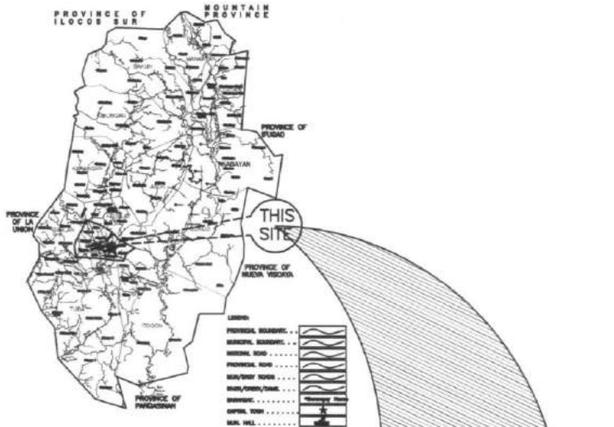
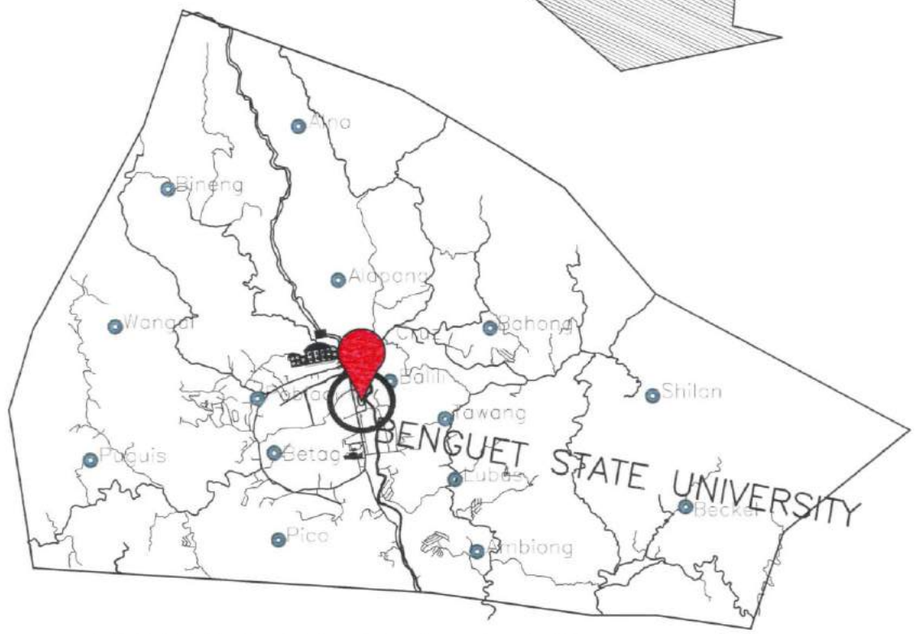
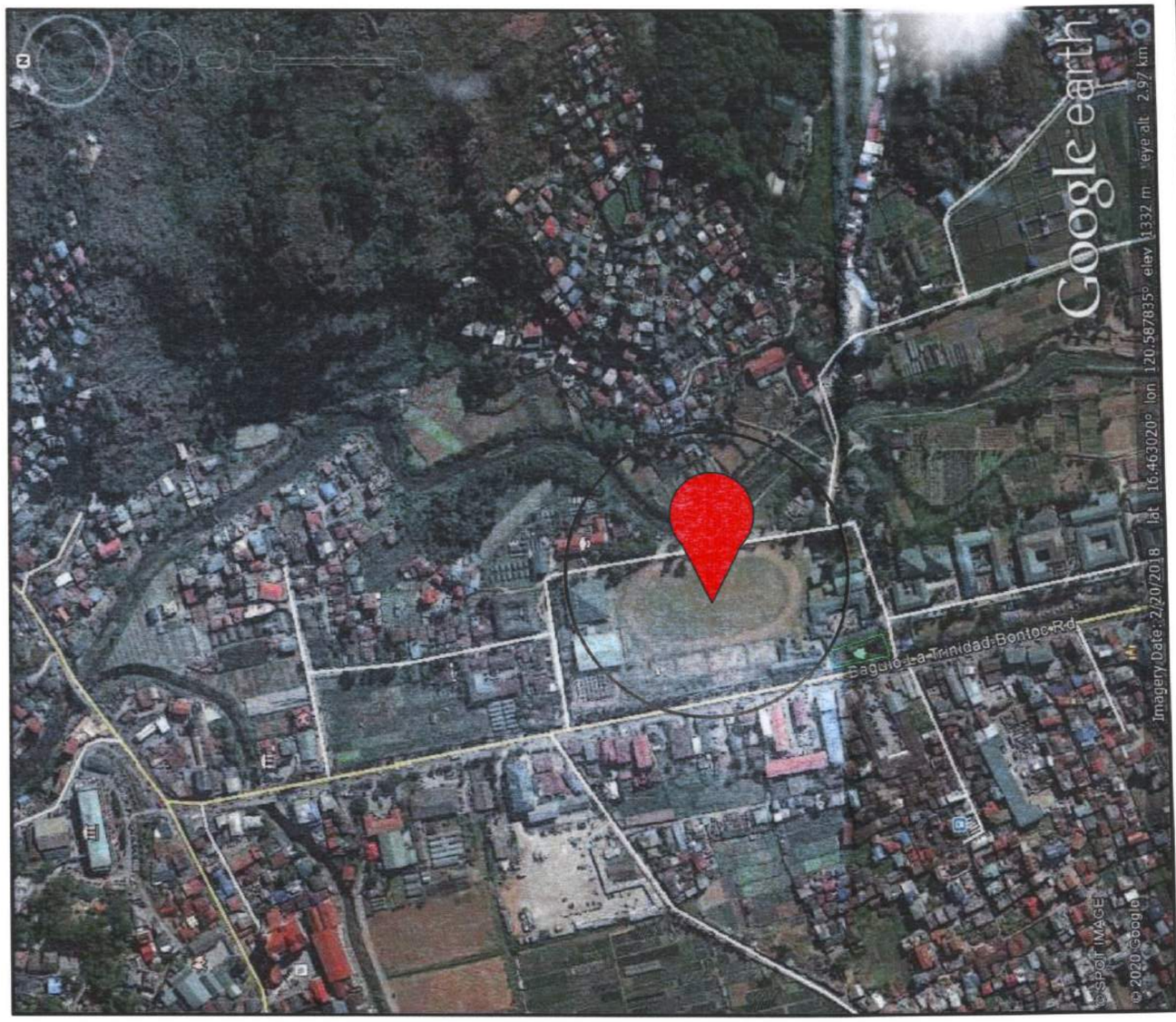


