

REHABILITATION OF EXISTING METALLED ROAD FROM MASKAN GATE TO PHARMACY INTERSECTION AT KARACHI UNIVERSITY

TENDER DRAWINGS
(DECEMBER 2024)



Leadership and Ideas for Tomorrow

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GENERAL ARRANGEMENT

LIST OF DRAWINGS

S.NO	DESCRIPTION	DRAWING NO.	REVISION
GENERAL ARRANGEMENT			
0	LIST OF DRAWING	AIE-IBA-GA-00	0
1	GENERAL NOTES	AIE-IBA-GA-01	0
TOPOGRAPHIC SURVEY DRAWINGS			
2	INDEX PLAN	AIE-IBA-TS-00	0
3	ENLARGE PLAN	AIE-IBA-TS-01	0
4	ENLARGE PLAN	AIE-IBA-TS-02	0
5	ENLARGE PLAN	AIE-IBA-TS-03	0
6	ENLARGE PLAN	AIE-IBA-TS-04	0
7	ENLARGE PLAN	AIE-IBA-TS-05	0
PROPOSED ROAD ALIGNMENT			
8	INDEX PLAN	AIE-IBA-LP-00	0
9	ENLARGE LAYOUT PLAN	AIE-IBA-LP-01	0
10	ENLARGE LAYOUT PLAN	AIE-IBA-LP-02	0
11	ENLARGE LAYOUT PLAN	AIE-IBA-LP-03	0
12	ENLARGE LAYOUT PLAN	AIE-IBA-LP-04	0
13	ENLARGE LAYOUT PLAN	AIE-IBA-LP-05	0
PROPOSED PLAN & PROFILE			
14	ENLARGE PLAN	AIE-IBA-PP-01	0
15	ENLARGE PLAN	AIE-IBA-PP-02	0
16	ENLARGE PLAN	AIE-IBA-PP-03	0
SETTING OUT LAYOUT PROPOSED ROAD ALIGNMENT			
17	INDEX PLAN	AIE-IBA-SO-00	0
18	ENLARGE LAYOUT PLAN	AIE-IBA-SO-01	0
19	ENLARGE LAYOUT PLAN	AIE-IBA-SO-02	0
20	ENLARGE LAYOUT PLAN	AIE-IBA-SO-03	0
21	ENLARGE LAYOUT PLAN	AIE-IBA-SO-04	0
22	ENLARGE LAYOUT PLAN	AIE-IBA-SO-05	0
TOPOGRAPHIC SURVEY SUPERIMPOSED PROPOSED ROAD ALIGNMENT			
17	INDEX PLAN	AIE-IBA-SI-00	0
18	ENLARGE LAYOUT PLAN	AIE-IBA-SI-01	0
19	ENLARGE LAYOUT PLAN	AIE-IBA-SI-02	0
20	ENLARGE LAYOUT PLAN	AIE-IBA-SI-03	0
21	ENLARGE LAYOUT PLAN	AIE-IBA-SI-04	0
22	ENLARGE LAYOUT PLAN	AIE-IBA-SI-05	0
PROPOSED ROAD SECTION			
23	PROPOSED ROAD SECTION A & B	AIE-IBA-RS-01	0
24	PROPOSED ROAD SECTION C & D	AIE-IBA-RS-02	0
MISCELLANEOUS DETAILS			
25	ROAD TRAFFIC SIGNS MISCELLANEOUS DETAIL	AIE-IBA-MIS-01	0
26	PAVEMENT MARKING MISCELLANEOUS DETAIL (SHEET 01 OF 04)	AIE-IBA-MIS-02	0
27	PAVEMENT MARKING MISCELLANEOUS DETAIL (SHEET 02 OF 04)	AIE-IBA-MIS-03	0
28	PAVEMENT MARKING MISCELLANEOUS DETAIL (SHEET 03 OF 04)	AIE-IBA-MIS-04	0
29	PAVEMENT MARKING MISCELLANEOUS DETAIL (SHEET 04 OF 04)	AIE-IBA-MIS-05	0

S.NO	DESCRIPTION	DRAWING NO.	REVISION
GATE HOUSE DRAWINGS			
ARCHITECTURAL DRAWINGS			
30	ENTRY WALL & GATE LEGEND, GENERAL NOTES & ABBREVIATIONS	AIE-IBA-ARCH-01	0
31	ENTRANCE GATE LOCATION PLAN	AIE-IBA-ARCH-02	0
32	FLOOR PLAN	AIE-IBA-ARCH-03	0
33	WAITING AREA ELEVATION	AIE-IBA-ARCH-04	0
34	CHECK POST ELEVATION	AIE-IBA-ARCH-05	0
35	TOILET BLOCK ELEVATION	AIE-IBA-ARCH-06	0
36	DOOR & WINDOWS DETAILS	AIE-IBA-ARCH-07	0
STRUCTURAL DRAWINGS			
37	GENERAL NOTES	AIE-IBA-GN-01	0
38	STANDARD DETAILS	AIE-IBA-GN-02	0
39	WAITING AREA GENERAL ARRANGEMENT PLAN	AIE-IBA-ST-01	0
40	WAITING AREA GENERAL REINFORCEMENT DETAILS	AIE-IBA-ST-02	0
41	TOILET BLOCK GENERAL ARRANGEMENT PLAN	AIE-IBA-ST-03	0
42	TOILET BLOCK REINFORCEMENT DETAILS	AIE-IBA-ST-04	0
43	CHECK POST GENERAL ARRANGEMENT & REINFORCEMENT DETAILS	AIE-IBA-ST-05	0
44	UNDERGROUND WATER STORAGE TANK GENERAL ARRANGEMENT DETAILS	AIE-IBA-ST-06	0
45	UNDERGROUND WATER STORAGE TANK REINFORCEMENT DETAILS	AIE-IBA-ST-07	0
46	SEPTIC TANK DETAILS	AIE-IBA-ST-08	0
46	MAIN GATE & BOUNDARY WALL DETAILS	AIE-IBA-ST-09	0
PLUMBING DRAWINGS			
47	EXTERNAL WATER SUPPLY LAYOUT	AIE-IBA-WA-01	0
48	EXTERNAL SEWERAGE LAYOUT	AIE-IBA-SW-01	0
49	SEPTIC TANK DETAIL & SECTION	AIE-IBA-SW-02	0
50	SOAKAGE PIT DETAIL & SECTION	AIE-IBA-SW-03	0
ELECTRICAL DRAWINGS			
51	GATE PAN & ELECTRICAL WORKING LEGEND	AIE-IBA-EL-01	0
52	LIGHTING & POWER LAYOUT PLAN	AIE-IBA-EL-02	0
53	LEGENDS, GENERAL NOTES	AIE-IBA-EL-03	
54	ELECTRICAL STANDARD DETAILS	AIE-IBA-EL-04	
55	POWER SINGLE LINE & SCHEMATIC DIAGRAM	AIE-IBA-EL-05	
56	RCP LAYOUT PLAN	AIE-IBA-EL-06	
57	LIGHTING LAYOUT PLAN	AIE-IBA-EL-07	
58	POWER LAYOUT PLAN	AIE-IBA-EL-08	
59	CCTV LAYOUT PLAN	AIE-IBA-EL-10	
60	RCP LAYOUT PLAN	AIE-IBA-EL-11	
61	LIGHTING LAYOUT PLAN	AIE-IBA-EL-12	
62	POWER LAYOUT PLAN	AIE-IBA-EL-13	
63	CCTV LAYOUT PLAN	AIE-IBA-EL-14	
64	RCP LAYOUT PLAN	AIE-IBA-EL-15	
65	LIGHTING LAYOUT PLAN	AIE-IBA-EL-16	

01-LIST OF DWGS_FINAL.dwg

REV	DATE	DESCRIPTION	SIGN
AMENDMENTS			
PROJECT: REHABILITATION OF METALED ROAD AT KARACHI UNIVERSITY IBA KARACHI			
CLIENT: 			
ENGINEERING CONSULTANT:  1st Floor, IEP Building, 177/2, Liaquat Barracks, Main Shahrah-e-Faisal, Karachi 75530, Pakistan Email: info_pk@aieengineers.com			
TITLE: LIST OF DRAWING			
STATUS TENDER DRAWING			
SCALE	N.T.S.	DATE	DEC-2024
DRAWN	H.G	CHECKED	M.A
DESIGNED	S.N	APPROVED	M.F.A
JOB NO.	P-066C	DRAWING NO.	AIE-IBA-GA-00
		REV. NO.	0

GENERAL NOTES.

1. ALL DIMENSIONS AND UNITS ARE IN SI UNIT SYSTEM OF MEASUREMENT EXCEPT WHERE OTHERWISE INDICATED.
2. ALL LEVELS ARE WITH RESPECT TO THE BENCH MARKS (BMS) ESTABLISHED ON SITE. THE COORDINATES & ELEVATION OF BMS ARE AS FOLLOWS:

LIST OF BENCH MARK				
POINT NO.	NORTHING	EASTING	ELEVATION	CODE
28	2759721.421	309868.753	39.718	BM1
47	2759624.309	309700.401	39.533	BM2
67	2759547.132	309553.043	39.323	BM3
114	2759460.897	309428.437	39.024	BM4
132	2759334.646	309241.32	38.198	BM5
377	2759217.989	309109.682	37.889	BM6
378	2759235.713	309120.743	37.939	BM7
424	2759082.206	308797.352	36.468	BM8
526	2759032.978	308756.499	36.532	BM9
573	2759531.152	309498.088	39.192	BM BM10
574	2759583.502	309596.118	39.747	BM BM13

3. GRID COORDINATES ARE IN METERS AND WITH REFERENCE TO UTM 42N.
4. ELEVATIONS AND TOPOGRAPHY SHOWN ON THE DRAWINGS REPRESENT CONDITIONS AT THE TIME OF SURVEY CARRIED OUT IN JULY 2024.
5. BEFORE COMMENCEMENT OF WORK, CONTRACTOR SHALL VERIFY THE EXISTING FEATURES AND ELEVATIONS SHOWN IN DRAWINGS JOINTLY WITH THE INDEPENDENT ENGINEER/GOS.
6. ALL DRAWINGS SHALL BE READ IN CONJUNCTION WITH RELEVANT PLAN AND CROSS-SECTIONAL DRAWINGS.
7. ANY CONFLICT FOUND BETWEEN DRAWINGS SHALL BE BROUGHT TO THE KNOWLEDGE OF THE THE INDEPENDENT ENGINEER/GOS FOR HIS CLARIFICATION AND INSTRUCTIONS BEFORE PROCEEDING WITH THE WORK.
8. DARK LINES SHOWN ON DRAWINGS INDICATE THE PROPOSED DEVELOPMENT, WHEREAS LIGHT LINES INDICATE THE EXISTING FEATURES OR AS SHOWN IN THE LEGENDS.
9. ALL EXISTING STRUCTURES, WHICH LIE IN THE PROPOSED CROSS SECTION, ARE REQUIRED TO BE DEMOLISHED/RELOCATED BY THE CONTRACTOR/CONCERNED AGENCIES IN COORDINATION WITH THE CONCERNED UTILITY DEPARTMENT SUBJECT TO PRIOR APPROVAL OF THE INDEPENDENT ENGINEER/GOS.
10. THE REMOVAL/SHIFTING OF EXISTING UNDERGROUND AND OVERHEAD SERVICES/UTILITIES SHALL BE CARRIED OUT BY THE CONCERNED DEPARTMENTS/AGENCIES SUBJECT TO PRIOR APPROVAL OF THE CLIENT.
11. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS AND EXPEDIENTS TO PREVENT DAMAGES TO THE ADJACENT STRUCTURES, OVER AND UNDER GROUND PIPES, CABLES AND CONDUITS ETC, ANY DAMAGE CAUSED TO THE STRUCTURE AND INSTALLATIONS DUE TO NEGLIGENCE OF THE CONTRACTOR SHALL BE REPAIRED/REPLACED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER WITHOUT ADDITIONAL COST TO THE EMPLOYER.
12. DURING RECONSTRUCTION, THE LEVEL OF EXISTING MANHOLES ARE REQUIRED TO BE ADJUSTED AS PER FINAL ROAD PROFILE.
13. PAVEMENT WIDENING SHALL BE REQUIRED WHERE EXISTING PAVEMENT WIDTH IS LESS THAN THE WIDTH SHOWN ON THE TYPICAL CROSS-SECTION.
14. ARROWS SHOWN ON PLANS INDICATE DIRECTION OF TRAFFIC ONLY, THEY DO NOT REPRESENT PAVEMENT MARKINGS UNLESS SPECIFICALLY NOTED.
15. ACCESS TO ANY EXISTING COMMERCIAL AND RESIDENTIAL AREAS WITHIN THE CONSTRUCTION ZONE SHALL NOT BE BLOCKED BY THE CONTRACTOR AT ANY TIME.
16. THE CONTRACTOR SHALL SUBMIT A COMPREHENSIVE TRAFFIC MANAGEMENT/DIVERSION PLAN BEFORE STARTING THE WORK FOR DIFFERENT PHASES OF CONSTRUCTION AND COORDINATE WITH ENGINEER/UNIVERSITY MANAGEMENT TO ENSURE UN-INTERRUPTED TRAFFIC FLOW.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TEMPORARY TRAFFIC DIVERSIONS ON THE ROAD, CONSTRUCTION OF DETOUR, MAINTENANCE, SPRINKLING OF WATER, GRADING AND COMPACTION, TRAFFIC SAFETY DEVICES, BEACON LIGHTS WHEN AND WHERE REQUIRED, OR AS DIRECTED BY THE ENGINEER, WITHOUT ADDITIONAL COST TO THE EMPLOYER.
18. THE GROUND ELEVATION, STRUCTURE LOCATIONS, SKEW ANGLE AND GRADES SHALL BE CHECKED DURING STAKE OUT SURVEY BEFORE EXECUTION OF THE WORKS SUFFICIENTLY IN ADVANCE. ADJUSTMENTS IN THE RELEVANT DRAWINGS, IF ANY, SHALL BE APPROVED BY THE ENGINEER BEFORE EXECUTION.
19. THE CONTRACTOR SHALL ENSURE THAT ALL THE SUITABLE MATERIAL OBTAINED DURING EXCAVATION SHALL BE USED IN NEW CONSTRUCTION.

20. THE CONTRACTOR SHALL TAKE CARE NOT TO DAMAGE ANY EXISTING UTILITIES (ELECTRIC, GAS, NTC, PTCL, SEWERAGE, WATER, ETC).
21. THE CONTRACTOR SHALL AVOID UNNECESSARY CUTTING/REMOVAL OF TREES.
22. THE CONTRACTOR SHALL AVOID UNNECESSARY CUTTING/DISMANTLING OF EXISTING ROAD/MEDIAN/FOOTPATH ETC. IF SUCH A WORK IS DAMAGED BY THE CONTRACTOR DURING CONSTRUCTION, IT SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER WITHOUT ANY FINANCIAL IMPLICATION TO THE EMPLOYER.
23. FOR ALL OTHER REINFORCED CONCRETE CROSS-SECTION REFER TO THE RELEVANT STRUCTURE DRAWINGS FOR CLASS OF CONCRETE AND TYPE OF CEMENT.
24. DRAINAGE SCHEME OF ROAD REHABILITATION WORKS SHALL BE UNDERTAKEN BY CONTRACTOR AS PER EXISTING SITE CONDITIONS AND NEAR BY DISPOSAL. SUBJECT TO PRIOR APPROVAL OF THE INDEPENDENT ENGINEER/GOS.

ABBREVIATION

ALGN – Alignment
 BD – Nallah Bed
 BM – Bench Mark
 BOP – Beginning of Project
 BLD – Building
 BM – Boundary Wall
 CN – Chainage
 CP – Control Point
 CL – Center Line
 CUR LEN – Vertical Curve Length
 D – Depth
 Dc – Degree of Curve (by Arc)
 Dch – Degree of Curve (by Chord)
 Deg – Degree
 Dm – Diameter
 Dim – Dimension
 DR – Drain
 E/C – Existing, Exc, External, Ordinate
 E/LEV – Elevation
 EOP – End of Project
 EP – Electric Pole
 F – Footpath
 F.R.L. – Finished Road Level
 H/HOR – Horizontal
 HV – Invert Level
 I/α – Deflection Angle (Horizontal Curve)
 Km – Kilometer
 L – Length of Horizontal
 LOW – Low Point

FP – Footpath
 LP – Light Pole
 M – M/D Ordinate
 mm – Millimeter
 Mtr – Meter
 N – Northing, North
 NO – Number
 N.T.S – Not to Scale
 NC – Not on Contract
 OF – Offset
 PC – Point of Horizontal Curve
 PG – Point of Gradient
 PGL – Profile Grade Line
 P – Point of Horizontal, Horizontal Curve
 PR – Point of Rotation
 T – Tangent Length
 R – Radius of Horizontal Curve
 RE – Road Edge
 R.O.W – Right of Way
 SL – Surface Level
 T – Tangent Length
 T.P – Telephone Pole

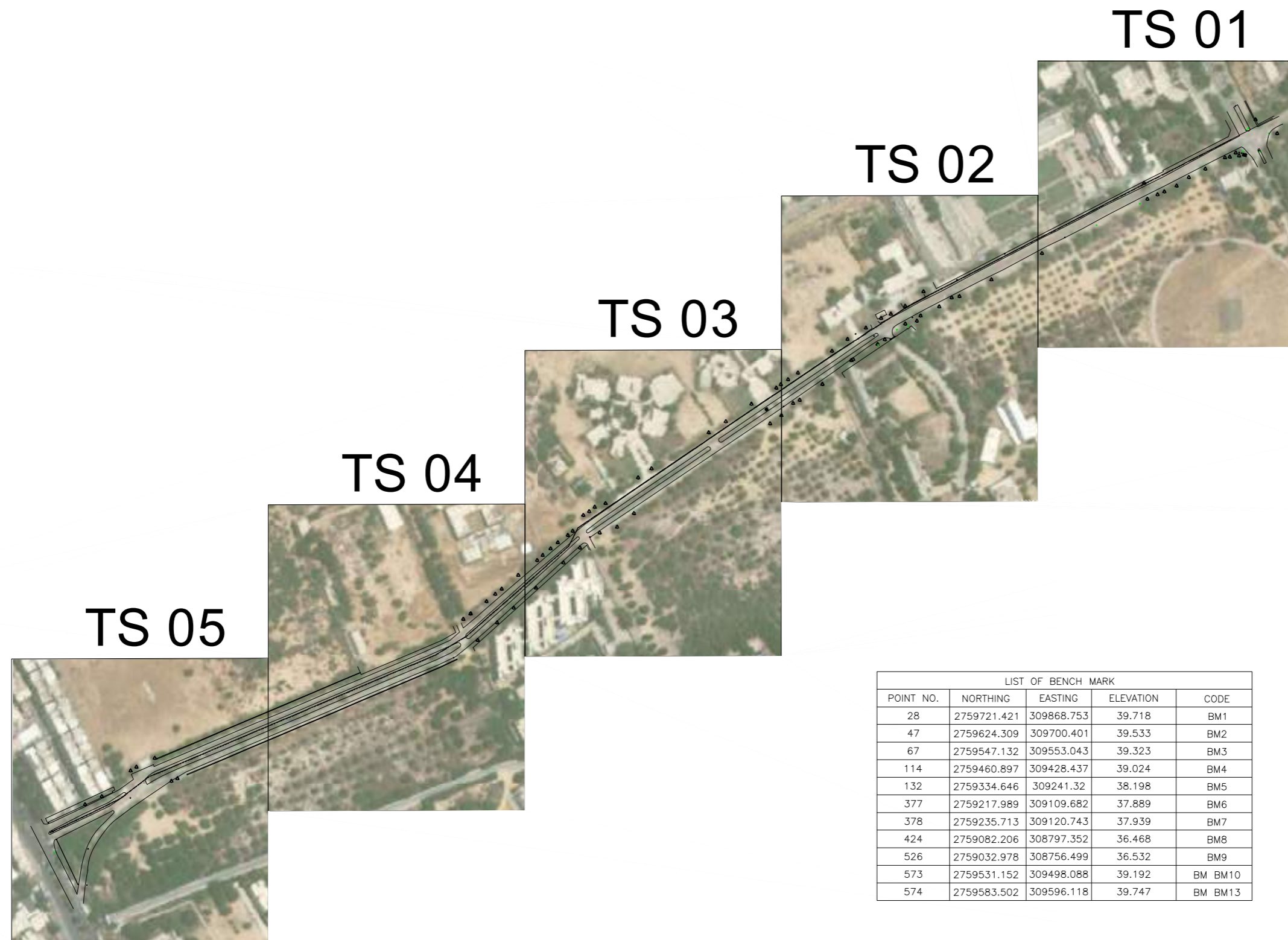
LEGEND

PROPOSED CARRIAGEWAY	
PROPOSED FOOTPATH	
PROPOSED MEDIAN	
TREE	
ELECTRIC POLE 11 KV OR SMALLER WITH TRANSMISSION LINE	
BUILDING, EXISTING STRUCTURES ETC.	
WATER SHUTOFF VALVE	
SANITARY SEWER MANHOLE	
WATER SUPPLY VALVE	
PROJECT BOUNDARY LINE WITH CORNER ANNOTATION	 BD N:3764230.00 E:724190.00 400.00
DRILL HOLE/BOREHOLE	
TESTPIT/TRIAL PIT	
SPOT ELEVATION/GROUND LEVEL	400.00
ENTRANCE/GATE	Gate
MANHOLE INVERT LEVEL	400.00 MHB
LIGHT POLE	LP
PARK/VEGETATION/SHRUBS/DEEP GRASS	
NULLAH/DRAIN/STREAM	

REV	DATE	DESCRIPTION	SIGN
AMENDMENTS			
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CLIENT: 			
ENGINEERING CONSULTANT: 1st Floor, IEP Building, 177/2, Liaquat Barracks, Main Shahr-e-Faisal, Karachi 75530, Pakistan Email: info_pk@aiengineers.com			
TITLE: GENERAL NOTES			
STATUS CLIENT REVIEW			
SCALE	N.T.S.	DATE	JUL.-2024
DRAWN	B.A	CHECKED	M.A
DESIGNED	S.N	APPROVED	M.F.A
JOB NO.	DRAWING NO.	REV. NO.	
P-066C	AIE-IBA-GN-01	0	

TOPOGRAPHIC SURVEY DRAWINGS

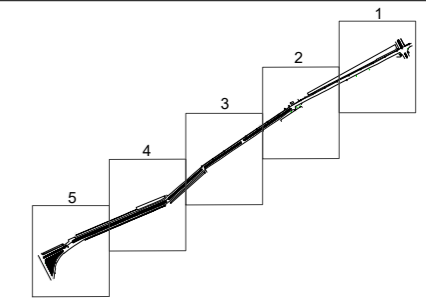
AIE-IBA-TS-00 TO AIE-IBA-TS-05.dwg



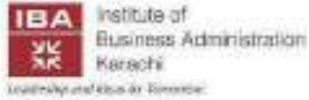

NOTES.

1. ALL DIMENSIONS AND LEVELS SHOWN ARE IN METER UNLESS OTHER WISE STATED.
2. REFER DRAWING NO. AIE-IBA-GN-01 FOR GENERAL NOTES.

KEY PLAN



LIST OF BENCH MARK				
POINT NO.	NORTHING	EASTING	ELEVATION	CODE
28	2759721.421	309868.753	39.718	BM1
47	2759624.309	309700.401	39.533	BM2
67	2759547.132	309553.043	39.323	BM3
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424	2759082.206	308797.352	36.468	BM8
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573	2759531.152	309498.088	39.192	BM BM10
574	2759583.502	309596.118	39.747	BM BM13

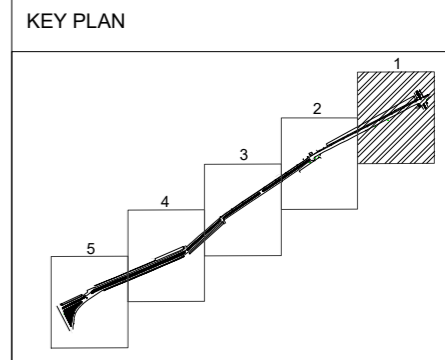
REV	DATE	DESCRIPTION	SIGN
AMENDMENTS			
PROJECT: REHABILITATION OF METELED ROAD AT KARACHI UNIVERSITY IBA KARACHI			
CLIENT: 			
ENGINEERING CONSULTANT:  1st Floor, IEP Building, 177/2, Liaquat Barracks, Main Shahrah-e-Faisal, Karachi 75530, Pakistan Email: info_pk@aengineers.com			
TITLE: TOPOGRAPHIC SURVEY INDEX PLAN			
STATUS TENDER DRAWING			
SCALE	NTS	DATE	Dec. - 2024
DRAWN	H.G	CHECKED	M.A
DESIGNED	S.N	APPROVED	M.F.A
JOB NO.	DRAWING NO.	REV. NO.	
P-066C	AIE-IBA-TS-00	0	

AIE-IBA-TS-00 TO AIE-IBA-TS-05.dwg

MATCH LINE D



- NOTES.**
1. ALL DIMENSIONS AND LEVELS SHOWN ARE IN METER UNLESS OTHER WISE STATED.
 2. REFER DRAWING NO. AIE-IBA-GN-01 FOR GENERAL NOTES.



REV	DATE	DESCRIPTION	SIGN
AMENDMENTS			

PROJECT:
REHABILITATION OF METELED ROAD AT KARACHI UNIVERSITY IBA KARACHI

CLIENT:



ENGINEERING CONSULTANT:



1st Floor, IEP Building, 177/2,
Liaquat Barracks,
Main Shahr-ah-e-Faisal,
Karachi 75530, Pakistan
Email: info_pk@aiengineers.com

TITLE:
ENLARGE PLAN OF TOPOGRAPHIC SURVEY

STATUS:
TENDER DRAWING

SCALE	N.T.S	DATE	DEC.-2024
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DRAWN	H.G	CHECKED	M.A
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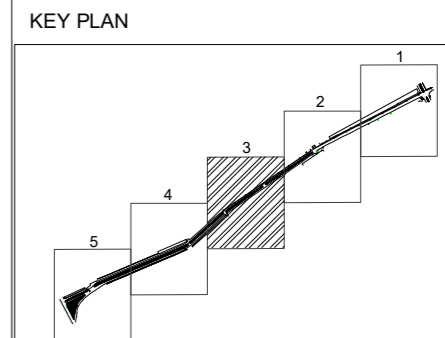
DESIGNED	S.N	APPROVED	M.F.A
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JOB NO.	DRAWING NO.	REV. NO.
P-066C	AIE-IBA-TS-01	0

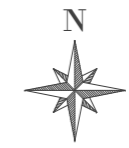
AIE-IBA-TS-00 TO AIE-IBA-TS-05.dwg



- NOTES.**
1. ALL DIMENSIONS AND LEVELS SHOWN ARE IN METER UNLESS OTHER WISE STATED.
 2. REFER DRAWING NO. AIE-IBA-GN-01 FOR GENERAL NOTES.



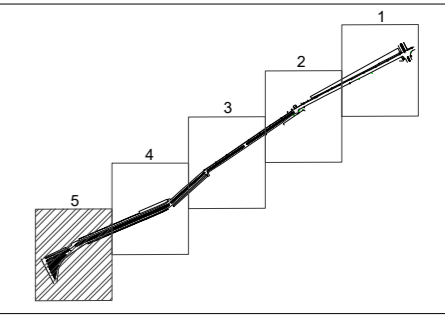
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AMENDMENTS			
PROJECT: REHABILITATION OF METEALED ROAD AT KARACHI UNIVERSITY IBA KARACHI			
CLIENT:  Institute of Business Administration Karachi			
ENGINEERING CONSULTANT:  1st Floor, IEP Building, 177/2, Liaquat Barracks, Main Shahrah-e-Faisal, Karachi 75530, Pakistan. Email: info_pk@aengineers.com			
TITLE: ENLARGE PLAN OF TOPOGRAPHIC SURVEY			
STATUS TENDER DRAWING			
SCALE	N.T.S	DATE	DEC.-2024
DRAWN	H.G	CHECKED	M.A
DESIGNED	S.N	APPROVED	M.F.A
JOB NO.	DRAWING NO.	REV. NO.	
P-066C	AIE-IBA-TS-03	0	



MATCH LINE A

- NOTES.**
1. ALL DIMENSIONS AND LEVELS SHOWN ARE IN METER UNLESS OTHER WISE STATED.
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KEY PLAN



REV	DATE	DESCRIPTION	SIGN

AMENDMENTS

PROJECT: REHABILITATION OF METELED ROAD AT KARACHI UNIVERSITY IBA KARACHI

CLIENT:



ENGINEERING CONSULTANT:



1st Floor, IEP Building, 177/2, Liaquat Barracks, Main Shahrah-e-Faisal, Karachi 75530, Pakistan
Email: info_pk@aiengineers.com

TITLE: ENLARGE PLAN OF TOPOGRAPHIC SURVEY

STATUS: TENDER DRAWING

SCALE: N.T.S DATE: DEC.-2024

DRAWN: H.G CHECKED: M.A

DESIGNED: S.N APPROVED: M.F.A

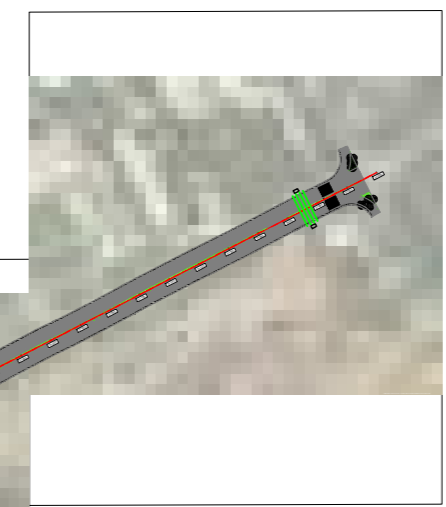
JOB NO. P-066C	DRAWING NO. AIE-IBA-TS-05	REV. NO. 0
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AIE-IBA-TS-00 TO AIE-IBA-TS-05.dwg

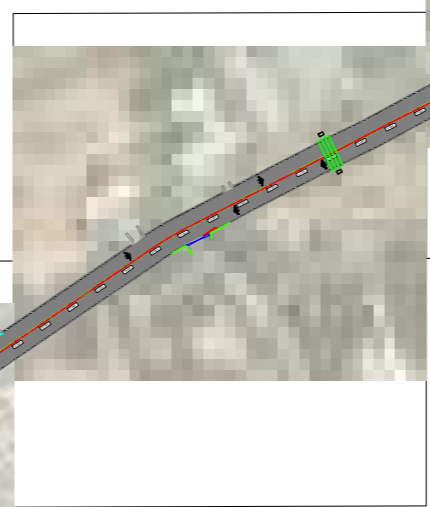
PROPOSED ROAD ALIGNMENT



SHEET #1



SHEET #2



SHEET #3



SHEET #4



SHEET #5



NOTES.

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LEGEND

PROPOSED CARRIAGEWAY	
PROPOSED FOOTPATH	
PROPOSED MEDIAN	
GATE HOUSE	
CHECK POST	
ENTRANCE/GATE	
PROPOSED WALL	
EXISTING WALL TO BE DEMOLISHED	
EXISTING WALL TO BE RETAINED	
SLEEVES	

REV	DATE	DESCRIPTION	SIGN
AMENDMENTS			

PROJECT:
REHABILITATION OF METALED ROAD AT KARACHI UNIVERSITY IBA KARACHI

CLIENT:



IBA Institute of Business Administration Karachi
Leadership and Innovation for Tomorrow

ENGINEERING CONSULTANT:



AI Engineers
Pakistan Private Limited
1st Floor, IEP Building, 177/2, Liaquat Barracks, Main Shahrah-e-Faisal, Karachi 75530, Pakistan
Email: info_pk@aengineers.com

TITLE:
PROPOSED ROAD ALIGNMENT KEY PLAN

STATUS
TENDER DRAWING

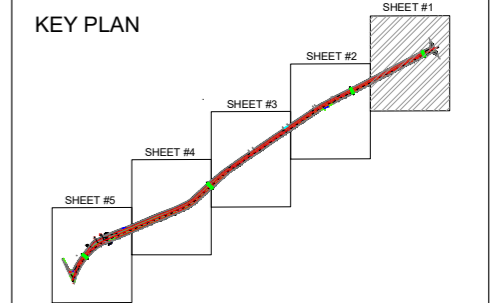
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JOB NO.	DRAWING NO.	REV. NO.
P-066C	AIE-IBA-LP-00	0

AIE-IBA-LP-00 TO AIE-IBA-LP-05.dwg



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 2. REFER DRAWING NO. AIE-IBA-GN-01 FOR GENERAL NOTES.



LEGEND

PROPOSED CARRIAGEWAY	
PROPOSED FOOTPATH	
PROPOSED MEDIAN	
GATE HOUSE	
CHECK POST	
ENTRANCE/GATE	
PROPOSED WALL	
EXISTING WALL TO BE DEMOLISHED	
EXISTING WALL TO BE RETAINED	
SLEEVES	

REV	DATE	DESCRIPTION	SIGN
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PROJECT: REHABILITATION OF METEALED ROAD AT KARACHI UNIVERSITY IBA KARACHI

CLIENT:

IBA Institute of Business Administration Karachi
Leadership and Innovation for Tomorrow

ENGINEERING CONSULTANT:

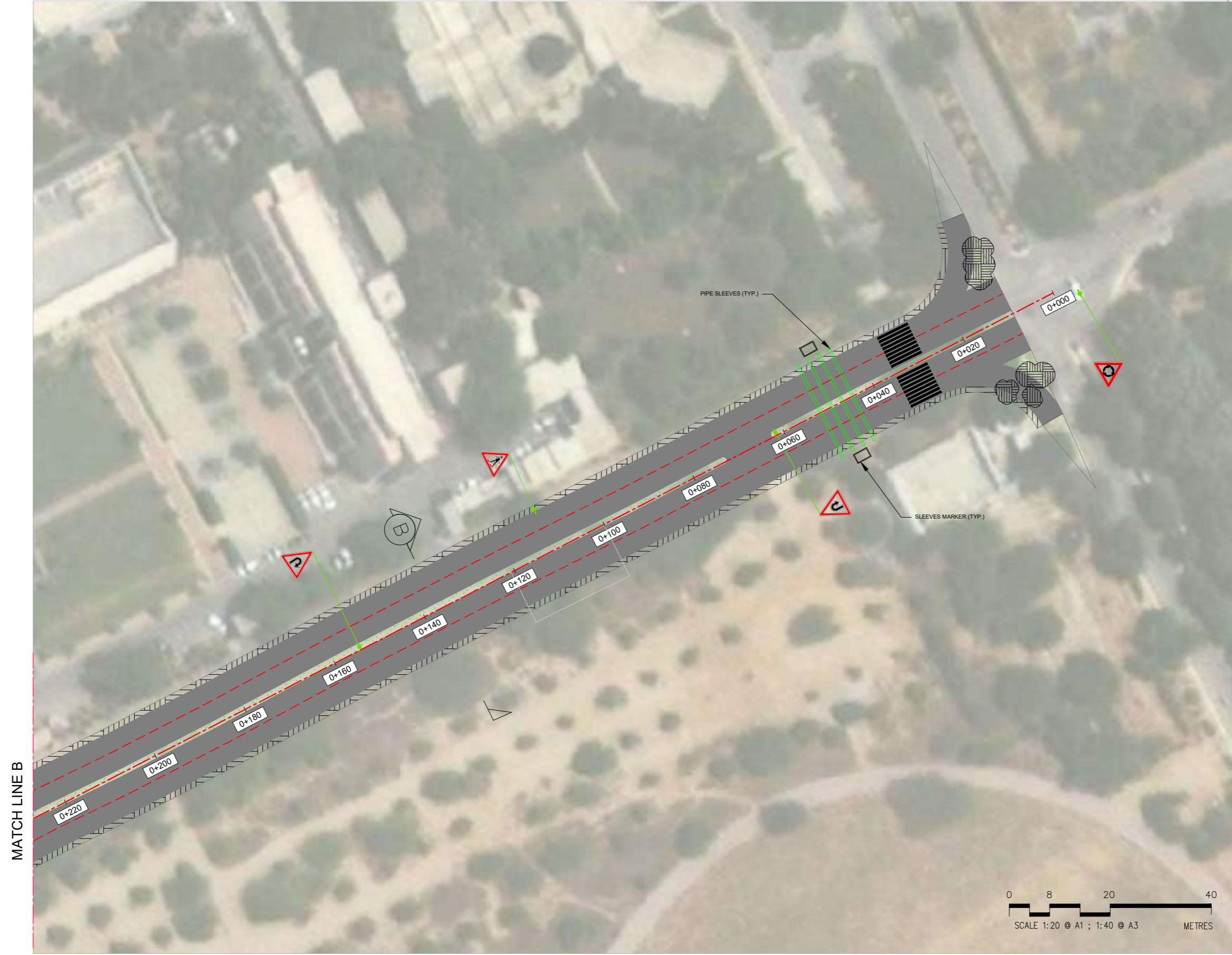
AI Engineers
1st Floor, IEP Building, 177/2, Liaquat Barracks, Main Shahrah-e-Faisal, Karachi 75530, Pakistan
Email: info_pk@aengineers.com

TITLE: PROPOSED ROAD ALIGNMENT ENLARGE LAYOUT PLAN (SHEET 01 OF 05)

STATUS: TENDER DRAWING

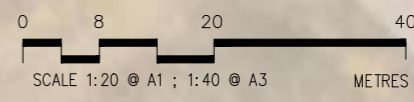
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DRAWN	H.G	CHECKED	M.A
DESIGNED	S.N	APPROVED	M.F.A

JOB NO.	DRAWING NO.	REV. NO.
P-066C	AIE-IBA-LP-01	0

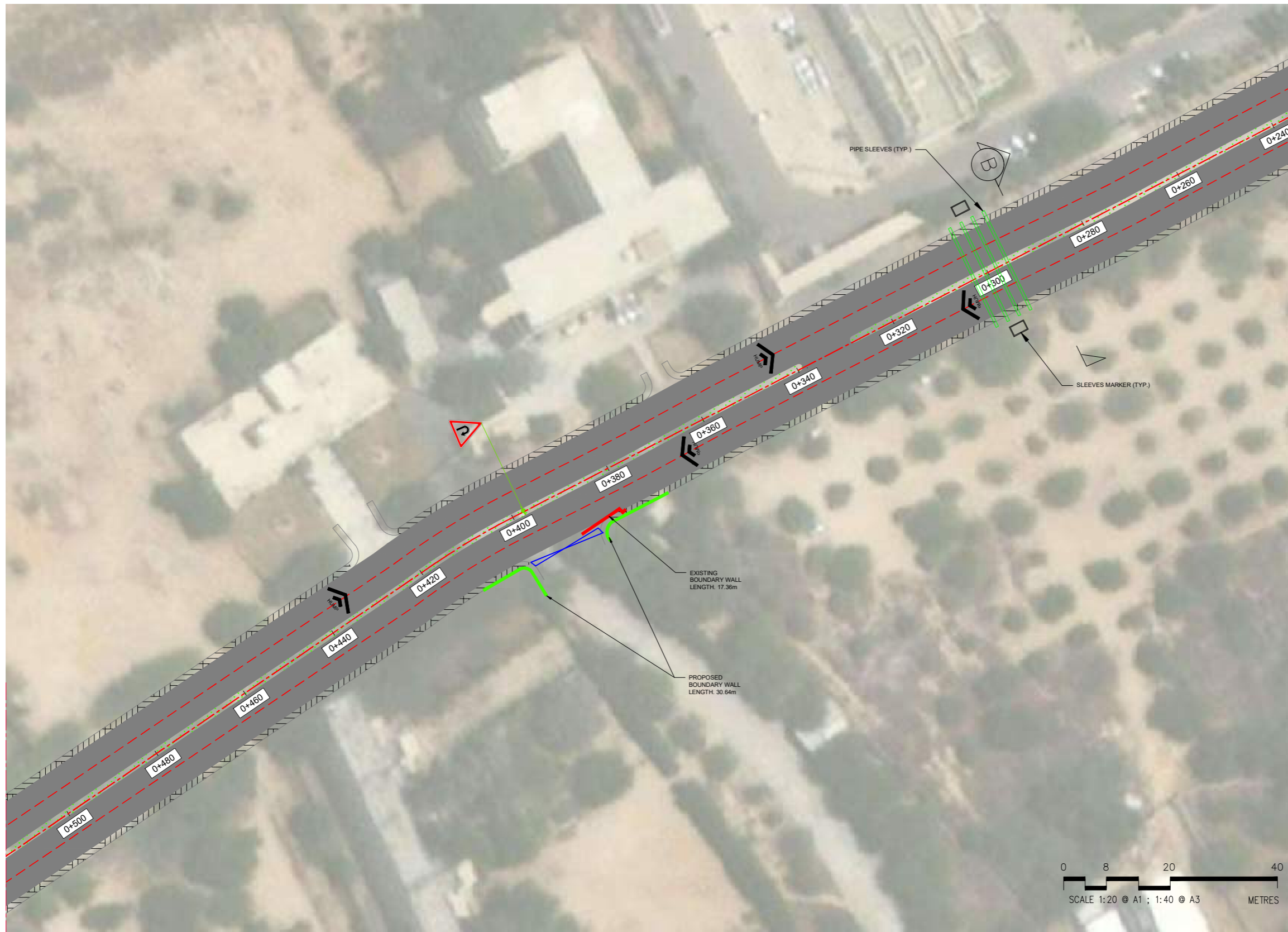


AIE-IBA-LP-00 TO AIE-IBA-LP-05.dwg

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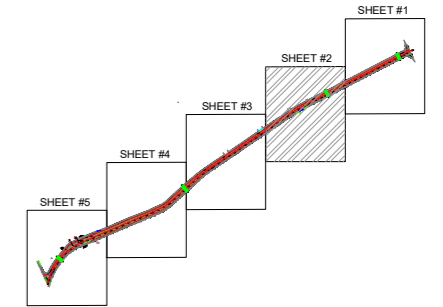


AIE-IBA-LP-00 TO AIE-IBA-LP-05.dwg



NOTES.

1. ALL DIMENSIONS AND LEVELS SHOWN ARE IN METER UNLESS OTHER WISE STATED.
2. REFER DRAWING NO. AIE-IBA-GN-01 FOR GENERAL NOTES.



LEGEND

PROPOSED CARRIAGEWAY	
PROPOSED FOOTPATH	
PROPOSED MEDIAN	
GATE HOUSE	
CHECK POST	
ENTRANCE/GATE	
PROPOSED WALL	
EXISTING WALL TO BE DEMOLISHED	
EXISTING WALL TO BE RETAINED	
SLEEVES	

REV	DATE	DESCRIPTION	SIGN
AMENDMENTS			

PROJECT: **REHABILITATION OF METEALED ROAD AT KARACHI UNIVERSITY IBA KARACHI**

CLIENT:

IBA Institute of Business Administration Karachi
Leadership and Innovation for Tomorrow

ENGINEERING CONSULTANT:

AI Engineers
1st Floor, IEP Building, 177/2, Liaquat Barracks, Main Shahrah-e-Faisal, Karachi 75530, Pakistan
Email: info_pk@aieengineers.com

TITLE: **PROPOSED ROAD ALIGNMENT ENLARGE LAYOUT PLAN (SHEET 02 OF 05)**

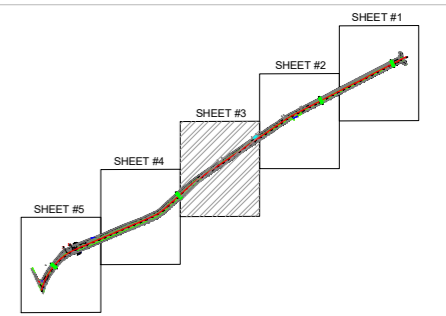
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SCALE	AS SHOWN	DATE	DEC.-2024
DRAWN	H.G	CHECKED	M.A
DESIGNED	S.N	APPROVED	M.F.A

JOB NO.	DRAWING NO.	REV. NO.
P-066C	AIE-IBA-LP-02	0



- NOTES.**
1. ALL DIMENSIONS AND LEVELS SHOWN ARE IN METER UNLESS OTHER WISE STATED.
 2. REFER DRAWING NO. AIE-IBA-GN-01 FOR GENERAL NOTES.



LEGEND

PROPOSED CARRIAGEWAY	
PROPOSED FOOTPATH	
PROPOSED MEDIAN	
GATE HOUSE	
CHECK POST	
ENTRANCE/GATE	
PROPOSED WALL	
EXISTING WALL TO BE DEMOLISHED	
EXISTING WALL TO BE RETAINED	
SLEEVES	

REV	DATE	DESCRIPTION	SIGN
-----	------	-------------	------

AMENDMENTS


PROJECT: REHABILITATION OF METEALED ROAD AT KARACHI UNIVERSITY IBA KARACHI

CLIENT:



Institute of Business Administration
Karachi
Leadership and Innovation for Tomorrow

ENGINEERING CONSULTANT:



AI Engineers
Pakistan's Premier Limited

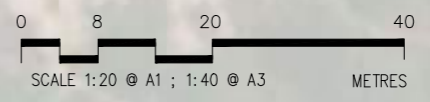
1st Floor, IEP Building, 177/2,
Liaquat Barracks,
Main Shahrah-e-Faisal,
Karachi 75530, Pakistan
Email: info_pk@aieengineers.com

TITLE: PROPOSED ROAD ALIGNMENT ENLARGE LAYOUT PLAN (SHEET 03 OF 05)

STATUS: TENDER DRAWING

SCALE	AS SHOWN	DATE	DEC.-2024
DRAWN	H.G	CHECKED	M.A
DESIGNED	S.N	APPROVED	M.F.A

JOB NO.	DRAWING NO.	REV. NO.
P-066C	AIE-IBA-LP-03	0



AIE-IBA-LP-00 TO AIE-IBA-LP-05.dwg

MATCH LINE D

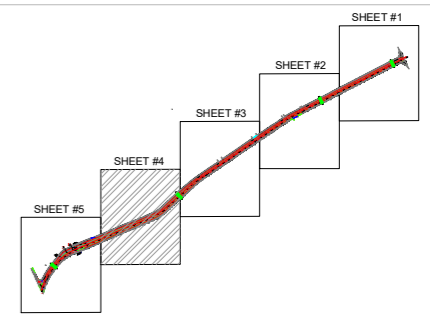
MATCH LINE B

AIE-IBA-LP-00 TO AIE-IBA-LP-05.dwg



NOTES.

1. ALL DIMENSIONS AND LEVELS SHOWN ARE IN METER UNLESS OTHER WISE STATED.
2. REFER DRAWING NO. AIE-IBA-GN-01 FOR GENERAL NOTES.



LEGEND

PROPOSED CARRIAGEWAY	
PROPOSED FOOTPATH	
PROPOSED MEDIAN	
GATE HOUSE	
CHECK POST	
ENTRANCE/GATE	
PROPOSED WALL	
EXISTING WALL TO BE DEMOLISHED	
EXISTING WALL TO BE RETAINED	
SLEEVES	

REV	DATE	DESCRIPTION	SIGN
AMENDMENTS			

PROJECT: **REHABILITATION OF METELED ROAD AT KARACHI UNIVERSITY**



ENGINEERING CONSULTANT:

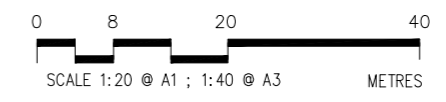
AI Engineers
1st Floor, IEP Building, 177/2, Liaquat Barracks, Main Shahrah-e-Faisal, Karachi 75530, Pakistan
Email: info_pk@aiengineers.com

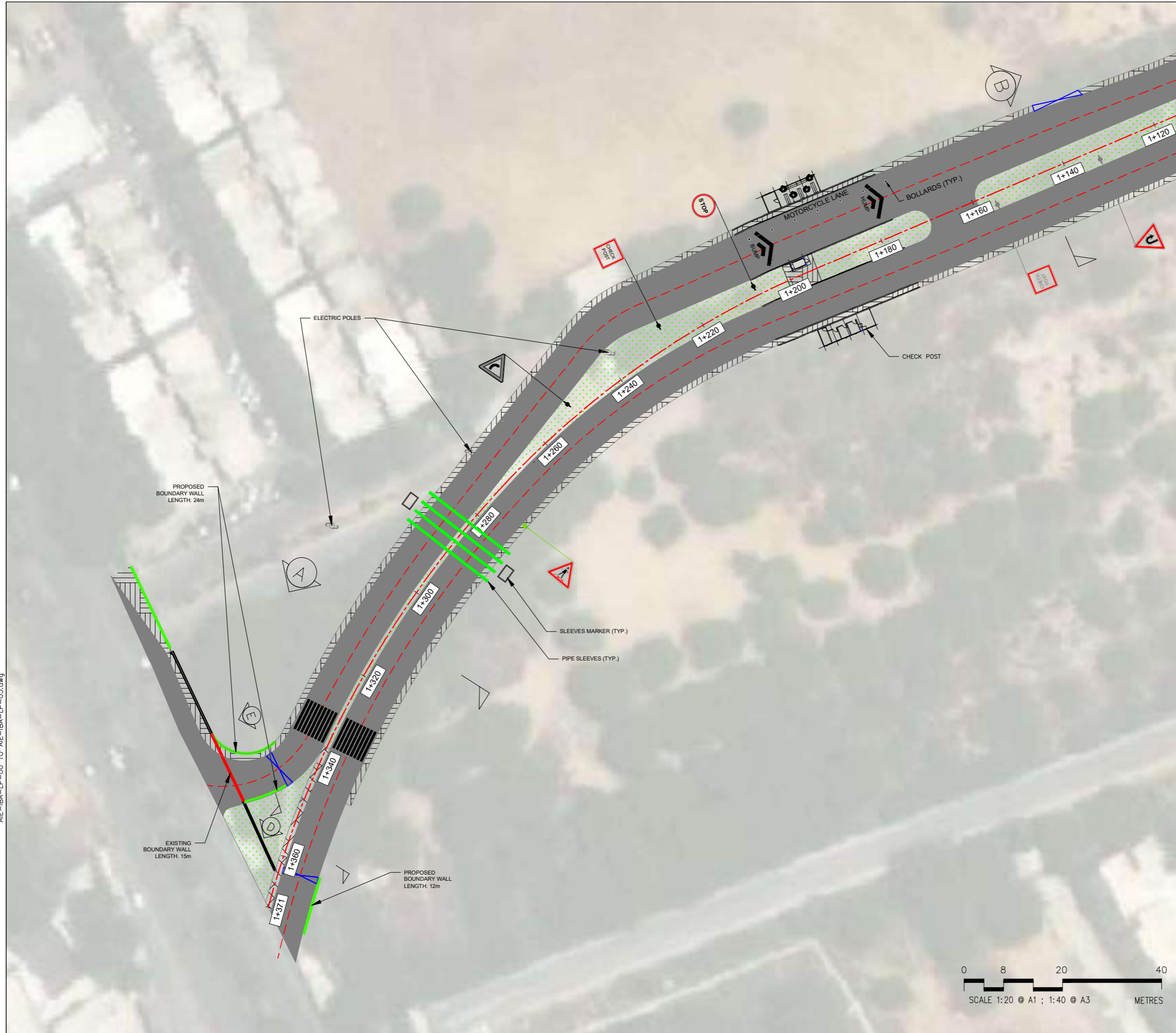
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STATUS: **TENDER DRAWING**

SCALE	AS SHOWN	DATE	DEC.-2024
DRAWN	H.G	CHECKED	M.A
DESIGNED	S.N	APPROVED	M.F.A

JOB NO.	DRAWING NO.	REV. NO.
P-066C	AIE-IBA-LP-04	0

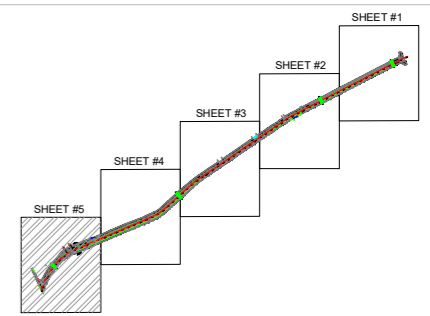




MATCH LINE D



- NOTES.**
1. ALL DIMENSIONS AND LEVELS SHOWN ARE IN METER UNLESS OTHER WISE STATED.
 2. REFER DRAWING NO. AIE-IBA-GN-01 FOR GENERAL NOTES.



LEGEND

PROPOSED CARRIAGEWAY	
PROPOSED FOOTPATH	
PROPOSED MEDIAN	
GATE HOUSE	
CHECK POST	
ENTRANCE/GATE	
PROPOSED WALL	
EXISTING WALL TO BE DEMOLISHED	
EXISTING WALL TO BE RETAINED	
SLEEVES	

REV	DATE	DESCRIPTION	SIGN
AMENDMENTS			

PROJECT: REHABILITATION OF METEALED ROAD AT KARACHI UNIVERSITY IBA KARACHI

CLIENT:

Leadership and Innovation for Tomorrow

ENGINEERING CONSULTANT:

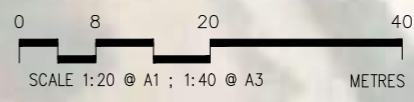
1st Floor, IEP Building, 177/2, Liaquat Barracks, Main Shahrah-e-Faisal, Karachi 75530, Pakistan
Email: info_pk@aieengineers.com

TITLE: PROPOSED ROAD ALIGNMENT ENLARGE LAYOUT PLAN (SHEET 05 OF 05)

STATUS: TENDER DRAWING

SCALE	AS SHOWN	DATE	DEC.-2024
DRAWN	H.G	CHECKED	M.A
DESIGNED	S.N	APPROVED	M.F.A

JOB NO.	DRAWING NO.	REV. NO.
P-066C	AIE-IBA-LP-05	0



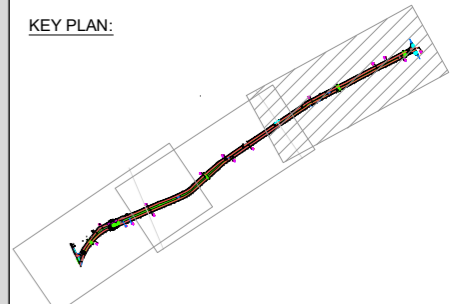
AIE-IBA-LP-00 TO AIE-IBA-LP-05.dwg

PROPOSED PLAN & PROFILE

NOTES.

1. ALL DIMENSIONS AND LEVELS SHOWN ARE IN METER UNLESS OTHERWISE STATED.
2. REFER DRAWING NO. AIE-IBA-GN-01 FOR GENERAL NOTES
3. REFER DRAWING NO. AIE-IBA-TS-01 TO AIE-IBA-TS-06 FOR TOPOGRAPHY SURVEY.
4. REFER DRAWING NO. AIE-IBA-LP-01 TO AIE-IBA-LP-06 FOR PROPOSED ROAD ALIGNMENT.
5. REFER DRAWING NO. AIE-IBA-SI-01 TO AIE-IBA-SI-06 FOR TOPOGRAPHIC SURVEY SUPERIMPOSED PROPOSED ROAD ALIGNMENT.
6. REFER DRAWING NO. AIE-IBA-RS-01 FOR ROAD TYPICAL SECTIONS.

