

STATE OF VERMONT
 CITIES OF BARRE & MONTPELIER
 BERLIN, VERMONT

SUMMARY OF QUANTITIES		
ITEM NO.	ITEM	QUANTITIES
P-152	UNCLASSIFIED EXCAVATION	20,000 CY
P-152	CLASSIFYING, RESHAPE & COMPACT	21,700 CY
P-214	PENETRATION MACADAM BASE COURSE	24,700 SY
P-225	KEYSTONE AGGREGATE SURFACE TREATMENT	4,600 SQY
P-405	BITUMINOUS WATERPROOF	16,900 GALS.
P-602	BITUMINOUS PRIME COAT	19,400 GALS.
P-604	BITUMINOUS SEAL COAT (COVER AGG)	1,500 TON.
P-604	BITUMINOUS SEAL COAT	15,000 GAL.
D-704A	STANDARD STRENGTH CLAY PIPE	325 LF
D-704B	REMOVE AND RELAY UNDER DRAIN	800 LF
D-705	15" STANDARD STRENGTH REIN. CONC. CUL.	325 LF
D-905	POROUS BACKFILL NO. 2	400 CY
D-907	GRATE SILET	9 EA.
D-751A	LOWER OR RAISE EXISTING C.B. GRATES	3 EA.
D-751B	REMOVE EXISTING CATCH BASIN	3 EA.
T-301	SEEDING - PREPARING SURFACE	456 ACRES
T-301	SEEDING - SOWING SEED	5.8 ACRES
T-305	TERRAZING	2,400 SQ.
L-108	AIRPORT CABLE TRENCH	3,000 LF.
L-108	AIRPORT UNDERGROUND CABLE	1,000 LF.
L-108A	TESTING RUNWAY ELEC. INSTALLATION	LUMP SUM
SES-114	INSTALLATION OF AIRPORT LIGHTS	22 EA.

CONSTRUCTION PLANS

FOR

BARRE - MONTPELIER AIRPORT
 GRADING, DRAINAGE, LIGHTING AND PAVING

10 JUNE 1950

INDEX TO DRAWINGS		
TITLE	SHEET NO.	
TITLE & APPROVAL SHEET - QUANTITIES & INDEX	1	
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CROSS SECTIONS NW-SE RUNWAY	11	

CIVIL AERONAUTICS ADMINISTRATION

APPROVED _____ DIRECTOR
 DATE _____ AIRPORT ENGINEERING SERVICE

APPROVED _____ SUPERINTENDENT
 DATE _____ AIRPORTS BRANCH

APPROVED _____ DISTRICT AIRPORT ENGR.
 DATE _____

VERMONT AERONAUTICS COMMISSION

APPROVED *D. C. Parson* CHAIRMAN
 DATE July 7, 1950

APPROVED *Joe F. Knoff* DIRECTOR
 DATE June 23, 1950

CITIES OF BARRE & MONTPELIER

APPROVED *Amos F. Barber* Mayor
 DATE 28 June 1950

Henry W. Wilcox Mayor
 DATE 28 June 1950

PREPARED BY

JOHN D. COOK, ENGINEER BARRE, VERMONT
 DATE 28 June 1950
John D. Cook
 Reg. Engineer

FORM ENG. 1A

EARTHWORK SHEET NO. 3 of 4

1941

		PROFILE				Total Excavation Earth and Rock		Balance and Rock Excavation		Embankment		Shaping Course of Gravel				PROFILE				Total Excavation Earth and Rock		Balance and Rock Excavation		Embankment		Shaping Course of Gravel		
V.C.	% Grade	STATION	ELEVATION		Correction for Vertical Curve	DIST.	AREA	CU. YDS.	AREA	CU. YDS.	AREA	CU. YDS.	AREA	CU. YDS.		V.C.	% Grade	STATION	ELEVATION		Correction for Vertical Curve	DIST.	AREA	CU. YDS.	AREA	CU. YDS.	AREA	CU. YDS.
			On Grades	On V Curves														On Grades	On V Curves									
		122	210.86															139	225.65									
		+50	211.43															+50	225.55									
		+55.5%	123+54.9	211.50														140	225.65									
		124	212.00															+50	225.75									
		+50	212.57															141	225.85									
		125	213.15															+50	225.95									
		+50	213.72															142	226.05									
		126	214.30															+50	226.15									
		+50	214.87															+75	226.20									
		127	215.45															143	226.25	226.30	+0.05							
		+50	216.02															+50	226.35	226.80	+0.45							
		128	216.60															144	226.45	227.70	+1.25							
		+50	217.17															+25	226.50	228.30	+1.80							
		129	217.75															+50	227.75	229.00	+1.25							
		+50	218.32															145	230.24	230.69	+0.45							
		130	218.90															+50	232.73	232.78	+0.05							
		+50	219.47															+75	233.95		0							
		131	220.05															146	235.23		0							
		+50	220.62															+50	237.72		0							
		132	221.20															147	240.21	240.03	-0.18							
		+50	221.77															+50	242.71	241.98	-0.73							
		133	222.35															148	245.20	243.56	-1.64							
		+50	222.92															+50	245.51	244.78	-0.73							
		134	223.50	223.46	-0.04													149	245.81	245.63	-0.18							
		+50	224.07	223.91	-0.16													+50	246.12		0							
		135	224.65	224.29	-0.36													150	246.42									
		+50	224.75	224.59	-0.16													+50	246.73									
		136	224.85	224.81	-0.04													151	247.03									
		+50	224.95		0													+50	247.34									
		137	225.05															+75	247.49		0							
		+50	225.15															152	247.64	247.70	+0.06							
		138	225.25															+50	247.95	248.49	+0.54							
		+50	225.35															153	248.25	249.75	+1.50							
		139	225.45															+25	248.40	250.57	+2.17							
																		+50	249.99	251.49	+1.50							
																		+75	251.59	251.56	+0.97							
																		154	253.19	253.73	+0.54							
																		+25	254.79	255.03	+0.24							
																		+50	256.38	256.46	+0.06							

