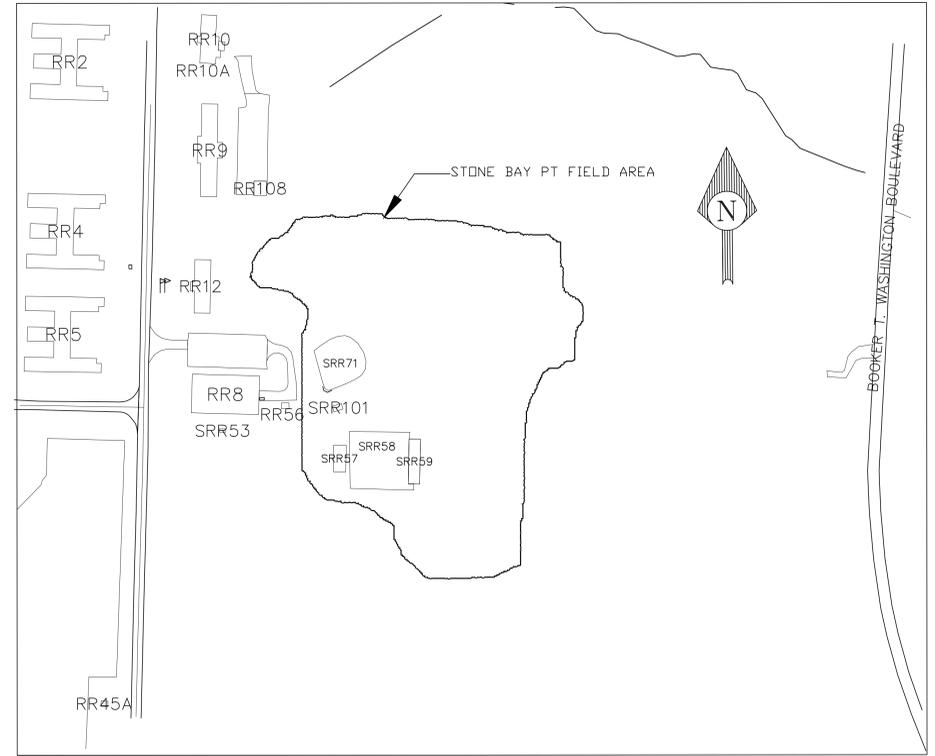
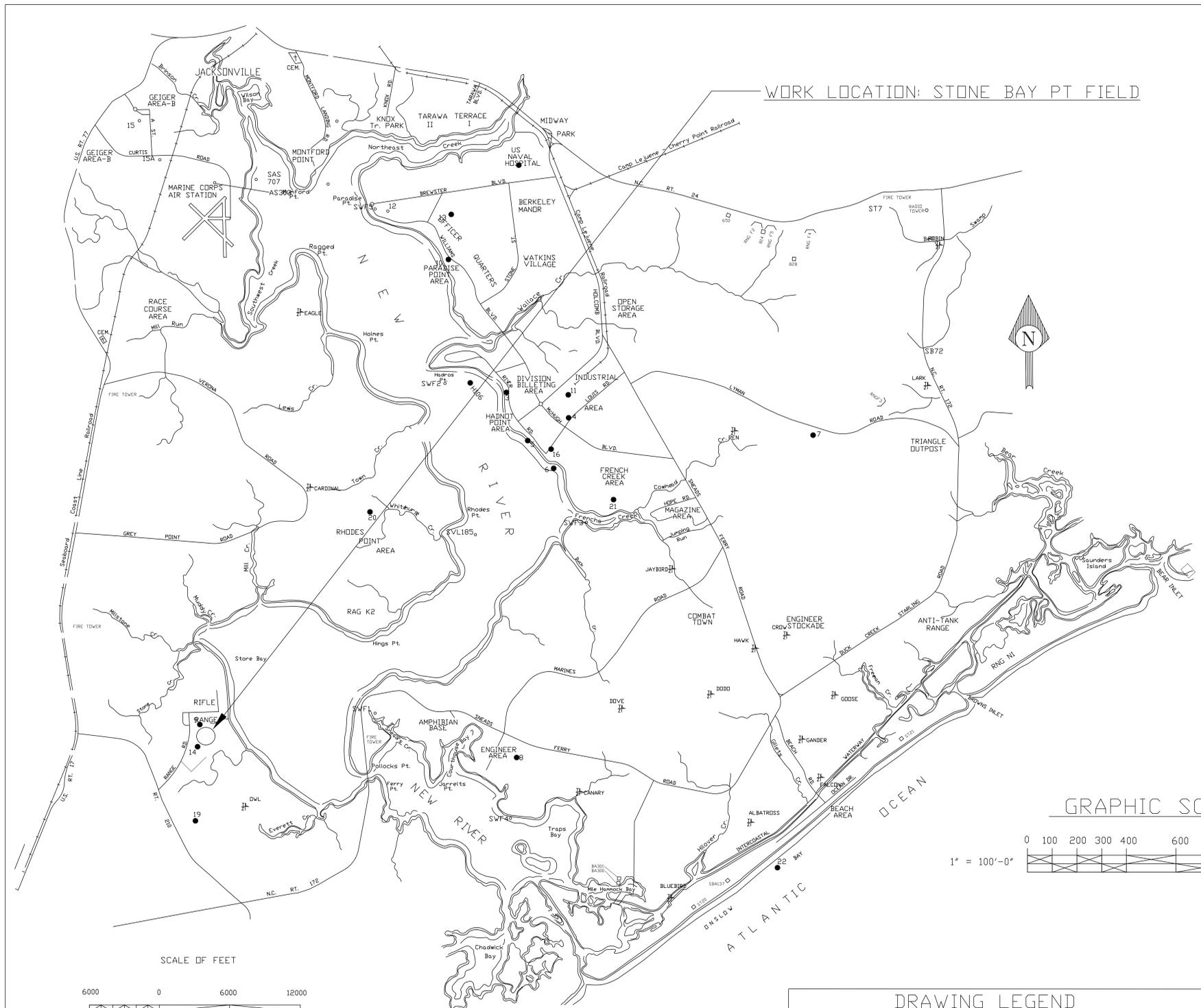
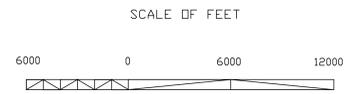
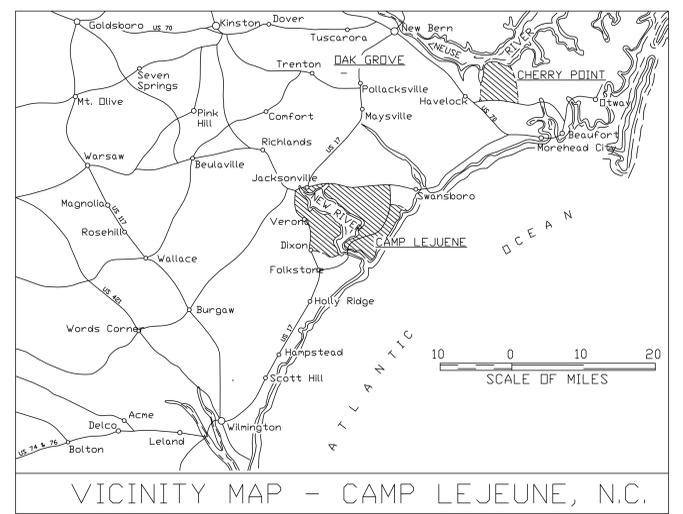
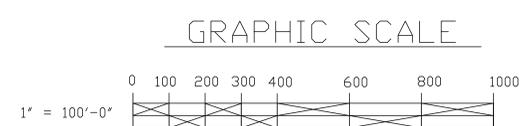


REVISIONS			
SYM		DATE	APPROVED



AREA MAP, STONE BAY PT FIELD
CAMP LEJEUNE, NC
SCALE: 1" = 100'-0"



LOCATION MAP - U. S. MARINE CORPS BASE - CAMP LEJEUNE, N.C.

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DRAWING LEGEND		
NAVFAC DRAWING #	SHEET	TITLE
60013732	T-1	LOCATION, VICINITY, & AREA MAPS
60013733	E-1	NOTES, SCHEDULE, DETAIL AND LEGEND
60013734	E-2	PLAN, ABBREVIATIONS, NOTES AND SCHEDULE
60013735	E-3	PLAN, DETAIL AND NOTES
60013736	E-4	DETAILS, RISER AND SCHEDULE
60013737	E-5	RISERS
60013738	E-6	RISERS AND DETAIL
60013739	E-7	DETAILS

T-1	
<small>DEPARTMENT OF THE NAVY</small> MARINE CORPS BASE <small>CAMP LEJEUNE, NORTH CAROLINA</small>	
CONSTRUCT LIGHTING, STONE BAY PT FIELD	
<small>LOCATION MAP, VICINITY MAP & AREA MAP</small>	
<small>DES. D.L. GUY</small> <small>DR. D.L. GUY</small> <small>CHK. W.T. JONES</small> <small>SUBMITTED BY: W.T. JONES</small> <small>DESIGN DIR. B. MARSHBURN, P.E.</small> <small>APPROVED: PWO OR OIC</small> <small>B.R. MARSHBURN P.E. 9-9-13</small> <small>SATISFACTORY TO: _____</small>	<small>DATE</small> <small>DATE</small> <small>DATE</small> <small>DATE</small> <small>DATE</small> <small>DATE</small> <small>DATE</small>
<small>SIZE</small> F	<small>CODE IDENT. NO.</small> 80091 <small>NAVFAC DRAWING NO.</small> 60013732 <small>CONSTR. CONTR. NO. N40085-13-B-0013</small>
<small>SCALE: NOTED</small>	<small>SPEC. 05-13-0013</small> <small>SHEET 1 OF 8</small>

