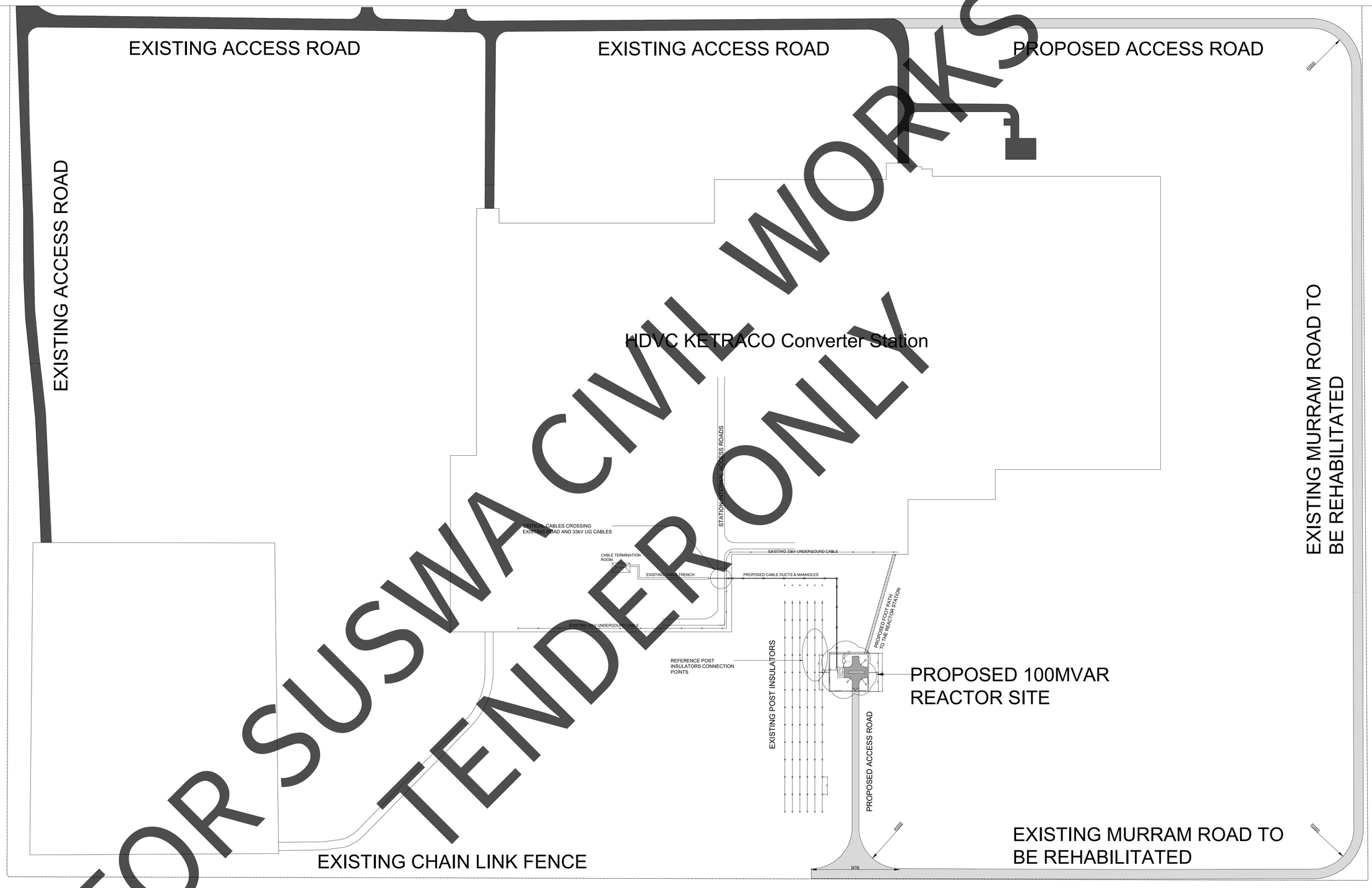


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NOTES

ALL DIMENSIONS TO BE READ AND NOT TO BE SCALED

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GENERAL NOTES:

