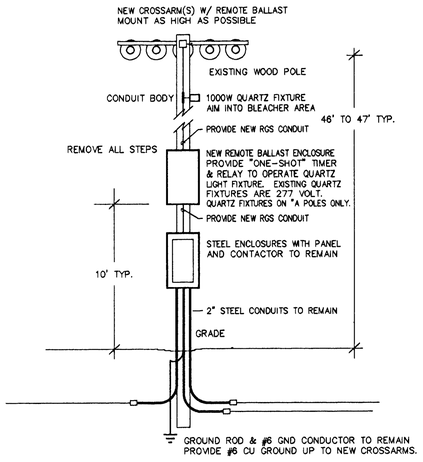
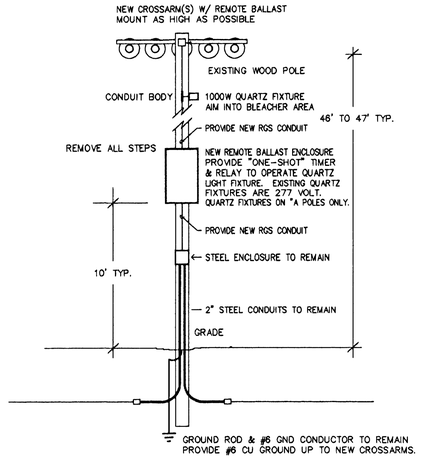
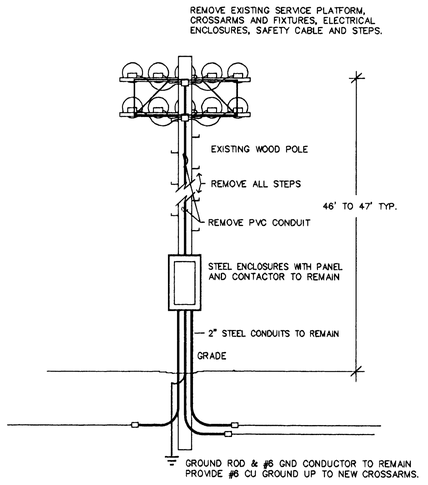


