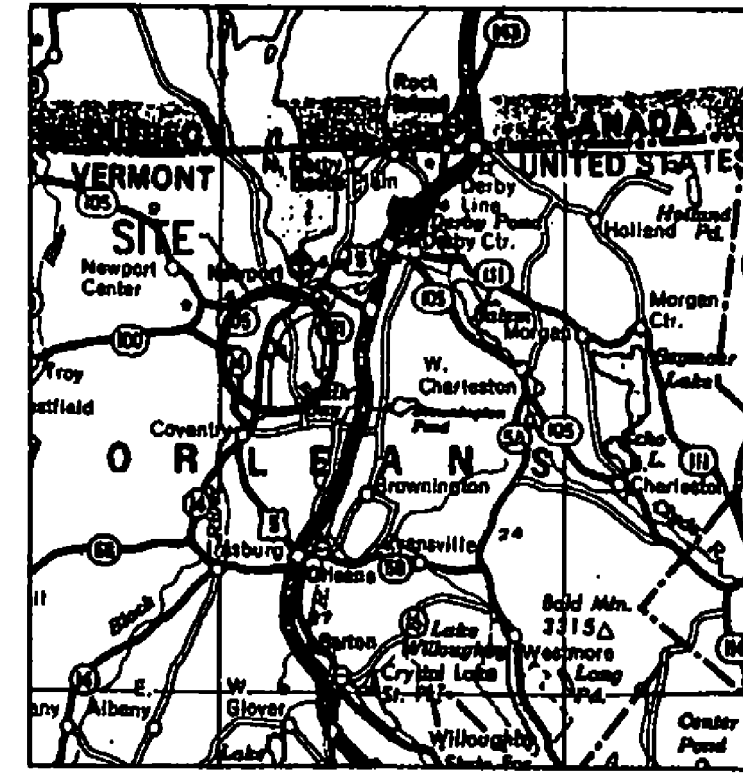


Ellen Kennel
 Director of Finance and Administration
 or Duty Authorized Agent

1/18/01
 Date

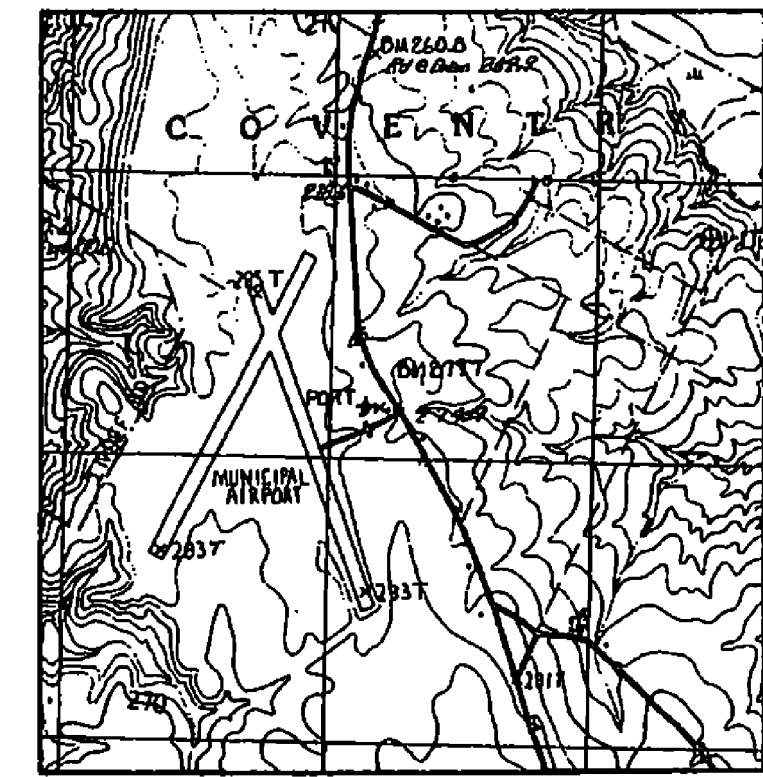
Scott's Construction Inc. 2014 S.C.I. Corp
 Contractor
[Signature]
 Signature
 1/18/01
 Date



LOCATION MAP
 APPROX. SCALE: 1" = 5 MILES

CONTRACT PLANS
 THESE PLANS DO NOT REFLECT
 CHANGES MADE ON THE PROJECT.

NEWPORT STATE AIRPORT COVENTRY, VERMONT RECONSTRUCTION OF RUNWAY 18-36 , INSTALLATION OF RUNWAY AND TAXIWAY LIGHTS AND INSTALLATION OF AIRFIELD SIGNS



VICINITY MAP
 APPROX. SCALE: 1"=2000'

AIP NO. 3-50-0013-04
 EA NO. 043142

SUMMARY OF AIP QUANTITIES

VAOT ITEM#	DESCRIPTION	UNIT	QUANTITIES	
			EST.	AS BUILT
201.10	CLEARING & GRUBBING (PLUS INDIVIDUAL TREES AND STUMPS)	L.S.	1	
203.15	EXCAVATION	C.Y.	4,200	
204.20	TRENCH EXCAVATION OF EARTH	C.Y.	12,600	
301.35	SUBBASE OF DENSE GRADED CRUSHED STONE(MOD)(P-154)	C.Y.	3,700	
404.45	TAR EMULSION (MOD)(P-603)	GAL	8,900	
406.50	PRICE ADJUSTMENT ASPHALT CEMENT (N.A.B.)	L.S.	1	
601.0805	12" REINFORCED CONCRETE PIPE, TYPE III	LF.	1,750	
601.0815	18" REINFORCED CONCRETE PIPE, TYPE III	LF.	850	
601.0825	24" REINFORCED CONCRETE PIPE, TYPE IV	LF.	2,700	
602.15	CEMENT RUBBLE MASONRY HEADWALL	C.Y.	9	
604.10	CONCRETE CATCH BASIN W/CAST IRON GRATE	EACH	18	
604.11	CONCRETE MANHOLE W/CAST IRON COVER	EACH	2	
604.21	PRECAST REINFORCED CONCRETE MANHOLE WITH CAST IRON COVER (MOD) (D-752)	EACH	1	
604.40	CHANGING ELEVATIONS OF D.I.CB OR MH	EACH	3	
605.10	6" PERFORATED UNDERDRAIN	LF.	10,500	
605.20	6" UNDERDRAIN CARRIER PIPE	LF.	150	
605.90	UNDERDRAIN RISER	EACH	28	
605.95	UNDERDRAIN FLUSHING BASIN	EACH	28	
613.16	RIPRAP LIGHT TYPE	C.Y.	100	
631.10	FIELD OFFICE - ENGINEERS	L.S.	1	
631.16	TESTING EQUIPMENT - CONCRETE	L.S.	1	
631.17	TESTING EQUIPMENT - BITUMINOUS	L.S.	1	
631.25	FIELD OFFICE TELEPHONE (N.A.B.)	L.U.	1	
635.10	MOBILIZATION	L.S.	1	
636.20	UTILITY VAULT (MOD) (L-120)	L.S.	1	

SUMMARY OF AIP QUANTITIES

VAOT ITEM#	DESCRIPTION	UNIT	QUANTITIES	
			EST.	AS BUILT
649.51	COBTEXTILE FOR SILT FENCE	S.Y.	110	
651.15	SEED	LB	500	
651.25	HAY MULCH	TON	25	
651.28	HAY BALES FOR EROSION CONTROL	EACH	400	
651.35	TOPSOIL	C.Y.	1,500	
678.23	WIRED CONDUIT (1") (MOD) (L-110)	LF.	8,850	
678.24	ELECTRICAL WIRING (MOD) (L-108)	LF.	10,500	
854.01	P-802 BITUMINOUS PRIME COAT	GAL	6,800	
854.03	P-825 TAR EMULSION PROTECTIVE SEAL COAT	GAL	2,125	
854.04	P-209 CRUSHED AGGREGATE BASE COURSE	C.Y.	6,400	
854.01	P-208A GOLD MIXED RECYCLED BASE COURSE	C.Y.	4,000	
884.02	P-401 BITUMINOUS CONCRETE PAVEMENT (PG 58-34)	TON	12,575	
884.03	P-620 RUNWAY AND TAXI PAINTING (WHITE)	S.F.	31,000	
884.03	P-620 RUNWAY AND TAXI PAINTING (BLACK)	S.F.	4,500	
884.03	P-620 RUNWAY AND TAXI PAINTING (YELLOW)	S.F.	2,900	
884.04	L-108 CABLE TRENCH (MOD) (SAW CUTTING P-410)	LF.	815	
884.06	L-108 #8 COUNTERPOISE WIRE	LF.	10,500	
884.08	L-110 4-WAY X 4" DIA. U.G. ELECTRICAL DUCT	LF.	32	
884.10	L-125 MEDIUM INTENSITY R/W LTS. BASE MTD. (MOD) (END LIGHTS)	EACH	14	
884.10	L-125 MEDIUM INTENSITY R/W LTS. BASE MTD.	EACH	42	
884.11	L-125 MEDIUM INTENSITY TAXIWAY LTS. BASE MTD.	EACH	17	
884.12	L-125 PRECISION APPROACH PATH INDICATOR	EACH	1	
884.13	L-125 RUNWAY END IDENTIFIER LIGHTS	EACH	2	
884.13	L-125 RUNWAY END IDENTIFIER LIGHTS (MOD) (3 PANEL HOLD SIGN) (RELOCATION)	EACH	1	
884.15	L-125 THRESHOLD LIGHTS(MOD)MARKERS RETROREFLECTIVE	EACH	38	

LIST OF STANDARDS

- AP-1
- AP-2
- AP-3
- AP-4
- AP-9
- AP-10
- AP-11
- AP-12
- D-4
- D-8
- D-11
- D-13
- D-15
- D-16
- T-1
- T-2

THESE PLANS AND SPECIFICATIONS ARE IN ACCORDANCE WITH CRITERIA IN CURRENT FAA ADVISORY CIRCULARS AS OF MAY 1, 1995.

DATE

1 VAOT COMMENTS AND SURVEY ADJUSTMENTS 1/18/01
 NO. REVISIONS DATE

Revised 03/19/01

INDEX OF DRAWINGS

SHT. #	DESCRIPTION
T1	TITLE SHEET
PL-1	PROJECT LAYOUT & OPERATIONS PLAN
DP-1	DEMOLITION PLAN
RW-1	RUNWAY 18-36 PLAN & PROFILE
RW-2	RUNWAY 18-36 PLAN & PROFILE
RW-3	RUNWAY 18-36 PLAN & PROFILE
RW-4	RUNWAY 18-36 PLAN & PROFILE
RW-5	RUNWAY INTERSECTION GRADING PLAN
RW-6	RUNWAY 5-23 PLAN & PROFILE
TW-1	TAXIWAY A PLAN & PROFILE
TW-2	TAXIWAY B PLAN & PROFILE
AP-1	APRON GRADING PLAN
XS-1	CROSS SECTIONS RUNWAY 18-36 (STA. 12+00 TO 16+50)
XS-2	CROSS SECTIONS RUNWAY 18-36 (STA. 17+00 TO 21+50)
XS-3	CROSS SECTIONS RUNWAY 18-36 (STA. 22+00 TO 26+50)
XS-4	CROSS SECTIONS RUNWAY 18-36 (STA. 27+00 TO 31+50)
XS-5	CROSS SECTIONS RUNWAY 18-36 (STA. 32+00 TO 36+50)
XS-6	CROSS SECTIONS RUNWAY 18-36 (STA. 37+00 TO 42+00)
XS-7	CROSS SECTIONS RUNWAY 18-36 (STA. 42+50 TO 47+00)
XS-8	CROSS SECTIONS RUNWAY 18-36 (STA. 47+50 TO 52+00)
XS-9	CROSS SECTIONS RUNWAY 5-23 (STA. 37+00 TO 42+50)
TS-1	TYPICAL SECTION & PAVING DETAILS
PM-1	PAVEMENT MARKING DETAILS
PM-2	PAVEMENT MARKING DETAILS
LP-1	RUNWAY & TAXIWAY LIGHTING PLAN
LP-2	RUNWAY & TAXIWAY LIGHTING PLAN
DE-1	DRAINAGE & EROSION CONTROL DETAILS
DE-2	RUNWAY & TAXIWAY ELECTRICAL DETAILS
DE-3	RUNWAY MARKING DETAILS
PP-1	PAPI MOUNTING PLAN, SECTIONS AND FOUNDATION PLAN
PP-2	PAPI GENERAL INSTALLATION DETAILS
PP-3	PAPI POWER AND CONTROLS STATION AND FOUNDATION PLAN
PP-4	PAPI WIRING, ELECTRIC ROOM DIAGRAM AND DETAILS

FEDERAL AVIATION ADMINISTRATION

APPROVED: CHIEF, AIRPORT ENGINEER AND SAFETY BRANCH DATE

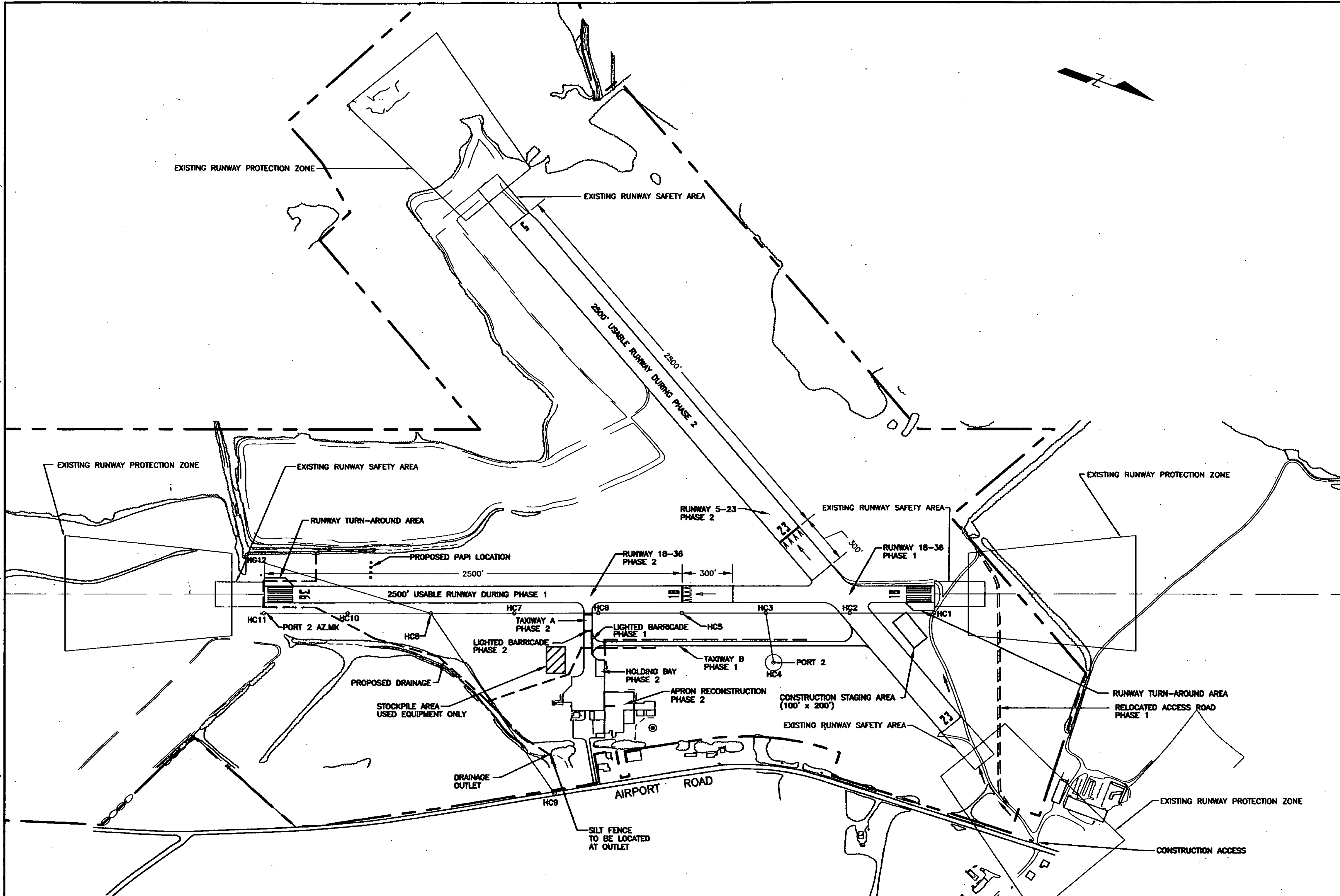
VERMONT AGENCY OF TRANSPORTATION

David C. Dine Feb 14, 2001
 APPROVED: DIRECTOR OF MAINTENANCE AND AVIATION DATE

PREPARED BY
 DuBOIS AND KING, INC.

P.O. BOX 339.....RANDOLPH, V.T. 05060.....TEL. (802) 728-3378

APPROVED: DATE



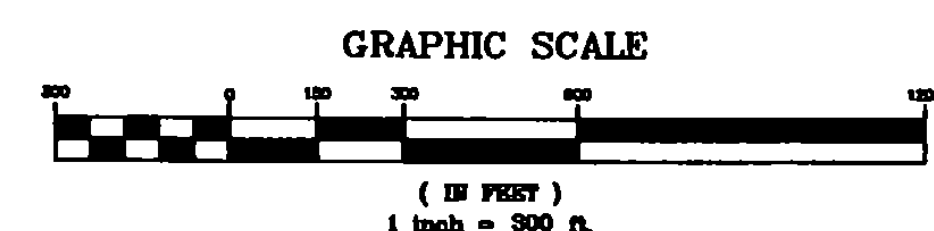
- CONSTRUCTION AND OPERATIONAL NOTES:**
1. THE AIRPORT SHALL BE OPEN AND USEABLE DURING DAYLIGHT HOURS THROUGHOUT THE DURATION OF CONSTRUCTION EXCEPT DURING RECONSTRUCTION OF TAXWAY A AND THE APRON. (SEE NOTE 4)
 2. CONSTRUCTION DURATION FOR THE PROJECT IS 14 WEEKS. RUNWAY LIGHTING MAY BE OUT OF OPERATION FOR NO MORE THAN 6 WEEKS.
 3. CONSTRUCTION SHALL BE CARRIED OUT IN TWO PHASES.
 PHASE 1 SHALL CONSIST OF THE CONSTRUCTION OF TAXWAY B, AND THE RECONSTRUCTION OF THE NORTHERN 1200 FEET OF RUNWAY 18-36. RUNWAY 5-23 SHALL REMAIN CLOSED DURING PHASE 1 CONSTRUCTION.
 PHASE 2 SHALL CONSIST OF THE RECONSTRUCTION OF THE SOUTHERN 2800 FEET OF RUNWAY 18-36, RECONSTRUCTION OF TAXWAY A, RECONSTRUCTION OF THE APRON, AND CONSTRUCTION OF THE HOLDING BAY. RUNWAY 18-36 SHALL REMAIN CLOSED DURING PHASE 2 CONSTRUCTION.
 4. ALL WORK PERTAINING TO THE RECONSTRUCTION OF TAXWAY A AND THE APRON, INCLUDING DRAINAGE, SHALL BE SCHEDULED SO THAT THE CONNECTION BETWEEN THE EXISTING TERMINAL AREA AND TAXWAY B IS CLOSED FOR NO MORE THAN 72 HOURS. THE DAYS OF THE CLOSURE SHALL BE COORDINATED WITH THE AIRPORT MANAGER AND THE RESIDENT ENGINEER. (SEE NOTE 17)
 5. THE CONTRACTOR SHALL ESTABLISH MARKINGS FOR THE DISPLACED THRESHOLD FOR RUNWAY 18-36, AND CLOSURE OF RUNWAY 5-23 PRIOR TO MOVING EQUIPMENT INTO THE STAGING OR STOCKPILE AREAS. RUNWAY 18-36 WILL HAVE A DISPLACED THRESHOLD DURING PHASE 1 CONSTRUCTION AND WILL BE CLOSED DURING PHASE 2 CONSTRUCTION. RUNWAY 5-23 WILL BE CLOSED DURING PHASE 1 CONSTRUCTION AND HAVE A DISPLACED THRESHOLD DURING PHASE 2 CONSTRUCTION.
 6. AN AREA 250 FEET EACH SIDE OF THE CENTER OF RUNWAY, AND 300 FEET FROM RUNWAY ENDS SHALL BE KEPT CLEAR AT ALL TIMES WHEN RUNWAYS ARE OPEN AND OPERATIONAL UNLESS PRIOR APPROVAL IS RECEIVED FROM BOTH THE AIRPORT MANAGER AND THE RESIDENT ENGINEER.
 7. CONSTRUCTION ACCESS WILL BE FROM AIRPORT ROAD AS INDICATED. THERE WILL BE NO CONSTRUCTION ACCESS ALLOWED DIRECTLY THROUGH EXISTING PAVED AIRPORT FACILITIES.
 8. CONSTRUCTION EQUIPMENT SHALL NOT BE ALLOWED TO USE EXISTING PAVED AIRPORT SURFACES FOR CONSTRUCTION ACCESS OR OPERATION DURING CONSTRUCTION.
 9. THE CONTRACTOR WILL BE REQUIRED TO SUBMIT A SCHEDULE OF WORK FOR APPROVAL BY ENGINEER PRIOR TO STARTING ANY CONSTRUCTION. THE SCHEDULE SHALL INDICATE DATES FOR ALL RUNWAY AND TAXWAY CLOSURES AND MUST BE UPDATED BI-WEEKLY IF SEQUENCE OR DURATIONS CHANGE.
 10. THE CONTRACTOR WILL BE RESPONSIBLE FOR SUPPLYING AND PLACING AN "X" ON THE RUNWAY NUMERALS TO SIGNIFY WHEN A RUNWAY IS CLOSED. MARKINGS MAY BE PLACED JUST OFF THE RUNWAY ENDS WHEN THE CONTRACTOR IS WORKING IN THE NUMERAL AREAS.
 11. THE CONTRACTOR WILL BE REQUIRED TO INSTALL AND MAINTAIN LIGHTED BARRICADES AND TEMPORARY SIGNAGE AS NECESSARY THROUGHOUT CONSTRUCTION. THESE BARRICADES AND SIGNS SHALL CONFORM TO THE DETAILS CONTAINED HEREIN AND NOTE 18.
 12. CONSTRUCTION STAGING AND STOCKPILE AREAS SHALL BE CONFINED TO THOSE AREAS INDICATED ON THE PLANS.
 13. ALL DISTURBED AREAS OUTSIDE OF THE CONSTRUCTION LIMITS SHALL BE RESTORED TO THEIR PRECONSTRUCTION CONDITION AT NO COST TO THE OWNER. THIS SHALL INCLUDE THE AREAS DESIGNATED FOR CONSTRUCTION ACCESS, STAGING, MATERIAL STORAGE AND STOCKPILING.
 14. ALL EXISTING RUNWAY AND TAXWAY LIGHTS, AND RUNWAY END IDENTIFICATION LIGHTS SHALL BE SALVAGED AND SHALL REMAIN THE PROPERTY OF THE VERMONT AGENCY OF TRANSPORTATION. SALVAGED ITEMS SHALL BE STOCKPILED ON SITE UNTIL REMOVED BY THE OWNER.
 15. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ANY AND ALL UNDERGROUND UTILITIES PRIOR TO THE START OF CONSTRUCTION.
 16. NOTICE TO AIRMEN (NOTAM'S) MUST BE ISSUED BY THE AIRPORT MANAGER, PRIOR TO ANY CHANGES TO AIRPORT OPERATIONS. NOTAM'S MUST BE ISSUED AT LEAST 48 HOURS IN ADVANCE OF ANY AIRPORT STATUS CHANGE. THERE CAN BE NO EXCEPTIONS. THE CONTRACTOR SHALL BE REQUIRED TO COORDINATE THIS EFFORT WITH THE AIRPORT MANAGER AND RESIDENT ENGINEER.
 17. AIRPORT CLOSURE MUST BE DURING WEEKDAYS AND ENDING PRIOR TO NOON ON FRIDAY.
 18. THE CONTRACTOR SHALL COMPLY WITH ALL THE PROVISIONS STATED IN THE FEDERAL AVIATION ADMINISTRATION ADVISORY CIRCULAR ON "OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION", FAA AC. NO. 150/5370-2C. FLASHING AMBER LIGHTS WILL BE REQUIRED ON ALL CONSTRUCTION VEHICLES.
 19. THE CONTRACTOR SHALL CONSTRUCT RUNWAY TURN-AROUND AREAS AT EACH END OF RUNWAY 18-36, AS DIRECTED BY THE ENGINEER.

HORIZONTAL CONTROL POINTS

HC #	STATION	OFFSET	ELEVATION
HC 1	12+00.00	-100.83	929.29
HC 2	17+00.00	-100.98	927.71
HC 3	22+00.00	-101.02	925.29
HC 4	21+53.18	-400.31	923.02
HC 5	27+00.00	-101.07	923.45
HC 6	32+00.00	-101.12	921.08
HC 7	37+00.00	-101.17	918.78
HC 8	42+00.00	-101.21	918.33
HC 9	38+60.11	-1193.99	901.44
HC 10	47+00.00	-101.25	918.38
HC 11	52+00.00	-101.30	918.18
HC 12	53+15.00	239.84	913.38

BENCHMARK
 PORT 2 ELEV. = 923.02
 BRASS NGS DISK SET IN CONCRETE

HORIZONTAL CONTROL
 PORT 2 AZ.MK N 888785.22
 BRASS NGS DISK SET IN CONCRETE E 1711699.08
 PORT 2 AZ.MK N 871721.84
 BRASS NGS DISK SET IN CONCRETE E 1711104.01



APPROXIMATE QUANTITIES FOR THESE 2 AREAS ARE:

ITEM	DESCRIPTION	UNIT	QUANTITY
203.15	EXCAVATION	CY	450
404.85	EMULSIFIED ASPHALT	GAL	170
651.15	SEED	LB	9
851.25	MULCH	TON	9
851.35	TOPSOIL	CY	216
854.04	CRUSHED AGG. BASE COURSE	CY	300
884.02	BITUMINOUS CONCRETE PAVEMENT	TON	320

CONTRACTOR SHALL NOT DISTURB HORIZONTAL OR VERTICAL CONTROL POINTS. CONTRACTOR SHALL BE LIABLE FOR ANY DAMAGE TO THESE POINTS AND SHALL BE RESPONSIBLE FOR ANY COSTS INCURRED BY THE OWNER TO FIX OR REPLACE.

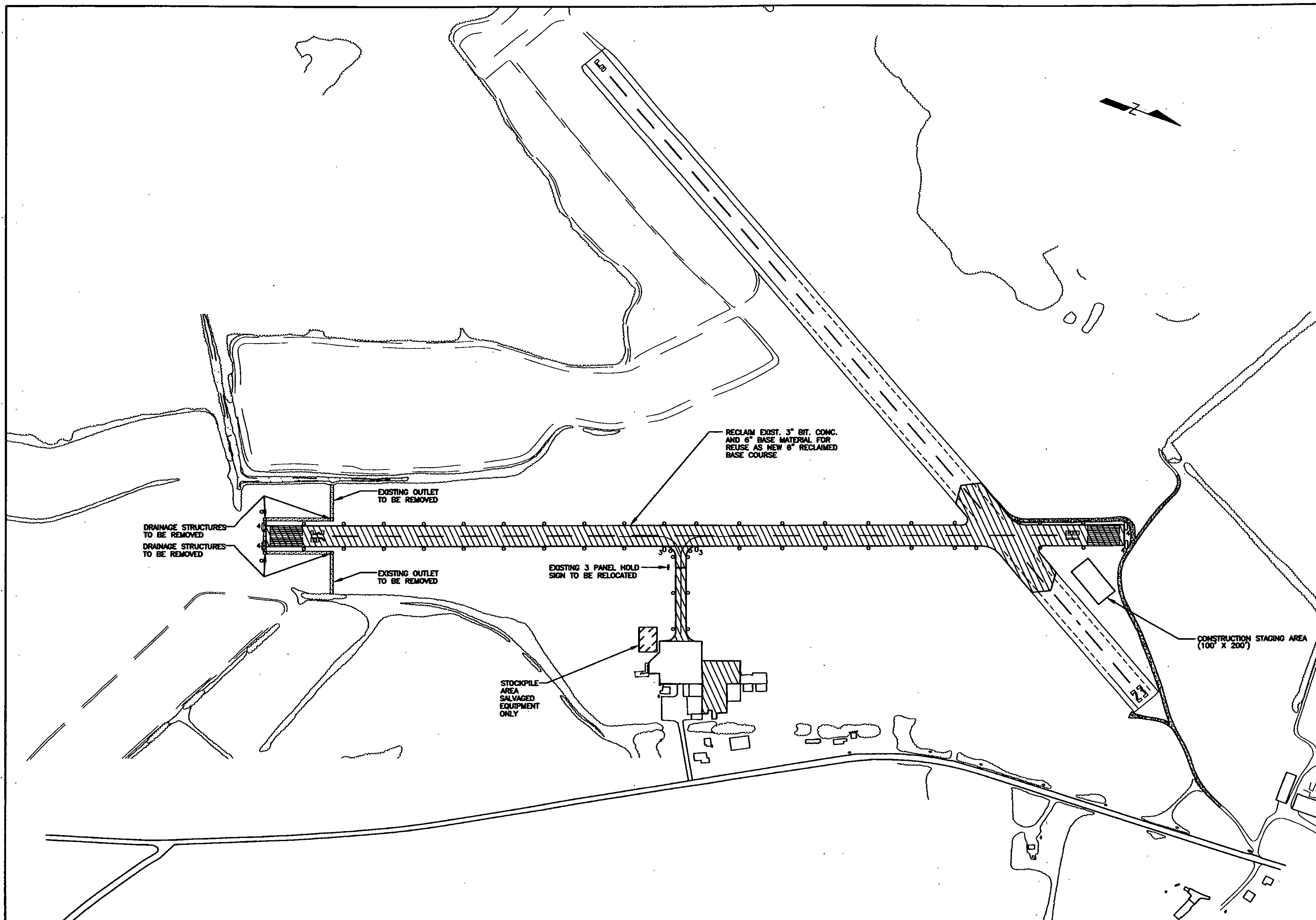
NO.	DATE	REVISIONS	BY	CHK'D
1	1/18/01	VAOT COMMENTS AND SURVEY ADJUSTMENTS	MDL	SJR

DUBOIS & KING
 engineering planning management development

VERMONT AGENCY OF TRANSPORTATION
 COVENTRY, VERMONT
 NEWPORT STATE AIRPORT
 RUNWAY 18-36 RECONSTRUCTION

PROJECT LAYOUT AND OPERATIONS PLAN

DRAM BY: JJP DATE: MAR. 2000
 CHECKED BY: [] PROJ. NO.: N15500
 PROJ. ENG.: JAA DRAW. NO.: 1
 SHEET: PL-1

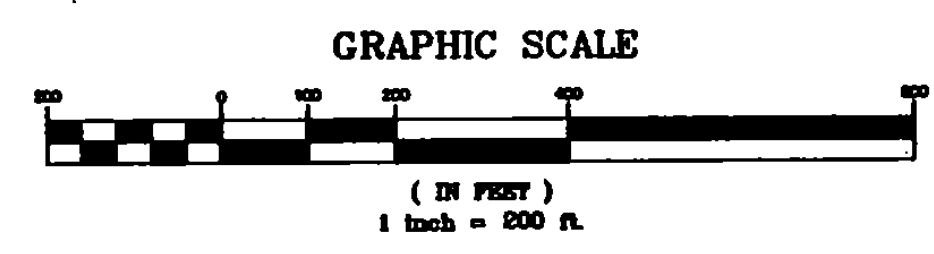


DEMOLITION NOTES:

1. THIS PLAN INDICATES EXISTING FACILITIES THAT WILL BE DEMOLISHED DURING CONSTRUCTION. (REFER TO LEGEND FOR ITEMS TO BE DEMOLISHED). REFER TO THE CONSTRUCTION AND OPERATIONAL NOTES ON SHEET PL-1 FOR STAGING AND SCHEDULING INFORMATION. ALL DEMOLITION OPERATIONS SHALL BE INDICATED ON THE CONSTRUCTION SCHEDULE.
2. ALL EXISTING RUNWAY AND TAXIWAY LIGHTS, AND RUNWAY END IDENTIFICATION LIGHTS SHALL BE SALVAGED AND SHALL REMAIN THE PROPERTY OF THE VERMONT AGENCY OF TRANSPORTATION. SALVAGED ITEMS SHALL BE STOCKPILED ON SITE UNTIL REMOVED BY THE OWNER.
3. ALL EXISTING MANHOLE FRAMES AND COVERS AND CATCH BASIN FRAMES, GRATES, AND LIDS SHALL BE SALVAGED AND SHALL REMAIN THE PROPERTY OF THE VERMONT AGENCY OF TRANSPORTATION. SALVAGED ITEMS SHALL BE STOCKPILED ON SITE UNTIL REMOVED BY THE OWNER.
4. EXISTING STORM DRAIN SHALL BE REMOVED AS NECESSARY TO FACILITATE CONSTRUCTION OF NEW STORM DRAIN. ALL OPEN ENDS OF EXISTING STORM DRAIN LEFT IN PLACE SHALL BE PLUGGED WITH BRICK AND MORTAR.

LEGEND

	= PAVEMENT TO BE RECLAIMED (9")
	= OUTLET TO BE REMOVED
	= ROAD TO BE OBLITERATED
	= RUNWAY LIGHTS TO BE REMOVED
	= DRAINAGE STRUCTURES TO BE REMOVED



NO.	DATE	REVISIONS	BY	CK'D
1	1/18/01	VAOT COMMENTS AND SURVEY ADJUSTMENTS	MDL	SJR

DuBois & King
INC.

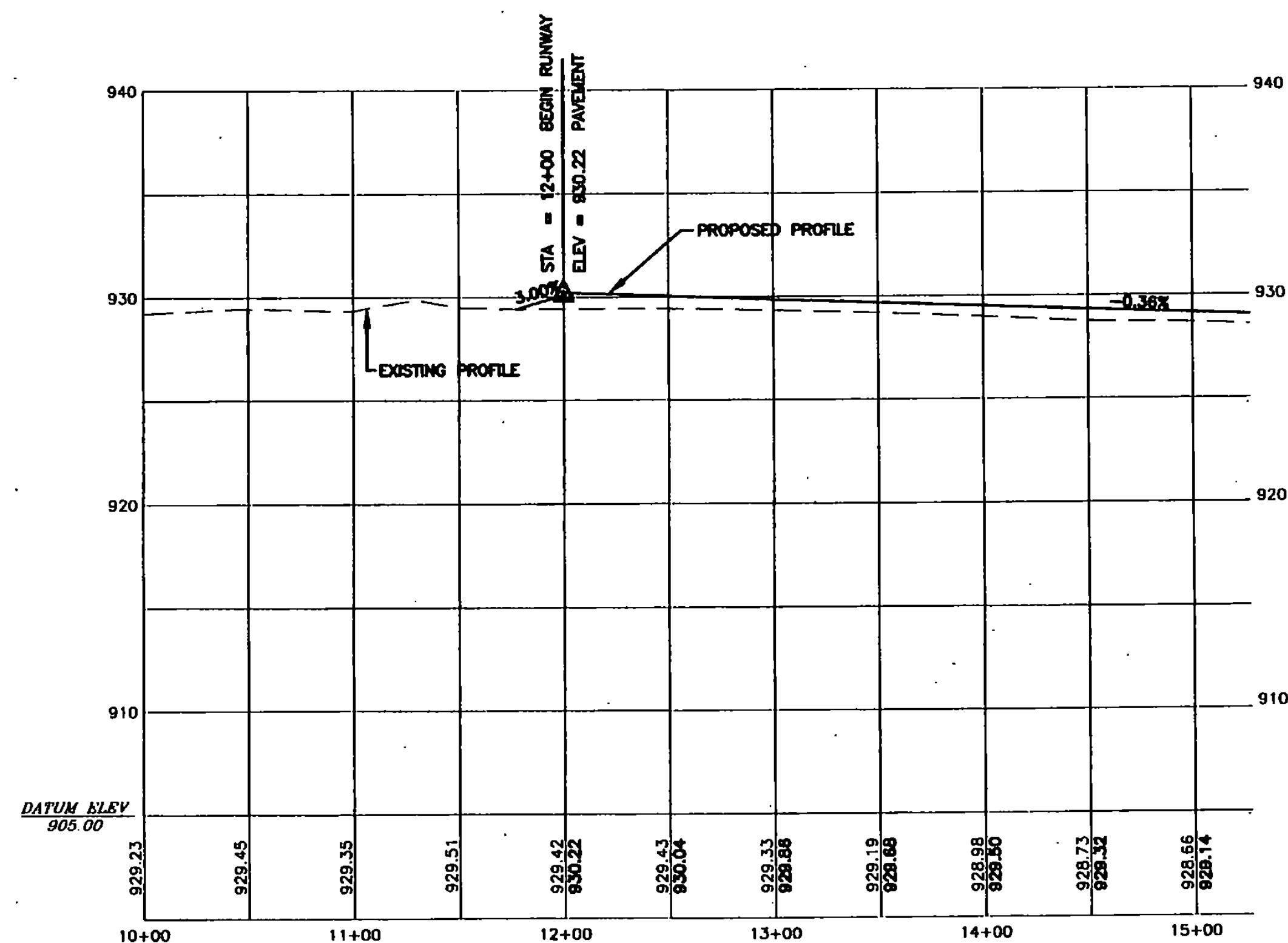
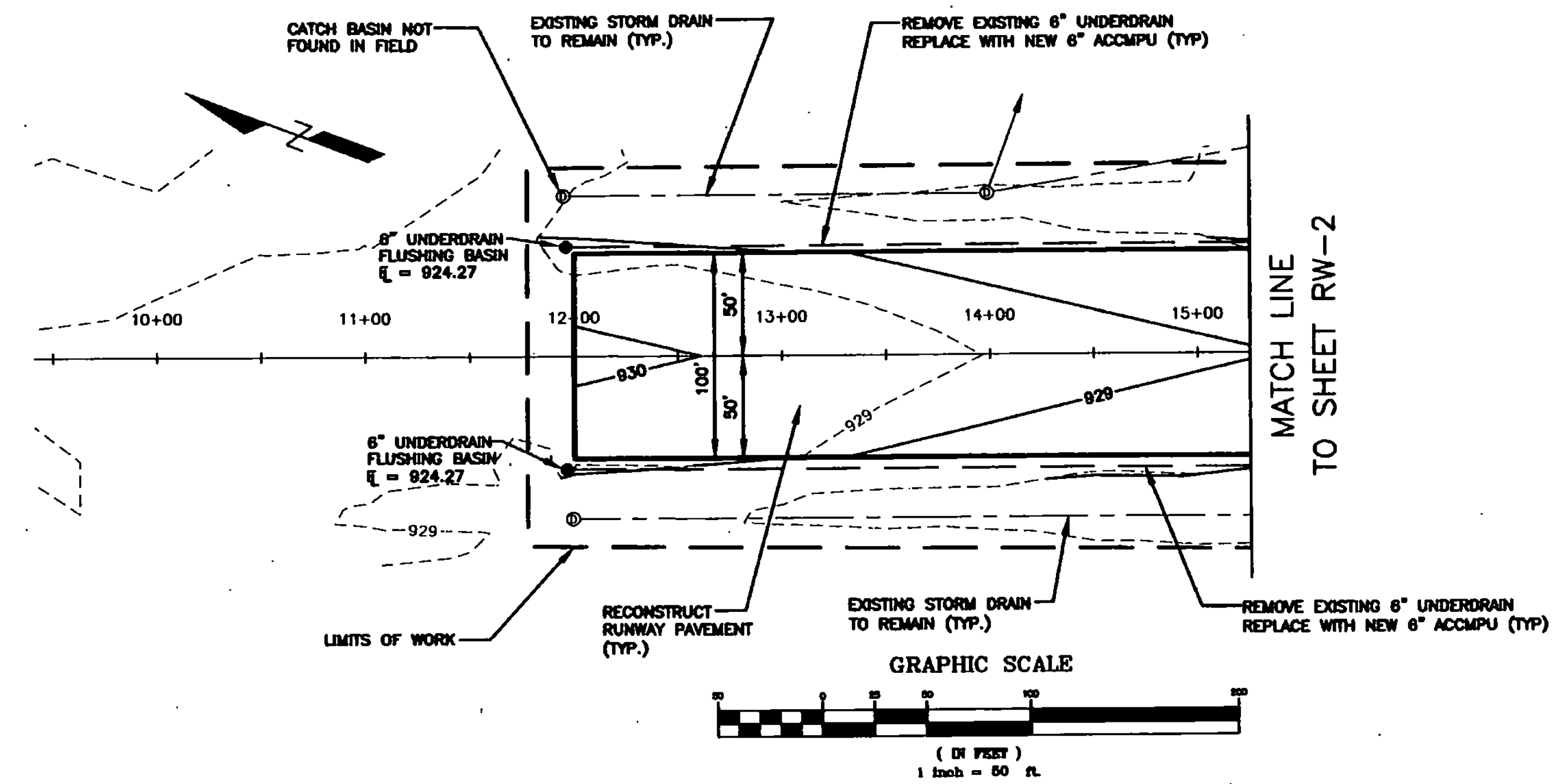
engineering planning management development

VERMONT AGENCY OF TRANSPORTATION
COVENTRY, VERMONT
 NEWPORT STATE AIRPORT
 RUNWAY 18-36 RECONSTRUCTION

DEMOLITION PLAN

DESIGNED BY JJP	DATE MAR. 2000
CHECKED BY JAA	PROJ. NO. N15500
PROJ. ENG. JAA	DRAW. NO. 1
SHEET DP-1	

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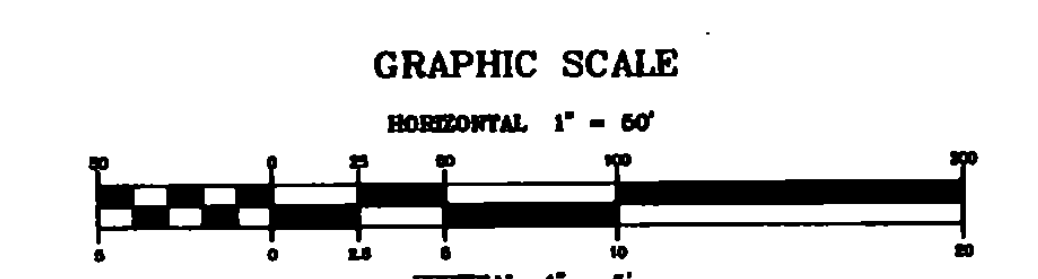
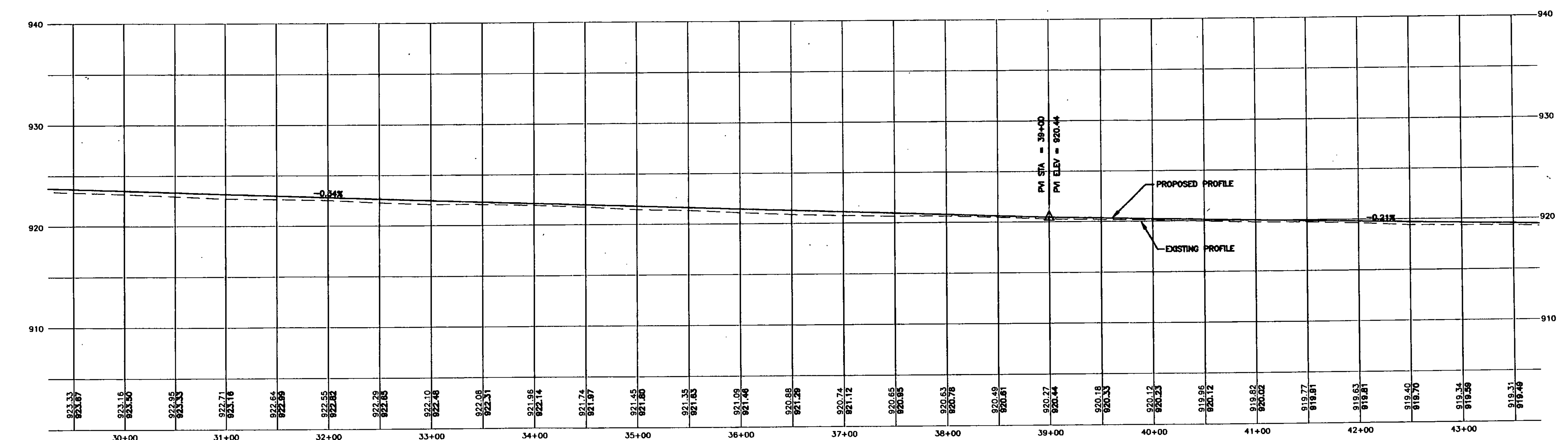
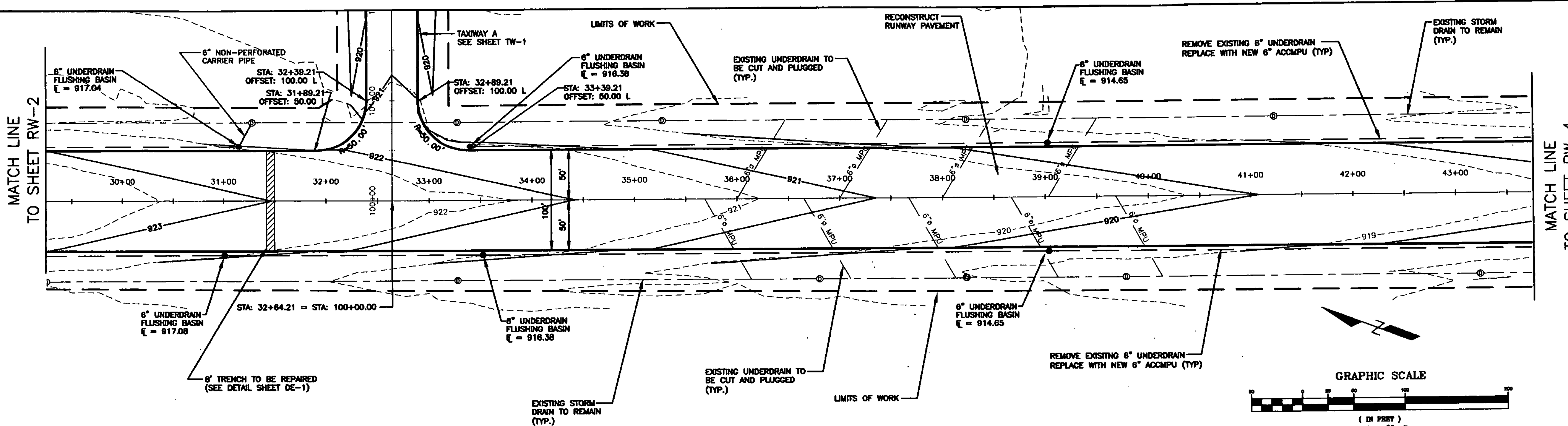
- LEGEND**
- LIMITS OF WORK
 - - - EXISTING CONTOURS
 - - - PROPOSED CONTOURS
 - - - PROPOSED UNDERDRAIN
 - - - EXISTING STORM DRAIN TO REMAIN
 - - - PROPOSED STORM DRAIN
 - EXISTING CATCH BASINS TO REMAIN
 - PROPOSED CATCH BASINS
 - FLUSHING BASIN

NO.	DATE	REVISIONS	BY	CK'D
1	1/18/01	VAOT COMMENTS AND SURVEY ADJUSTMENTS	MDL	SJR

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VERMONT AGENCY OF TRANSPORTATION
COVENTRY, VERMONT
 NEWPORT STATE AIRPORT
 RUNWAY 18-36 RECONSTRUCTION
 RUNWAY 18-36 PLAN & PROFILE
 STA. 10+00 TO 15+25

DRAWN BY JJP	DATE MAR. 2000
CHECKED BY JAA	PROJ. NO. N15500
PROJ. ENG. JAA	DRAW. NO. 1
SHEET RW-1	



- LEGEND**
- LIMITS OF WORK
 - - - EXISTING CONTOURS
 - PROPOSED CONTOURS
 - - - PROPOSED UNDERDRAIN
 - - - EXISTING STORM DRAIN TO REMAIN
 - - - PROPOSED STORM DRAIN
 - ⊙ EXISTING CATCH BASINS TO REMAIN
 - ⊙ PROPOSED CATCH BASINS
 - ⊙ FLUSHING BASIN

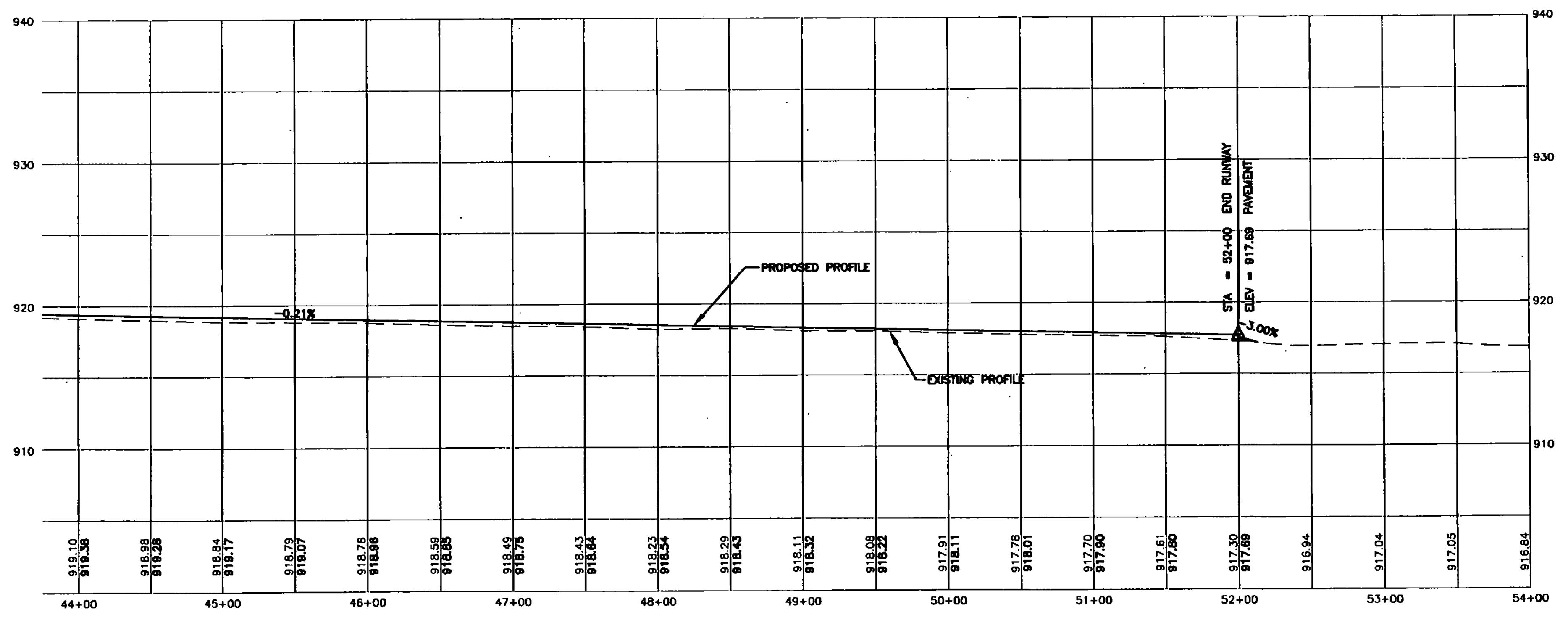
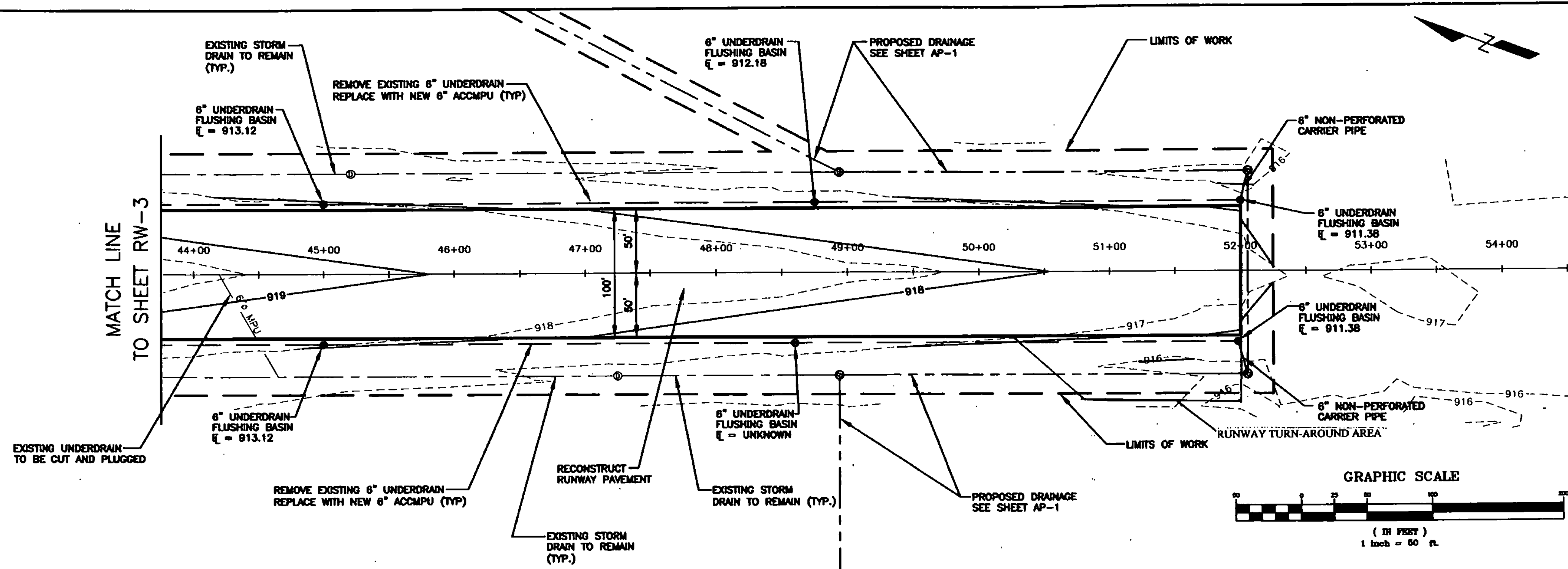
NO.	DATE	REVISIONS	BY	CK'D

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VERMONT AGENCY OF TRANSPORTATION
 COVENTRY, VERMONT
 NEWPORT STATE AIRPORT
 RUNWAY 18-36 RECONSTRUCTION
 RUNWAY 18-36 PLAN & PROFILE
 STA. 29+25 TO 43+75

DRAWN BY JJJ	DATE MAR. 2000
CHECKED BY JAA	PROJ. NO. N15500
PROJ. ENG. JAA	DRAW. NO. 1
SHEET RW-3	

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- LEGEND**
- LIMITS OF WORK
 - - - EXISTING CONTOURS
 - - - PROPOSED CONTOURS
 - - - PROPOSED UNDERDRAIN
 - - - EXISTING STORM DRAIN TO REMAIN
 - - - PROPOSED STORM DRAIN
 - ⊙ EXISTING CATCH BASINS TO REMAIN
 - ⊙ PROPOSED CATCH BASINS
 - ⊙ FLUSHING BASIN

NO.	DATE	REVISIONS	BY	CK'D

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VERMONT AGENCY OF TRANSPORTATION
COVENTRY, VERMONT
 NEWPORT STATE AIRPORT
 RUNWAY 18-36 RECONSTRUCTION
 RUNWAY 18-36 PLAN & PROFILE
 STA. 43+75 TO 54+00

DRAWN BY JJP	DATE MAR. 2000
CHECKED BY JAA	PROJ. NO. N15500
PROJ. ENG. JAA	DRAW. NO. 1
SHEET RW-4	



RUNWAY 23

RUNWAY TURN-AROUND AREA

PAVEMENT MATCH/
SAWCUT LINE

TAXIWAY B
(SEE SHEET TW-2 FOR ADDITIONAL GRADING AND PROFILE)

ADJUST EXISTING
CATCH BASIN
EXIST. RIM = 927.56
PROP. RIM = 927.46

ADJUST EXISTING
CATCH BASIN
EXIST. RIM = 927.67
PROP. RIM = 927.57

ADJUST EXISTING
CATCH BASIN
EXIST. RIM = 927.30
PROP. RIM = 926.77

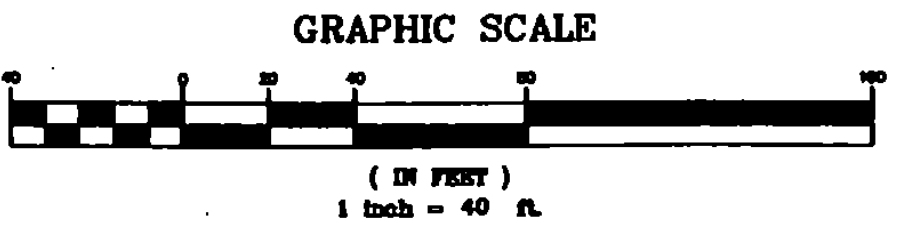
PAVEMENT MATCH/
SAWCUT LINE

RUNWAY 5

PROPOSED DITCH
GRADE TO DRAIN

RUNWAY 36

11+00 12+00 14+00 15+00 16+00 17+00 18+00 19+00 20+00 21+00 22+00 23+00 24+00



LEGEND

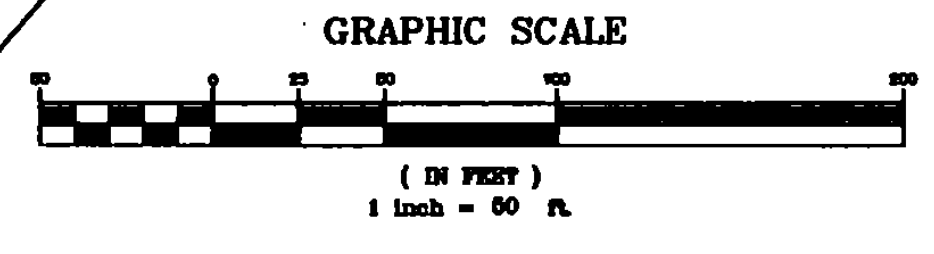
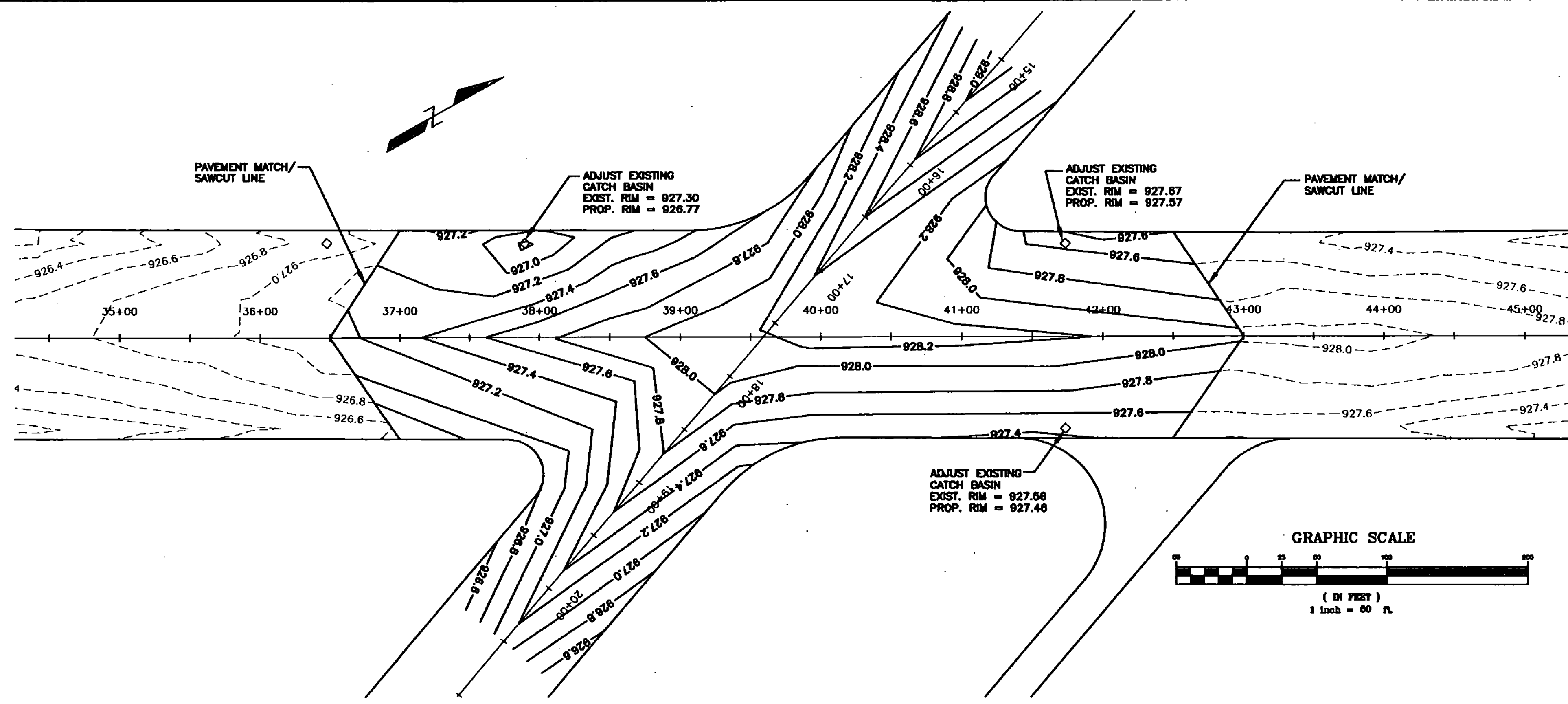
- LIMITS OF WORK
- - - EXISTING CONTOURS
- - - PROPOSED CONTOURS
- - - PROPOSED UNDERDRAIN
- - - EXISTING STORM DRAIN TO REMAIN
- - - PROPOSED STORM DRAIN
- ⊙ EXISTING CATCH BASINS TO REMAIN
- ⊙ PROPOSED CATCH BASINS
- FLUSHING BASIN

NO.	DATE	REVISIONS	BY	CK'D
1	1/18/01	VAOT COMMENTS AND SURVEY ADJUSTMENTS	MDL	SJR

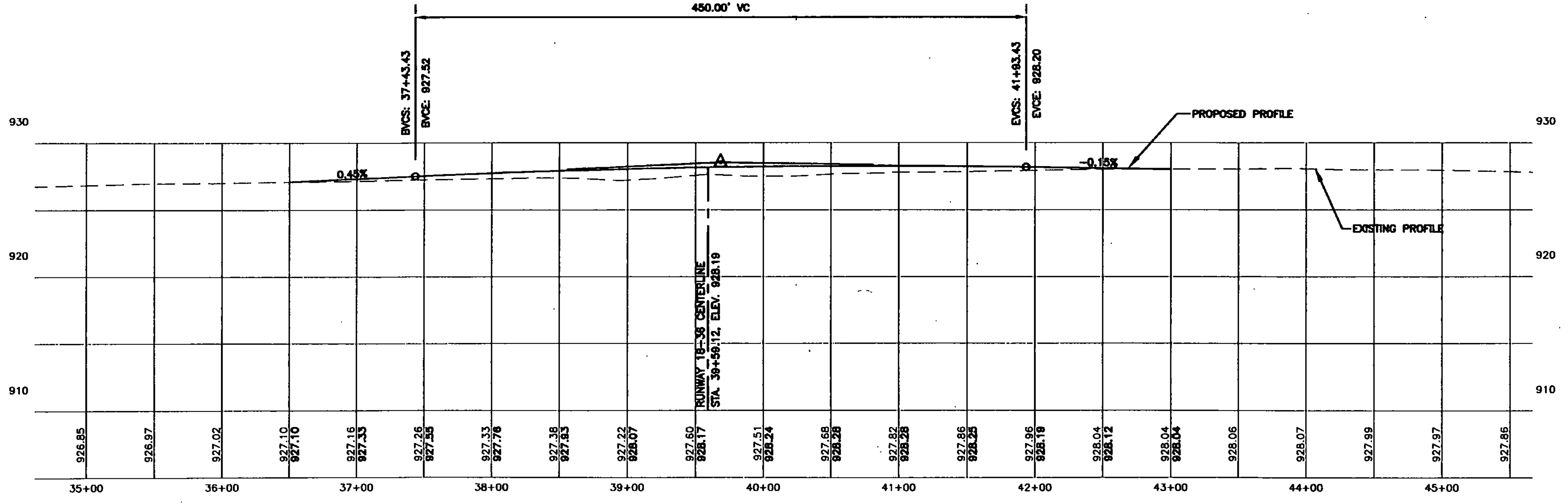
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VERMONT AGENCY OF
 TRANSPORTATION
 COVENTRY, VERMONT
 NEWPORT STATE AIRPORT
 RUNWAY 18-36 RECONSTRUCTION
 RUNWAY INTERSECTION
 GRADING PLAN

DRAWN BY JJP	DATE MAR. 2000
CHECKED BY	PROJ. NO. N15500
PROJ. ENG. JAA	DRAW. NO. 1
SHEET RW-5	

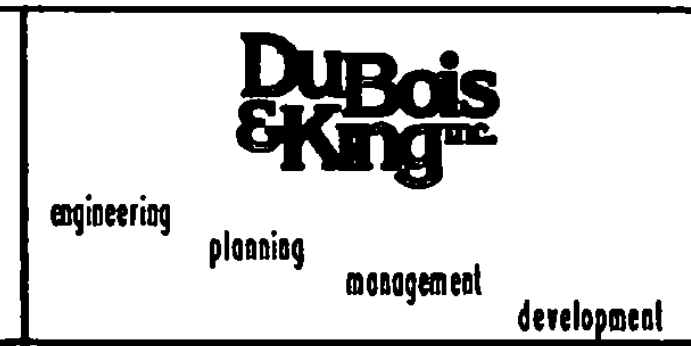


PVI STA = 39+88.43
 PVI ELEV = 928.54
 A.D. = -0.60
 K = 743.97
 450.00' VC



- LEGEND**
- LIMITS OF WORK
 - - - EXISTING CONTOURS
 - - - PROPOSED CONTOURS
 - - - PROPOSED UNDERDRAIN
 - - - EXISTING STORM DRAIN TO REMAIN
 - - - PROPOSED STORM DRAIN
 - ⊙ EXISTING CATCH BASINS TO REMAIN
 - ⊙ PROPOSED CATCH BASINS
 - FLUSHING BASIN

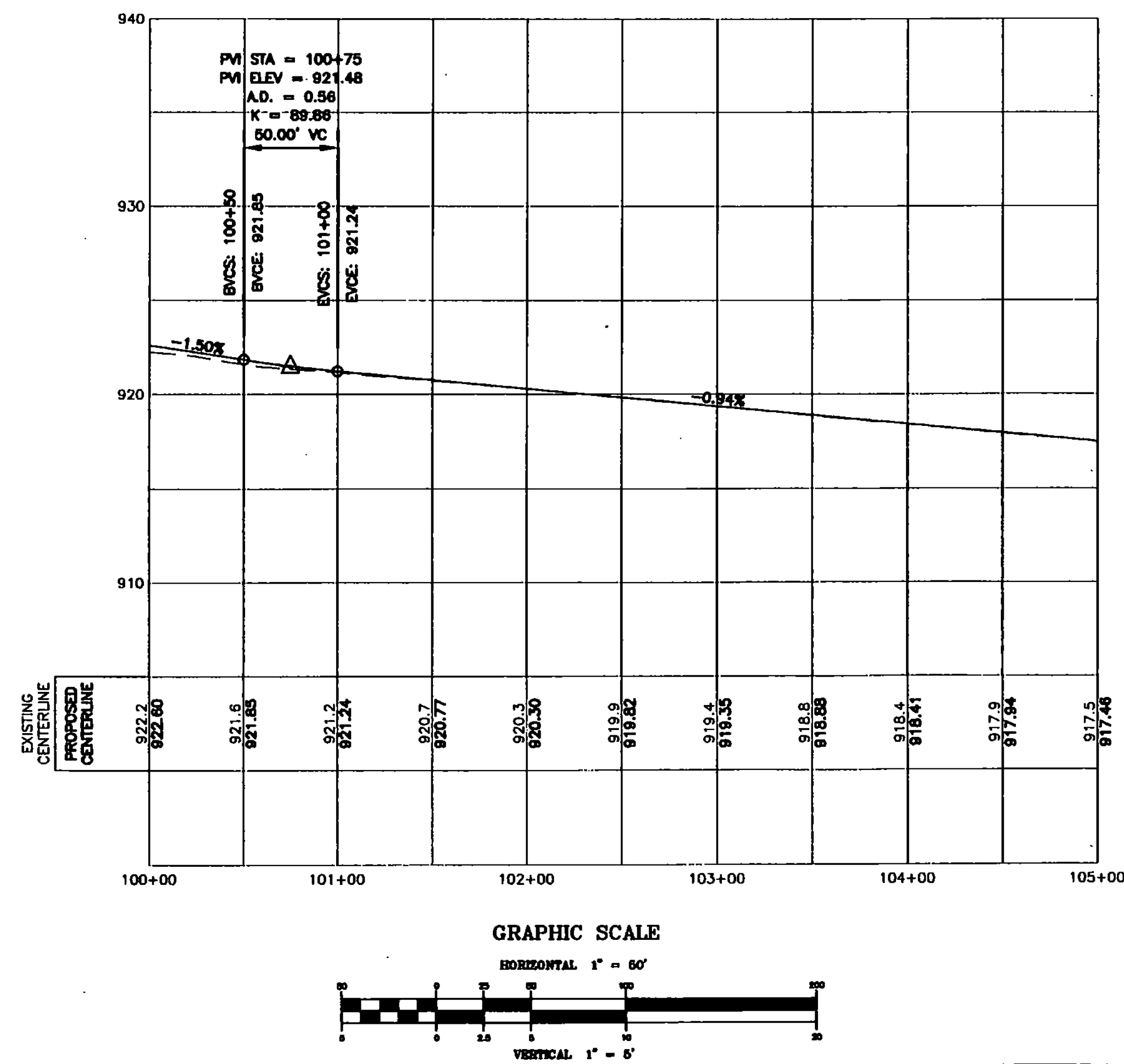
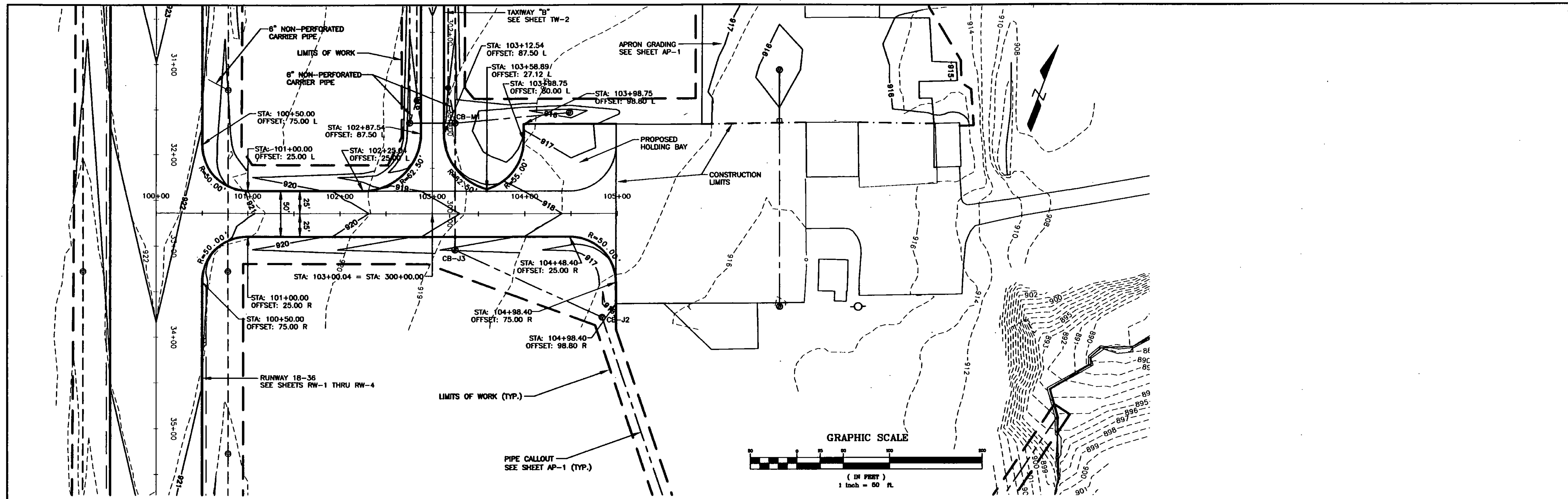
NO.	DATE	REVISIONS	BY	CHK'D
1	1/18/01	VAOT COMMENTS AND SURVEY ADJUSTMENTS	MDL	SJR



VERMONT AGENCY OF TRANSPORTATION
 COVENTRY, VERMONT
 NEWPORT STATE AIRPORT
 RUNWAY 18-36 RECONSTRUCTION
 RUNWAY 5-23 PLAN & PROFILE
 STA. 25+50 TO 35+50

DRAWN BY JJP	DATE MAR. 2000
CHECKED BY	PROJ. NO. N15500
PROJ. ENGR. JAA	DRAW. NO. 1
SHEET RW-6	

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- NOTES:**
- CONTRACTOR SHALL VERIFY LOCATION OF EXISTING LIGHTING CIRCUITS AND REPORT THEM TO THE RESIDENT ENGINEER PRIOR TO CONSTRUCTION.
 - DRAINAGE WORK FROM CATCH BASIN M1 TO CATCH BASIN J3 TO CATCH BASIN J2 SHALL BE CONSTRUCTED DURING THE 3 DAY AIRPORT CLOSURE PERIOD. (SEE NOTE 4 ON SHEET PL-1)

- LEGEND**
- LIMITS OF WORK
 - - - EXISTING CONTOURS
 - PROPOSED CONTOURS
 - - - PROPOSED UNDERDRAIN
 - EXISTING STORM DRAIN TO REMAIN
 - - - PROPOSED STORM DRAIN
 - EXISTING CATCH BASINS TO REMAIN
 - PROPOSED CATCH BASINS
 - FLUSHING BASIN

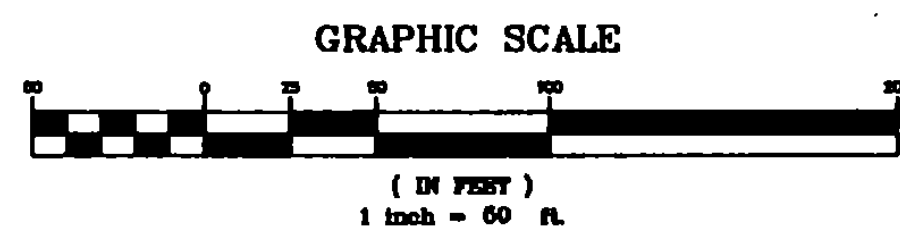
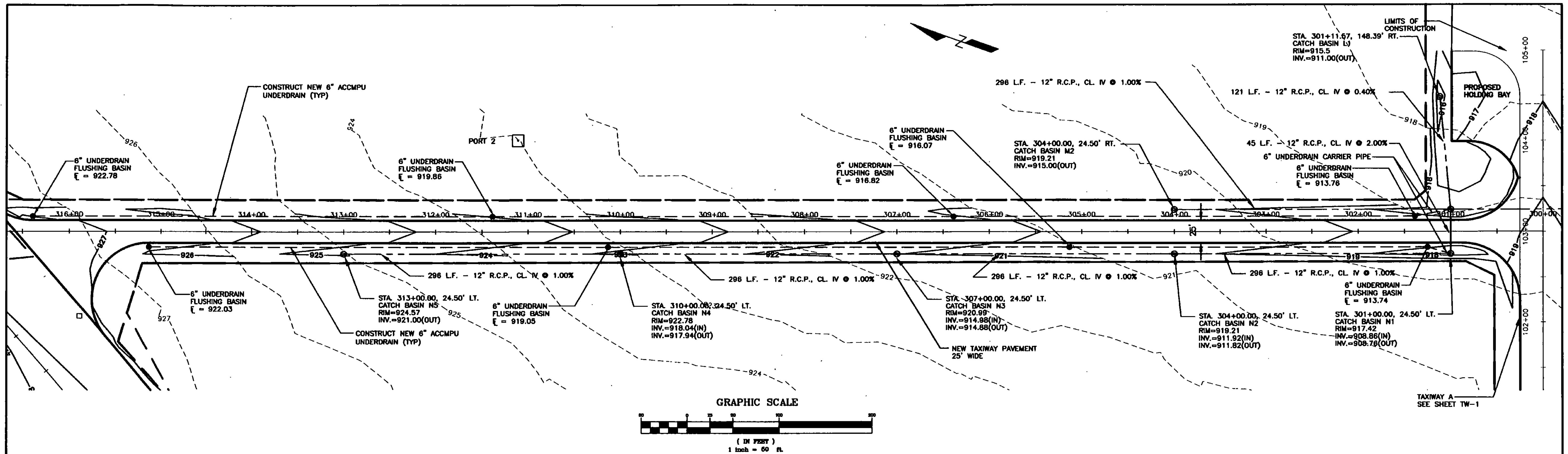
NO.	DATE	REVISIONS	BY	CK'D

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VERMONT AGENCY OF
TRANSPORTATION
COVENTRY, VERMONT
NEWPORT STATE AIRPORT
RUNWAY 18-36 RECONSTRUCTION
TAXIWAY A PLAN & PROFILE

DRAWN BY JJP	DATE MAR. 2000
CHECKED BY JAA	PROJ. NO. N15500
PROJ. ENG. JAA	DRAW. NO. 1
SHEET TW-1	

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LOW POINT ELEV = 918.44
 LOW POINT STA = 300+88.73
 PM STA = 300+76
 PM ELEV = 918.23
 A.D. = 2.09
 K = 47.82
 100.00' VC

