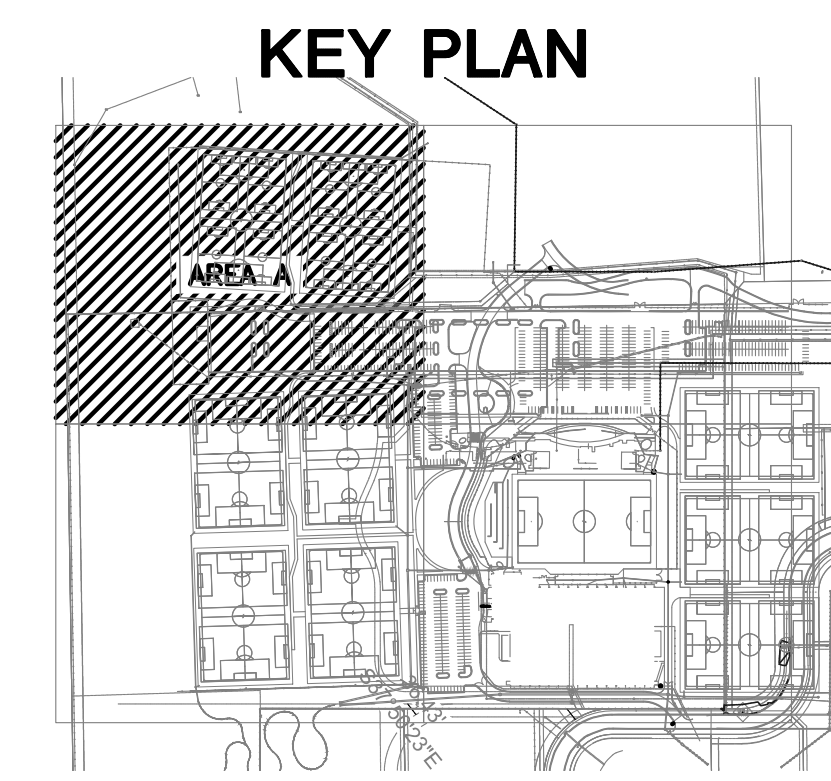
PHASE 5 - SPORTS FIELD LIGHTING  
**STRYKER SPORTS**  
 WICHITA, KANSAS



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### ELECTRICAL SITE PLAN - AREA A

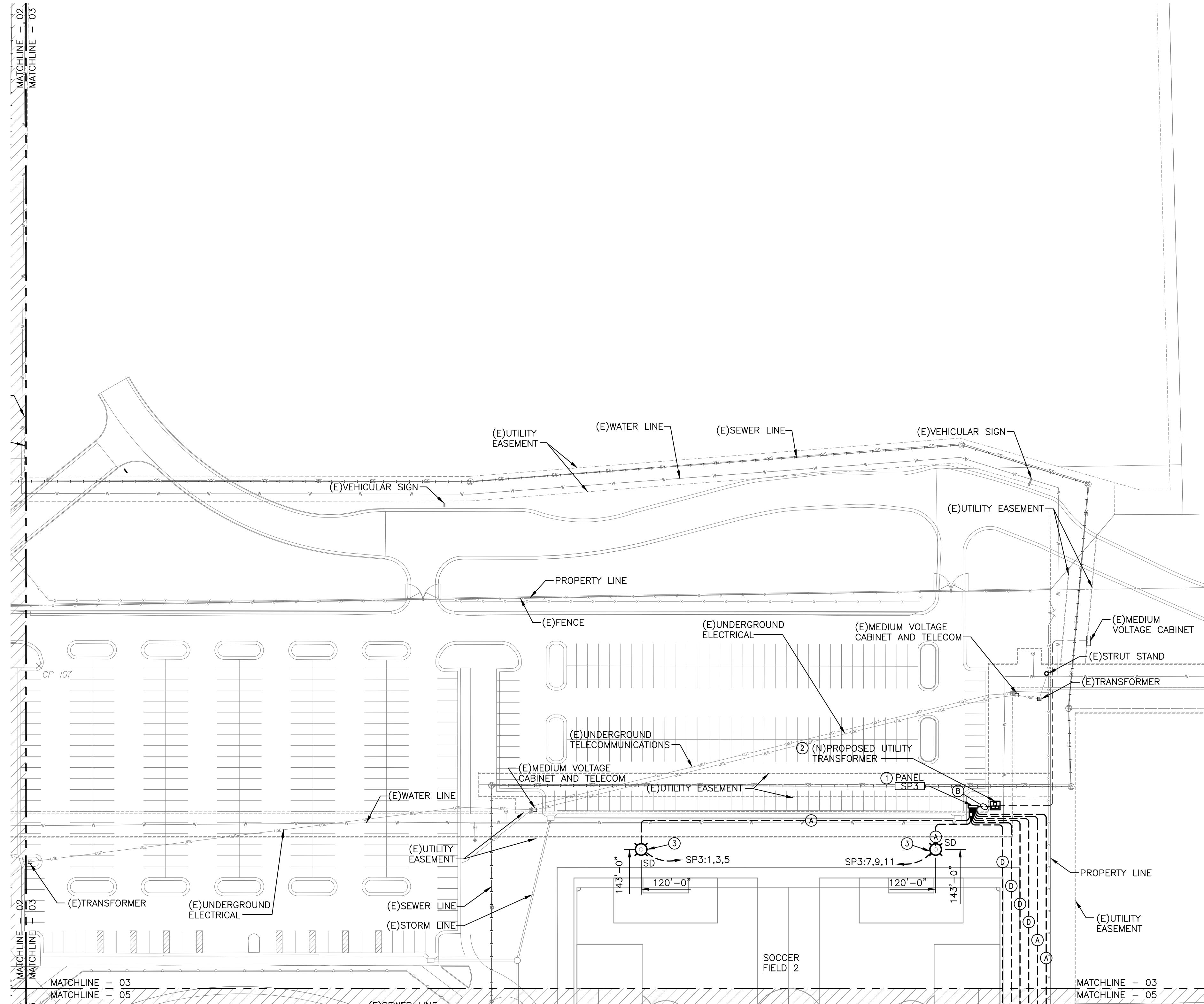
PROJECT NO.	1701010567	
DATE	04-25-18	
SCALE	1"=50'-0"	
DESIGNED	CNG	
DRAWN	ECW	
CHECKED	JRBW	
ISSUED FOR CONST.	04-25-18	
NO.	REVISION	DATE
SHEET NO. 02		



**ELECTRICAL SITE PLAN - AREA A**  
SCALE: 1" = 50'-0"

PLOTTED: Wednesday, April 25, 2018 @ 03:25PM

J:\PROJECTS\2017\101010567\_COW\_STRYKER\_170567\_CAD\SHS10\_BLOG\_MEP\SPORTS LIGHTING PLANDWG



**A ELECTRICAL SITE PLAN - AREA B**  
SCALE: 1" = 50'-0"

FIXTURE LEGEND	
	SPORTS LIGHTING
HATCH LEGEND	
	AREA NOT COVERED ON THIS SHEET.

- GENERAL NOTES**
- EXISTING CONDITIONS SHOWN ON THE DRAWINGS WERE TAKEN FROM ORIGINAL DOCUMENTS AND FIELD OBSERVATIONS. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF EXISTING CONDITIONS. E.C. SHALL VISIT THE JOBSITE PRIOR TO BID AND VERIFY ALL EXISTING CONDITIONS.
  - UPON COMPLETION OF PROJECT, E.C. SHALL PROVIDE A FULL TYPED AND UPDATED PANEL DIRECTORY FOR EACH PANELBOARD AFFECTED BY THE SCOPE OF THIS PROJECT.
  - FEEDER ROUTING INDICATED ON THE DRAWINGS DOES NOT INDICATE NEC CODE REQUIRED PULL BOXES. E.C. SHALL BE RESPONSIBLE FOR LOCATING AND INSTALLING REQUIRED PULL BOXES FOR EACH FEEDER.
  - PROVIDE AND INSTALL 12"x12"x12" TIER 22 IN-GRADE OPEN BOTTOM QUAZITE BOX OR EQUAL ADJACENT TO ALL SPORTS LIGHTING POLES ON FIELDS 2-10. ROUTE CONDUCTORS THROUGH BOXES PRIOR TO ENTERING POLE BASE.

- KEYED NOTES**
- PROVIDE AND INSTALL PANEL, TRANSFORMER, AND LIGHTING CONTROL PANEL ON STRUT STAND. SEE DETAIL 5/06 FOR PANEL "SP3" ONE-LINE DIAGRAM AND DETAIL 1/06 FOR STRUT STAND.
  - UTILITY TRANSFORMER AND PRIMARY CONDUCTORS PROVIDED BY WESTAR. E.C. SHALL INSTALL BASE FOR TRANSFORMER PER DETAIL 4/06. SEE ONE-LINE DIAGRAM FOR ADDITIONAL WORK DOWNSTREAM OF UTILITY TRANSFORMER.
  - PROVIDE AND INSTALL SPORTS LIGHTING BASE, POLE, FIXTURES, DRIVERS, ETC. PER SPECIFICATIONS.