PROVINCE OF BENGUET
SCALE AS SHOWN



MUNICIPALITY OF LA TRINIDAD
SCALE AS SHOWN



PROJECT LOCATION MAP
SCALE AS SHOWN

REPUBLIC OF THE PHILIPPINES
BENGUET STATE UNIVERSITY
LA TRINIDAD, BENGUET, 2601

PROJECT NAME AND LOCATION:
REPAIR OF DRAINAGE SYSTEM FOR THE GYMNASIUM, OVAL, AND NEW BUILDING
BSU COMPOUND, KM6, LA TRINIDAD, BENGUET

PREPARED BY:
SHERIFF JOHN C. LA MADRID
PROJECT DEVELOPMENT OFFICER

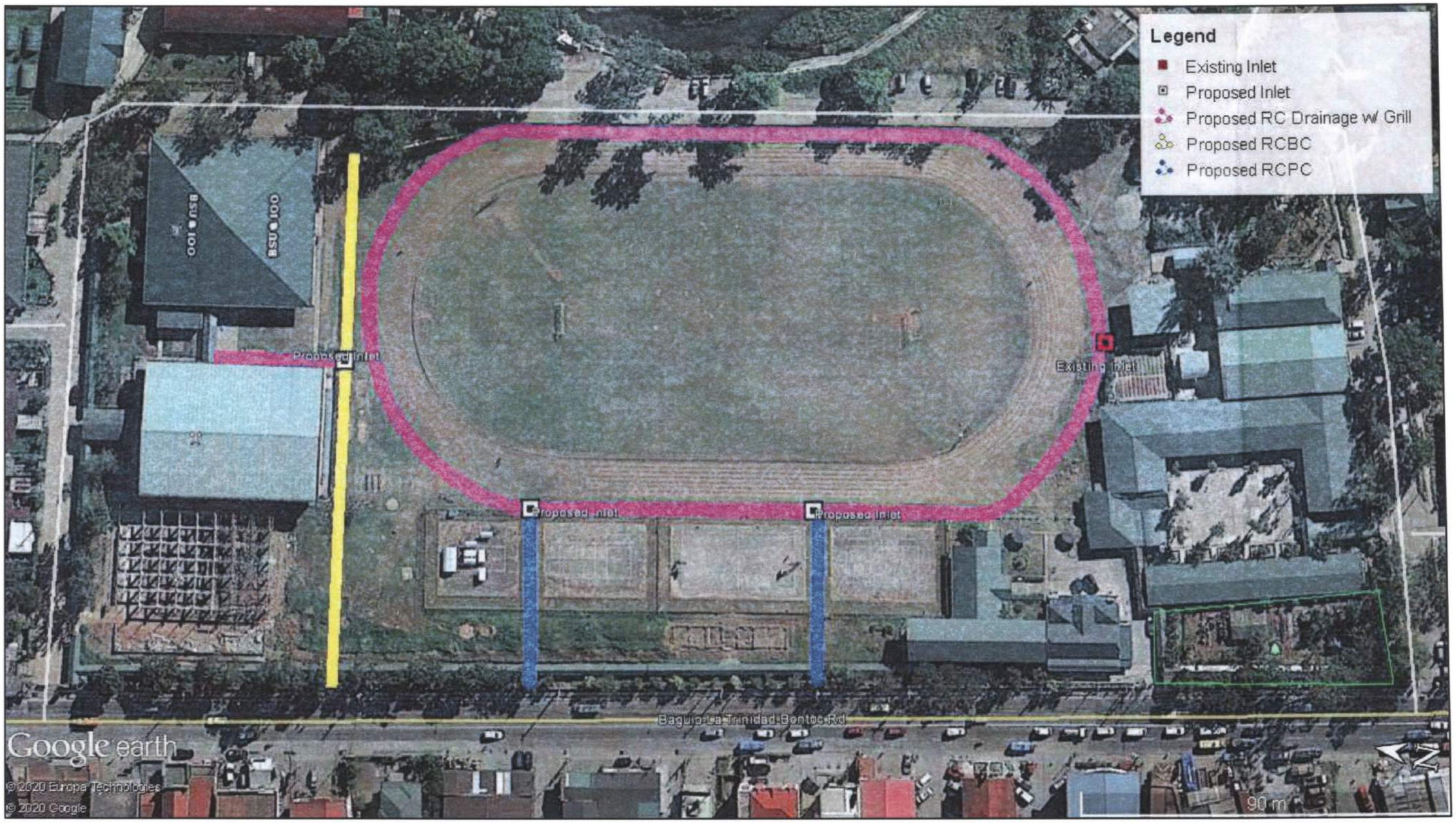
CHECKED BY:
HAZELINE N. TIBANGAY
ARCHITECT III

END-USER:
REX JOHN G. BAWANG
DIRECTOR, INSTITUTE OF HUMAN KINETICS

RECOMMENDING APPROVAL:
JOHN JAMES F. MALAMUG
VICE PRESIDENT-ADMIN. & FINANCE

APPROVED:
FELIPE S. COMILA
UNIVERSITY PRESIDENT

SHEET NO.: 01/06



GENERAL DRAINAGE LAYOUT

SCALE AS SHOWN

NOTE: BEFORE THE START OF THE ACTUAL CONSTRUCTION, THE "AS-STAKED" PLAN SHOULD BE SUBMITTED TO THE BENGUET STATE UNIVERSITY PLANNING AND DEVELOPMENT OFFICE IN ORDER THAT IMMEDIATE STEPS MAY BE TAKEN TO CORRECT OR ADJUST WHATEVER APPRECIABLE DEVIATION THERE MAY BE FROM THE ORIGINAL PLAN.