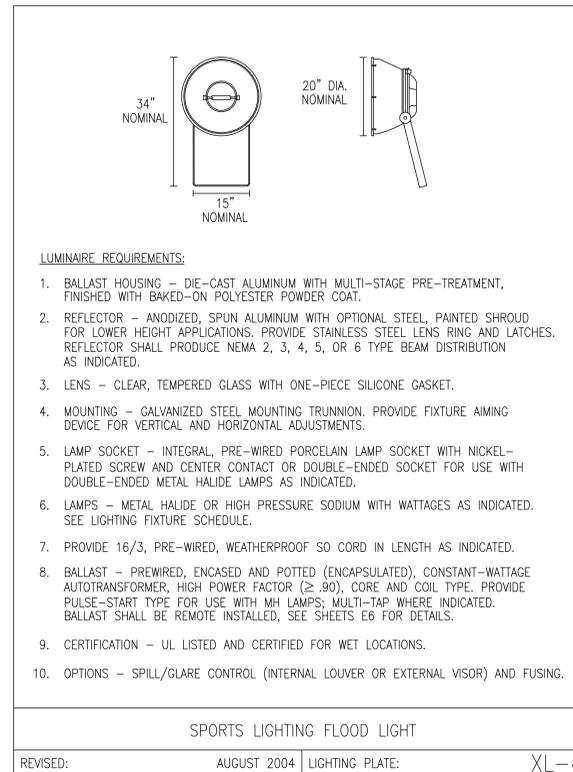
REVISIONS		
SYM	DATE	APPROVED

ELECTRICAL NOTES

- ALL WORK & MATERIALS, UNLESS NOTED OTHERWISE AS EXISTING, ARE NEW & SHALL BE PROVIDED BY THE CONTRACTOR. ELECTRICAL INSTALLATION SHALL CONFORM TO REQUIREMENTS OF NFPA 70 & REQUIREMENTS SPECIFIED HEREIN. WORK PLACE SHALL MEET REQUIREMENTS OF NFPA 70E.
- EXISTING EQUIPMENT IS TO REMAIN UNLESS NOTED OTHERWISE. ALL EXISTING MATERIAL & EXISTING EQUIPMENT THAT IS INDICATED TO BE REMOVED, & NOT REUSED, SHALL BECOME THE PROPERTY OF THE CONTRACTOR & SHALL BE REMOVED FROM GOVERNMENT PROPERTY.
- ELECTRICAL PLANS ARE PARTIALLY DIAGRAMMATIC. REFER TO MECHANICAL DRAWINGS FOR LOCATION OF MECHANICAL EQUIPMENT & BUILDING ORIENTATION. INSTALL ELECTRICAL SYSTEMS WITHOUT INTERFERING WITH EXISTING DUCTS, PIPES, STRUCTURES, OTHER SYSTEMS. LOCATE LIGHTING FIXTURES SYMMETRICALLY IN PROPER RELATIONS TO FINISHED AREAS EXCEPT WHERE DIMENSIONED ON THE DRAWINGS OR LOCATED IN REFLECTED CEILING PLANS.
- PROVIDE ADDITIONAL SUPPORTS FOR SWITCHES, RACEWAYS, & LUMINAIRES WHEREVER THE BUILDING STRUCTURE IS NOT SUITABLE FOR DIRECT MOUNTING. PROVIDE MINIMUM 1/4 INCH AIR SPACE BETWEEN CONCRETE/MASONRY SURFACE & ELECTRICAL DEVICES & OUTLETS. VERIFY ALL EQUIPMENT CHARACTERISTIC & MOUNTING REQUIREMENTS PRIOR TO ROUGH-IN. PROVIDE PROPER MOUNTING ACCESSORIES, TRIMS, ETC., TO SUIT THE FLOOR, WALL & CEILING SYSTEMS.
- PANELBOARD SHALL BE EQUIPPED WITH THERMAL MAGNETIC TYPE BOLT-IN BRANCH BREAKERS. PROVIDE UPDATED PANELBOARD DIRECTORY IN EACH AFFECTED EXISTING PANELBOARD; INDICATE LOADS SERVED BY EACH CIRCUIT OF PANELBOARD.
- ALL CONDUCTORS SHALL BE COPPER. PROVIDE INSULATED CONDUCTORS WITH EQUIPMENT GROUNDING (E.G.) CONDUCTOR IN CONDUIT & RACEWAYS; WIRE & CONDUIT SIZES AS INDICATED. COLOR CODING OF 480/277 VOLT SYSTEM UNGROUNDED CONDUCTORS: PHASE A - BROWN; PHASE B - ORANGE; PHASE C - YELLOW; GROUNDED CONDUCTOR: NEUTRAL - WHITE; GROUNDING CONDUCTOR: (EGC) - GREEN/BARE. INSULATION SHALL BE 600- VOLT, TYPE THWN/THHN.
- PROVIDE INSULATED CONDUCTORS INSTALLED IN SCHEDULE 40 PVC CONDUIT. ANY CONDUIT INSTALLED BETWEEN 36 INCHES BELOW GRADE AND ABOVE GRADE SHALL BE SCHEDULE 80 PVC. ANY DAMAGE CAUSED BY THE CONTRACTOR TO EXISTING PROPERTY SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR TO MATCH EXISTING AT THEIR EXPENSE. IF FLEX CONDUIT IS REQUIRED, PROVIDE LIQUIDTIGHT FLEXIBLE METAL CONDUIT (LFMC), IN LENGTHS NO LONGER THAN 6'. PROVIDE SEPARATE EQUIPMENT GROUNDING CONDUCTOR ACROSS FLEXIBLE CONNECTIONS. ALL NEW ENCLOSURES AND COVERS SHALL BE APPROVED FOR WET LOCATIONS.
- PROVIDE UNGROUNDED & NEUTRAL (GROUNDED) CONDUCTORS FOR EACH BRANCH CIRCUIT; IDENTIFY OTHER NEUTRAL WITH COLORED STRIPE WHENEVER MORE THAN ONE NEUTRAL IS IN SAME RACEWAY.
- PROVIDE GROUNDING BUSHINGS, WEDGES, & JUMPERS AS REQUIRED TO BOND ELECTRICAL SYSTEM.
- WHERE CONDUIT & WIRING HAS NOT BEEN SHOWN ON THE DRAWINGS, THE ARRANGEMENT & ROUTING OF THE BRANCH CIRCUITS WILL BE AT THE CONTRACTOR'S DISCRETION IN ACCORDANCE WITH GENERALLY ACCEPTED GOOD PRACTICE FOR ELECTRICAL WORK & N.E.C. CODE REQUIREMENTS.
- SEAL ALL CONDUIT & RACEWAY PENETRATIONS. PROVIDE CONDUIT BODIES WITH NON-HARDENING CAULKING COMPOUND & SEAL CONDUITS THAT CONNECT TO ALL PANELBOARDS.
- VERIFY & DE-ENERGIZE CIRCUITS PRIOR TO BEGINNING WORK; WIRING & CONDUIT/RACEWAYS MAY VARY FROM THAT SHOWN.
- CONNECT BRANCH CIRCUIT NEUTRAL TO RECEPTACLE TERMINAL BY MEANS OF A SHORT "PIGTAIL" PERMANENTLY SPLICED TO THE NEUTRAL.
- FOR CLARITY, WIRING & CONDUITS ARE NOT SHOWN ON VARIOUS CIRCUITS.
- ONLY EXISTING ELECTRICAL SYSTEM AFFECTING THIS CONTRACT IS SHOWN.
- CONTRACTOR SHALL MAKE NECESSARY ARRANGEMENTS FOR SHORT TERM POWER INTERRUPTION IF NECESSARY.
- NECESSARY POWER OUTAGES SHALL BE MINIMAL AND BE PREARRANGED WITH THE CONTRACTING OFFICER BY CONTRACTOR.
- BEFORE ENERGIZING CIRCUITS OR EQUIPMENT, VERIFY VOLTAGE BY CALIBRATED METER TO ENSURE VOLTAGE MEASUREMENT COINCIDES WITH DRAWINGS AND MATCHES EQUIPMENT REQUIREMENTS. CONTRACTOR SHALL ADHERE TO NFPA 70E.
- BEFORE ANY EXCAVATION, CONTRACTOR SHALL PROVIDE THE SERVICES OF A PROFESSIONAL UNDERGROUND UTILITY LOCATOR, IN ORDER TO AVOID DAMAGING EXISTING UTILITIES DURING EXCAVATIONS. PRIME CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OR REPLACEMENT OF ANY UTILITIES DAMAGED BY THE CONTRACTOR OR ANY OF THEIR SUB CONTRACTORS. REPAIR OR REPLACEMENT UTILITY WORK SHALL BE INSPECTED BY THE OWNER OF EXISTING UTILITY BEFORE COVERING UP WORK WITH DIRT OR ANY OTHER MATERIALS.
- PRESERVE AND PROTECT ALL COMMUNICATIONS CABLING AND EQUIPMENT. DO NOT REMOVE OR DISCONNECT ANY WORK AREA OUTLETS, COVER WITH PAINTERS TAPE AND PAINT AROUND. IF CEILING WORK IS BEING DONE, ALL NEW & EXISTING CABLING IN THE CEILING SHALL BE SUPPORTED BY APPROVED COMMUNICATIONS PATHWAY DURING WORK AND BEFORE NEW CEILING IS INSTALLED. ANY AND ALL OLD CABLING THAT IS NOT TERMINATED AT BOTH ENDS IS CONSIDERED ABANDONED AND SHALL BE REMOVED.
- GROUNDING ELECTRODE CONDUCTORS SHALL BE TYPE HARD DRAWN SOLID COPPER. FASTEN TO POLE WITH THE QUANTITY OF APPROVED INDUSTRY STANDARD CONNECTIONS. GROUNDING ELECTRODE CONDUCTOR GUARD SHALL EXTEND FROM 18" BELOW GRADE TO 60" ABOVE GRADE, FASTEN TO POLE WITH THE QUANTITY OF APPROVED INDUSTRY STANDARD CONNECTIONS.
- IF CONTAMINATION IS SUSPECTED THROUGH VISUAL INSPECTION OR ODORS, STOP WORK IMMEDIATELY AND CONTACT 911, CONTRACTING OFFICER AND EMD/RCRS (910-451-1482). IF A MONITORING WELL IS FOUND OR INADVERTAENTLY DAMAGED, STOP WORK IMMEDIATELY AND CONTACT EMD/EOB (910-451-9017).