KEY PLAN:



LEGEND:

- FRL PROFILE
- EXISTING PROFILE

REV	DATE	DESCRIPTION	SIGN
AMENDMENTS			

PROJECT:
REHABILITATION OF METEALED ROAD AT KARACHI UNIVERSITY IBA KARACHI



ENGINEERING CONSULTANT:
AI Engineers
1st Floor, IEP Building, 177/2, Liaquat Barracks, Main Shahr-e-Faisal, Karachi 75530, Pakistan
Email: info_pk@aengineers.com

TITLE:
PROPOSED ROAD ALIGNMENT ENLARGE LAYOUT & PROFILE (SHEET 01 OF 03)

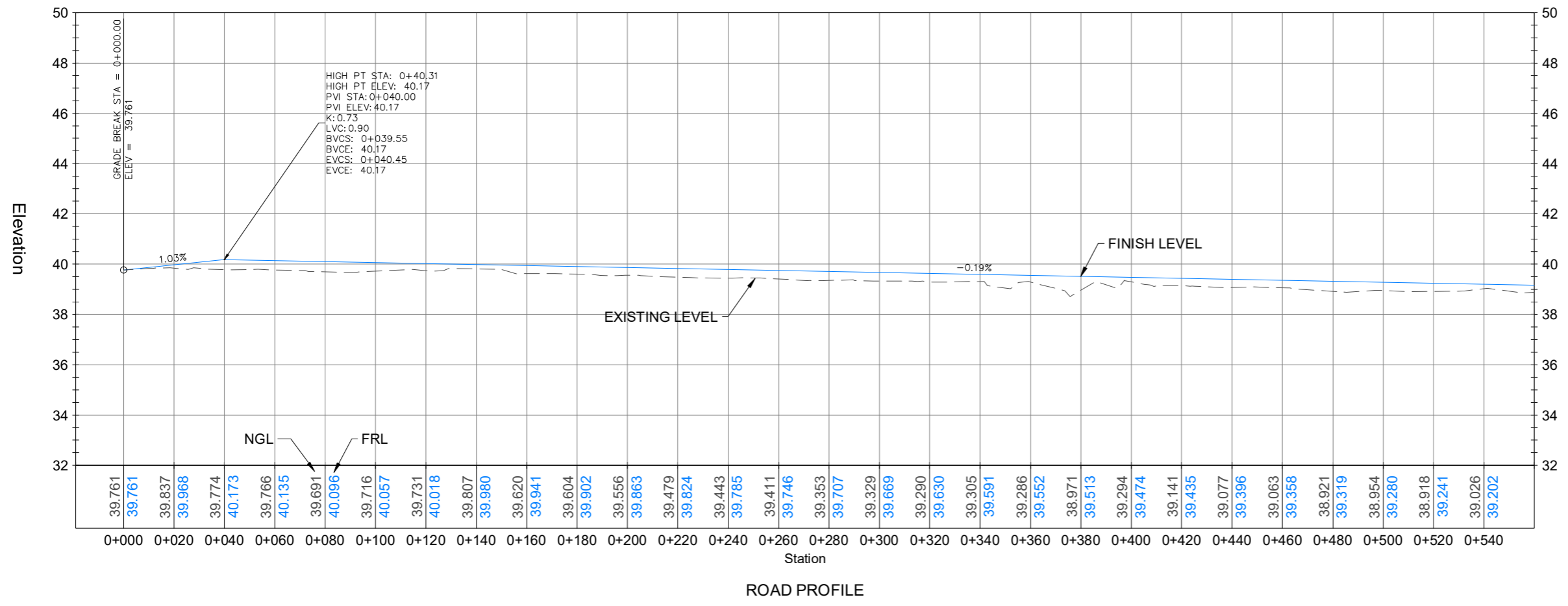
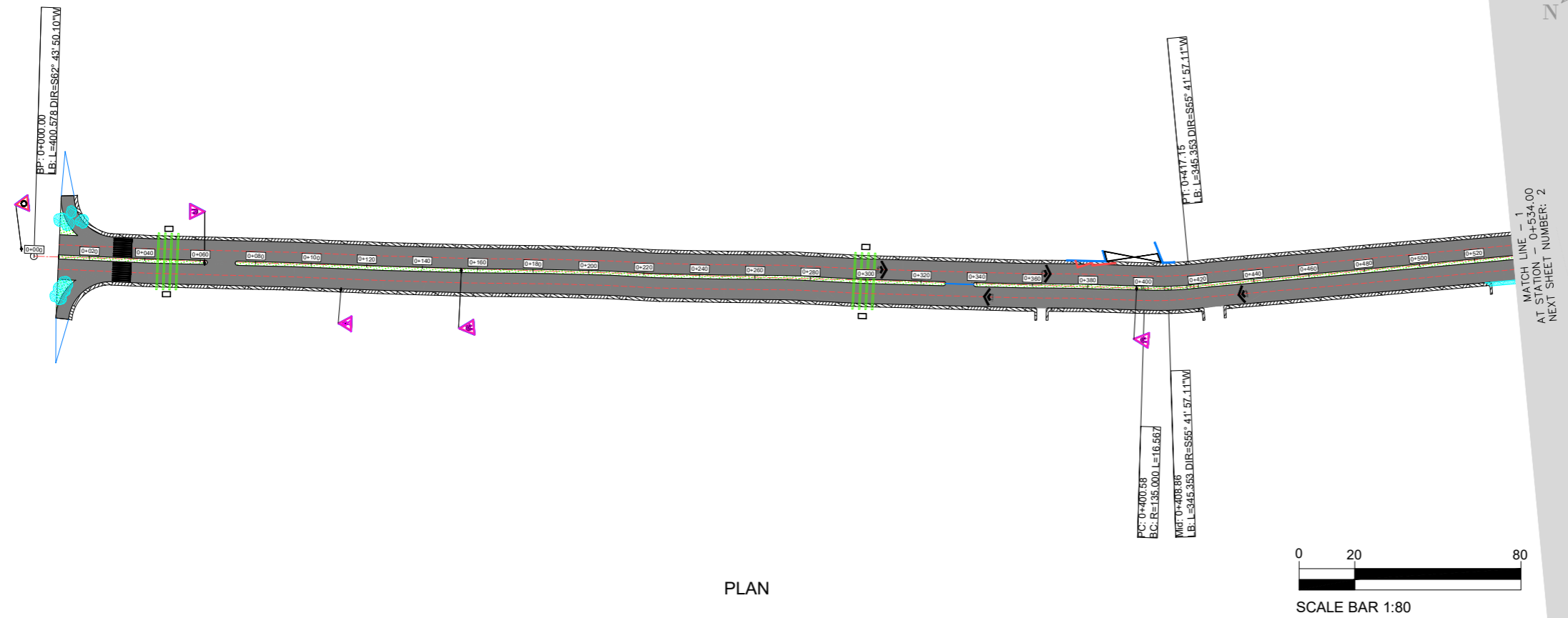
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DATE: DEC.-2024

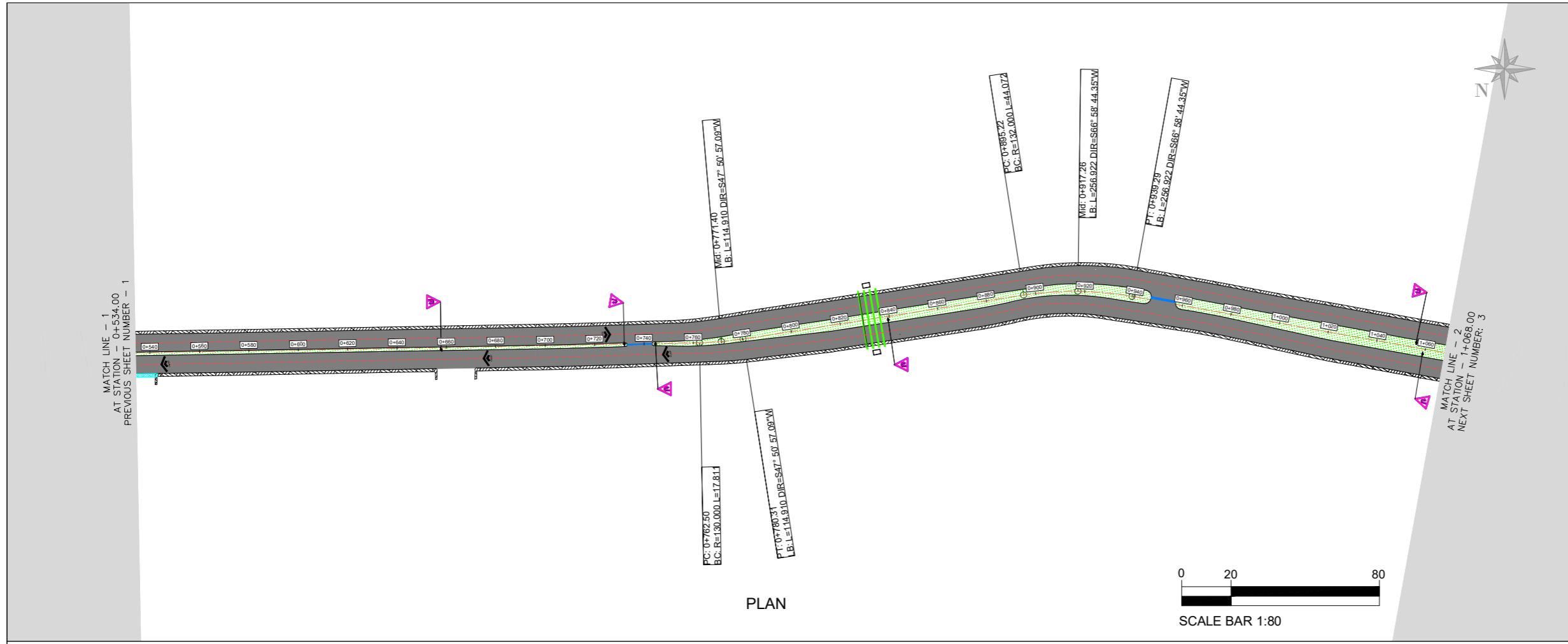
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DESIGNED: S.N, **APPROVED:** M.F.A

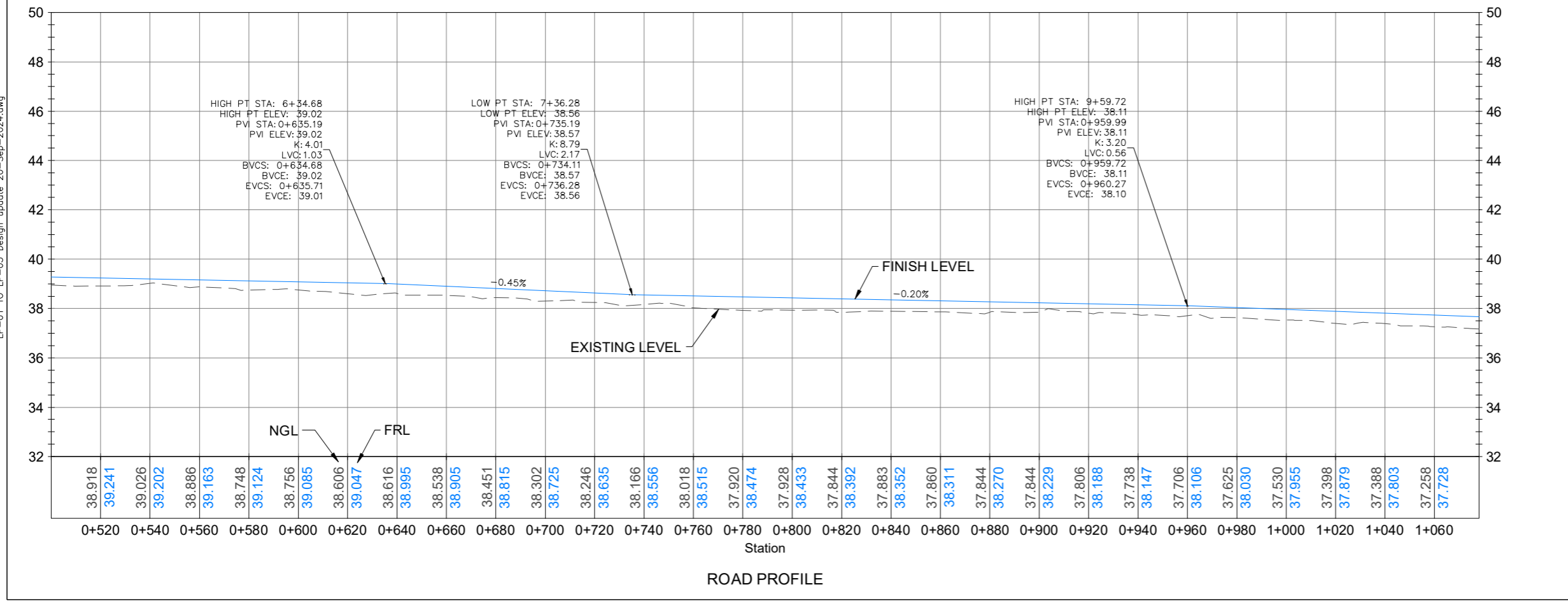
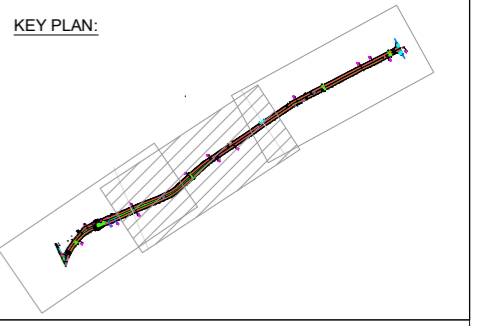
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LP-01 TO LP-05 Design update 20-Sep-2024.dwg



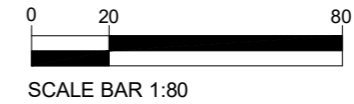
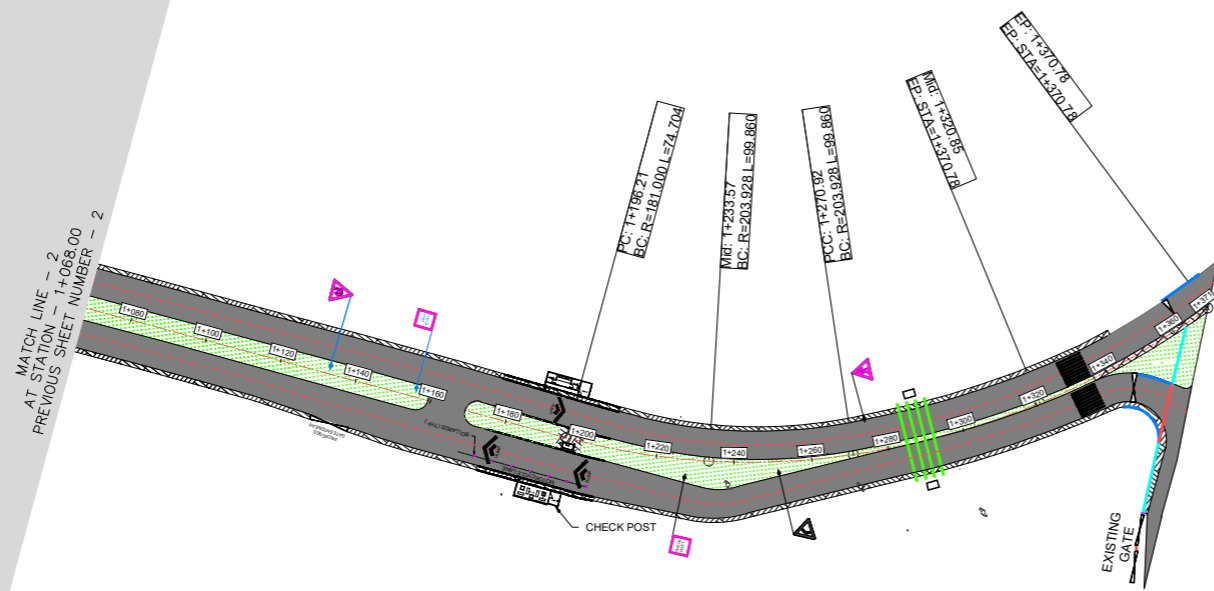
- NOTES.**
1. ALL DIMENSIONS AND LEVELS SHOWN ARE IN METER UNLESS OTHERWISE STATED.
 2. REFER DRAWING NO. AIE-IBA-GN-01 FOR GENERAL NOTES
 3. REFER DRAWING NO. AIE-IBA-TS-01 TO AIE-IBA-TS-06 FOR TOPOGRAPHY SURVEY.
 4. REFER DRAWING NO. AIE-IBA-LP-01 TO AIE-IBA-LP-06 FOR PROPOSED ROAD ALIGNMENT.
 5. REFER DRAWING NO. AIE-IBA-SI-01 TO AIE-IBA-SI-06 FOR TOPOGRAPHIC SURVEY SUPERIMPOSED PROPOSED ROAD ALIGNMENT.
 6. REFER DRAWING NO. AIE-IBA-RS-01 FOR ROAD TYPICAL SECTIONS.



REV	DATE	DESCRIPTION	SIGN
AMENDMENTS			
PROJECT: REHABILITATION OF METEALED ROAD AT KARACHI UNIVERSITY IBA KARACHI			
CLIENT: IBA Institute of Business Administration Karachi			
ENGINEERING CONSULTANT: AI Engineers			
TITLE: PROPOSED ROAD ALIGNMENT ENLARGE LAYOUT & PROFILE (SHEET 02 OF 03)			
STATUS: TENDER DRAWING			
SCALE: H = 1:1000, V = 1:100	DATE: DEC.-2024		
DRAWN: H.G	CHECKED: M.A		
DESIGNED: S.N	APPROVED: M.F.A		
JOB NO. P-066C	DRAWING NO. AIE-IBA-PP-02	REV. NO. 0	

LP-01 TO LP-05 Design update 20-Sep-2024.dwg

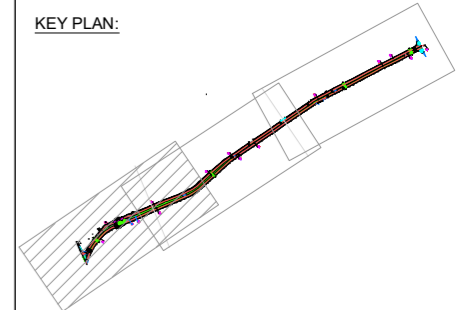
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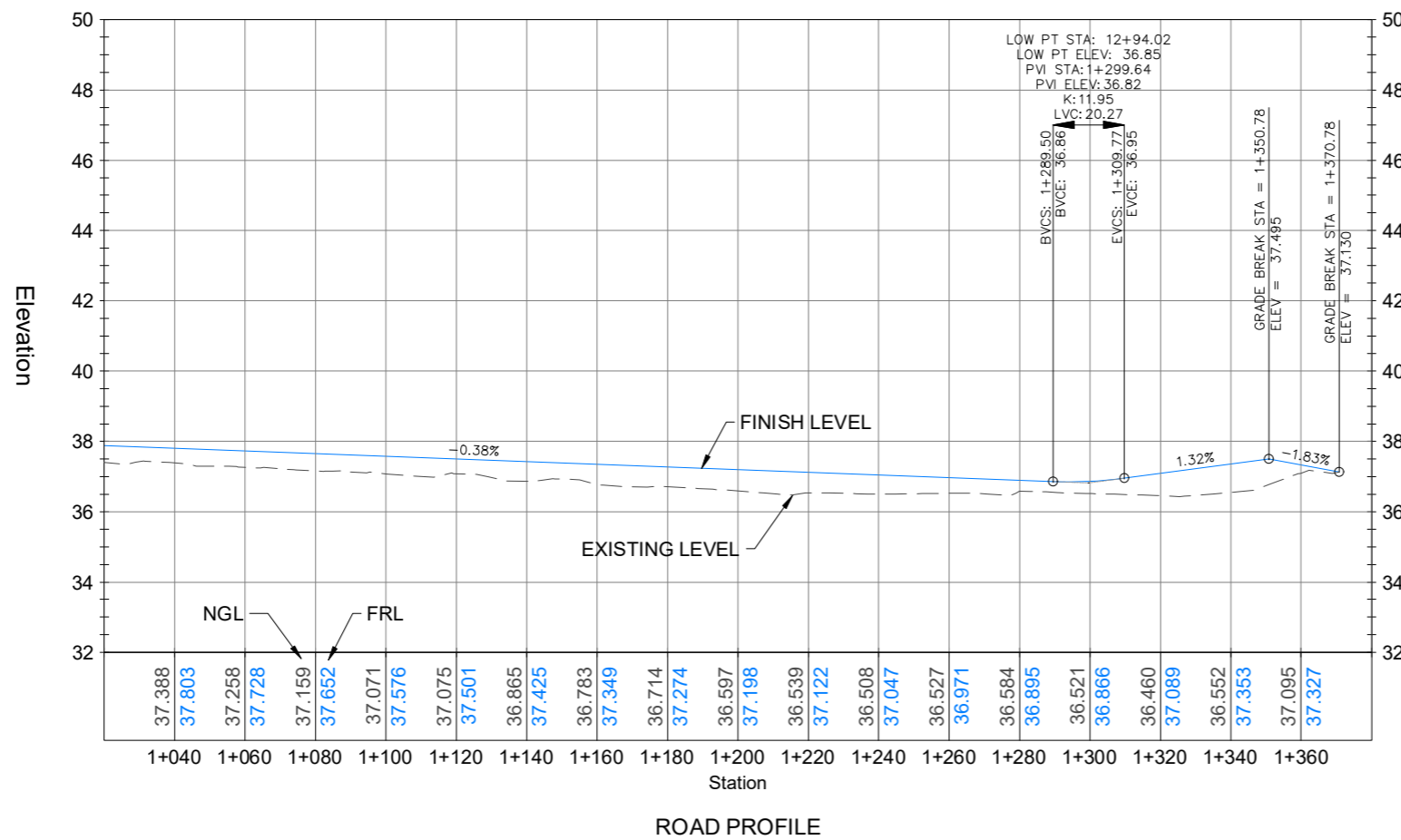
1. ALL DIMENSIONS AND LEVELS SHOWN ARE IN METER UNLESS OTHER WISE STATED.
2. REFER DRAWING NO. AIE-IBA-GN-01 FOR GENERAL NOTES
3. REFER DRAWING NO. AIE-IBA-TS-01 TO AIE-IBA-TS-06 FOR TOPOGRAPHY SURVEY.
4. REFER DRAWING NO. AIE-IBA-LP-01 TO AIE-IBA-LP-06 FOR PROPOSED ROAD ALIGNMENT.
5. REFER DRAWING NO. AIE-IBA-SI-01 TO AIE-IBA-SI-06 FOR TOPOGRAPHIC SURVEY SUPERIMPOSED PROPOSED ROAD ALIGNMENT.
6. REFER DRAWING NO. AIE-IBA-RS-01 FOR ROAD TYPICAL SECTIONS.

KEY PLAN:



LEGEND:

- FRL PROFILE
- EXISTING PROFILE



REV	DATE	DESCRIPTION	SIGN
AMENDMENTS			

PROJECT:
REHABILITATION OF METEALED ROAD AT KARACHI UNIVERSITY IBA KARACHI



ENGINEERING CONSULTANT:
 AI Engineers
 1st Floor, IEP Building, 177/2, Liaquat Barracks, Main Shahr-e-Faisal, Karachi 75530, Pakistan
 Email: info_pk@aengineers.com

TITLE:
PROPOSED ROAD ALIGNMENT ENLARGE LAYOUT & PROFILE (SHEET 03 OF 03)

STATUS: **TENDER DRAWING**

SCALE: H = 1:1000, V = 1:100
DATE: DEC.-2024

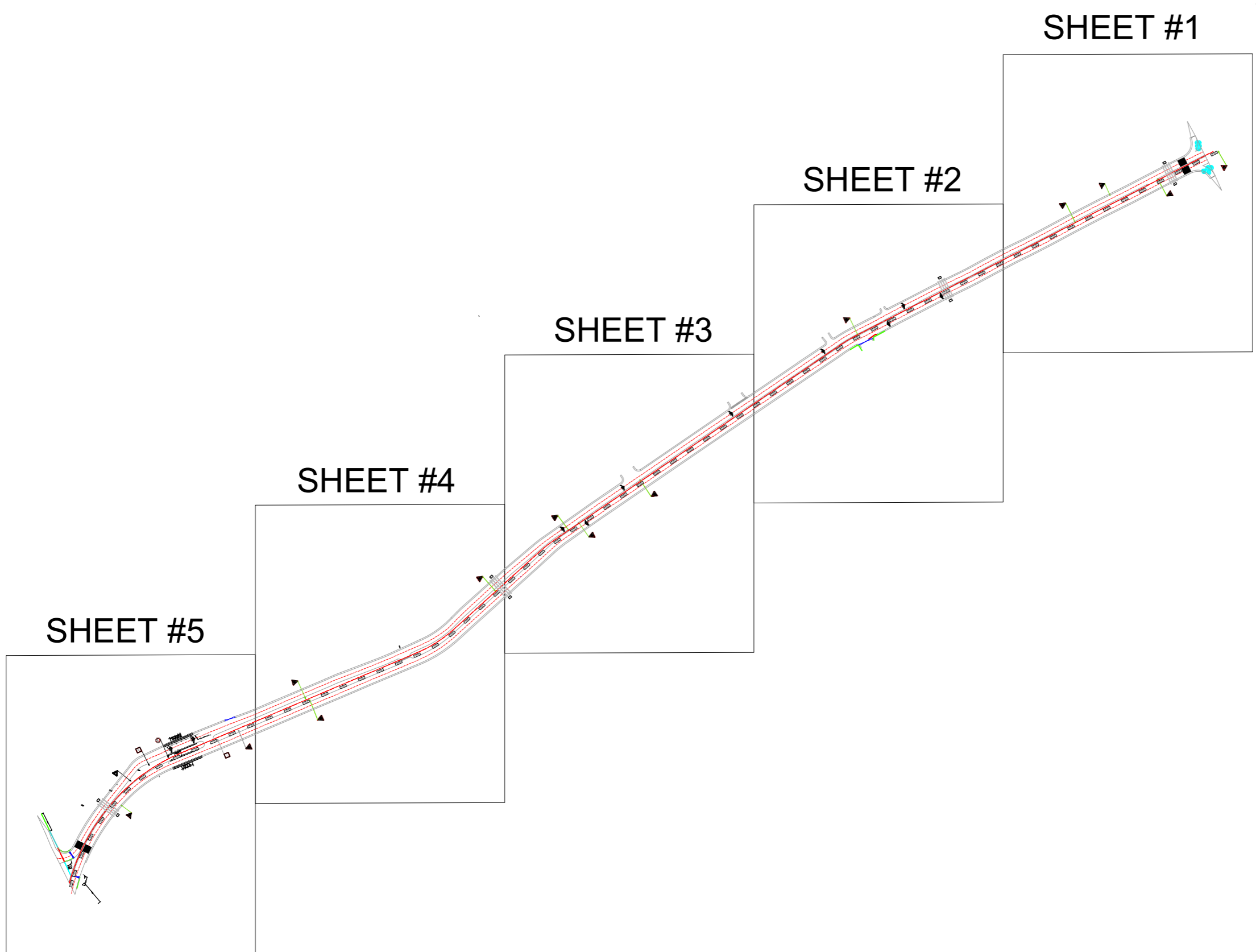
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DESIGNED: S.N, APPROVED: M.F.A

JOB NO. P-066C, DRAWING NO. AIE-IBA-PP-03, REV. NO. 0

SETTING OUT LAYOUT PLAN

AIE-IBA-LP-00 TO AIE-IBA-LP-05 Coordinates.dwg



- NOTES.**
1. ALL DIMENSIONS AND LEVELS SHOWN ARE IN METER UNLESS OTHER WISE STATED.
 2. REFER DRAWING NO. AIE-IBA-GN-01 FOR GENERAL NOTES.

LEGEND

COORDINATES	E: 36.93452 N: 11.73459
CHECK POST	
GATE HOUSE / ENTRANCE	Gate
PROPOSED WALL	
EXISTING WALL TO BE DEMOLISHED	
EXISTING WALL TO BE RETAINED	
SLEEVES	

REV	DATE	DESCRIPTION	SIGN
AMENDMENTS			

PROJECT:
REHABILITATION OF METALED ROAD AT KARACHI UNIVERSITY IBA KARACHI

CLIENT:



IBA Institute of Business Administration Karachi
Leadership and Innovation Tomorrow

ENGINEERING CONSULTANT:



AI Engineers
1st Floor, IEP Building, 177/2, Liaquat Barracks, Main Shahrah-e-Faisal, Karachi 75530, Pakistan
Email: info_pk@aengineers.com

TITLE:
**SETTING OUT PLAN
KEY PLAN**

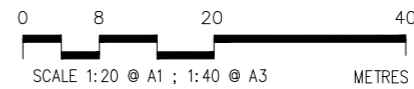
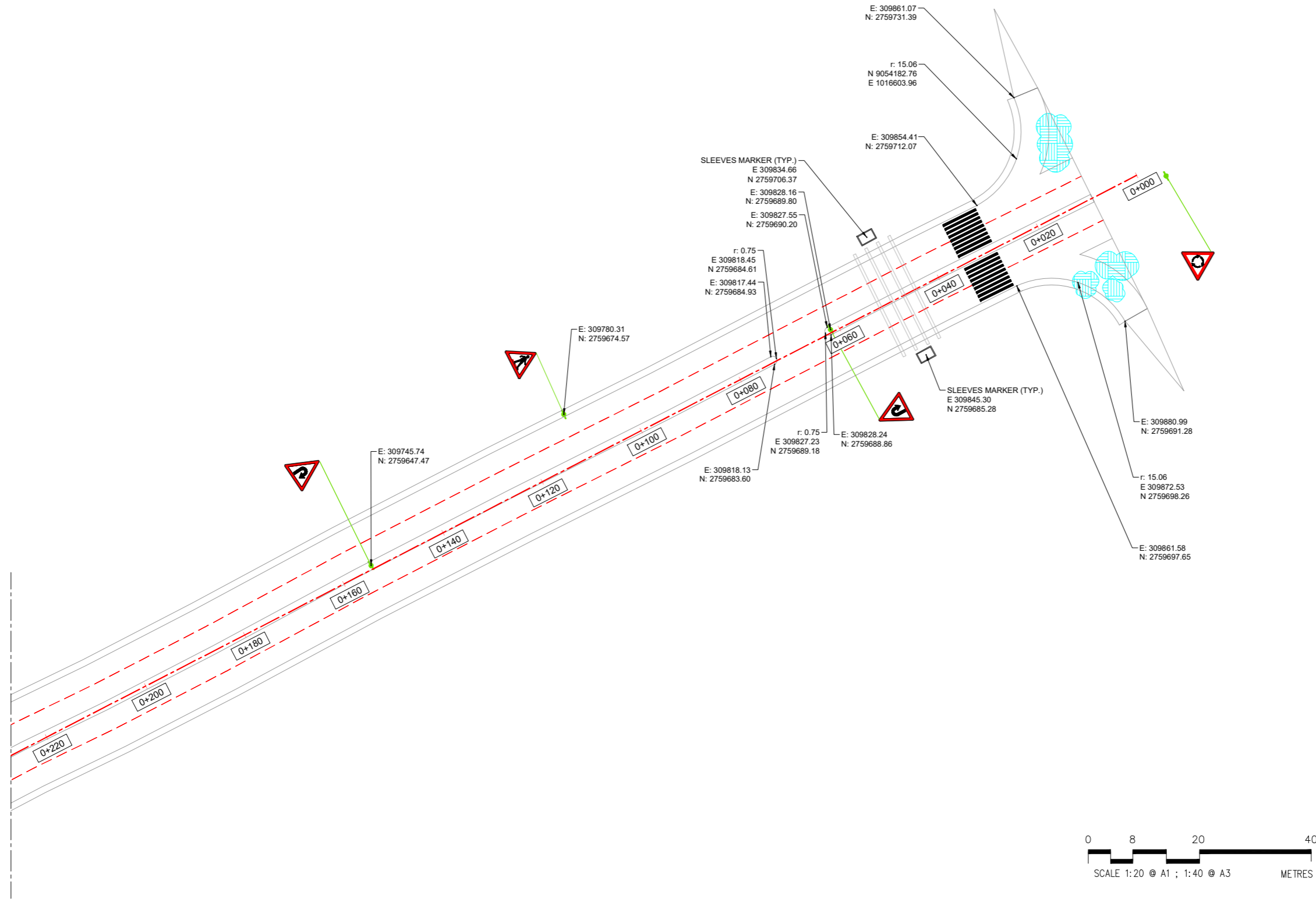
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SCALE	N.T.S	DATE	DEC.-2024
DRAWN	H.G	CHECKED	M.A
DESIGNED	S.N	APPROVED	M.F.A

JOB NO.	DRAWING NO.	REV. NO.
P-066C	AIE-IBA-SO-00	0

AIE-IBA-LP-00 TO AIE-IBA-LP-05 Coordinates.dwg

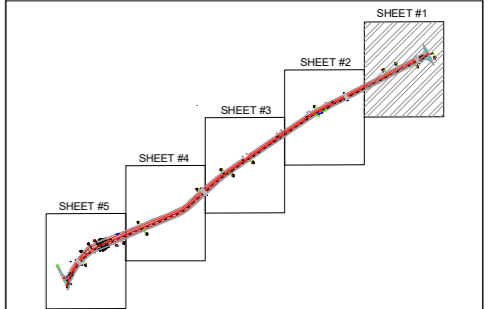
MATCH LINE B



NOTES.

1. ALL DIMENSIONS AND LEVELS SHOWN ARE IN METER UNLESS OTHER WISE STATED.
2. REFER DRAWING NO. AIE-IBA-GN-01 FOR GENERAL NOTES.

KEY PLAN



LEGEND

COORDINATES	E: 36.93452 N: 11.73459
CHECK POST	
GATE HOUSE / ENTRANCE	Gate
PROPOSED WALL	
EXISTING WALL TO BE DEMOLISHED	
EXISTING WALL TO BE RETAINED	
SLEEVES	

REV	DATE	DESCRIPTION	SIGN
AMENDMENTS			

PROJECT:
REHABILITATION OF METEALED ROAD AT KARACHI UNIVERSITY IBA KARACHI

CLIENT:

IBA Institute of Business Administration Karachi
Leadership and Innovation for Tomorrow

ENGINEERING CONSULTANT:

AI Engineers
1st Floor, IEP Building, 177/2, Liaquat Barracks, Main Shahrah-e-Faisal, Karachi 75530, Pakistan
Email: info_pk@aieengineers.com

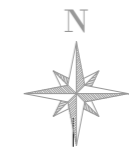
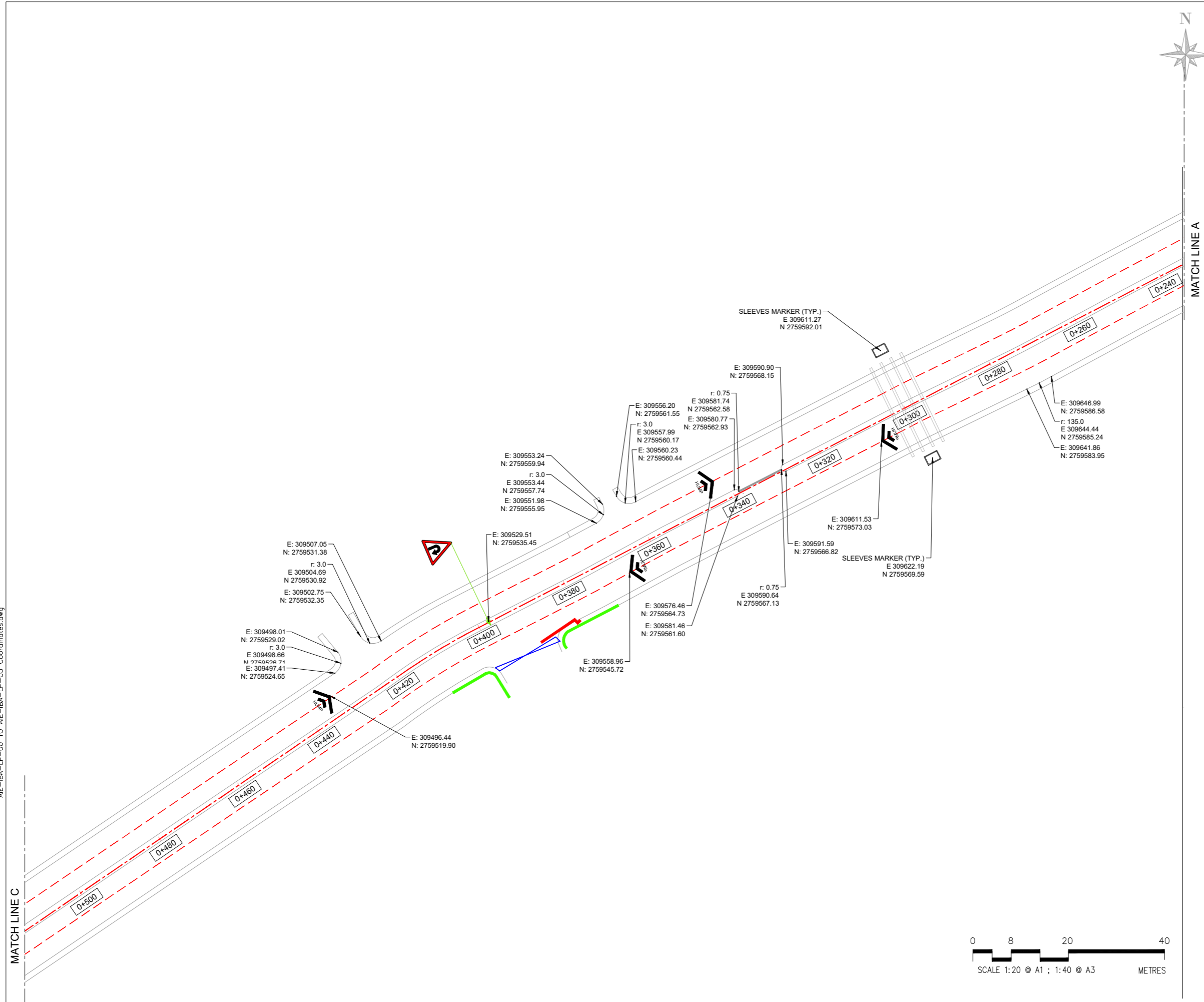
TITLE:
SETTING OUT PLAN (SHEET 01 OF 05)

STATUS: **TENDER DRAWING**

SCALE	AS SHOWN	DATE	DEC.-2024
DRAWN	H.G	CHECKED	M.A
DESIGNED	S.N	APPROVED	M.F.A

JOB NO.	DRAWING NO.	REV. NO.
P-066C	AIE-IBA-SO-01	0

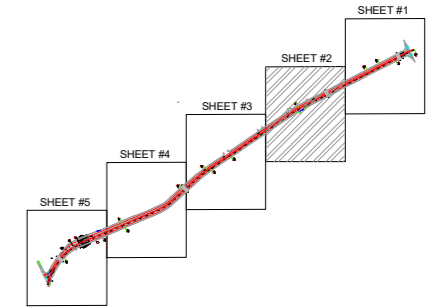
AIE-IBA-LP-00 TO AIE-IBA-LP-05 Coordinates.dwg



NOTES.

1. ALL DIMENSIONS AND LEVELS SHOWN ARE IN METER UNLESS OTHER WISE STATED.
2. REFER DRAWING NO. AIE-IBA-GN-01 FOR GENERAL NOTES.

KEY PLAN



LEGEND

COORDINATES	E: 36.93452 N: 11.73459
CHECK POST	
GATE HOUSE / ENTRANCE	Gate
PROPOSED WALL	
EXISTING WALL TO BE DEMOLISHED	
EXISTING WALL TO BE RETAINED	
SLEEVES	

REV	DATE	DESCRIPTION	SIGN
AMENDMENTS			

PROJECT:
REHABILITATION OF METEALED ROAD AT KARACHI UNIVERSITY IBA KARACHI

CLIENT:

Institute of Business Administration
Karachi
Leadership and Innovation for Tomorrow

ENGINEERING CONSULTANT:

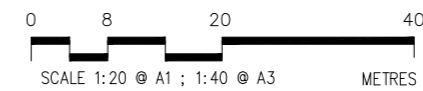
AI Engineers
Pakistan Private Limited
1st Floor, IEP Building, 177/2,
Liaquat Barracks,
Main Shahrah-e-Faisal,
Karachi 75530, Pakistan
Email: info_pk@aengineers.com

TITLE:
SETTING OUT PLAN (SHEET 02 OF 05)

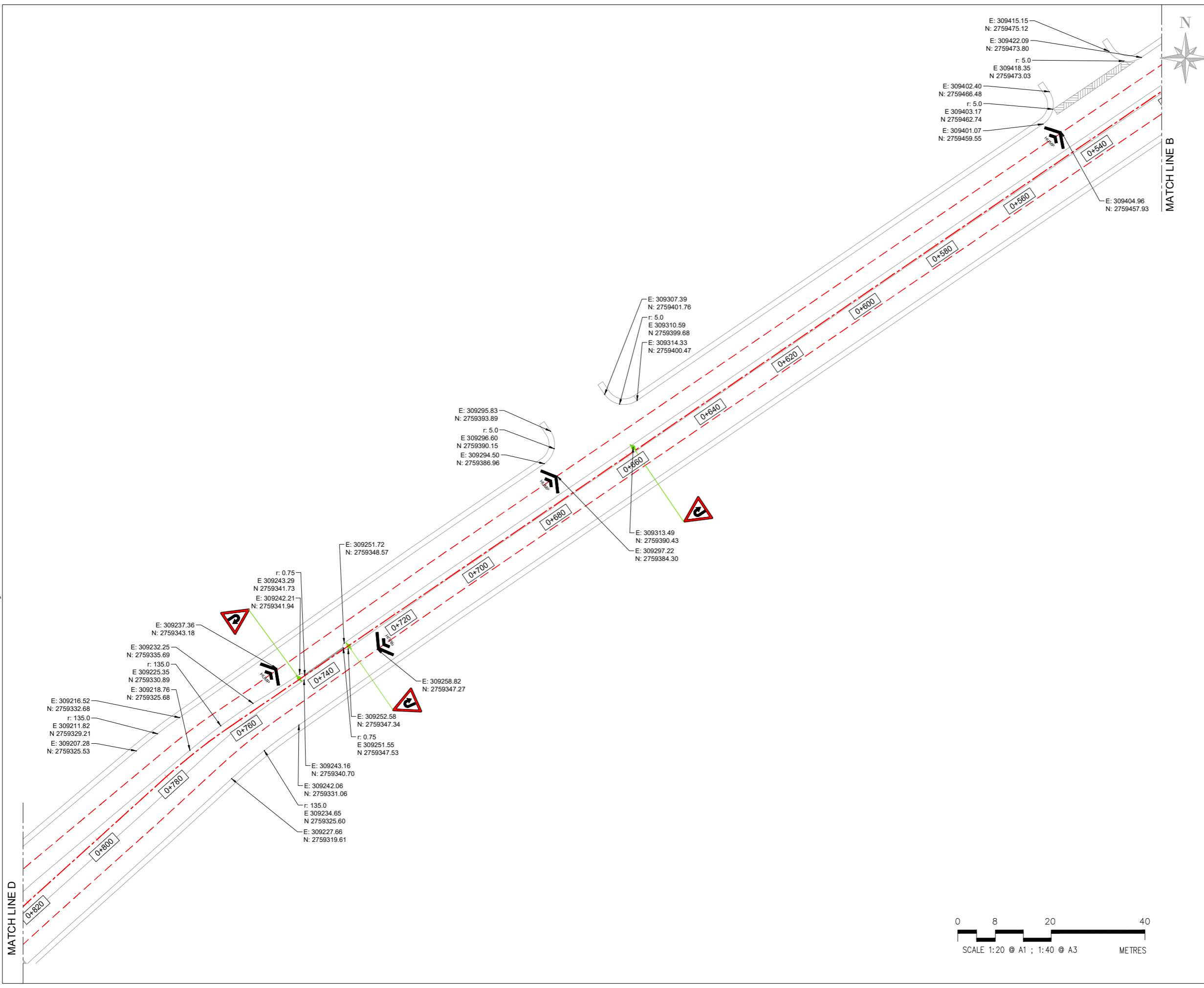
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DESIGNED	S.N	APPROVED	M.F.A

JOB NO.	DRAWING NO.	REV. NO.
P-066C	AIE-IBA-SO-02	0



AIE-IBA-LP-00 TO AIE-IBA-LP-05 Coordinates.dwg



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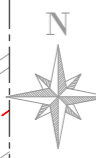
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N: 2759325.60

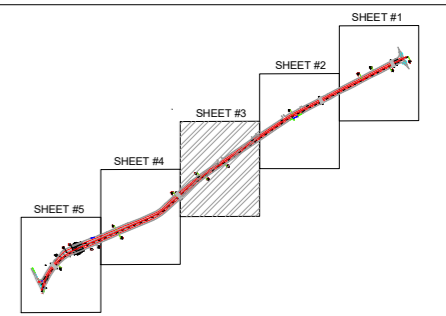
E: 309227.66
N: 2759319.61



NOTES.

1. ALL DIMENSIONS AND LEVELS SHOWN ARE IN METER UNLESS OTHERWISE STATED.
2. REFER DRAWING NO. AIE-IBA-GN-01 FOR GENERAL NOTES.

KEY PLAN



LEGEND

COORDINATES	E: 36.925464 N: 11.793454
CHECK POST	
GATE HOUSE / ENTRANCE	Gate
PROPOSED WALL	
EXISTING WALL TO BE DEMOLISHED	
EXISTING WALL TO BE RETAINED	
SLEEVES	

REV	DATE	DESCRIPTION	SIGN
AMENDMENTS			

PROJECT:
REHABILITATION OF METEALED ROAD AT KARACHI UNIVERSITY IBA KARACHI

CLIENT:

Leadership and Innovation for Tomorrow

ENGINEERING CONSULTANT:

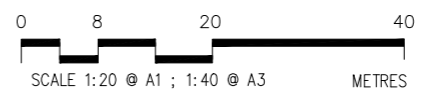
1st Floor, IEP Building, 177/2, Liaquat Barracks, Main Shahr-e-Faisal, Karachi 75530, Pakistan
Email: info_pk@aieengineers.com

TITLE:
SETTING OUT PLAN (SHEET 03 OF 05)

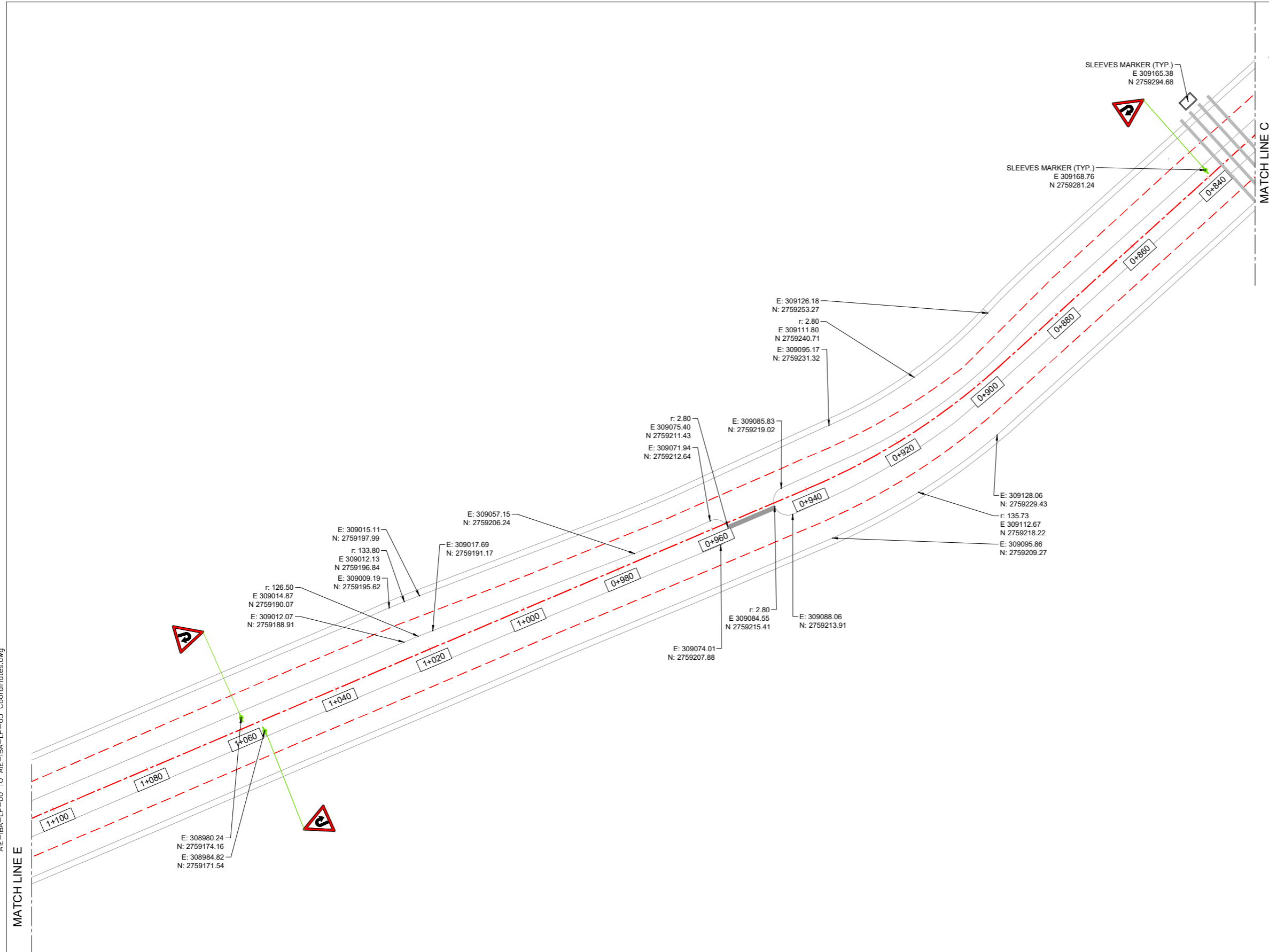
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SCALE	AS SHOWN	DATE	DEC.-2024
DRAWN	H.G	CHECKED	M.A
DESIGNED	S.N	APPROVED	M.F.A

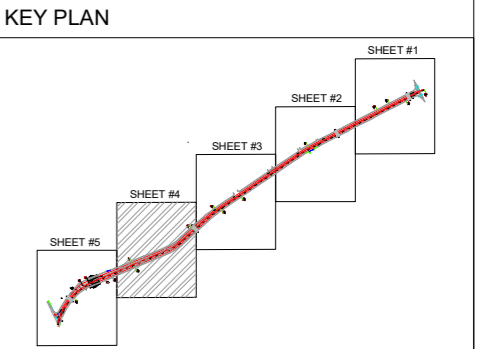
JOB NO.	DRAWING NO.	REV. NO.
P-066C	AIE-IBA-SO-03	0



AIE-IBA-LP-00 TO AIE-IBA-LP-05 Coordinates.dwg



- NOTES.**
1. ALL DIMENSIONS AND LEVELS SHOWN ARE IN METER UNLESS OTHER WISE STATED.
 2. REFER DRAWING NO. AIE-IBA-GN-01 FOR GENERAL NOTES.



LEGEND

COORDINATES	E: 36.93452 N: 11.73459
CHECK POST	
GATE HOUSE / ENTRANCE	Gate
PROPOSED WALL	
EXISTING WALL TO BE DEMOLISHED	
EXISTING WALL TO BE RETAINED	
SLEEVES	

REV	DATE	DESCRIPTION	SIGN
AMENDMENTS			

PROJECT: REHABILITATION OF METEALED ROAD AT KARACHI UNIVERSITY IBA KARACHI



ENGINEERING CONSULTANT:

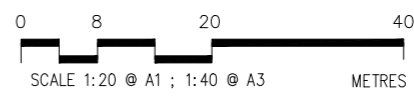
1st Floor, IEP Building, 177/2, Liaquat Barracks, Main Shahrah-e-Faisal, Karachi 75530, Pakistan
Email: info_pk@aieengineers.com

TITLE: **SETTING OUT PLAN (SHEET 04 OF 05)**

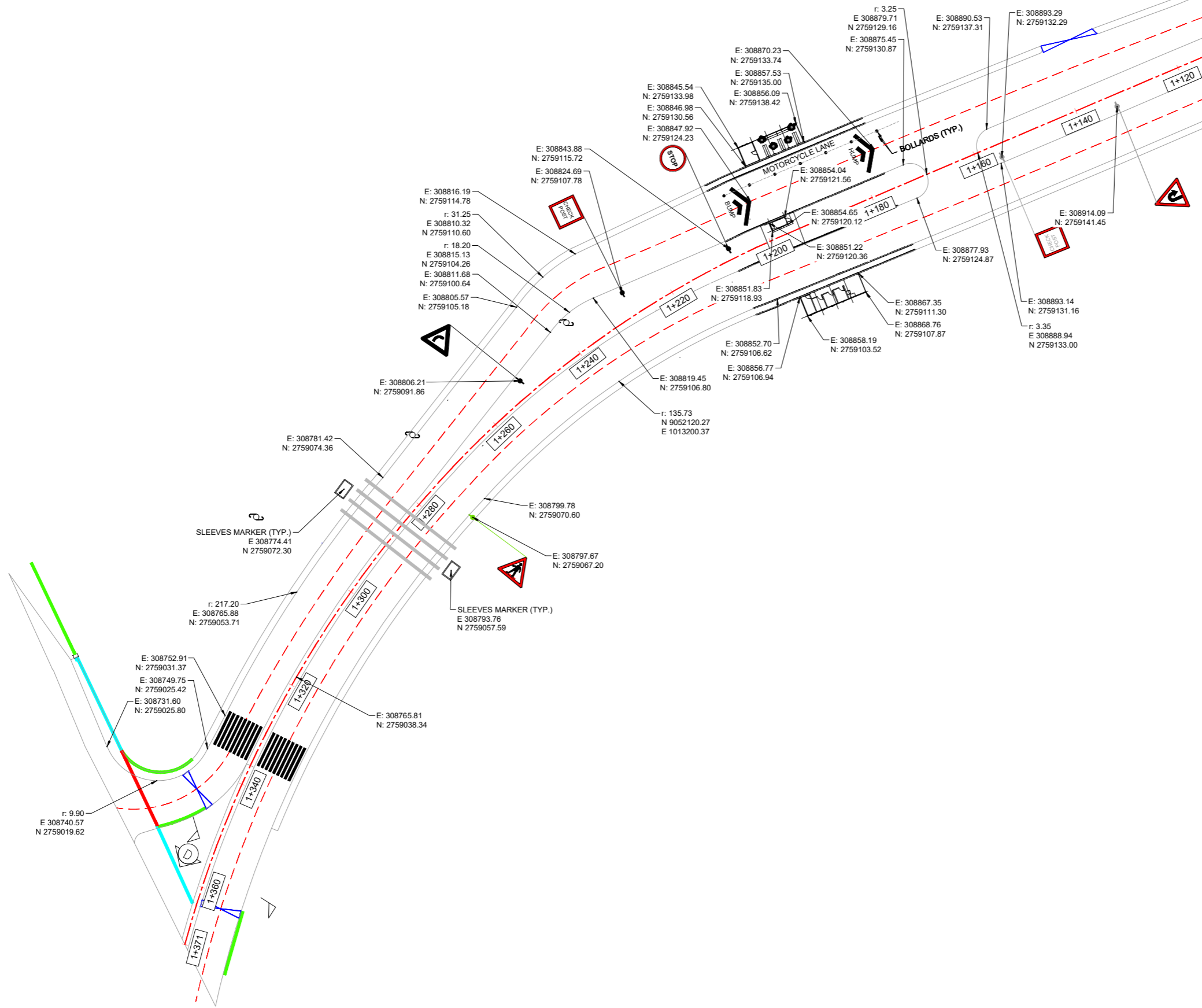
STATUS: **TENDER DRAWING**

SCALE	AS SHOWN	DATE	DEC.-2024
DRAWN	H.G	CHECKED	M.A
DESIGNED	S.N	APPROVED	M.F.A

JOB NO.	DRAWING NO.	REV. NO.
P-066C	AIE-IBA-SO-04	0



AIE-IBA-LP-00 TO AIE-IBA-LP-05 Coordinates.dwg

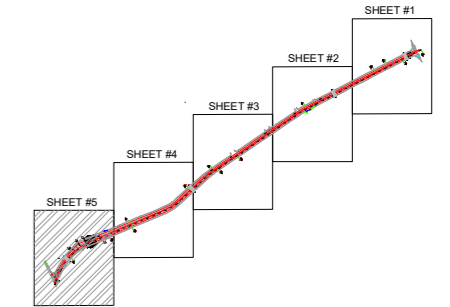


MATCH LINE D

NOTES.

1. ALL DIMENSIONS AND LEVELS SHOWN ARE IN METER UNLESS OTHERWISE STATED.
2. REFER DRAWING NO. AIE-IBA-GN-01 FOR GENERAL NOTES.

KEY PLAN



LEGEND

COORDINATES	E: 36.93452 N: 11.73459
CHECK POST	
GATE HOUSE / ENTRANCE	Gate
PROPOSED WALL	
EXISTING WALL TO BE DEMOLISHED	
EXISTING WALL TO BE RETAINED	
SLEEVES	

REV	DATE	DESCRIPTION	SIGN
AMENDMENTS			

PROJECT:
REHABILITATION OF METEALED ROAD AT KARACHI UNIVERSITY IBA KARACHI

CLIENT:

Institute of Business Administration
Karachi
Leadership and Innovation for Tomorrow

ENGINEERING CONSULTANT:

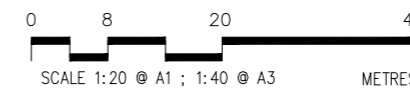
AI Engineers
1st Floor, IEP Building, 177/2,
Liaquat Barracks,
Main Shahrah-e-Faisal,
Karachi 75530, Pakistan
Email: info_pk@aieengineers.com

TITLE:
SETTING OUT PLAN
(SHEET 05 OF 05)

STATUS:
TENDER DRAWING

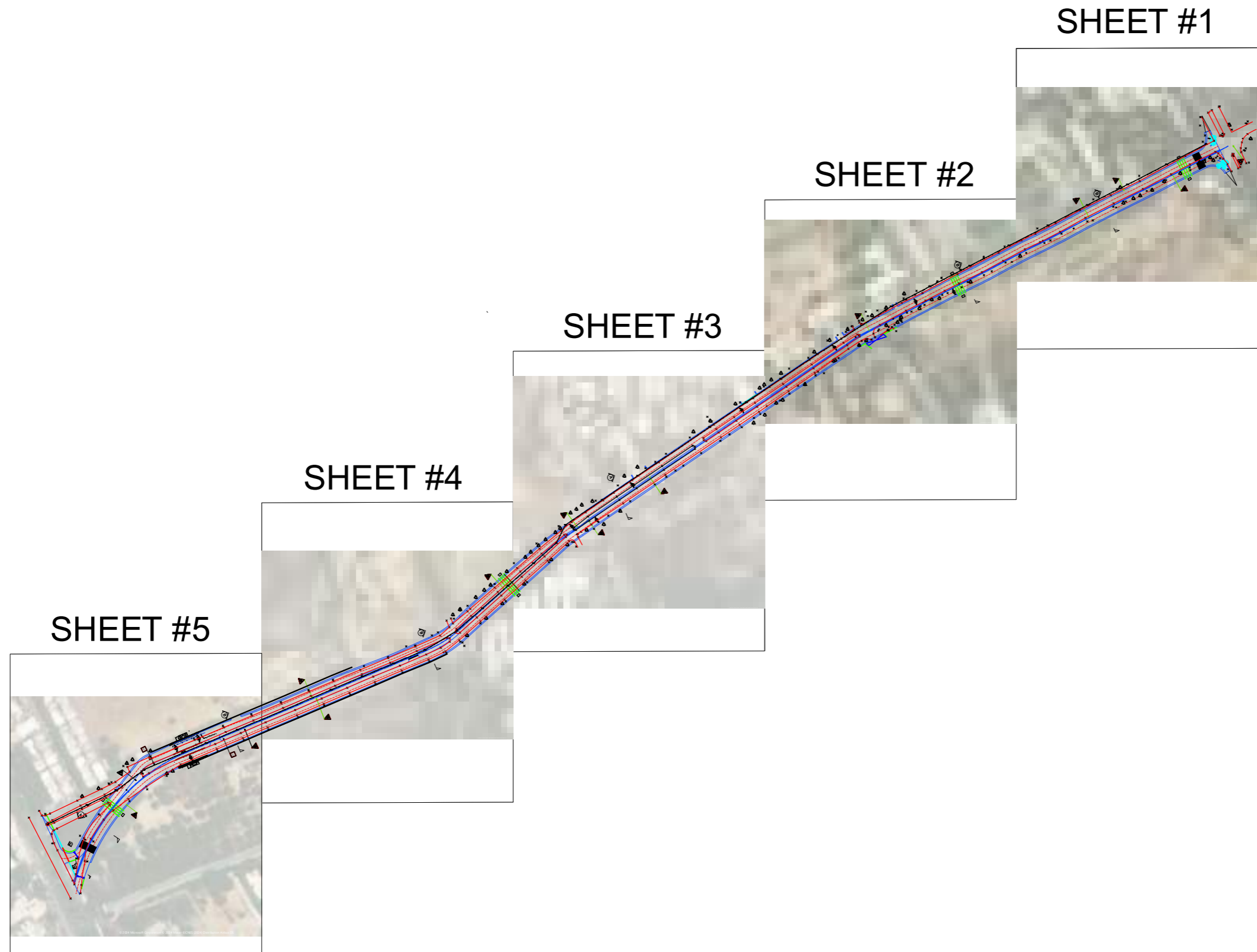
SCALE	AS SHOWN	DATE	DEC.-2024
DRAWN	H.G	CHECKED	M.A
DESIGNED	S.N	APPROVED	M.F.A

JOB NO.	DRAWING NO.	REV. NO.
P-066C	AIE-IBA-SO-05	0

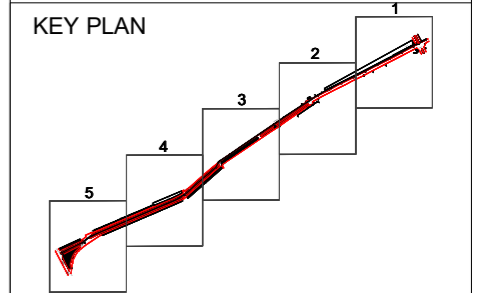


**TOPOSURVEY SUPERIMPOSED
PROPOSED ROAD ALIGNMENT**

AIE-IBA-SI-00 TO AIE-IBA-SI-05.dwg



NOTES.
 1. ALL DIMENSIONS AND LEVELS SHOWN ARE IN METER UNLESS OTHERWISE STATED.
 2. REFER DRAWING NO. AIE-IBA-GN-01 FOR GENERAL NOTES.



LEGEND

EXISTING ROAD	
PROPOSED ROAD	
DEMOLISHED	

REV	DATE	DESCRIPTION	SIGN
AMENDMENTS			

PROJECT: REHABILITATION OF METEALED ROAD AT KARACHI UNIVERSITY IBA KARACHI

CLIENT:



IBA Institute of Business Administration Karachi
 Creating a Better Tomorrow

ENGINEERING CONSULTANT:



AI Engineers
 1st Floor, IEP Building, 177/2, Liaquat Barracks, Main Shahrath-e-Faisal, Karachi 75530, Pakistan
 Email: info_pk@aiengineers.com

TITLE: TOPOGRAPHIC SURVEY SUPERIMPOSED PROPOSED ROAD ALIGNMENT INDEX PLAN

STATUS: TENDER DRAWING

SCALE	AS SHOWN	DATE	DEC.-2024
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DRAWN	H.G	CHECKED	M.A
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DESIGNED	S.N	APPROVED	M.F.A
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JOB NO.	DRAWING NO.	REV. NO.
P-066C	AIE-IBA-SI-00	0

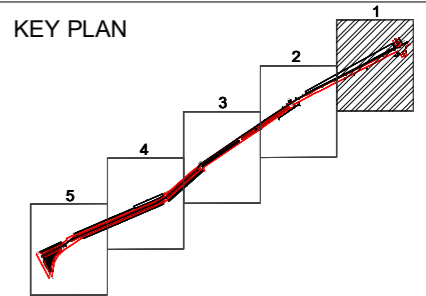
AIE-IBA-SI-00 TO AIE-IBA-SI-05.dwg



NOTES.

1. ALL DIMENSIONS AND LEVELS SHOWN ARE IN METER UNLESS OTHER WISE STATED.
2. REFER DRAWING NO. AIE-IBA-GN-01 FOR GENERAL NOTES.