Station	Proposed Left Edge	Proposed Centerline	Proposed Right Edge	Existing Left Edge	Existing Centerline	Existing Right Edge
316+00	927.54	927.5	927.53	927.4	927.4	927.4
315+00	926.46	926.5	926.45	926.4	926.4	926.4
314+00	925.18	925.2	925.16	925.1	925.1	925.1
313+00	924.08	924.1	924.06	924.0	924.0	924.0
312+00	923.08	923.1	923.06	923.0	923.0	923.0
311+00	922.08	922.1	922.06	922.0	922.0	922.0
310+00	921.08	921.1	921.06	921.0	921.0	921.0
309+00	920.08	920.1	920.06	920.0	920.0	920.0
308+00	919.08	919.1	919.06	919.0	919.0	919.0
307+00	918.08	918.1	918.06	918.0	918.0	918.0
306+00	917.08	917.1	917.06	917.0	917.0	917.0
305+00	916.08	916.1	916.06	916.0	916.0	916.0
304+00	915.08	915.1	915.06	915.0	915.0	915.0
303+00	914.08	914.1	914.06	914.0	914.0	914.0
302+00	913.08	913.1	913.06	913.0	913.0	913.0
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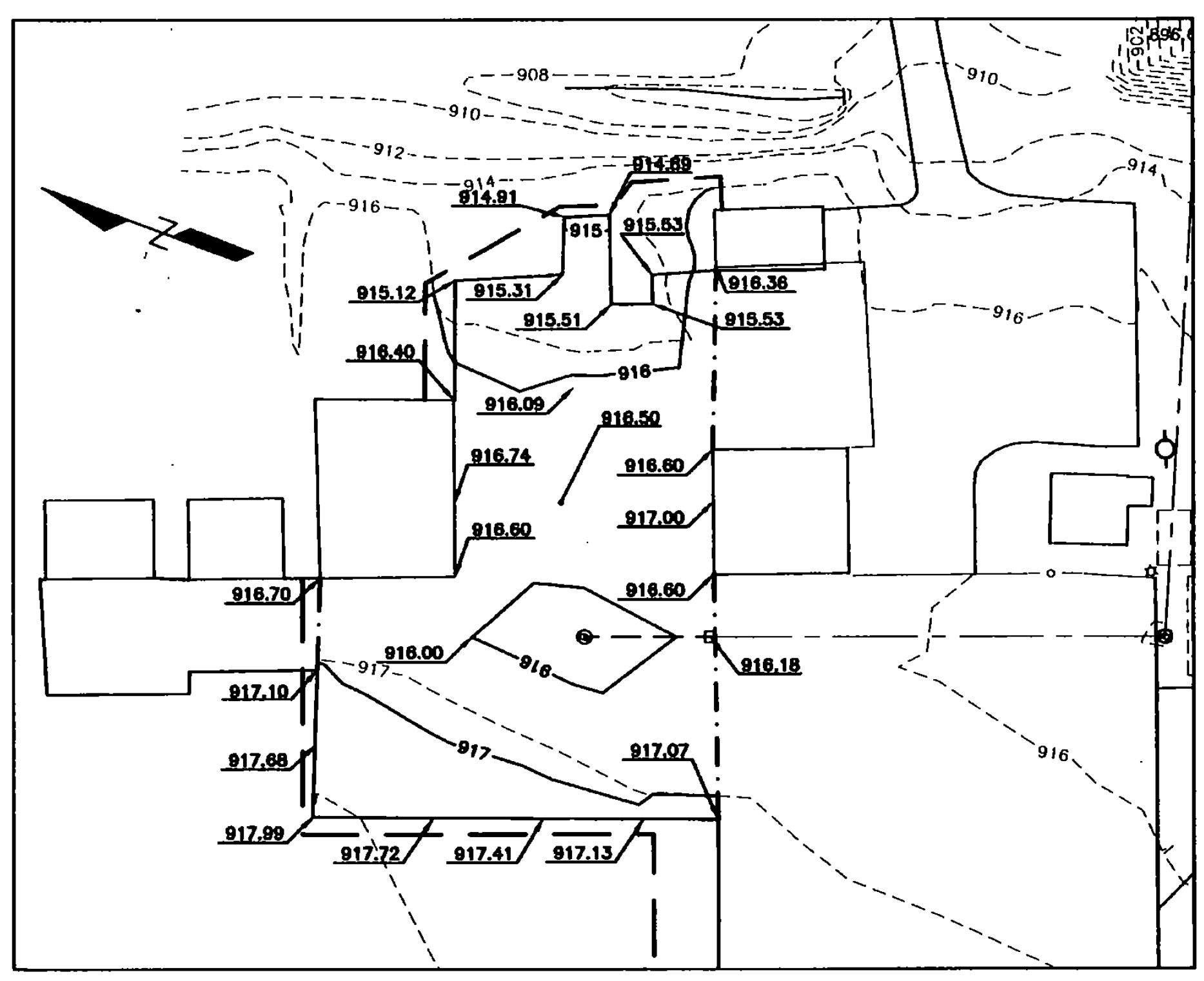
- LEGEND**
- LIMITS OF WORK
 - - - EXISTING CONTOURS
 - PROPOSED CONTOURS
 - PROPOSED UNDERDRAIN
 - EXISTING STORM DRAIN TO REMAIN
 - PROPOSED STORM DRAIN
 - EXISTING CATCH BASINS TO REMAIN
 - PROPOSED CATCH BASINS

NO.	DATE	REVISIONS	BY	CHK'D

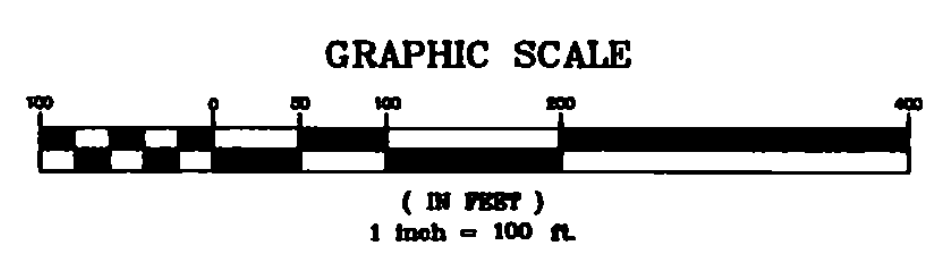
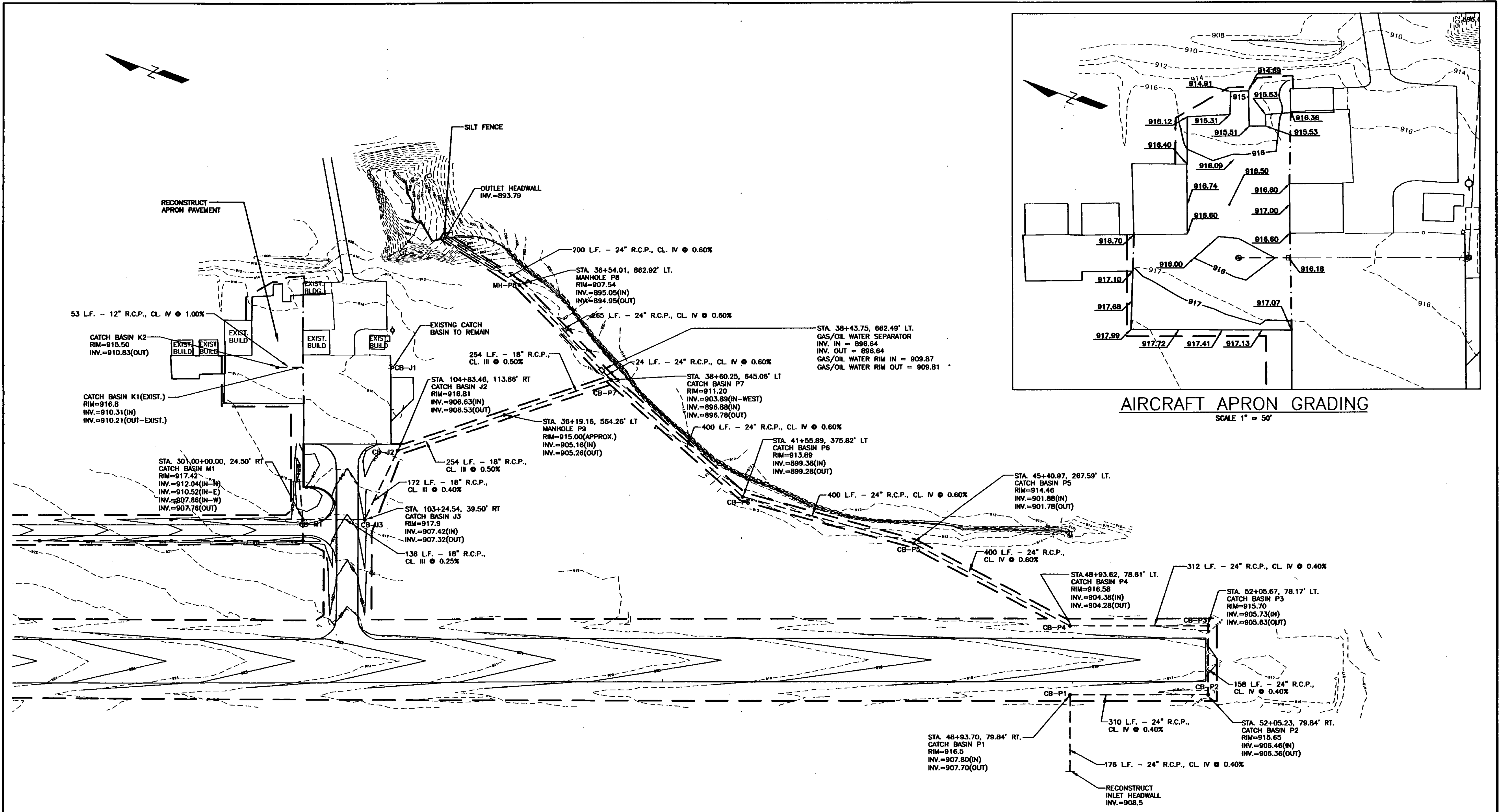
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VERMONT AGENCY OF TRANSPORTATION
 COVENTRY, VERMONT
 NEWPORT STATE AIRPORT
 RUNWAY 18-36 RECONSTRUCTION
 TAXIWAY B
 PLAN & PROFILE

DRAWN BY JJP	DATE MAR. 2000
CHECKED BY JAA	PROJ. NO. N15500
PROJ. ENG. JAA	DRAW. NO. 1
SHEET TW-2	



AIRCRAFT APRON GRADING
SCALE 1" = 50'



LEGEND

- LIMITS OF WORK
- - - EXISTING CONTOURS
- - - PROPOSED CONTOURS
- - - PROPOSED UNDERDRAIN
- - - EXISTING STORM DRAIN TO REMAIN
- - - PROPOSED STORM DRAIN
- ⊙ EXISTING CATCH BASINS TO REMAIN
- ⊙ PROPOSED CATCH BASINS
- ⊙ FLUSHING BASIN

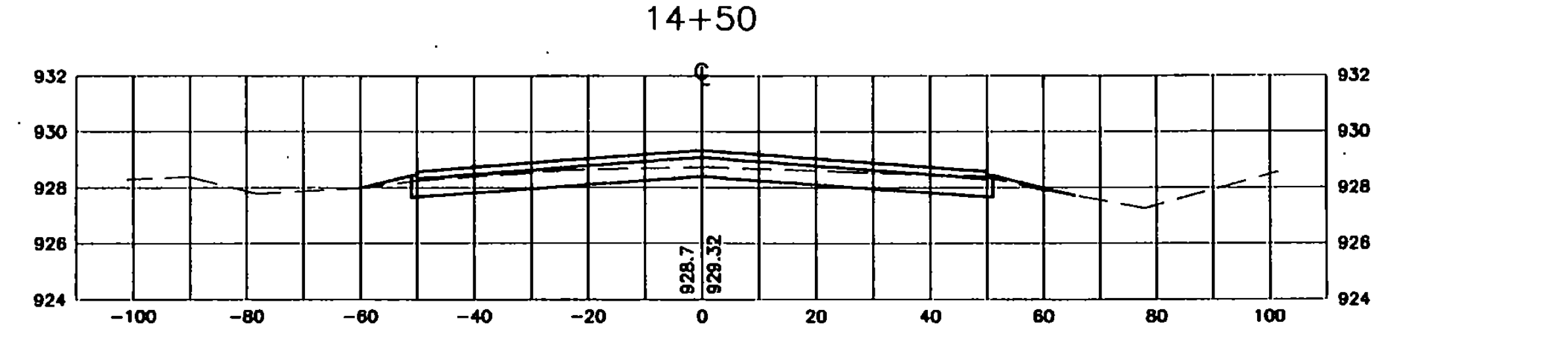
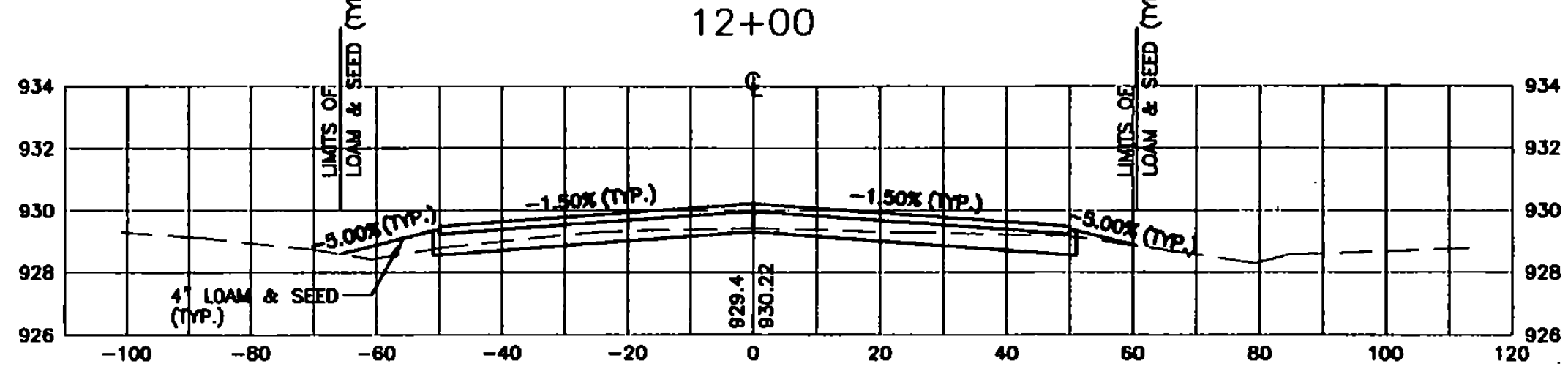
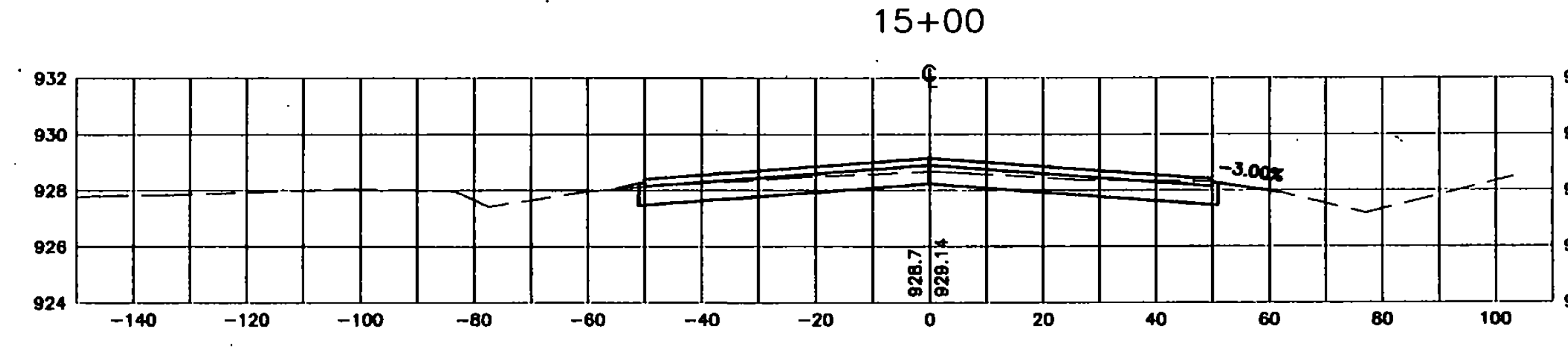
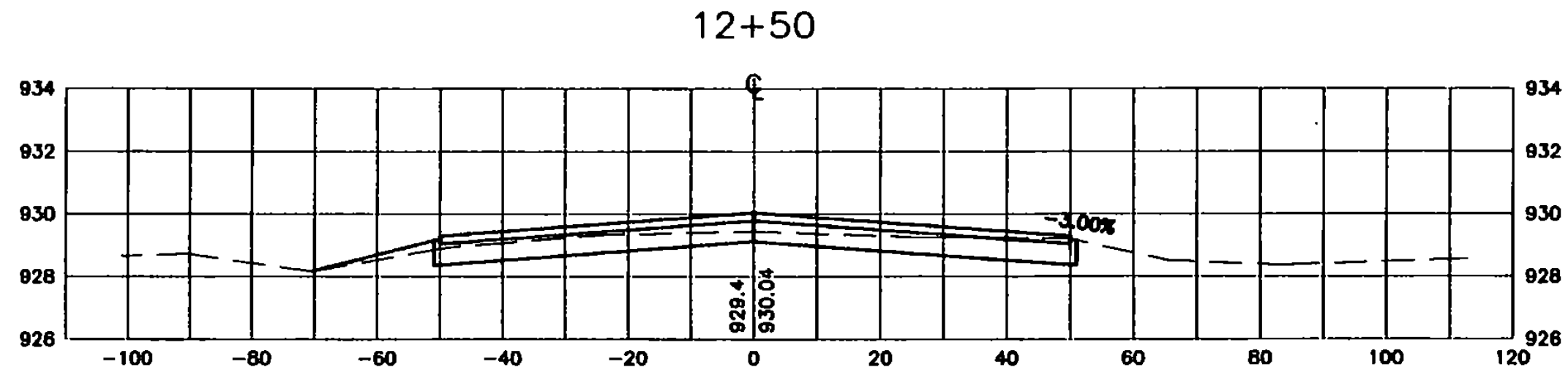
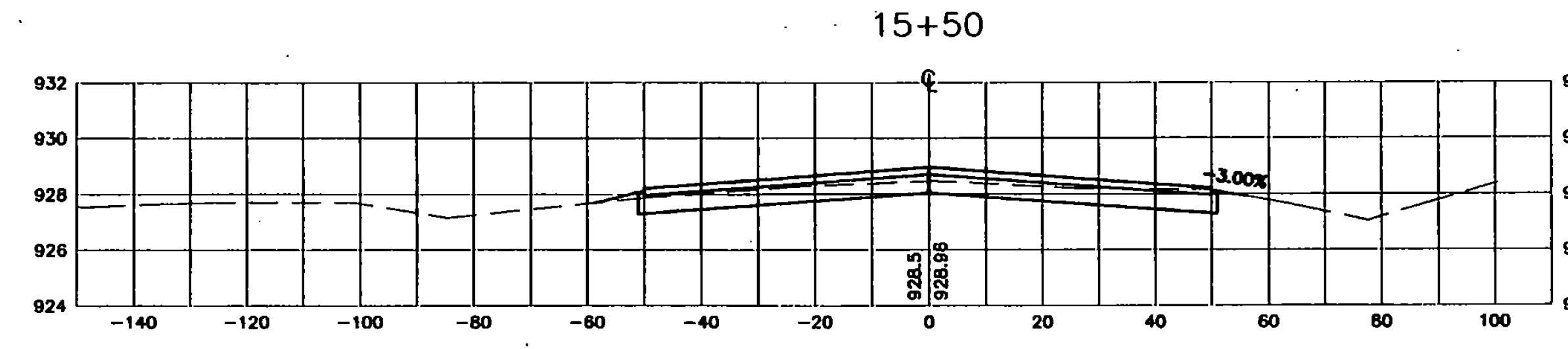
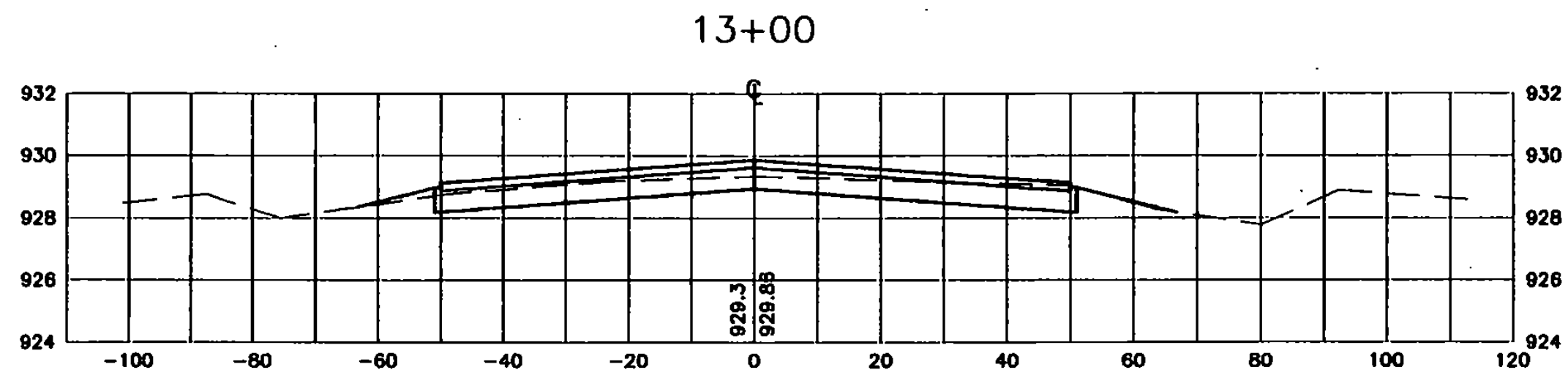
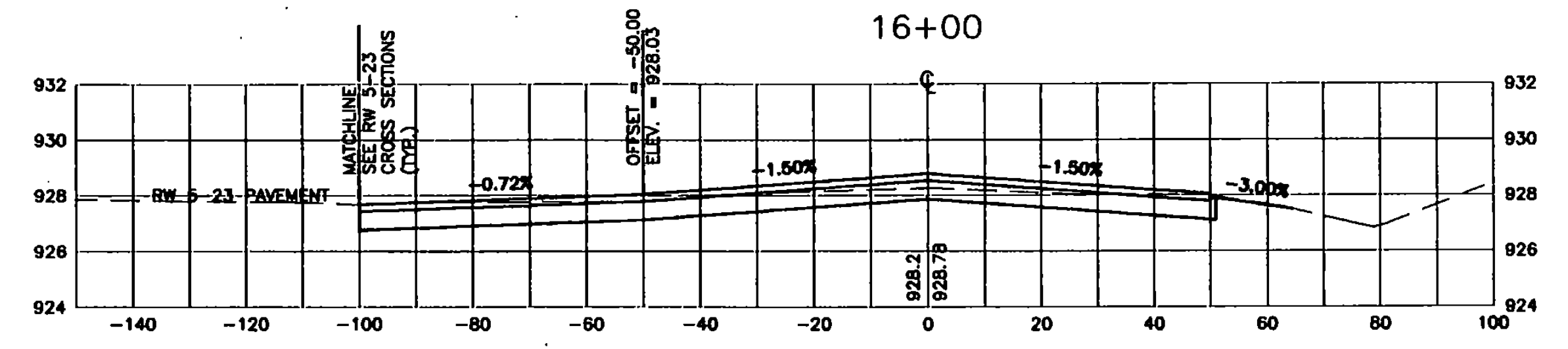
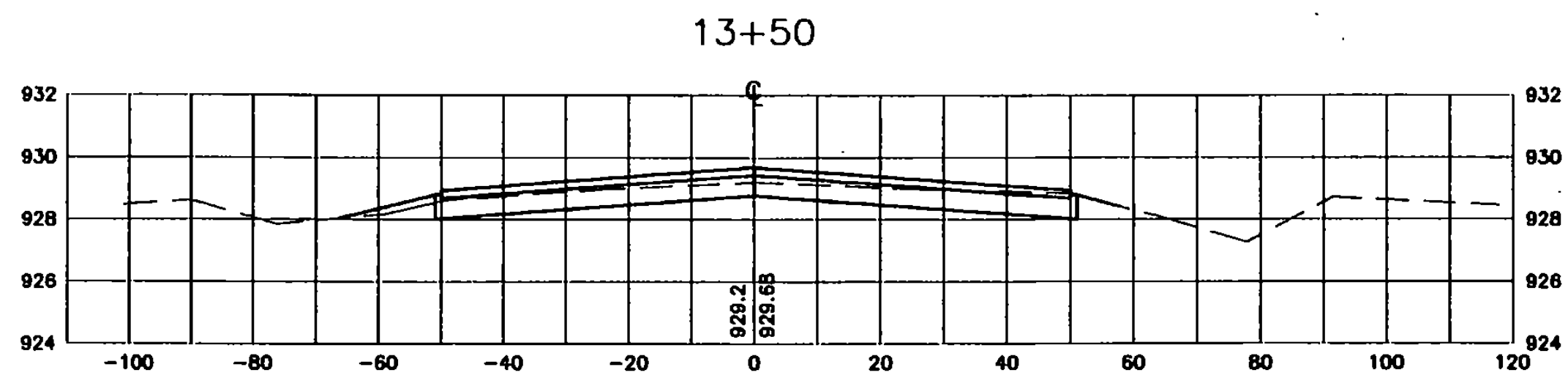
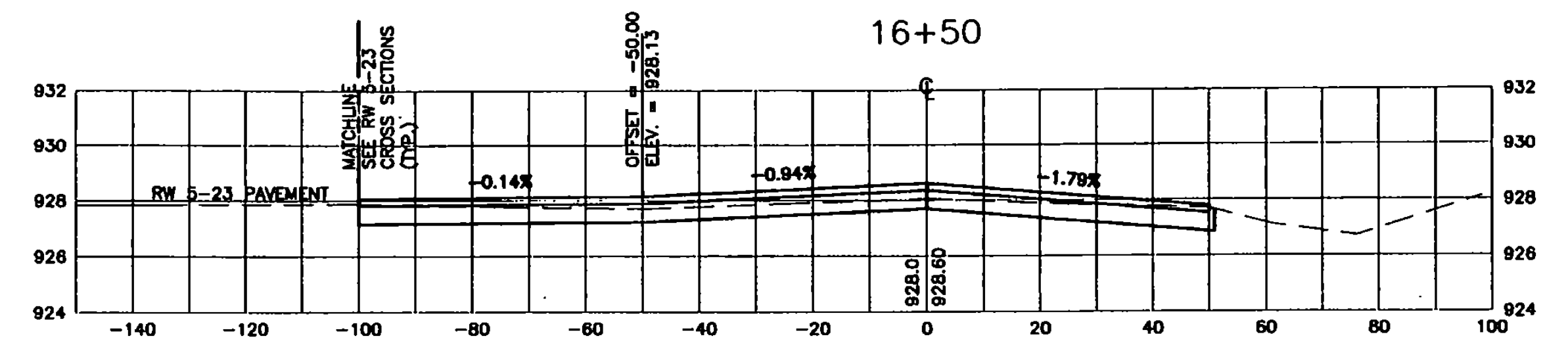
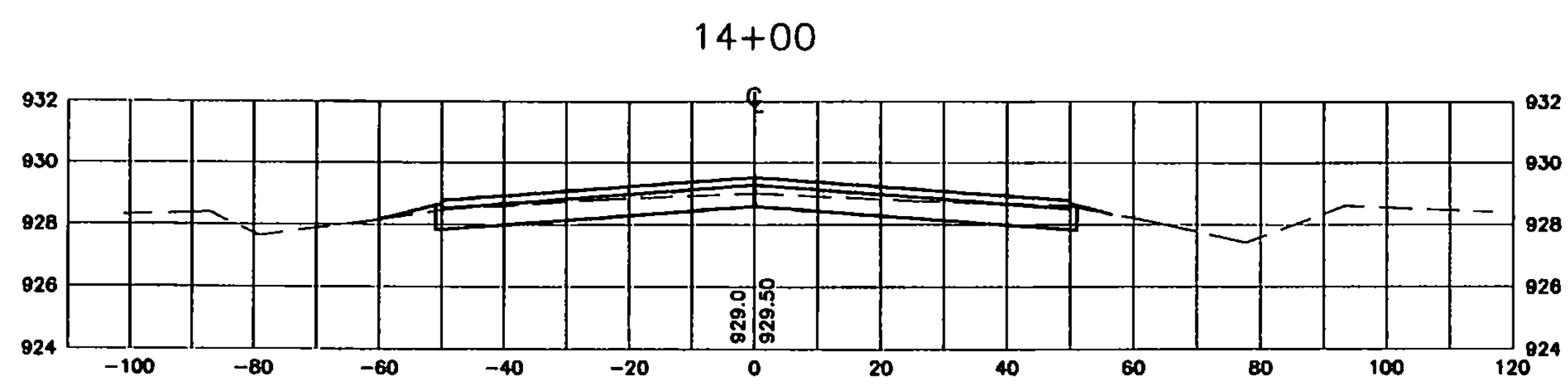
NO.	DATE	REVISIONS	BY	CHK'D
1	1/18/01	VAOT COMMENTS AND SURVEY ADJUSTMENTS	MDL	SJR

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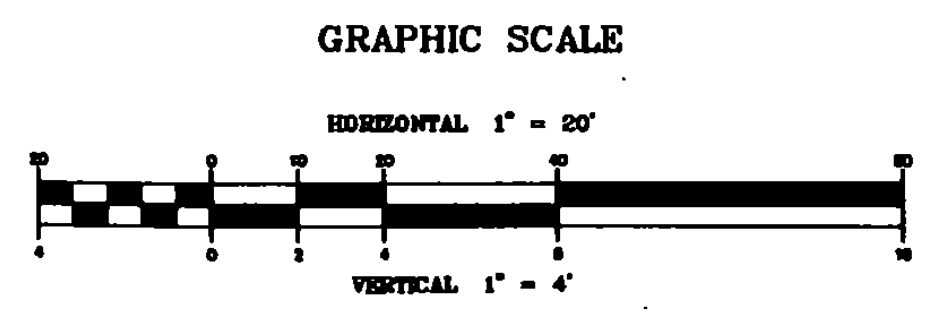
VERMONT AGENCY OF TRANSPORTATION
COVENTRY, VERMONT
NEWPORT STATE AIRPORT
RUNWAY 18-36 RECONSTRUCTION
AIRCRAFT APRON GRADING PLAN
RUNWAY OUTLET DRAINAGE

DRAWN BY JJP	DATE MAR. 2000
CHECKED BY	PROJ. NO. N15500
PROJ. ENG. JAA	DRAW. NO. 1
SHEET AP-1	

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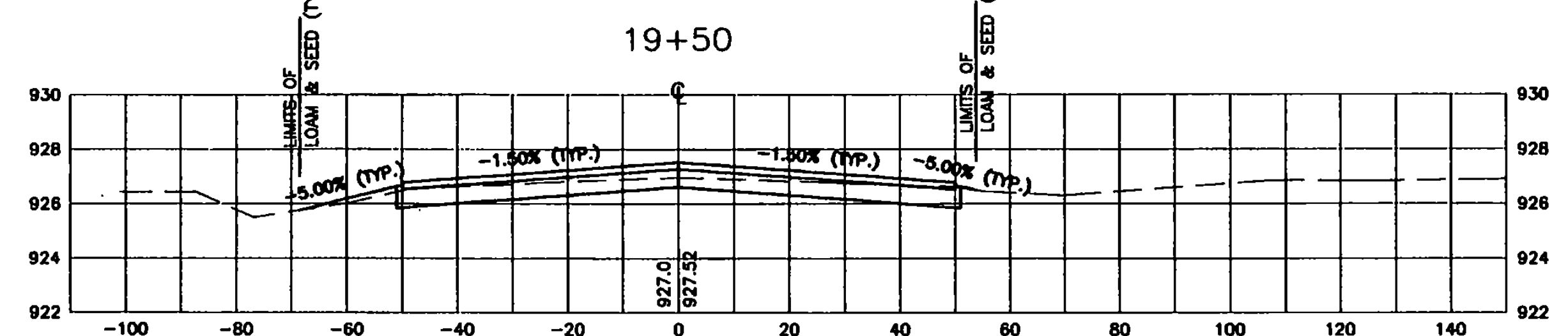
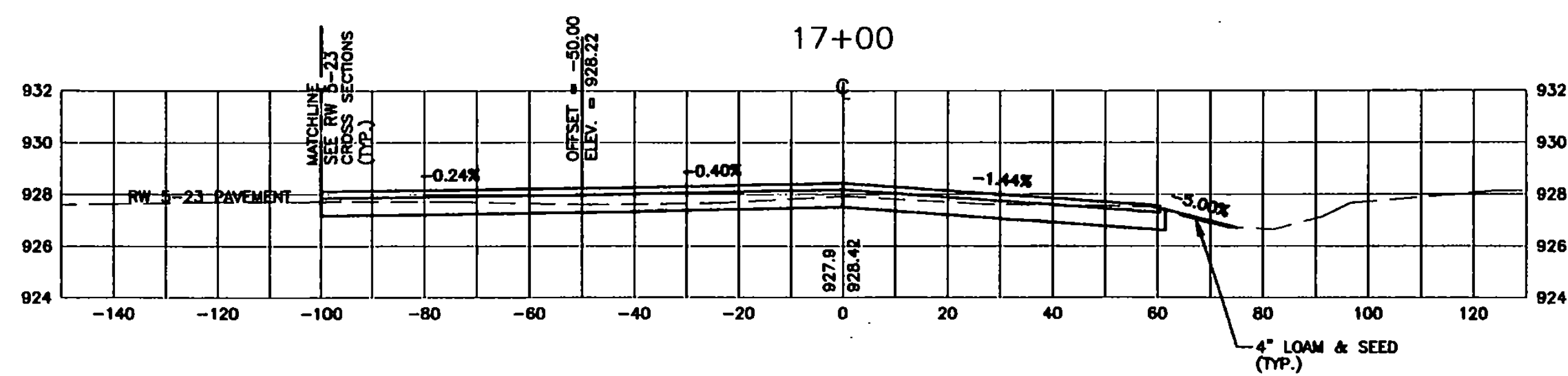
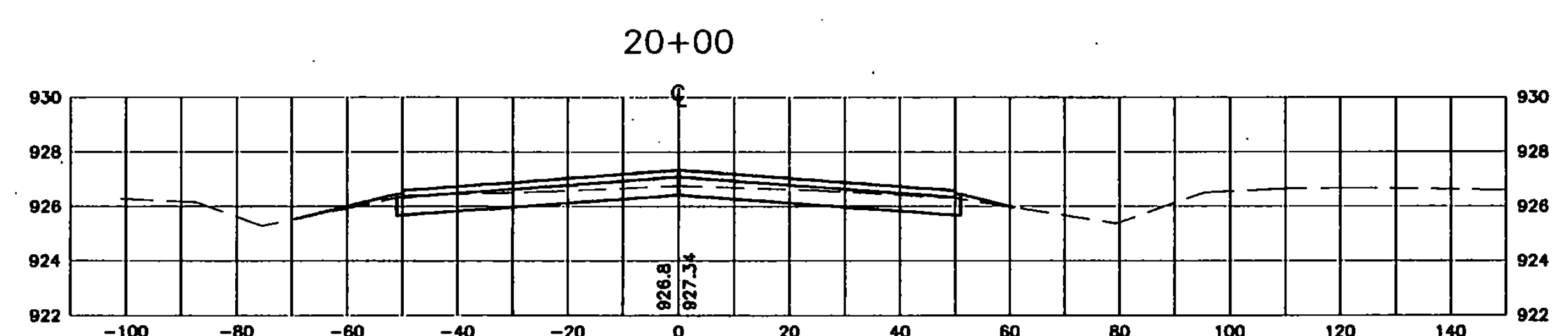
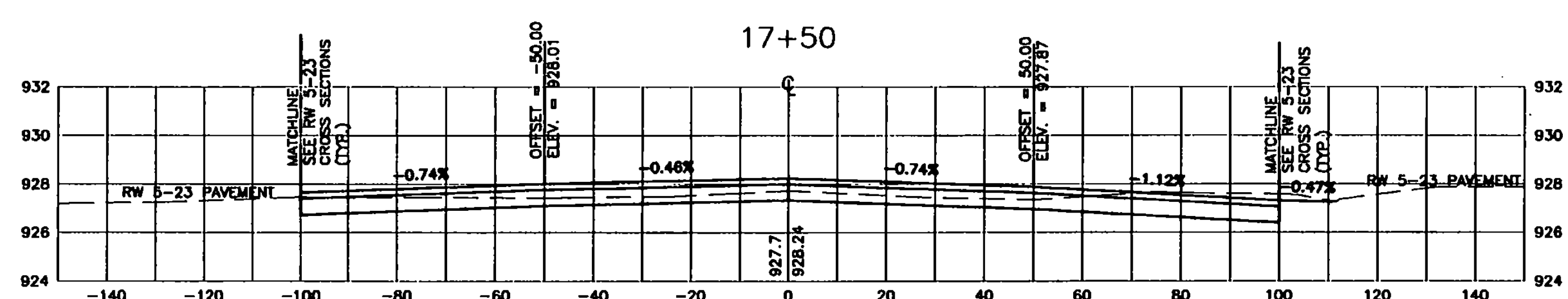
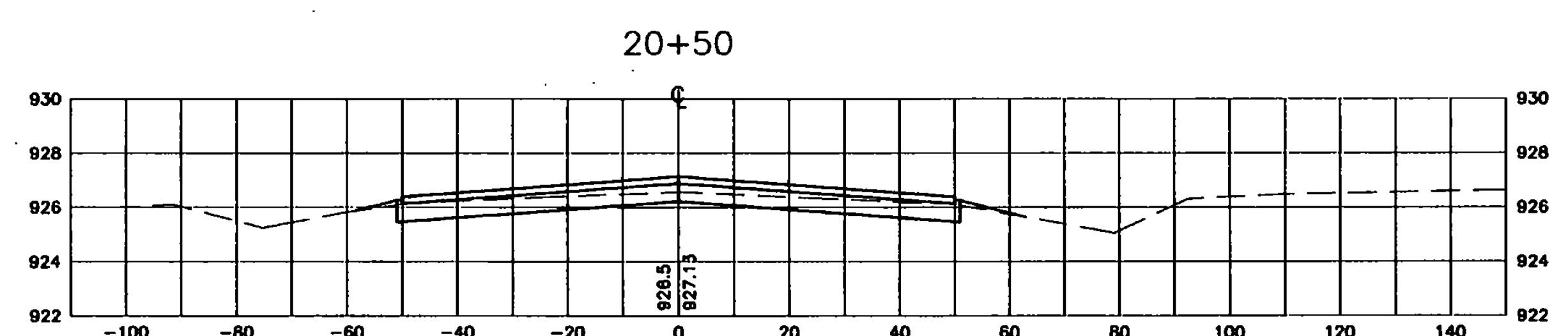
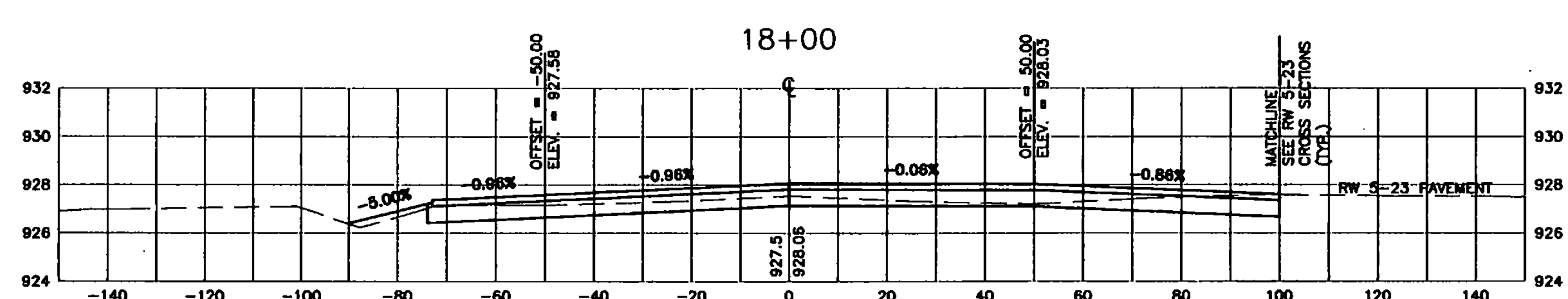
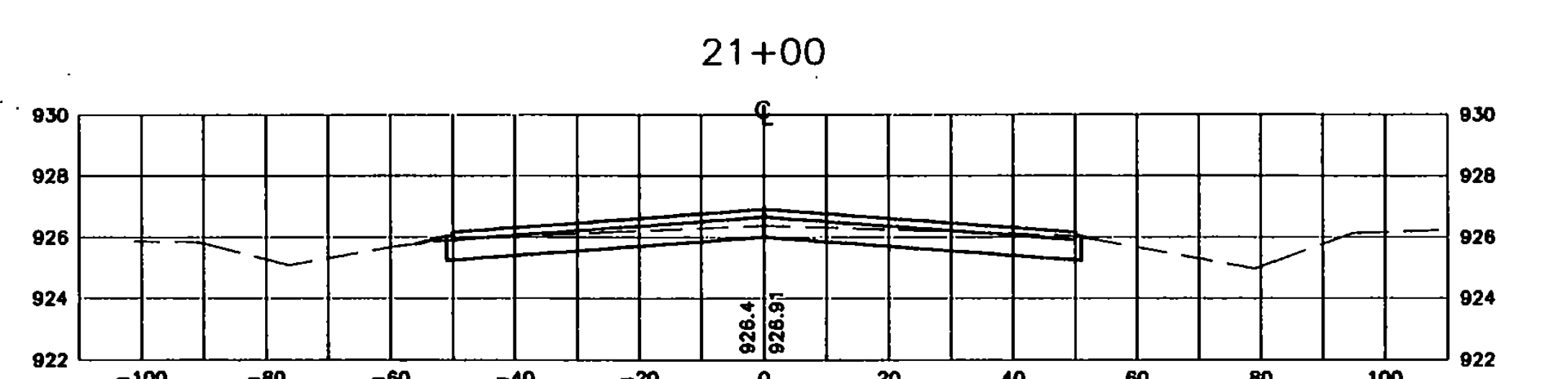
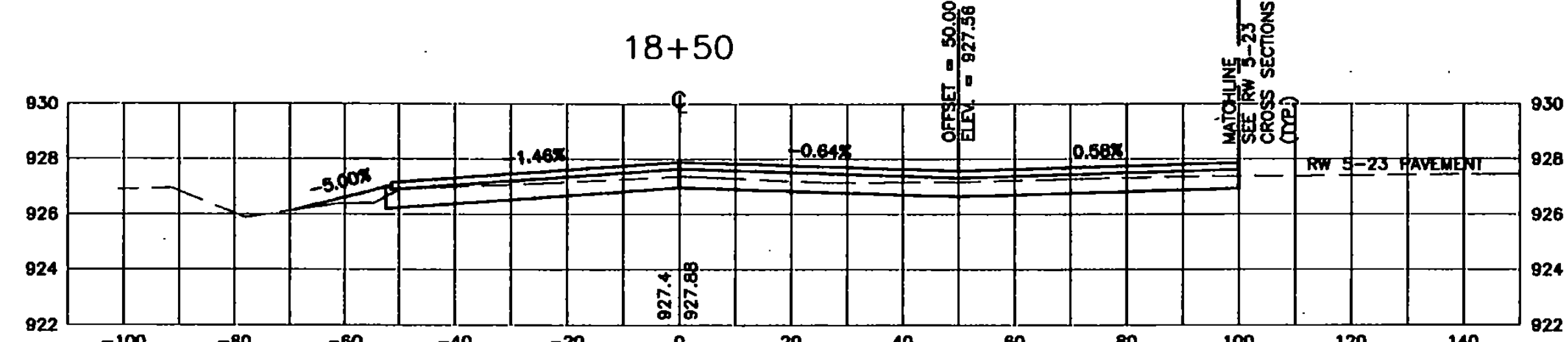
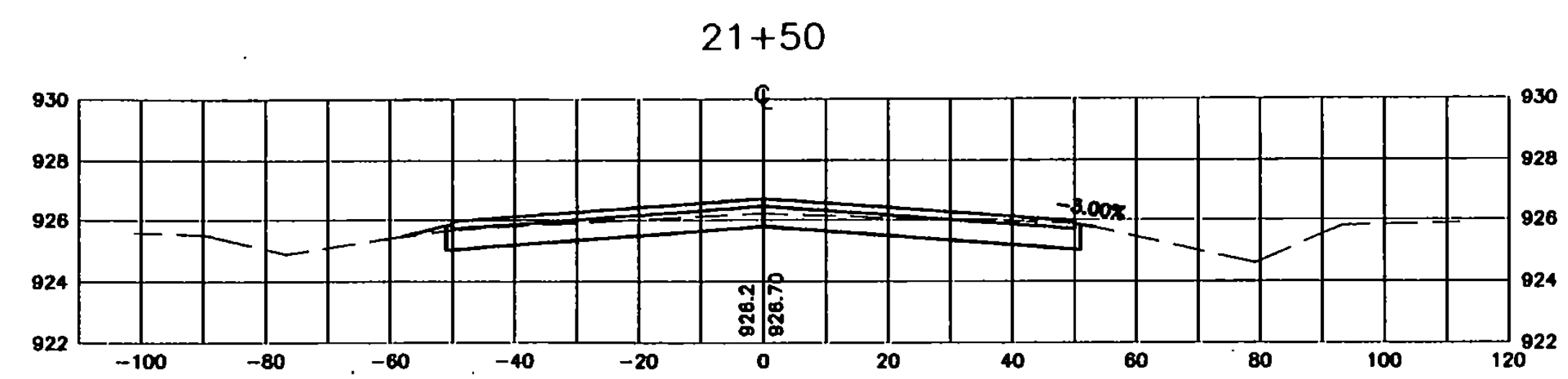
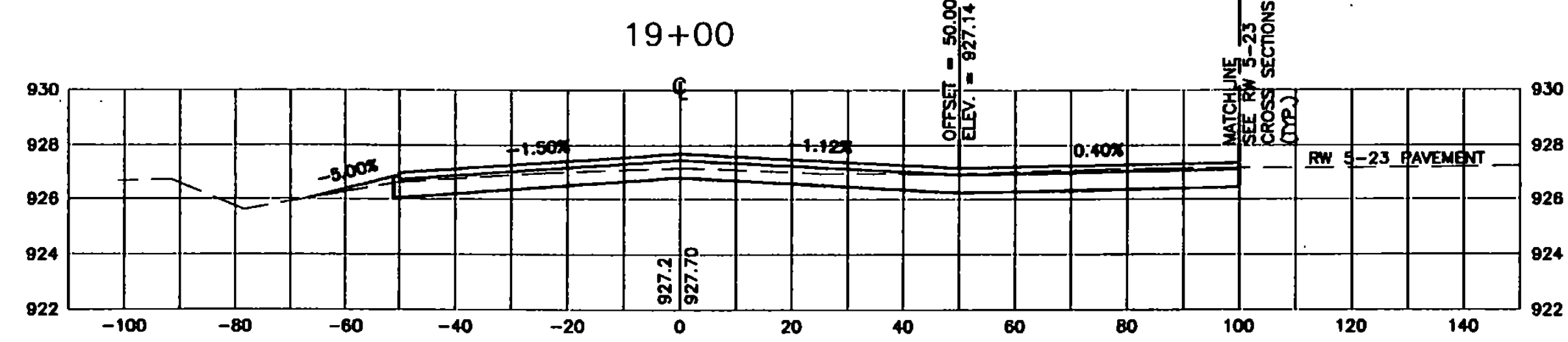


NO.	DATE	REVISIONS	BY	CHK'D
1	1/18/01	VAOT COMMENTS AND SURVEY ADJUSTMENTS	MDL	SJR

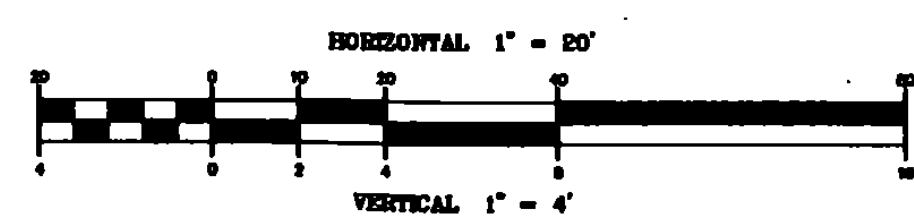
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 NEWPORT STATE AIRPORT
 RUNWAY 18-36 RECONSTRUCTION
 CROSS SECTIONS RW 18-36
 STA. 12+00 TO 16+50

DRAWN BY JJP	DATE MAR. 2000
CHECKED BY JAA	PROJ. NO. N15500
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SHEET XS-1	



GRAPHIC SCALE

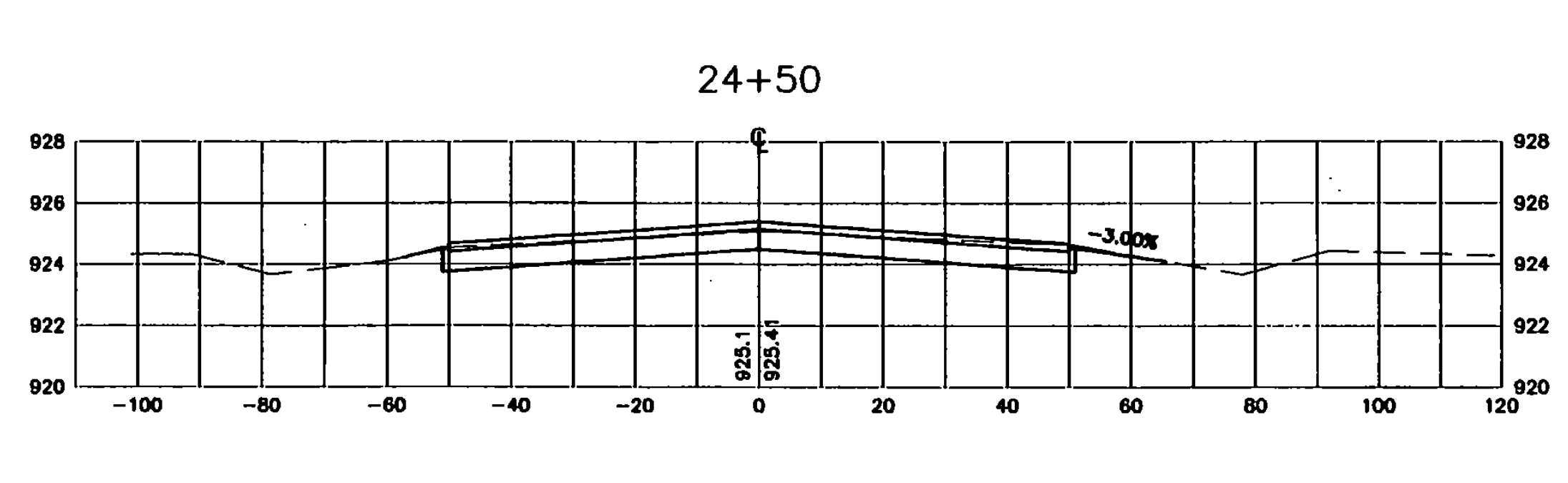
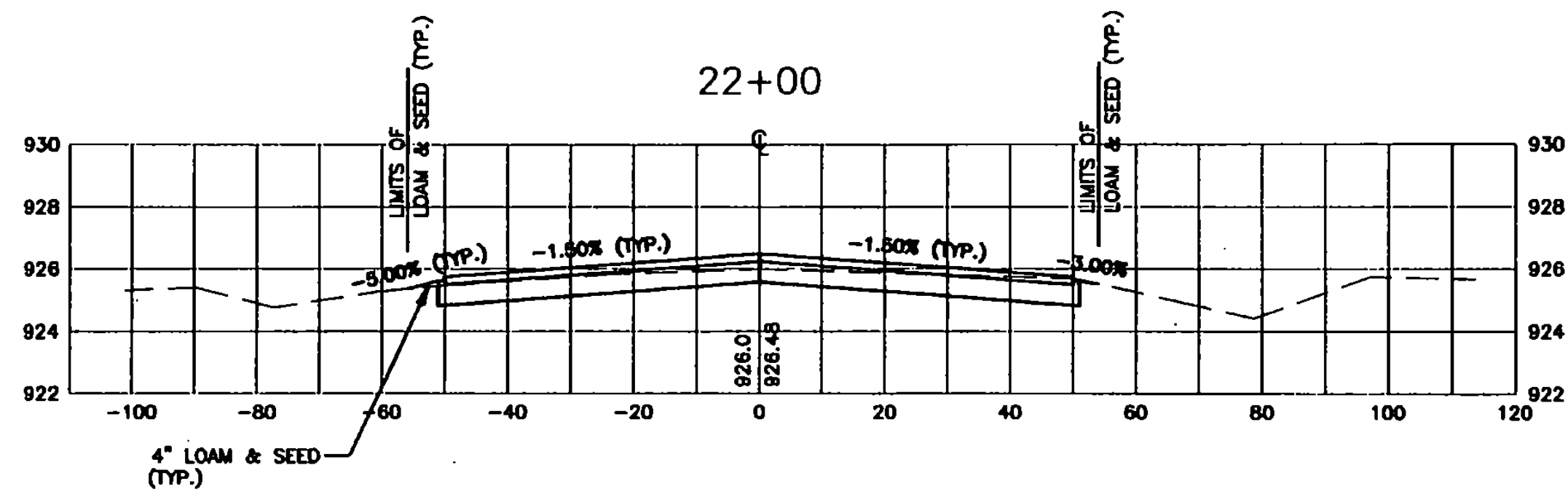
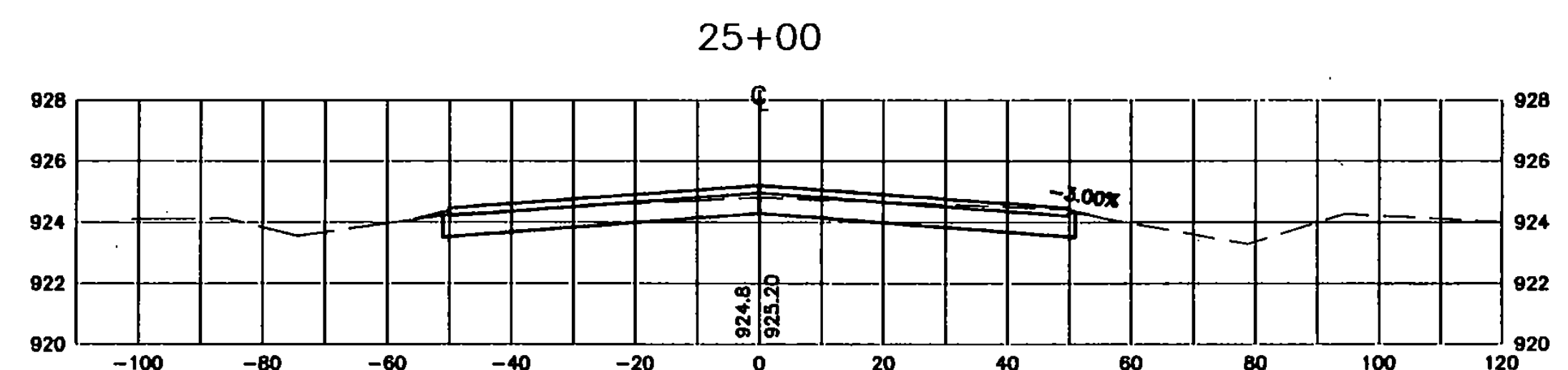
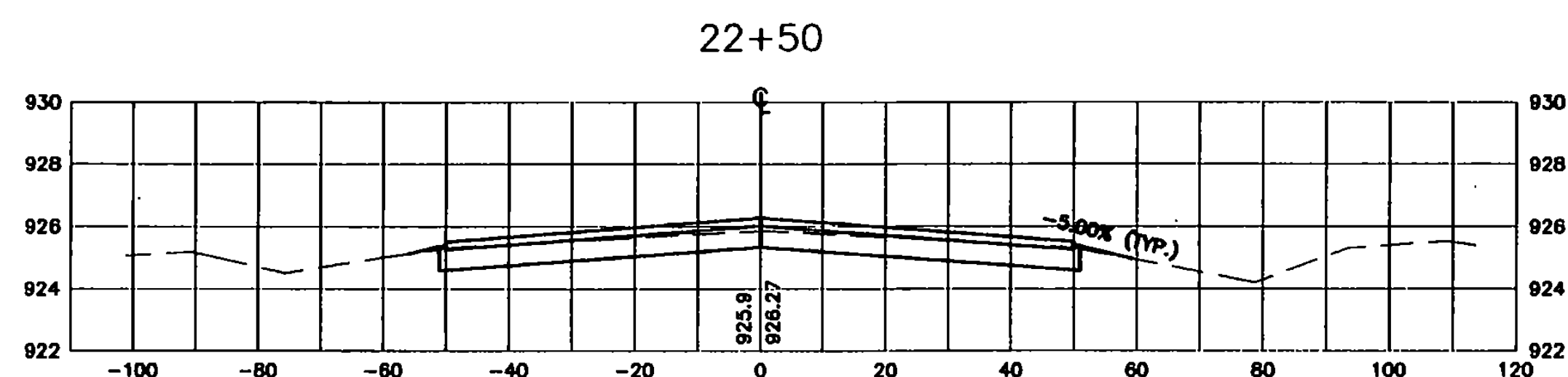
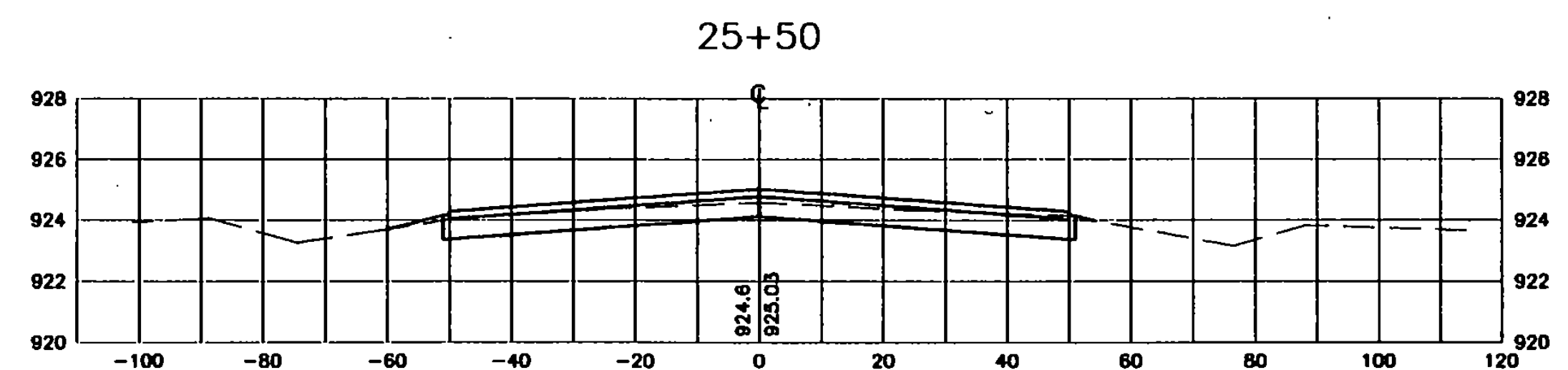
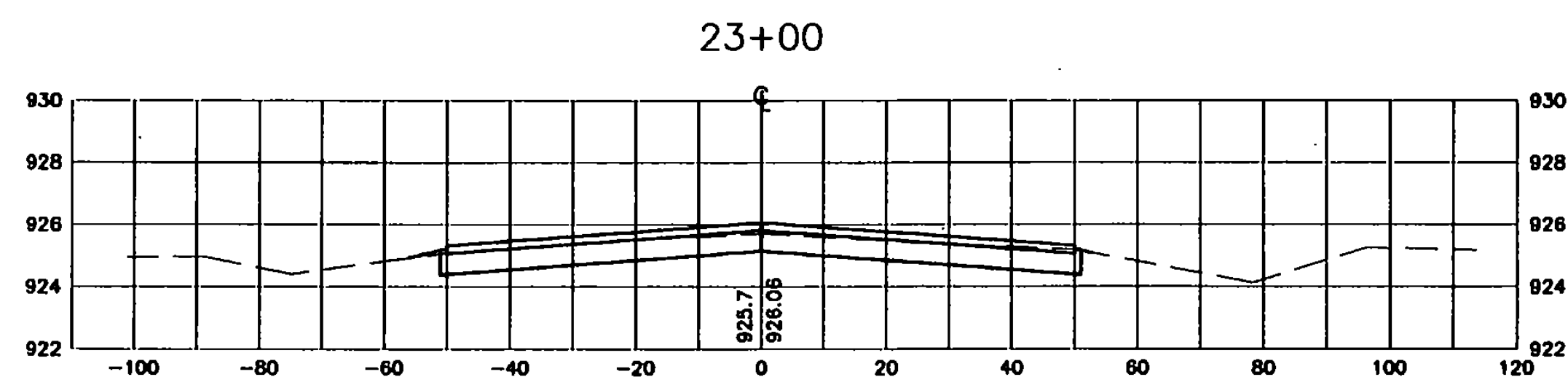
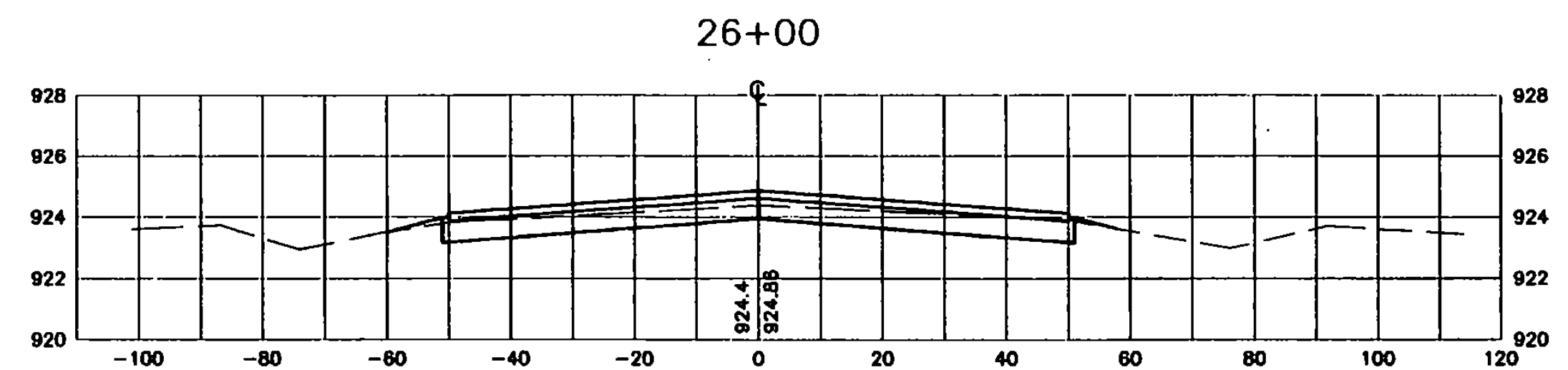
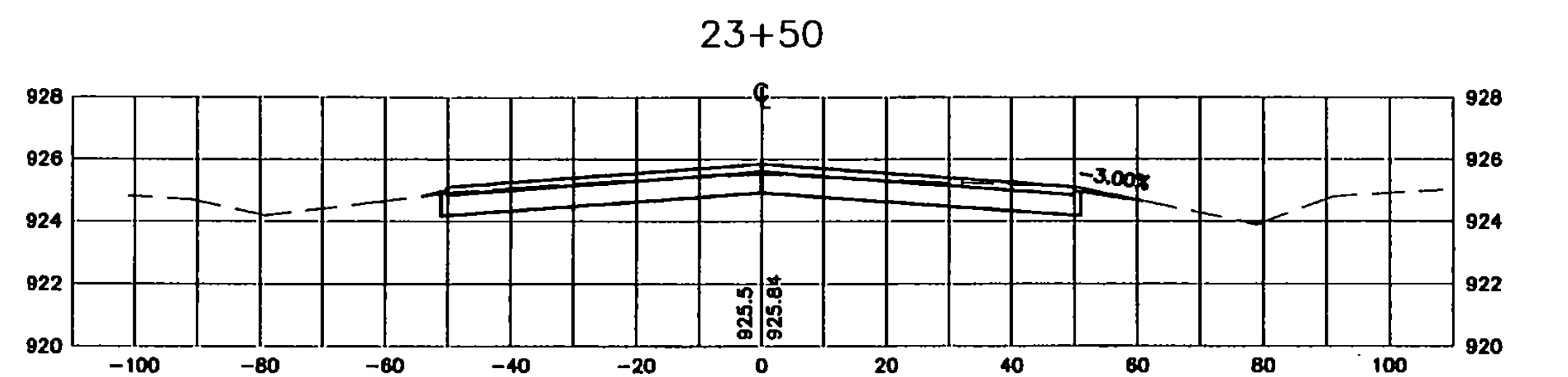
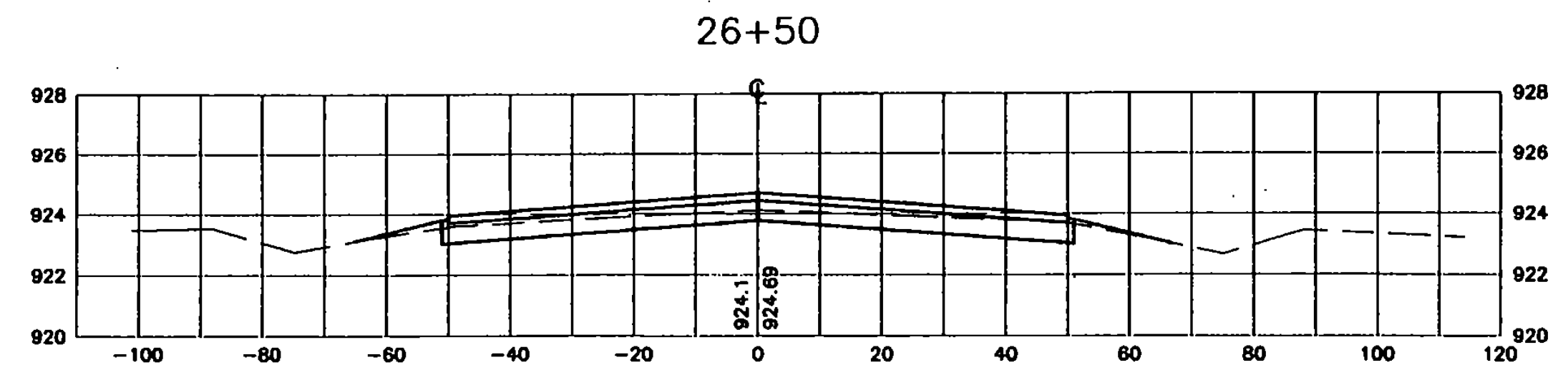
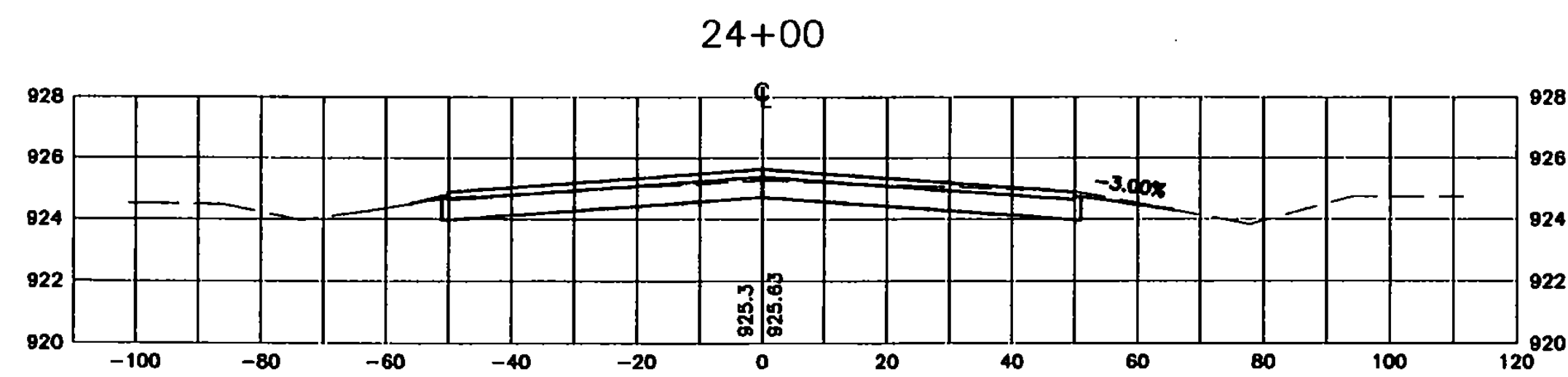


NO.	DATE	DESCRIPTION	BY	CHK'D
1	1/18/01	VAOT COMMENTS AND SURVEY ADJUSTMENTS	MDL	SJR
		REVISIONS		

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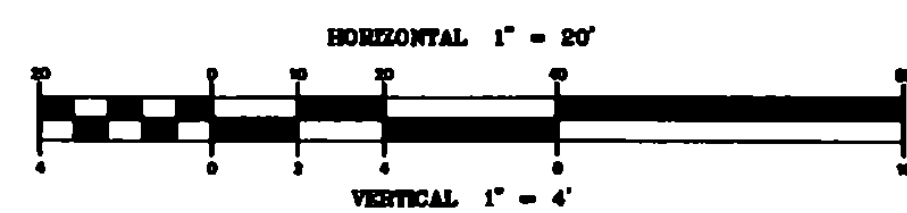
VERMONT AGENCY OF
 TRANSPORTATION
 COVENTRY, VERMONT
 NEWPORT STATE AIRPORT
 RUNWAY 18-36 RECONSTRUCTION
 CROSS SECTIONS RW 18-36
 STA. 17+00 TO 21+50