LEGEND

SYMBOL	DESCRIPTION
	NEW PANEL "A". SEE THIS SHEET, SHEET E2, E4 AND E7 FOR DETAILS.
PT-5	POLE-LIGHT NAME, TYPICAL FOR ALL NEW POLE LOCATIONS. SEE SHEET E2 FOR DETAILS.
	TYPE 'A', AND 'B', POLE MOUNTED LIGHTING. SEE SHEET E6 FOR DETAILS.
	PAD MOUNT TRANSFORMER: EXISTING.
	PAD MOUNT TRANSFORMER: NEW. -SEE THIS SHEET, SHEET E-2, & SHEET E-4 FOR DETAILS.



POLE-LIGHTING SCHEDULE

TYPE POLE LIGHTING	FIXTURE TYPE SEE THIS SHEET FOR DETAILS	FIXTURE VOLTAGE	LAMP DETAILS	
A & B	XL-4 NEMA 6	480	1000 WATT METAL HALIDE LAMPS	ALL BALLAST SHALL BE REMOTE MOUNTED ON POLE.

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E-1	
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA	
DES. D.L. GUY DR. D.L. GUY CHK. W.T. JONES SUBMITTED BY: W.T. JONES	CONSTRUCT LIGHTING, STONE BAY PT FIELD
DESIGN DIR. B.R. MARSHBURN, PE	NOTES, SCHEDULE, DETAIL & LEGEND
APPROVED: PWO OR OICC DATE B.R. MARSHBURN P.E. 9-9-13	NAVFAC DRAWING NO. 60013733
SATISFACTORY TO: DATE	CONST. CNTR. NO. N40085-13-B-0013
SCALE: NOTED	SHEET 2 OF 8

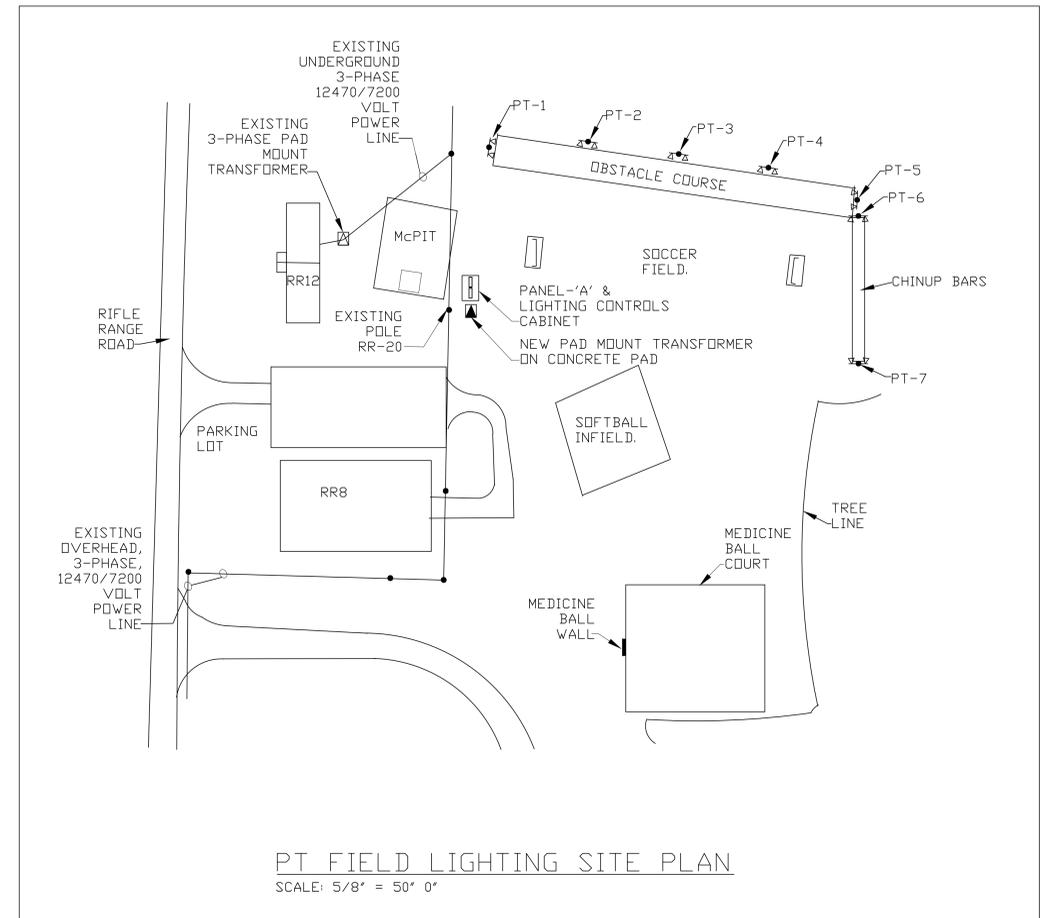
REVISIONS		
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ABBREVIATIONS

- DB - OBSTACLE COURSE
- MC - MCPIT
- CU - CHIN UP BARS
- CL - CLASS OF POLE
- W - WATTAGE
- V - VOLTAGE
- A - AMPERAGE
- GEC - GROUNDING ELECTRODE CONDUCTOR.
- GFCI -GROUND FAULT CIRCUIT INTERRUPTER.

EXPLANATION OF POLE MOUNTED LIGHTING SCHEDULE

1. TYPE INDICATES POLE CONFIGURATION OF NUMBER OF LIGHTING FIXTURES MOUNTED TO TOP OF POLE. SEE THIS SHEET AND SHEET E6 FOR DETAILS.
2. * ASTERISK INDICATES NUMBER AND WATTAGE OF LIGHT FIXTURES MOUNTED ON THE TOP CROSSARM OR POLE. SEE THIS SHEET AND E6 FOR DETAILS. DB INDICATES FIXTURE AIMING LOCATION, FOR OBSTACLE COURSE, SEE ABBREVIATIONS THIS SHEET.
3. LAST LINE INDICATES POLE LENGTH AND CLASS. SEE THIS SHEET FOR DETAILS.



PT FIELD LIGHTING SITE PLAN
SCALE: 5/8" = 50' 0"

POLE-LIGHT SCHEDULE

POLE ID	POLE-LIGHT CONSTRUCTION CONFIGURATION	
	NEW	COMMENTS
PT-1	TYPE 'B' *2/1000W, DB, 60', CL-3 POLE CAP, POLE GROUND W/GUARD.	SEE SHEET E6 AIM 1 FIXTURE TO MCPIT AREA & 1 TO OBSTACLE COURSE, SEE THIS SHEET.
PT-2	TYPE 'B' *2/1000W, DB, 60', CL-3, POLE CAP, POLE GROUND W/GUARD.	SEE SHEET E6
PT-3	TYPE 'B' *2/1000W, DB, 60', CL-3, POLE CAP, POLE GROUND W/GUARD.	SEE SHEET E6
PT-4	TYPE 'B' *2/1000W, DB, 60', CL-3, POLE CAP, POLE GROUND W/GUARD.	SEE SHEET E6
PT-5	TYPE 'B' *2/1000W, DB, 60', CL-3, POLE CAP, POLE GROUND W/GUARD.	SEE SHEET E6
PT-6	TYPE 'A' *1/1000W, CU, 50', CL-3, POLE CAP, POLE GROUND W/GUARD.	SEE SHEET E6
PT-7	TYPE 'A' *1/1000W, CU, 50', CL-3, POLE CAP, POLE GROUND W/GUARD.	SEE SHEET E6

POLE-LIGHT SCHEDULE

PT FIELD SITE PLAN NOTES

1. SEE POLE LIGHT SCHEDULE THIS SHEET FOR ALL POLE DETAILS.
2. PROVIDE AND INSTALL POLE ID LETTERS AND NUMBERS AS SHOWN POLE-LIGHT SCHEDULE. LETTERS AND NUMBERS SHALL BE MINIMUM 2" IN HEIGHT, APPROVED FOR EXTERIOR USE AND PERMANENTLY AND SECURELY ATTACHED TO EACH POLE 5' ABOVE ADJACENT FINISH GRADE.
3. INSTALL A HANDHOLE WITHIN 3' OF EACH NEW POLE. ADDITIONALLY INSTALL HANDHOLES AS REQUIRED BY WIRE MANUFACTURER'S STRAIN RELIEF ON CONDUCTORS, SEE SHEET E6 FOR DETAILS.
4. PROVIDE #6 HD BARE COPPER GROUNDING ELECTRODE CONDUCTOR FROM GROUND RODS TO 6' AERIAL ABOVE TOP OF EACH NEW POLE. ATTACH CONDUCTOR WITH REA APPROVED POLE STAPLES IN ACCORDANCE WITH APPROVED STANDARDS AND PROVIDE AND INSTALL PVC GROUND WIRE GUARD FROM 18" BELOW GRADE TO 5' ABOVE SURROUNDING FINISH GRADE.
4. PROVIDE AND INSTALL ALL LIGHTING BALLAST REMOTE IN AN APPROVED NEMA 4X ENCLOSURE ON THE BACKSIDE OF EACH POLE APPROXIMATELY 2' BELOW LOWEST CROSSARM.
5. TREE TRIMMING AND REMOVAL SHALL BE COMPLETE PRIOR TO INSTALLING ELECTRICAL WORK WITHIN TREE TRIMMING AND REMOVAL AREA.