KEY PLAN



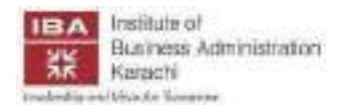
LEGEND

EXISTING ROAD	
PROPOSED ROAD	
DEMOLISHED	

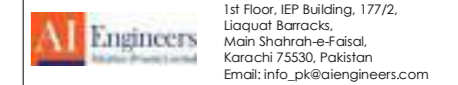
REV	DATE	DESCRIPTION	SIGN
AMENDMENTS			

PROJECT: REHABILITATION OF METELED ROAD AT KARACHI UNIVERSITY IBA KARACHI

CLIENT:



ENGINEERING CONSULTANT:



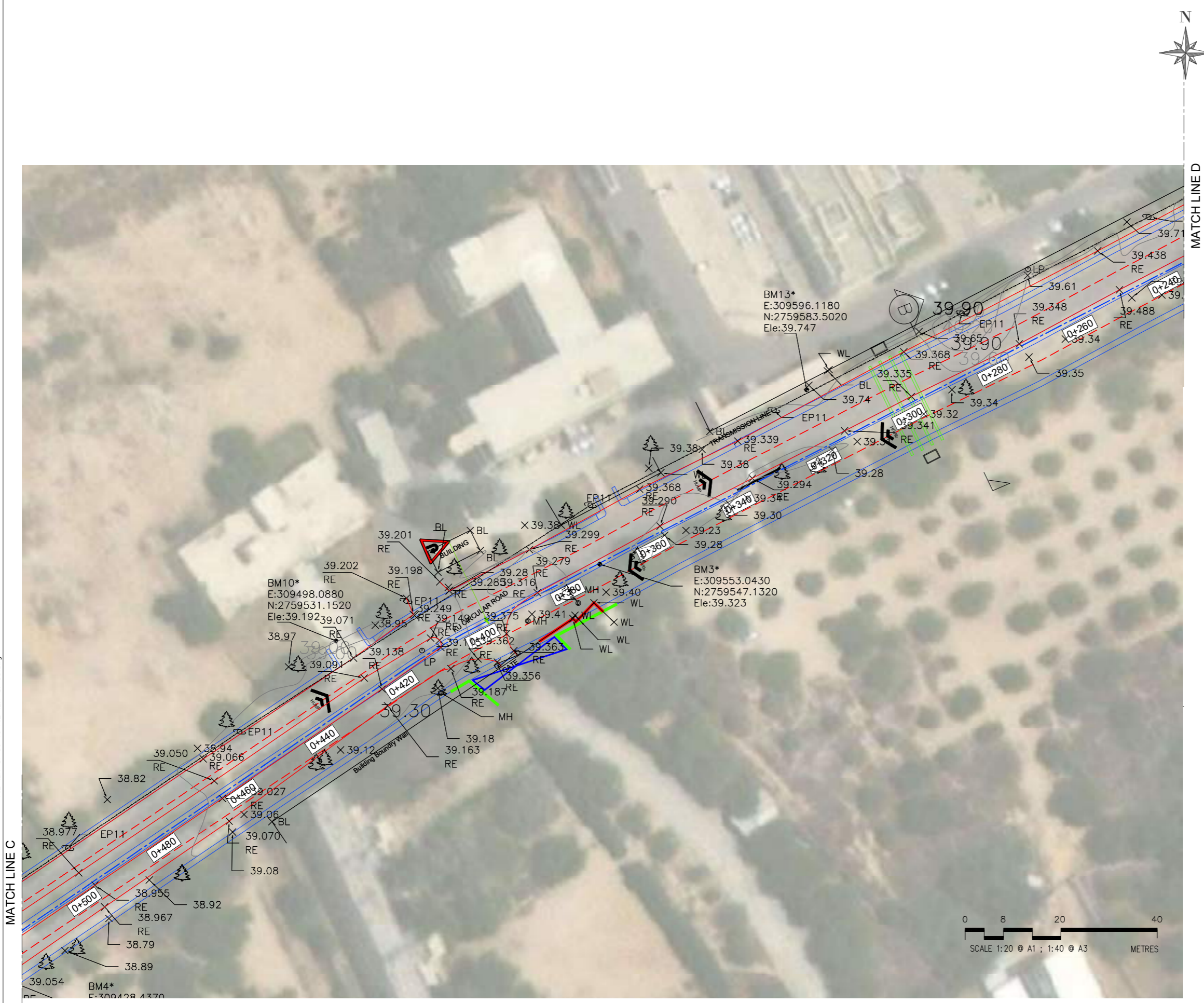
TITLE: TOPOGRAPHIC SURVEY SUPERIMPOSED PROPOSED ROAD ALIGNMENT ENLARGE LAYOUT PLAN

STATUS: TENDER DRAWING

SCALE	AS SHOWN	DATE	DEC.-2024
DRAWN	H.G	CHECKED	M.A
DESIGNED	S.N	APPROVED	M.F.A

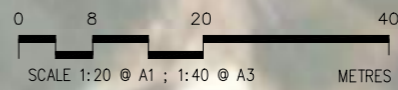
JOB NO.	DRAWING NO.	REV. NO.
P-066C	AIE-IBA-SI-01	0

AIE-IBA-SI-00 TO AIE-IBA-SI-05.dwg

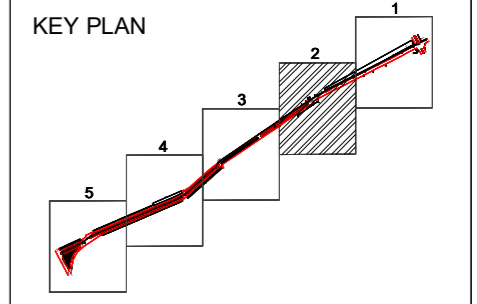


MATCH LINE D

MATCH LINE C



NOTES.
 1. ALL DIMENSIONS AND LEVELS SHOWN ARE IN METER UNLESS OTHER WISE STATED.
 2. REFER DRAWING NO. AIE-IBA-GN-01 FOR GENERAL NOTES.



LEGEND

EXISTING ROAD	
PROPOSED ROAD	
DEMOLISHED	

REV	DATE	DESCRIPTION	SIGN

AMENDMENTS

PROJECT: REHABILITATION OF METELED ROAD AT KARACHI UNIVERSITY IBA KARACHI

CLIENT:

ENGINEERING CONSULTANT:

1st Floor, IEP Building, 177/2, Liaquat Barracks, Main Shahrath-e-Faisal, Karachi 75530, Pakistan
 Email: info_pk@aingenieurs.com

TITLE: TOPOGRAPHIC SURVEY SUPERIMPOSED PROPOSED ROAD ALIGNMENT ENLARGE LAYOUT PLAN

STATUS: TENDER DRAWING

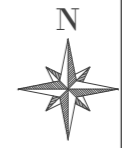
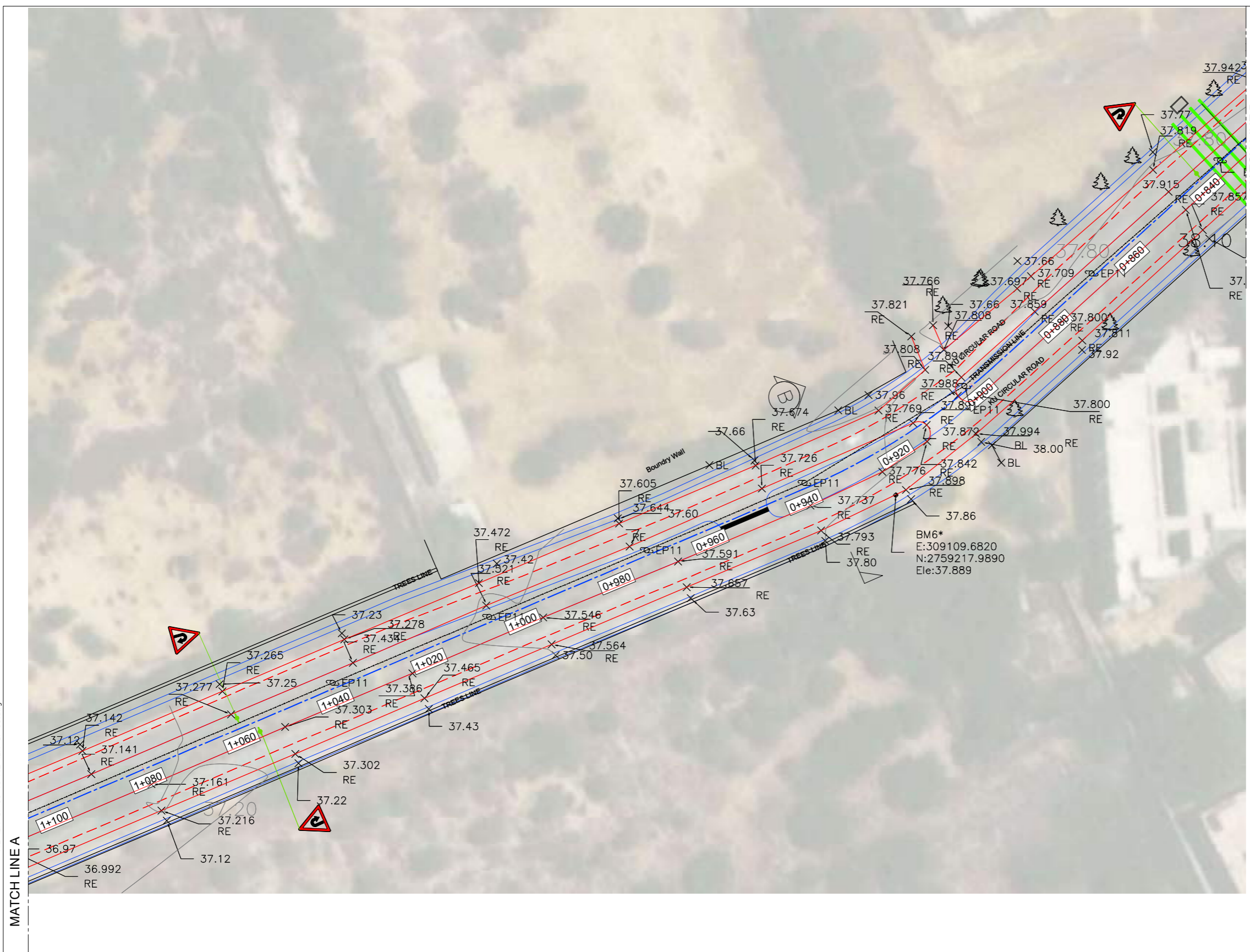
SCALE	AS SHOWN	DATE	DEC.-2024
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DRAWN	H.G	CHECKED	M.A
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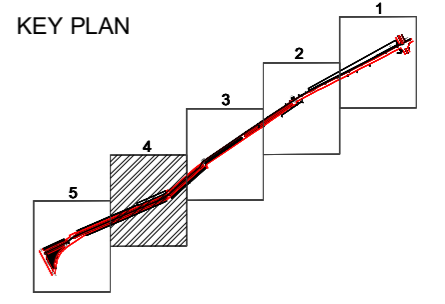
DESIGNED	S.N	APPROVED	M.F.A
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JOB NO.	DRAWING NO.	REV. NO.
P-066C	AIE-IBA-SI-02	0

AIE-IBA-SI-00 TO AIE-IBA-SI-05.dwg



- NOTES:**
1. ALL DIMENSIONS AND LEVELS SHOWN ARE IN METER UNLESS OTHER WISE STATED.
 2. REFER DRAWING NO. AIE-IBA-GN-01 FOR GENERAL NOTES.



LEGEND

EXISTING ROAD	
PROPOSED ROAD	
DEMOLISHED	

REV	DATE	DESCRIPTION	SIGN
AMENDMENTS			

PROJECT: REHABILITATION OF METELED ROAD AT KARACHI UNIVERSITY IBA KARACHI



ENGINEERING CONSULTANT:

1st Floor, IEP Building, 177/2, Liaquat Barracks, Main Shahrath-e-Faisal, Karachi 75530, Pakistan
Email: info_pk@aiengineers.com

TITLE: TOPOGRAPHIC SURVEY SUPERIMPOSED PROPOSED ROAD ALIGNMENT ENLARGE LAYOUT PLAN

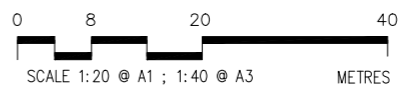
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SCALE	AS SHOWN	DATE	DEC.-2024
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DRAWN	H.G	CHECKED	M.A
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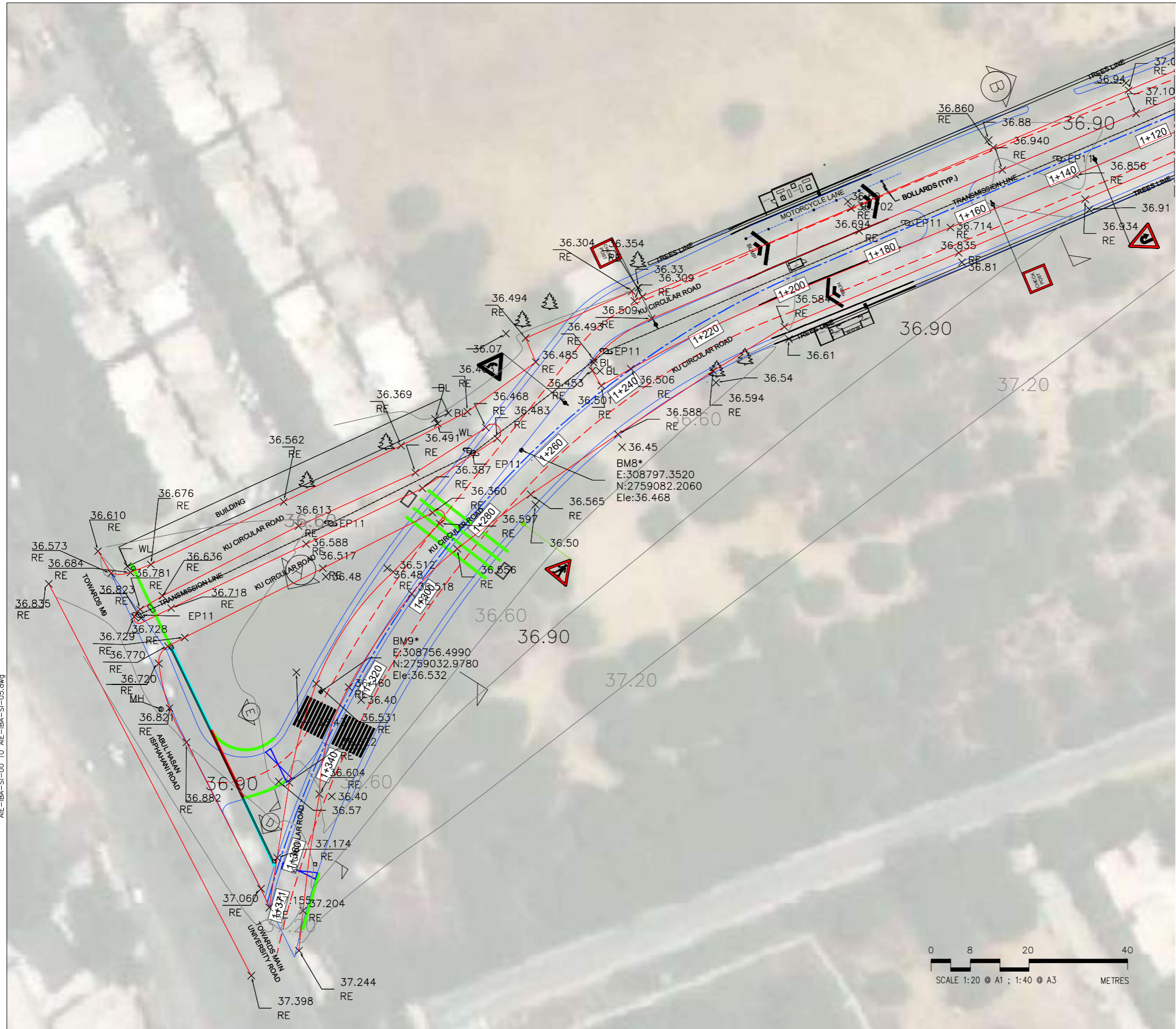
DESIGNED	S.N	APPROVED	M.F.A
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JOB NO.	DRAWING NO.	REV. NO.
P-066C	AIE-IBA-SI-04	0

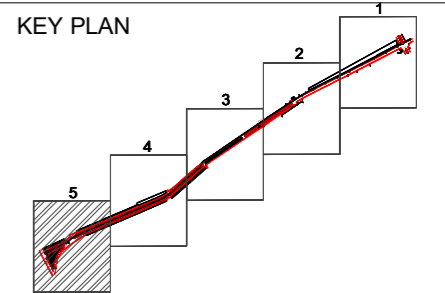


MATCH LINE A

MATCH LINE B



NOTES:
 1. ALL DIMENSIONS AND LEVELS SHOWN ARE IN METER UNLESS OTHERWISE STATED.
 2. REFER DRAWING NO. AIE-IBA-GN-01 FOR GENERAL NOTES.



LEGEND

EXISTING ROAD	
PROPOSED ROAD	
DEMOLISHED	

REV	DATE	DESCRIPTION	SIGN

AMENDMENTS
 PROJECT: REHABILITATION OF METELED ROAD AT KARACHI UNIVERSITY IBA KARACHI

CLIENT:

Institute of Business Administration
Karachi
Creating and Adding to Tomorrow

ENGINEERING CONSULTANT:

AI Engineers
1st Floor, IEP Building, 177/2, Liaquat Barracks, Main Shahrah-e-Faisal, Karachi 75530, Pakistan
Email: info_pk@aieengineers.com

TITLE:
**TOPOGRAPHIC SURVEY
 SUPERIMPOSED PROPOSED ROAD
 ALIGNMENT ENLARGE LAYOUT PLAN**

STATUS: **TENDER DRAWING**

SCALE	AS SHOWN	DATE	DEC.-2024
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DRAWN	H.G	CHECKED	M.A
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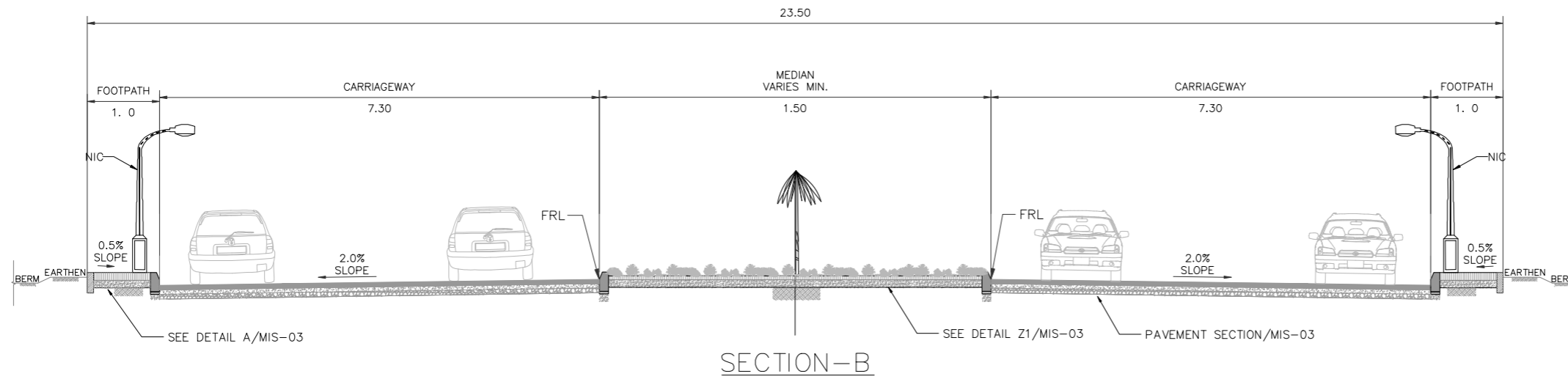
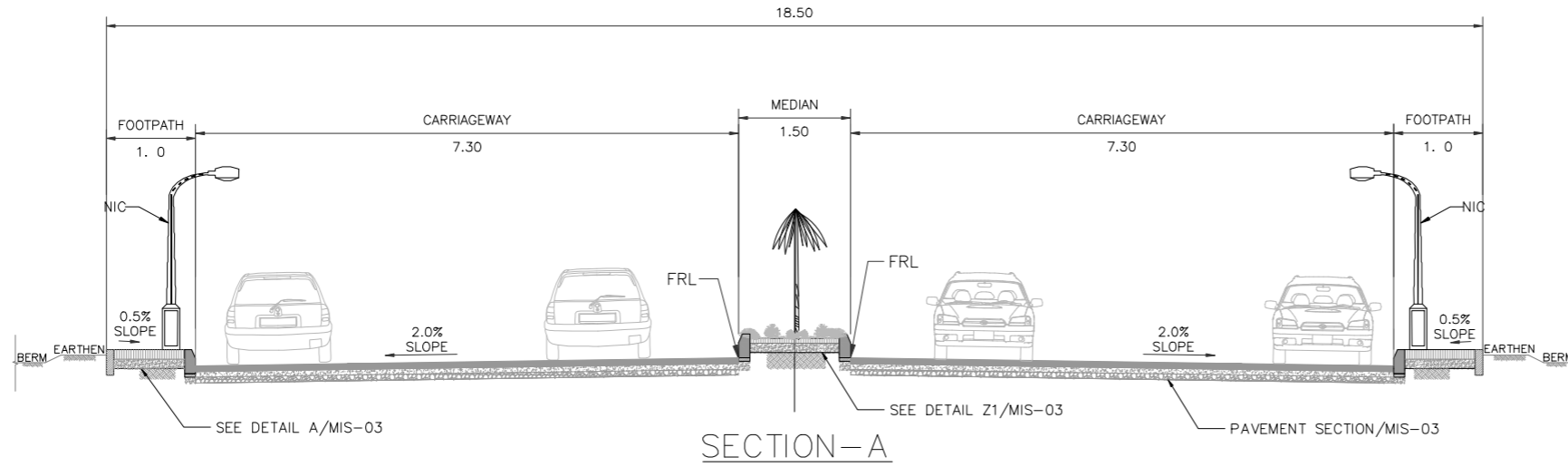
DESIGNED	S.N	APPROVED	M.F.A
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JOB NO.	DRAWING NO.	REV. NO.
P-066C	AIE-IBA-SI-05	0

AIE-IBA-SI-00 TO AIE-IBA-SI-05.dwg

PROPOSED ROAD SECTION

Road Section Detail.dwg



NOTES.

1. ALL DIMENSIONS AND LEVELS SHOWN ARE IN METER UNLESS OTHERWISE STATED.
2. REFER DRAWING NO. AIE-IBA-GN-01 FOR GENERAL NOTES
3. REFER DRAWING NO. AIE-IBA-TS-01 TO AIE-IBA-TS-06 FOR TOPOGRAPHY SURVEY.
4. REFER DRAWING NO. AIE-IBA-LP-01 TO AIE-IBA-LP-06 FOR PROPOSED ROAD ALIGNMENT.
5. REFER DRAWING NO. AIE-IBA-SI-01 TO AIE-IBA-SI-06 FOR TOPOGRAPHIC SURVEY SUPERIMPOSED PROPOSED ROAD ALIGNMENT.
6. REFER DRAWING NO. AIE-IBA-RS-01 & AIE-IBA-RS-02 FOR ROAD TYPICAL SECTIONS.
7. THE TOILET BLOCK, CHECK POST AND WAITING AREA SHOWN ON THIS DRAWING ARE INDICATIVE ONLY.

REV	DATE	DESCRIPTION	SIGN
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AMENDMENTS

PROJECT: REHABILITATION OF METEALED ROAD AT KARACHI UNIVERSITY IBA KARACHI

CLIENT:



ENGINEERING CONSULTANT:



1st Floor, IEP Building, 177/2,
Liaquat Barracks,
Main Shahr-e-Faisal,
Karachi 75530, Pakistan
Email: info_pk@aengineers.com

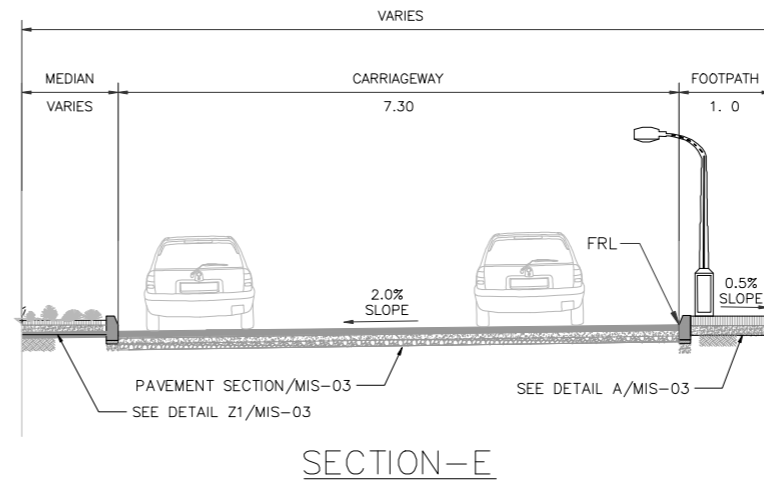
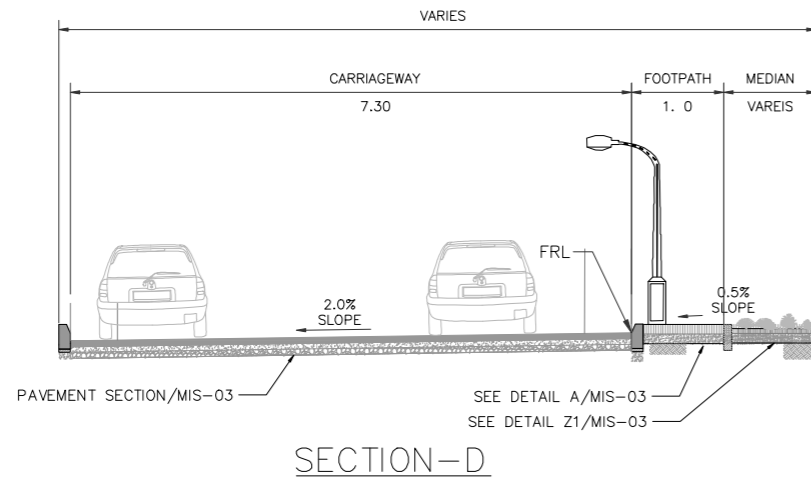
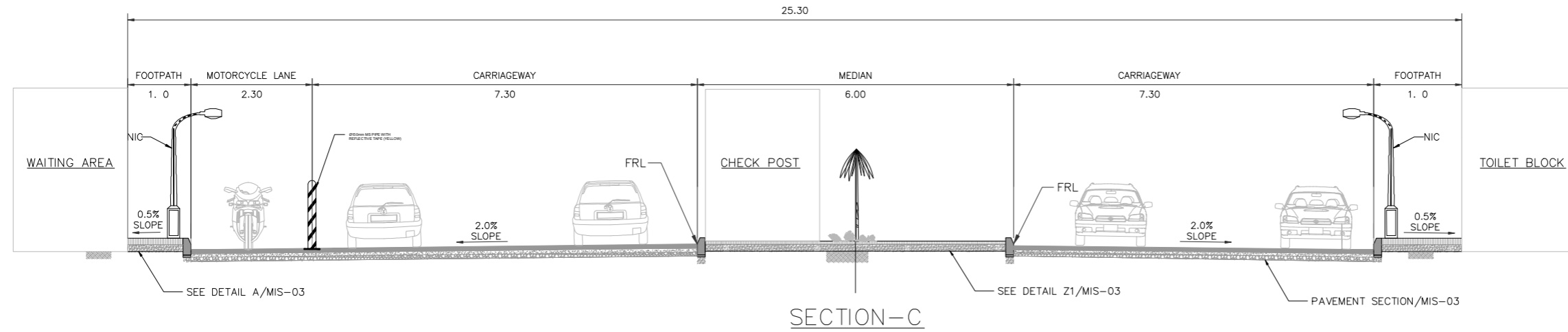
TITLE: PROPOSED ROAD SECTION A, B (01 OF 02)

STATUS: TENDER DRAWING

SCALE	N.T.S	DATE	DEC.-2024
DRAWN	H.G	CHECKED	M.A
DESIGNED	S.N	APPROVED	M.F.A

JOB NO.	DRAWING NO.	REV. NO.
P-066C	AIE-IBA-RS-01	0

Road Section Detail.dwg



NOTES.

1. ALL DIMENSIONS AND LEVELS SHOWN ARE IN METER UNLESS OTHER WISE STATED.
2. REFER DRAWING NO. AIE-IBA-GN-01 FOR GENERAL NOTES
3. REFER DRAWING NO. AIE-IBA-TS-01 TO AIE-IBA-TS-06 FOR TOPOGRAPHY SURVEY.
4. REFER DRAWING NO. AIE-IBA-LP-01 TO AIE-IBA-LP-06 FOR PROPOSED ROAD ALIGNMENT.
5. REFER DRAWING NO. AIE-IBA-SI-01 TO AIE-IBA-SI-06 FOR TOPOGRAPHIC SURVEY SUPERIMPOSED PROPOSED ROAD ALIGNMENT.
6. REFER DRAWING NO. AIE-IBA-RS-01 FOR ROAD TYPICAL SECTIONS.
7. THE TOILET BLOCK, CHECK POST AND WAITING AREA SHOWN ON THIS DRAWING ARE INDICATIVE ONLY.

REV	DATE	DESCRIPTION	SIGN
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AMENDMENTS

PROJECT: REHABILITATION OF METEALED ROAD AT KARACHI UNIVERSITY IBA KARACHI

CLIENT:



ENGINEERING CONSULTANT:



1st Floor, IEP Building, 177/2, Liaquat Barracks, Main Shahr-e-Faisal, Karachi 75530, Pakistan
Email: info_pk@aengineers.com

TITLE: PROPOSED ROAD SECTION C, D & E (02 OF 02)

STATUS: TENDER DRAWING

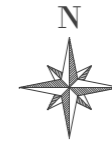
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DRAWN: H.G	CHECKED: M.A
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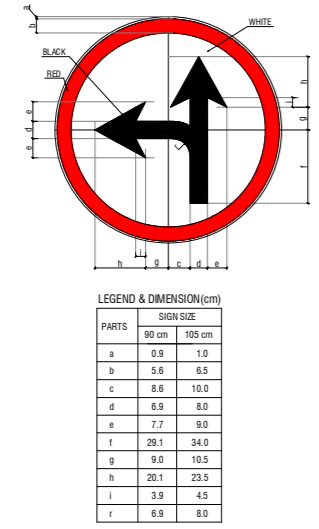
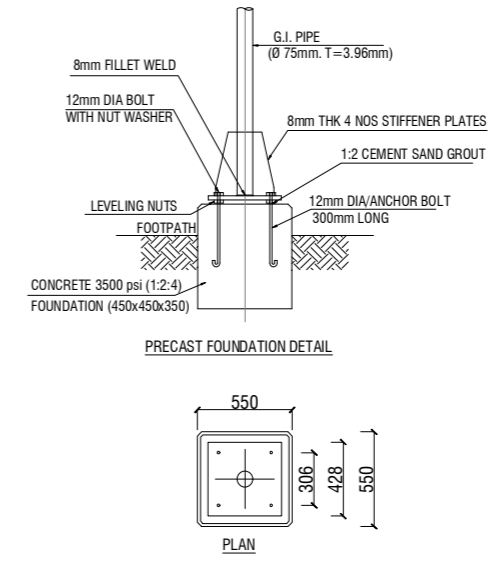
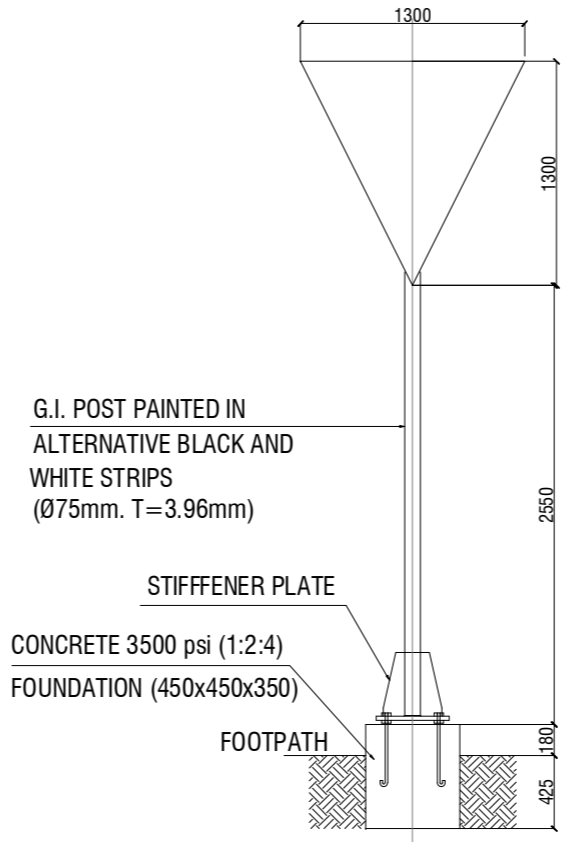
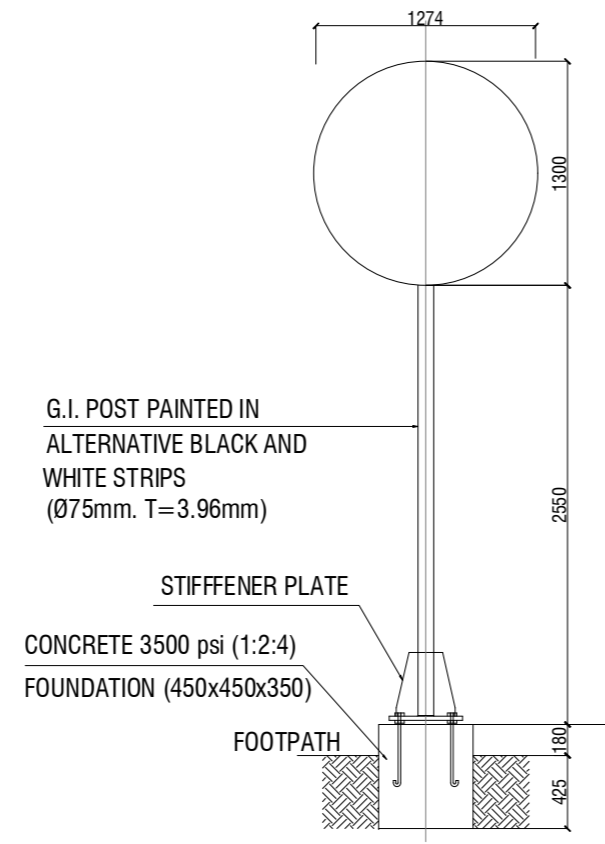
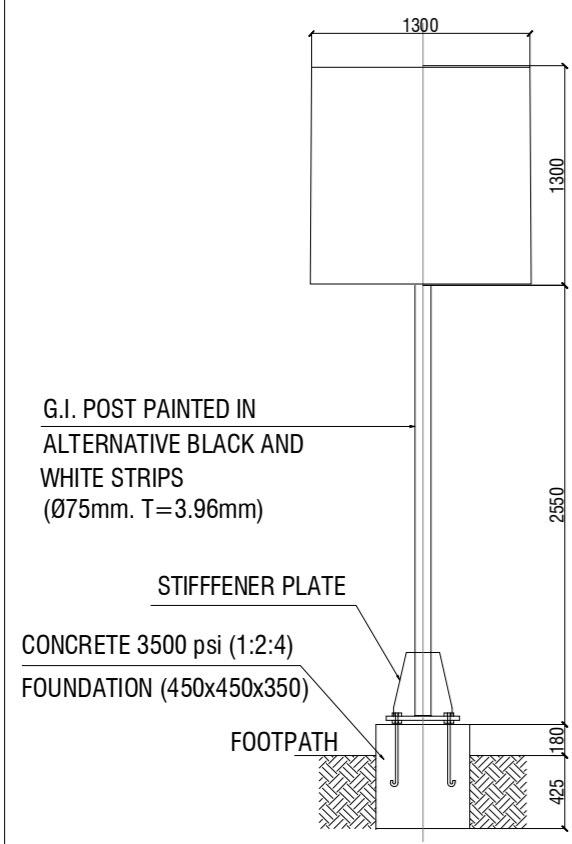
DESIGNED: S.N	APPROVED: M.F.A
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JOB NO. P-066C	DRAWING NO. AIE-IBA-RS-02	REV. NO. 0
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MISCELLANEOUS DETAILS

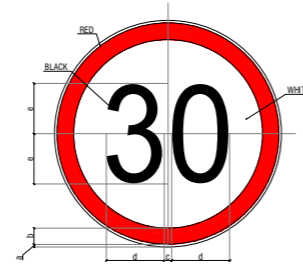
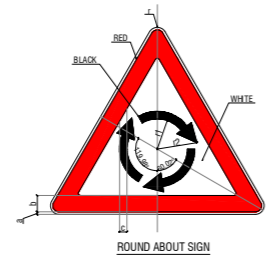


- NOTES.**
1. ALL DIMENSIONS SHOWN ARE IN (mm) UNLESS OTHER WISE STATED.
 2. REFER DRAWING NO. AIE-IBA-GN-01 FOR GENERAL NOTES



LEGEND & DIMENSION (cm)

PARTS	SIGN SIZE	
	90 cm	105 cm
a	0.9	1.0
b	5.6	6.5
c	8.6	10.0
d	6.9	8.0
e	7.7	9.0
f	29.1	34.0
g	9.0	10.5
h	20.1	23.5
i	3.9	4.5
r	6.9	8.0



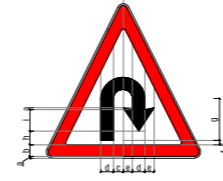
LEGEND & DIMENSION (cm)

PARTS	SIGN SIZE	
	90 cm	105 cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	3.0	3.5
d	9.0	10.5
r1	12.0	14.0
r2	16.0	18.7



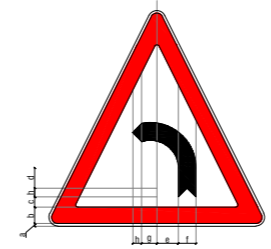
LEGEND & DIMENSION (cm)

PARTS	SIGN SIZE	
	60 cm	75 cm
r	2.3	2.9
a	0.7	0.8
b	4.3	5.4
c	1.7	2.1
d	28.7	35.8
e	15.3	19.2



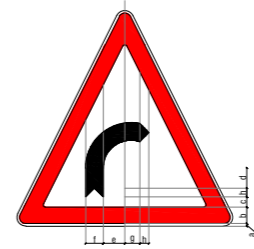
LEGEND & DIMENSION (cm)

PARTS	SIGN SIZE	
	60 cm	75 cm
r	2.3	2.9
a	0.7	0.8
b	4.3	5.4
c	3.7	4.6
d	4.7	5.8
e	3.3	4.2
f	1.7	2.1
g	15.3	19.2
h	5.0	6.3
i	8.0	10.0



LEGEND & DIMENSION (cm)

PARTS	SIGN SIZE	
	90 cm	105 cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	4.0	4.7
d	11.5	13.4
e	8.5	9.9
f	7.0	8.2
g	6.0	7.0
h	3.5	4.1
r1	12.5	14.6



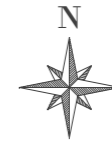
LEGEND & DIMENSION (cm)

PARTS	SIGN SIZE	
	90 cm	105 cm
r	3.5	4.1
a	1.0	1.2
b	6.5	7.6
c	4.0	4.7
d	11.5	13.4
e	8.5	9.9
f	7.0	8.2
g	6.0	7.0
h	3.5	4.1
r1	12.5	14.6

AIE-IBA-MIS-01 TO AIE-IBA-MIS-06.dwg

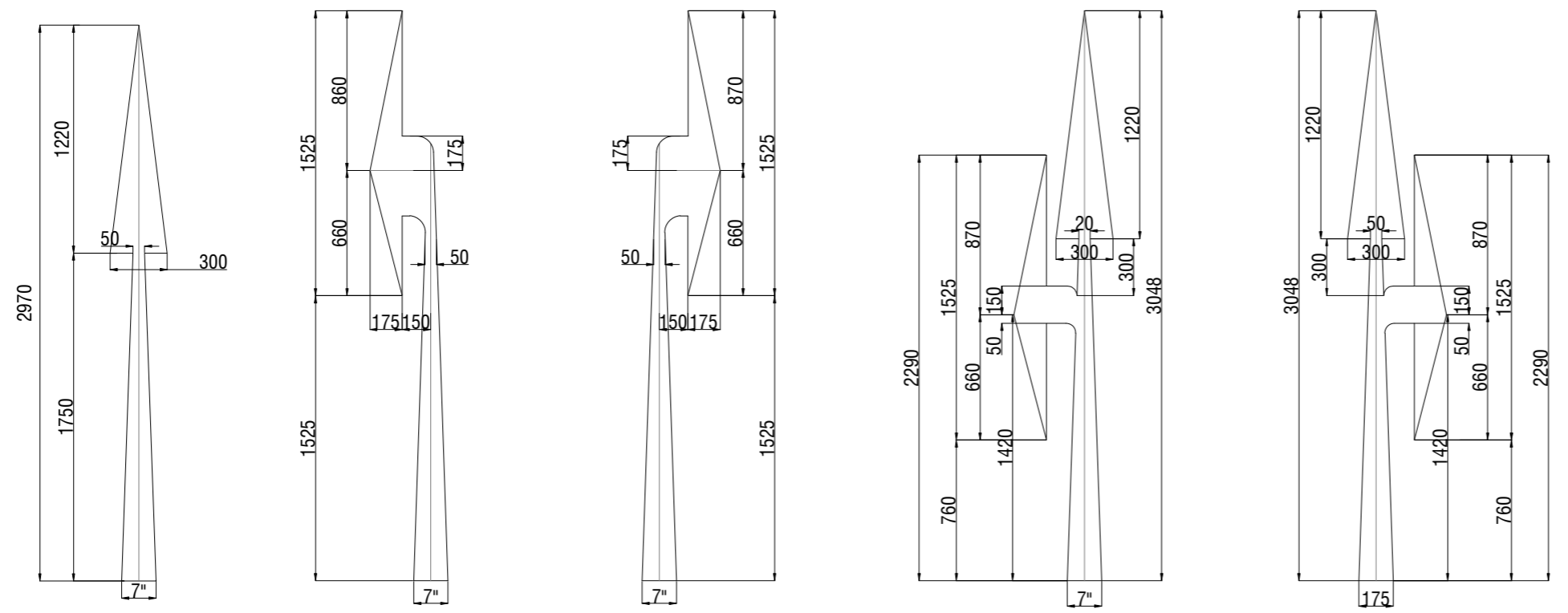
REV	DATE	DESCRIPTION	SIGN
AMENDMENTS			
PROJECT: REHABILITATION OF METELED ROAD AT KARACHI UNIVERSITY IBA KARACHI			
CLIENT:			
ENGINEERING CONSULTANT: 1st Floor, IEP Building, 177/2, Liaquat Barracks, Main Shahrah-e-Faisal, Karachi 75530, Pakistan. Email: info_pk@aiengineers.com			
TITLE: ROAD TRAFFIC SIGNS MISCELLANEOUS DEATILS			
STATUS: TENDER DRAWING			
SCALE: N.T.S		DATE: DEC.-2024	
DRAWN: H.G		CHECKED: M.A	
DESIGNED: S.N		APPROVED: M.F.A	
JOB NO. P-066C	DRAWING NO. AIE-IBA-MIS-01	REV. NO. 0	

AIE-IBA-MIS-01 TO AIE-IBA-MIS-06.dwg

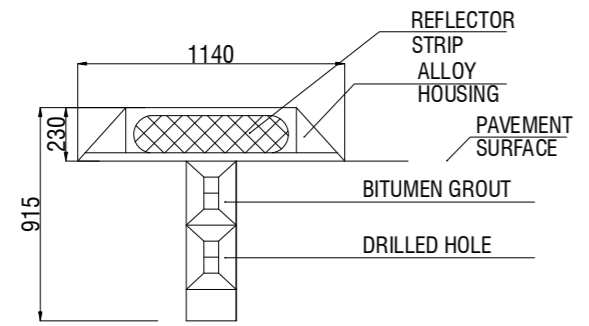


NOTES.

1. ALL DIMENSIONS SHOWN ARE IN (mm) UNLESS OTHER WISE STATED.
2. REFER DRAWING NO. AIE-IBA-GN-01 FOR GENERAL NOTES

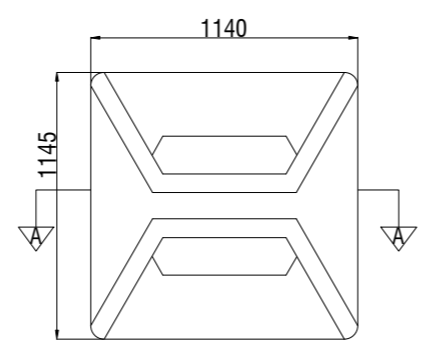


ARROW SIGNS

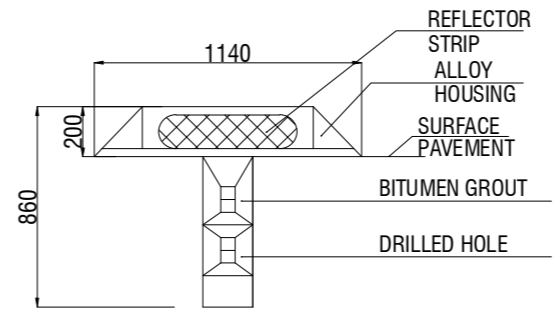


SECTION A-A

ROAD STUD



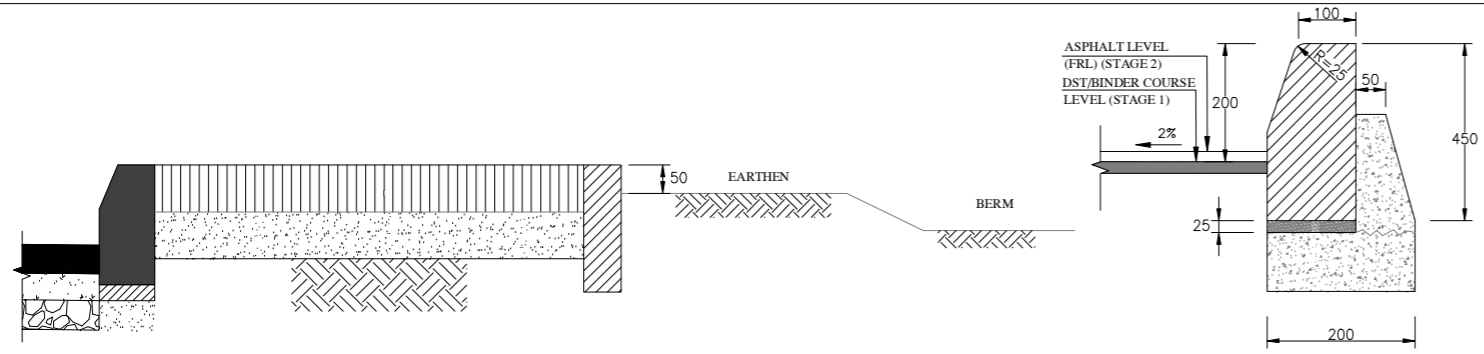
PLAN



SECTION A-A

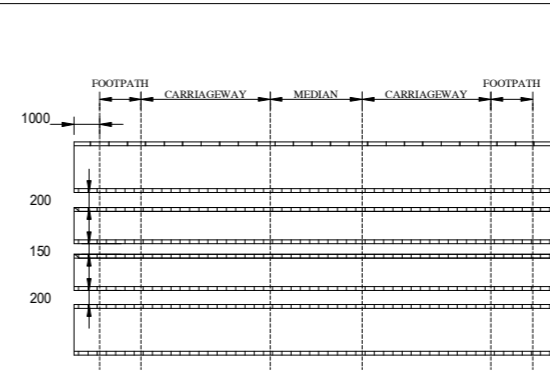
ROAD STUD

REV	DATE	DESCRIPTION	SIGN
AMENDMENTS			
PROJECT: REHABILITATION OF METELED ROAD AT KARACHI UNIVERSITY IBA KARACHI			
CLIENT:			
ENGINEERING CONSULTANT: 1st Floor, IEP Building, 177/2, Liaquat Barracks, Main Shahrah-e-Faisal, Karachi 75530, Pakistan. Email: info_pk@aiengineers.com			
TITLE: PAVEMENT MARKING MISCELLANEOUS DETAILS (SHEET 01 OF 04)			
STATUS: TENDER DRAWING			
SCALE: N.T.S		DATE: DEC.-2024	
DRAWN: H.G		CHECKED: M.A	
DESIGNED: S.N		APPROVED: M.F.A	
JOB NO. P-066C	DRAWING NO. AIE-IBA-MIS-02	REV. NO. 0	

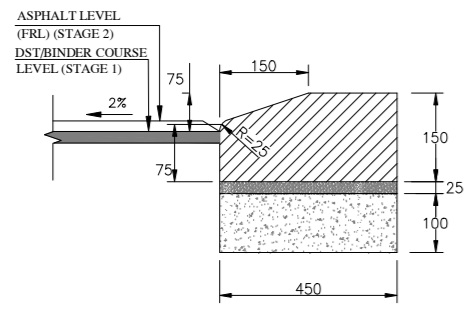


DETAIL A
FOOT PATH DETAIL

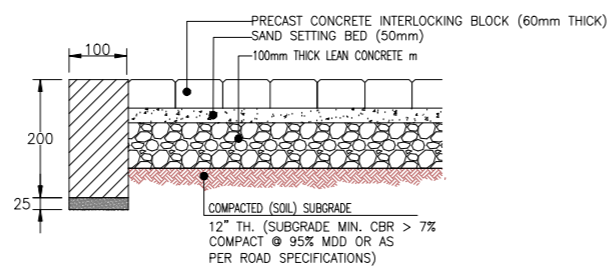
DETAIL B
PRECAST CONCRETE CURB



SLEEVES DETAIL

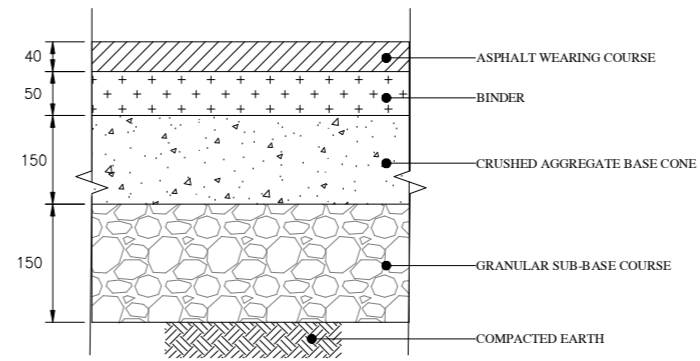


DETAIL C
MOUNTABLE CURB

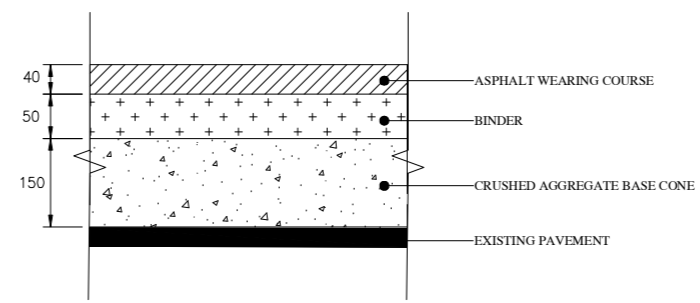


DETAIL D
EDGE STONE

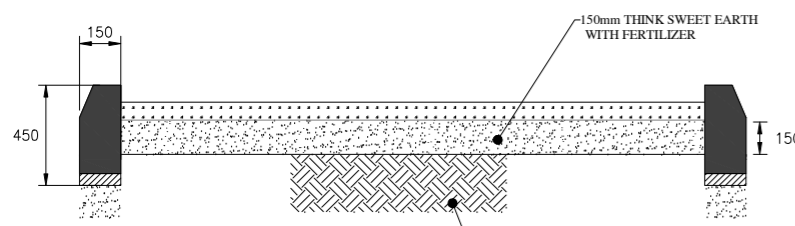
DETAIL Z
FOOTPATH PAVEMENT DETAIL



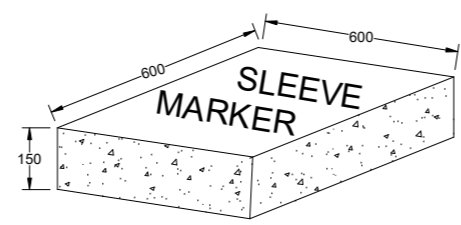
PAVEMENT SECTION



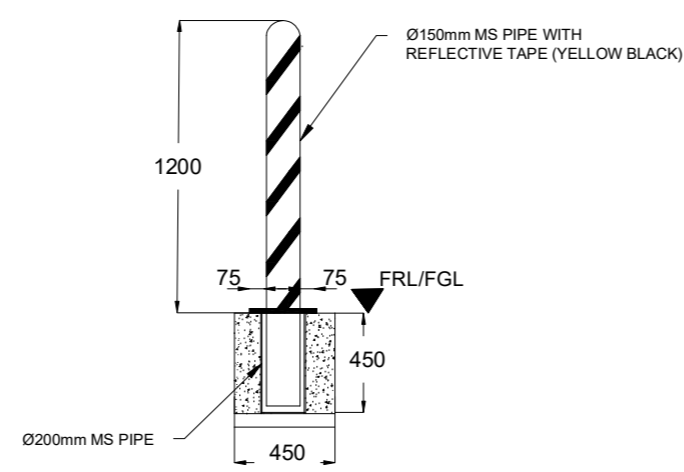
PAVEMENT SECTION FOR EXISTING ROAD



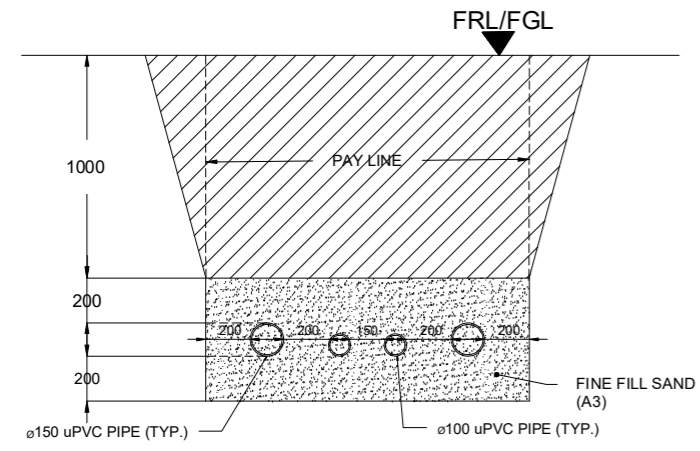
DETAIL Z1
MEDIAN DETAIL



SLEEVE MARKER



BOLLARD DETAIL



TYPICAL SECTION OF uPVC PIPE SLEEVES

NOTE:
1. THE PIPE SLEEVES LENGTH SHALL BE AS PER SITE CONDITION. THE SLEEVES SHALL BE EXTENDED 1m BEYOND FOOTPATH AS BOTH SIDES.

NOTES.
1. ALL DIMENSIONS SHOWN ARE IN (mm) UNLESS OTHER WISE STATED.
2. REFER DRAWING NO. AIE-IBA-GN-01 FOR GENERAL NOTES

REV	DATE	DESCRIPTION	SIGN
AMENDMENTS			

PROJECT:
REHABILITATION OF METEALED ROAD AT KARACHI UNIVERSITY IBA KARACHI

CLIENT:

ENGINEERING CONSULTANT:

1st Floor, IEP Building, 177/2, Liaquat Barracks, Main Shahrath-e-Faisal, Karachi 75530, Pakistan
Email: info_pk@aiengineers.com

TITLE:
PAVEMENT MARKING MISCELLANEOUS DETAILS (SHEET 02 OF 04)

STATUS:
TENDER DRAWING

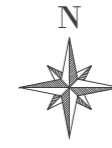
SCALE: N.T.S DATE: DEC.-2024

DRAWN: H.G CHECKED: M.A

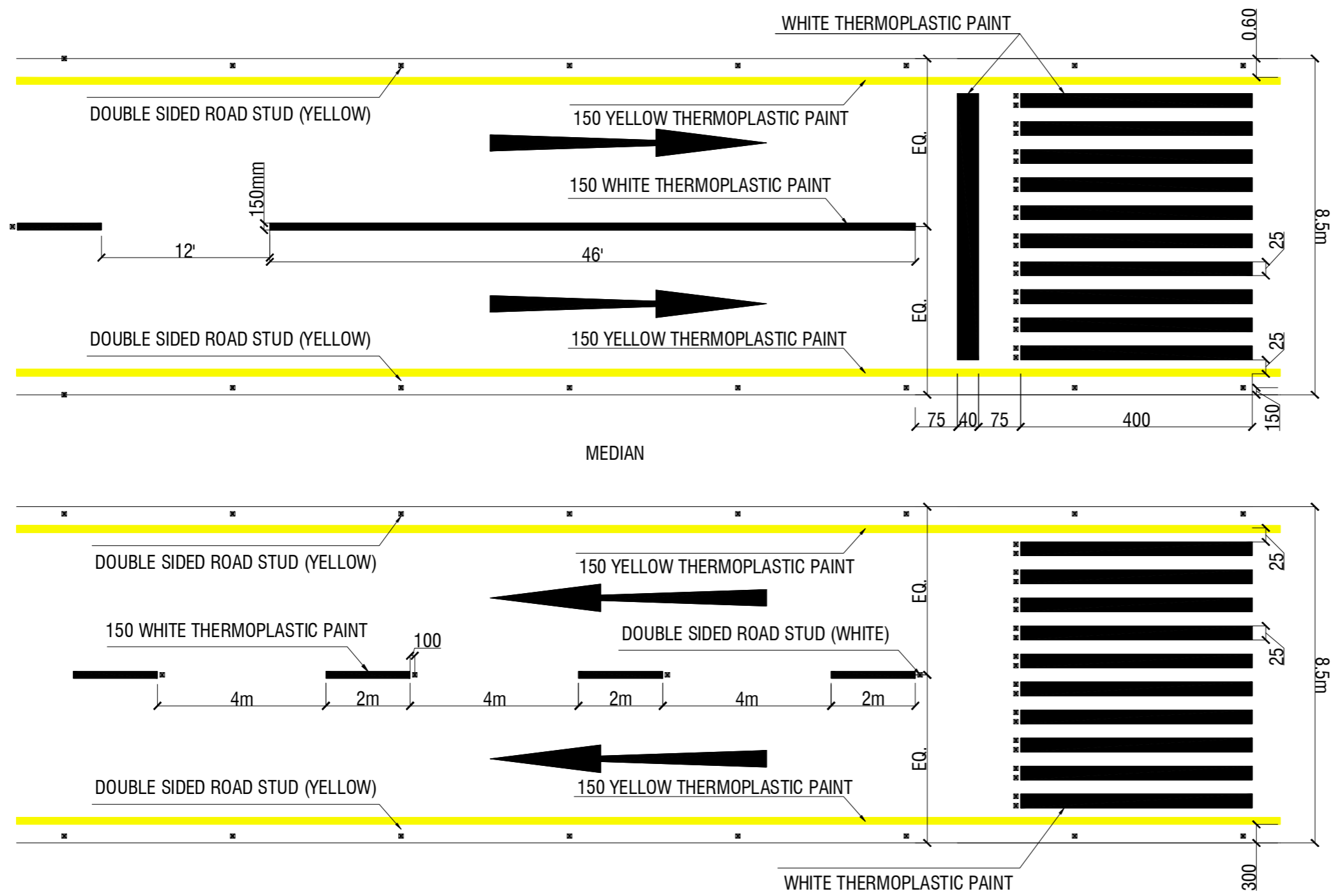
DESIGNED: S.N APPROVED: M.F.A

JOB NO. P-066C DRAWING NO. AIE-IBA-MIS-03 REV. NO. 0

AIE-IBA-MIS-01 TO AIE-IBA-MIS-06.dwg





- NOTES.**
1. ALL DIMENSIONS SHOWN ARE IN (mm) UNLESS OTHER WISE STATED.
 2. REFER DRAWING NO. AIE-IBA-GN-01 FOR GENERAL NOTES

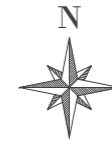


TYPICAL DETAIL OF ZEBRA CROSSING

AIE-IBA-MIS-01 TO AIE-IBA-MIS-06.dwg

REV	DATE	DESCRIPTION	SIGN
AMENDMENTS			
PROJECT: REHABILITATION OF METEALED ROAD AT KARACHI UNIVERSITY IBA KARACHI			
CLIENT: 			
ENGINEERING CONSULTANT:  1st Floor, IEP Building, 177/2, Liaquat Barracks, Main Shahrah-e-Faisal, Karachi 75530, Pakistan Email: info_pk@aiengineers.com			
TITLE: PAVEMENT MARKING MISCELLANEOUS DETAILS (SHEET 03 OF 04)			
STATUS TENDER DRAWING			
SCALE N.T.S		DATE DEC.-2024	
DRAWN H.G		CHECKED M.A	
DESIGNED S.N		APPROVED M.F.A	
JOB NO. P-066C	DRAWING NO. AIE-IBA-MIS-04	REV. NO. 0	

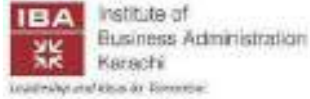

AIE-IBA-MIS-01 TO AIE-IBA-MIS-06.dwg



TYPICAL DETAIL OF ZEBRA CROSSING

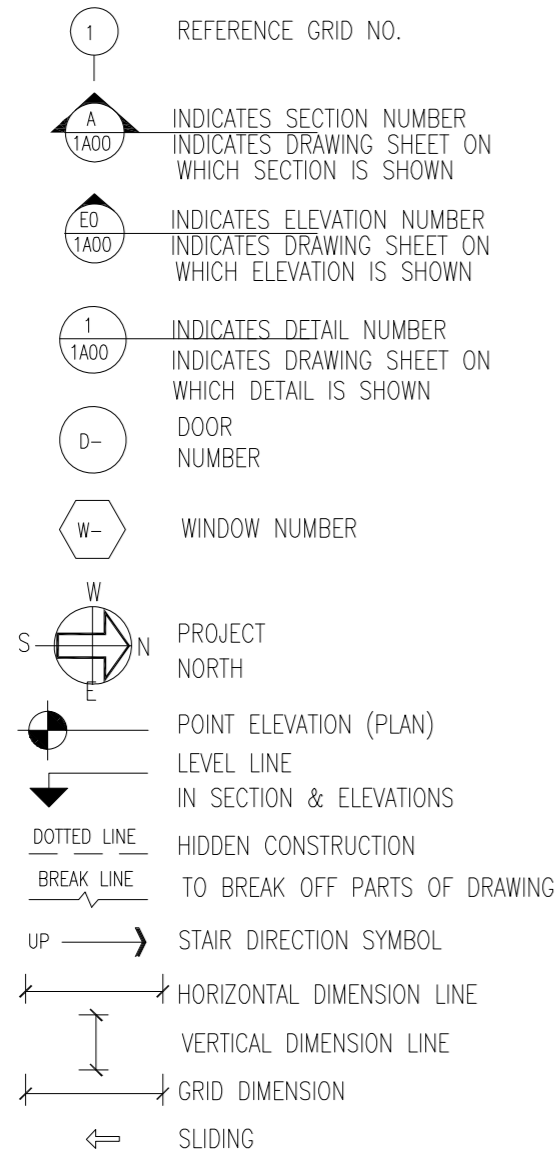
NOTES.