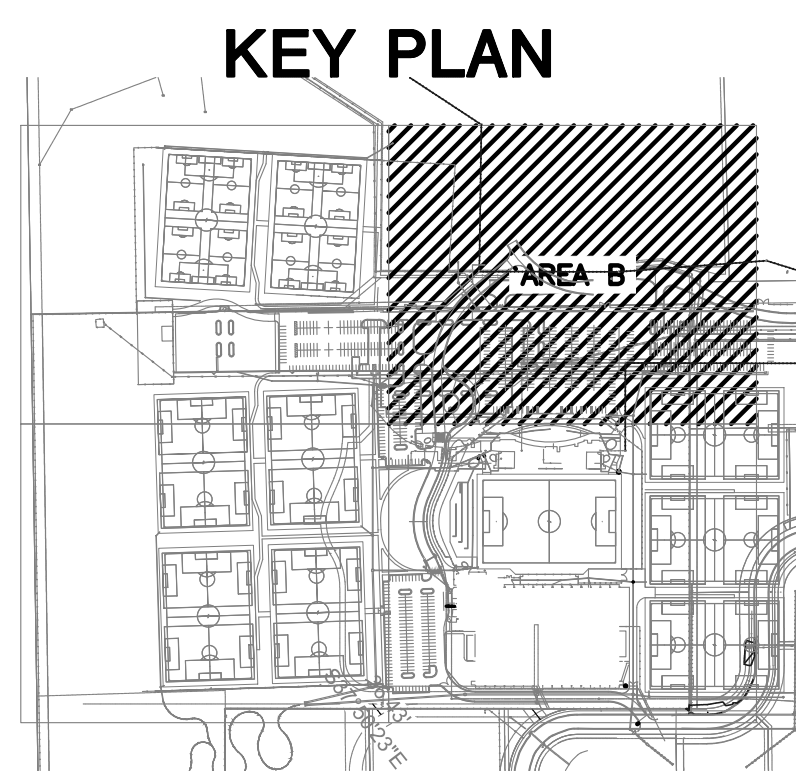
**FEEDER SCHEDULE**

(A)	PROVIDE (3)-#10, (1)-#10 GND IN EXISTING 1" CONDUIT FOR SPORTS LIGHTING POWER.
(B)	PROVIDE (4)-3/0, (1)-#3 GND IN EACH OF (2) EXISTING 4" CONDUITS FOR POWER DISTRIBUTION.
(D)	PROVIDE (3)-#10, (1)-#10 GND IN EACH EXISTING 1" CONDUIT FOR SPORTS LIGHTING POWER. (2) CONDUITS PER POLE.

**CONSTRUCTION SEQUENCE**

THE CONTRACTOR SHALL COORDINATE ALL INSTALLATIONS WITH NATIONAL BUILDERS, MULTICOM, MKEC, AND THE CITY TO ENSURE PROPER ACCESS TO ALL LOCATIONS IS PROVIDED AND OTHER TRADES ARE NOT AFFECTED BY THIS WORK. ANY DAMAGE TO THE TURF, SUBGRADE, DRAINAGE, UTILITIES, AND GRADING CAUSED DURING THE INSTALLATION OF THE SPORTS LIGHTING SHALL BE CORRECTED TO THE SATISFACTION OF MKEC AND THE CITY PRIOR TO COMPLETION OF THE PROJECT. REFERENCE ALL AVAILABLE GRADING DRAWINGS, GEOTECHNICAL REPORTS, AND CONSTRUCTION PACKAGES FOR ADDITIONAL INFORMATION THAT MAY AFFECT YOUR BID SUCH AS GRADE CHANGES, CONSTRUCTION SEQUENCE OF THE FIELDS, ERECTION OF THE INDOOR FACILITY AND STADIUM IMPROVEMENTS, ETC. THE CONTRACTOR SHALL SUBMIT IN WRITING WITH THEIR BID THE CONFIRMATION THAT THE INSTALLATION OF ALL SYSTEMS REQUIRED FOR A FULLY OPERATIONAL SPORTS LIGHTING PACKAGE FOR EACH FIELD CAN BE CONSTRUCTED WHILE MAINTAINING A 3'-0" CLEARANCE FROM THE EDGE OF ANY PLAYING FIELD. ANY CRANES USED SHALL BE A TRACK TYPE TO BETTER DISTRIBUTE THE WEIGHT OVER A LARGER AREA.

DRIVER REQUIREMENTS: DRIVERS FOR ALL NEW SPORTS LIGHTING SHALL BE CAPABLE OF OPERATING WITHIN A VOLTAGE RANGE OF 347V-480V. IF DRIVERS ARE NOT CAPABLE OF OPERATING WITHIN THIS RANGE THE MANUFACTURER MUST INCLUDE IN THEIR BID PRICE ANY INCREASE IN CONDUCTOR SIZE TO DECREASE VOLTAGE DROP SO IT IS WITHIN THE RANGE OF THE PROVIDED DRIVER.



PHASE 5 - SPORTS FIELD LIGHTING  
**STRYKER SPORTS**  
 WICHITA, KANSAS

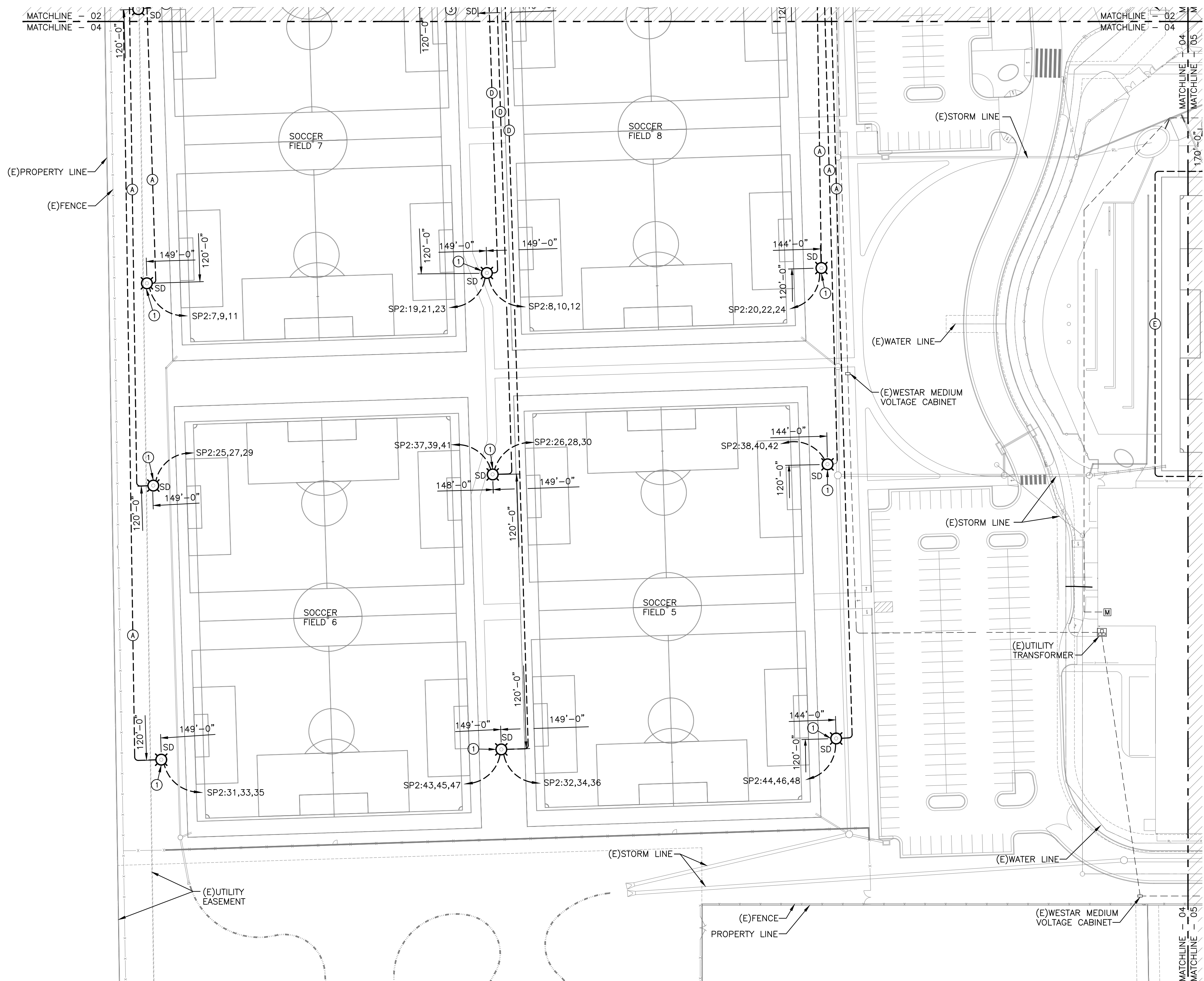


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**ELECTRICAL SITE PLAN - AREA B**

PROJECT NO.	1701010567	
DATE	04-25-18	
SCALE	1"=50'-0"	
DESIGNED	CNG	
DRAWN	ECW	
CHECKED	JRBW	
NO.	REVISION	DATE
0	ISSUED FOR CONST.	04-25-18
SHEET NO. 03		

J:\PROJECTS\2017\1701010567\_COW\_STRYKER\_170567\_CAD\SHS10 BLOG MEPS\SPORTS LIGHTING PLAN.DWG  
 PLOTTED: Wednesday, April 25, 2018 @ 03:26PM



**ELECTRICAL SITE PLAN - AREA C**  
 SCALE: 1" = 50'-0"

FIXTURE LEGEND	
	SPORTS LIGHTING
HATCH LEGEND	
	AREA NOT COVERED ON THIS SHEET.

- GENERAL NOTES**
- EXISTING CONDITIONS SHOWN ON THE DRAWINGS WERE TAKEN FROM ORIGINAL DOCUMENTS AND FIELD OBSERVATIONS. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF EXISTING CONDITIONS. E.C. SHALL VISIT THE JOBSITE PRIOR TO BID AND VERIFY ALL EXISTING CONDITIONS.
  - UPON COMPLETION OF PROJECT, E.C. SHALL PROVIDE A FULL TYPED AND UPDATED PANEL DIRECTORY FOR EACH PANELBOARD AFFECTED BY THE SCOPE OF THIS PROJECT.
  - FEEDER ROUTING INDICATED ON THE DRAWINGS DOES NOT INDICATE NEC CODE REQUIRED PULL BOXES. E.C. SHALL BE RESPONSIBLE FOR LOCATING AND INSTALLING REQUIRED PULL BOXES FOR EACH FEEDER.
  - PROVIDE AND INSTALL 12"x12"x12" TIER 22 IN-GRADE OPEN BOTTOM QUAZITE BOX OR EQUAL ADJACENT TO ALL SPORTS LIGHTING POLES ON FIELDS. TO ROUTE CONDUCTORS THROUGH BOXES PRIOR TO ENTERING POLE BASE.

