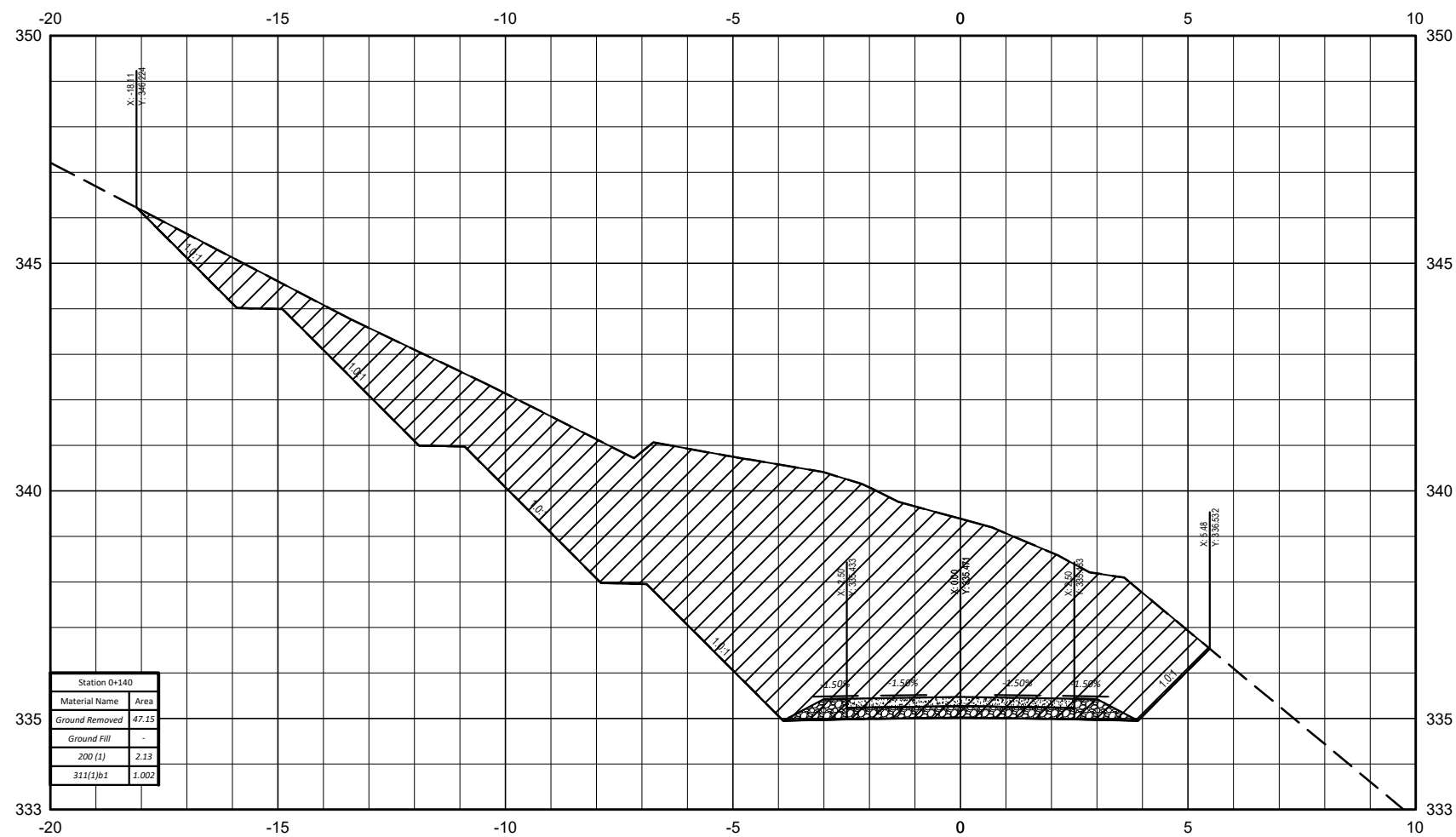


STA 0+160.00



STA 0+140.00



REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
REGIONAL OFFICE No. IV-A
BATANGAS 2ND DISTRICT
ENGINEERING OFFICE
KUMINTANG ILAYA, BATANGAS CITY

PROJECT NAME AND LOCATION:

Opening and Concreting of Brgy. Estrella
to Brgy. Laurel FMR, Brgy. Estrella and
Brgy. Laurel, Mabini, Batangas

SHEET CONTENT:

CROSS SECTION
STA. 0+140 - STA. 0+160

DRAFTED:

MARK LEE M. DALANGIN
ENGINEER II

PREPARED:

JUNEIL RAY M. CHAVEZ
ENGINEER II

REVIEWED :

BRYAN EDWARD R. ANDAL
ENGINEER II

DATE:

SUBMITTED :

GEMMA L. OLAN
CHIEF
PLANNING AND DESIGN SECTION

DATE:

RECOMMENDED:

ARIEL V. ARMEDILLA
ASSISTANT DISTRICT ENGINEER

DATE:

APPROVED:

SONIA D. PAGLICAUAN
DISTRICT ENGINEER

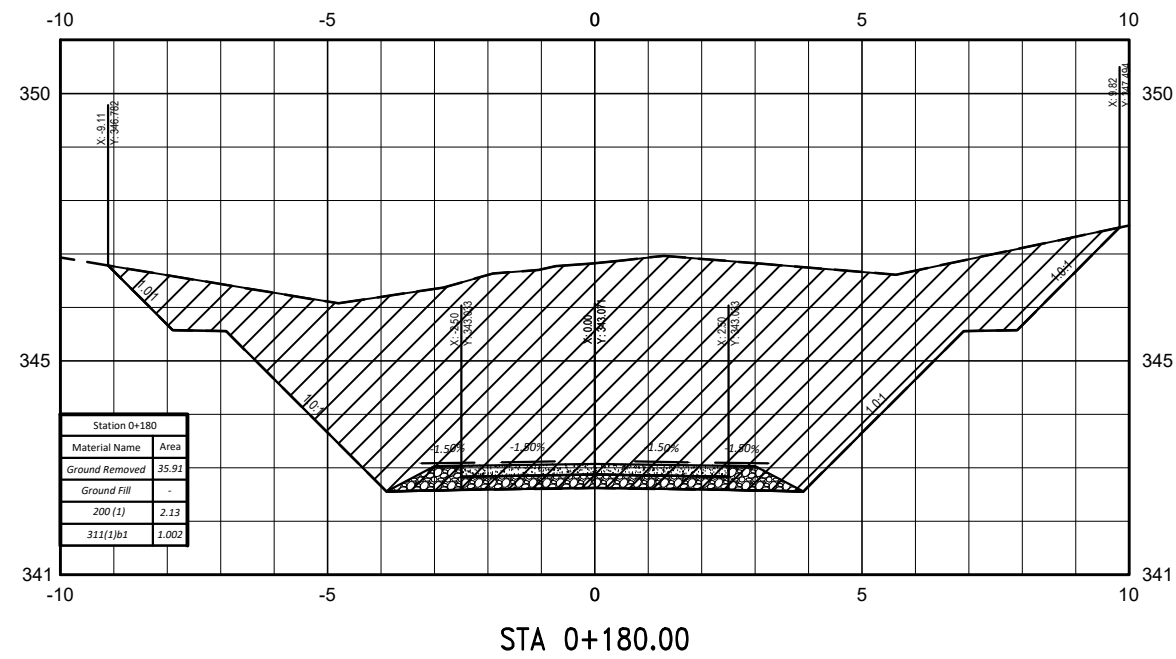
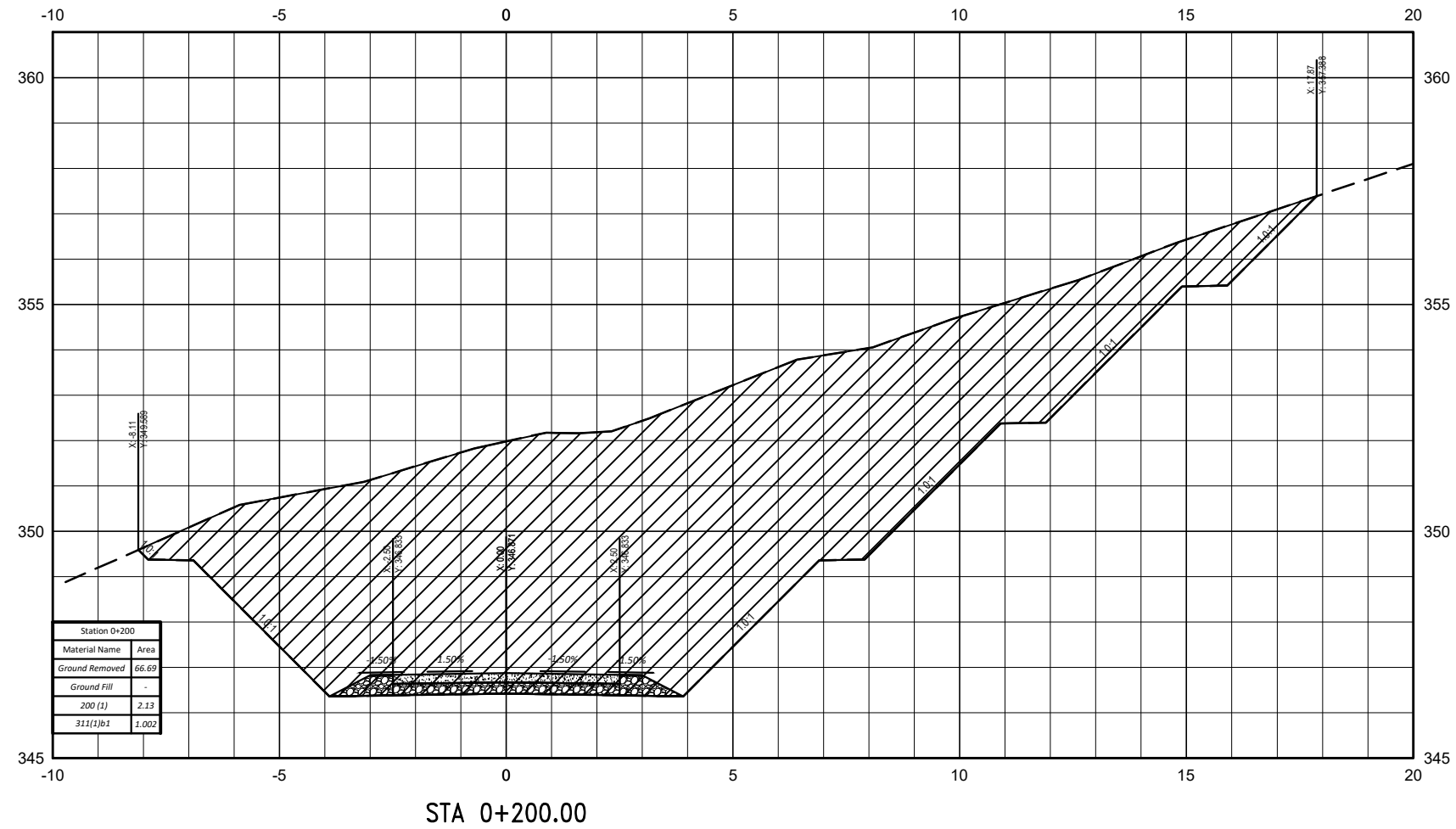
DATE:

SET NO.

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SHEET NO.

19
23



REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
REGIONAL OFFICE No. IV-A
BATANGAS 2ND DISTRICT
ENGINEERING OFFICE
KUMINTANG ILAYA, BATANGAS CITY

PROJECT NAME AND LOCATION:

Opening and Concreting of Brgy. Estrella
to Brgy. Laurel FMR, Brgy. Estrella and
Brgy. Laurel, Mabini, Batangas

SHEET CONTENT:

CROSS SECTION
STA. 0+180 - STA. 0+200

DRAFTED:

MARK LEE M. DALANGIN
ENGINEER II

PREPARED:

JUNEIL RAY M. CHAVEZ
ENGINEER II

REVIEWED:

BRYAN EDWARD R. ANDAL
ENGINEER II

DATE:

SUBMITTED:

GEMMA L. OLAN
CHIEF
PLANNING AND DESIGN SECTION

DATE:

RECOMMENDED:

ARIEL V. ARMEDILLA
ASSISTANT DISTRICT ENGINEER

DATE:

APPROVED:

SONIA D. PAGLICAUAN
DISTRICT ENGINEER

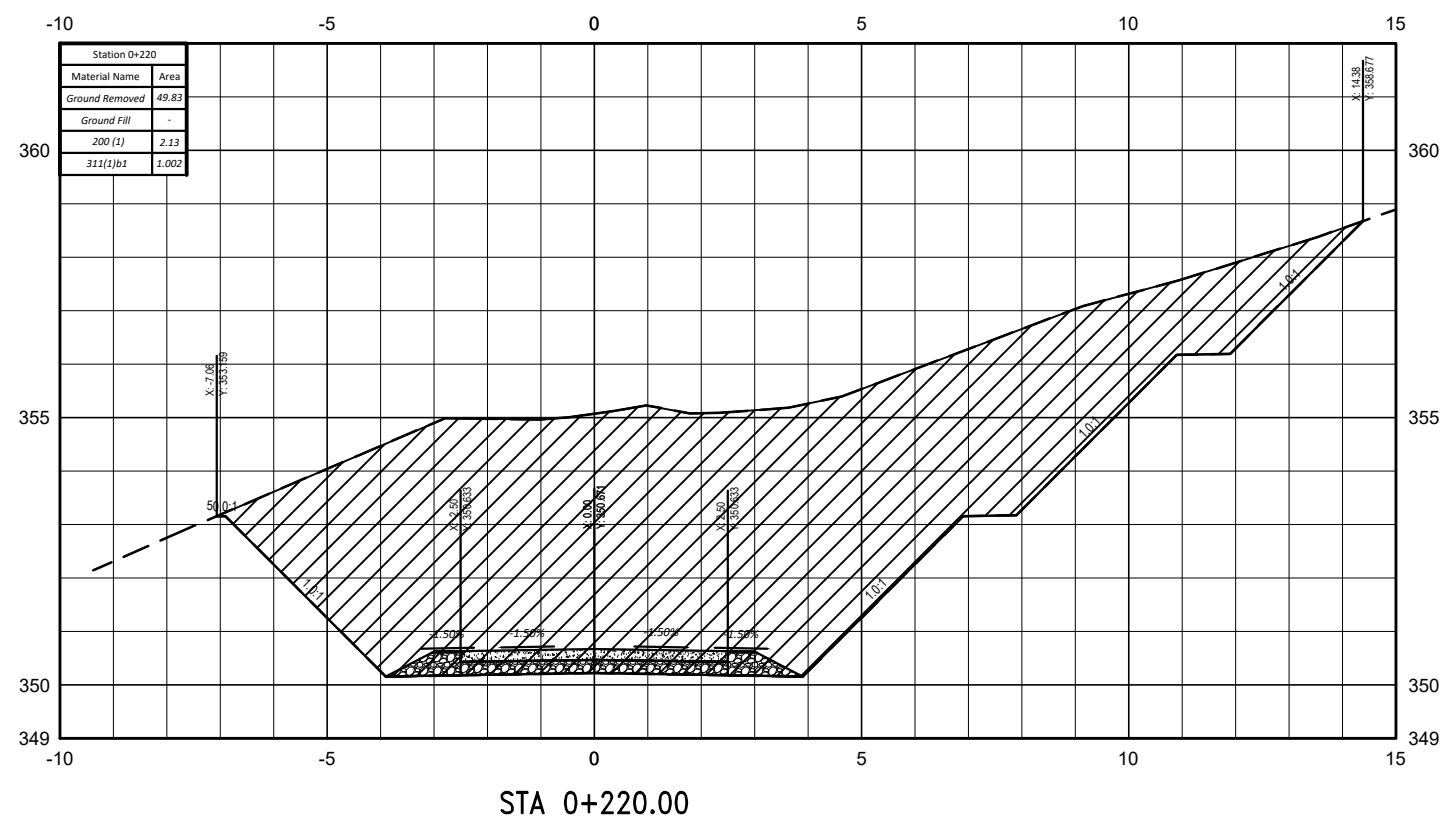
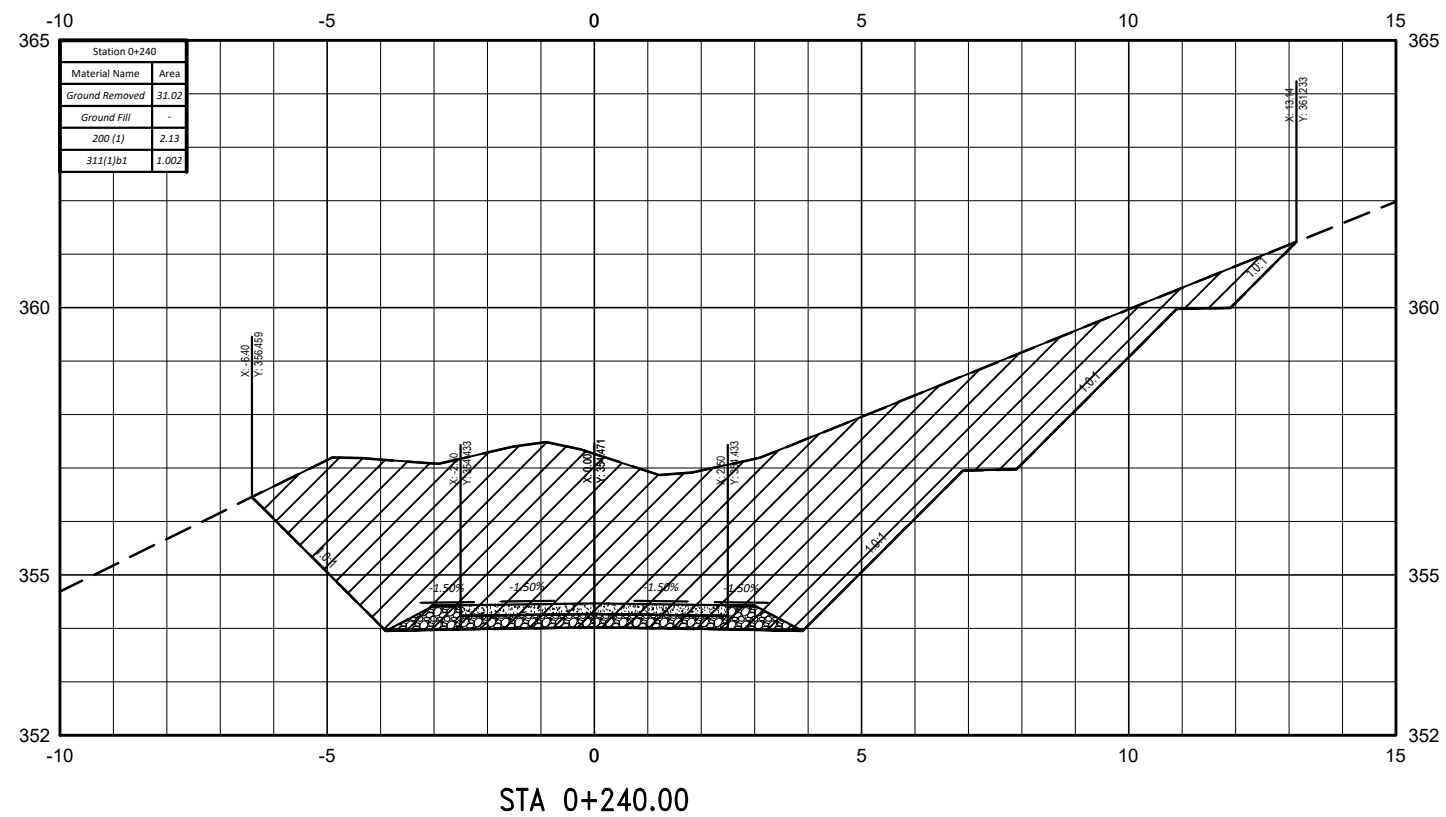
DATE:

SET NO.

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SHEET NO.

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23



REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
REGIONAL OFFICE No. IV-A
BATANGAS 2ND DISTRICT
ENGINEERING OFFICE
KUMINTANG ILAYA, BATANGAS CITY

PROJECT NAME AND LOCATION:

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to Brgy. Laurel FMR, Brgy. Estrella and
Brgy. Laurel, Mabini, Batangas

SHEET CONTENT:

CROSS SECTION
STA. 0+220 - STA. 0+240

DRAFTED:

MARK LEE M. DALANGIN
ENGINEER II

PREPARED:

JUNEIL RAY M. CHAVEZ
ENGINEER II

REVIEWED:

BRYAN EDWARD R. ANDAL
ENGINEER II

DATE:

SUBMITTED:

GEMMA L. OLAN
CHIEF
PLANNING AND DESIGN SECTION

DATE:

RECOMMENDED:

ARIEL V. ARMEDILLA
ASSISTANT DISTRICT ENGINEER

DATE:

APPROVED:

SONIA D. PAGLICAUAN
DISTRICT ENGINEER

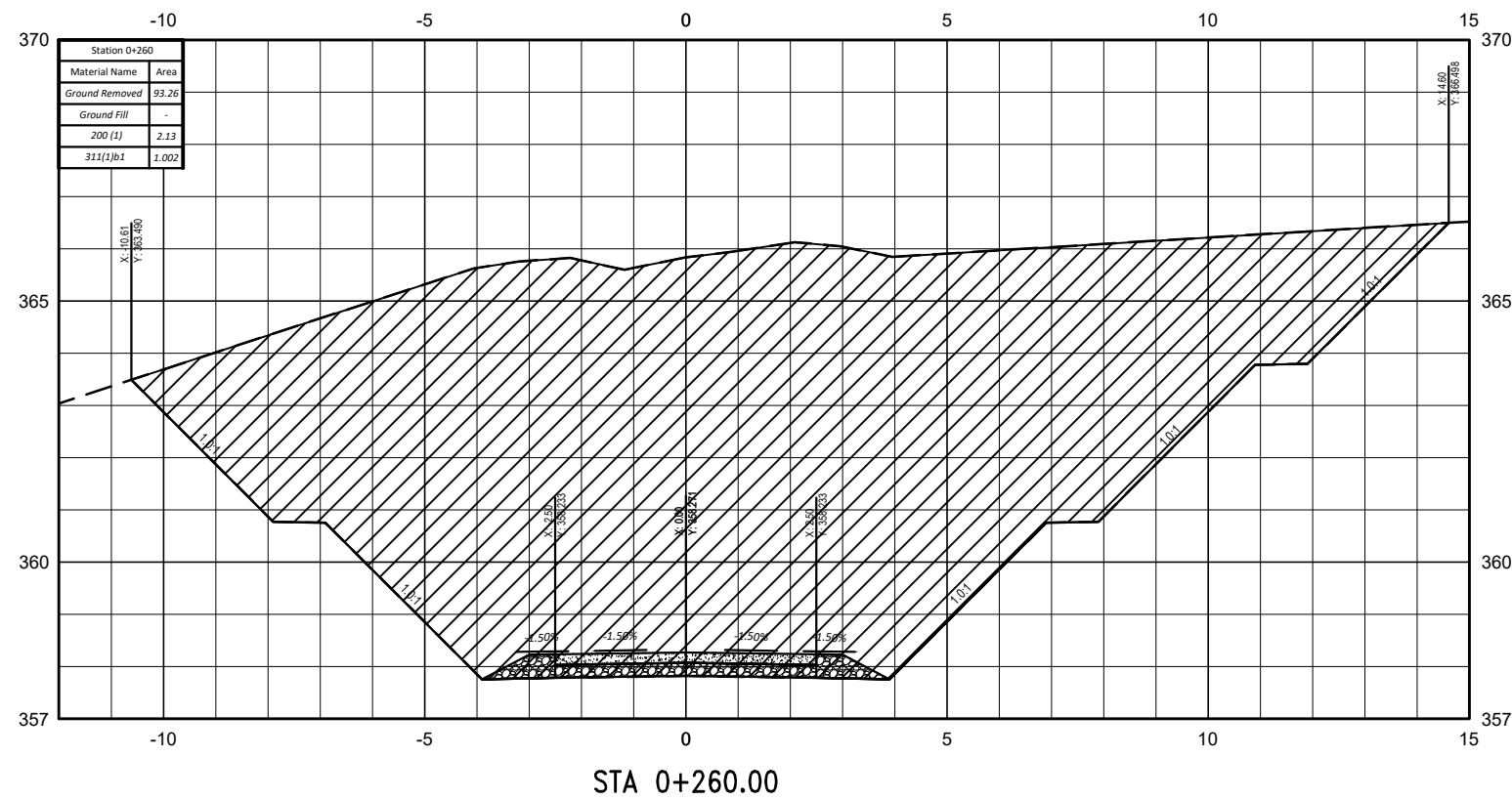
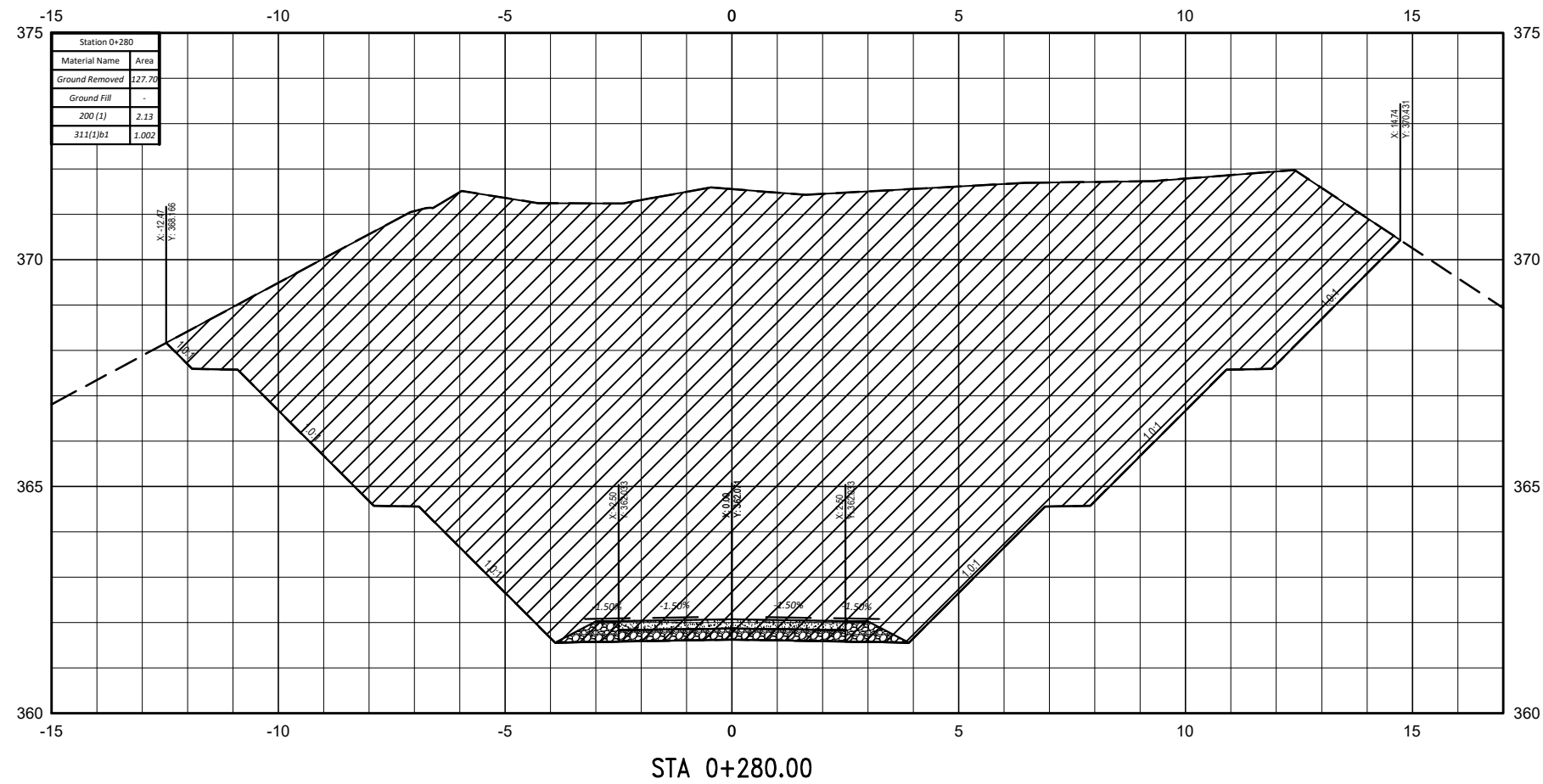
DATE:

SET NO.

R
14 16

SHEET NO.

21
23



REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
REGIONAL OFFICE No. IV-A
BATANGAS 2ND DISTRICT
ENGINEERING OFFICE
KUMINTANG ILAYA, BATANGAS CITY

PROJECT NAME AND LOCATION:

Opening and Concreting of Brgy. Estrella
to Brgy. Laurel FMR, Brgy. Estrella and
Brgy. Laurel, Mabini, Batangas

SHEET CONTENT:

CROSS SECTION
STA. 0+260 - STA. 0+280

DRAFTED:

MARK LEE M. DALANGIN
ENGINEER II

PREPARED:

JUNEIL RAY M. CHAVEZ
ENGINEER II

REVIEWED :

BRYAN EDWARD R. ANDAL
ENGINEER II

DATE:

SUBMITTED :

GEMMA L. OLAN
CHIEF
PLANNING AND DESIGN SECTION

DATE:

RECOMMENDED:

ARIEL V. ARMEDILLA
ASSISTANT DISTRICT ENGINEER

DATE:

APPROVED:

SONIA D. PAGLICAUAN
DISTRICT ENGINEER

DATE:

SET NO.

R
15 16

SHEET NO.

22
23

SCHEDULE OF SUBGRADE PREPARATION

STATION	LENGTH	WIDTH
STA 0+000.00 STA 0+280.00	280.00	7.80

SCHEDULE OF AGGREGATE SUBBASE COURSE

STATION	LENGTH	AREA
STA 0+000.00 STA 0+280.00	280.00	2.13

SCHEDULE OF PORTLAND CEMENT CONCRETE PAVEMENT
(UNREINFORCED), 0.20 M THICK, 14 DAYS

STATION	LENGTH	WIDTH
STA 0+000.00 STA 0+280.00	280.00	5.00

ITEM 506 (1) - STONE MASONRY

STATION	LENGTH	AREA
STA 0+005.00 STA 0+025.00	20.00	3.85

STATION	LENGTH	AREA	NO. OF PAR
STA 0+005.00 STA 0+025.00	20.00	0.73	14.00

SCHEDULE OF CUT AND FILL

FILL					
STATION		LENGTH	AREA 1	AREA 2	VOL
STA 0+000.00	STA 0+020.00	20.00	0.01	-	0.07
STA 0+020.00	STA 0+040.00	20.00	-	-	-
STA 0+040.00	STA 0+060.00	20.00	-	-	-
STA 0+060.00	STA 0+080.00	20.00	-	-	-
STA 0+080.00	STA 0+100.00	20.00	-	-	-
STA 0+100.00	STA 0+120.00	20.00	-	-	-
STA 0+120.00	STA 0+140.00	20.00	-	-	-
STA 0+140.00	STA 0+160.00	20.00	-	-	-
STA 0+160.00	STA 0+180.00	20.00	-	-	-
STA 0+180.00	STA 0+200.00	20.00	-	-	-
STA 0+200.00	STA 0+220.00	20.00	-	-	-
STA 0+220.00	STA 0+240.00	20.00	-	-	-
STA 0+240.00	STA 0+260.00	20.00	-	-	-
STA 0+260.00	STA 0+280.00	20.00	-	-	-

CUT					
STATION		LENGTH	AREA 1	AREA 2	VOL
STA 0+000.00	STA 0+020.00	20.00	5.12	6.11	112.34
STA 0+020.00	STA 0+040.00	20.00	6.11	4.49	106.07
STA 0+040.00	STA 0+060.00	20.00	4.49	16.54	210.38
STA 0+060.00	STA 0+080.00	20.00	16.54	33.02	495.64
STA 0+080.00	STA 0+100.00	20.00	33.02	33.66	666.79
STA 0+100.00	STA 0+120.00	20.00	33.66	56.14	897.95
STA 0+120.00	STA 0+140.00	20.00	56.14	47.15	1,032.83
STA 0+140.00	STA 0+160.00	20.00	47.15	28.12	752.72
STA 0+160.00	STA 0+180.00	20.00	28.12	35.91	640.38
STA 0+180.00	STA 0+200.00	20.00	35.91	66.69	1,026.00
STA 0+200.00	STA 0+220.00	20.00	66.69	49.83	1,165.17
STA 0+220.00	STA 0+240.00	20.00	49.83	31.02	808.50
STA 0+240.00	STA 0+260.00	20.00	31.02	93.26	1,242.79
STA 0+260.00	STA 0+280.00	20.00	93.26	127.70	2,209.62

TABLE OF HORIZONTAL GEOMETRY

P.I.NO.	P.I.STATION	COORDINATES		AZIMUTH	DISTANCE	Included Angle	RADIUS (m)	MID ORDINATE (m)	EXTERNAL TANGENT (m)	EXTERNAL SECANT (m)	CHORD LENGTH (m)	CHORD DIRECTION	STATION OF PC	STATION OF PT	Lc (m)	D
		EASTING	NORTHING													
POT				356d14'49"	6.25											
1	0+006.25m	(489529.6705m, 1518113.3206m)		31d10'13"	33.63	145.0768 (d)	16.348m	0.753	5.142m	0.750m	9.811m	S13° 42' 31"W	0+001.10m	0+011.07m	9.964m	34.9232 (d)
2	0+039.56m	(489512.2632m, 1518094.5438m)		67d3'47"	106.99	144.1071 (d)	50.000m	2.433	16.194m	2.557m	30.813m	S49° 07' 00"W	0+023.36m	0+054.69m	31.322m	35.8929 (d)
3	0+145.48m	(489413.7352m, 1518042.8490m)		96d45'44"	76.28	150.3007 (d)	80.000m	2.672	21.211m	2.764m	41.005m	S81° 54' 46"W	0+124.27m	0+165.74m	41.468m	29.6993 (d)
4	0+220.80m	(489337.8899m, 1518051.8305m)		305d7'21"	70.5	28.3602 (d)	13.000m	9.815	51.451m	40.068m	25.208m	S20° 56' 33"W	0+169.35m	0+203.76m	34.406m	151.6398 (d)
5	0+222.81m	(489395.6531m, 1518011.2703m)		296d10'37"	89.32	171.0546 (d)	120.000m	0.365	9.367m	0.367m	18.716m	S59° 21' 01"E	0+213.42m	0+232.15m	18.735m	8.9454 (d)

TABLE OF VERTICAL GEOMETRY

No.	PVI Station	PVI Elevation	Grade In	Grade Out	A (Grade Change)	Profile Curve Type	Profile Curve Length	K Value	Curve Radius
1	0+000.00m	312.471m		13.00%					
2	0+060.00m	320.271m	13.00%	19.00%	6.00%	Sag	95.779m	15.963	1596.316m
3	0+360.00m	377.271m	19.00%	10.91%	8.09%	Crest	150.000m	18.546	1854.573m
4	0+609.49m	404.495m	10.91%						