1. THE MINIMUM 28 DAYS CONCRETE STRENGTH SHOULD BE; COLUMN CLASS 25/30
2. REINFORCEMENT TO BE HIGH YIELD RIBBED ('T') BARS WITH MINIMUM TENSILE STRENGTH OF 500N/mm2
3. MINIMUM COVER TO MAIN REINFORCEMENT TO BE; PLINTH FOUNDATION = 50mm
4. MINIMUM LAPS ARE 50 x DIAMETER OF THE BAR
5. ALL REINFORCEMENT TO BE INSPECTED BY THE STRUCTURAL ENGINEER BEFORE CONCRETING
6. THE STRUCTURAL DRAWING TO BE READ IN CONJUNCTION WITH ARCHITECTURAL & M.E.P DRAWINGS
7. ALL FOUNDATIONS TO BE TAKEN DOWN TO FIRM BEARING STRATA TO ENGINEER'S APPROVAL.
8. FOUNDATIONS DESIGNED FOR ALLOWABLE BEARING PRESSURE OF 250 KN/m2

SPECIFIC NOTES:

THE SUBSTATION LEVEL ADOPTED FOR KPLC SHOULD BE AS FOLLOWS;

1. SWITCH YARD LEVEL SHOULD BE 500MM ABOVE AVERAGE ADJACENT GROUND LEVEL (TO AVOID FLOODING)
2. THE AVERAGE ROAD LEVEL SHOULD DRAIN WATER OUTSIDE THE SUBSTATION PREMISE.
3. TOP OF REACTOR LEVELS TO BE 500MM ABOVE SWITCH YARD

REVISIONS

No	DATE	DETAILS	Chd	Appd

CLIENT

KENYA POWER & LIGHTING COMPANY LTD AND KETRACO

LOCATION

400KV KETRACO SUSWA SUB-STATION

Project

PROPOSED 100 MVAR REACTOR STATION AT SUSWA 400 KV SUB-STATION

Description

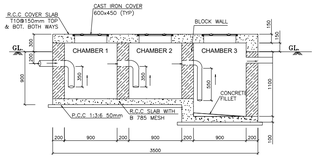
ACCESS ROAD AND REACTOR LOCATION

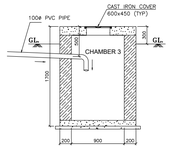
Designed by:	Drawn by:	Checked & Appoved by:
	DUNCAN KONES	JARED ARUDHI

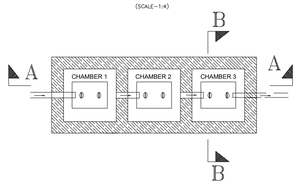
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1:25/50/75/100	OCTOBER, 2026.