REPUBLIC OF THE PHILIPPINES BENGUET STATE UNIVERSITY LA TRINIDAD, BENGUET, 2601	PROJECT NAME AND LOCATION: REPAIR OF DRAINAGE SYSTEM FOR THE GYMNASIUM, OVAL, AND NEW BUILDING BSU COMPOUND, KM6, LA TRINIDAD, BENGUET	PREPARED BY: SHERIFF JOHN C. LA MADRID PROJECT DEVELOPMENT OFFICER	CHECKED BY: HAZELINE N. TIBANGAY ARCHITECT III	END-USER: REX JOHN G. BAWANG DIRECTOR, INSTITUTE OF HUMAN KINETICS	RECOMMENDING APPROVAL: JOHN JAMES F. MALAMUG VICE PRESIDENT-ADMIN. & FINANCE	APPROVED: FELIPE S. COMILA UNIVERSITY PRESIDENT	SHEET NO.: 02 06

GENERAL CONSTRUCTION NOTES

GENERAL NOTES

1. IN THE INTERPRETATION OF THE DRAWING, INDICATED DIMENSIONS SHALL GOVERN AND DISTANCES AND SIZES SHALL NOT BE SCALED FOR CONSTRUCTION PURPOSES.
2. IN REFERENCE TO THE OTHER DRAWINGS, SEE ARCHITECTURAL DRAWINGS FOR DEPRESSIONS IN FLOOR SLABS , OPENING IN THE WALLS AND SLABS, INTERIOR PARTITIONS, LOCATION OF DRAINS, ETC.
3. IN CASE OF DISCREPANCIES AS TO THE LAYOUT, DIMENSIONS, AND ELEVATIONS IN THE DRAWINGS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER FOR CLARIFICATIONS.
4. ALL CONCRETE WORK SHALL BE DONE IN ACCORDANCE WITH THE ACI.318 95 BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE AND ALL STRUCTURAL STEEL WORK ACCORDING WITH AISC SPECIFICATION (9th EDITION) IN SO FAR AS THEY DO NOT CONFLICT WITH THE LOCAL BUILDING CODE REQUIREMENT.
5. ACI REFERS TO AMERICAN CONCRETE INSTITUTE, AISC TO AMERICAN INSTITUTE OF STEEL CONSTRUCTION, AND ASTM TO AMERICAN SOCIETY FOR TESTING MATERIALS.
6. CONSTRUCTION NOTES AND TYPICAL DETAILS APPLY TO ALL DRAWINGS UNLESS OTHERWISE SHOWN OR NOTED. MODIFY TYPICAL DETAILS AS DIRECTED TO MEET SPECIAL CONDITIONS.
7. SHOP DRAWINGS WITH ERECTION AND PLACING DIAGRAMS OF ALL STRUCTURAL STEELS, MISCELLANEOUS IRON, PRE-CAST CONCRETE, ETC. SHALL BE SUBMITTED FOR ENGINEERS APPROVAL BEFORE FABRICATION.
8. ALL RESULTS OF MATERIAL TESTING FOR CONCRETE, REINFORCING BARS, AND STRUCTURAL STEEL MUST BE NOTED AND APPROVED BY THE ENGINEER.

NOTES ON CONCRETE MIXES & PLACING

1. ALL CONCRETE SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH AT THE END OF THE TWENTY EIGHTH (28) DAYS WITH CORRESPONDING MAXIMUM SIZE AGGREGATE AND SLUMPS AS FOLLOWS.

LOCATION	28 DAYS STRENGTH	MAX. SIZE OF AGG.	MAX. SLUMP
ALL OTHER STRUCTURES	3000 PSI (20.7 MPa)	20 mm	100 mm

2. MAINTAIN MINIMUM CONCRETE COVER FOR REINFORCING STEEL AS FOLLOWS.
   - WHERE CONCRETE IS EXPOSED TO EARTH BUT POURED AGAINST FORMS ---------- 50mm
   - WHERE CONCRETE IS DEPOSITED DIRECTLY AGAINST EARTH ---------- 75mm
3. CONCRETE SHALL BE DEPOSITED IN ITS FINAL POSITION WITHOUT SEGREGATION. RE-HANDLING OR PLACING SHALL BE DONE PREFERABLY WITH BUGGIES, BUCKETS OR WHEELBORROWS, NO CHUTES WILL BE ALLOWED EXCEPT TO TRANSFER CONCRETE FROM HOPPERS TO BUGGIES, WHEELBORROWS OR BUCKETS IN WHICH CASE THEY SHALL NOT EXCEED SIX (6) METERS IN AGGREGATE LENGTH.
4. NO DEPOSITING OF CONCRETE SHALL BE ALLOWED WITHOUT THE USE OF VIBRATORS UNLESS AUTHORIZED IN WRITING BY THE DESIGNERS AND ONLY FOR UNUSUAL CONDITIONS WHERE VIBRATIONS ARE EXTREMELY DIFFICULT TO ACCOMPLISH.
5. ALL ANCHOR BOLTS, DOWELS, AND OTHER INSERTS, SHALL BE PROPERLY POSITIONED & SECURED IN PLACE PRIOR TO PLACING OF CONCRETE.
6. ALL CONCRETE SHALL BE KEPT MOIST FOR A MINIMUM OF SEVEN (7) CONSECUTIVE DAYS IMMEDIATELY AFTER POURING BY THE USE OF WET BURLAP, FOG SPRAYING, CURING COMPOUNDS OR OTHER APPROVED METHODS.
7. STRIPPING OF FORMS AND SHORES:
   - FOUNDATION ---------- 24 HRS.
   - SUSPENDED SLAB EXCEPT WHEN ADDITIONAL LOADS ARE IMPOSED ---------- 8 DAYS
   - WALLS ---------- 21 DAYS
8. THE CONTRACTOR SHALL SUBMIT THE SCHEDULE OF POURING AND THE LOCATION OF THE CONSTRUCTION JOINTS TO THE STRUCTURAL ENGINEER AT LEAST FOUR (4) DAYS PRIOR TO THE POURING FOR APPROVAL.
9. THE CONTRACTOR SHALL FURNISH AND MAINTAIN ADEQUATE FORMS AND SHORING UNTIL THE CONCRETE MEMBERS HAVE ATTAINED THEIR WORKING CONDITION AND STRENGTH.