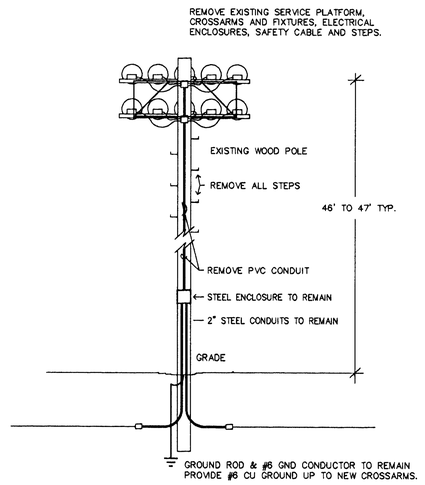
NEW LIGHTING ON POLES W/ PANELS



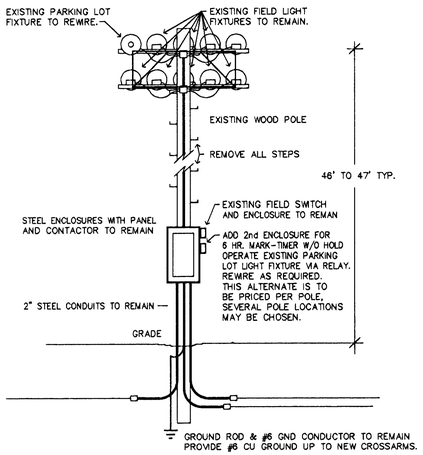
NEW LIGHTING ON TYP. POLES



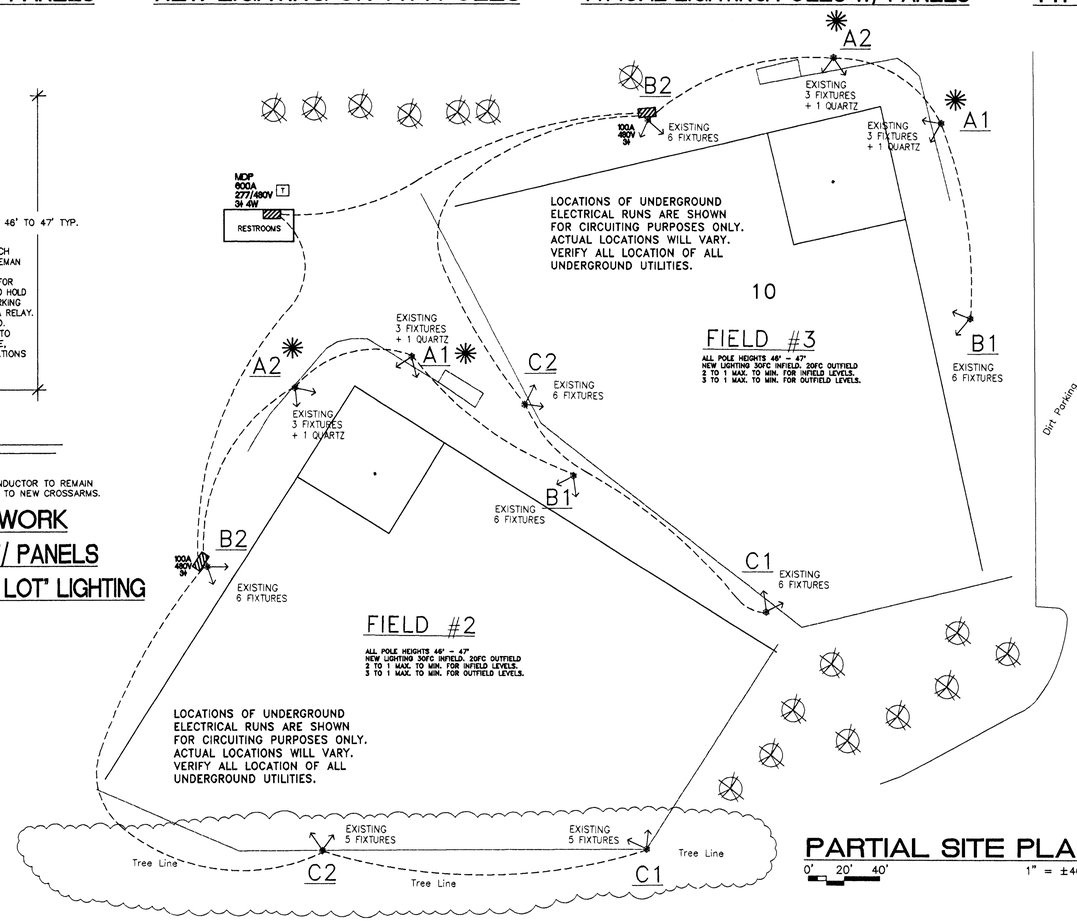
TYPICAL LIGHTING POLES W/ PANELS



TYPICAL LIGHTING POLES



ADD ALTERNATE "2" WORK
TYPICAL LIGHTING POLES W/ PANELS
ADDITIONAL REWORKED "PARKING LOT" LIGHTING



PARTIAL SITE PLAN

0' 20' 40' 1" = ±40'

N

BASE BID & ALTERNATES

BASE BID –
REMOVE EXISTING FIXTURES, CROSSARMS, STEPS, ECT. ON FIELD #2 ONLY AND REPLACE WITH NEW LIGHTING SYSTEM AS DESCRIBED ON PLANS AND SPECIFICATIONS.
ACCEPTABLE MANUFACTURER'S:
HUBBELL FIXTURE SYSTEM.
MUSCO FIXTURE SYSTEM.
G.E. FIXTURE SYSTEM.

ADD ALTERNATE #1
REMOVE EXISTING FIXTURES, CROSSARMS, STEPS, ECT. ON FIELD #3 ONLY AND REPLACE WITH NEW LIGHTING SYSTEM AS DESCRIBED ON PLANS AND SPECIFICATIONS.
ACCEPTABLE MANUFACTURER'S:
HUBBELL FIXTURE SYSTEM.
MUSCO FIXTURE SYSTEM.
G.E. FIXTURE SYSTEM.

ADD ALTERNATE #2
PROVIDE A UNIT PRICE PER POLE, FOR THE PARKING LOT LIGHTING/CONTROL CHANGES, AS DESCRIBED ON THE PLANS AND THE SPECIFICATIONS. THE NUMBER OF ALTERNATE #2 CHANGES WILL VARY FROM 0 TO 4.

ADD ALTERNATE #3
PROVIDE A UNIT PRICE TO REMOVE EXISTING POLE AND RECONNECT EXIST. ELECT. & INSTALL NEW LIGHTING EQUIPMENT ON NEW 60' (CLASS 1 OR 2) YELLOW PINE POLES WITH 12# PENTA TREATMENT, NO CREOSOLT. E.C. SHALL INCLUDE IN HIS BID AS A WARRANTY ITEM, THE REALIGNMENT OF ANY NEW WOOD POLE WHICH LEANS MORE THAN 2° OFF PLUM, FOR A PERIOD OF 36 MONTHS. NEW POLES SHALL BE BACKFILLED W/ SCREENED AB3 IN 9" LAYERS, & THOROUGHLY TAPPED TO ARCHIVE A COMPACTION EQUAL TO 95% OF MAXIMUM DRY DENSITY.