DRAWN BY JJP	DATE MAR. 2000
CHECKED BY	PROJ. NO. N15500
PROJ. ENG. JAA	DRAW. NO. 1
SHEET XS-2	



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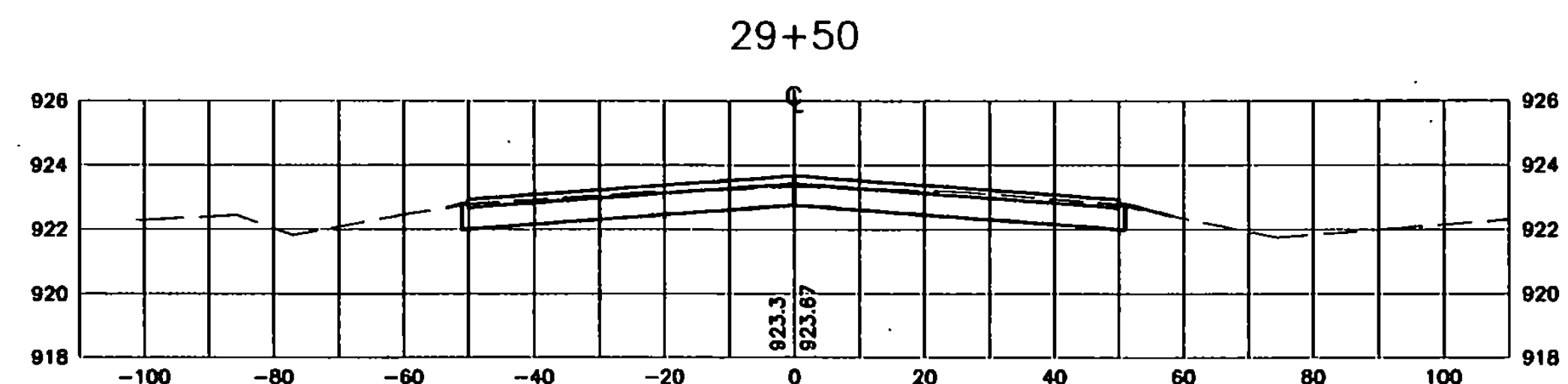
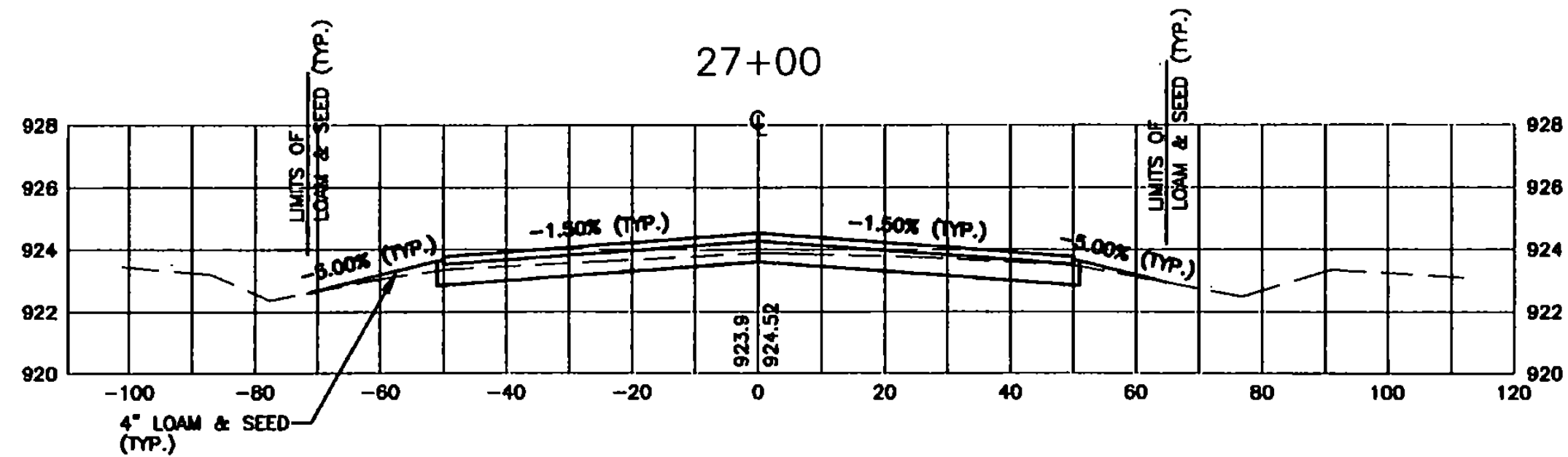
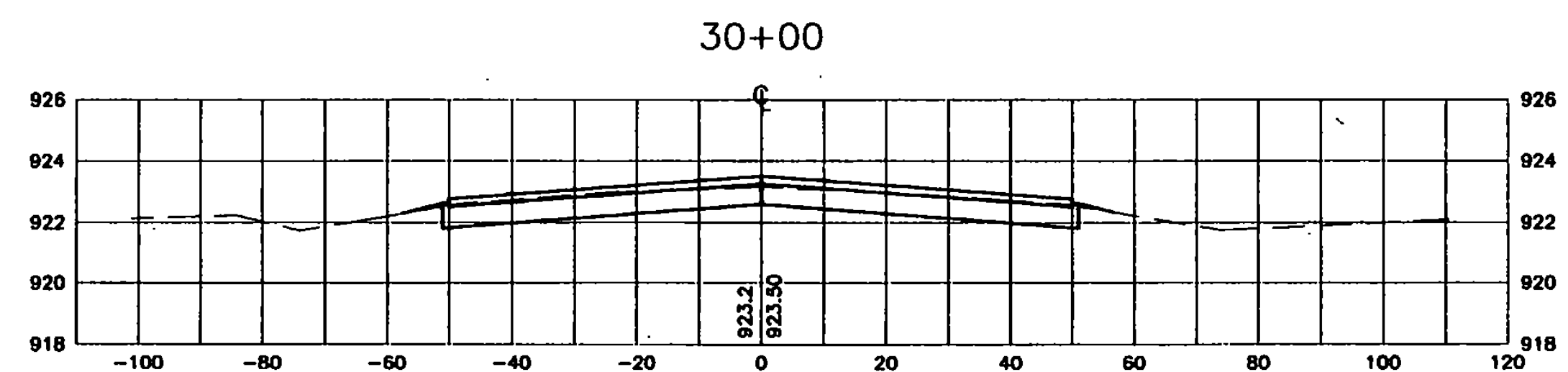
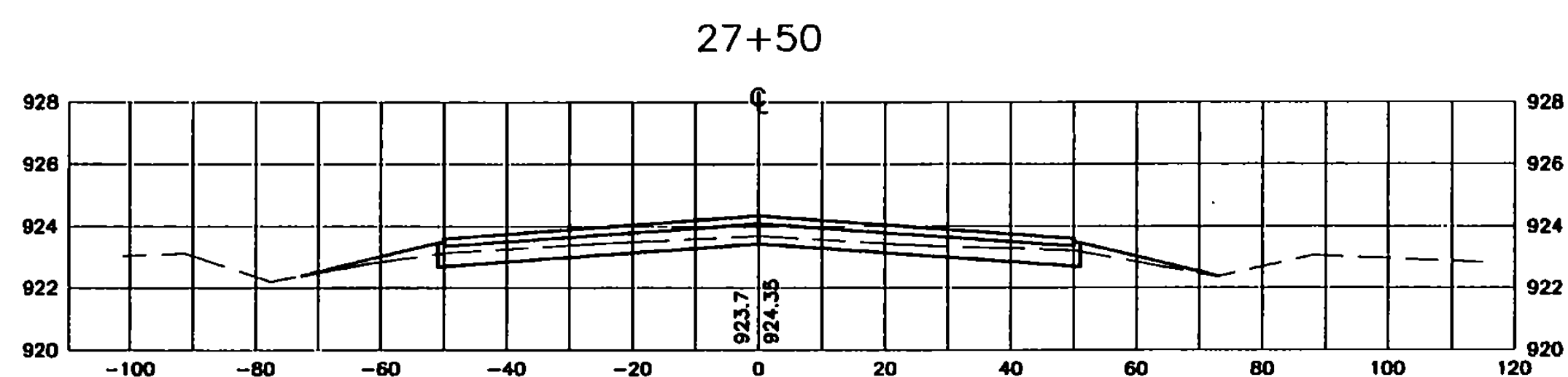
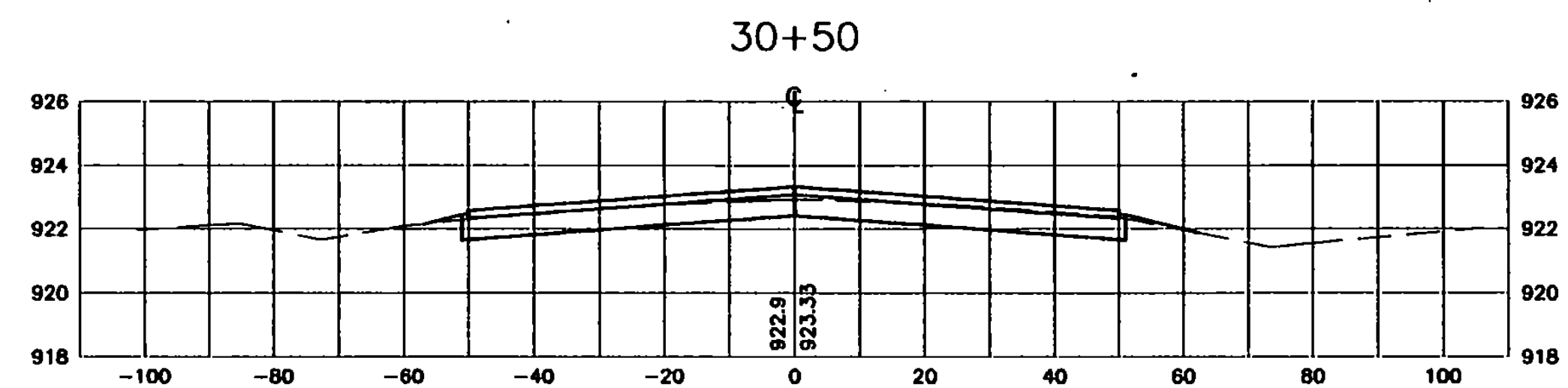
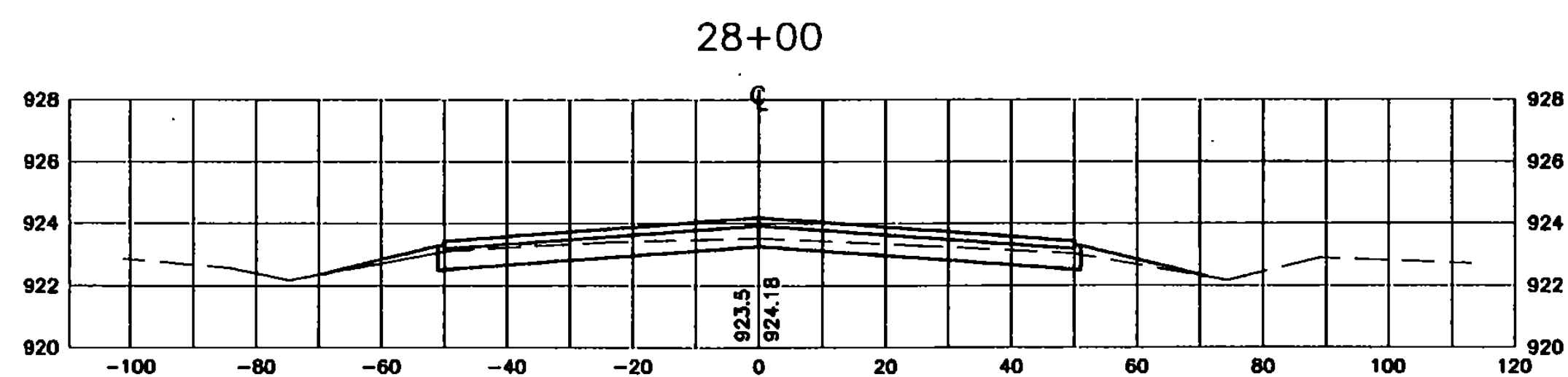
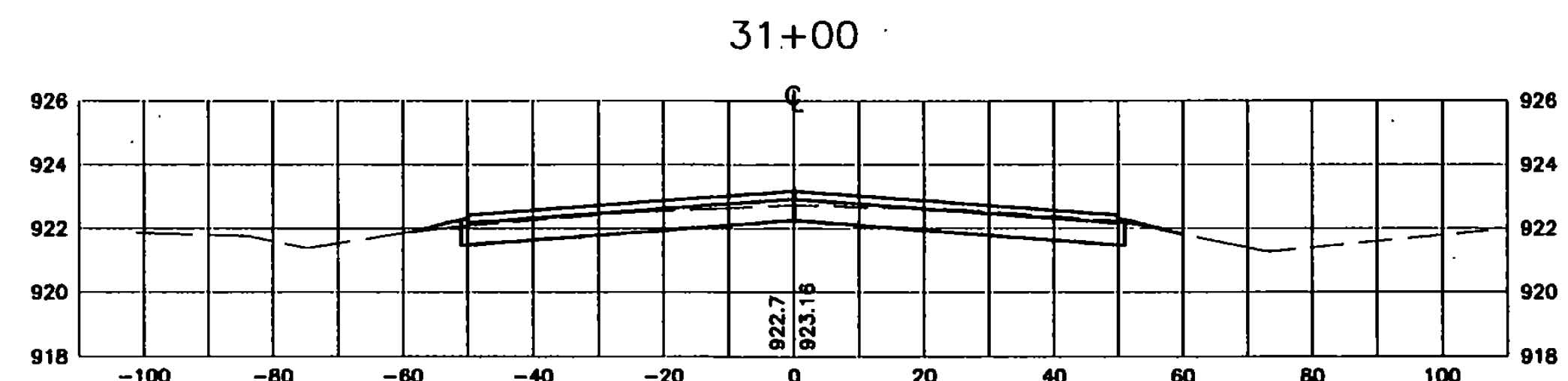
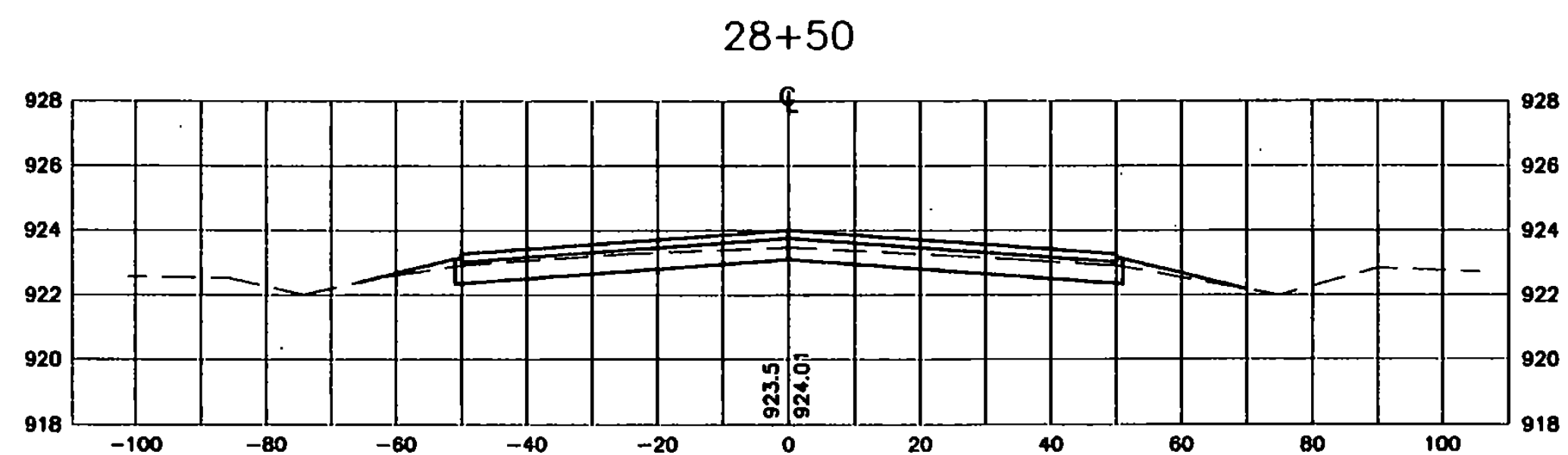
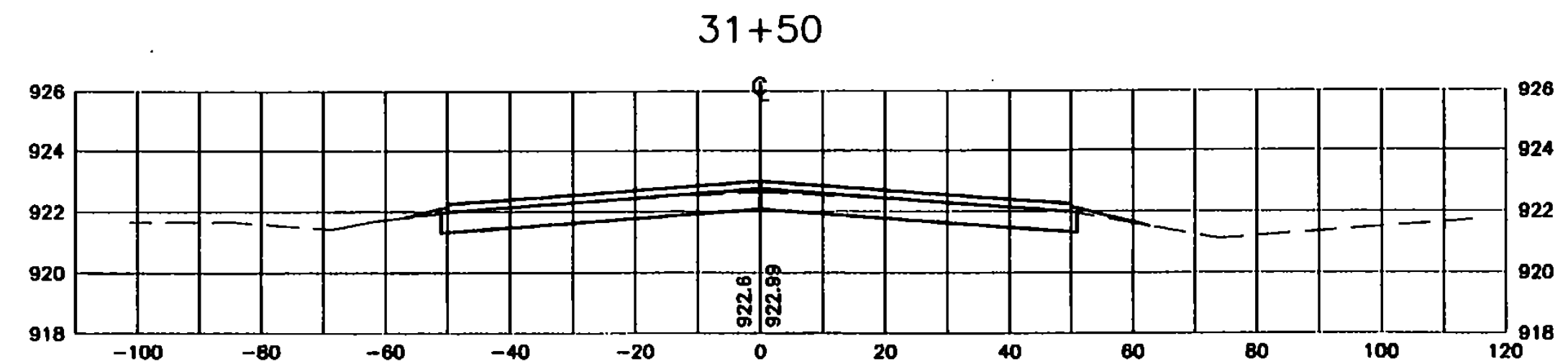
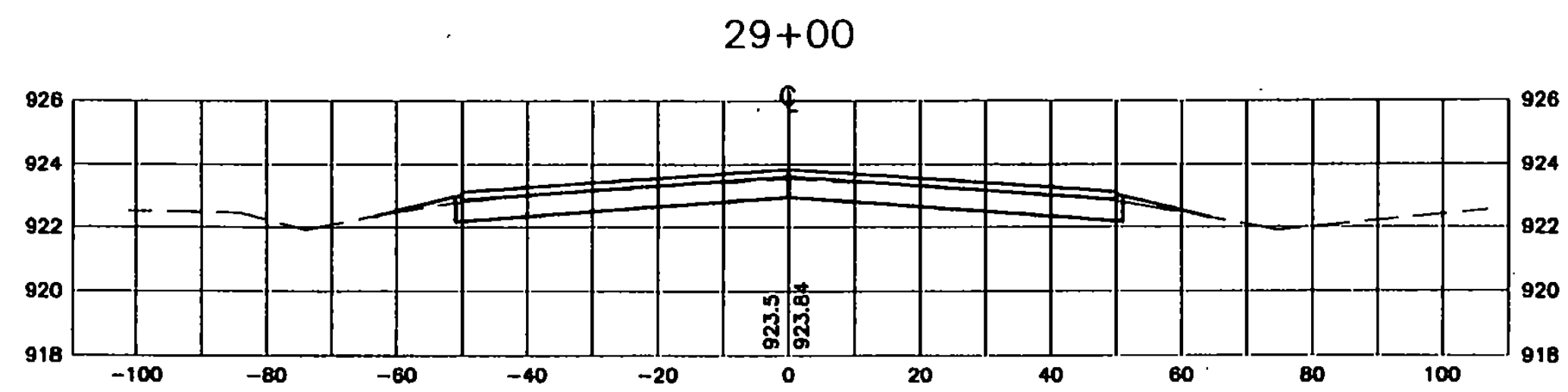


NO.	DATE	REVISIONS	BY	CHK'D
1	1/16/01	VADT COMMENTS AND SURVEY ADJUSTMENTS	MDL	SJR

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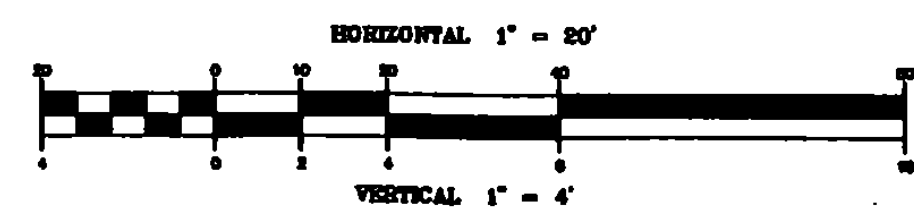
VERMONT AGENCY OF
TRANSPORTATION
COVENTRY, VERMONT
NEWPORT STATE AIRPORT
RUNWAY 18-36 RECONSTRUCTION
CROSS SECTIONS RW 18-36
STA. 22+00 TO 26+50

DRAWN BY JJP	DATE MAR. 2000
CHECKED BY	PROJ. NO. NT15500
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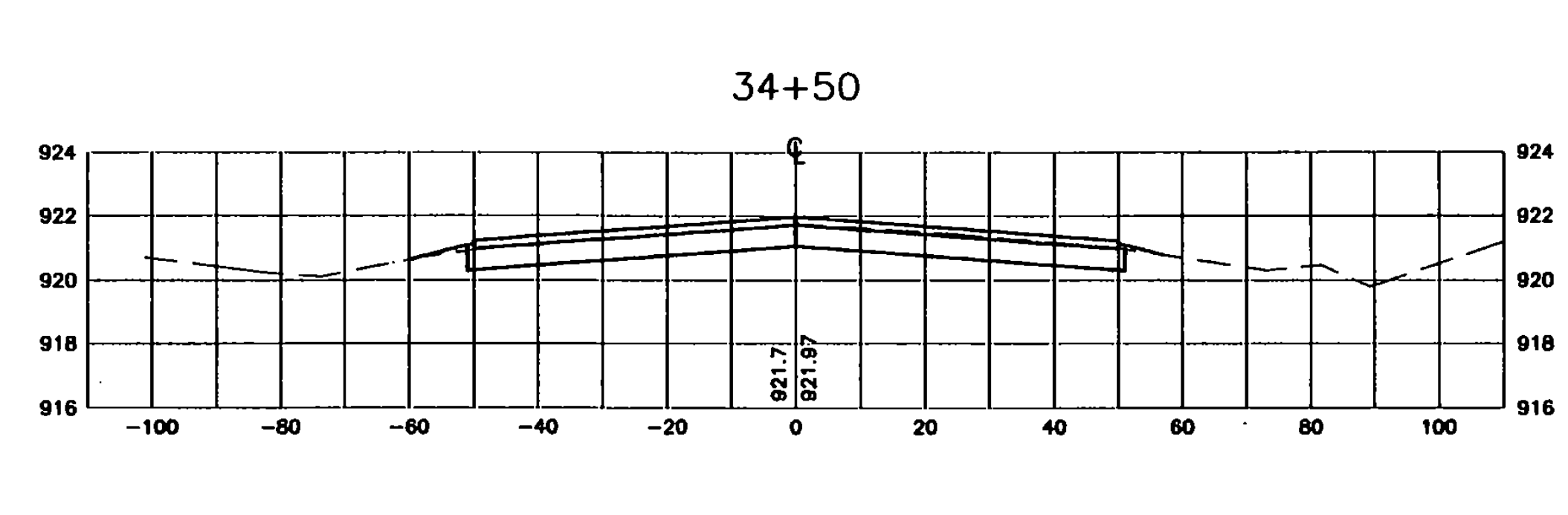
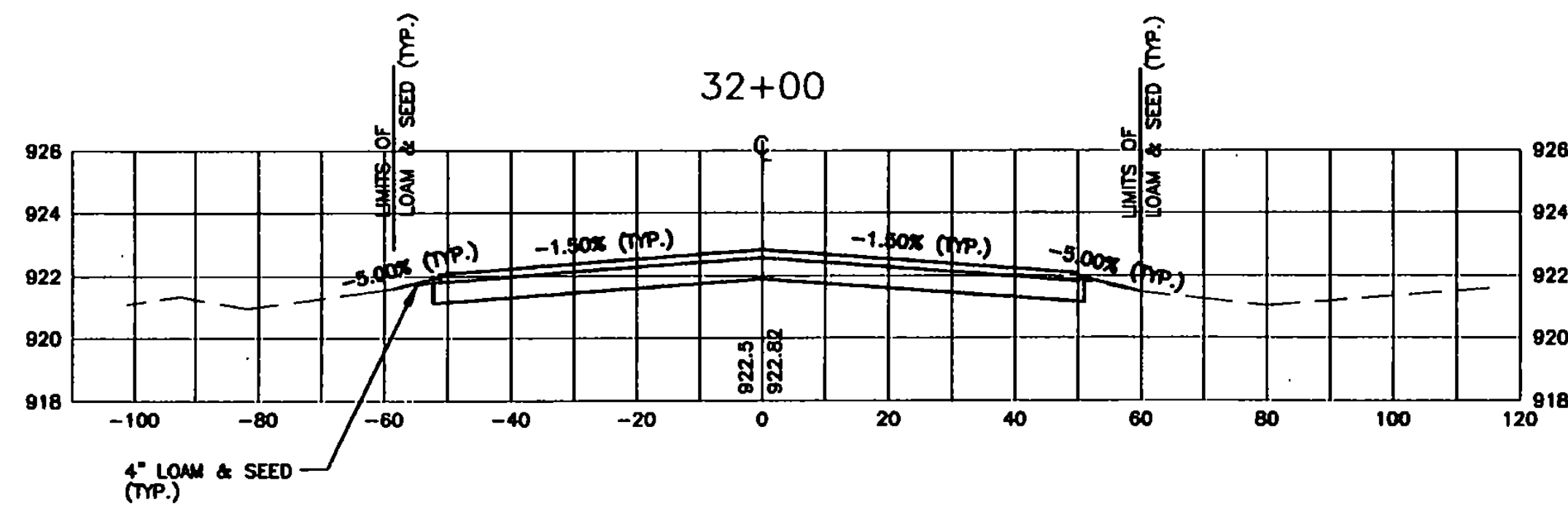
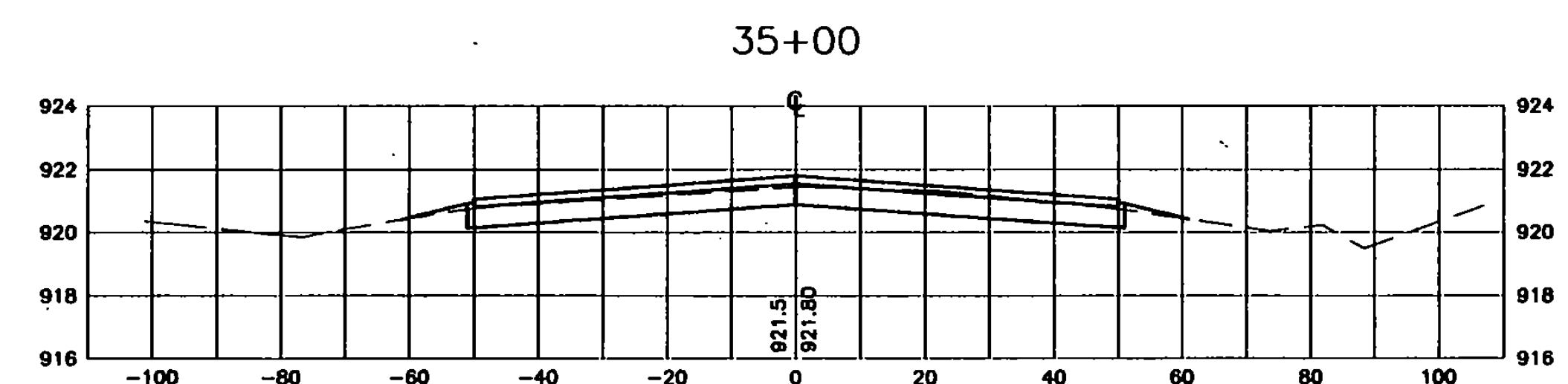
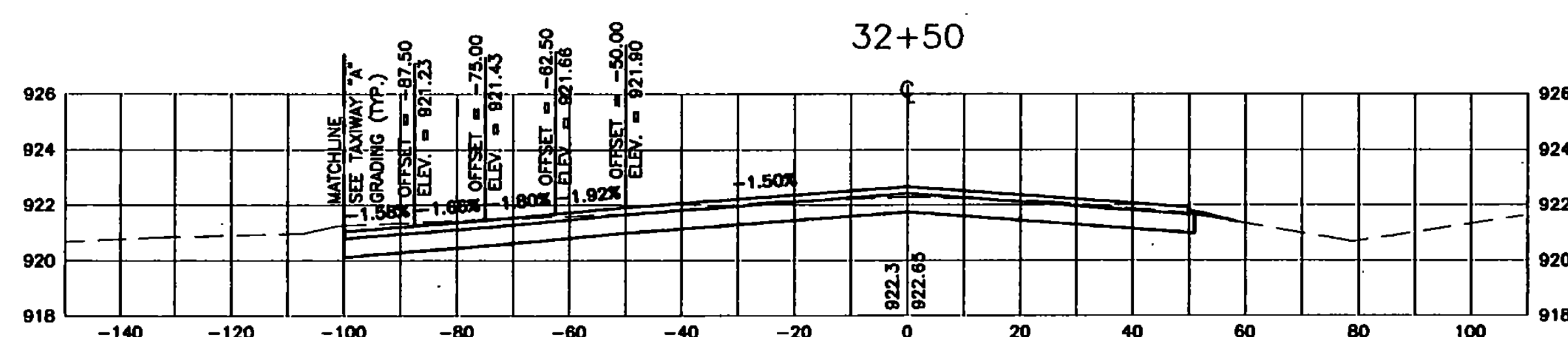
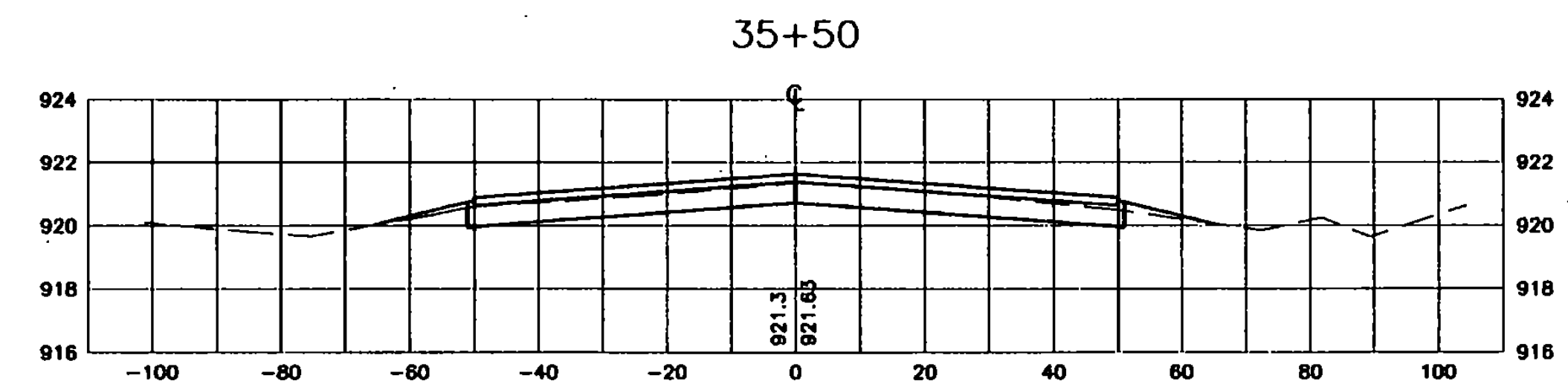
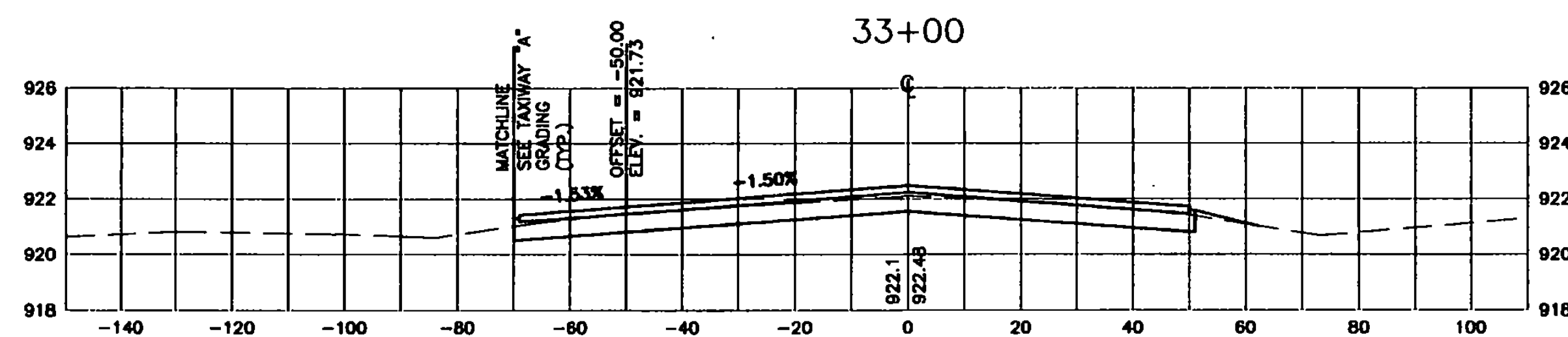
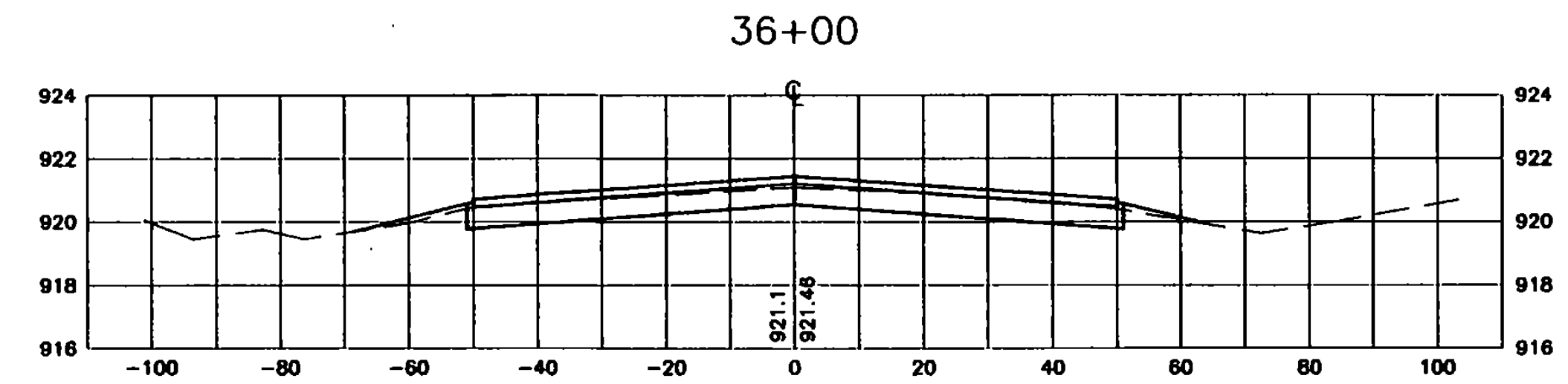
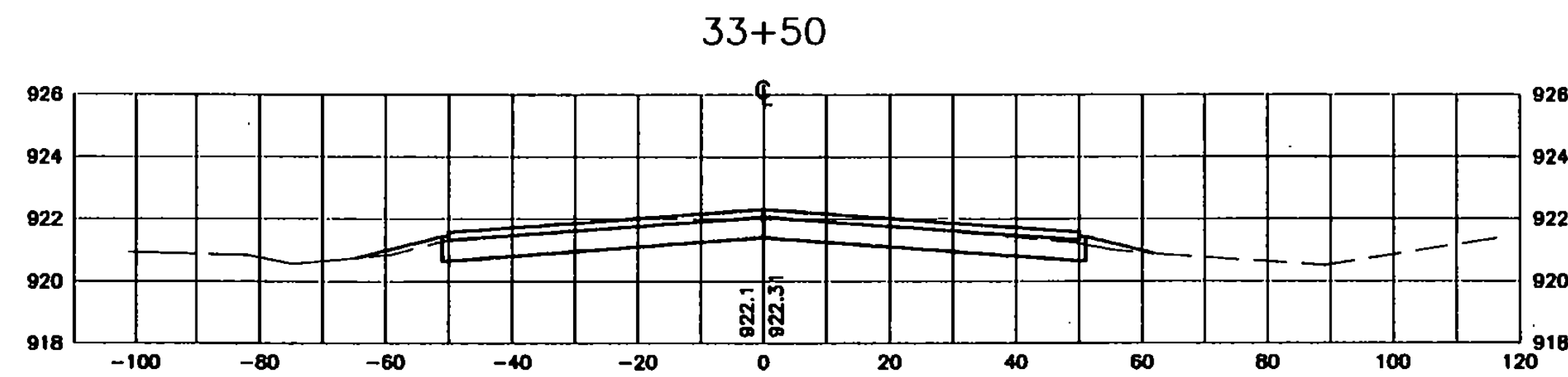
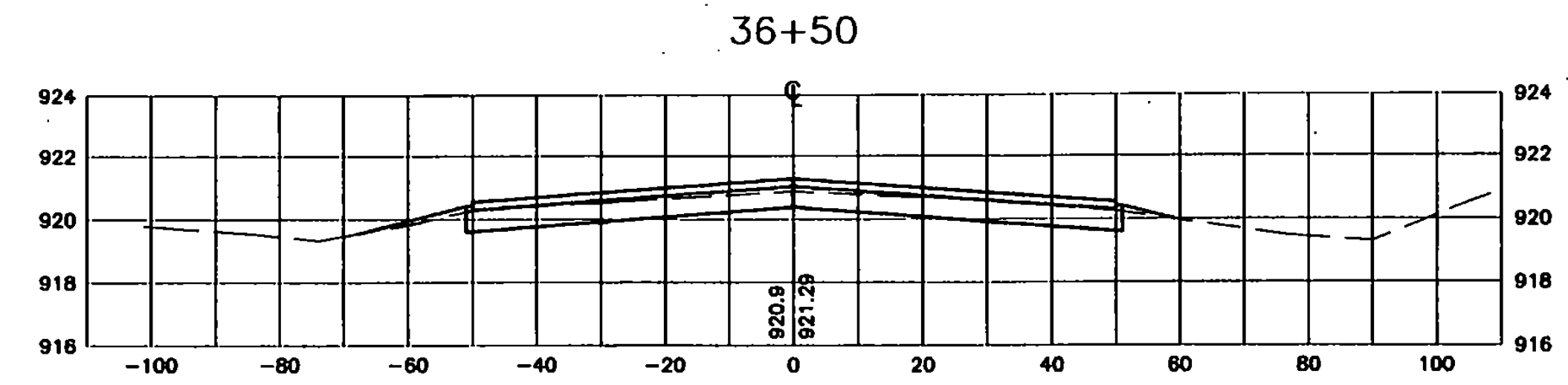
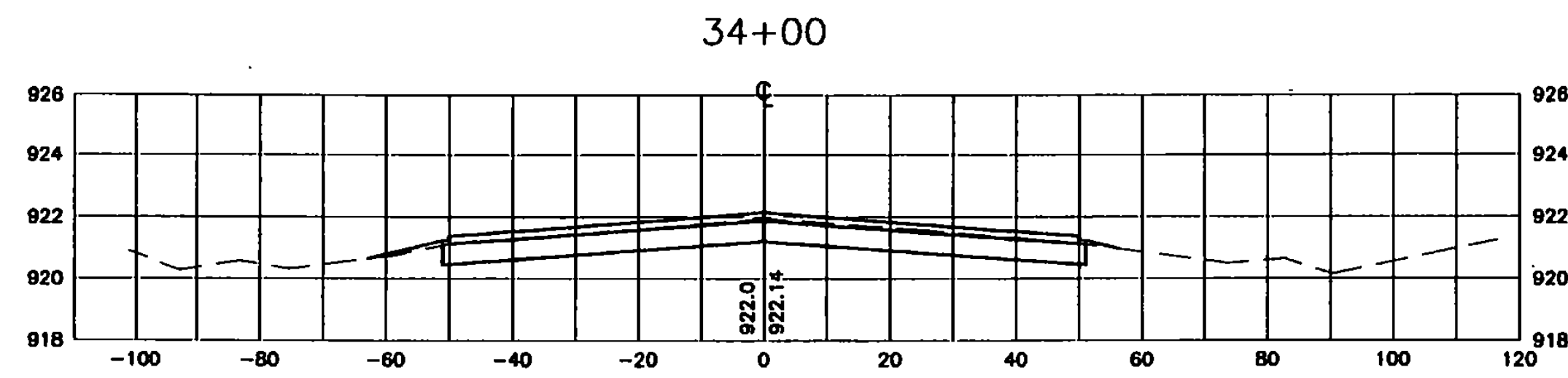
NO.	DATE	REVISIONS	BY	CHK'D
1	1/18/01	VAOT COMMENTS AND SURVEY ADJUSTMENTS	MDL	SJR

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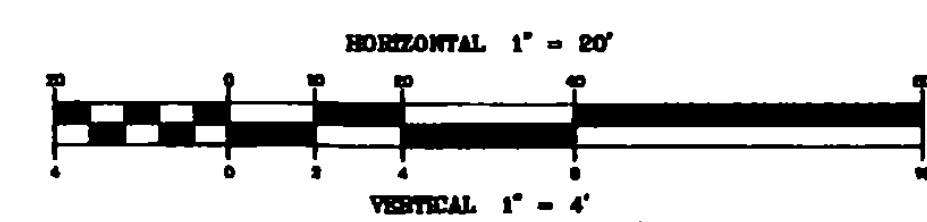
VERMONT AGENCY OF
 TRANSPORTATION
 COVENTRY, VERMONT
 NEWPORT STATE AIRPORT
 RUNWAY 18-36 RECONSTRUCTION
 CROSS SECTIONS RW 18-36
 STA. 27+00 TO 31+50

DRAWN BY JJP	DATE MAR, 2000
CHECKED BY	PROJ. NO. N15500
PROJ. ENG. JAA	DRAW. NO. 1
SHEET XS-4	

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GRAPHIC SCALE



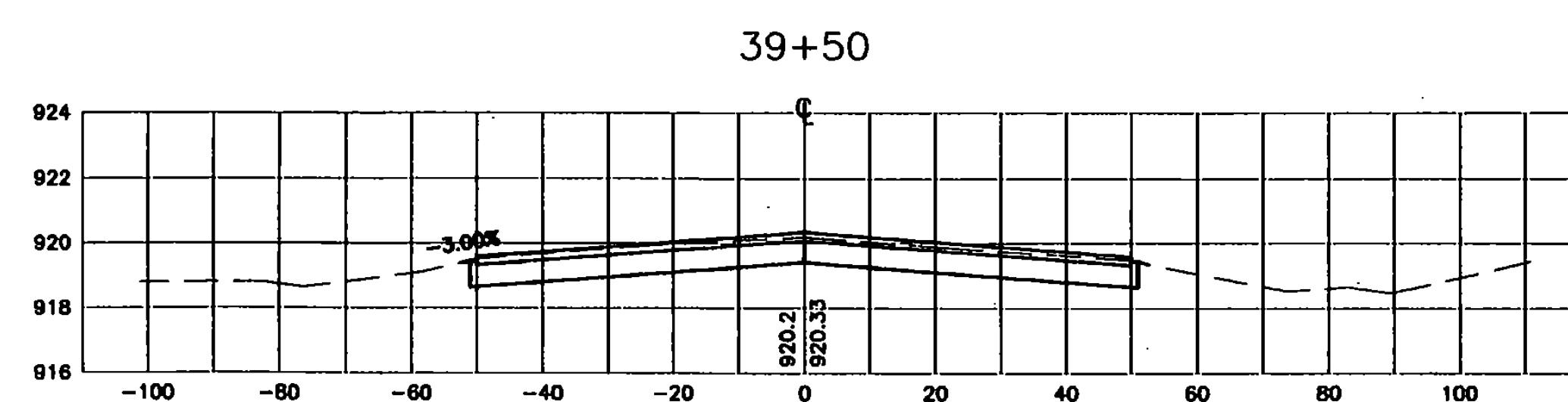
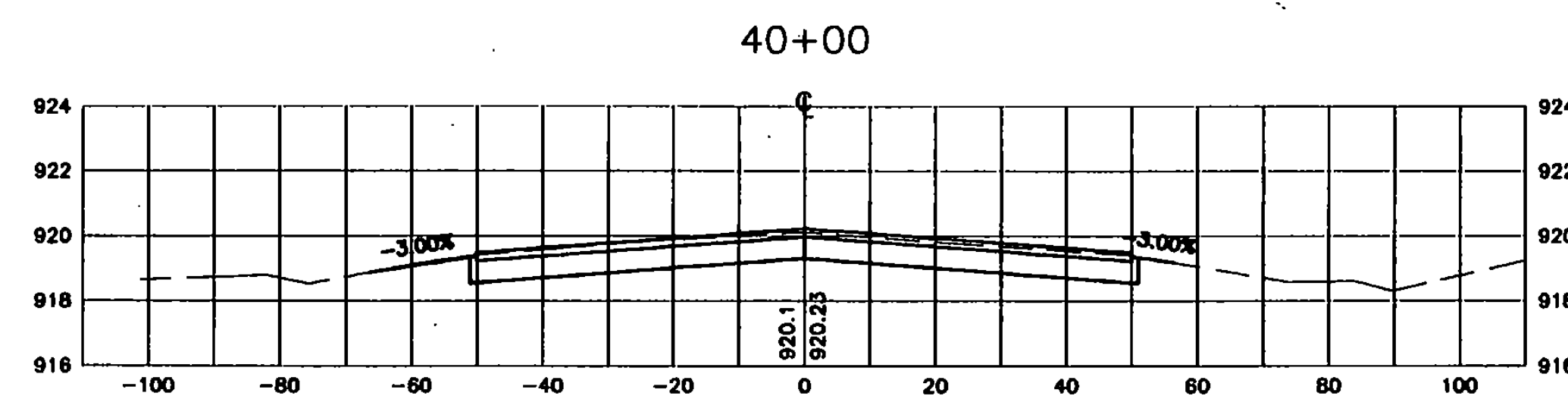
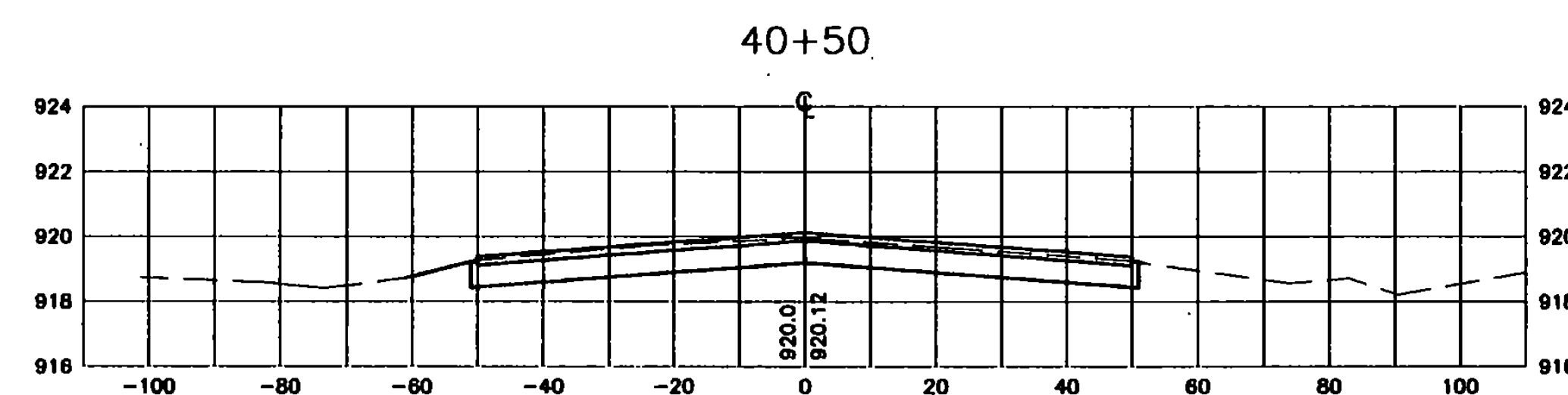
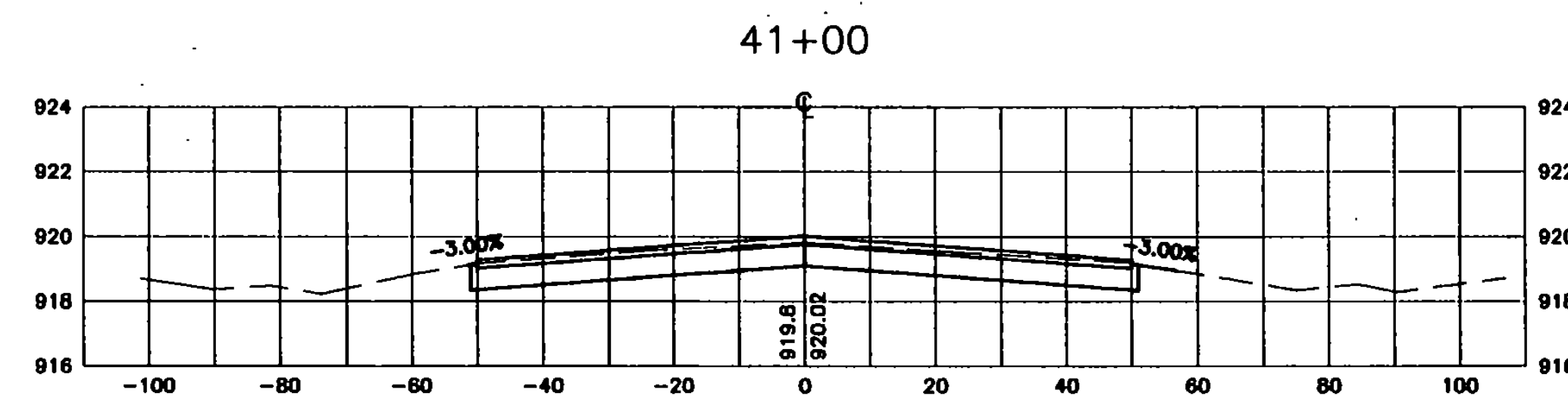
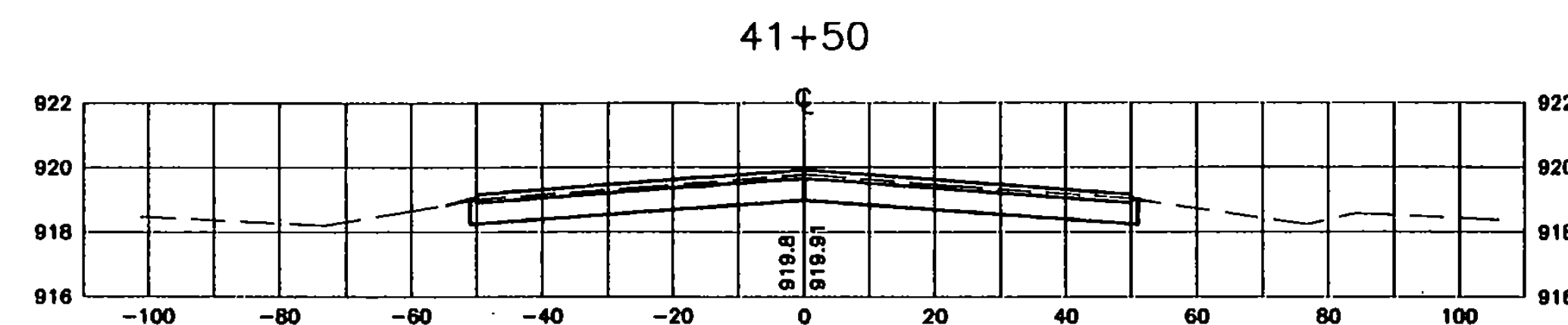
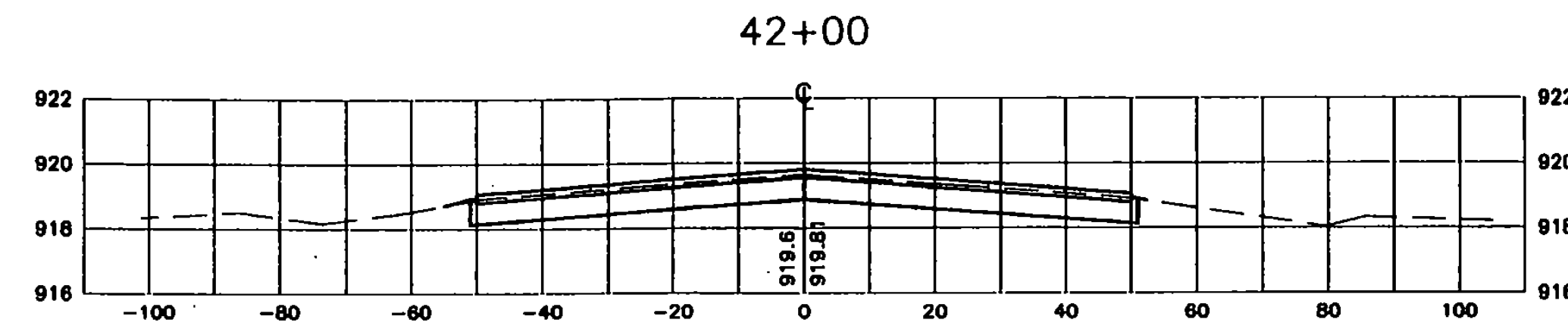
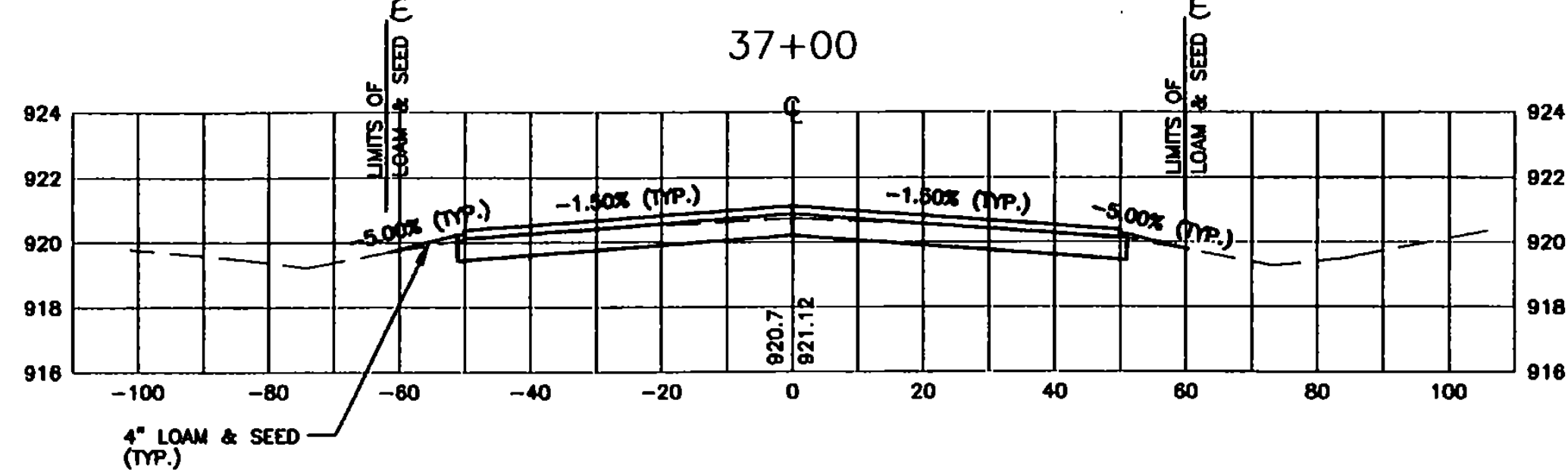
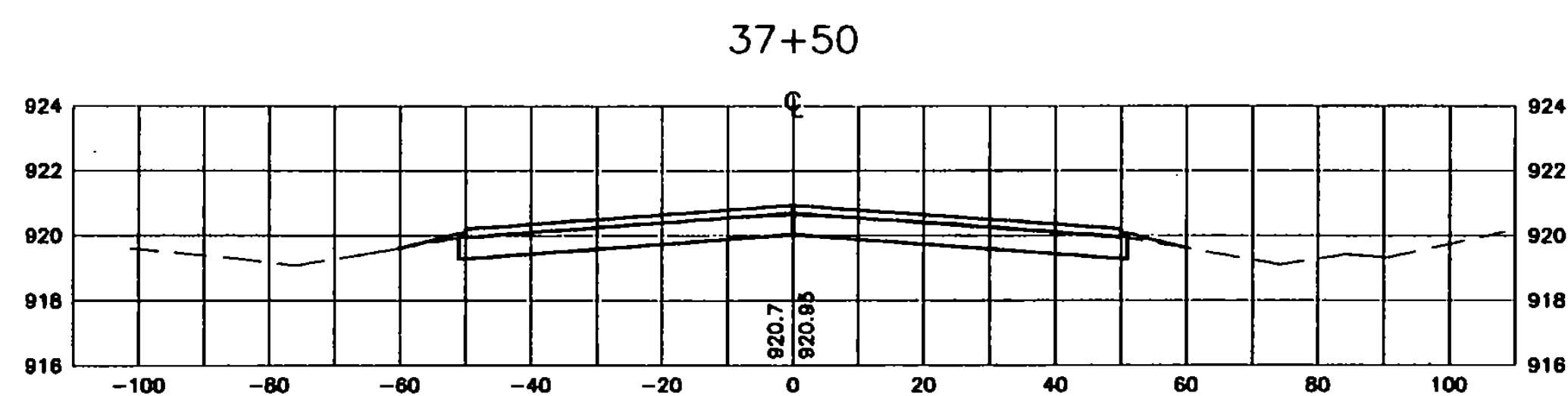
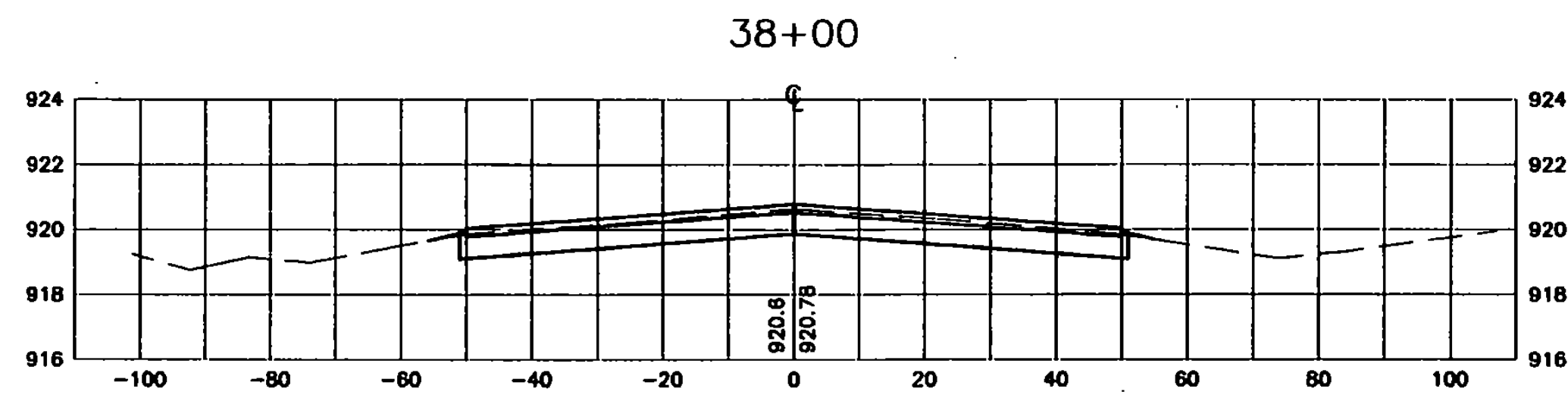
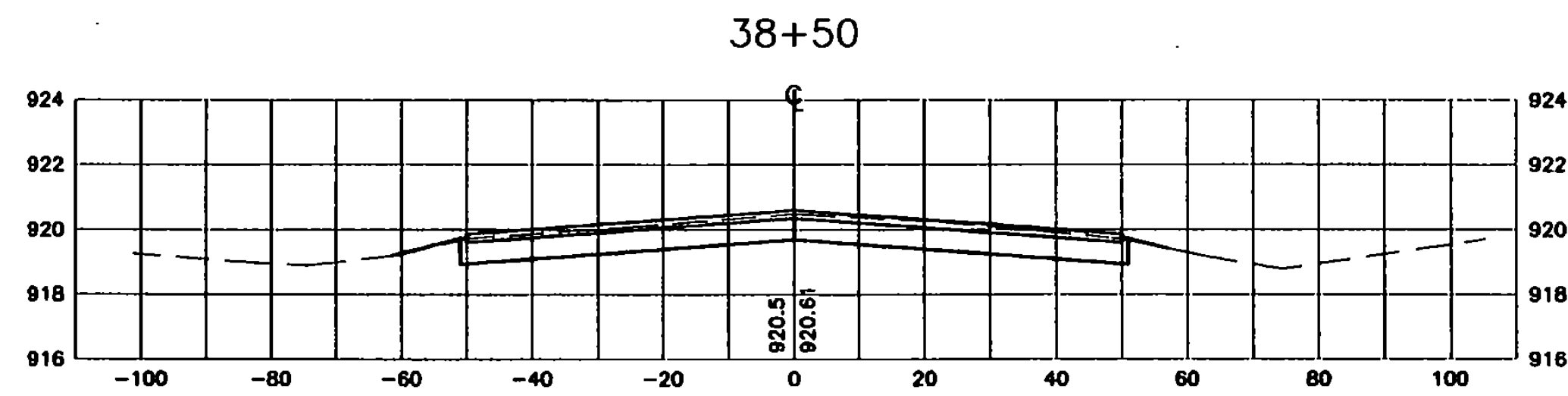
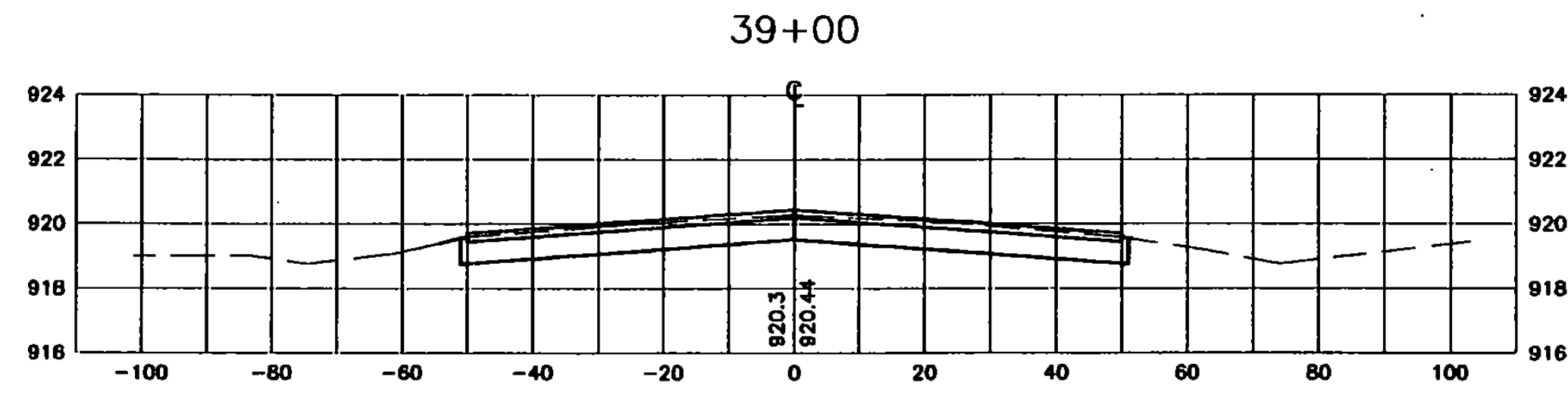
NO.	DATE	REVISIONS	BY	CHK'D
1	1/18/01	VAOT COMMENTS AND SURVEY ADJUSTMENTS	MDL	SJR

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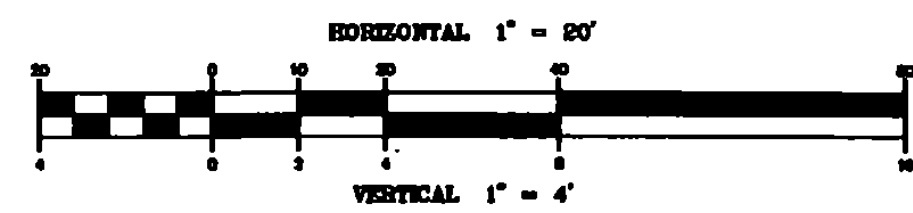
VERMONT AGENCY OF
 TRANSPORTATION
 COVENTRY, VERMONT
 NEWPORT STATE AIRPORT
 RUNWAY 18-36 RECONSTRUCTION
 CROSS SECTIONS RW 18-36
 STA. 32+00 TO 36+50

DRAWN BY JJP	DATE MAR. 2000
CHECKED BY	PROJ. NO. N15500
PROJ. ENG. JAA	DRAW. NO. 1
SHEET XS-5	

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GRAPHIC SCALE



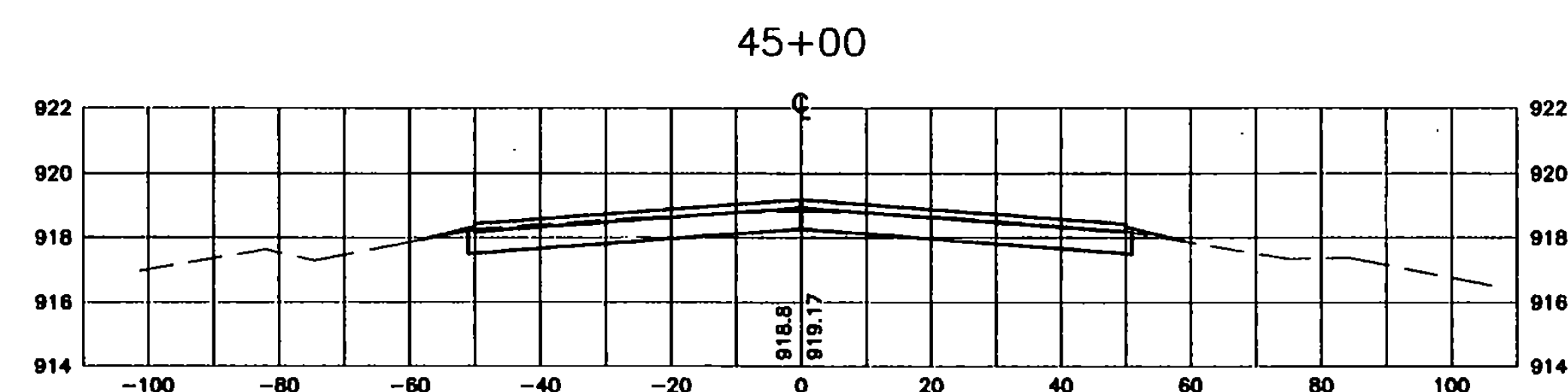
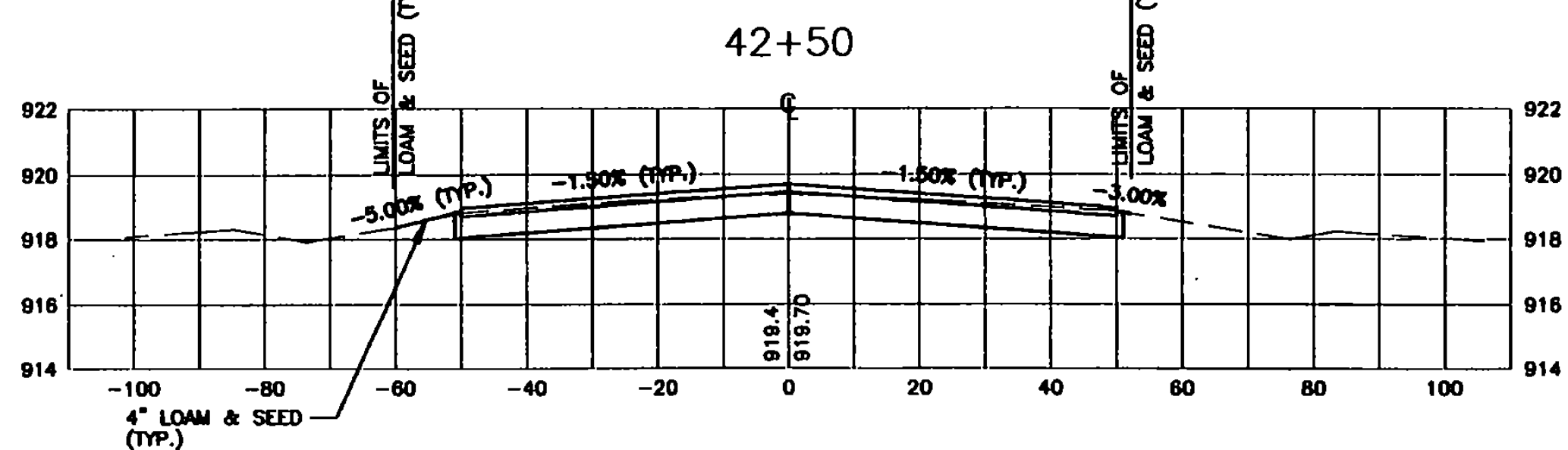
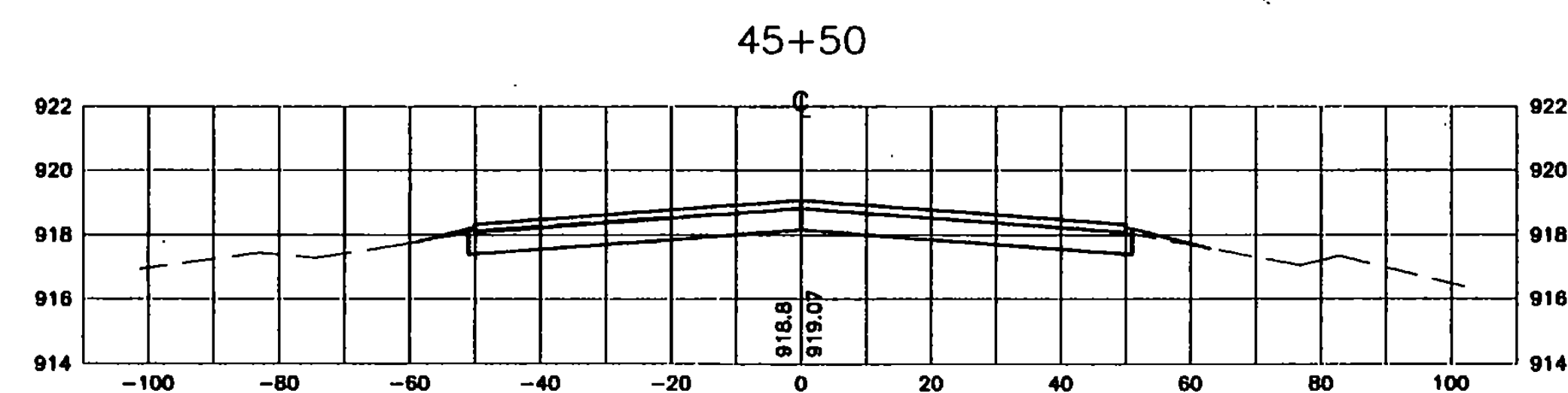
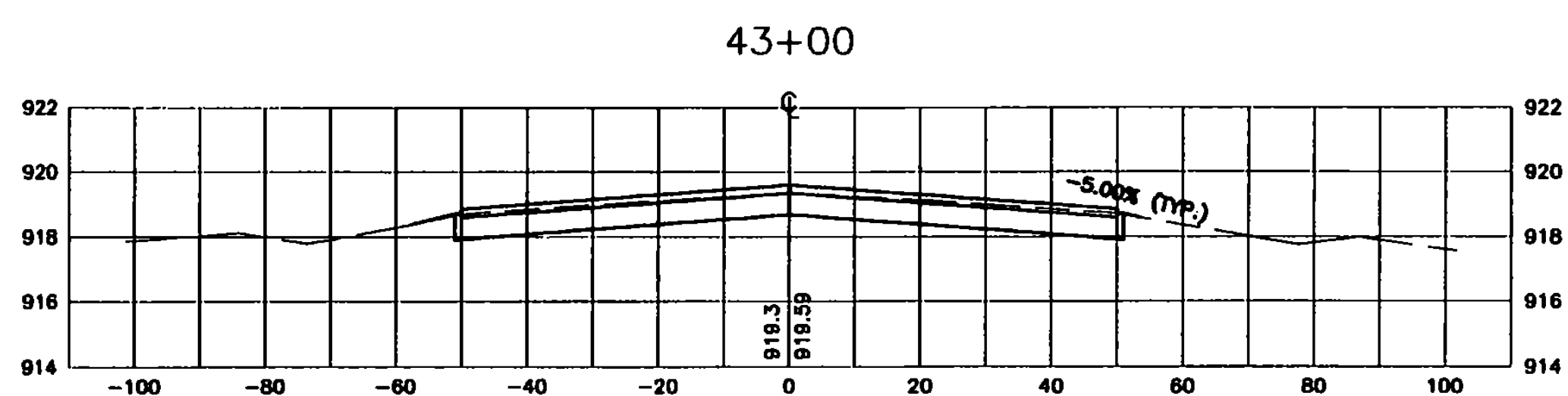
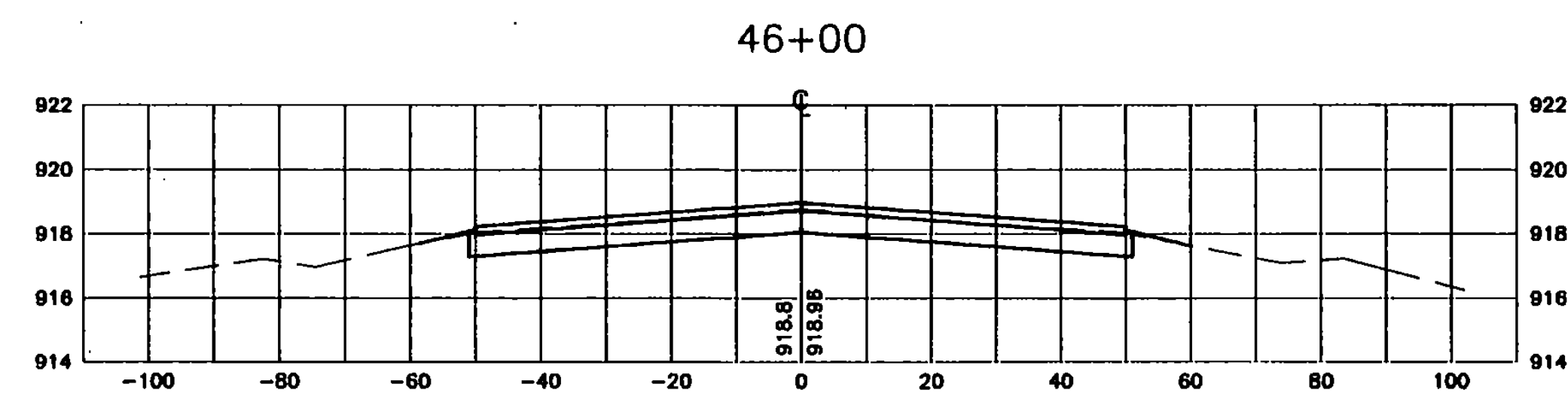
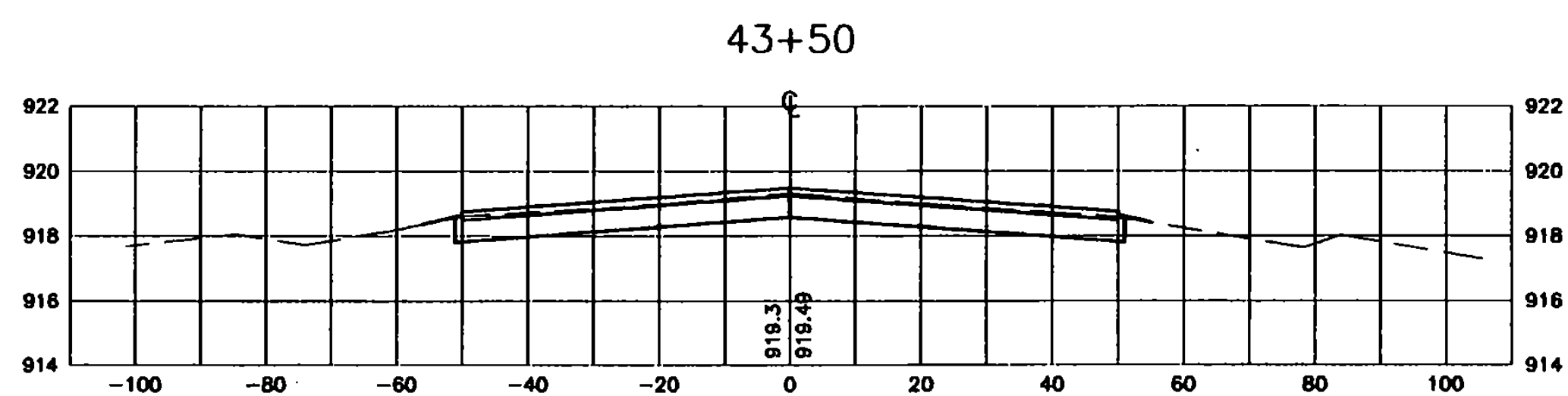
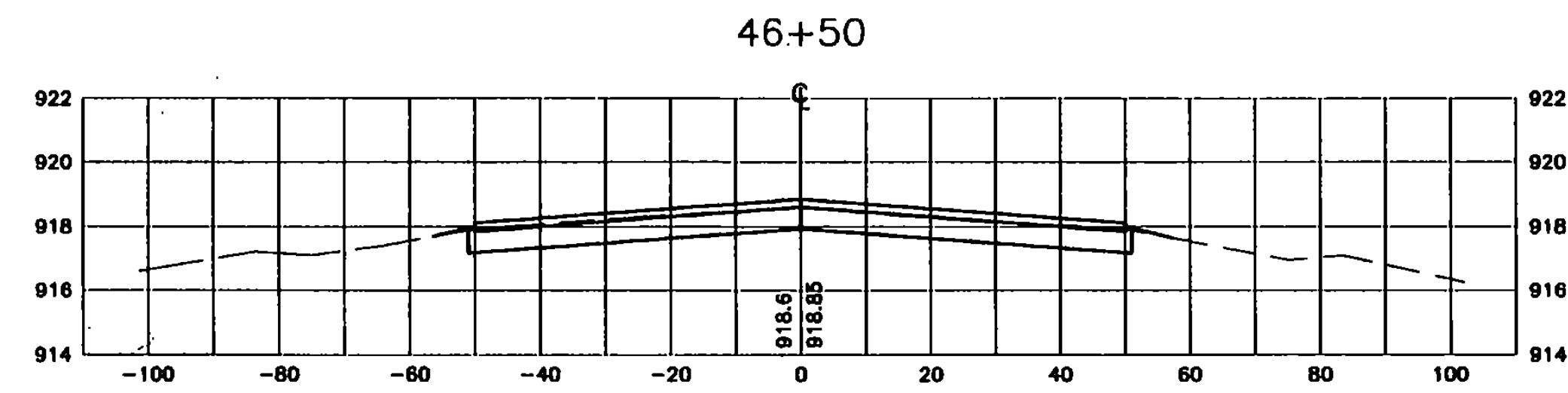
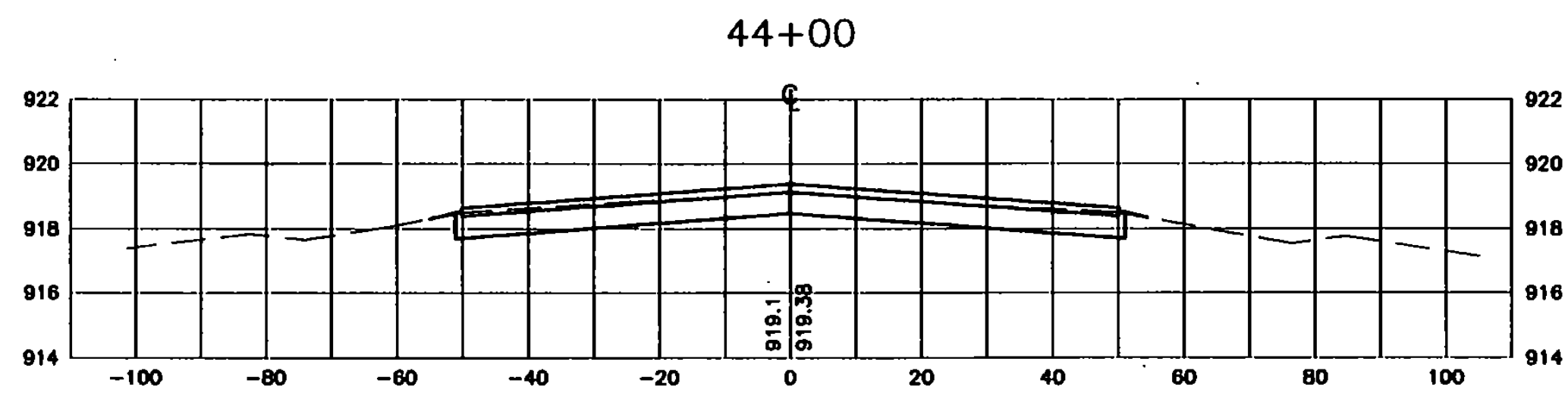
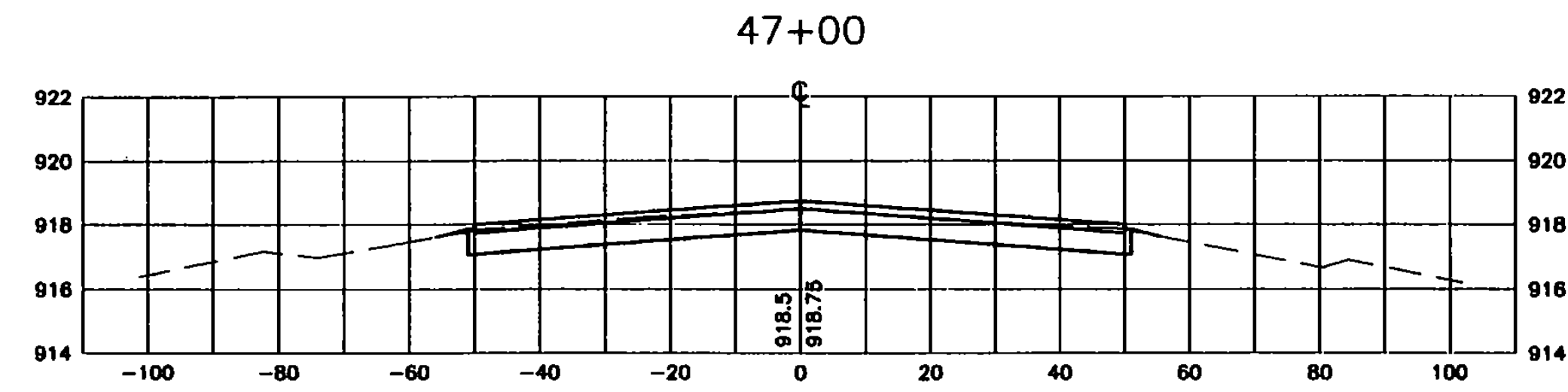
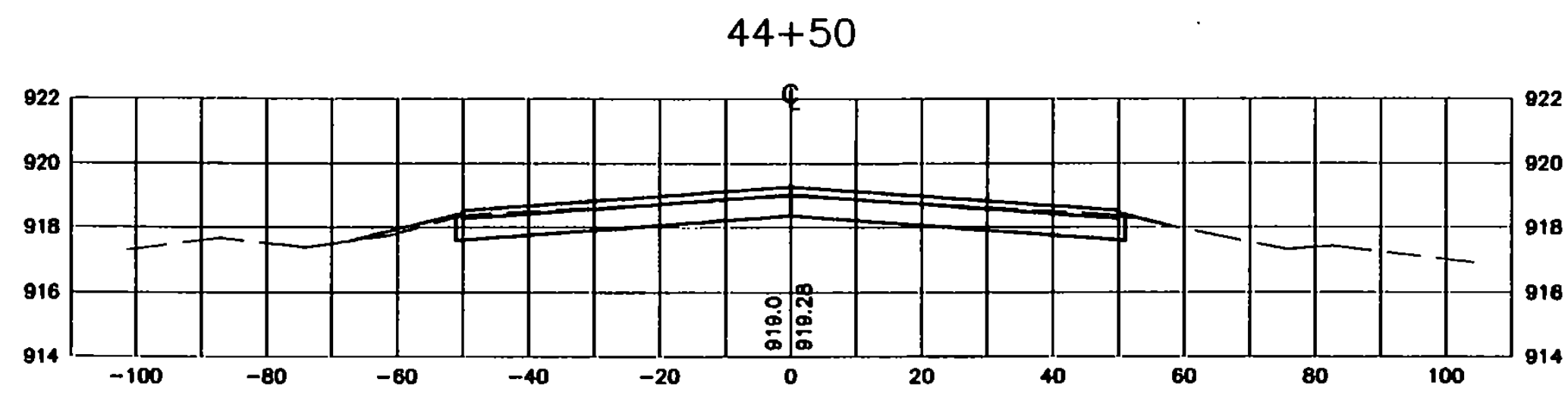
NO.	DATE	REVISIONS	BY	CK'D
1	1/18/01	VAOT COMMENTS AND SURVEY ADJUSTMENTS	MDL	SJR

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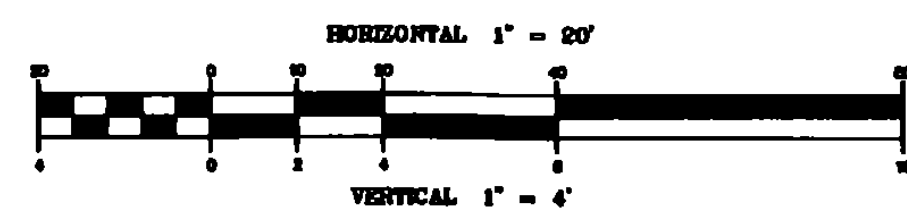
VERMONT AGENCY OF
 TRANSPORTATION
 COVENTRY, VERMONT
 NEWPORT STATE AIRPORT
 RUNWAY 18-36 RECONSTRUCTION
 CROSS SECTIONS RW 18-36
 STA. 37+00 TO 42+00