NOTES ON REINFORCEMENT

1. UNLESS OTHERWISE NOTED IN THE PLANS, THE YIELD STRENGTH OF REINFORCING BARS SHALL BE:

A. FOOTINGS, FOOTING BEAMS AND GIRDERS --- FY=276 MPA (40,000 PSI)

B. COLUMNS AND SHEAR WALLS ---------- FY = 276MPA (40,000 PSI)

C. BEAMS AND GIRDERS ---------- FY = 276 MPA (40,000 PSI)

D. NON-LOAD BEARING WALL PARTITIONS, BEDDED SLABS, FLOOR AND ROOF SLABS, PARAPETS, CATCH BASIN, SIDE WALK -- FY = 227.5MPA (33,000PSI)

2. ALL REINFORCING BARS SIZE 10MM OR LARGER SHALL BE DEFORMED IN ACCORDANCE WITH ASTM A 706. BARS SMALLER THAN 10MM MAY BE PLAIN.
3. SPLICES SHALL BE SECURELY WIRED TOGETHER & SHALL LAP OR EXTEND IN ACCORDANCE WITH TABLE A AND TABLE B (TABLE OF LAP SPLICE & ANCHORAGE LENGTH) UNLESS OTHERWISE SHOWN ON DRAWINGS, SPLICES SHALL BE STAGGERED WHENEVER POSSIBLE.

NOTES ON WELDS

1. USE E70xx ELECTRODES FOR ALL MEMBERS WELDED.
2. WELDS SHALL DEVELOP THE FULL STRENGTH OF MEMBERS JOINED UNLESS OTHERWISE SHOWN OR DETAILED IN THE DRAWINGS.

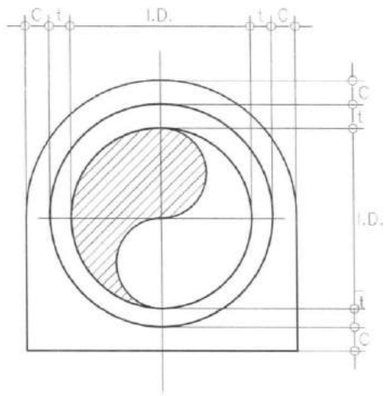
NOTES ON STRUCTURAL STEEL

1. STRUCTURAL STEEL TO BE USED FOR FABRICATION AND ERECTION OF THIS STRUCTURE SHALL COMPLY WITH ALL THE PERTINENT PROVISIONS OF AISC SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDING LATEST EDITION.
2. ALL STRUCTURAL STEEL SHAPES SHALL CONFORM TO ASTM A36 STRUCTURAL STEEL UNLESS OTHERWISE INDICATED.
3. ALL WELDED CONNECTIONS SHALL DEVELOP THE FULL STRENGTH OF THE MEMBERS CONNECTED.
4. UNLESS OTHERWISE SPECIFIED, ALL WELDING RODS SHALL CONFORM AWS E60 ELECTRODES.
5. ALL BOLTS USED UNLESS OTHERWISE SPECIFIED SHALL BE ASTM A 307 BOLTS.

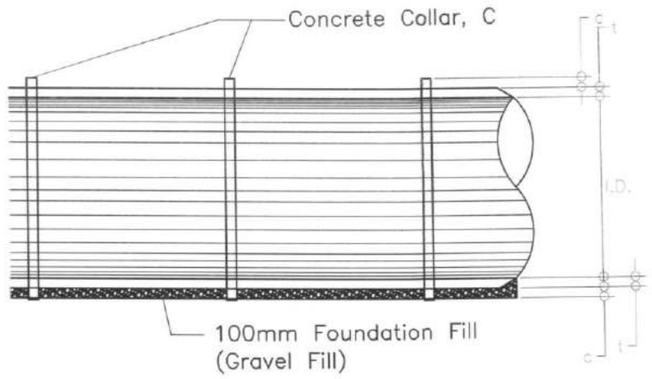
NOTES ON DRAINAGE STRUCTURES:

1. EXACT LOCATIONS, SLOPES, OUTFALLS, AND INVERT ELEVATIONS OF DRAINAGE STRUCTURES SHALL BE CHECKED IN THE FIELD BY THE ENGINEER. MINOR ADJUSTMENT MAY BE MADE WITH THE APPROVAL OF THE ENGINEER TO SUIT ACTUAL FIELD CONDITIONS.
2. ANY REVISIONS, REMOVAL AND/OR RELAYING OF DRAINAGE STRUCTURES AS DIRECTED BY THE ENGINEER TO SUIT EXISTING FIELD CONDITIONS SHALL BE CONSIDERED AS SUBSIDIARY WORK PERTAINING TO OTHER CONTRACT ITEMS. NO DIRECT PAYMENT SHALL BE MADE FOR THIS WORK UNLESS OTHERWISE SPECIFICALLY IDENTIFIED FOR PAYMENT IN THE BID SCHEDULE.
3. EXISTING DRAINAGE STRUCTURES OR PART THEREOF REMOVED BY THE CONTRACTOR THAT ARE STILL SERVICEABLE SHALL BE TURNED OVER TO THE GOVERNMENT AND SHALL BE DEPOSITED AT A PLACE WITHIN THE PROJECT SITE DESIGNATED BY THE ENGINEER WITHOUT ANY EXTRA COMPENSATION. EXTREME PRECAUTION SHALL BE EXERCISED BY THE CONTRACTOR NOT TO DAMAGE THESE MATERIALS DURING THE REMOVAL AND HANDLING.

