

INFRASTRUCTURE FOR BIODIVERSITY CONSERVATION IN KIDEPO VALLEY NP - IMILINY RANGER POST -  
LIST OF DRAWINGS 2

Drawing Description	Drawing No.	Revision
OFFICE AND STORE BLOCK		
Imiliny RP Office & Store Block _ Floor layout	906-01-DWG-A301	
Imiliny RP Office & Store Block _ Elevations	906-01-DWG-A302	
Imiliny RP Office & Store Block _ Door & Window Schedules	906-01-DWG-A303	
Imiliny RP Office & Store Block _ Section A-A	906-01-DWG-A304	
Imiliny RP Office & Store Block _ Foundation layout & Details	906-01-DWG-S301	
Imiliny RP Office & Store Block _ Ground Beam layout & Details	906-01-DWG-S302	
Imiliny RP Office & Store Block _ Ring Beam layout & Details	906-01-DWG-S303	
Imiliny RP Office & Store Block _ Roof layout & Truss Details	906-01-DWG-S304	
Imiliny RP Office & Store Block _ Reinforced Concrete Wall Details	906-01-DWG-S305	
Imiliny RP Office & Store Block _ Electrical layout	906-01-DWG-E301	
Imiliny RP Office & Store Block _ Electrical Schematics	906-01-DWG-E302	
Imiliny RP Office & Store Block _ Earthing layout & Details	906-01-DWG-E303	
KITCHEN BLOCK_3No.		
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Imiliny RP Kitchen Block _ Elevations	906-01-DWG-A402	
Imiliny RP Kitchen Block _ Sectional Elevations	906-01-DWG-A403	
Imiliny RP Kitchen Block _ Typical Section & Bench Details	906-01-DWG-A404	
Imiliny RP Kitchen Block _ Foundation layout & Details	906-01-DWG-S401	
Imiliny RP Kitchen Block _ Ground Beam layout & Details	906-01-DWG-S402	
Imiliny RP Kitchen Block _ Ring Beam layout & Details	906-01-DWG-S403	
Imiliny RP Kitchen Block _ Roof layout	906-01-DWG-S404	
Imiliny RP Kitchen Block _ Truss & Fixing Details	906-01-DWG-S405	
Imiliny RP Kitchen Block _ Electrcal layout & Schematics	906-01-DWG-E401	
Imiliny RP Kitchen Block _ Earthing layout & Details	906-01-DWG-E402	

Drawing Description	Drawing No.	Revision
4 STANCE VIP TOILET BLOCK_2No.		
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Imiliny RP Toilet Block _ VIP latrine Elevations	906-01-DWG-A502	
Imiliny RP Toilet Block _ Bathroom Layout & Elevations	906-01-DWG-A503	
Imiliny RP Toilet Block _ Absorption Field Layout & Sections	906-01-DWG-A504	
Imiliny RP Toilet Block _ VIP latrine & Bathroom Section A-A	906-01-DWG-A505	
Imiliny RP Toilet Block _ VIP latrine Roof Details	906-01-DWG-S501	
Imiliny RP Toilet Block _ VIP latrine Foundation & Slab Details	906-01-DWG-S502	
Imiliny RP Toilet Block _ VIP latrine Suspended walkway Layout & Section	906-01-DWG-S503	
Imiliny RP Toilet Block _ VIP latrine Suspended walkway Details	906-01-DWG-S504	
GATEHOUSE AND CHECKPOINT BARRIER		
Imiliny RP Gate House _ Floor layout & Elevations	906-01-DWG-A601	
Imiliny RP Gate House _ Section A-A & Schedules	906-01-DWG-A602	
Imiliny RP Gate House _ Foundation layout	906-01-DWG-S601	
Imiliny RP Gate House _ Ground beam layout	906-01-DWG-S602	
Imiliny RP Gate House _ Ring beam layout	906-01-DWG-S603	
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EXTERNAL WORKS		
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Imiliny RP External Works _ Site grading Section A-A Details	906-01-DWG-C-RP-001.2	
Imiliny RP External Works _ Section Details 1	906-01-DWG-C-RP-001.3	
Imiliny RP External Works _ Section Details 2	906-01-DWG-C-RP-001.4	
Imiliny RP External Works _ Trapezoidal Drainage Channel Details	906-01-DWG-EW01	
Imiliny RP External Works _ 5000 litre Rainwater harvest Elevations, Section and Plan Details	906-01-DWG-EW02	

**GENERAL NOTES 1: IN CASE OF DISCREPANCIES BETWEEN THE GENERAL NOTES/DETAILS AND ANY NOTES/DETAILS ON INDIVIDUAL DRAWINGS, THE NOTES / DETAILS ON EACH DRAWING TAKE PRECEDENCE**

**1. GENERAL**

- 1.1. THE STRUCTURES AND THEIR COMPONENTS ARE DESIGNED ACCORDING TO THE CRITERIA INDICATED BY THE REGULATIONS BELOW. ALL THE REGULATIONS BELOW ARE IN THE LATEST VERSIONS:  
INTERNATIONAL DESIGNS CODES.  
  
EN 1990 - 'EUROCODE 0: BASIS OF STRUCTURAL DESIGN'  
EN 1991 - 'EUROCODE 1: ACTIONS ON STRUCTURES'  
EN 1992 - 'EUROCODE 2: DESIGN OF CONCRETE STRUCTURES'  
EN 1993 - 'EUROCODE 3: DESIGN OF STEEL STRUCTURES'  
EN 1995 - 'EUROCODE 5: DESIGN OF TIMBER STRUCTURES'  
EN 1997 - 'EUROCODE 7: GEOTECHNICAL DESIGN'  
EN 1998 - 'EUROCODE 8: DESIGN OF STRUCTURES FOR EARTHQUAKE RESISTANCE'
- 1.2. IN HARMONISATION OF PROFESSIONAL PRACTICE AND ENSURING APPROPRIATE LEVELS OF SAFETY, HEALTH AND ECONOMY WITH DUE CONSIDERATION OF THE OBJECTIVES CONDITIONS AND NEED OF THE CONSTRUCTION THE STANDARD SPECIFICATION FOR BUILDING WORKS FOR MINISTRY OF WORKS HOUSING AND COMMUNICATIONS SHOULD BE APPLIED HAND IN HAND WITH THE NAMED STANDARDS.
- 1.3. ALL DIMENSIONS ARE IN MM. DIMENSIONS ARE NOT TO BE SCALED FROM THE DRAWINGS. FOLLOW WRITTEN DIMENSIONS ONLY.
- 1.4. ALL STRUCTURAL DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE RELEVANT ARCHITECTURAL DRAWINGS, SPECIFICATIONS, BILLS OF QUANTITIES AND ALL OTHER RELEVANT DOCUMENTS. DISCREPANCIES MUST BE REPORTED IMMEDIATELY TO THE ENGINEER PRIOR TO COMMENCEMENT OF ANY WORK.
- 1.5. THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS ON SITE BEFORE COMMENCEMENT OF WORKS AND ANY DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER BEFORE EXECUTION.
- 1.6. ALL CONCRETE SIZES AND LEVELS ARE FOR STRUCTURAL ELEMENTS UNLESS OTHERWISE NOTED.
- 1.7. ALL OPENINGS FOR PIPING AND CONVEYANCE SHALL BE FORMED IN POSITION BEFORE THE CASTING OF CONCRETE. FOR LOCATION OF OPENINGS REQUIRED FOR M & E INSTALLATION REFER TO THE RELEVANT M & E DRAWINGS.
- 1.8. NO HOLES OR CHASES ARE PERMITTED IN THE CONCRETE MEMBERS OTHER THAN AS DETAILED OR UNLESS APPROVED BY THE ENGINEER.
- 1.9. CONSTRUCTION JOINTS SHALL BE LOCATED TO THE APPROVAL OF THE ENGINEERS.
- 1.10. ANY DAMAGE CAUSED TO ANY CIVIL/ STRUCTURAL WORK SHALL BE REINSTATED TO ITS ORIGINAL CONDITION WITH NO COST IMPLICATION TO THE CLIENT.
- 1.11. ELECTRICAL CONDUITS SHOULD NOT BE PLACED WITHIN THE CONCRETE REINFORCEMENT COVER OF THE STRUCTURAL ELEMENTS.

**2. ANTI TERMITE TREATMENT**

- 2.1. FOUNDATION TRENCHES AND PITS SHALL RECEIVE ANTI-TERMITE PRIOR TO PLACING OF ANY MATERIALS AND SECOND ROUND OF TREATMENT SHALL BE CARRIED OUT PRIOR TO CONSTRUCTION OF THE GROUND FLOOR SLAB. THE CONTRACTOR SHALL SUPPLY NECESSARY INFORMATION FROM THE MANUFACTURES FOR ENGINEER'S APPROVAL OF THE ANTI TERMITE CHEMICAL.

**3. FOUNDATIONS**

- 3.1. BOTTOM OF EXCAVATIONS FOR WALLS & COLUMN FOUNDATIONS SHALL BE COMPACTED PRIOR TO LAYING OF BLINDING.
- 3.2. FOUNDATION EXCAVATION DEPTH TO BE APPROVED BY THE ENGINEER PRIOR TO THE CONSTRUCTION OF FOUNDATIONS.
- 3.3. CONTRACTOR SHALL CARRYOUT BACK FILLING OF EXCAVATIONS FOR FOUNDATIONS, USING APPROVED BACKFILL MATERIAL.