✳ AT EACH "A" POLE LOCATION THE SPORTS LIGHTING MANUFACTURER SHALL PROVIDE A "ONE-SHOT" TIME DELAY OFF RELAY INSIDE THE REMOTE BALLAST ENCLOSURE. THE 1000W (277V) QUARTZ LIGHT FIXTURE, MOUNTED APPROX. 30FT. UP SHALL TURN ON DURING ALL INITIAL STARTS AND ALL LIGHT FIXTURE HOT-RESTRIKES DUE TO MOMENTARY POWER INTERRUPTIONS. SET ADJUSTABLE "ONE-SHOT" TIMER FOR 10 MINUTES. TIMER RANGE 5 TO 20 MIN.

GENERAL NOTES

1. THE INSTALLING CONTRACTOR IS RESPONSIBLE TO REVIEW ALL SPECIFICATIONS AND ADDENDA. INFORMATION AND/OR COORDINATION. ADDITIONAL ELECTRICAL REQUIREMENTS MAY BE INCLUDED IN THE ABOVE REFERENCED DOCUMENTS THAT THE E.C. IS RESPONSIBLE FOR PROVIDING AND/OR INSTALLING.
2. STRAIGHT RUNS UNDERGROUND / IN SLAB CONDUIT MAY BE SCHEDULE 40 PVC, 3/4" MINIMUM WITH STEEL ELLS, BENDS AND RISERS. ALL RISERS PENETRATING SLAB OR EXITING FROM EARTH SHALL BE RIGID STEEL. NO EXCEPTIONS.
3. E.C. SHALL VISIT SITE TO DETERMINE : 1.) EXISTING CONDITIONS. 2.) THE EXTENT OF DEMOLITION. ANY CONFLICTS BETWEEN PLANS/SPECIFICATIONS AND ACTUAL EXISTING CONDITIONS THAT AFFECT CONSTRUCTABILITY, SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO BID. NO EXCEPTIONS.
4. ALL PANELS SHALL BE PANELBOARD CONSTRUCTION WITH BOLT-IN CIRCUIT BREAKERS, COPPER BUS AND ISOLATED GROUND BUS. REFER TO THE PANEL SCHEDULES FOR ADDITIONAL INFORMATION. TANDEM STYLE BREAKERS ARE NOT ALLOWED. IF ADDITIONAL POLE SPACE IS REQUIRED, INFORM THE ENGINEER OF CONDITIONS PRIOR TO INSTALLATION.
5. ALL WORK SHALL COMPLY WITH LOCAL, STATE AND NATIONAL CODES. THE ELECTRICAL CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS, FEES, INSPECTIONS AND CERTIFICATES REQUIRED.
6. THE ELECTRICAL CONTRACTOR SHALL FURNISH ALL LABOR, MATERIAL, TOOLS, TRANSPORTATION, AND EQUIPMENT REQUIRED FOR THE COMPLETE, PROPER AND SUBSTANTIAL INSTALLATION OF ALL ELECTRICAL WORK INDICATED OR REQUIRED FOR A COMPLETE WORKING INSTALLATION OF ALL ELECTRICAL SYSTEMS.

SITE LIGHTING SCOPE OF WORK

1. CONTRACTOR (E.C.) IS RESPONSIBLE FOR GETTING ALL UNDERGROUND UTILITIES FLAGGED. THIS INCLUDES, BUT IS NOT LIMITED TO THE FOLLOWING: GAS, ELECTRIC, TELEPHONE, CABLE, FIBER OPTIC CABLE, WATER, AND IRRIGATION LINES. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER TO GET FLAGGED ANY OWNER INSTALLED UNDERGROUND UTILITIES. IT IS NOT ANTICIPATED THAT ANY UNDERGROUND WORK IS REQUIRED FOR THE REPLACEMENT OF THE SPORTS LIGHTING FIXTURES.
2. E.C. SHALL PROVIDE AND INSTALL NEW SPORTS LIGHTING SYSTEM AS REQUIRED BY THE EQUIPMENT MANUFACTURER AND AS INDICATED IN THE PLANS, SPECIFICATIONS AND THE CITY OF WICHITA ENGINEER. CONTRACTOR SHALL FULLY FAMILIARIZE HIMSELF WITH THE PLANS AND SPECIFICATIONS OF ALL NEW WORK UNDER THIS CONTRACT.
3. E.C. SHALL HAVE THE NEW LIGHTING SYSTEM UP AND RUNNING ON EACH POLE ON A POLE-BY-POLE BASIS. NOT EVERY NIGHT ARE THE FIELDS USED, BUT MOST.
4. E.C. SHALL REMOVE/DISPOSE THE EXISTING EQUIP./CONDUITS/LIGHTS INDICATED, OFF SITE.
5. E.C. SHALL RESTORE ALL AREAS OF TURF DISRUPTED BY THE CONSTRUCTION BACK TO THE ORIGINAL CONDITION. PHOTO'S OF ORIGINAL CONDITION ON FILE. THIS RESTORATION INCLUDES GRADING AND GRASS ESTABLISHMENT.
6. ALL OF THE REQUIRED ELECTRICAL WORK IS NOT NECESSARILY SPECIFIED OR SHOWN ON PLANS. ALL REQUIREMENTS OF THE LIGHTING SYSTEM SHALL BE COORDINATED AND VERIFIED WITH THE EQUIPMENT SUPPLIER.
7. THE COMPLETION OF ALL WORK REQUIRED BY THIS PLAN/SPEC SHALL BE AS PER THE TIME SCHEDULE PRESCRIBED IN THE PLAN/SPEC. CONTRACTOR IS RESPONSIBLE FOR ALL PLAN & SPEC SECTIONS OF THE CONSTRUCTION DOCUMENTS.