RCPC Internal Diameter, I.D. (mm)	RCPC Thickness, t(mm)		Concrete Collar, C (mm)
	Machine Made	Hand Made	
760	76	102	130



RCPC SECTION
SCALE AS SHOWN



DETAILS OF RCPC SECTION
SCALE AS SHOWN

REPUBLIC OF THE PHILIPPINES
BENGUET STATE UNIVERSITY
LA TRINIDAD, BENGUET, 2601

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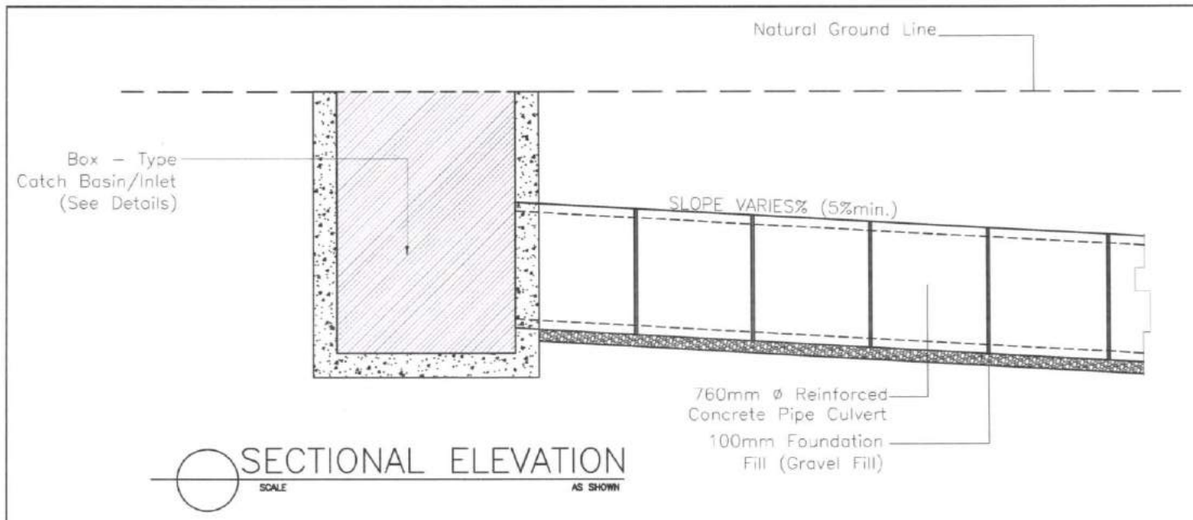
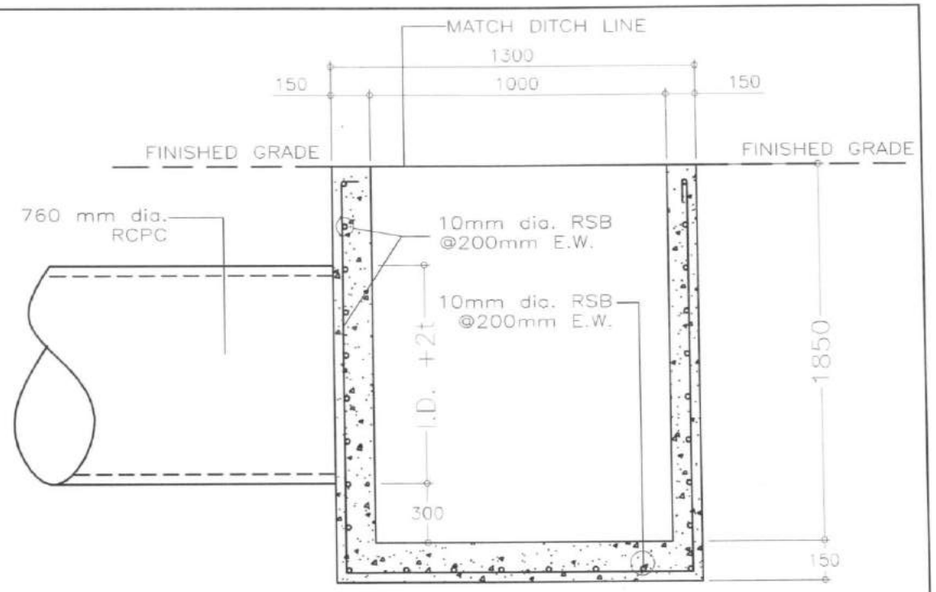
VICE PRESIDENT-ADMIN. & FINANCE