**4. TIMBER**

- 4.1. ALL TIMBER FOR CARPENTRY WORKS SHALL BE HARDWOOD TIMBER.
- 4.2. ALL TIMBER FOR CARPENTRY WORKS SHALL BE VACUUM PRESSURE TREATED WITH CELCURE OR TARNALITH OR OTHER APPROVED MEDIUM TOXIC TO TERMITES AND OTHER TIBER PESTS.(CRYPTO TERMES BREVIS)
- 4.3. ALL CUT ENDS OF TIMBER SO IMPREGNATED ARE TO BE TREATED WITH TWO COATS OF WYKABOR10.1 OR OTHER APPROVED TREATMENT.
- 4.4. PRESSURE TREATMENT SHALL BE CARRIED OUT BY A SPECIALIST FIRM WITH APPROVED EQUIPMENT.THE ONE WHO UNDERTAKES THE TREATMENT SHALL SUPPLY A CERTIFICATE OF COMPLIANCE TO THE CONTRACTOR.
- 4.5. TIMBER SHALL BE SEASONED AFTER PRESEVATIVE TREATMENT HAS BEEN CARRIED OUT TO MOISTURE CONTENT AS SHOWN IN TABLE BELOW.

Position	Moiture Content of Timber Timber in its Permanent Position %	Moiture Content of Timber Timber at Time of erection %
Purlins, Rafters, battens, etc	15	22
Floor joists	15	22
T and G flooring	12-14	15-22

- 4.6. AFTER DELIVERY TO SITE TIMBER SHALL BE CAREFULLY STACKED TO ENSURE A FREE CIRCULATION OF AIR THROUGHOUT THE STACK AND COVERED WITH A WATER PROOF COVER TO PREVENT EXCESSIVE DRING BY SUN OR REABSORPTION OF RAINWATER.

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PROJECT NAME:

USAID / Uganda Architect & Engineering Design and Construction  
Management Consulting Services

ACTIVITY NAME:

Infrastructure for Biodiversity Conservation in Kidepo Valley NP

DRAWING DESCRIPTION:

Imiliny Ranger Post \_ List of General Notes  
LIST OF GENERAL NOTES 1

DESIGNED BY:

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CHECKED BY:

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APPROVED BY:

WF

REV. No.

DATE

DESCRIPTION OF REVISION

BY

ENGINEER'S SEAL

SCALE:

AS NOTED

REF FILE:

-

STATUS:

Tender

DATE:

JULY 2023

PAPER:

A3

DRAWING NUMBER:

908-01-DWG-GN01

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GENERAL NOTES 2: IN CASE OF DISCREPANCIES BETWEEN THE GENERAL NOTES/DETAILS AND ANY NOTES/DETAILS ON INDIVIDUAL DRAWINGS, THE NOTES / DETAILS ON EACH DRAWING TAKE PRECEDENCE

5. REINFORCEMENT

- 5.1. UNLESS OTHERWISE SPECIFIED, ALL STEEL REINFORCEMENT BARS AND WELDED STEEL FABRIC REINFORCEMENTS (WSFR) SHALL COMPLY WITH THE REQUIREMENTS OF EUROCODE 2.
- 5.2. 'R' DENOTES MILD STEEL OF YIELD STRENGTH = 250 N/MM<sup>2</sup>  
'T' DENOTES HIGH TENSILE DEFORMED BARS (TYPE 2) OF YIELD STRENGTH = 460 N/MM<sup>2</sup>
- 5.3. CONCRETE COVER TO OUTERMOST REINFORCEMENT, INCLUDING LINKS, SHALL BE AS FOLLOWS :

STRUCTURAL ELEMENTS	IN CONTACT WITH GROUND	OTHER
SLABS	50 mm	20 mm
BEAMS	50 mm (TOP) 50 mm (SIDE & BOT.)	25 mm
COLUMNS	50 mm	40 mm
FOOTINGS	50 mm	--

- 5.4. WELDING OF REINFORCEMENT WILL NOT BE PERMITTED WITHOUT THE APPROVAL OF THE ENGINEER.
- 5.5. ALL BARS SHALL BE CUT AND BENT TO CONFORM TO EUROCODE 2. UNLESS OTHERWISE STATED IN THE DRAWINGS, THE MINIMUM LAP LENGTH FOR REINFORCEMENT SHALL BE 50 TIMES THE DIA. OF SMALLER BAR IN THE LAP.

BAR SIZE (mm)	6	10	12	16	20	25	32
T = HIGH YIELD STEEL	-	500	600	800	1000	1200	1330
R = MILD STEEL	300	-	-	-	-	-	-

BAR SIZE (mm)	A	B	C
T32	1100	-	900
T25	850	-	700
T20	700	-	330
T16	330	450	450
T12	400	400	400
T10	-	300	-

- 5.6. ALL BARS AT THE ENDS OF THE BEAMS WHERE THE BEAM IS NO MORE CONTINUOUS SHALL BE ANCHORED EITHER STRAIGHT OR BENT (DEPENDING ON THE WIDTH OF THE SUPPORT) AS SHOWN BELOW. THESE SHALL NOT BE USED IN CANTILEVERED BEAMS OR SLABS. THE ACTUAL DESIGN DRAWING SHALL BE STRICTLY ADHERE TO.

6. CONCRETE

- 6.1 UNLESS OTHERWISE SPECIFIED, ALL STRUCTURAL CONCRETE MIX TO BE OF GRADE 25
- 6.2 ALL CONCRETE STRENGTHS ARE 28 DAYS CUBE STRENGTH.
- 6.3 UNLESS OTHERWISE SPECIFIED, A LAYER OF 50mm THICK GRADE 15 CONCRETE TO BE PROVIDED BELOW ALL REINFORCED CONCRETE STRUCTURES IN CONTACT WITH THE GROUND.
- 6.4 UNLESS OTHERWISE SPECIFIED, ALL LEAN CONCRETE MIX TO BE OF GRADE 15.
- 6.5 MAXIMUM AGGREGATE SIZE SHALL BE 20mm.
- 6.6 CURING OF CONCRETE
- EXPOSED CONCRETE SURFACES SHOULD BE COVERED WITH DAMP ABSORBENT MATERIAL AFTER PLACING CONCRETE.
  - THEY SHOULD BE KEPT CONTINUOUSLY WET BY FREQUENT SPRAYING OF WATER.
  - IN COLUMNS CURING SHOULD BE STARTED IMMEDIATELY AFTER REMOVAL OF FORMWORK.
  - MINIMUM PERIOD OF CURING IS 4 DAYS.

- 6.7 REMOVAL OF SHUTTERING:

STRUCTURAL ELEMENTS	MINIMUM PERIOD
VERTICAL FORMWORK TO COLUMNS AND WALLS	24 HOURS
SOFFIT FORMWORK TO SLABS	10 DAYS
SOFFIT FORMWORK TO BEAMS	10 DAYS
PROPS TO BEAMS	14 DAYS

- 6.8 GRADE OF CONCRETE

CONCRETE	CUBE/ CYLINDER	CHARACTERISTIC STRENGTH, N/mm <sup>2</sup>
BLINDING SCREED / LEVELING CONCRETE	C15, (C12)	15
MASS CONCRETE	C20, (C15)	20
STRUCTURAL CONCRETE	C25, (C20)	25
WATER RETAINING STRUCTURES	C35A, (C30A)	35

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AS NOTED

REF FILE:

-

STATUS:

Tender

DATE:

JULY 2023

PAPER:

A3

DRAWING NUMBER:

908-01-DWG-GN02




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## 7. STRUCTURAL STEEL WORK

- |      |  |
|------|--|
| 7.1  | CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR APPROVAL PRIOR TO FABRICATION.   |
| 7.2  | FABRICATION AND ERECTION OF STRUCTURAL STEELWORKS SHALL IN GENERAL BE CARRIED OUT IN ACCORDANCE WITH EUROCODE 3.   |
| 7.3  | UNLESS OTHERWISE SPECIFIED ALL BOLTS SHALL BE BLACK BOLTS.   |
| 7.4  | ALL BOLTS AND NUTS SHALL COMPLY EUROCODE 3.  |
| 7.5  | THE LENGTH OF HOLDING DOWN BOLTS INDICATED ON THE RESPECTIVE DRAWINGS REFER TO THE PENETRATION DEPTH ONLY.   |
| 7.6  | UNLESS OTHERWISE SPECIFIED , THE MATERIALS FOR ALL STRUCTURAL STEEL WORK SHALL COMPLY WITH THE FOLLOWING STANDARDS: <ul style="list-style-type: none"> <li>a. BS EN 10025:1993 HOT ROLLED PRODUCTS OF NON-ALLOY STRUCTURAL STEELS</li> <li>b. BS EN 10056:1993 STRUCTURAL STEEL EQUAL AND UNEQUAL LEG ANGLES - DIMENSIONS</li> <li>c. BS EN 10113:1993 HOT ROLLED PRODUCTS IN WELDABLE FINE GRAIN STRUCTURAL STEELS</li> <li>d. BS EN 10210:1994 HOT FINISHED STRUCTURAL HOLLOW SECTIONS OF NON-ALLOY AND FINE GRAIN STRUCTURAL STEEL</li> <li>e. BS EN 10219:1997 COLD FORMED WELDED STRUCTURAL HOLLOW SECTIONS OF NON-ALLOY AND FINE GRAIN STEELS</li> </ul> |
| 7.7  | THE USE OF HIGH STRENGTH FRICTION GRIP (SHFG) BOLTS AND ASSOCIATED NUTS AND WASHERS SHALL COMPLY WITH BS 43EN 14399 AND SHALL BE IN ACCORDANCE WITH EUROCODE 3.  |
| 7.8  | ALL METAL ARC WELDING SHALL BE DONE IN ACCORDANCE WITH BS EN 1011. ELECTRODES USED SHALL COMPLY WITH BS EN 499.  |
| 7.9  | UNLESS OTHERWISE SPECIFIED , ALL OPEN ENDS OF HOLLOW SECTIONS ARE TO BE COVERED WITH 6MM THICK MILD STEEL PLATE WELDED ALL ROUND.  |
| 7.10 | ENDS OF COLUMNS, RAFTERS AND ALL PLATE EDGES SHALL BE CUT CLEAN AND SQUARE TO ENSURE GOOD FIT BETWEEN COMPONENTS.  |
| 7.11 | ALL FILLET WELDS ARE TO BE 6mm THICK CONTINUOUS UNLESS OTHERWISE SPECIFIED.  |
| 7.12 | ALL BASE PLATES SHALL BE SET ON 25mm MINIMUM HIGH STRENGTH NON-SHRINK GROUT.   |
| 7.13 | ALL DIRT, GRIT, OIL, RUST AND MILL SCALES ARE TO BE REMOVED BEFORE ANY COAT OF PAINT CAN BE APPLIED.   |
| 7.14 | ALL STRUCTURAL STEEL WORK SHALL BE SAND BLASTED, PAINTED WITH 1 COAT OF AN APPROVED RUST-INHIBITIVE PRIMER, 1 COAT OF AN APPROVED UNDERCOAT AND 2 FINISHING COATS OF APPROVED EPOXY PAINT.   |
| 7.15 | CONSIDERATION SHALL BE GIVEN TO THE STABILITY AND SAFETY OF STEEL FRAMEWORK DURING ERECTION. THE CONTRACTOR SHALL ENSURE THAT THE STRUCTURE IS NOT SUBJECT TO EXCESSIVE DEFLECTION OR STRESS DURING ERECTION.  |
| 7.16 | STRUCTURAL STEEL MEMBERS WHICH ARE TO BE ENCASED IN CONCRETE SHALL BE LEFT UNPAINTED AND SHALL BE CLEAN AND FREE FROM LOOSE RUST AND SCALE AT THE TIME OF CONCRETING.  |
| 7.17 | ALL GALVANIZED STRUCTURAL STEEL WORK SHALL BE HOT-DIPPED GALVANIZED WITH A MINIMUM COATING MASS OF 450 g/m². THE GALVANIZED COATING ON ALL STEEL MEMBERS SHALL CONFORM TO THE REQUIREMENT OF BS EN 1461:1999.  |
| 7.18 | ALL OTHER PRECAUTIONS FOR CLEANING AND RUST PREVENTION OF STRUCTURAL STEEL AS MENTIONED IN SPECIFICATIONS AND/OR ARCHITECTURAL DRAWING SHALL BE DONE AS DEEMED NECESSARY BY THE ENGINEER.  |
| 7.19 | UNLESS OTHERWISE SPECIFIED ALL STRUCTURAL STEEL SHALL BE OF GRADE 43A( $p_y = 275 \text{ N/mm}^2$ ) OR AN EQUIVALENT   |
| 7.20 | BOLT HOLE DIAMETER TO BE (BOLT DIA. + 2mm) UNLESS OTHER WISE STATED.   |

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				<b>DRAWN BY:</b> BK									<b>STATUS:</b> <b>Tender</b>	<b>DATE:</b> <b>JULY 2023</b>	<b>PAPER</b> <b>A3</b>
				<b>CHECKED BY:</b> BB									<b>DRAWING NUMBER:</b> <b>906-01-DWG-GN03</b>		
				<b>APPROVED BY:</b> WF	REV. No.	DATE	DESCRIPTION OF REVISION	BY					COPYRIGHT RESERVED		



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8. STIFFENERS & LINTEL DETAILS

8.1 VERTICAL & HORIZONTAL RC STIFFENERS FOR ALL BRICK WALLS SHALL BE PROVIDED IN ACCORDANCE WITH THE DETAILS GIVEN BELOW :

RC MEMBERS	REINFORCEMENT DETAILS	
	150mm BRICK WALL	
VERTICAL STIFFENERS	@ 4000 C/C WITH 4T12 AND R6-150 C/C LINKS	
HORIZONTAL STIFFENERS	@ 4000 C/C WITH 4T12 AND R6-200 C/C LINKS	

8.2 SCHEDULE OF LINTELS

LOCATION	MAIN R/F	STIRRUPS	SECTION
OPENINGS UPTO 1m FOR 150mm WALLS	2T12	--	
OPENINGS 1m TO 1.4m FOR 150mm WALLS	2T12	--	
OPENINGS 1.4m TO 1.8m FOR 150mm WALLS	4T12	R6-150 C/C	
OPENINGS 1.8m TO 3m FOR 150mm WALLS	4T12	R6-150 C/C	
OPENINGS UPTO 1.2m FOR 350mm THICK WALLS	3T12	R6-200	

\* FOR OPENINGS GREATER THAN 3.0m CHECK WITH STRUCTURAL DESIGNER.

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USAID / Uganda Architect & Engineering Design and Construction Management Consulting Services

ACTIVITY NAME:

Infrastructure for Biodiversity Conservation in Kidepo Valley NP

DRAWING DESCRIPTION:

Imiliny Ranger Post \_ List of General Notes  
LIST OF GENERAL NOTES 4

DESIGNED BY:

BB

DRAWN BY:

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APPROVED BY:

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REV. No.

DATE

DESCRIPTION OF REVISION

ENGINEER'S SEAL

SCALE:

AS NOTED

REF FILE:

-

STATUS:

Tender

DATE:

JULY 2023

PAPER:

A3

DRAWING NUMBER:

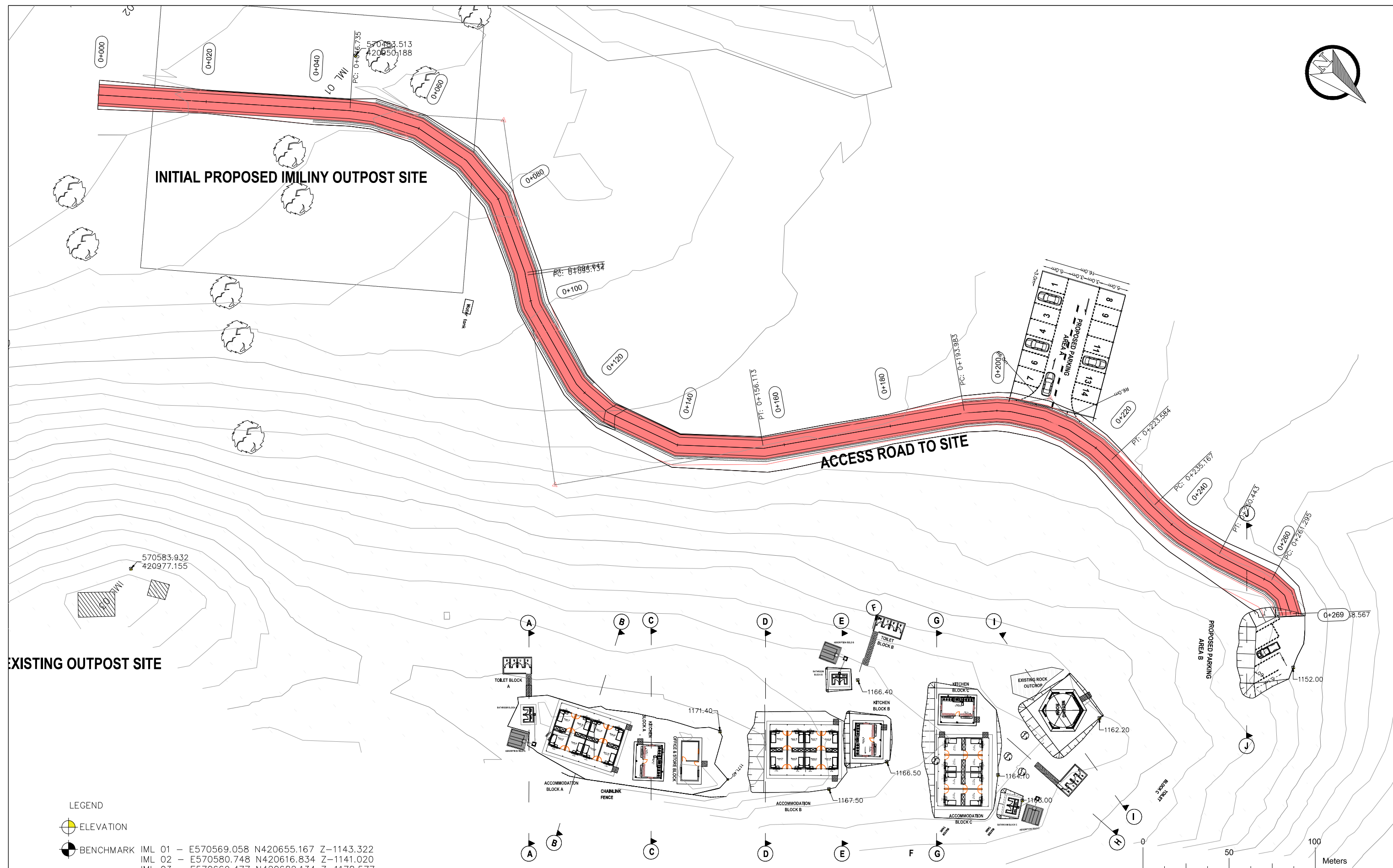
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# SITE LAYOUT & GRADING SECTIONS