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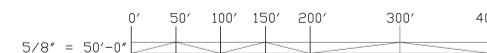
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GRAPHIC SCALE

E-2

DEPARTMENT OF THE NAVY		NAVAL FACILITIES ENGINEERING COMMAND	
MARINE CORPS BASE			
CAMP LEJEUNE, NORTH CAROLINA			
DES. D.L. GUY	CONSTRUCT LIGHTING, STONE BAY PT FIELD PLAN, ABBREVIATIONS, NOTES & SCHEDULE		
DR. D.L. GUY			
CHK. W.T. JONES			
SUBMITTED BY: W.T. JONES			
DESIGN DIR. B.R. MARSHBURN, PE	DATE	SIZE	CODE IDENT. NO.
APPROVED: PWO OR OIC	9-9-13	F	80091
B.R. MARSHBURN P.E.	DATE	NAVFAC DRAWING NO.	
SATISFACTORY TO:	DATE	60013734	
		CONST. CONTR. N40085-13-B-0013	
		SCALE: NOTED	SPEC. 05-13-0013
		SHEET 3 OF 8	

REVISIONS		
SYM	DATE	APPROVED

BASE SEEDING SCHEDULE

VEGETATIVE SEEDING	
AFTER COMPLETION OF GRADING ACTIVITIES AND THE CONSTRUCTION OF SWALES, ALL EXPOSED AREAS SHALL BE SEED TO THE FOLLOWING SPECIFICATIONS:	
SEED BED (JANUARY THROUGH DECEMBER)	
LIME	1-1/2 TON PER ACRE
FERTILIZER	1/2-TON PER ACRE
TEMPORARY SEED (JANUARY THROUGH DECEMBER)	
TO BE PROVIDED IN ADDITION TO OTHER SEEDS LISTED	
RYE GRAIN	50 LBS PER ACRE
SWITCH GRASS	9 LBS PER ACRE
PERMANENT SEED (JANUARY THROUGH DECEMBER)	
BAHIA GRASS	50 LBS PER ACRE
CENTPEDE	10 LBS PER ACRE
BERMUDAGRASS (UNHULLED)	35 LBS PER ACRE
RYE GRAIN	25 LBS PER ACRE
PERMANENT SOD	
CENTPEDE SOD	
PROCEDURE	
STRAW MULCH SHALL BE APPLIED AT A RATE WHICH WILL INSURE APPROXIMATELY 75% COVERAGE OF THE SEEDED AREA. THE STRAW AND SOWN SEED WILL BE LIGHTLY CRIMPED INTO THE BED TO GIVE IT FURTHER RESISTENCE TO BLOWING AND WASHING.	
THE CONTRACTOR SHALL GUARANTEE A FULL STAND OF GRASS OVER THE ENTIRE DISTURBED AREA. IF NECESSARY THE CONTRACTOR WILL WET DOWN THE AREAS TO ASSIST IN SEED GERMINATION OR AID IN GROWTH IN TIMES OF EXCESSIVELY DRY WEATHER. A STAND OF GRASS WILL BE CONSIDERED ACCEPTABLE WHEN THE ENTIRE STAND OF GRASS IS AT LEAST FOUR INCHES HIGH AND HAS ACHIEVED AT LEAST 95% COVERAGE OF DISTURBED AREAS. RESEEDING WILL BE REQUIRED AS NECESSARY BY THE CONTRACTOR TO OBTAIN THE SPECIFIED STAND OF GRASS.	

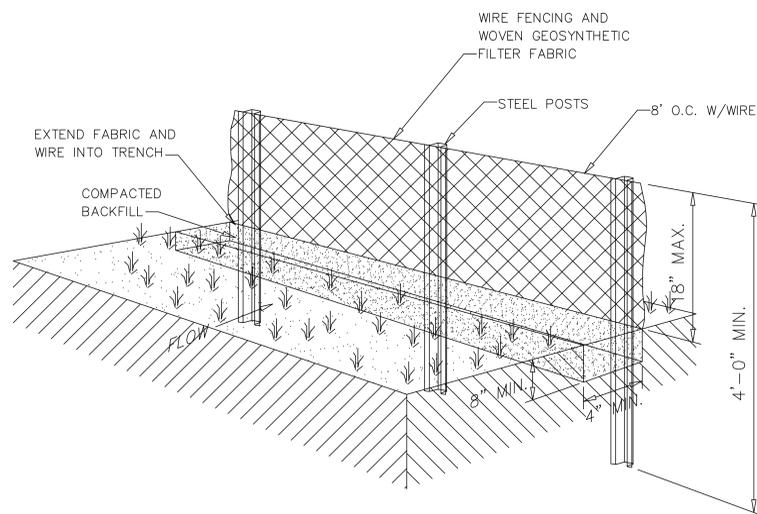
CONSTRUCTION SPECIFICATION

MATERIALS:

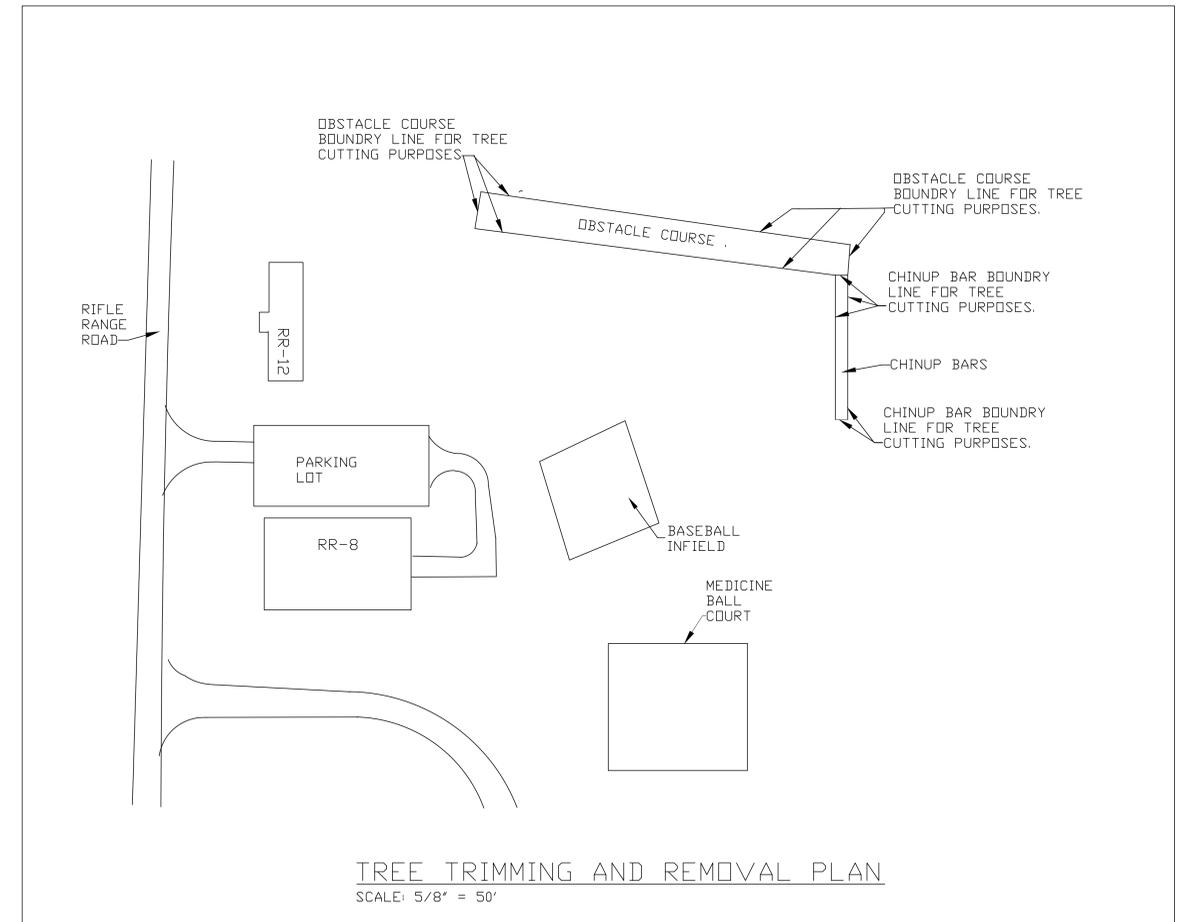
- USE A SYNTHETIC FILTER FABRIC OF AT LEAST 95% BY WEIGHT OF POLYOLEFINS OR POLYESTER, WHICH IS CERTIFIED BY THE MANUFACTURER OR SUPPLIER AS CONFORMING TO THE REQUIREMENTS IN ASTM D 6461, WHICH IS SHOWN IN PART IN TABLE 6.62B. SYNTHETIC FILTER FABRIC SHOULD CONTAIN ULTRAVIOLET RAY INHIBITORS AND STABILIZERS TO PROVIDE A MINIMUM OF 6 MONTHS OF EXPECTED USABLE CONSTRUCTION LIFE AT A TEMPERATURE RANGE OF 0 TO 120° F.
- ENSURE THAT POSTS FOR SEDIMENT FENCES ARE 1.33 LB/LINEAR FT STEEL WITH A MINIMUM LENGTH OF 5 FEET. MAKE SURE THAT STEEL POSTS HAVE PROJECTIONS TO FACILITATE FASTENING THE FABRIC.
- FOR REINFORCEMENT OF STANDARD STRENGTH FILTER FABRIC, USE WIRE FENCE WITH A MINIMUM 14 GAUGE AND A MAXIMUM MESH SPACING OF 6 INCHES.

NOTE:

- REMOVE ANY SEDIMENT GREATER THAN 12" DEEP. REPAIR ANY UNDERMINING IMMEDIATELY.
- STONE OUTLET TO BE ADDED AT LOW POINTS IN SILT FENCE, SEE DETAIL.
- CONTRACTORS OPTION TO USE AT TOE OF SLOPES ADJACENT TO PAVEMENT TO PROTECT PAVED SURFACES.
- FABRIC SHALL BE INSTALLED ON THE UPSLOPE SIDE OF THE WIRE FENCING.