- KEYED NOTES**
- PROVIDE AND INSTALL SPORTS LIGHTING BASE, POLE, FIXTURES, DRIVERS, ETC. PER SPECIFICATIONS.

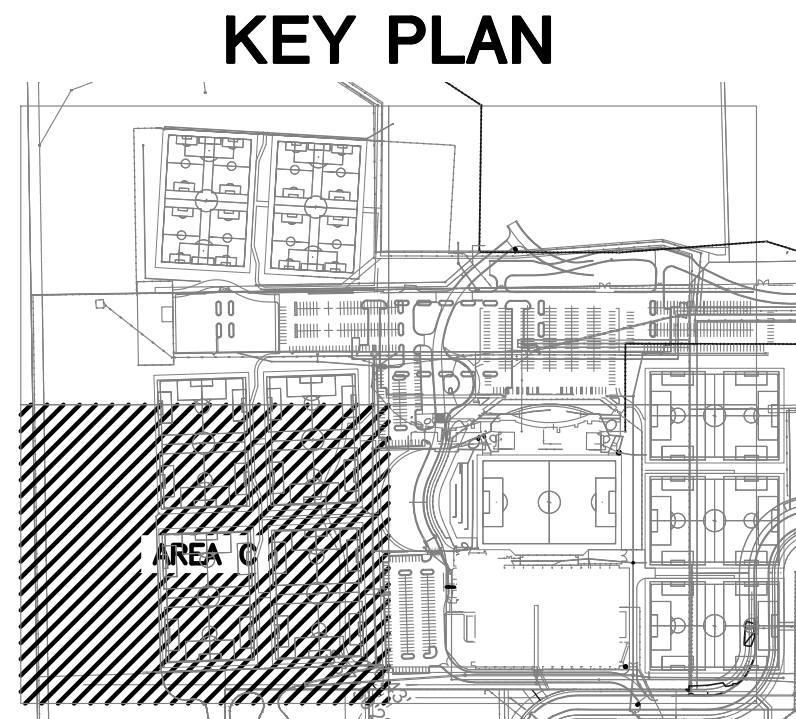
**FEEDER SCHEDULE**

(A)	PROVIDE (3)-#10, (1)-#10 GND IN EXISTING 1" CONDUIT FOR SPORTS LIGHTING POWER.
(B)	PROVIDE (3)-#10, (1)-#10 GND IN EACH EXISTING 1" CONDUIT FOR SPORTS LIGHTING POWER. (2) CONDUITS PER POLE.
(E)	PROVIDE (2)-#4, (1)-#10 GND IN EXISTING 1" CONDUIT FOR SPORTS LIGHTING POWER.

**CONSTRUCTION SEQUENCE**

THE CONTRACTOR SHALL COORDINATE ALL INSTALLATIONS WITH NATIONAL BUILDERS, MULTICON, MKEC, AND THE CITY TO ENSURE PROPER ACCESS TO ALL LOCATIONS IS PROVIDED AND OTHER TRADES ARE NOT AFFECTED BY THIS WORK. ANY DAMAGE TO THE TURF, SUBGRADE, DRAINAGE, UTILITIES, AND GRADING CAUSED DURING THE INSTALLATION OF THE SPORTS LIGHTING SHALL BE CORRECTED TO THE SATISFACTION OF MKEC AND THE CITY PRIOR TO COMPLETION OF THE PROJECT. REFERENCE ALL AVAILABLE GRADING DRAWINGS, GEOTECHNICAL REPORTS, AND CONSTRUCTION PACKAGES FOR ADDITIONAL INFORMATION THAT MAY AFFECT YOUR BID SUCH AS GRADE CHANGES, CONSTRUCTION SEQUENCE OF THE FIELDS, ERECTION OF THE INDOOR FACILITY AND STADIUM IMPROVEMENTS, ETC. THE CONTRACTOR SHALL SUBMIT IN WRITING WITH THEIR BID CONFIRMATION THAT THE INSTALLATION OF ALL SYSTEMS REQUIRED FOR A FULLY OPERATIONAL SPORTS LIGHTING PACKAGE FOR EACH FIELD CAN BE CONSTRUCTED WHILE MAINTAINING A 3'-0" CLEARANCE FROM THE EDGE OF ANY PLAYING FIELD. ANY CRANES USED SHALL BE A TRACK TYPE TO BETTER DISTRIBUTE THE WEIGHT OVER A LARGER AREA.

DRIVER REQUIREMENTS:  
 DRIVERS FOR ALL NEW SPORTS LIGHTING SHALL BE CAPABLE OF OPERATING WITHIN A VOLTAGE RANGE OF 347V-480V. IF DRIVERS ARE NOT CAPABLE OF OPERATING WITHIN THIS RANGE THE MANUFACTURER MUST INCLUDE IN THEIR BID PRICE ANY INCREASE IN CONDUCTOR SIZE TO DECREASE VOLTAGE DROP SO IT IS WITHIN THE RANGE OF THE PROVIDED DRIVER.



PHASE 5 - SPORTS FIELD LIGHTING  
**STRYKER SPORTS**  
 WICHITA, KANSAS

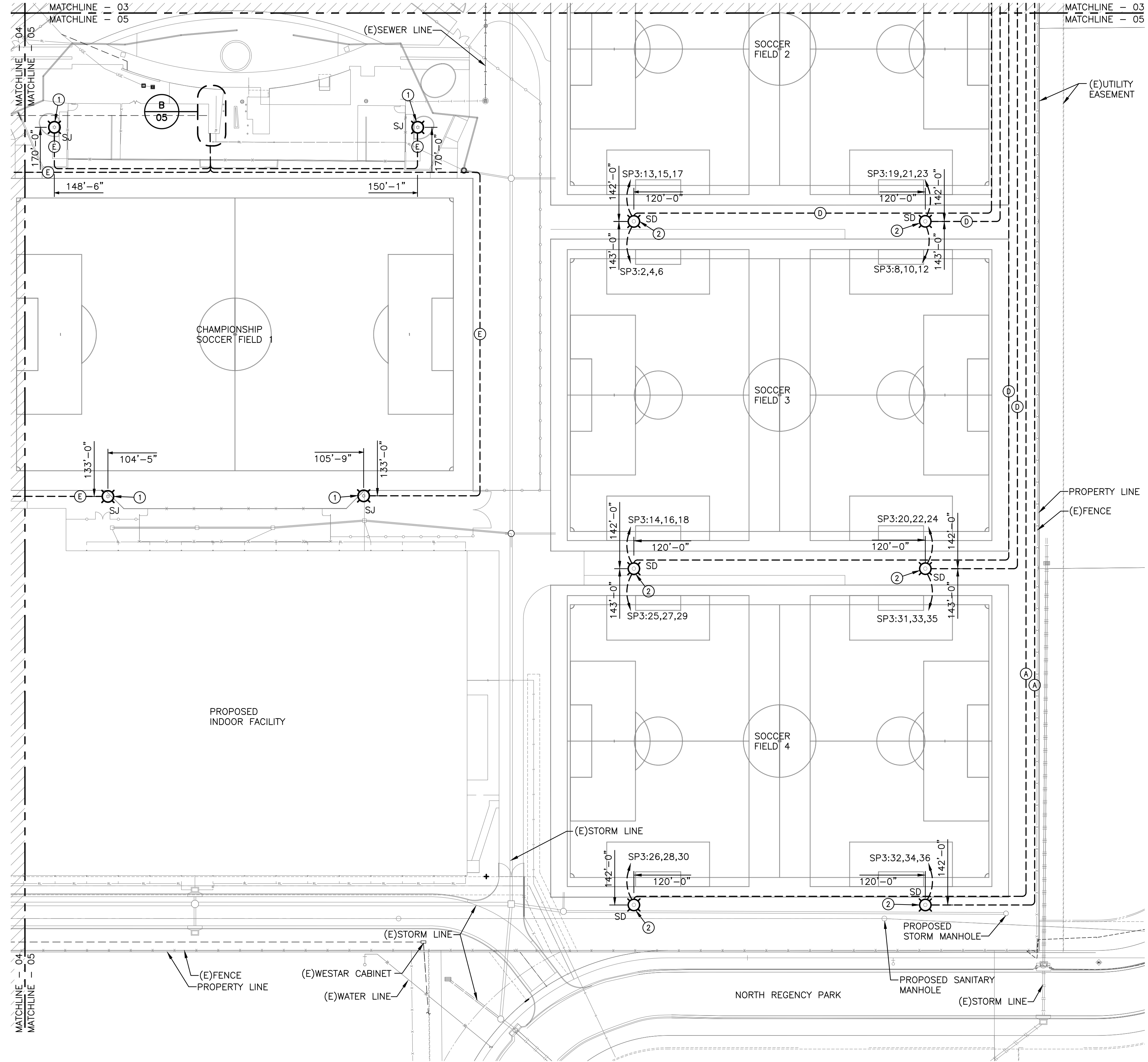


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**ELECTRICAL SITE PLAN - AREA C**

PROJECT NO.	1701010567	
DATE	04-25-18	
SCALE	1"=50'-0"	
DESIGNED	CNG	
DRAWN	ECW	
CHECKED	JRBW	
ISSUED FOR CONST.	04-25-18	
NO.	REVISION	DATE
SHEET NO. 04		

J:\PROJECTS\2017\1010567\_COW\_STRYKER\_170567\_CAD\SHS10\_BLOG\_MEP\SPORTS LIGHTING PACKAGE\170567\_04-01-18\_ELECTRICAL SPORTS LIGHTING PLAN.DWG  
 PLOTTED: Wednesday, April 25, 2018 @ 03:39PM



**A ELECTRICAL SITE PLAN - AREA D**  
SCALE: 1" = 50'-0"

FIXTURE LEGEND	
	SPORTS LIGHTING
HATCH LEGEND	
	AREA NOT COVERED ON THIS SHEET.