APPROVED:
FELIPE S. COMILA
UNIVERSITY PRESIDENT

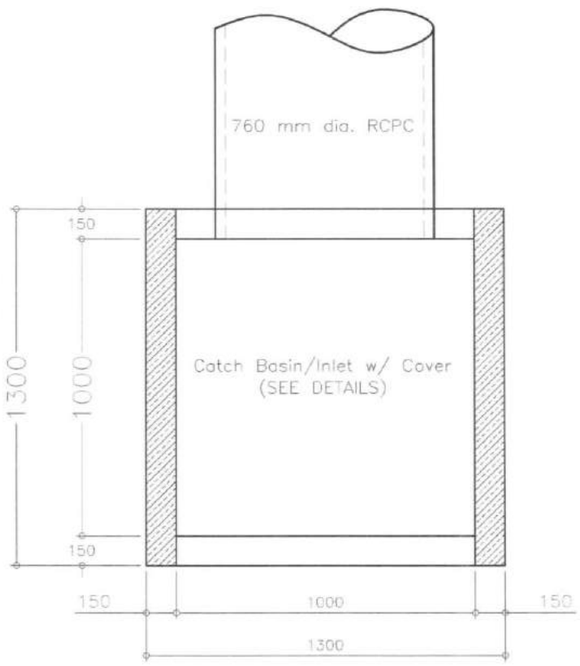
SHEET NO.: 03/06



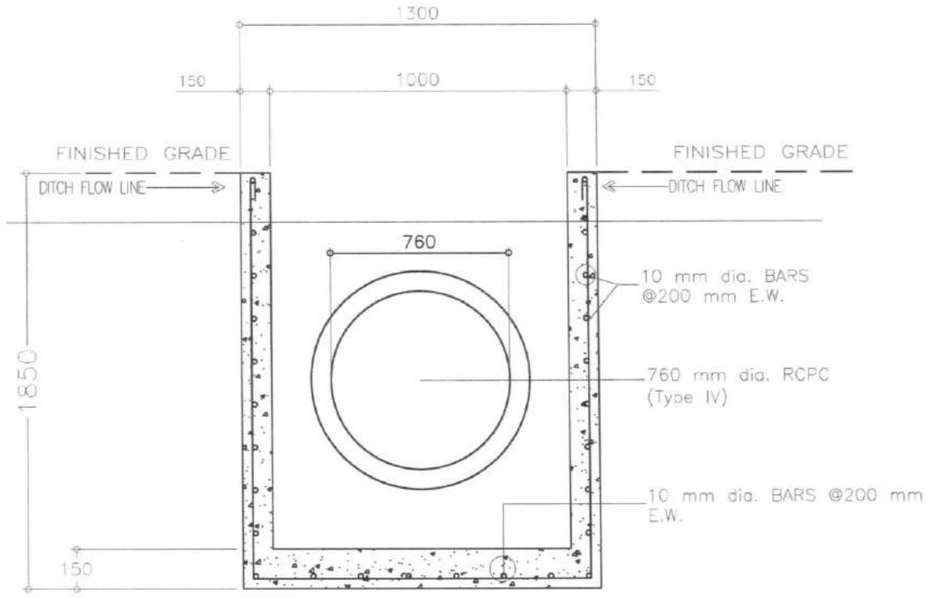
SECTIONAL ELEVATION
SCALE AS SHOWN



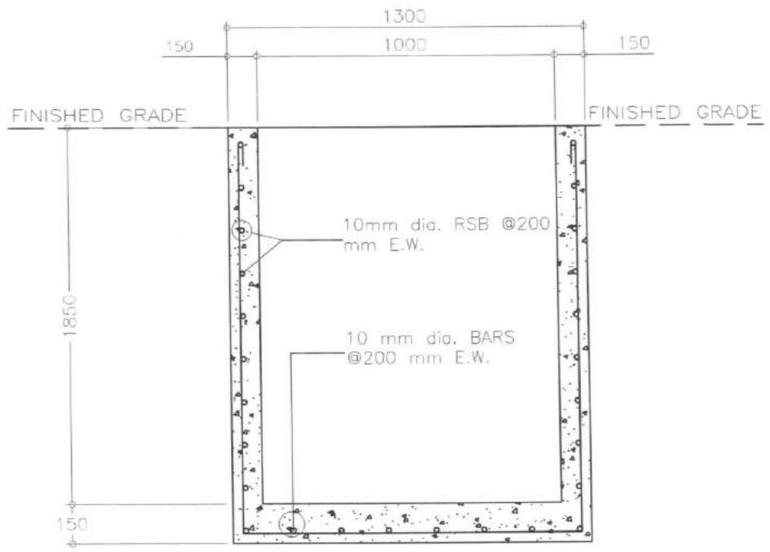
SIDE VIEW



TOP VIEW



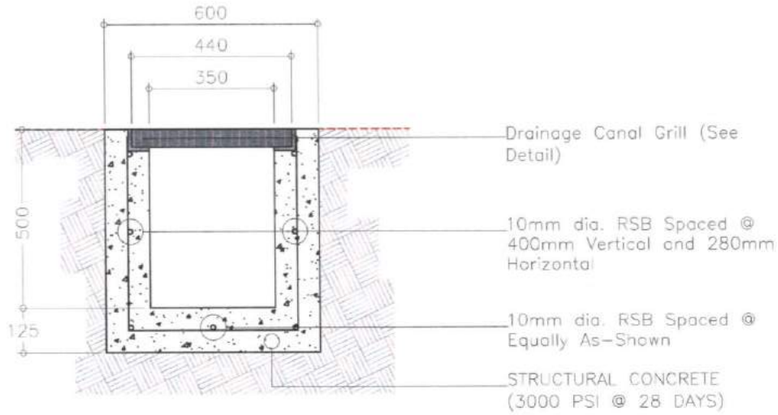
FRONT VIEW



BACK VIEW

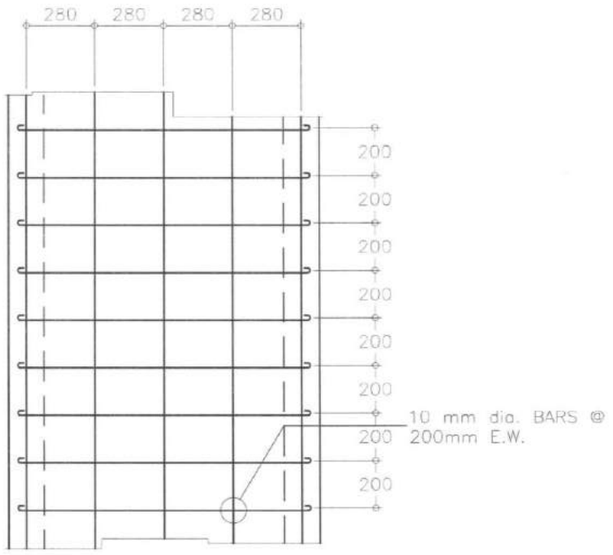
TYPICAL BOX–TYPE CATCH BASIN/INLET SECTION DETAILS
SCALE AS SHOWN

REPUBLIC OF THE PHILIPPINES BENGUET STATE UNIVERSITY LA TRINIDAD, BENGUET, 2601	PROJECT NAME AND LOCATION: REPAIR OF DRAINAGE SYSTEM FOR THE GYMNASIUM, OVAL, AND NEW BUILDING BSU COMPOUND, KM6, LA TRINIDAD, BENGUET	PREPARED BY: SHERIFF JOHN C. LA MADRID PROJECT DEVELOPMENT OFFICER	CHECKED BY: HAZELINE N. TIBANGAY ARCHITECT III	END–USER: REX JOHN G. BAWANG DIRECTOR, INSTITUTE OF HUMAN KINETICS	RECOMMENDING APPROVAL: JOHN JAMES F. MALAMUG VICE PRESIDENT–ADMIN. & FINANCE	APPROVED: FELIPE S. COMILA UNIVERSITY PRESIDENT	SHEET NO.: 04 06