# IMILINY RANGER POST SITE PLAN



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ACTIVITY NAME:

**Infrastructure for Biodiversity Conservation in Kidepo Valley National Park.**

DRAWING DESCRIPTION:

**IMILINY RANGER OUTPOST SITE PLAN**

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DATE

DESCRIPTION OF REVISION

BY

ENGINEER'S SEAL

SCALE: HORIZONTAL VERTICAL REF FILE:

A1 SCALE 1:1000 1:100

A3 SCALE 1:2000 1:200

STATUS: DATE: JUL 2023 PAPER:

DETAILED DESIGN

DRAWING NUMBER:

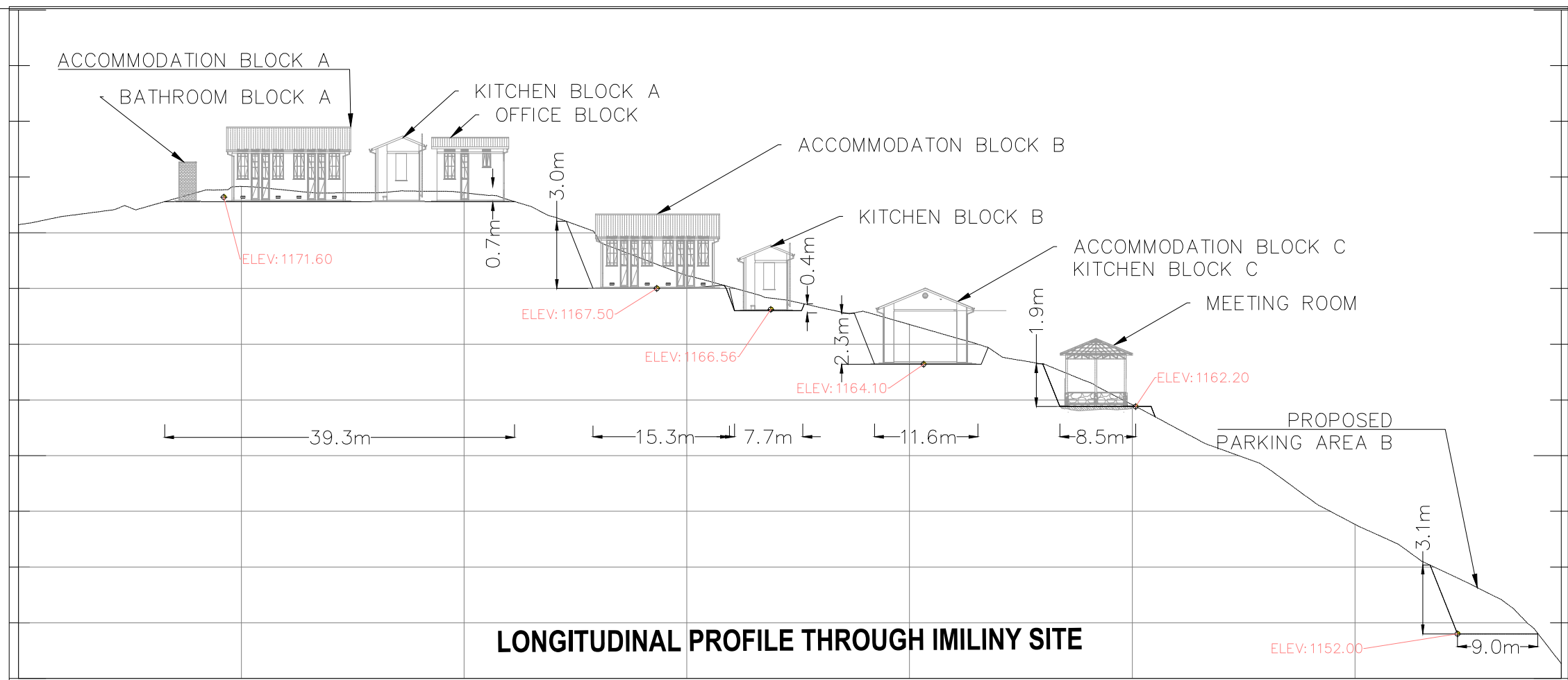
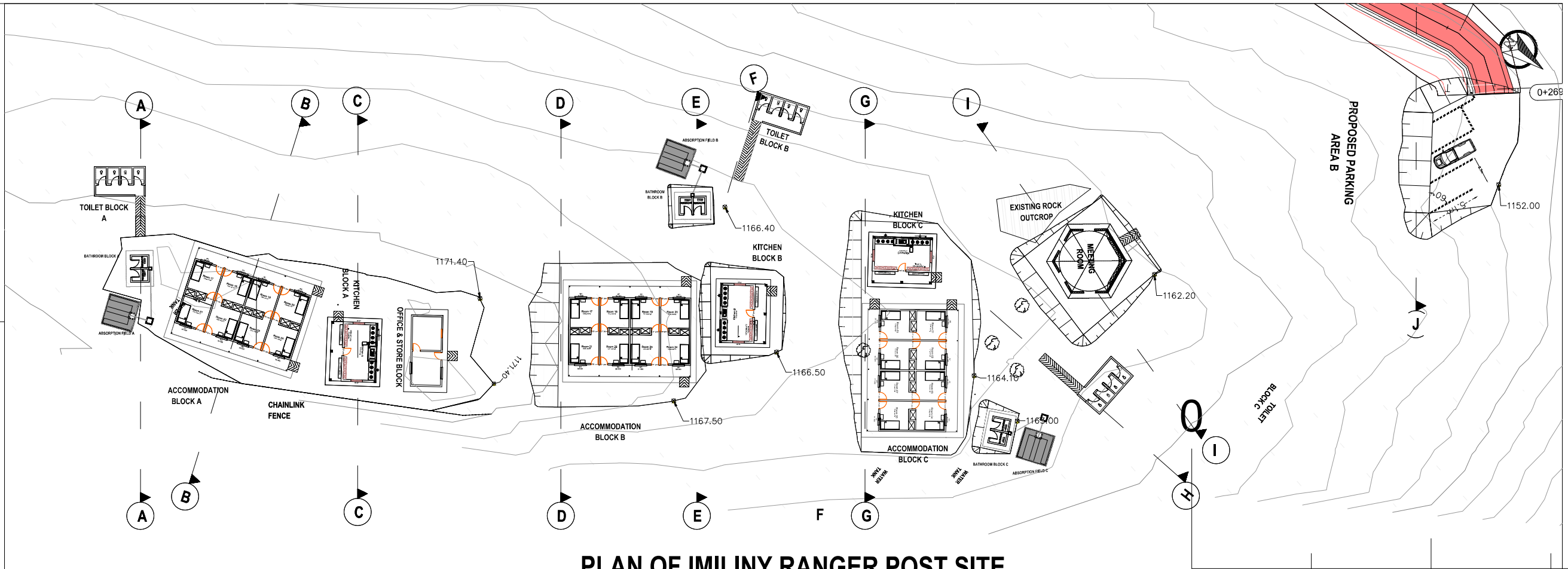
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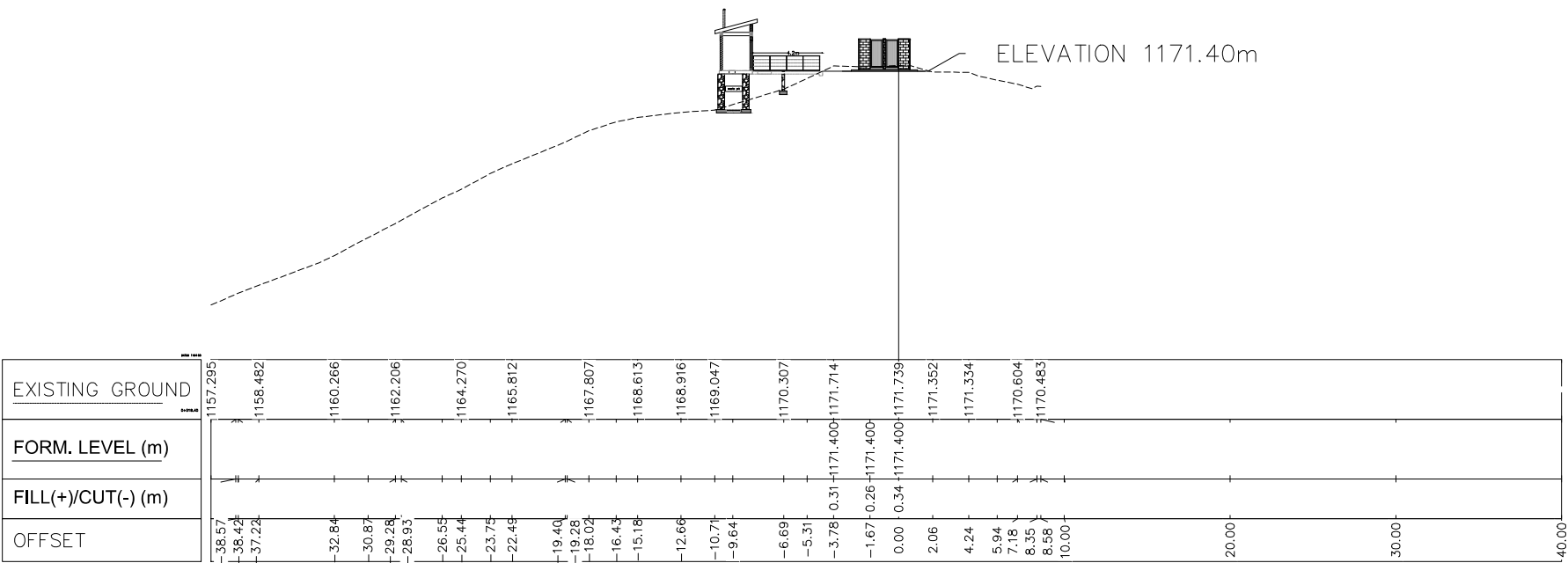
# IMILIMY RANGER POSTS SITE PLAN AND PROFILE

