










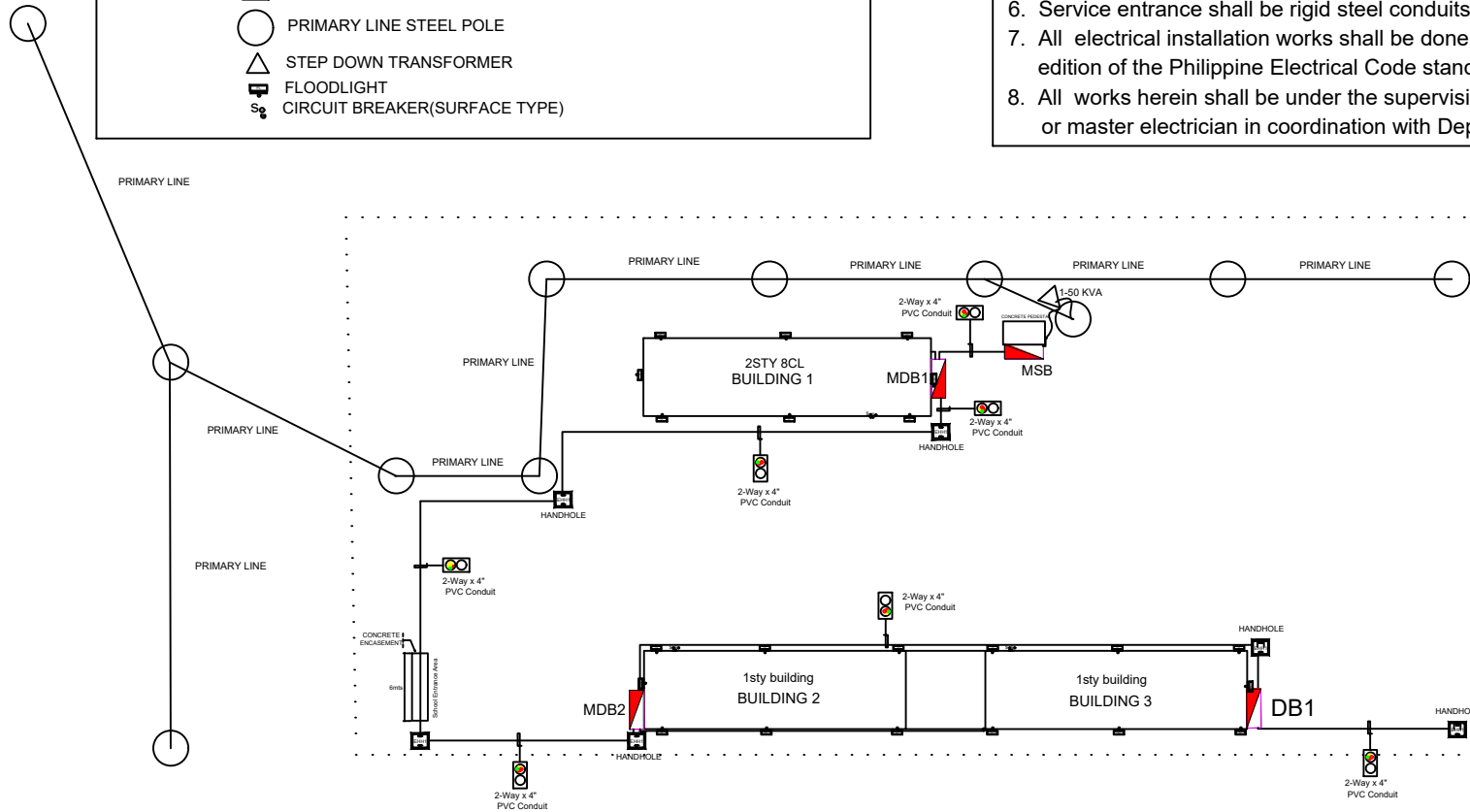
SITE DEVELOPMENT PLAN


LEGEND:

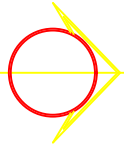
-  MSB- MAIN SWITCH BOARD
-  MDB- MAIN DISTRIBUTION BOARD
-  DB- DISTRIBUTION BOARD
-  ELECTRICAL HANDHOLE
-  2 WAY 4" PVC CONDUIT WITH 3 AC LINE WIRES AND 1 FOR GROUNDING
-  PRIMARY LINE STEEL POLE
-  STEP DOWN TRANSFORMER
-  FLOODLIGHT
-  CIRCUIT BREAKER(SURFACE TYPE)

Note:

1. All distribution transformer shall be brandnew and transformer test attached upon delivery.
2. All outdoor panel enclosures shall be NEMA 3R and NEMA 4X for salty air area.
3. Minimum protection capacity for small circuit breaker shall be 5 KAIC.
4. All non-current carrying metallic electrical installation shall be grounded.
5. All electrical materials/equipments shall be brandnew and approved type for installation, location and purpose.
6. Service entrance shall be rigid steel conduits.
7. All electrical installation works shall be done in accordance with the provision of the latest edition of the Philippine Electrical Code standard, requirements and recommendation.
8. All works herein shall be under the supervision of the duly licensed electrical engineer or master electrician in coordination with DepEd electrical engineers.

