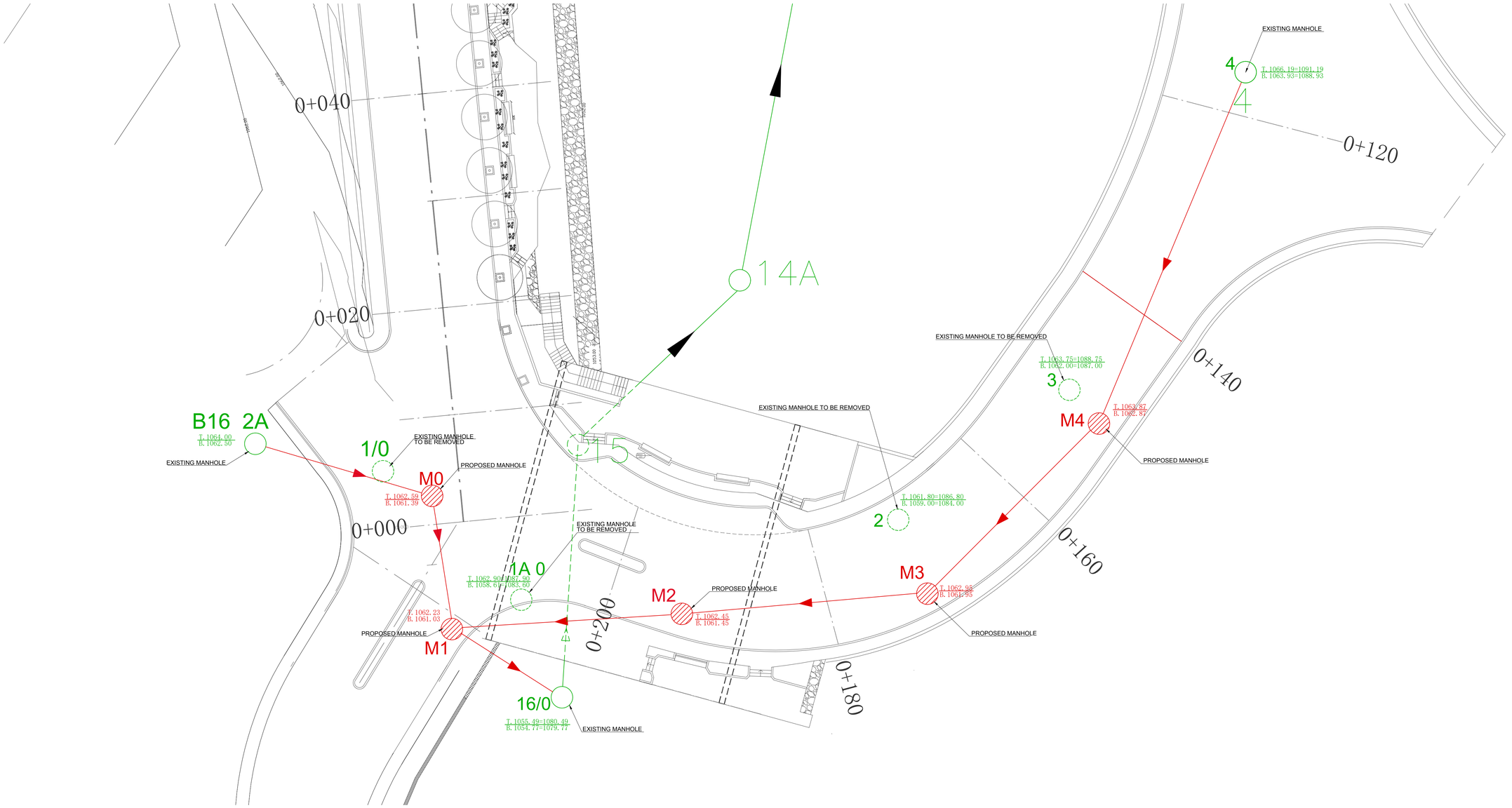

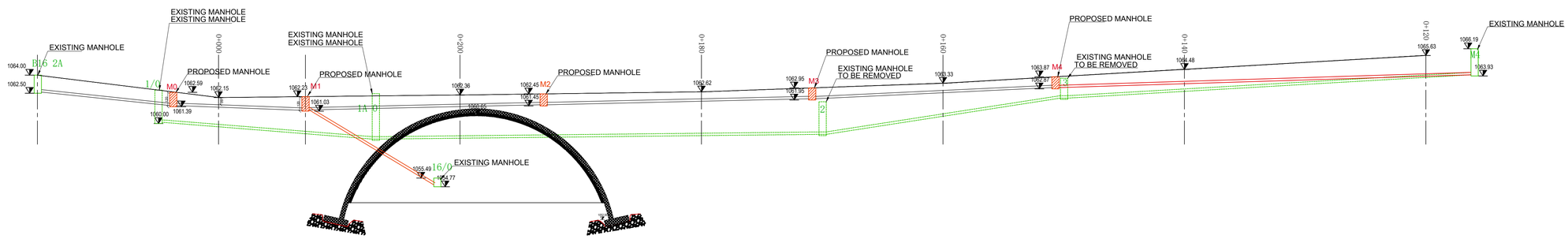

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PROJECT

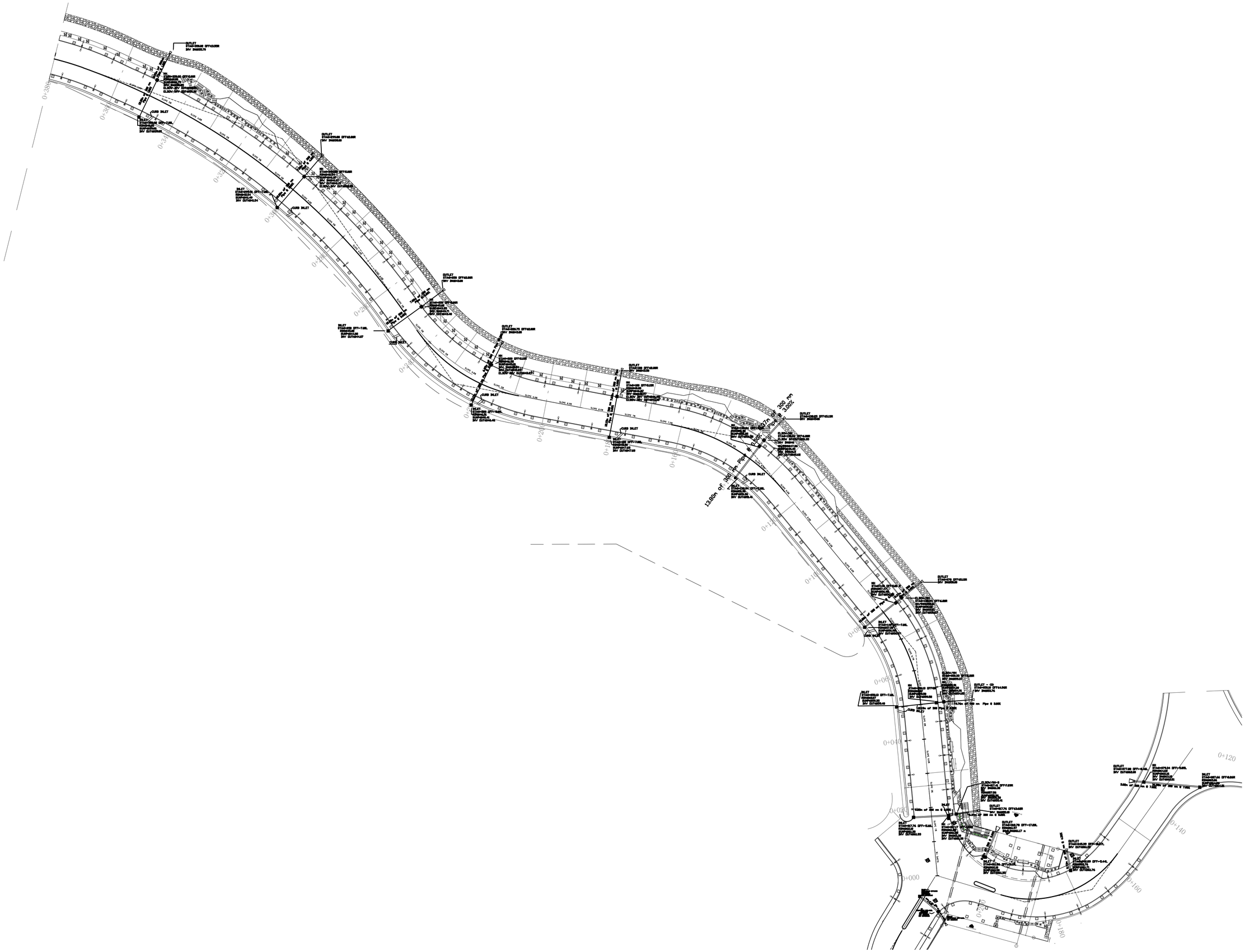
STATUS
TENDER

NOTES

ISSUE	DATE	AMENDMENT	CHECKED
ISSUE	DATE	AMENDMENT	CHECKED

DRAWN —
NORTH
SCALE 1: 200 A1
CHECKED —
APPROVED AK

DRAWING TITLE
MASTER SITE PLAN - MANHOLE PLAN
SHEET NUMBER M—001
ISSUE DATE MARCH 2020


0+380
0+360
0+340
0+320
0+300
0+280
0+260
0+240
0+220
0+200
0+180
0+160
0+140
0+120
0+100
0+080
0+060
0+040
0+020
0+000
OUTLET
CURB INLET
SLOPE 4.5%
SLOPE 1%
SLOPE 2%
SLOPE 7%
SLOPE 10%
SLOPE 12%
SLOPE 15%
SLOPE 17%
SLOPE 20%
SLOPE 25%
SLOPE 30%
SLOPE 35%
SLOPE 40%
SLOPE 45%
SLOPE 50%
SLOPE 55%
SLOPE 60%
SLOPE 65%
SLOPE 70%
SLOPE 75%
SLOPE 80%
SLOPE 85%
SLOPE 90%
SLOPE 95%
SLOPE 100%
SLOPE 105%
SLOPE 110%
SLOPE 115%
SLOPE

NOTES:
- CONCRETE ENCASEMENT FOR uPVC PIPES ON ROOFS
- VERTICAL uPVC PIPES ON WALLS SHALL BE ANCHORED @1M TO 1.5 M INTERVAL