Project No	Drawing. Number: SUSWA 01

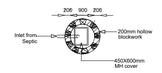
OIL INTERCEPTOR & SOAK PIT



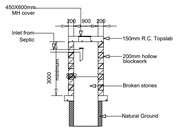




SOAK PIT

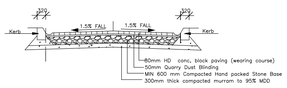


SOAK PIT : PLAN VIEW
SCALE 1:50

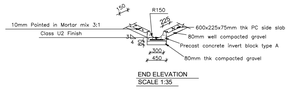


SOAK PIT : SECTION
SCALE 1:50

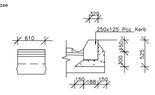
ACCESS ROAD

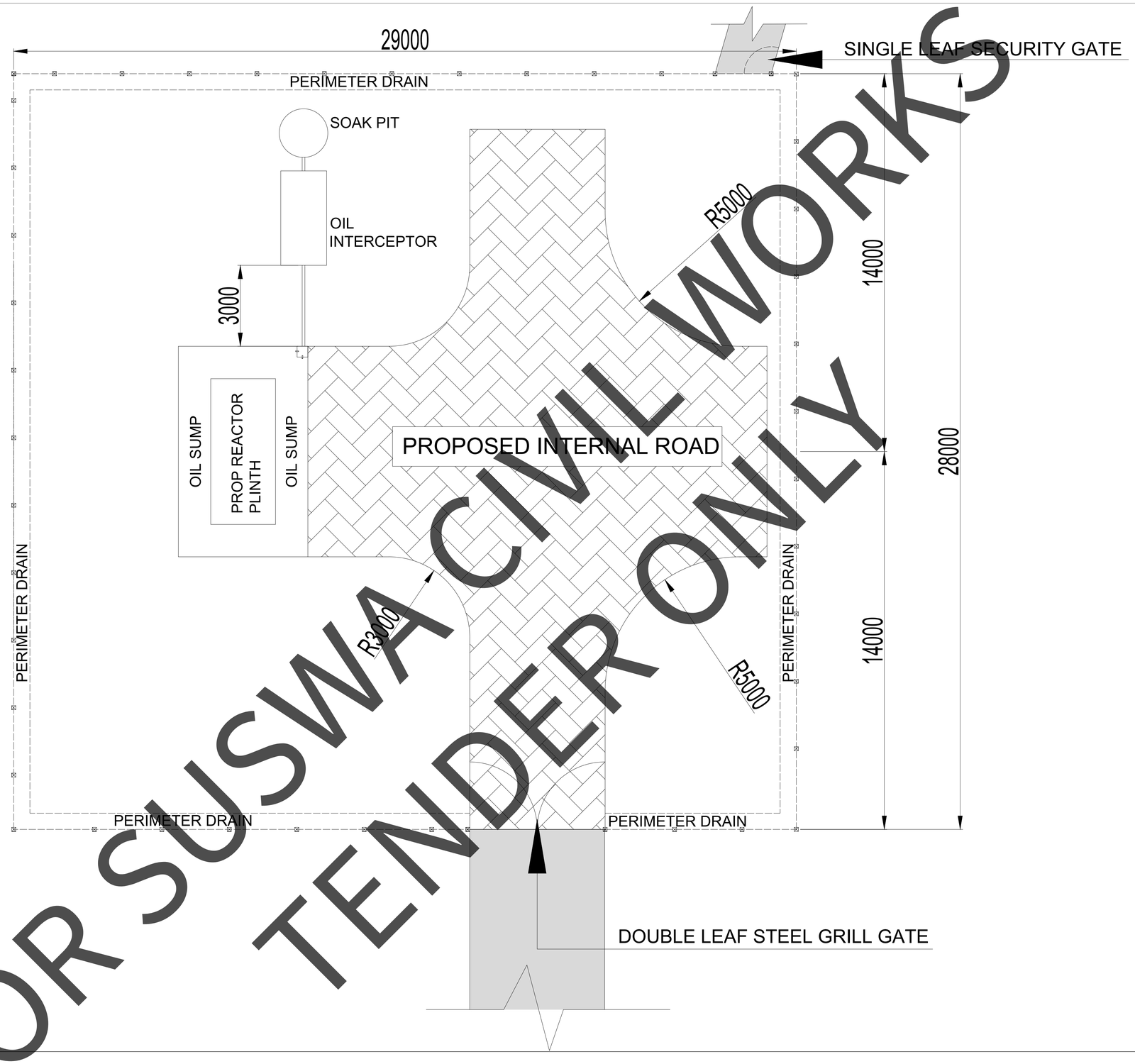


TYPICAL SECTION THROUGH
ACCESS ROAD
SCALE 1:50



END ELEVATION
SCALE 1:35


320
610
250x125, Pcc. Kerb
320
320
320



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GENERAL NOTES:

1:THE MINIMUM 28 DAYS CONCRETE STRENGTH SHOULD BE;
COLUMN CLASS 25/30
WATER TANK & LIFT SHAFT/SHEAR WALLS CLASS 25/30
ALL OTHER STRUCTURAL MEMBERS CLASS 20/25