1. ALL DIMENSIONS SHOWN ARE IN (mm) UNLESS OTHER WISE STATED.
2. REFER DRAWING NO. AIE-IBA-GN-01 FOR GENERAL NOTES

REV	DATE	DESCRIPTION	SIGN
AMENDMENTS			
PROJECT: REHABILITATION OF METELED ROAD AT KARACHI UNIVERSITY IBA KARACHI			
CLIENT: 			
ENGINEERING CONSULTANT:  1st Floor, IEP Building, 177/2, Liaquat Barracks, Main Shahrath-e-Faisal, Karachi 75530, Pakistan. Email: info_pk@aiengineers.com			
TITLE: PAVEMENT MARKING MISCELLANEOUS DETAILS (SHEET 04 OF 04)			
STATUS TENDER DRAWING			
SCALE	N.T.S	DATE	DEC.-2024
DRAWN	H.G	CHECKED	M.A
DESIGNED	S.N	APPROVED	M.F.A
JOB NO.	DRAWING NO.	REV. NO.	
P-066C	AIE-IBA-MIS-05	0	

ARCHITECTURE DRAWINGS

LEGEND:





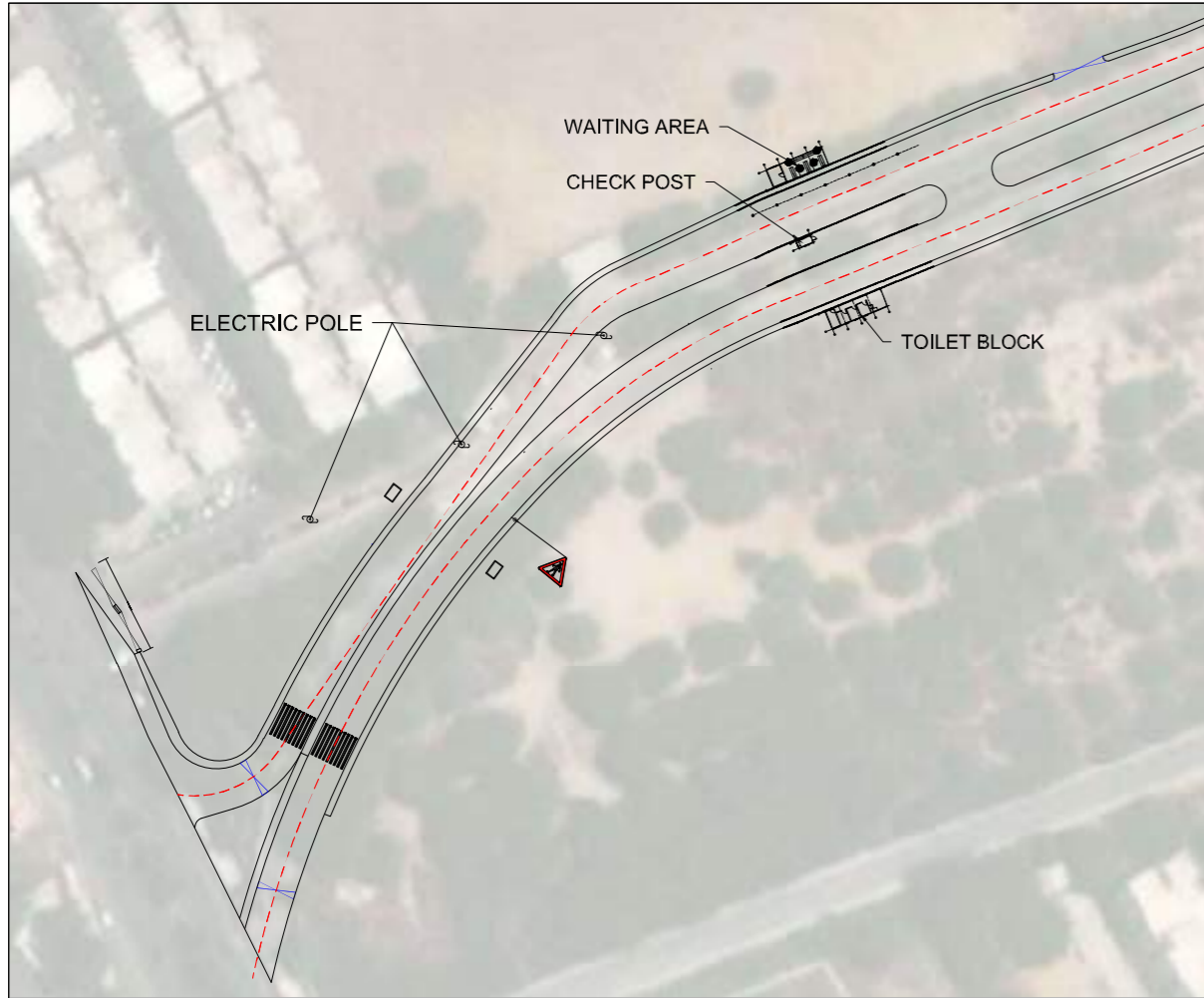
ABBREVIATIONS

C/C	CENTER TO CENTER
COL	COLUMN
COMM. PLY	COMMERCIAL PLY
CL	CONCRETE LEVEL
CM	CENTIMETER
CS	CEMENT SAND
D	DOOR
DW	DOOR WINDOW
EQ.	EQUAL
FFL	FINISHED FLOOR LEVEL
FT	FLOOR TRAP
MM	MILLIMETER
M	METER
NSL	NATURAL SURFACE LEVEL
PCC	PLAIN CEMENT CONCRETE
PL	PLINTH LEVEL
R	RISER
RCC	REINFORCED CEMENT CONCRETE
C.CON	CONCRETE
RL	ROAD LEVEL
T	TREAD
TH.	THICKNESS, THICK
TYP.	TYPICAL
V	VENTILATOR
W	WINDOW
WB	WASH BASIN
WC	WATER CLOSET
ELE.	ELEVATION

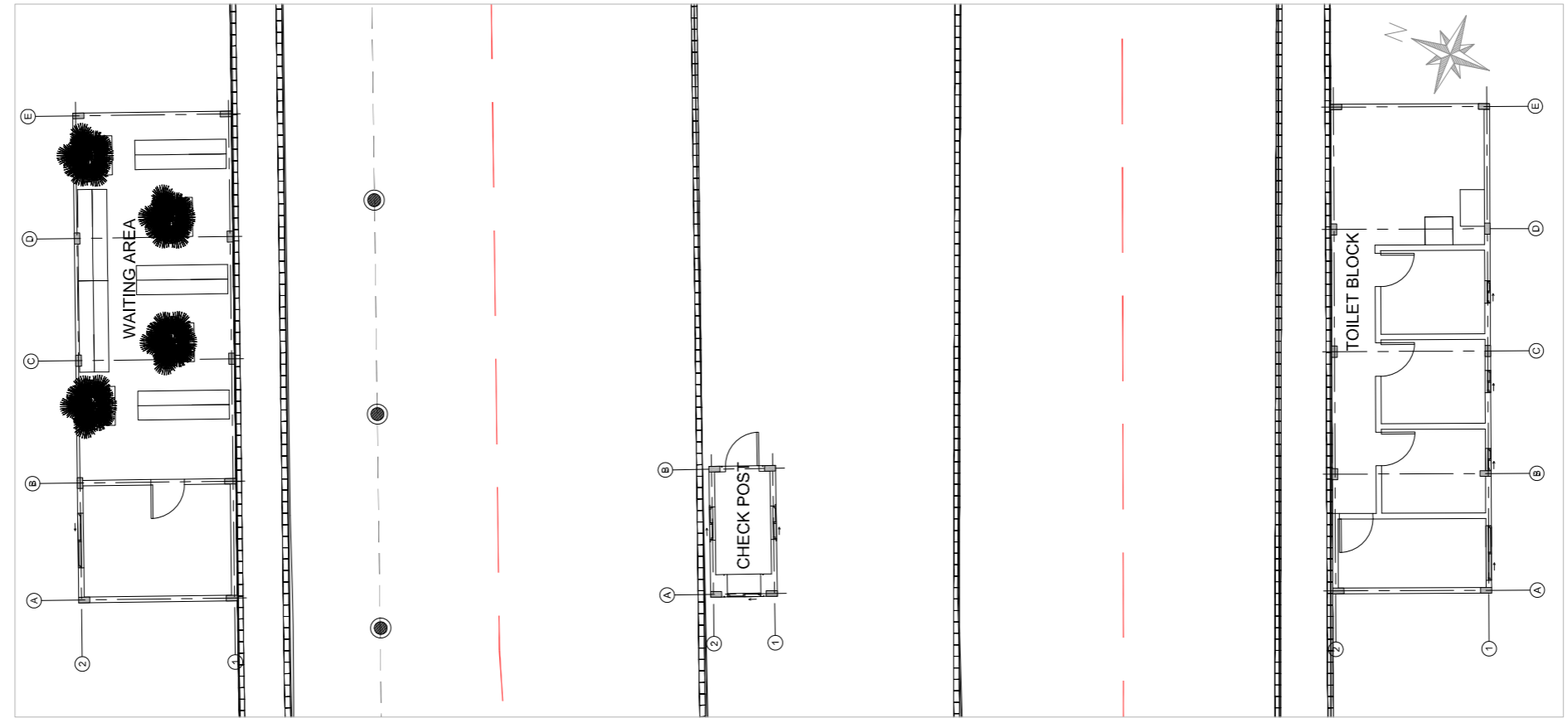
GENERAL NOTES

- ALL DIMENSIONS ARE IN FEET/INCHES UNLESS OTHERWISE MENTIONED.
- WRITTEN DIMENSION SHALL BE GOVERN NO DIMENSION SCALED.
- POTABLE WATER TO BE USED DURING CONSTRUCTION.
- ALL BRICK MASONRY TO BE 6" TH. EXCEPT NOTED OTHERWISE.
- MOCKUPS OF ALL ITEMS TO BE PREPARED FOR ARCHITECT'S APPROVAL.
- ALL FLOORS ARE LAID WITHOUT ANY SLOPE, EXCEPT OF BATH ROOMS, OPEN CORRIDORS AND KITCHEN IN WHICH CASES SLOPE IS TOWARDS DRAIN.
- ALL DOOR OPENINGS TO BE TAKEN AS PLASTERED OPENINGS.
- MS. LOUVERS TO BE RUST TREATED AS PER ARCHITECT'S INSTRUCTION.
- LINTELS TO BE CASTE OVER DOOR/WINDOW OPENING WHERE NEEDED AS PER STRUCTURAL DESIGN.
- FOR DIMENSIONS OF STRUCTURAL MEMBERS SUCH AS R.C.C COLUMNS, BEAMS AND SLABS ETC. REFER TO STRUCTURAL DRAWINGS.
- THE DRAWINGS SHALL BE READ IN CONJUNCTION WITH STRUCTURAL, ELECTRICAL & PLUMBING DRAWINGS
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF THE DIMENSIONS AND LEVELS BEFORE EXECUTION OF WORK. ANY DISCREPANCY, ERROR OR OMISSION IF FOUND SHALL BE BROUGHT TO THE NOTICE OF ENGINEER FOR CORRECTION & APPROVAL.
- ALL WORKS PERTAINING TO SERVICES, SUCH AS WATER SUPPLY, SEWERAGE AND DRAINAGE, ELECTRICITY, GAS AND TELEPHONE SHALL BE CARRIED OUT IN ACCORDANCE WITH THE RULES AND REGULATIONS OF CONCERNED AUTHORITIES.
- COLOR SHADES AND QUALITY OF PAINTS, CERAMIC TILES, MARBLE TILES, WATER SUPPLY AND SANITARY FITTINGS ETC. ARE SUBJECT TO THE APPROVAL OF THE ENGINEER.

REV	DATE	DESCRIPTION	SIGN
AMENDMENTS			
PROJECT: REHABILITATION OF METALED RAOD AT KARACHI UNIVERSITY IBA KARACHI			
CLIENT: 			
ENGINEERING CONSULTANT:  1st Floor, IEP Building, 177/2, Liaquat Barracks, Main Shahrh-e-Faisal, Karachi 75530, Pakistan Email: info_pk@aengineers.com			
TITLE: ENTRY WALL & GATE LEGEND, GENERAL NOTES & ABBREVIATIONS			
STATUS TENDER DRAWING			
SCALE	N.T.S	DATE	OCT-2024
DRAWN	H.G	CHECKED	M.A
DESIGNED	S.N	APPROVED	M.F.A
JOB NO.	DRAWING NO.	REV. NO.	
P-066C	AIE-IBA-ARCH-01	0	



KEY PLAN
SCALE NTS





LAYOUT PLAN
SCALE NTS



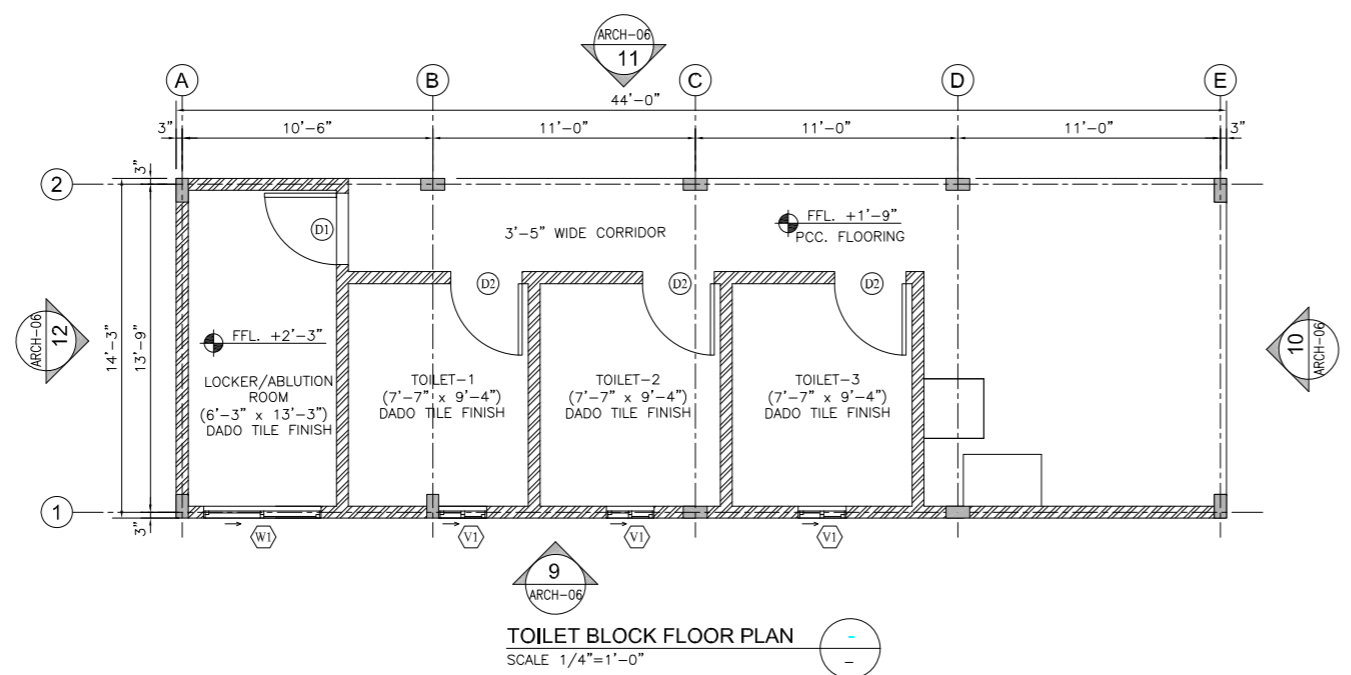
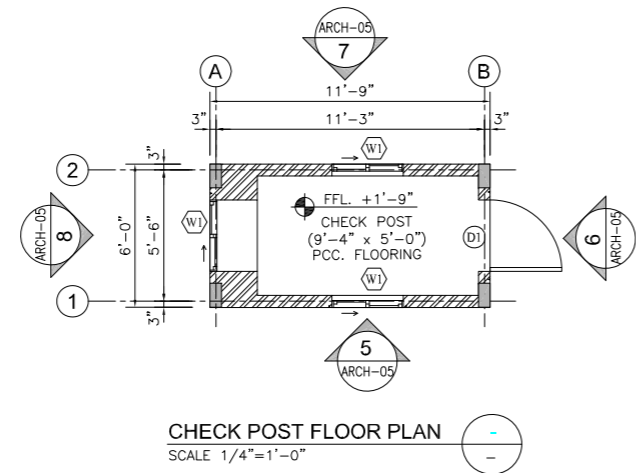
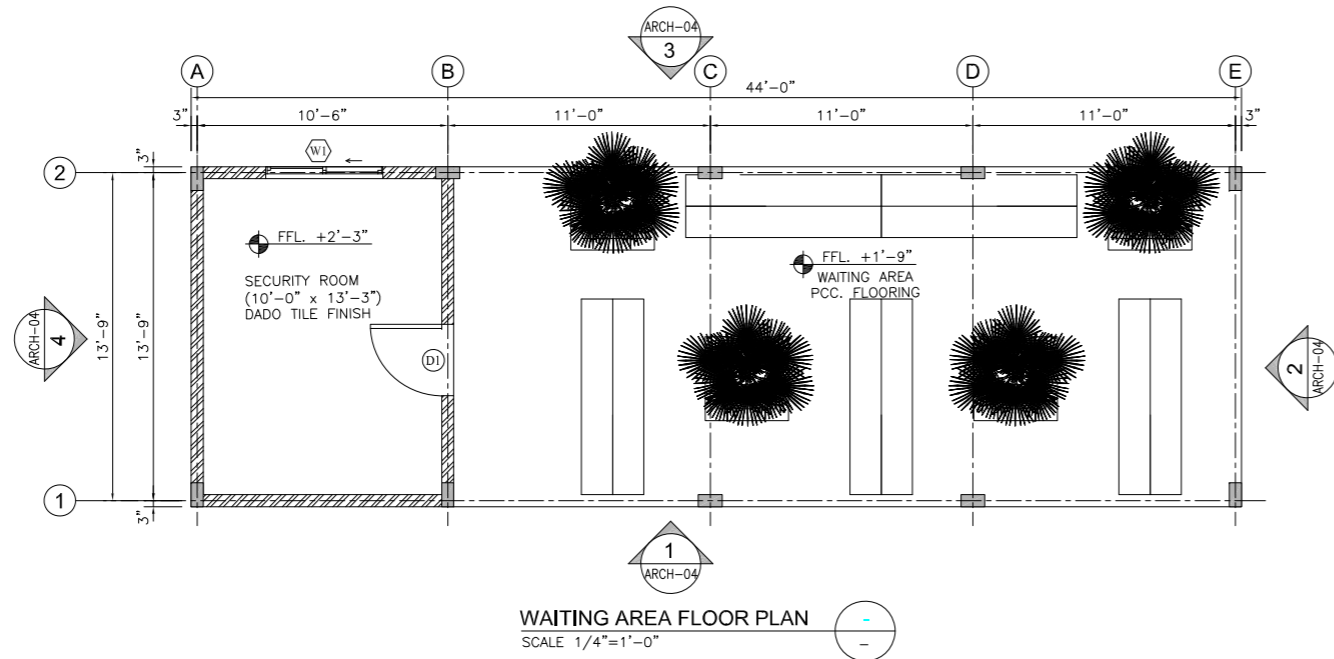
- NOTES:**
1. ALL DIMENSIONS AND LEVELS SHOWN ARE IN METER UNLESS OTHERWISE STATED.
 2. REFER DRAWING NO. AIE-IBA-GN-01 FOR GENERAL NOTES
 3. REFER DRAWING NO. AIE-IBA-TS-01 TO AIE-IBA-TS-06 FOR TOPOGRAPHY SURVEY.
 4. REFER DRAWING NO. AIE-IBA-LP-01 TO AIE-IBA-LP-06 FOR PROPOSED ROAD ALIGNMENT.
 5. REFER DRAWING NO. AIE-IBA-SI-01 TO AIE-IBA-SI-06 FOR TOPOGRAPHIC SURVEY SUPERIMPOSED PROPOSED ROAD ALIGNMENT.
 6. REFER DRAWING NO. AIE-IBA-RS-01 FOR ROAD TYPICAL SECTIONS.

LEGEND

PROPOSED CARRIAGEWAY	
PROPOSED FOOTPATH	
PROPOSED MEDIAN	
GATE HOUSE	
CHECK POST	
BOUNDARY WALL	
ENTRANCE/GATE	
PROPOSED LINE	
EXISTING LINE	
EXISTING WALL BE REMAIN	
SLEEVES	

REV	DATE	DESCRIPTION	SIGN
AMENDMENTS			
PROJECT: REHABILITATION OF METEALED ROAD AT KARACHI UNIVERSITY IBA KARACHI			
CLIENT:  Institute of Business Administration Karachi <i>Leadership and More for Tomorrow</i>			
ENGINEERING CONSULTANT:  1st Floor, IEP Building, 177/2, Liaquat Barracks, Main Shahrah-e-Faisal, Karachi 75530, Pakistan Email: info_pk@aengineers.com			
TITLE: ENTRANCE GATE LOCATION PLAN			
STATUS TENDER DRAWING			
SCALE	N.T.S	DATE	OCT-2024
DRAWN	H.G	CHECKED	M.A
DESIGNED	S.N	APPROVED	M.F.A
JOB NO.	P-066C	DRAWING NO.	AIE-IBA-ARCH-02
REV. NO.	0		

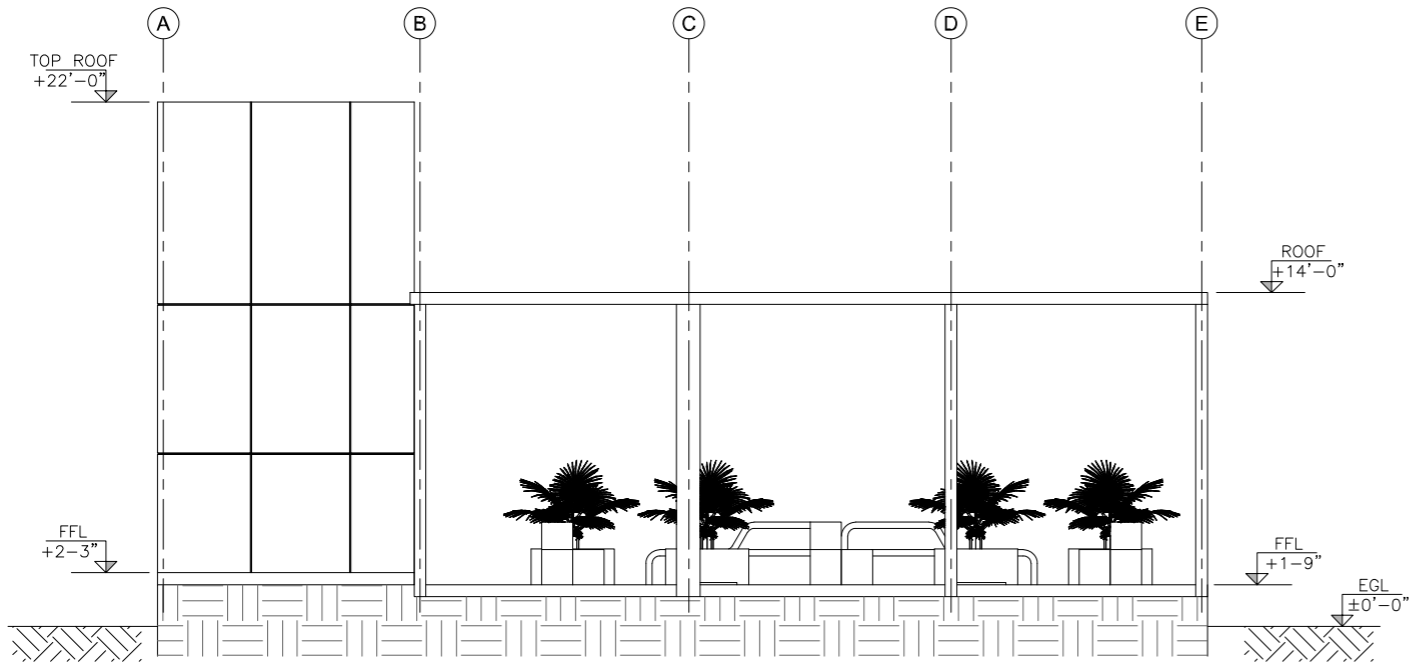
Arch Drawing Layout.dwg



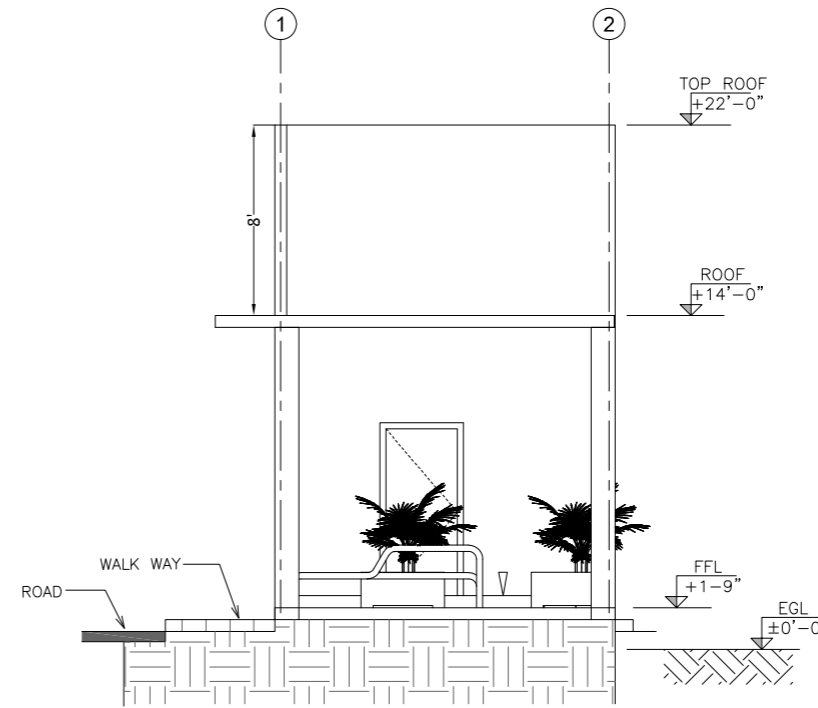
- NOTES:**
1. NO PORTION EITHER FULL OR PART OF THIS DRAWING MAY BE DUPLICATED, COPIED, SCANNED, REPRODUCED OR USED IN ANY TECHNICAL OR COMMERCIAL PURPOSE WITHOUT PRIOR WRITTEN PERMISSION FROM ARCHITECT.
 2. DRAWING IS NOT TO BE SCALED ONLY WRITTEN DIMENSION TO BE USED.
 3. ALL DIMENSIONS ARE TO BE RECHECKED AND VERIFIED ON SITE.
 4. ANY DISCREPANCY IS TO BE BROUGHT TO THE ATTENTION OF ARCHITECT PRIOR TO COMMENCEMENT OF WORK ON SITE.

REV	DATE	DESCRIPTION	SIGN
AMENDMENTS			
PROJECT: REHABILITATION OF METALED RAOD AT KARACHI UNIVERSITY IBA KARACHI			
CLIENT:  Institute of Business Administration Karachi			
ENGINEERING CONSULTANT:  AI Engineers 1st Floor, IEP Building, 177/2, Liaquat Barracks, Main Shahrah-e-Faisal, Karachi 75530, Pakistan Email: info_pk@aengineers.com			
TITLE: FLOOR PLANS			
STATUS TENDER DRAWING			
SCALE	1/4"=1'-0"	DATE	OCT-2024
DRAWN	H.G	CHECKED	M.A
DESIGNED	S.N	APPROVED	M.F.A
JOB NO.	P-066C	DRAWING NO.	AIE-IBA-ARCH-03
		REV. NO.	0

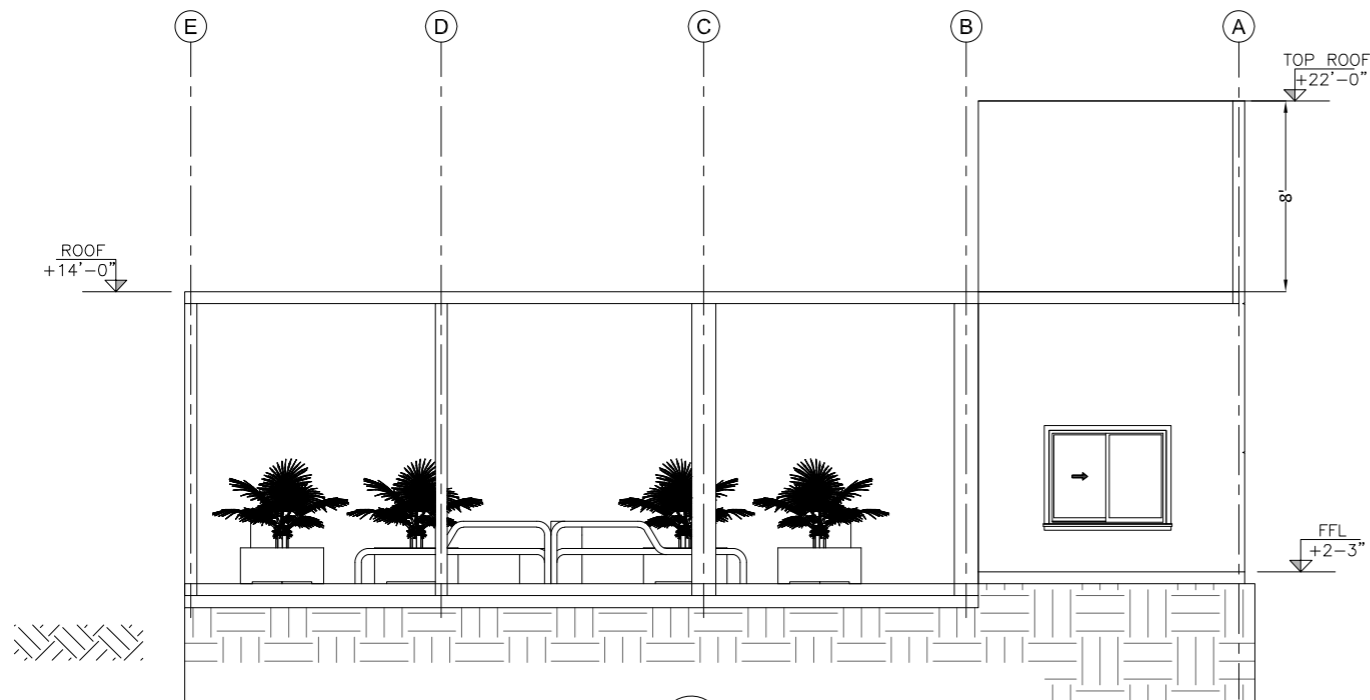
FloorPlan.dwg



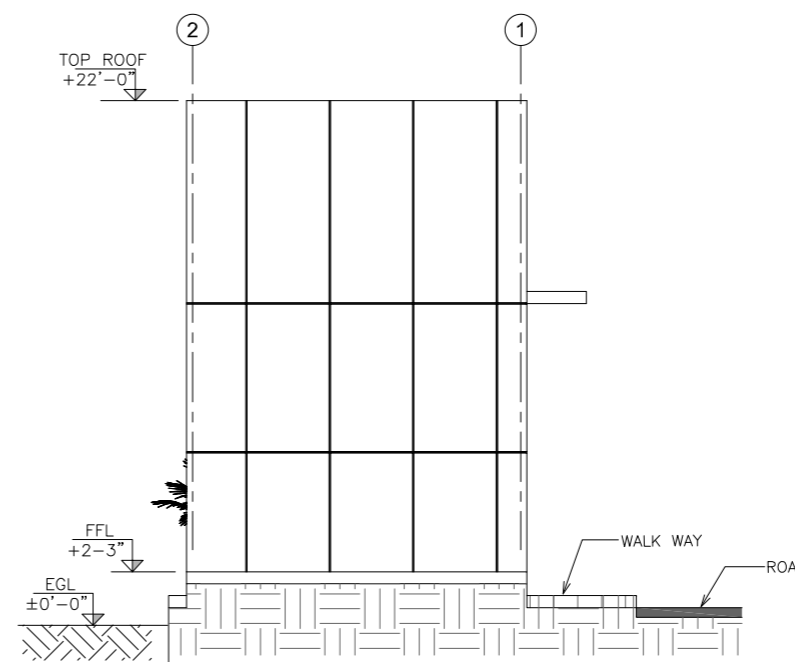
ELEVATION 1
SCALE 1/4"=1'-0" ARCH-03



ELEVATION 2
SCALE 1/4"=1'-0" ARCH-03



ELEVATION 3
SCALE 1/4"=1'-0" ARCH-03



ELEVATION 4
SCALE 1/4"=1'-0" ARCH-03

NOTES:

1. NO PORTION EITHER FULL OR PART OF THIS DRAWING MAY BE DUPLICATED, COPIED, SCANNED, REPRODUCED OR USED IN ANY TECHNICAL OR COMMERCIAL PURPOSE WITHOUT PRIOR WRITTEN PERMISSION FROM ARCHITECT.
2. DRAWING IS NOT TO BE SCALED ONLY WRITTEN DIMENSION TO BE USED.
3. ALL DIMENSIONS ARE TO BE RECHECKED AND VERIFIED ON SITE.
4. ANY DISCREPANCY IS TO BE BROUGHT TO THE ATTENTION OF ARCHITECT PRIOR TO COMMENCEMENT OF WORK ON SITE.

REV	DATE	DESCRIPTION	SIGN
AMENDMENTS			

PROJECT:
REHABILITATION OF METALED RAOD AT
KARACHI UNIVERSITY IBA KARACHI

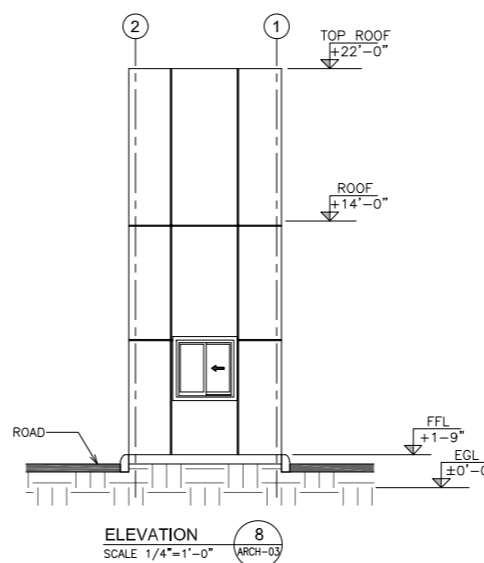
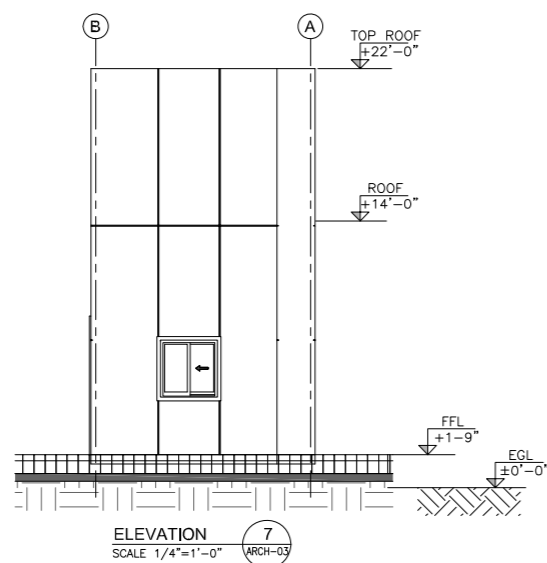
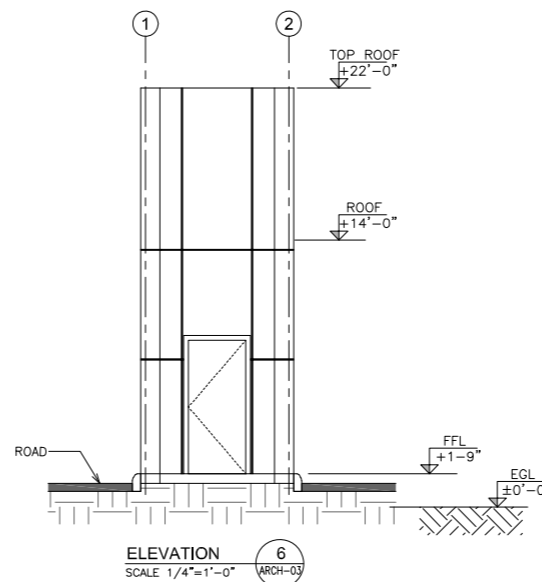
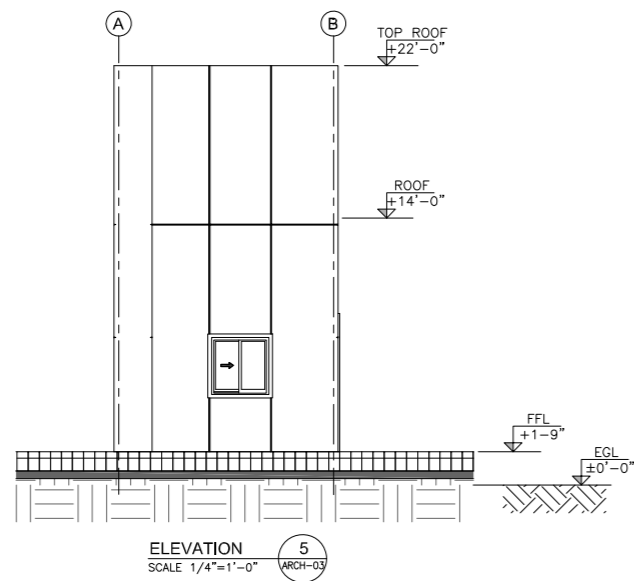


ENGINEERING CONSULTANT:

TITLE:
WAITING AREA ELEVATION

STATUS
TENDER DRAWING

SCALE	1/4"=1'-0"	DATE	OCT-2024
DRAWN	H.G	CHECKED	M.A
DESIGNED	S.N	APPROVED	M.F.A
JOB NO.	P-066C	DRAWING NO.	AIE-IBA-ARCH-04
REV. NO.	0		



NOTES:

1. NO PORTION EITHER FULL OR PART OF THIS DRAWING MAY BE DUPLICATED, COPIED, SCANNED, REPRODUCED OR USED IN ANY TECHNICAL OR COMMERCIAL PURPOSE WITHOUT PRIOR WRITTEN PERMISSION FROM ARCHITECT.
2. DRAWING IS NOT TO BE SCALED ONLY WRITTEN DIMENSION TO BE USED.
3. ALL DIMENSIONS ARE TO BE RECHECKED AND VERIFIED ON SITE.
4. ANY DISCREPANCY IS TO BE BROUGHT TO THE ATTENTION OF ARCHITECT PRIOR TO COMMENCEMENT OF WORK ON SITE.

REV	DATE	DESCRIPTION	SIGN
-----	------	-------------	------

AMENDMENTS

PROJECT:
REHABILITATION OF METELED ROAD AT
KARACHI UNIVERSITY IBA KARACHI



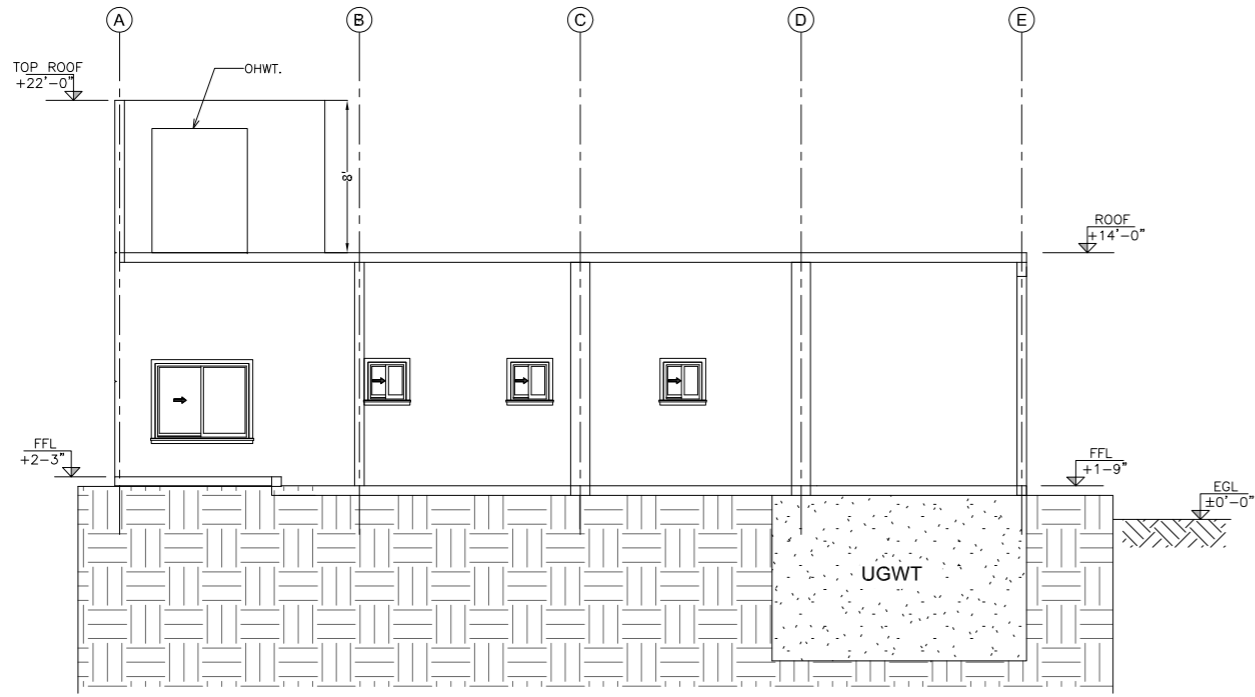
ENGINEERING CONSULTANT:

TITLE:
CHECK POST ELEVATION

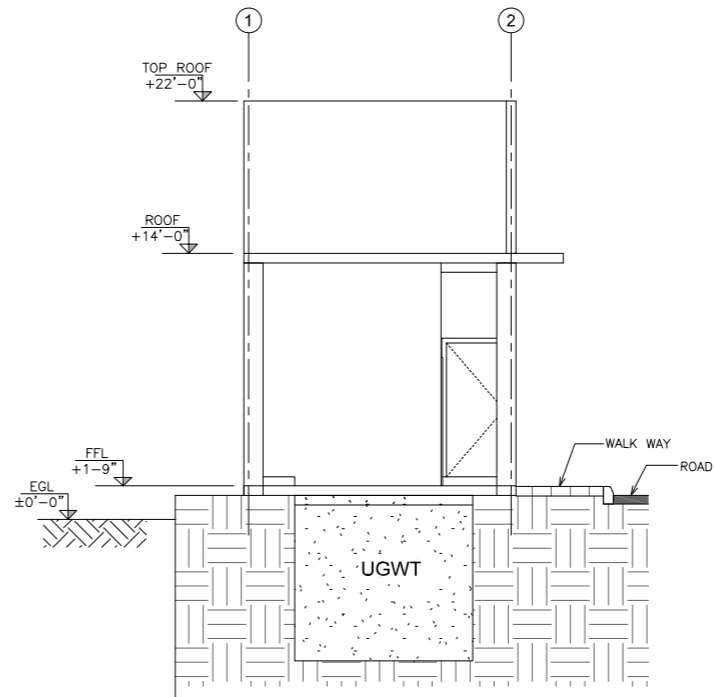
STATUS
TENDER DRAWING

SCALE	N.T.S	DATE	OCT-2024
DRAWN	H.G	CHECKED	M.A
DESIGNED	S.N	APPROVED	M.F.A

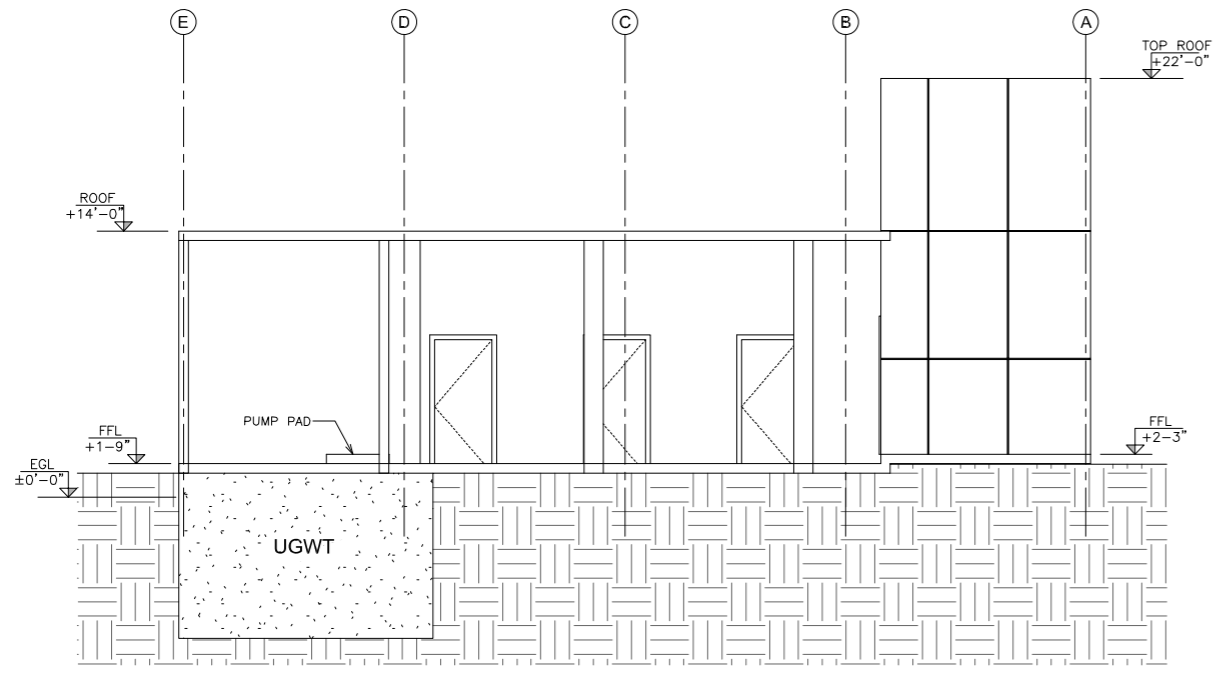
JOB NO.	DRAWING NO.	REV. NO.
P-066C	AIE-IBA-ARCH-05	0



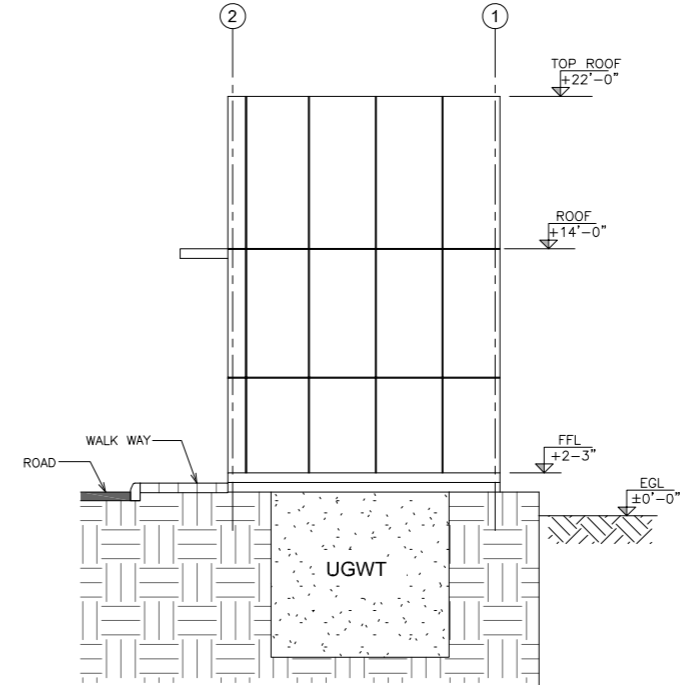
ELEVATION 9
SCALE 1/4"=1'-0" ARCH-03



ELEVATION 10
SCALE 1/4"=1'-0" ARCH-03



ELEVATION 11
SCALE 1/4"=1'-0" ARCH-03

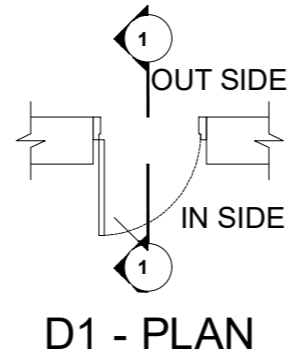
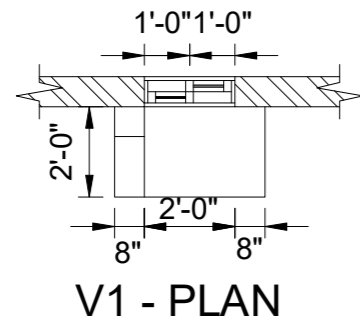


ELEVATION 12
SCALE 1/4"=1'-0" ARCH-03

- NOTES:**
1. NO PORTION EITHER FULL OR PART OF THIS DRAWING MAY BE DUPLICATED, COPIED, SCANNED, REPRODUCED OR USED IN ANY TECHNICAL OR COMMERCIAL PURPOSE WITHOUT PRIOR WRITTEN PERMISSION FROM ARCHITECT.
 2. DRAWING IS NOT TO BE SCALED ONLY WRITTEN DIMENSION TO BE USED.
 3. ALL DIMENSIONS ARE TO BE RECHECKED AND VERIFIED ON SITE.
 4. ANY DISCREPANCY IS TO BE BROUGHT TO THE ATTENTION OF ARCHITECT PRIOR TO COMMENCEMENT OF WORK ON SITE.

REV	DATE	DESCRIPTION	SIGN
AMENDMENTS			
PROJECT: REHABILITATION OF METALED RAOD AT KARACHI UNIVERSITY IBA KARACHI			
CLIENT: 			
ENGINEERING CONSULTANT:  1st Floor, IEP Building, 177/2, Liaquat Barracks, Main Shahrah-e-Faisal, Karachi 75530, Pakistan. Email: info_pk@aengineers.com			
TITLE: WASHROOMS BACK, SIDE & FRONT SIDE ELEVATION			
STATUS: TENDER DRAWING			
SCALE	N.T.S	DATE	OCT-2024
DRAWN	H.G	CHECKED	M.A
DESIGNED	S.N	APPROVED	M.F.A
JOB NO.	DRAWING NO.	REV. NO.	
P-066C	AIE-IBA-ARCH-06	0	

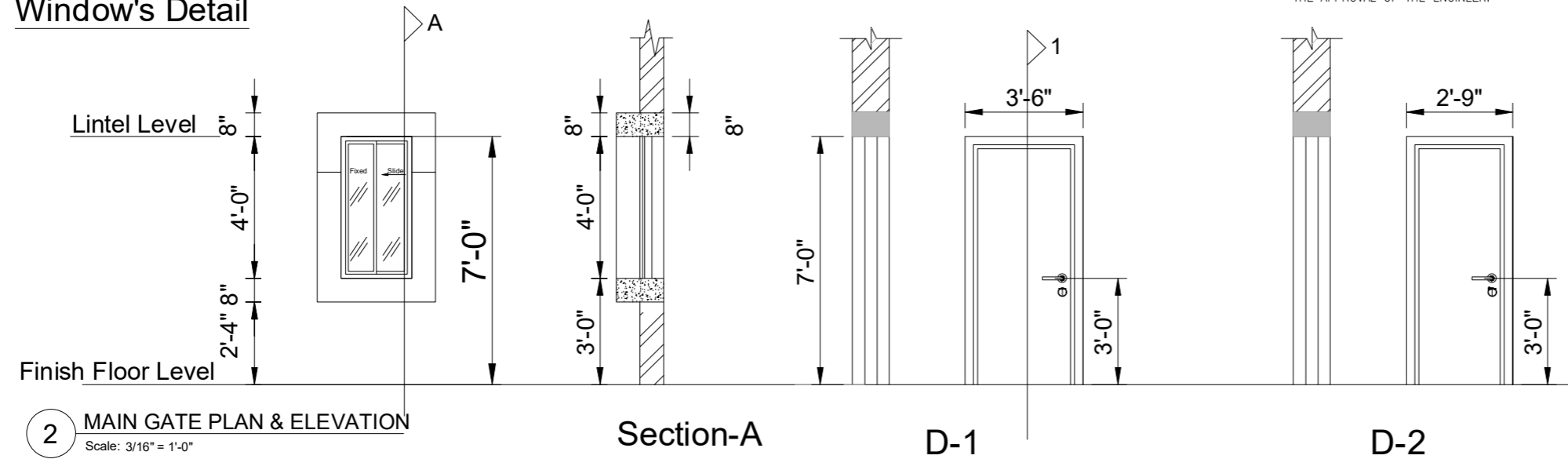
Elevation.dwg



NOTE:-

- 1 5mm THICK PLAIN GLASS Typ.
- 2 5mm THICK ONE SIDE OBSCURE/FROSTED GLASS FOR TOILETS Typ.
- 3 STEEL GRILL TO BE FIXED INSIDE ALL STEEL WINDOWS ON GROUND FLOOR ONLY.
- 4 HYDRAULIC DOOR CLOSER SHALL BE PROVIDED FOR MAIN DOOR AND THESE SHALL BE SUBJECT TO ENGINEER'S APPROVAL.
- 5 DESIGN QUALITY MAKE SELECTION OF ALL TYPE OF ACCESSORIES FOR DOORS & WINDOWS SHALL BE PROVIDED BY THE CONTRACTOR AND THESE SHALL BE SUBJECT TO THE ENGINEER'S APPROVAL.
- 6 CONTRACTOR SHALL PROVIDE SHOP DRAWINGS OF DOORS & WINDOWS FOR THE APPROVAL OF THE ENGINEER.

Window's Detail



2 MAIN GATE PLAN & ELEVATION
Scale: 3/16" = 1'-0"

Section-A

D-1

D-2

VERTICAL SECTION 1-1 & ELEVATION

Name	W1	Name	V1	Name	D1	Name	D2
Size	4'-0" x 4'-0"	Size	2'-0" x 2'-0"	Size	3'-6" x 7'-0"	Size	2'-9" x 7'-0"
Sill Level	+3'-0"	Sill Level	+6'-0"	Type	WOODEN / METAL	Type	WOODEN / METAL
Type	Aluminum and Glass	Type	Aluminum and Glass	Lintel Level	+7'-0"	Lintel Level	+7'-0"
Lintel Level	+7'-0"	Lintel Level	+8'-0"				

NOTES:

1. FOR GENERAL NOTES REFER DRAWING NO. AIE-IBA-ARCH-01.
2. NO PORTION EITHER FULL OR PART OF THIS DRAWING MAY BE DUPLICATED, COPIED, SCANNED, REPRODUCED OR USED IN ANY TECHNICAL OR COMMERCIAL PURPOSE WITHOUT PRIOR WRITTEN PERMISSION FROM ARCHITECT.
3. DRAWING IS NOT TO BE SCALED ONLY WRITTEN DIMENSION TO BE USED.
4. ALL DIMENSIONS ARE TO BE RECHECKED AND VERIFIED ON SITE.
5. ANY DISCREPANCY IS TO BE BROUGHT TO THE ATTENTION OF ARCHITECT PRIOR TO COMMENCEMENT OF WORK ON SITE.