CARRIED FORWARD
COLUMN FOOTINGS

CARRIED FORWARD
COLUMN FOOTINGS

REVISIONS

VOLUMES

VERTICAL CURVES

GRADES

REVISIONS

VOLUMES

VERTICAL CURVES

GRADES

By

By

Computed by
Checked by

Computed by
Checked by

Computed by
Checked by

Computed by
Checked by

Computed by
Checked by

Computed by
Checked by

+1150%

300' VC

+10200%

+10200%

300' VC

+4987%

300' VC

+0610%

300' VC

+6387%

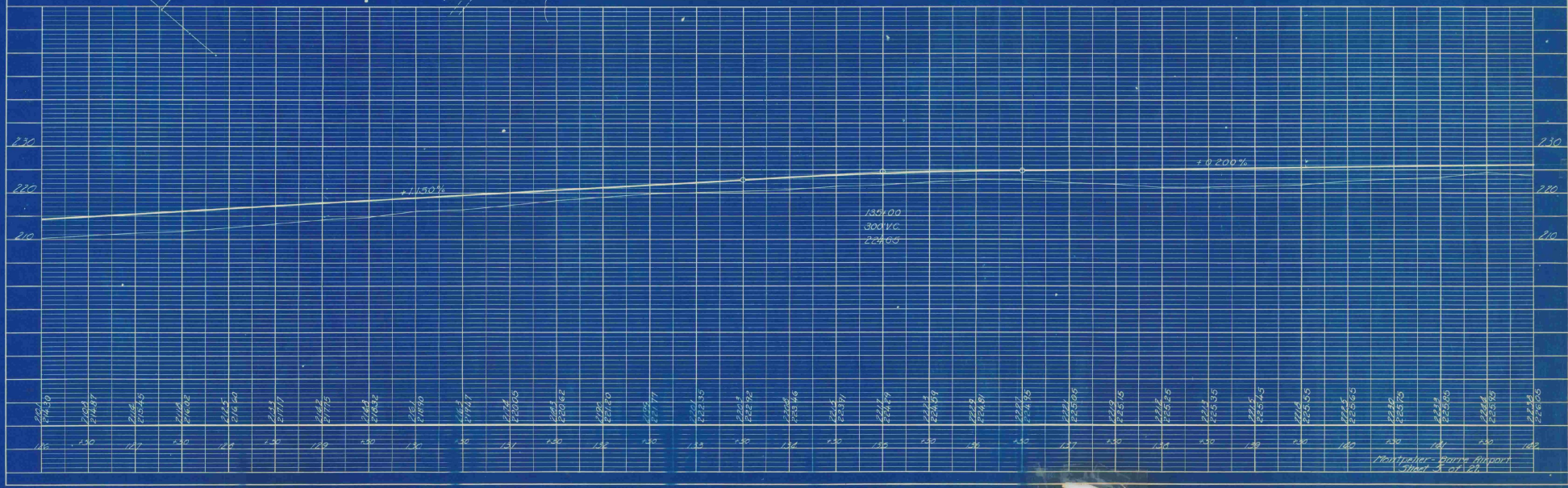
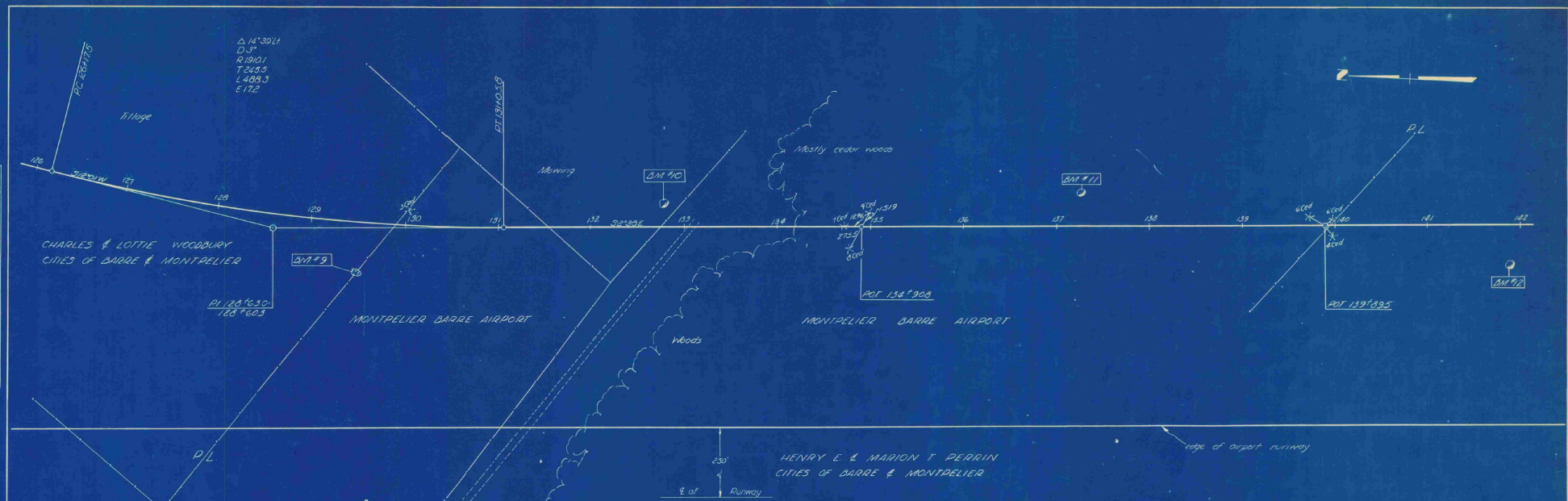
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R. 202
Pac. 112