2:REINFORCEMENT TO BE HIGH YIELD RIBBED ('T') BARS WITH MINIMUM TENSILE STRENGTH OF 500N/mm2

3: MINIMUM COVER TO MAIN REINFORCEMENT TO BE;

COLUMNS	=40mm
CONCRETE WALLS	=40mm
FLOOR BEAMS	=25mm
FLOOR SLABS	=20mm
STAIRCASE	=20mm

4: MINIMUM LAPS ARE 50 x DIAMETER OF THE BAR

5: ALL REINFORCEMENT TO BE INSPECTED BY THE STRUCTURAL ENGINEER BEFORE CONCRETING

6: THE STRUCTURAL DRAWING TO BE READ IN CONJUNCTION WITH ARCHITECTURAL & M.E.P DRAWINGS

7: ALL FOUNDATIONS TO BE TAKEN DOWN TO FIRM BEARING STRATA TO ENGINEER'S APPROVAL.

8: FOUNDATIONS DESIGNED FOR ALLOWABLE BEARING PRESSURE OF 250 KN/m2

SPECIFIC NOTES:

THE SUBSTATION LEVEL ADOPTED FOR KPLC SHOULD BE AS FOLLOWS:

1. CONTROL BUILDING SHOULD BE 1 METER ABOVE SWITCH YARD LEVEL.

2. SWITCH YARD LEVEL SHOULD BE 600MM ABOVE AVERAGE ADJACENT GROUND LEVEL (TO AVOID FLOODING)

3. THE AVERAGE ROAD LEVEL SHOULD DRAIN WATER OUTSIDE THE SUBSTATION PREMISE.

4. TOP OF TRANSFORMER LEVELS TO BE 500MM ABOVE SWITCH YARD

NO.	DATE	REVISION	CHECKED	SIGN

CONSULTANTS:
KPLC & KETRACO

LOCATION
400KV KETRACO SUSWA SUB-STATION

Project
PROPOSED 100 MVAR REACTOR STATION
CIVIL WORKS

Description: CHAIN LINK FENCE AND GATES SITE PLAN

Designed by:	Drawn by:	Checked by:
	DUNCAN.C.KONES	JARED ARUDHI

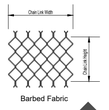
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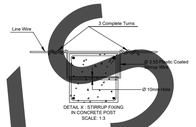
Project No | Drawing. Number: SUSWA 03