LEGEND

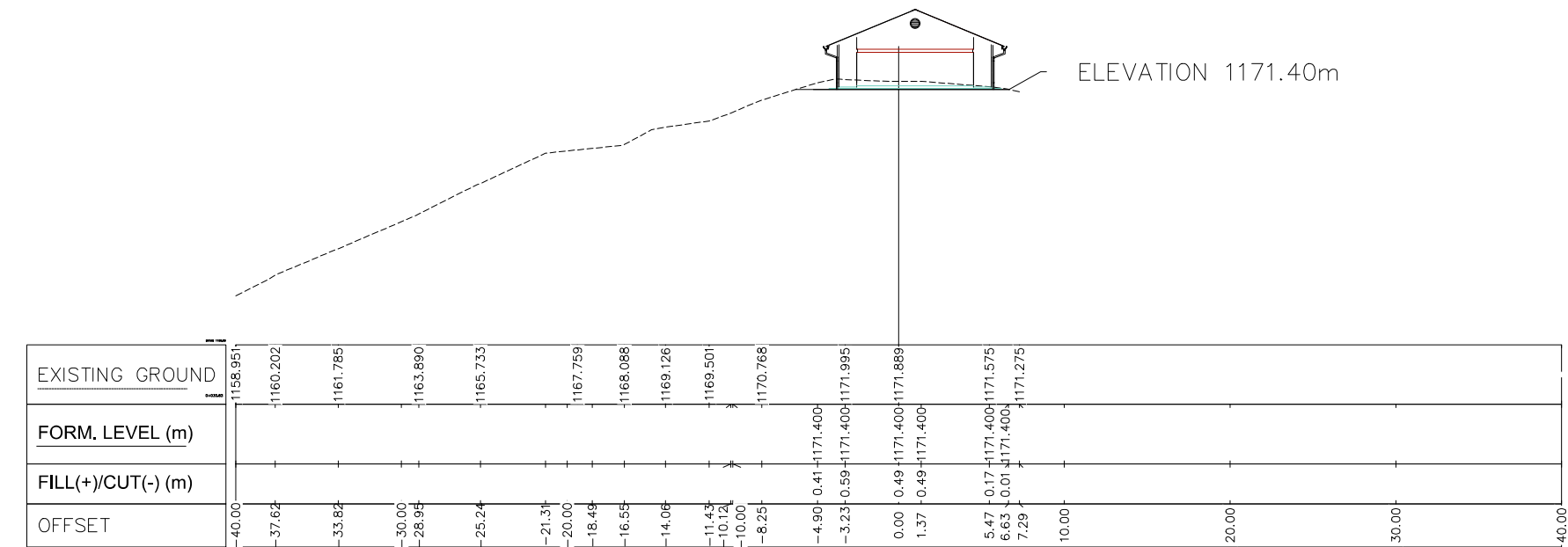



CONSULTANT:				FUNDER:				CLIENT:				PROJECT NAME:				DESIGNED BY:				ENGINEER'S SEAL							
<div><div>Plot 107 Kira Road, Kamukaya, P.O.Box 8493, Kampala-Uganda Tel: +256 (0)393 740800 / 0701 740800 Email: mbw@mbw.co.ug</div></div>				<div><div><b>USAID</b> FROM THE AMERICAN PEOPLE</div></div>				<div><div><b>Uganda Wildlife Authority</b> @ugandawildlifeauthority PO Box 3530, Kampala, Uganda Tel +256-41-355114, 355111, 355118</div></div>				<div><b>USAID / Uganda Architect &amp; Engineering Design and Construction Management Consulting Services</b></div> <div><b>ACTIVITY NAME:</b> Infrastructure for Biodiversity Conservation in Kidepo Valley National Park.</div> <div><b>DRAWING DESCRIPTION:</b> PLAN AND LONGITUDINAL PROFILE OF IMILINY SITE <b>IMILINY RANGER POSTS SITE LAYOUT</b></div>				ENG. BB				<div><div>REV. No.</div><div>DATE</div><div>DESCRIPTION OF REVISION</div><div>BY</div></div>							
																DRAWN BY: JMK											
																CHECKED BY: ENG. BB											
																APPROVED BY: ---											