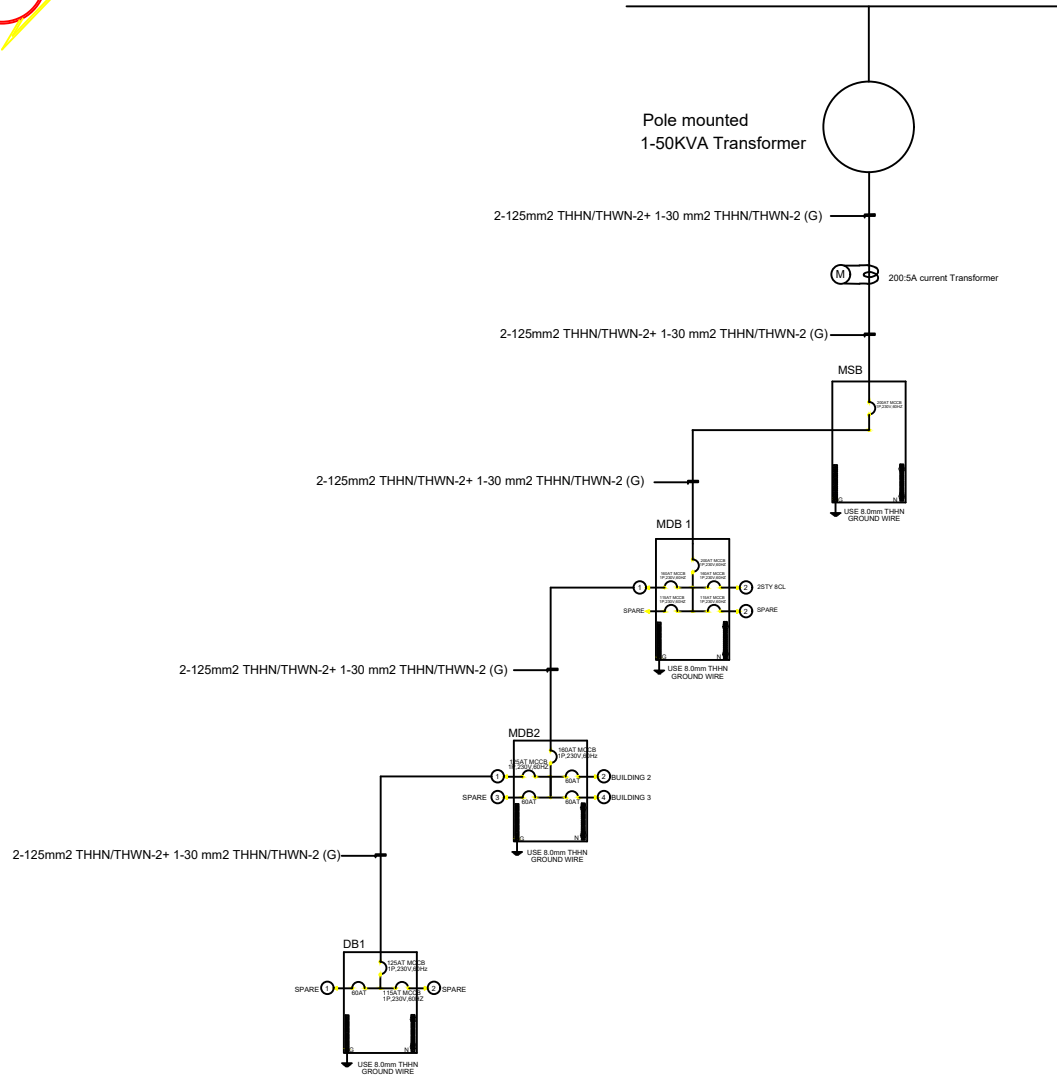


 DEPARTMENT OF EDUCATION DIVISION OF EL SALVADOR CITY	PREPARED BY:	SIGNED:	SEALED:	NOTED BY:	RECOMMENDING APPROVAL:	APPROVED BY:	PROJECT TITLE :
	ENGR. JASON A. MAULA TA-III	PEE	PRC No.: _____ VALIDITY DATE: _____ PTR No.: _____ DATE ISSUED: _____ TIN No.: _____ PLACE ISSUED: _____	ENGR. TONNIE MAE M. GONZALES DEPED DIVISION ENGINEER	ROLLY B. LABIS SGOD CHIEF	RANDOLPH B. TORTOLA, Ph.D., CESO V SCHOOLS DIVISION SUPERINTENDENT	UP-GRADING & MODERNIZATION ELECTRIFICATION PROJECT LOCATION : HIMAYA NATIONAL HIGH SCHOOL




SINGLE LINE DIAGRAM

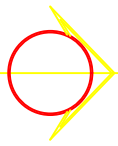
PRIMARY LINE



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SCHEDULE OF LOADS

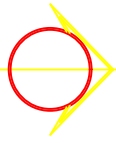
PANEL ID: M02		MAIN DISTRIBUTION BOARD#2										LOCATION					
SERVICE VOLTAGE		BUS RATING 200 AMPERES										MOUNTING					
220V, 1-Phase, 3-Wire, 60Hz.												SI CONCRETE					
Cable Size in mm ²												PEDESTAL					
DESCRIPTION	BREAKER	VOLT AMPERES			AMPS	CIRCUIT NO.	BUS CONNECTION			CIRCUIT AMP'S	VOLT AMPERES			BREAKER	DESCRIPTION	Cable Size in mm ²	
		Phase	A	B			C	A	B		C	Phase	A				B
2-125mm ² THHNTHWAL-2 (0)	MDB1	2	200	18,400	100.00	1											
			18,400														
			18,400														
PER PHASE VA			18,400	18,400	0												
BUS-A 18,400		Main Breaker Size		200 AT		LINE AMP'S		100 A		PHASE		1-Phase, 3-Wire, 60Hz.		KVA DEMAND		38.8 KVA	
BUS-B 18,400		Feeder Cable Entry		TOP		CIRCUIT		2-125mm ² THHNTHWAL-2		CIRCUIT		2-125mm ² THHNTHWAL-2		CIRCUIT		CIRCUIT	
BUS-C 0		Feeder Cable Size		0		CIRCUIT		0		CIRCUIT		0		CIRCUIT		CIRCUIT	
TOTAL LOAD IN VA		36,800		Source		TRANSFORMER											