- GENERAL NOTES**
- EXISTING CONDITIONS SHOWN ON THE DRAWINGS WERE TAKEN FROM ORIGINAL DOCUMENTS AND FIELD OBSERVATIONS. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF EXISTING CONDITIONS. E.C. SHALL VISIT THE JOBSITE PRIOR TO BID AND VERIFY ALL EXISTING CONDITIONS.
  - UPON COMPLETION OF PROJECT, E.C. SHALL PROVIDE A FULL TYPED AND UPDATED PANEL DIRECTORY FOR EACH PANELBOARD AFFECTED BY THE SCOPE OF THIS PROJECT.
  - FEEDER ROUTING INDICATED ON THE DRAWINGS DOES NOT INDICATE NEC CODE REQUIRED PULL BOXES. E.C. SHALL BE RESPONSIBLE FOR LOCATING AND INSTALLING REQUIRED PULL BOXES FOR EACH FEEDER.
  - PROVIDE AND INSTALL 12"x12"x12" TIER 22 IN-GRADE OPEN BOTTOM QUARTZITE BOX OR EQUAL ADJACENT TO ALL SPORTS LIGHTING POLES ON FIELDS 2-TO-4. ROUTE CONDUCTORS THROUGH BOXES PRIOR TO ENTERING POLE BASE.

- KEYED NOTES**
- REPLACE EXISTING SPORTS LIGHTS ON EXISTING POLE WITH NEW LED FIXTURE. EXISTING MUSCO POLE AND BASE SHALL REMAIN. REPLACE EXISTING BALL ASTS AND EXISTING CONDUCTORS WITH NEW DRIVERS IN NEW BOX PER SPECIFICATIONS.
  - PROVIDE AND INSTALL SPORTS LIGHTING BASE, POLE, FIXTURES, DRIVERS, ETC. PER SPECIFICATIONS.
  - REPLACE EXISTING LIGHTING CONTROL CABINET WITH NEW CONTROL CABINET FOR SPORTS LIGHTING CONTROL. RE-USE CONDUCTORS AS FEASIBLE. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
  - SEE SCHEDULE SHEET ON SHEET 07 FOR WORK TO BE DONE.
  - ROUTE NEW CONDUCTORS IN EXISTING 1" CONDUIT OVERHEAD IN ELECTRICAL ROOM.
  - ROUTE NEW CONDUCTORS IN EXISTING 1" CONDUIT UNDERGROUND FROM NEW LIGHTING CONTROL CABINET.
  - COORDINATE ALL WORK IN THIS ROOM WITH STADIUM IMPROVEMENT PACKAGE TO ENSURE THAT ONCE ROOF IS LOWERED, WORKING CLEARANCE REQUIREMENTS IN STADIUM IMPROVEMENT PACKAGE ARE MET.

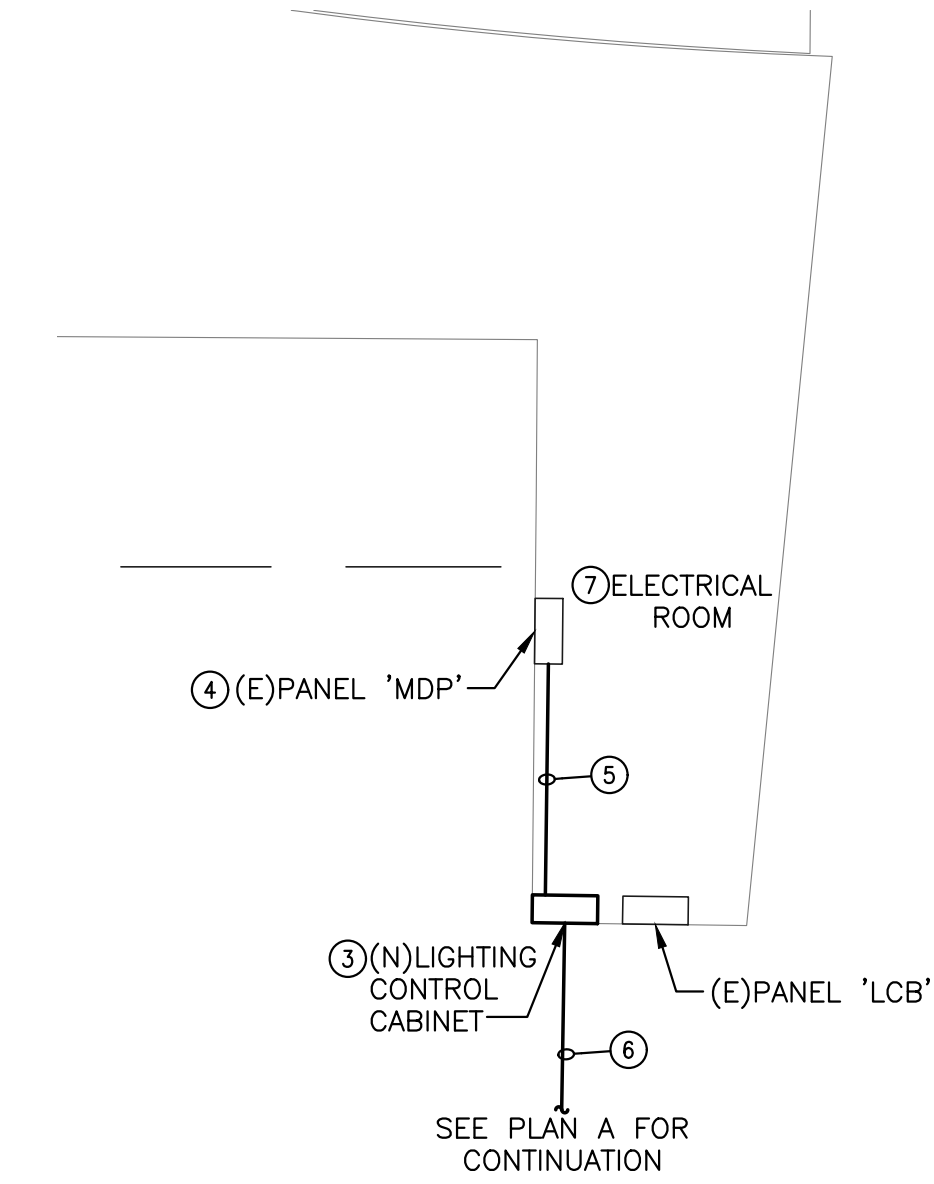
**FEEDER SCHEDULE**

(A)	PROVIDE (3)-#10, (1)-#10 GND IN EXISTING 1" CONDUIT FOR SPORTS LIGHTING POWER.
(D)	PROVIDE (3)-#10, (1)-#10 GND IN EACH EXISTING 1" CONDUIT FOR SPORTS LIGHTING POWER. (2) CONDUITS PER POLE.
(E)	PROVIDE (2)-#4, (1)-#10 GND IN EXISTING 1" CONDUIT FOR LIGHTING.

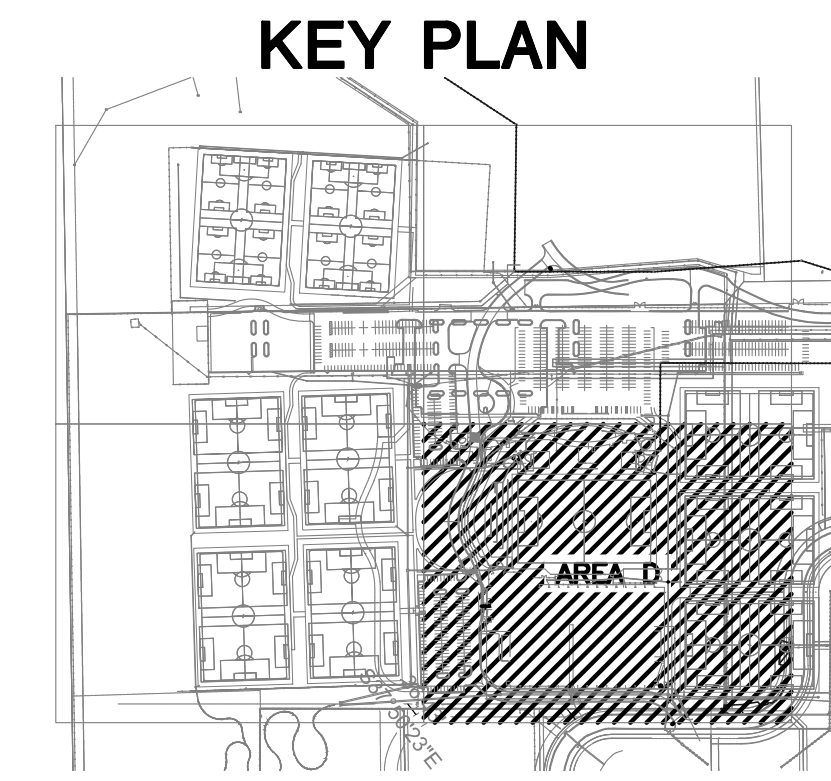
**CONSTRUCTION SEQUENCE**

THE CONTRACTOR SHALL COORDINATE ALL INSTALLATIONS WITH NATIONAL BUILDERS, MULTICON, MKEC, AND THE CITY TO ENSURE PROPER ACCESS TO ALL LOCATIONS IS PROVIDED AND OTHER TRADES ARE NOT AFFECTED BY THIS WORK. ANY DAMAGE TO THE CURB, SUBGRADE, DRAINAGE UTILITIES, AND GRADING CAUSED DURING THE INSTALLATION OF THE SPORTS LIGHTING SHALL BE CORRECTED TO THE SATISFACTION OF MKEC AND THE CITY PRIOR TO COMPLETION OF THE PROJECT. REFERENCE ALL AVAILABLE GRADING DRAWINGS, GEOTECHNICAL REPORTS, AND CONSTRUCTION PACKAGES FOR ADDITIONAL INFORMATION THAT MAY AFFECT YOUR BID SUCH AS GRADE CHANGES, CONSTRUCTION SEQUENCE OF THE FIELDS, ERECTION OF THE INDOOR FACILITY AND STADIUM IMPROVEMENTS, ETC. THE CONTRACTOR SHALL SUBMIT IN WRITING WITH THEIR BID CONFIRMATION THAT THE INSTALLATION OF ALL SYSTEMS REQUIRED FOR A FULLY OPERATIONAL SPORTS LIGHTING PACKAGE FOR EACH FIELD CAN BE CONSTRUCTED WHILE MAINTAINING A 3'-0" CLEARANCE FROM THE EDGE OF ANY PLAYING FIELD. ANY CRANES USED SHALL BE A TRACK TYPE TO BETTER DISTRIBUTE THE WEIGHT OVER A LARGER AREA.

