



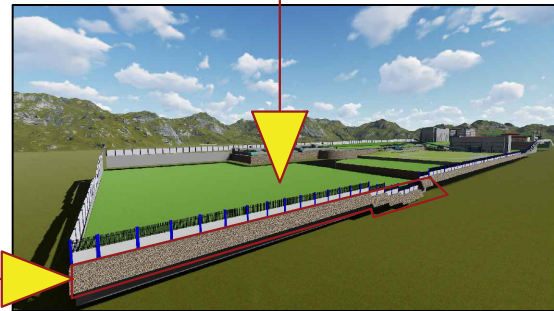
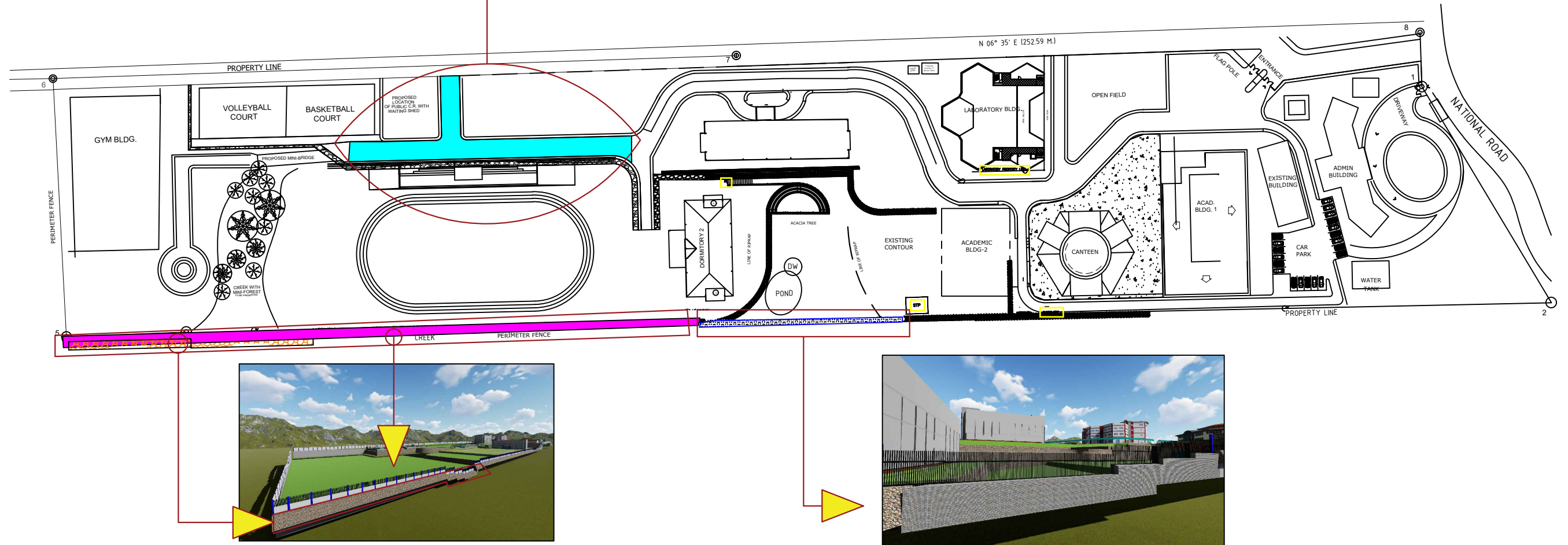
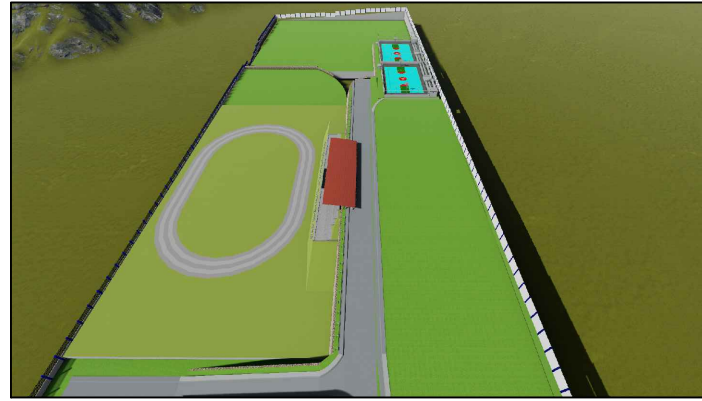