SILT FENCE DETAIL
NOT TO SCALE



TREE TRIMMING AND REMOVAL PLAN
SCALE: 5/8" = 50'

TREE TRIMMING AND REMOVAL PLAN NOTES

- CONTRACTOR SHALL CLEAR AND GRUB WITHIN OBSTACLE COURSE AND CHIN UP BAR BOUNDRY LINES AND 15 FEET OUTSIDE OF SAME BOUNDRY LINES. RIGHT-OF-WAY CLEARING SHALL BE GRUBBED AND GRADED SO GRASS OR SOD CAN BE PLANTED. TOTAL DISTURBANCE SHALL NOT EXCEED 1 ACRE. CONTRACTOR IS RESPONSIBLE FOR DISPOSAL OF DEBRIS GENERATED FROM RIGHT-OF-WAY CLEARING.
- WHERE CLEARING AND GRUBBING TAKES PLACE, SILT FENCE SHALL BE INSTALLED AS SHOWN IN DETAIL TO PREVENT ANY AND ALL SEDIMENT FROM LEAVING THE SITE. ASSURE NO SEDIMENT LEAVES THE SITE AS A RESULT OF LAND-DISTURBING ACTIVITIES.
- ONCE RIGHT-OF-WAY HAS BEEN CLEARED AND GRUBBED, PLANT OR SOD AREA ACCORDING TO BASE SEEDING SCHEDULE.

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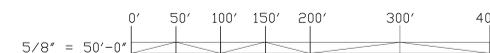
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GRAPHIC SCALE

E-3

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MARINE CORPS BASE			
CAMP LEJUNE, NORTH CAROLINA			
DES. D.L. GUY	CONSTRUCT LIGHTING, STONE BAY PT FIELD		
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CHK. W.T. JONES	60013735		
SUBMITTED BY: W.T. JONES	CONST. CONTR. N40085-13-B-0013		
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B.R. MARSHBURN P.E.	DATE	SCALE: NOTED SPEC. 05-13-0013 SHEET 4 OF 8	
SATISFACTORY TO:	DATE		

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SYM	DATE	APPROVED

PANELBOARD 'A' SCHEDULE

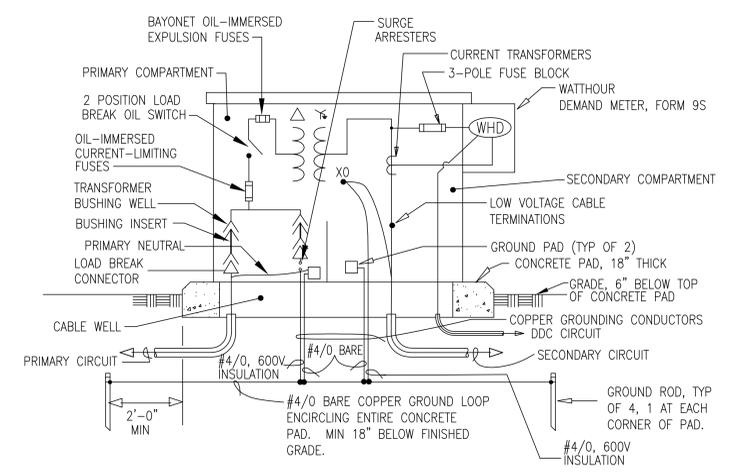
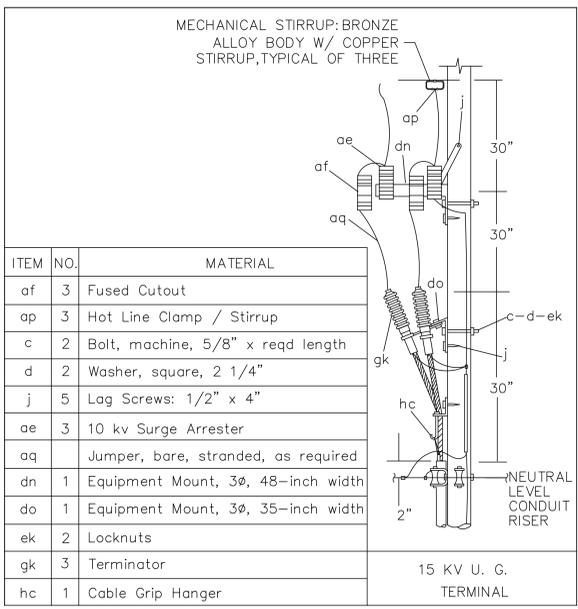
LOAD SERVED	WIRE SIZE	TRIP POLE	CKT NO.	VOLT	AMP/PHASE	CKT NO.	TRIP POLE	WIRE SIZE	LOAD SERVED
MC-1-1000W PT-1	#12	15/2	1			2	25/2	#8	DB-9-1000W PT-1 THRU 5
CONTROL CKT.	#12	20/1	5			6	15/2	#12	CU-2-1000W PT-6 & 7
SPARE	-	20/1	7			8	-	-	-
SPARE	-	20/1	9			10	20/1	-	SPACE
SPARE	-	20/1	11			12	20/1	-	SPACE
SPARE	-	20/1	13			14	20/1	-	SPACE
SPACE	-	-	15			16	20/1	-	SPACE
SPACE	-	-	17			18	-	-	SPACE
SPACE	-	-	19			20	-	-	SPACE
SPACE	-	-	21			22	-	-	SPACE
SPACE	-	-	23			24	-	-	SPACE
SPACE	-	-	25			26	-	-	SPACE
SPACE	-	-	27			28	-	-	SPACE
SPACE	-	-	29			30	-	-	SPACE

480/277V, 200A, 3-PHASE, 10-KAIC, 150A, MAIN BREAKER. SURFACE MOUNT, SERVICE EQUIPMENT RATED, 10K AIC, BOLT-ON BREAKERS ONLY.
NOTE: THIS PANEL SHALL BE NEMA 4X ENCLOSURE AND LOCKABLE. SEE SHEET E-7 AND THIS SHEET FOR DETAILS.

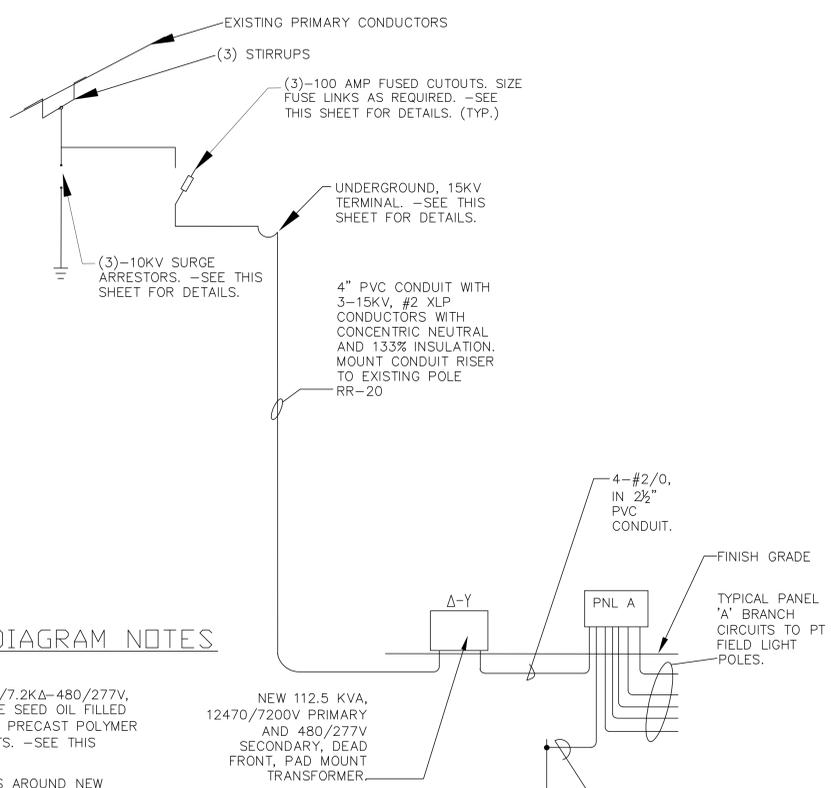
PANEL "A"

EXPLANATION OF LOAD SERVED IN PANEL 'A' SCHEDULE

- 'CU' REPRESENTS 'CHINUP AREA'.
- '2' REPRESENTS THE NUMBER OF 1000 WATT METAL HALIDE FIXTURES.
- '1000W' REPRESENTS THE WATTAGE OF EACH METAL HALIDE FIXTURE
- SEE THIS SHEET AND SHEET E2 FOR DETAILS.



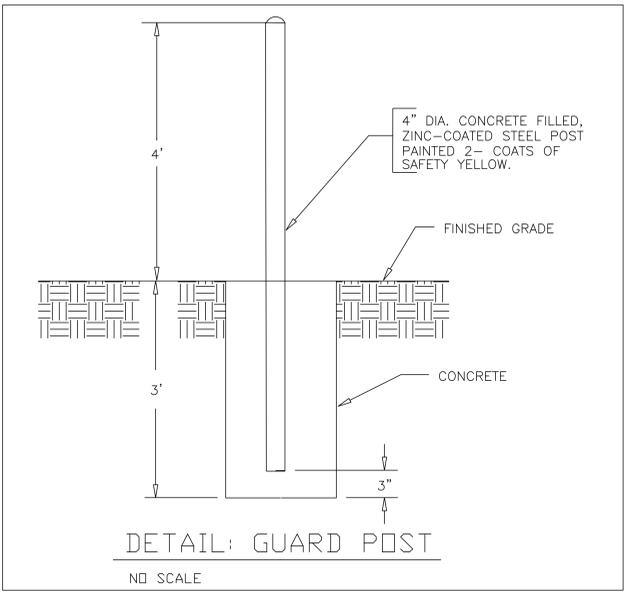
PAD-MOUNTED TRANSFORMER DETAIL
NOT TO SCALE
[MULTI-GROUNDED PRIMARY SYSTEM (DELTA-WYE) - WITH SURGE ARRESTERS.]



PANEL 'A' RISER DIAGRAM NOTES

- PROVIDE (1) 112.5 KVA, 12.47/7.2KΔ-480/277V, 3ø, DEAD FRONT, BIODEGRADABLE SEED OIL FILLED PAD MOUNTED TRANSFORMER W/ PRECAST POLYMER CONCRETE PAD, (4) GUARD POSTS. -SEE THIS SHEET FOR DETAILS.
- GUARD POST -PROVIDE POSTS AROUND NEW TRANSFORMER AT EACH CORNER, PLACE POSTS 5FT FROM TRANSFORMER. SEE DETAIL THIS SHEET.
- 15 KV UG, CONDUIT RISER SHALL BE 4" SCHEDULE 80 PVC, CONCRETE DUCT BANK 36" BELOW GRADE. CONCRETE SHALL BE 3000 PSI AND MINIMUM COVERAGE OF CONDUIT SHALL BE 3". EXTEND CONCRETE VERTICALLY TO 8" ABOVE GRADE AT POLE ATTACHMENT. -SEE THIS SHEET FOR DETAILS.