PANEL ID: M02		MAIN DISTRIBUTION BOARD#2										LOCATION					
SERVICE VOLTAGE		BUS RATING 200 AMPERES										MOUNTING					
220V, 1-Phase, 3-Wire, 60Hz.												SI CONCRETE					
Cable Size in mm ²												PEDESTAL					
DESCRIPTION	BREAKER	VOLT AMPERES			AMPS	CIRCUIT NO.	BUS CONNECTION			CIRCUIT AMP'S	VOLT AMPERES			BREAKER	DESCRIPTION	Cable Size in mm ²	
		Phase	A	B			C	A	B		C	Phase	A				B
2-125mm ² THHNTHWAL-2 (0)	MDB2	2	125	11,000	100.00	1											
			11,000														
			11,000														
			11,000														
PER PHASE VA			11,000	11,000	0												
BUS-A 22,000		Main Breaker Size		100 AT		LINE AMP'S		100 A		PHASE		1-Phase, 3-Wire, 60Hz.		KVA DEMAND		38.7 KVA	
BUS-B 22,000		Feeder Cable Entry		BOTTOM		CIRCUIT		2-125mm ² THHNTHWAL-2		CIRCUIT		2-125mm ² THHNTHWAL-2		CIRCUIT		CIRCUIT	
BUS-C 0		Feeder Cable Size		0		CIRCUIT		0		CIRCUIT		0		CIRCUIT		CIRCUIT	
TOTAL LOAD IN VA		66,100		Source		MDB 1											

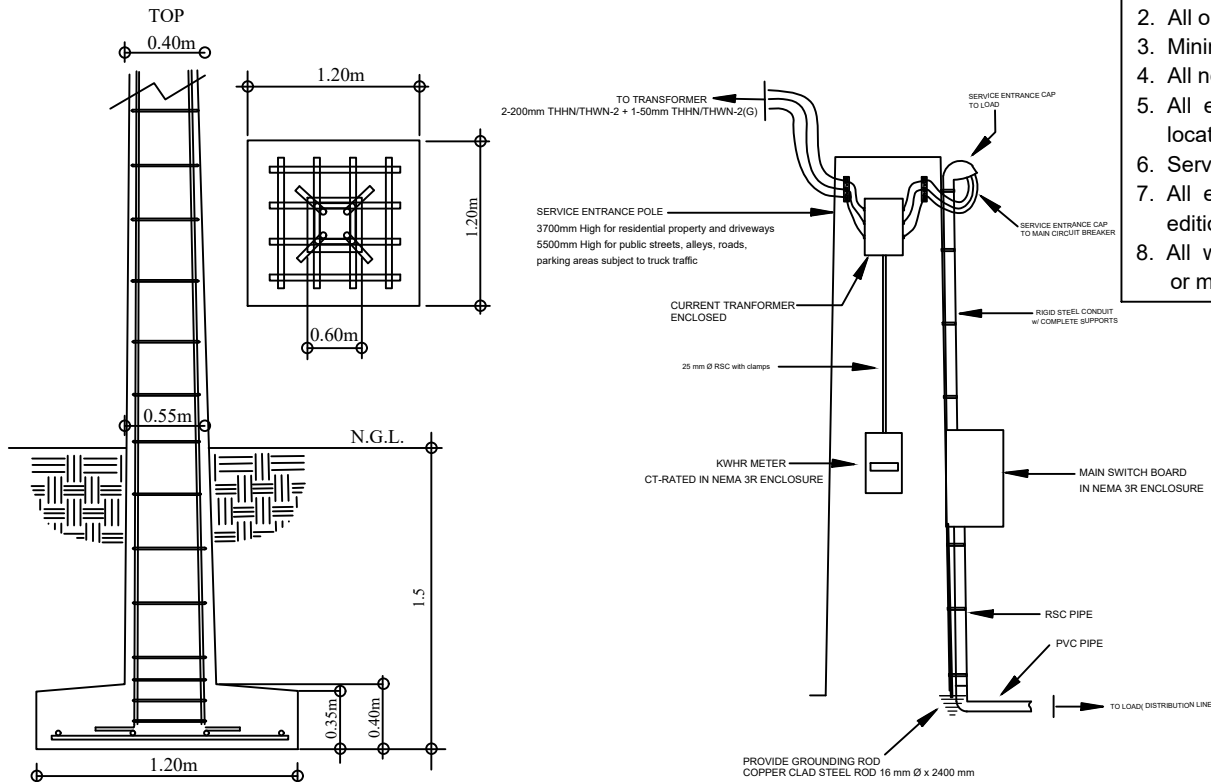
PANEL ID: M01		MAIN DISTRIBUTION BOARD#1										LOCATION					
SERVICE VOLTAGE		BUS RATING 200 AMPERES										MOUNTING					
220V, 1-Phase, 3-Wire, 60Hz.												SI CONCRETE					
Cable Size in mm ²												PEDESTAL					
DESCRIPTION	BREAKER	VOLT AMPERES			AMPS	CIRCUIT NO.	BUS CONNECTION			CIRCUIT AMP'S	VOLT AMPERES			BREAKER	DESCRIPTION	Cable Size in mm ²	
		Phase	A	B			C	A	B		C	Phase	A				B
2-125mm ² THHNTHWAL-2 (0)	MDB2	2	100	14,720	125.00	1											
			14,720														
			14,720														
			14,720														
PER PHASE VA			29,440	29,440	0												
BUS-A 58,740		Main Breaker Size		200 AT		LINE AMP'S		100 A		PHASE		1-Phase, 3-Wire, 60Hz.		KVA DEMAND		48.3 KVA	
BUS-B 58,740		Feeder Cable Entry		BOTTOM		CIRCUIT		2-125mm ² THHNTHWAL-2		CIRCUIT		2-125mm ² THHNTHWAL-2		CIRCUIT		CIRCUIT	
BUS-C 0		Feeder Cable Size		0		CIRCUIT		0		CIRCUIT		0		CIRCUIT		CIRCUIT	
TOTAL LOAD IN VA		109,880		Source		MDB											