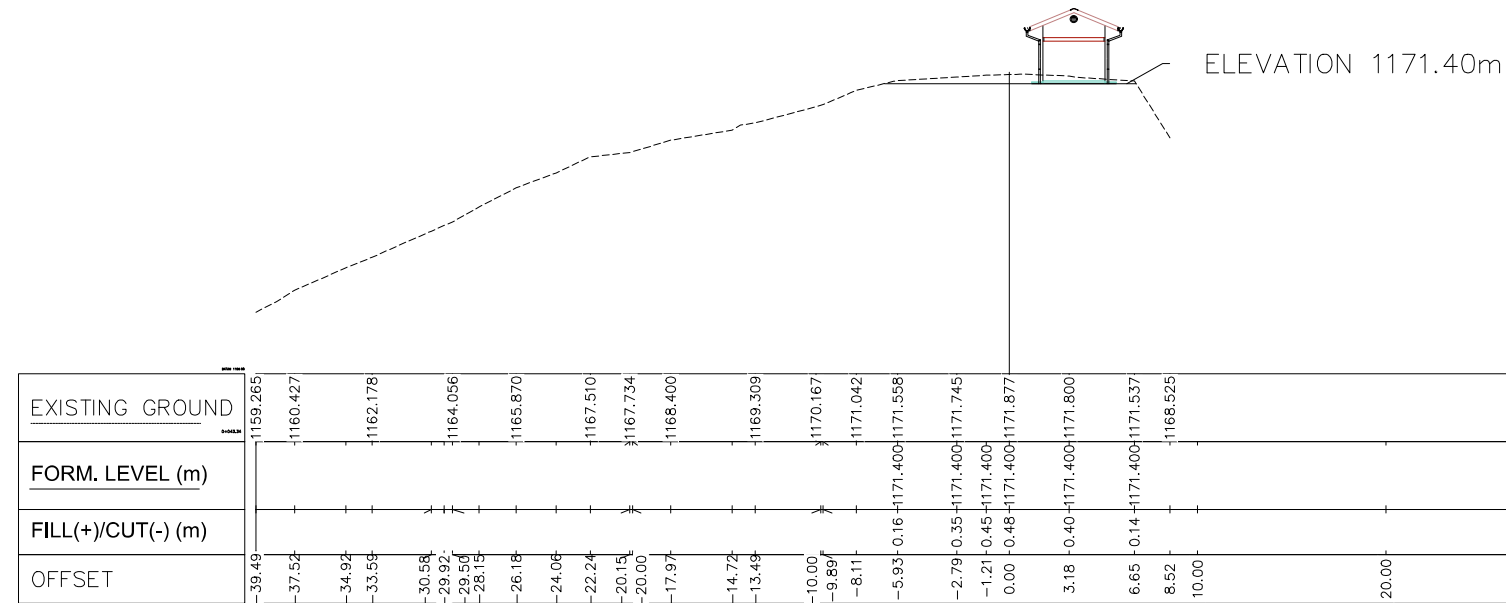
# IMILIMY RANGER POSTS SITE GRADING CROSS SECTIONS



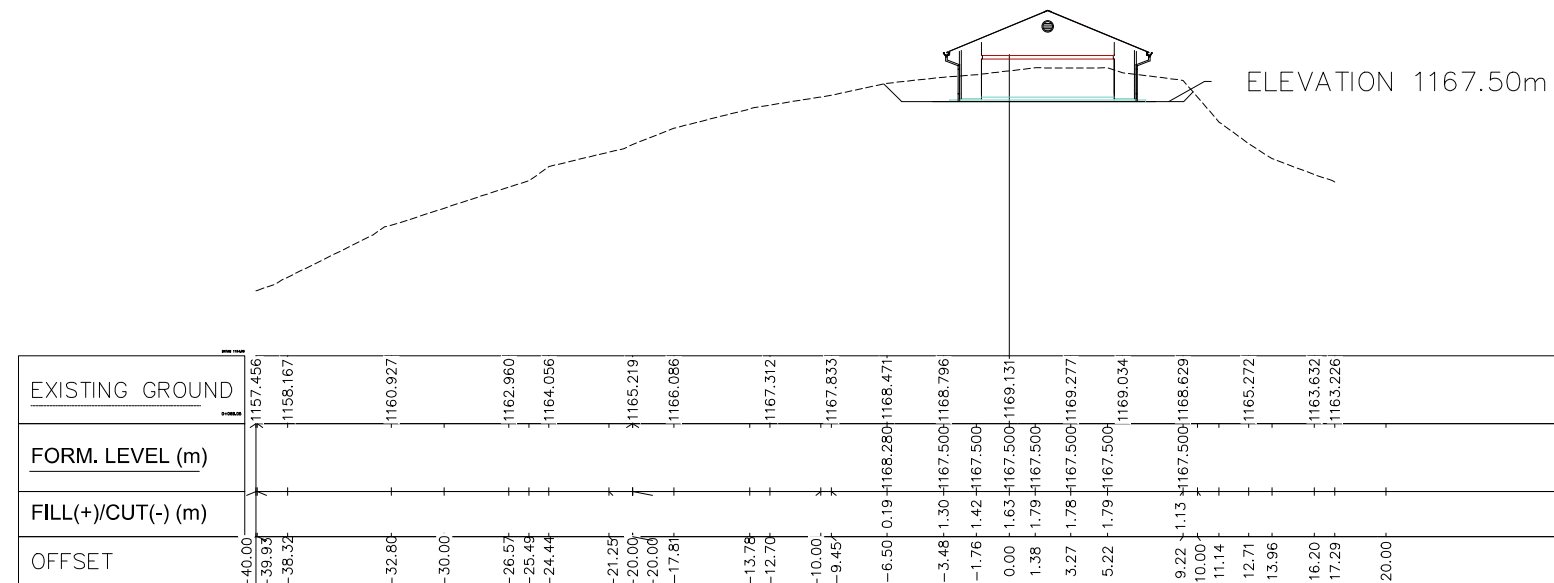
Toilet Block A SECTION A-A






Accommodation Block A SECTION B-B



Office and Kitchen Block A SECTION C-C



Accommodation Block B SECTION D-D

<div>CONSULTANT:</div> <div><div>Plot 107 Kira Road, Kamukoya, P.O.Box 8493, Kampala-Uganda Tel: +256 (0)393 740800 / 07701 740800 Email: mbw@mbw.co.ug</div></div>	<div>FUNDER:</div> <div><div>USAID FROM THE AMERICAN PEOPLE</div></div>	<div>CLIENT:</div> <div><div>Uganda Wildlife Authority @ugandawildlifeauthority PO Box 3530, Kampala, Uganda Tel +256-41-355114, 355111, 355118</div></div>	PROJECT NAME:	DESIGNED BY:					ENGINEER'S SEAL	<div><div>SCALE:</div><div>A1 SCALE 1:1000 A3 SCALE 1:2000</div><div>REF FILE:</div><div>VERTICAL 1:100 1:200</div></div>		
			ACTIVITY NAME:	DRAWN BY:								
			DRAWING DESCRIPTION:	CHECKED BY:								
				APPROVED BY:								
					REV. No.	DATE	DESCRIPTION OF REVISION	BY			COPYRIGHT RESERVED	
DETAILED LANDSCAPING SECTION 3 AND 4												



ELEVATION 1166.40m

EXISTING GROUND	1157.030	1158.048	1158.741	1160.656	1161.830	1164.983	1165.924	1166.577	1166.400	1166.400	1166.400	1166.759	1167.516	1167.668	1167.574	1167.626	1167.216	1165.607	1164.111	1162.276	1162.229												
FORM. LEVEL (m)																																	
FILL(+)/CUT(-) (m)																																	
OFFSET	-40.00	-37.83	-36.67	-33.56	-30.00	-28.08	-27.05	-25.53	-20.00	-18.54	-17.06	-14.30	-13.23	-0.18	-10.00	-9.84	-7.92	-3.88	-1.01	0.00	2.74	5.92	8.83	10.00	10.20	11.90	13.54	15.89	17.28	19.77	19.86	20.00	30.00

Bathroom B SECTION E-E

ELEVATION 1166.50m

EXISTING GROUND		1156.094	1156.150	1157.507	1158.885	1160.782	1163.382	1164.823	1166.065	1166.339	1166.776	1166.500	1167.444	1166.879	1165.558	1164.633	1163.656	1162.287	1162.071													
FORM. LEVEL (m)																																
FILL(+)/CUT(-) (m)																																
OFFSET		39.47	38.45	35.68	34.32	30.79	29.69	28.84	25.27	21.37	19.99	19.23	17.33	13.72	9.61	9.60	5.56	4.37	0.52	1166.500	1166.500	1166.500	1167.444	1166.879	1165.558	1164.633	1163.656	1162.287	1162.071	20.26	30.00	40.00

Kitchen B & Toilet Block B SECTION F-F

CONSULTANT:



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Tel: +256 (0)393 740800 /  
0701 740800  
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FUNDER:



CLIENT:



**Uganda Wildlife  
Authority**  
@ugandawildlifeauthority  
PO Box 3530, Kampala,  
Uganda  
Tel +256-41-355114, 355111,  
355118

PROJECT NAME:

**USAID / Uganda Architect & Engineering Design and Construction  
Management Consulting Services**

ACTIVITY NAME:

**Infrastructure for Biodiversity Conservation in Kidepo Valley National Park.**

DRAWING DESCRIPTION:

DETAILED LANDSCAPING SECTION 5 AND 6

DESIGNED BY:

ENG. BB

DRAWN BY:

JMK

CHECKED BY:

ENG. BB

APPROVED BY:

--

REV. No

DATE

DESCRIPTION OF REVISION

BY

ENGINEER'S SEAL

SCALE: HORIZONTAL VERTICAL REF FILE:

A1 SCALE 1:1000 1:100

A3 SCALE 1:2000 1:200

STATUS: DATE: JUL 2023 PAPER:

DETAILED DESIGN

DRAWING NUMBER:

906-01-DWG-D-CS- 003

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# IMILIMY RANGER POSTS SITE ACCESS ROAD PLAN AND PROFILE

LEGEND

BUILDING / STRUCTURE

FOREST

SWAMP

WATER STREAM

HUMP

RUMBLE STRIPS

CULVERT (PLAN)

CULVERT (SECTION)

TREE

R.O.W

GATE

⊗

EP

TP

POLE  
(ELECTRIC/TELE/LIGHT)