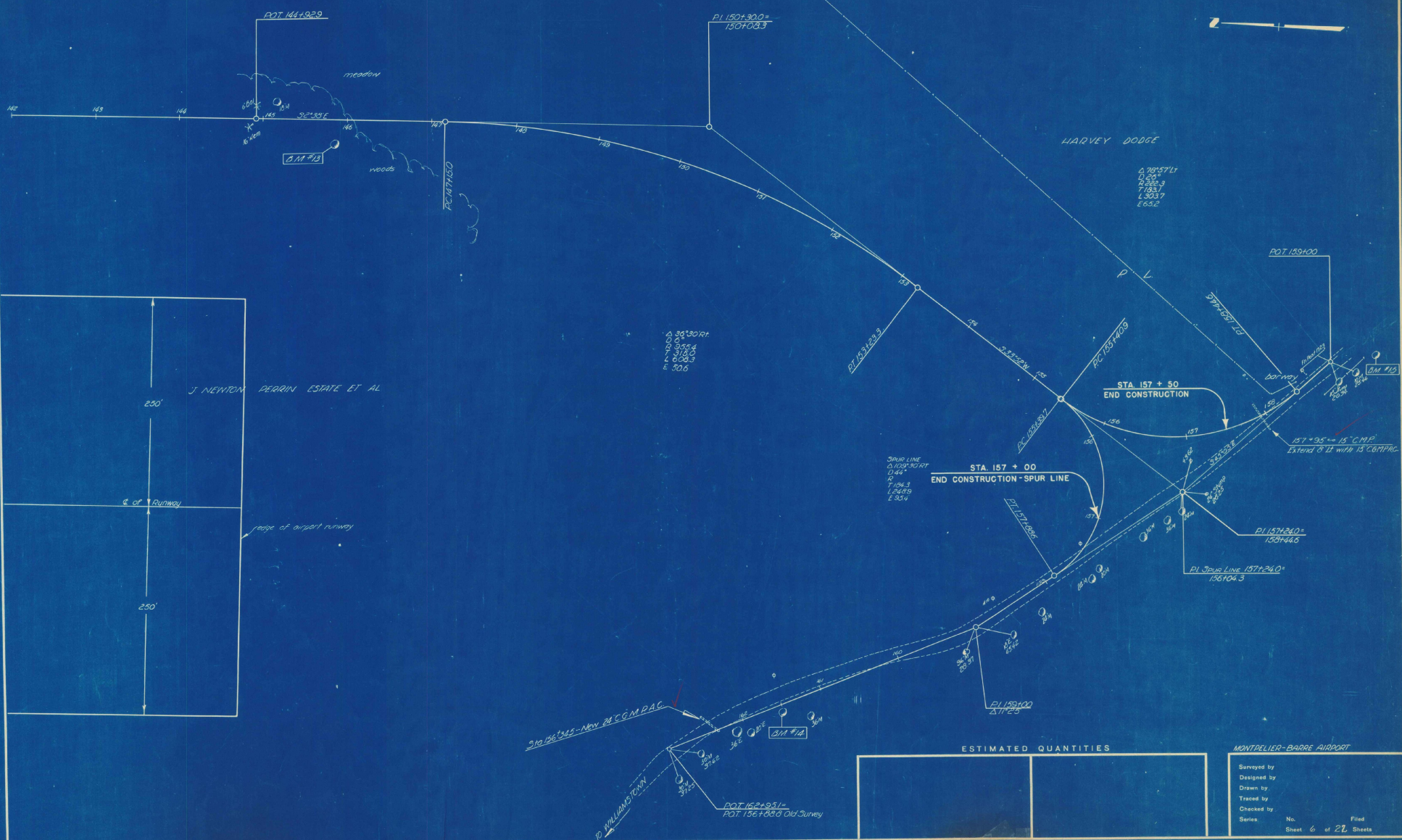
C.R. 239
R. 202
Pac. 112

C.R. 239
R. 202
Pac. 112

PLAN
 SURVEYED BY
 MONTELLA
 CHECKED BY
 H. W. CHASE
 NO. 1000

PROFILE
 ELEVATION
 CHECKED BY
 H. W. CHASE
 NO. 1000





Δ 38°30'RT
 L 205
 E 222.3
 7.037
 L 303.7
 E 65.2

SPUR LINE
 Δ 109°40'RT
 D 44°
 L 7.043
 L 230.0
 E 35.4

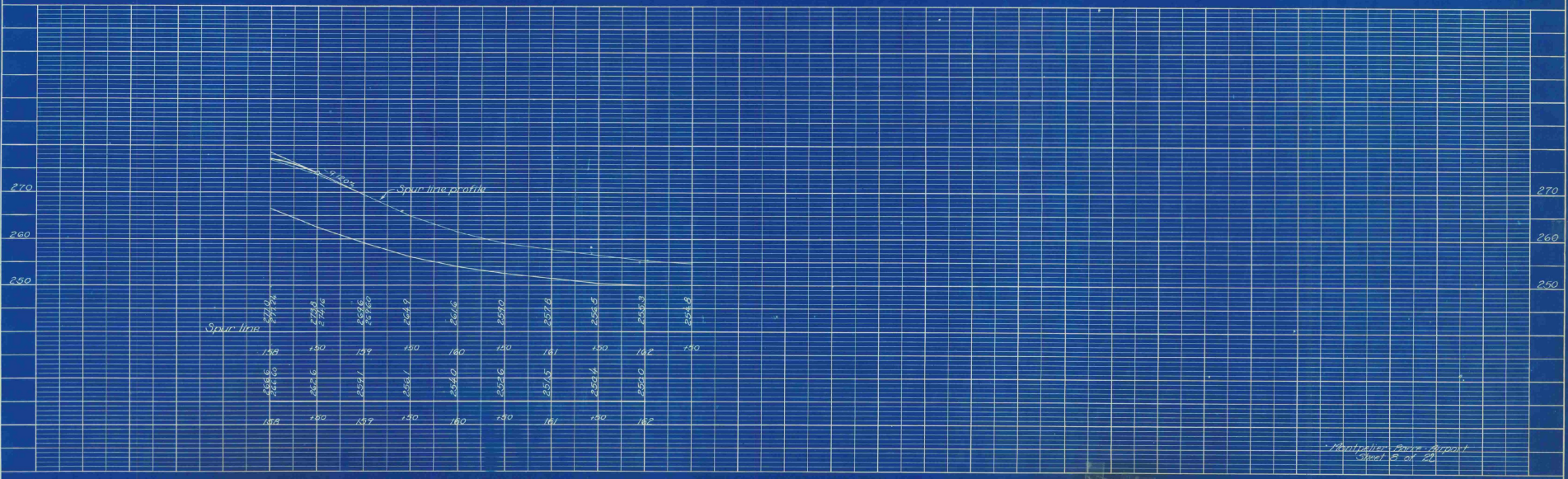
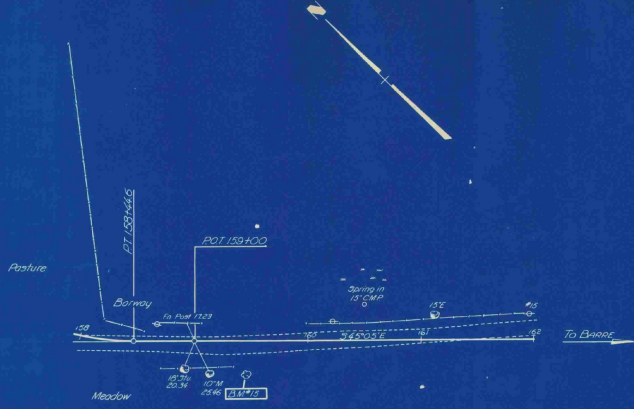
Δ 78°07'LT
 L 205
 E 222.3
 7.037
 L 303.7
 E 65.2

ESTIMATED QUANTITIES

MONTPELLIER-BARRE AIRPORT
 Surveyed by
 Designed by
 Drawn by
 Traced by
 Checked by
 Series No. 6 of 22 Sheets
 Filed

PLAN
 DATE: 1/22/22
 DRAWN BY: J.S.D.
 CHECKED BY: J.S.D.
 NO. 1

PROFILE
 DATE: 1/22/22
 DRAWN BY: J.S.D.
 CHECKED BY: J.S.D.
 NO. 1



Montreal, Quebec, Canada
 Sheet 8 of 10

135.97
78+0
18" C.G.T.P.A.C. Long. 38 ft.