PANEL ID: M01		MAIN DISTRIBUTION BOARD#1										LOCATION					
SERVICE VOLTAGE		BUS RATING 200 AMPERES										MOUNTING					
220V, 1-Phase, 3-Wire, 60Hz.												SI CONCRETE					
Cable Size in mm ²												PEDESTAL					
DESCRIPTION	BREAKER	VOLT AMPERES			AMPS	CIRCUIT NO.	BUS CONNECTION			CIRCUIT AMP'S	VOLT AMPERES			BREAKER	DESCRIPTION	Cable Size in mm ²	
		Phase	A	B			C	A	B		C	Phase	A				B
2-125mm ² THHNTHWAL-2 (0)	MDB2	2	60	6,600	48.00	1											
			6,600														
			6,600														
			6,600														
PER PHASE VA			13,200	13,200	0												
BUS-A 16,100		Main Breaker Size		125 AT		LINE AMP'S		100 A		PHASE		1-Phase, 3-Wire, 60Hz.		KVA DEMAND		34.2 KVA	
BUS-B 16,100		Feeder Cable Entry		BOTTOM		CIRCUIT		2-125mm ² THHNTHWAL-2		CIRCUIT		2-125mm ² THHNTHWAL-2		CIRCUIT		CIRCUIT	
BUS-C 0		Feeder Cable Size		0		CIRCUIT		0		CIRCUIT		0		CIRCUIT		CIRCUIT	
TOTAL LOAD IN VA		32,200		Source		MDB2											

 DEPARTMENT OF EDUCATION DIVISION OF EL SALVADOR CITY	PREPARED BY:	SIGNED:	SEALED:	NOTED BY:	RECOMMENDING APPROVAL:	APPROVED BY:	PROJECT TITLE :
	ENGR. JASON A. MAULA	PEE	PRC No.: _____ PTR No.: _____ TIN No.: _____	ENGR. TONNIE MAE M. GONZALES	ROLLY B. LABIS	RANDOLPH B. TORTOLA, Ph.D., CESO V	UP-GRADING & MODERNIZATION ELECTRIFICATION PROJECT
	TA-III		VALIDITY DATE: _____ DATE ISSUED: _____ PLACE ISSUED: _____	DEPED DIVISION ENGINEER	SCOD CHIEF	SCHOOLS DIVISION SUPERINTENDENT	LOCATION : HIMAYA NATIONAL HIGH SCHOOL