DRAWN BY JJJ	DATE MAR. 2000
CHECKED BY JAA	PROJ. NO. N15500
PROJ. ENG. JAA	DRAW. NO. 1
SHEET XS-6	

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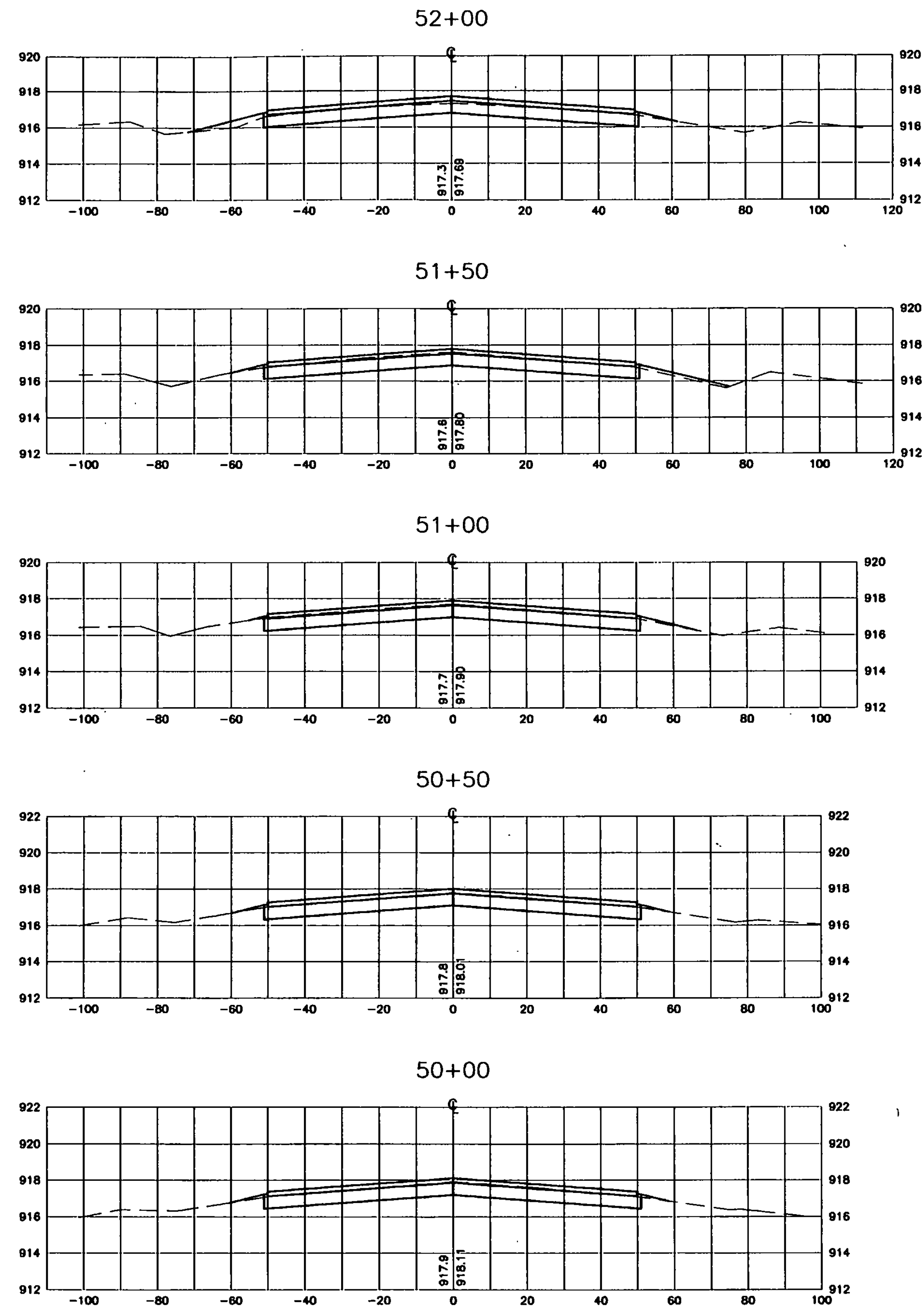
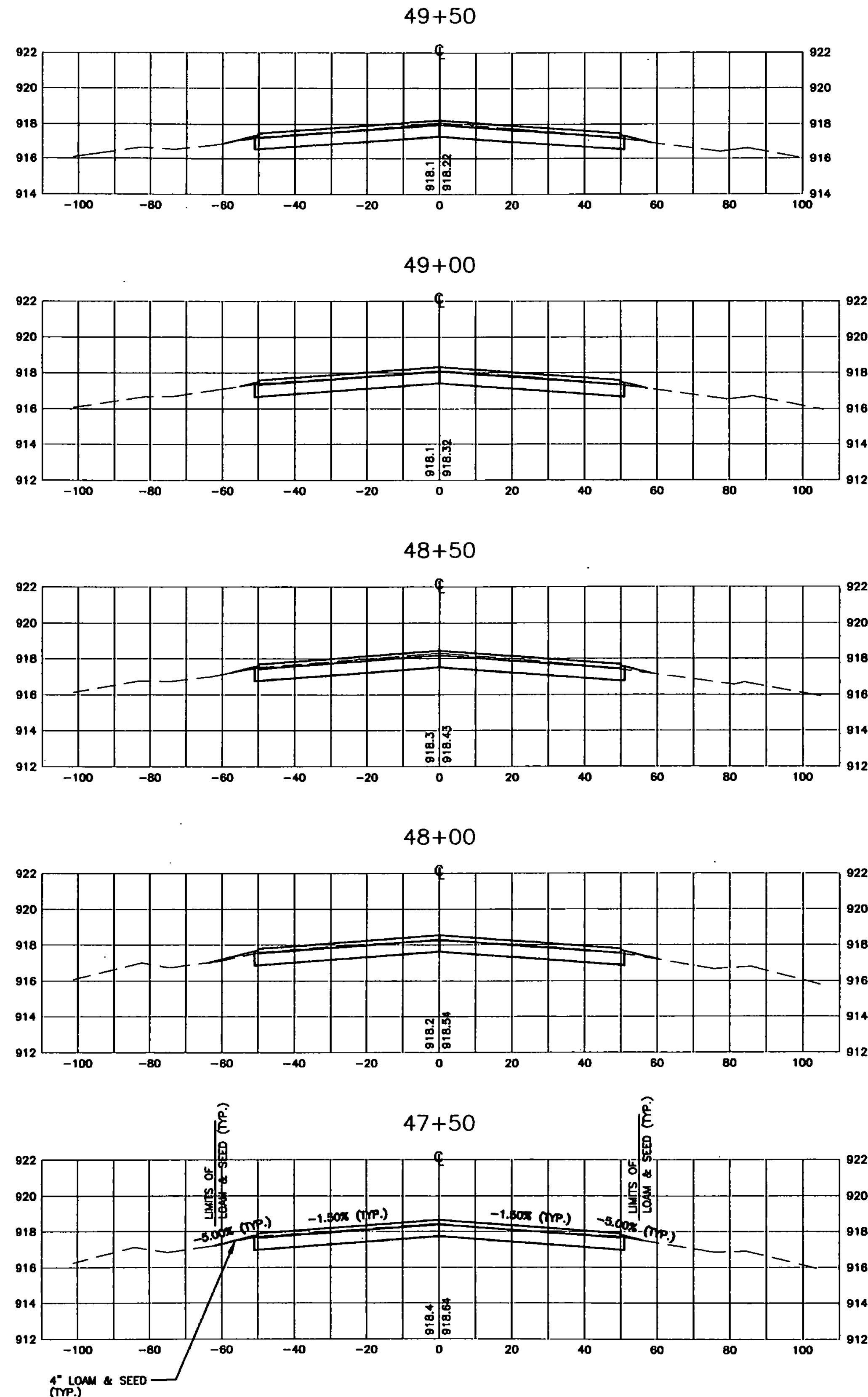
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1	1/18/01	VAOT COMMENTS AND SURVEY ADJUSTMENTS	MDL	SJR

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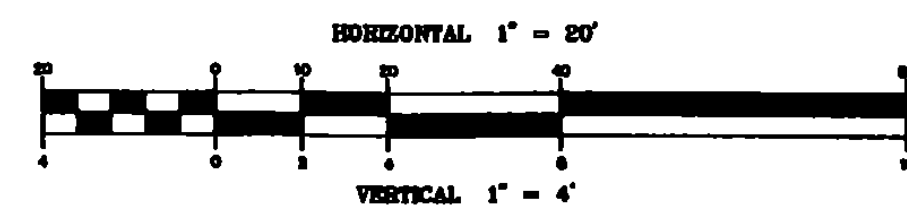
VERMONT AGENCY OF
 TRANSPORTATION
 COVENTRY, VERMONT
 NEWPORT STATE AIRPORT
 RUNWAY 18-36 RECONSTRUCTION
 CROSS SECTIONS RW 18-36
 STA. 42+50 TO 47+00

DRAWN BY JJJ	DATE MAR. 2000
CHECKED BY	PROJ. NO. N15500
PROJ. ENG. JAA	DRAW. NO. 1
SHEET XS-7	

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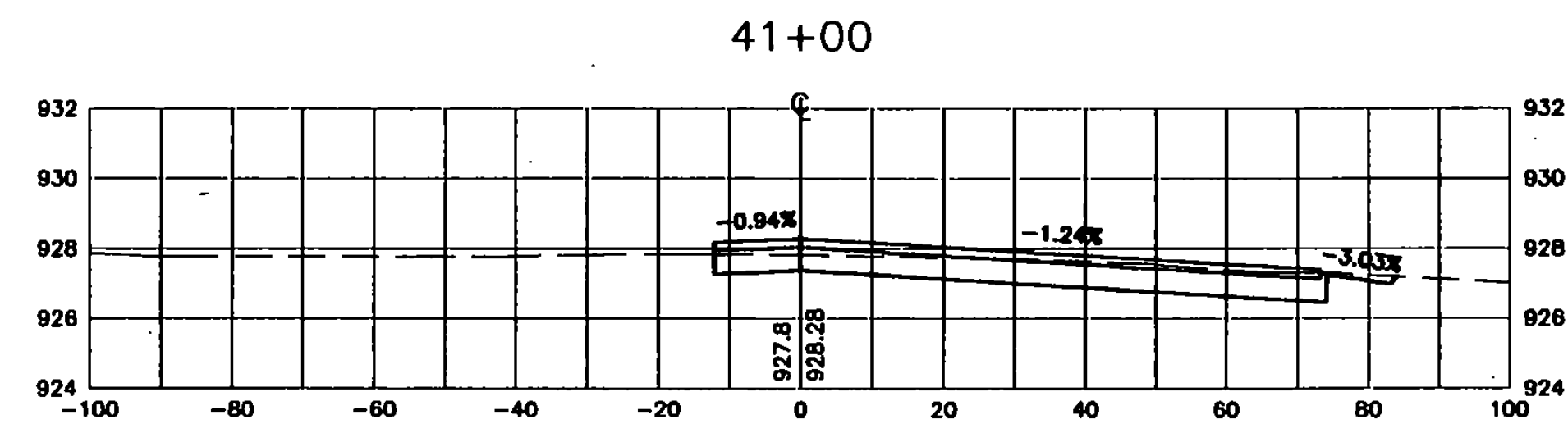
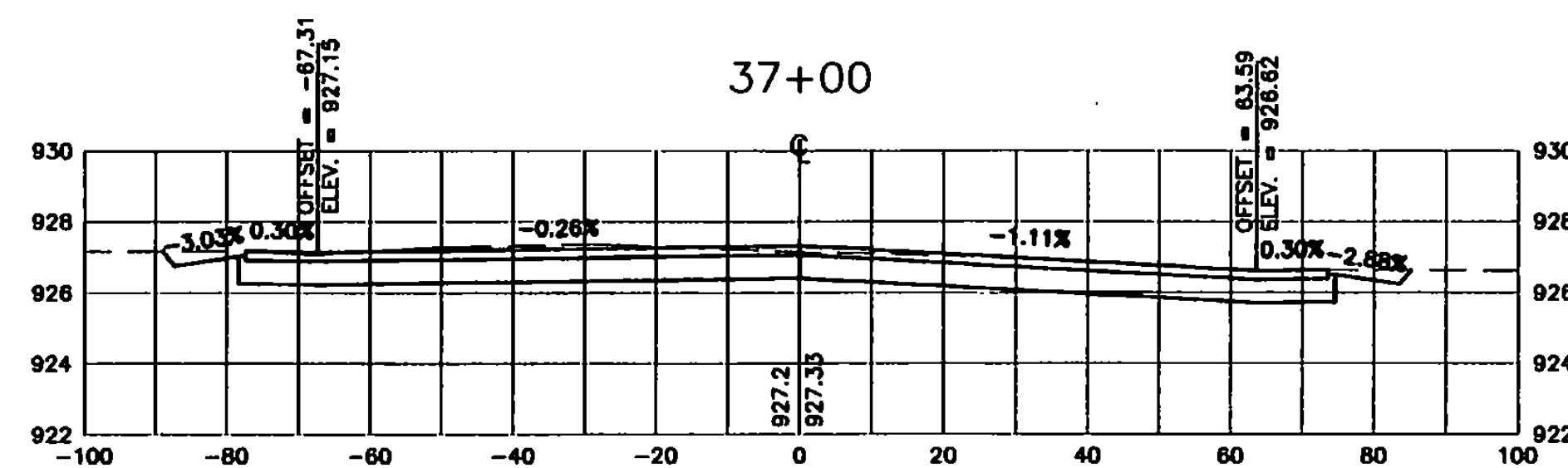
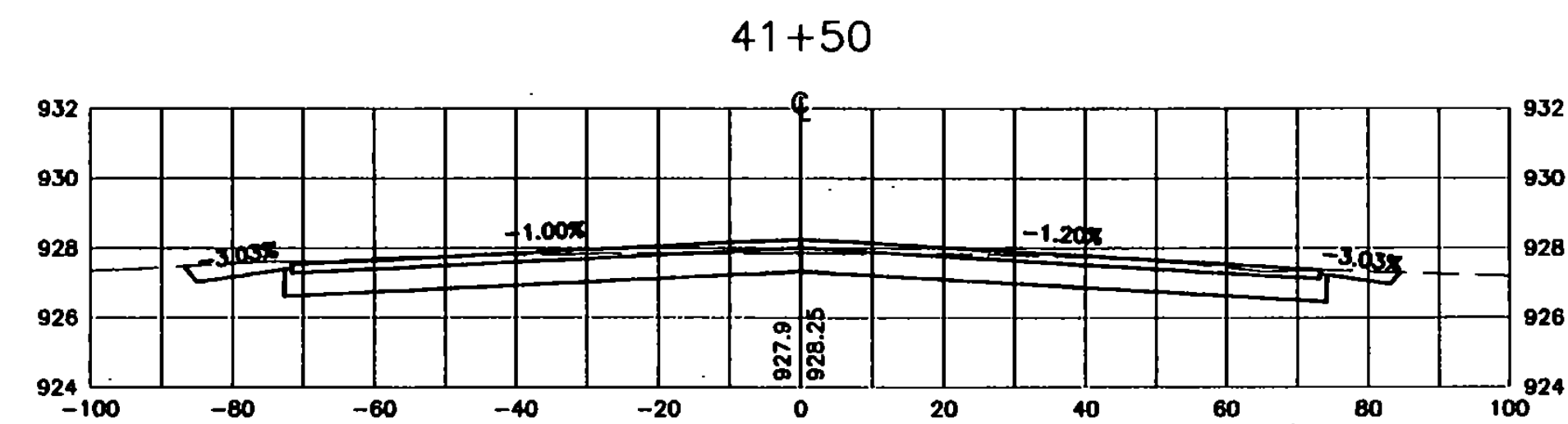
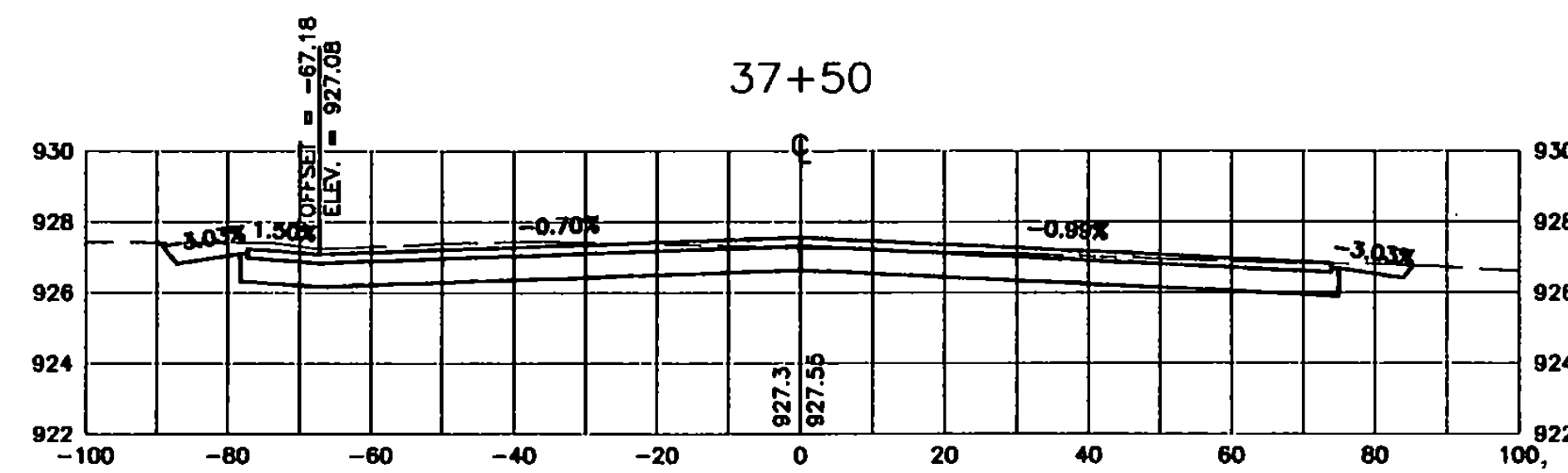
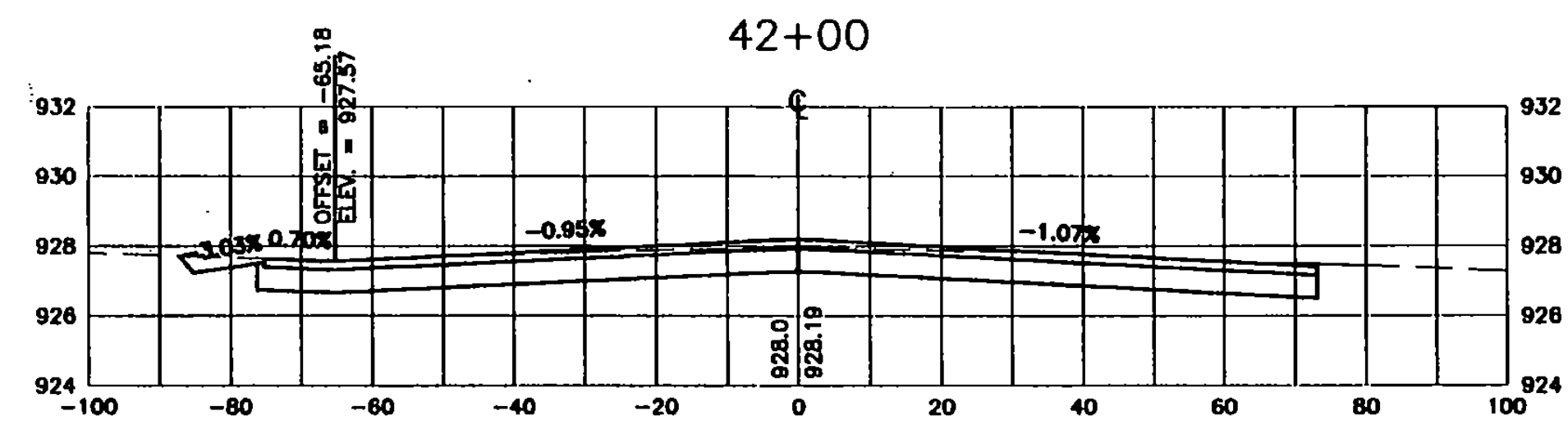
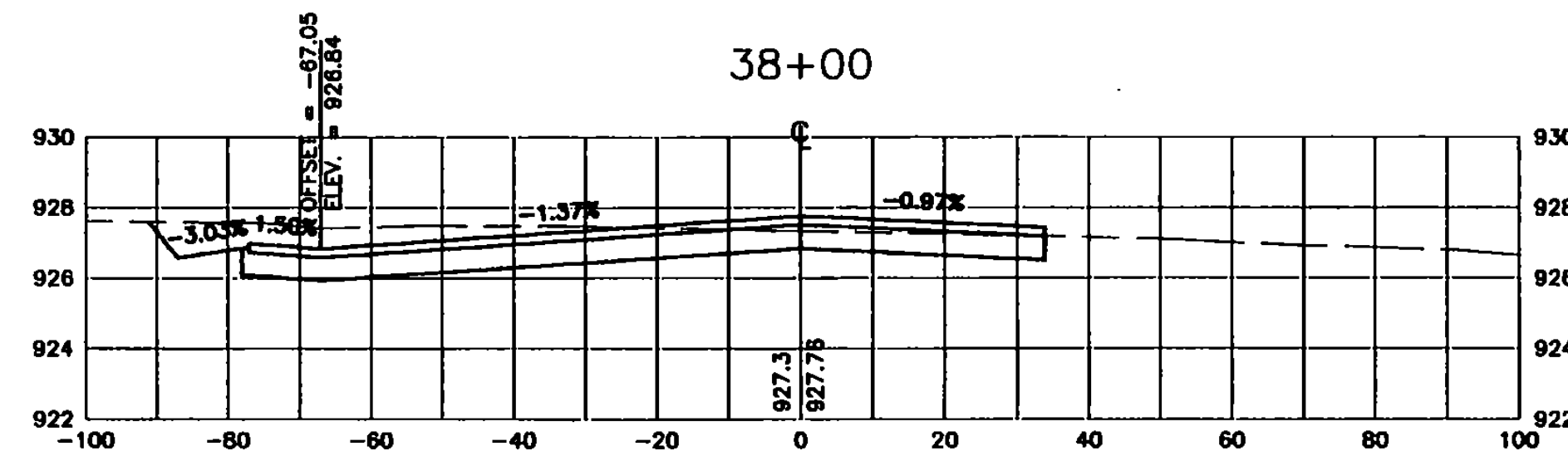
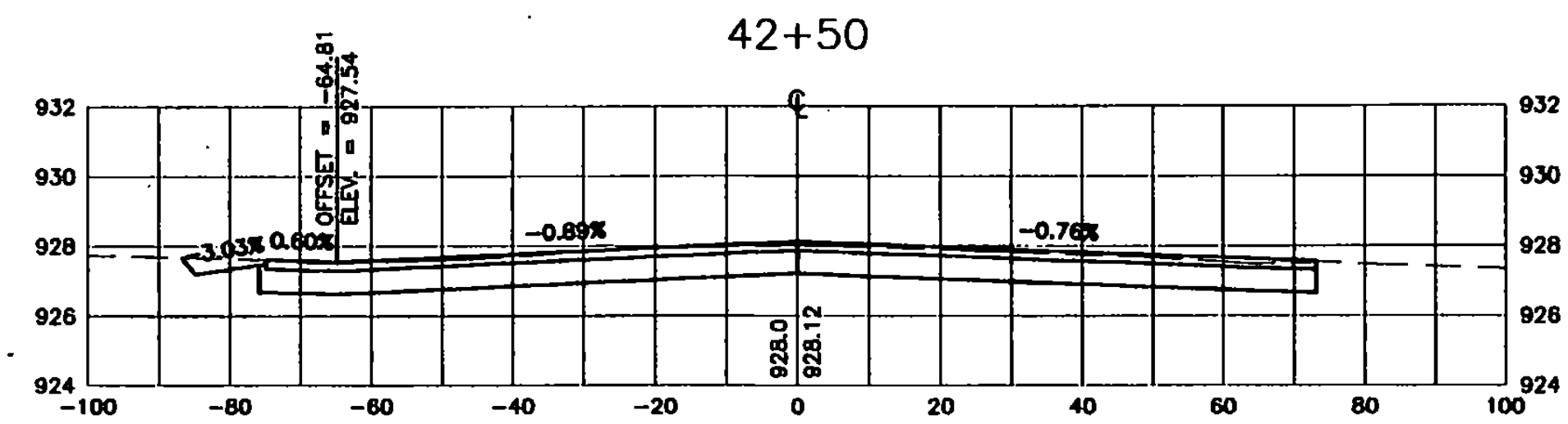
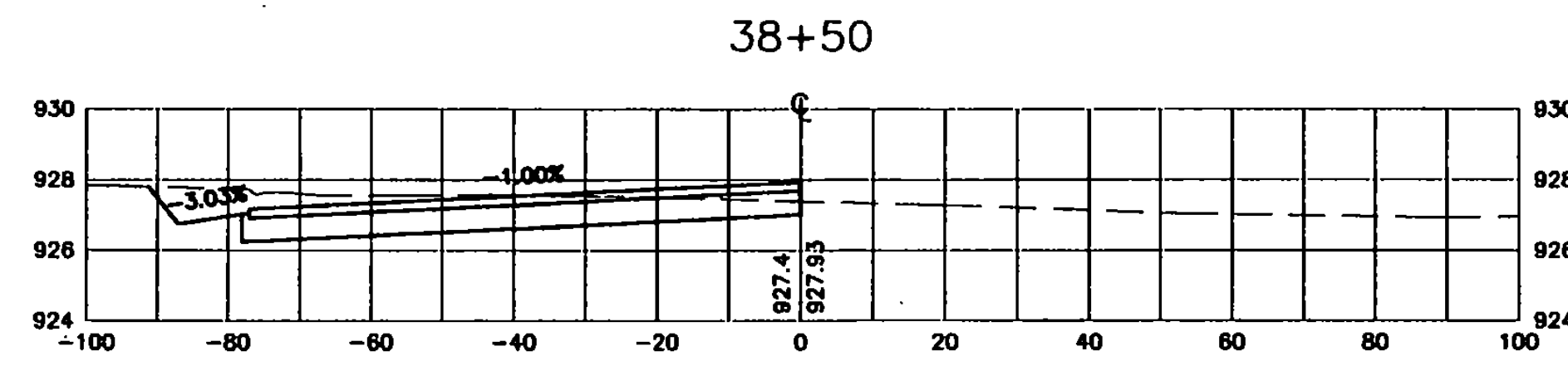
NO.	DATE	REVISIONS	BY	CHK'D
1	1/18/01	VADT COMMENTS AND SURVEY ADJUSTMENTS	MDL	SJR

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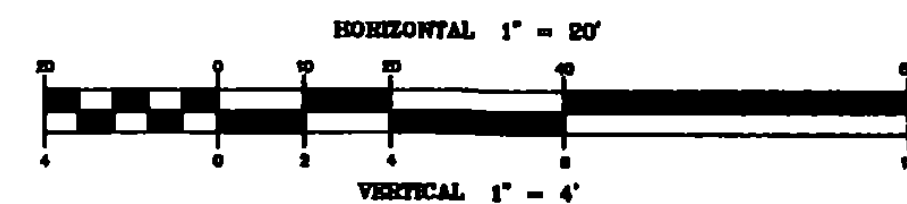
VERMONT AGENCY OF
 TRANSPORTATION
 COVENTRY, VERMONT
 NEWPORT STATE AIRPORT
 RUNWAY 18-36 RECONSTRUCTION
 CROSS SECTIONS RW 18-36
 STA. 47+50 TO 52+00

DRAWN BY JJP	DATE MAR. 2000
CHECKED BY	PROJ. NO. N15500
PROJ. ENG. JAA	DRAW. NO. 1
SHEET XS-8	

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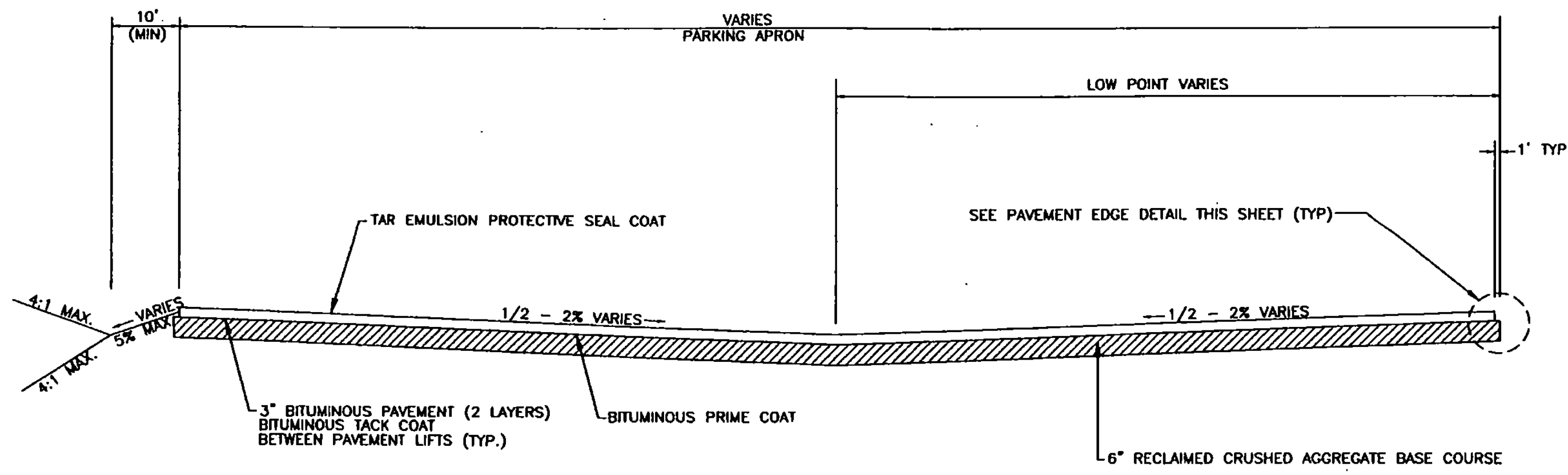


NO.	DATE	REVISIONS	BY	CHK'D
1	1/18/01	VAOT COMMENTS AND SURVEY ADJUSTMENTS	MDL	SJR

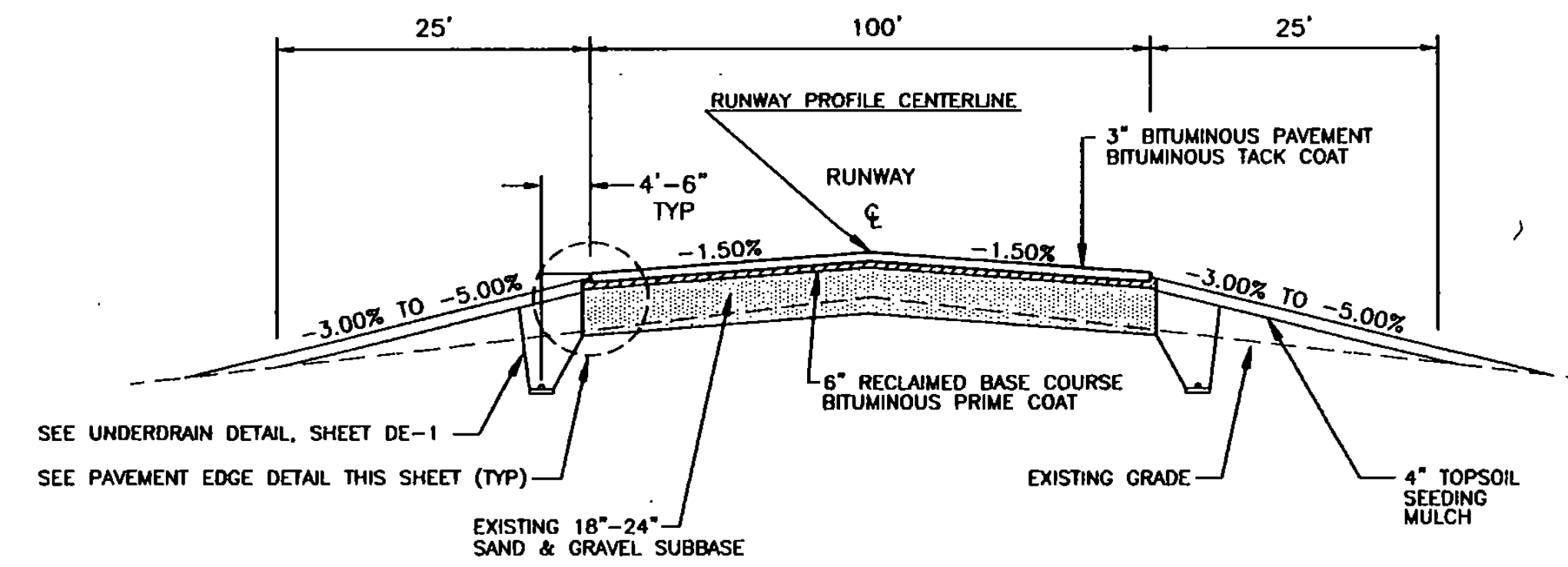
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VERMONT AGENCY OF
 TRANSPORTATION
 COVENTRY, VERMONT
 NEWPORT STATE AIRPORT
 RUNWAY 18-36 RECONSTRUCTION
 CROSS SECTIONS RW 5-23
 STA. 37+00 TO 38+50 & 41+00 TO 42+50

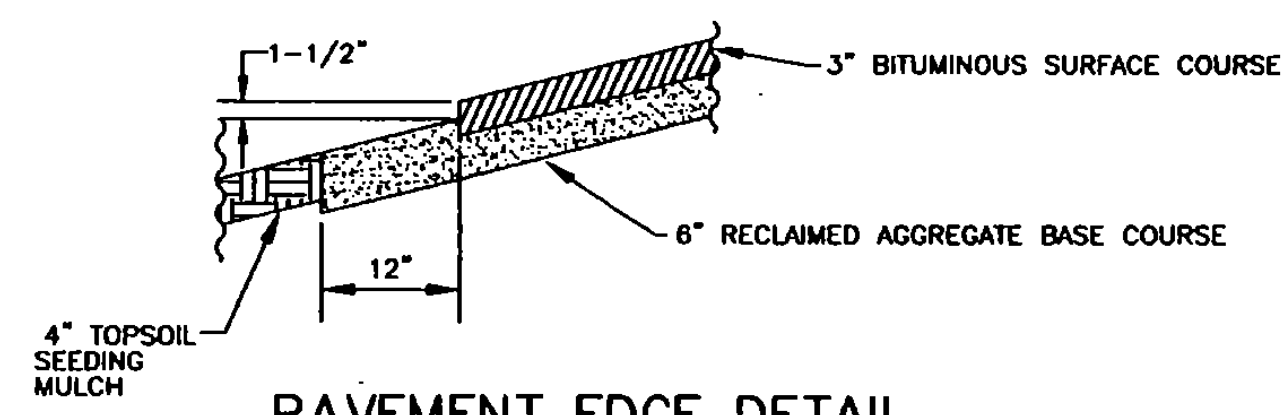
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PROJ. ENGR. JAA	DRAW. NO. 1
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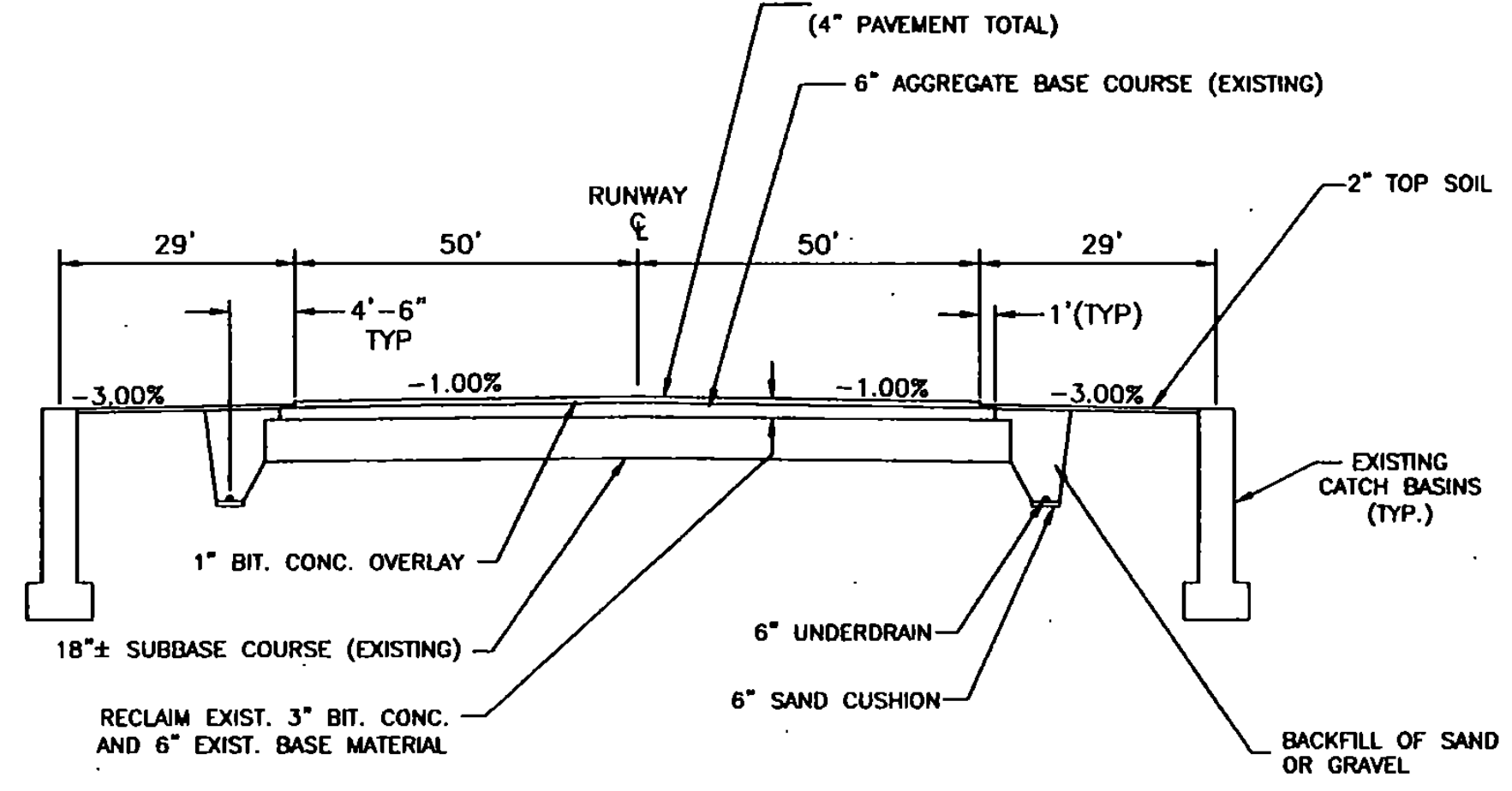
APRON TYPICAL SECTION
NOT TO SCALE



RUNWAY TYPICAL SECTION
NOT TO SCALE

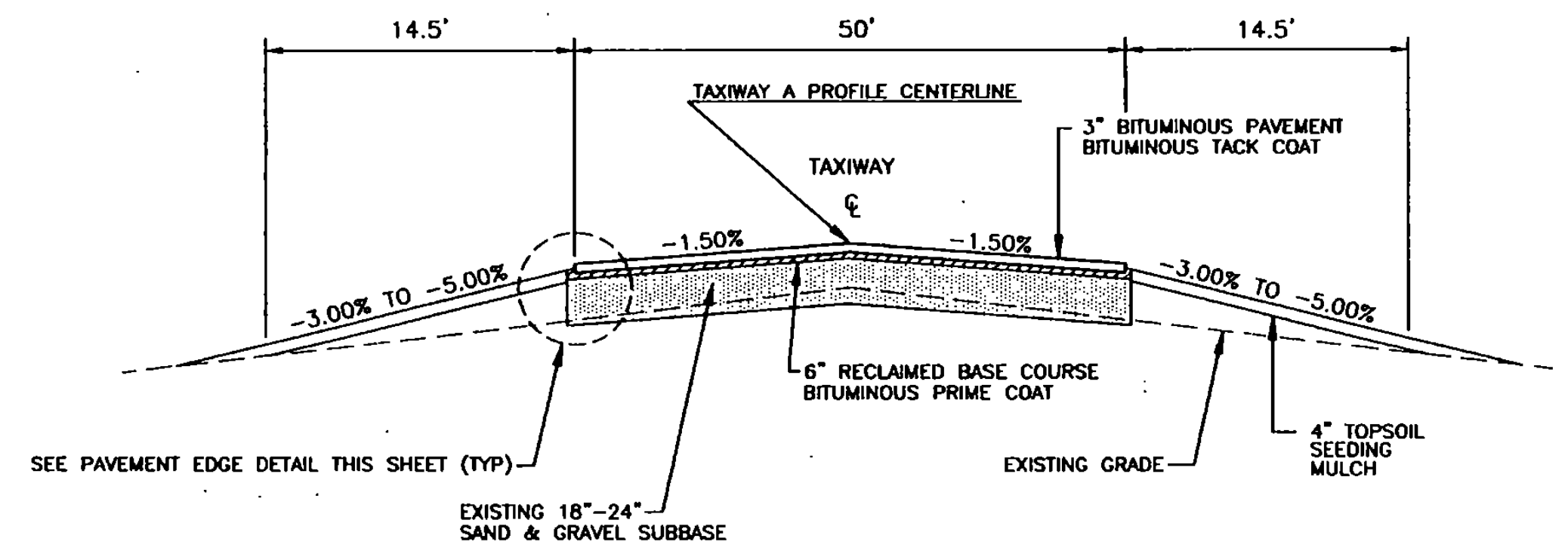


PAVEMENT EDGE DETAIL
NOT TO SCALE

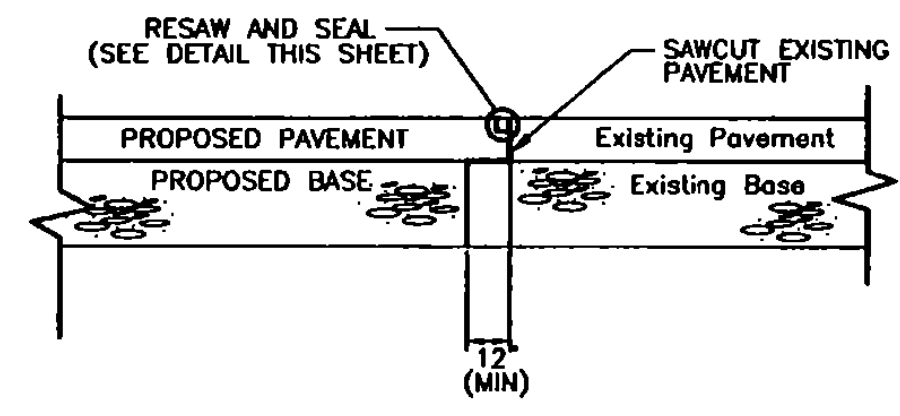


EXISTING TYPICAL SECTION
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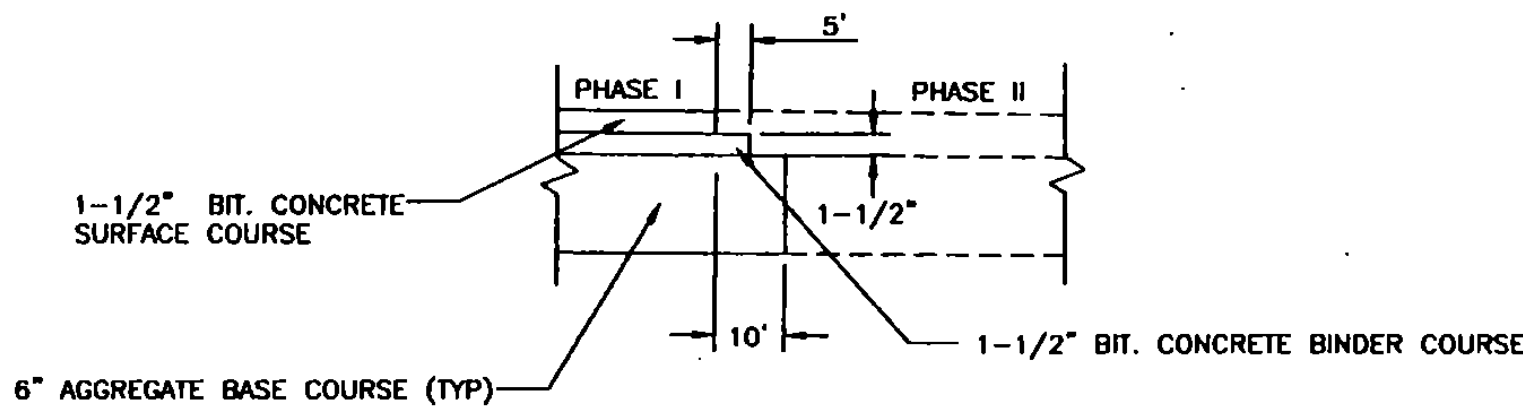
NOTE:
SECTIONS 12+00 TO 28+00 HAS 3" BITUMINOUS CONCRETE PAVEMENT
SECTIONS 28+00 TO 52+00 HAS 4" BITUMINOUS CONCRETE PAVEMENT



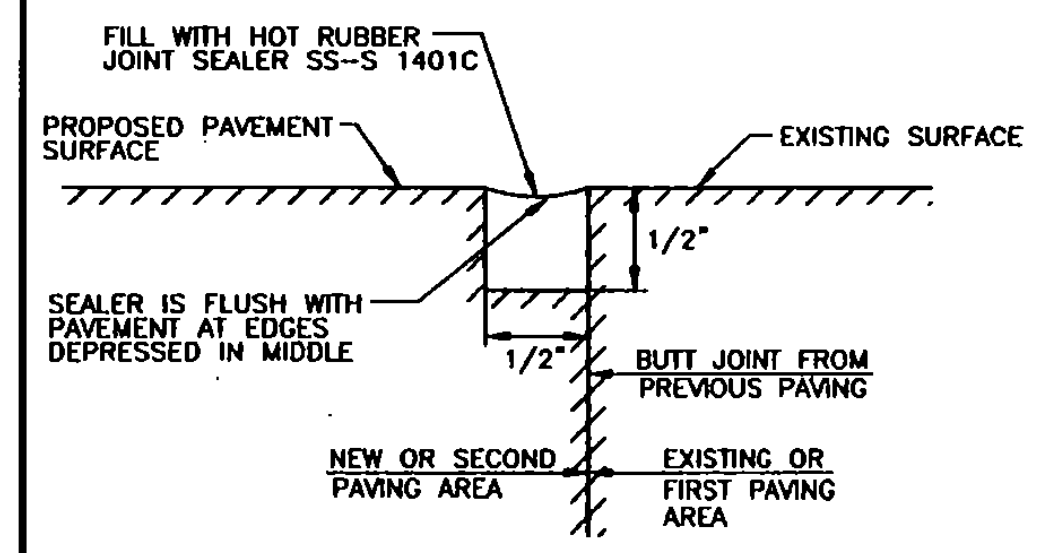
TAXIWAY A TYPICAL SECTION
NOT TO SCALE



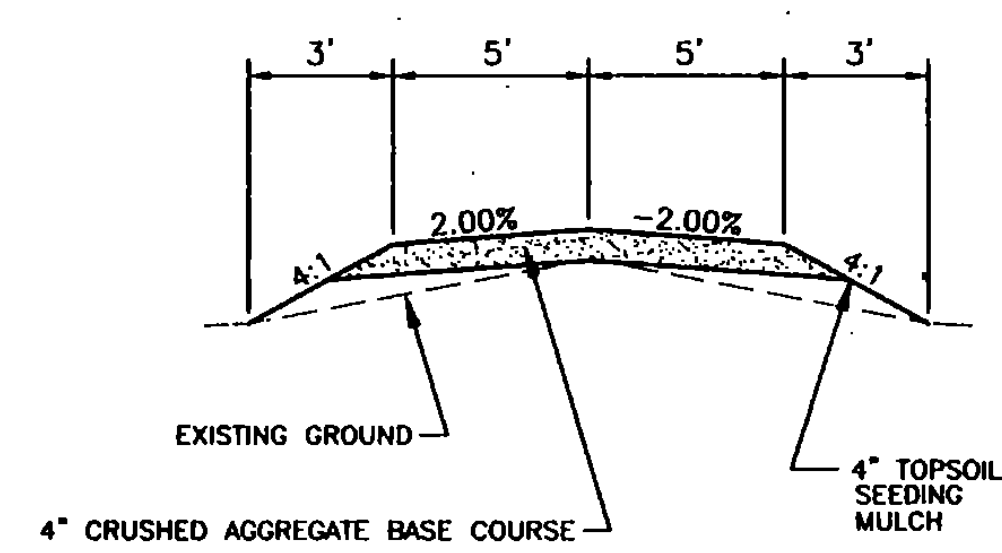
SAWCUT JOINT DETAIL
NOT TO SCALE



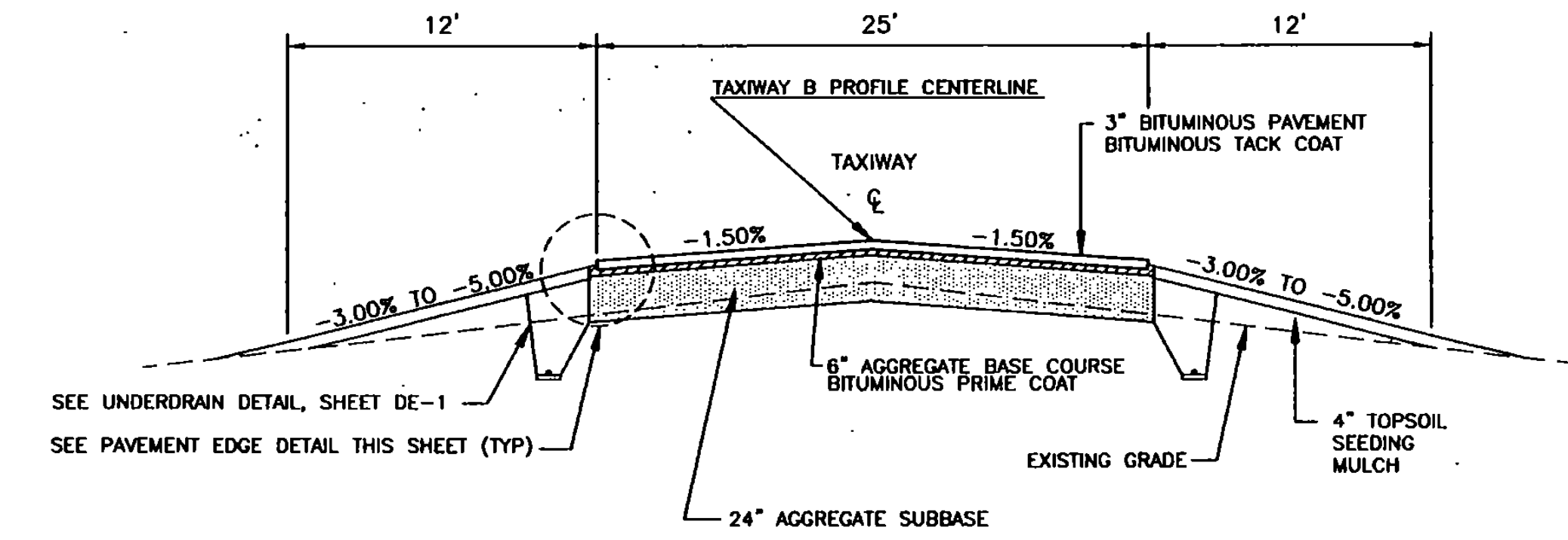
RUNWAY PHASE PAVEMENT MATCH
NOT TO SCALE



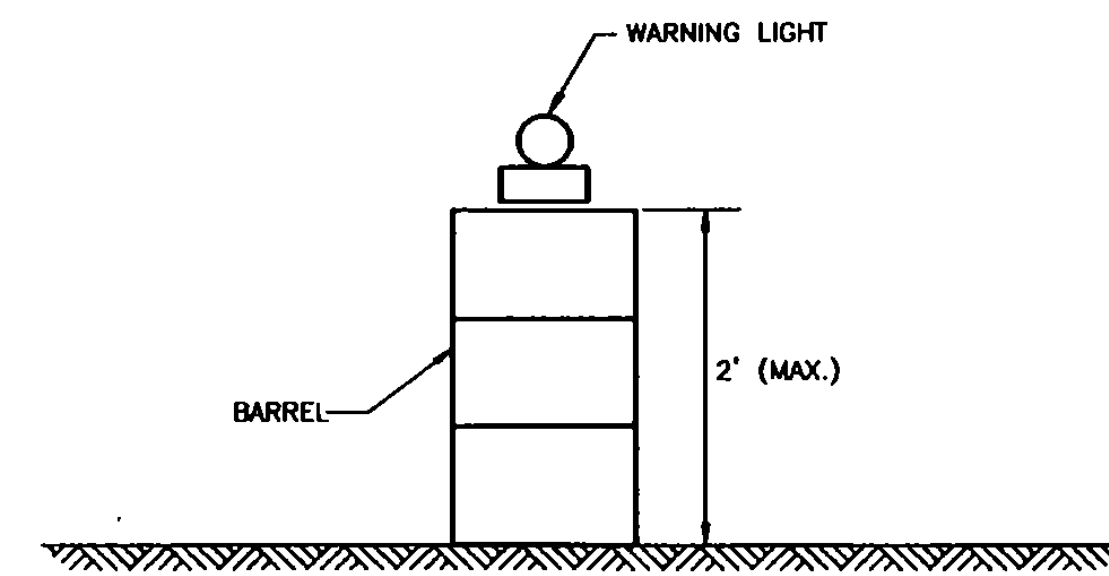
RESAW AND SEAL DETAIL
NOT TO SCALE



TYPICAL SECTION GRAVEL SERVICE ROAD
NOT TO SCALE



TAXIWAY B TYPICAL SECTION
NOT TO SCALE



LIGHTED BARRICADES
NOT TO SCALE

NO.	DATE	REVISIONS	BY	CHK'D
1	1/18/01	VAOT COMMENTS AND SURVEY ADJUSTMENTS	MDL	SJR

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VERMONT AGENCY OF TRANSPORTATION
COVENTRY, VERMONT
NEWPORT STATE AIRPORT
RUNWAY 18-36 RECONSTRUCTION
TYPICAL SECTION & PAVING DETAILS

DRAWN BY: JJP DATE: MAR. 2000
CHECKED BY: PROJ. NO. N15500
PROJ. ENG. JAA DRAW. NO. 1
SHEET TS-1

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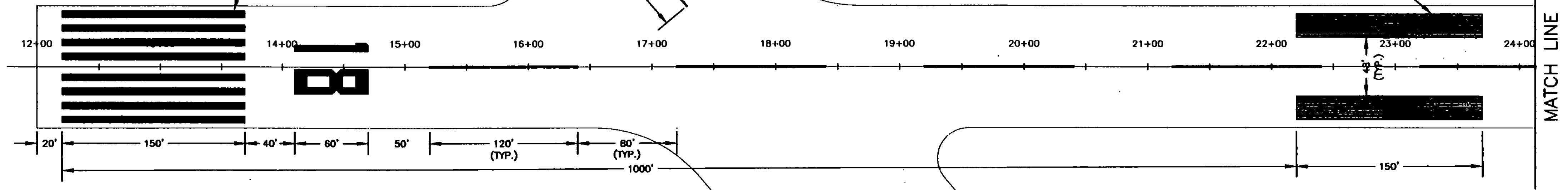
PROPOSED THRESHOLD MARKINGS
(6) 5.75' WIDE STRATED STRIPES
WITH (6) 5.75' VOIDS
SEE DETAIL SHEET DE-3

MATCH LINE TO SHEET PM-2

REMARK IN KIND RUNWAY 5-23 CENTER
LINE AND SHOULDER MARKINGS
IN DISTURBED AREAS ONLY

6" TAXIWAY LEADIN LINE NOT TO
EXTEND INTO RUNWAY 18-36

PROPOSED AIMING POINT (TYP.)
18' WIDE STRATED STRIPES
SEE DETAIL SHEET DE-3

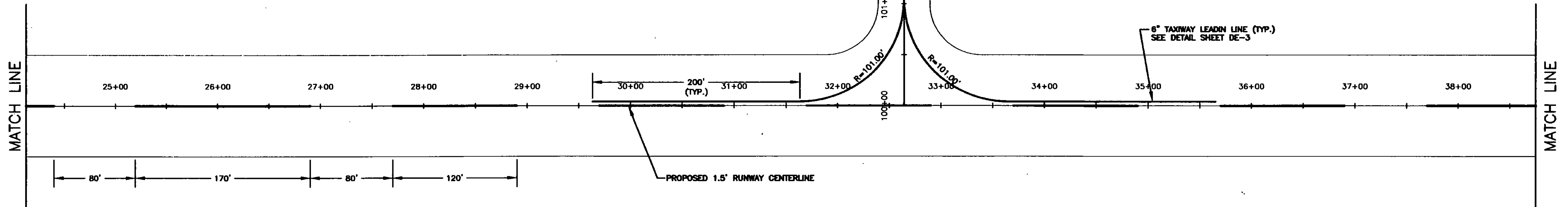


REMARK IN KIND RUNWAY 5-23 CENTER
LINE AND SHOULDER MARKINGS
IN DISTURBED AREAS ONLY

TAXIWAY A
MATCH LINE TO SHEET PM-2

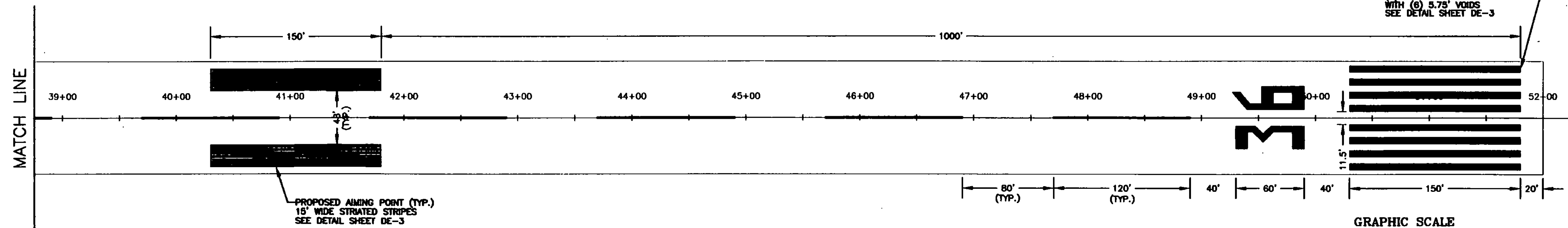
PROPOSED HOLD BAR
125' FROM RUNWAY 18-36 CENTERLINE
SEE DETAIL SHEET DE-3

6" TAXIWAY LEADIN LINE (TYP.)
SEE DETAIL SHEET DE-3



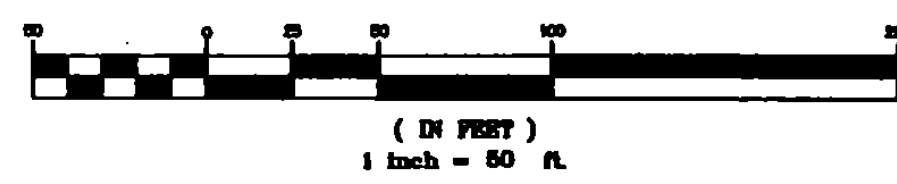
PROPOSED 1.5' RUNWAY CENTERLINE

PROPOSED THRESHOLD MARKINGS
(6) 5.75' WIDE STRATED STRIPES
WITH (6) 5.75' VOIDS
SEE DETAIL SHEET DE-3



PROPOSED AIMING POINT (TYP.)
18' WIDE STRATED STRIPES
SEE DETAIL SHEET DE-3

GRAPHIC SCALE



NOTES:

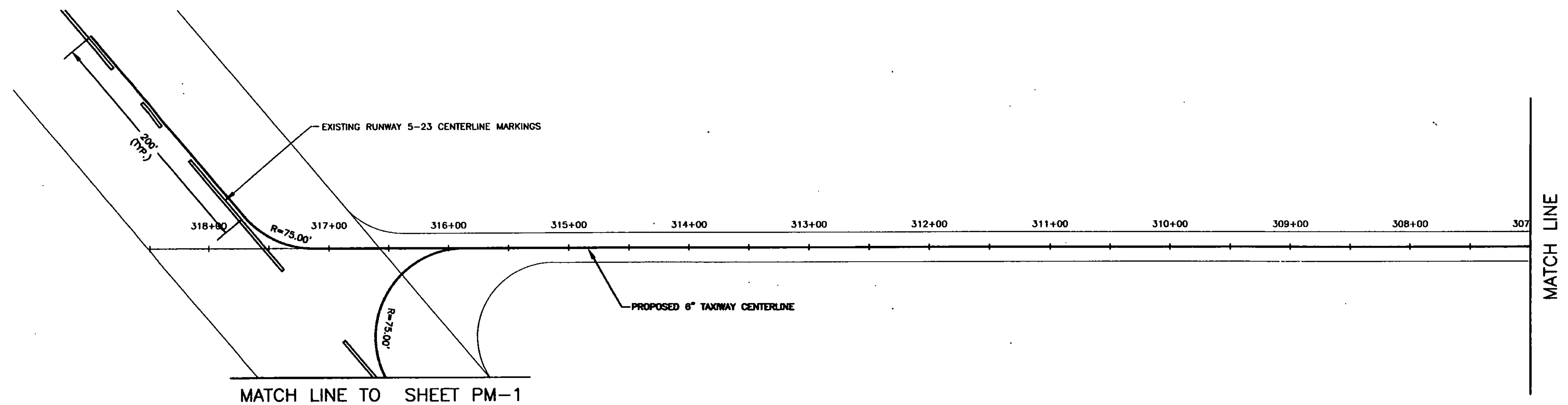
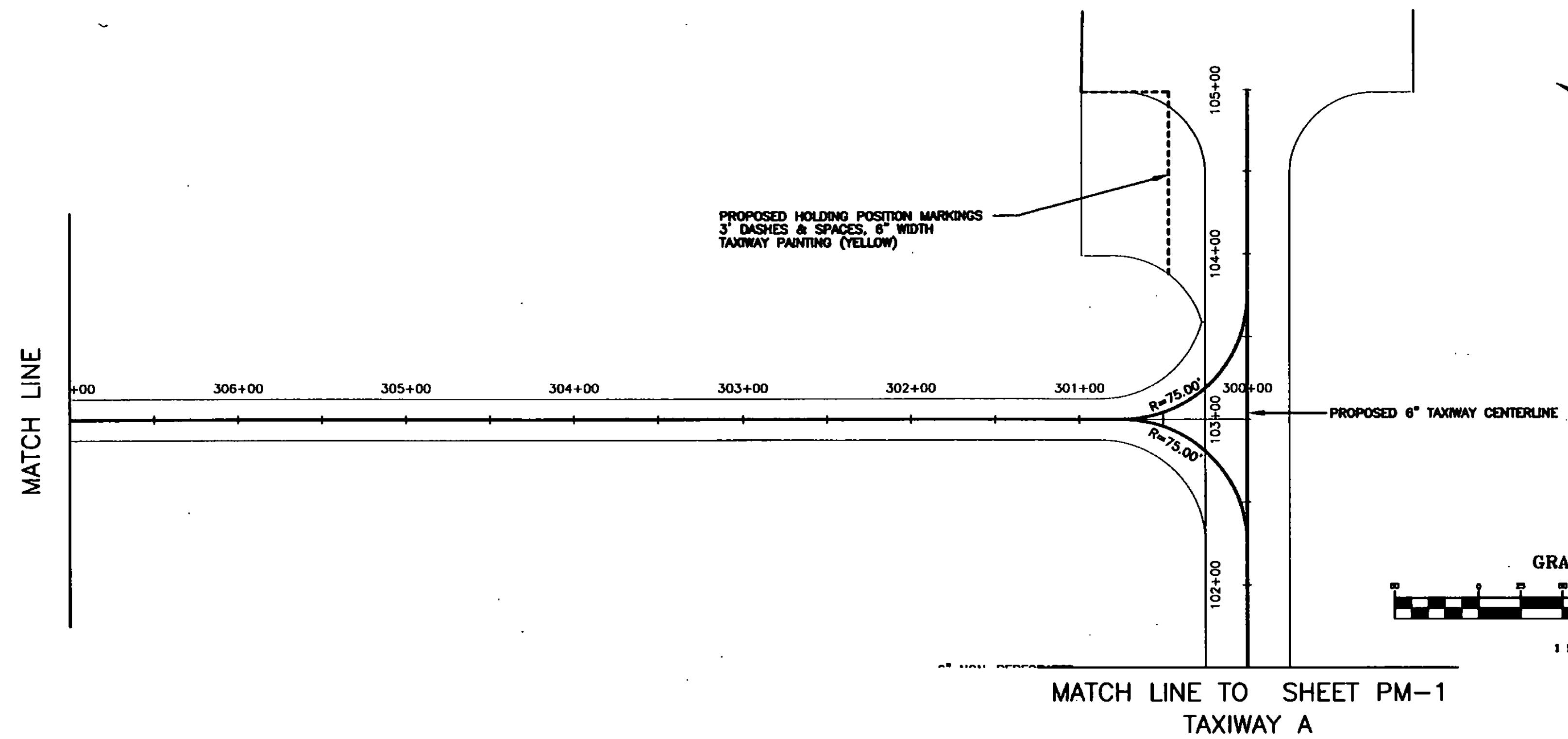
1. ALL RUNWAY MARKINGS, EXCEPT CENTERLINE STRIPES, SHALL BE STRATED-WHITE. CENTERLINE STRIPES TO BE SOLID-WHITE (SEE SHEET DE-3).
2. ALL TAXIWAY MARKINGS AND STRIPES SHALL BE SOLID-YELLOW, INCLUDING THOSE PORTIONS WHICH ENTER THE RUNWAY.
3. PAINT SHALL NOT BE APPLIED UNTIL THE LAYOUT AND SURFACE CONDITIONS OF THE PAVEMENT IS APPROVED BY THE ENGINEER.

NO.	DATE	REVISIONS	BY	CHK'D

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VERMONT AGENCY OF
TRANSPORTATION
COVENTRY, VERMONT
NEWPORT STATE AIRPORT
RUNWAY 18-36 RECONSTRUCTION
PAVEMENT MARKING DETAILS
RUNWAY 18-36

DRAWN BY JJP	DATE MAR. 2000
CHECKED BY	PROJ. NO. N15500
PROJ. ENG. JAA	DRAW. NO. 1
SHEET PM-1	



NOTES:

1. ALL RUNWAY MARKINGS, EXCEPT CENTERLINE STRIPES, SHALL BE STRIATED-WHITE. CENTERLINE STRIPES TO BE SOLID-WHITE (SEE SHEET DE-3).
2. ALL TAXIWAY MARKINGS AND STRIPES SHALL BE SOLID-YELLOW, INCLUDING THOSE PORTIONS WHICH ENTER THE RUNWAY.
3. PAINT SHALL NOT BE APPLIED UNTIL THE LAYOUT AND SURFACE CONDITIONS OF THE PAVEMENT IS APPROVED BY THE ENGINEER.

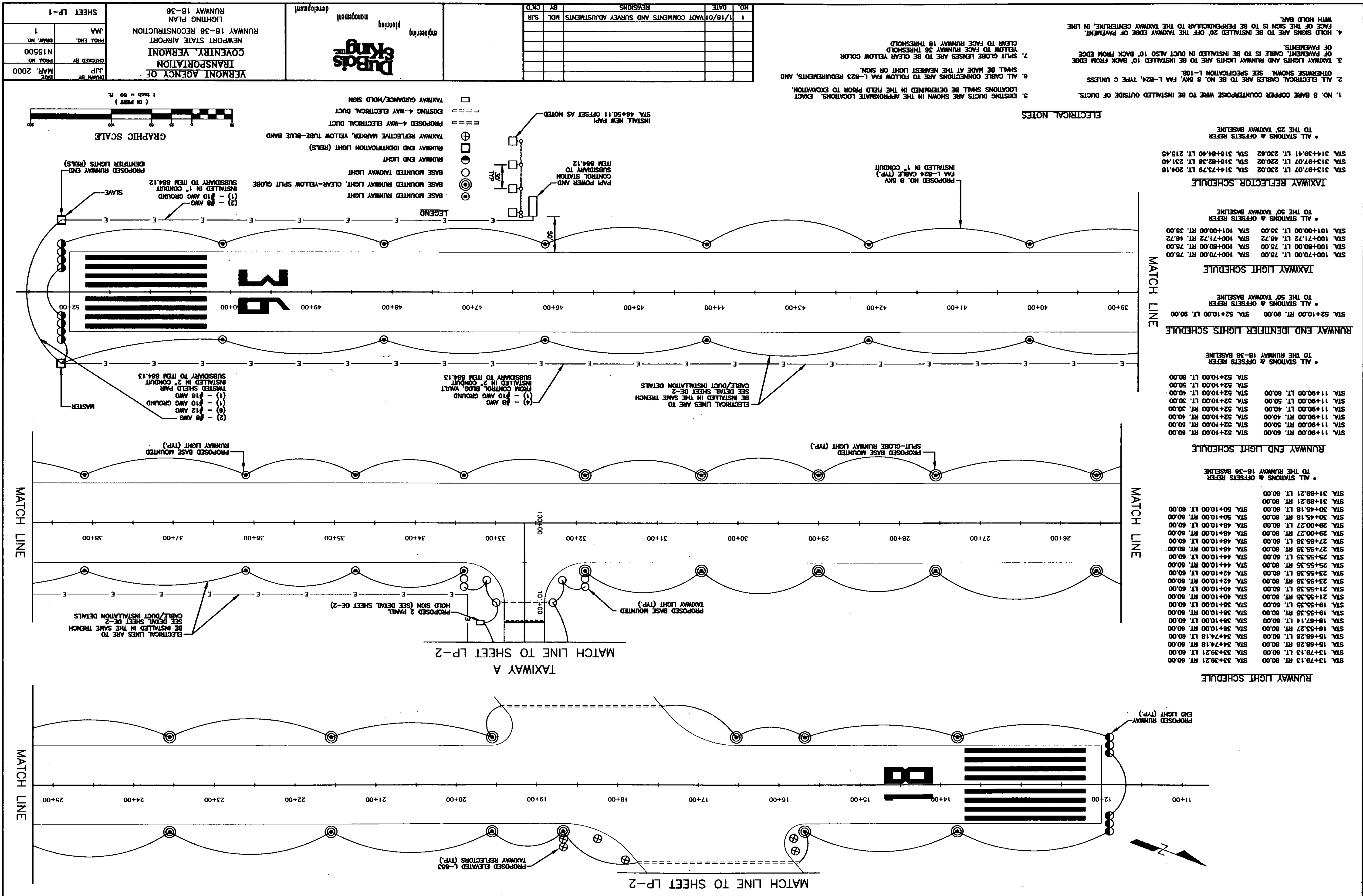
NO.	DATE	REVISIONS	BY	CHK'D

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 engineering planning management development

VERMONT AGENCY OF TRANSPORTATION
COVENTRY, VERMONT
 NEWPORT STATE AIRPORT
 RUNWAY 18-36 RECONSTRUCTION
 PAVEMENT MARKING DETAILS
 TAXIWAY & HOLDING BAY

DRAWN BY JJP	DATE MAR. 2000
CHECKED BY	PROJ. NO. N15500
PROJ. ENG. JAA	DRAW. NO. 1
SHEET PM-2	

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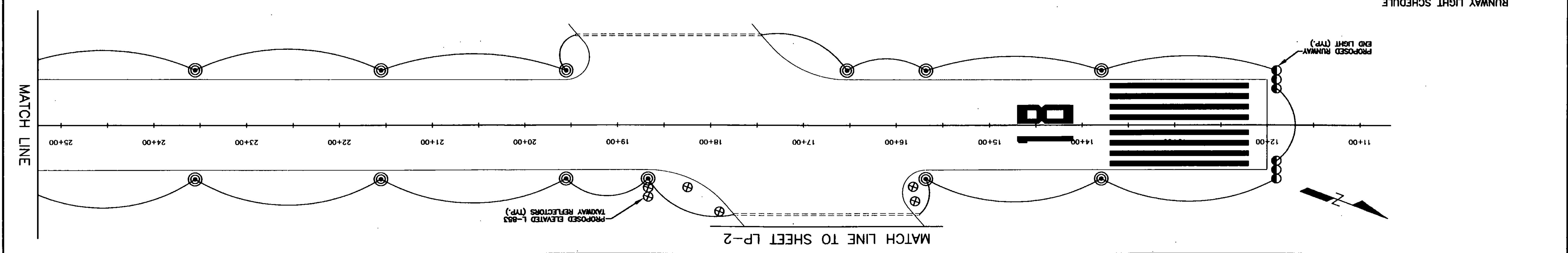
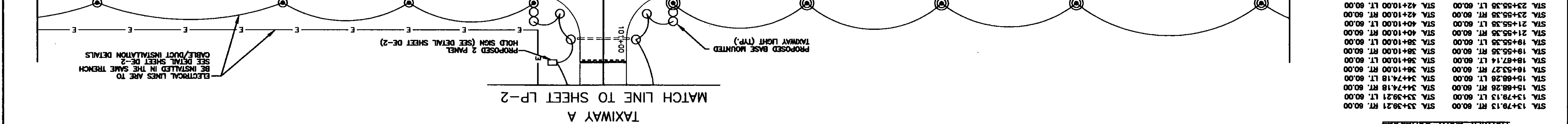
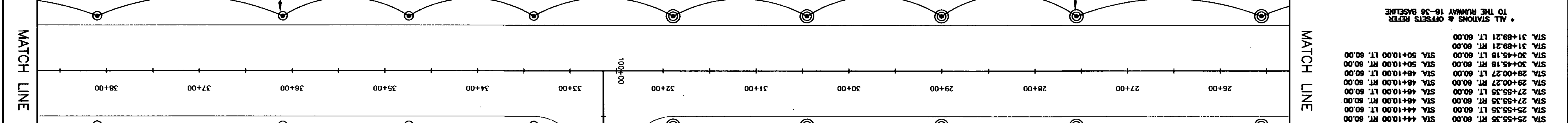
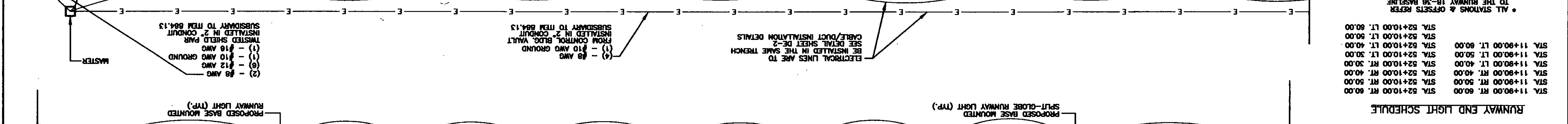
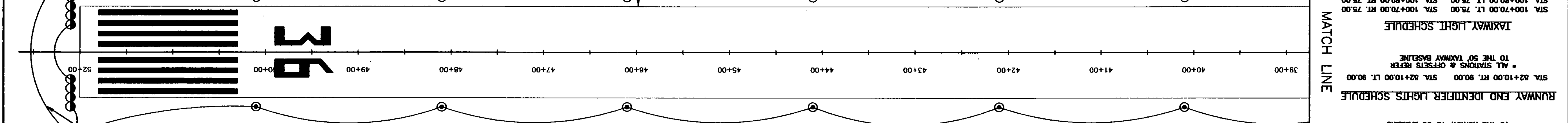
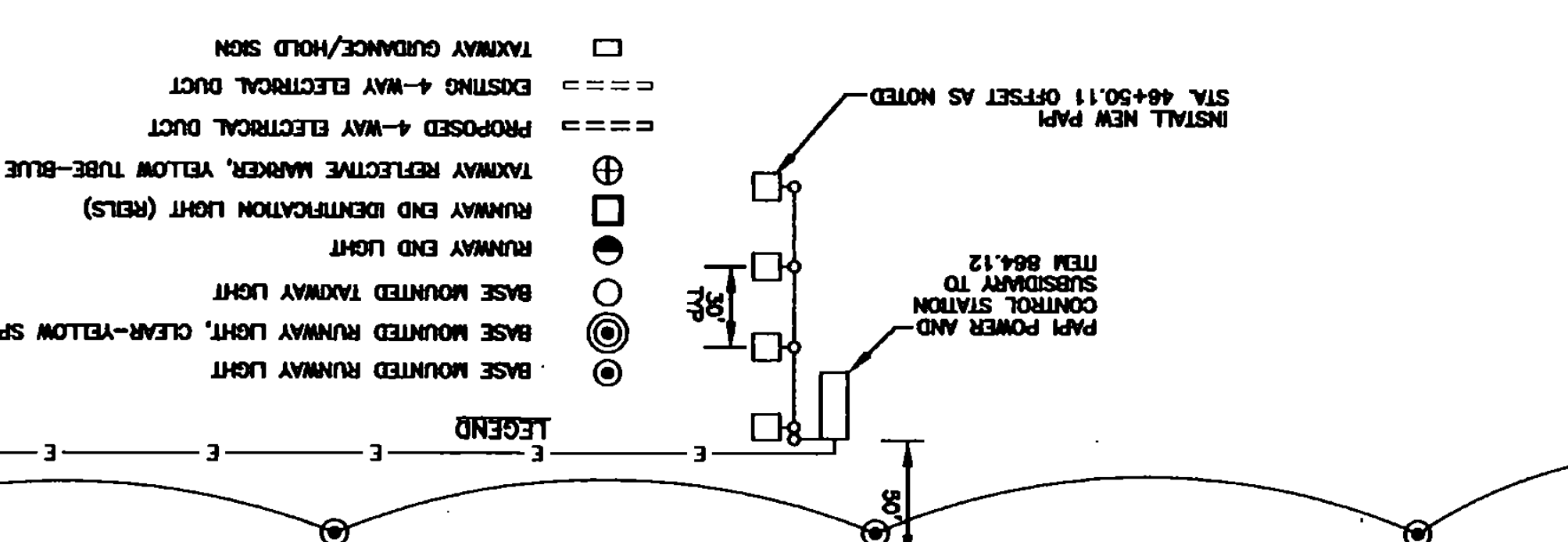
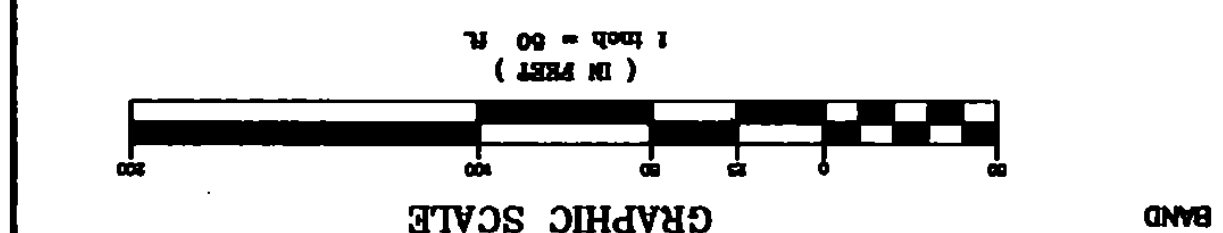


VERMONT AGENCY OF TRANSPORTATION
COVENTRY, VERMONT
NEWPORT STATE AIRPORT
 LIGHTING PLAN
 RUNWAY 18-36 RECONSTRUCTION
 RUNWAY 18-36

DESIGNED BY: JJP
 DATE: MAR. 2000
 CHECKED BY: N15500
 DRAWING NO.: 1
 SHEET LP-1

NO.	DATE	REVISIONS	BY	CHK'D
1	1/18/01	AVT COMMENTS AND SURVEY ADJUSTMENTS	MDL	SJR

- ELECTRICAL NOTES**
- NO. 8 BARE COPPER COUNTERPOISE WIRE TO BE INSTALLED OUTSIDE OF DUCTS.
 - ALL ELECTRICAL CABLES ARE TO BE NO. 8 AWG, FAA L-824, TYPE C UNLESS OTHERWISE SHOWN. SEE SPECIFICATION 1-108.
 - TAXIWAY LIGHTS AND RUNWAY LIGHTS ARE TO BE INSTALLED 10' BACK FROM EDGE OF PAVEMENT. SPLIT GLOBE LENSES ARE TO BE CLEAR YELLOW COLOR CLEAN TO FACE RUNWAY 36 THRESHOLD.
 - HOLD SIGNS ARE TO BE INSTALLED 20' OFF THE TAXIWAY EDGE OF PAVEMENT, IN LINE WITH HOLD BAR.