DRIVER REQUIREMENTS:  
DRIVERS FOR ALL NEW SPORTS LIGHTING SHALL BE CAPABLE OF OPERATING WITHIN A VOLTAGE RANGE OF 347V-480V. IF DRIVERS ARE NOT CAPABLE OF OPERATING WITHIN THIS RANGE THE MANUFACTURER MUST INCLUDE IN THEIR BID PRICE ANY INCREASE IN CONDUCTOR SIZE TO DECREASE VOLTAGE DROP SO IT IS WITHIN THE RANGE OF THE PROVIDED DRIVER.



**B ENLARGED ELECTRICAL ROOM**  
SCALE: 1/8" = 1'-0"



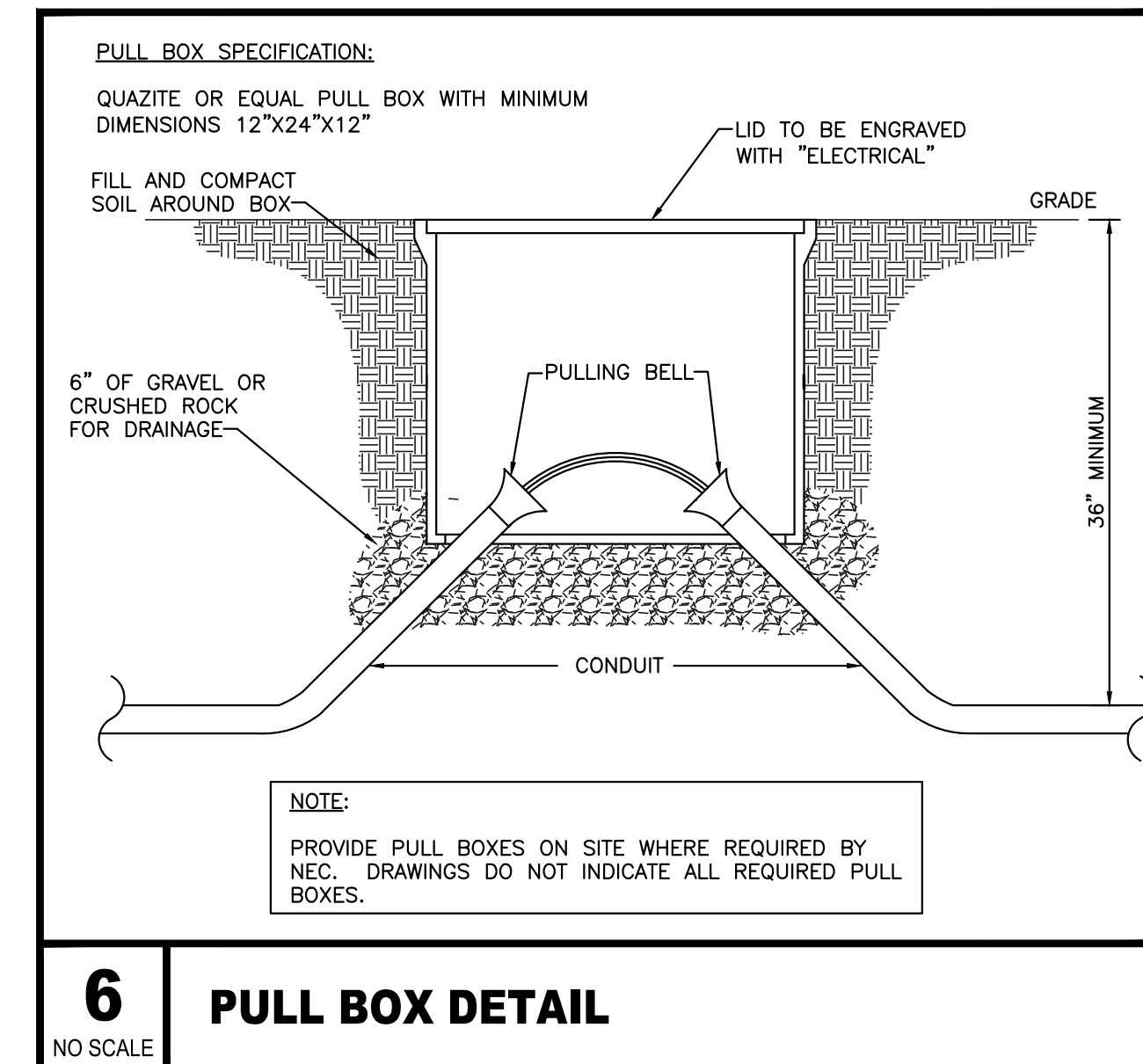
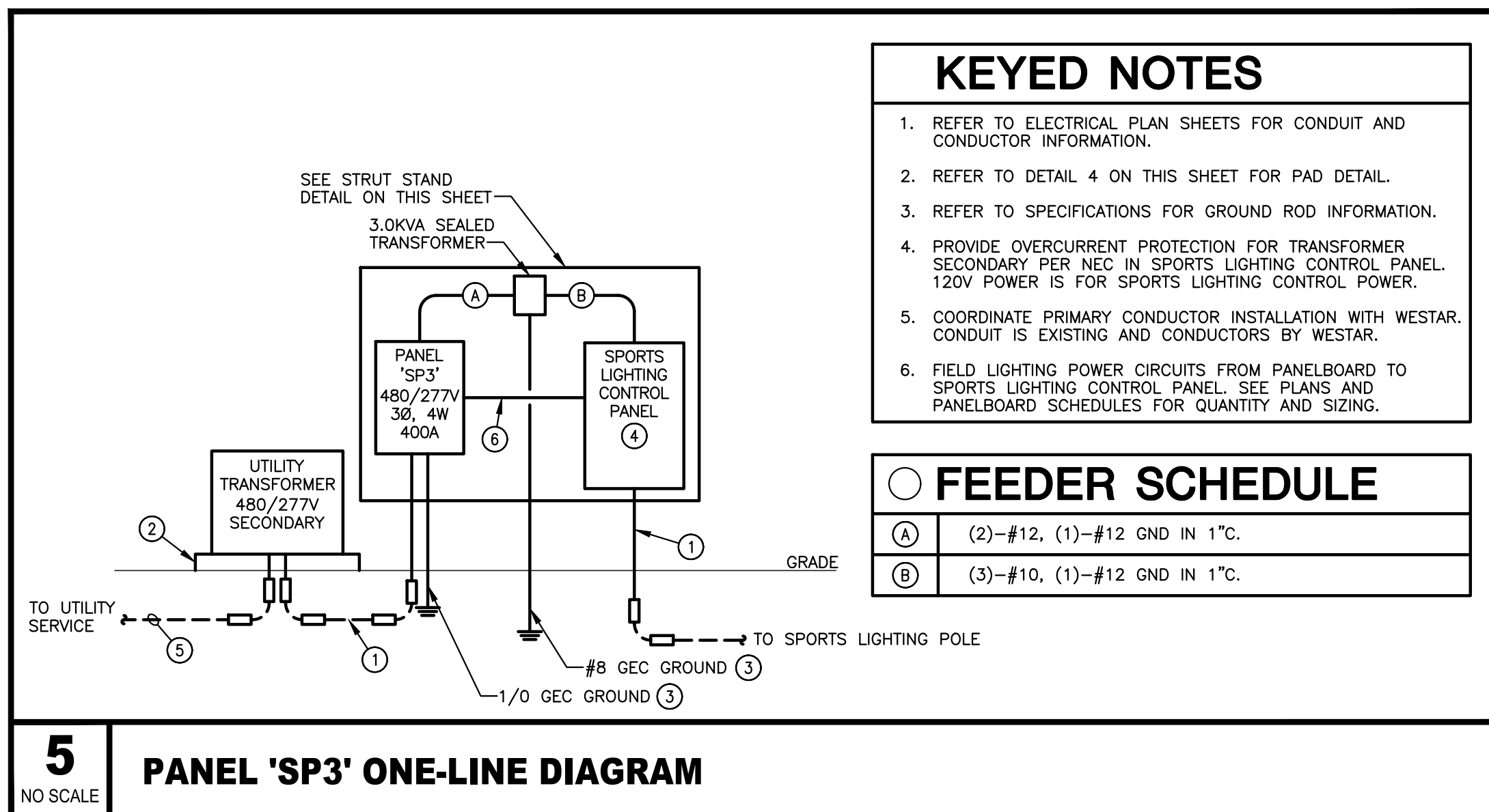
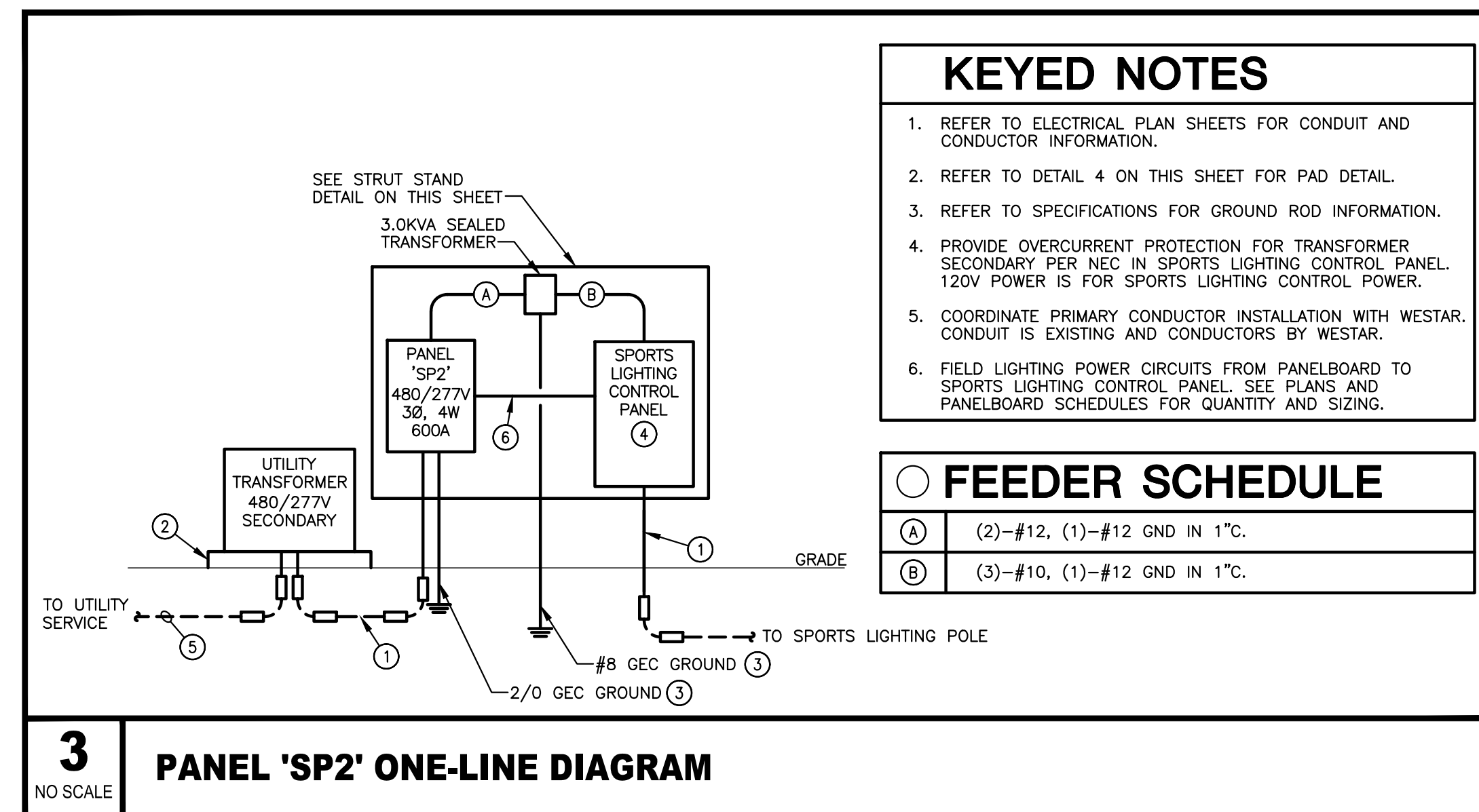
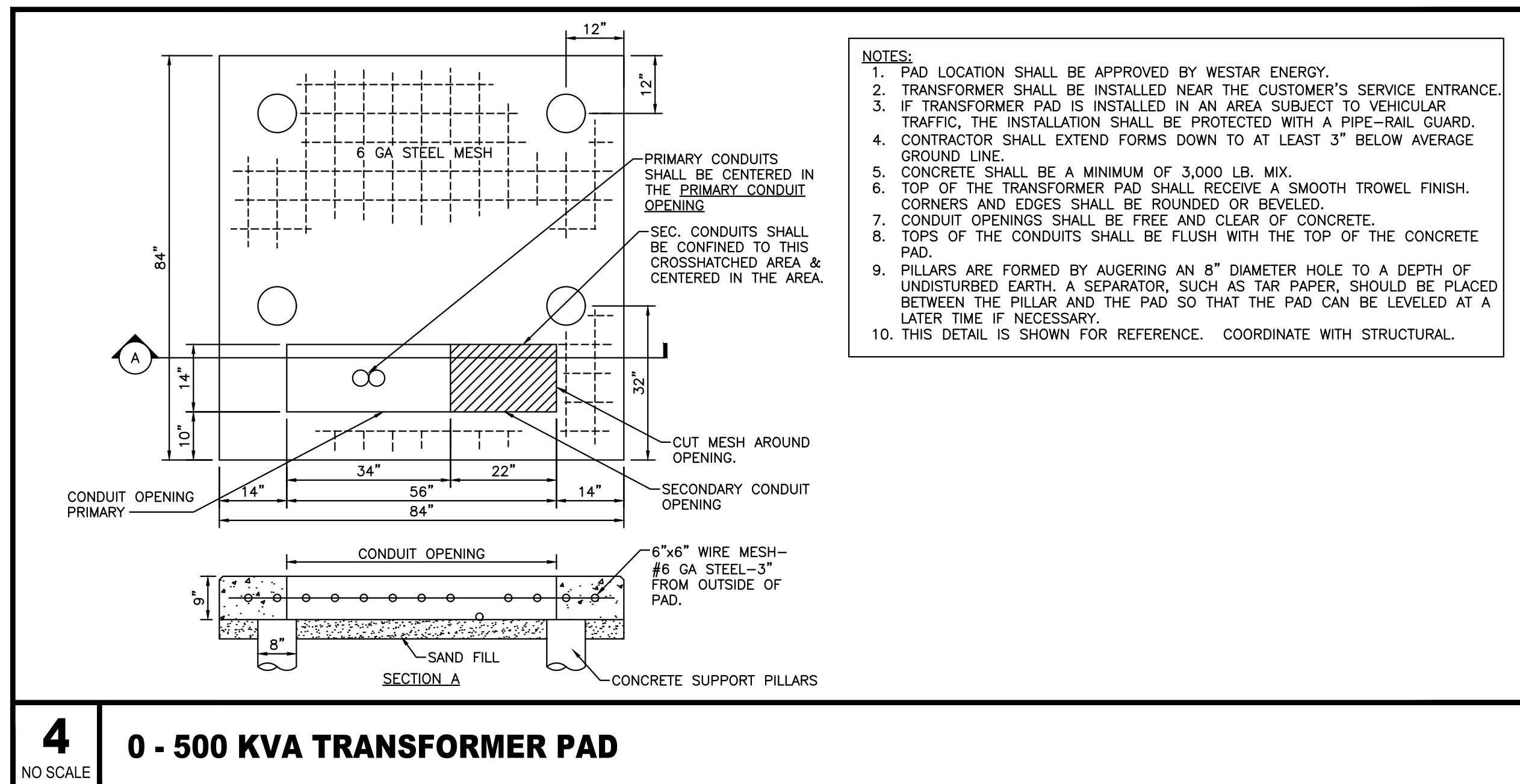
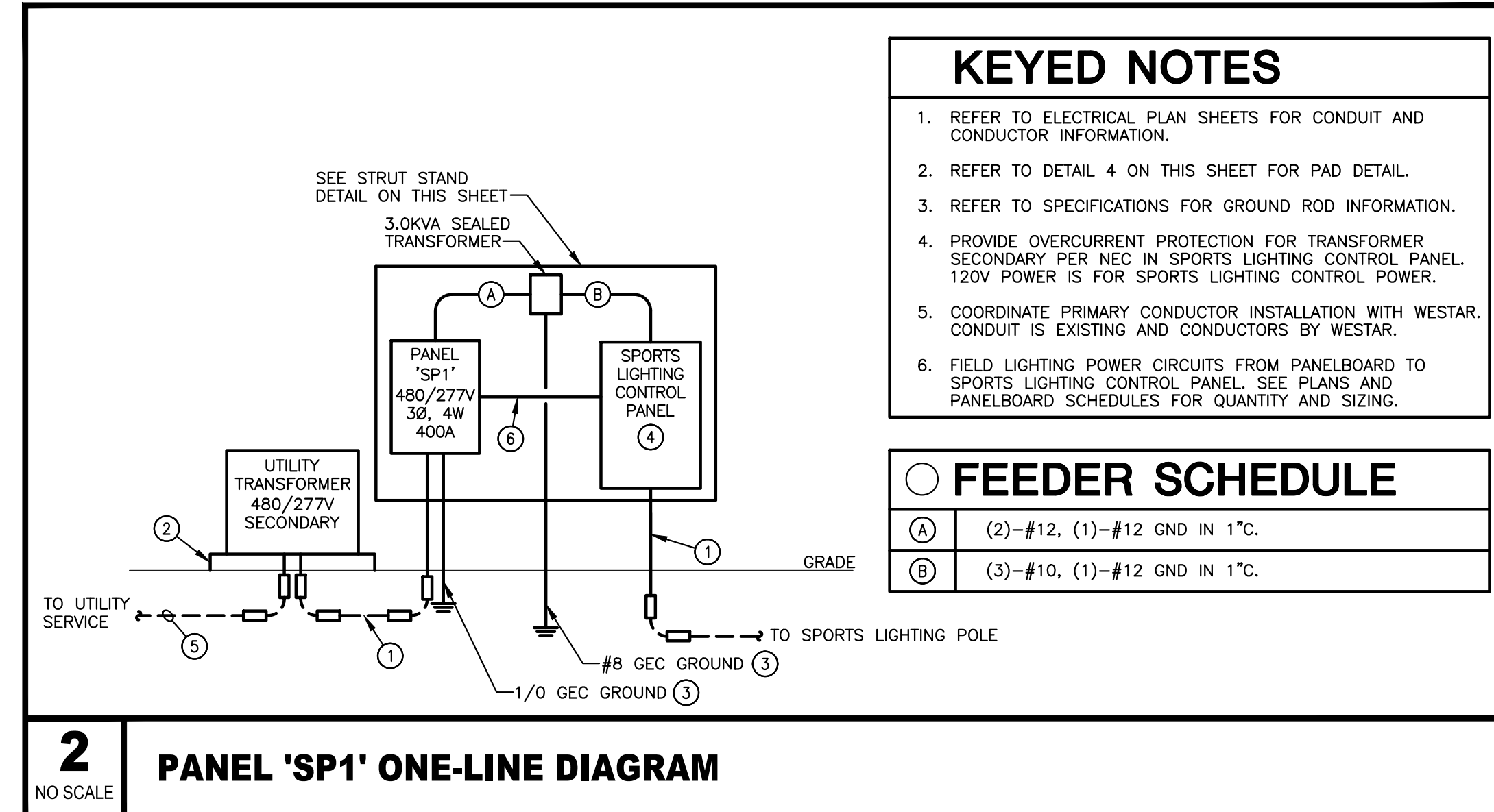
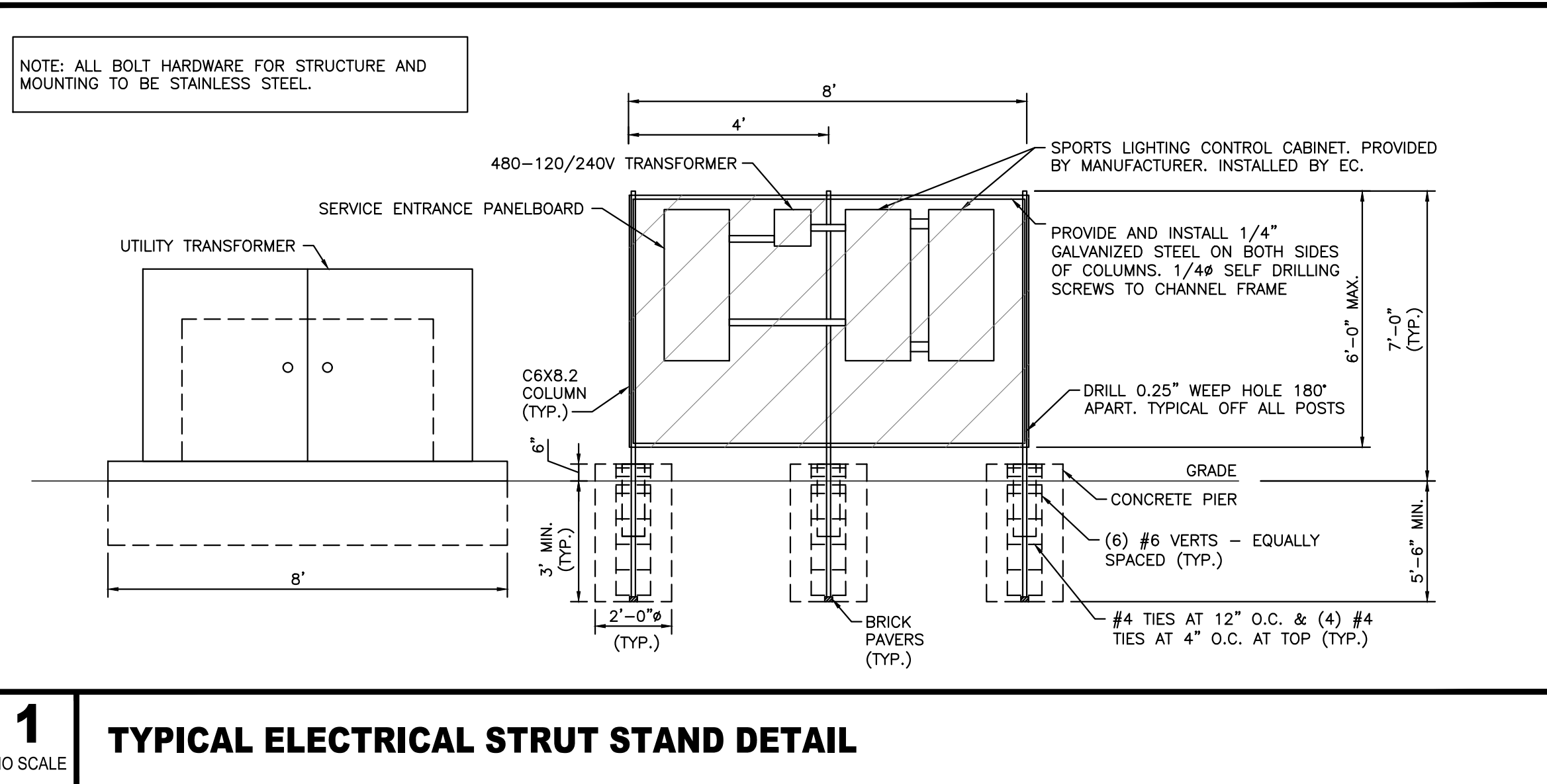
PHASE 5 - SPORTS FIELD LIGHTING  
**STRYKER SPORTS**  
 WICHITA, KANSAS