SITE WORKS DETAILS PLAN



Note:

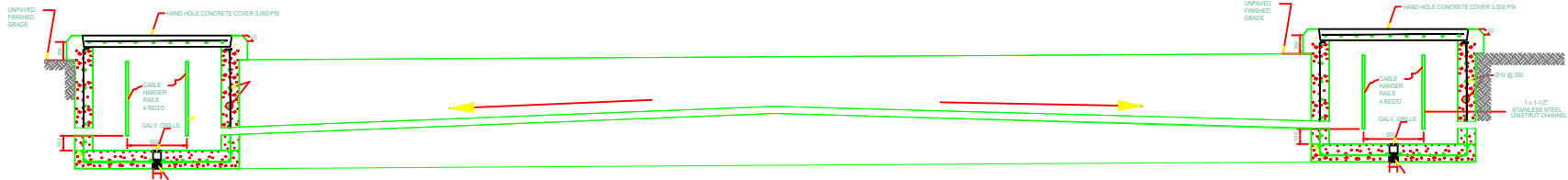
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 DEPARTMENT OF EDUCATION DIVISION OF EL SALVADOR CITY	PREPARED BY: ENGR. JASON A. MAULA TA-III	SIGNED: 	SEALED: PRC No.: _____ VALIDITY DATE: _____ PTR No.: _____ DATE ISSUED: _____ TIN No.: _____ PLACE ISSUED: _____ PEE	NOTED BY: ENGR. TONNIE MAE M. GONZALES DEPED DIVISION ENGINEER	RECOMMENDING APPROVAL: ROLLY B. LABIS SGOD CHIEF	APPROVED BY: RANDOLPH B. TORTOLA, Ph.D., CESO V SCHOOLS DIVISION SUPERINTENDENT	PROJECT TITLE : UP-GRADING & MODERNIZATION ELECTRIFICATION PROJECT LOCATION : HIMAYA NATIONAL HIGH SCHOOL
	DIVISION OF EL SALVADOR CITY						

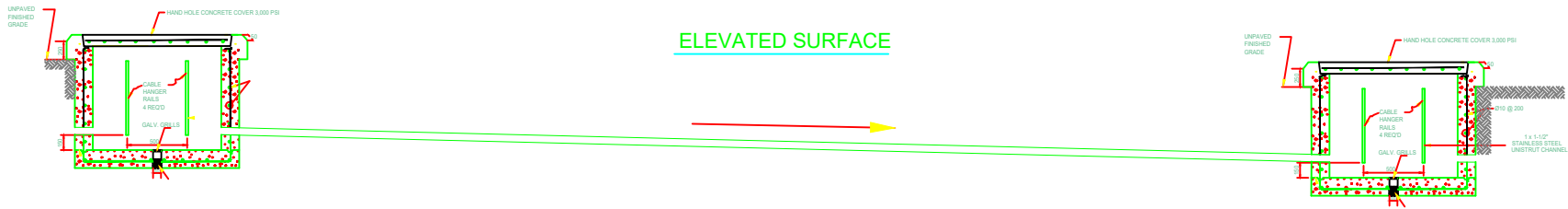


SITE WORKS DETAILS PLAN


PLANE SURFACE

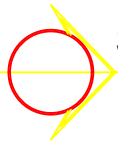


ELEVATED SURFACE



DUCT PROFILE DETAILS (TYPICAL)

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	TA-III		PRC No.: _____ VALIDITY DATE: _____ PTR No.: _____ DATE ISSUED: _____ TIN No.: _____ PLACE ISSUED: _____	DEPED DIVISION ENGINEER	SGOD CHIEF	SCHOOLS DIVISION SUPERINTENDENT	LOCATION : HIMAYA NATIONAL HIGH SCHOOL