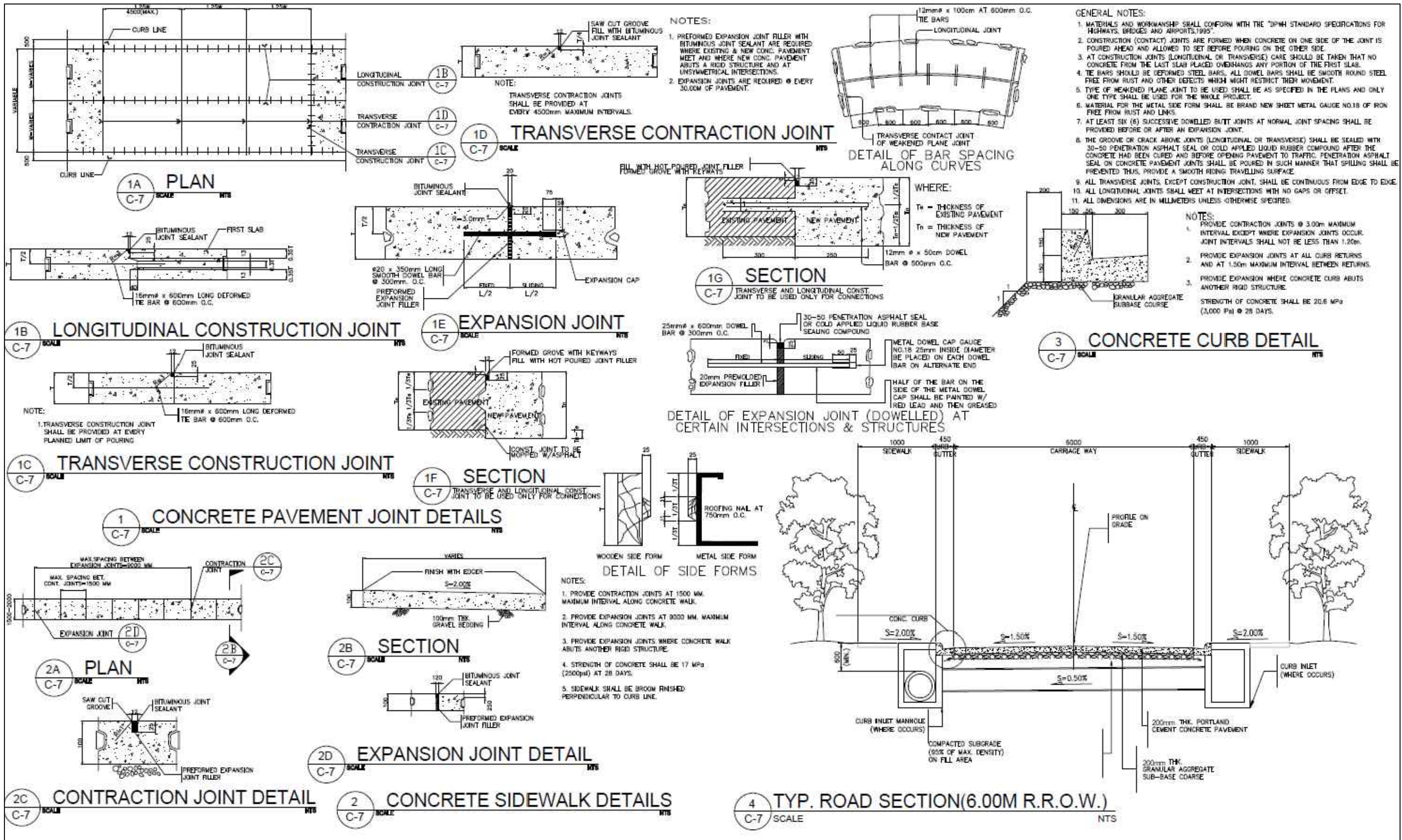


-  160 Im ROAD NETWORK
-  240 Im HALF CONCRETE, HALF STEEL PERIMETER FENCE
-  70 Im RETAINING WALL
-  115 Im SLOPE PROTECTION