⊗

LP

DRAIN

⊗

B

BENCH MARK /  
SURVEY CONTROL

—

C

CABLE

—

S

SIGN POST

—

X

X

X

FENCE

—

—

—

BRIDGE

⊗

B

BORE-HOLE

M.H

MAN HOLE

GV

GRAVE YARD

DESIGN SPEED

50KPH

R.O.W

20 M

TYPICAL CROSS SECTIONS

LINE

2.0m

LINE

2.0m

2.0m

CROSS-SECTION

PAVEMENT DESIGN

GRAVEL MATERIAL

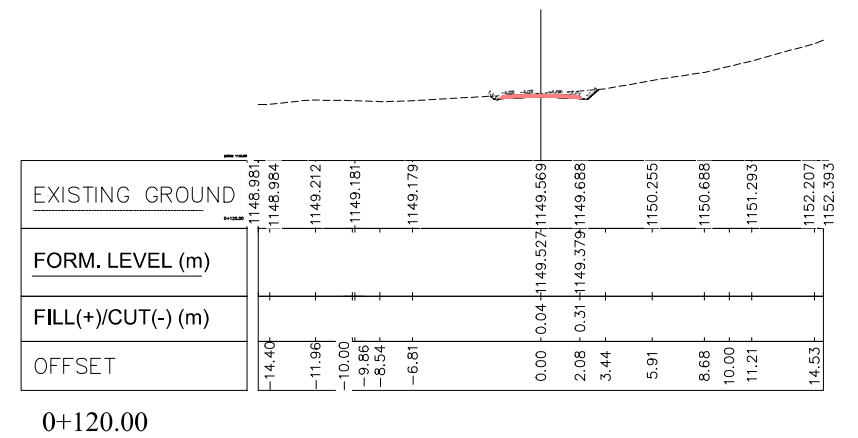
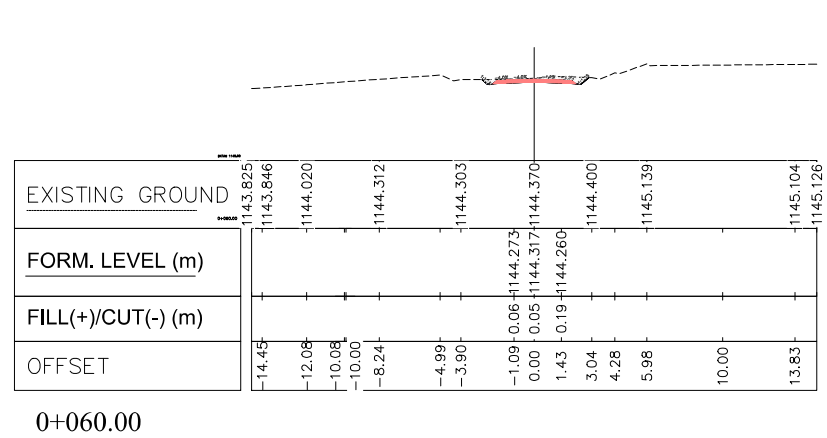
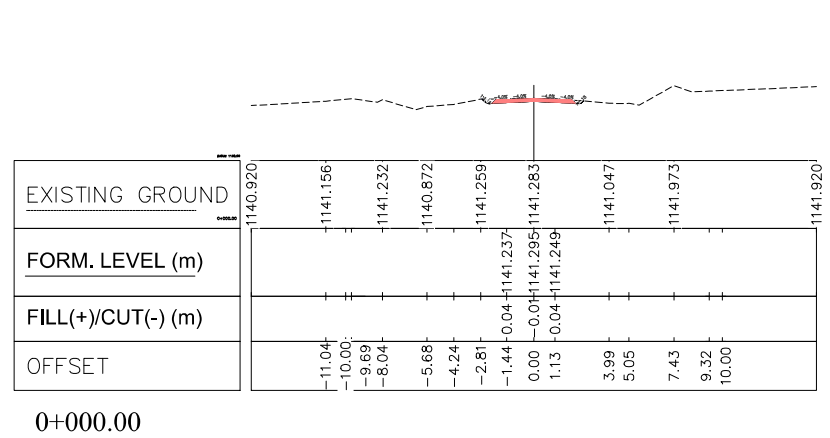
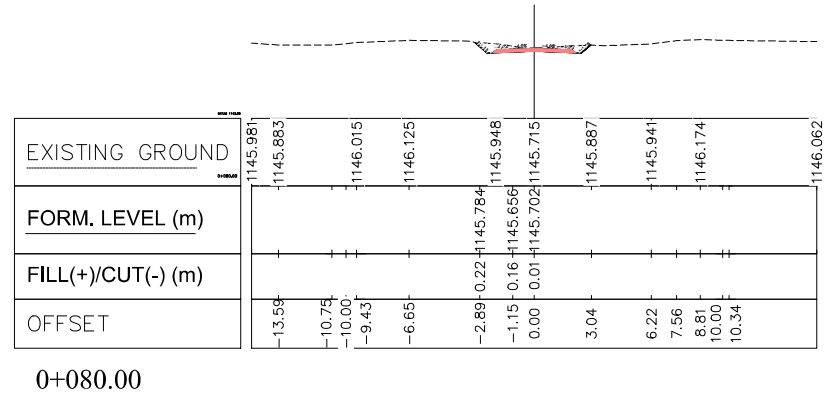
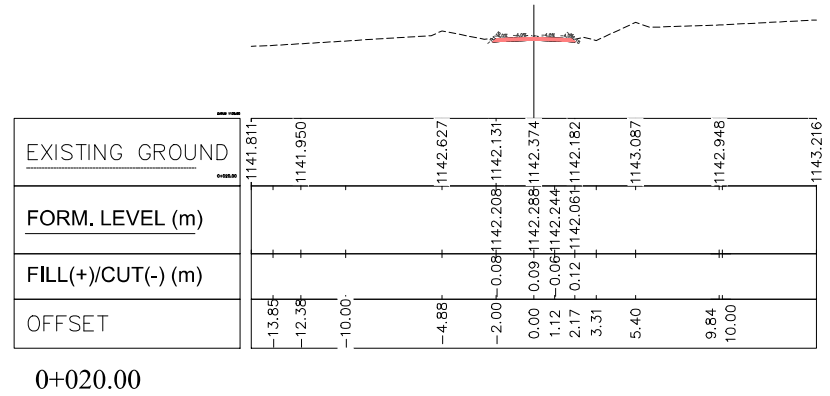
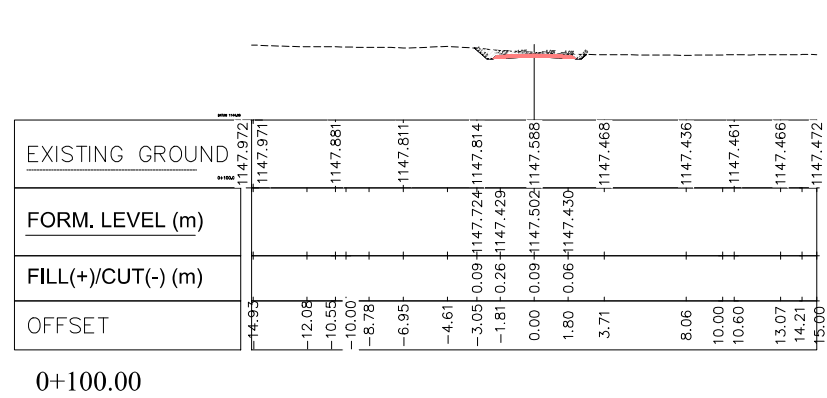
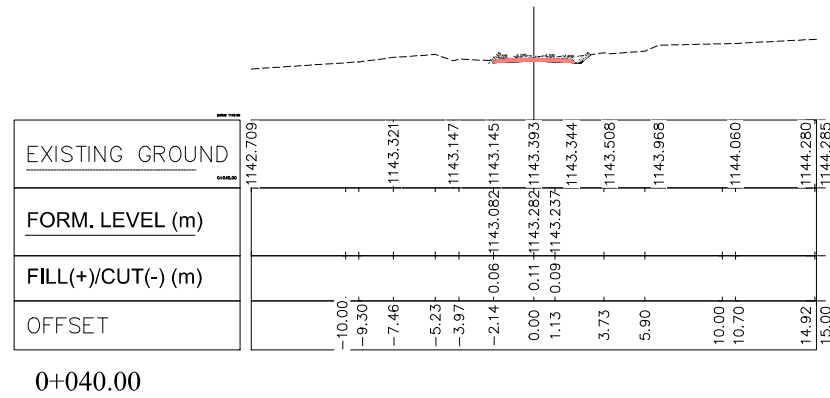
CHAINAGE (KM)
FINISHED DESIGN LEVEL - CL (m)
EXISTING GROUND LEVEL - CL(m)
FILL (+) / CUT(-) (m)
HORIZONTAL SCHEMATIC
VERTICAL SCHEMATIC
SUPERELEVATION

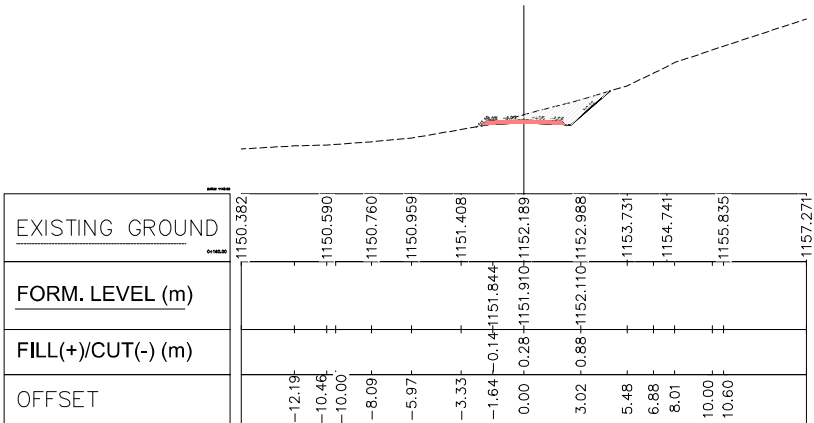
1158.000	1156.000	1154.000	1152.000	1150.000	1148.000	1146.000	1144.000	1142.000							
0+000	0+020	0+040	0+060	0+080	0+100	0+120	0+140	0+160	0+180	0+200	0+220	0+240	0+260	0+275	
1141.295	1142.288	1143.282	1144.317	1145.702	1147.502	1149.527	1151.096	1151.910	1152.102	1152.160	1152.130	1152.078	1152.026	1152.000	
1141.283	1142.374	1143.393	1144.370	1145.716	1147.588	1149.568	1151.393	1152.189	1152.092	1152.810	1152.541	1152.121	1152.525	1152.525	
0.011	-0.085	-0.111	-0.053	-0.014	-0.087	-0.041	-0.287	-0.279	0.010	-0.651	-0.411	-0.043	-0.499	-0.499	
L=46.73m		L=47.91m R=35.00m		L=60.98m R=38.00m		L=37.87m		L=29.60m R=30.00m		L=15.28m R=11.58m		L=7.21m R=10.84m		L=7.21m R=10.84m	
51.13		50.00		16.55		50.00		42.38		50.92		5.49		5.49	

CONSULTANT:	FUNDER:	CLIENT:	PROJECT NAME:	DESIGNED BY:	ENGINEER'S SEAL				DRAWING NUMBER
<div><div><div>MBW</div><div>CONSULTING</div></div><div><div>Plot 107 Kiya Road, Kamukoya, P.O.Box 8493, Kampala-Uganda Tel: +256 (0)393 740800 / (0)701 740800 Email: mbw@mbw.co.ug</div></div></div> <div><div><div>USAID</div><div>FROM THE AMERICAN PEOPLE</div></div></div> <div><div><div><div>UWA</div><div>Conserving for Generations</div></div><div><div>Uganda Wildlife Authority</div><div>@ugandawildlifeauthority PO Box 3330, Kampala, Uganda Tel +256-41-355114, 355111, 355118</div></div></div><div><div>USAID / Uganda Architect &amp; Engineering Design and Construction Management Consulting Services</div><div>ACTIVITY NAME: Infrastructure for Biodiversity Conservation in Kidepo Valley National Park.</div><div>DRAWING DESCRIPTION: PLAN AND LONGITUDINAL PROFILE MILINY RANGER POSTS ACCESS ROAD</div></div><div><div>ENG. BB</div><div>JMK</div><div>ENG. BB</div><div>--</div></div><div><div>REV. No.</div><div>DATE</div><div>REVISED BY</div><div>DESCRIPTION OF REVISION</div><div>BY</div></div><div><div>SCALE: A1 SCALE 1:1000 A3 SCALE 1:2000</div><div>VERTICAL 1:100 1:200</div><div>REF FILE:</div><div>STATUS: DETAILED DESIGN</div><div>DATE: JUL 2023</div><div>PAPER:</div><div>DRAWING NUMBER: 906-01-DWG-D-PP- 2</div></div></div>									