Sum. from 800 to 1000

131.50

80+0

131.56

81+50

132.62

81+0

132.68

80+50

132.72

80+0

133.77

79+69

133.79

79+50

132.25

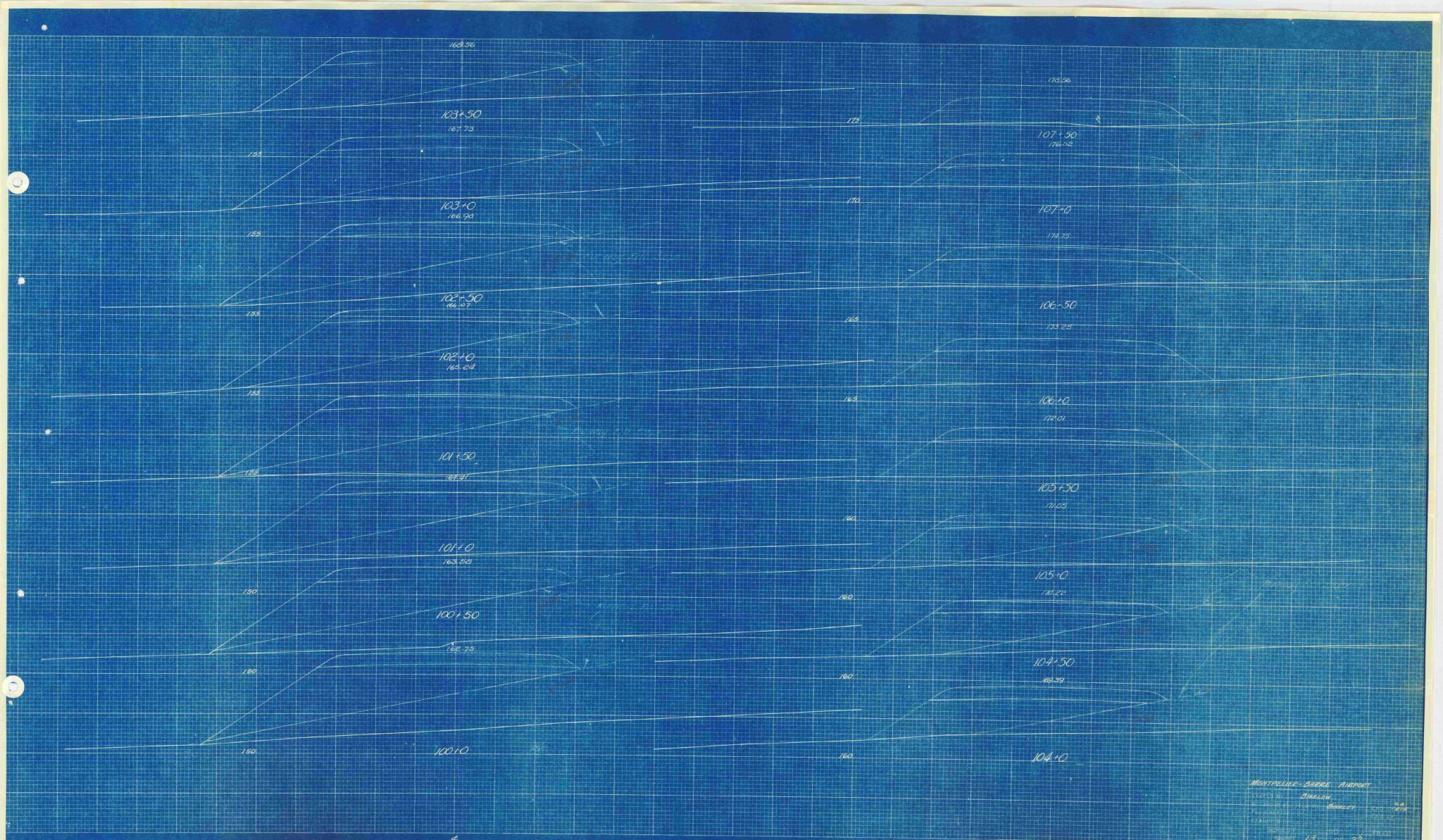
79+0

132.91

78+50

P.C. 81+02.0
6" Right
Bank 1/6" per foot

MONTPELLIER-DANES AIRPORT
BRILLON
BRUNETT

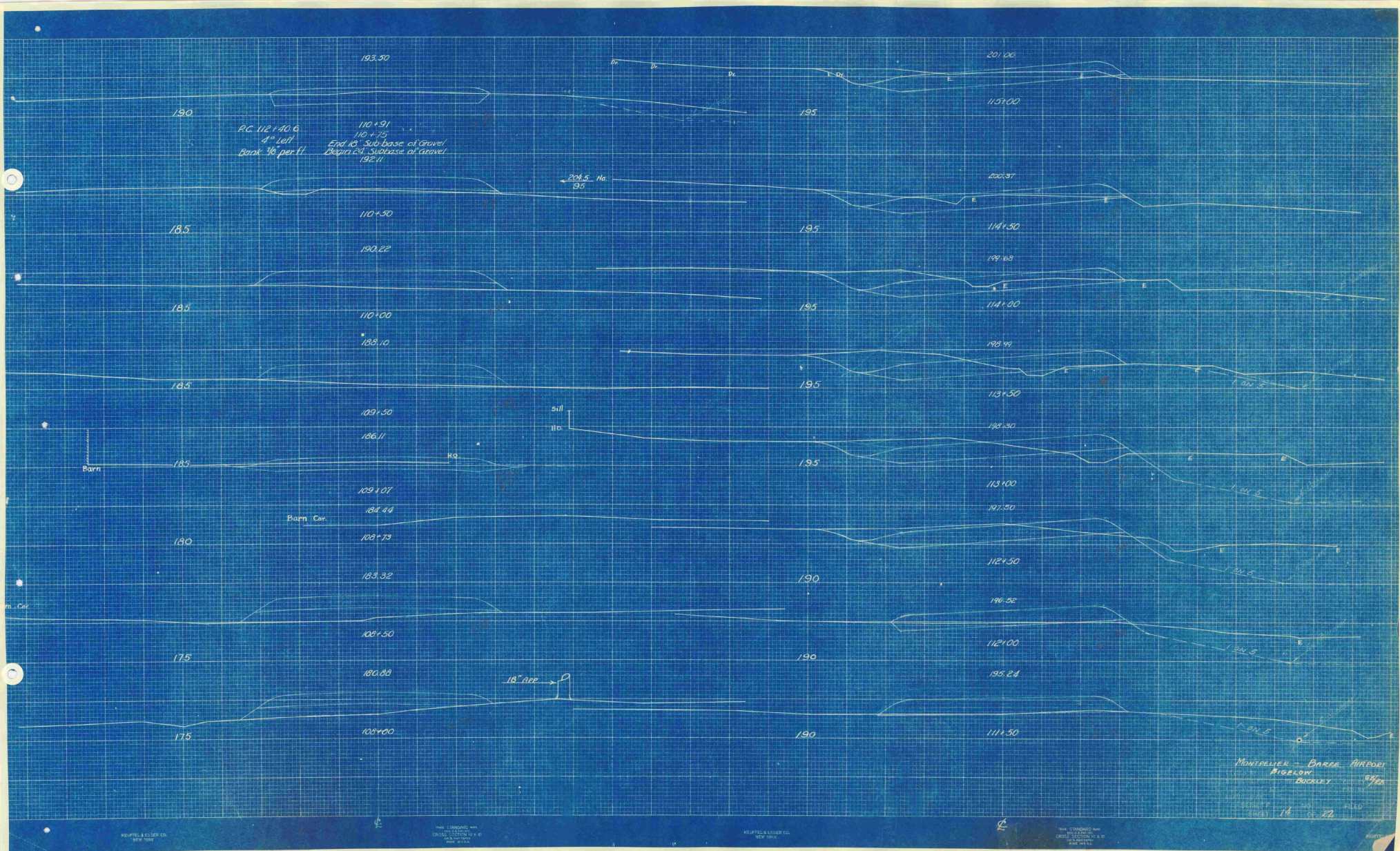


STANDARD
DRAWING
BY
DATE
CHECKED
DATE
APPROVED
DATE

KRUEGER & CO.
NEW YORK

STANDARD
DRAWING
BY
DATE
CHECKED
DATE
APPROVED
DATE

MONTPELIER-SARRE AVENUE
DINELLY
PLANNING
STATIONING
SHEET 13 OF 22



P.C. 112+40.6
 4" Left
 Bank 18 per ft

110+91
 110+75
 End of Sub base of Gravel
 Begins 18" Sub base of Gravel
 192.11

204.5 Hg
 96

110+50

190.22

110+00

189.10

109+50

186.11

109+07

184.44

108+73

183.32

108+50

180.88

108+00

18" Pipe

MONTPELIER - BARRA AIRPORT
 BIGELOW
 BUCKLEY
 55/28
 14 40
 14 40
 14 40
 14 40

PC 117+46.2
 5' Left
 Bank 1 per foot

Stumps

Stumps

SW 43'

PT 115+82.1 =
 114 + 19.2 RG = 168.9
 Bank 1/4" per foot
 4" Left

100+50
 End of Sub-base of Gravel
 Begin 18" Sub-base of Gravel

To DESIGN AIRPORT ROAD RECONSTRUCTION
 REVISIONS BY STRICKNEY
 PROJECTS DESIGNED BY EMERLEY
 DRAWN BY
 CHECKED BY
 SURVEY NO. FILED
 SHEET 13 OF 22