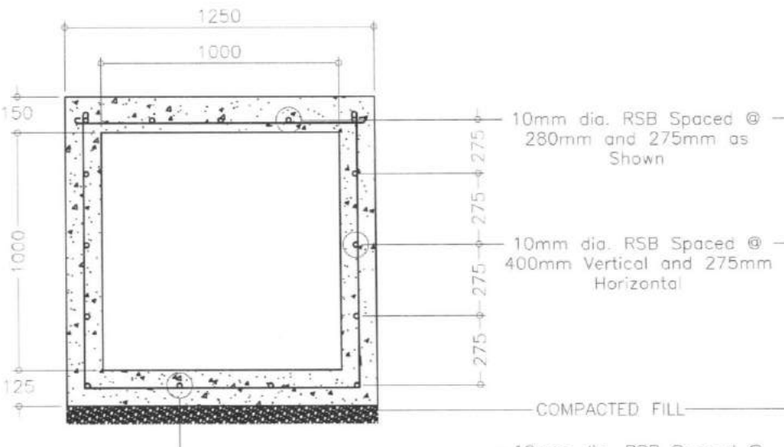


TYPICAL REINFORCED CONCRETE DRAINAGE WITH GRILL

SCALE: AS SHOWN



TOP VIEW



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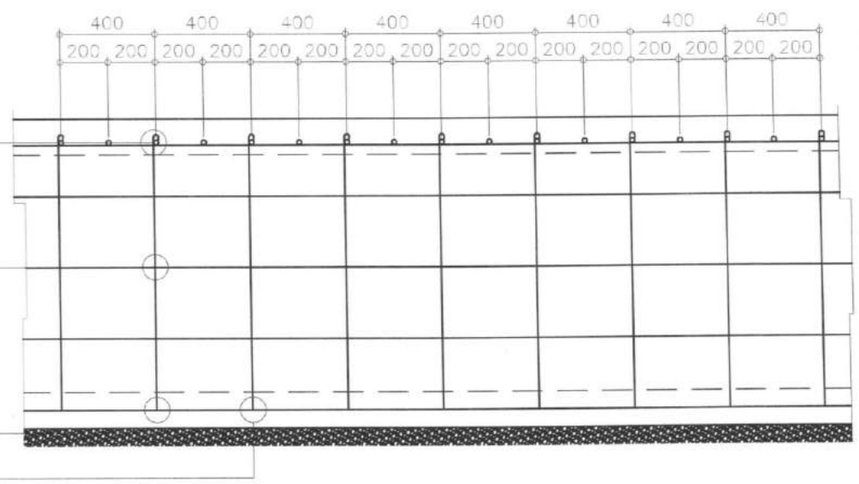
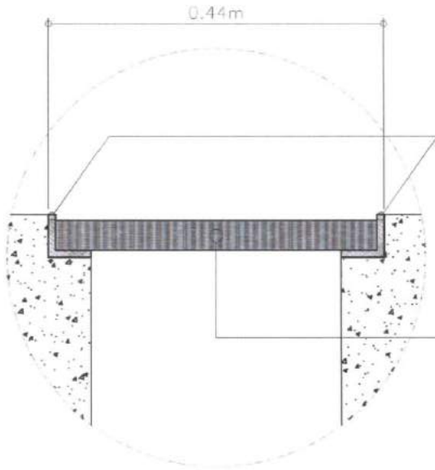


SIDE VIEW

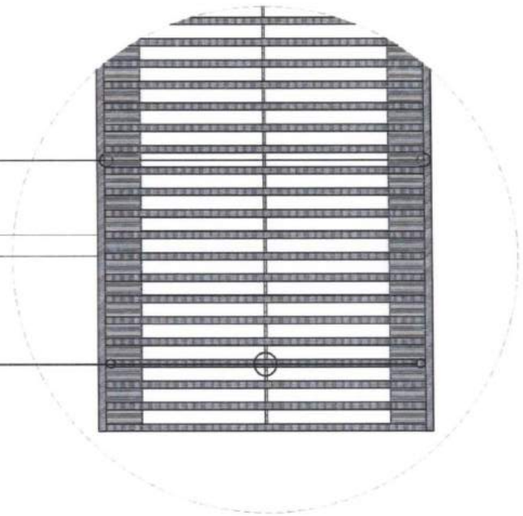
PROPOSED RCBC DETAILS

SCALE: AS SHOWN

REPUBLIC OF THE PHILIPPINES BENGUET STATE UNIVERSITY LA TRINIDAD, BENGUET, 2601	PROJECT NAME AND LOCATION: REPAIR OF DRAINAGE SYSTEM FOR THE GYMNASIUM, OVAL, AND NEW BUILDING BSU COMPOUND, KM6, LA TRINIDAD, BENGUET	PREPARED BY: SHERIFF JOHN C. LA MADRID PROJECT DEVELOPMENT OFFICER	CHECKED BY: HAZELINE N. TIBANGAY ARCHITECT III	END-USER: REX JOHN G. BAWANG DIRECTOR, INSTITUTE OF HUMAN KINETICS	RECOMMENDING APPROVAL: JOHN JAMES F. MALAMUG VICE PRESIDENT-ADMIN. & FINANCE	APPROVED: FELIPE S. COMILA UNIVERSITY PRESIDENT	SHEET NO.: 05 06