TAXIWAY LIGHT SCHEDULE

STA. 102+25.04 LT. 35.00	STA. 102+25.04 RT. 35.00
STA. 103+08.89 LT. 35.00	STA. 103+08.89 RT. 35.00
STA. 103+79.29 LT. 52.91	STA. 104+48.40 RT. 35.00
STA. 103+68.78 LT. 60.00	STA. 104+78.89 RT. 48.72
	STA. 104+68.40 RT. 75.00

* ALL STATIONS & OFFSETS REFER TO THE 25' TAXIWAY BASELINE

TAXIWAY REFLECTOR SCHEDULE

STA. 300+00.38 LT. 37.88	STA. 313+34.84 LT. 22.50
STA. 300+06.53 RT. 33.68	STA. 313+34.84 RT. 22.50
STA. 300+07.50 LT. 22.50	STA. 315+13.34 LT. 22.50
STA. 300+07.50 RT. 22.50	STA. 315+13.34 RT. 22.50
STA. 302+03.84 LT. 22.50	STA. 315+13.67 LT. 198.22
STA. 302+03.84 RT. 22.50	STA. 315+38.28 LT. 98.85
STA. 304+42.34 LT. 22.50	STA. 315+48.89 LT. 102.28
STA. 304+42.34 RT. 22.50	STA. 315+63.62 LT. 108.67
STA. 306+20.84 LT. 22.50	STA. 315+60.81 LT. 82.77
STA. 306+20.84 RT. 22.50	STA. 316+38.78 RT. 22.50
STA. 307+08.34 LT. 22.50	STA. 316+60.89 RT. 27.44
STA. 307+08.34 RT. 22.50	STA. 316+63.89 RT. 84.18
STA. 308+77.84 LT. 22.50	STA. 316+71.38 RT. 47.74
STA. 308+77.84 RT. 22.50	STA. 316+79.03 RT. 41.33
STA. 311+08.34 LT. 22.50	STA. 317+48.17 LT. 140.67
STA. 311+08.34 RT. 22.50	STA. 316+08.38 LT. 65.78

* ALL STATIONS & OFFSETS REFER TO THE 50' TAXIWAY BASELINE

LEGEND

- ⊙ BASE MOUNTED RUNWAY LIGHT
- ⊙ BASE MOUNTED RUNWAY LIGHT, CLEAR-YELLOW SPLIT GLOBE
- ⊙ BASE MOUNTED TAXIWAY LIGHT
- ⊙ RUNWAY END LIGHT
- ⊙ RUNWAY END IDENTIFICATION LIGHT (RELS)
- ⊕ TAXIWAY REFLECTIVE MARKER, YELLOW TUBE-BLUE BAND
- PROPOSED 4-WAY ELECTRICAL DUCT
- EXISTING 4-WAY ELECTRICAL DUCT
- TAXIWAY GUIDANCE/HOLD SIGN

ELECTRICAL NOTES

- NO. 8 BARE COPPER COUNTERPOISE WIRE TO BE INSTALLED OUTSIDE OF DUCT.
- ALL ELECTRICAL CABLES ARE TO BE NO. 8 SKV, FAA L-824, TYPE C UNLESS OTHERWISE SHOWN. SEE SPECIFICATION L-108.
- TAXIWAY LIGHTS AND RUNWAY LIGHTS ARE TO BE INSTALLED 10' BACK FROM EDGE OF PAVEMENT, CABLE IS TO BE INSTALLED IN DUCT ALSO 10' BACK FROM EDGE OF PAVEMENT.
- HOLD SIGNS ARE TO BE INSTALLED 20' OFF THE TAXIWAY EDGE OF PAVEMENT. FACE OF THE SIGN IS TO BE PERPENDICULAR TO THE TAXIWAY CENTERLINE, IN LINE WITH HOLD BAR.
- EXISTING DUCTS ARE SHOWN IN THE APPROXIMATE LOCATIONS. EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD PRIOR TO EXCAVATION.
- ALL CABLE CONNECTIONS ARE TO FOLLOW FAA L-823 REQUIREMENTS, AND SHALL BE MADE AT THE NEAREST LIGHT OR SIGN.

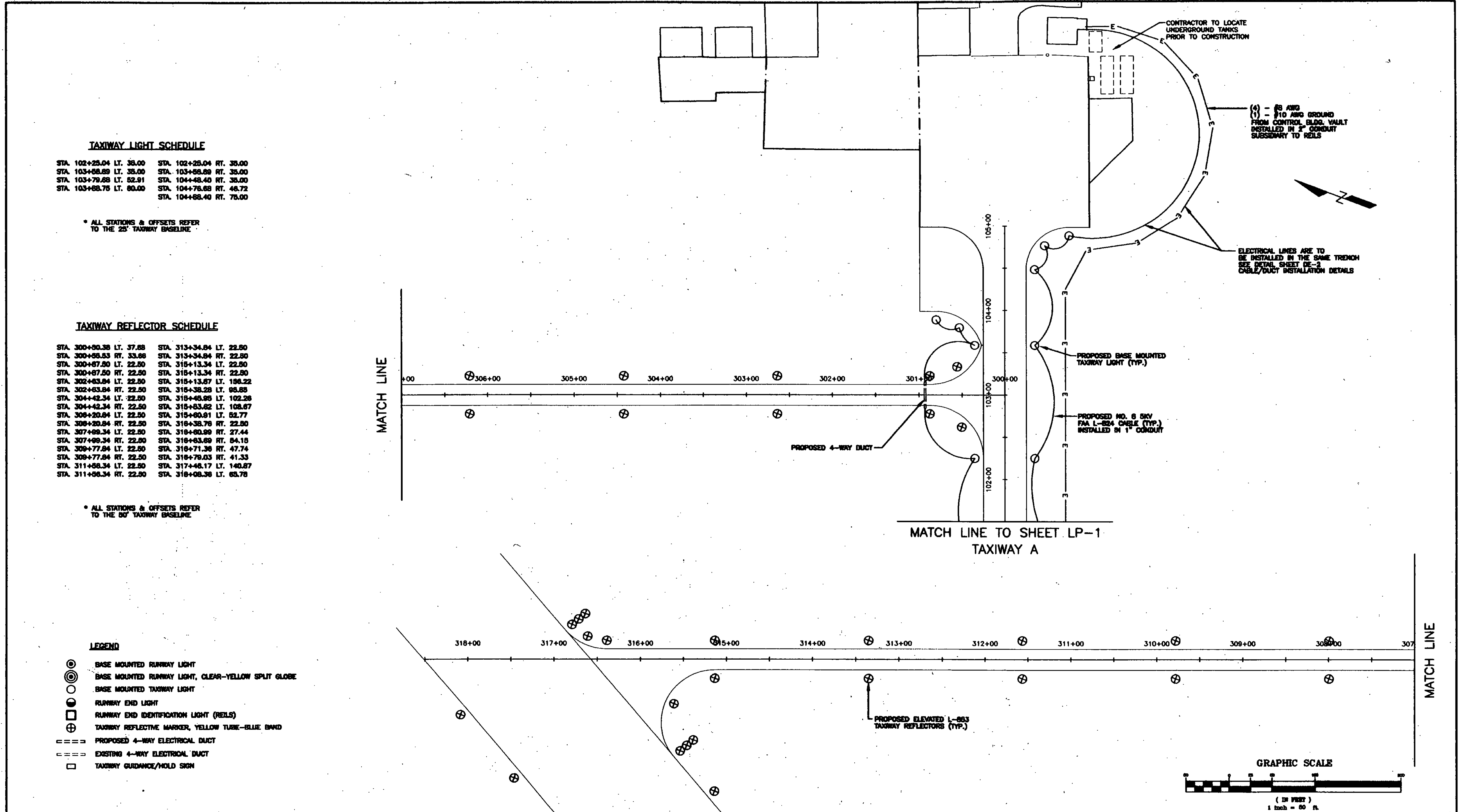
NO.	DATE	REVISIONS	BY	CHK'D

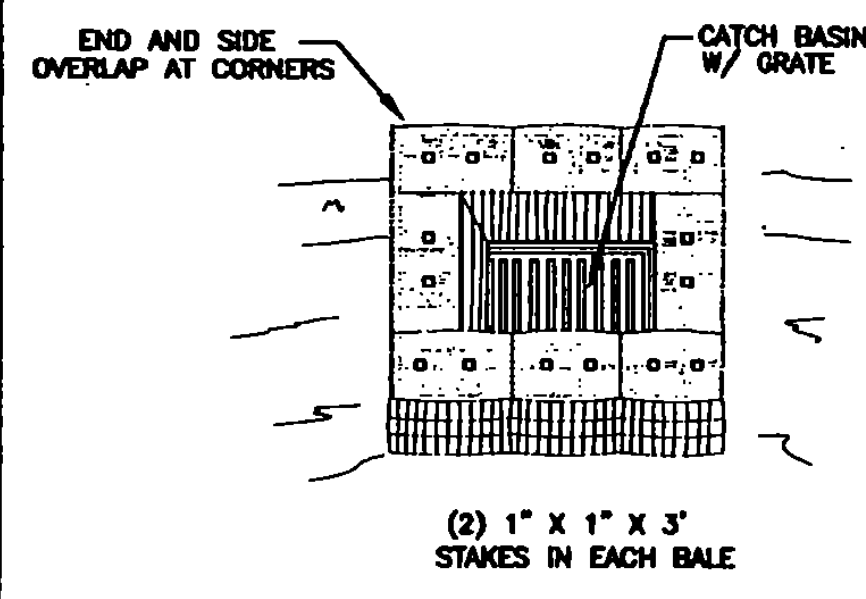
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VERMONT AGENCY OF TRANSPORTATION
 COVENTRY, VERMONT
 NEWPORT STATE AIRPORT
 RUNWAY 18-36 RECONSTRUCTION
 LIGHTING PLAN
 EXISTING & TEMPORARY TAXIWAYS

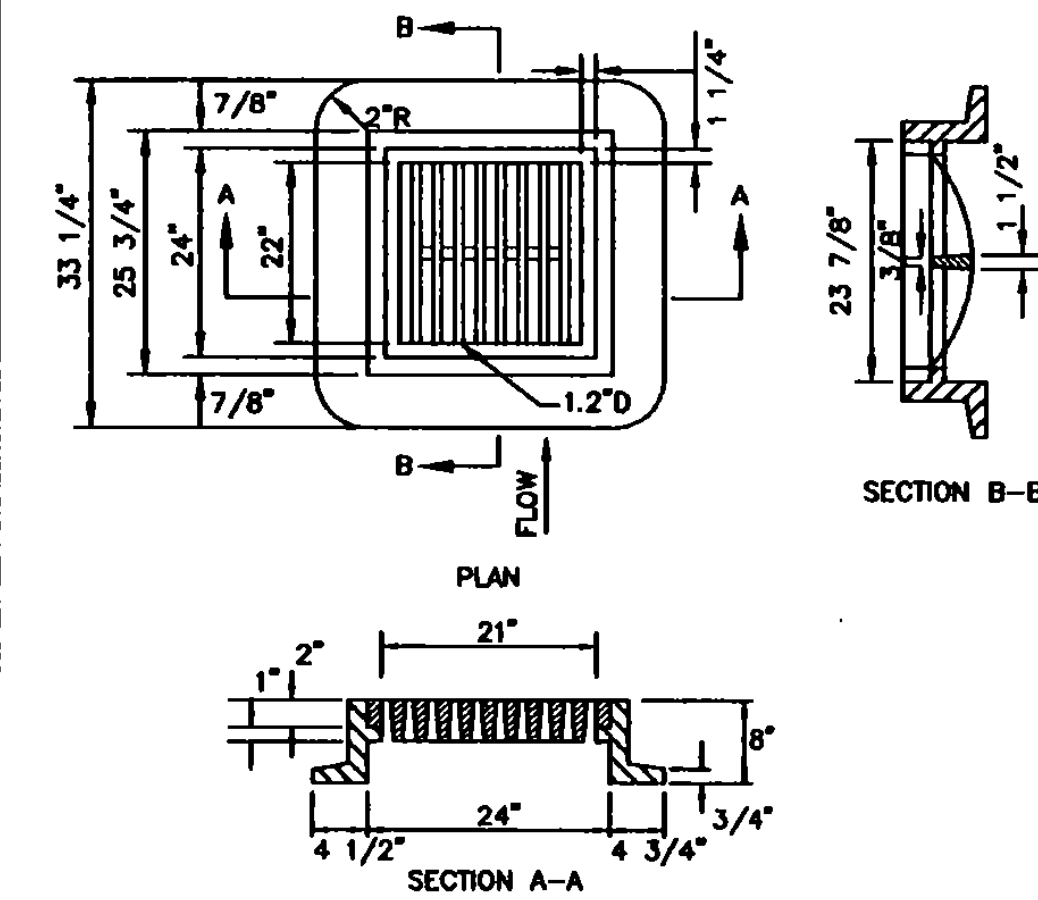
DRAWN BY JJP	DATE MAR. 2000
CHECKED BY 	PROJ. NO. N15500
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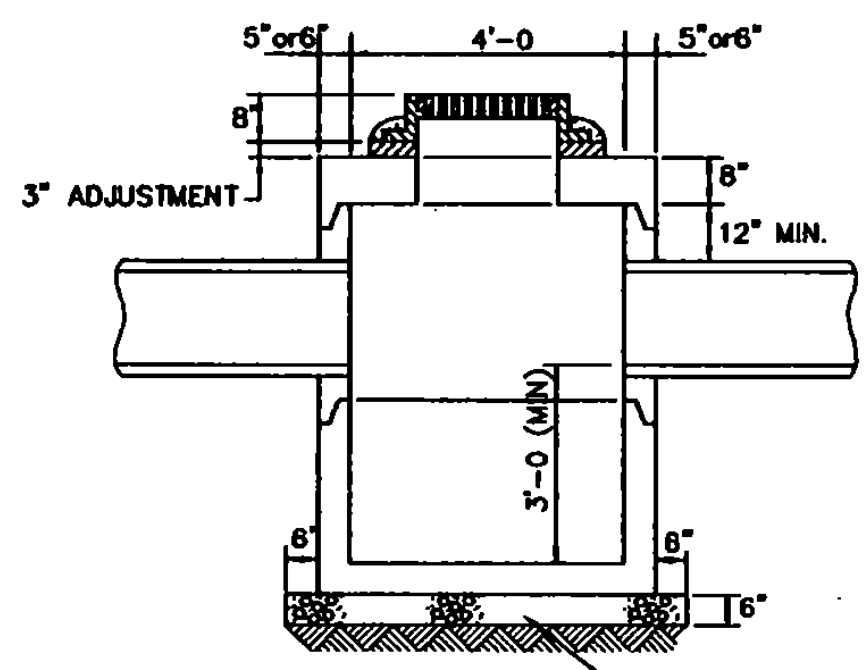


STRAW OR HAY BALE BARRIER
NOT TO SCALE



GRATE & FRAME DETAIL
NOT TO SCALE

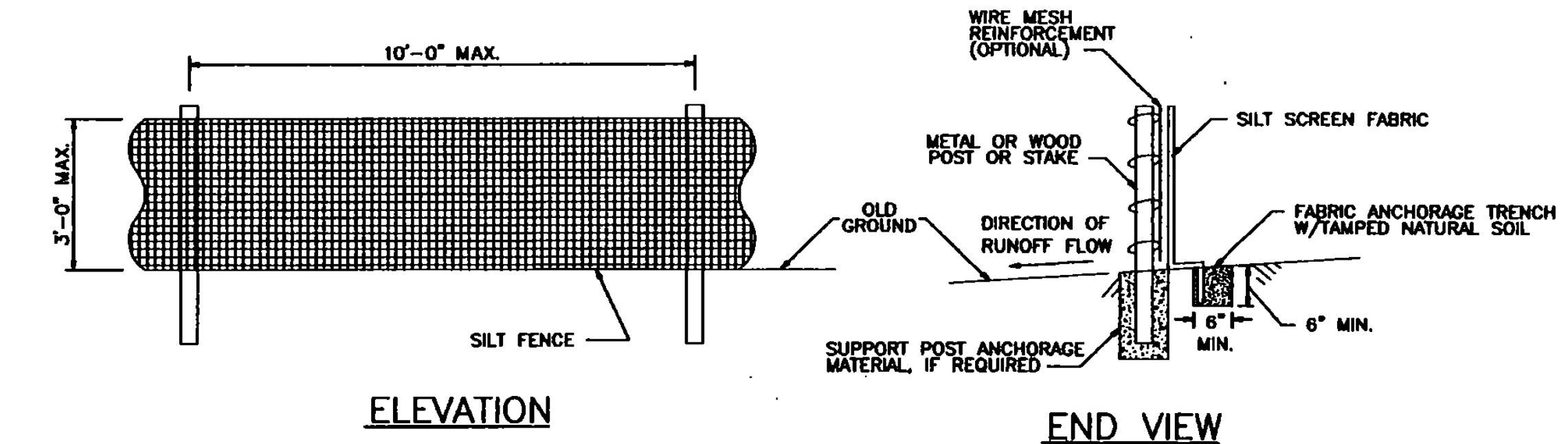
- NOTES:**
- GRATES AND FRAMES TO BE CAST IRON, TYPE A AND SHALL MEET VAOT SPECIFICATION 604.10
 - SUPPLIER SHALL CERTIFY THAT THE GRATE/FRAME ARE CAPABLE OF SUPPORTING 28,500 lb. WHEEL LOAD.



TYPICAL CATCH BASIN
NOT TO SCALE

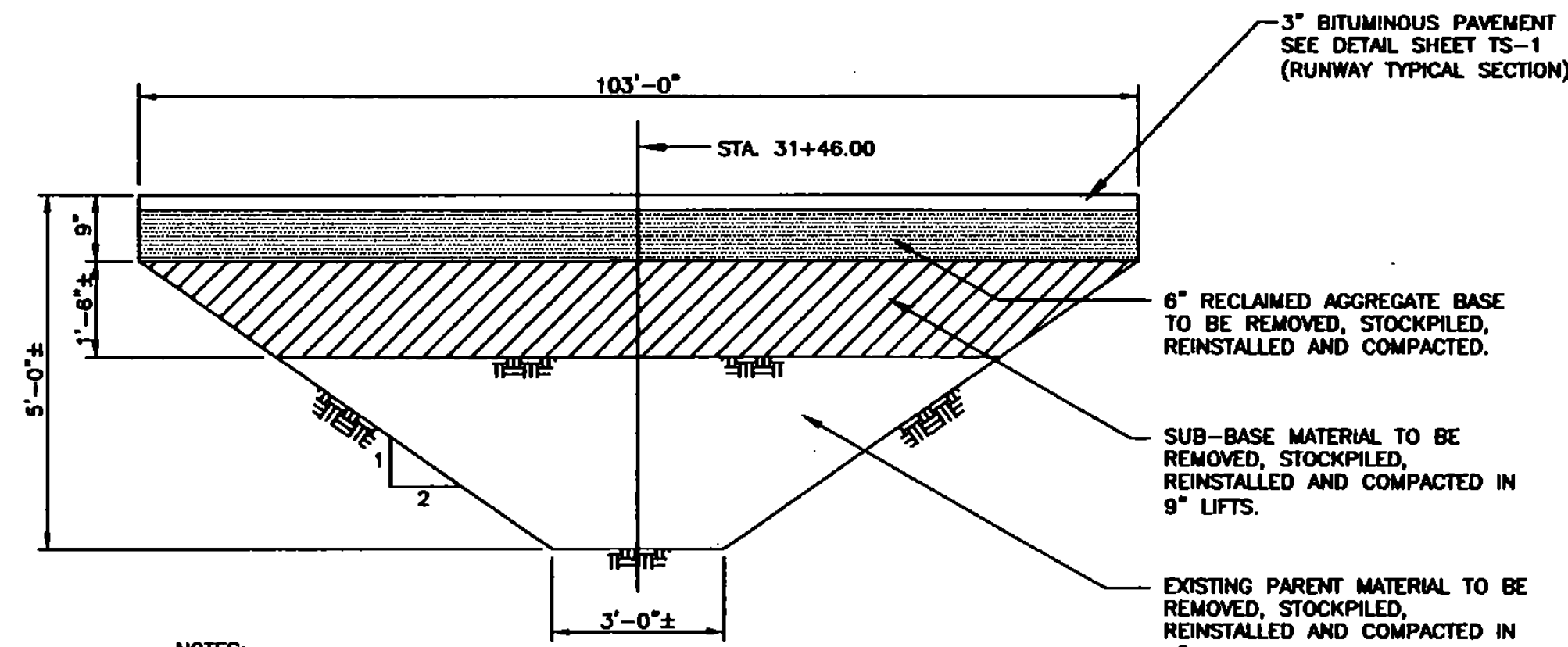
- NOTES:**
- PRECAST WALLS AND BASES SHALL MEET VAOT SPECIFICATION 604.10
 - PRECAST REINFORCED CONCRETE TOP, BASE, AND RISER SECTIONS SHALL MEET VAOT SPECIFICATION 604.10
 - SEE GRATE & FRAME DETAIL ABOVE.
 - SEE PLANS FOR PIPE INVERTS.

(EQUAL TO PIPE OPENING)
NOTE: BAFFLE OPEN = 5.0 SQUARE FEET



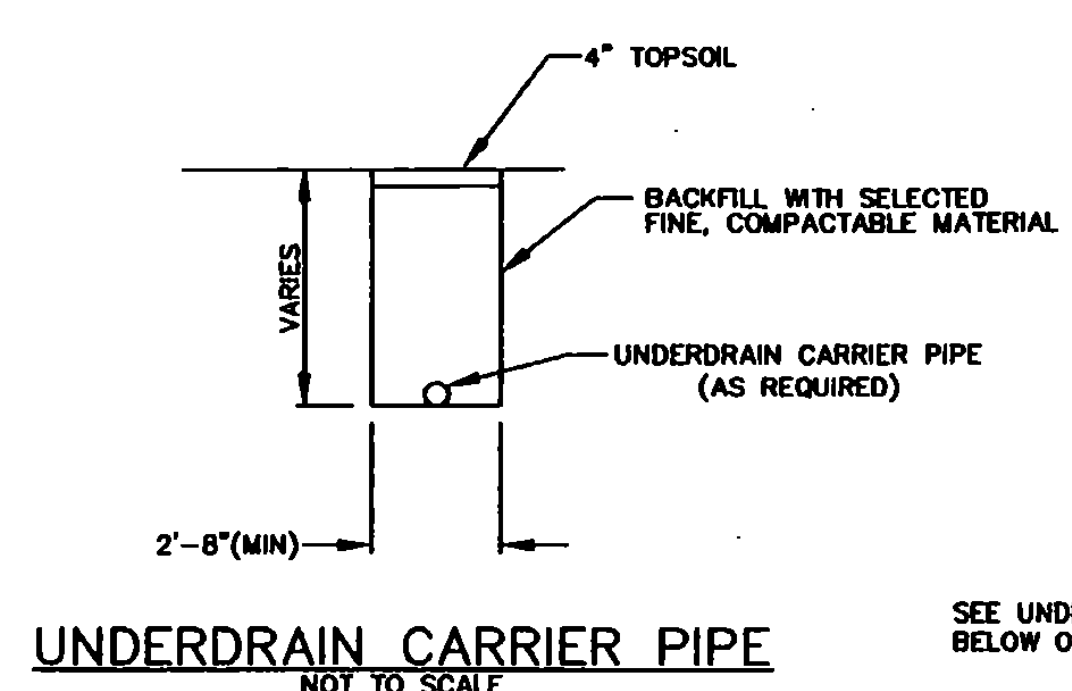
ELEVATION
SILT FENCE
NOT TO SCALE

- NOTES:**
- SILT FENCE SHALL CONSIST OF AN APPROVED PREFABRICATED SILT FENCE WITH FABRIC ATTACHED TO POSTS AND SHALL BE ASSEMBLED IN THE FIELD ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS. WIRE MESH REINFORCEMENT AND/OR CLOSER POST SPACING MAY BE ORDERED BY THE ENGINEER IN AREAS WHERE HIGH RUNOFF VOLUMES ARE ANTICIPATED, OR IN LOW SPOTS WHERE SEDIMENT WILL BE COLLECTED.
 - PRIOR TO BEGINNING EARTHWORK OPERATIONS AT LOCATIONS DIRECTED BY THE ENGINEER, SILT FENCE SHALL BE CONSTRUCTED ALONG THE TOE OF PROPOSED EMBANKMENT SLOPES AT THE LIMITS OF CLEARING.

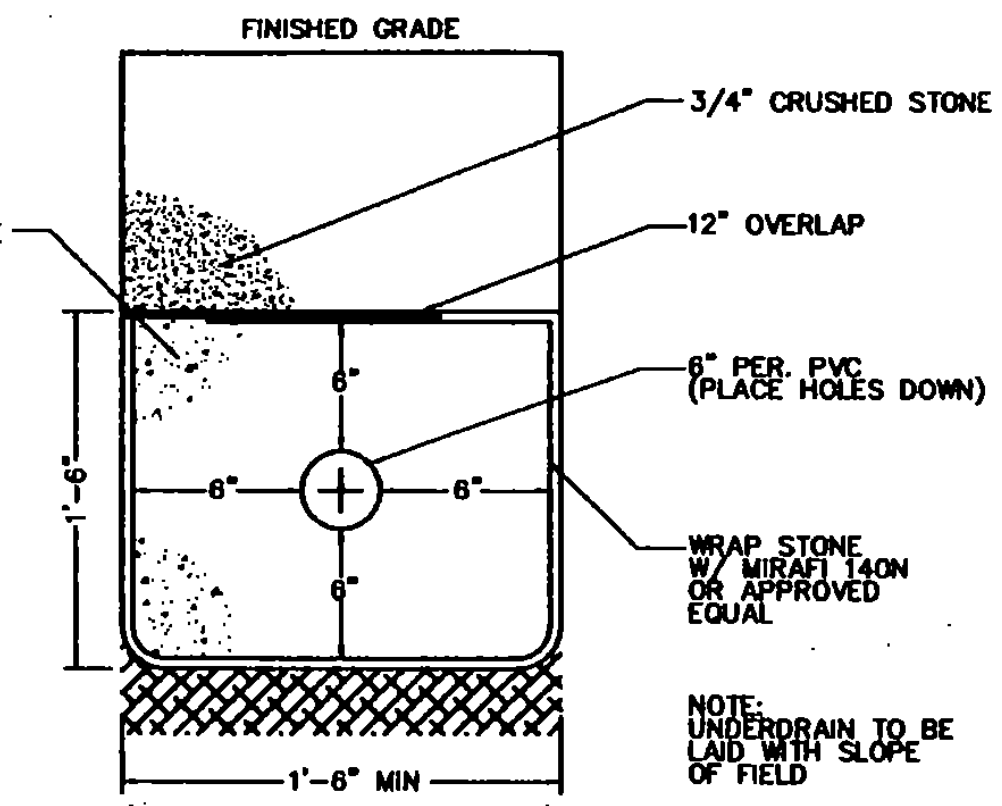


PAVEMENT REPAIR DETAIL
NOT TO SCALE

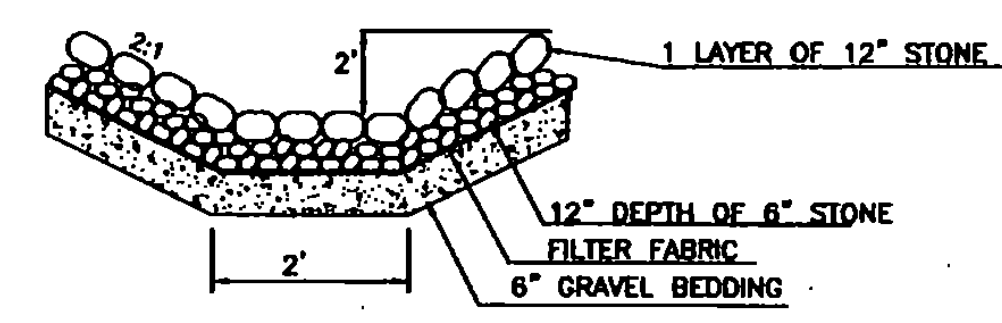
- NOTES:**
- PAVEMENT REPAIR TO BE DIRECTED BY ENGINEER
 - ALL EXCAVATION AND BACKFILL PAID FOR UNDER UNCLASSIFIED EXCAVATION.



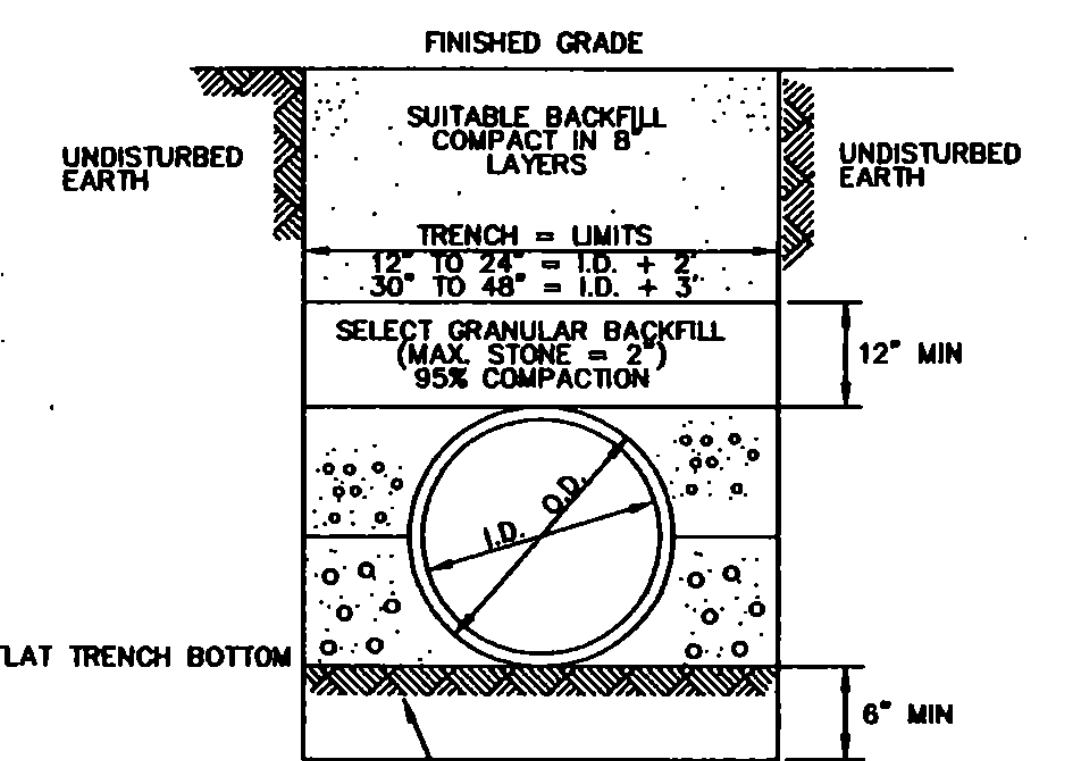
UNDERDRAIN CARRIER PIPE
NOT TO SCALE



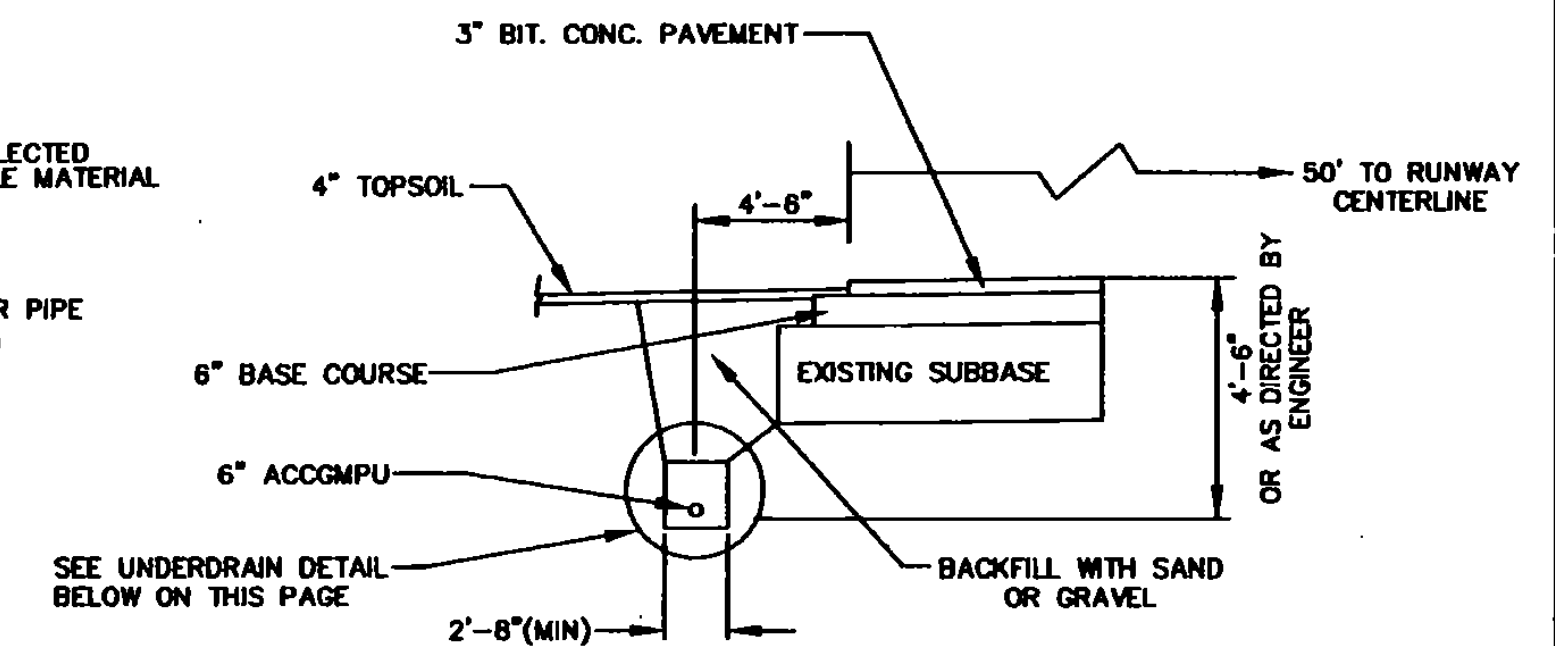
UNDERDRAIN DETAIL
NOT TO SCALE



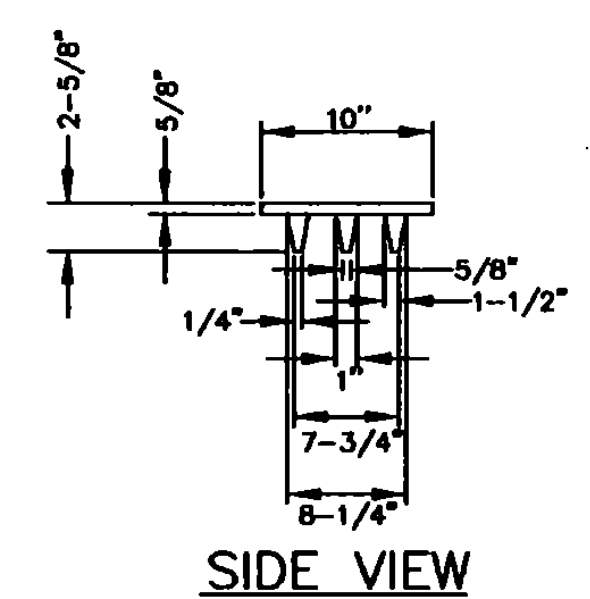
TYPICAL RIPRAP OUTLET
NOT TO SCALE



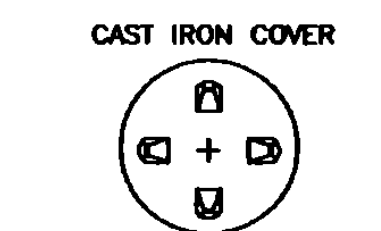
TYPICAL TRENCH DETAIL
NOT TO SCALE



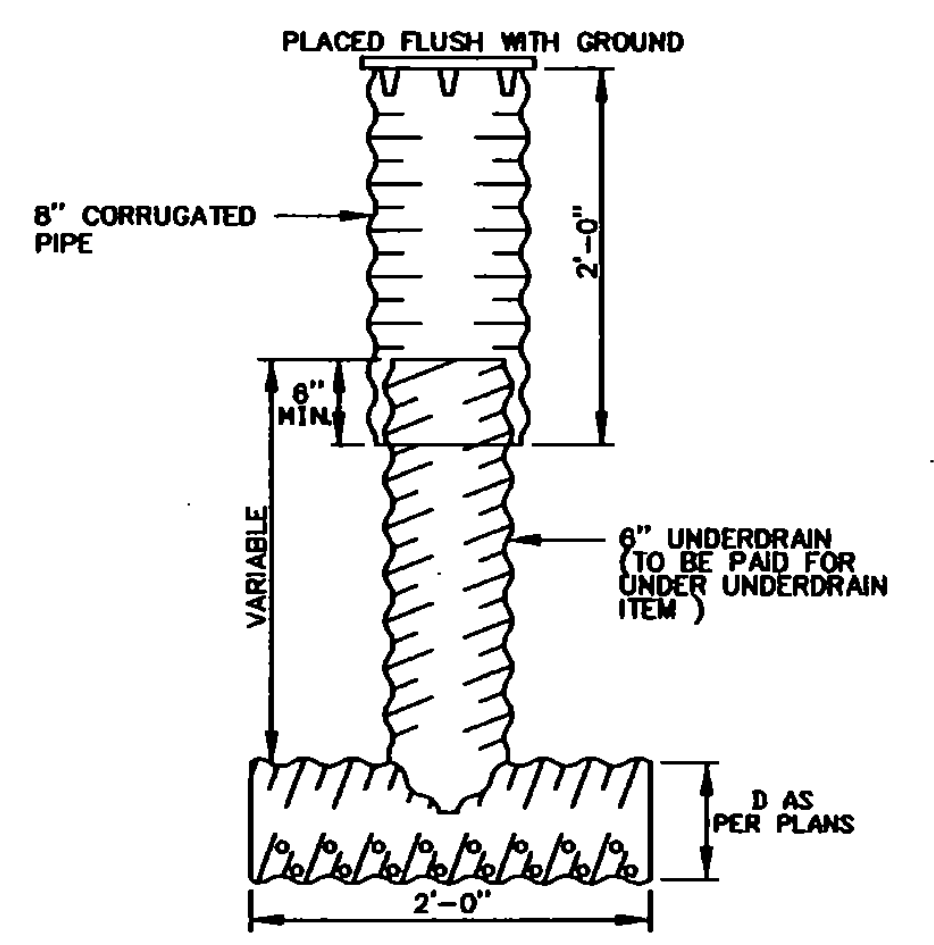
UNDERDRAIN SECTION
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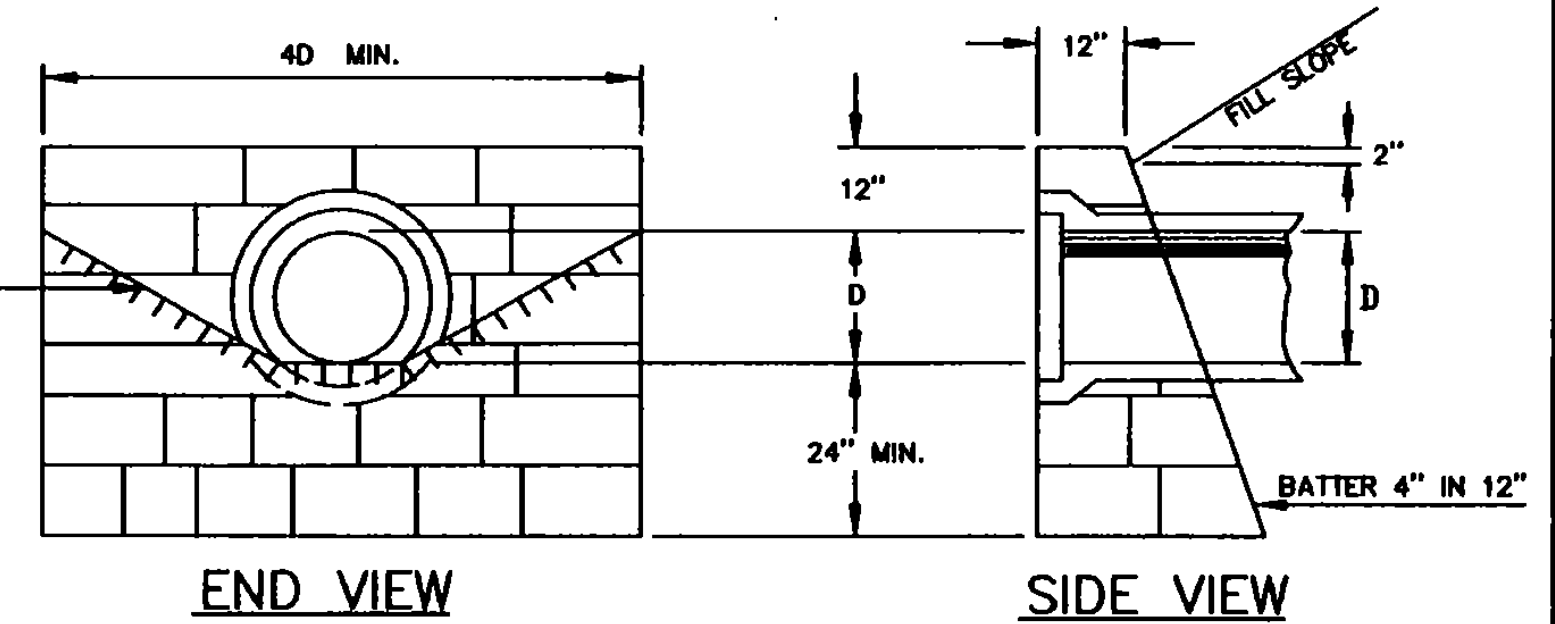
SIDE VIEW



BOTTOM VIEW



UNDERDRAIN FLUSHING BASIN
NOT TO SCALE



END VIEW

SIDE VIEW

QUANTITY SCHEDULE FOR CEMENT RUBBLE MASONRY

PIPE DIAMETER	12"	15"	18"	24"	30"	36"	42"	48"	54"	60"
C.R.M. QUANTITY	1.0	1.3	1.8	2.7	3.5	4.9	8.4	8.0	10.0	12.3

C.R.M. QUANTITIES EXCLUDE PIPE DIAMETERS FOR 30" AND OVER.
SAME DEDUCTION MADE FOR CONCRETE PIPE AS IS MADE FOR METAL PIPE.

CEMENT RUBBLE MASONRY STRAIGHT HEADWALL
NOT TO SCALE

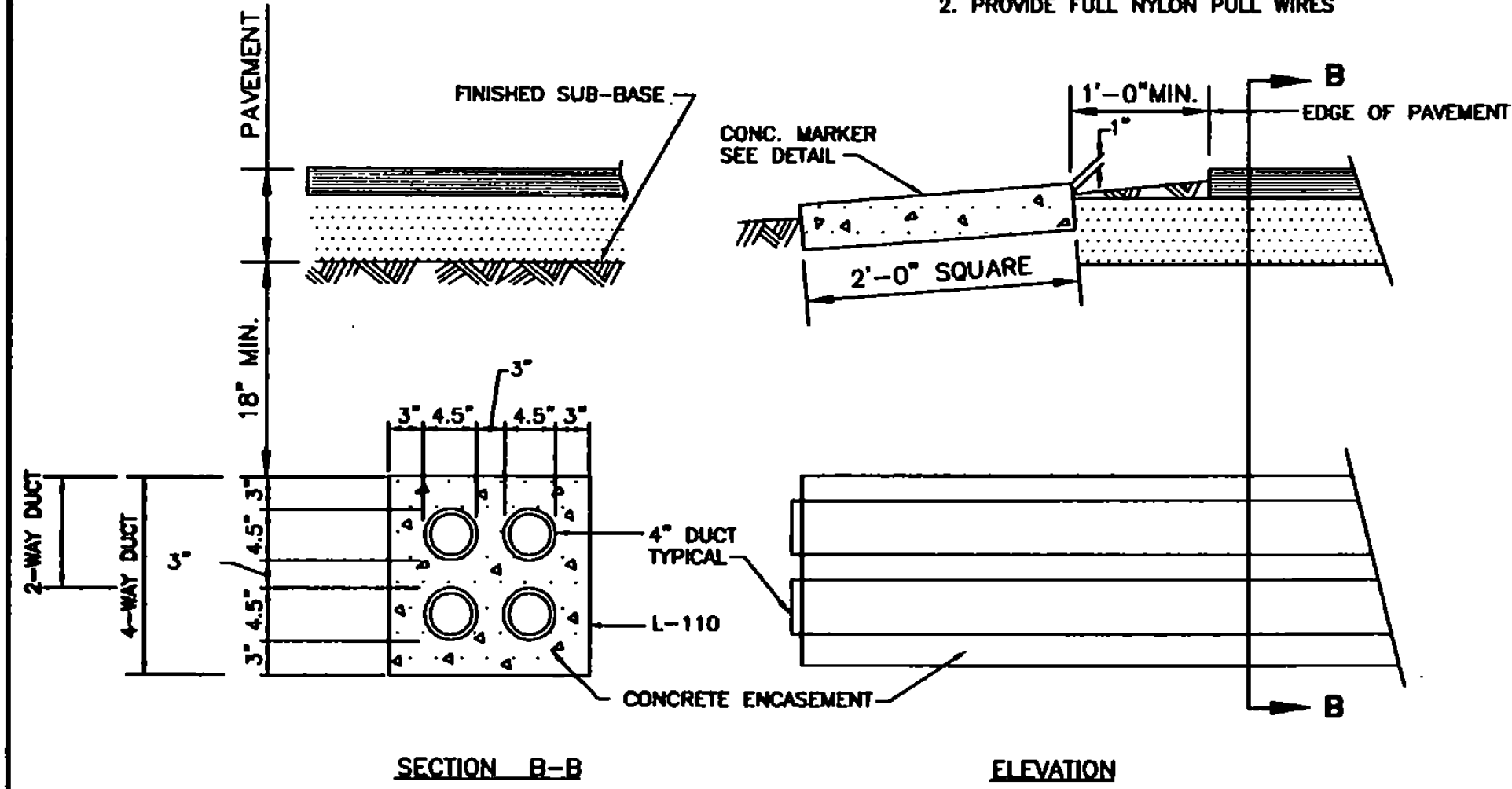
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1	1/18/01	VAOT COMMENTS AND SURVEY ADJUSTMENTS	MDL	SUR

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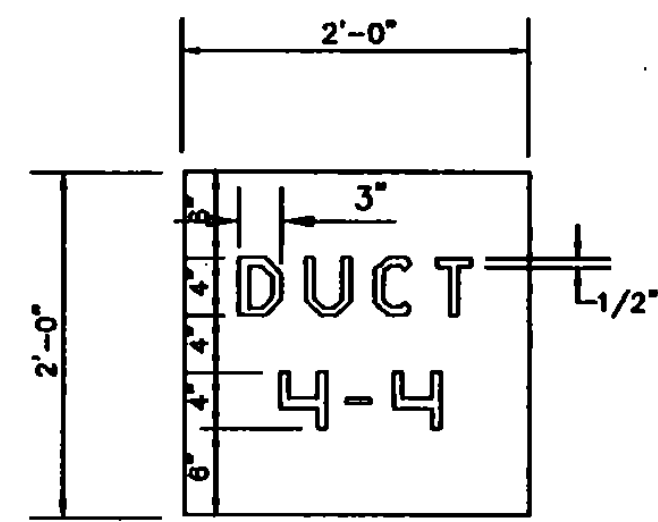
VERMONT AGENCY OF TRANSPORTATION
COVENTRY, VERMONT
NEWPORT STATE AIRPORT
RUNWAY 18-36 RECONSTRUCTION
DRAINAGE & EROSION CONTROL
DETAILS

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CHECKED BY: N15500
PROJ. ENG.: JAA
DATE: MAR. 2000
PROJ. NO.: N15500
DRAW. NO.: 1
SHEET DE-1

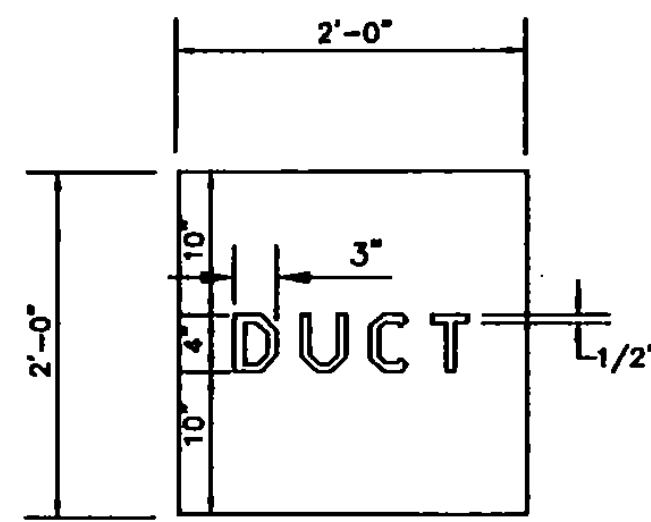
NOTE:
 1. SLOPE DUCTS 3"/100 FT. FOR DRAINAGE
 2. PROVIDE FULL NYLON PULL WIRES



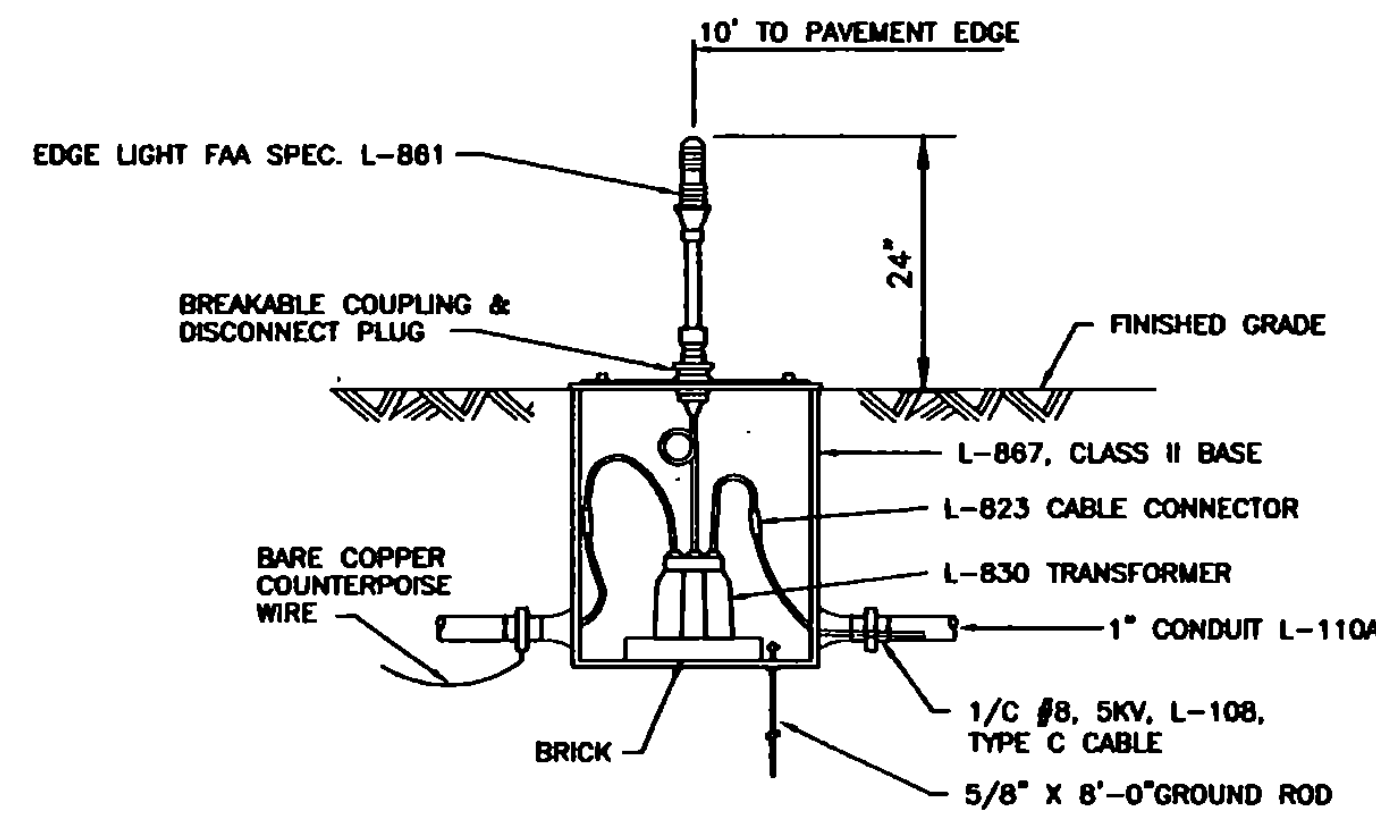
DUCT (4-WAY) AND CONCRETE MARKER DETAILS
 NOT TO SCALE



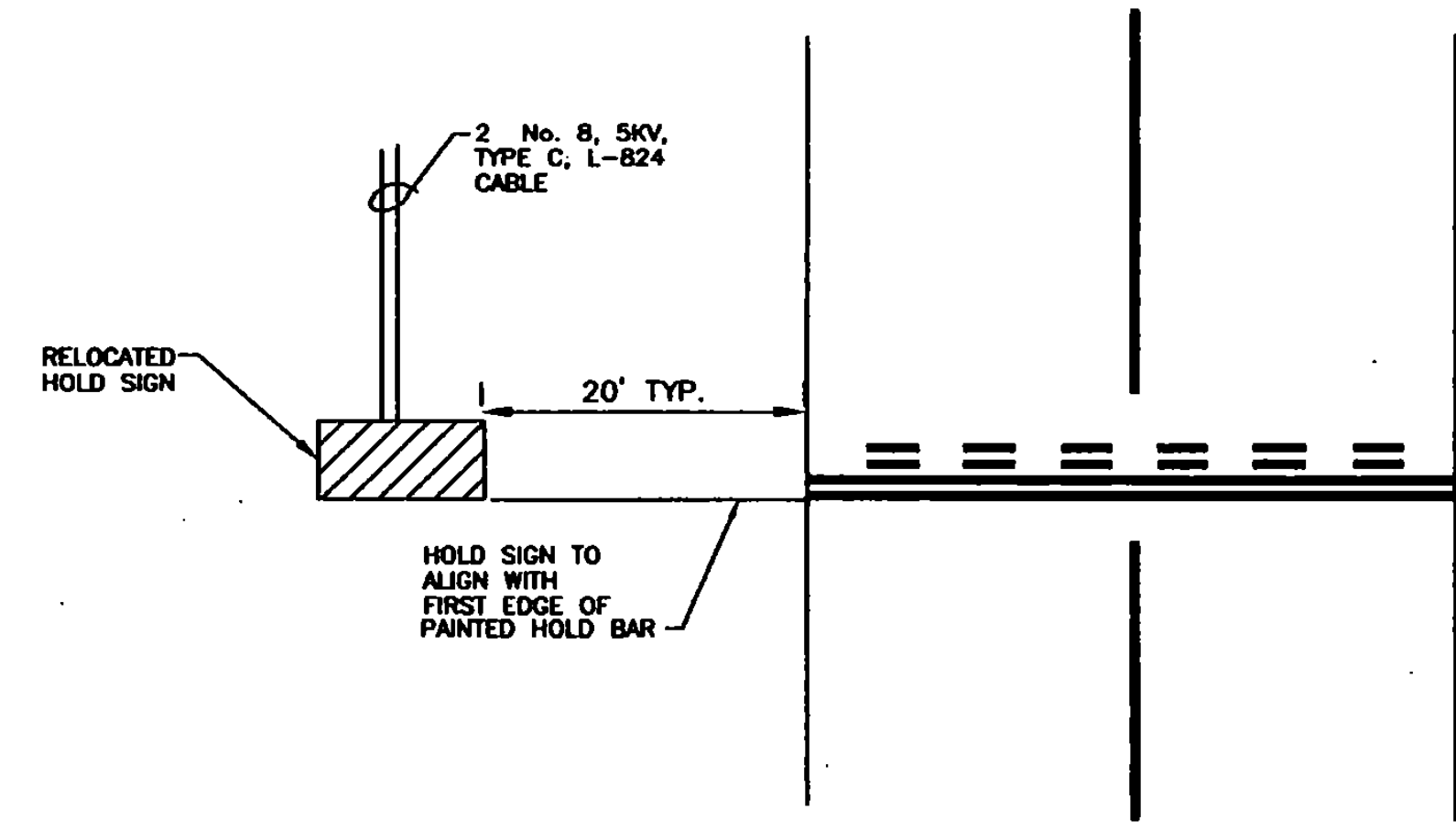
CONCRETE DUCT MARKER
 NOT TO SCALE



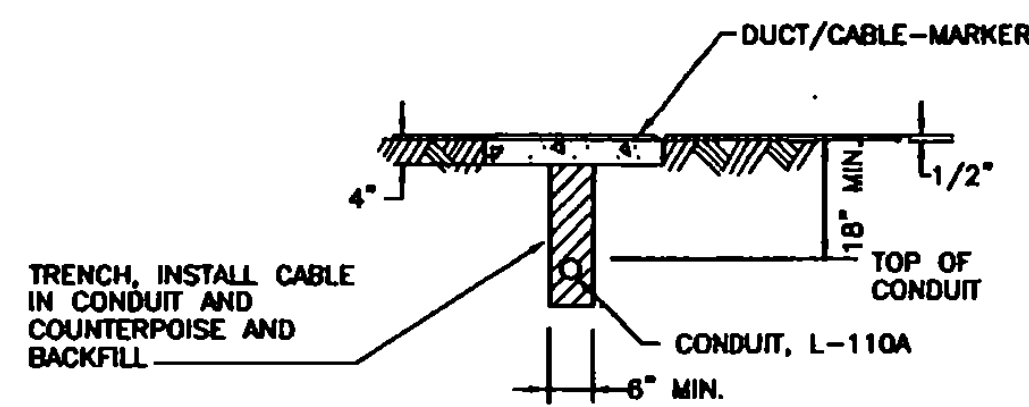
CONCRETE UTILITY DUCT MARKER
 NOT TO SCALE



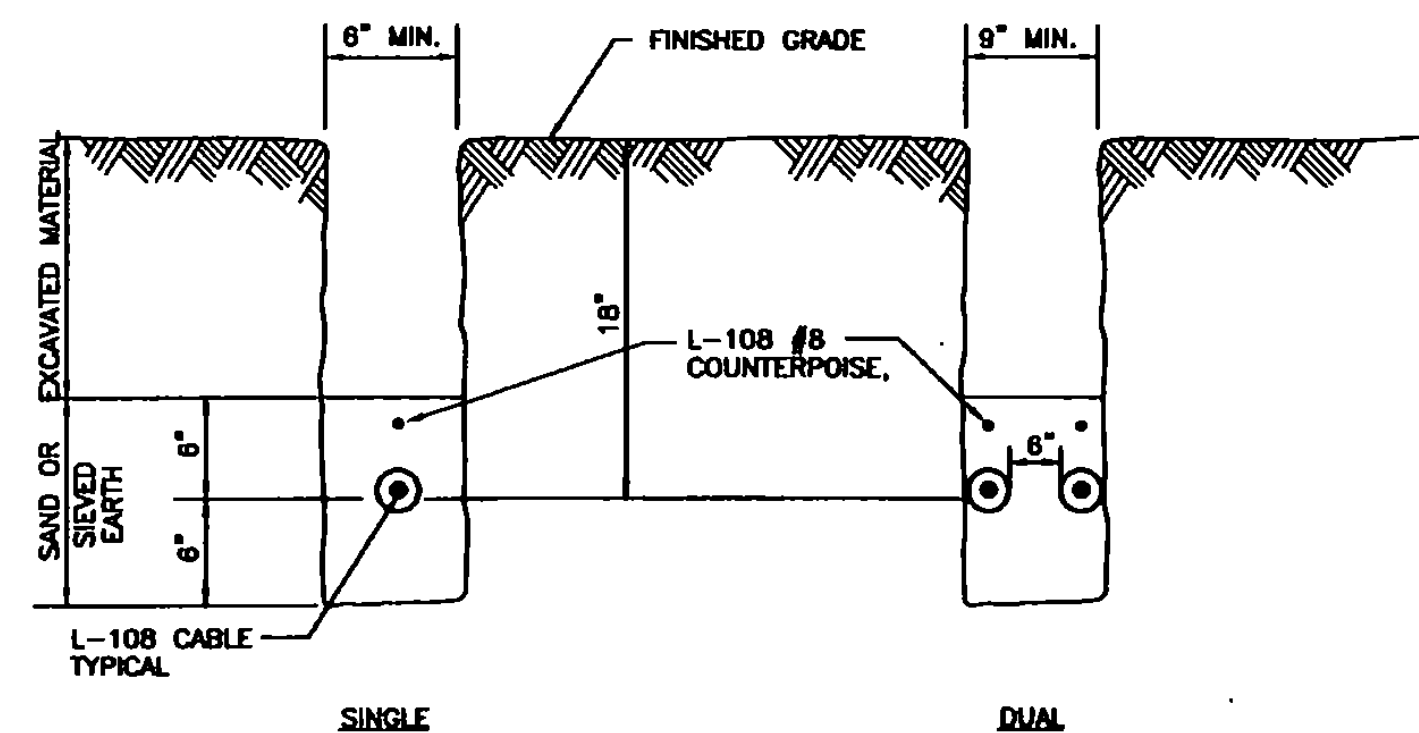
BASE MOUNTED SERIES CIRCUIT
 NOT TO SCALE



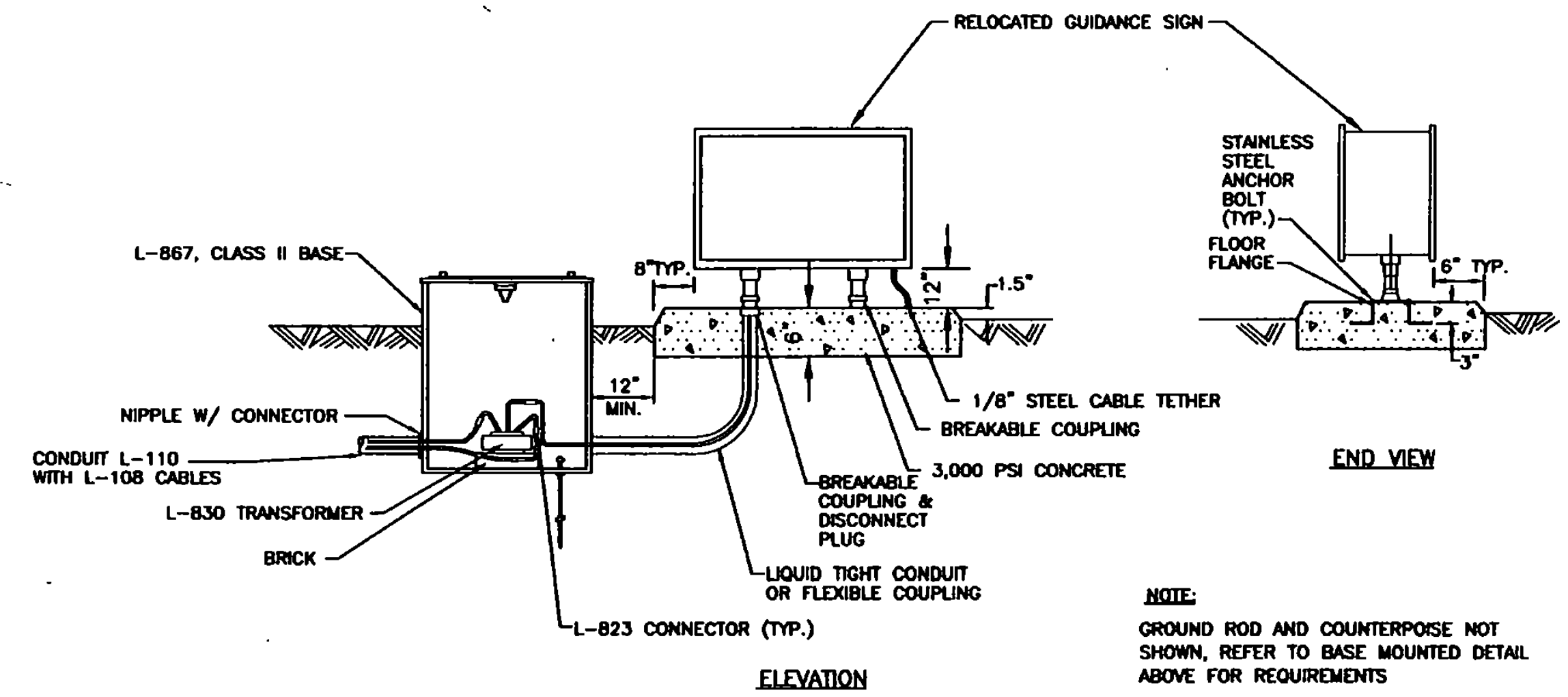
HOLD SIGN LAYOUT DETAIL
 NOT TO SCALE



CABLE/DUCT-MARKER DETAIL
 NOT TO SCALE



CABLE/DUCT INSTALLATION DETAILS
 NOT TO SCALE



GUIDANCE SIGN DETAIL
 NOT TO SCALE

NOTE:
 GROUND ROD AND COUNTERPOISE NOT SHOWN, REFER TO BASE MOUNTED DETAIL ABOVE FOR REQUIREMENTS

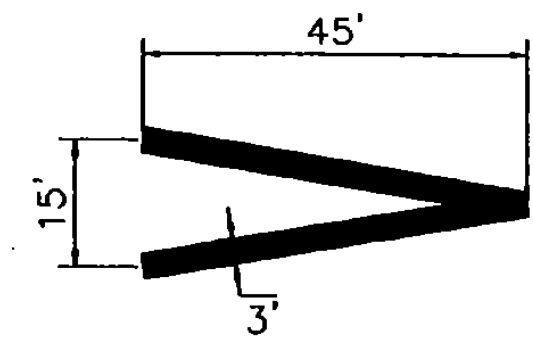
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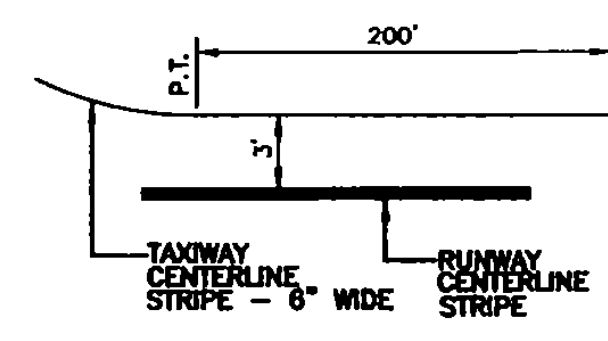
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VERMONT AGENCY OF TRANSPORTATION
COVENTRY, VERMONT
 NEWPORT STATE AIRPORT
 RUNWAY 18-36 RECONSTRUCTION
 RUNWAY AND TAXIWAY ELECTRICAL DETAILS

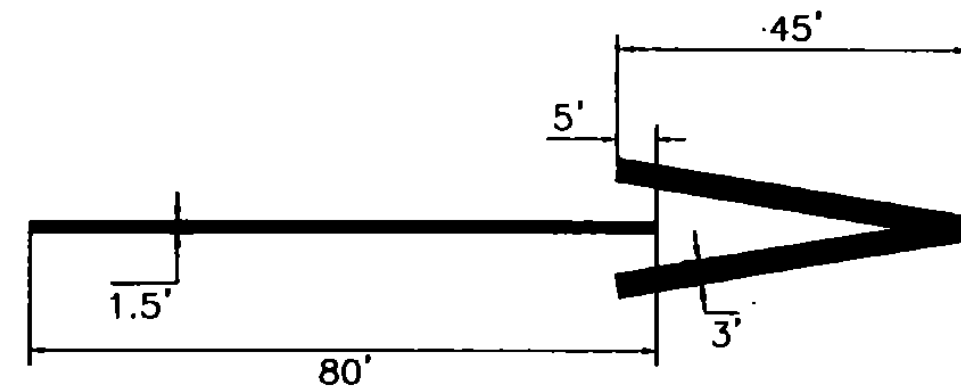
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PREP. ENG. JAA	DRAW. NO. 1
SHEET DE-2	



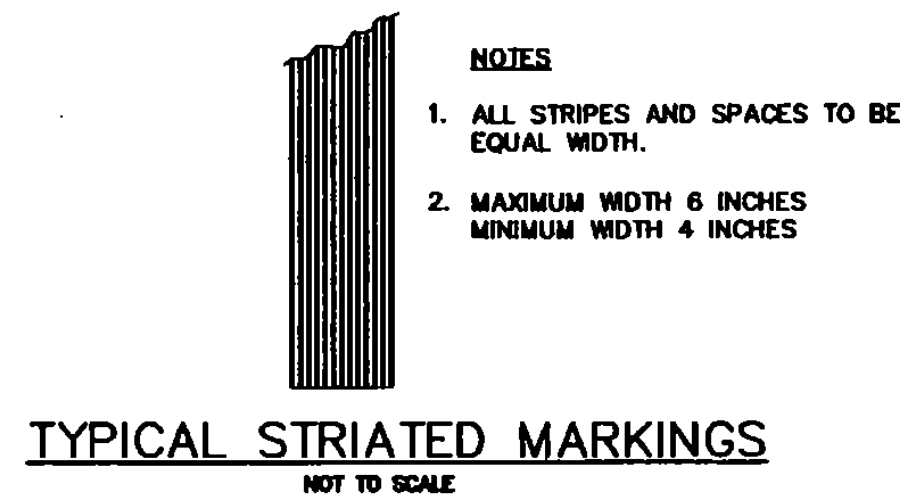
ARROWHEAD DETAIL
NOT TO SCALE



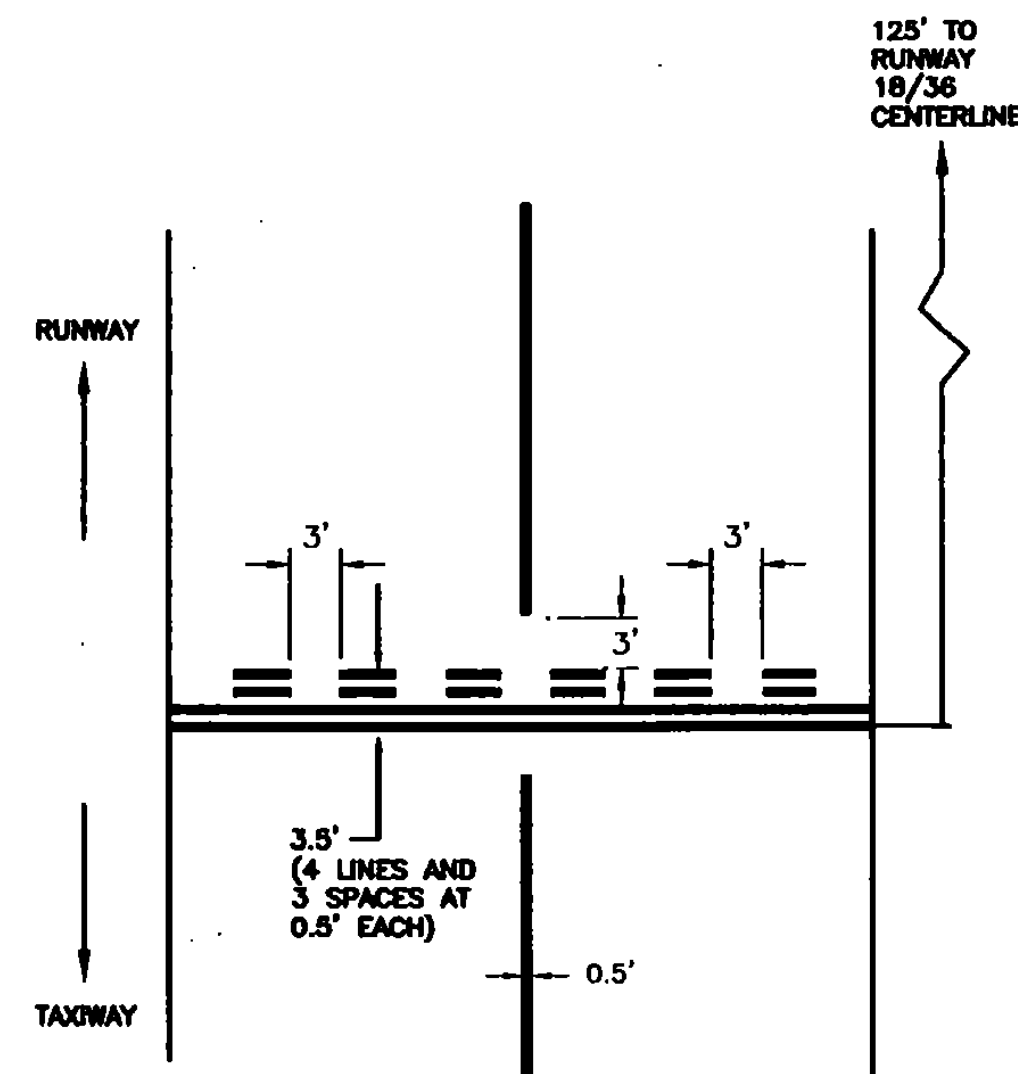
TAXIWAY LEAD IN LINE DETAIL
NOT TO SCALE



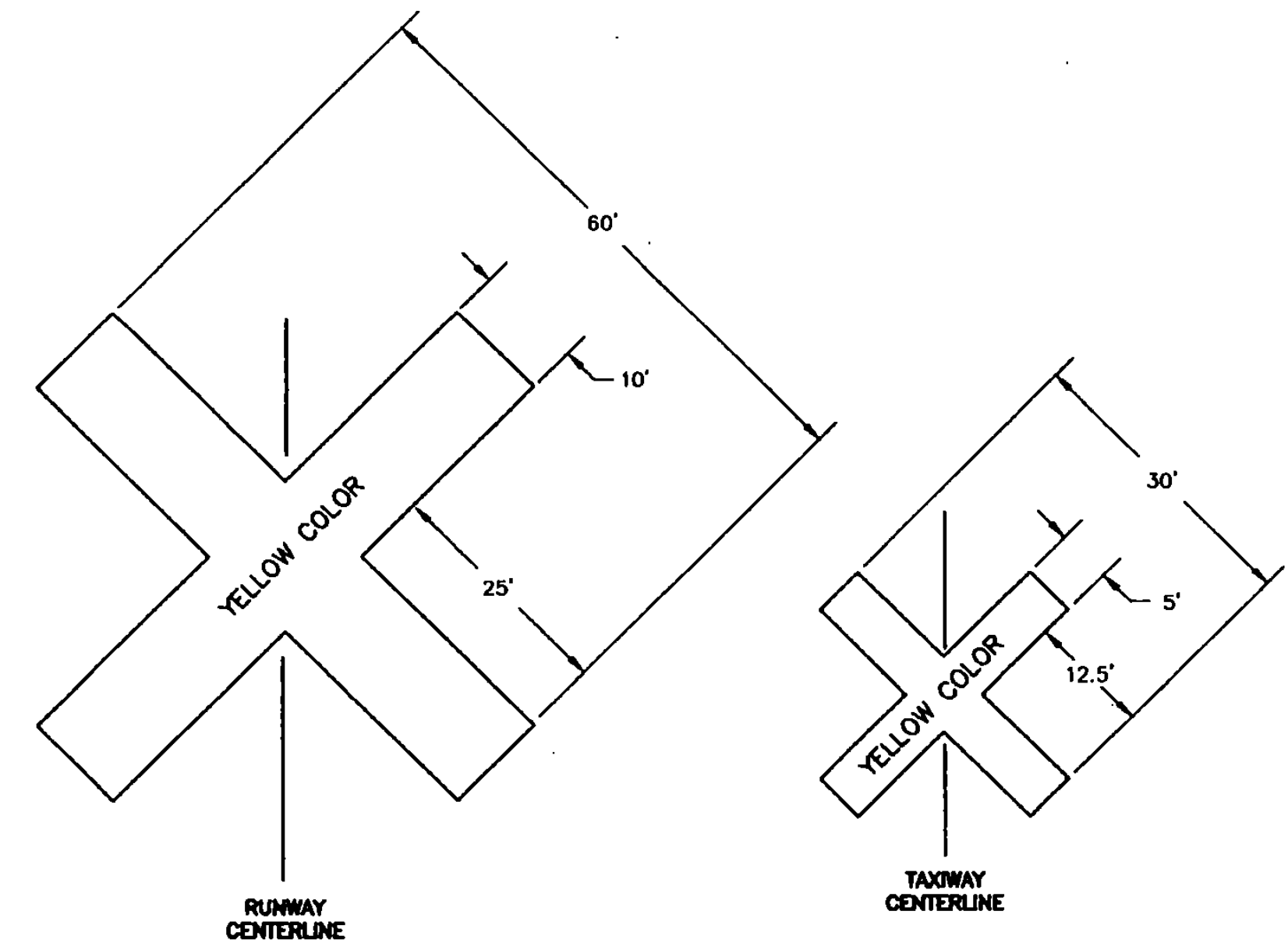
ARROW DETAIL
NOT TO SCALE



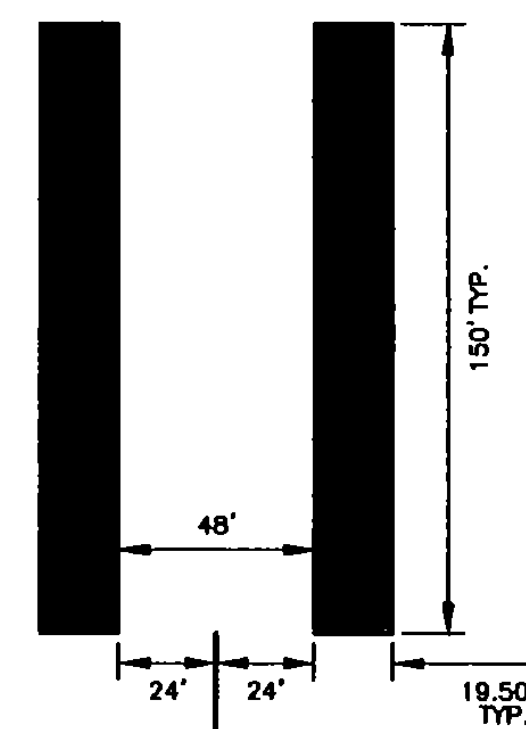
TYPICAL STRIATED MARKINGS
NOT TO SCALE



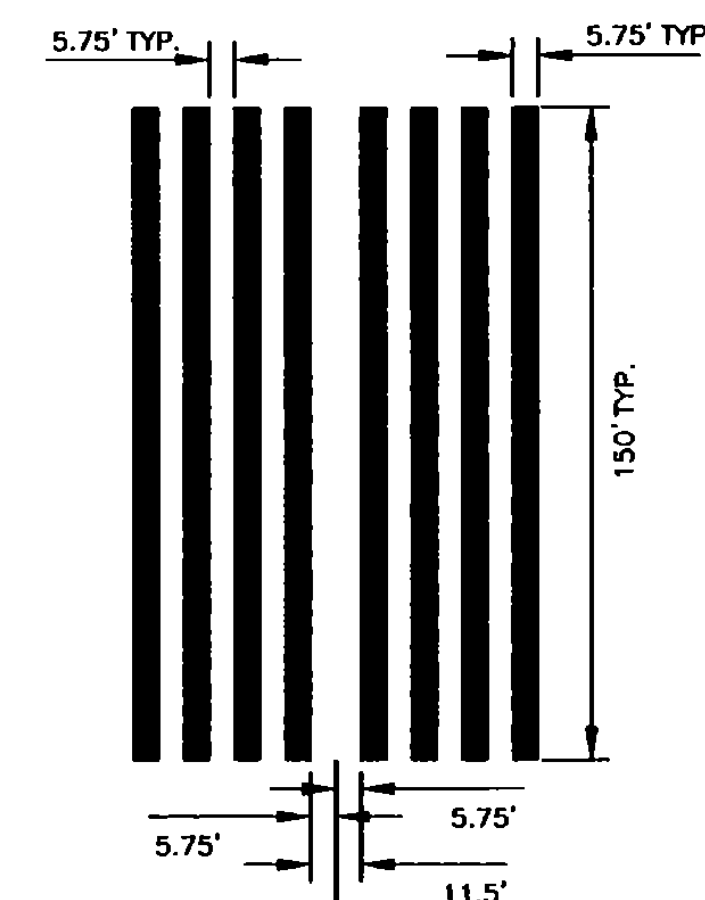
HOLD BAR DETAIL
NOT TO SCALE



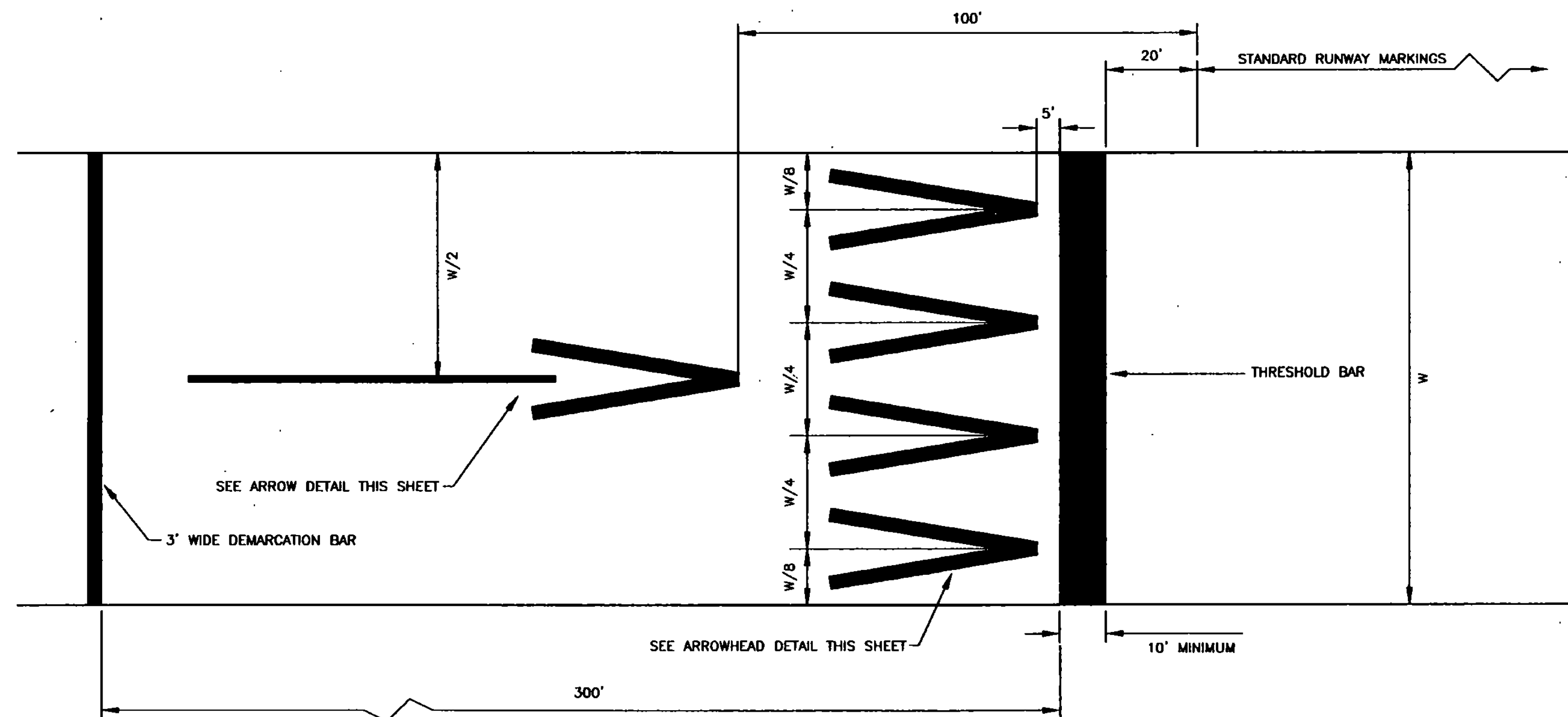
CLOSED RUNWAY AND TAXIWAY MARKINGS
NOT TO SCALE



AIMING POINT DETAIL
NOT TO SCALE

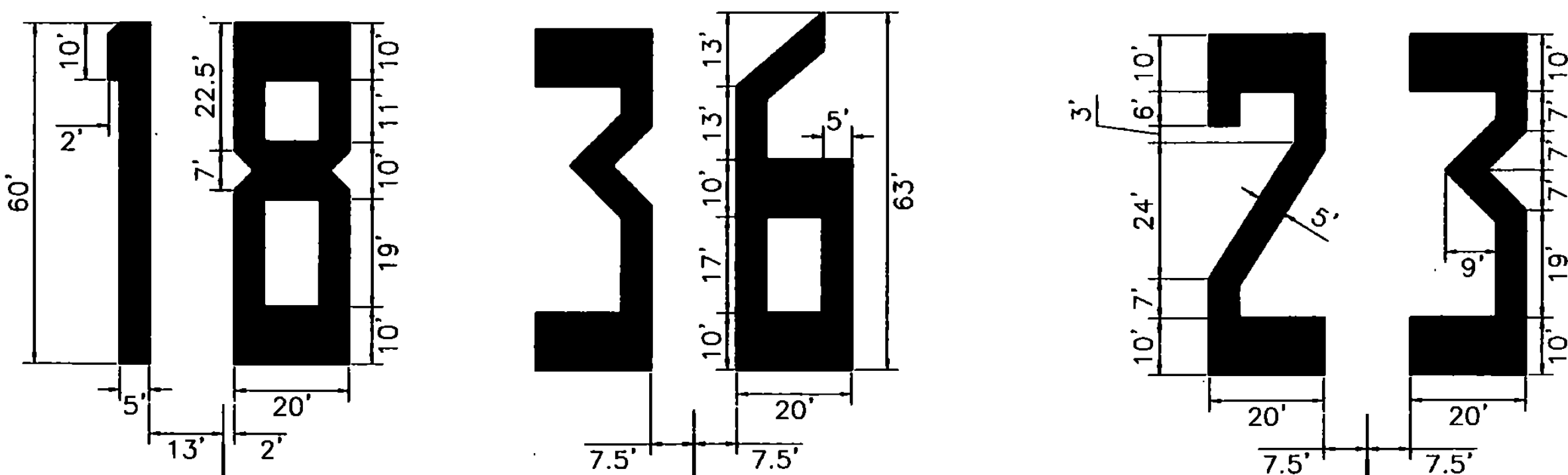


THRESHOLD MARK DETAIL
NOT TO SCALE



DISPLACED THRESHOLD MARKINGS

- NOTES**
- FOUR (4) ARROWHEADS ARE PLACED SYMMETRICALLY ACROSS RUNWAY WITH UNIFORM LATERAL SPACING AS INDICATED.
 - ALL MARKINGS IN THE DISPLACED AREA ARE YELLOW EXCEPT THE THRESHOLD BAR WHICH IS WHITE.



