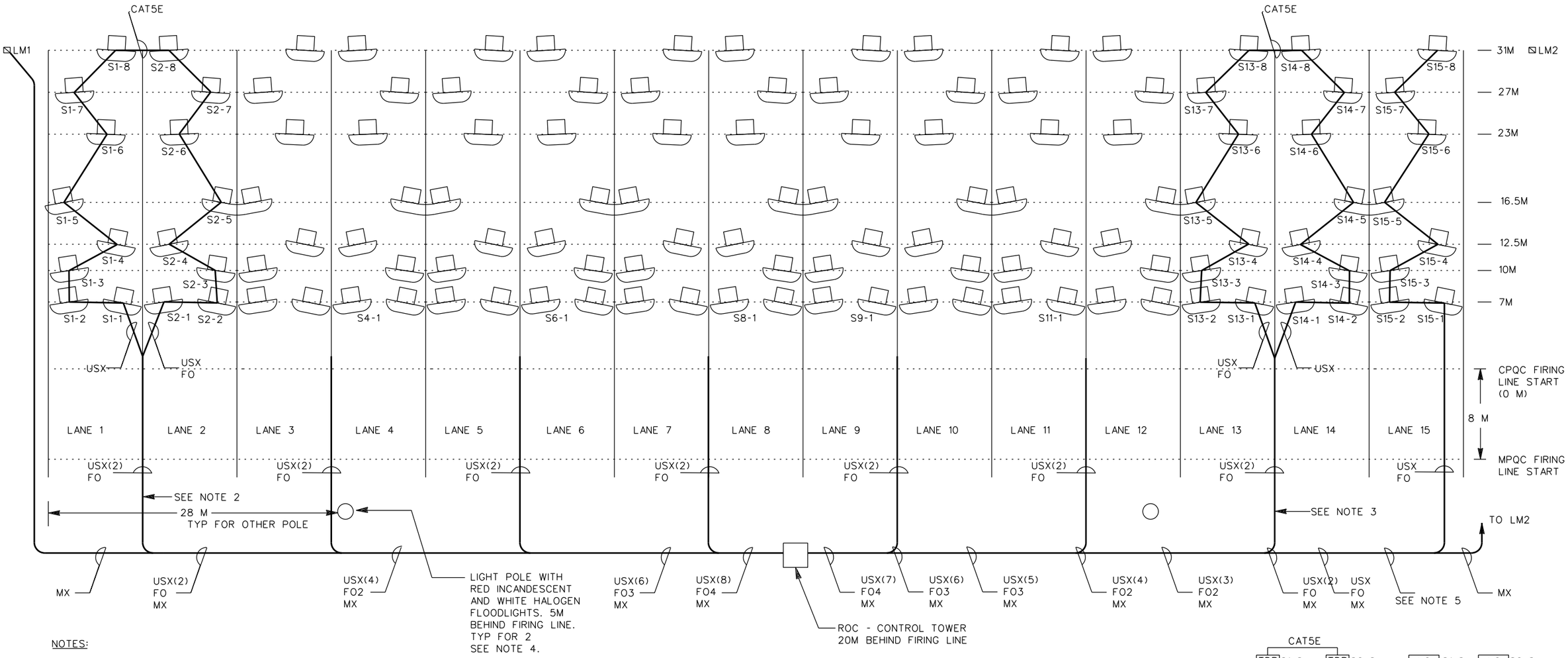


NOTES:

1. THE MILITARY POLICE FIREARMS QUALIFICATION COURSE IS SHOWN OVERLAYED ON THE COMBAT PISTOL QUALIFICATION COURSE.
2. CIRCUIT LAYOUT IS TYPICAL FOR LANES 1-8.
3. CIRCUIT LAYOUT IS TYPICAL FOR LANES 9-15.
4. LIGHT POLE CONTAINS TWO HALOGEN AND TWO INCANDESCENT FLOOD LIGHTS.
5. FIBER TO THE FIRST TARGET MAY BE REPLACED WITH CAT5E, IF ALL DATA CIRCUIT RUNS FROM TOWER TO FIRST TARGET IN EACH CIRCUIT IS UNDER 90M (ENSURES THAT ONLY ONE TYPE OF CABLING EITHER FIBER OPTICS OR COPPER NETWORK CABLING ENTERS THE DATA TERMINATION RACK). DISTANCE BETWEEN TARGET EMPLACEMENTS IS LESS THAN 90M ALLOWING ALL OTHER RUNS TO BE SHIELDED CAT5E OR BETTER NETWORK CABLING.
6. CABLING SHOULD ENTER AND EXIT THE SIDE OR THE REAR OF EACH TARGET EMPLACEMENT. CABLING IS SHOWN ENTERING FRONT OF TARGET FOR DRAWING CLARITY ONLY.