3.62R

ATION 02

78 OFF:-17.20L

7

51.17 m

OUTLET
STA:0+077.80 OFF:-8.46L
INV OUT:1062.00

NH
STA:0+079.34 OFF:-5.85L
RIM:1064.62
SUMP:1062.16
INV IN:1063.12
INV OUT:1062.21

3.02m of 300 mm @ 7.00%

16.38m of 300 mm @ 7.00%

INLET
STA:0+087.66 OFF:8.26R
RIM:1065.06
SUMP:1064.26
INV OUT:1064.21

0+120

0+140

0+160

OUTLET
STA:0+045.39 OFF:-10.87L
INV OUT:1061.50

5.73m of 300 mm @ 4.50%

INLET
STA:0+042.89 OFF:-5.44L
RIM:1062.76
SUMP:1061.71
INV OUT:1061.76

B

80 272 80

300

80 150 80

160

200

2695

1120

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TENDER

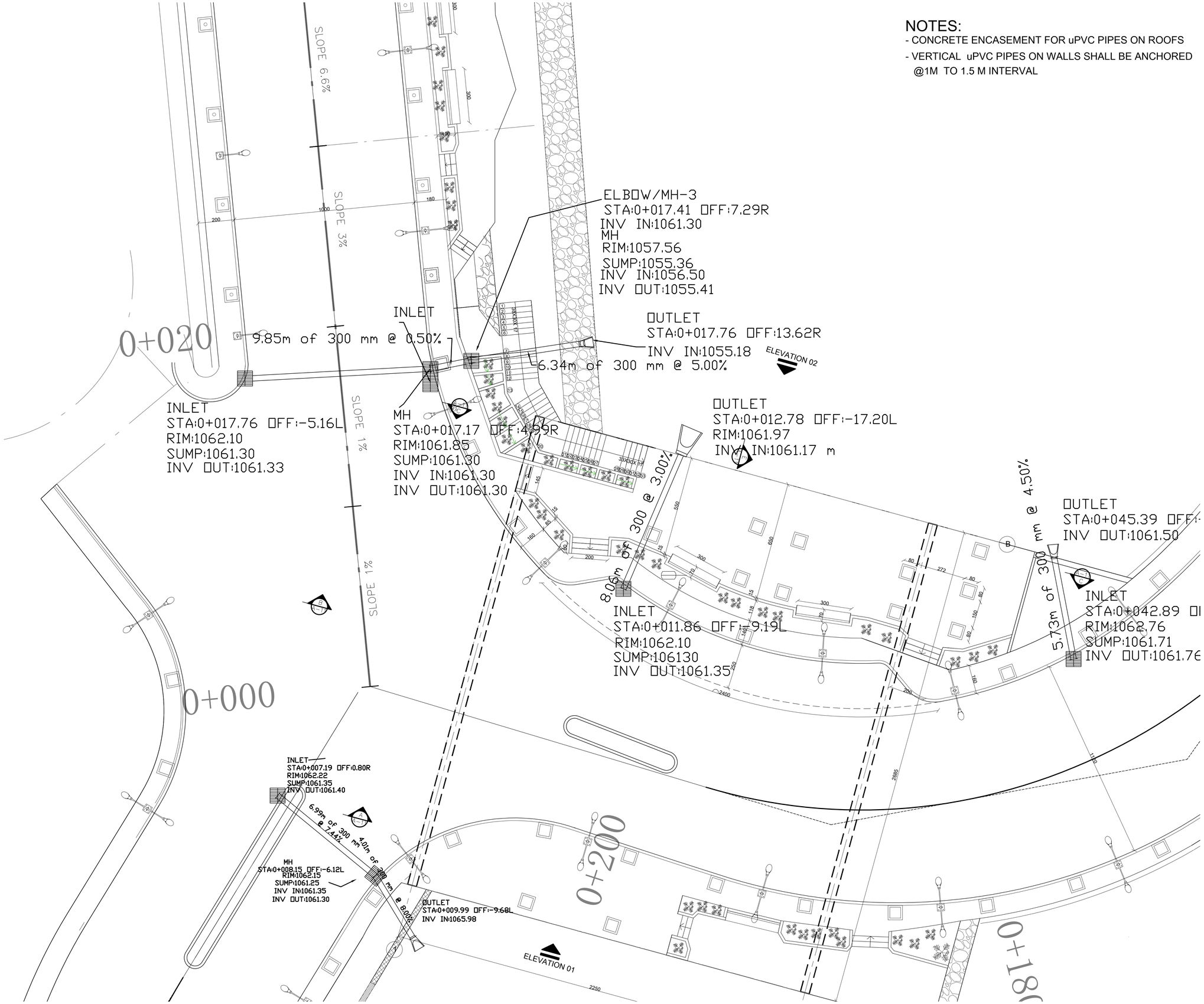
NOTES

ISSUE	DATE	AMENDMENT	CHECKED
ISSUE	DATE	AMENDMENT	CHECKED

DRAWN –
NORTH
SCALE 1:100 A1
CHECKED –
APPROVED AK

DRAWING TITLE
DRAINAGE LAYOUT 1/6
SHEET NUMBER A–011
ISSUE DATE FEBRUARY 2020

NOTES:
- CONCRETE ENCASEMENT FOR uPVC PIPES ON ROOFS
- VERTICAL uPVC PIPES ON WALLS SHALL BE ANCHORED @1M TO 1.5 M INTERVAL



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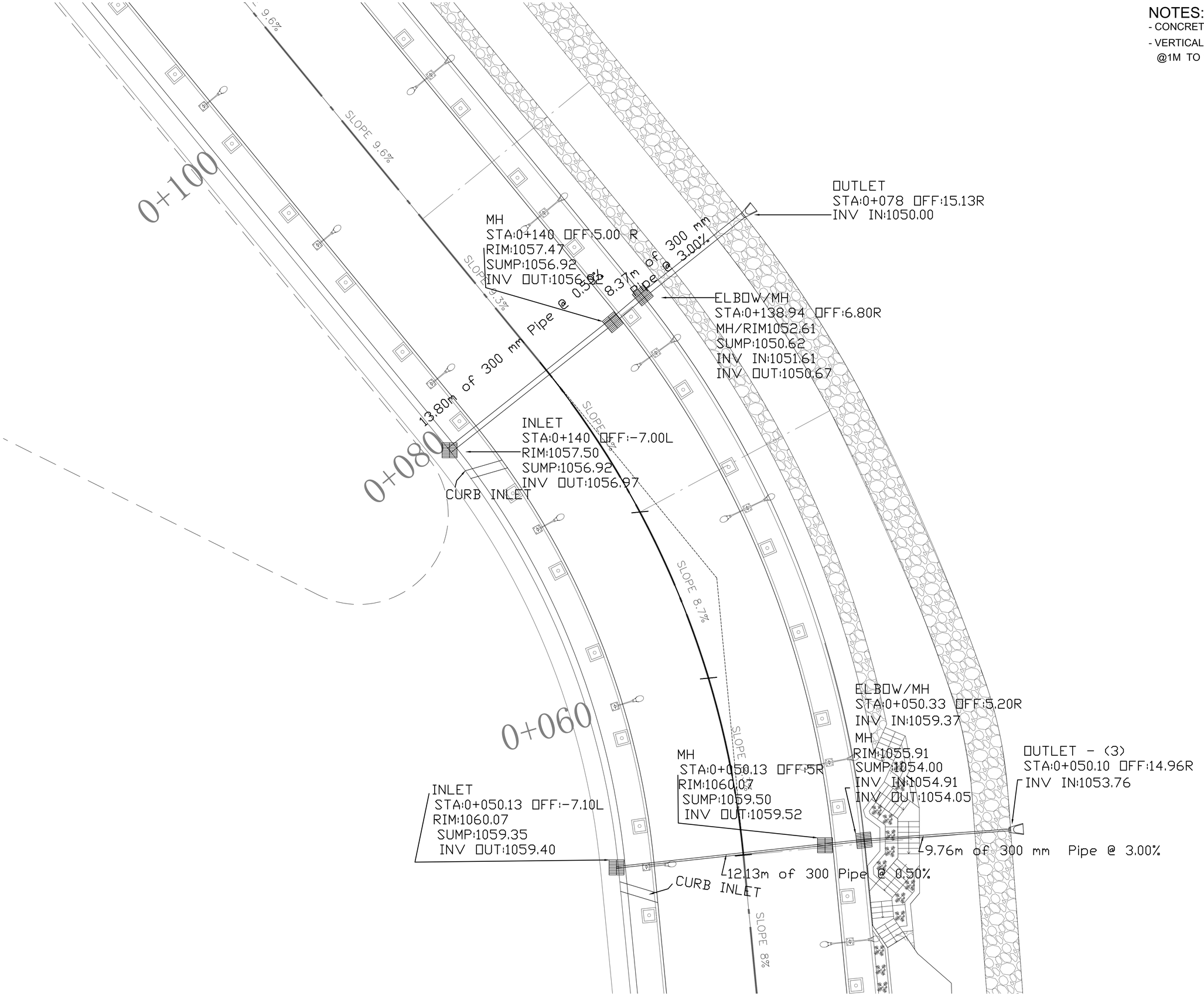
NOTES