RUNWAY MARKINGS
NOT TO SCALE

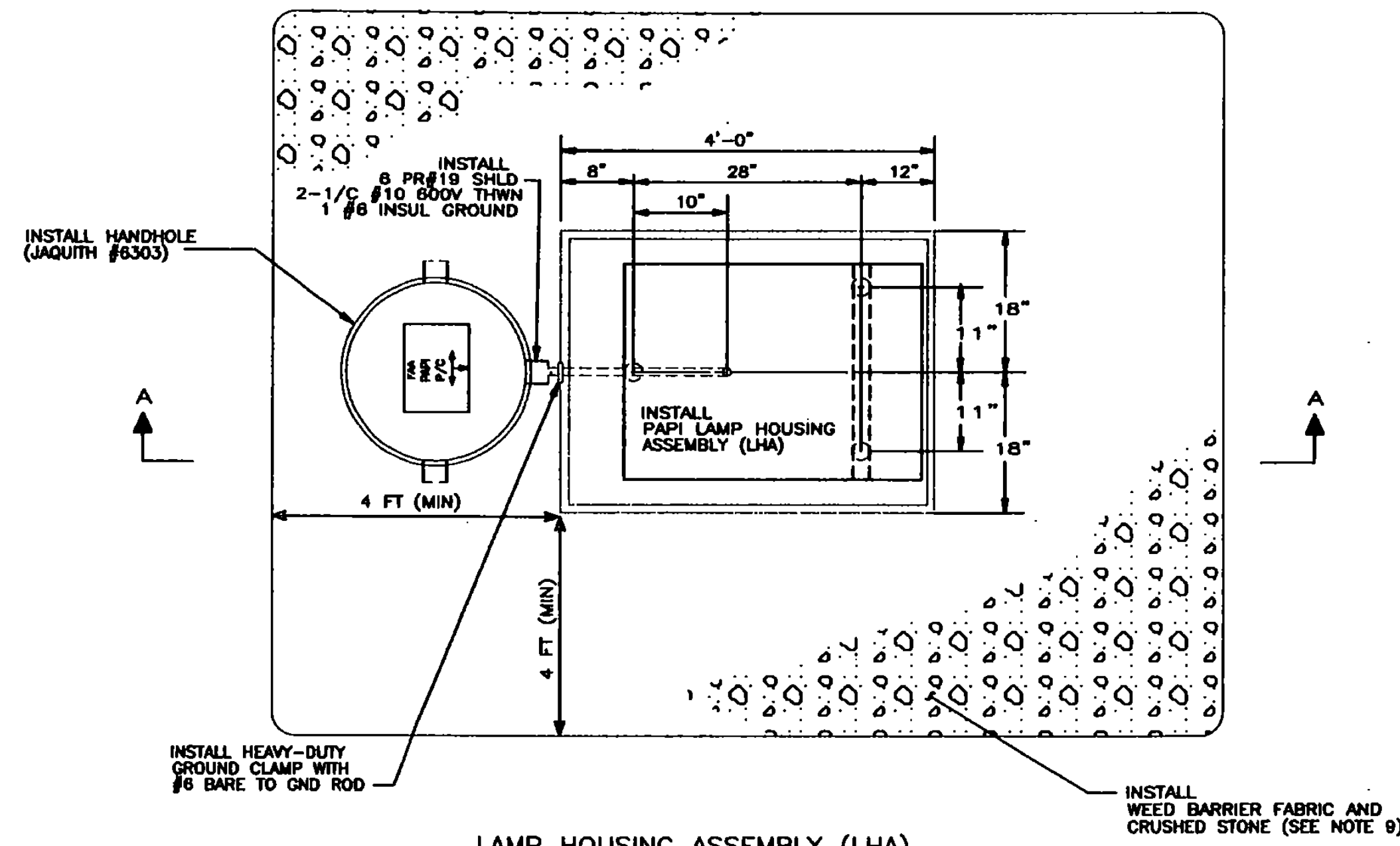
- NOTES**
- ALL RUNWAY MARKINGS ARE WHITE EXCEPT IN THE DISPLACED THRESHOLD AREA.
 - FOR RUNWAY LESS THAN 150' IN WIDTH, THE WIDTH OF THE MARKINGS, SPACES BETWEEN MARKINGS, AND DISTANCE OF MARKINGS FROM THE RUNWAY EDGES ARE CHANGED PROPORTIONALLY.
 - ADJUSTMENTS TO THE LENGTH OF THE CENTERLINE STRIPES AND GAPS, WHERE NECESSARY TO ACCOMMODATE THE RUNWAY LENGTH, ARE MADE NEAR THE RUNWAY MIDPOINT.
 - ALL RUNWAY MARKINGS, EXCEPT CENTERLINE, ARE TO BE STRIATED WITH ALL STRIPES AND SPACES EQUAL IN WIDTH (4" TO 6").
 - PAINT SHALL NOT BE APPLIED UNTIL THE PREPARED SURFACE CONDITION OF THE EXISTING PAVEMENT HAS BEEN APPROVED BY THE ENGINEER.

NO.	DATE	REVISIONS	BY	CHK'D

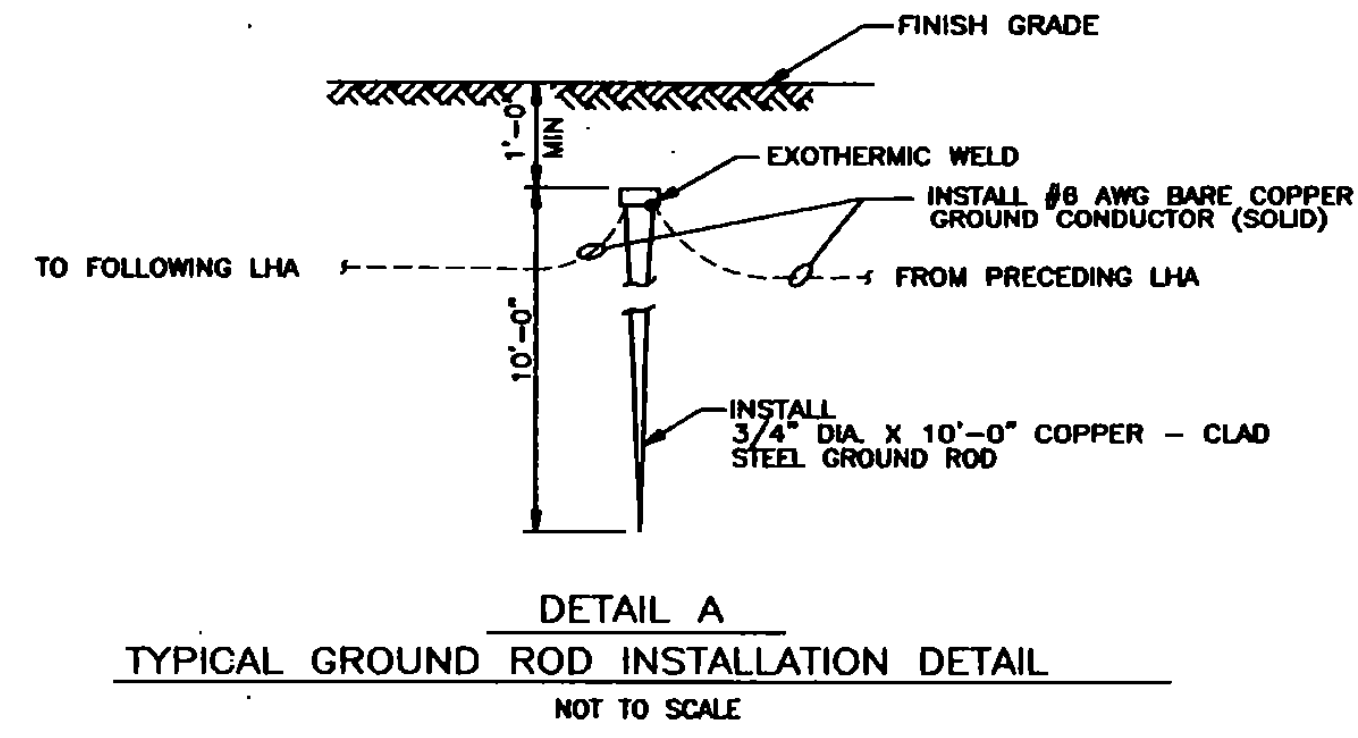
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VERMONT AGENCY OF TRANSPORTATION
COVENTRY, VERMONT
NEWPORT STATE AIRPORT
RUNWAY 18-36 RECONSTRUCTION

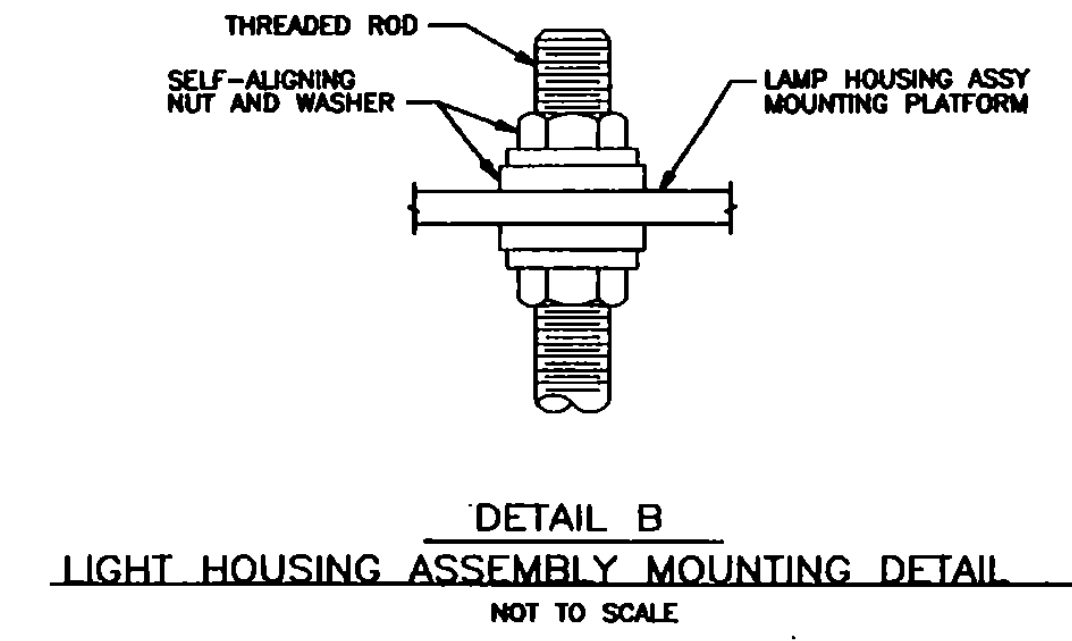
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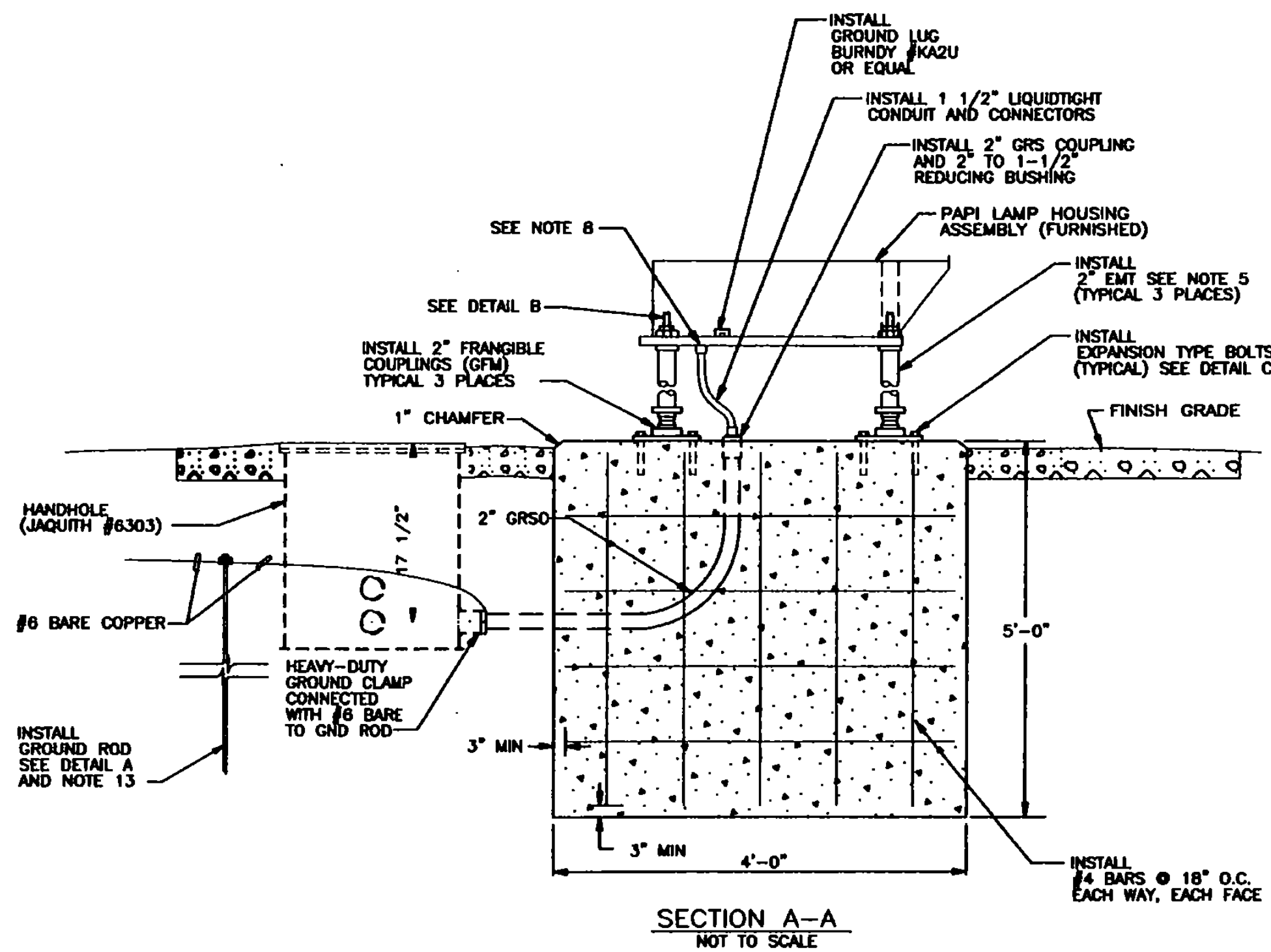
LAMP HOUSING ASSEMBLY (LHA)
PLAN VIEW
NOT TO SCALE



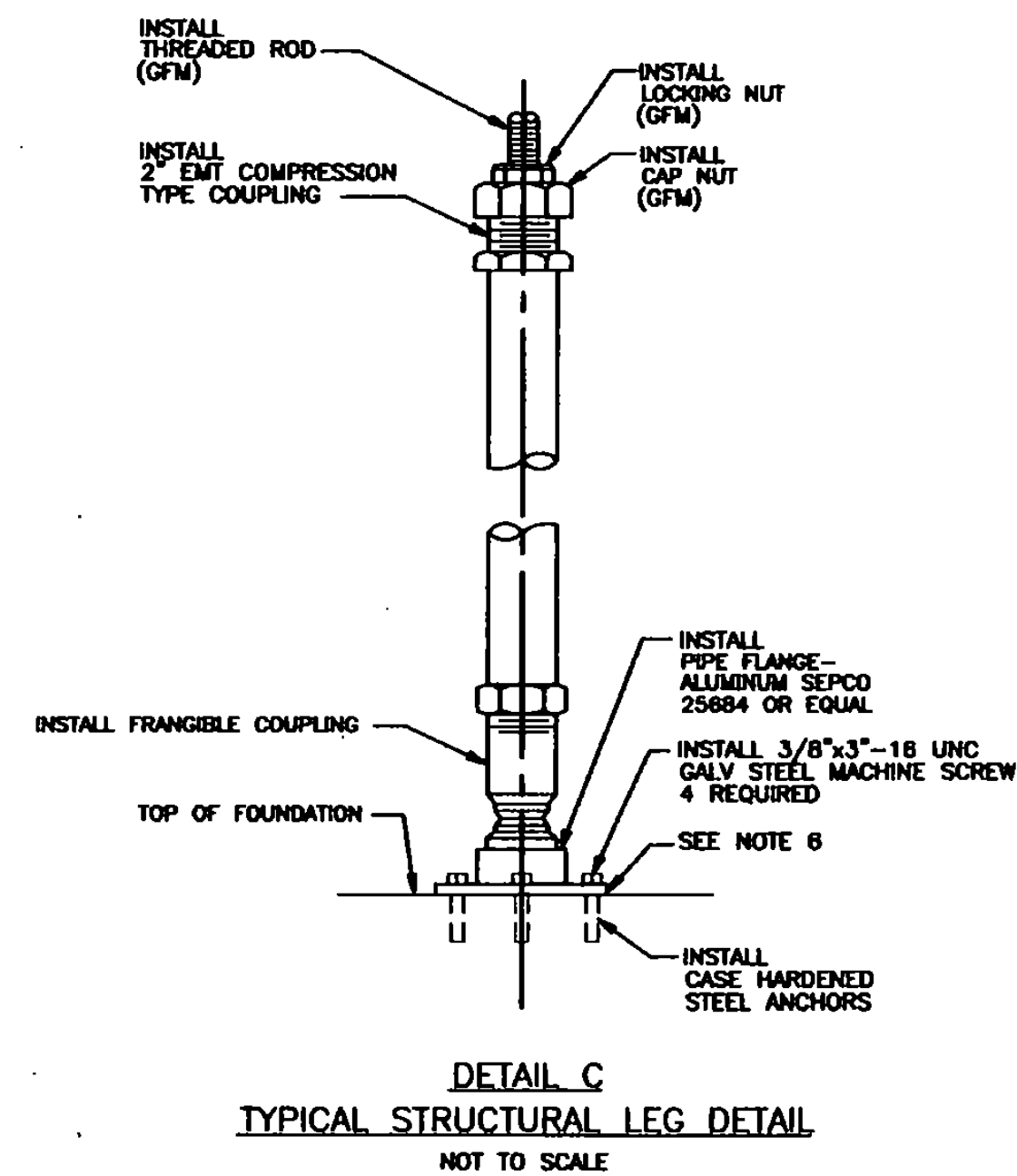
DETAIL A
TYPICAL GROUND ROD INSTALLATION DETAIL
NOT TO SCALE



DETAIL B
LIGHT HOUSING ASSEMBLY MOUNTING DETAIL
NOT TO SCALE



SECTION A-A
NOT TO SCALE



DETAIL C
TYPICAL STRUCTURAL LEG DETAIL
NOT TO SCALE

NOTES

- FOUNDATION DEPTH SHALL BE 6 FEET (MIN). THE BOTTOM OF ALL FOUNDATION EXCAVATIONS SHALL BE FREE OF WATER AND LOOSE EARTH AND SHALL BE COMPACTED TO 95% MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT AS PER AASHTO T-99, PRIOR TO INSTALLING FOUNDATIONS.
- FORM FOUNDATIONS FULL DEPTH SUCH THAT VERTICAL SURFACES ARE SMOOTH AND RESISTANT TO FROST HEAVES.
- CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE CURRENT ISSUE OF ACI-318; BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE. CONCRETE TO DEVELOP MINIMUM STRENGTH OF 3000 PSI IN 28 DAYS WITH MAXIMUM SLUMP OF 3 INCHES AND MAXIMUM AGGREGATE SIZE OF 3/4 INCH. CONCRETE SHALL BE PROTECTED FROM FREEZING DURING AND FOR 7 DAYS AFTER PLACEMENT.
- DRILL HOLES AND INSTALL EXPANSION TYPE ANCHOR BOLTS WHEN PAPI UNITS HAVE BEEN ACCURATELY LOCATED AND AFTER CONCRETE HAS HARDENED SUFFICIENTLY.
- 2" EMT LENGTH SHALL BE SET AS REQUIRED SO THAT THE BEAM CENTERS OF ALL LIGHT UNITS SHALL BE WITHIN +/- 1 INCH OF A HORIZONTAL PLANE. THIS HORIZONTAL PLANE SHALL BE 2'-0" ABOVE THE ELEVATION OF THE RUNWAY CROWN PERPENDICULAR TO THE PAPI UNITS.
- COAT THE FLANGE SURFACE RESTING ON THE CONCRETE WITH AN ASPHALTIC COMPOUND FOR METAL PROTECTION.
- WHERE REQUIRED AT PAPI FOUNDATIONS, FILL SHALL BE PLACED IN LAYERS NOT EXCEEDING 6 INCHES, EACH LAYER SHALL BE THOROUGHLY COMPACTED TO 95% OF MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT IN ACCORDANCE WITH AASHTO-T99.
- FOLD BACK UNUSED SHIELDED PAIRS AND TAPE TO PREVENT WATER INFILTRATION; LEAVE IN THE LHA UNIT.
- WEED BARRIER COVERED WITH A 4 INCH LAYER OF 3/4" CRUSHED STONE SHALL BE PLACED IN THE AREA EXTENDING 4 FEET FROM EACH SIDE OF EACH LHA, POWER AND CONTROL STATION.
- A #8 SOLID BARE COPPER GROUND SHALL RUN THROUGH ALL CONDUITS AND SHALL BE ATTACHED TO GROUND BUSHINGS AT EACH CONDUIT END AND SHALL BE ATTACHED TO GROUND LUGS IN EACH LHA.
- ALL MATERIAL AND EQUIPMENT NOT LISTED UNDER "FURNISHED MATERIAL" SHALL BE SUPPLIED BY THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION OF ALL MATERIAL AND EQUIPMENT.
- ALL RIGID CONDUIT FITTINGS, NUTS, BOLTS AND STEEL WORK SHALL BE GALVANIZED, OR STAINLESS STEEL. ALL FITTINGS USED WITH RIGID CONDUIT SHALL BE THREADED TYPE.
- INSTALL GROUND RODS AT THE END OF ALL CABLE RUNS, EVERY 200' ALONG RUNS OR AS DIRECTED ON THE DRAWING.

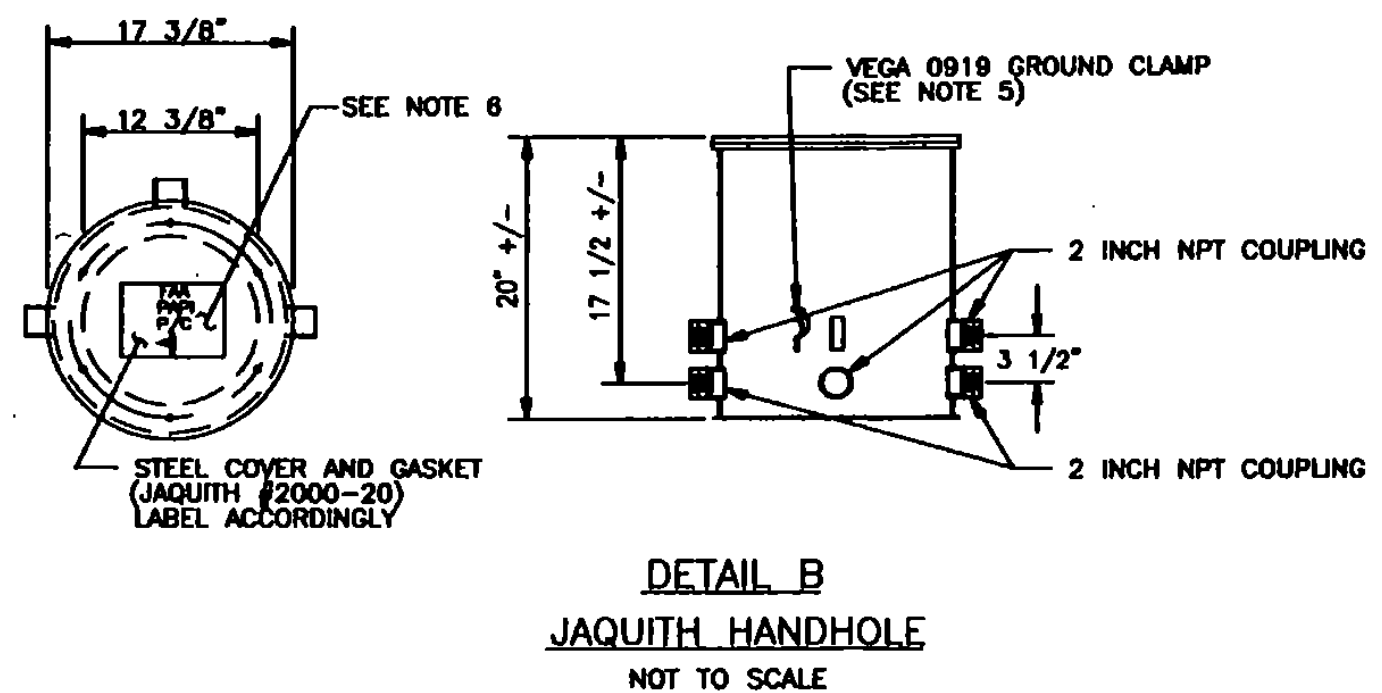
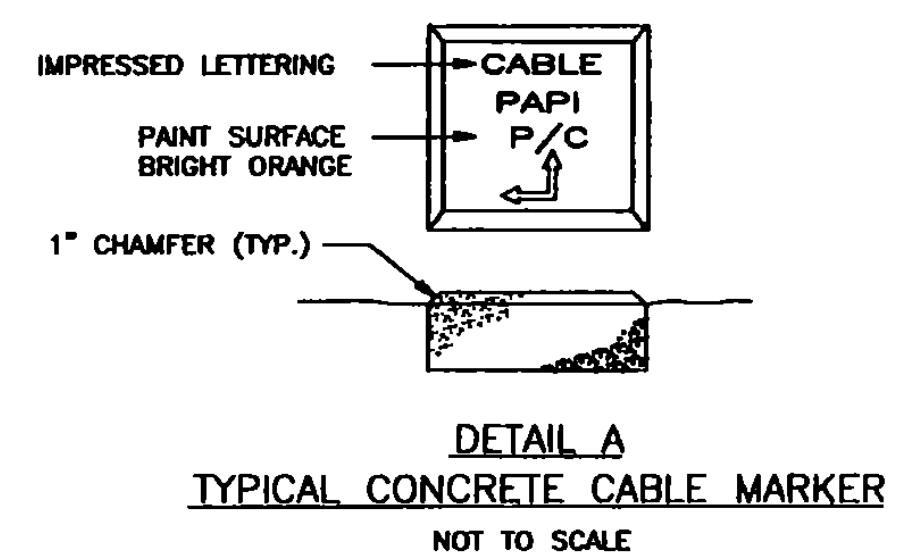
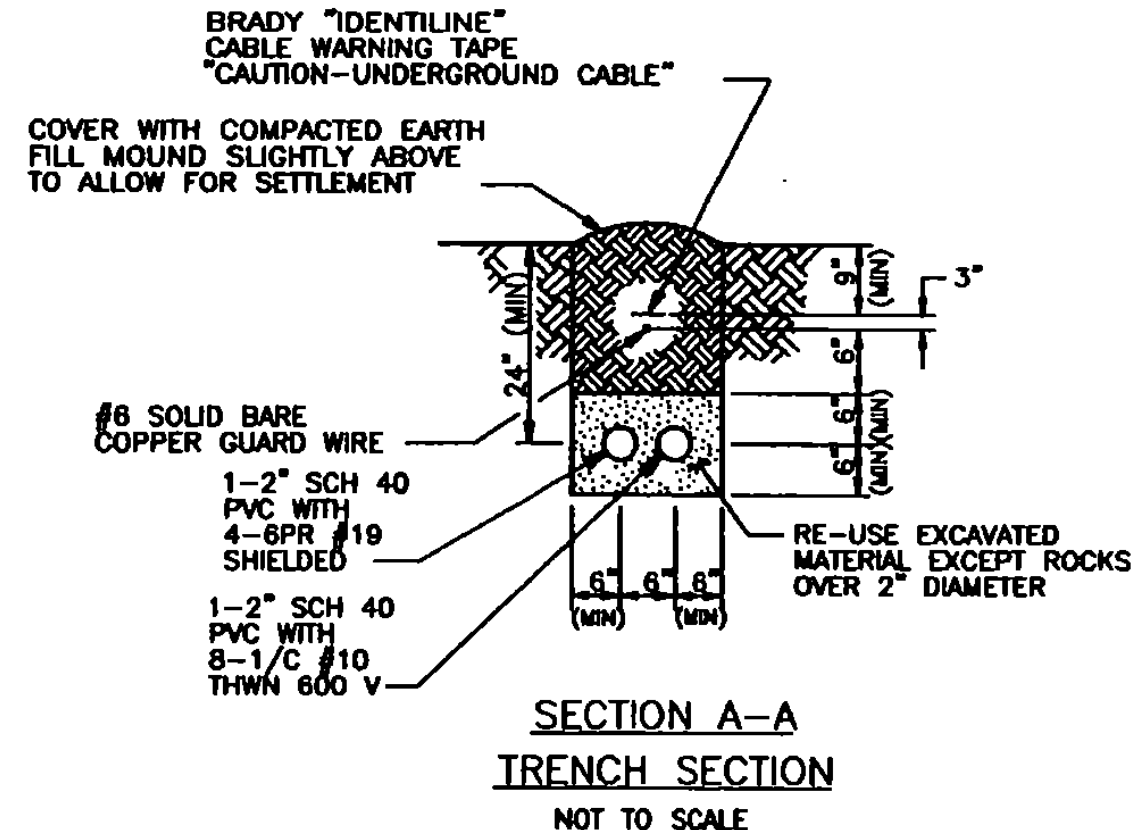
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NO.	DATE	REVISIONS	BY	CHK'D

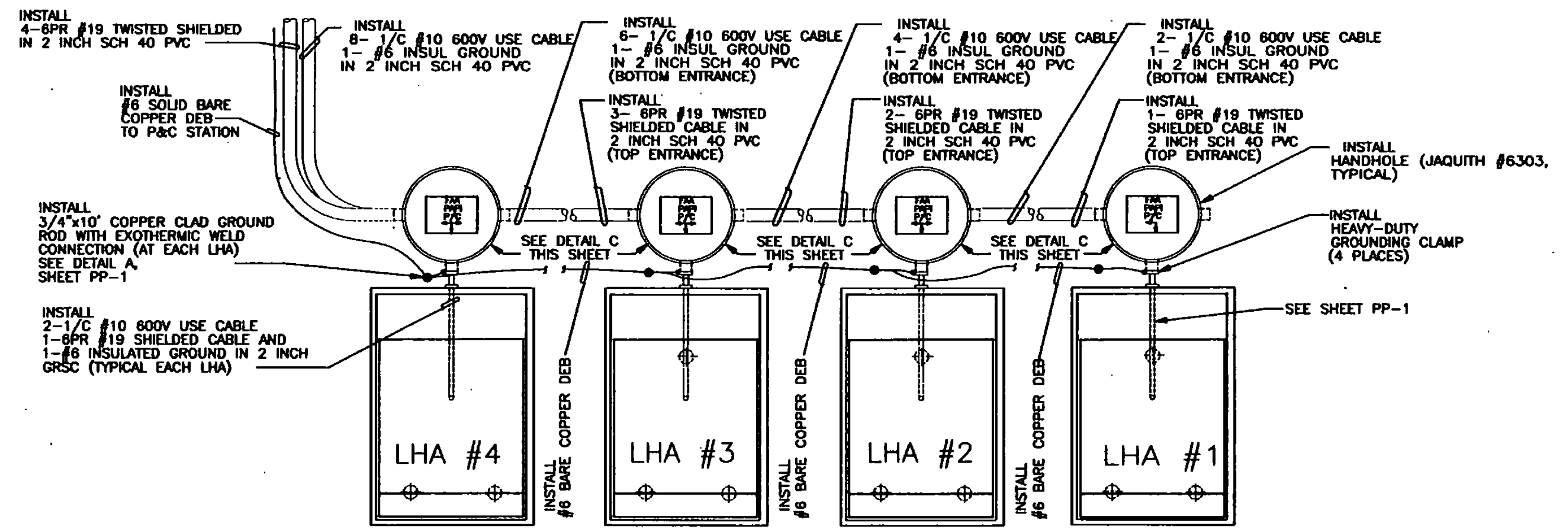
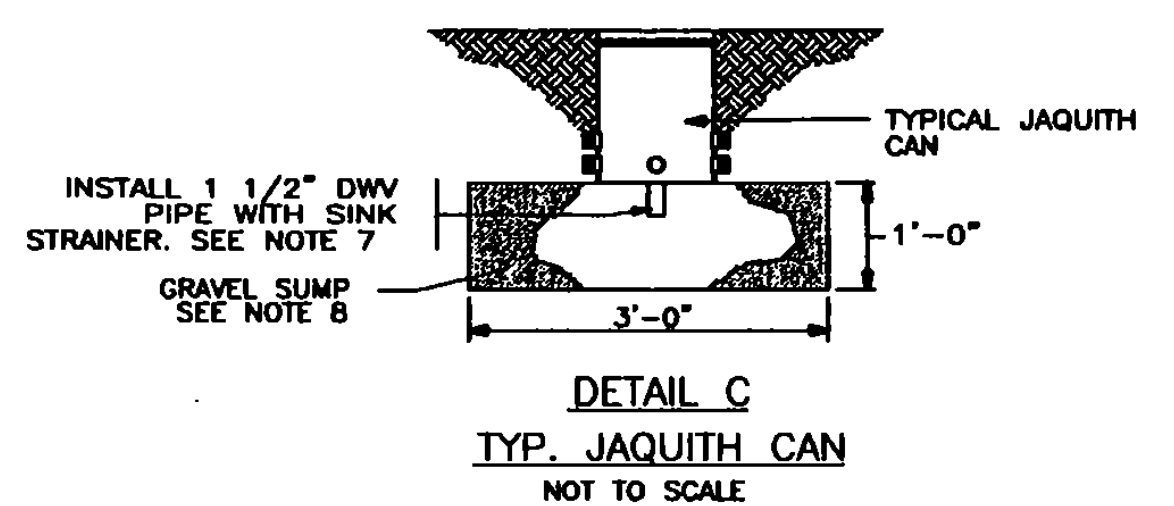
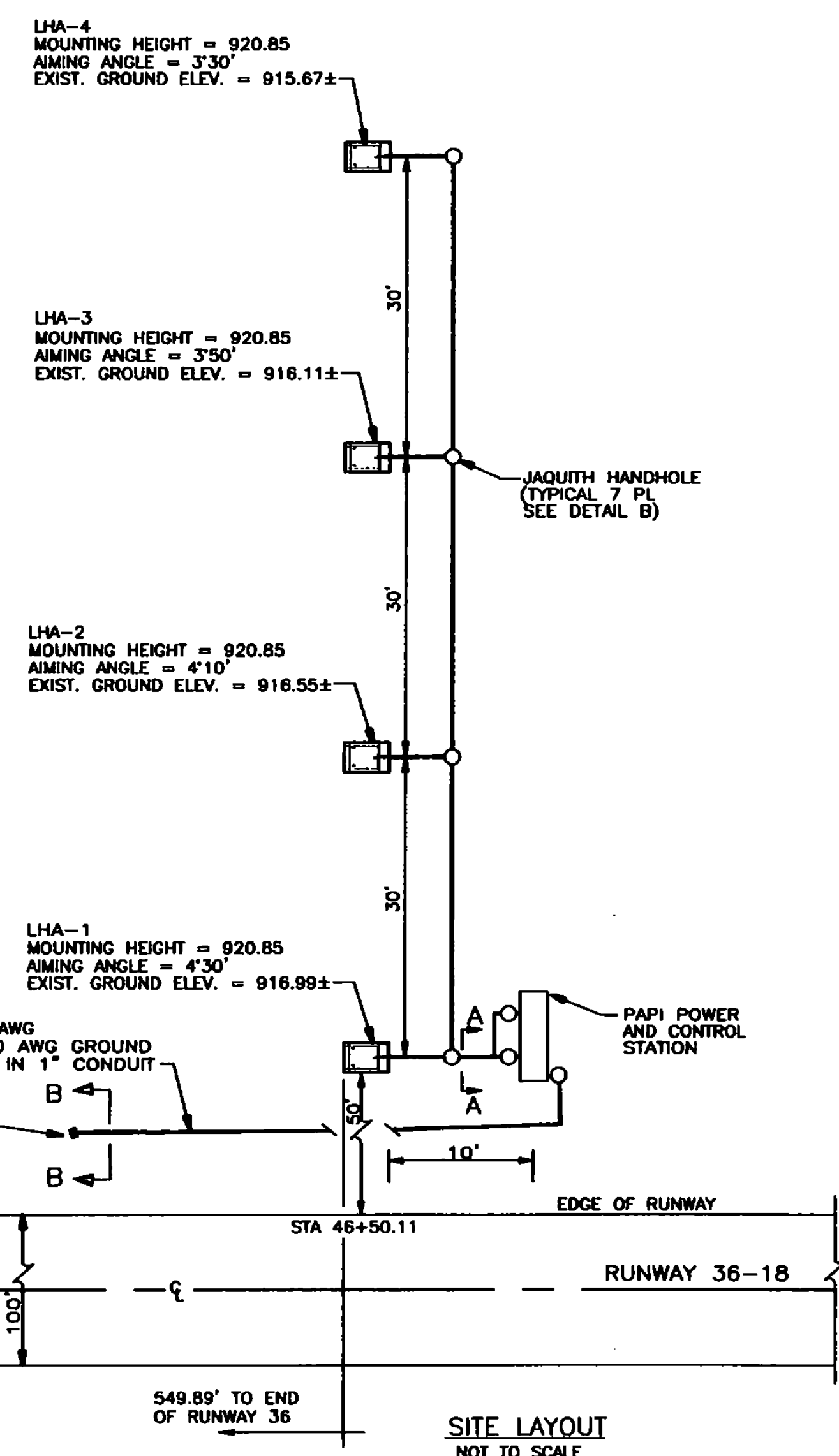
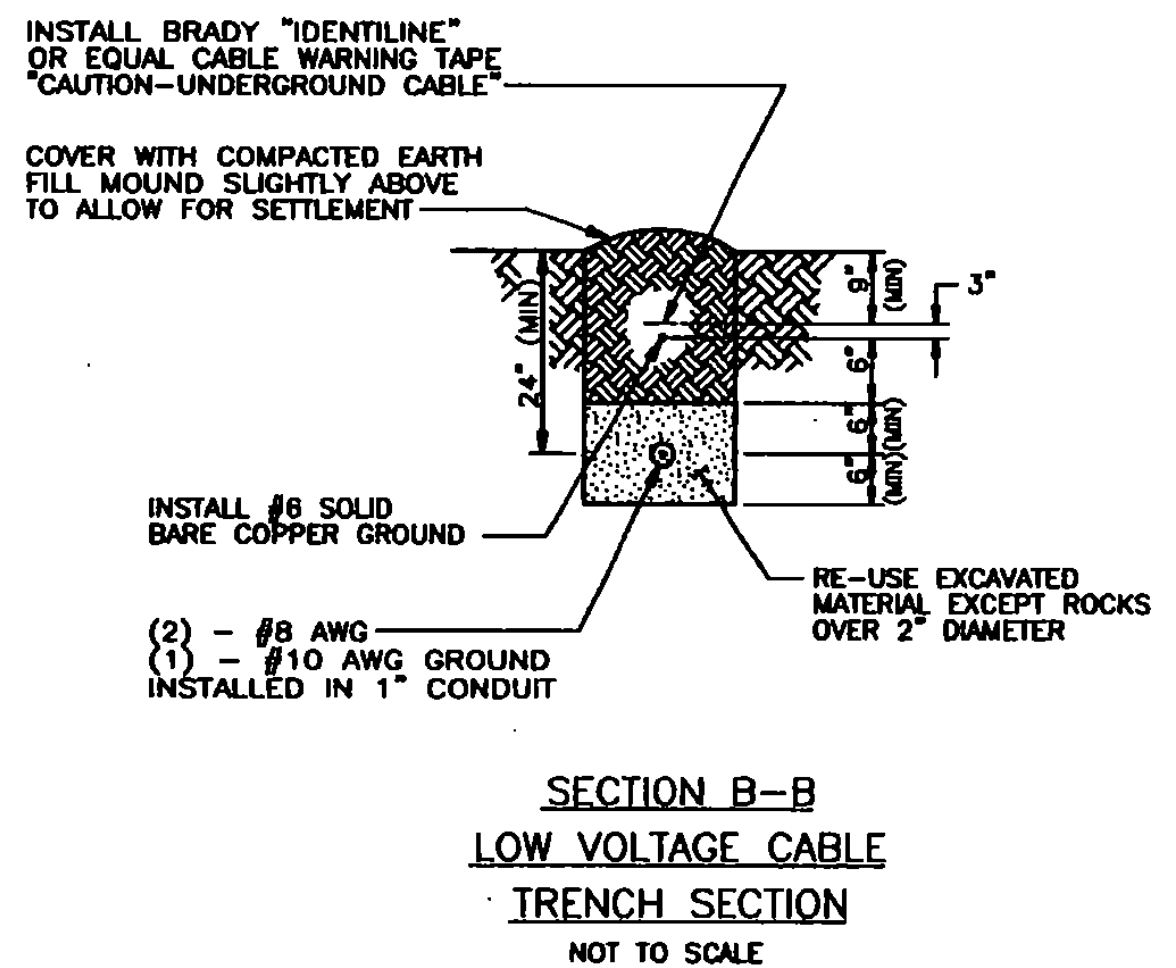
DuBois & King
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VERMONT AGENCY OF
TRANSPORTATION
COVENTRY, VERMONT
NEWPORT STATE AIRPORT
RUNWAY 18-36 RECONSTRUCTION
PAPI MOUNTING PLAN
SECTIONS AND FOUNDATION DETAILS

DRAWN BY JJP	DATE MAR. 2000
CHECKED BY N15500	PROJ. NO. N15500
PRAL. ENG. JAA	DRAW. NO. 1
SHEET PP-1	



- NOTES:
1. ALL GRSC SWEEPS SHALL HAVE GROUND CLAMPS AND BE CONNECTED TO A GROUND ROD VIA #6 SOLID BARE CU WIRE.
 2. CABLE MARKERS SHALL BE PLACED EVERY 200 FEET ALONG TRENCH AND AT ANY CHANGE IN DIRECTION.
 3. ALL TRENCHES SHALL BE FILLED IN LAYERS NOT EXCEEDING 6" AND EACH LAYER SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY. FILL SHALL BE OF STRUCTURAL NATURE ONLY.
 4. ALL INSULATED CABLE SHALL BE PROPERLY AND PERMANENTLY COLOR CODED AT EACH END PRIOR TO INSTALLATION.
 5. CONTRACTOR SHALL VERIFY THAT GROUND LUGS HAVE BEEN INSTALLED ON BOTH INTERIOR AND EXTERIOR OF JAQUITH CAN. IF CLAMPS DO NOT EXIST, CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION.
 6. CONTRACTOR SHALL FURNISH AND INSTALL BRASS IDENTIFICATION PLATES. THESE PLATES SHALL BE 8" X 8" WITH THREE ROWS OF CHARACTERS (2 FOR WORDS, 1 FOR DIRECTION ARROW), AND 1" LETTERING.
 7. CONTRACTOR SHALL DRILL 1 1/2" HOLE THROUGH THE BOTTOM OF JAQUITH CAN, AND SPRAY COLD GALV. ON CAN PRIOR TO INSTALLATION.
 8. INSTALL A 3"x3"x1' 3/4" CRUSHED STONE SUMP UNDER ALL JAQUITH CANS. THE CRUSHED STONE SHALL BE WRAPPED IN GEOTEXTILE FABRIC.



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NO.	DATE	REVISIONS	BY	CHK'D

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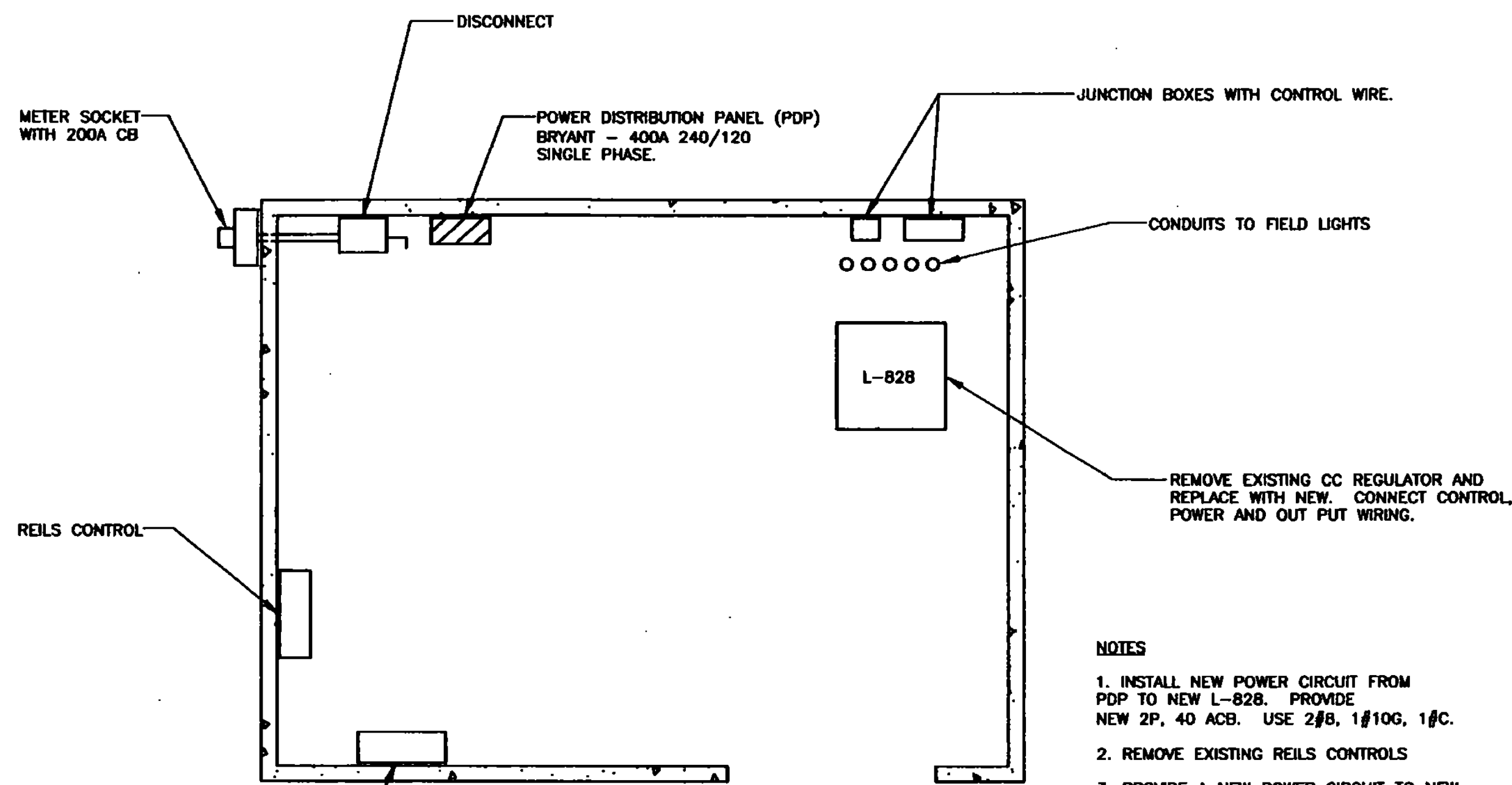
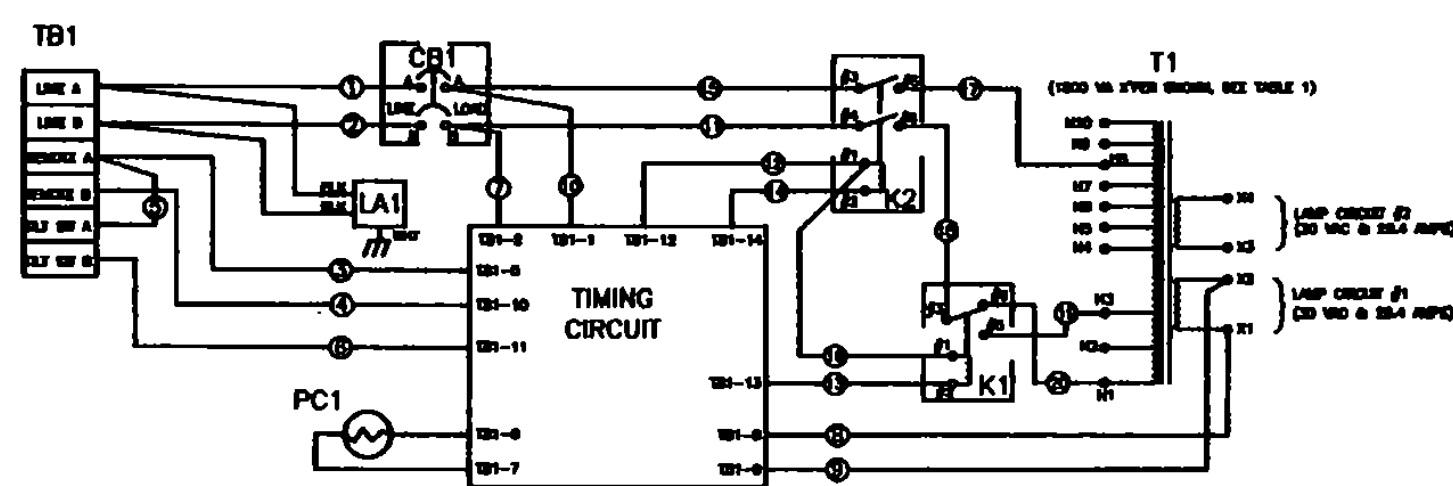
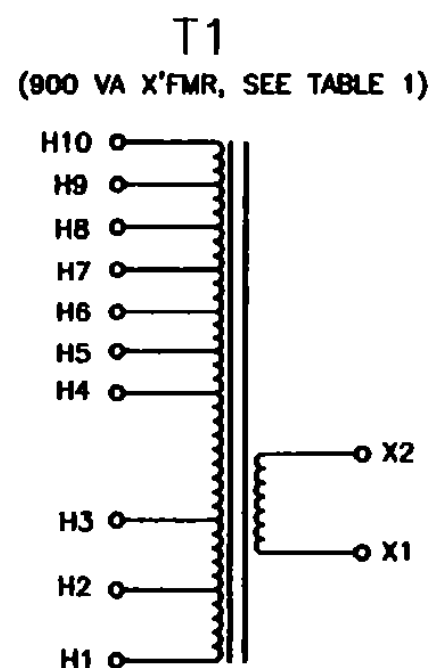
VERMONT AGENCY OF TRANSPORTATION
 COVENTRY, VERMONT
 NEWPORT STATE AIRPORT
 RUNWAY 18-36 RECONSTRUCTION
 PAPI GENERAL INSTALLATION DETAILS

DESIGN BY JJP	DATE MAR. 2000
CHECKED BY JAA	PROJ. NO. N15500
PRD. ENR. JAA	DRAW. NO. 1
SHEET PP-2	

NOTICE: WIRE #17 HAS BEEN FACTORY PRE-SET TO T1-H8 (235-245V) TERMINAL. CHANGE WIRE #17 TERMINATION SUCH THAT THE PAPI LAMP VOLTAGE IS BETWEEN 28.4 AND 31.2 VOLTS.

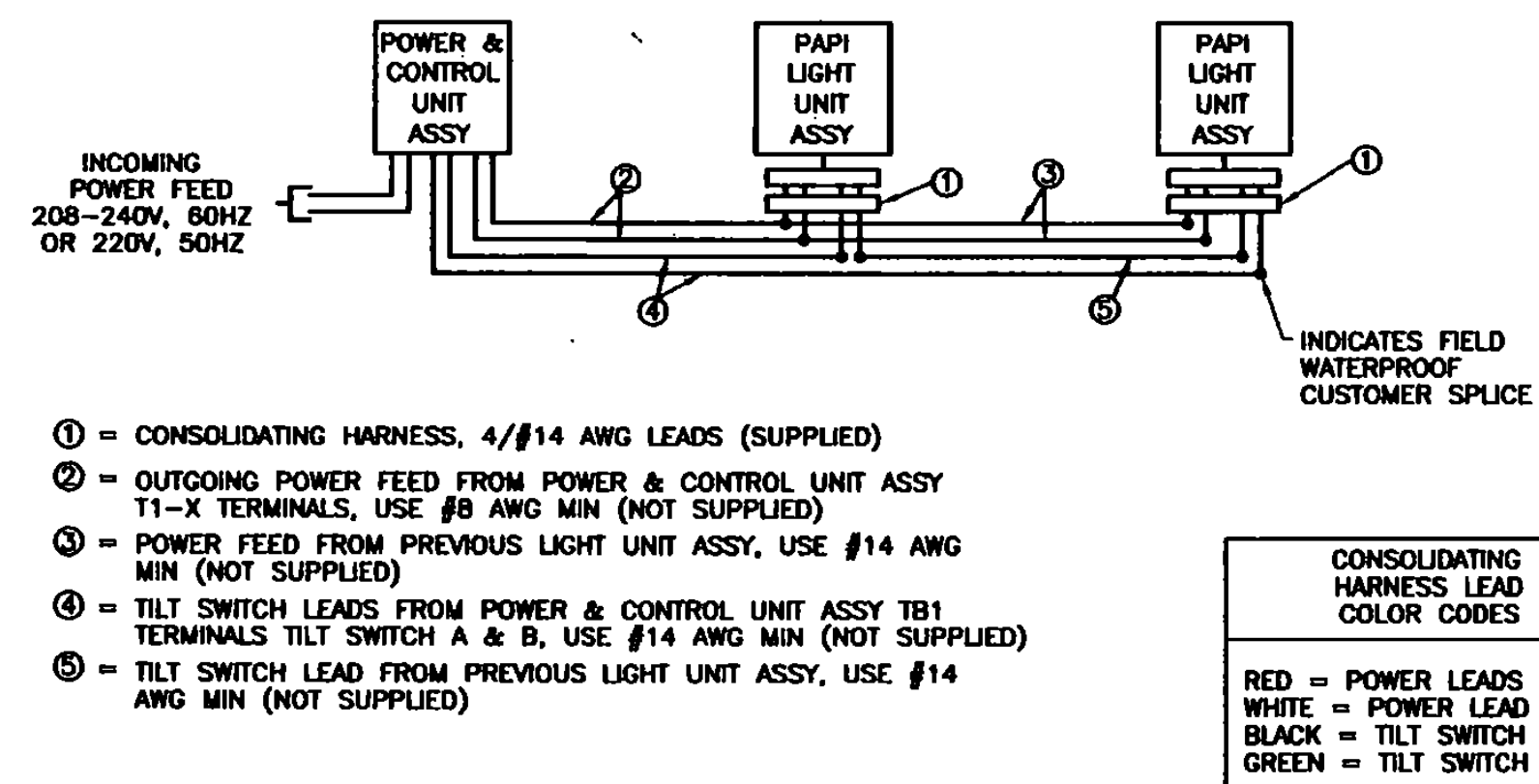
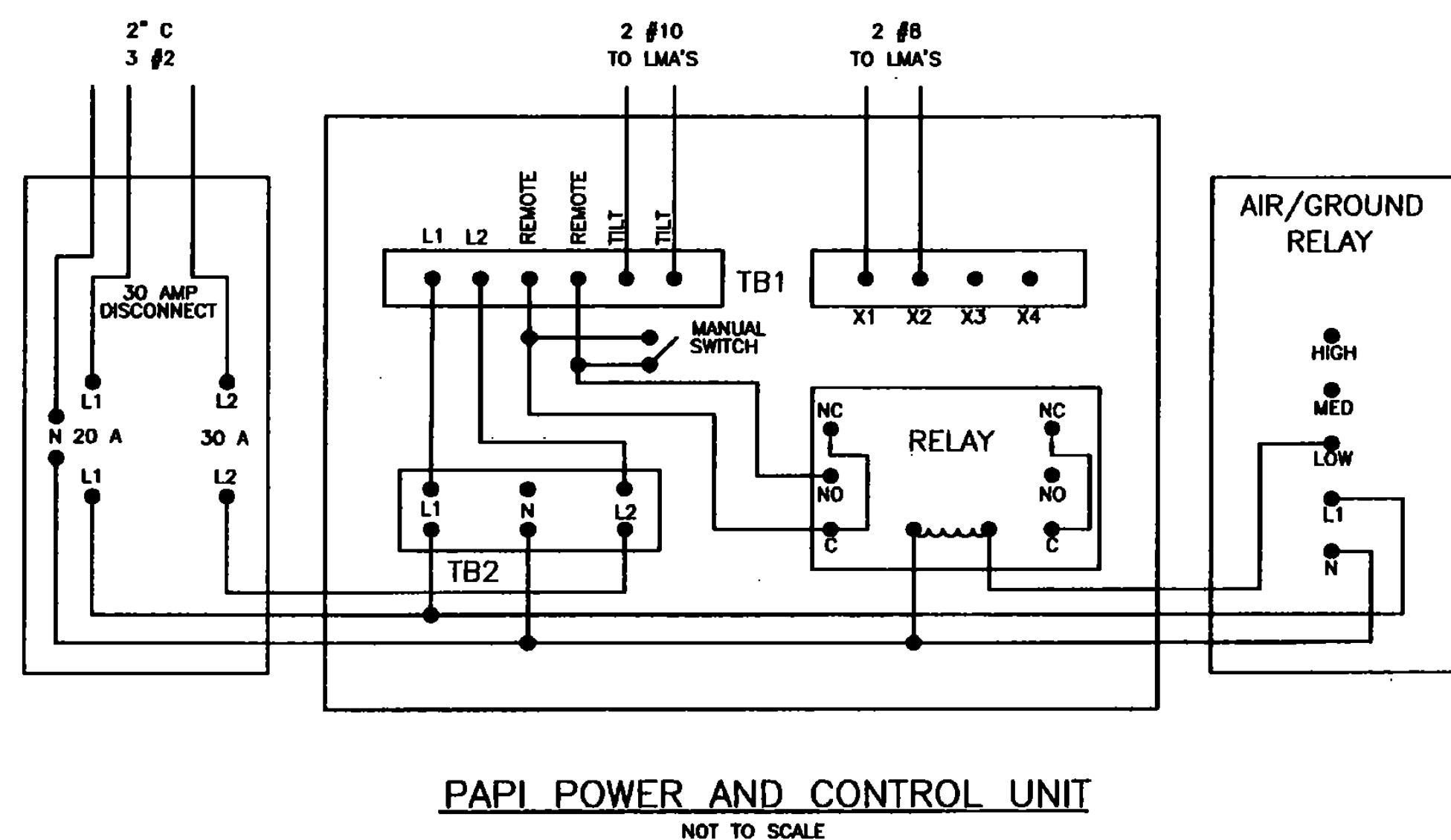
TABLE 1
(REFERENCE ONLY)

LINE VOLTAGE	CONNECT TO WIRE #17
195-205	H4
205-215	H5
215-225	H6
225-235	H7
235-245	H8
245-255	H9
255-265	H10



NOTES

1. INSTALL NEW POWER CIRCUIT FROM PDP TO NEW L-828. PROVIDE NEW 2P, 40 ACB. USE 2#8, 1#10G, 1#C.
2. REMOVE EXISTING REELS CONTROLS
3. PROVIDE A NEW POWER CIRCUIT TO NEW REELS FROM PANEL PDP. PROVIDE NEW 20A, 2PCB. 2#8, 1#10G. SEE SHEET LP-1 FOR CONDUIT SIZE AND ROUTING.
4. PROVIDE NEW POWER FROM PDP TO PAPI. PROVIDE NEW 20A, 2PCB. 2#8, 1#10G SEE SHEET LP-1 FOR CONDUIT SIZE AND RATING.
5. RECONNECT THE AIR TO GROUND RECEIVER L-854 TO THE OPERATING CONTROLS OF THE CONSTANT CURRENT TRANSFORMER L-828 TO MATCH THE EXISTING CONTROL PATTERN. THIS WILL ALLOW FOR THREE LEVELS OF LIGHTING.



NOTE: ON 8812A-2-11 OR -20 PAPI SYSTEMS, NO TILT SWITCH WIRES (4) & (5) ARE REQUIRED. A JUMPER WIRE (#18 AWG MIN) MUST BE ADDED BETWEEN POWER & CONTROL UNIT ASSY TB1 TERMINALS TILT SWITCH A & B FOR UNIT FUNCTION.

L-881 STYLE "A" SYSTEM

NO SCALE
PART NO's 8812A-1, 8812A-2 & 8812A-2-11 OR -20
PAPI FIELD WIRING CONNECTIONS

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VERMONT AGENCY OF TRANSPORTATION
COVENTRY, VERMONT
NEWPORT STATE AIRPORT
RUNWAY 18-36 RECONSTRUCTION
PAPI WIRING/ ELECTRIC ROOM
DIAGRAM AND DETAIL

DESIGN BY JJP	DATE MAR. 2000
CHECKED BY	PROJ. NO. N15500
PROJ. ENG. JAA	DRWN. NO. 1
SHEET PP-4	

NO.	DATE	REVISIONS	BY	CHKD

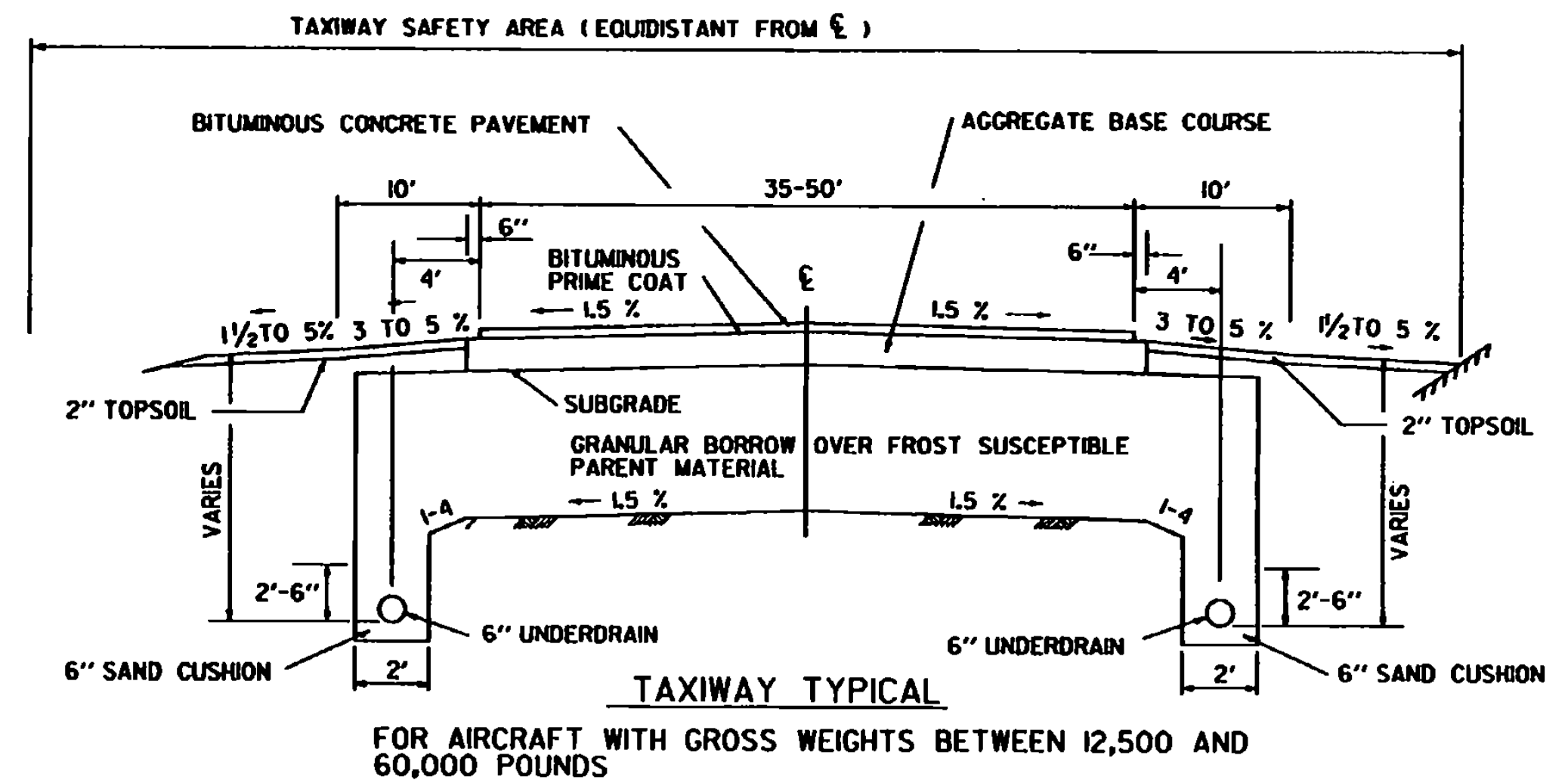
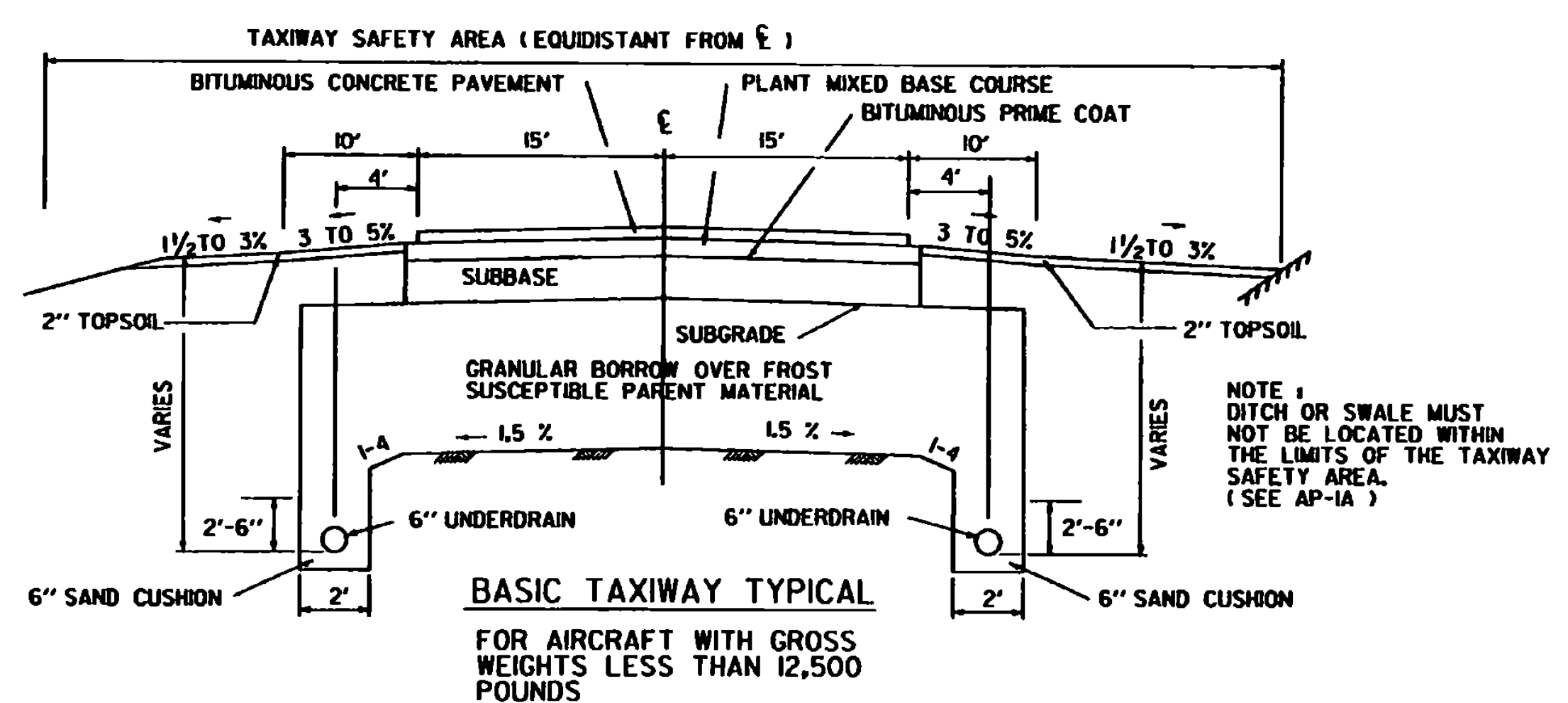
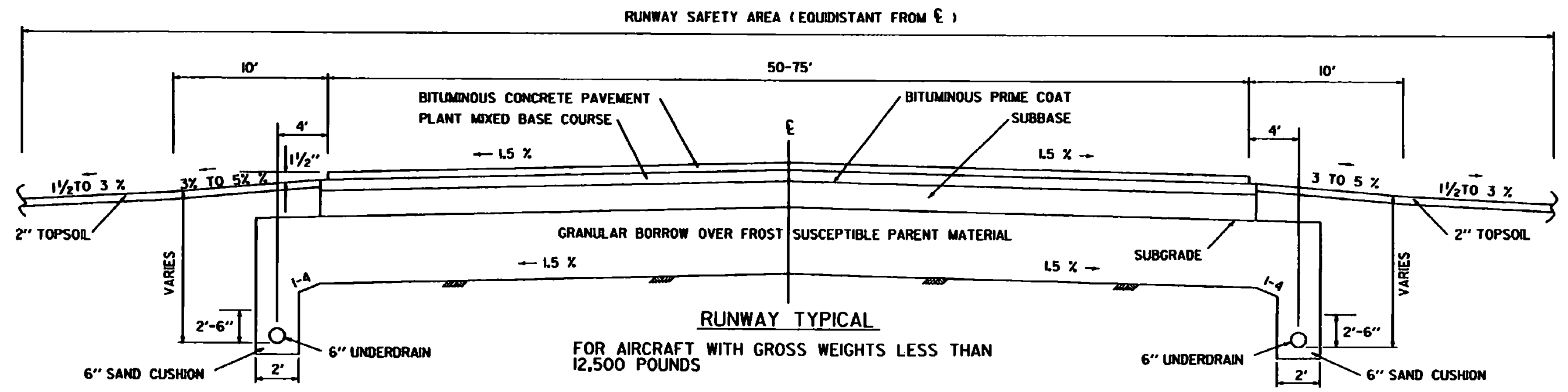
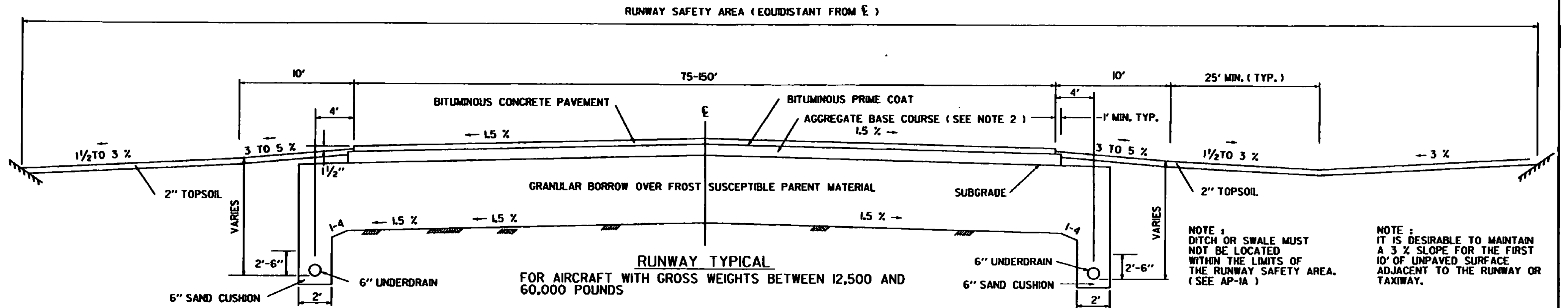
NOTES

1. PAVEMENT DESIGN IS BASED ON CURRENT FAA ADVISORY CIRCULAR .

AIRPORT	AVG. FROST PENETRATION	REQUIRED PAVEMENT SECTION FOR 80% FROST PROTECTION	
		65% (MINIMUM)	80% (DESIRED)
BENNINGTON	58"	38"	46"
CALEDONIA	72"	47"	58"
E.F. KNAPP	70"	45"	56"
FRANKLIN	70"	45"	56"
MIDDLEBURY	65"	42"	52"
MORRISVILLE-STOWE	72"	47"	58"
NEWPORT	75"	49"	60"
RUTLAND	65"	42"	52"
HARTNESS	60"	39"	48"

2. FOR SURFACES DESIGNED FOR AIRCRAFT WITH GROSS TAKEOFF WEIGHTS GREATER THAN 30,000 POUNDS, USE CRUSHED AGGREGATE BASE COURSE, TYPE II.
FOR SURFACES DESIGNED FOR AIRCRAFT WITH GROSS TAKEOFF WEIGHTS BETWEEN 12,500 POUNDS AND 30,000 POUNDS, USE EITHER CRUSHED AGGREGATE BASE COURSE, TYPE I OR UNCRUSHED AGGREGATE BASE COURSE.