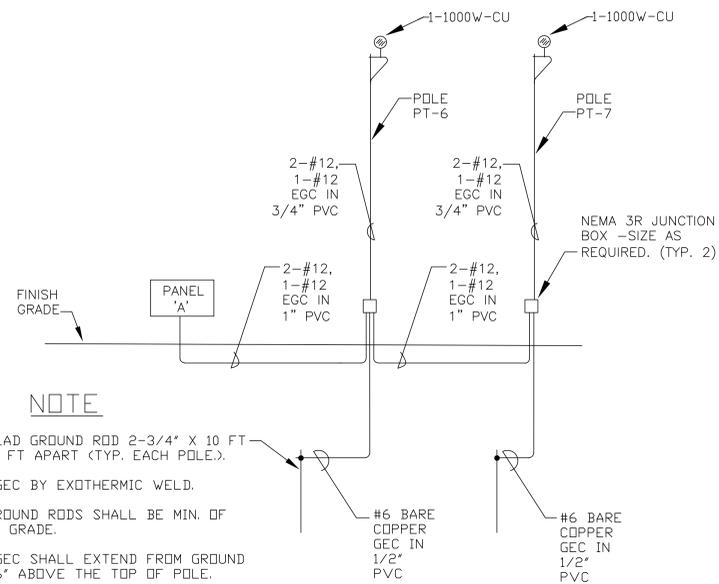
PANEL 'A' RISER DIAGRAM
ND SCALE



DISCLOSURE OF INFORMATION
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(2) THE INFORMATION IS OTHERWISE IN THE PUBLIC DOMAIN BEFORE THE DATE OF RELEASE.
(B) REQUESTS FOR APPROVAL SHALL IDENTIFY THE SPECIFIC INFORMATION TO BE RELEASED, THE MEDIUM TO BE USED, AND THE PURPOSE FOR THE RELEASE. THE CONTRACTOR SHALL SUBMIT IT'S REQUEST TO THE CONTACTING OFFICER AT LEAST 45 DAYS BEFORE THE PROPOSED DATE FOR RELEASE.
(C) THE CONTRACTOR AGREES TO INCLUDE A SIMILIAR REQUIREMENT IN EACH SUBCONTRACT UNDER THIS CONTRACT. SUBCONTRACTORS SHALL SUBMIT REQUESTS FOR AUTHORIZATION TO RELEASE THROUGH THE PRIME CONTRACTOR TO THE CONTACTING OFFICER.

E-4	
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA	
DES. D.L. GUY DR. D.L. GUY CHK. W.T. JONES SUBMITTED BY: W.T. JONES DESIGN DIR. B.R. MARSHBURN, PE	CONSTRUCT LIGHTING, STONE BAY PT FIELD
APPROVED: PWO OR OICC B.R. MARSHBURN P.E. 9-9-13 SATISFACTORY TO:	DETAILS, RISER AND SCHEDULE NAVFAC DRAWING NO. 60013736 CONST. CONTR. NO. N40085-13-B-0013
DATE: 9-9-13	SCALE: NOTED SPEC. 05-13-0013 SHEET 5 OF 8

REVISIONS		
SYM	DATE	APPROVED



NOTE

COPPER CLAD GROUND ROD 2-3/4" X 10 FT SPACED 10 FT APART (TYP. EACH POLE).

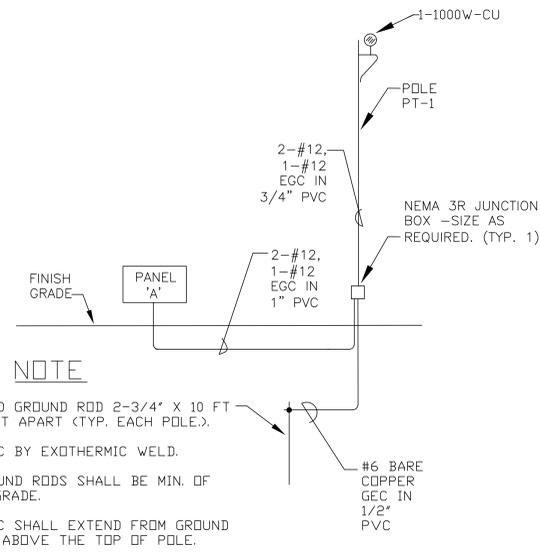
CONNECT GEC BY EXOTHERMIC WELD.

TOP OF GROUND RODS SHALL BE MIN. OF 18" BELOW GRADE.

EACH #6 GEC SHALL EXTEND FROM GROUND RODS TO 6" ABOVE THE TOP OF POLE.

PROVIDE POLE GROUNDING ELECTRODE GROUND WIRE GUARD FROM 8' BELOW GRADE TO 60' ABOVE GRADE.

CHIN UP BARS RISER DIAGRAM
NO SCALE



NOTE

COPPER CLAD GROUND ROD 2-3/4" X 10 FT SPACED 10 FT APART (TYP. EACH POLE).

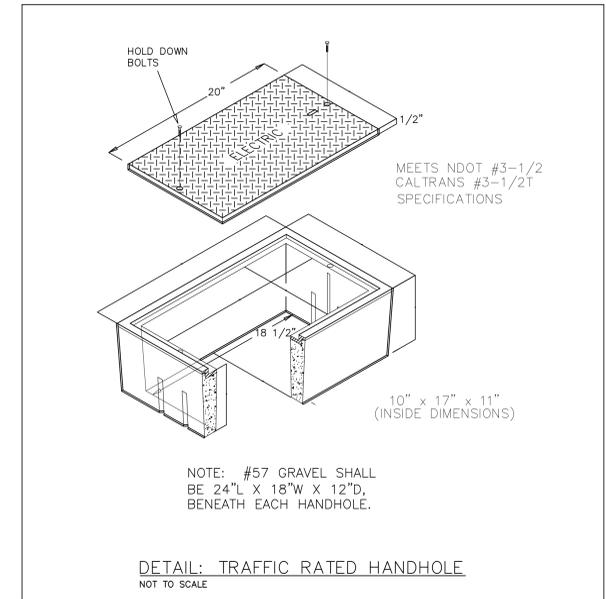
CONNECT GEC BY EXOTHERMIC WELD.

TOP OF GROUND RODS SHALL BE MIN. OF 18" BELOW GRADE.

EACH #6 GEC SHALL EXTEND FROM GROUND RODS TO 6" ABOVE THE TOP OF POLE.

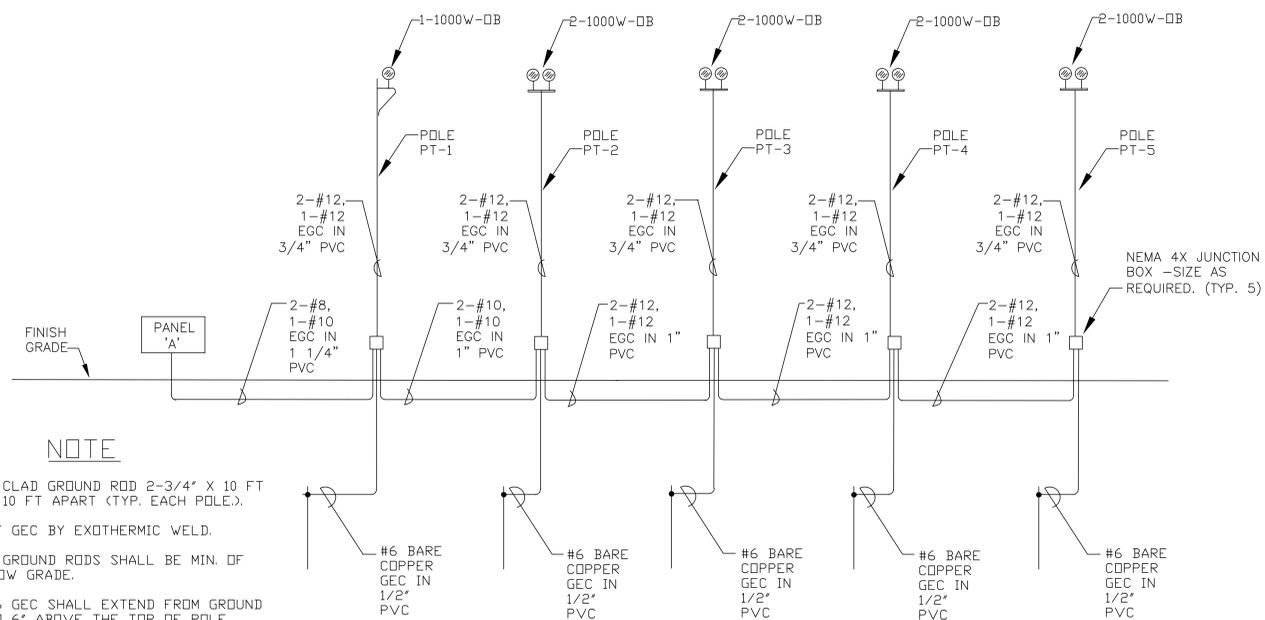
PROVIDE POLE GROUNDING ELECTRODE GROUND WIRE GUARD FROM 8' BELOW GRADE TO 60' ABOVE GRADE.

MCPIT RISER DIAGRAM
NO SCALE



NOTE: #57 GRAVEL SHALL BE 24" L X 18" W X 12" D, BENEATH EACH HANDHOLE.

DETAIL: TRAFFIC RATED HANDHOLE
NOT TO SCALE



NOTE

COPPER CLAD GROUND ROD 2-3/4" X 10 FT SPACED 10 FT APART (TYP. EACH POLE).