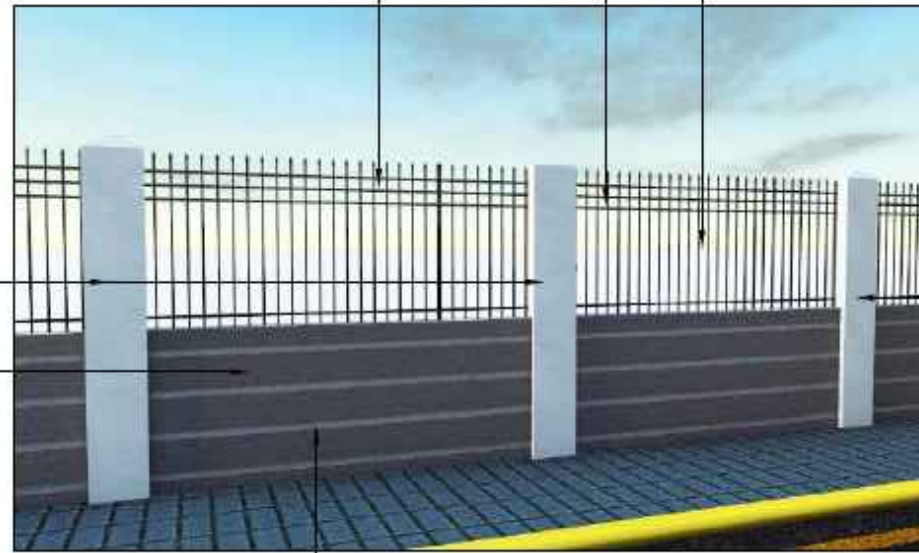


PHILIPPINE SCIENCE HIGH SCHOOL - MIMAROPA REGION CAMPUS  
**SITE DEVELOPMENT PLAN**  
 SCALE: NTS

|   |   |  |  |  |                 |   |     |  |   |
|---|---|--|--|--|-----------------|---|-----|--|---|
| <br>REPUBLIC OF THE PHILIPPINES<br>DEPARTMENT OF SCIENCE AND TECHNOLOGY<br><b>PHILIPPINE SCIENCE HIGH SCHOOL</b><br>MIMAROPA REGION CAMPUS<br>BRGY. RIZAL, ODIONGAN, ROMBLON<br><br><small>Certificate No. SCP000833Q</small> | PROJECT TITLE:  | PREPARED BY:   | RECOMMENDING APPROVAL:   | APPROVED:  | SHEET CONTENTS: | SHEET NO.:  |     |  |   |
|   | <b>CONSTRUCTION OF<br/>         SITE DEVELOPMENT 2021</b> | <b>KEN JAMES F. FADRIQUELA</b><br><small>RESIDENT CIVIL ENGINEER</small> | <b>MERIAM F. FALLAR</b><br><small>ADMINISTRATIVE OFFICER V</small> | <b>EDWARD C. ALBARACIN</b><br><small>CAMPUS DIRECTOR III</small> | AS SHOWN        | <table border="1" style="margin: auto;"> <tr><td colspan="2" style="text-align: center;">SDP</td></tr> <tr><td style="text-align: center;">0</td><td style="text-align: center;">1</td></tr> </table> | SDP |  | 0 |
| SDP   |   |  |  |  |                 |   |     |  |   |
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GRILL WORKS  
ON STEEL FENCE  
1" X 1" X 5MM  
THK ANGLE BAR

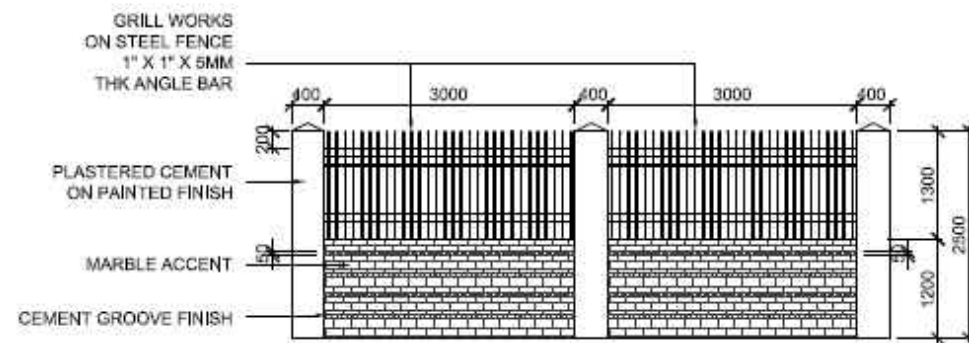
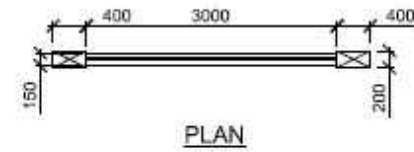