ISSUE	DATE	AMENDMENT	CHECKED
ISSUE	DATE	AMENDMENT	CHECKED

DRAWN	NORTH	SCALE	DRAWING TITLE
—		1:100 A1	DRAINAGE LAYOUT 2/6
CHECKED	APPROVED	SHEET NUMBER	ISSUE DATE
—	AK	A–013	FEBRUARY 2020

NOTES:
- CONCRETE ENCASEMENT FOR uPVC PIPES ON ROOFS
- VERTICAL uPVC PIPES ON WALLS SHALL BE ANCHORED @1M TO 1.5 M INTERVAL



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ADDRESS: 0000000, JORDAN

STATUS: TENDER

NOTES

ISSUE	DATE	AMENDMENT	CHECKED

ISSUE	DATE	AMENDMENT	CHECKED

DRAWN	NORTH	SCALE	DRAWING TITLE
—		1:100 A1	DRAINAGE LAYOUT 3/6
CHECKED	APPROVED	SHEET NUMBER	ISSUE DATE
—	AK	A-014	FEBRUARY 2020

NOTES:
- CONCRETE ENCASEMENT FOR uPVC PIPES ON ROOFS
- VERTICAL uPVC PIPES ON WALLS SHALL BE ANCHORED @1M TO 1.5 M INTERVAL

OUTLET
STA:0+180 OFF:12.80R
INV IN:1043.50

300 mm Pipe @ 4.00%

MH
STA:0+180 OFF:5.15R
RIM:1048.80
SUMP:1046.87
INV IN:1046.97
ELBOW INV OUT:1046.95
ELBOW INV OUT:1043.80

7.65m of 300 mm Pipe @ 3.00%

SLOPE 6.5%

SLOPE 7%

SLOPE 7.5%

SLOPE 8%

12.15m of 300 mm Pipe @ 3.00%

CURB INLET

INLET
STA:0+180 OFF:-7.00L
RIM:1048.80
SUMP:1047.65
INV OUT:1047.60

0+180

0+160

0+140

13,80m of 300 mm Pipe @ 0.50%

SLOPE 8%

SLOPE 8.5%

CURB INLET

INLET
STA:0+138.94 OFF:-7.00L
RIM:1051.90
SUMP:1051.36
INV OUT:1051.41

SLOPE 9.6%

MH
STA:0+138.94 OFF:-6.00L
RIM:1051.90
SUMP:1051.35
INV OUT:1051.35

8.37m of 300 mm Pipe @ 3.00%

OUTLET
STA:0+138.25 OFF:15.13R
INV IN:1045.00

ELBOW/MH
STA:0+138.94 OFF:6.80R
ELBOW INV OUT:1051.35
INV IN:1046

MH/RIM1047.36
SUMP:1045.45
INV IN1046.5
INV OUT:1045.62

SLOPE 9.6%

SLOPE 9.6%

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STATUS
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NOTES

ISSUE	DATE	AMENDMENT	CHECKED
ISSUE	DATE	AMENDMENT	CHECKED

DRAWN — NORTH — SCALE 1:100 A1
CHECKED — APPROVED AK
DRAWING TITLE: DRAINAGE LAYOUT 4/6
SHEET NUMBER A–015 ISSUE DATE FEBRUARY 2020

NOTES:
- CONCRETE ENCASEMENT FOR uPVC PIPES ON ROOFS
- VERTICAL uPVC PIPES ON WALLS SHALL BE ANCHORED @1M TO 1.5 M INTERVAL

0+280

0+260

0+240

0+220

SLOPE 4.9%

SLOPE 4.9%

SLOPE 5%

SLOPE 5%

SLOPE 5%

SLOPE 4.8%

SLOPE 5%

SLOPE 4.9%

SLOPE 6.5%

SLOPE 6.