REV	DATE	DESCRIPTION	SIGN
AMENDMENTS			

PROJECT:
REHABILITATION OF METALED RAOD AT
KARACHI UNIVERSITY IBA KARACHI



ENGINEERING CONSULTANT:
AI Engineers
1st Floor, IEP Building, 177/2,
Liaquat Barracks,
Main Shahr-e-Faisal,
Karachi 75530, Pakistan
Email: info_pk@aieengineers.com

TITLE:
DOOR & WINDOWS DETAILS

STATUS
TENDER DRAWING

SCALE **N.T.S** DATE **08 OCT - 2024**

DRAWN **H.G** CHECKED **M.A**

DESIGNED **S.N** APPROVED **M.F.A**

JOB NO. **P-066C** DRAWING NO. **AIE-IBA-ARCH-07** REV. NO. **0**

STRUCTURE DRAWINGS

NOTES:

A- GENERAL

- 1- ALL DIMENSIONS AND LEVELS ARE IN FEET AND INCHES.
- 2- ALL STRUCTURAL DRAWINGS SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL AND OTHER SERVICES DRAWINGS.
- 3- ANY DISCREPANCY IN THE DRAWING SHALL BE REFERRED TO THE ENGINEER FOR DECISION BEFORE PROCEEDING WITH THE WORKS.
- 4- THE CONTRACTOR IS REQUIRED TO VISIT THE SITE AND FULLY ACQUAINT HIMSELF WITH THE EXISTING SITE CONDITIONS AND IN PARTICULAR THE CLOSE PROXIMITY OF ADJACENT PROPERTIES, LT AND HT CABLES, EXISTING SERVICES OR OTHER ASPECTS LIABLE TO AFFECT CONSTRUCTION OF THE NEW WORK, ANY CLAIMS MADE BY THE CONTRACTOR ON THE GROUNDS OF LACK OF KNOWLEDGE OF SITE CONDITIONS WILL NOT BE ENTERTAINED.
- 5- THE CONTRACTOR SHALL ENGAGE HIS OWN PROFESSIONAL ENGINEER TO DESIGN, PROVIDE AND REMOVE ALL NECESSARY TEMPORARY WORKS WHETHER SPECIFICALLY MENTIONED OR NOT, TO SUPPORT ADJACENT WORK/ STRUCTURES, EXCAVATION AND/OR TO PREVENT SUBSIDENCE OF ABUTTING ROADS. TEMPORARY WORKS SHALL DEEM TO INCLUDE ANY MONITORING MEASURES REQUIRED TO AVOID DAMAGE TO EXISTING PROPERTIES AS WELL AS PRE-CONSTRUCTION CONDITION SURVEY TO DOCUMENT EXISTING CONDITIONS OF ADJACENT PROPERTIES. ALL NECESSARY SAFETY MEASURES INCLUDING SHIELDING, PROVIDING ADEQUATE BARRIERS AND SIGNS, SHALL BE TAKEN DURING THE WHOLE OPERATION.
- 6- SETTING-OUT DIMENSIONS AND SIZES OF STRUCTURAL MEMBERS SHALL NOT BE OBTAINED BY SCALING THE STRUCTURAL DRAWINGS, ONLY WRITTEN DIMENSIONS MUST BE FOLLOWED.
- 7- ANY SETTING-OUT DIMENSION SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE VERIFIED ON SITE AND WITH THE ARCHITECTURAL DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL DIMENSIONS.
- 8- WHERE EXCAVATION WORK IS TO BE CARRIED OUT THE EXACT LEVEL OF THE UNDERSIDE OF THE FOUNDATION SHALL BE OBTAINED PRIOR TO EXCAVATION. UNDERPINNING AND SHORING OF THE STRUCTURE SHALL BE CARRIED OUT AS NECESSARY AND ADJOINING STRUCTURE SHALL BE MAINTAINED IN A STABLE AND SOUND CONDITION.
- 9- ADEQUATE TEMPORARY DRAINAGE SYSTEM INCLUDING DEWATERING SYSTEMS, DRAIN CHANNELS, SUMPS SHALL BE PROVIDED TO ENSURE DRY SITE CONDITIONS AND THE STABILITY OF THE BASE OF THE EXCAVATION AT ALL TIMES. THE DESIGN OF SUCH DRAINS AND DISCHARGE POINTS MUST BE APPROVED BY THE ENGINEER. DESIGN, INSTALLATION, OPERATION AND MAINTENANCE OF PROPER DEWATERING SYSTEM SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. A NETWORK OF TEMPORARY CUT-OFF DRAINS, INCLUDING SILT TRAPS AND WASH BAYS SHALL BE PROVIDED BY THE CONTRACTOR TO ADEQUATELY DRAIN THE SITE AND CONTROL MUD/SILT FROM FLOWING INTO ADJOINING PREMISES.
- 10- DURING CONSTRUCTION THE STRUCTURE SHALL BE MAINTAINED IN A STABLE CONDITION. CONSTRUCTION LOADS MUST NOT EXCEED THE CAPACITY OF THE STRUCTURE AT THE TIME OF LOADING.
- 11- ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT EDITIONS, INCLUDING AMENDMENTS, OF THE RELEVANT AMERICAN/BRITISH STANDARDS (WHEREVER APPLICABLE).
- 12- REFER TO ARCHITECTURAL DRAWINGS FOR BRICK WALL THICKNESS (WHERE NOT MENTIONED ON THESE DRAWINGS) AND FOR FALLS IN SLABS, EXTRA PACKING, WATER-PROOFING TREATMENT, CONSTRUCTION JOINT FILLING MATERIALS AND ALL ARCHITECTURAL FEATURES SUCH AS DRIP GROOVES, POUR BREAKS IN OFF-FORM CONCRETE, FILLETS, ETC.
- 13- CONTRACTOR TO CONFIRM LOCATION, SIZE AND INVERT LEVEL OF ALL SERVICES PRIOR TO CONSTRUCTION .
- 14- THE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF ALL RELEVANT STATUTORY BODIES.

B- DESIGN CODE AND STANDARDS:-

THE STRUCTURAL DESIGN HAS BEEN CARRIED OUT IN ACCORDANCE WITH THE FOLLOWING CODES AND STANDARDS:
 ACI 318-08 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE (2005) UBC-97 = UNIFORM BUILDING CODE (1997)
 BCP-2007 = BUILDING CODE OF PAKISTAN (SEISMIC PROVISIONS-2007)
 ASTM = AMERICAN SOCIETY FOR TESTING AND MATERIALS

DESIGN LOADS:

i. DEAD LOAD	
MATERIAL LOADS :	
REINFORCED CONCRETE	150 PCF
PLAIN CONCRETE	144 PCF
MASONRY	120 PCF
GLASS PANEL	158 PCF
STRUCTURAL STEEL	490 PCF
ii. SUPERIMPOSED DEAD LOAD:	
3" FINISHES (TYP. FLOOR)	36 PSF
9" THICK SOLID BLOCKS	Variable as per height
GLASS PANEL LOAD	Variable as per height & Thickness
STAIR	100 PSF
RESTAURANT	100 PSF
ROOF	20 PSF

C- FOOTINGS AND BASEMENTS:-

1. ALL FOOTINGS HAVE BEEN DESIGNED FOR A NET ALLOWABLE BEARING CAPACITY OF 1.0TSF AT - 5'-0" BELOW EXISTING ROAD LEVEL AS PER GEOTECHNICAL INVESTIGATION REPORT.
2. FOUNDATION SHOULD BE PLACED AT MINIMUM 3'-6" FT. BELOW EXISTING ROAD LEVEL (RL ±100) WHICH CORRESPONDS TO LEVEL ± 0'-0".
3. ALL FOOTING EXCAVATIONS SHALL BE CLEANED OF LOOSE MATERIAL AND WATER.
4. ALL FOUNDATION MATERIAL SHALL BE INSPECTED BY THE ENGINEER BEFORE ANY CONCRETE IS PLACED.
5. BEFORE PLACEMENT OF FOUNDATION SOIL SHOULD BE COMPACTED TO MINIMUM 95% OF MAXIMUM DRY DENSITY (MDD) OF SOIL. INCASE THE SOIL IS NOT SUITABLE FOR FOUNDATION CONSTRUCTION, THE CONTRACTOR HAS TO INFORM THE ENGINEER'S REPRESENTATIVE, AND WORK AS PER THE ENGINEER'S INSTRUCTIONS.
- 6- WHERE VERIFIED FOUNDATION MATERIAL IS FOUND LOWER THAN THE UNDERSIDE OF FOOTINGS AS DETAILED, THE CONTRACTOR SHALL BACKFILL THE SPACE BETWEEN FOUNDING MATERIAL AND FOOTING SOFFIT WITH LEAN CONCRETE.
- 7- THE CONTRACTOR SHALL SUBMIT HIS PROPOSED METHODS STATEMENT FOR THE CONSTRUCTION OF FOUNDATION PRIOR TO THE COMMENCEMENT OF WORK, FOR ENGINEER'S APPROVAL/RECORD.
- 8- APPROVED ANTI-TERMITE TREATMENT SHALL BE CARRIED OUT AS PER SPECIFICATION OR AS DIRECTED BY THE ENGINEER.

D-BACKFILL TO STRUCTURES:-

- 1- NO EXCAVATED MATERIAL WILL BE USED FOR BACKFILLING TO STRUCTURES OR EARTH FILLING IN EMBANKMENTS UNLESS APPROVED BY THE ENGINEER.
- 2- ALL STRUCTURE BACKFILL MATERIAL SHALL CONSIST OF MATERIAL FREE FROM ORGANIC MATERIAL OR OTHER UNSUITABLE MATERIAL AS DETERMINED BY THE ENGINEER.
- 3- SOIL AROUND THE STRUCTURE SHOULD BE BACKFILLED AND COMPACTED AFTER CASTING OF TOP SLAB. NO BACKFILL TO BE PLACED ADJACENT TO ANY CAST IN PLACE CONCRETE BEFORE THE CONCRETE ATTAINS ITS SPECIFIED 28 DAY STRENGTH.
- 4- THE BACKFILL OR EXCAVATION OPERATIONS AROUND STRUCTURE MUST BE MADE SIMULTANEOUSLY ON BOTH SIDES AND NO SIDE SHALL LAG THE OPPOSITE SIDE BY MORE THAN 1.0M HEIGHT OF SOIL.
- 5- ALL BACKFILL MATERIAL AROUND RC WALLS SHALL BE APPROVED WELL GRADE GRANULAR, AND SHALL BE COMPACTED USING OPTIMUM MOISTURE CONTENT NO LESS THAN 95% OF MDD.
- 6- COMPACTION AROUND STRUCTURE SHALL BE ACHIEVED BY APPLYING COMPACTOR / ROLLER, PASSES ALONG THE LENGTH OF THE STRUCTURE / WALL IN LAYERS. (i.e. MAXIMUM 6" LAYERS).

E- CONCRETE:-

- 1- ALL CONCRETE WORKS ABOVE AND BELOW PLINTH LEVEL SHALL BE OF CONCRETE MIX USING OPC AS PER ASTM C-150 OR BS-12.
- 2- PRIOR TO CONSTRUCTION OF ANY LEVEL, THE CONTRACTOR IS TO SUBMIT A PROPOSAL DEPICTING LOCATION OF CONSTRUCTION JOINTS AND SEQUENCE OF CONSTRUCTION TO SUIT HIS CONCRETING PROGRAM TO THE ENGINEER FOR APPROVAL.
- 3- CONSTRUCTION JOINTS AND POUR BREAKS, WHERE NOT SHOWN ON PLANS OR DETAILS, SHALL BE SO MADE AND LOCATED AS NOT TO IMPAIR THE STRENGTH OF THE STRUCTURE. CONSTRUCTION JOINTS IN FLOORS SHALL BE LOCATED WITHIN THE MIDDLE THIRD OF SPANS OF SLABS AND BEAMS, SUBJECTED TO THE ENGINEER'S APPROVAL.
- 4- WATER STOPS OR WATER BAR (SWELLABLE) SHALL BE PROVIDED AT ALL CONSTRUCTION JOINTS OF WALLS OR SLABS EXPOSED TO THE GROUND, WEATHER OR WATER, SUCH AS RETAINING WALLS, OPEN AREAS ETC. WHETHER SHOWN ON DRAWINGS OR NOT.
- 5- NO PENETRATIONS, RECESSES OR CHASES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE MADE IN CONCRETE MEMBERS WITHOUT PRIOR APPROVAL OF THE ENGINEER.
- 6- ALL OPENINGS FOR PIPING AND CONVEYANCE SHALL BE FORMED IN POSITION BEFORE CASTING CONCRETE.
- 7- UNLESS SPECIFIED OTHERWISE ALL REINFORCED CONCRETE SHALL HAVE A MINIMUM CYLINDER STRENGTH AT 28 DAYS AS FOLLOWS:
 FOOTING..... 3500 psi
 COLUMNS..... 3500 psi
 BEAMS/SLABS..... 3500 psi
 LEAN/BLINDING..... 1200 psi
 PCC..... 2000 psi
- 8- CONCRETE ADMIXTURES WHERE USED SHALL CONFORM TO RELEVANT ASTM OR BS STANDARDS
- 9- CONCRETE SHALL BE CONSOLIDATED BY VIBRATION. CURING OF ALL CONCRETE SURFACES SHALL BE DONE AS PER SPECIFICATIONS.
- 10- SAMPLING AND TESTING OF CONCRETE SHALL BE IN ACCORDANCE WITH ACI-318 (2005) UNLESS NOTED OTHERWISE.
- 11- BRICK WORK SHALL NOT BE ERECTED ON CONCRETE SLABS OR BEAMS UNTIL FORMWORK SUPPORTING THE SAME HAS BEEN REMOVED.
- 12- SIZES OF CONCRETE ELEMENTS DO NOT INCLUDE THICKNESS OF APPLIED FINISHES.
- 13- BEAM DEPTHS INCLUDE SLAB THICKNESS WHERE SLAB IS PLACED INTEGRALLY WITH THE BEAM.
- 14- A BOND BREAKING MATERIAL IS TO BE PLACED BETWEEN SURFACES IN CONTACT AT PERMANENT JOINTS UNLESS NOTED OTHERWISE.
- 15- ALL NON-LOAD BEARING WALLS SHALL BE KEPT CLEAR OF THE UNDERSIDE OF SLABS AND BEAMS BY 3/4", UNLESS NOTED OTHERWISE. THE GAP SHALL BE APPROPRIATELY SEALED WITH A COMPRESSIBLE FILLER, AND SEALED TO ARCHITECT'S SPECIFICATIONS/APPROVAL. SIMILARLY VERTICAL INTERFACES BETWEEN RC COLUMNS/WALLS AND NON LOAD BEARING WALLS SHALL BE TREATED WITH APPROPRIATE DETAIL/SEALANTS ACCORDING TO ARCHITECT'S DETAILS/SPECIFICATIONS. SUFFICIENT TIES TO ARCHITECT'S DETAILS/SPECIFICATIONS MUST BE USED ACROSS THESE JOINTS TO PROVIDE RESTRAINT TO NON LOAD BEARING WALLS.
- 16- ALL CONCRETE SHALL BE CURED FOR MINIMUM 7 DAYS.
- 17- UNLESS NOTED OTHERWISE, A MINIMUM 04" THICK LEAN CONCRETE LAYER SHALL BE PROVIDED ON ALL SOIL SURFACES FORMING THE UNDERSIDE OF ANY REINFORCED CONCRETE BEAMS, SLABS, SUMP PITS, FOOTINGS, ETC.

F- WATER PROOFING:-

- 1- CONCRETE CAST BELOW GROUND LEVEL AND CONCRETE CAST IN CONTACT WITH SOIL TO BE PROTECTED BY TWO COATS OF BITUMEN PAINT OR EQUIVALENT WITH THE SPECIFICATIONS EXTENDING 4" (100mm) ABOVE GROUND FLOOR .
- 2- ROOF INSULATION / WATERPROOFING AND DAMP ROOF COURSE AT PLINTH SHALL BE IN ACCORDANCE WITH ARCHITECTURAL DETAILS.

F- FORMWORK REMOVAL AND SHORING:-

- 1- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE DESIGN, CONSTRUCTION AND SAFETY OF THE FORMWORK AND SHORING.
- 2- THE REMOVAL OF FORMWORK FOR MULTISTORY CONSTRUCTION SHALL BE A PART OF A PLANNED PROCEDURE CONSIDERING THE TEMPORARY SUPPORT OF THE WHOLE STRUCTURE AS WELL AS THAT OF EACH INDIVIDUAL MEMBER. SUCH A PROCEDURE SHALL BE WORKED OUT AND SUBMITTED BY THE CONTRACTOR AND SHALL BE BASED ON A STRUCTURAL ANALYSIS TAKING INTO ACCOUNT THE FOLLOWING ITEMS, AS A MINIMUM:-
 - a) THE STRUCTURAL SYSTEM THAT EXISTS AT THE VARIOUS STAGES OF CONSTRUCTION AND THE CONSTRUCTION LOAD CORRESPONDING TO THOSE STAGES.
 - b) THE STRENGTH OF CONCRETE AT THE VARIOUS AGES DURING CONSTRUCTION.
 - c) THE INFLUENCE OF DEFORMATION OF THE STRUCTURE AND SHORING SYSTEM ON THE DISTRIBUTION OF DEAD LOADS AND CONSTRUCTION LOADS DURING THE VARIOUS STAGES OF CONSTRUCTION.
 - d) THE STRENGTH AND SPACING OF SHORES OR SHORING SYSTEM USED, AS WELL AS THE METHOD OF SHORING, BRACING, SHORE REMOVAL AND RESHORING INCLUDING THE MINIMUM TIME INTERVALS BETWEEN THE VARIOUS OPERATIONS.
 - e) ANY OTHER LOADING OR CONDITION THAT AFFECTS THE SAFETY OR SERVICEABILITY OF THE STRUCTURE DURING CONSTRUCTION.
 - f) THE STRENGTH OF THE CONCRETE DURING THE VARIOUS STAGES OF CONSTRUCTION SHALL BE SUBSTANTIATED BY FIELD CURED TEST SPECIMENS OR OTHER APPROVED METHODS.
- 3- NO CONSTRUCTION LOAD EXCEEDING THE SUPERIMPOSED DEAD LOAD PLUS SPECIFIED LIVE LOAD SHALL BE SUPPORTED AT ANY UNSHORED PORTION OF THE STRUCTURE UNDER CONSTRUCTION, UNLESS ANALYSIS INDICATES ADEQUATE STRENGTH TO SUPPORT SUCH ADDITIONAL LOADS.
- 4 THE FOLLOWING MINIMUM TIME PERIODS SHALL BE OBSERVED FOR FORMWORK REMOVAL
 - a) WALLS AND COLUMNS = 24 HOURS
 - b) SIDES OF BEAMS /SLABS = 24 HOURS
 - c) SOFFIT OF BEAMS / SLABS = 14 DAYS

G- REINFORCEMENT:-

- 1- ALL REINFORCEMENT SHALL CONFORM TO ASTM A-615 WITH A MINIMUM CHARACTERISTIC YIELD STRENGTH OF 60,000 psi.
- 2- PROVIDE BAR SUPPORTS OR SPACERS TO GIVE THE FOLLOWING CONCRETE COVER TO ALL REINFORCEMENT UNLESS NOTED OTHERWISE ON DRAWINGS. (COVER IS THE CLEAR DISTANCE FROM THE CONCRETE SURFACE TO THE NEAREST EDGE OF ANY REINFORCEMENT).
- 3- UNLESS NOTED OTHERWISE, MINIMUM COVER TO ALL REINFORCEMENT (INCLUDING LINKS) SHALL BE AS FOLLOWS:

ELEMENT	TOP	BOTTOM	SIDES
SLABS	3/4"	3/4"	-
BEAMS	1 1/2"	1 1/2"	1 1/2"
COLUMNS	-	-	1 1/2"
FOUNDATION	2"	3"	3"

- 4- SPLICES IN REINFORCEMENT SHALL BE MADE ONLY IN THE POSITIONS SHOWN ON THE DRAWINGS.
- 5- FIX REINFORCEMENT AS SHOWN ON DRAWINGS. THE TYPE AND GRADE IS INDICATED BY A SYMBOL AS SHOWN BELOW.
 ON THE DRAWINGS THIS IS FOLLOWED BY A NUMERAL WHICH DIVIDED BY 8 INDICATES THE DIA OF BAR IN INCHES.
 # - DENOTES HIGH YIELD DEFORMED BAR
 THE NOTATION #4@8" c/c MEANS #4 HIGH YIELD DEFORMED BARS, SPACED AT 6" c/c
- 6- BARS SHOWN STAGGERED ON PLAN SHALL BE PLACED ALTERNATELY.
- 7- BARS SHOULD BE EVENLY DISTRIBUTED OVER THE EXTENT INDICATED, UNLESS NOTED OTHERWISE. DISTRIBUTION REINFORCEMENT AT RIGHT ANGLES TO MAIN REINFORCEMENT SHALL BE AS SHOWN BELOW UNLESS NOTED OTHERWISE ON PLANS. THE MAIN REINFORCEMENT SHALL NOT BE LESS THAN DISTRIBUTION REINFORCEMENT.

SLAB THICKNESS	DISTRIBUTION REINFORCEMENT
5"	#3@10" c/c
6"	#3@10" c/c
7"	#3@8" c/c
8"	#3@7" c/c
9"	#3@6" c/c
10"	#3@6" c/c
12"	#3@5" c/c

REV	DATE	DESCRIPTION	SIGN

AMENDMENTS

PROJECT: REHABILITAION OF METALED RAOD AT KARACHI UNIVERSITY IBA KARACHI

CLIENT:



ENGINEERING CONSULTANT:



1st Floor, IEP Building, 177/2, Liaquat Barracks, Main Shahrah-e-Faisal, Karachi 75530, Pakistan
 Email: info_pk@aiengineers.com

TITLE: GENERAL NOTES

STATUS: TENDER DRAWING

SCALE	AS SHOWN	DATE	OCT-2024
DRAWN	H.G	CHECKED	M.A
DESIGNED	S.N	APPROVED	M.F.A

JOB NO.	DRAWING NO.	REV. NO.
P-066C	AIE-IBA-GN-01	0

G- REINFORCEMENT:-

- 8- BARS CONFLICTING WITH SMALL HOLES OR OTHER MINOR COMPLICATIONS SHALL BE DISPLACED AS DIRECTED ON SITE.
- 9- ALL CONDUITS SHALL RUN ABOVE BOTTOM REINFORCEMENT AND BELOW TOP REINFORCEMENT IN SLAB, INSIDE BEAM AND COLUMN LINKS AND BETWEEN WALL REINFORCEMENT LAYERS.
- 10- REINFORCEMENT DEVELOPMENT, SPLICING AND HOOKS SHALL BE PROVIDED AS FOLLOWS: TABLE I: DEVELOPMENT AND SPLICE LENGTHS

BAR SIZE	DEVELOPMENT LENGTH			SPLICE LENGTH (CLASS B)		
	TENSION		COMP.	TENSION		COMP.
	TOP BAR	OTHER BAR		TOP BAR	OTHER BAR	
	(IN.)	(IN.)	(IN.)	(IN.)	(IN.)	(IN.)
#3	19	16	8	24	21	12
#4	25	19	10	32	25	14
#5	31	26	13	40	33	19
#6	37	41	17	48	53	23
#8	62	50	21	80	64	30

TABLE II: STANDARD HOOKS TO MAIN BARS

BAR SIZE	INTERNAL BEND DIAMETER D (IN.)	180° HOOK		90° HOOK
		A (IN.)	J (IN.)	A (IN.)
#3	2 1/4"	5"	3"	6"
#4	3"	6"	4"	8"
#5	3 3/4"	7"	5"	10"
#6	4 1/2"	8"	6"	1'-0"
#8	6"	11"	8"	1'-4"

TABLE III: STANDARD HOOKS TO STIRRUPS AND TIES

BAR SIZE	INTERNAL BEND DIAMETER D (IN.)	90° HOOK	135° HOOK	
		A	A	H (APPROX.)
#3	1 1/2"	4"	4 1/2"	3"
#4	2"	4 1/2"	4 1/2"	3"

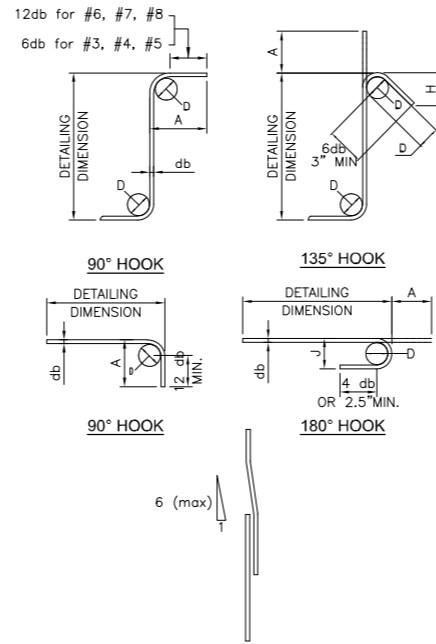
- 11- WHERE BARS OF DIFFERENT DIAMETERS ARE LAPPED, THE LAP LENGTH SHALL BE BASED ON THE SMALLER BAR DIAMETER.
- 12- WELDING OF REINFORCEMENT SHALL NOT BE PERMITTED.
- 13- AT THE TIME CONCRETE IS PLACED, REINFORCEMENT SHALL BE FREE FROM MUD, OIL OR OTHER NONMETALLIC COATINGS.
- 14- REINFORCEMENT PARTIALLY EMBEDDED IN CONCRETE SHALL NOT BE FIELD BENT, EXCEPT AS SHOWN ON THE DESIGN DRAWINGS OR PERMITTED BY THE ENGINEER.
- 15- CONSECUTIVE CROSSTIES IN COLUMNS SHALL BE ALTERNATED END FOR END ALONG THE LONGITUDINAL REINFORCEMENT.

ABBREVIATIONS:-

DRG. (DWG) -	DRAWING
No. (No'S.)	- NUMBER(S)
SOP	- SETTING OUT POINT
DIA	- DIAMETER
H	- HEIGHT
TYP.	- TYPICAL
EGL	- EXISTING GROUND LEVEL
FGL	- FINISH GROUND LEVEL
CJ	- CONSTRUCTION JOINT
EJ	- EXPANSION JOINT
GA	- GENERAL ARRANGEMENT
GL	- GROUND LEVEL
MAX	- MAXIMUM
MIN	- MINIMUM
NTS	- NOT TO SCALE
REV	- REVISION
PL	- PLINTH LEVEL
THK	- THICKNESS
UNO	- UNLESS NOTED OTHERWISE
ALT	- ALTERNATE
NSE	- NOT SHOWN IN ELEVATION
F.F.L	- FINISHED FLOOR LEVEL
S.S.L	- STRUCTURAL SLAB LEVEL
T.O.W	- TOP OF WALL
T.O.C	- TOP OF CONCRETE
T.O.B	- TOP OF BEAM
T.O.S	- TOP OF STRUCTURE
U/S	- UPSTAND
WO	- WALL OPENING
S.F	- SLAB FOLD

LEGENDS

S.No.	Description	Sample
1	Cloud Size should be defined as Arc Length = Scale x 3.5	
2	Elevation Marks	
3	Section Mark with Attribute Section Mark with Attribute	
4	Detail Mark	
5	Grid Mark for Vertical Grids	
6	Grid Mark for Horizontal Grids	
7	Level Mark for Floor Plans	
8	Setting-Out Point Mark	
9	Level Mark for Sections AND Elevations	
10	Level Drop in Plans	
11	Slab Marks 1Way and 2Way in Plans	
12	Slab Thickness in Plan	
13	Break Line	
14	Break Line for Circular Objects	
15	North Direction	
16	Arrow Showing Stairs Direction (HOR)	
17	Arrow Showing Stairs Direction (VER)	
18	Center Line	
19	Column Under	
20	Column Over AND Under	
21	Picked-up-Column	
22	Opening in Floor or Wall	
23	12" x 30"	

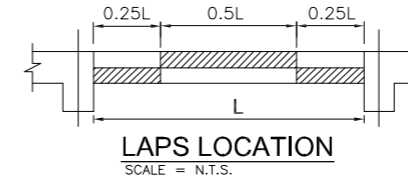


TYPICAL COLUMN / WALL VERTICAL CRANK DETAIL

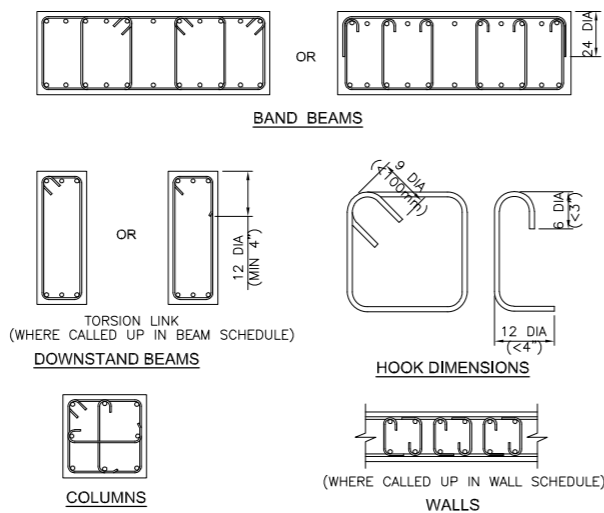
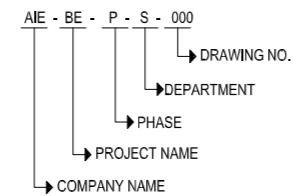
NOTES:

1. TO AVOID EXCESSIVE LAPPING THE CONTRACTOR MAY PROPOSE ALTERNATIVE REINFORCEMENT ARRANGEMENTS FOR CONTINUOUS BEAMS FOR THE ENGINEER'S APPROVAL. THE ALTERNATIVE ARRANGEMENTS MUST NOT RESULT IN LESSER REINFORCEMENT BEING PROVIDED IN ANY LOCATION THAN THAT INDICATED IN THE BEAM SCHEDULE.
2. CONTRACTOR MAY PROPOSE ALTERNATIVE DETAILING FOR CONTINUOUS BEAMS FOR CONSIDERING REINFORCEMENT TO RUN CONTINUOUSLY ACROSS BEAM/COLUMN JUNCTION UTILIZING THE MAXIMUM LENGTH OF BAR AS MUCH AS POSSIBLE. LAPS WHERE REQUIRED SHOULD BE PROVIDED ONLY AT THE LOCATIONS SHOWN ON THE TYPICAL DETAILS.
3. FOR DETAILS OF BARS MARKED THUS (A), (B), (C) ETC. SEE BEAM SCHEDULES.
4. SIDE REINFORCEMENT FOR ALL BEAMS DEPTH GREATER THAN 30" (OVERALL) U.N.O

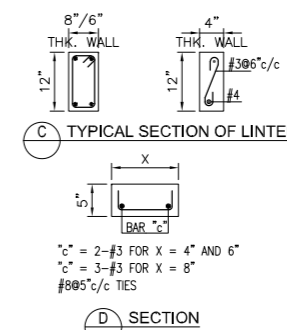
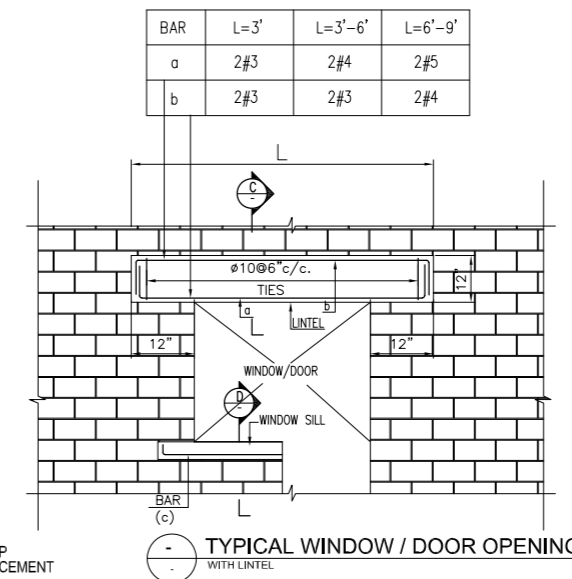
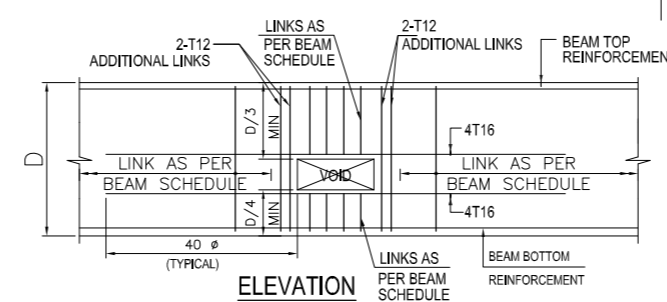
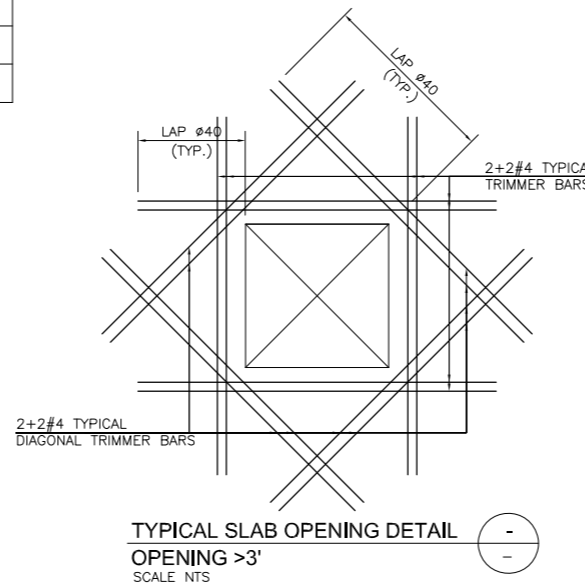
WIDTH OF BEAM	SIDE BARS
8"	#4@10"c/c
12"	#4@8"c/c
16"	#4@6"c/c
20" OR GREATER THAN 20"	#5@8"c/c



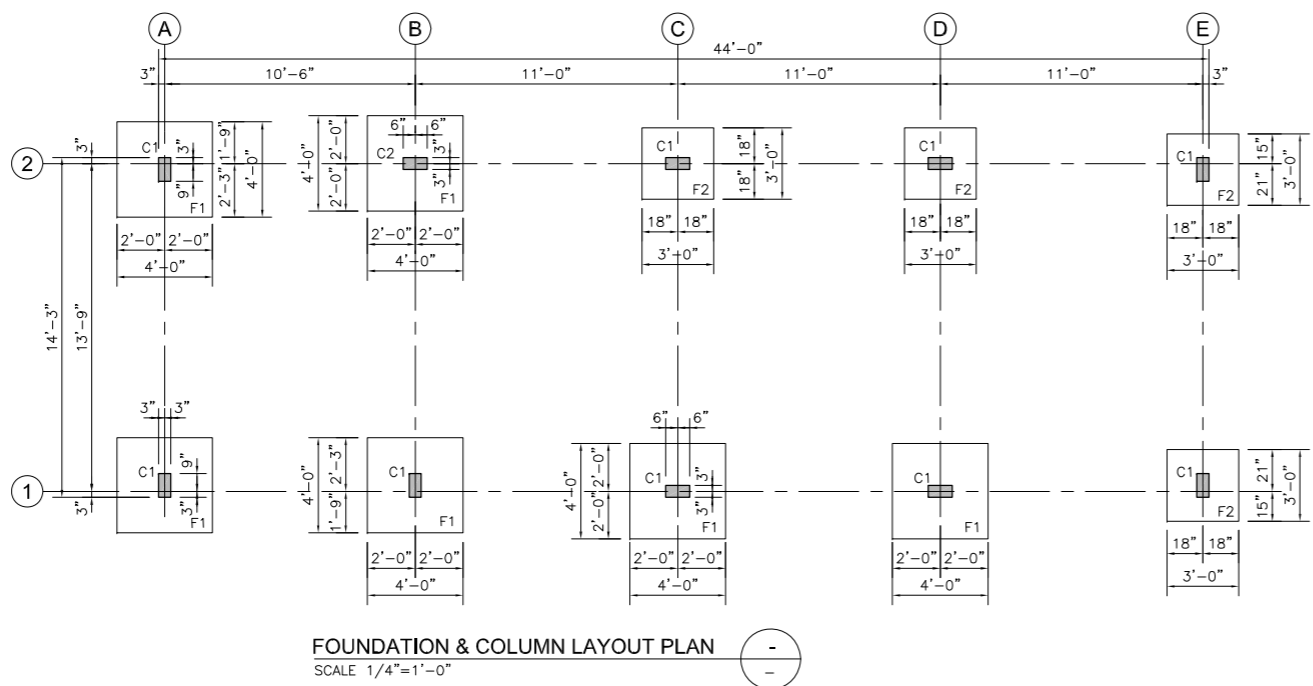
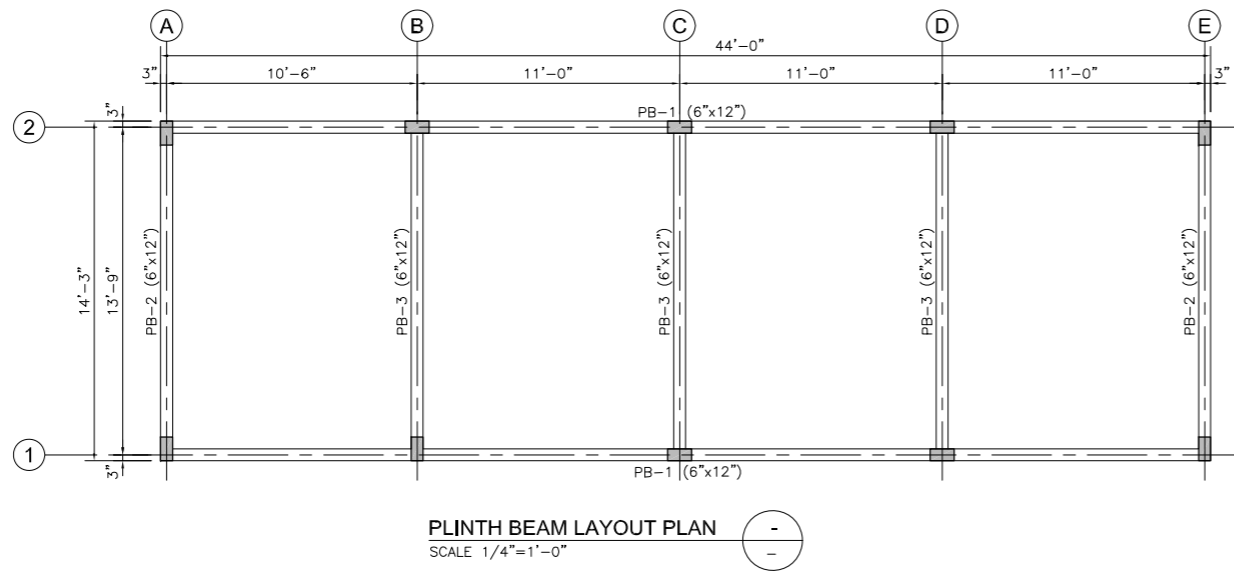
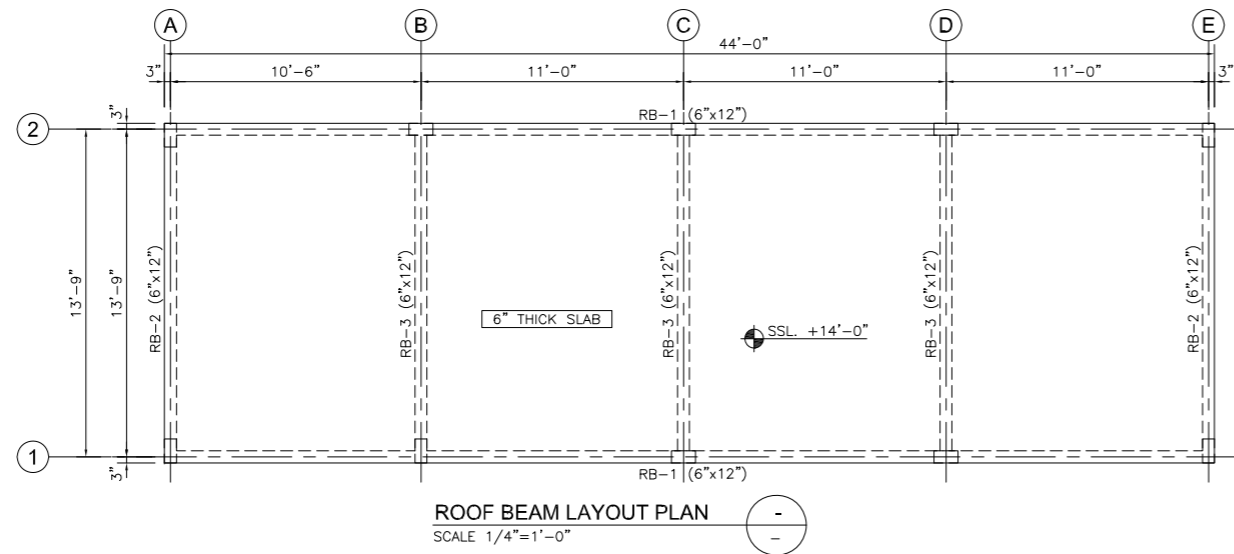
DRAWING NAME DESCRIPTION:



TYPICAL LINK SHAPES
SCALE = N.T.S.



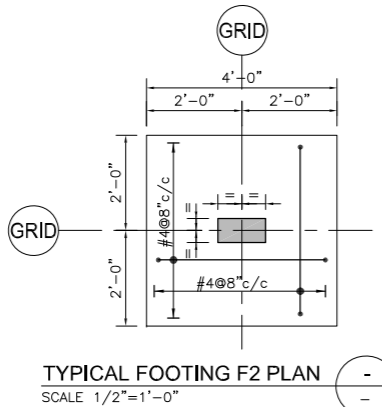
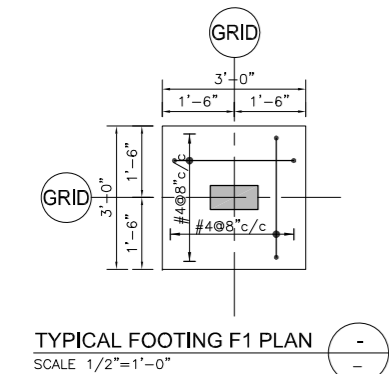
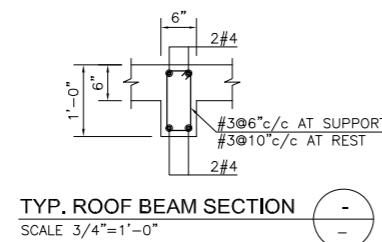
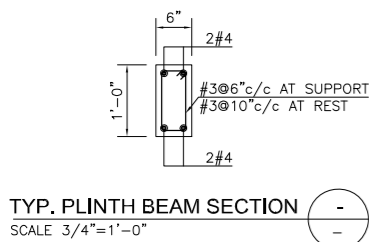
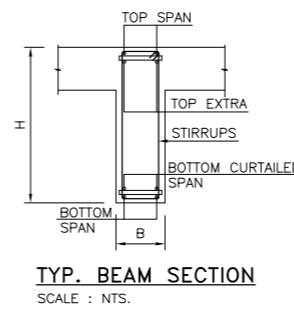
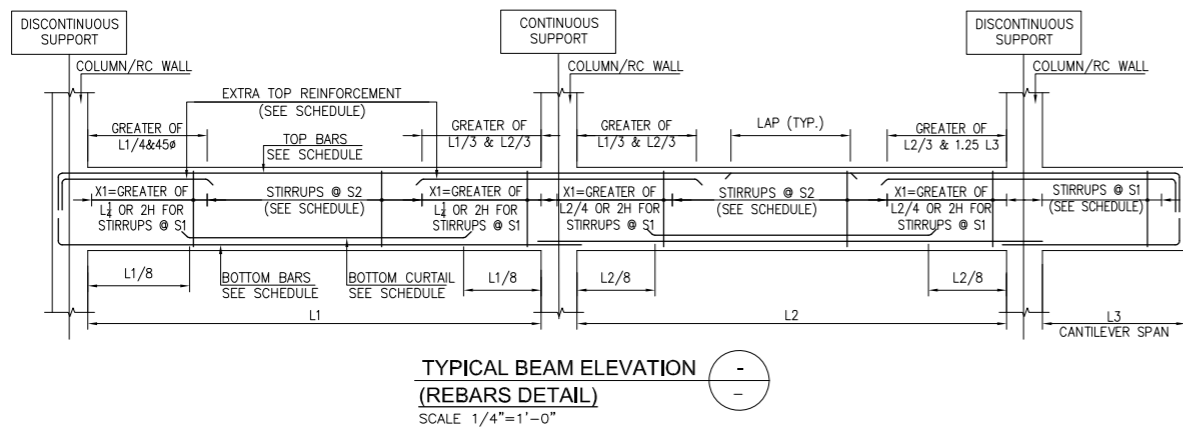
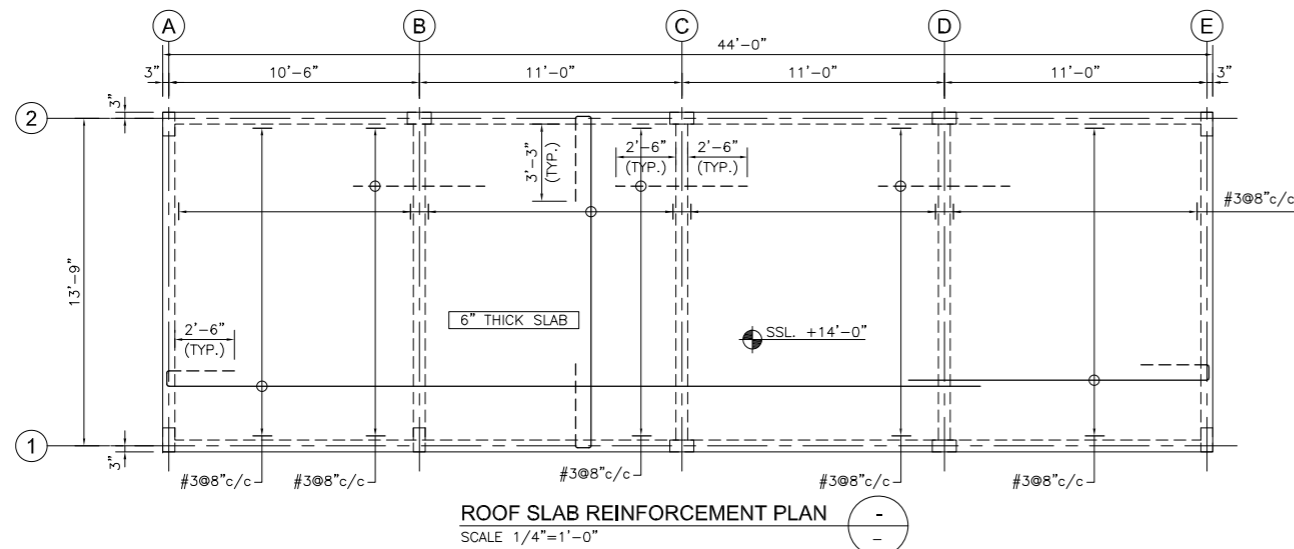
REV	DATE	DESCRIPTION	SIGN
AMENDMENTS			
PROJECT: REHABILITATION OF METELED RAOD AT KARACHI UNIVERSITY IBA KARACHI			
CLIENT: Institute of Business Administration Karachi			
ENGINEERING CONSULTANT: 1st Floor, IEP Building, 177/2, Liaquat Barracks, Main Shahrah-e-Faisal, Karachi 75530, Pakistan. Email: info_pk@aingeniers.com			
TITLE: STANDARD DETAILS			
STATUS TENDER DRAWING			
SCALE AS SHOWN		DATE OCT-2024	
DRAWN H.G		CHECKED M.A	
DESIGNED S.N		APPROVED M.F.A	
JOB NO. P-066C	DRAWING NO. AIE-IBA-GN-02	REV. NO. 0	



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 - ALL FOOTINGS HAVE BEEN DESIGNED FOR A NET ALLOWABLE BEARING CAPACITY OF 1.0TSF AT -5'-0" BELOW EXISTING ROAD LEVEL AS PER GEOTECHNICAL INVESTIGATION REPORT.
 - FOUNDATION SHOULD BE PLACED AT MINIMUM 5'-0" FT. BELOW EXISTING GROUND LEVEL.
 - ALL FOUNDATION TO BE PLACED ON WELL COMPACTED SUB-GRADE (min. 95% MDD) USING APPROPRIATE COMPACTION EQUIPMENT. IF ANY LOOSE FILL MATERIAL IS ENCOUNTERED AT THIS LEVEL, IT MUST BE REPLACED WITH ENGINEERED FILL TO ITS FULL EXTENT.
 - PROVIDE PLUMB CONCRETE/BRICK WALL BELOW PLINTH BEAM IS SUBJECTED TO EXISTING GROUND LEVEL.
 - FOR LOCATION, SIZES AND INVERT LEVELS OF SELVES / OPENING SHALL BE COORDINATED AND VERIFIED WITH THE RELEVANT MEP. DRAWING PRIOR TO CONSTRUCTION.

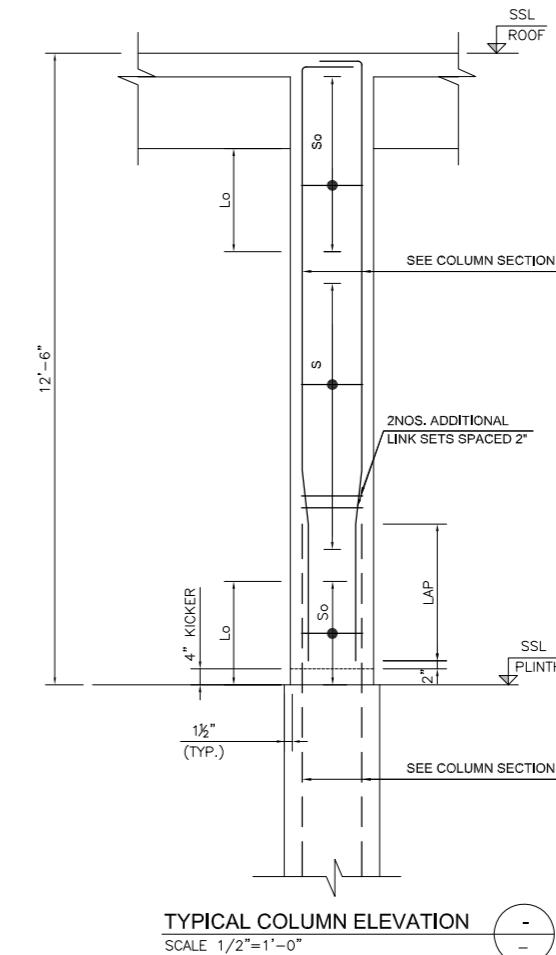
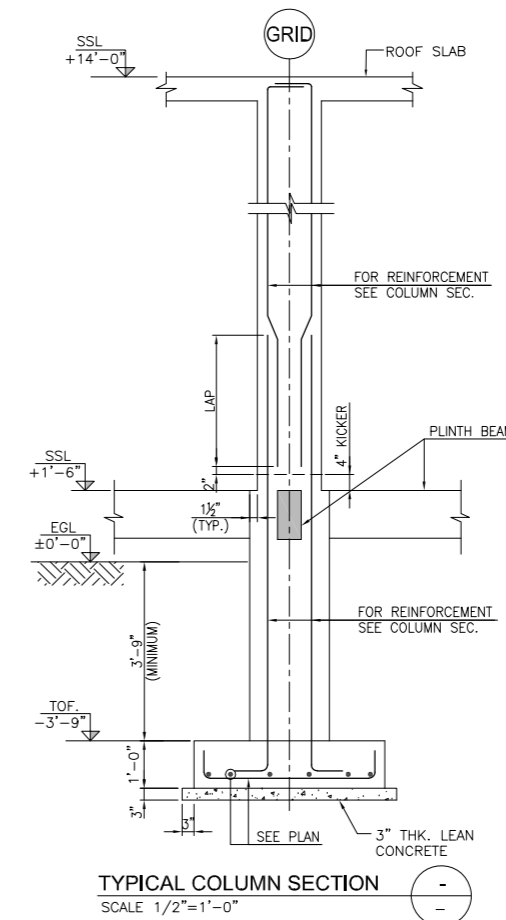
- LEGEND:**
- SSL : STRUCTURAL SLAB LEVEL
 - EGL : EXISTING GROUND LEVEL
 - TOF : TOP OF FOOTING

REV	DATE	DESCRIPTION	SGN
AMENDMENTS			
PROJECT: REHABILITATION OF METALED RAOD AT KARACHI UNIVERSITY IBA KARACHI			
CLIENT:  Institute of Business Administration Karachi <i>Leadership and Area for Success</i>			
ENGINEERING CONSULTANT:  AI Engineers 1st Floor, IEP Building, 177/2, Liaquat Barracks, Main Shahr-eh-Faisal, Karachi 75530, Pakistan Email: info_pk@aingeners.com			
TITLE: WAITING AREA GENERAL ARRANGEMENT PLAN			
STATUS TENDER DRAWING			
SCALE	1/4"=1'-0"	DATE	OCT-2024
DRAWN	H.G	CHECKED	M.A
DESIGNED	S.N	APPROVED	M.F.A
JOB NO.	DRAWING NO.	REV. NO.	
P-066C	AIE-IBA-ST-01	0	



COLUMN SCHEDULE

MARK	C1	C2
ROOF TO PLINTH	 So = #3@6" c/c S = #3@10" c/c Lo = 2'-6"	 So = #3@6" c/c S = #3@10" c/c Lo = 2'-6"
PLINTH TO FOUNDATION	 So = #3@6" c/c S = #3@10" c/c Lo = 2'-6"	 So = #3@6" c/c S = #3@10" c/c Lo = 2'-6"



- NOTES:**
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 - TOF : TOP OF FOOTING

REV	DATE	DESCRIPTION	SGN

AMENDMENTS
 PROJECT: REHABILITATION OF METEAD ROAD KARACHI UNIVERSITY
 CLIENT: IBA Institute of Business Administration Karachi



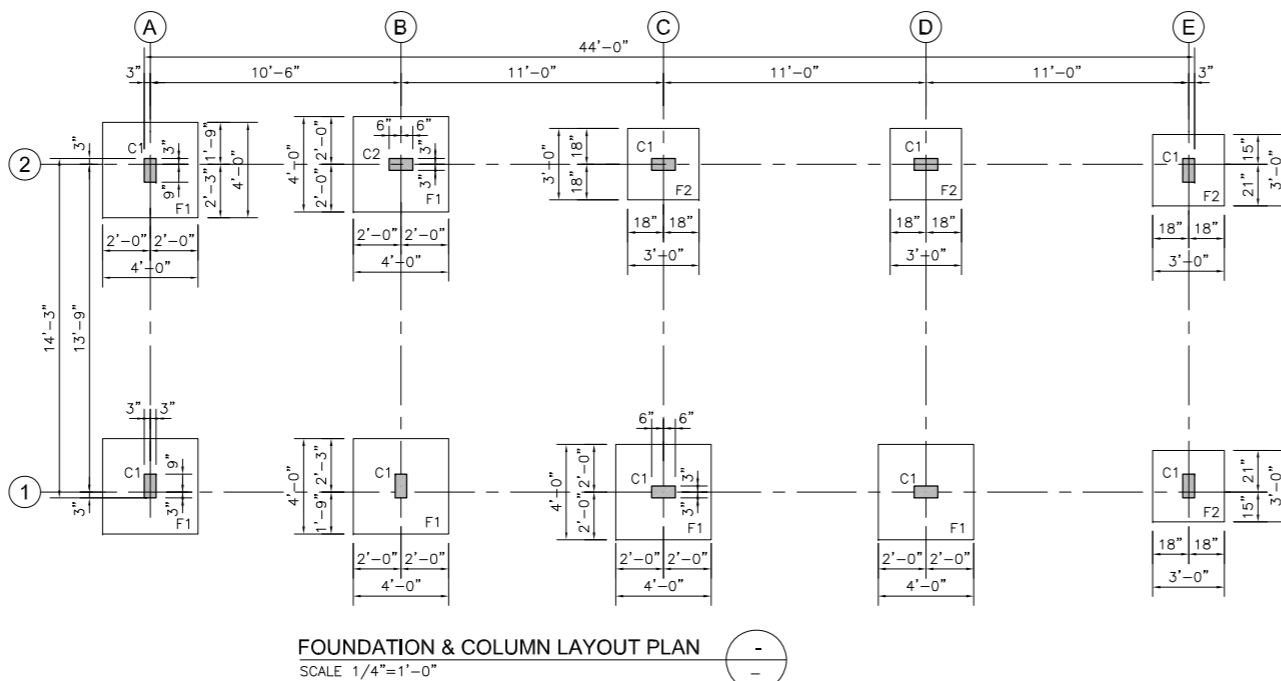
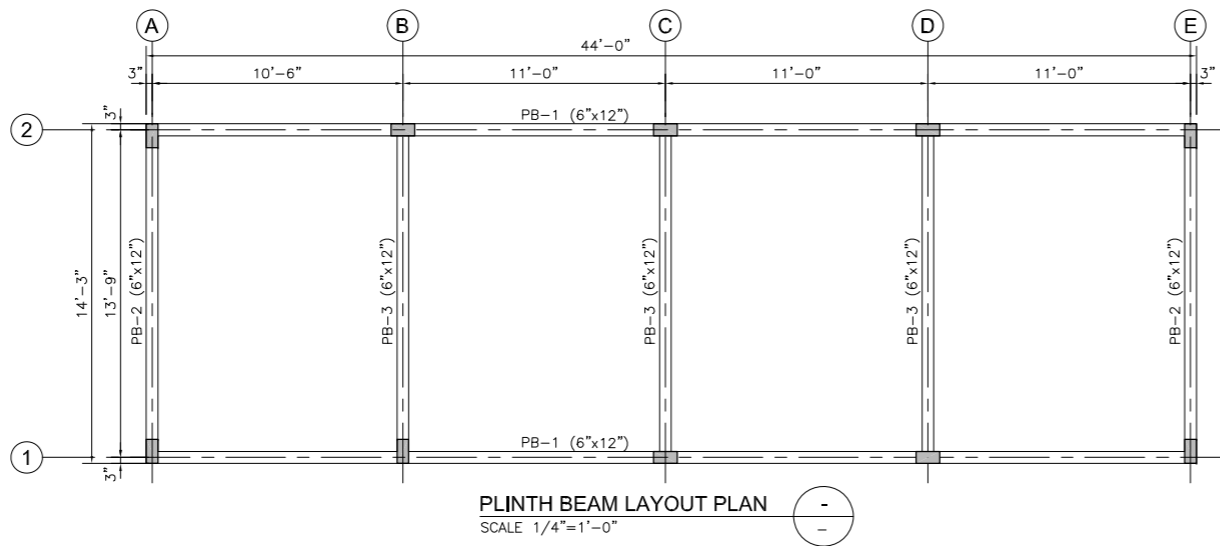
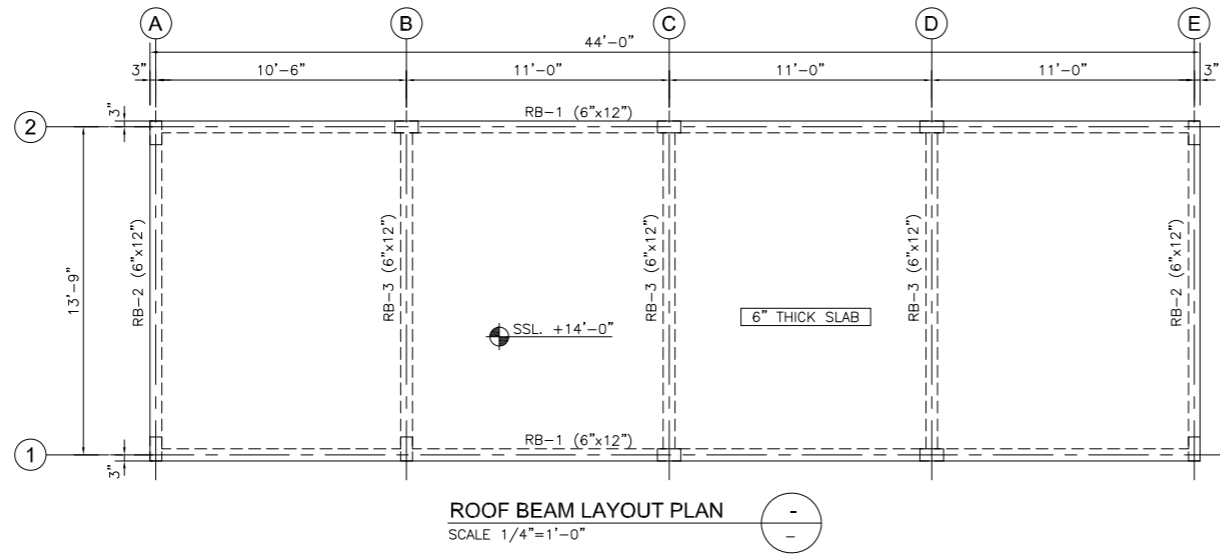
ENGINEERING CONSULTANT: AI Engineers
 1st Floor, IEP Building, 177/2, Liaquat Barracks, Main Shahr-e-Faisal, Karachi 75530, Pakistan
 Email: info_pk@aialengineers.com

TITLE: WAITING AREA REINFORCEMENT DETAILS

STATUS: TENDER DRAWING

SCALE	AS SHOWN	DATE	OCT-2024
DRAWN	H.G	CHECKED	M.A
DESIGNED	S.N	APPROVED	M.F.A

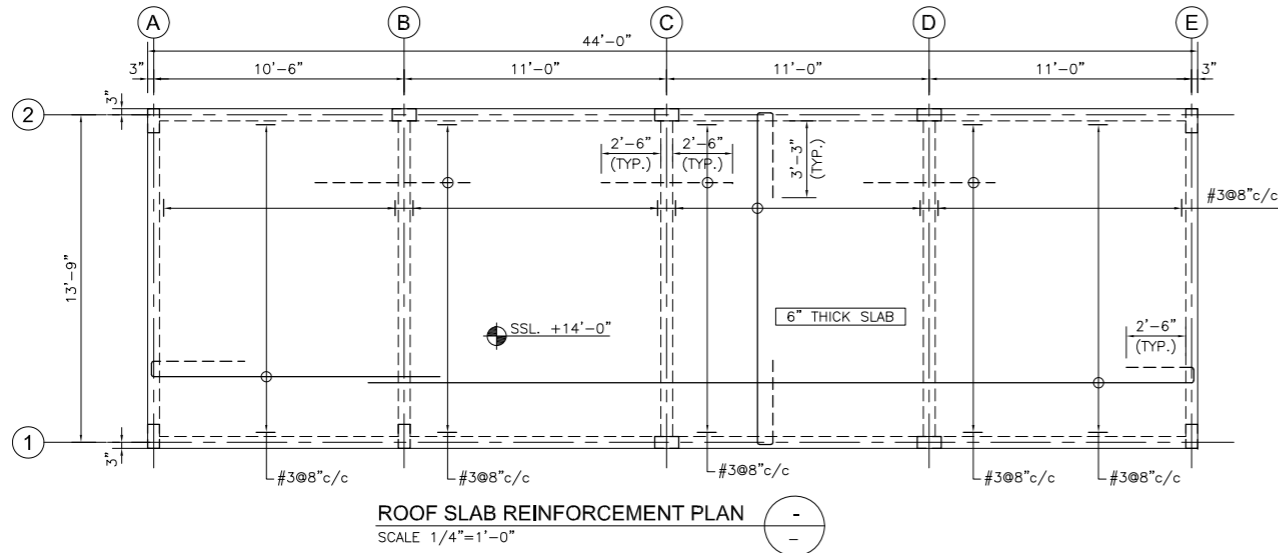
JOB NO.	DRAWING NO.	REV. NO.
P-066C	AIE-IBA-ST-02	0



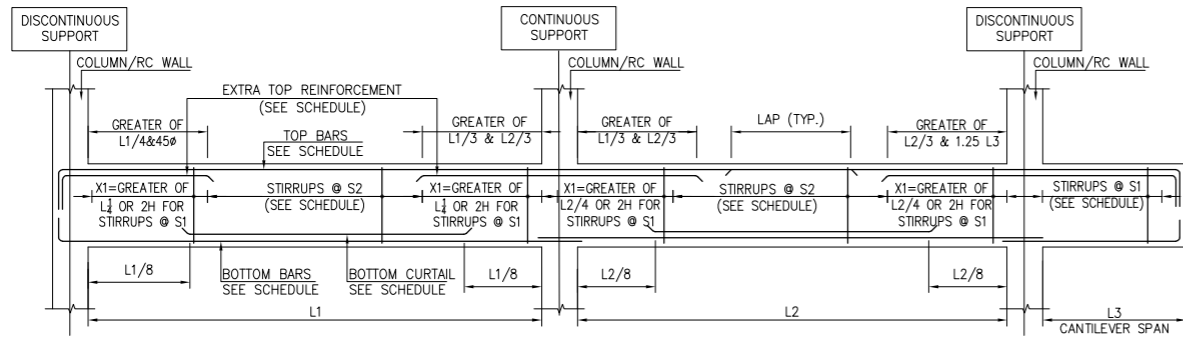
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- LEGEND:**
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 - EGL : EXISTING GROUND LEVEL
 - TOF : TOP OF FOOTING

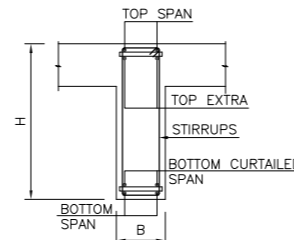
REV	DATE	DESCRIPTION	SIGN
AMENDMENTS			
PROJECT: REHABILITATION OF METEALED RAOD AT KARACHI UNIVERSITY IBA KARACHI			
CLIENT:  Institute of Business Administration Karachi <i>Leadership and Vision for Tomorrow</i>			
ENGINEERING CONSULTANT:  1st Floor, IEP Building, 177/2, Liaquat Barracks, Main Shahrah-e-Faisal, Karachi 75530, Pakistan Email: info_pk@aengineers.com			
TITLE: TOILET BLOCK GENERAL ARRANGEMENT PLAN			
STATUS TENDER DRAWING			
SCALE	1/4"=1'-0"	DATE	OCT-2024
DRAWN	H.G	CHECKED	M.A
DESIGNED	S.N	APPROVED	M.F.A
JOB NO.	DRAWING NO.	REV. NO.	
P-066C	AIE-IBA-ST-03	0	



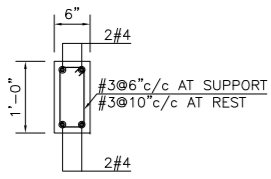
ROOF SLAB REINFORCEMENT PLAN
SCALE 1/4"=1'-0"



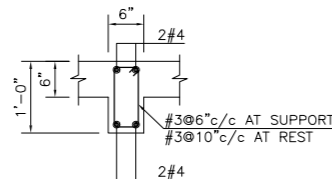
TYPICAL BEAM ELEVATION (REBARS DETAIL)
SCALE 1/4"=1'-0"



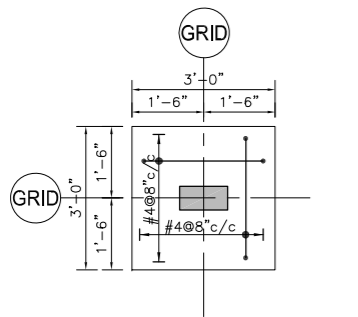
TYP. BEAM SECTION
SCALE : NTS.