PLASTERED  
CEMENT ON  
PAINTED FINISH  
(The Paint Color  
must be approved  
by the End-User)

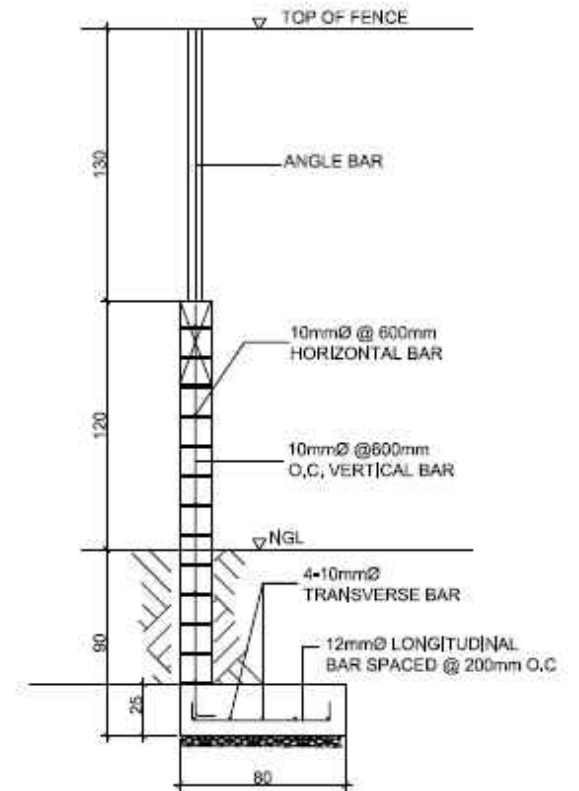
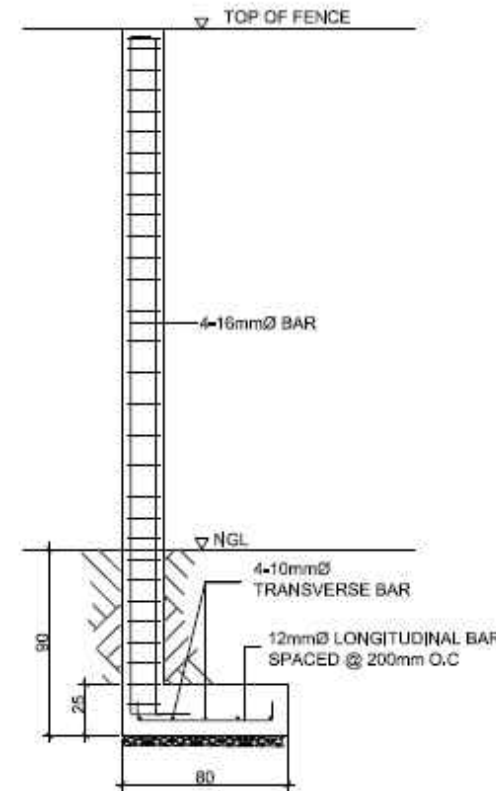
PLASTERED CEMENT  
ON PAINTED FINISH



1 PERIMETER FENCE PERSPECTIVE  
A-2 N T S



2 PERIMETER FENCE ELEVATION  
A-2 SCALE: 1:50 M



3 PERIMETER FENCE DETAIL  
A-2 SCALE: 1:20 M



REPUBLIC OF THE PHILIPPINES  
DEPARTMENT OF SCIENCE AND TECHNOLOGY  
PHILIPPINE SCIENCE HIGH SCHOOL  
MIMAROPA REGION CAMPUS  
BRGY. RIZAL, ODIONGAN, ROMBLON



PROJECT TITLE:

CONSTRUCTION OF  
SITE DEVELOPMENT 2021

PREPARED BY:

KEN JAMES F. FADRIQUELA  
RESIDENT CIVIL ENGINEER

RECOMMENDING APPROVAL:

MERIAM F. FALLAR  
ADMINISTRATIVE OFFICER V

APPROVED:

EDWARD C. ALBARACIN  
CAMPUS DIRECTOR III

SHEET CONTENTS:

AS SHOWN

SHEET NO.:

SDP

0 3

**A. GENERAL NOTES:**

1. IN THE INTERPRETATION OF THESE DRAWINGS, INDICATED DIMENSIONS SHALL GOVERN AND DISTANCES OR SIZES SHALL NOT BE SCALED FOR CONSTRUCTION PURPOSES.
2. THE CONTRACTOR SHALL COORDINATE WITH THE AR, ME, SE, EE, AND OTHER UTILITIES AND EQUIPMENT PLANS FOR THE EXACT SIZE, NUMBER AND LOCATIONS OF ALL SLEEVES OR OPENINGS THRU FLOOR SLABS, BEAMS AND WALLS AND ALSO BUILDING DIMENSIONS.
3. ALL REINFORCED CONCRETE WORK SHALL BE DONE IN ACCORDANCE WITH THE ACI - 318 - 14 BUILDING CODE, AND ALL STRUCTURAL STEEL WORK SHALL BE DONE IN ACCORDANCE WITH AISC SPECIFICATIONS (LATEST EDITION) IN SO FAR AS THEY DO NOT CONFLICT WITH THE LOCAL BUILDING CODE REQUIREMENTS.
4. ALL SLABS, BEAMS, GIRDERS AND OTHER STRUCTURAL ELEMENTS WHICH ARE NOT INDICATED, DETAILED, DESIGNATED OR INADVERTENTLY OMITTED BUT ARE NECESSARY TO BE COORDINATED WITH ARCHITECTURAL AND OTHER ALLIED ENGINEERING PLANS AS WELL AS TO COMPLETE THE STRUCTURAL WORKS IN ACCORDANCE WITH THE INTENT OF THE PLANS AND SPECIFICATIONS SHALL BE BROUGHT UP DURING PRE-BIDS/MEETINGS/NEGOTIATIONS. IT IS UNDERSTOOD THAT THE CONTRACTOR HAS PROVIDED AND INCLUDED ALL THESE ITEMS IN THEIR BID.

**B. NOTES ON CONCRETE MIXES AND PLACING**

1. UNLESS OTHERWISE INDICATED IN PLANS OR NOTED IN THE SPECIFICATIONS THE MINIMUM 28-DAYS CYLINDER COMPRESSIVE STRENGTH OF CONCRETE  $f'_c$ , SHALL BE AS FOLLOWS:
 

|                        |                    |
|------------------------|--------------------|
| 1.1 FOUNDATION & WALLS | 28 MPa. (4000 psi) |
|------------------------|--------------------|
2. CONCRETE SHALL BE DEPOSITED IN ITS FINAL POSITION WITHOUT SEGREGATION, RE-HANDLING OR FLOWING. PLACING SHALL BE DONE PREFERABLY WITH BUGGIES, BUCKETS OR WHEEL BARROWS. NO CHUTES WILL BE ALLOWED EXCEPT TO TRANSFER CONCRETE FROM HOPPERS TO BUGGIES, WHEEL BARROWS OR BUCKETS, IN WHICH CASE, THEY SHALL NOT EXCEED SIX THOUSAND (6000mm) IN AGGREGATE LENGTH.
3. NO DEPOSITING OF CONCRETE SHALL BE ALLOWED WITHOUT THE USE OF VIBRATORS UNLESS AUTHORIZED IN WRITING BY THE STRUCTURAL ENGINEER AND ONLY FOR UNUSUAL CONDITIONS WHERE VIBRATION IS EXTREMELY DIFFICULT TO ACCOMPLISH.

**C. NOTES ON REINFORCING STEEL BARS**

1. ALL REINFORCING STEEL BARS SHALL BE NEW BILLET, HOT ROLLED, WELDABLE, DEFORMED BARS CONFORMING TO THE SPECIFICATIONS OF PNS 49: 1986 (ASTM 615) , AND ASTM A706 (GR. 60, WELDABLE) WHOSE GRADE IS SHOWN ON TABLE 1.
 