APPROXIMATE SUMMARY OF QUANTITIES				DETAILED SUMMARY OF QUANTITIES				TYPE OF ROAD ONE COURSE CEMENT CONCRETE PAVEMENT										
QUANTITIES	UNIT	ITEMS	ITEM NO.	QUANTITIES	UNIT	ITEMS	ITEM NO.	QUANTITIES	UNIT	ITEMS	STATIONS	PAVEMENT WIDTHS	EQUATIONS					
											From	To	20'	21'	22'	+	-	
300	cu. yd.	Common Excavation	10		lin. ft.	12" Cast Iron Pipe	45A		eu. yd.	Solid Rock Excavation								
	"	Solid Rock Excavation	10		"	"	45B		"	Excavation as per Sections								
8200	"	Borrow	11		"	"	45C	50		Calvert Excavation (incl. Factor) (Est)	969+00.0	1014+55.2	355.2					0.5
	"	Common Excavation Inc. Borrow	10-11		"	"	45D				274+55.7	282+00.0	75.3					
	cu. yd.	Sub-base of Field or Quarry Stone	12A		lin. ft.	12" Reinforced Concrete Pipe (incl. 1/4" LE Overrun)	49A	250	"	Overrun								
	"	Sub-base of Gravel	12B		"	"	49B		eu. yd.	TOTAL	992+00.0	991+00.0	578.7					Bridge 79 ft.
500	"	Sub-base of Sand	12C	1740	"	"	49C	300			992+00.0	991+00.0	578.7					
	"	Sub-base of Crushed Rock or Slag	12D	416	"	"	49D				992+00.0	991+00.0	578.7					
	days	Patrol Maintenance	13	164	"	"	49E	2871	eu. yd.	Common Excavation incl. Borrow								
	cu. yd.	Channel Excavation	14		"	"	49F		"	Excavation as per Sections								
	"	Structure Excavation	15		"	"	49G	1348	"	Borrow								
	cu. yd.	Broken Stone Base Course	19		lin. ft.	6" Vitrified Clay Pipe	51A	744	"	Calvert Excavation incl. Factor								
	"	Gravel Surface Course	20A		"	"	51B		eu. yd.	Underdrain Excavation incl. Factor								
	"	Gravel Surface Course (Crushed)	20B		"	"	51C	5200										
900	"	Gravel Shoulders (incl. 100 sq. Overrun)	21		"	"	51D		eu. yd.	TOTAL								
	cu. yd.	Bitum. Macadam Surface Course (Asphalt or Tar)	22A	300	lin. ft.	Relaying Pipe Culverts	51	206	eu. yd.	Sub Base of Gravel								
	"	" (Emulsified Asph.)	22B		"	"	52		"	Sub-base								
	sq. ft.	Oil Asphalt	22C		hump sum	Terrapin Bridge	55		"	Shaping Course as per Sections								
	"	Refined Tar	22D		lin. ft.	Timber Filing	56		"	Surfacing for Driveway								
	"	Emulsified Asphalt	22E		M. B. M.	Timber Cribbing	57		"	Bleeders								
	"	Cut Back Asphalt	22F		cu. ft.	Concrete Cribbing	58	296	Overrun									
900	cu. yd.	One Course Cement Concrete Pavement	23		cu. yd.	Stone Fill	60	500	eu. yd.	TOTAL								
	"	Gravel Mixed-in-place Surface Course	24A		"	Plas. Rip-Rap	61											
	"	Crushed Stone Mixed-in-place Surface Course	24B		"	Rip-Rap for Bank Protection	62											
	sq. ft.	Dragged Seal Coat for Bitum. Macad. Surface	24C		lin. ft.	Standard Underdrain with 6" Vitrified Clay Pipe	63A	8										
	"	Oil Asphalt	24D		"	"	63B											
	"	Refined Tar	24E		"	Standard Underdrain with 6" Perforated Concrete	63C	92										
	"	Emulsified Asphalt	24F		"	Galvanized Metal Pipe - Bitum. Coat	63D	100										
	"	Cut Back Asphalt	24G		"	Standard Underdrain with 8" Perforated Concr.	63E											
	sq. yd.	Single Bituminous Surface Treatment	25		lin. ft.	Wood Guard Rail	66											
4200	"	Double " " (incl. Overrun)	26		"	Cable Guard Rail	67A											
	"	Natural Rock Asphalt Surface Course	27		each	" " " Concrete Posts	67B											
	cu. yd.	Concrete Class A	33A		each	Guide Posts	68	500	cu. yd.	Common Excav. Incl. Borrow								
127	"	" " B	33B		"	" " Concrete	69	193	"	Concrete Class A								
	"	" " C	33C		"	ANCHORS for Cable Rail	70	3300	lbs.	Reinforcing Steel								
	"	" " D (cyclopan)	33D		each	Erection of State or Federal Aid Markers	71											
10100	lb.	Reinforcing Steel	34		cu. yd.	Plain Rubble Paving	70A											
	sq. yd.	Waterproofing Membrane	35		"	Grouted Rubble Paving	70B											
	lb.	Structural Steel	36A		sq. yd.	Plain Cement Concrete Gutter	73											
	hump sum	Steel Superstructure	36B	100	"	Grouted Cobble Gutter	74A											
					each	Leaching Basins	75											
	hump sum	Plain Timber Floor System	37A		"	Catch Basins (Brick)	76											
	"	Timber Floor System Treated in Field	37B		"	" (Concrete)	76B											
	"	Crossed Timber Floor System	37C	23	"	Changing Elevations of Manholes & Catch Basins	77											
163	cu. yd.	Cement Rubble Masonry	43		lin. ft.	Snow Fence	79											
	"	Dry Rubble Masonry	44		lin. ft.	LE Curb												
	sq. yd.	Repointing Masonry	45		"	Special Down Inlet (Metal)												
	lin. ft.	12" Coated Galvanized Metal Pipe (Bitum. Coated)	47A		lin. ft.	Delustrant Rail												
	"	"	47B		hump sum	Lighting System												
	"	"	47C		sq. yd.	One Course Cement Concrete Sidewalk												
	"	"	47D		cu. yd.	High Early Strength Cement Concrete												
	"	"	47E															
	"	"	47F															

25 cu. Common Excav. Incl. Borrow
 104 sq. yd. Structure Excavation
 25 sq. yd. One Course Cement Concrete Pavement
 180 cu. yd. Concrete Class A
 5807 lbs. Reinforcing Steel
 197 lbs. Removal of Present Superstructures
 1 lb. Rebar
 20 cu. yd. Ballast
 14 cu. yd. Solid Fresh Excav.
 75 cu. yd. Concrete Class B
 34

VILLAGE PARTICIPATION
 500 cu. yd. Common Excav. Incl. Borrow
 193 cu. yd. Concrete Class A
 3300 lbs. Reinforcing Steel

	CONCRETE	STEEL	C. R. M.	GRATES
	cu. yd.	lbs.	sq. ft.	each
Pipe Culverts	193	1345		
Box Culverts	42.9	4504		
Manholes				
Walls			150	
Curb and Gutter				
Downsloped Curb	15.6	750		
Overrun	19.2	963		
TOTAL	127.0	10700	165	