GENERAL SCOPE OF WORK TO RETROFIT NEW SPORTS LIGHTING FIXTURES

A. THE CONTRACTOR IS TO REMOVE THE EXISTING LIGHT FIXTURES, CROSSARMS, ELECTRICAL WIRING UP THE POLE, AND THE STEEL SERVICE PLATFORMS. THE CONTRACTOR IS RESPONSIBLE FOR THE OFF SITE REMOVAL OF ALL REMOVED MATERIALS. E.C. SHALL NOTIFY OWNER OF ANY UNSAFE/SUBSTANDARD EXISTING POLES FOUND.

B. THE CONTRACTOR SHALL TIGHTEN ALL EXISTING WIRENUTS, BREAKER TERMINATIONS, AND PANEL FEEDER LUGS.

C. THE CONTRACTOR SHALL INSTALL THE NEW REMOTE BALLAST CABINETS ON THE EXISTING POLES, WITH THE BOTTOM AT APPROXIMATELY 10' ABOVE GROUND.

D. THE CONTRACTOR SHALL INSTALL THE NEW CROSSARMS W/INTEGRAL WIREWAYS TO THE EXISTING POLES, AS PER THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. RGS CONDUIT SHALL BE USED TO RUN BETWEEN THE REMOTE BALLAST ENCLOSURE AND THE NEW FIXTURE WIREWAY/CROSSARMS.

E. THE CONTRACTOR SHALL EXTEND THE EXISTING #4 GROUND CONDUCTOR UP TO THE NEW CROSSARMS.

F. THE E.C. SHALL BE RESPONSIBLE FOR AIMING AND ADJUSTING ALL FIXTURES AS DIRECTED BY THE AIMING DIAGRAM SUPPLIED BY THE LIGHTING SYSTEM MANUFACTURER. 10 YEAR MIN. WARRANTY ON FIXTURE/BALLAST COMPONENTS, INCLUDING FIXTURE ASSEMBLIES (LESS LAMP) AND ALL BALLAST COMPONENTS. THE ELECTRICAL CONTRACTOR SHALL MEASURE, IN THE PRESENCE OF A REPRESENTATIVE OF THE OWNER, THE FINAL LIGHTING LEVELS AFTER THE COMPLETION OF THE INSTALLATION. IN THE EVENT THAT THE UNIFORMITY AND FOOTCANDLE CRITERIA IS NOT MET, THE ELECTRICAL CONTRACTOR SHALL MODIFY OR REPLACE EQUIPMENT, AT HIS EXPENSE, UNTIL ALL CRITERIA IS MET.

G. THE E.C. SHALL BE RESPONSIBLE FOR REVISING BRANCH CIRCUITS, FEEDERS AND CIRCUITING AS REQUIRED BY ALTERNATE EQUIPMENT MFR'S. INFORMATION SHOWN ON PLANS ARE MINIMUM DESIGN AND SHALL NOT BE REDUCED. E.C. SHALL INCLUDE THESE REQUIREMENTS IN HIS BID.

PROJECT NO. 472-84002

OCA NO 602562

CITY OF WICHITA

IMPROVED SPORTS LIGHTING

WEST SIDE ATHLETIC FIELDS

JOHNSON ENGINEERING
330 S. LAURA
WICHITA, KS 67211
(316) 264-1953
(316) 264-1956 FAX

kemiller engineering
516 S. Market
Wichita, KS 67202
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PROJECT NUMBER O.C.A. # 602562			
J/E PRO. # #04094	FILE	DATE 3-31-05	SHEET 1
DESIGN DAJ	DRAWN DAJ	REVISED	OF 1

11-10-01-00