| GRADE                                | BAR DIAMETER               |
|--------------------------------------|----------------------------|
| GRADE 415 ( $f_y = 60 \text{ ksi}$ ) | 16, 20, 25, 28, 32 MM DIA. |
| GRADE 275 ( $f_y = 40 \text{ ksi}$ ) | 10, 12 MM DIA.             |
| GRADE 230 ( $f_y = 33 \text{ ksi}$ ) | SMALLER THAN 10 MM DIA.    |
2. THE SUPPLEMENTARY REQUIREMENTS OF WELDABLE DEFORMED REINFORCING BARS SHALL BE AS FOLLOWS:
  - 2.1 THE MAXIMUM YIELD STRENGTH OF WELDABLE BARS = 540 MPa.
  - 2.2 THE TENSILE STRENGTH SHALL NOT BE LESS THAN 1.25 TIMES THE ACTUAL YIELD STRENGTH.
3. ALL CONCRETE REINFORCEMENT SHALL BE DETAILED, FABRICATED, LABELED, SUPPORTED AND SPACED IN FORMS, SECURED IN THE REQUIRED LOCATION IN ACCORDANCE WITH THE PROCEDURES AND REQUIREMENTS OUTLINED IN THE LATEST EDITION OF THE BUILDING CODE AND THE MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES, ACI - 315.
4. ALL REINFORCING BARS SHALL BE CLEANED THOROUGHLY OF ALL LOOSE RUST, SOIL OR OTHER MATERIAL IMMEDIATELY PRIOR TO PLACING CONCRETE.
5. THE REQUIRED LENGTH OF LAP FOR TENSION SPLICES IS BASED ON THE DEVELOPMENT LENGTH,  $L_d$ , SHOWN IN TABLE 2 FOR RC BEAMS AND GIRDERS, ON THE FOLLOWING CLASSIFICATIONS :

| TENSION SPlice CLASSIFICATION | SPLICE LENGTH |
|-------------------------------|---------------|
| CLASS A                       | 1.0 $L_d$     |
| CLASS B                       | 1.3 $L_d$     |

6. TOP BARS ARE HORIZONTAL BARS WITH AT LEAST 300 mm OF CONCRETE CAST BELOW IT.

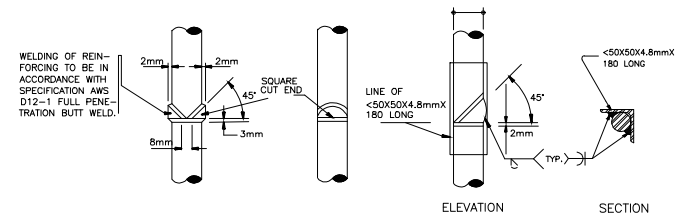
| BAR SIZE (mm) | $f'_c = 21 \text{ MPa}$<br>(3,000 psi) |             | $f'_c = 28 \text{ MPa}$<br>(4,000 psi) |             |
|---------------|--|-------------|--|-------------|
|               | TOP BARS (mm)                          | OTHERS (mm) | TOP BARS (mm)                          | OTHERS (mm) |
| 16#           | 800                                    | 600         | 700                                    | 525         |
| 20#           | 1090                                   | 840         | 1000                                   | 730         |

NOTE: FOR BUNDLE BARS (3 BUNDLES/4 BUNDLES) MULTIPLY ABOVE TABLE BY 1.3

7. THE REQUIRED LENGTH OF LAP FOR COMPRESSION SPLICES SHALL BE AS SHOWN IN TABLE 4.

| BAR SIZE (mm) | $f'_c = 21.0 \text{ MPa}$<br>(3,000 psi) | $f'_c = 28.0 \text{ MPa}$<br>(4,000 psi) |
|---------------|--|--|
| 16            | 420                                      | 390                                      |
| 20            | 540                                      | 510                                      |
| 25            | 720                                      | 600                                      |
| 28            | 810                                      | 720                                      |
| 32            | 900                                      | 780                                      |
| 36            | 990                                      | 900                                      |

8. A FULL WELDED SPLICES SHALL HAVE BARS BUTTED AND WELDED TO DEVELOP IN TENSION AT LEAST 125 PERCENT OF THE SPECIFIED YIELD STRENGTH  $f_y$  OF THE BAR. (SEE FIGURE 1a & 1b))