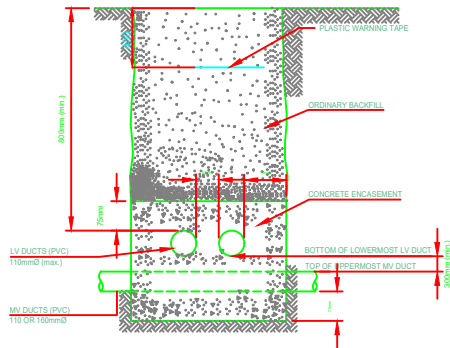
SITE WORKS DETAILS PLAN

BURIED METHODS

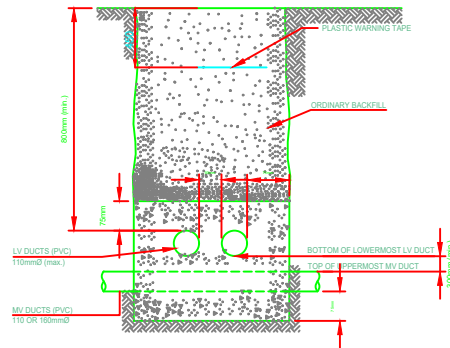
MINIMUM CABLE & DUCT SPACING DIMENSIONS (SEE NOTE 13)			
SYSTEM VOLTAGE	a	b	c
600 & BELOW	75	50	800 mm
ABOVE 600	75	50	1000 mm

HANDHOLE TYPE

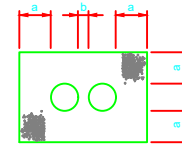
TYPE	INSIDE DIMENSION			MAX. NO. DUCTS
	LENGTH L-mm	WIDTH W-mm	DEPTH D-mm	
A	600	400	1100	4-50mm
B	750	600	1200	4-75mm
C	800	800	1200	6-75mm
D	900	600	1200	4-75mm
E	1100	800	1400	6-75mm



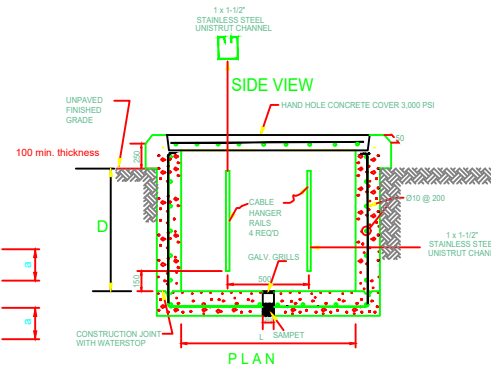
LOW VOLTAGE AND MEDIUM VOLTAGE DUCTS CROSSING DETAILS (TYPICAL)



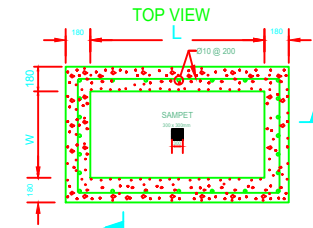
DIRECT BURIAL CABLE (LOW VOLTAGE) TRENCH DETAIL



2 - WAY



HANDHOLE HANGER RAILS DETAIL



HANDHOLE REINFORCEMENT DETAIL



PREPARED BY:
ENGR. JASON A. MAULA
TA-III

SIGNED:
PEE

SEALED:
PRC No.: _____ VALIDITY DATE: _____
PTR No.: _____ DATE ISSUED: _____
TIN No.: _____ PLACE ISSUED: _____

NOTED BY:
ENGR. TONNIE MAE M. GONZALES
DEPED DIVISION ENGINEER

RECOMMENDING APPROVAL:
ROLLY B. LABIS
SODD CHIEF

APPROVED BY:
RANDOLPH B. TORTOLA, Ph.D., CESO V
SCHOOLS DIVISION SUPERINTENDENT

PROJECT TITLE :
UP-GRADING & MODERNIZATION
ELECTRIFICATION PROJECT
LOCATION : HIMAYA NATIONAL HIGH SCHOOL