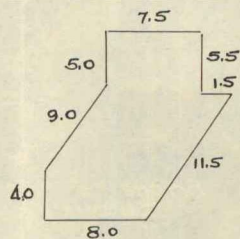
	LENGTH OF PROJECT			
	STA. TO STA.	FEET	MILES	
Highway	929+00	1012+39	4259.5	0.806
Bridge	81499	391+74.0	992+80.0	79.0
Length of Project			4336.5	0.821

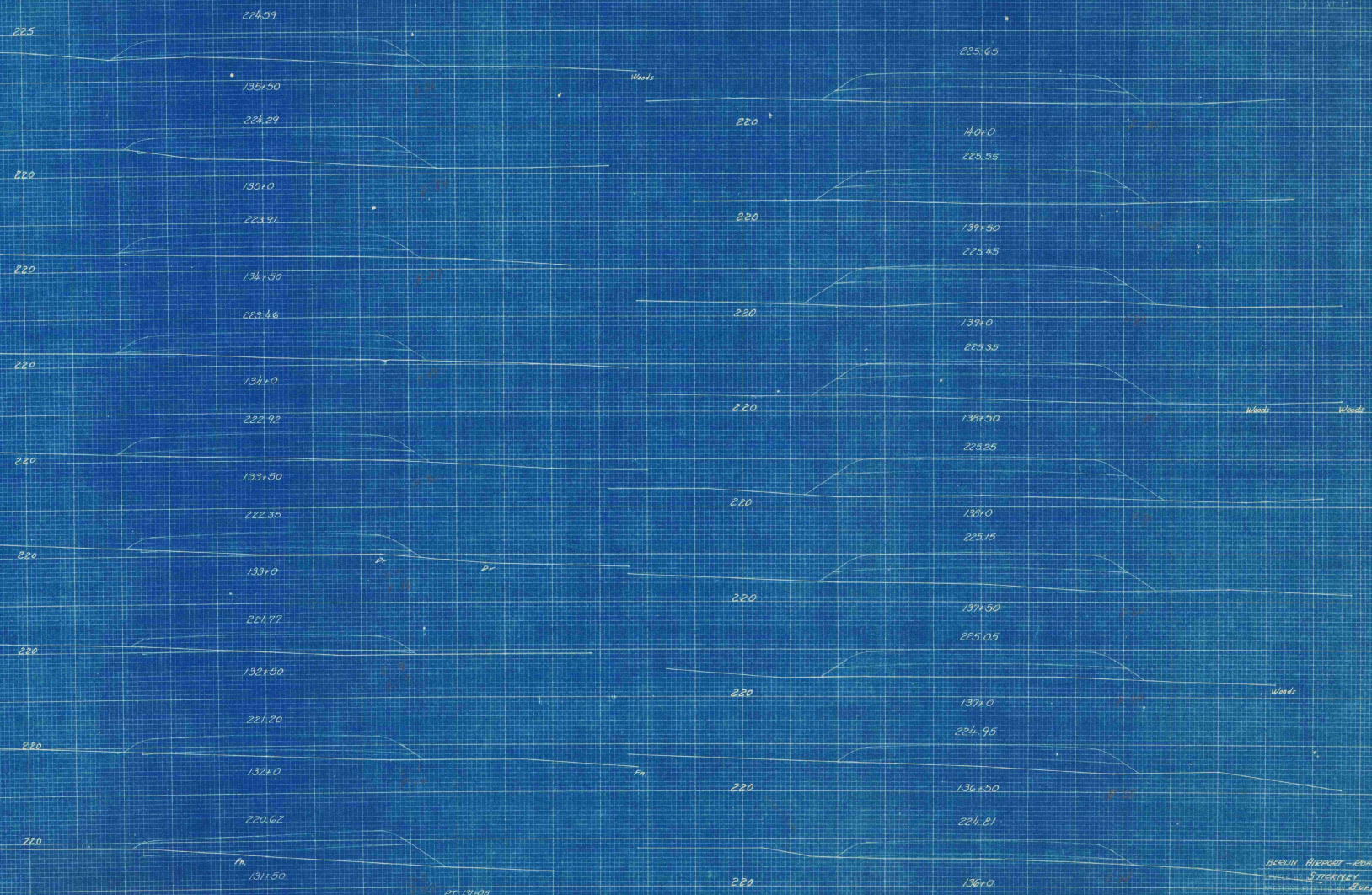
CURB DOWELLED TO PAVEMENT

LEFT			RIGHT		
STA.	STA.	HGT.	STA.	STA.	HGT.
982+88.7	983+92.3	7"	969+0	982+46.9	7"
992+11.3	992+56.3	8"	984+47	985+56	6"
993+07.6	993+92	7"	985+73	986+12	6"
994+08.5	994+87	7"	987+16.5	988+07	6"
995+03	996+14	7"	988+95	989+05	6"
996+27	997+70	7"	989+19	989+47	6"
997+89	998+89	7"	989+66	991+42.3	6"
999+08	1001+25.5	7"	992+95	993+65	7"
1001+42	1001+95	7"	993+74	994+40	7"
1002+11	1004+05	7"	994+50	994+89.5	7"
1004+20	1004+77	7"	994+98	995+16	7"
1004+94	1005+48	7"	1008+54	1008+94	7"
1005+52	1006+41	7"			
1006+58	1006+90	7"			
1007+13	1008+75	7"			
1008+87.5	1009+65	7"			
1009+82	1010+39	7"			
1010+51	1011+88	7"			