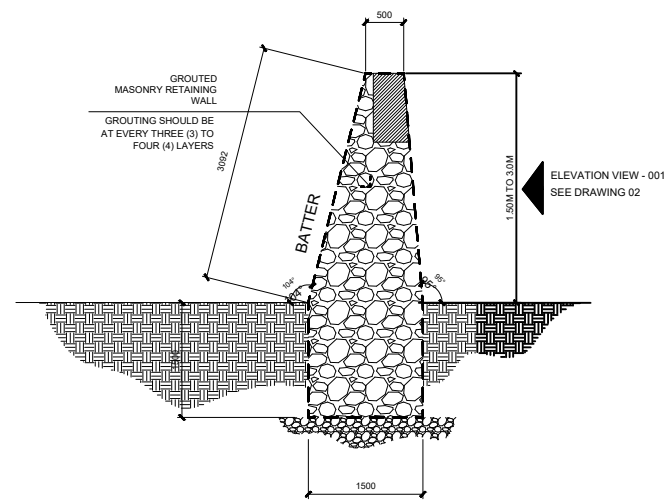


**FIGURE 1a** **FIGURE 1b**  
**TYPICAL WELDED SPLICE DETAILS FOR BARS 25# TO 36#**  
**FIGURE 1**

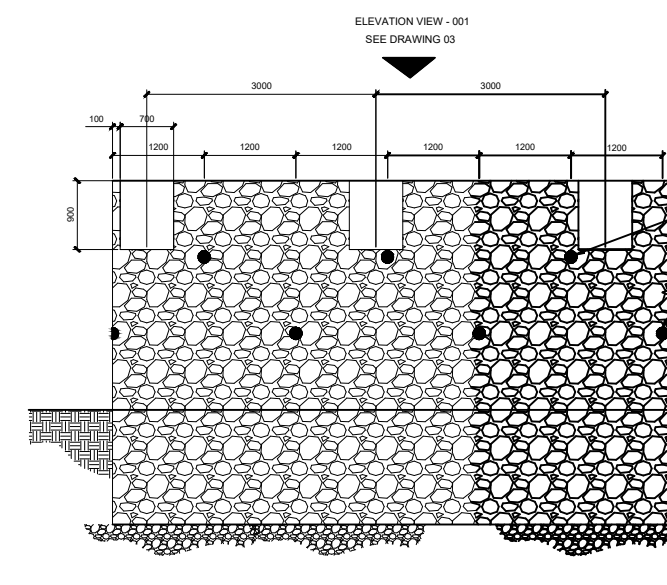
9. ALL WELDING OF REINFORCEMENT SHALL CONFORM TO THE PROVISIONS OF THE STRUCTURAL WELDING CODE-REINFORCING STEEL, AWS D1.4
10. A FULL MECHANICAL CONNECTION (REBAR SPLICER) SHALL DEVELOP IN TENSION OR COMPRESSION, AS REQUIRED, 125 PERCENT OF THE SPECIFIED YIELD STRENGTH  $f_y$  OF THE BAR. IF USED, SUBMIT SAMPLE FOR APPROVAL OF THE STRUCTURAL ENGINEER.
11. CLEAR CONCRETE COVER FOR REINFORCING BARS SHALL BE AS FOLLOWS:
  - 1) CONCRETE CAST AGAINST EARTH - 75 mm
  - 2) CONCRETE EXPOSED TO EARTH OR WEATHER-  
20 mm TO 36 mm BARS - 50 mm  
16 mm BARS AND SMALLER - 40 mm
  - 3) CONCRETE NOT EXPOSED TO EARTH OR WEATHER-  
SLABS, WALLS, JOINTS - 20 mm  
BEAMS AND COLUMNS - 40 mm