SECTION

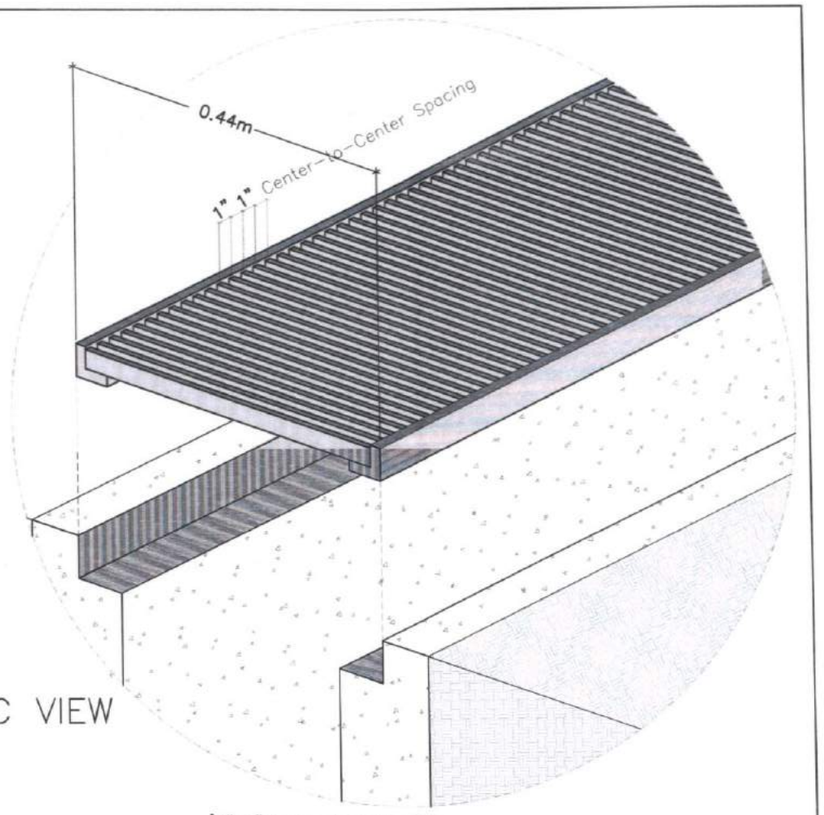


PLAN

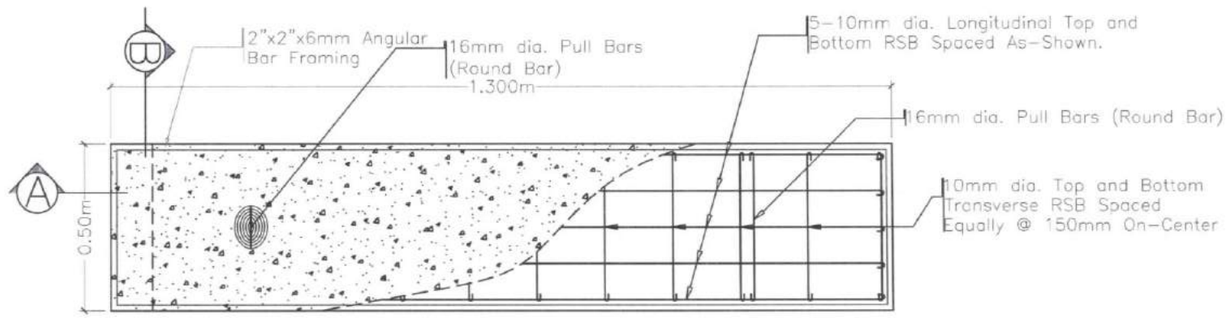
NOTE: Length Per Set of Drainage Canal Grill = 3.00m

DRAINAGE CANAL GRILL DETAILS

SCALE AS SHOWN



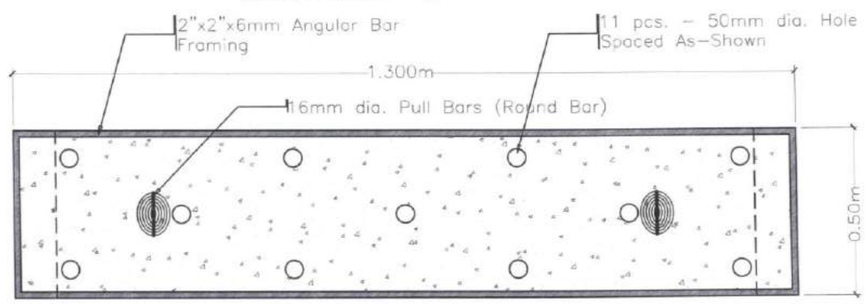
ISOMETRIC VIEW



PLAN

SECTION 'B'

SECTION 'A'



PLAN

TYPICAL CLEAN-OUT/MANHOLE COVER DETAILS

SCALE AS SHOWN

REPUBLIC OF THE PHILIPPINES BENGUET STATE UNIVERSITY LA TRINIDAD, BENGUET, 2601	PROJECT NAME AND LOCATION: REPAIR OF DRAINAGE SYSTEM FOR THE GYMNASIUM, OVAL, AND NEW BUILDING BSU COMPOUND, KM6, LA TRINIDAD, BENGUET	PREPARED BY: SHERIFF JOHN C. LA MADRID PROJECT DEVELOPMENT OFFICER	CHECKED BY: HAZELINE M. TIBANGAY ARCHITECT III	END-USER: REX JOHN G. BAWANG DIRECTOR, INSTITUTE OF HUMAN KINETICS	RECOMMENDING APPROVAL: JOHN JAMES F. MALAMUG VICE PRESIDENT-ADMIN. & FINANCE	APPROVED: FELIPE S. COMILA UNIVERSITY PRESIDENT	SHEET NO.: 06 06