GROUTED COBBLE GUTTER

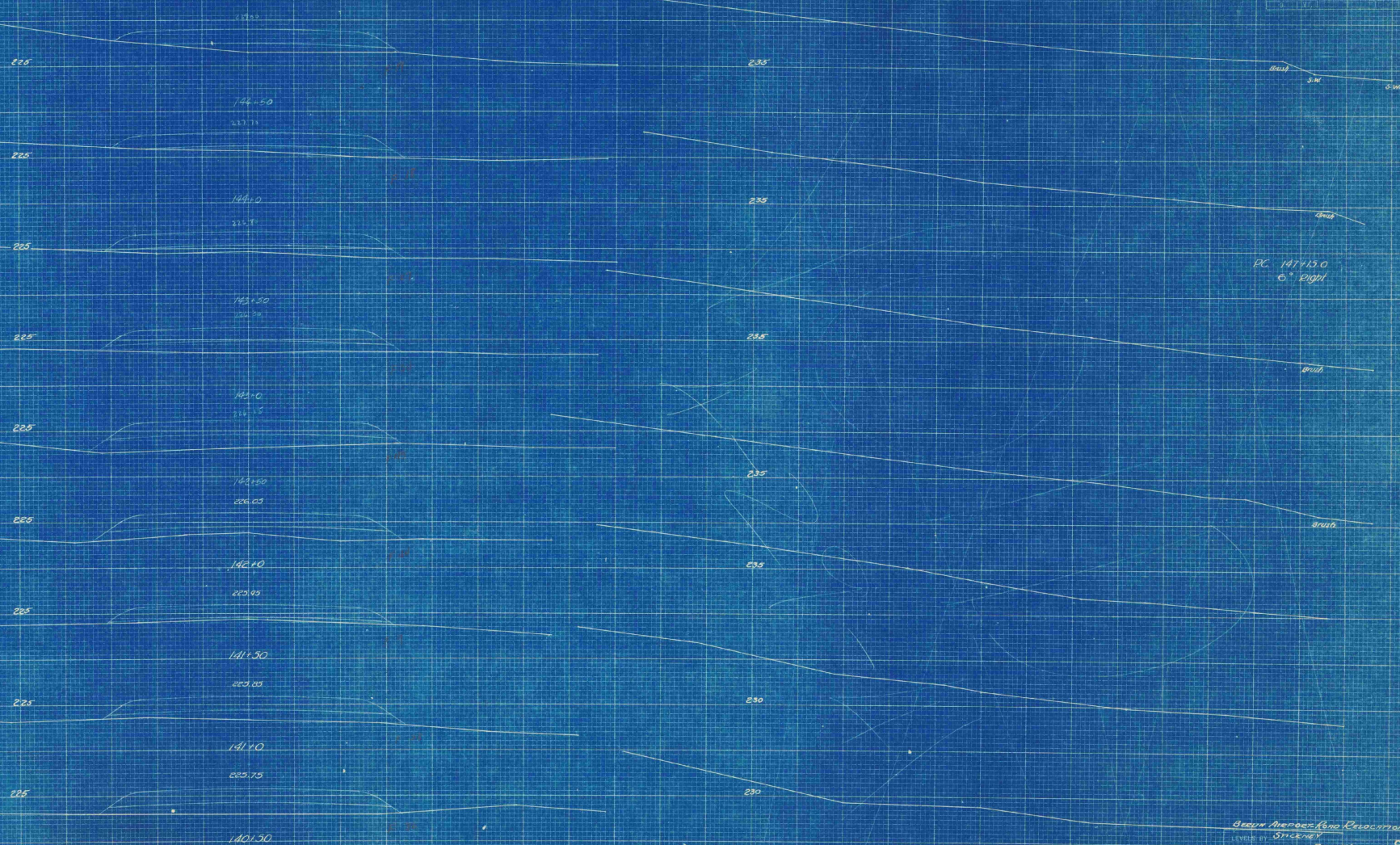
STA.		LENG.
970+32	RT.	22' x 6'
972+48	"	17' x 6'
974+77	"	19' x 5.5'
975+88	"	15' x 6'
1012+23	"	SEE SKETCH





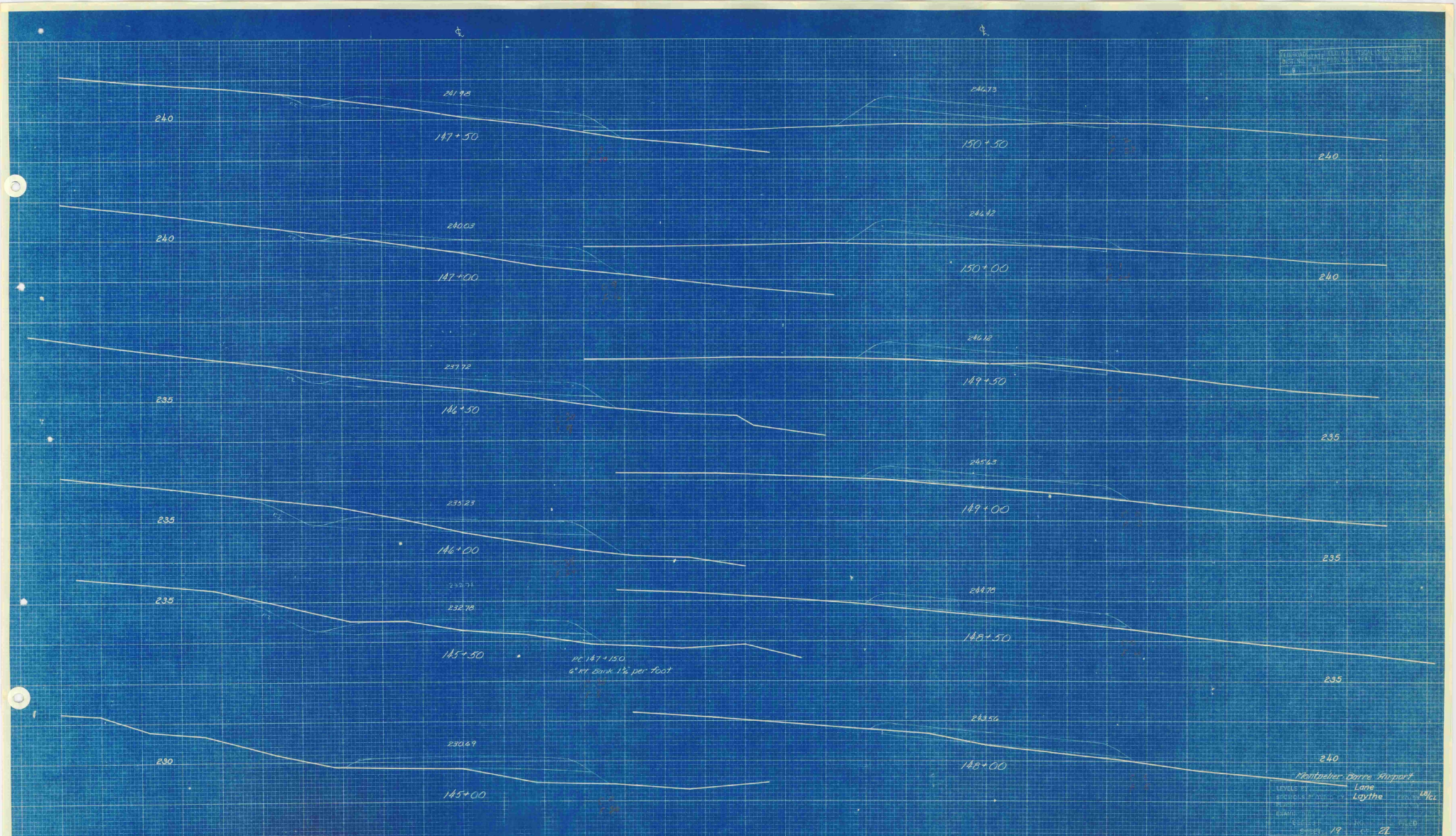
BECKEN AIRPORT - ROAD RELOCATION
 DRAWN BY SIDNEY
 CHECKED BY B. B. BENTLEY
 DESIGNED BY
 ENGINEER
 SHEET NO. 17 OF 22
 FIGURE