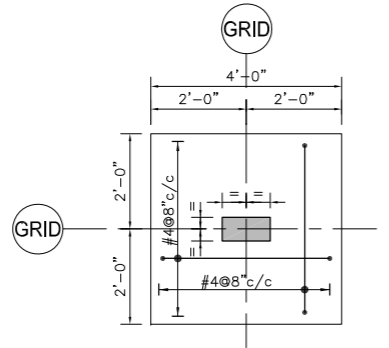
TYP. PLINTH BEAM SECTION
SCALE 3/4"=1'-0"



TYP. ROOF BEAM SECTION
SCALE 3/4"=1'-0"



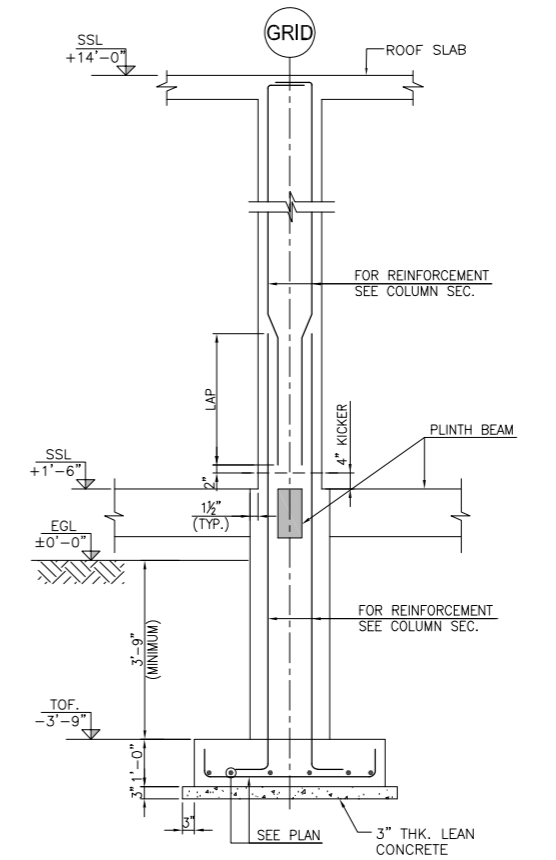
TYPICAL FOOTING F1 PLAN
SCALE 1/2"=1'-0"



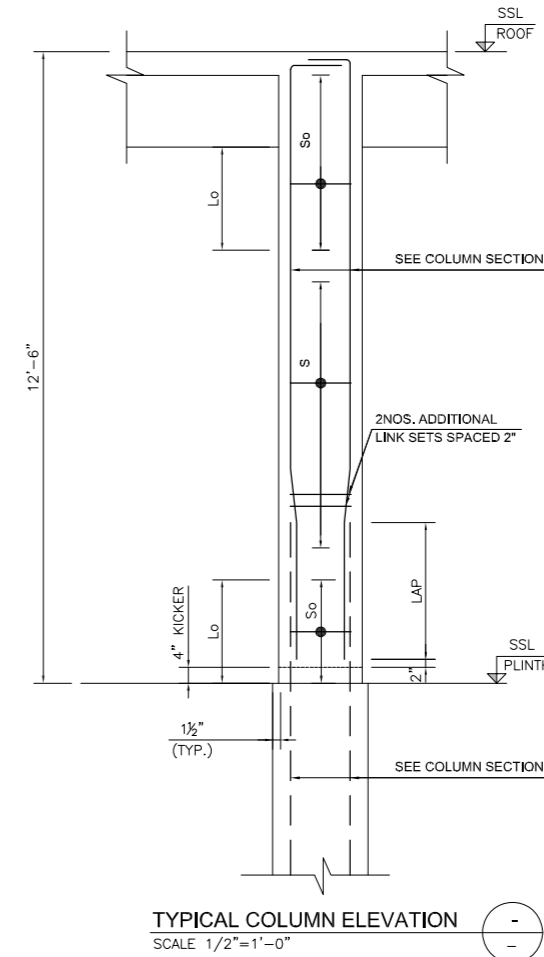
TYPICAL FOOTING F2 PLAN
SCALE 1/2"=1'-0"

COLUMN SCHEDULE

	C1	C2
ROOF TO PLINTH	6#4 So = #3@6" c/c S = #3@10" c/c Lo = 2'-6"	8#4 So = #3@6" c/c S = #3@10" c/c Lo = 2'-6"
PLINTH TO FOUNDATION	6#4 So = #3@6" c/c S = #3@10" c/c Lo = 2'-6"	8#4 So = #3@6" c/c S = #3@10" c/c Lo = 2'-6"
MARK	C1	C2



TYPICAL COLUMN SECTION
SCALE 1/2"=1'-0"



TYPICAL COLUMN ELEVATION
SCALE 1/2"=1'-0"

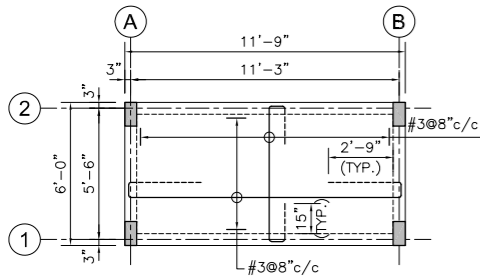
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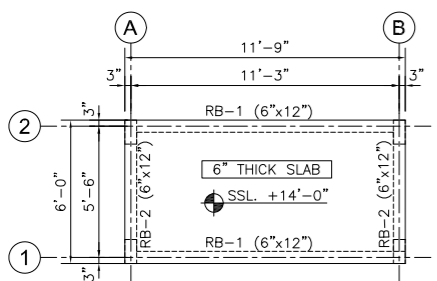
LEGEND:

- SSL : STRUCTURAL SLAB LEVEL
- EGL : EXISTING GROUND LEVEL
- TOF : TOP OF FOOTING

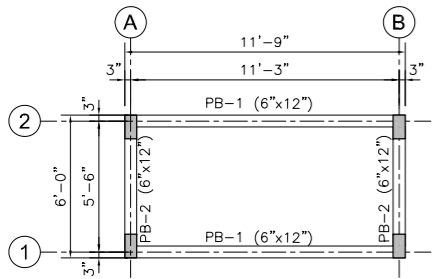
REV	DATE	DESCRIPTION	SIGN
AMENDMENTS			
PROJECT: REHABILITATION OF METALED RAOD AT KARACHI UNIVERSITY IBA KARACHI			
CLIENT:  Institute of Business Administration Karachi			
ENGINEERING CONSULTANT:  AI Engineers 1st Floor, IEP Building, 177/2, Liaquat Barracks, Main Shahr-e-Faisal, Karachi 75530, Pakistan Email: info_pk@aengineers.com			
TITLE: TOILET BLOCK REINFORCEMENT DETAILS			
STATUS TENDER DRAWING			
SCALE	AS SHOWN	DATE	OCT-2024
DRAWN	H.G	CHECKED	M.A
DESIGNED	S.N	APPROVED	M.F.A
JOB NO.	DRAWING NO.	REV. NO.	
P-066C	AIE-IBA-ST-04	0	



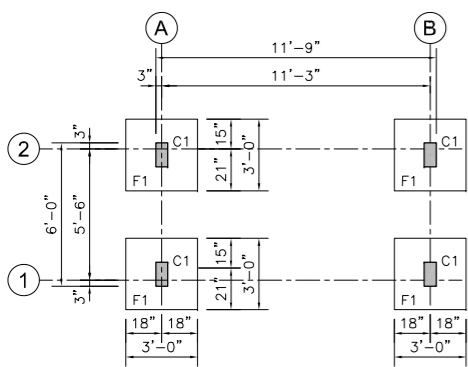
ROOF SLAB REINFORCEMENT PLAN
SCALE 1/4"=1'-0"



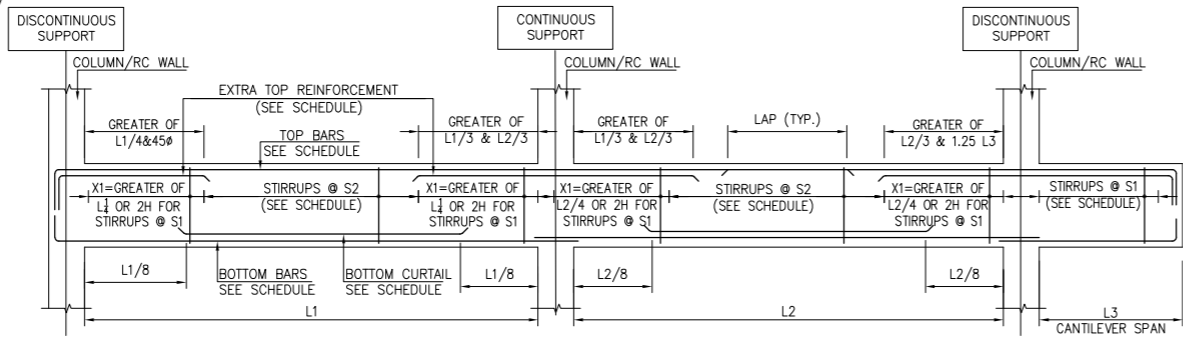
ROOF BEAM LAYOUT PLAN
SCALE 1/4"=1'-0"



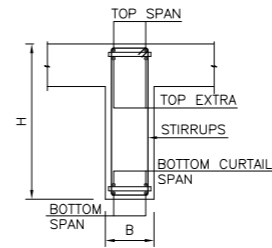
PLINTH BEAM LAYOUT PLAN
SCALE 1/4"=1'-0"



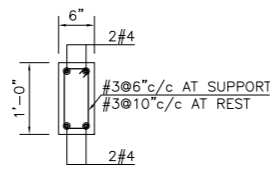
FOUNDATION & COLUMN LAYOUT PLAN
SCALE 1/4"=1'-0"



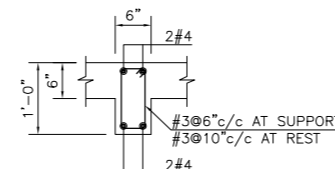
TYPICAL BEAM ELEVATION (REBARS DETAIL)
SCALE 1/4"=1'-0"



TYP. BEAM SECTION



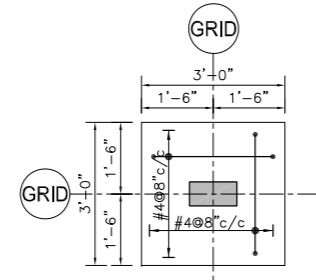
TYP. PLINTH BEAM SECTION
SCALE 3/4"=1'-0"



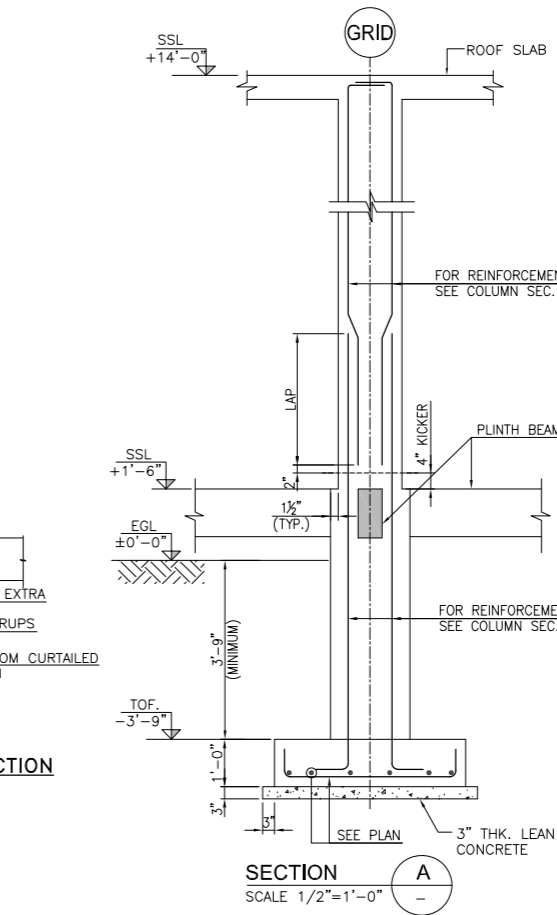
TYP. ROOF BEAM SECTION
SCALE 3/4"=1'-0"

COLUMN SCHEDULE

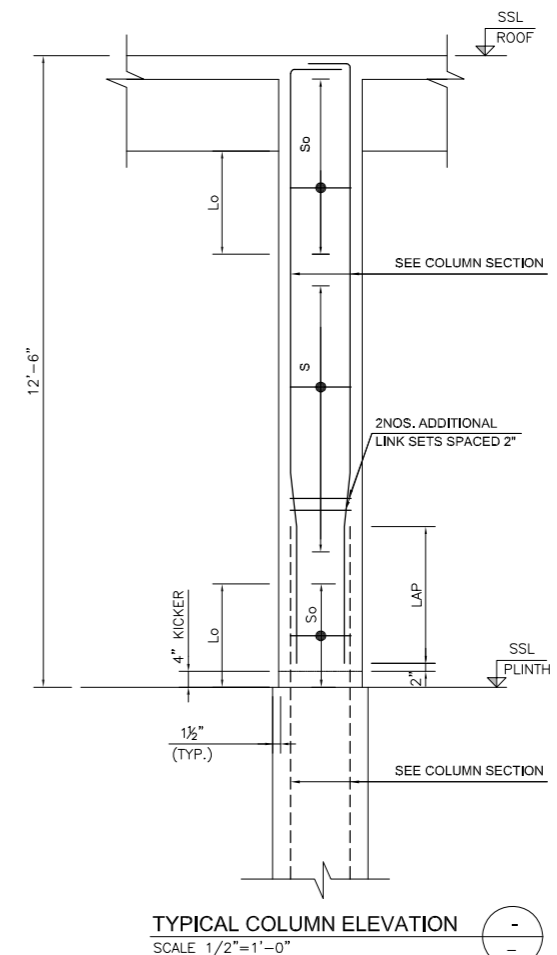
ROOF TO PLINTH	
PLINTH TO FOUNDATION	
MARK	C1



TYPICAL FOOTING F1 PLAN
SCALE 1/2"=1'-0"



SECTION A
SCALE 1/2"=1'-0"



TYPICAL COLUMN ELEVATION
SCALE 1/2"=1'-0"

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 - PROVIDE PLUMB CONCRETE/BRICK WALL BELOW PLINTH BEAM IS SUBJECT TO EXISTING GROUND LEVEL.
 - FOR LOCATION, SIZES AND INVERT LEVELS OF SELVES / OPENING SHALL BE COORDINATED AND VERIFIED WITH THE RELEVANT MEP. DRAWING PRIOR TO CONSTRUCTION.

- LEGEND:**
- SSL : STRUCTURAL SLAB LEVEL
 - EGL : EXISTING GROUND LEVEL
 - TOF : TOP OF FOOTING

REV	DATE	DESCRIPTION	SIGN
-----	------	-------------	------

AMENDMENTS

PROJECT: REHABILITATION OF METALED RAOD AT KARACHI UNIVERSITY IBA KARACHI

CLIENT:



ENGINEERING CONSULTANT:



TITLE: CHECK POST GENERAL ARRANGEMENT & REINFORCEMENT DETAILS

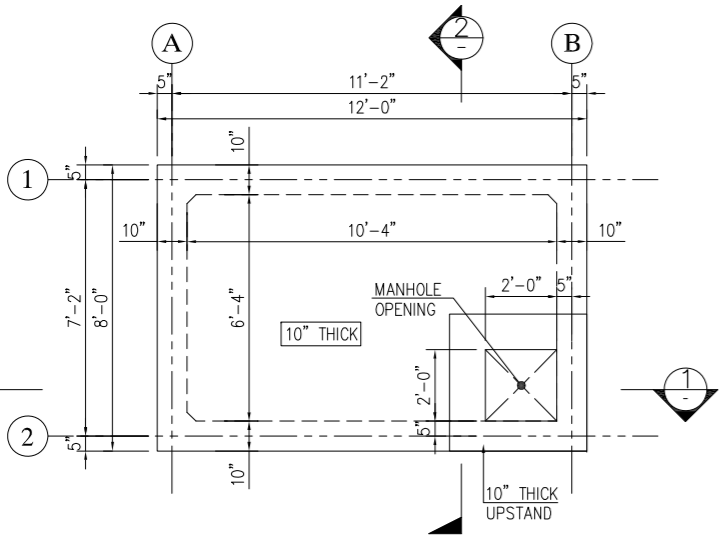
STATUS: TENDER DRAWING

SCALE: AS SHOWN **DATE:** OCT-2024

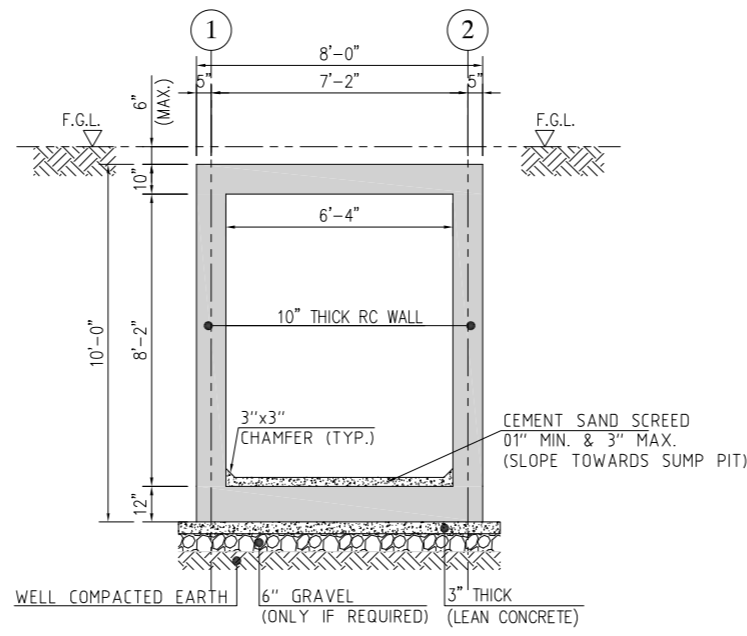
DRAWN: H.G **CHECKED:** M.A

DESIGNED: S.N **APPROVED:** M.F.A

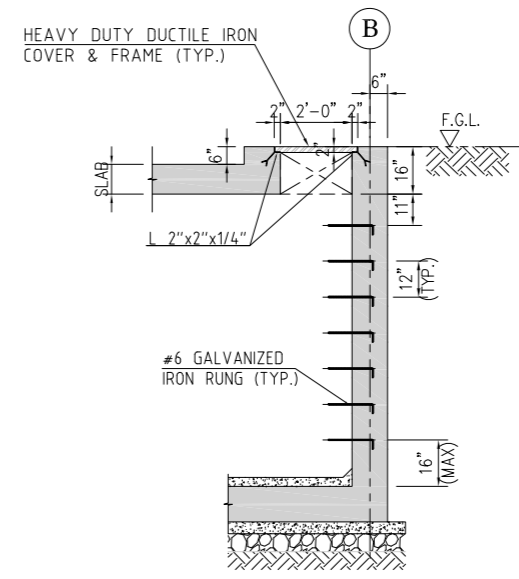
JOB NO.: P-066C **DRAWING NO.:** AIE-IBA-ST-05 **REV. NO.:** 0



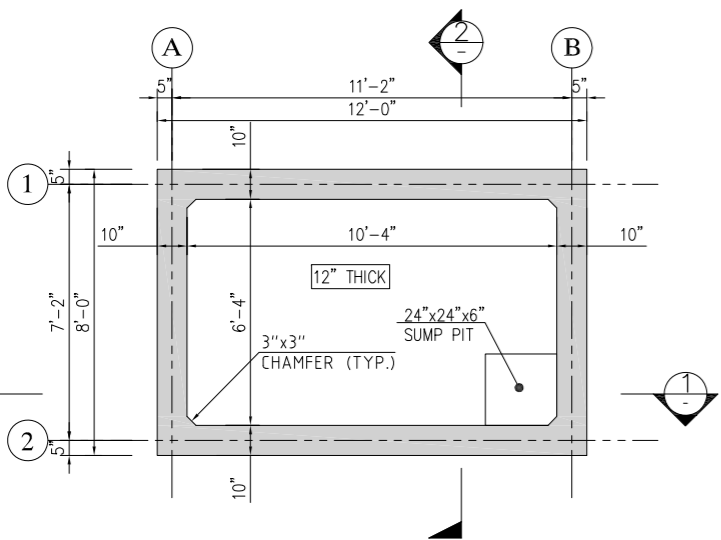
B TOP SLAB
SCALE : 3/8"=1'-0"



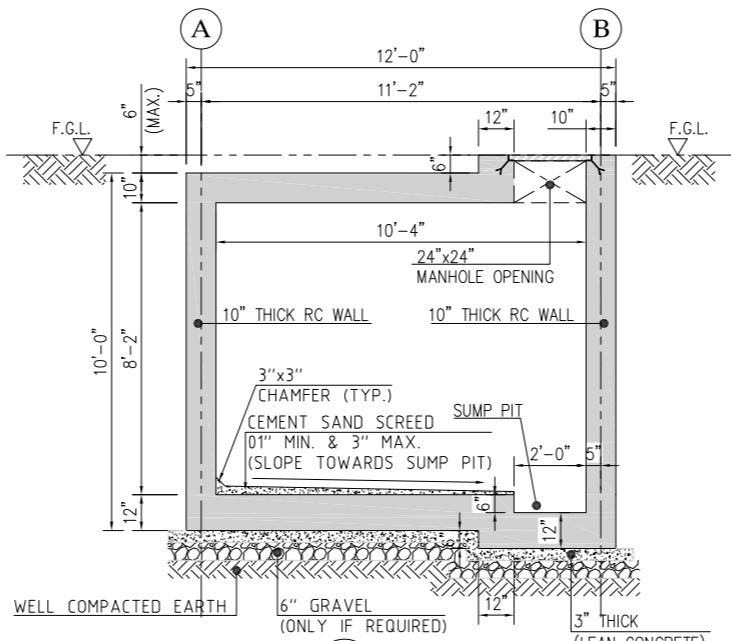
2 SECTION - 2
SCALE : 3/8"=1'-0"



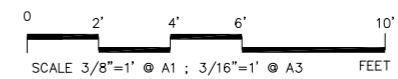
- IRON RUNGS DETAIL
SCALE : 3/8"=1'-0"





A BOTTOM SLAB
SCALE : 3/8"=1'-0"



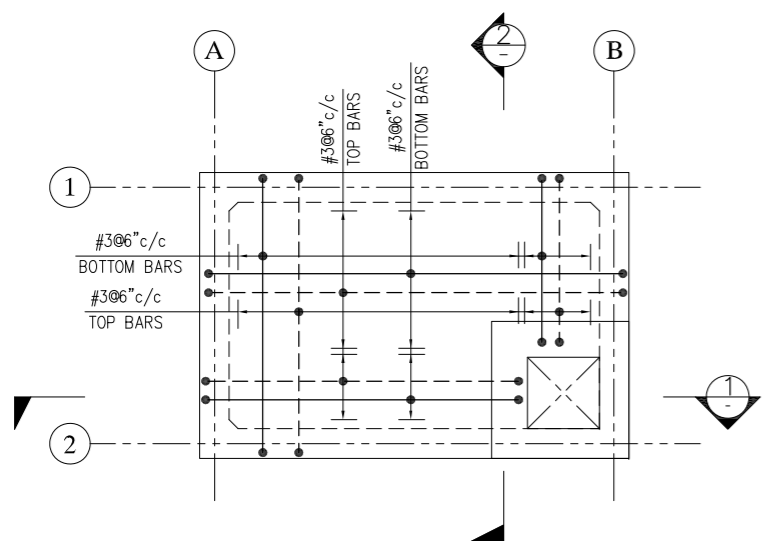
1 SECTION - 1
SCALE : 3/8"=1'-0"



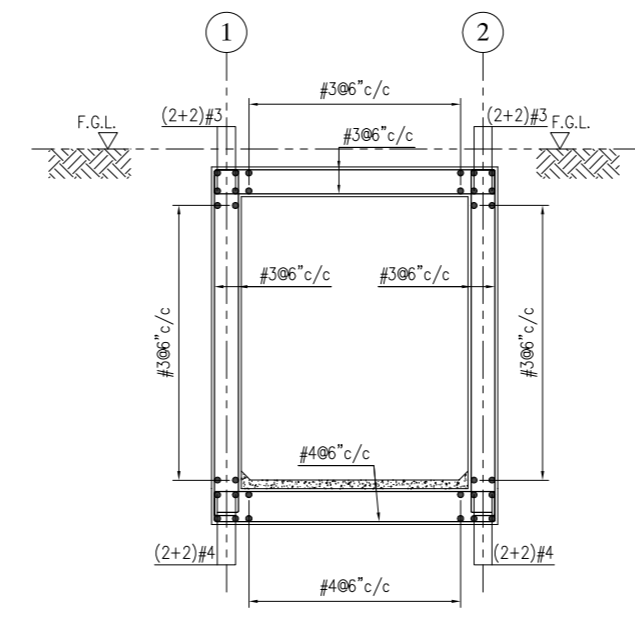
- NOTE:**
- FOR GENERAL NOTES REFER DWG. NO. AIE-IBA-GN-01.
 - FOR STANDARD DETAILS REFER DWG. NO. AIE-IBA-GN-02.
 - ALL DIMENSIONS AND LEVELS ARE IN FEET-INCHES UNLESS NOTED OTHERWISE
 - THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL RELEVANT DRAWINGS.
 - ALL DETAILS PROVIDED FOR APPROVAL PURPOSE ONLY, AND SHALL NOT BE USED FOR CONSTRUCTION.
 - THE FOUNDATION HAS BEEN DESIGNED ASSUMING A NET ALLOWABLE BEARING CAPACITY OF 1.0 TSF.
 - THE CONTRACTOR IS REQUIRED TO VERIFY BEARING CAPACITY PRIOR TO CONSTRUCTION, AND SHALL CONSULT THE DESIGN ENGINEER, IF THE ACTUAL BEARING CAPACITY VALUE (i.e. THROUGH INVESTIGATION) COMES OUT TO BE LESS THEN ASSUMED VALUE OF 1.0 TSF.
 - WHERE THE CONSTRUCTION OF THE PERMANENT WORK ENTAIL WORKING ADJACENT TO THE EXISTING STRUCTURE, CONTRACTOR SHALL ENSURE THAT ADEQUATE MEASURE ARE TAKEN TO PREVENT DAMAGES OR ADVERSE EFFECT TO THE EXISTING STRUCTURE.

REV	DATE	DESCRIPTION	SIGN
AMENDMENTS			
PROJECT: REHABILITATION OF METALED RAOD AT KARACHI UNIVERSITY IBA KARACHI			
CLIENT:  Institute of Business Administration Karachi <i>Leadership and Vision for Tomorrow</i>			
ENGINEERING CONSULTANT:  AI Engineers 1st Floor, IEP Building, 177/2, Liaquat Barracks, Main Shahr-eh-Faisal, Karachi 75530, Pakistan Email: info_pk@aiengineers.com			
TITLE: UNDERGROUND WATER STORAGE TANK GENERAL ARRANGEMENT DETAILS			
STATUS TENDER DRAWING			
SCALE	AS SHOWN	DATE	OCT-2024
DRAWN	H.G	CHECKED	M.A
DESIGNED	S.N	APPROVED	M.F.A
JOB NO.	DRAWING NO.	REV. NO.	
P-066C	AIE-IBA-ST-06	0	

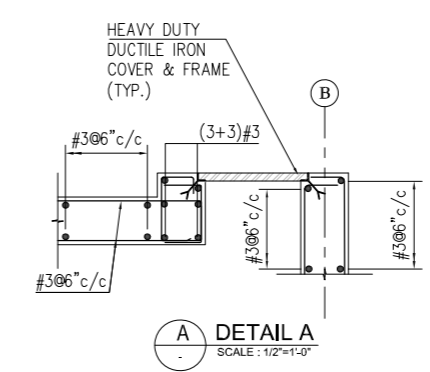
AIE-IBA-ST-06 & 07.dwg



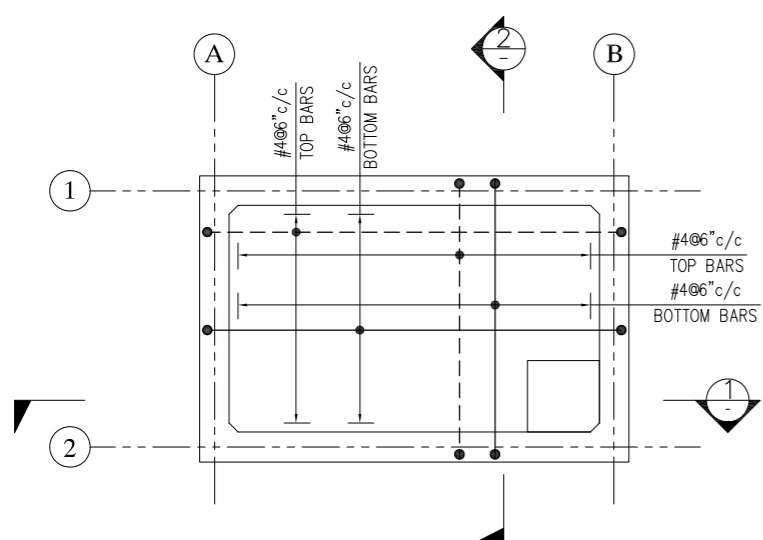
B TOP SLAB REINFORCEMENT PLAN
SCALE : 3/8"=1'-0"



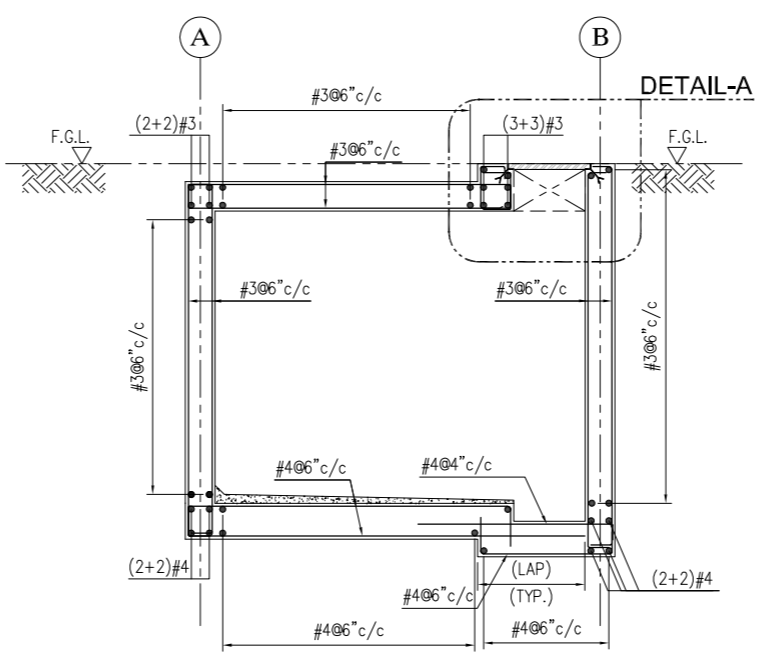
2 SECTION - 2
SCALE : 3/8"=1'-0"



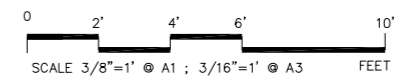
A DETAIL A
SCALE : 1/2"=1'-0"



A BOTTOM SLAB REINFORCEMENT PLAN
SCALE : 3/8"=1'-0"



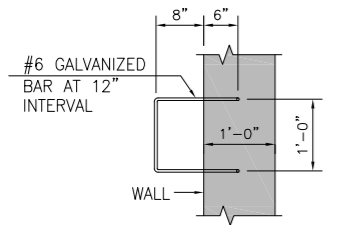
1 SECTION - 1
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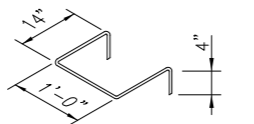
- NOTE:**
- FOR GENERAL NOTES REFER DWG. NO. AIE-IBA-GN-01
 - FOR STANDARD DETAILS REFER DWG. NO. AIE-IBA-GN-02
 - ALL DIMENSIONS AND LEVELS ARE IN FEET-INCHES UNLESS NOTED OTHERWISE
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 - THE CONTRACTOR IS REQUIRED TO VERIFY BEARING CAPACITY PRIOR TO CONSTRUCTION, AND SHALL CONSULT THE DESIGN ENGINEER, IF THE ACTUAL BEARING CAPACITY VALUE (i.e. THROUGH INVESTIGATION) COMES OUT TO BE LESS THEN ASSUMED VALUE OF 1.0 TSF.
 - WHERE THE CONSTRUCTION OF THE PERMANENT WORK ENTAIL WORKING ADJACENT TO THE EXISTING STRUCTURE, CONTRACTOR SHALL ENSURE THAT ADEQUATE MEASURE ARE TAKEN TO PREVENT DAMAGES OR ADVERSE EFFECT TO THE EXISTING STRUCTURE.

REV	DATE	DESCRIPTION	SIGN
AMENDMENTS			
PROJECT: REHABILITATION OF METALED RAOD AT KARACHI UNIVERSITY IBA KARACHI			
CLIENT:  Institute of Business Administration Karachi <i>Leadership and Vision for Tomorrow</i>			
ENGINEERING CONSULTANT:  AI Engineers 1st Floor, IEP Building, 177/2, Liaquat Barracks, Main Shahrah-e-Faisal, Karachi 75530, Pakistan Email: info_pk@aengineers.com			
TITLE: UNDERGROUND WATER STORAGE TANK REINFORCEMENT DETAILS			
STATUS TENDER DRAWING			
SCALE	AS SHOWN	DATE	OCT-2024
DRAWN	H.G	CHECKED	M.A
DESIGNED	S.N	APPROVED	M.F.A
JOB NO.	DRAWING NO.	REV. NO.	
P-066C	AIE-IBA-ST-07	0	

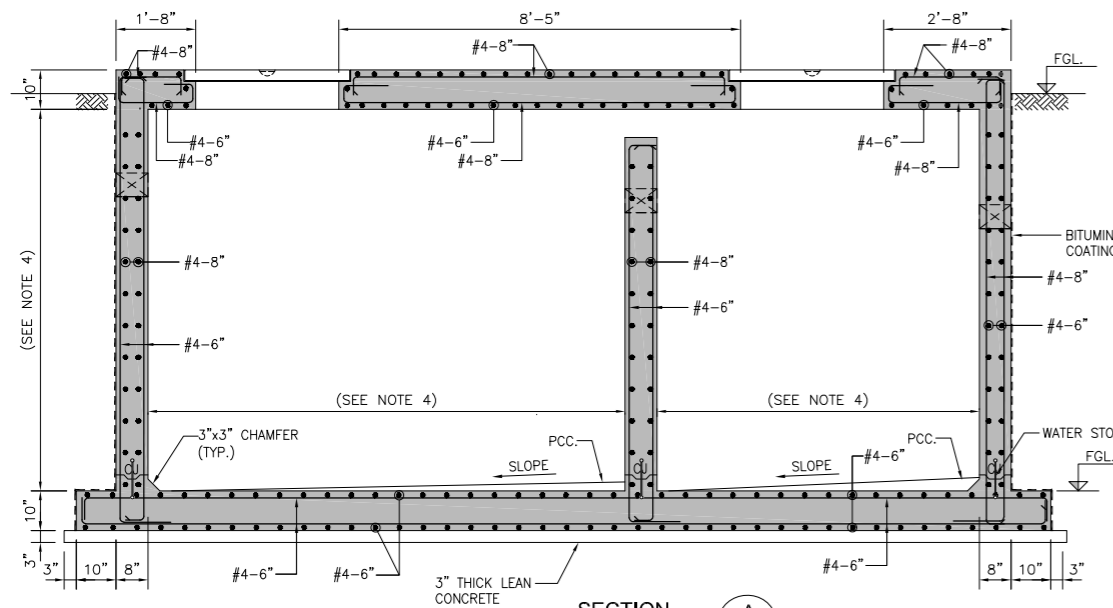
AIE-IBA-ST-06 & 07.dwg



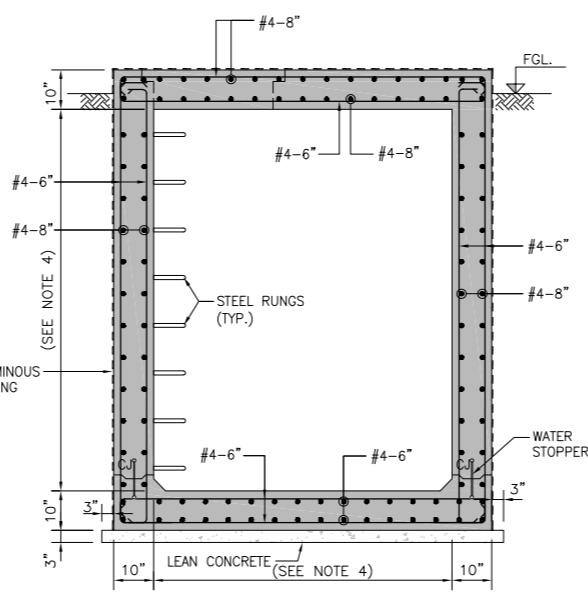
TYP. PLAN OF RUNGS
SCALE 3/4\"=1'-0\"



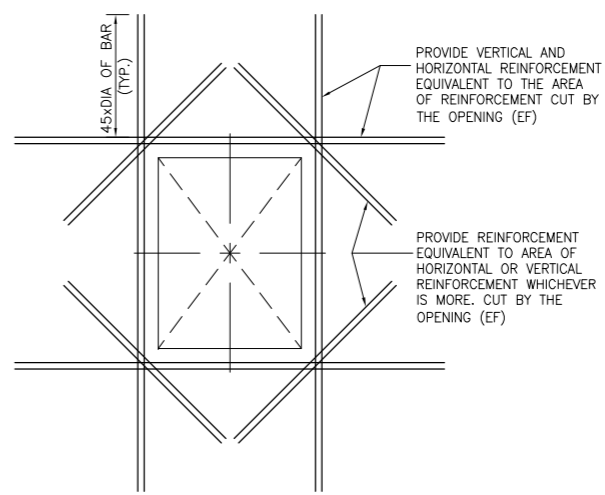
TYP. RUNG DETAIL
SCALE 3/4\"=1'-0\"



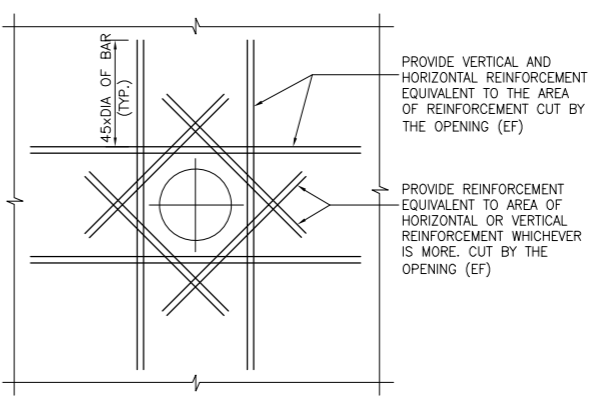
SECTION A
SCALE 1/2\"=1'-0\"



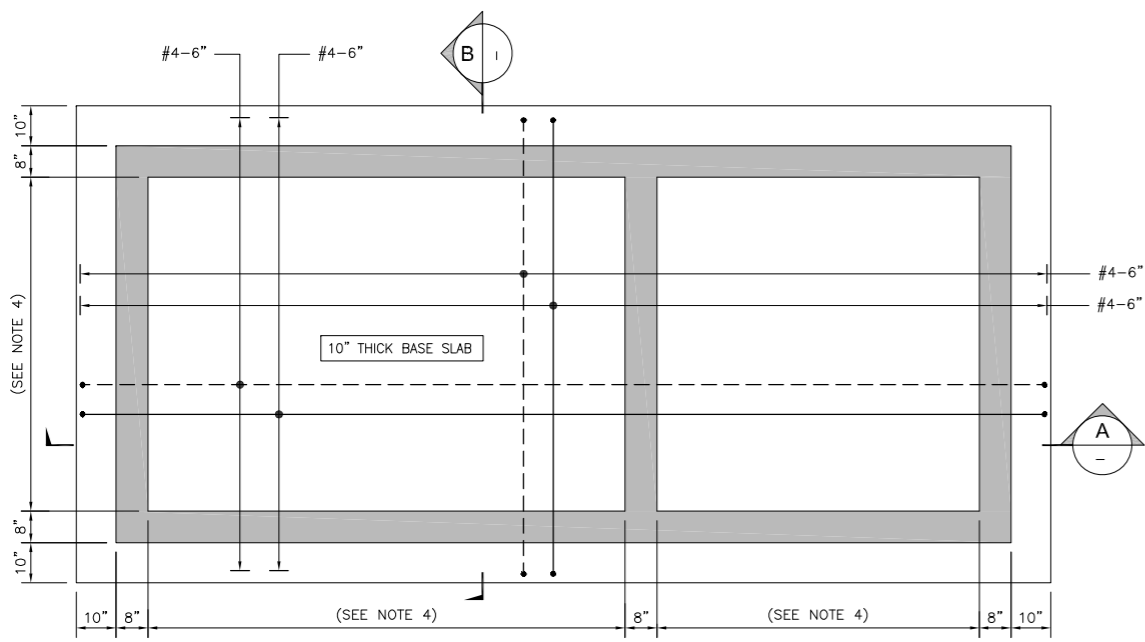
SECTION B
SCALE 1/2\"=1'-0\"



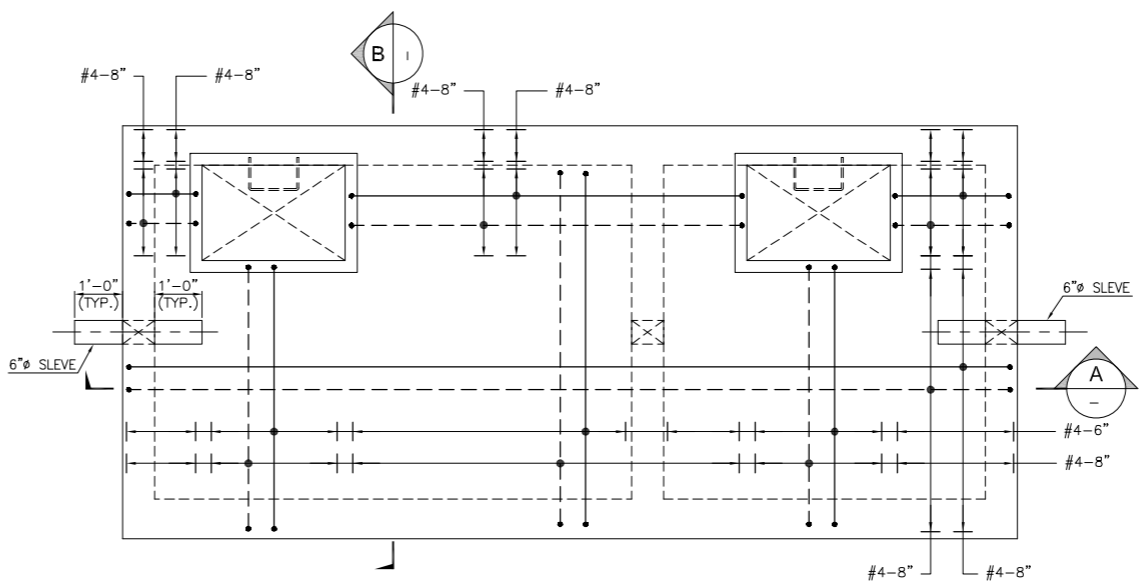
TYPICAL MAINHOLE OPENING DETAIL
N.T.S.



TYPICAL OPENING DETAIL
N.T.S.



REINFORCEMENT DETAIL OF SEPTIC TANK BASE SLAB
SCALE 1/2\"=1'-0\"



REINFORCEMENT DETAIL OF SEPTIC TANK TOP SLAB
SCALE 1/2\"=1'-0\"

- NOTES:**
- NO PORTION EITHER FULL OR PART OF THIS DRAWING MAY BE DUPLICATED, COPIED, SCANNED, REPRODUCED OR USED IN ANY TECHNICAL OR COMMERCIAL PURPOSE WITHOUT PRIOR WRITTEN PERMISSION FROM ARCHITECT.
 - DRAWING IS NOT TO BE SCALED ONLY WRITTEN DIMENSION TO BE USED.
 - ALL DIMENSIONS ARE TO BE RECHECKED AND VERIFIED ON SITE.
 - FOR GENERAL ARRANGEMENT, DIMENSION AND DETAILS REFER DWG. AIE-IBA-SW-02.
 - ANY DISCREPANCY IS TO BE BROUGHT TO THE ATTENTION OF ARCHITECT PRIOR TO COMMENCEMENT OF WORK ON SITE.
 - ALL FOOTINGS HAVE BEEN DESIGNED FOR A NET ALLOWABLE BEARING CAPACITY OF 1.0TSF AT -5'-0\"/>
 - FOUNDATION SHOULD BE PLACED AT MINIMUM 5'-0\"/>
 - ALL FOUNDATION TO BE PLACED ON WELL COMPACTED SUB-GRADE (min. 95% MDD) USING APPROPRIATE COMPACTION EQUIPMENT. IF ANY LOOSE FILL MATERIAL IS ENCOUNTERED AT THIS LEVEL, IT MUST BE REPLACED WITH ENGINEERED FILL TO ITS FULL EXTENT.
 - PROVIDE PLUMB CONCRETE/BRICK WALL BELOW PLINTH BEAM IS SUBJECTED TO EXISTING GROUND LEVEL.
 - FOR LOCATION, SIZES AND INVERT LEVELS OF SELVES / OPENING SHALL BE COORDINATED AND VERIFIED WITH THE RELEVANT MEP. DRAWING PRIOR TO CONSTRUCTION.

- LEGEND:**
- SSL : STRUCTURAL SLAB LEVEL
 - EGL : EXISTING GROUND LEVEL
 - TOF : TOP OF FOOTING

REV	DATE	DESCRIPTION	SIGN

AMENDMENTS

PROJECT: REHABILITATION OF METALED RAOD AT KARACHI UNIVERSITY IBA KARACHI

CLIENT:

ENGINEERING CONSULTANT:

1st Floor, IEP Building, 177/2, Liaquat Barracks, Main Shahrah-e-Faisal, Karachi 75530, Pakistan
Email: info_pk@aengineers.com

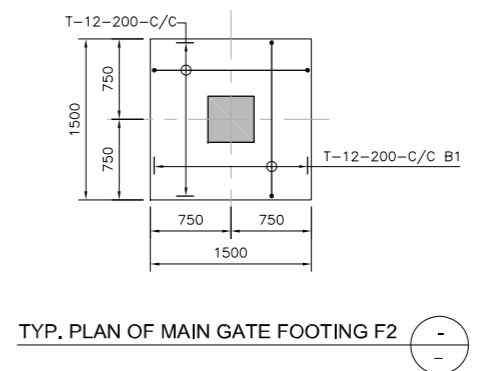
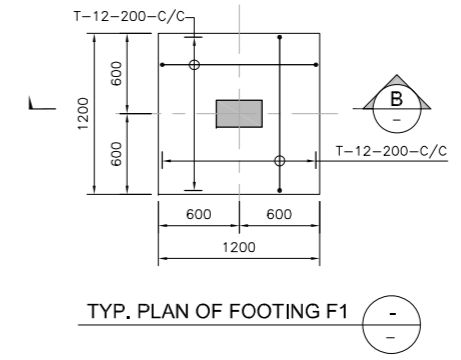
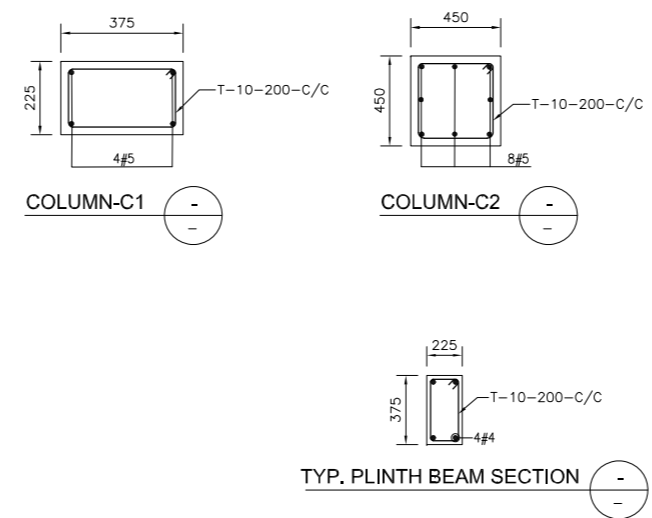
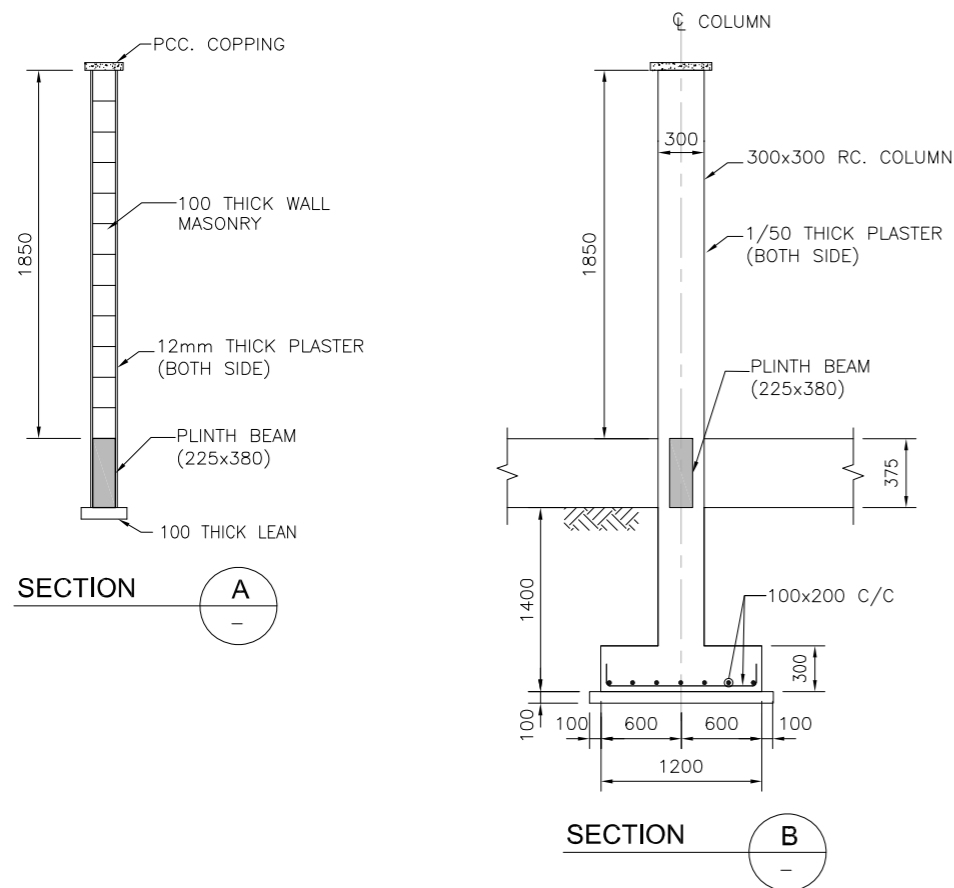
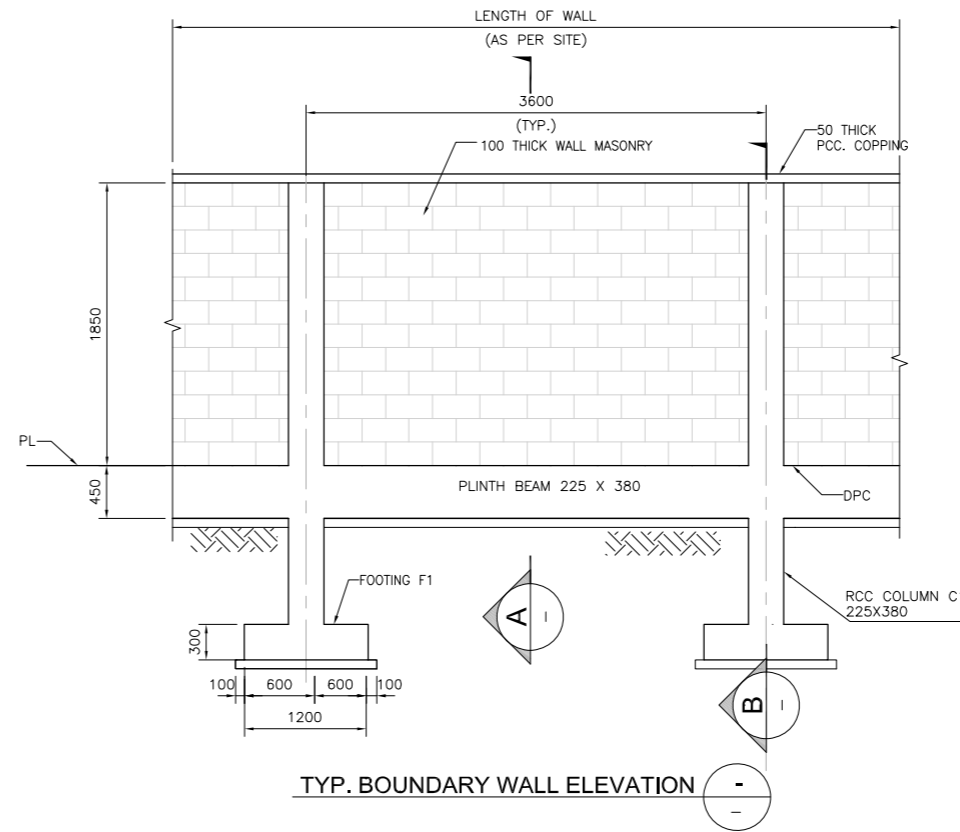
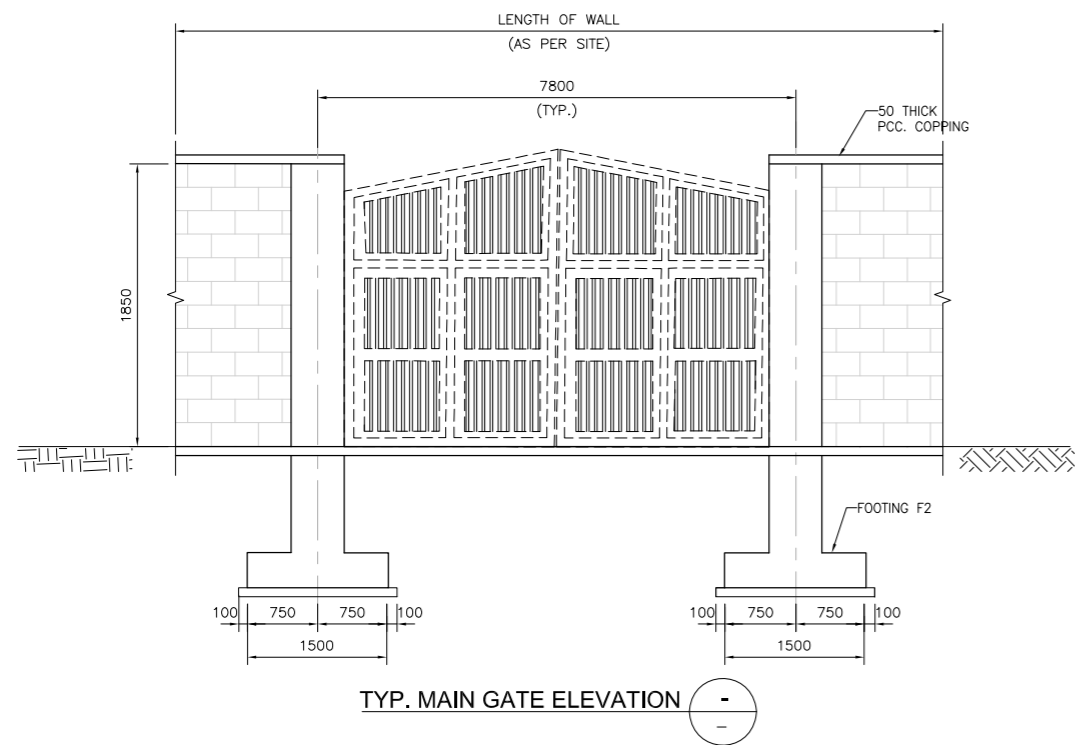
TITLE: SEWERAGE SEPTIC TANK DETAILS