3. FOR AIRPORT DESIGN GROUP CRITERIA, REFER TO CURRENT FAA ADVISORY CIRCULAR .



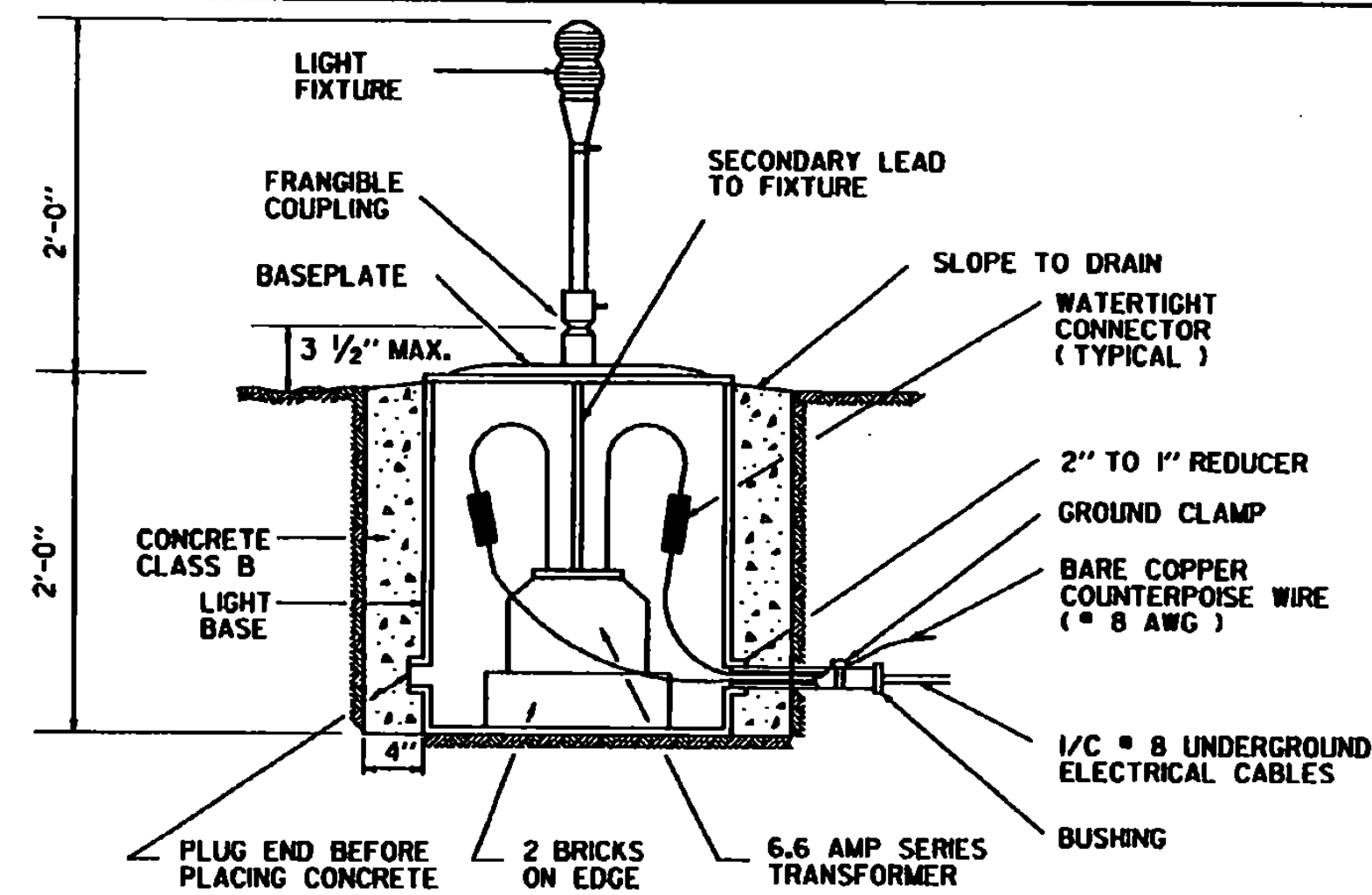
REVISIONS AND CORRECTIONS
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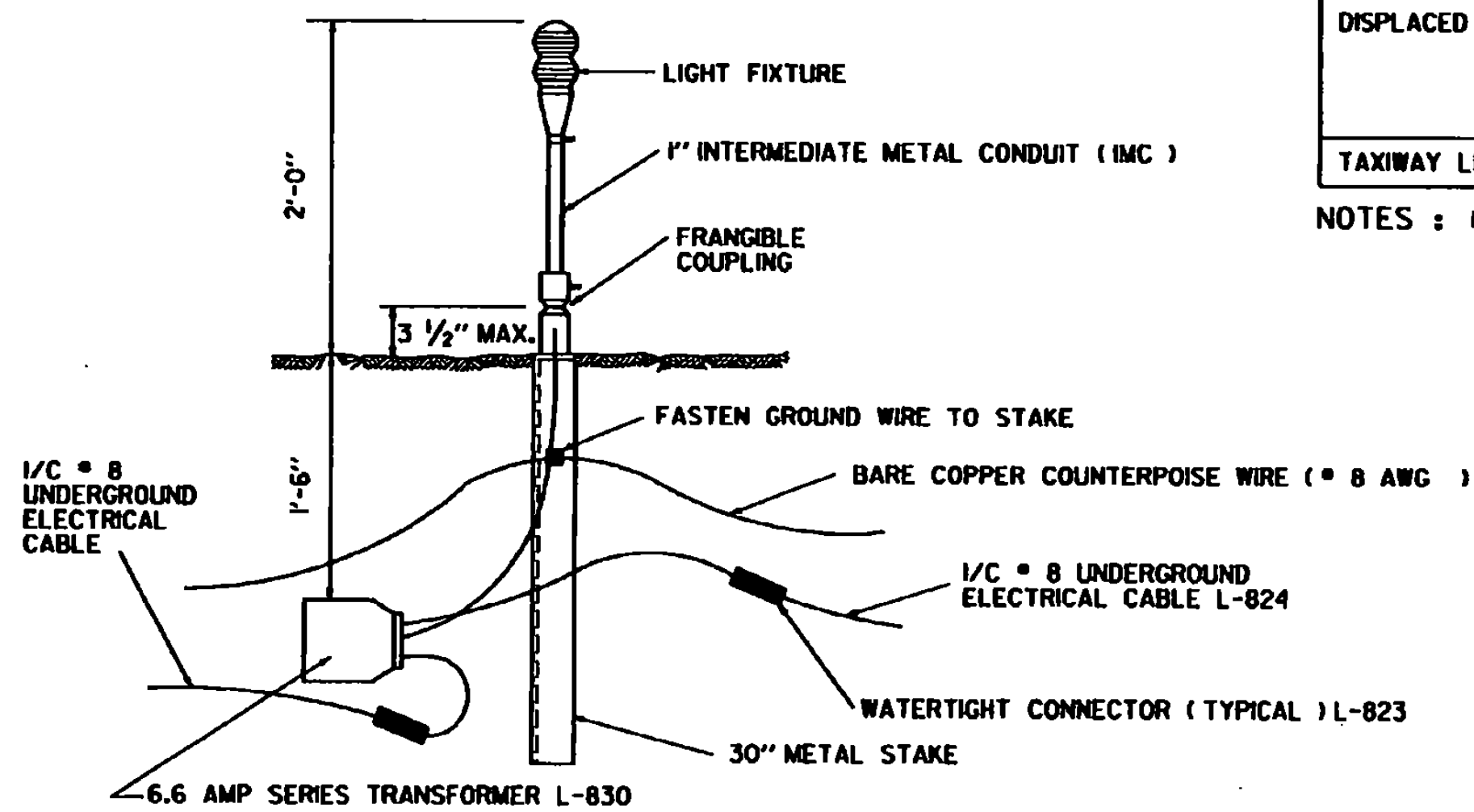
RUNWAY AND TAXIWAY TYPICALS

STANDARD AP-1



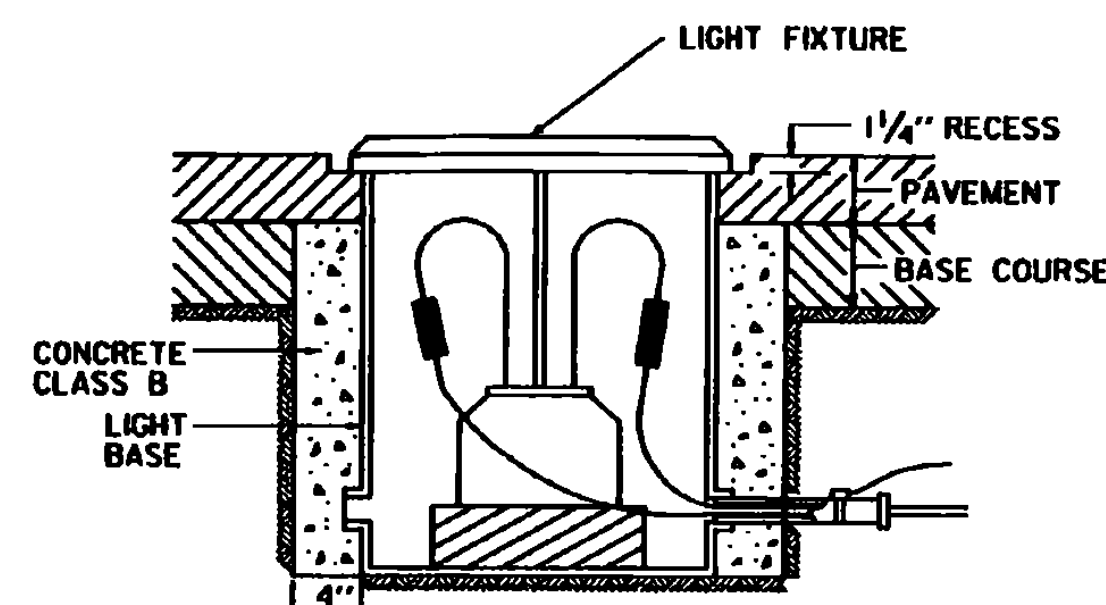
- NOTES :
1. PROVIDE 3 FEET OF SLACK IN CABLES AT TRANSFORMER. SEAL END OF CONDUIT (DUCT SEAL)
 2. PROVIDE 1/2" PER FT. PITCH ON ALL CONDUITS

BASE MOUNTED UNIT
ELEVATED LIGHT
NO SCALE



- NOTES :
1. PROVIDE 3 FEET OF SLACK IN CABLES AT TRANSFORMER. 30" METAL STAKE SHALL BE MADE OF GALVANIZED STEEL ANGLE 2" x 2" x 3/8" WITH A SUITABLE TAPPED FITTING BOLTED AT THE TOP TO RECEIVE THE FRANGIBLE COUPLING.

STAKE MOUNTED UNIT
ELEVATED LIGHT
NO SCALE



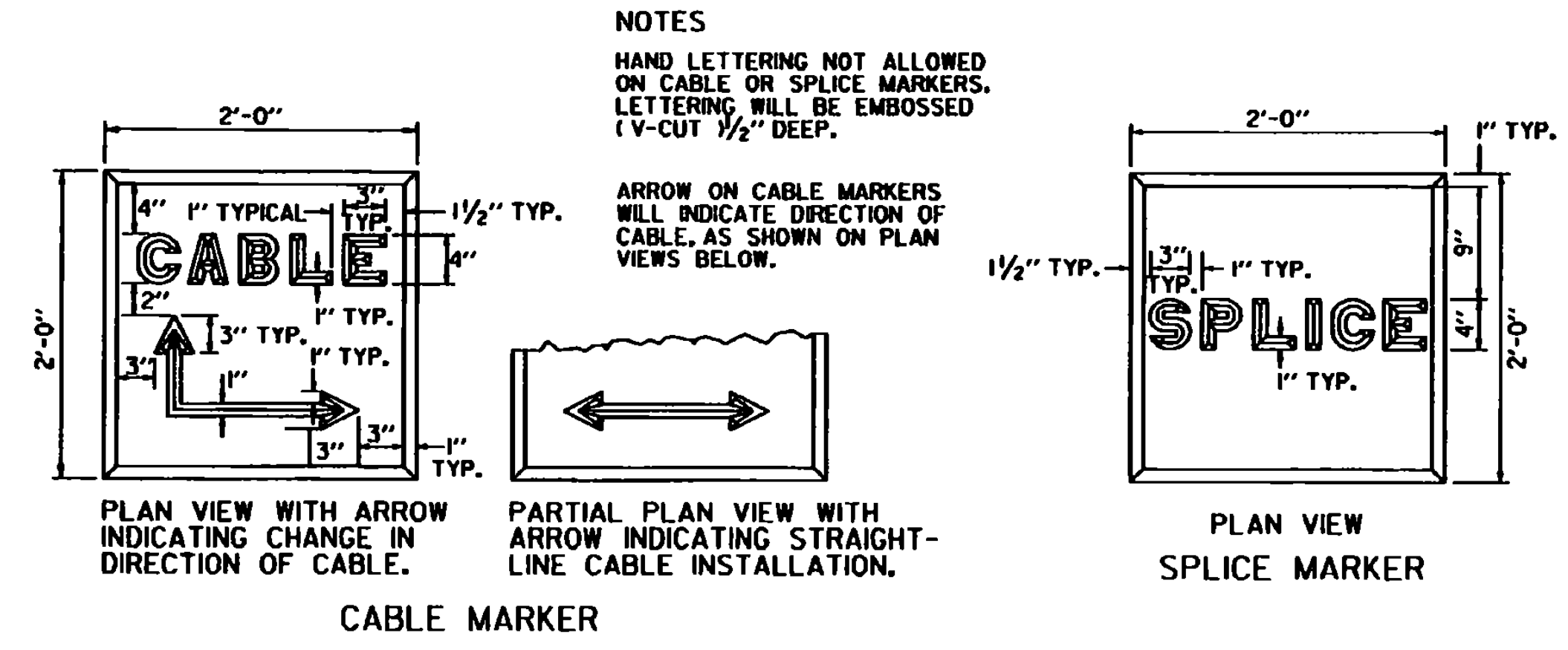
NOTE : FOR ALL OTHER DETAILS, SEE BASE MOUNTED UNIT FOR ELEVATED LIGHT.

BASE MOUNTED UNIT
SEMI-FLUSH LIGHT
NO SCALE

LIGHT LOCATION	LAMP		LENS
	MEDIUM INTENSITY	HIGH INTENSITY	
RUNWAY EDGE LIGHT	6.6A, 30W	6.6A, 15-20W	360° CLEAR 180° CLEAR/180° YELLOW
RUNWAY THRESHOLD LIGHT	6.6A, 45W	6.6A, 15-20W	180° RED/180° GREEN
		6.6A, 15-20W	360° RED
DISPLACED THRESHOLD LIGHT	6.6A, 30/45W		180° RED/180° CLEAR
			180° OBSCURED/180° GREEN
			180° CLEAR/180° GREEN
TAXIWAY LIGHT	6.6A, 30W		360° BLUE

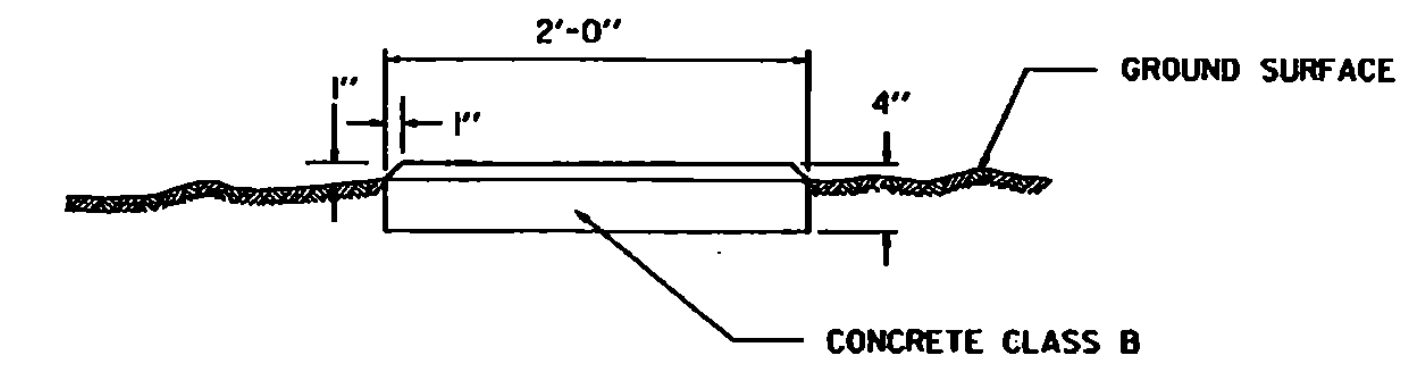
NOTES : 1. SEE PLAN SHEET FOR LENS/LIGHT TYPE.

NOTE : AIRPORT LIGHT BASES SHOULD BE CONSTRUCTED TO FAA SPECIFICATIONS. SEE CURRENT ADVISORY CIRCULAR.

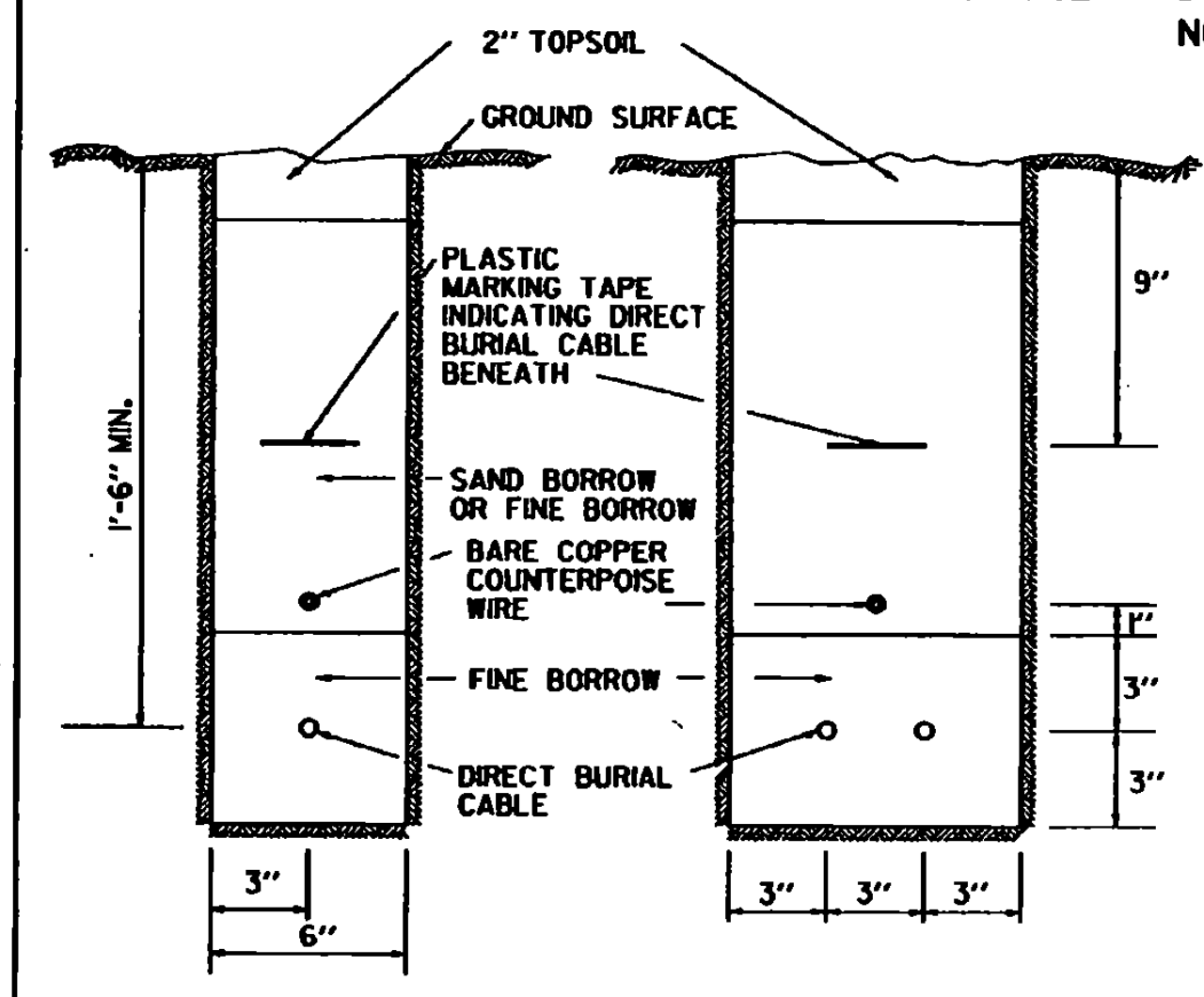


NOTES
HAND LETTERING NOT ALLOWED ON CABLE OR SPLICE MARKERS. LETTERING WILL BE EMBOSSED (V-CUT 1/2" DEEP).
ARROW ON CABLE MARKERS WILL INDICATE DIRECTION OF CABLE, AS SHOWN ON PLAN VIEWS BELOW.

NOTE : SEE STANDARD AP-3 FOR UNDERGROUND ELECTRICAL DUCT DETAILS.

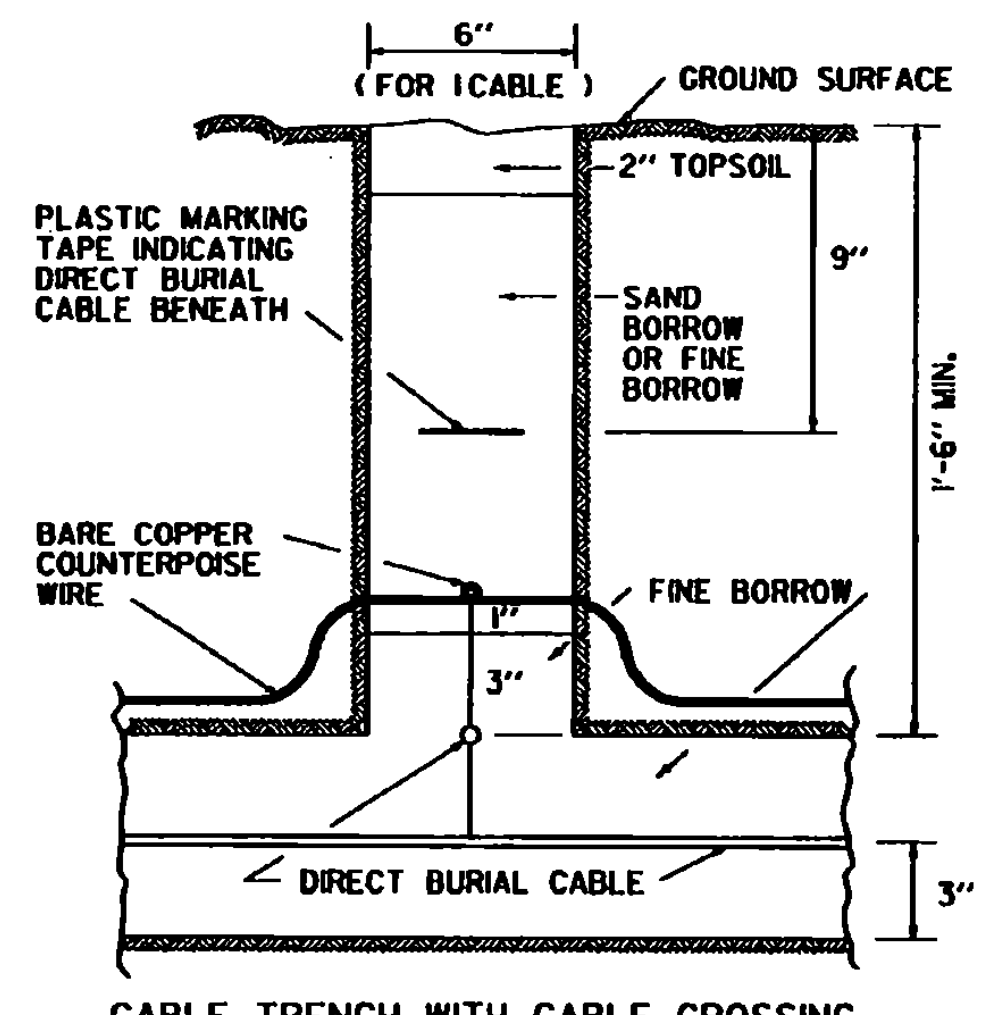


ELEVATION VIEW (TYPICAL FOR CABLE AND SPLICE MARKERS)
CABLE AND SPLICE MARKERS
NO SCALE



SINGLE CABLE INSTALLATION TWO CABLE INSTALLATION

NOTE : FOR MULTIPLE-CABLE INSTALLATIONS, PROVIDE 3" ADDITIONAL TRENCH WIDTH FOR EACH ADDITIONAL CABLE.



CABLE TRENCH WITH CABLE CROSSING

NOTE : UNDERGROUND ELECTRICAL CABLE SHOULD BE CONSTRUCTED TO FAA SPECIFICATION, SEE CURRENT ADVISORY CIRCULAR.

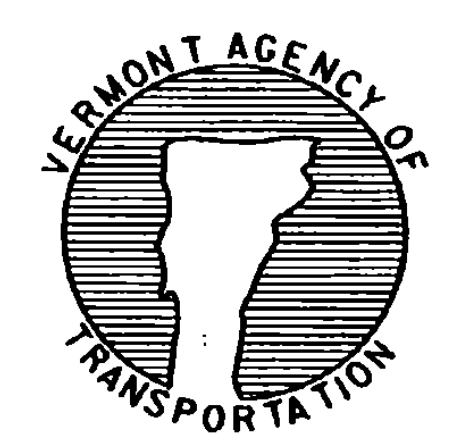
UNDERGROUND ELECTRICAL CABLE INSTALLATION
TRENCH DETAILS
(IN EARTH OR ROCK)
NO SCALE

REVISIONS AND CORRECTIONS
DEC. 15, 1981 - ORIGINAL APPROVAL DATE
MAR. 1, 1990 - SHEET UPDATED
JUNE 1, 1994 - REISSUED, WITHOUT CHANGE, UNDER NEW SIGNATURES.

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[Signature]
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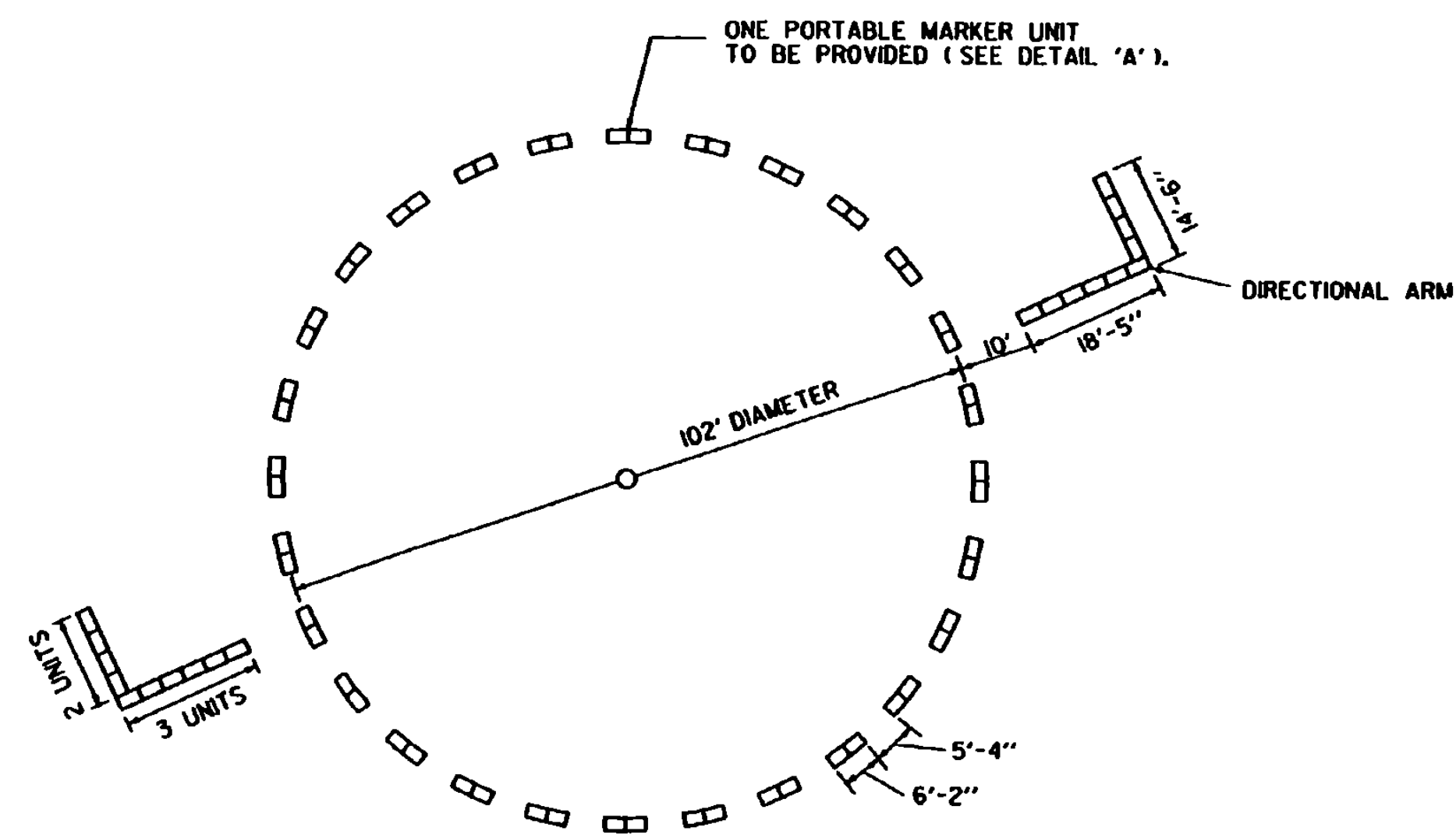
LIGHTING & ELECTRICAL DETAILS



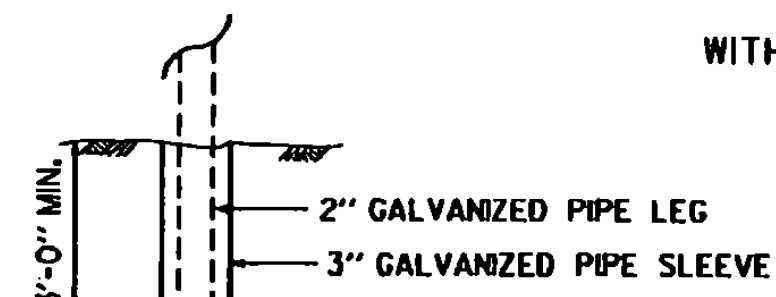
STANDARD
AP-2

NOTES

1. THE LOCATION OF THE PORTABLE MARKER UNIT SHALL BE AS ORDERED BY THE ENGINEER.
2. DIRECTIONAL ARMS ARE INSTALLED ONLY ON AIRPORTS WITH A NON-STANDARD TRAFFIC PATTERN (RIGHT-HAND PATTERN). WHEN INSTALLED, DIRECTIONAL ARMS WILL BE MAGNETICALLY ORIENTED TO THE RUNWAY AND WILL SHOW TRAFFIC PATTERN ON EACH RUNWAY.

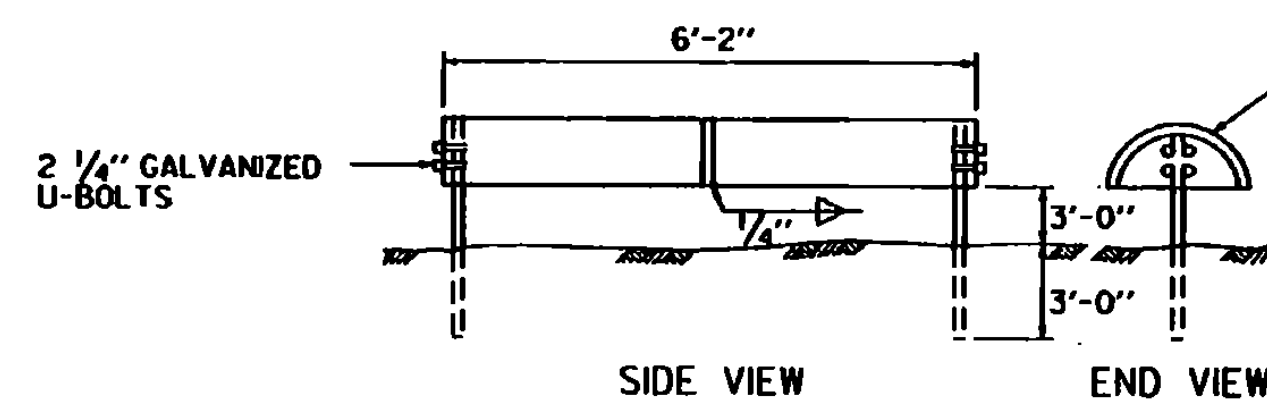


SEGMENTED CIRCLE LAYOUT WITH DIRECTIONAL ARMS

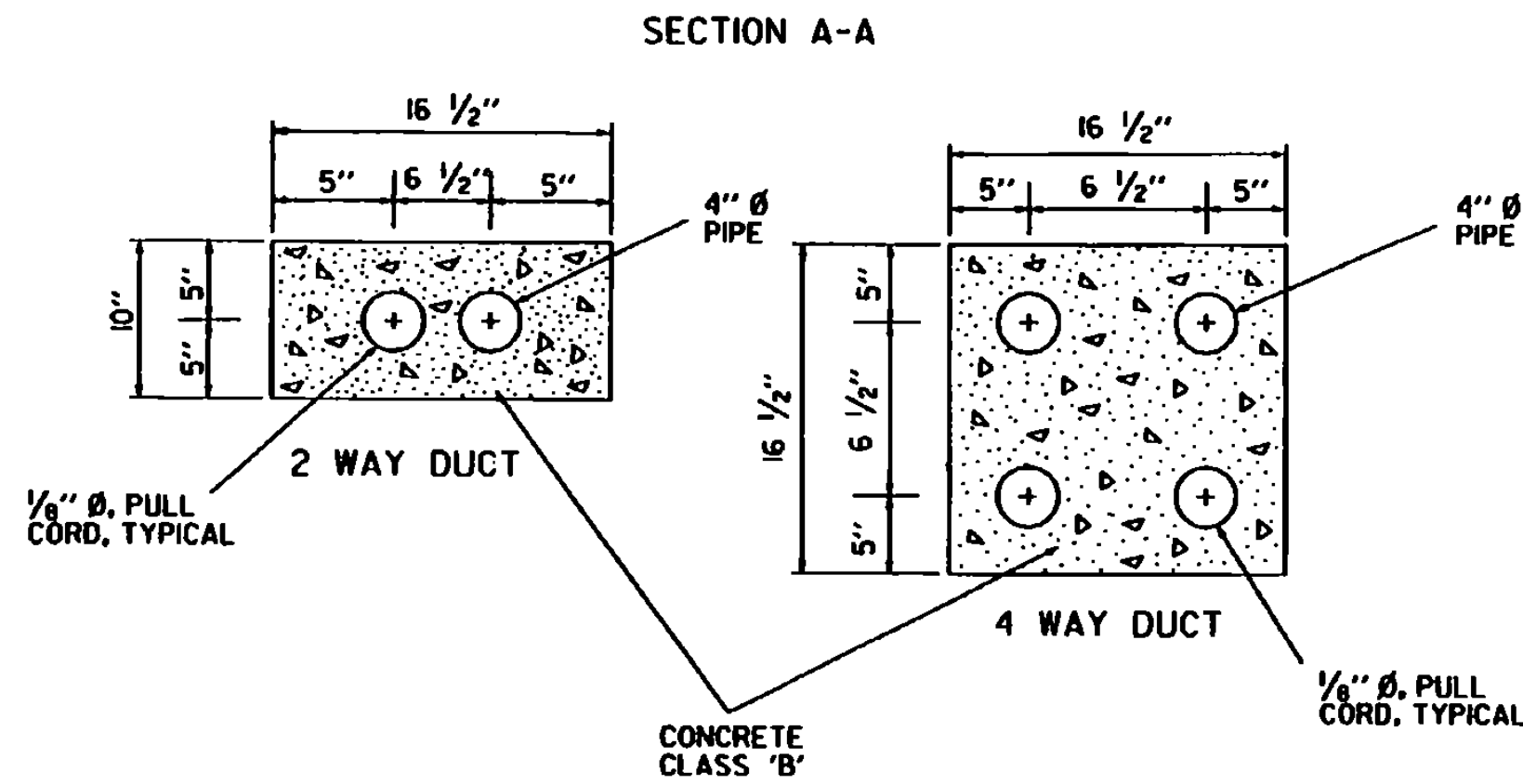


LEG DETAIL FOR PORTABLE MARKER UNIT

DETAIL 'A'

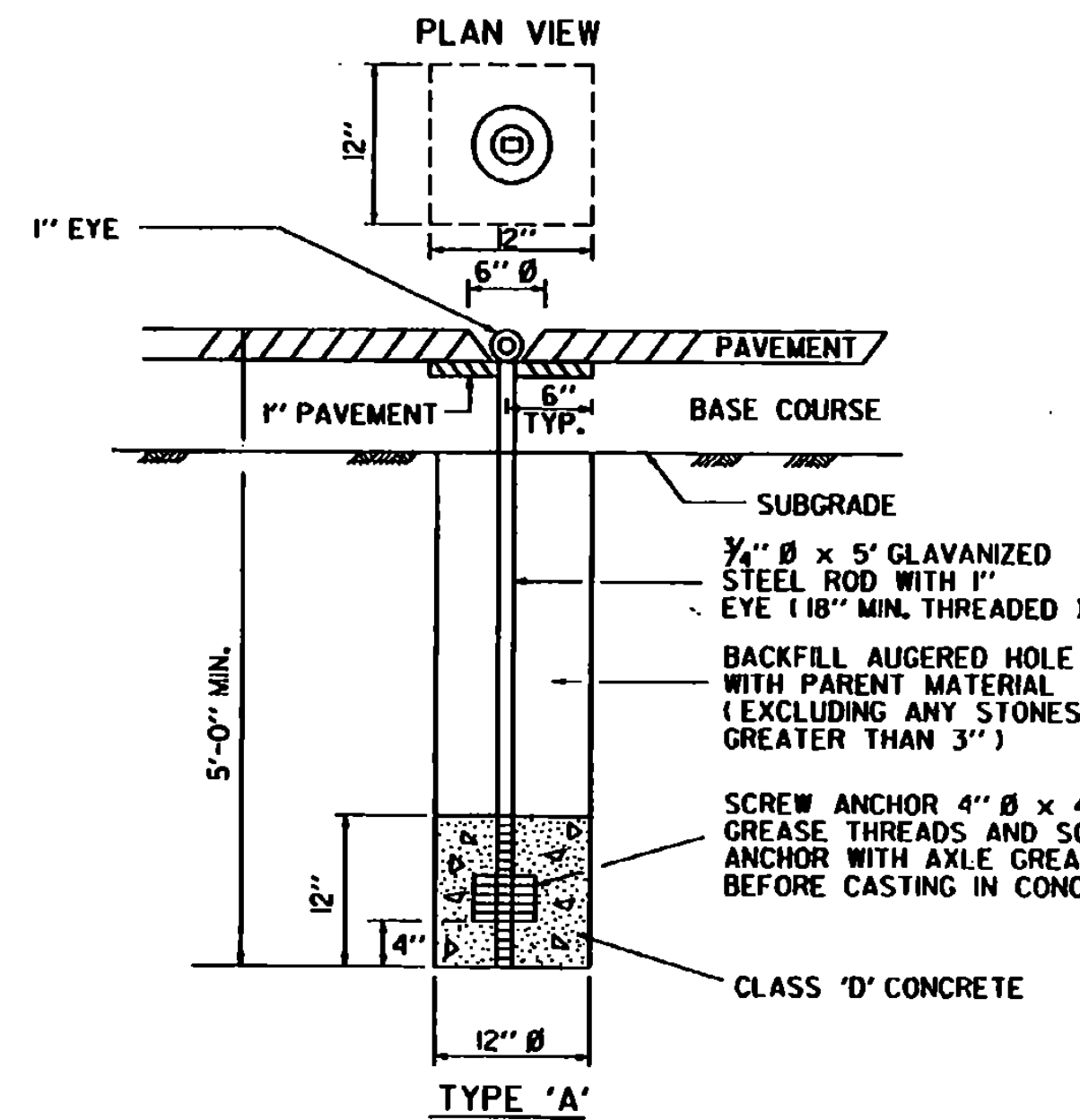


SEGMENTED CIRCLE MARKER UNIT

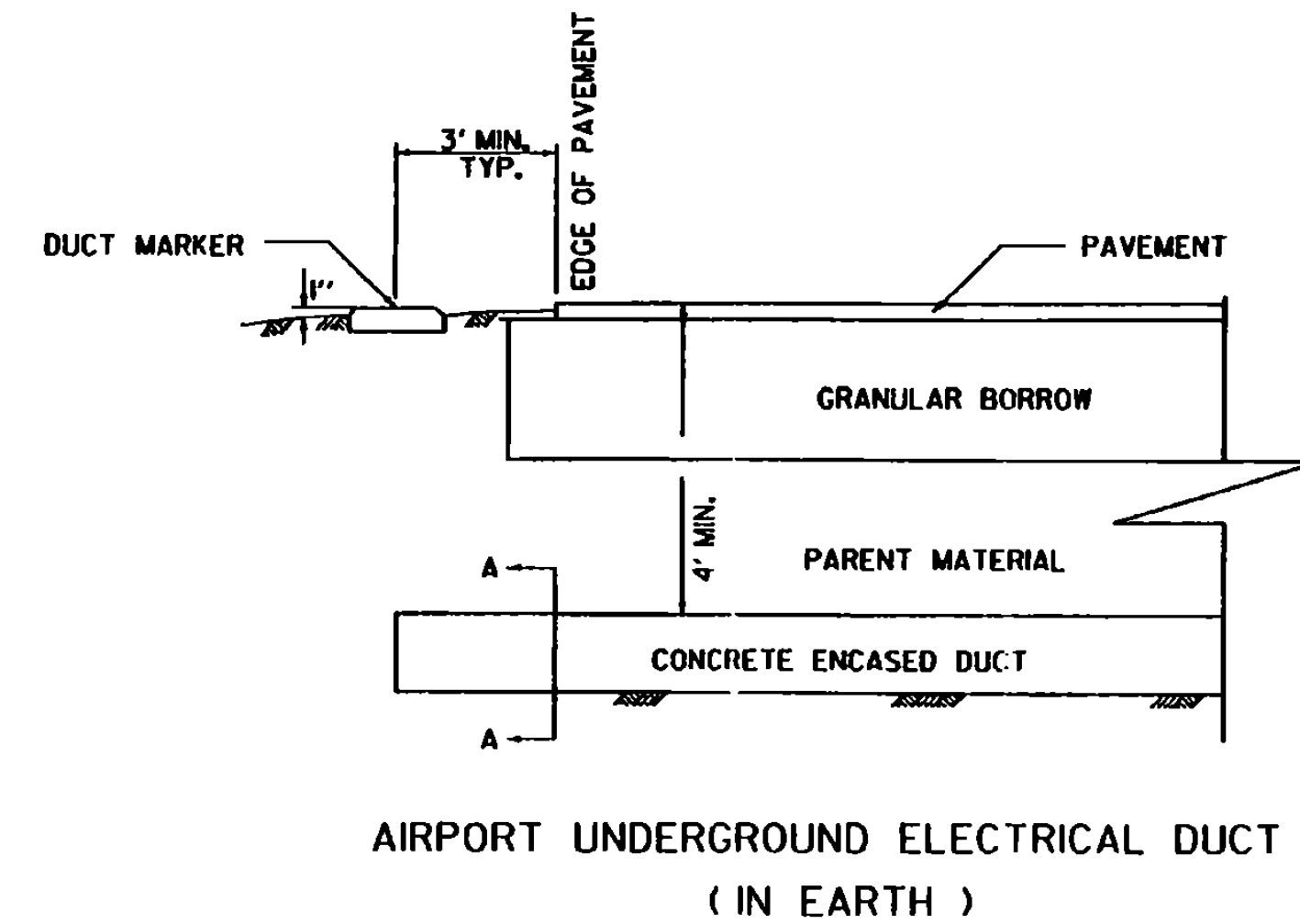


ALL DUCTS, EXCEPT STEEL CONDUIT, INSTALLED UNDER RUNWAYS, TAXIWAYS, APRONS, AND OTHER PAVED AREAS SHALL BE ENCASED IN A CONCRETE ENVELOPE

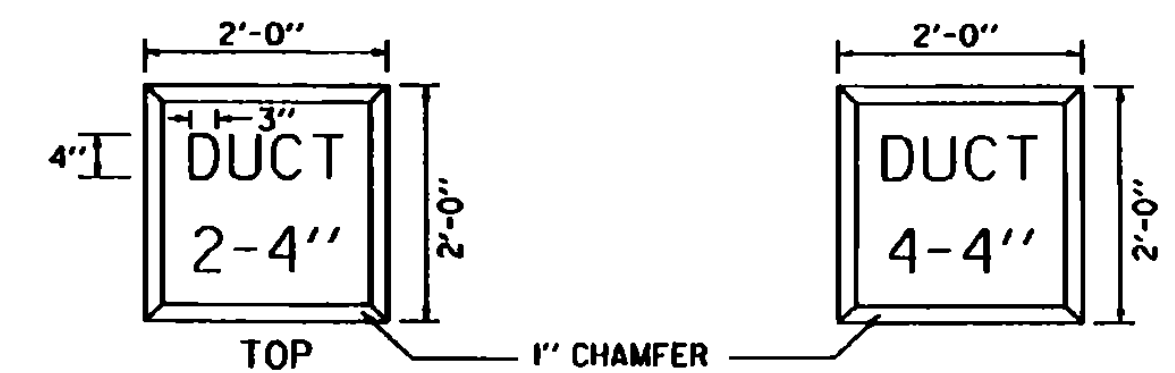
SEE STANDARD AP-2 FOR DIRECT BURIAL CABLE DETAILS.



AIRCRAFT TIE DOWN ANCHOR

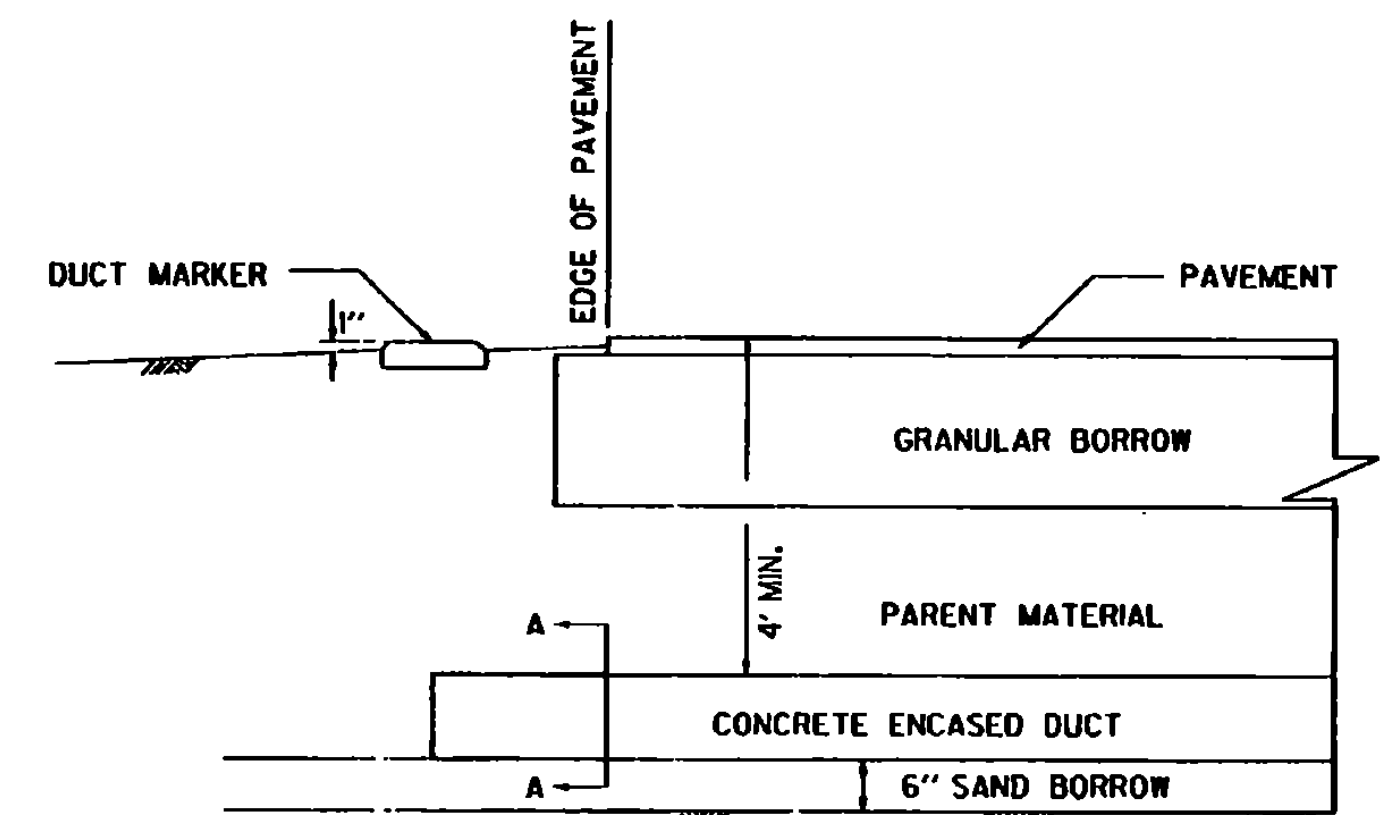


AIRPORT UNDERGROUND ELECTRICAL DUCT (IN EARTH)



DUCT MARKERS

- NOTES**
1. LETTERING ON DUCT MARKERS TO BE EMBOSSED, 1/2" CUT, 1/2" DEEP.
 2. HAND LETTERING NOT ALLOWED



AIRPORT UNDERGROUND ELECTRICAL DUCT (IN ROCK)

REVISIONS AND CORRECTIONS

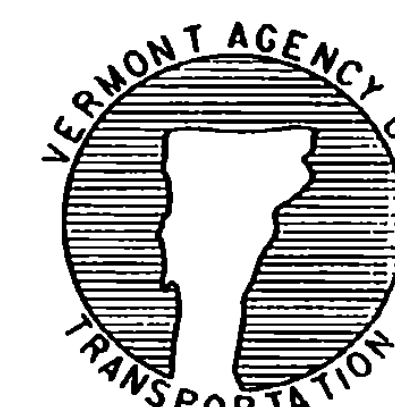
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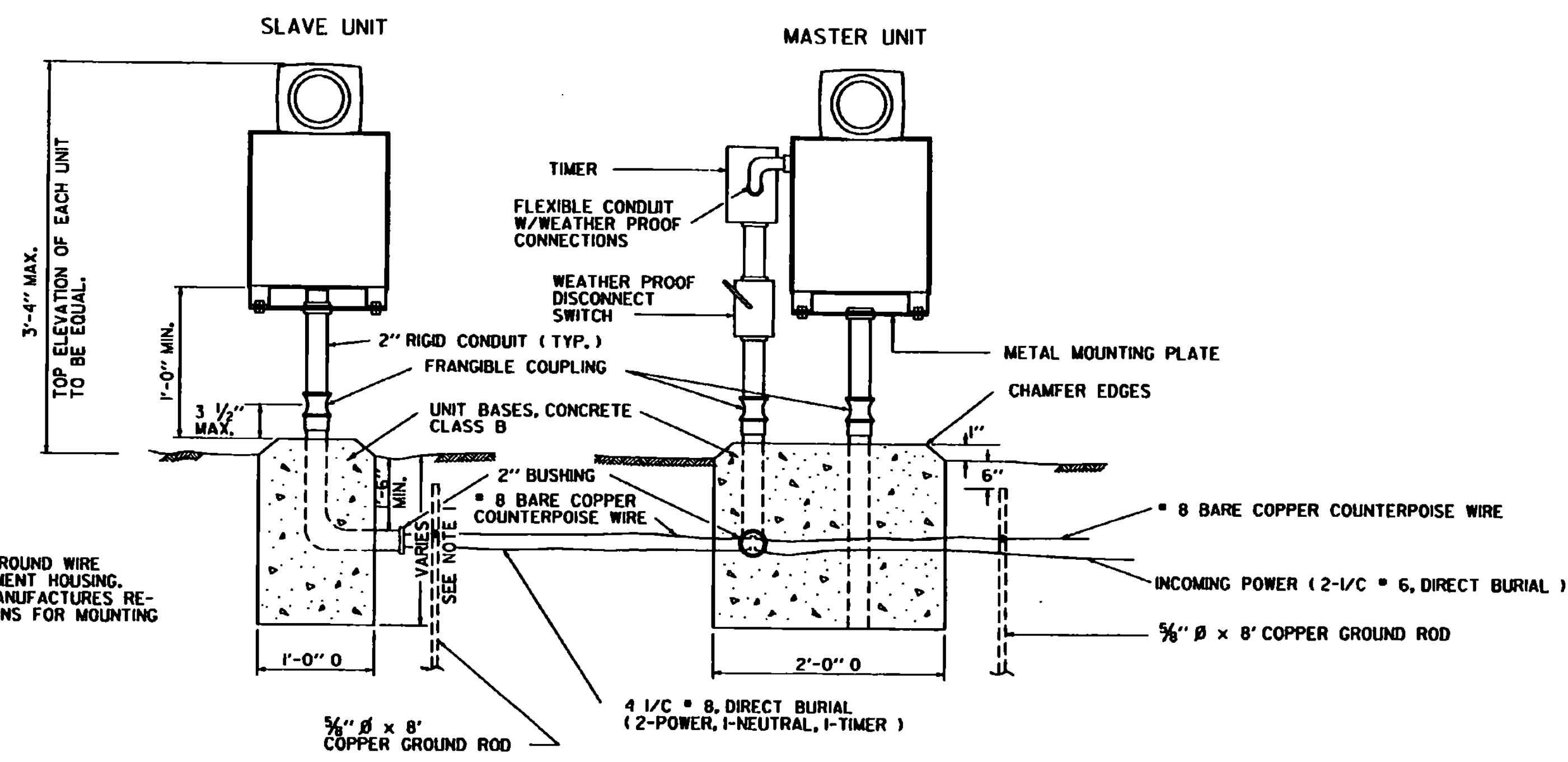
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MISCELLANEOUS AIRPORT DETAILS

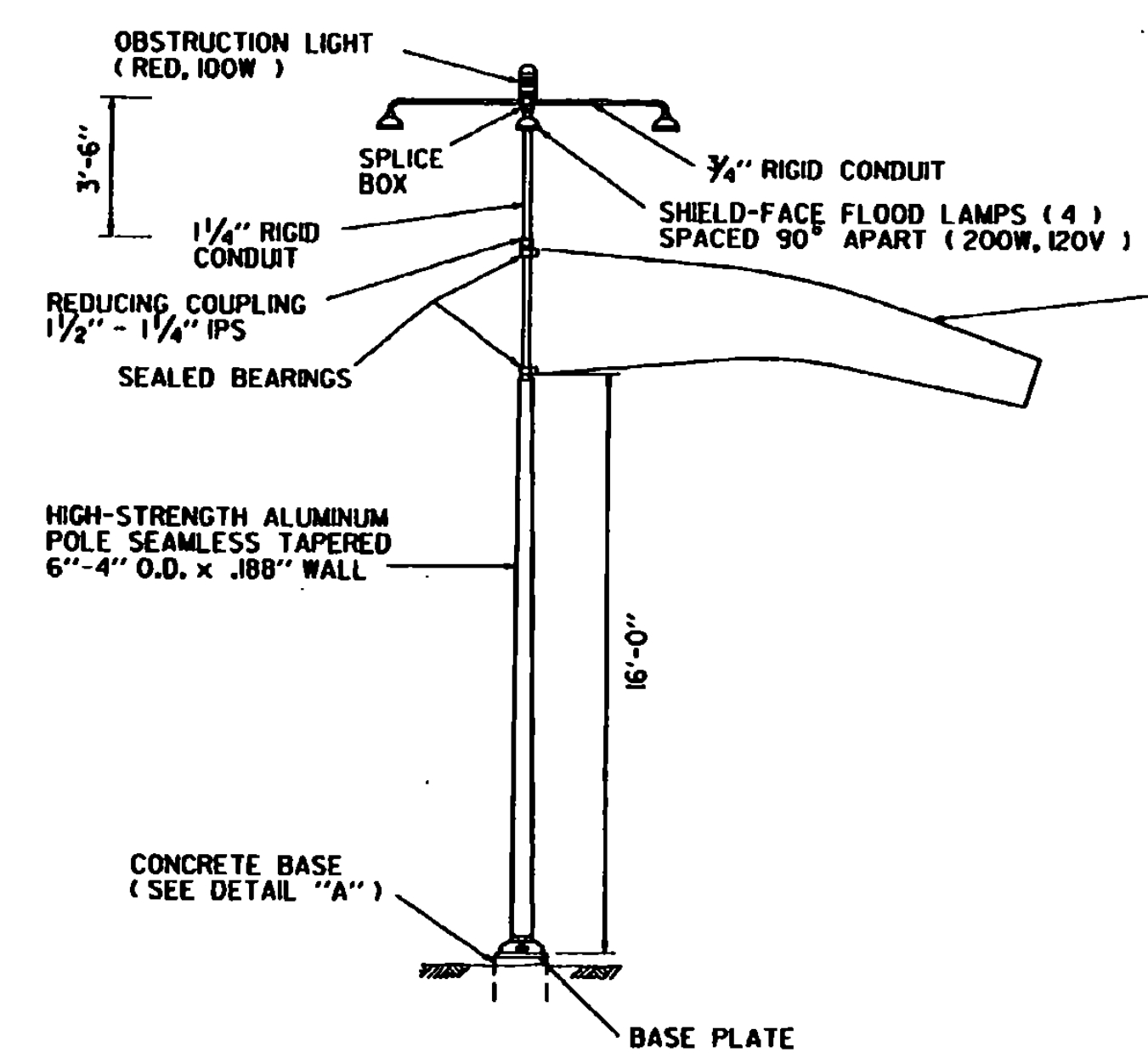


STANDARD AP-3

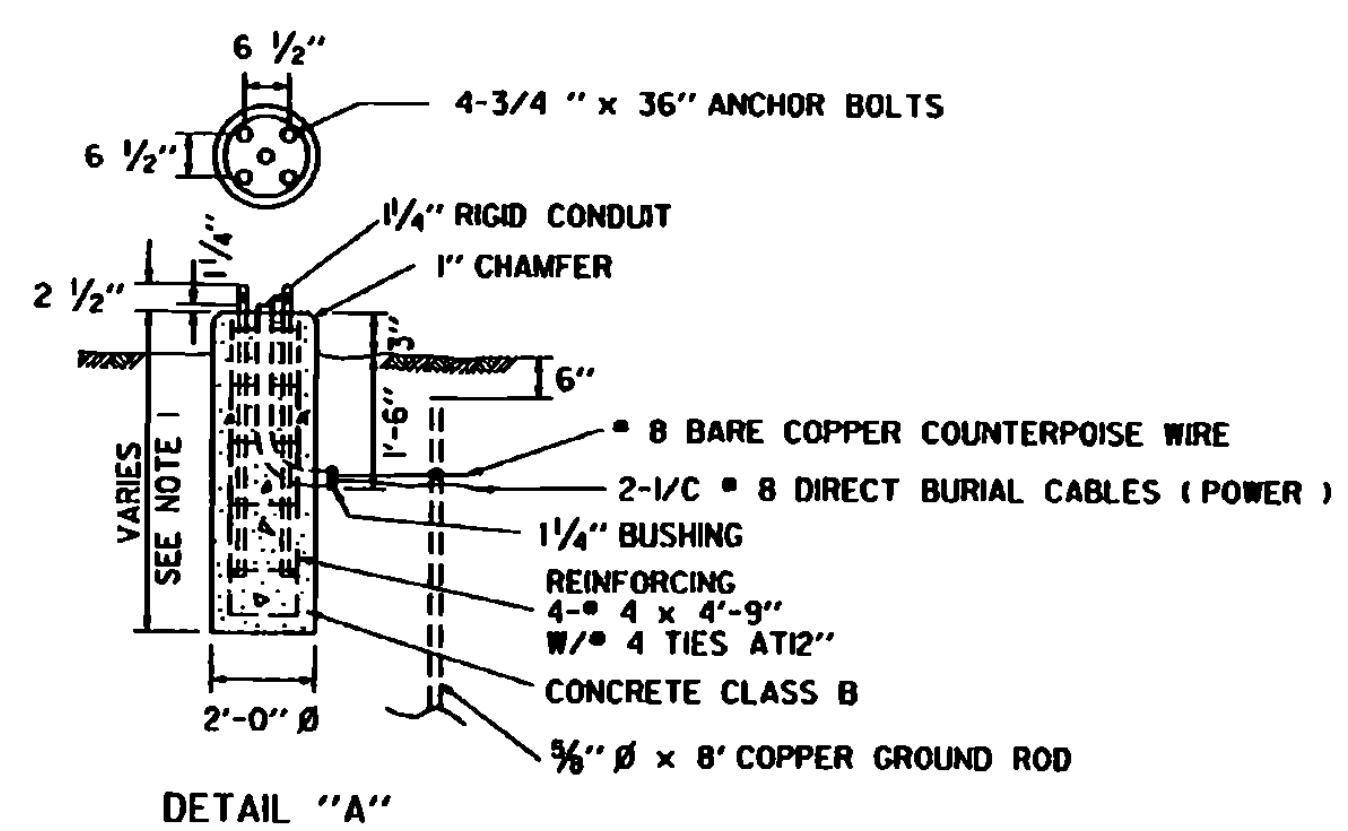


RUNWAY END IDENTIFIER LIGHTS (REILS) L-849

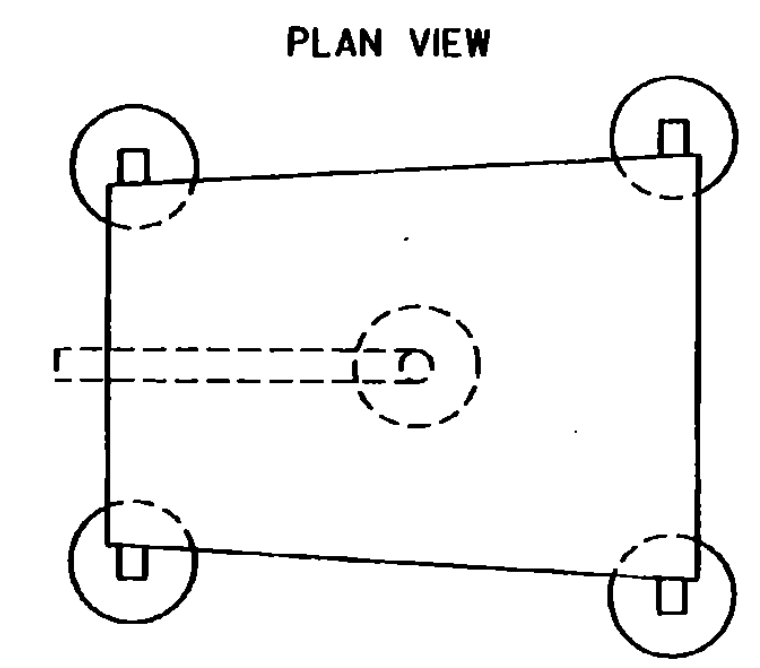
NOTES:
 1. TERMINATE GROUND WIRE INSIDE EQUIPMENT HOUSING. REFER TO MANUFACTURER'S RECOMMENDATIONS FOR MOUNTING REIL UNITS.



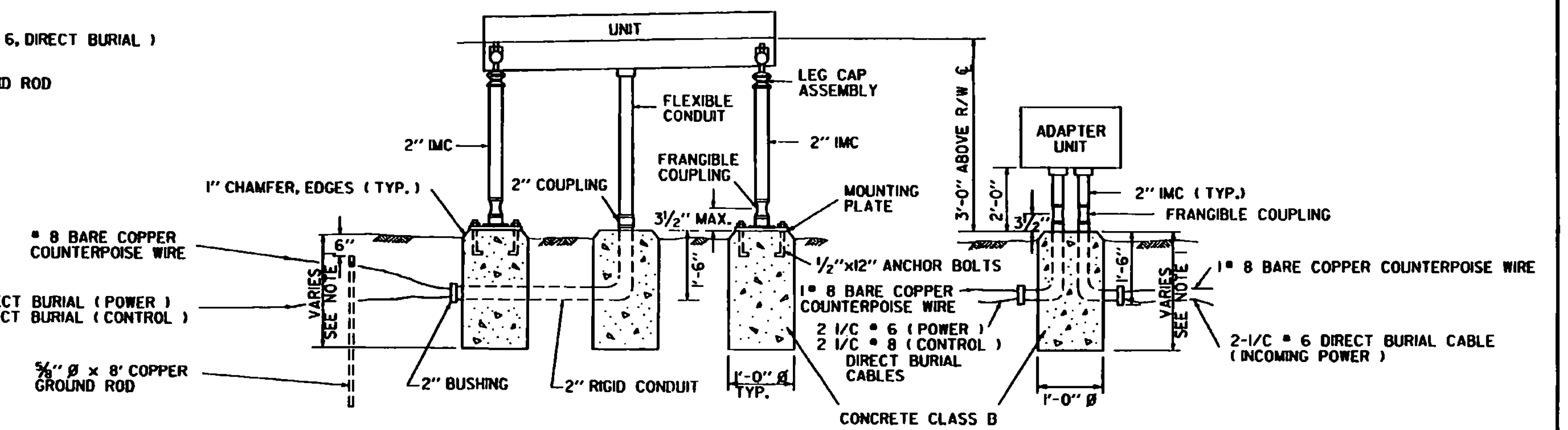
EIGHT FOOT OR TWELVE FOOT ILLUMINATED WIND CONE L-806



NOTES:
 1. ALL FOUNDATIONS SHOULD EXTEND ONE (1) FOOT BELOW AVERAGE FROST PENETRATION. (SEE STANDARD AP-1)
 2. TERMINATE COUNTERPOISE WIRES INSIDE EQUIPMENT HOUSING.



NOTES:
 SYSTEM TO INCLUDE 2 OR 4 UNITS. SEE AIRPORT PLAN-LAYOUT SHEET FOR SYSTEM TO BE INSTALLED. ONE ADAPTER UNIT TO BE INSTALLED PER SYSTEM.



PRECISION APPROACH PATH INDICATOR (PAPI)
 L880 (4 LIGHT UNITS)
 L881 (2 LIGHT UNITS)

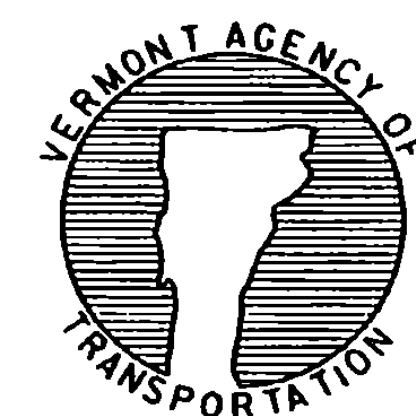
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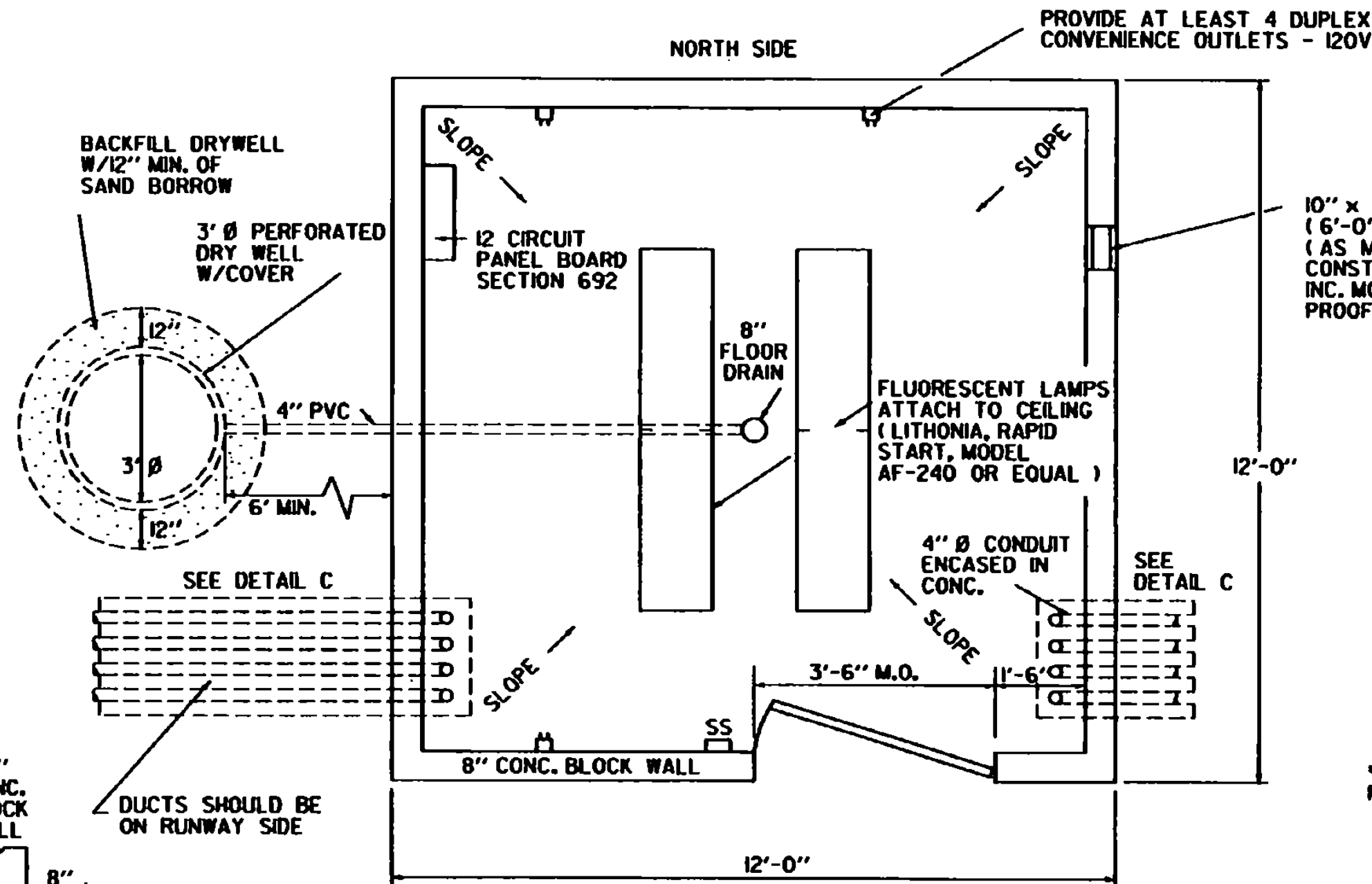
VISUAL APPROACH AIDS



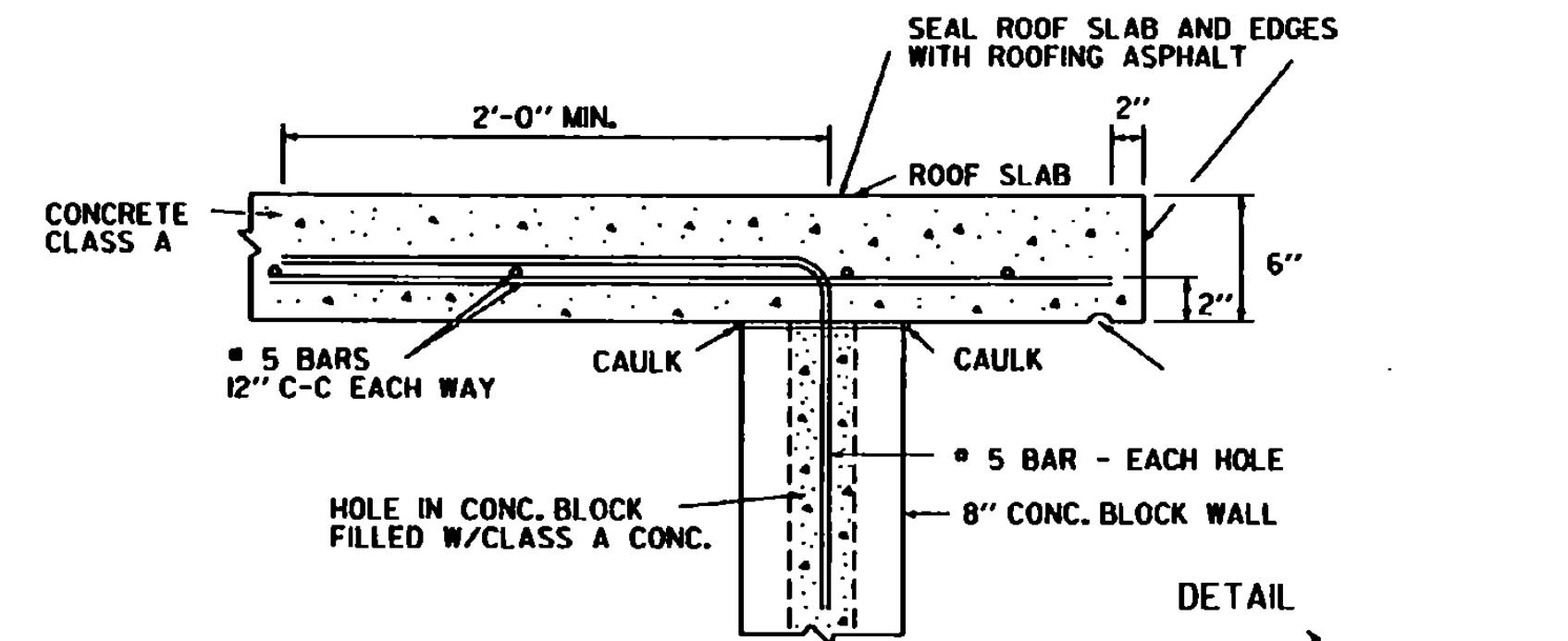
STANDARD
 AP-4

NOTES

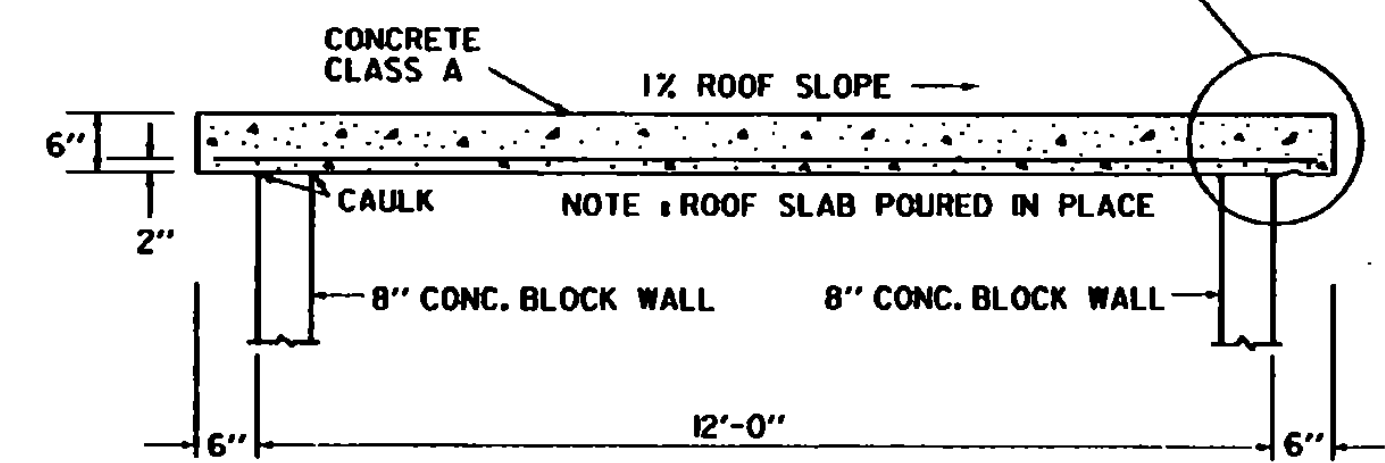
- 1 MOUNT CONTACTORS, BOOSTER TRANSFORMERS AND MISC. HARDWARE ON SAME WALL AS NEW 12 CIRCUIT PANEL BOX.
- 2 PROVIDE GROUND BUS BENEATH 12 CIRCUIT PANEL BOX.
- 3 INSTALL ELECTRIC PANEL ON 3/4" PLYWOOD, SET OFF FROM WALL ON 2" x 4" S. ALL WOOD TO BE PAINTED.
- 4 PROVIDE AT LEAST 1% ROOF SLOPE (TO EAST).
- 5 FOUNDATION FLOOR TO SLOPE TO CENTER OF VAULT.
- 6 FIRST COURSE OF BLOCKS ON FOUNDATION TO BE TWO 4" SOLID BLOCKS WITH COPPER FABRIC FLASHING BETWEEN - SEE DETAIL A.
- 7 PROVIDE ALUMINUM BIRD AND INSECT SCREEN AT AIR INTAKE ON LOUVER AND EXHAUST VENT.
- 8 CAULK AT ALL METAL TO CONCRETE INTERFACES.
- 9 PROVIDE DOOR BUMPER ON WALL AND STRIKE SIDE OF JAMB.
- 10 ELECTRICAL PANEL BOARD AND METER INCLUDED IN AIRPORT TRANSFORMER VAULT EQUIP.
- 11 CONCRETE BLOCK WALLS AND CONCRETE CEILING SHALL BE SEALED WITH TWO COATS OF APPROVED SEALER. A FINAL COAT OF WHITE PAINT SHALL BE APPLIED OVER THE SEALER.
- 12 ALL CAULKING SHALL BE ASPHALTIC JOINT COMPOUND.