CONNECT GEC BY EXOTHERMIC WELD.

TOP OF GROUND RODS SHALL BE MIN. OF 18" BELOW GRADE.

EACH #6 GEC SHALL EXTEND FROM GROUND RODS TO 6" ABOVE THE TOP OF POLE.

PROVIDE POLE GROUNDING ELECTRODE GROUND WIRE GUARD FROM 8' BELOW GRADE TO 60' ABOVE GRADE.

OBSTACLE COURSE RISER DIAGRAM
NO SCALE

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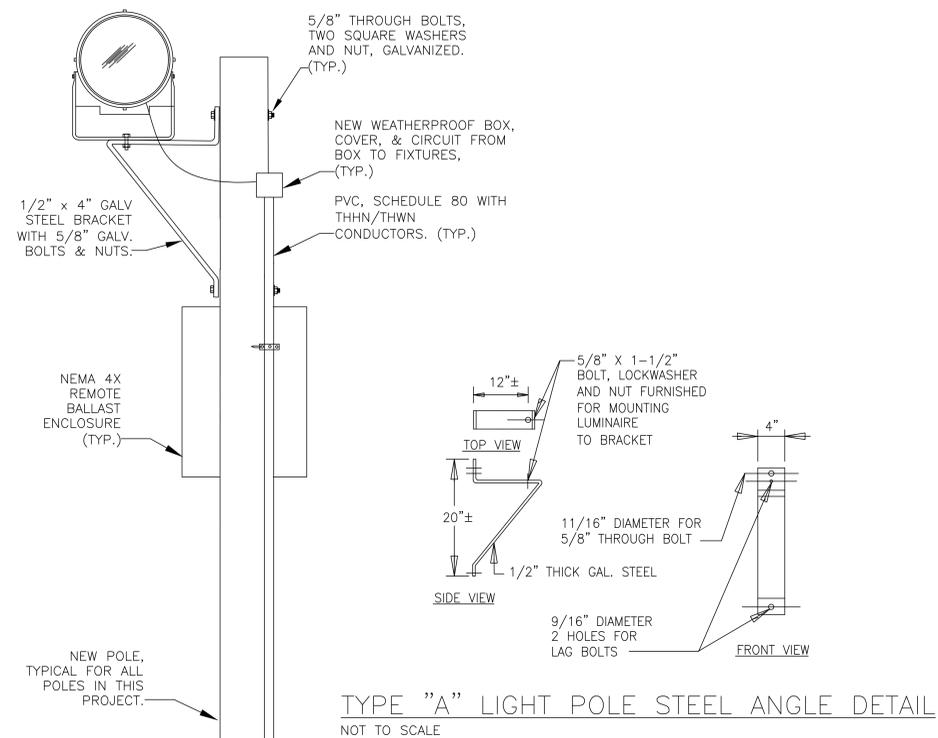
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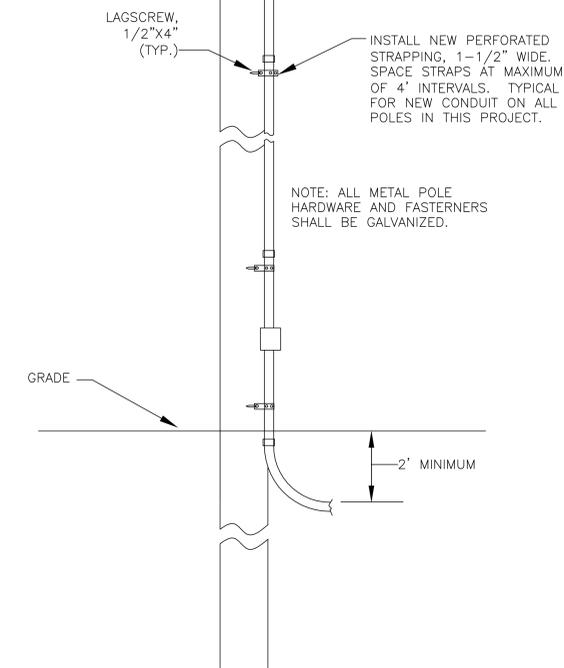
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E-5				
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA				
DES. D.L. GUY	CONSTRUCT LIGHTING, STONE BAY PT FIELD RISERS AND DETAIL			
DR. D.L. GUY				
CHK. W.T. JONES				
SUBMITTED BY: W.T. JONES				
DESIGN DIR. B.R. MARSHBURN, PE				
APPROVED: PWO OR OIC	DATE	SIZE	CODE IDENT. NO.	NAVFAC DRAWING NO.
B.R. MARSHBURN P.E.	9-9-13	F	80091	60013737
SATISFACTORY TO:	DATE	CONST. CONTR. NDL N40085-13-B-0013		
		SCALE: NOTED	SPEC. 05-13-0013	SHEET 6 OF 8

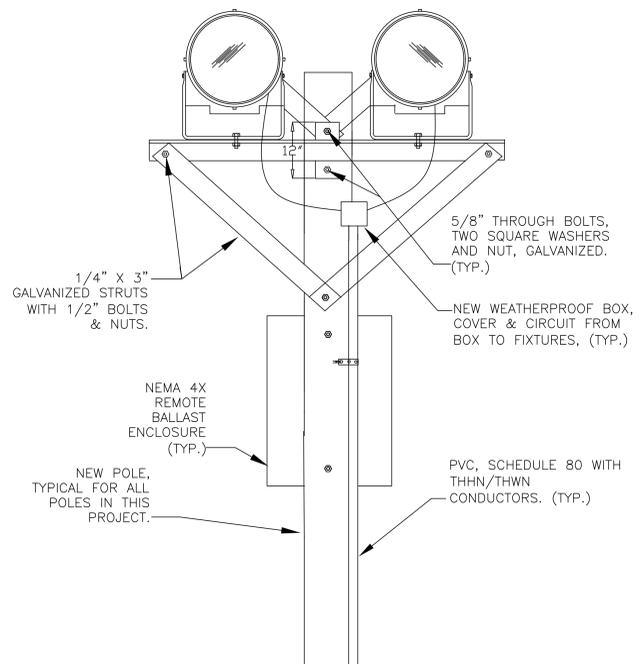
REVISIONS			
SYM		DATE	APPROVED



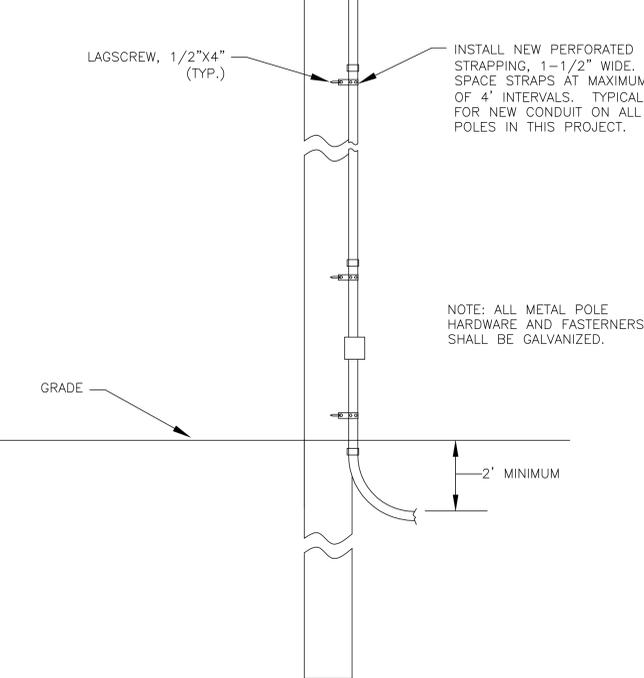
TYPE "A" LIGHT POLE STEEL ANGLE DETAIL
NOT TO SCALE



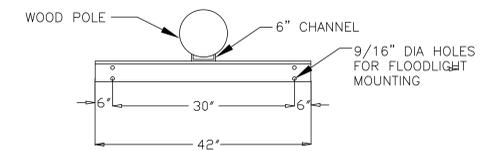
TYPE "A" LIGHT POLE DETAIL
NOT TO SCALE:



TYPE "B" LIGHT POLE STEEL ANGLE DETAIL
NOT TO SCALE



TYPE "B" LIGHT POLE DETAIL
NOT TO SCALE



TYPE "B" LIGHT POLE CROSSARM DETAIL
NOT TO SCALE

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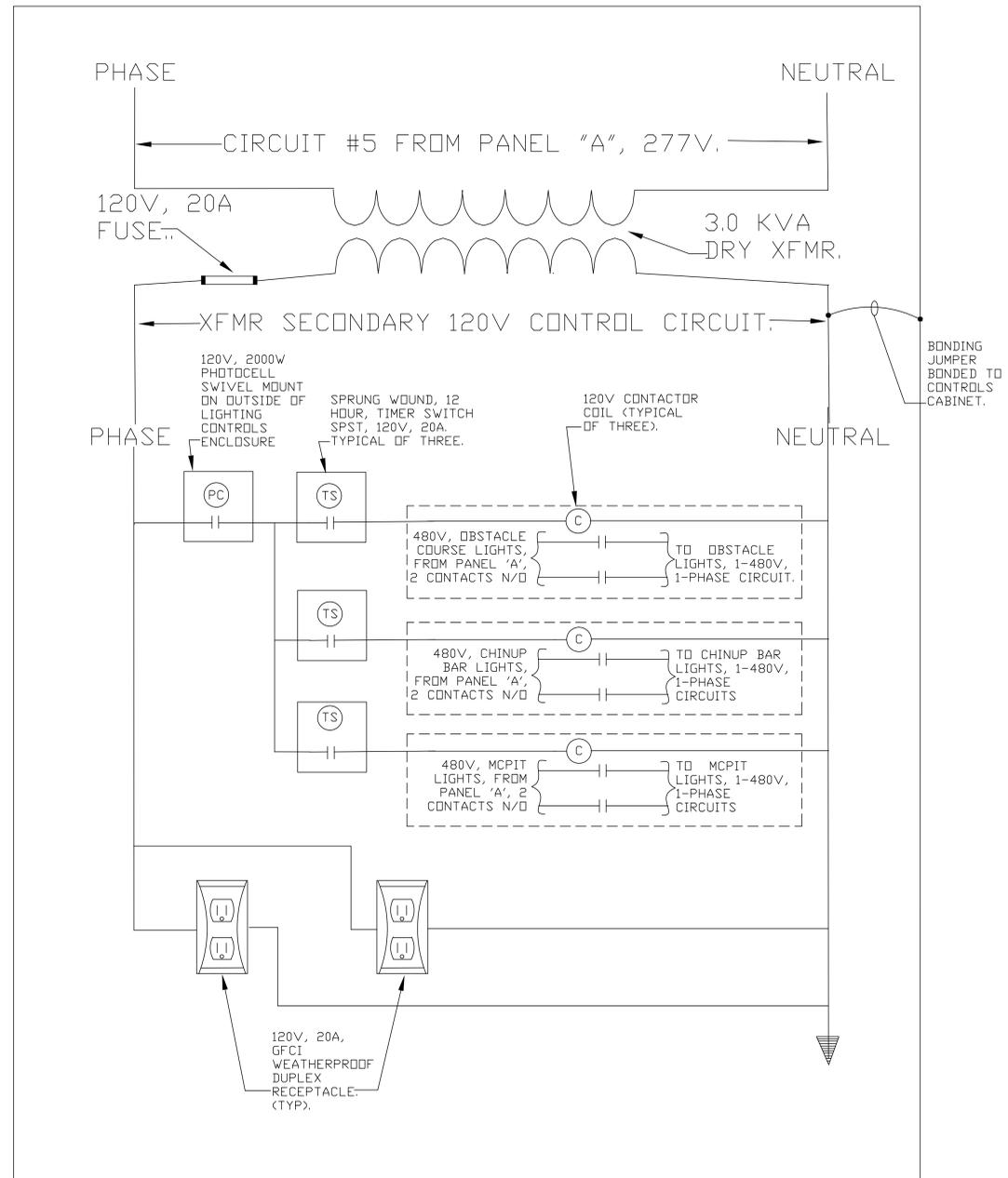
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E-6

DES. D.L. GUY		NAVFAC DRAWING NO. 60013738	
DR. D.L. GUY		CONSTRUCT LIGHTING, STONE BAY PT FIELD	
CHK. W.T. JONES		DETAILS	
SUBMITTED BY: W.T. JONES		DATE 9-9-13	
DESIGN DIR: B.R. MARSHBURN, PE		SIZE CODE IDENT. NO. F 80091	
APPROVED: PWO OR OIC		CONST. CONTR. NO. N40085-13-B-0013	
B.R. MARSHBURN P.E., 9-9-13		SCALE: NOTED	
SATISFACTORY TO:		SPEC. 05-13-0013	
		SHEET 7 OF 8	

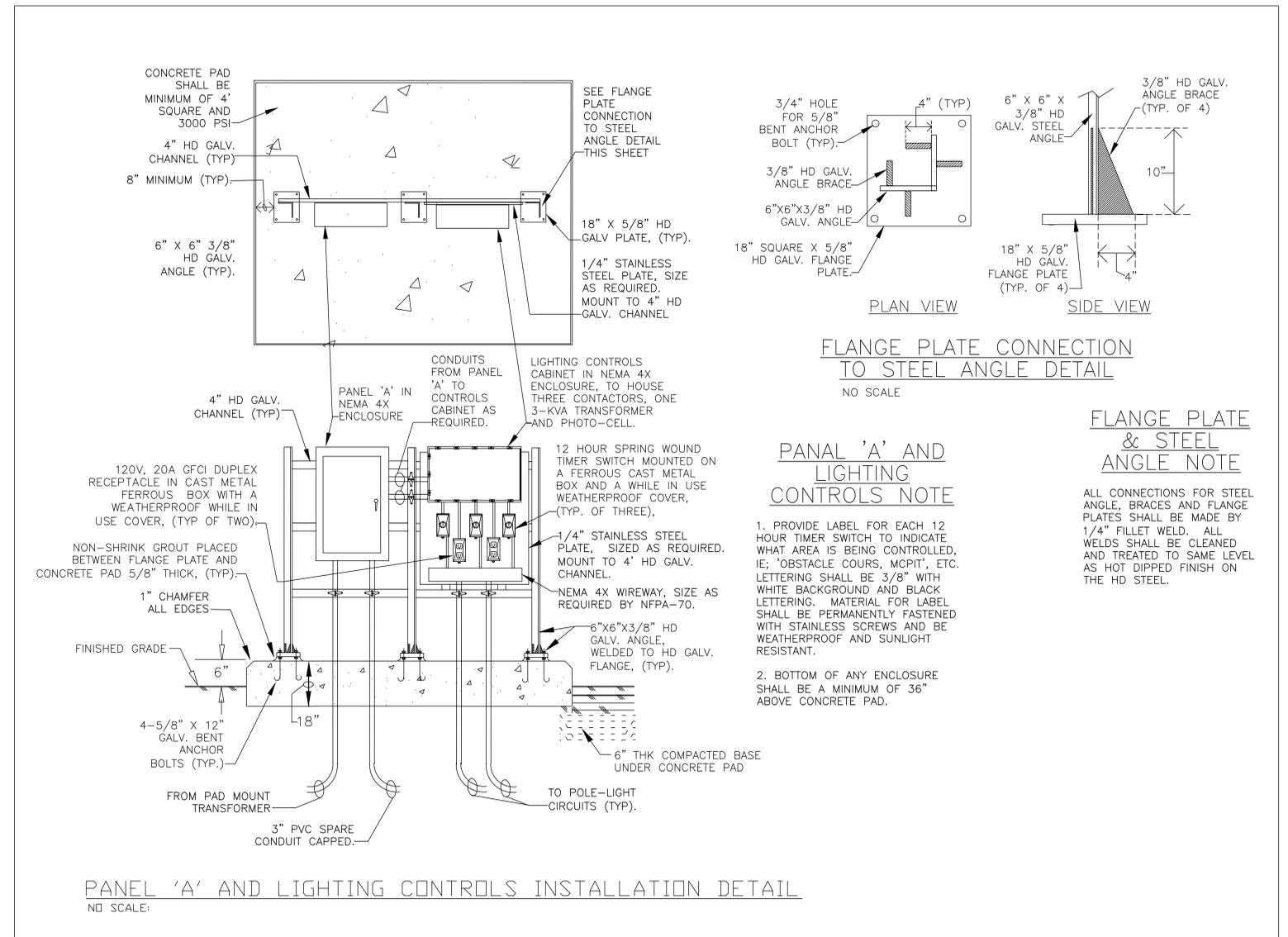
REVISIONS			
SYM		DATE	APPROVED



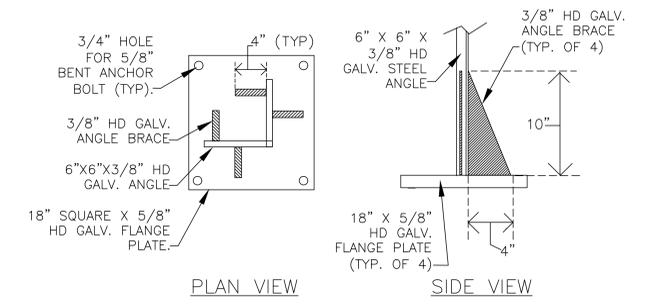
POLE-LIGHTING CONTROL DETAIL.
NO SCALE:

POLE-LIGHTING CONTROL
DETAIL NOTE

EACH LIGHTING CONTACTOR SHALL BE ELECTRICALLY OPERATED, MECHANICALLY HELD, WITH 120 VOLT, 60 Hz. COIL, N.O. CONTACTS AS REQUIRED TO OPEN ALL CURRENT CARRYING CONDUCTORS OF EACH LIGHTING CIRCUIT. RATED AT 30 AMPS, MOUNTED IN LIGHTING CONTROLS ENCLASURE. PROVIDE THREE CONTACTORS.



PANEL 'A' AND LIGHTING CONTROLS INSTALLATION DETAIL
NO SCALE:



FLANGE PLATE CONNECTION
TO STEEL ANGLE DETAIL
NO SCALE

PANEL 'A' AND
LIGHTING
CONTROLS NOTE

1. PROVIDE LABEL FOR EACH 12 HOUR TIMER SWITCH TO INDICATE WHAT AREA IS BEING CONTROLLED, IE: 'OBSTACLE COURSE, MCPIT', ETC. LETTERING SHALL BE 3/8" WITH WHITE BACKGROUND AND BLACK LETTERING. MATERIAL FOR LABEL SHALL BE PERMANENTLY FASTENED WITH STAINLESS SCREWS AND BE WEATHERPROOF AND SUNLIGHT RESISTANT.
2. BOTTOM OF ANY ENCLOSURE SHALL BE A MINIMUM OF 36" ABOVE CONCRETE PAD.

FLANGE PLATE
& STEEL
ANGLE NOTE

ALL CONNECTIONS FOR STEEL ANGLE, BRACES AND FLANGE PLATES SHALL BE MADE BY 1/4" FILLET WELD. ALL WELDS SHALL BE CLEANED AND TREATED TO SAME LEVEL AS HOT DIPPED FINISH ON THE HD STEEL.

DISCLOSURE OF INFORMATION

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E-7

DES. D.L. GUY		DR. D.L. GUY		CHK. W.T. JONES		SUBMITTED BY: W.T. JONES		DESIGN DIR: B.R. MARSHBURN, PE		APPROVED: PWO OR OIC		DATE: 9-9-13		SATISFACTORY TO:	
MARINE CORPS BASE		CAMP LEJEUNE, NORTH CAROLINA		CONSTRUCT LIGHTING,		STONE BAY PT FIELD		DETAILS		NAVFAC DRAWING NO.		60013739		CONST. CONTR. NO. N40085-13-B-0013	
SCALE: NOTED		SPEC. 05-13-0013		SHEET 8		OF 8		80091		DATE		DATE		DATE	