STATUS: TENDER DRAWING



SCALE	AS SHOWN	DATE	OCT-2024
DRAWN	H.G	CHECKED	M.A
DESIGNED	S.N	APPROVED	M.F.A

JOB NO.	DRAWING NO.	REV. NO.
P-066C	AIE-IBA-ST-08	0

AIE-IBA-ST-08.dwg

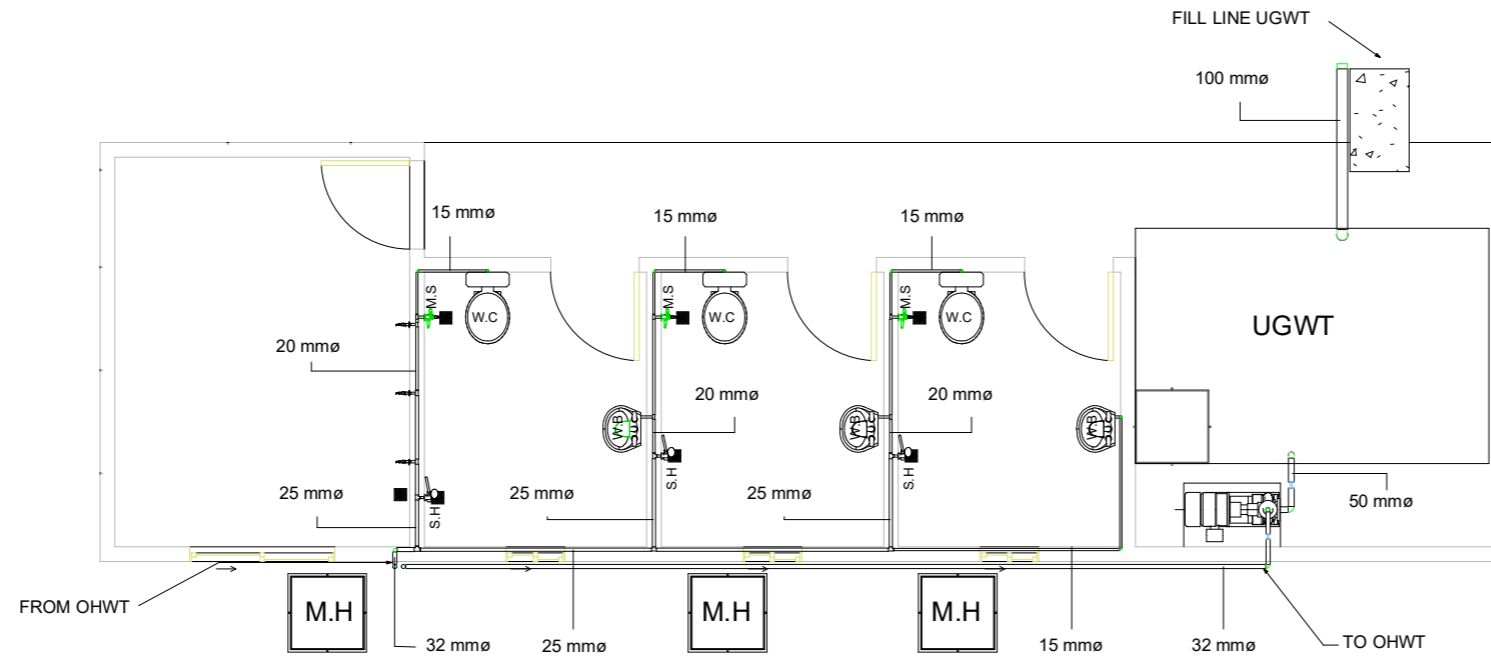


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 - ALL FOOTINGS HAVE BEEN DESIGNED FOR A NET ALLOWABLE BEARING CAPACITY OF 1.0TSF AT -5'-0" BELOW EXISTING ROAD LEVEL AS PER GEOTECHNICAL INVESTIGATION REPORT.
 - FOUNDATION SHOULD BE PLACED AT MINIMUM 5'-0" FT. BELOW EXISTING GROUND LEVEL.
 - ALL FOUNDATION TO BE PLACED ON WELL COMPACTED SUB-GRADE (min. 95% MDD) USING APPROPRIATE COMPACTION EQUIPMENT. IF ANY LOOSE FILL MATERIAL IS ENCOUNTERED AT THIS LEVEL, IT MUST BE REPLACED WITH ENGINEERED FILL TO ITS FULL EXTENT.
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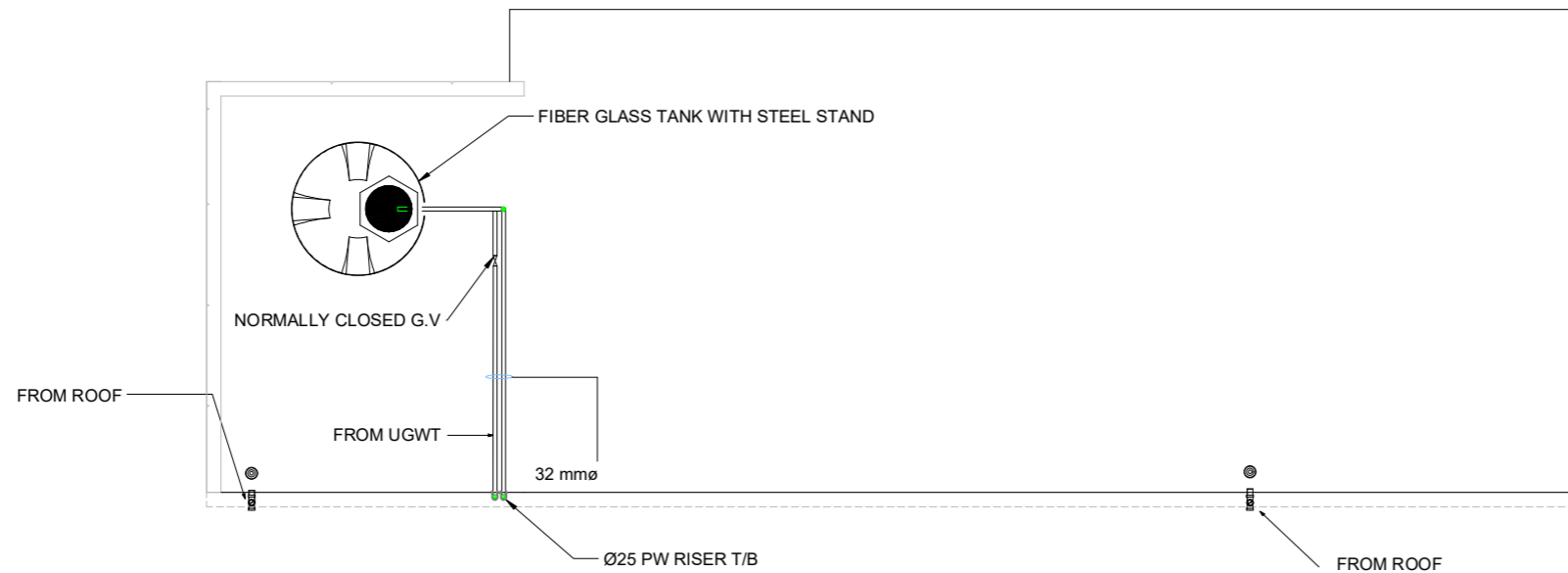
REV	DATE	DESCRIPTION	SIGN
AMENDMENTS			
PROJECT: REHABILITATION OF METALED ROAD AT KARACHI UNIVERSITY IBA KARACHI			
CLIENT:  Institute of Business Administration Karachi <small>Leadership and Ethics for Tomorrow</small>			
ENGINEERING CONSULTANT:  AI Engineers <small>Member of the Pakistan Engineering Council</small> 1st Floor, IEP Building, 177/2, Liaquat Barracks, Main Shahr-e-Faisal, Karachi 75530, Pakistan Email: info_pk@aieengineers.com			
TITLE: MAIN GATE & BOUNDARY WALL DETAILS			
STATUS TENDER DRAWING			
SCALE	N.T.S	DATE	OCT-2024
DRAWN	H.G	CHECKED	M.A
DESIGNED	S.N	APPROVED	M.F.A
JOB NO.	P-066C	DRAWING NO.	AIE-IBA-ST-09
		REV. NO.	0

PLUMBING DRAWINGS


AIE-IBA-WA-01 & AIE-IBA-SW-01.dwg



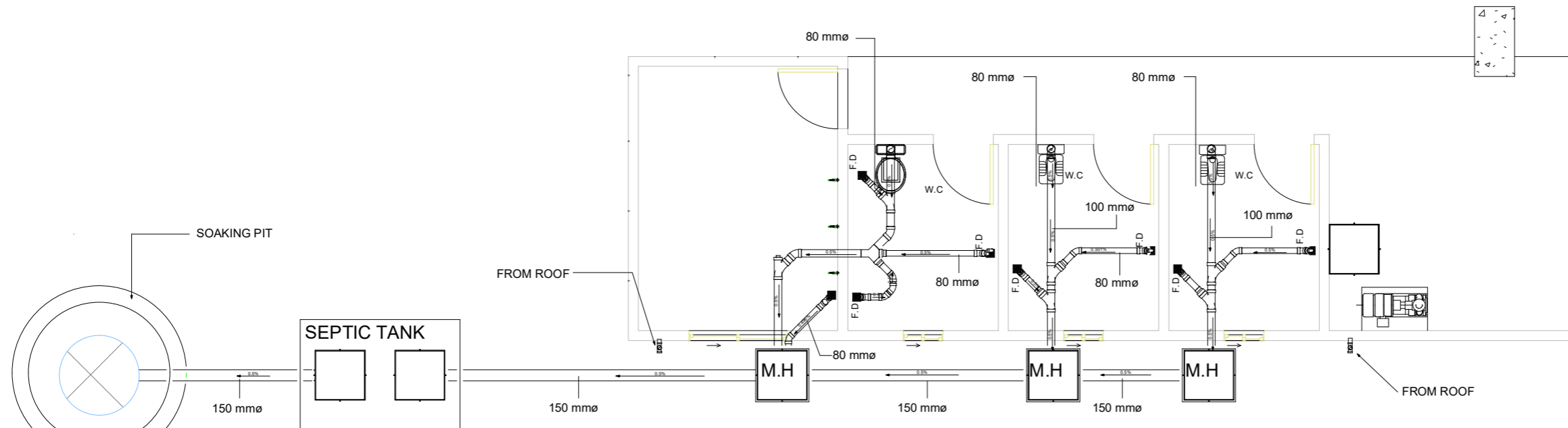
GROUND FLOOR PLAN



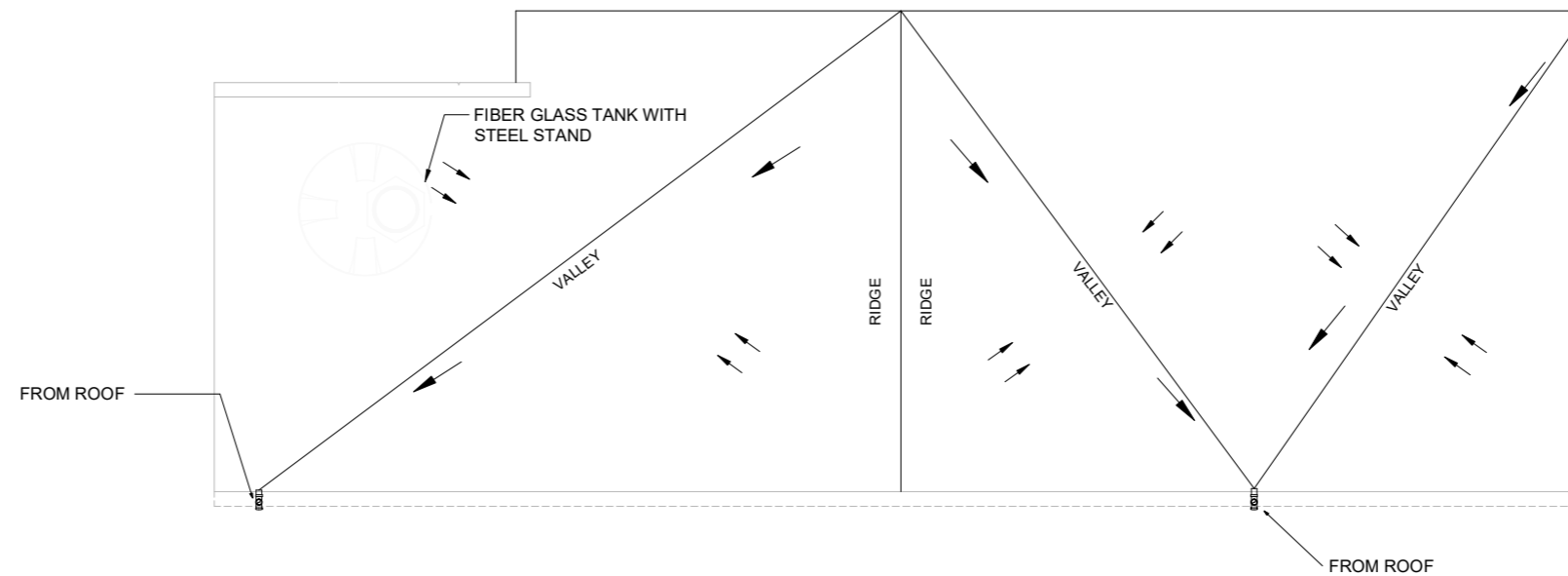
ROOF PLAN

REV	DATE	DESCRIPTION	SIGN
AMENDMENTS			
PROJECT: REHABILITATION OF METELED RAOD AT KARACHI UNIVERSITY IBA KARACHI			
CLIENT:  Institute of Business Administration Karachi <small>Creating the Next Generation</small>			
ENGINEERING CONSULTANT:  AI Engineers <small>1st Floor, IEP Building, 177/2, Liaquat Barracks, Main Shahrah-e-Faisal, Karachi 75530, Pakistan Email: info_pk@aiengineers.com</small>			
TITLE: EXTERNAL WATER SUPPLY LAYOUT			
STATUS TENDER DRAWING			
SCALE	N.T.S	DATE	DEC.-2024
DRAWN	H.G	CHECKED	M.A
DESIGNED	S.N	APPROVED	M.F.A
JOB NO.	P-066C	DRAWING NO.	AIE-IBA-WA-01
		REV. NO.	0

AIE-IBA-WA-01 & AIE-IBA-SW-01.dwg





GROUND FLOOR PLAN

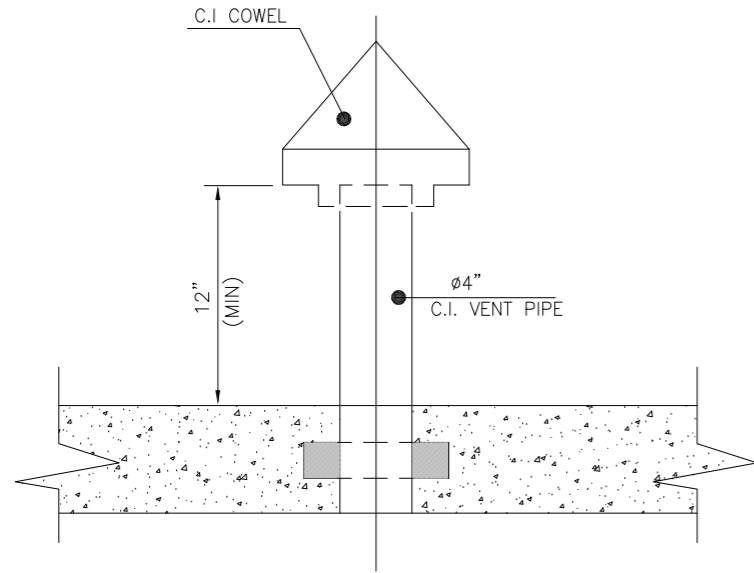


ROOF PLAN

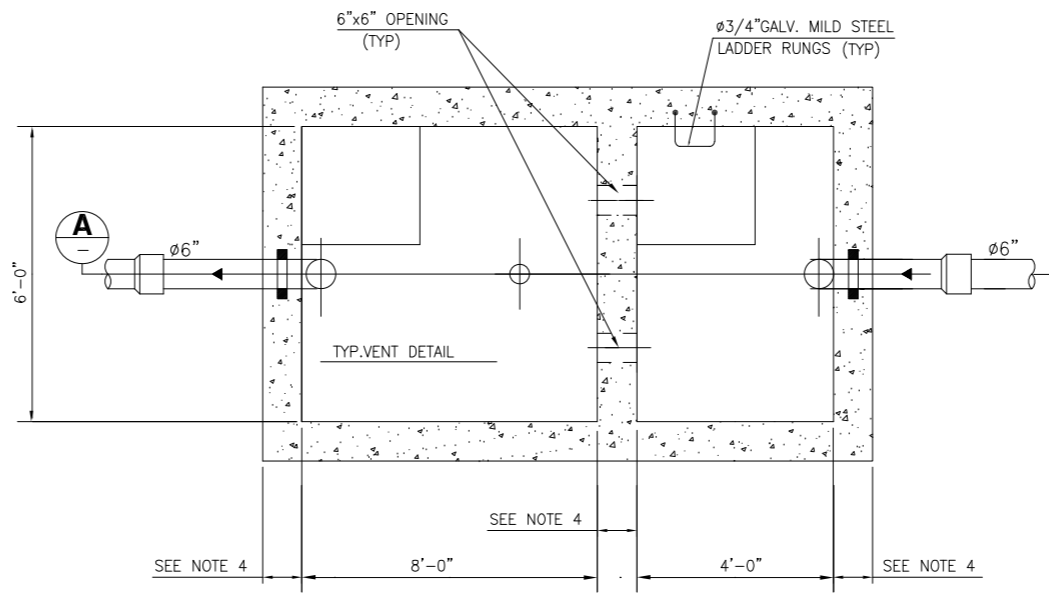
NOTES.

1. ALL DIMENSIONS AND LEVELS SHOWN ARE IN METER UNLESS OTHER WISE STATED.
2. THE CONTRACTOR WILL NOTIFY TO THE ENGINEER IF ANY DISCREPANCY FOUND IN THE LEVELS AND SLOPE OF MANHOLES BEFORE EXECUTION.

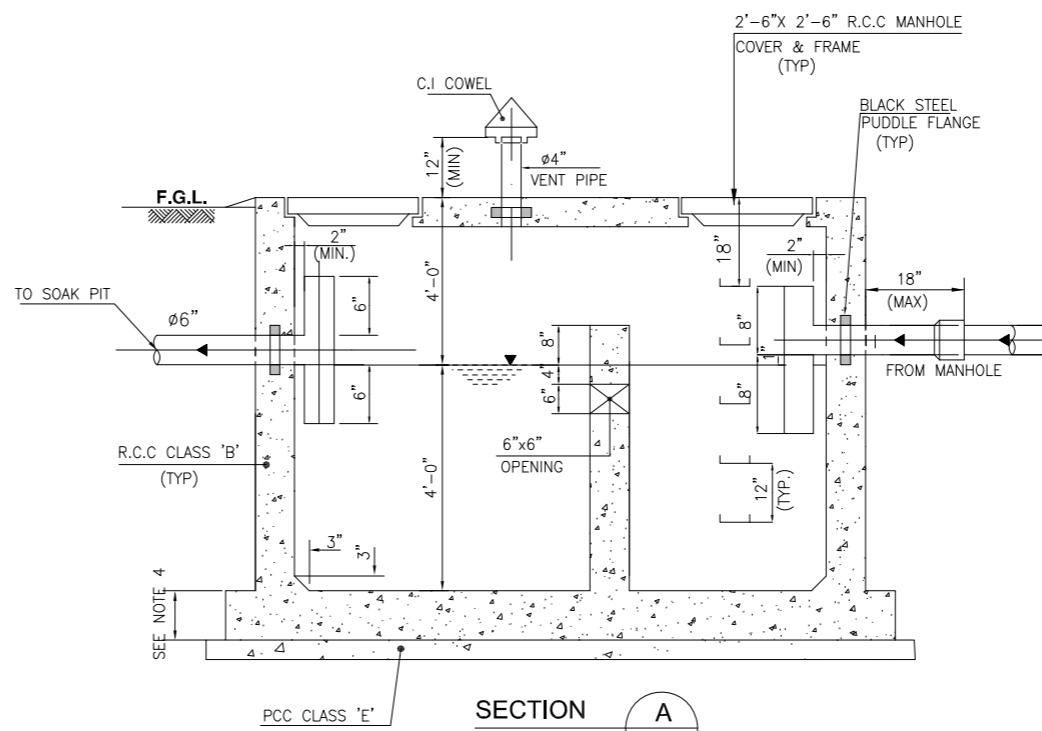
REV	DATE	DESCRIPTION	SIGN
AMENDMENTS			
PROJECT: REHABILITATION OF METELED ROAD AT KARACHI UNIVERSITY IBA KARACHI			
CLIENT:  Institute of Business Administration Karachi			
ENGINEERING CONSULTANT:  AI Engineers 1st Floor, IEP Building, 177/2, Liaquat Barracks, Main Shahrah-e-Faisal, Karachi 75530, Pakistan Email: info_pk@aiengineers.com			
TITLE: EXTERNAL SEWERAGE LAYOUT			
STATUS TENDER DRAWING			
SCALE	N.T.S	DATE	DEC.-2024
DRAWN	H.G	CHECKED	M.A
DESIGNED	S.N	APPROVED	M.F.A
JOB NO.	P-066C	DRAWING NO.	AIE-IBA-SW-01
REV. NO.	0		



TYP. VENT PIPE DETAIL
SCALE : NTS.





SEPTIC TANK PLAN
SCALE : NTS.

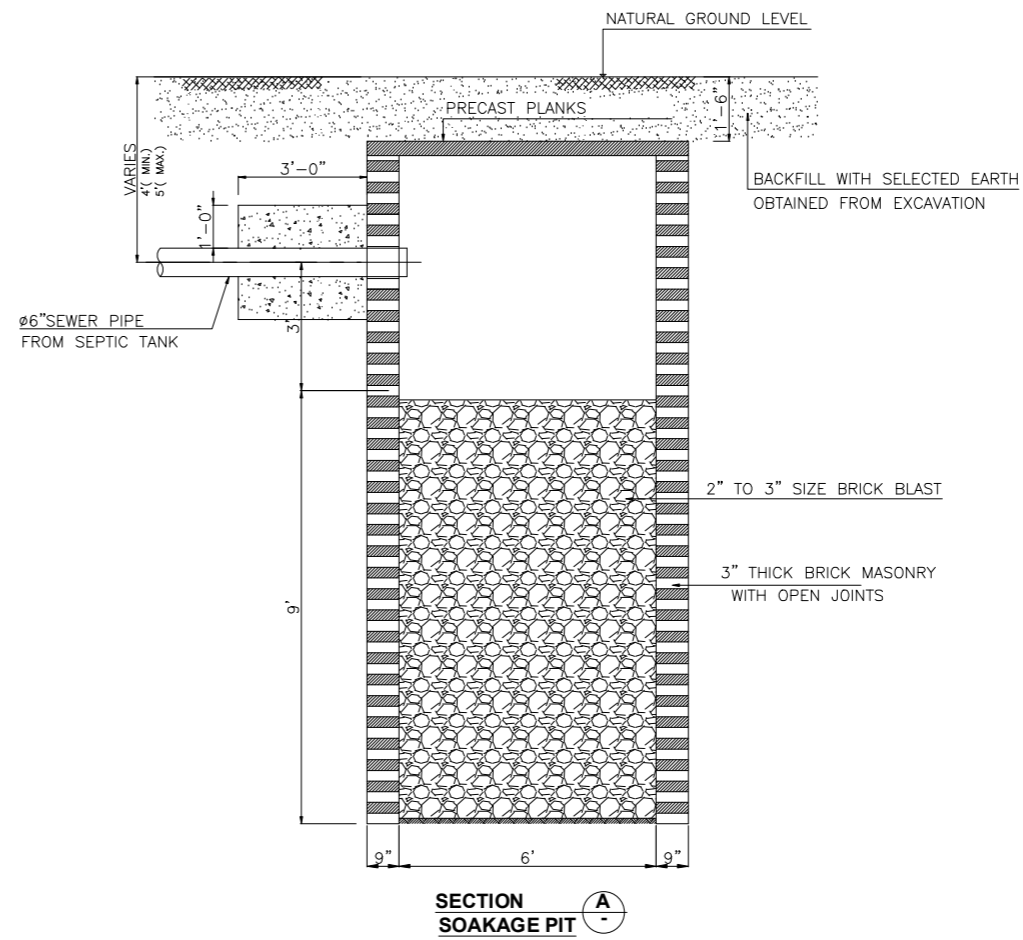
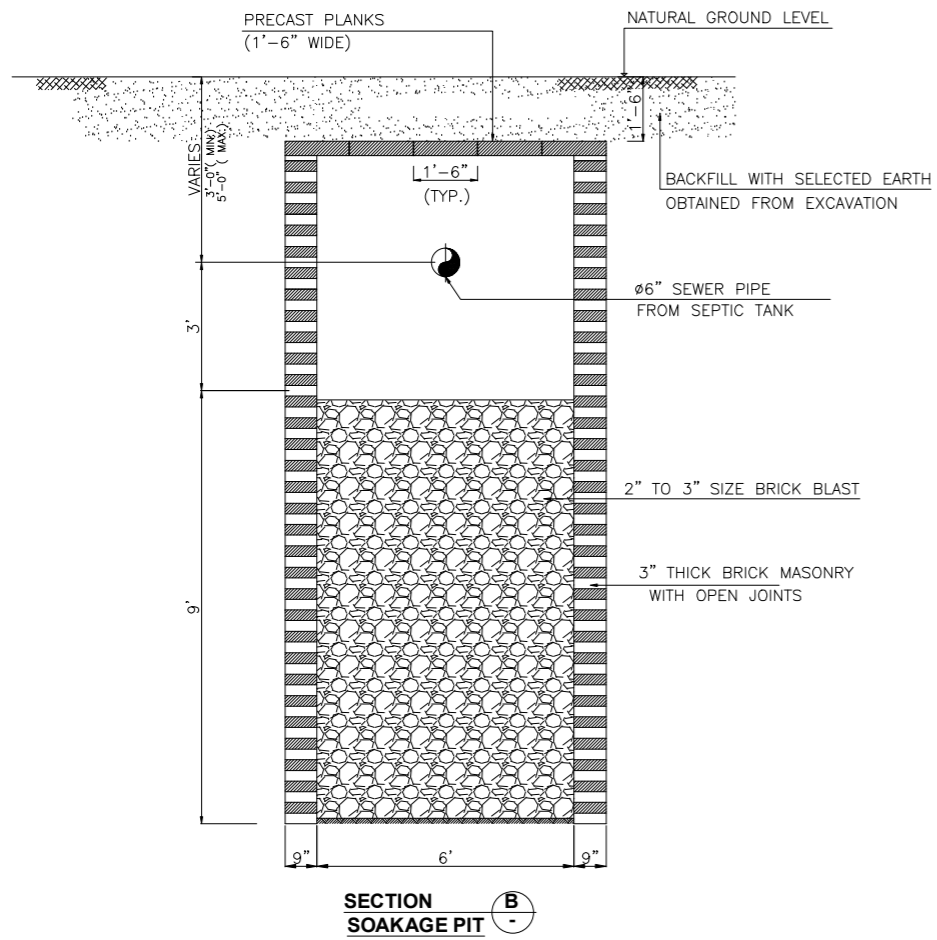
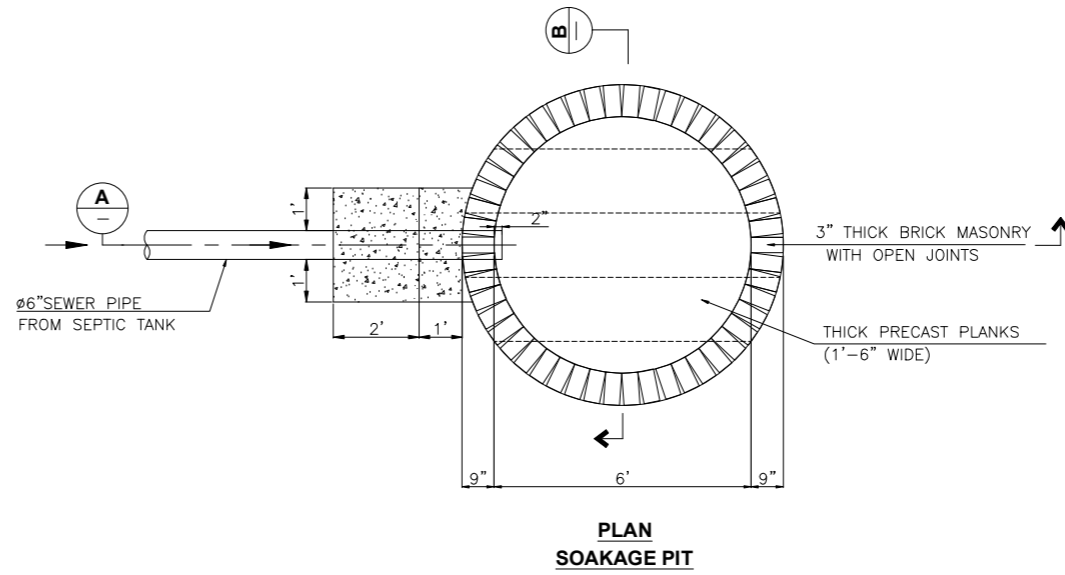




SECTION A
SCALE : NTS.

- NOTES:**
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REV	DATE	DESCRIPTION	SIGN
AMENDMENTS			
PROJECT: REHABILITAION OF METALED RAOD AT KARACHI UNIVERSITY IBA KARACHI			
CLIENT:  Institute of Business Administration Karachi <i>Leadership and Vision for Tomorrow</i>			
ENGINEERING CONSULTANT:  AI Engineers 1st Floor, IEP Building, 177/2, Liaquat Barracks, Main Shahr-e-Faisal, Karachi 75530, Pakistan Email: info_pk@aengineers.com			
TITLE: SEPTIC TANK DETAIL & SECTION			
STATUS TENDER DRAWING			
SCALE	NTS	DATE	OCT-2024
DRAWN	H.G	CHECKED	M.A
DESIGNED	S.N	APPROVED	M.F.A
JOB NO.	DRAWING NO.	REV. NO.	
P-066C	AIE-IBA-SW-02	0	

AIE-IBA-SW-03.dwg



REV	DATE	DESCRIPTION	SIGN
AMENDMENTS			
PROJECT: REHABILITATION OF METELED RAOD AT KARACHI UNIVERSITY IBA KARACHI			
CLIENT: 			
ENGINEERING CONSULTANT:  1st Floor, IEP Building, 177/2, Liaquat Barracks, Main Shahrah-e-Faisal, Karachi 75530, Pakistan. Email: info_pk@aiengineers.com			
TITLE: SOAKAGE PIT DETAIL & SECTION			
STATUS TENDER DRAWING			
SCALE	NTS	DATE	DEC.-2024
DRAWN	H.G	CHECKED	M.A
DESIGNED	S.N	APPROVED	M.F.A
JOB NO.	DRAWING NO.	REV. NO.	
P-066C	AIE-IBA-SW-03	0	

ELECTRICAL DRAWINGS

LEGENDS

SYMBOL	DESCRIPTION	MOUNTING
	DISTRIBUTION BOARD - DB	1350mm AFFL
	TRIPLE POLE, 500 VOLTS, MOLDED CASE CIRCUIT BREAKER (RUPTURING CAPACITY INDICATED ON DRAWINGS)	
	MINIATURE CIRCUIT BREAKER TRIPLE POLE 500 VOLTS (RUPTURING CAPACITY INDICATED ON DRAWING (32 AMPERES)	
	MINIATURE CIRCUIT BREAKER TRIPLE POLE 500 VOLTS (RUPTURING CAPACITY INDICATED ON DRAWING (32 AMPERES)	
	MINIATURE CIRCUIT BREAKER TRIPLE POLE 250 VOLTS (RUPTURING CAPACITY INDICATED ON DRAWING (32 AMPERES)	
	LOAD BREAK SWITCH (RUPTURING CAPACITY INDICATED ON DRAWING)	
	EARTH LEAKAGE CIRCUIT BREAKER FOUR POLE 500 VOLTS (TRIP RATING INDICATED ON DRAWING) (40 AMPERES)	
	INSTRUMENT PROTECTION FUSES (THREE NOS.)	
	PHASE INDICATION LAMPS R-RED Y-YELLOW B - BLUE	
	FOUR POLE MANUAL CHANGEOVER SWITCH	
	PULL BOX	CEILING / FLOOR

SCHEDULE OF LIGHT FIXTURE

FIX ID	SYMBOL	DESCRIPTION	COLOR TEMP.	MOUNTING
ALL LIGHTS SHALL HAVE VOLTAGE RANGE 120V -240V WITH MINIMUM 0.9PF				
A		15W LED DOWN LIGHT	4000K	CEILING / RECESSED
B		100W FLOOD LIGHT	4000K	WALL MOUNTED
C		80W EXHAUST FAN	4000K	WALL MOUNTED / RECESSED
D		100W CEILING FAN	4000K	WALL MOUNTED

ELECTRICAL CONDEUTING LAYERS

NAMES	LAYERS	ARROW
LIGHTING		
POWER		
UPC POWER		
DATA		
VOICE		
CCTV CAMERA		
EMERGENCY LIGHTS		
SPEAKER		
FIRE ALARM		

POWER & LOW CRENATE SYSTEMS FIXTURE

SYMBOL	DESCRIPTION
	5AMP UNIVERSAL SOCKETS
	15 / 13A MP UNIVERSAL SOCKETS
	15 / 5A MP HEIGHT PLUG UNIVERSAL SOCKETS
	FURNITURE OUTLET BOX AND FLOOR BOX
	DATA POINT
	TELEPHONE POINT
	CEILING MOUNTED WIFI POINT
	32A TP ISOLATOR / 20A DP ISOLATOR
	INSET KILLER POINT
	LIGHTING POWER DISTRIBUTION BOX
	INDOOR CEILING CAMERA POINT
	OUT DOOR WALL MOUNTED CAMERA POINT
	IT RACK
	NETWORK VIDEO RECORDER
	EMERGENCY LIGHT POINT
	EMERGENCY EXIT LIGHT POINT
	CEILING MOUNTED SPEAKER POINT
	AMPLIFIER
	DVD PLAYER
	FIRE ALARM CONTROL PANEL
	ELECTRIC SOUNDER POINT WITH FLASHER
	MANUAL CALL POINT
	HEAT DETECTOR POINT
	SMOKE DETECTOR POINT

NOTES

- THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE CIVIL, PLUMBING, HVAC, DRAWINGS & INSTALLATION WORK CAREFULLY COORDINATED ON SITE. EXACT LOCATION OF OUTLETS EQUIPMENT & ROUTING OF RACEWAYS ARE TO BE APPROVED BY THE ENGINEER/ARCHITECT.
- MINIMUM PVC CONDUIT SIZE SHALL BE 20mm DIA UNLESS OTHERWISE NOTED.
- MAXIMUM PVC CONDUIT CAPACITY FOR PVC CABLES SHALL BE AS FOLLOWS:

CONDUIT	CABLES(sq.mm)	1.5	2.5	4.0	6.0	10	16	25
20mm DIA		8	6	4	3	2	-	-
25mm DIA		18	11	8	6	4	3	2
32mm DIA		26	17	13	10	6	4	3

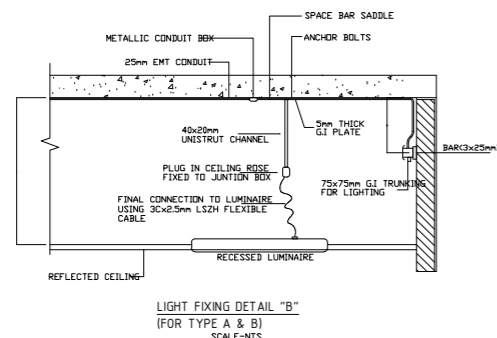
- SINGLE CORE LSZH INSULATED WIRE SIZES SHALL BE AS FOLLOWS:
 LIGHT/FAN/Socket/BELL POINT 2x1.5 sq.mm + 1.5 sq.mm CPC
 LIGHT CIRCUIT (FROM SWITCH TO DB) 2x2.5 sq.mm + 2.5 sq.mm CPC
 15AMP SOCKET OUTLET 2x4.0 sq.mm + 4.0 sq.mm CPC
 15AMP SOCKET OUTLET IN PARALLEL 2x4.0 sq.mm + 4.0 sq.mm CPC
- EACH LIGHT/POWER CIRCUIT SHALL BE LAID IN A SEPARATE CONDUIT FROM THE DB
- SEPARATE CONDUITS (MIN 25mm DIA) SHALL BE LAID FOR EACH OF THE TELEPHONE/VOICE, FIRE ALARM, CCTV, PA, SECURITY, DATA, CENTRALISED POWER CONDITIONING SYSTEMS CABLES.
- CAREFULLY COORDINATE CONDUIT DROPS/RISERS WITH WALL POSITIONS.
- NO CHASING /CUTTING OF THE STRUCTURE SHALL BE CARRIED OUT UNLESS PRIOR WRITTEN PERMISSION IS OBTAINED FROM THE ENGINEER/ARCHITECT.
- OUTLETS ALONG BASIN/COUNTERS SHALL BE AT 1000mm AFFL.
- SWITCHES ON DIFFERENT PHASES (OR ON EMERGENCY CIRCUITS) SHALL BE INSTALLED IN SEPARATE BACK-BOXES
- BACK-BOXES (WITH EARTH TERMINAL) & PULL BOXES SHALL BE OF 18 SWG G.I SHEET STEEL.
- CIRCUITS IN DB(S) ARE TO BE ARRANGED IN SUCH A WAY THAT LOAD BALANCING IS ACHIEVED. ALL SINGLE PHASE CIRCUIT CABLES ARE TO BE IN RED COLOR AND LABELED AND THREE PHASE CIRCUIT CABLING SHALL BE IN RED, YELLOW & BLUE. LOAD DISTRIBUTION / CIRCUIT MAPPING SHEET TO BE PROVIDED IN DB AS PER CONSULTANT'S INSTRUCTIONS.
- ALL EXTERNAL EQUIPMENT SHALL BE WEATHER PROOF TYPE. IP56 OR IP65 AS REQUIRED.
- THE ENTIRE ELECTRICAL INSTALLATIONS AND METAL RACEWAYS SHALL BE PROPERLY EARTHED.
- SHOP DRAWING TO BE SUBMITTED FOR CONSULTANT'S APPROVAL BEFORE COMMENCEMENT OF WORK AND SHALL INCLUDE EXACT LOCATIONS OF OUTLETS, FIXTURES, EQUIPMENTS AND CONDUIT RUN, PULL BOXES, ETC. SHOP DRAWING SHALL BE COORDINATED WITH OTHER WORKS AND SERVICES ON SITE.
- MAXIMUM PVC/EMT CONDUIT CAPACITY FOR TELEPHONE CABLE SHALL BE AS FOLLOWS:-

CONDUIT	CABLES	2p	5p	7p	10p	15p	20p	25p	30p	50p
20mm DIA		4	2	1	-	-	-	-	-	-
25mm DIA		7	3	2	1	1	1	1	1	-
32mm DIA		14	5	3	3	3	2	2	1	-
38mm DIA		18	6	6	4	4	3	2	2	1
50mm DIA		-	-	-	6	6	4	4	3	1

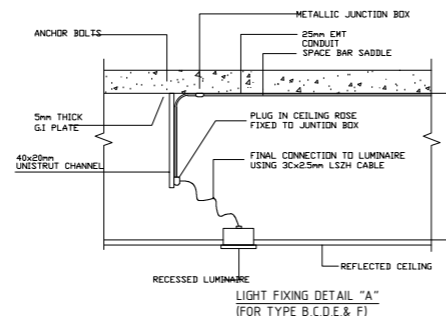
NOTES.

1. NO PORTION EITHER FULL OR PART OF THIS DRAWING MAY BE DUPLICATED, COPIED, SCANNED, REPRODUCED OR USED IN ANY TECHNICAL OR COMMERCIAL PURPOSE WITHOUT PRIOR WRITTEN PERMISSION FROM ARCHITECT.
2. THIS DRAWING IS NOT TO BE SCALED ONLY WRITTEN DIMENSION TO BE USED.
3. ALL DIMENSIONS ARE TO BE RECHECKED AND VERIFIED ON SITE.
4. ANY DISCREPANCY IS TO BE BROUGHT TO THE ATTENTION OF ARCHITECT PRIOR TO COMMENCEMENT OF WORK ON SITE.

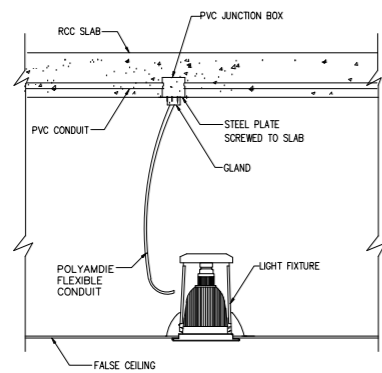
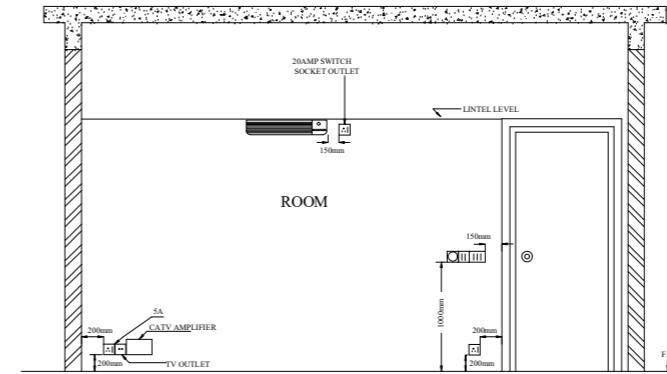
REV	DATE	DESCRIPTION	SIGN
AMENDMENTS			
PROJECT: REHABILITATION OF METALED ROAD AT KARACHI UNIVERSITY			
CLIENT: Institute of Business Administration Karachi			
ENGINEERING CONSULTANT: 1st Floor, IEP Building, 177/2, Liaquat Barracks, Main Shahr-e-Faisal, Karachi 75530, Pakistan Email: info_pk@aengineers.com			
TITLE: GATE PAN & ELECTRICAL WORKING LEGEND			
STATUS TENDER DRAWING			
SCALE	N.T.S	DATE	DEC.-2024
DRAWN	H.G	CHECKED	M.A
DESIGNED	S.N	APPROVED	M.F.A
JOB NO.	DRAWING NO.	REV. NO.	
P-066C	AIE-IBA-EL-01	0	



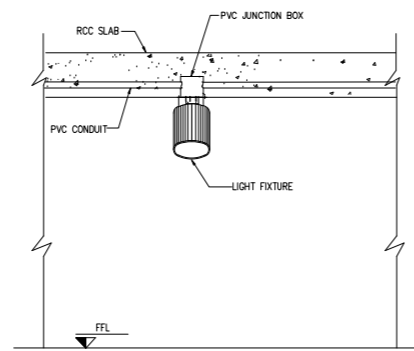
LIGHT FIXING DETAIL "B"
(FOR TYPE A & B)
SCALE-NTS



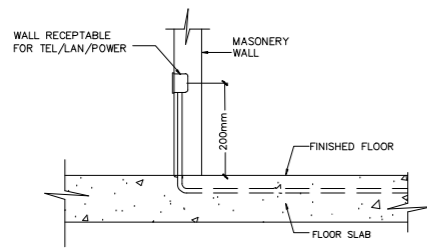
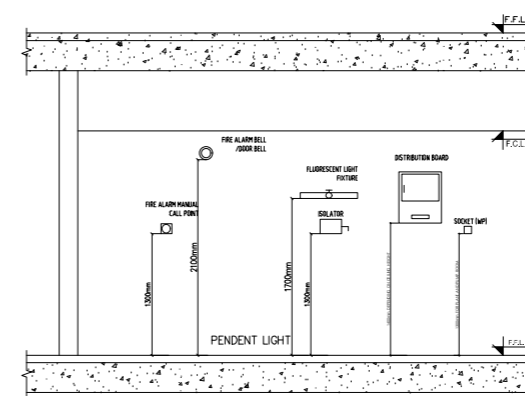
LIGHT FIXING DETAIL "A"
(FOR TYPE B, C, D, E, & F)
SCALE-NTS



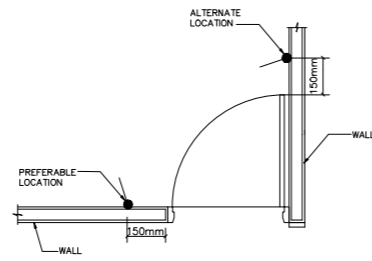
RECESSED LUMINAIRE INSTALLATION DETAIL



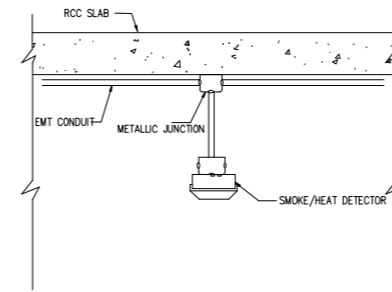
SURFACE LUMINAIRE INSTALLATION DETAIL



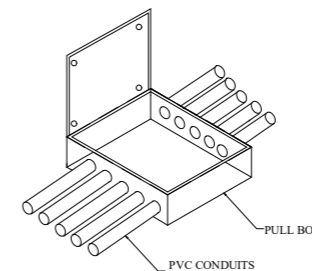
RECEPTACLE INSTALLATION DETAIL



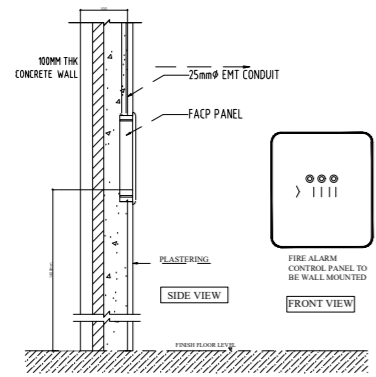
SWITCH LOCATION DETAIL



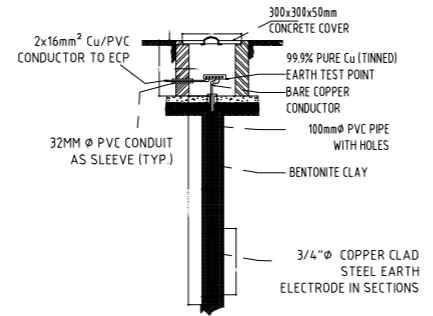
FIRE ALARM SYSTEM FLEXIBLE CONDUIT



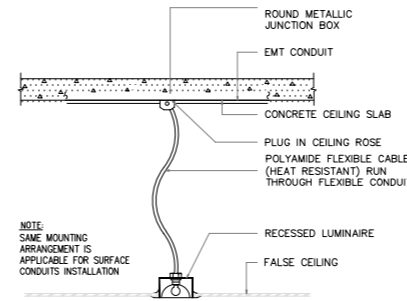
PULL BOX INSTALLATION DETAIL



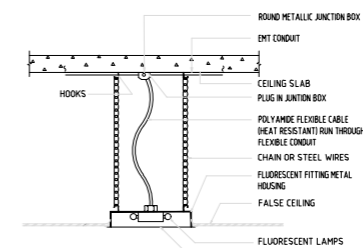
FIRE ALARM PANEL INSTALLATION DETAILS



EARTHING / GROUNDING DETAIL



RECESSED LUMINAIRE INSTALLATION DETAIL



RECESSED LUMINAIRE INSTALLATION DETAIL

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REV	DATE	DESCRIPTION	SIGN
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AMENDMENTS

PROJECT: REHABILITATION OF METALED ROAD AT KARACHI UNIVERSITY

CLIENT:

ENGINEERING CONSULTANT:

1st Floor, IEP Building, 177/2, Liaquat Barracks, Main Shahr-e-Faisal, Karachi 75530, Pakistan
Email: info_pk@aengineers.com

TITLE: ELECTRICAL STANDARD DETAILS

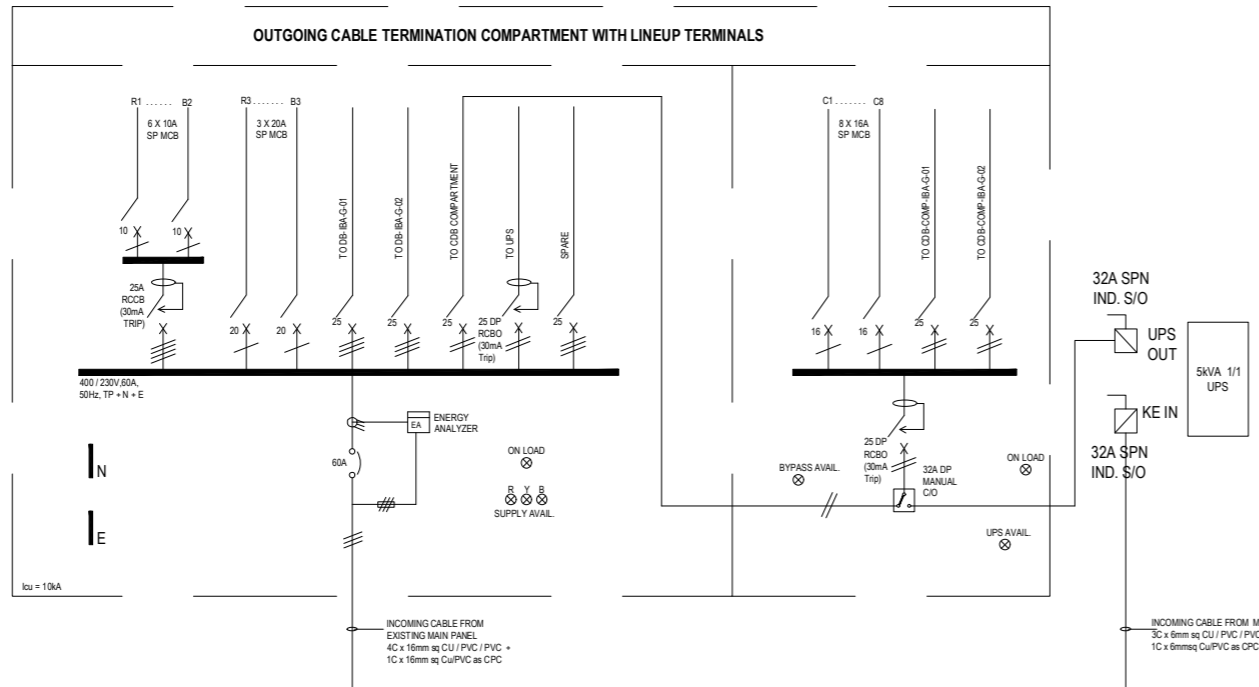
STATUS: TENDER DRAWING

SCALE	N.T.S	DATE	DEC.-2024
DRAWN	H.G	CHECKED	M.A
DESIGNED	S.N	APPROVED	M.F.A

JOB NO.	DRAWING NO.	REV. NO.
P-066C	AIE-IBA-EL-02	0

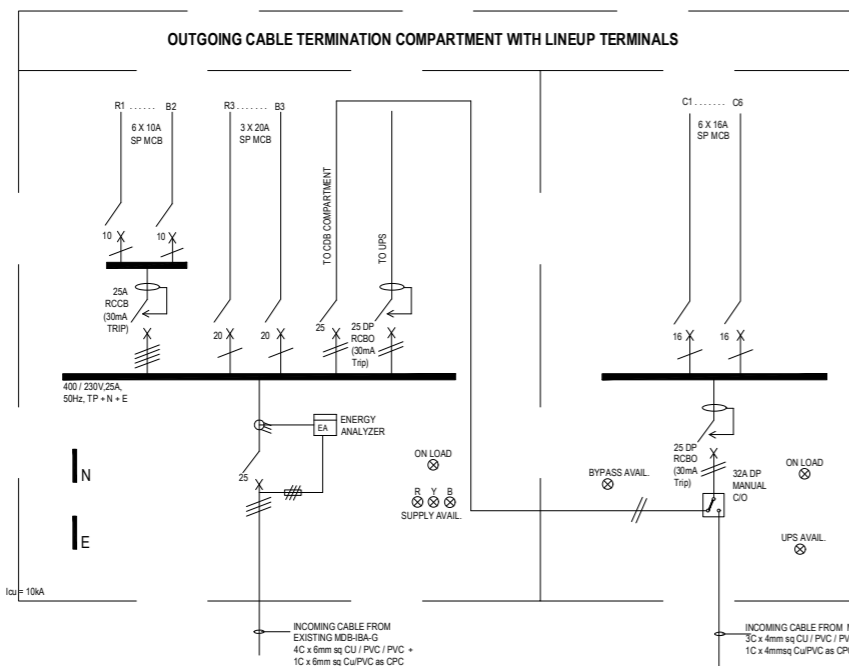
MDB-IBA-G

CABLE	3 x 1C x 2.5sq mm Cu / PVC	3 x 1C x 4.0sq mm Cu/PVC	DB-IBA-G-01	DB-IBA-G-02	TO DB COMP-IBA-G-01	TO DB COMP-IBA-G-02
CIRCUITS IN USE	R1 TO B1	R3				
SPARE CIRCUITS	R2 TO B2	Y3 TO B3				
USAGE	LIGHTING / 13A UNIVERSAL SOCKET	PUMP				



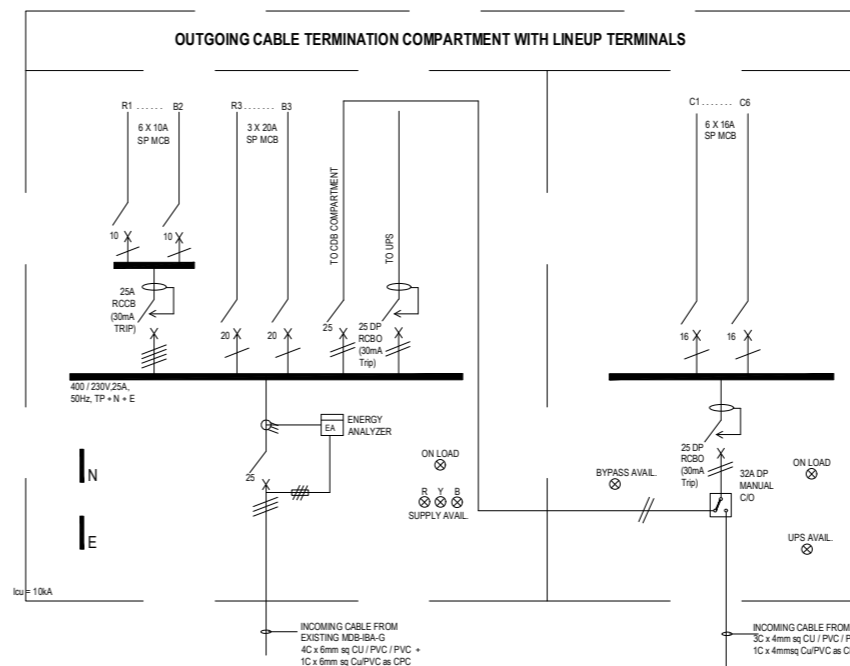
DB-IBA-G-01

CABLE	3 x 1C x 2.5sq mm Cu / PVC	3 x 1C x 4.0sq mm Cu/PVC	TO DB COMPARTMENT	TO UPS
CIRCUITS IN USE	R1 TO B1	R3 TO Y3		
SPARE CIRCUITS	R2 TO B2	B3		
USAGE	LIGHTING / 13A UNIVERSAL SOCKET	15A UNIVERSAL SOCKET		



DB-IBA-G-02

CABLE	3 x 1C x 2.5sq mm Cu / PVC	3 x 1C x 4.0sq mm Cu/PVC	TO DB COMPARTMENT	TO UPS
CIRCUITS IN USE	R1 TO B1			
SPARE CIRCUITS	R2 TO B2	R3 TO B3		
USAGE	LIGHTING / 13A UNIVERSAL SOCKET	15A UNIVERSAL SOCKET		



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REV	DATE	DESCRIPTION	SIGN
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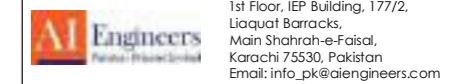
AMENDMENTS

PROJECT: REHABILITATION OF METALED ROAD AT KARACHI UNIVERSITY

CLIENT:



ENGINEERING CONSULTANT:



TITLE:

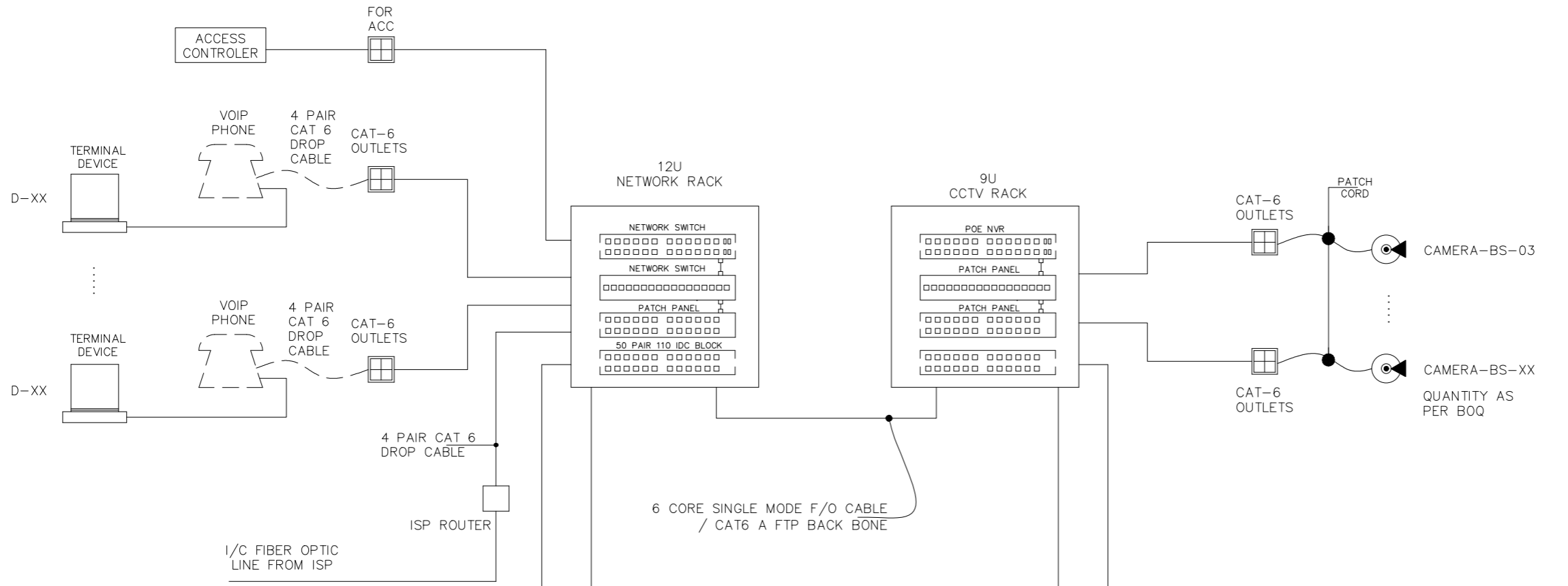
SINGLE LINE DIAGRAM

STATUS: TENDER DRAWING

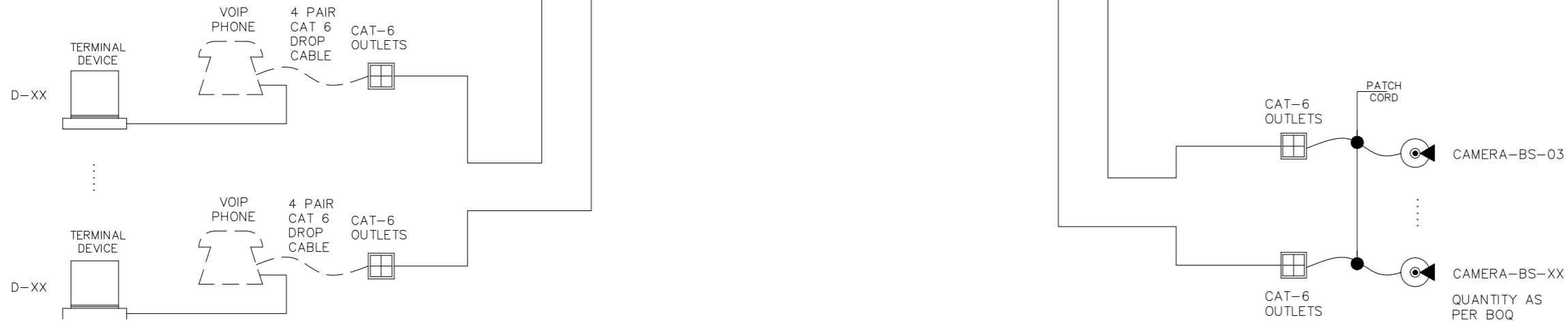
SCALE	N.T.S	DATE	DEC.-2024
DRAWN	H.G	CHECKED	M.A
DESIGNED	S.N	APPROVED	M.F.A

JOB NO.	DRAWING NO.	REV. NO.
P-066C	AIE-IBA-EL-03	0

SCHEMATIC - DATA, VOICE & CCTV



FIRST FLOOR



GROUND FLOOR

NOTES.