OUTLET
STA:0+250 OFF:12.80R
INV IN:1043.00

7.80m of 300 mm Pipe @ 5.00%

MH
STA:0+250 OFF:5.00R
RIM:1045.02
SUMP:1043.35
INV IN:1043.71
INV OUT:1043.40

12.00m of 300 mm Pipe @ 3.00%

INLET
STA:0+250 OFF:-7.00L
RIM1045.02
SUMP:1044.02
INV OUT:1044.07

CURB INLET

OUTLET
STA:0+220.75 OFF:12.00R
INV IN:1043.00

5.00%

300 mm Pipe @5.00%

MH
STA:0+220 OFF:5.15R
RIM:1046.52
SUMP:1045.19
INV IN:1045.24
INV OUT:1045.24
ELBOW INV OUT:1043.27

6.85m of 300 mm Pipe @ 2.00%

13.15m of 100 mm Pipe @ 2.00%

CURB INLET

INLET
STA:0+220 OFF:-8.00L
RIM1046.51
SUMP:1046.41
INV OUT:1046.46

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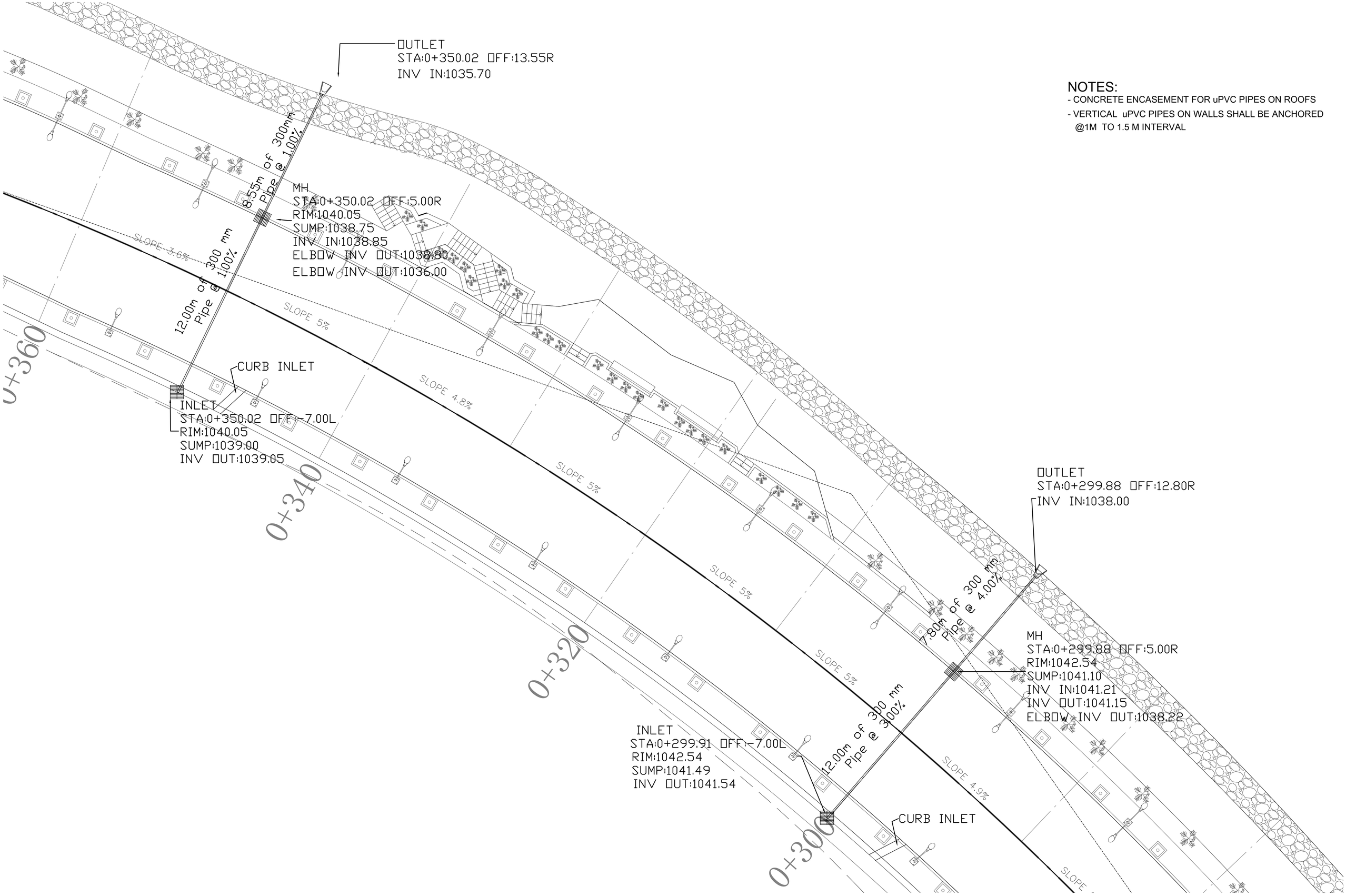
STATUS
TENDER