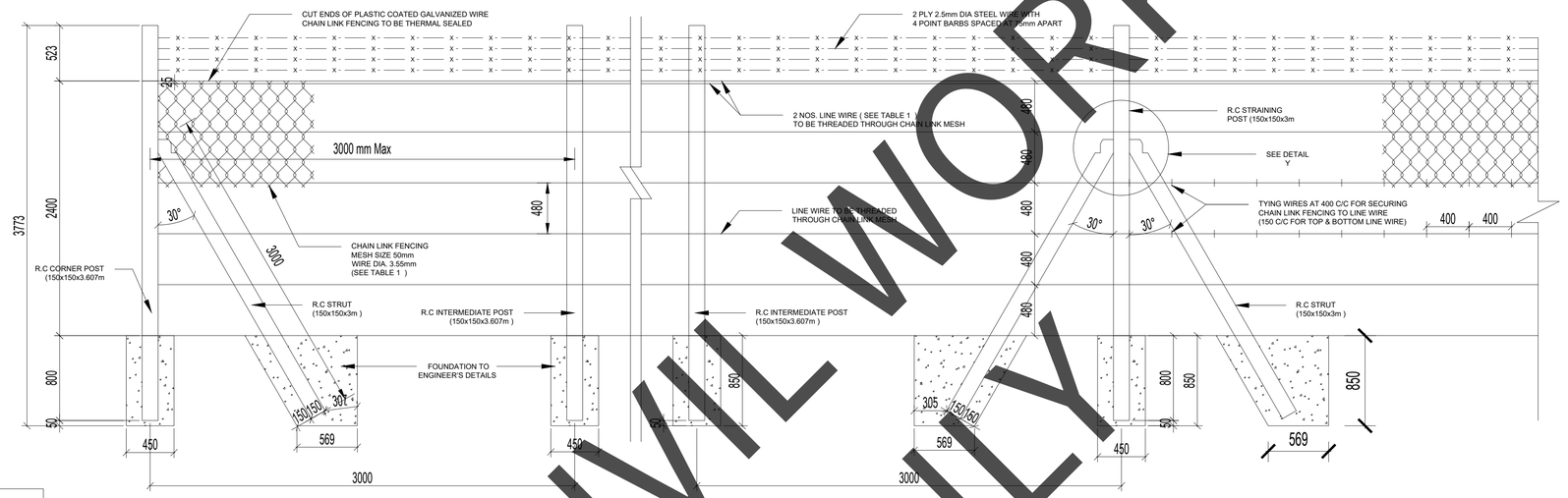
CHAIN LINK FENCE DETAILS

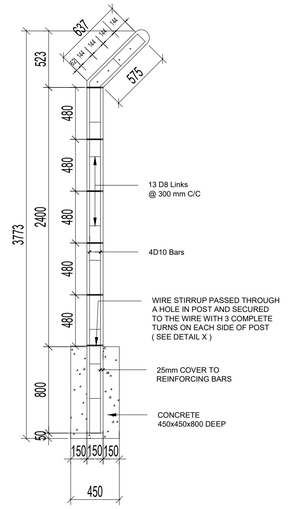


BARBED SELVEDGE - TOP DETAIL





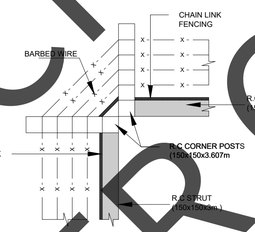




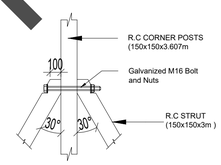
CONCRETE POSTS

PLASTIC COATED GALVANISED WIRE CHAIN LINK FENCING		
	OUTSIDE DIA. mm	CORE DIA. mm
CHAIN LINK FENCING	4.75	3.55
LINE WIRE	4.75	3.55
STIRRUP WIRE	3.55	2.50
TYING WIRE	2.00	1.40

TABLE 1 : SIZES OF WIRES



ARRANGEMENT OF POSTS AT CORNER



DETAIL Y : CORNER AND STRAINING POSTS BRACING

NOTES

1. EXCEPT WHERE OTHERWISE STATED, THE CHAIN LINK FENCE SHALL GENERALLY BE IN ACCORDANCE WITH B.S. 1722 PART 10 AND B.S. 4102.

2. THE CHAIN LINK FENCING SHALL BE OF 50mm WIRE MESH TO A NET GAUGE OF 3.55mm DIA. AND GALVANIZED.

3. ALL POSTS SHALL BE SPACED AT NOT MORE THAN 3 METERS APART.

4. STRAINING POSTS SHALL BE SPACED EQUALLY AND PROVIDED AT ALL ENDS AND CORNERS, AT CHANGES IN DIRECTION OR ACUTE VARIATIONS IN LEVEL AND AT INTERVALS NOT EXCEEDING EVERY TEN POST IN STRAIGHT LENGTHS OF FENCE THAT IS 30 METERS.

5. ALL BOLTS, NUTS, STAPLES AND WASHERS SHALL BE PLATED OR COATED WITH STAINLESS METAL.

6. LINE WIRE SHALL BE TO A NET GAUGE OF 3.55mm DIA, AND GALVANIZED.

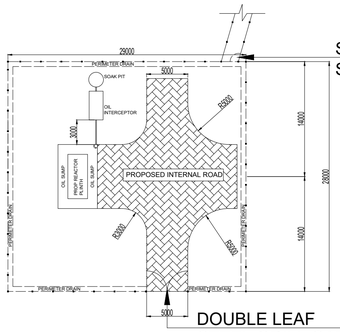
7. THE BARBED WIRE SHALL CONSIST OF 2 PLY DIA. 2.5mm STEEL WIRE WITH 4 POINT BARBS SPACED AT 75mm APART AND GALVANIZED.