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REV	DATE	DESCRIPTION	SIGN
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AMENDMENTS

PROJECT: REHABILITATION OF METALED ROAD AT KARACHI UNIVERSITY

CLIENT:



ENGINEERING CONSULTANT:



1st Floor, IEP Building, 177/2, Liaquat Barracks, Main Shahr-e-Faisal, Karachi 75530, Pakistan
Email: info_pk@aengineers.com

TITLE: SCHEMATIC DIAGRAM

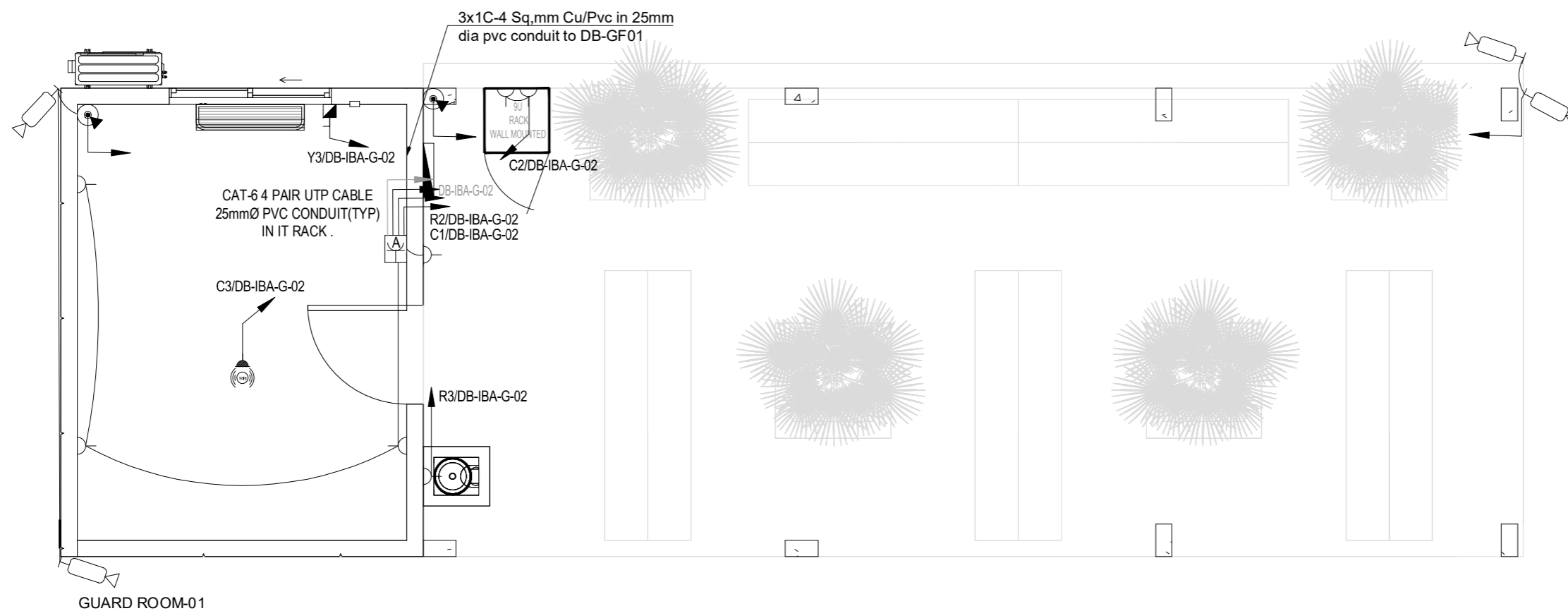
STATUS: TENDER DRAWING

SCALE	N.T.S	DATE	DEC.-2024
DRAWN	H.G	CHECKED	M.A
DESIGNED	S.N	APPROVED	M.F.A

JOB NO.	DRAWING NO.	REV. NO.
P-066C	AIE-IBA-EL-04	0

GH-MEP ELECTRICAL.dwg

GH-MEP ELECTRICAL.dwg



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REV	DATE	DESCRIPTION	SIGN
AMENDMENTS			

PROJECT:
REHABILITATION OF METALED ROAD AT KARACHI UNIVERSITY

CLIENT:



ENGINEERING CONSULTANT:



1st Floor, IEP Building, 177/2,
Liaquat Barracks,
Main Shahr-e-Faisal,
Karachi 75530, Pakistan
Email: info_pk@aengineers.com

TITLE:
POWER LAYOUT PLAN

STATUS
TENDER DRAWING

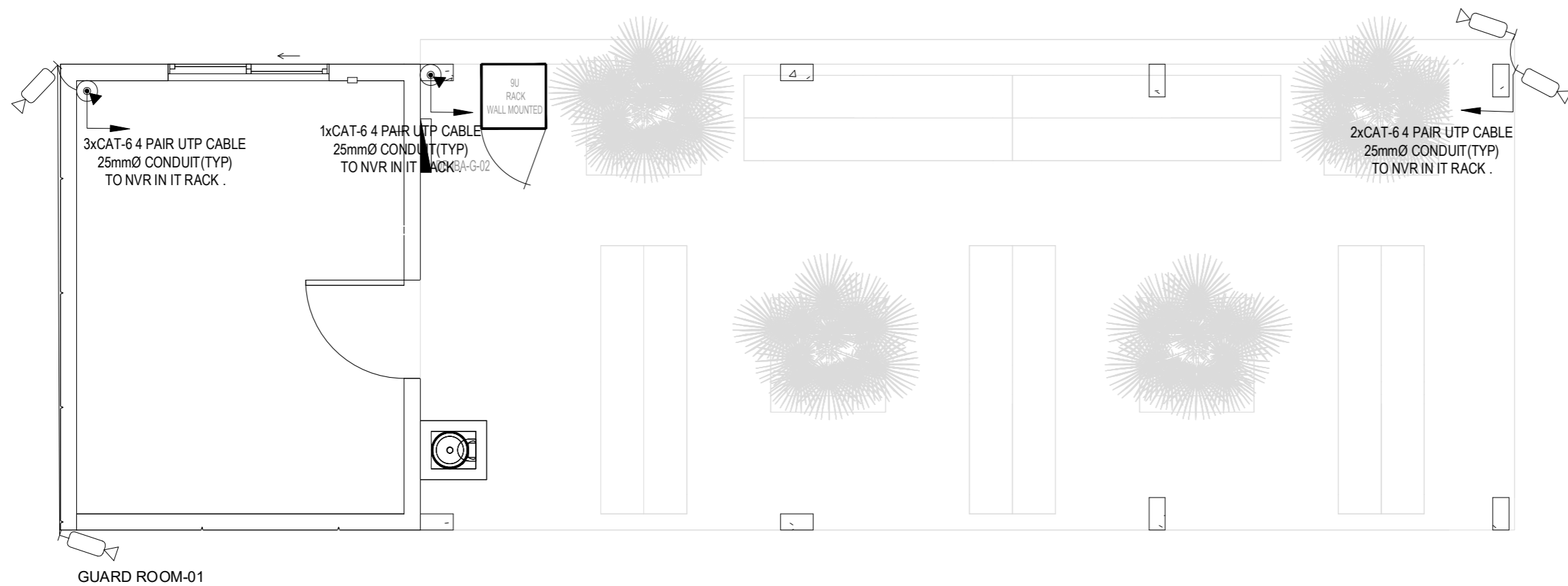
SCALE	N.T.S	DATE	DEC.-2024
DRAWN	H.G	CHECKED	M.A
DESIGNED	S.N	APPROVED	M.F.A

JOB NO.	DRAWING NO.	REV. NO.
P-066C	AIE-IBA-EL-05	0

SYMBOL	DESCRIPTION
	13A UNIVERSAL SOCKET
	13A UNIVERSAL SOCKET (HEIGHT)
	FURNITURE BOX
	INSECT KILLER
	20A DOUBLE POLE SWITCH
	ISOLATOR
	HAND DRYER
	VOICE POINT
	DATA POINT
	HOME POINT
	WIRE POINT

SYMBOL	13A SOCKET FLAT PIN (UPS)	13A SOCKET UNIVERSAL (KE)	DATA (CAT6 RJ45)	VOICE (CAT6 RJ45)
	A	2	1	1
	B	2	1	2
	(C)	1	1	

GH-MEP ELECTRICAL.dwg



GUARD ROOM-01

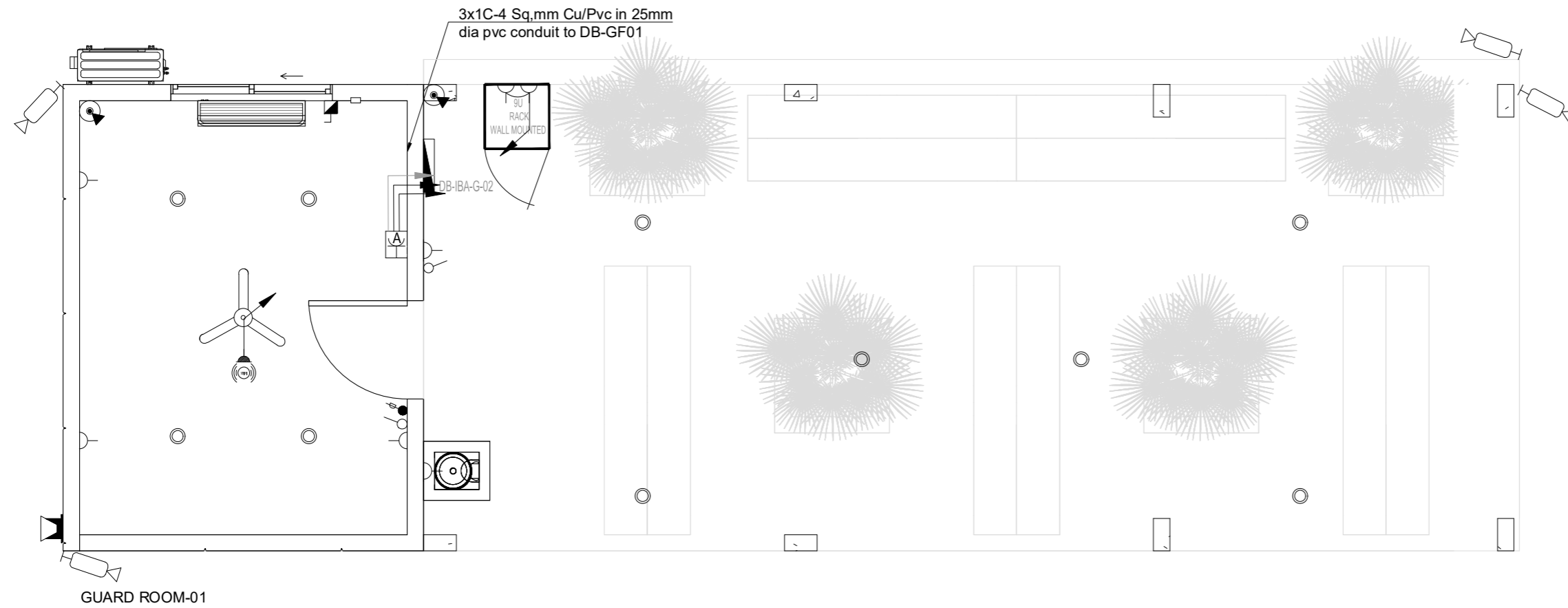
FIXTURE SCHEDULE	
SYMBOL	DESCRIPTION
	CEILING EM LIGHTS / WALL EM LIGHTS
	EXIT LIGHT
	DOME CAMERA (INDOOR)
	BULLET CAMERA (OUTDOOR)

NOTES.

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5. ANY DISCREPANCY IS TO BE BROUGHT TO THE ATTENTION OF ARCHITECT PRIOR TO COMMENCEMENT OF WORK ON SITE.

REV	DATE	DESCRIPTION	SIGN
AMENDMENTS			
PROJECT: REHABILITATION OF METELED ROAD AT KARACHI UNIVERSITY			
CLIENT: Institute of Business Administration Karachi <small>University of the Punjab</small>			
ENGINEERING CONSULTANT: 1st Floor, IEP Building, 177/2, Liaquat Barracks, Main Shahr-e-Faisal, Karachi 75530, Pakistan Email: info_pk@aiengineers.com			
TITLE: CCTV LAYOUT PLAN			
STATUS TENDER DRAWING			
SCALE	N.T.S	DATE	DEC.-2024
DRAWN	H.G	CHECKED	M.A
DESIGNED	S.N	APPROVED	M.F.A
JOB NO.	P-066C	DRAWING NO.	AIE-IBA-EL-06
		REV. NO.	0

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5. ANY DISCREPANCY IS TO BE BROUGHT TO THE ATTENTION OF ARCHITECT PRIOR TO COMMENCEMENT OF WORK ON SITE.

REV	DATE	DESCRIPTION	SIGN
AMENDMENTS			
PROJECT: REHABILITATION OF METALED ROAD AT KARACHI UNIVERSITY			
CLIENT: Institute of Business Administration Karachi			
ENGINEERING CONSULTANT: 1st Floor, IEP Building, 177/2, Liaquat Barracks, Main Shahr-e-Faisal, Karachi 75530, Pakistan. Email: info_pk@aengineers.com			
TITLE: RCP LAYOUT PLAN			
STATUS: TENDER DRAWING			
SCALE: N.T.S		DATE: DEC.-2024	
DRAWN: H.G		CHECKED: M.A	
DESIGNED: S.N		APPROVED: M.F.A	
JOB NO. P-066C	DRAWING NO. AIE-IBA-EL-07	REV. NO. 0	

SYMBOL	DESCRIPTION
	CEILING EM LIGHTS / WALL EM LIGHTS
	EXIT LIGHT
	DOME CAMERA (INDOOR)
	BULLET CAMERA (OUTDOOR)

SYMBOL	DESCRIPTION
	FIRE ALARM CONTROL PANEL
	SMOKE DETECTOR
	MANUEL CALL POINT
	ELECTRONIC SOUNDER WITH FLASHER
	SPEAKER
	AMPLIFIER
	VOLUME CONTROLLER

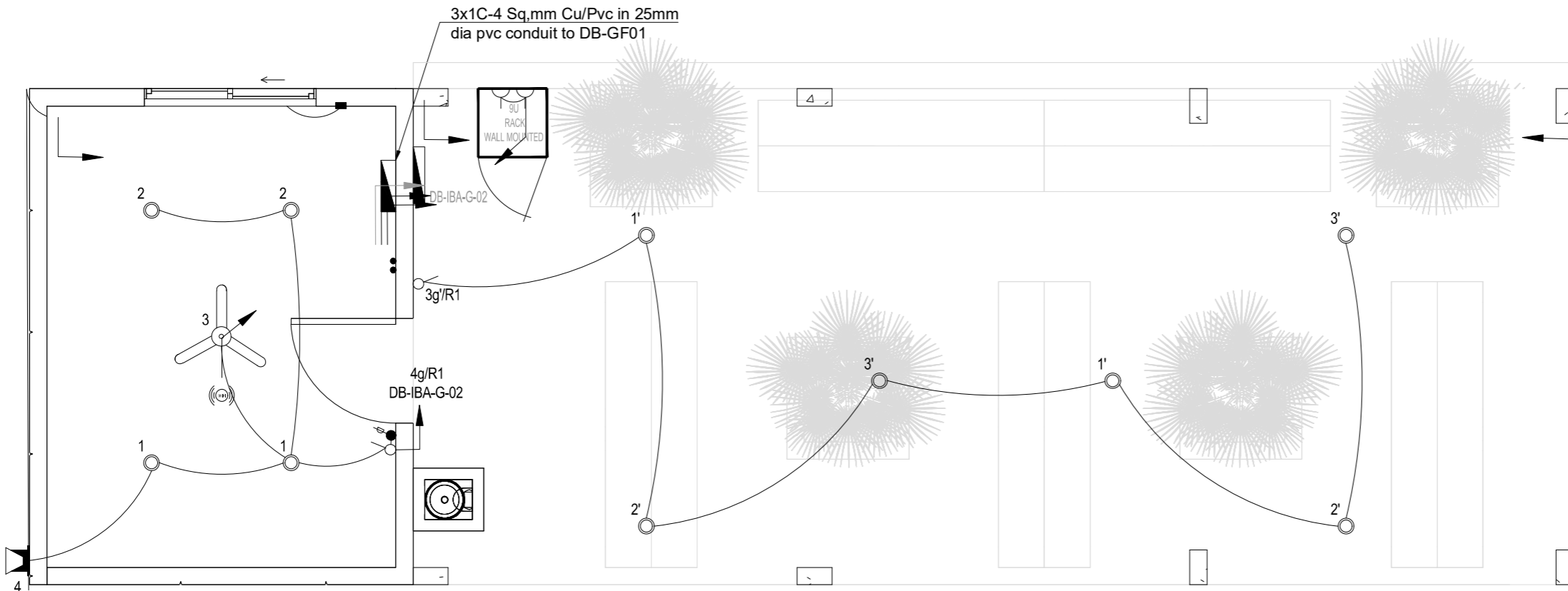
FIX ID	SYMBOL	DESCRIPTION	MOUNTING
A		15W LED DOWN LIGHT	CEILING / RECESSED
B		100W FLOOD LIGHT	WALL MOUNTED
C		80W EXHAUST FAN	WALL MOUNTED / RECESSED
D		100W CEILING FAN	WALL MOUNTED

SYMBOL	DESCRIPTION
	13A UNIVERSAL SOCKET
	13A UNIVERSAL SOCKET (RIGHT)
	FURNITURE BOX
	INSECT KILLER
	20A DOUBLE POLE SWITCH
	ISOLATOR
	HAND DRYER
	VOICE POINT
	DATA POINT
	HDMI POINT
	WiFi POINT

SYMBOL	13A SOCKET FLAT PIN (UPS)	13A SOCKET UNIVERSAL (KE)	DATA (CAT6 RJ45)	VOICE (CAT6 RJ45)
	2	1	1	1
	2	1	1	2
	1		1	

NOTES.

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GUARD ROOM-01

GH-MEP ELECTRICAL.dwg

LIGHT FIXTURE SCHEDULE

FIX ID	SYMBOL	DESCRIPTION	MOUNTING
A	○	15W LED DOWN LIGHT	CEILING / RECESSED
B	◼	100W FLOOD LIGHT	WALL MOUNTED
C	⊗	80W EXHAUST FAN	WALL MOUNTED / RECESSED
D	⊕	100W CEILING FAN	WALL MOUNTED

LIGHT FIXTURE SCHEDULE

FIX ID	SYMBOL	DESCRIPTION	MOUNTING
A	○	15W LED DOWN LIGHT	CEILING / RECESSED
B	◼	100W FLOOD LIGHT	WALL MOUNTED
C	⊗	80W EXHAUST FAN	WALL MOUNTED / RECESSED
D	⊕	100W CEILING FAN	WALL MOUNTED

REV	DATE	DESCRIPTION	SIGN

AMENDMENTS

PROJECT: **REHABILITATION OF METALED ROAD AT KARACHI UNIVERSITY**



ENGINEERING CONSULTANT:
AI Engineers (Pakistan Private Limited)
 1st Floor, IEP Building, 177/2, Liaquat Barracks, Main Shahr-eh-Faisal, Karachi 75530, Pakistan
 Email: info_pk@aengineers.com

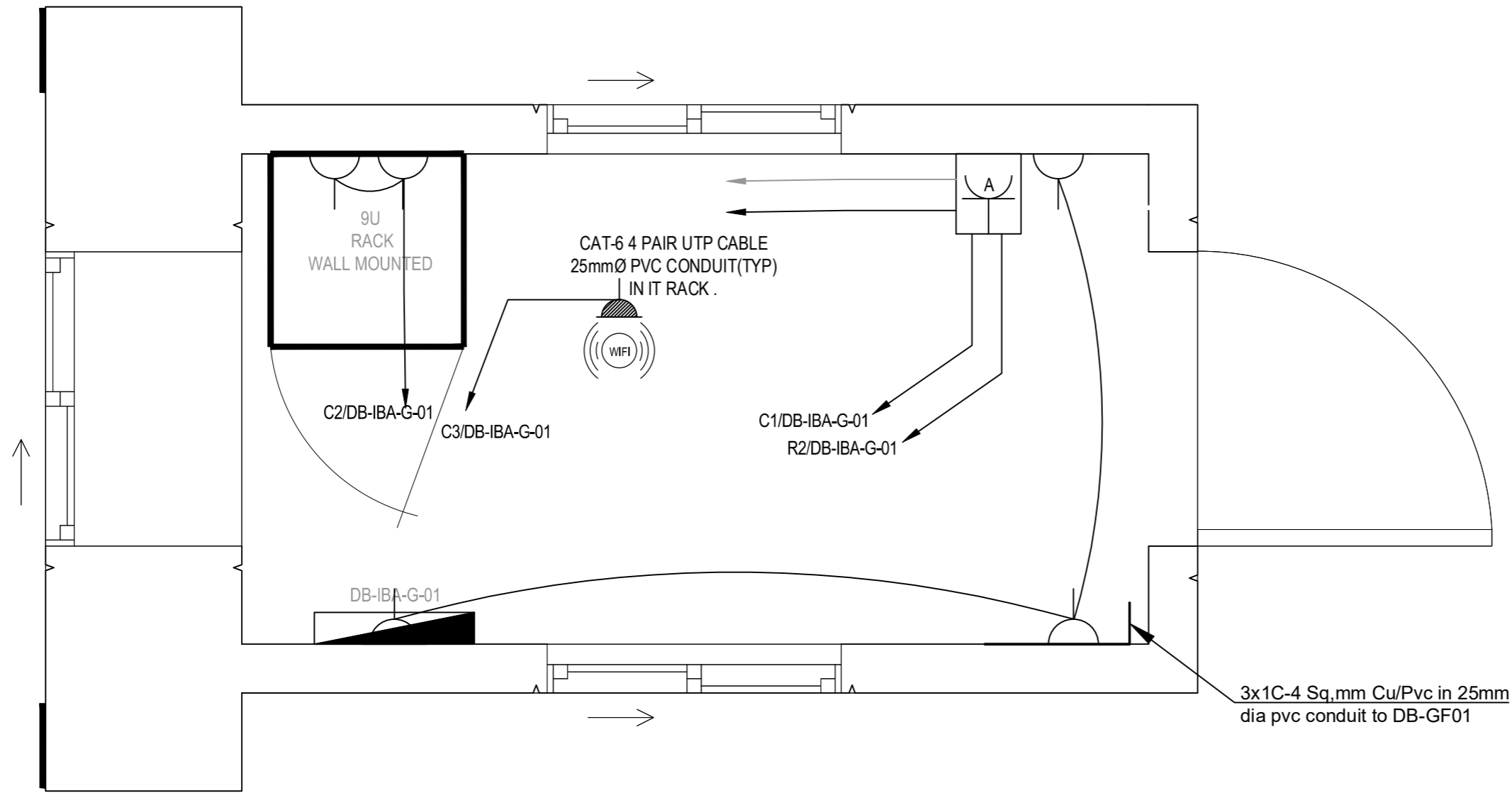
TITLE: **LIGHTING LAYOUT PLAN**

STATUS: **TENDER DRAWING**

SCALE	N.T.S	DATE	DEC.-2024
DRAWN	H.G	CHECKED	M.A
DESIGNED	S.N	APPROVED	M.F.A

JOB NO.	DRAWING NO.	REV. NO.
P-066C	AIE-IBA-EL-08	0

GH-MEP ELECTRICAL.dwg



GUARD ROOM-02

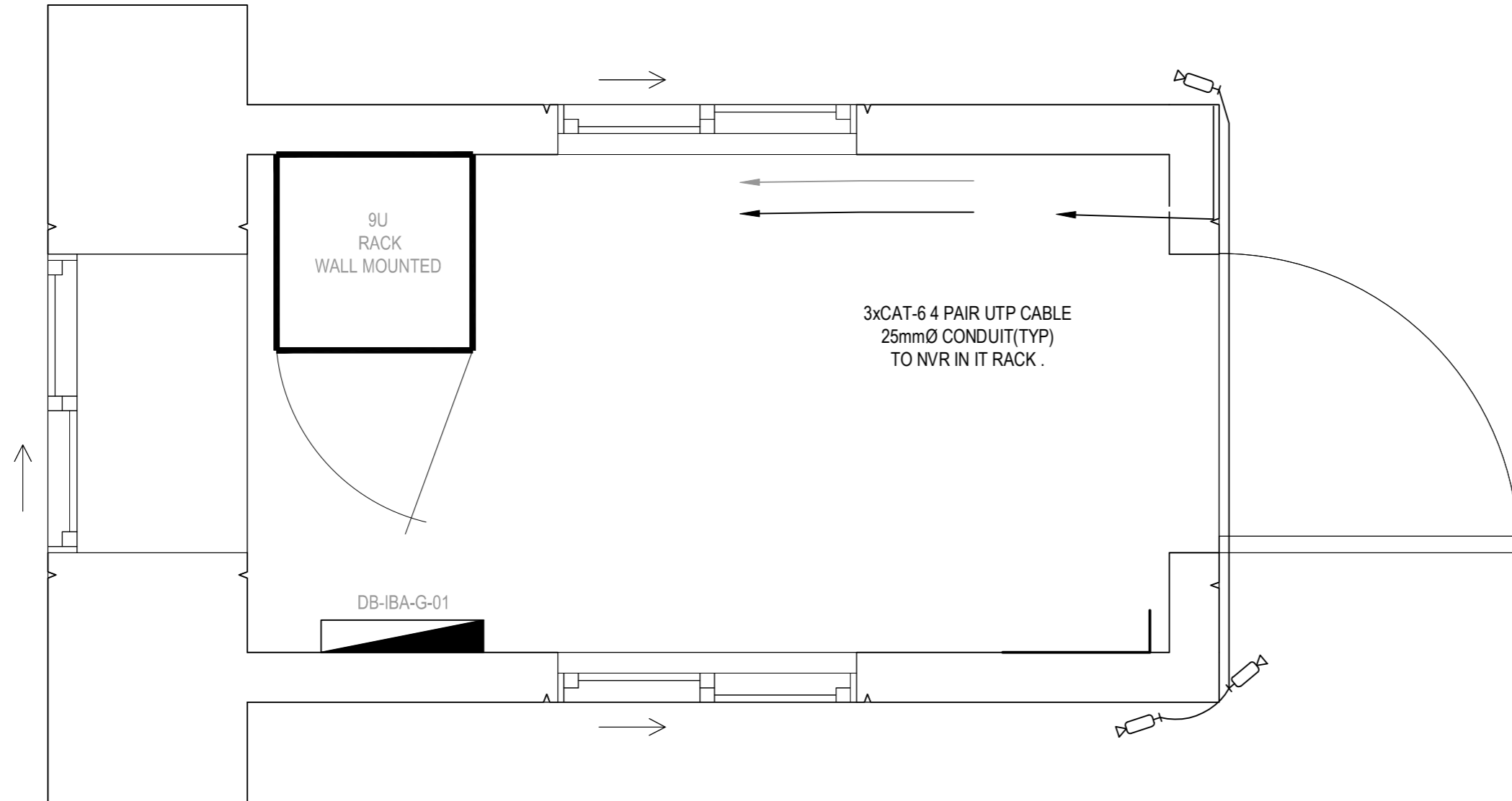
NOTES.

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3. THIS DRAWING IS NOT TO BE SCALED ONLY WRITTEN DIMENSION TO BE USED.
4. ALL DIMENSIONS ARE TO BE RECHECKED AND VERIFIED ON SITE.
5. ANY DISCREPANCY IS TO BE BROUGHT TO THE ATTENTION OF ARCHITECT PRIOR TO COMMENCEMENT OF WORK ON SITE.

REV	DATE	DESCRIPTION	SIGN
AMENDMENTS			
PROJECT: REHABILITATION OF METELED ROAD AT KARACHI UNIVERSITY			
CLIENT: 			
ENGINEERING CONSULTANT: 1st Floor, IEP Building, 177/2, Liaquat Barracks, Main Shahr-e-Faisal, Karachi 75530, Pakistan. Email: info_pk@aengineers.com			
TITLE: POWER LAYOUT PLAN			
STATUS TENDER DRAWING			
SCALE	N.T.S	DATE	DEC.-2024
DRAWN	H.G	CHECKED	M.A
DESIGNED	S.N	APPROVED	M.F.A
JOB NO.	P-066C	DRAWING NO.	AIE-IBA-EL-09
		REV. NO.	0

SYMBOL	DESCRIPTION
	13A UNIVERSAL SOCKET
	13A UNIVERSAL SOCKET (HEIGHT)
	FURNITURE BOX
	INSECT KILLER
	20A DOUBLE POLE SWITCH
	ISOLATOR
	HAND DRYER
	VOICE POINT
	DATA POINT
	HDMI POINT
	WiFi POINT

SYMBOL	13A SOCKET FLAT PIN (UPS)	13A SOCKET UNIVERSAL (KE)	DATA (CAT6 RJ45)	VOICE (CAT6 RJ45)
	A	2	1	1
	B	2	1	2
		1	1	



GUARD ROOM-02

NOTES.

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REV	DATE	DESCRIPTION	SIGN
-----	------	-------------	------

AMENDMENTS

PROJECT:
REHABILITATION OF METELED ROAD AT KARACHI UNIVERSITY

CLIENT:



ENGINEERING CONSULTANT:



1st Floor, IEP Building, 177/2, Liaquat Barracks, Main Shahr-e-Faisal, Karachi 75530, Pakistan
Email: info_pk@aiengineers.com

TITLE:
CCTV LAYOUT PLAN

STATUS: **TENDER DRAWING**

SCALE: **N.T.S** DATE: **DEC.-2024**

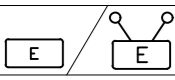


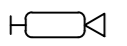
DRAWN: **H.G** CHECKED: **M.A**

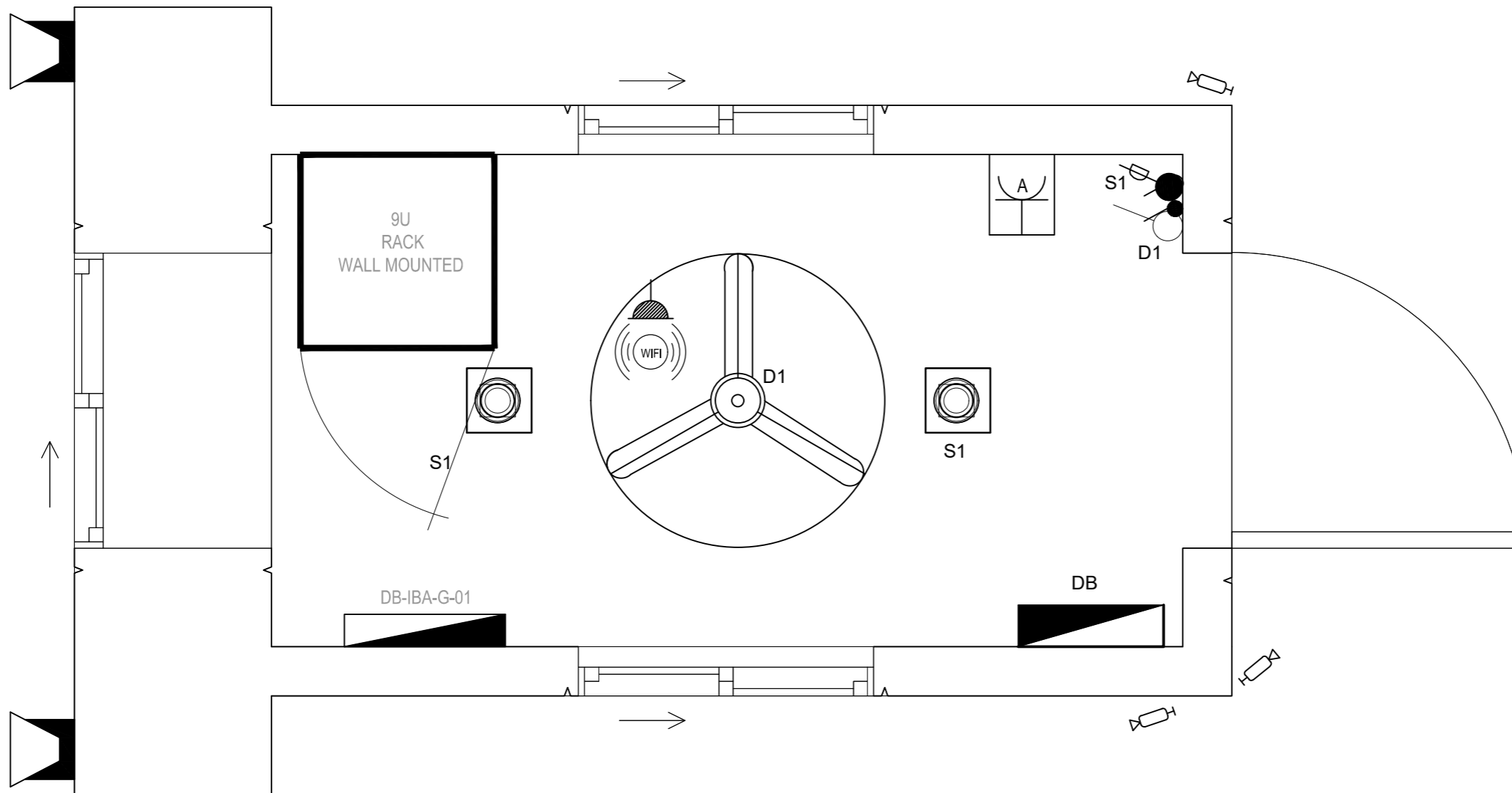
DESIGNED: **S.N** APPROVED: **M.F.A**

JOB NO. P-066C	DRAWING NO. AIE-IBA-EL-10	REV. NO. 0
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GH-MEP ELECTRICAL.dwg

FIXTURE SCHEDULE

SYMBOL	DESCRIPTION
	CEILING EM LIGHTS / WALL EM LIGHTS
	EXIT LIGHT
	DOME CAMERA (INDOOR)
	BULLET CAMERA (OUTDOOR)



GUARD ROOM-02

SYMBOL	DESCRIPTION
	CEILING EM LIGHTS / WALL EM LIGHTS
	EXIT LIGHT
	DOME CAMERA (INDOOR)
	BULLET CAMERA (OUTDOOR)

SYMBOL	DESCRIPTION
	FIRE ALARM CONTROL PANEL
	SMOKE DETECTOR
	MANUEL CALL POINT
	ELECTRONIC SOUNDER WITH FLASHER
	SPEAKER
	AMPLIFIER
	VOLUME CONTROLLER

FIX ID	SYMBOL	DESCRIPTION	MOUNTING
A		15W LED DOWN LIGHT	CEILING / RECESSED
B		100W FLOOD LIGHT	WALL MOUNTED
C		80W EXHAUST FAN	WALL MOUNTED / RECESSED
D		100W CEILING FAN	WALL MOUNTED

SYMBOL	DESCRIPTION
	13A UNIVERSAL SOCKET
	13A UNIVERSAL SOCKET (HEIGHT)
	FURNITURE BOX
	INSECT KILLER
	20A DOUBLE POLE SWITCH
	ISOLATOR
	HAND DRYER
	VOICE POINT
	DATA POINT
	HDMI POINT
	WiFi POINT

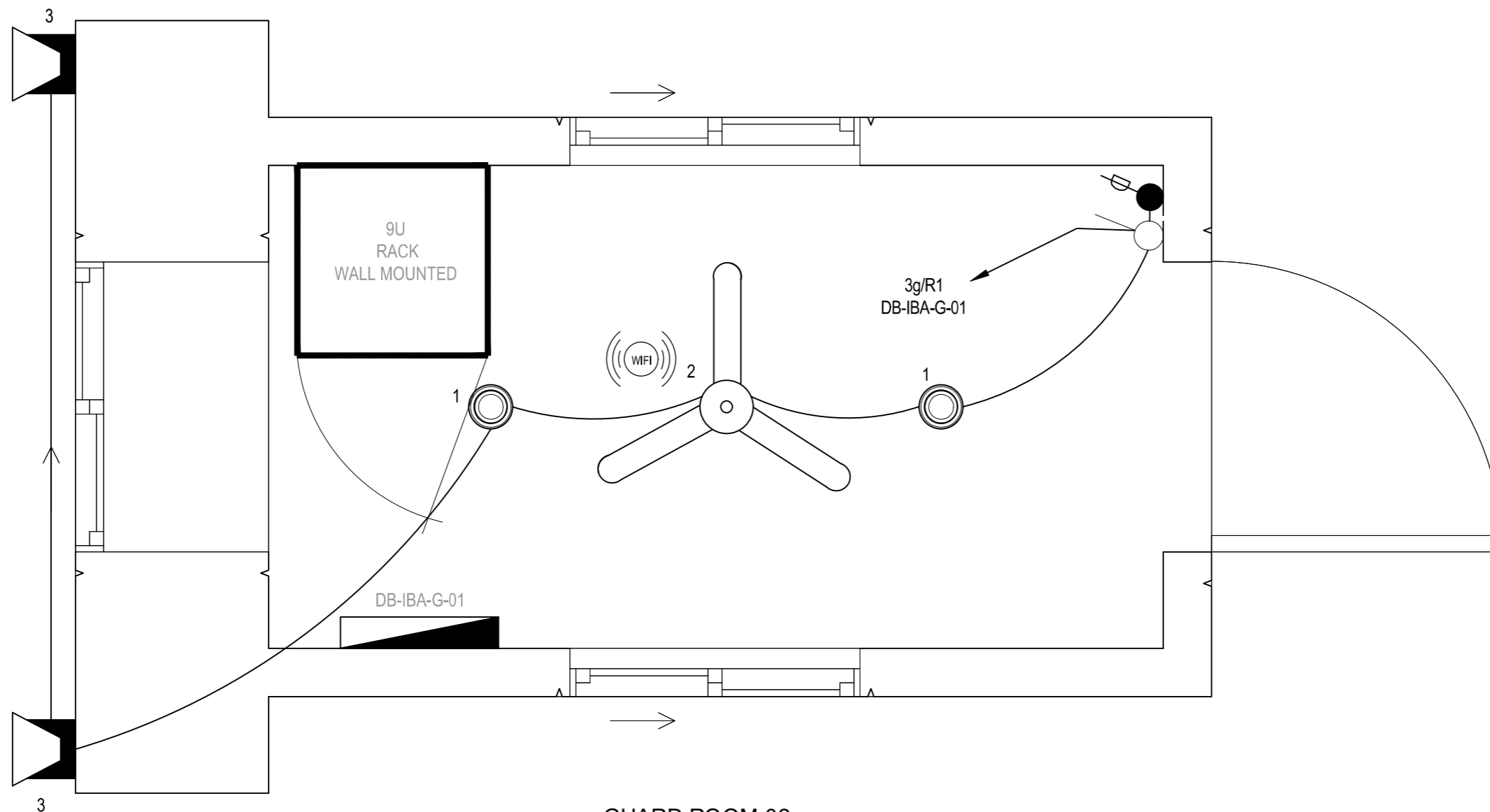
SYMBOL	13A SOCKET FLAT PIN (UPS)	13A SOCKET UNIVERSAL (KE)	DATA (CAT6 RJ45)	VOICE (CAT6 RJ45)
	2	1	1	1
	2	1	1	2
	1		1	

NOTES.

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REV	DATE	DESCRIPTION	SIGN
AMENDMENTS			
PROJECT: REHABILITATION OF METELED ROAD AT KARACHI UNIVERSITY			
CLIENT:			
ENGINEERING CONSULTANT: 1st Floor, IEP Building, 177/2, Liaquat Barracks, Main Shahr-e-Faisal, Karachi 75530, Pakistan. Email: info_pk@aengineers.com			
TITLE: RCP LAYOUT PLAN			
STATUS: TENDER DRAWING			
SCALE: N.T.S		DATE: DEC.-2024	
DRAWN: H.G		CHECKED: M.A	
DESIGNED: S.N		APPROVED: M.F.A	
JOB NO. P-066C	DRAWING NO. AIE-IBA-EL-11	REV. NO. 0	

GH-MEP ELECTRICAL.dwg



GUARD ROOM-02

LIGHT FIXTURE SCHEDULE			
FIX ID	SYMBOL	DESCRIPTION	MOUNTING
A		15W LED DOWN LIGHT	CEILING / RECESSED
B		100W FLOOD LIGHT	WALL MOUNTED
C		80W EXHAUST FAN	WALL MOUNTED / RECESSED
D		100W CEILING FAN	WALL MOUNTED

NOTES.

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REV	DATE	DESCRIPTION	SIGN

AMENDMENTS

PROJECT:
REHABILITATION OF METELED ROAD AT KARACHI UNIVERSITY

CLIENT:

ENGINEERING CONSULTANT:

 1st Floor, IEP Building, 177/2, Liaquat Barracks, Main Shahr-e-Faisal, Karachi 75530, Pakistan. Email: info_pk@aiengineers.com

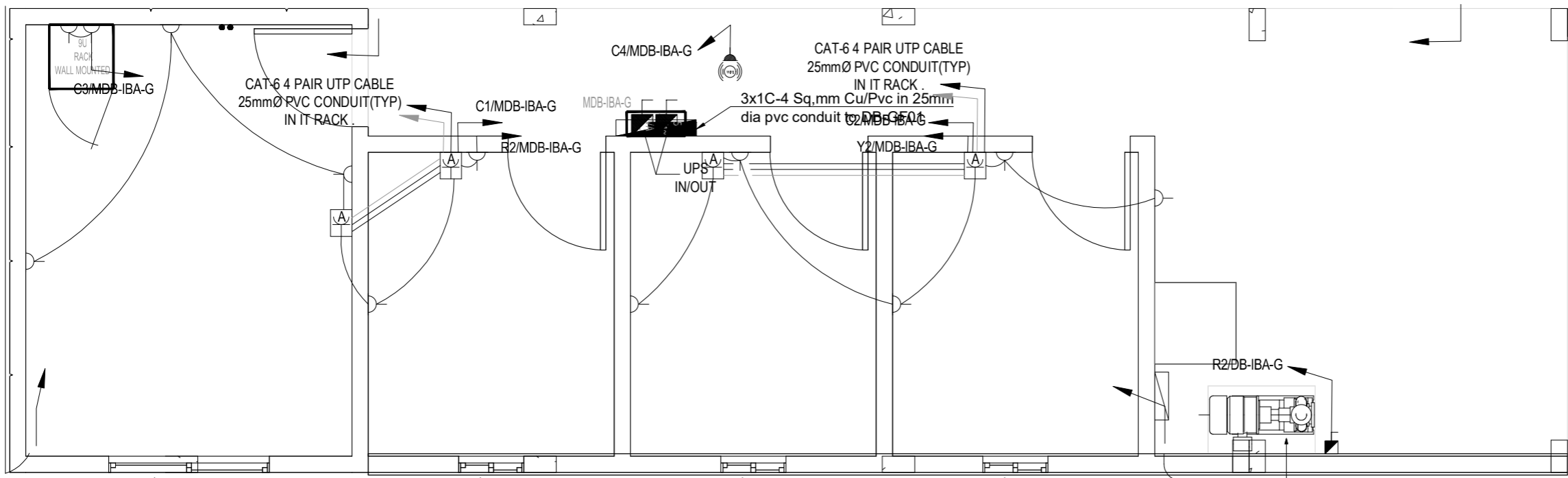
TITLE:
LIGHTING LAYOUT PLAN

STATUS: **TENDER DRAWING**

SCALE	N.T.S	DATE	DEC.-2024
DRAWN	H.G	CHECKED	M.A
DESIGNED	S.N	APPROVED	M.F.A

JOB NO.	DRAWING NO.	REV. NO.
P-066C	AIE-IBA-EL12	0

GH-MEP ELECTRICAL.dwg



GUARD ROOM-03

PUMP (2 hp)

NOTES.

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REV	DATE	DESCRIPTION	SIGN
AMENDMENTS			

PROJECT:
REHABILITATION OF METELED ROAD AT KARACHI UNIVERSITY

CLIENT:



ENGINEERING CONSULTANT:



1st Floor, IEP Building, 177/2, Liaquat Barracks, Main Shahr-e-Faisal, Karachi 75530, Pakistan
Email: info_pk@aengineers.com

TITLE:
POWER LAYOUT PLAN

STATUS: **TENDER DRAWING**

SCALE: **N.T.S** DATE: **DEC.-2024**

DRAWN: **H.G** CHECKED: **M.A**

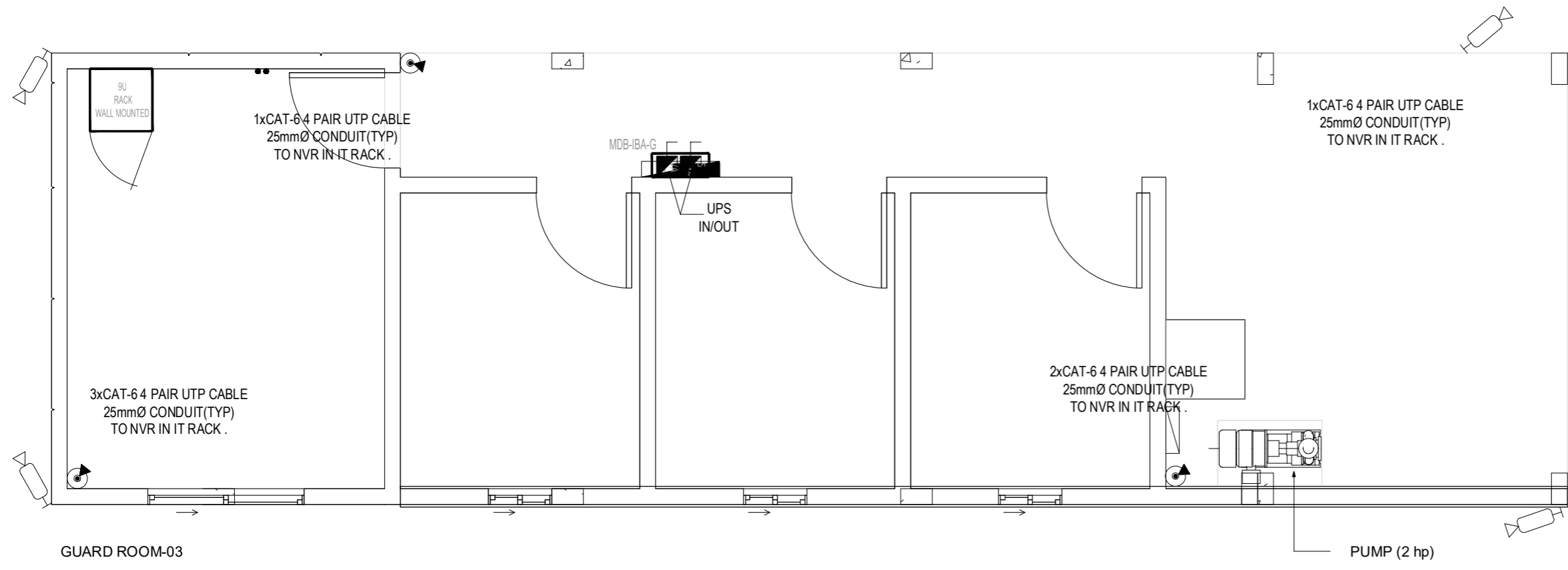
DESIGNED: **S.N** APPROVED: **M.F.A**

JOB NO. P-066C	DRAWING NO. AIE-IBA-EL-13	REV. NO. 0
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SYMBOL	DESCRIPTION
	13A UNIVERSAL SOCKET
	13A UNIVERSAL SOCKET (HEIGHT)
	FURNITURE BOX
	INSECT KILLER
	20A DOUBLE POLE SWITCH
	ISOLATOR
	HAND DRYER
	VOICE POINT
	DATA POINT
	HDMI POINT
	WiFi POINT

SYMBOL	13A SOCKET FLAT PIN (UPS)	13A SOCKET UNIVERSAL (KE)	DATA (CAT6 RJ45)	VOICE (CAT6 RJ45)
	A	2	1	1
	B	2	1	2
		1	1	

GH-MEP ELECTRICAL.dwg



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REV	DATE	DESCRIPTION	SIGN
AMENDMENTS			

PROJECT:
REHABILITATION OF METELED ROAD AT KARACHI UNIVERSITY

CLIENT:



ENGINEERING CONSULTANT:



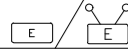


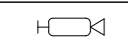
1st Floor, IEP Building, 177/2, Liaquat Barracks, Main Shahr-eh-Faisal, Karachi 75530, Pakistan
Email: info_pk@aengineers.com

TITLE:
CCTV LAYOUT PLAN

STATUS: **TENDER DRAWING**

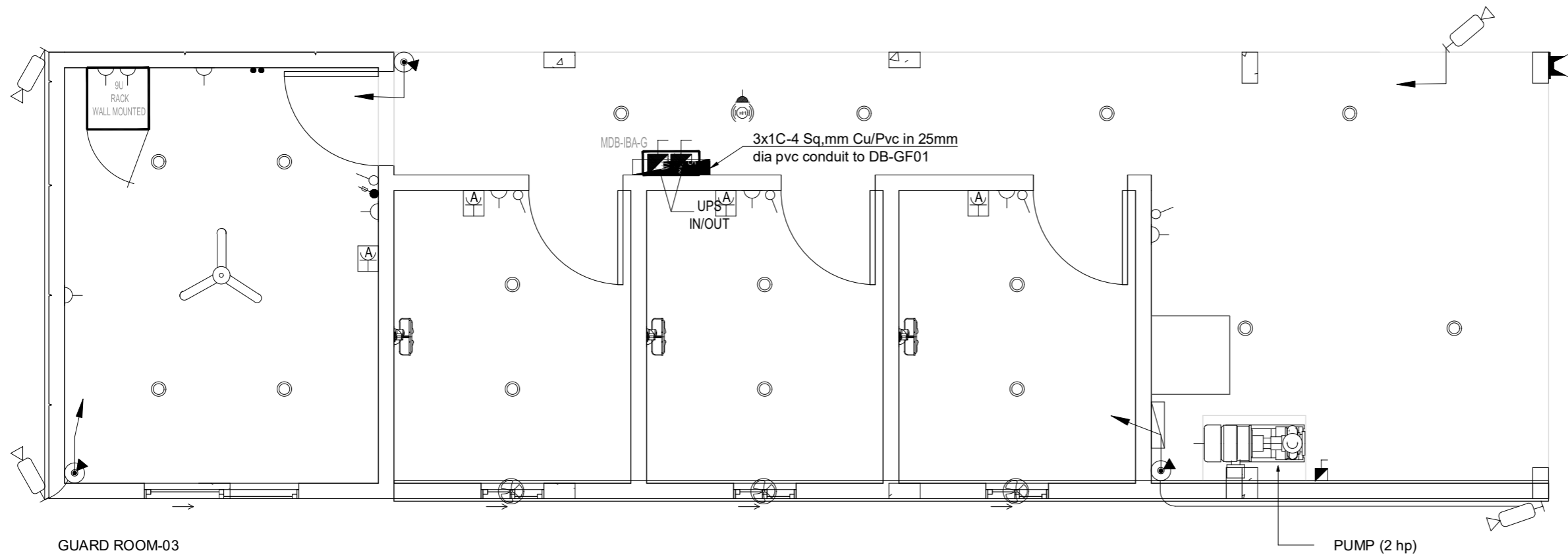
SCALE	N.T.S	DATE	DEC.-2024
DRAWN	H.G	CHECKED	M.A
DESIGNED	S.N	APPROVED	M.F.A

JOB NO.	DRAWING NO.	REV. NO.
P-066C	AIE-IBA-EL-14	0

FIXTURE SCHEDULE	
SYMBOL	DESCRIPTION
	CEILING EM LIGHTS / WALL EM LIGHTS
	EXIT LIGHT
	DOME CAMERA (INDOOR)
	BULLETT CAMERA (OUTDOOR)

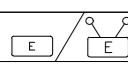


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





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














REV	DATE	DESCRIPTION	SIGN
AMENDMENTS			
PROJECT: REHABILITATION OF METALED ROAD AT KARACHI UNIVERSITY			
CLIENT:  Institute of Business Administration Karachi			
ENGINEERING CONSULTANT:  1st Floor, IEP Building, 177/2, Liaquat Barracks, Main Shahrah-e-Faisal, Karachi 75530, Pakistan. Email: info_pk@aiengineers.com			
TITLE: RCP LAYOUT PLAN			
STATUS TENDER DRAWING			
SCALE N.T.S		DATE DEC.-2024	
DRAWN H.G		CHECKED M.A	
DESIGNED S.N		APPROVED M.F.A	
JOB NO. P-066C	DRAWING NO. AIE-IBA-EL-15	REV. NO. 0	




GH-MEP ELECTRICAL.dwg

SYMBOL	DESCRIPTION
	EXIT LIGHT
	DOME CAMERA (INDOOR)
	BULLET CAMERA (OUTDOOR)

SYMBOL	DESCRIPTION
	FIRE ALARM CONTROL PANEL
	SMOKE DETECTOR
	MANUEL CALL POINT
	ELECTRONIC SOUNDER WITH FLASHER
	SPEAKER
	AMPLIFIER
	VOLUME CONTROLLER

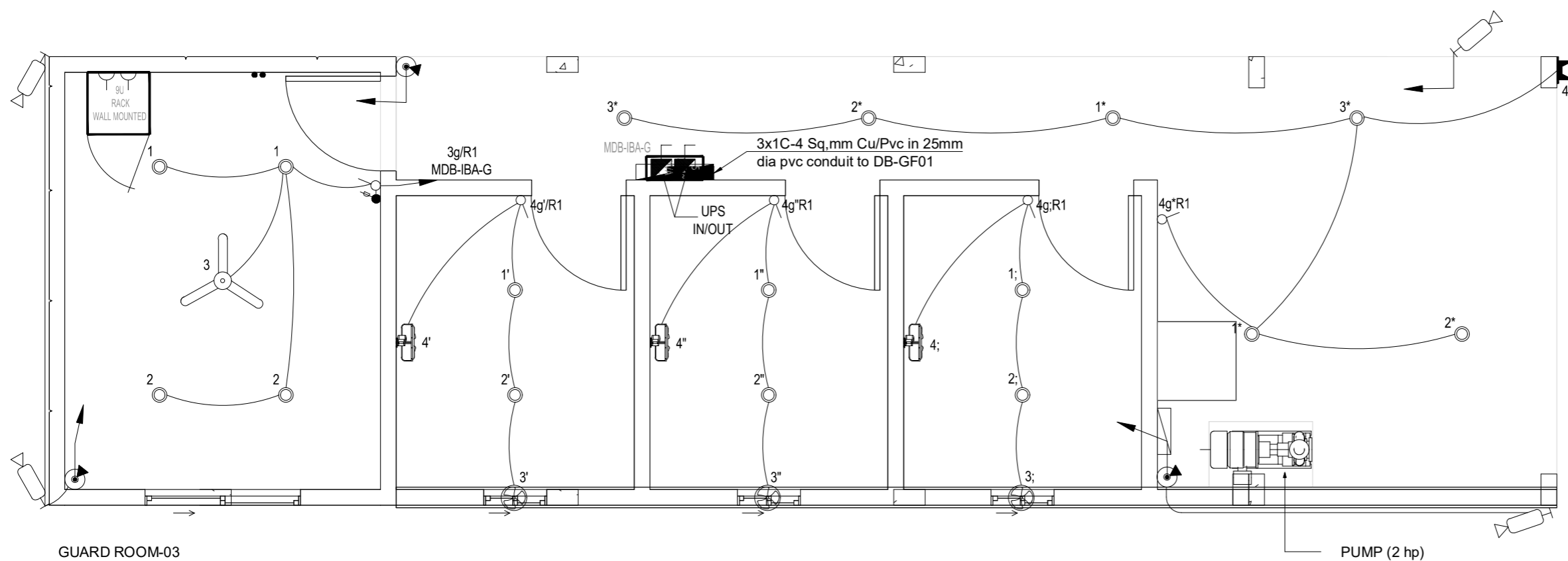
FIX ID	SYMBOL	DESCRIPTION	MOUNTING
A		15W LED DOWN LIGHT	CEILING / RECESSED
B		100W FLOOD LIGHT	WALL MOUNTED
C		80W EXHAUST FAN	WALL MOUNTED / RECESSED
D		100W CEILING FAN	WALL MOUNTED

SYMBOL	DESCRIPTION
	13A UNIVERSAL SOCKET
	13A UNIVERSAL SOCKET (HEIGHT)
	PUNCTURE BOX
	INSECT KILLER
	24A DOUBLE POLE SWITCH
	ISOLATOR
	HAND DRYER
	VOICE POINT
	DATA POINT
	HDMI POINT
	WiFi POINT

SYMBOL	13A SOCKET FLAT PIN (UPS)	13A SOCKET UNIVERSAL (KE)	DATA (CAT6 RJ45)	VOICE (CAT6 RJ45)
	2	1	1	1
	2	1	1	2
	1		1	

NOTES.

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GH-MEP ELECTRICAL.dwg

GUARD ROOM-03

PUMP (2 hp)

LIGHT FIXTURE SCHEDULE			
FIX ID	SYMBOL	DESCRIPTION	MOUNTING
A		15W LED DOWN LIGHT	CEILING / RECESSED
B		100W FLOOD LIGHT	WALL MOUNTED
C		80W EXHAUST FAN	WALL MOUNTED / RECESSED
D		100W CEILING FAN	WALL MOUNTED

REV	DATE	DESCRIPTION	SIGN
AMENDMENTS			
PROJECT: REHABILITATION OF METELED ROAD AT KARACHI UNIVERSITY			
CLIENT: Institute of Business Administration Karachi <small>University of the Federal Capital Islamabad</small>			
ENGINEERING CONSULTANT: AI Engineers <small>1st Floor, IEP Building, 177/2, Liaquat Barracks, Main Shahr-e-Faisal, Karachi 75530, Pakistan Email: info_pk@aengineers.com</small>			
TITLE: LIGHTING LAYOUT PLAN			
STATUS TENDER DRAWING			
SCALE	N.T.S	DATE	DEC.-2024
DRAWN	H.G	CHECKED	M.A
DESIGNED	S.N	APPROVED	M.F.A
JOB NO.	DRAWING NO.	REV. NO.	
P-066C	AIE-IBA-EL-16	0	