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**ELECTRICAL SITE PLAN - AREA D**

PROJECT NO.	1701010567	
DATE	04-25-18	
SCALE	1"=50'-0"	
DESIGNED	CNG	
DRAWN	ECW	
CHECKED	JRBW	
ISSUED FOR CONST.	04-25-18	
NO.	REVISION	DATE
SHEET NO.		
05		



PANEL "SP1"		BRANCH PANELBOARD - NORMAL POWER													
LOCATION: FIELD 10 FED FROM: UTILITY MOUNTING: Surface ENCLOSURE: Type 3R		VOLTAGE: 480/277 PHASE: Three WIRES: 4W + G		AIG: 65000A MANS: 400A MGR: 400A		Load Type L= Lighting, R=Receptacle, M=Motors, Ho= Hospital K=Kitchen, H=Heat, Mi=Misc									
CKT	LOAD DESCRIPTION	TRIP	POLE	TYPE	PHASE	A	PHASE	B	PHASE	C	TYPE	POLE	TRIP	LOAD DESCRIPTION	CKT
1				L	6094	6094					L			FIELD 10 LIGHT	2
3				L			6094	6094			L			FIELD 9 LIGHT	4
5				L					6094	6094	L			FIELD 8 LIGHT	6
7				L	6094	6094					L			FIELD 9 LIGHT	8
9				L			6094	6094			L			FIELD 8 LIGHT	10
11				L					6094	6094	L			FIELD 9 LIGHT	12
13				L	6094	6094					L			FIELD 9 LIGHT	14
15				L			6094	6094			L			FIELD 8 LIGHT	16
17				L					6094	6094	L			FIELD 9 LIGHT	18
19				L	6094	6094					L			FIELD 8 LIGHT	20
21				L			6094	6094			L			FIELD 9 LIGHT	22
23				L					6094	6094	L			FIELD 8 LIGHT	24
25				Mi	1500						Mi		20	SPARE	26
27				Mi		1500					Mi		20	SPARE	28
29				Mi							Mi		20	SPARE	30
TOTAL LOAD (KVA)				50.252		50.252		48.752							
TOTAL AMPS/PHASE				181.42		181.42		176.00							

LOAD SUMMARY				
LOAD TYPES	CONNECTED LOAD (KVA)	DEMAND FACTOR	DEMAND (KVA)	PANEL TOTALS
LIGHTS	146.3	1.25 Continuous	182.8	
RECEPTACLES	0.0	Per NEC Table 220	0.0	TOTAL CONN. LOAD (KVA) 149.3
MOTORS	0.0	Per NEC Table 220	0.0	TOTAL DEMAND LOAD (KVA) 185.8
HOSPITAL	0.0	Per NEC Table 220	0.0	TOTAL CONN. CURRENT 1179.5
KITCHEN	0.0	Per NEC Table 220	0.0	TOTAL DEMAND CURRENT 223.5
HEAT	0.0	Per NEC Table 220	0.0	
MISC	3.0	1.00	3.0	

PANEL "SP3"		BRANCH PANELBOARD - NORMAL POWER													
LOCATION: FIELD 2 FED FROM: UTILITY MOUNTING: Surface ENCLOSURE: Type 3R		VOLTAGE: 480/277 PHASE: Three WIRES: 4W + G		AIG: 65000A MANS: 400A MGR: 400A		Load Type L= Lighting, R=Receptacle, M=Motors, Ho= Hospital K=Kitchen, H=Heat, Mi=Misc									
CKT	LOAD DESCRIPTION	TRIP	POLE	TYPE	PHASE	A	PHASE	B	PHASE	C	TYPE	POLE	TRIP	LOAD DESCRIPTION	CKT
1				L	6094	6094					L			FIELD 3 LIGHT	2
3				L			6094	6094			L			FIELD 3 LIGHT	4
5				L					6094	6094	L			FIELD 3 LIGHT	6
7				L	6094	6094					L			FIELD 3 LIGHT	8
9				L			6094	6094			L			FIELD 3 LIGHT	10
11				L					6094	6094	L			FIELD 3 LIGHT	12
13				L	6094	6094					L			FIELD 3 LIGHT	14
15				L			6094	6094			L			FIELD 3 LIGHT	16
17				L					6094	6094	L			FIELD 3 LIGHT	18
19				L	6094	6094					L			FIELD 3 LIGHT	20
21				L			6094	6094			L			FIELD 3 LIGHT	22
23				L					6094	6094	L			FIELD 3 LIGHT	24
25				L	6094	6094					L			FIELD 4 LIGHT	26
27				L			6094	6094			L			FIELD 4 LIGHT	28
29				L					6094	6094	L			FIELD 4 LIGHT	30
31				L	6094	6094					L			FIELD 4 LIGHT	32
33				L			6094	6094			L			FIELD 4 LIGHT	34
35				L					6094	6094	L			FIELD 4 LIGHT	36
37				Mi	1500						Mi		20	SPARE	38
39				Mi		1500					Mi		20	SPARE	40
41				Mi							Mi		20	SPARE	42
TOTAL LOAD (KVA)				74.628		74.628		73.128							
TOTAL AMPS/PHASE				269.42		269.42		264.00							