NOTES

ISSUE	DATE	AMENDMENT	CHECKED
ISSUE	DATE	AMENDMENT	CHECKED

DRAWN	NORTH	SCALE	DRAWING TITLE
—		1:100 A1	DRAINAGE LAYOUT 5/6
CHECKED	APPROVED	SHEET NUMBER	ISSUE DATE
—	AK	A-016	FEBRUARY 2020



NOTES:

- CONCRETE ENCASEMENT FOR uPVC PIPES ON ROOFS
- VERTICAL uPVC PIPES ON WALLS SHALL BE ANCHORED @1M TO 1.5 M INTERVAL

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NOTES

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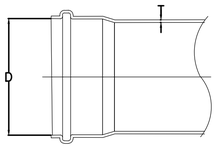
ISSUE	DATE	AMENDMENT	CHECKED

DRAWN — | NORTH | SCALE 1:100 A1
CHECKED — | APPROVED AK

DRAWING TITLE
DRAINAGE LAYOUT 6/6

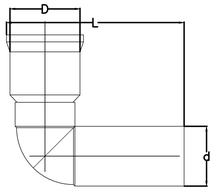
SHEET NUMBER A-017 | ISSUE DATE FEBRUARY 2020



uPVC Pipe Push Fit

uPVC Pipe Push Fit

NOMINAL SIZE	MEAN OUTSIDE DIA.		WALL THICKNESS		LENGTH
	uPVC Pipe Push Fit MIN. (mm)	MAX. (mm)	MIN. (mm)	MAX. (mm)	M
8"	219	219.4	7.8	9	5.86
10"	273	273.4	9.7	11.2	5.86
12"	323	324.3	11.5	13.3	5.86
16"	406	406.9	14.5	16.7	5.86

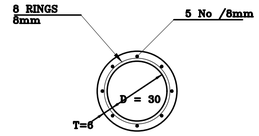


uPVC Elbow Push Fit

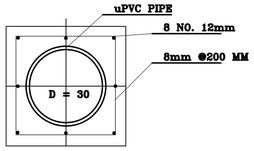
uPVC Elbow Push Fit

NOMINAL SIZE	MEAN OUTSIDE DIA.		LENGTH
	D (mm)	d (mm)	M
8"	219	219	325
10"	273	273	440
12"	323	323	520
16"	406	406	650

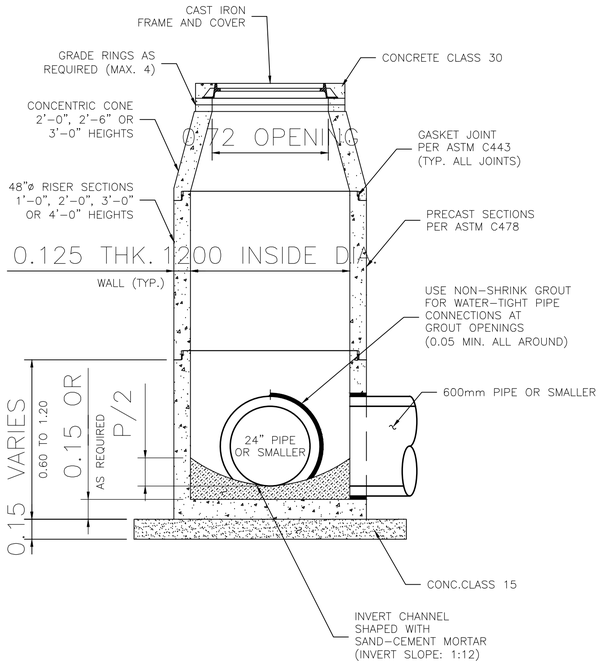
uPVC PIPE
FOR DRAINAGE IN ROAD ON ROOFS



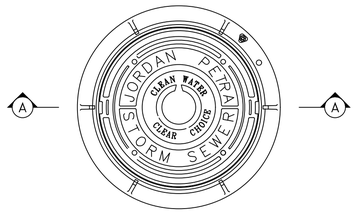
REINFORCED PIPES CROSS SECTIONS
FOR DRAINAGE IN ROAD ON EARTH



REINFORCED ENCASEMENT
FOR DRAINAGE IN ROAD ON ROOFS



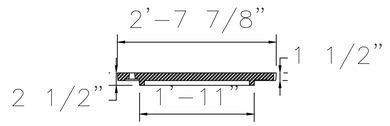
1200ø PRECAST CONCENTRIC MANHOLE
FOR PIPE SIZES 600mM OR SMALLER



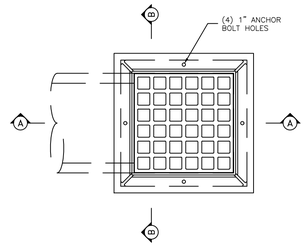
PLAN VIEW
FRAME AND COVER
SCALE: 1" = 1'–0"