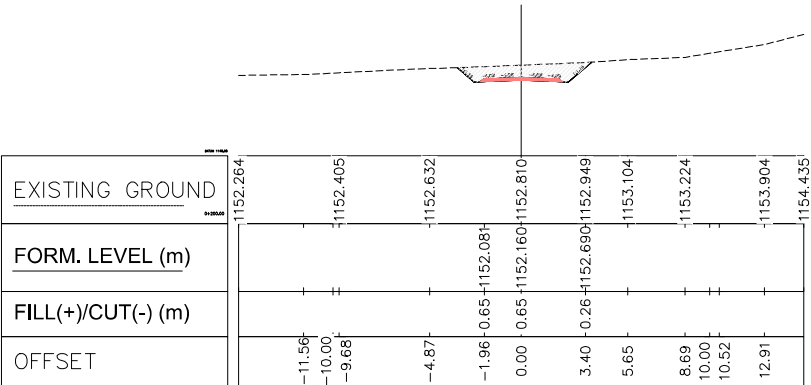


IMILIMY RANGER POSTS SITE  
ACCESS ROAD CROSS  
SECTIONS

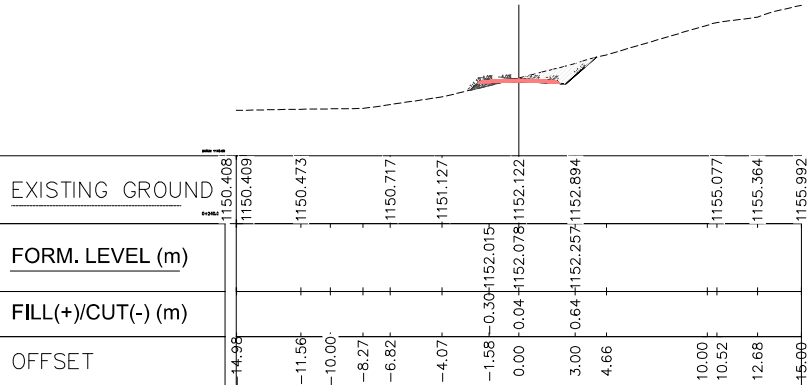




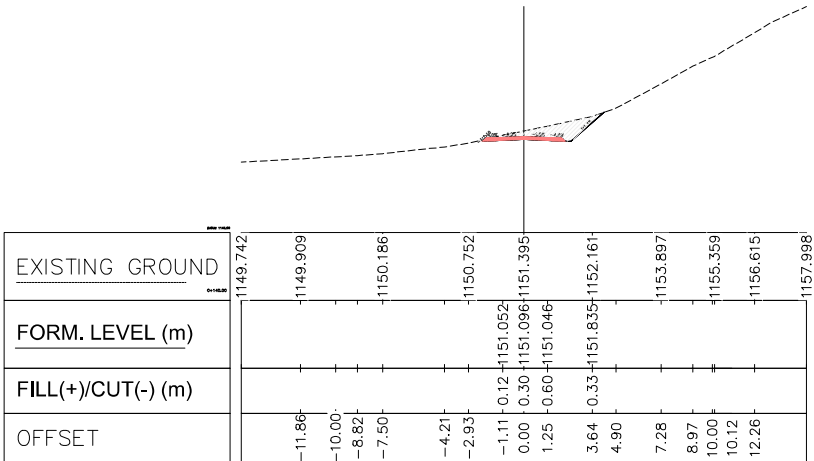
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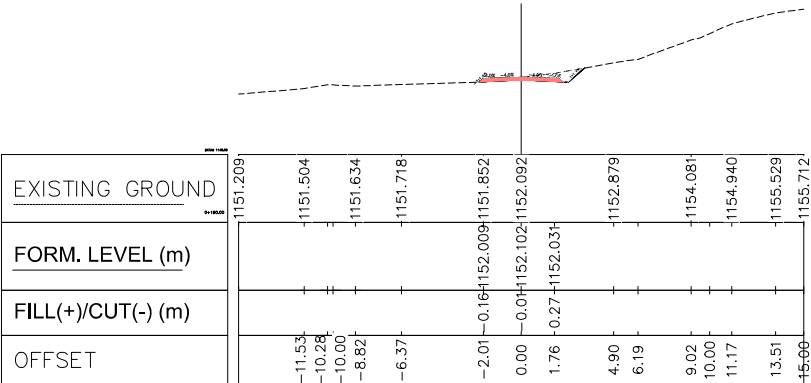
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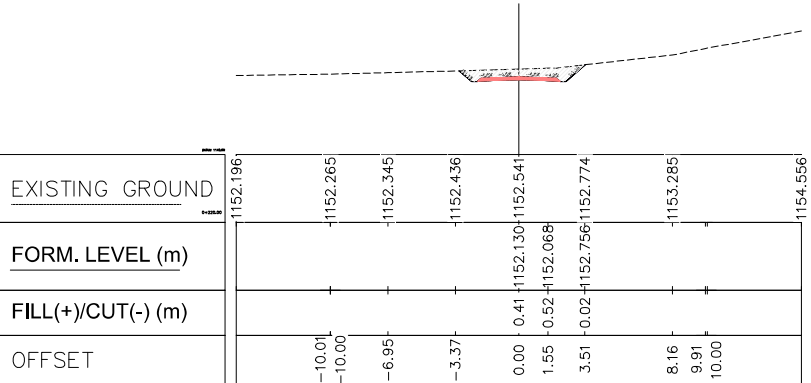
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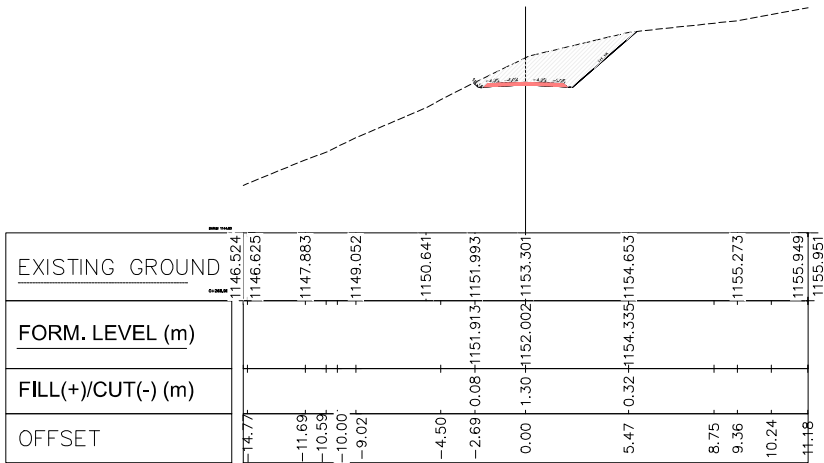
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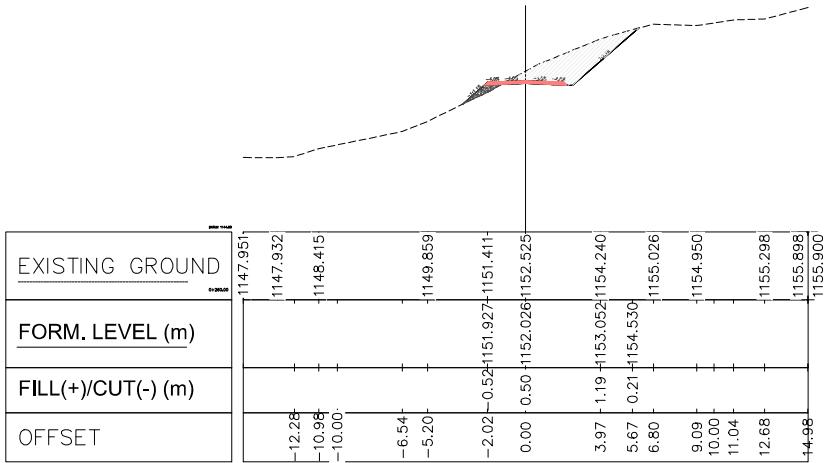
0+180.00






0+220.00



0+268.98



0+260.00

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			USAID / Uganda Architect & Engineering Design and Construction Management Consulting Services				ENG. BB										
			ACTIVITY NAME:				DRAWN BY:										
			Infrastructure for Biodiversity Conservation in Kidepo Valley National Park.				JMK										
			DRAWING DESCRIPTION:				DETAILED CROSS SECTIONS FOR APPROACH ROAD				CHECKED BY:						STATUS:
ENG. BB													DETAILED DESIGN		JUL 2023		
APPROVED BY:																	906-01-DWG-D-CS- 008
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