8. ALL LINE WIRES, CHAIN LINK FENCING AND BARBED WIRES SHALL BE PROPERLY STRAINED.

9. ALL STRUCTURES ABOVE GROUND TO BE AT LEAST 2.3 METERS CLEAR OFF ALL BOUNDARIES.

10. ALL CONCRETE TO BE CLASS 25 AND ABOVE UNLESS OTHERWISE SPECIFIED.

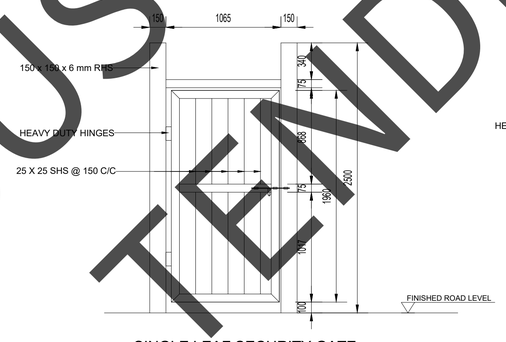
CHAIN LINK FENCE & SECURITY GATES SITE PLAN



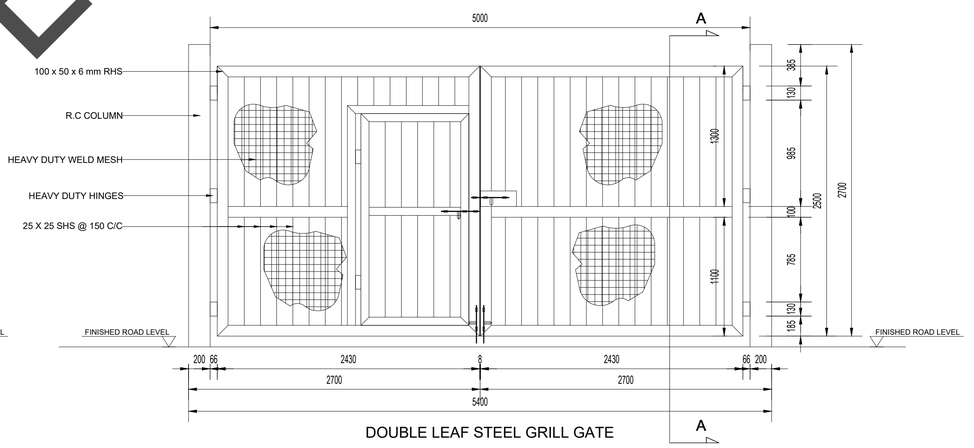
SINGLE LEAF SECURITY GATE

DOUBLE LEAF STEEL GRILL GATE

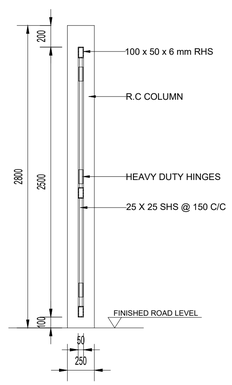
GATE DETAILS



SINGLE LEAF SECURITY GATE



DOUBLE LEAF STEEL GRILL GATE



SECTION A- A

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NO.	DATE	REVISION	CHECKED	SIGN

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CONSULTANTS:
KPLC & KETRACO

LOCATION
400KV KETRACO SUSWA SUB-STATION

Project
PROPOSED 100 MVAR REACTOR STATION
CIVIL WORKS

Description: CHAINLINK FENCE AND GATE DETAILS

Designed by:	Drawn by:	Checked by:
	DUNCAN.C.KONES	JARED ARUDHI

Scale 1:25/50/75/100 | Date OCTOBER, 2026.

Project No | Drawing. Number: SUSWA 04

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