1. ALL DIMENSIONS ARE IN cm EXCEPT REINFORCEMENT BAR DIAMETER WHICH ARE IN mm.
2. REINFORCED CONCRETE FOR PIPES SHALL BE AS PER SPECIFICATIONS OTHER REINFORCED CONCRETE SHALL BE CLASS 40, AND BLINDING CONCRETE SHALL BE CLASS15
3. STEEL REINFORCEMENT SHALL CONFORM TO THE REQ. OF ASTIM A615 GARDE 60.
4. ALL EXPOSED FACES OF WING-WALLS AND HEAD-WALL SHALL BE FAIR-FACED CONCRETE.
5. PROVIDE 7.5cm THICK BLINDING CONC. C15 UNDER APRON SLAB & WING-WALLS.
6. FLARE ANGLES, WING WALLS & APRON SLAB DIMENSIONS (L, W1, H...) SHALL BE DETERMINED BY THE ENGINEER TO SUIT SITE CONDITION.
7. REINFORCEMENT BARS SHALL HAVE THE FOLLOWING CONC. COVER :-
   i) ALL OUTSIDE FACES 4cm.
   ii) VERTICAL INSIDE FACES 5cm.
   iii) BOTTOM SLAB TOP FACES 7.5cm.
8. BACKFILL IMMEDIATELY ABOVE THE REINFORCED PIPES SHALL BE COMPACTED MANUALLY.
9. OTHER PIPES REINFORCEMENT ARRANGEMENT CAN BE USED IF IT SATISFIES SPECIFICATIONS REQUIREMENTS

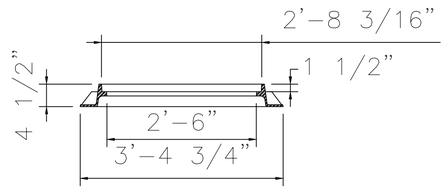
MAXIMUM PIPE DIA. 'P IN mm'	INSIDE DIA. 'A IN mm'	MIN. WALL THICKNESS 'B IN MM'	MIN. BASE THICKNESS 'C IN mm'
300	800	150	200
400	900	150	200
500	1000	150	200
600	1200	175	200



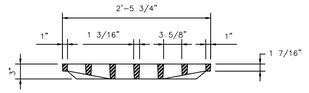
COVER SECTION A–A



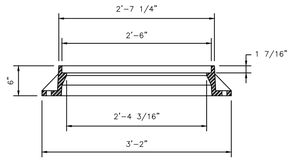
PLAN VIEW



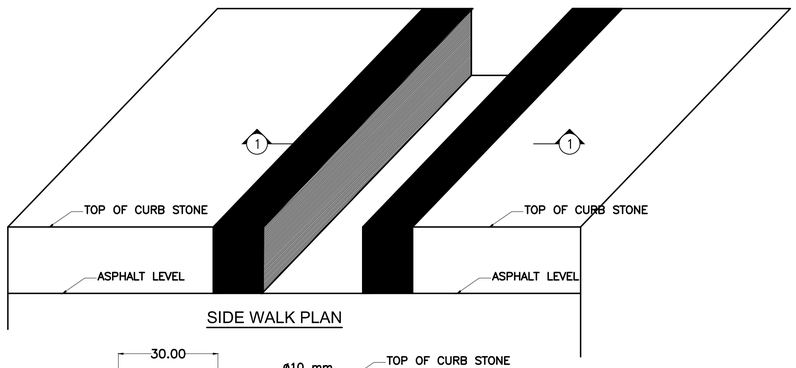
FRAME SECTION A–A



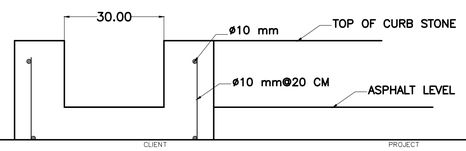
GRATE SECTION A–A

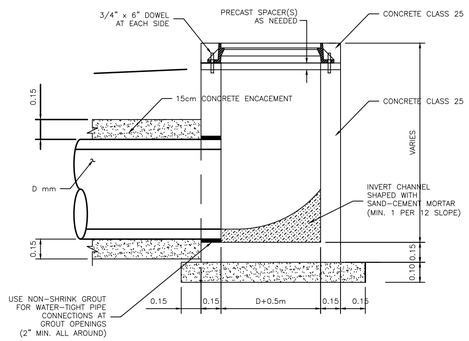


FRAME SECTION A–A



SIDE WALK PLAN





SECTION A–A