**D. NOTES ON FOUNDATION**

1. THE FOUNDATION IS DESIGNED FOR A NET ALLOWABLE SOIL BEARING PRESSURE OF 100 kPa AT A MINIMUM DEPTH OF ONE AND A HALF (1.50) METERS FROM THE NATURAL GRADE LINE.
- NO FOOTING SHALL REST ON FILL. FOOTINGS FOR CHB WALLS AND OTHER MINOR STRUCTURES SHALL BE EMBEDDED AT LEAST 800mm FROM THE NATURAL GRADE LEVEL.
- PROVIDE TEMPORARY REMOVAL OF WATER FROM ANY SOURCE DURING CONSTRUCTION. DEWATERING SHALL BE CAREFULLY AND PROPERLY PERFORMED TO AVOID DISTURBING THE FOUNDATIONS AND SLAB BEARING SURFACES.
- CONTRACTOR SHALL DESIGN, INSTALL AND MONITOR EXCAVATIONS RETENTION SYSTEMS, AS REQUIRED FOR PROTECTION OF ADJACENT PROPERTIES AND PROVIDE ALL MEASURES AND PRECAUTIONS NECESSARY TO MINIMIZE SETTLEMENT AND PREVENT DAMAGE TO ADJACENT EXISTING OR NEW CONSTRUCTION.
- PREPARE CONDITIONS OF CONCRETE SUPPLY AND PLACEMENT OF THE COMPLETE FOUNDATION FOR THE FULL THICKNESS AS A CONTINUOUS MONOLITHIC CASTING.
- DO NOT BACKFILL AGAINST BASEMENT WALLS UNTIL GROUND FLOOR SLABS HAVE BEEN PLACED AND THE CONCRETE HAS ATTAINED THE REQUIRED STRENGTH.
- REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL ELEVATION DETAILS, REFER TO ARCHITECTURAL, MECHANICAL, PLUMBING AND OTHER TRADES FOR SUBSOIL DRAINAGE SYSTEM, MACHINERY ANCHORS AND OTHER EMBEDDED ITEMS, DEPRESSIONS, FINISHES, DOWELS FOR MASONRY WALLS, CURBS, ETC
- SEE TYPICAL DETAIL OF LIMITING SLOPE OF ADJACENT FOOTING AT DIFFERENT ELEVATION. (REFER TO FIGURE 2)

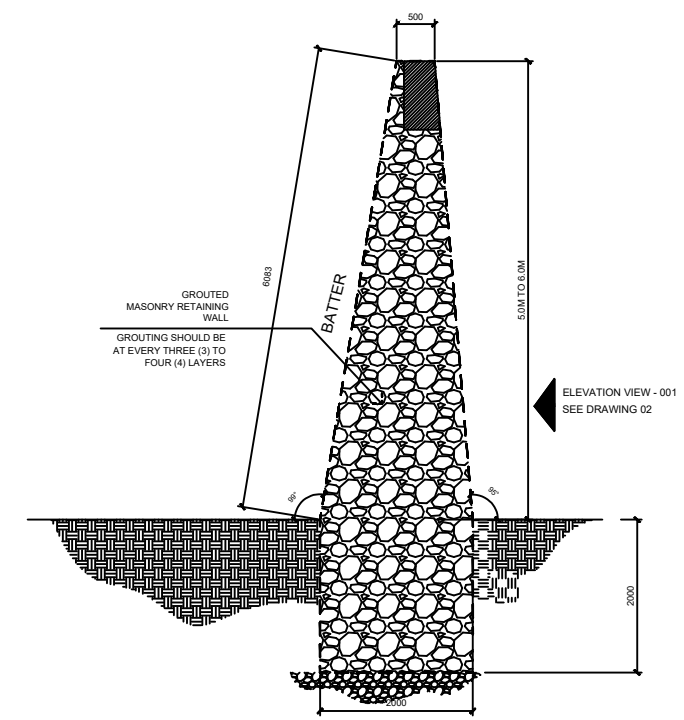


**CROSS SECTION**  
**1A** **GRouted MASONRY RETAINING WALL -1**  
RSP-01 SCALE 1:50m

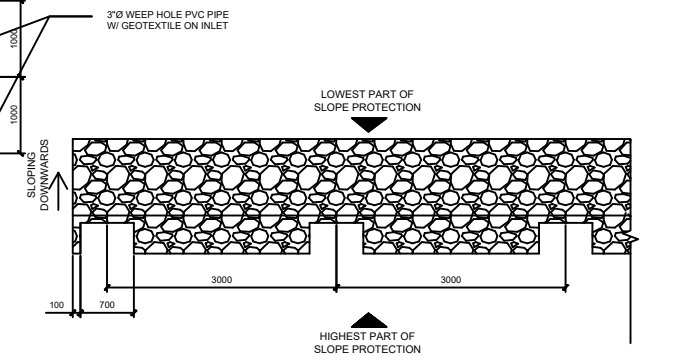


**ELEVATION VIEW - 001**  
**2** **GRouted MASONRY RETAINING WALL -1**  
RSP-01 SCALE 1:50m

**BLOCKING DETAILS**



**CROSS SECTION**  
**1B** **GRouted MASONRY RETAINING WALL -2**  
RSP-01 SCALE 1:50m



**ELEVATION VIEW - 002**  
**3** **GRouted MASONRY RETAINING WALL -1**  
RSP-01 SCALE 1:50m

**BLOCKING DETAILS**