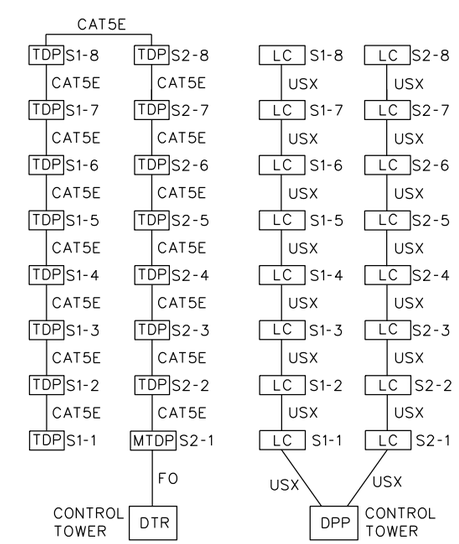
NOTES TO DESIGNER:

1. LAYOUT SHOWN IS FOR TYPICAL CPMPQC. ACTUAL LAYOUT OF TRENCHING MUST BE COORDINATED AROUND EXISTING ENVIRONMENTAL AND UXO CONDITIONS.
2. CONDUCTOR SIZING MUST BE VALIDATED USING TARGET FEEDER VOLTAGE DROP CALCULATOR. CALCULATOR CAN BE FOUND ON RANGE DESIGN GUIDE.
3. CAT5E CABLE MUST HAVE AN INSTALLED LENGTH LESS THAN 295'. IF DATA CABLE LENGTH WILL EXCEED LIMIT FIBER OPTIC CABLE MUST BE INSTALLED.
4. TO MINIMIZE TRENCHING, COLLOCATE POWER AND DATA CABLES WHERE POSSIBLE.
5. THE DESIGNER MUST PROVIDE A COMPLETE SITE DRAWING, A COMPLETE DATA ONE-LINE DIAGRAM, AND A COMPLETE SECONDARY POWER ONE-LINE DIAGRAM AS PART OF THE DESIGN DOCUMENTS FOR SPECIFIC PROJECTS. SAMPLE DIAGRAMS OR PLANS ARE NOT ACCEPTABLE.

POWER AND DATA PLAN
NOT TO SCALE

LEGEND

	SIT (STATIONARY INFANTRY TARGET)
LMX	LIMIT MARKER, X IS A REPRESENATIVE NUMBER.
USX(Y)	DIRECT BURIED 3/C POWER CABLE - X INDICATES SIZE IN AWG. (Y) INDICATES NUMBER OF 3/C CABLE IN TRENCH. (Y) NOT SHOWN FOR SINGLE 3/C CABLE.
FOX	DIRECT BURIED FIBER OPTIC CABLE - X INDICATES NUMBER OF 6-STRAND CABLES. X NOT SHOWN FOR SINGLE 6-STRAND.
CAT5E	DIRECT BURIED SHIELDED CAT5E NETWORK CABLE.
MX	DIRECT BURIED POWER FOR RANGE LIMIT MARKER. X INDICATES SIZE IN AWG.
DTR	DATA TERMINATION RACK
MTDP	MASTER TARGET DATA PANEL
TDP	TARGET DATA PANEL
DPP	DISTRIBUTION POWER PANEL
LC	TARGET EMPLACEMENT LOAD CENTER



SAMPLE DATA ONE-LINE

SAMPLE POWER ONE-LINE

US Army Corps of Engineers

Rev.	Description	Date	Approved
*			

Date: | Rev.
Designed by: | Date by: | Ckd by: | Design file no.
Reviewed by: | Drawing code:
Submitted by: | File name: | Plot scale: | Plot date:

U. S. ARMY ENGINEERING AND SUPPORT CENTER, HUNTSVILLE
HUNTSVILLE, ALABAMA

30 APR, 2013

RANGE AND TRAINING LAND PROGRAM
STANDARD DESIGN MANUAL

COMBAT PISTOL - MILITARY POLICE QUALIFICATION COURSE
ELECTRICAL POWER AND DATA LAYOUT

Sheet reference number:
PQC-E-1

Sheet of