LOAD SUMMARY				
LOAD TYPES	CONNECTED LOAD (KVA)	DEMAND FACTOR	DEMAND (KVA)	PANEL TOTALS
LIGHTS	219.4	1.25 Continuous	274.2	
RECEPTACLES	0.0	Per NEC Table 220	0.0	TOTAL CONN. LOAD (KVA) 222.4
MOTORS	0.0	Per NEC Table 220	0.0	TOTAL DEMAND LOAD (KVA) 277.2
HOSPITAL	0.0	Per NEC Table 220	0.0	TOTAL CONN. CURRENT 267.5
KITCHEN	0.0	Per NEC Table 220	0.0	TOTAL DEMAND CURRENT 333.5
HEAT	0.0	Per NEC Table 220	0.0	
MISC	3.0	1.00	3.0	

FXTR. LTR.	MANUFACTURER	CATALOG NUMBER	LAMPS # TYPE	BALLASTS # TYPE	FIXTURE VOLTAGE	FINISH	MOUNTING	FIXTURE VA	REMARKS/DESCRIPTION	SPECIFIC NOTES
SD									NEW SPORT LIGHTING	SEE SPECIFICATIONS FOR SPECIFIC REQUIREMENTS
SJ									UPGRADED SPORTS LIGHTING	SEE SPECIFICATIONS FOR SPECIFIC REQUIREMENTS

**GENERAL NOTES (APPLY TO ALL LIGHTING):**

A ALL LIGHTING FIXTURES SHALL BE RATED FOR LIGHTING POWER CIRCUIT VOLTAGE. CONTRACTOR MUST VERIFY ALL LOCATIONS.

B ELECTRICAL CONTRACTOR SHALL PROVIDE EACH LIGHTING FIXTURE COMPLETE WITH ALL INSTALLATION AND HANGING HARDWARE AS REQUIRED FOR A COMPLETE AND FINISHED INSTALLATION AT EACH FIXTURE LOCATION.

C ALL FIXTURES SHALL BE LISTED BY A NATIONALLY RECOGNIZED TESTING LABORATORY (NRTL) AND LABELED. ALL LIGHTING FIXTURES EXPOSED TO WEATHER, MOISTURE, OR OTHER ENVIRONMENTS SHALL BEAR THE APPLICABLE ENVIRONMENTAL OR APPLICATION LABEL.

D REFER TO APPLICABLE SECTIONS OF THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS FOR LIGHTING FIXTURES.

E SHOP DRAWINGS: DIFFERENCES SHALL BE SPECIFICALLY NOTED ON THE "SHOP DRAWINGS." THIS INCLUDES BUT IS NOT LIMITED TO: FIXTURE SUBSTITUTIONS, LAMPS, VOLTAGE, MOUNTING, PHYSICAL DIMENSIONS AND FINISHES. FAILURE TO COMPLY DOES NOT RELIEVE THE CONTRACTOR OF DESIGN DOCUMENT INTENTION AND WILL NOT BE REASON FOR ADDITIONAL REIMBURSEMENT. ADDITIONAL REQUIREMENTS MAY BE FOUND ELSEWHERE IN THE DRAWINGS OR SPECIFICATIONS.

TRANSFORMER SCHEDULE						
MARK	PANEL SERVED	KVA RATING	PHASE	PRIMARY		NOTES
				VOLTAGE	CONNECTION	
TF-1	SP1	3	1	480	DELTA	120/240 WYE 1
TF-2	SP2	3	1	480	DELTA	120/240 WYE 1
TF-3	SP3	3	1	480	DELTA	120/240 WYE 1

**NOTES:**

(1) PROVIDE ENCLOSED AND SEALED TRANSFORMER.

PANEL "SP2"		BRANCH PANELBOARD - NORMAL POWER													
LOCATION: FIELD 8 FED FROM: UTILITY MOUNTING: Surface ENCLOSURE: Type 3R		VOLTAGE: 480/277 PHASE: Three WIRES: 4W + G		AIG: 65000A MANS: 600A MGR: 600A		Load Type L= Lighting, R=Receptacle, M=Motors, Ho= Hospital K=Kitchen, H=Heat, Mi=Misc									
CKT	LOAD DESCRIPTION	TRIP	POLE	TYPE	PHASE	A	PHASE	B	PHASE	C	TYPE	POLE	TRIP	LOAD DESCRIPTION	CKT
1				L	6094	6094					L			FIELD 8 LIGHT	2
3				L			6094	6094			L			FIELD 8 LIGHT	4
5				L					6094	6094	L			FIELD 8 LIGHT	6
7				L	6094	6094					L			FIELD 8 LIGHT	8
9				L			6094	6094			L			FIELD 8 LIGHT	10
11				L					6094	6094	L			FIELD 8 LIGHT	12
13				L	6094	6094					L			FIELD 8 LIGHT	14
15				L			6094	6094			L			FIELD 8 LIGHT	16
17				L					6094	6094	L			FIELD 8 LIGHT	18
19				L	6094	6094					L			FIELD 8 LIGHT	20
21				L			6094	6094			L			FIELD 8 LIGHT	22
23				L					6094	6094	L			FIELD 8 LIGHT	24
25				L	6094	6094					L			FIELD 5 LIGHT	26
27				L			6094	6094			L			FIELD 5 LIGHT	28
29				L					6094	6094	L			FIELD 5 LIGHT	30
31				L	6094	6094					L			FIELD 5 LIGHT	32
33				L			6094	6094			L			FIELD 5 LIGHT	34
35				L					6094	6094	L			FIELD 5 LIGHT	36
37				L	6094	6094					L			FIELD 5 LIGHT	38
39				L			6094	6094			L			FIELD 5 LIGHT	40
41				L					6094	6094	L			FIELD 5 LIGHT	42
43				L	6094	6094					L			FIELD 5 LIGHT	44
45				L			6094	6094			L			FIELD 5 LIGHT	46
47				L					6094	6094	L			FIELD 5 LIGHT	48
49				Mi	1500						Mi		20	SPARE	50
51				Mi		1500					Mi		20	SPARE	52
53				Mi							Mi		20	SPARE	54
TOTAL LOAD (KVA)				99.004		99.004		97.504							
TOTAL AMPS/PHASE				357.42		357.42		352.00							

LOAD SUMMARY				
LOAD TYPES	CONNECTED LOAD (KVA)	DEMAND FACTOR	DEMAND (KVA)	PANEL TOTALS
LIGHTS	292.5	1.25 Continuous	365.6	
RECEPTACLES	0.0	Per NEC Table 220	0.0	TOTAL CONN. LOAD (KVA) 295.5
MOTORS	0.0	Per NEC Table 220	0.0	TOTAL DEMAND LOAD (KVA) 368.6
HOSPITAL	0.0	Per NEC Table 220	0.0	TOTAL CONN. CURRENT 355.4
KITCHEN	0.0	Per NEC Table 220	0.0	TOTAL DEMAND CURRENT 443.4
HEAT	0.0	Per NEC Table 220	0.0	
MISC	3.0	1.00	3.0	

EXISTING

"MDP-A" CIRCUIT BREAKER DISTRIBUTION PANEL SCHEDULE					
BRANCH DISTRIBUTION - NORMAL POWER					
TYPE:	SQUARE D I-LINE HCM	MOUNTING:	SURFACE	AIC RATING:	50000
MAIN SIZE:	800A	VOLTAGE:	480	LOCATION:	STADIUM MECH RM.
MAIN BREAKER:	800A	PHASE:	SINGLE	SERVED BY:	UTILITY TRANSFORMER
MOUNTING SPACE:		WIRE:	2W		
CIRCUIT NO.	LOAD DESCRIPTION	FRAME (AMPS/POLE)	TRIP (AMPS)	CIRCUIT BREAKER TYPE	MOUNTING HEIGHT
1	TVSS	30/1	30		--
2	WATER HEATER	30/1	30		--
3	EUH-1	35/2	35		--
4	ECH-1	30/1	30		--
5	NORTHWEST FIELD LTG.	150/2	150		--
6	EVH-2	40/2	40		--
7	SOUTHWEST FIELD LTG.	150/2	150		--
8	SOUTHEAST FIELD LTG.	150/2	150		--
9	PANEL MDP-B	225/2	225		--
10	NORTHEAST FIELD LTG.	150/2	150		--
TOTALS					--

NOTES:

IMPROVEMENT

"MDP-A" CIRCUIT BREAKER DISTRIBUTION PANEL SCHEDULE					
BRANCH DISTRIBUTION - NORMAL POWER					
TYPE:	SQUARE D I-LINE HCM	MOUNTING:	SURFACE	AIC RATING:	50000
MAIN SIZE:	800A	VOLTAGE:	480	LOCATION:	STADIUM MECH RM.
MAIN BREAKER:	800A	PHASE:	SINGLE	SERVED BY:	UTILITY TRANSFORMER
MOUNTING SPACE:		WIRE:	2W		
CIRCUIT NO.	LOAD DESCRIPTION	FRAME (AMPS/POLE)	TRIP (AMPS)	CIRCUIT BREAKER TYPE	MOUNTING HEIGHT
1	TVSS	30/1	30		--
2	WATER HEATER	30/1	30		--
3	EUH-1	35/2	35		--
4	ECH-1	30/1	30		--
5	NORTHWEST FIELD LTG. (1)	150/2	80		--
6	ECH-2	40/2	40		--
7	SOUTHWEST FIELD LTG. (1)	150/2	80		--
8	SOUTHEAST FIELD LTG. (1)	150/2	80		--
9	PANEL MDP-B	225/2	225		--
10	NORTHEAST FIELD LTG. (1)	150/2	80		--
TOTALS					--

NOTES:

(1) REPLACE EXISTING BREAKER IN PANEL WITH NEW BREAKER IN SAME LOCATION. MATCH EXISTING PANEL AIC RATING.



PHASE 5 - SPORTS FIELD LIGHTING

# STRYKER SPORTS

WICHITA, KANSAS



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ELECTRICAL SCHEDULES	
PROJECT NO.	1701010567
	04-25-18
SCALE	N.T.S.