FEDERAL BUREAU OF SURVEYING
 DISTRICT OF COLUMBIA
 1-2-57

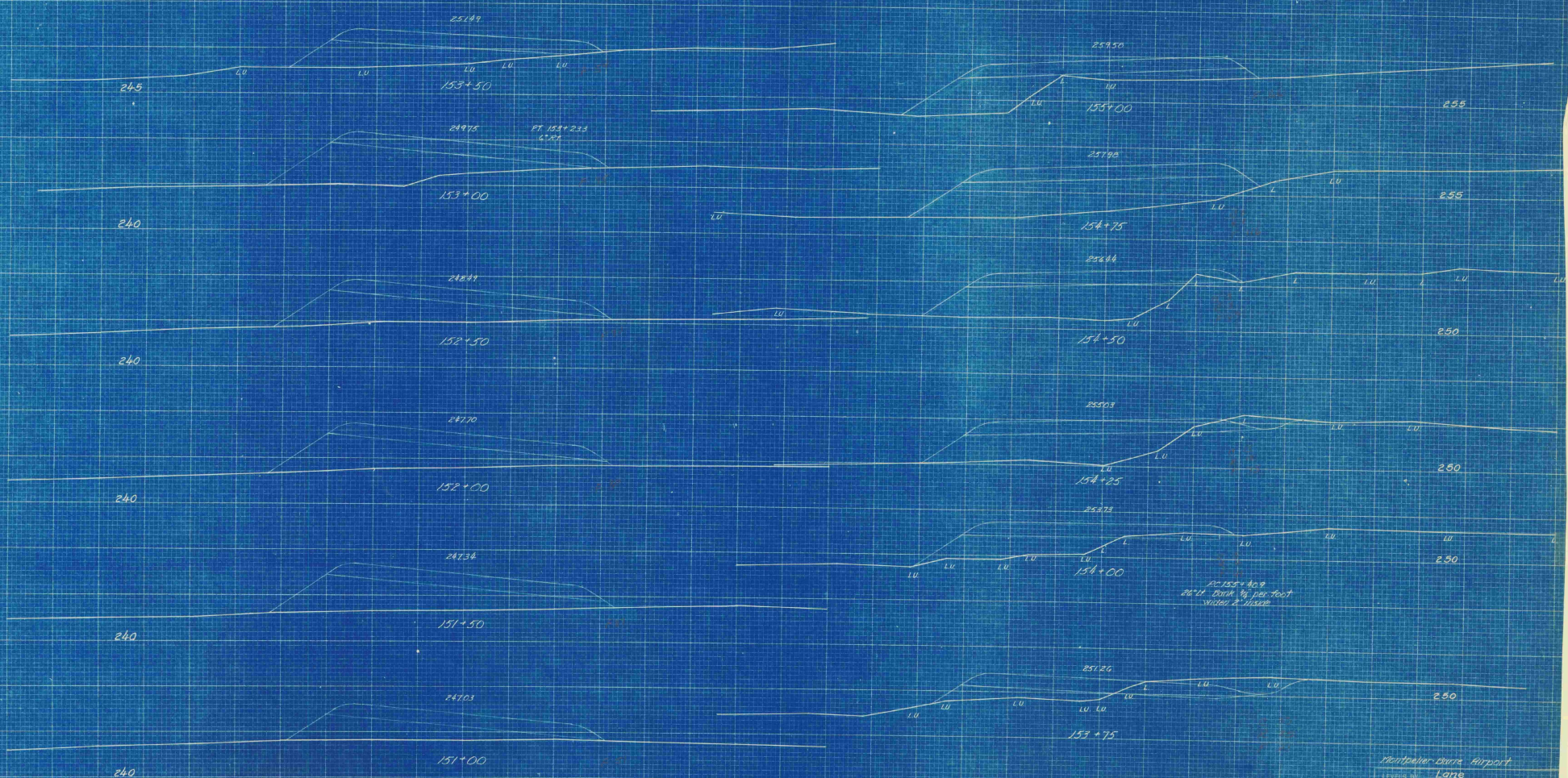


Bevin Meadows Road Relocation
 DESIGNED BY: *Strickland*
 DRAWING CHECKED BY: *Shelley*
 EXAMINED BY: _____
 SERIES F. NO. _____ FILED
 SHEET 18 OF 27

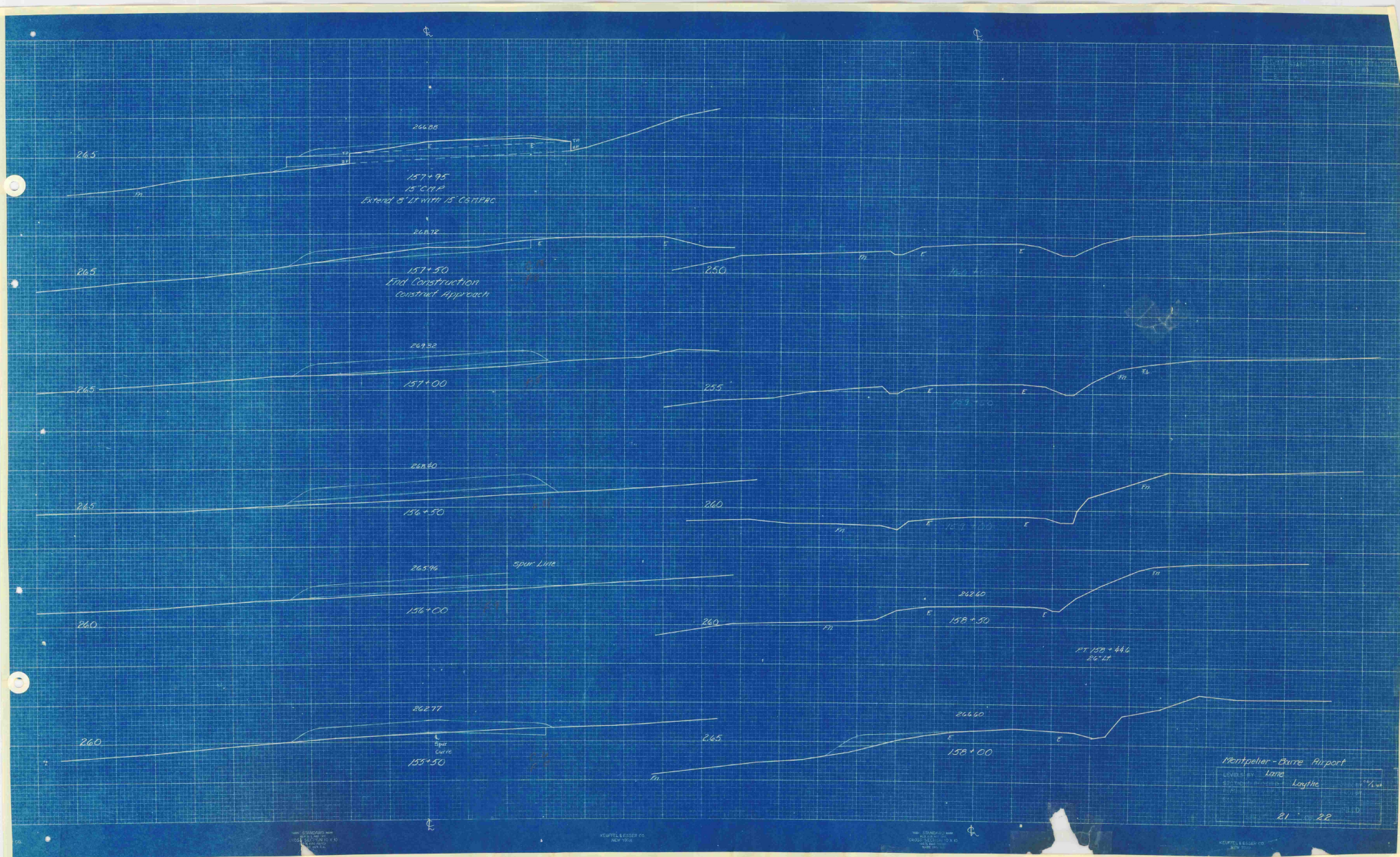
PROJECT: Montpelier, Dorris Airport
 DRAWING: 156C
 SHEET: 19 OF 21



DATE: _____
 DRAWN BY: _____
 CHECKED BY: _____
 SCALE: _____



Reappeler - Ours, Airport
 Lane
 Laythe
 20' W. DRAIN 1/2"



Montpelier - Buire Airport

Station	Long	Lat
157+00	81	22