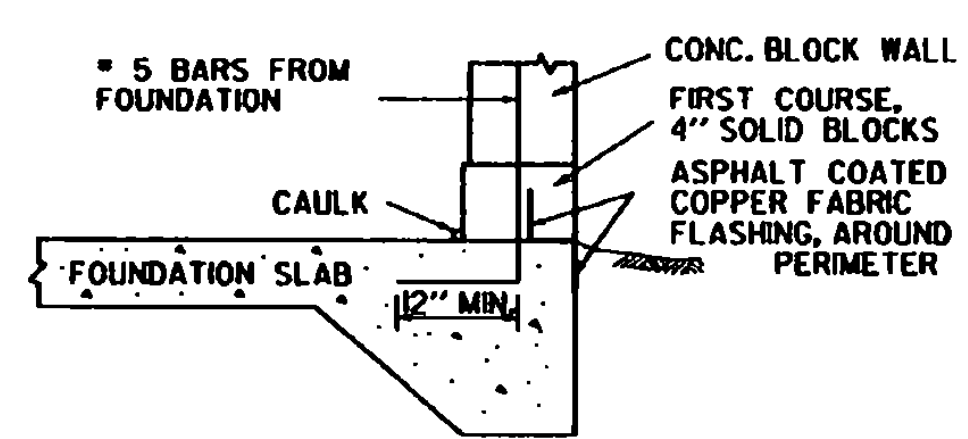
PLAN



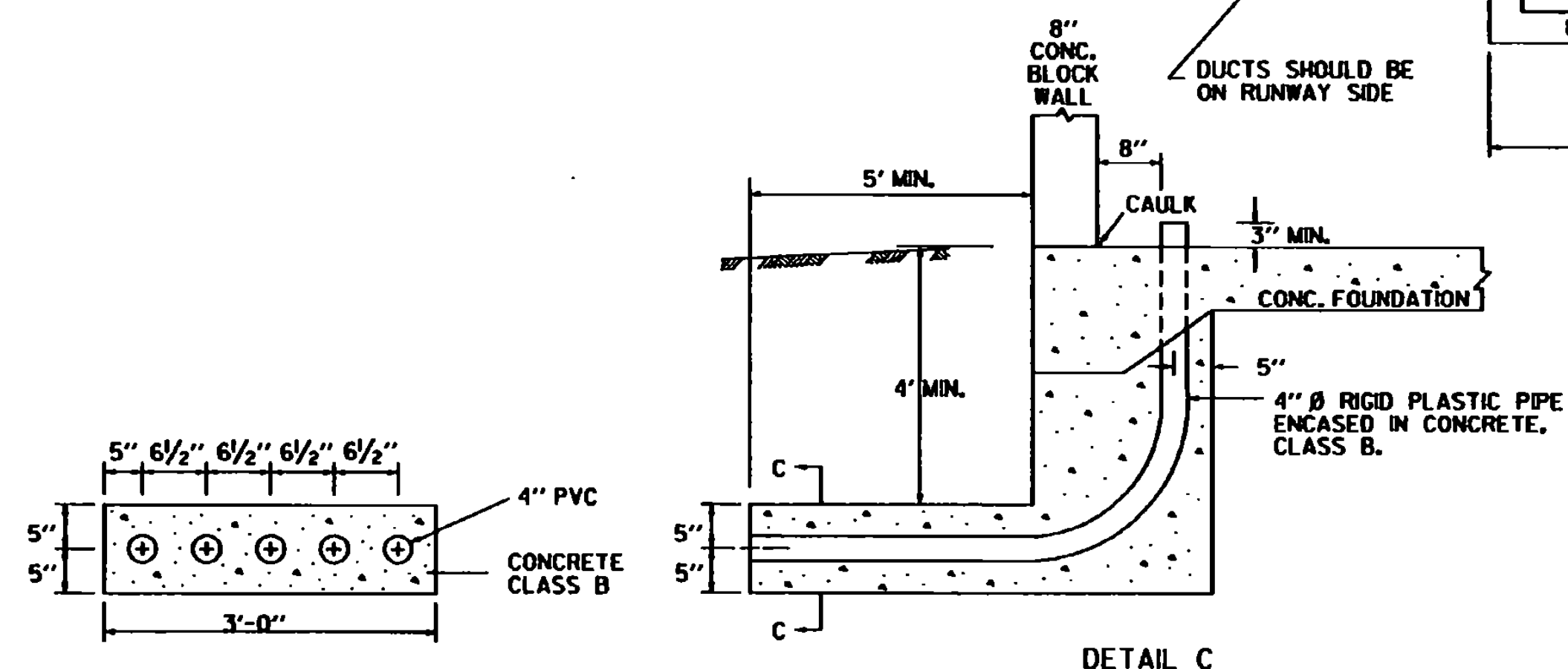
DETAIL



ROOF DETAIL

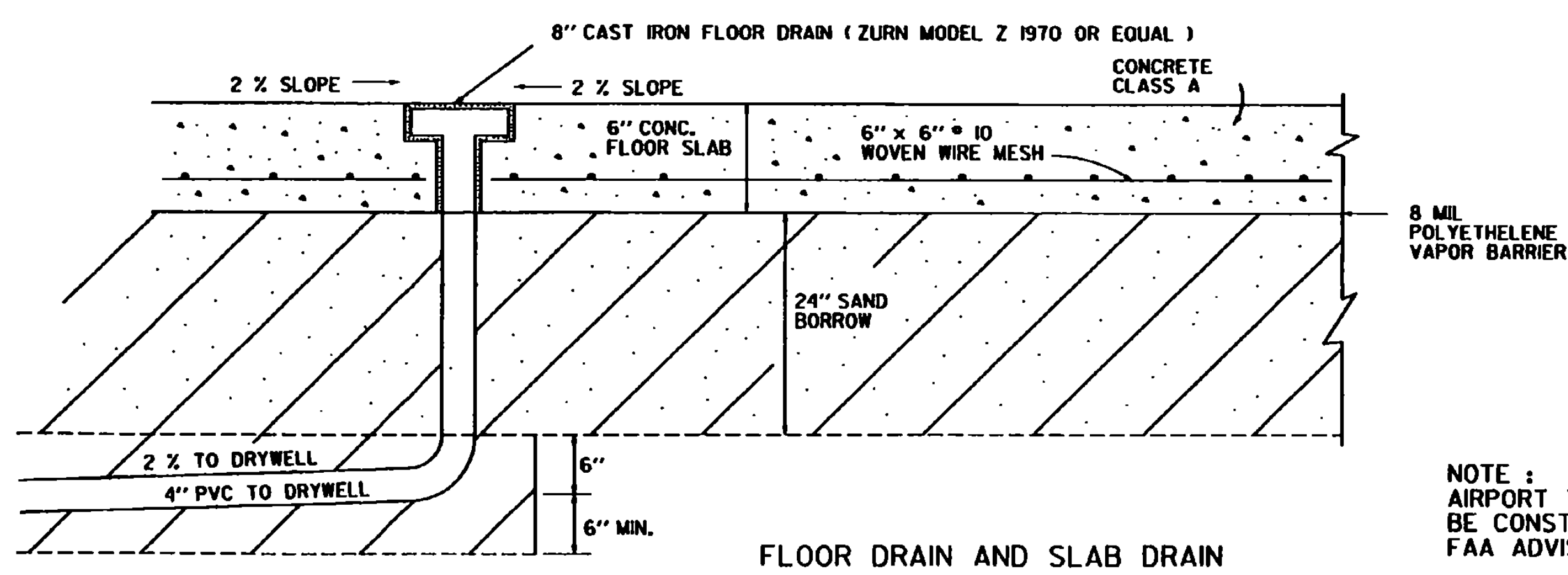


DETAIL A

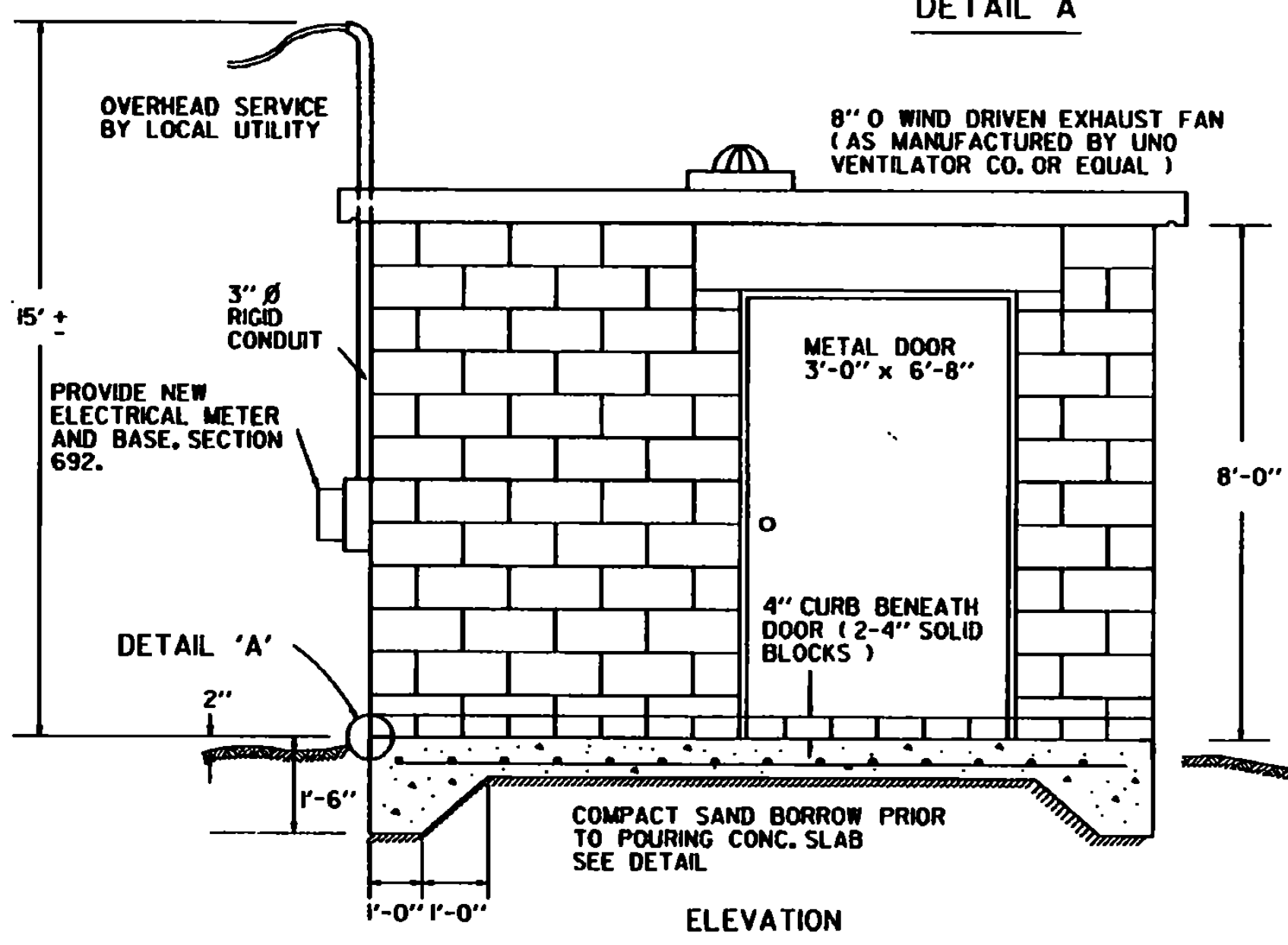


SECTION C-C

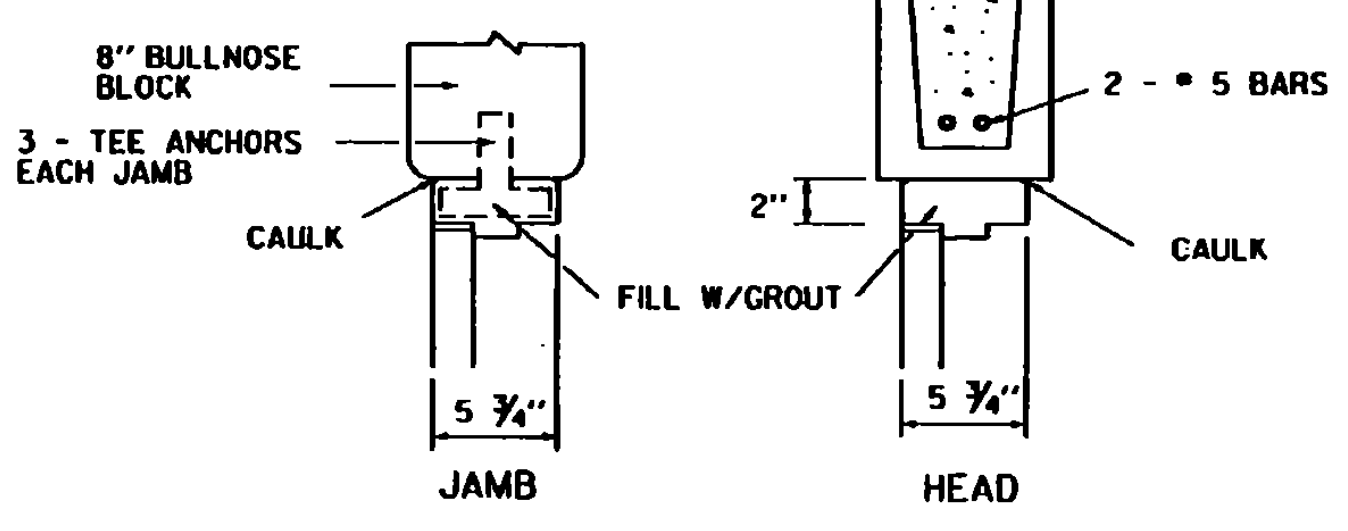
DETAIL C



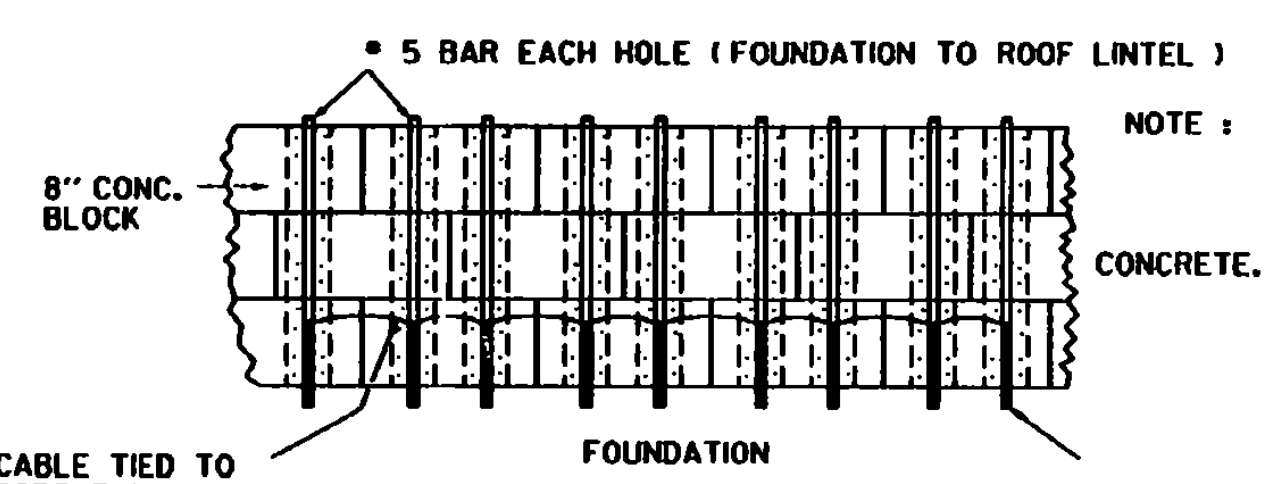
FLOOR DRAIN AND SLAB DRAIN



AIRPORT TRANSFORMER VAULT



DOOR DETAILS FOR HOLLOW METAL FRAMES



WALL DETAIL

NOTE: AIRPORT TRANSFORMER HOUSING TO BE CONSTRUCTED AS PER CURRENT FAA ADVISORY CIRCULAR.

4.0 COPPER CABLE TIED TO FOUNDATION RODS FOR COUNTERPOISE TERMINATIONS

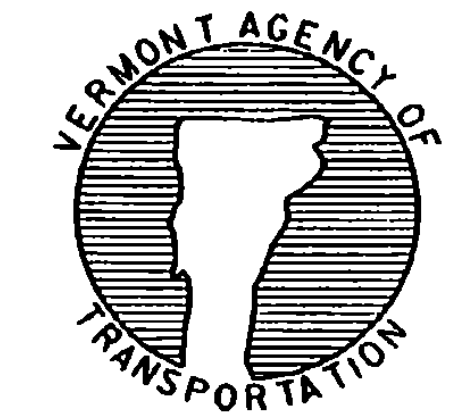
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APPROVED

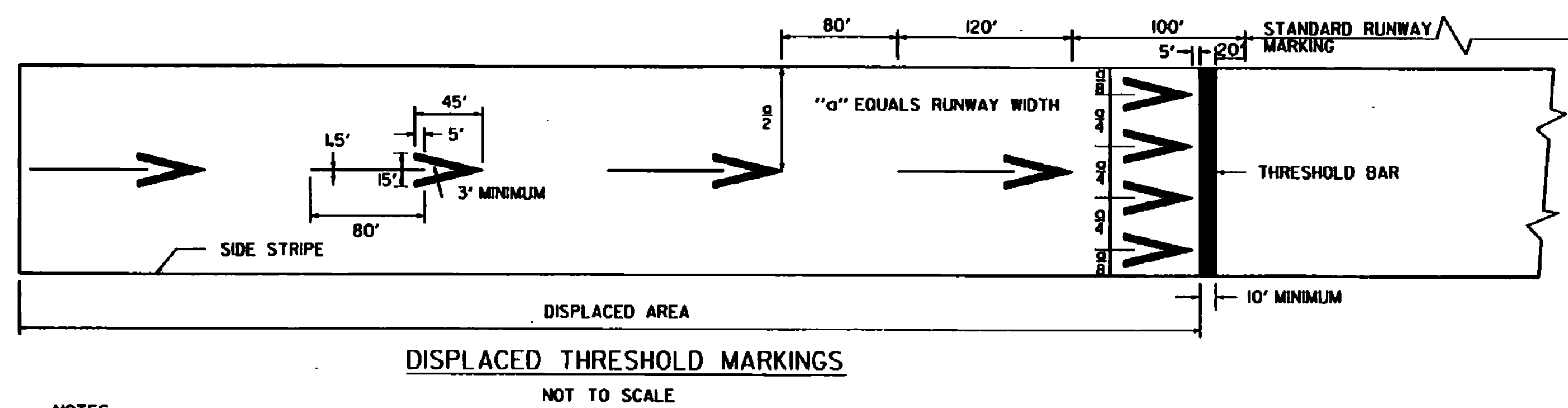
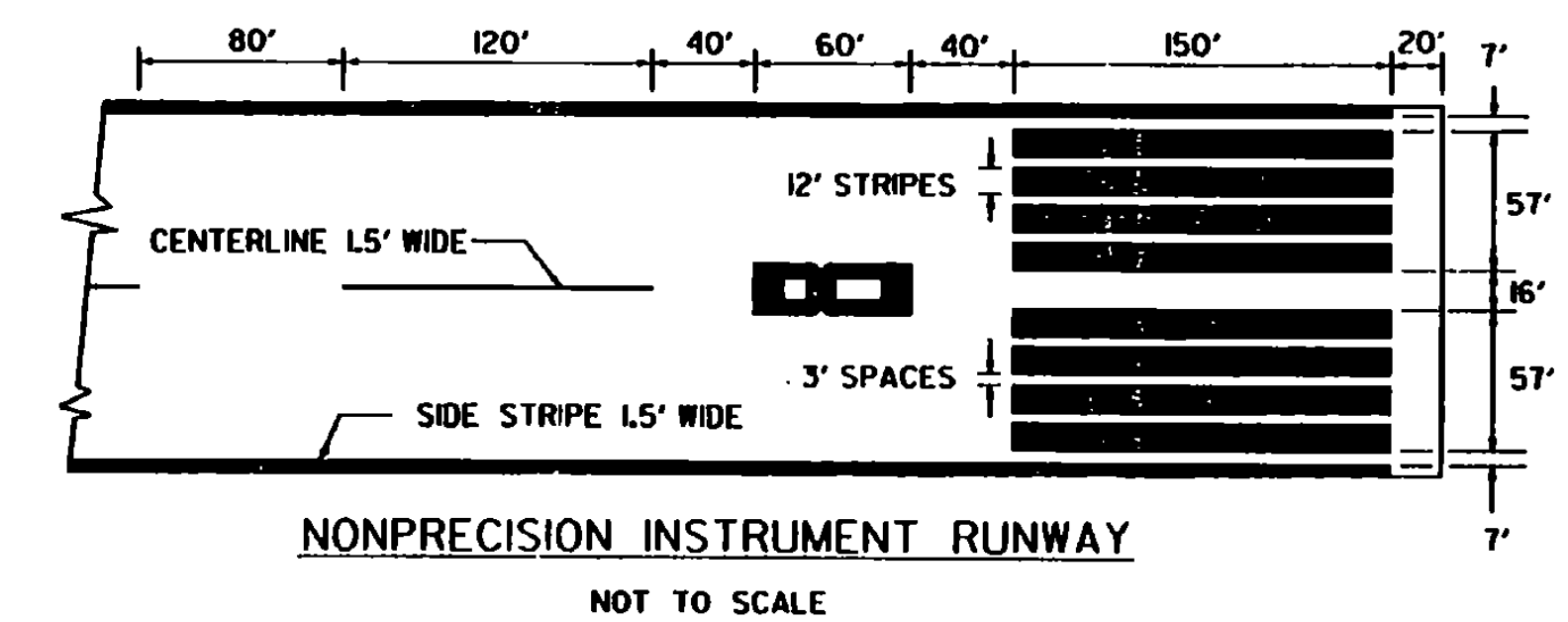
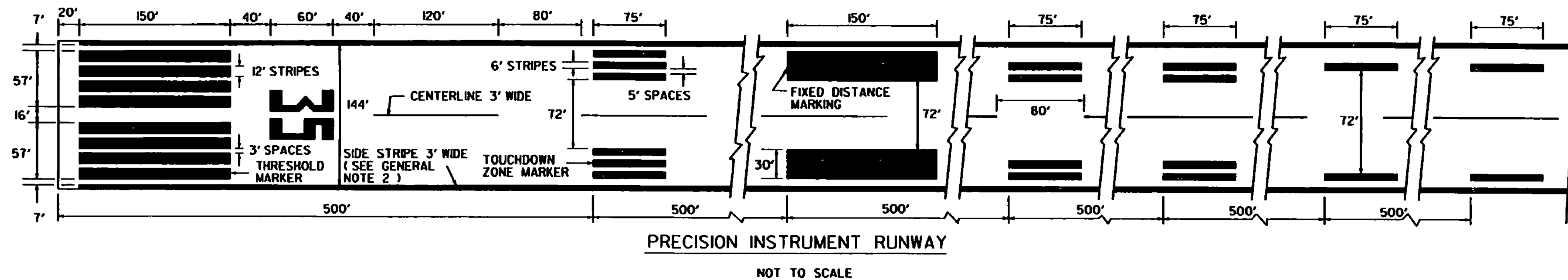
 DIRECTOR OF RAIL, AIR AND PUBLIC TRANSIT

APPROVED FOR THIS PROJECT AND/OR DESIGN IMPLEMENTATION, FHWA FINAL APPROVAL PENDING.

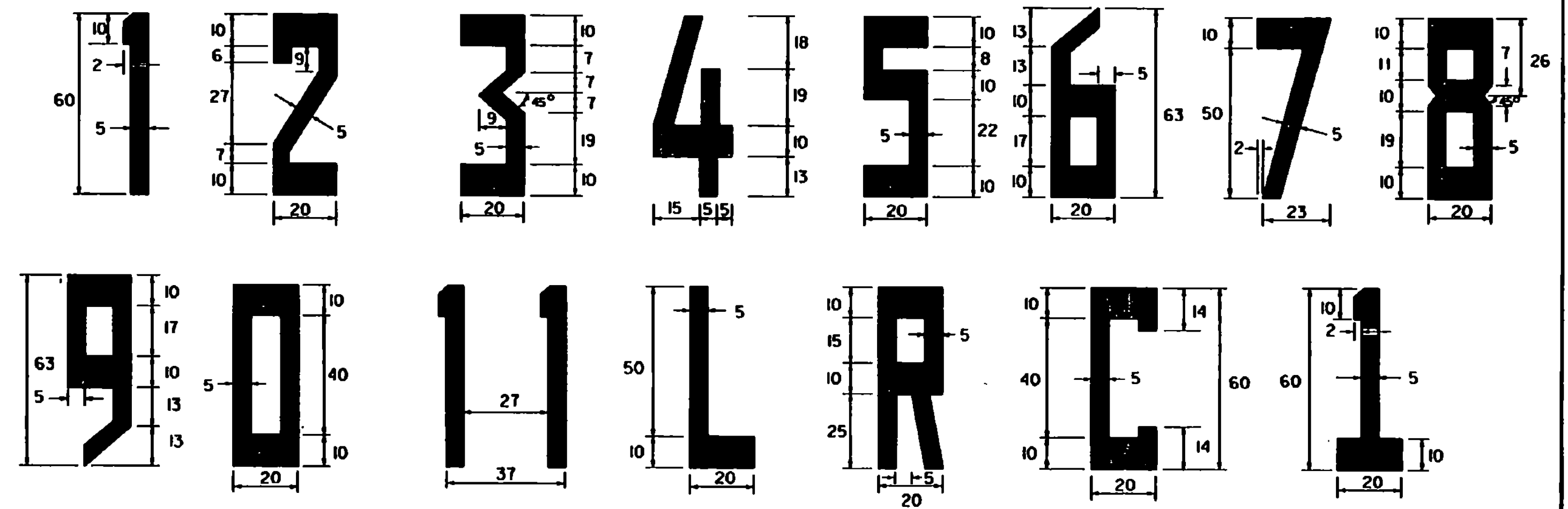
TRANSFORMER VAULT DETAILS



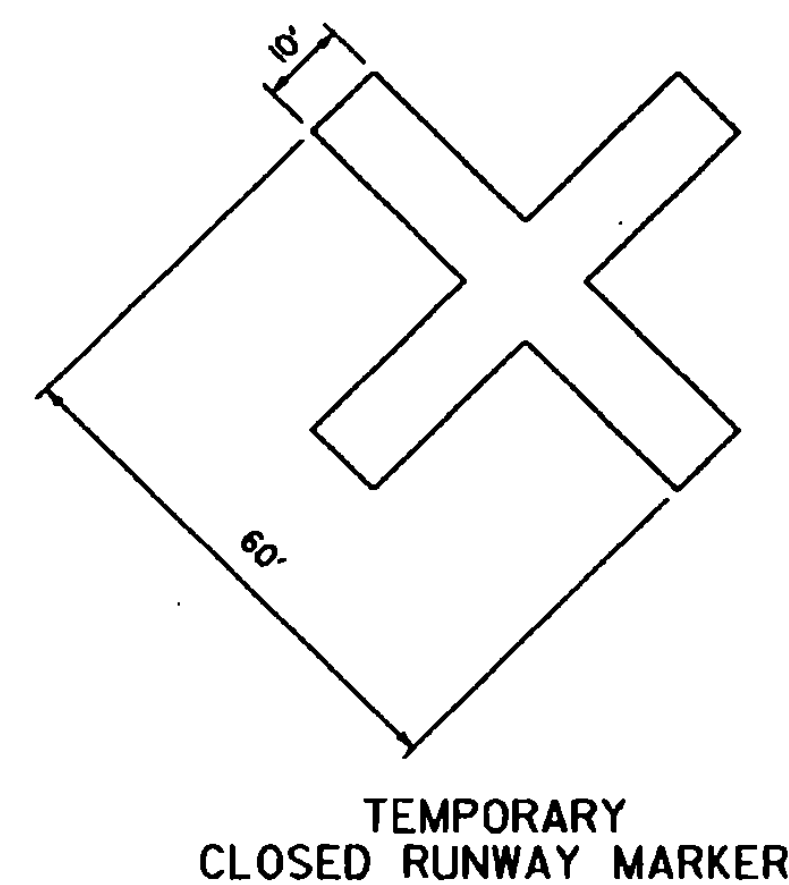
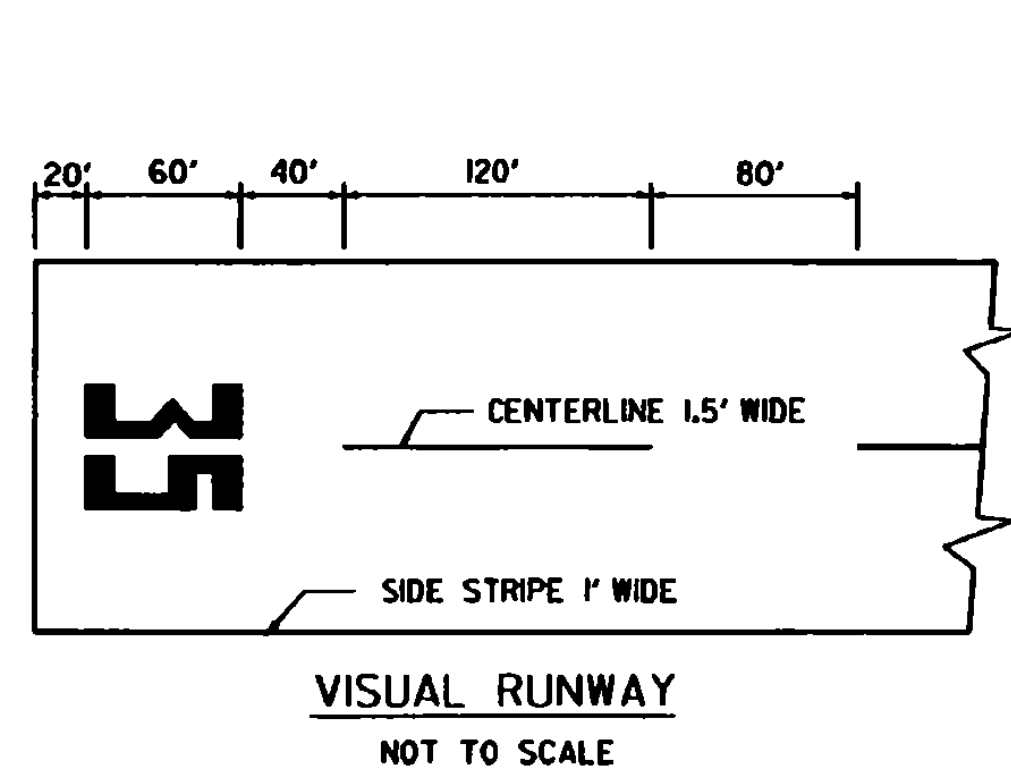
**STANDARD
 AP-9**



- NOTES**
- FOUR ARROWHEADS ARE PLACED SYMMETRICALLY ACROSS RUNWAY WITH UNIFORM LATERAL SPACING AS INDICATED.
 - ALL MARKINGS IN THE DISPLACED AREA ARE YELLOW EXCEPT THE THRESHOLD BAR WHICH IS WHITE.
 - RUNWAY SIDE STRIPES, WHEN USED ON THE RUNWAY, EXTEND INTO THE DISPLACED AREA.



- NOTES**
- ALL LETTERS AND NUMERALS, EXCEPT THE NUMBER ELEVEN AS SHOWN, ARE HORIZONTALLY SPACED 15 FEET APART.
 - DIMENSIONS ARE EXPRESSED IN FEET.
 - THE NUMERAL ONE, WHEN USED ALONE, CONTAINS A HORIZONTAL BAR TO DIFFERENTIATE IT FROM THE RUNWAY CENTERLINE MARKING.



- TEMPORARY CLOSED RUNWAY MARKER NOTES :**
- MARKERS TO BE YELLOW PLYWOOD OR SNOW FENCE.
 - MARKERS TO BE SUBSIDIARY TO OTHER PAVEMENT ITEMS.
 - MARKERS TO BE PLACED OVER RUNWAY NUMERALS OR OFF THE RUNWAY ENDS AS APPLICABLE.
 - MARKERS TO BE ANCHORED TO THE SATISFACTION OF THE ENGINEER.

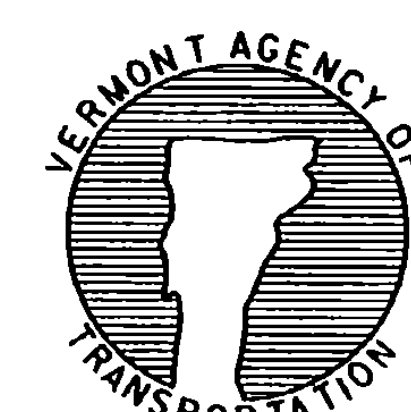
- GENERAL NOTES**
- ALL RUNWAY MARKINGS ARE WHITE EXCEPT IN THE DISPLACED THRESHOLD AREA AND NON FULL STRENGTH SHOULDER MARKINGS.
 - FOR RUNWAYS LESS THAN 150' IN WIDTH, THE WIDTH OF THE MARKINGS, SPACES BETWEEN MARKINGS, AND DISTANCE OF MARKINGS FROM THE RUNWAY EDGE ARE CHANGED PROPORTIONALLY.
 - ADJUSTMENTS TO THE LENGTH OF THE CENTERLINE STRIPES AND GAPS, WHERE NECESSARY TO ACCOMMODATE THE RUNWAY LENGTH, ARE MADE NEAR THE RUNWAY MIDPOINT.
 - ALL RUNWAY MARKINGS ARE TO BE STRIATED WITH ALL STRIPES AND SPACES EQUAL IN WIDTH (4" TO 6").

NOTE :
MARKING OF RUNWAY SHOULD BE BASED ON FAA SPECIFICATIONS. SEE CURRENT FAA ADVISORY CIRCULAR.

REVISIONS AND CORRECTIONS
JUNE 29, 1982 - ORIGINAL APPROVAL DATE
MAR. 5, 1990 - SHEET UPDATED
JUNE 1, 1994 - REISSUED, WITHOUT CHANGE, UNDER NEW SIGNATURE.

APPROVED
APPROVED FOR THIS PROJECT AND/OR DESIGN IMPLEMENTATION. FHWA FINAL APPROVAL PENDING.
W. S. [Signature]
DIRECTOR OF RAIL, AIR AND PUBLIC TRANSIT

RUNWAY MARKING DETAILS

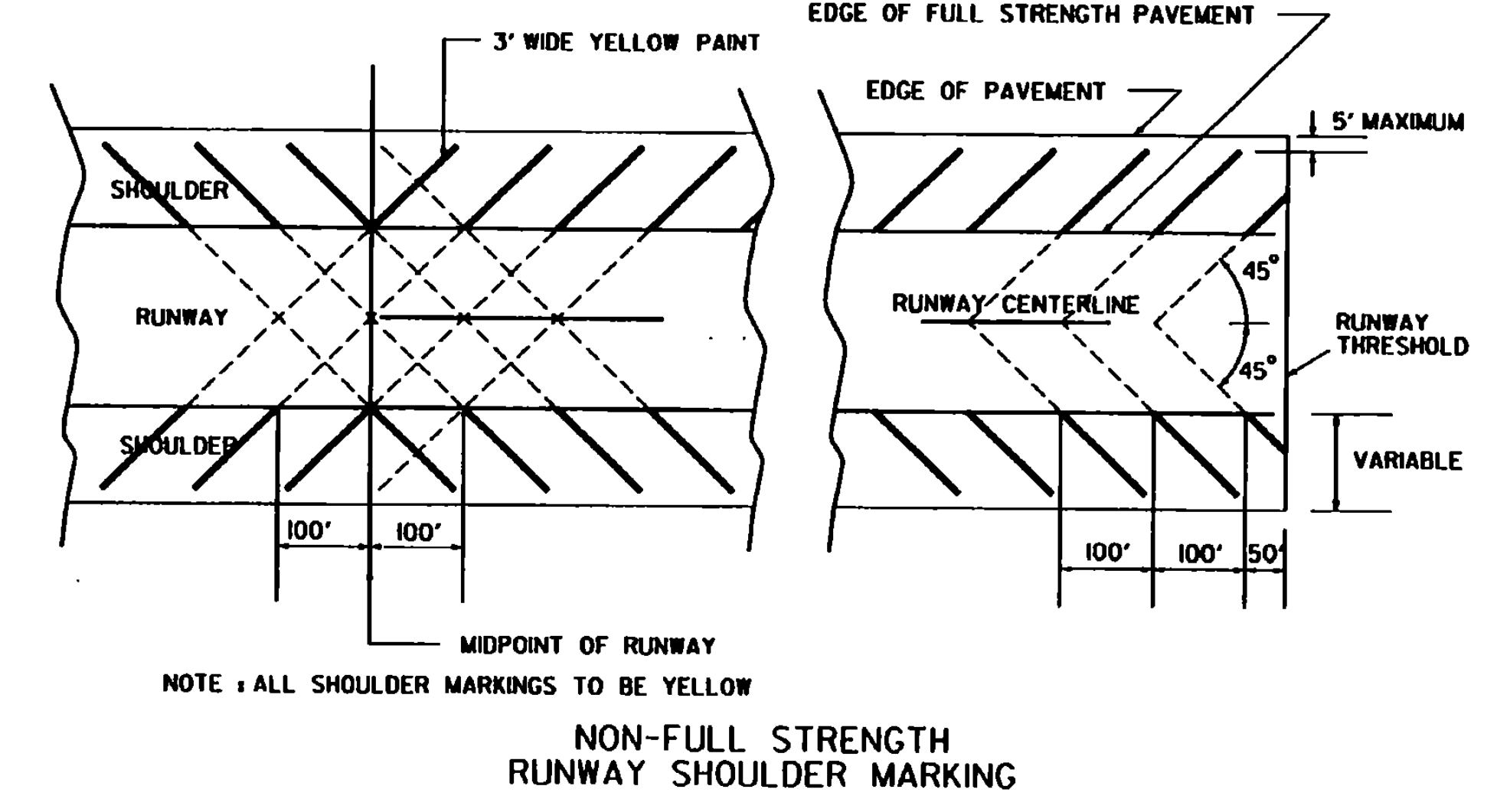
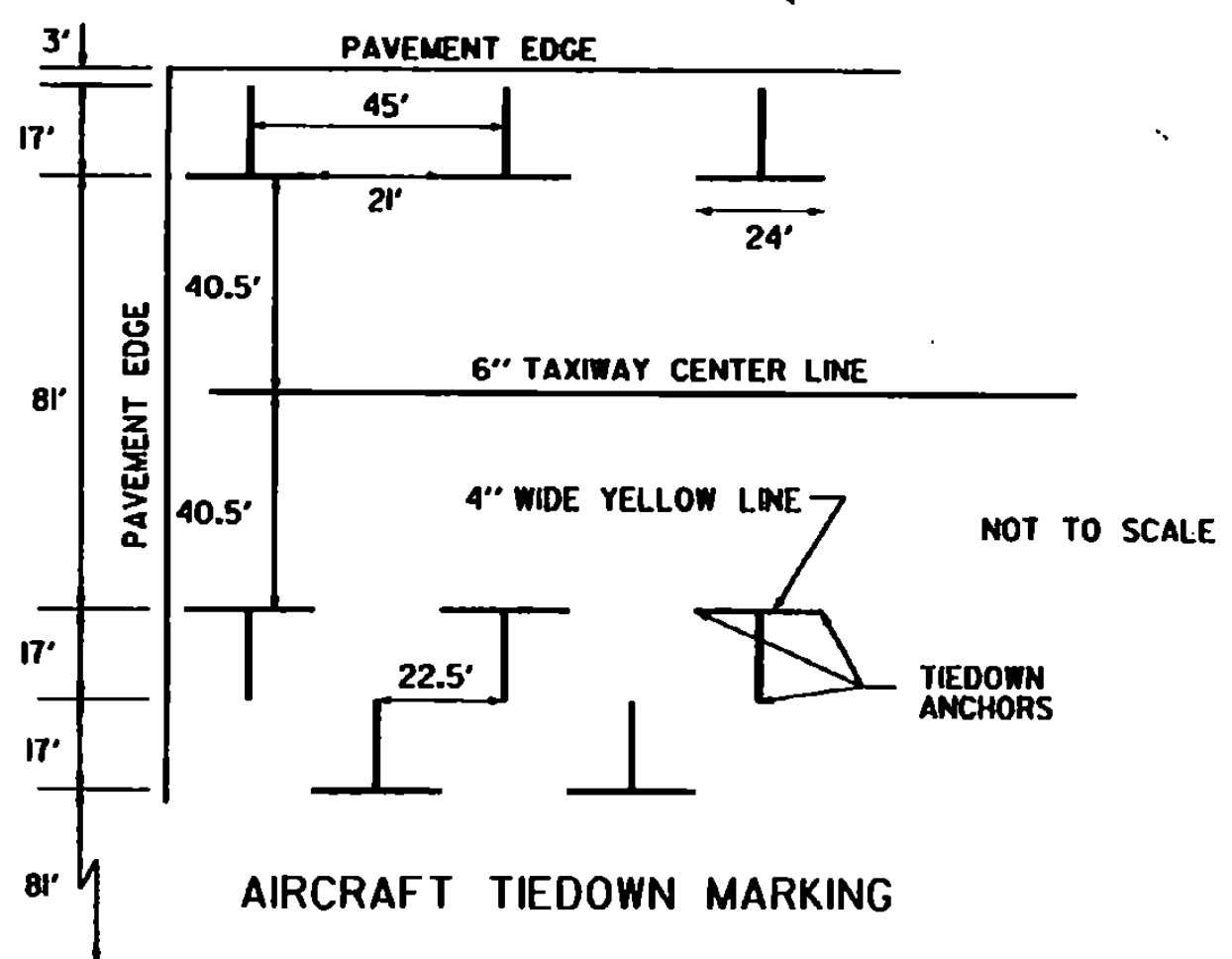
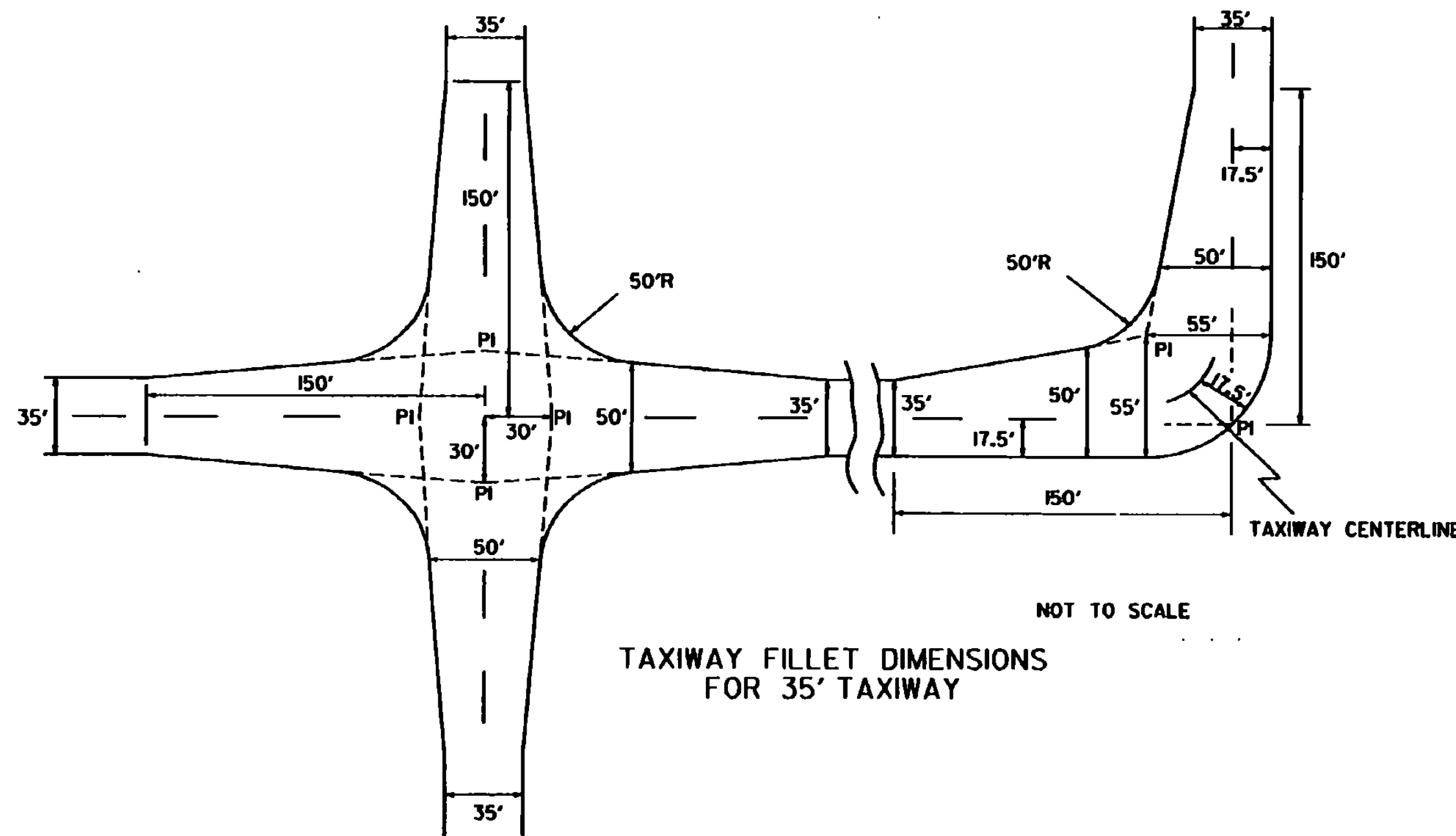
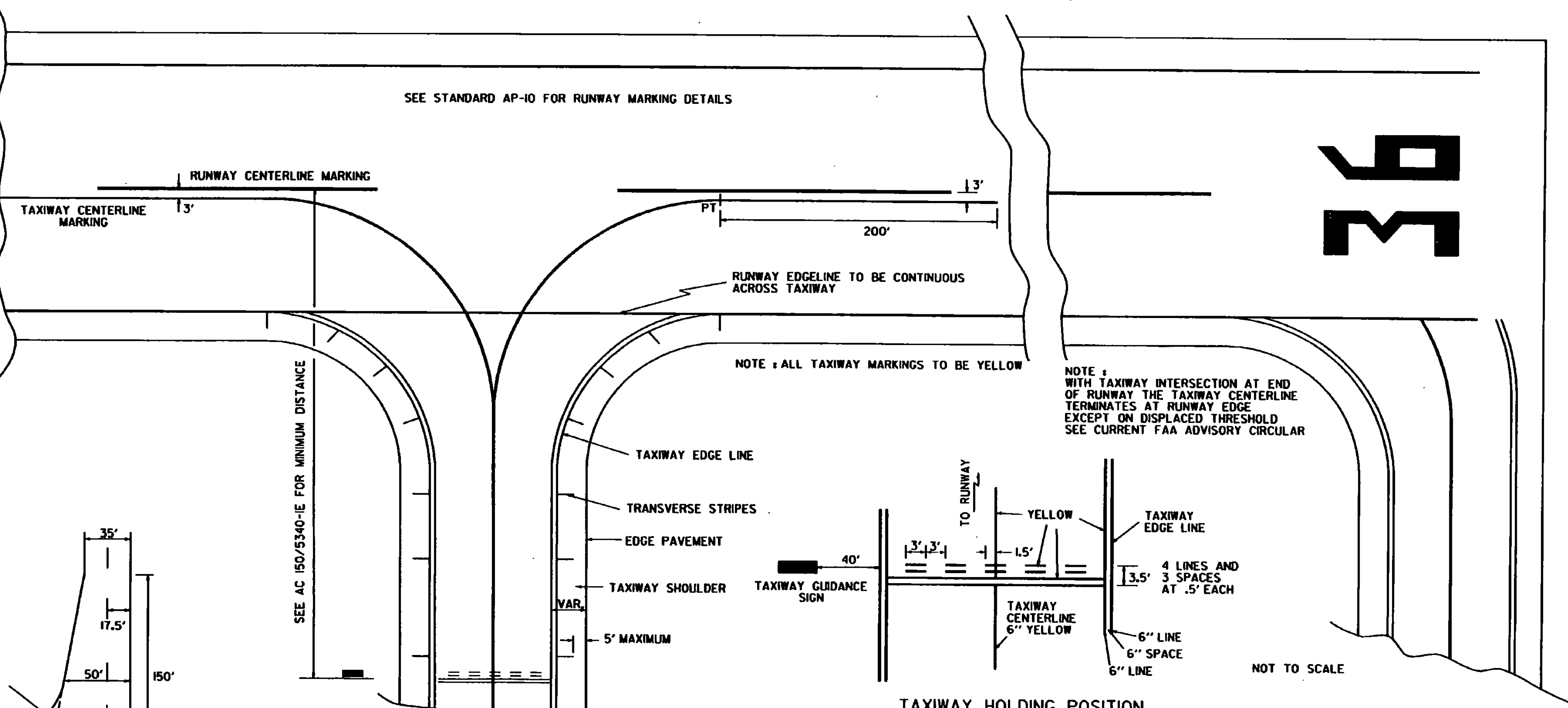


STANDARD
AP-10

NOTE :
ON LIGHT COLORED PAVEMENTS THE CONTRAST OF THE MARKINGS IS
TO BE INCREASED BY OUTLINING ALL MARKINGS WITH A 6" BLACK BORDER.

SEE STANDARD AP-10 FOR RUNWAY MARKING DETAILS

AP-11



REVISIONS AND CORRECTIONS

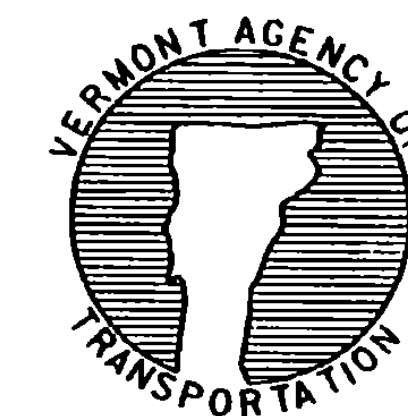
MAR. 1, 1990 - SHEET UPDATED
JUNE 1, 1994 - REISSUED, WITHOUT CHANGE,
UNDER NEW SIGNATURE.

APPROVED

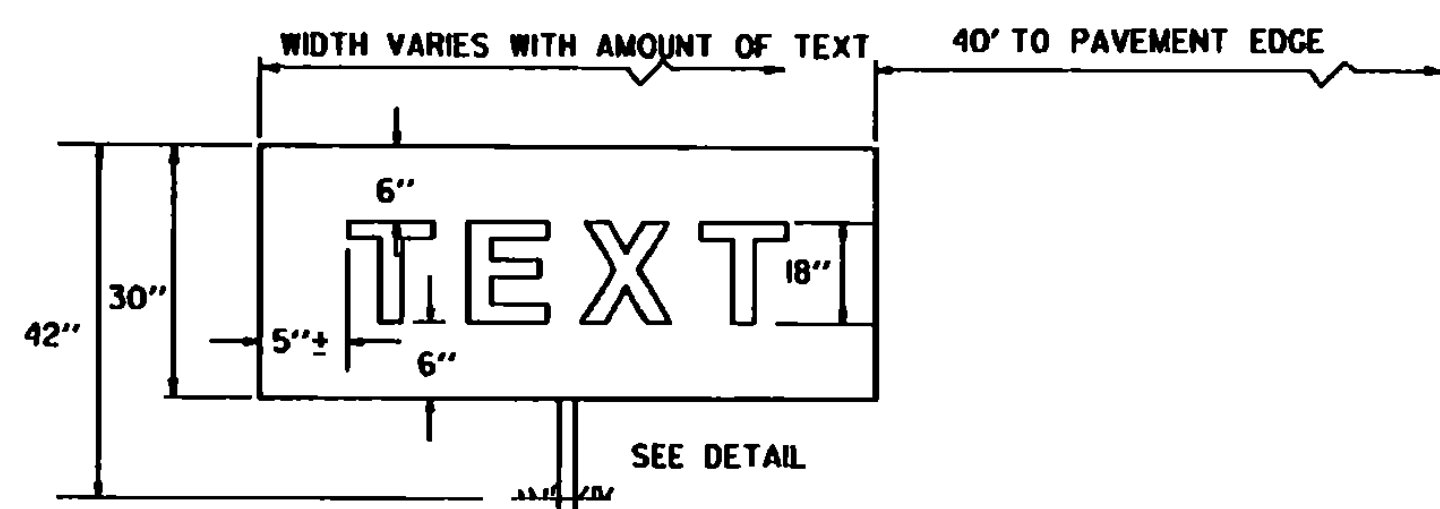
APPROVED FOR THIS PROJECT
AND/OR DESIGN IMPLEMENTATION.
FHWA FINAL APPROVAL PENDING.

W.S. Brown
DIRECTOR OF RAIL, AIR AND PUBLIC TRANSIT

TAXIWAY AND APRON
MARKING DETAILS

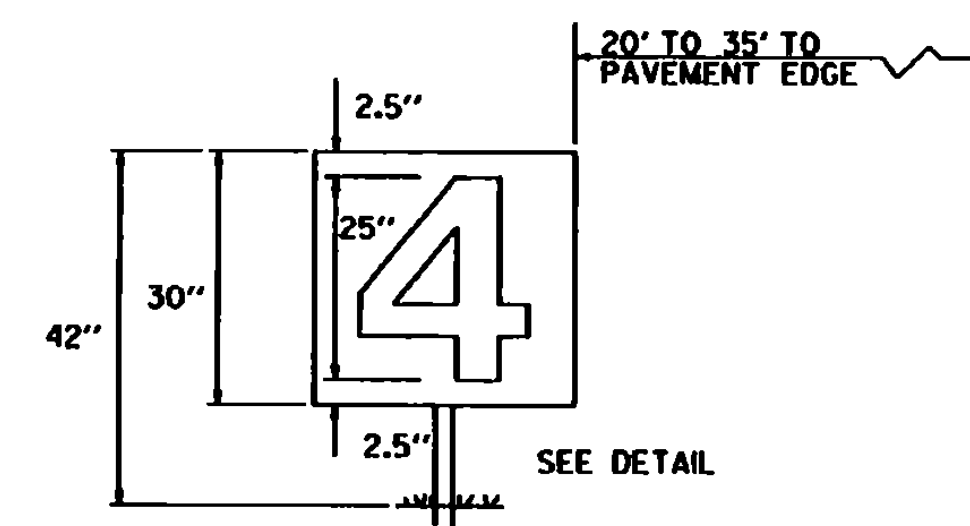
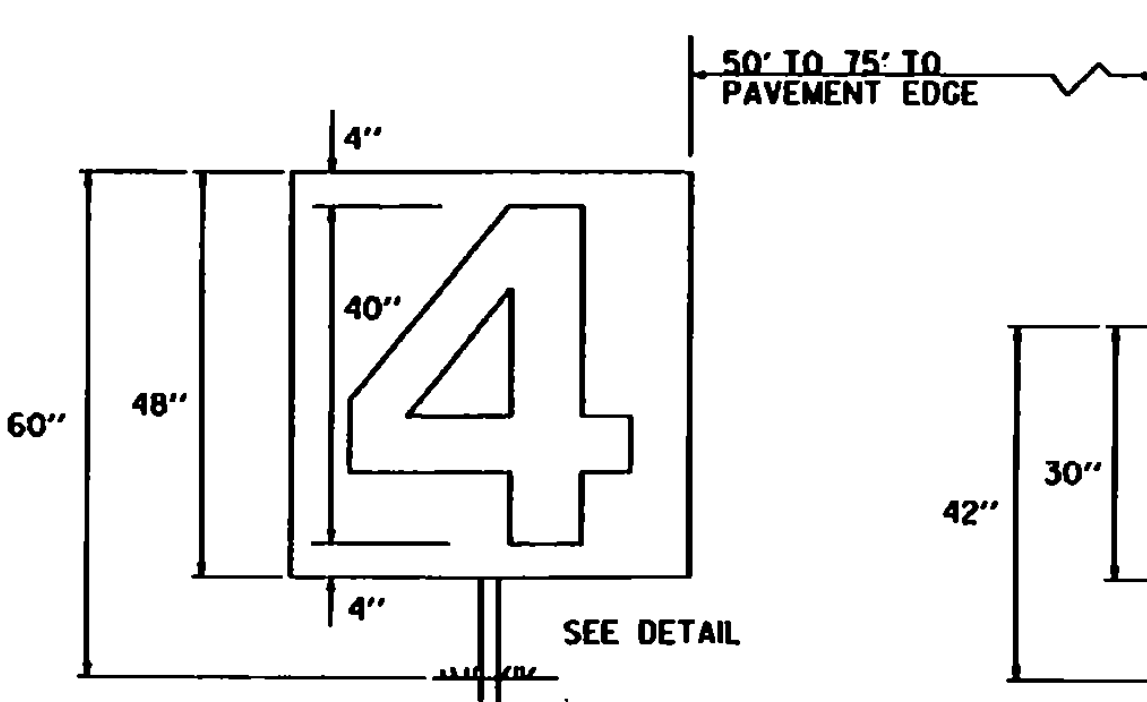


STANDARD
AP-11



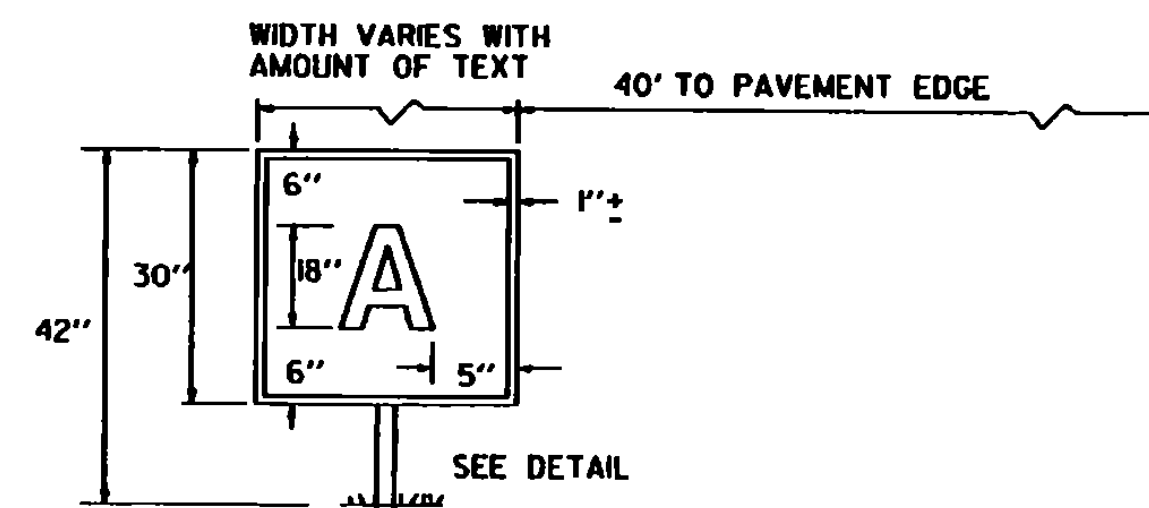
MANDATORY SIGNS

- MANDATORY SIGNS HAVE WHITE INSCRIPTIONS ON A RED BACKGROUND
- SIGNS TO BE LIGHTED WHEN USED ON CERTIFICATED AIRPORTS OR OTHER AIRPORTS HAVING INSTRUMENT OPERATIONS.
- UNLIGHTED, RETROREFLECTIVE SIGNS MAY BE USED AT GENERAL AVIATION AIRPORTS HAVING ONLY VISUAL FLIGHT (VFR) OPERATIONS.



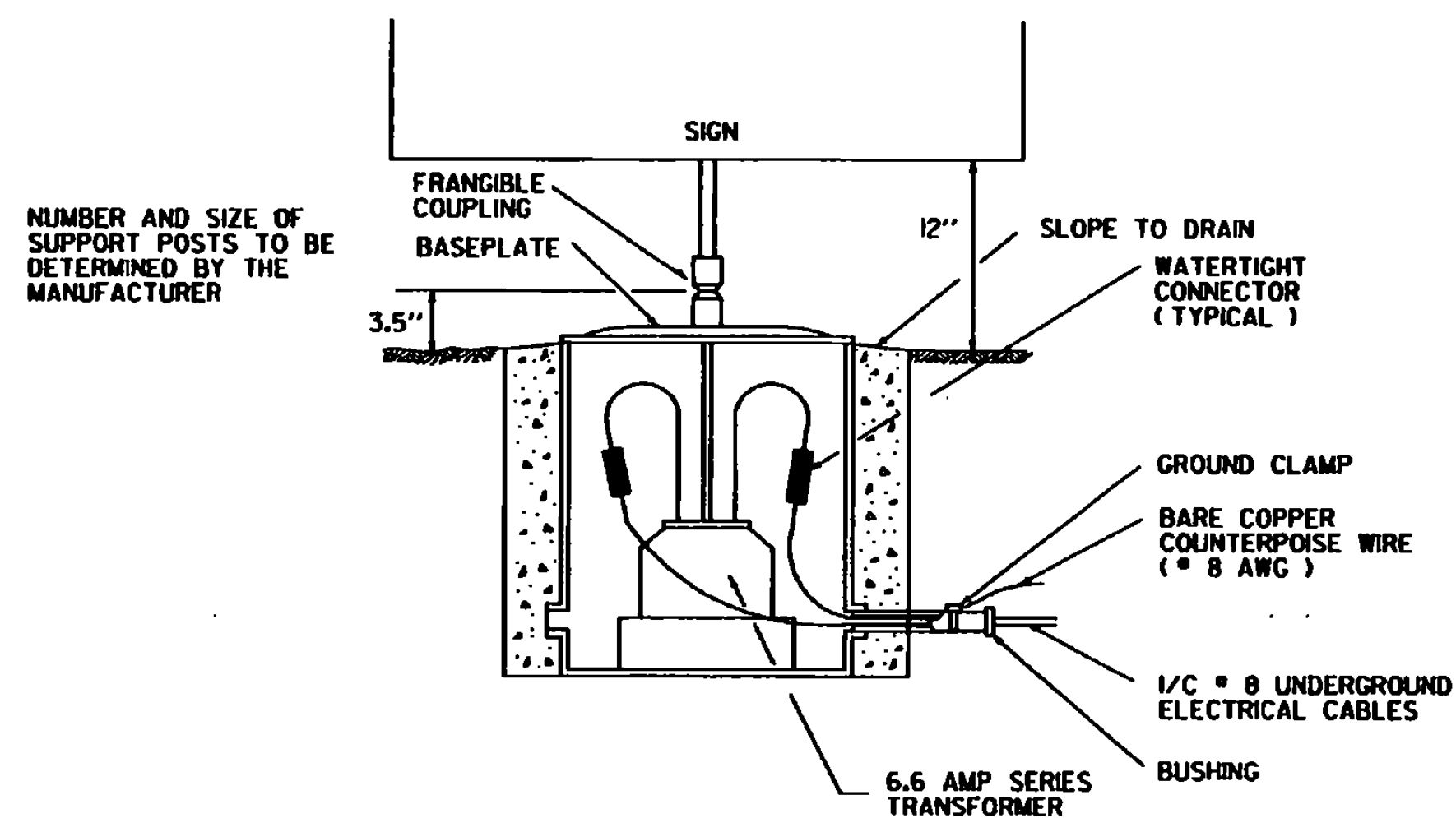
RUNWAY DISTANCE REMAINING SIGNS

- SIGNS HAVE WHITE INSCRIPTIONS ON A BLACK BACKGROUND.
- LARGE SIGNS USED IF PLACED 50 TO 75 FEET FROM PAVEMENT EDGE.
- SMALL SIGNS USED IF PLACED 20 TO 35 FEET FROM PAVEMENT EDGE.
- SIGN SIZE SHOULD BE CONSISTANT ALONG LENGTH OF EACH RUNWAY.
- ONLY LIGHTED SIGNS ARE USED FOR RUNWAY DISTANCE REMAINING SIGNS.
- SIGNS TO BE DOUBLE-SIDED, PREFERABLY LOCATED ON THE LEFT SIDE OF RUNWAY AS VIEWED FROM THE MOST OFTEN USED DIRECTION.

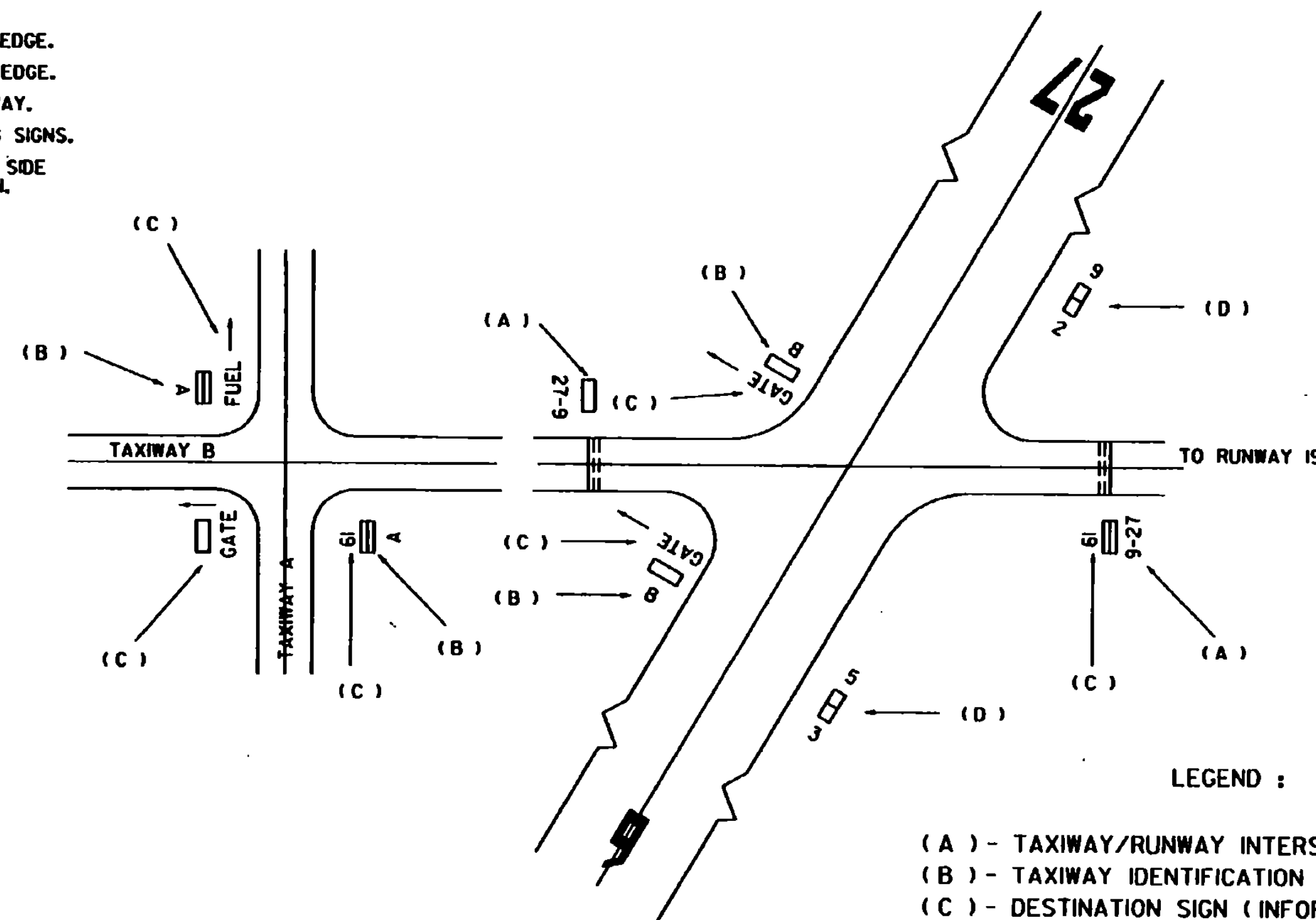


INFORMATION SIGNS

- INFORMATION SIGNS HAVE BLACK INSCRIPTIONS ON A YELLOW BACKGROUND, AND HAVE A BLACK BORDER.



BASE FOR LIGHTED SIGNS
DETAIL



LEGEND :

- (A) - TAXIWAY/RUNWAY INTERSECTION SIGN (MANDATORY TYPE)
- (B) - TAXIWAY IDENTIFICATION SIGN (INFORMATION TYPE)
- (C) - DESTINATION SIGN (INFORMATION TYPE)
- (D) - RUNWAY DISTANCE REMAINING SIGN

TYPICAL SIGN APPLICATIONS

REFER TO CURRENT FAA ADVISORY CIRCULAR .

REVISIONS AND CORRECTIONS

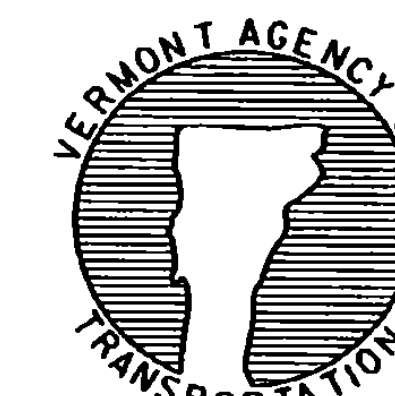
MAR. 1, 1990 - SHEET UPDATED
JUNE 1, 1994 - REISSUED, WITHOUT CHANGE, UNDER NEW SIGNATURE.

APPROVED

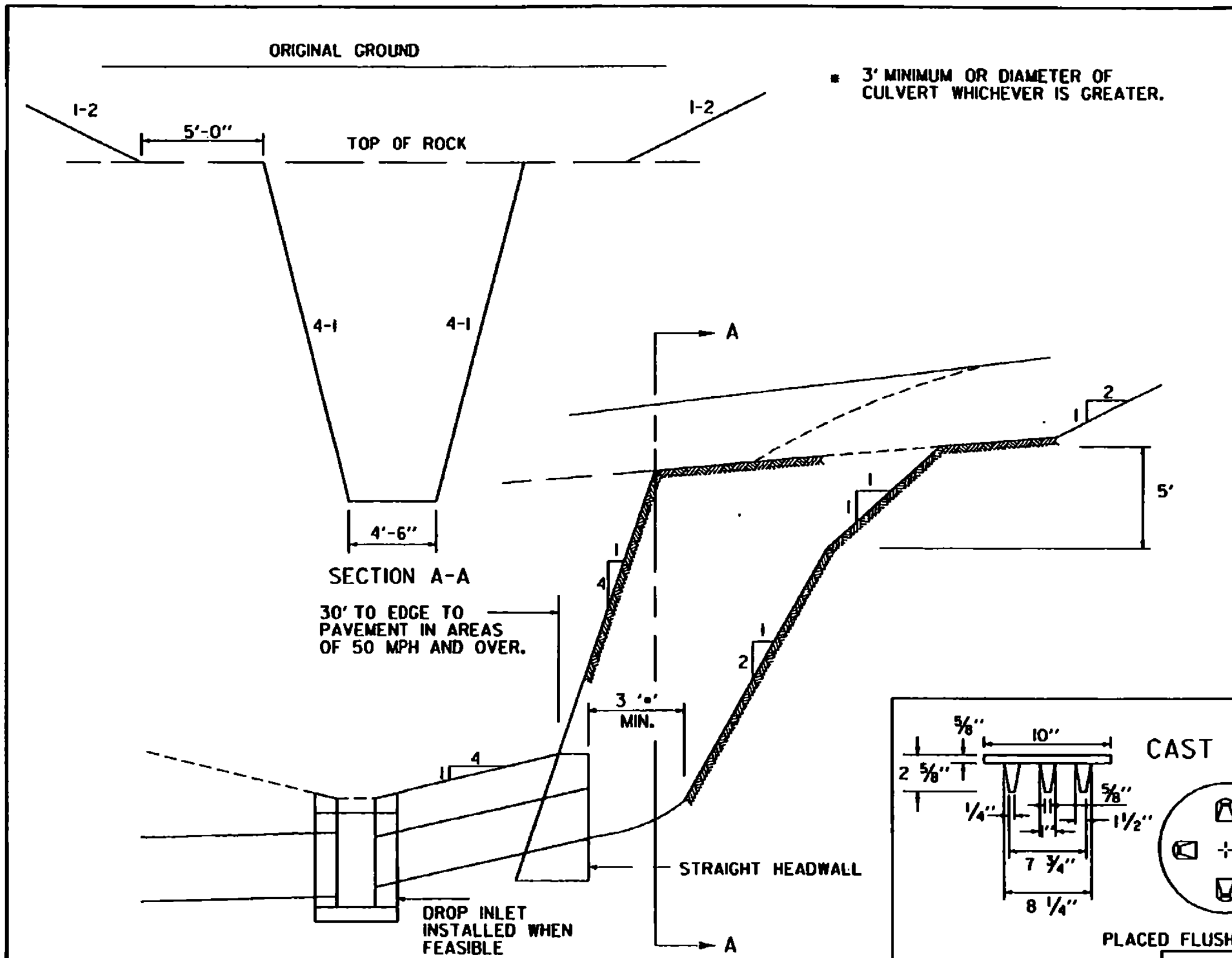
APPROVED FOR THIS PROJECT AND/OR DESIGN IMPLEMENTATION. FHWA FINAL APPROVAL PENDING.

W. S. Bump
DIRECTOR OF RAIL, AIR AND PUBLIC TRANSIT

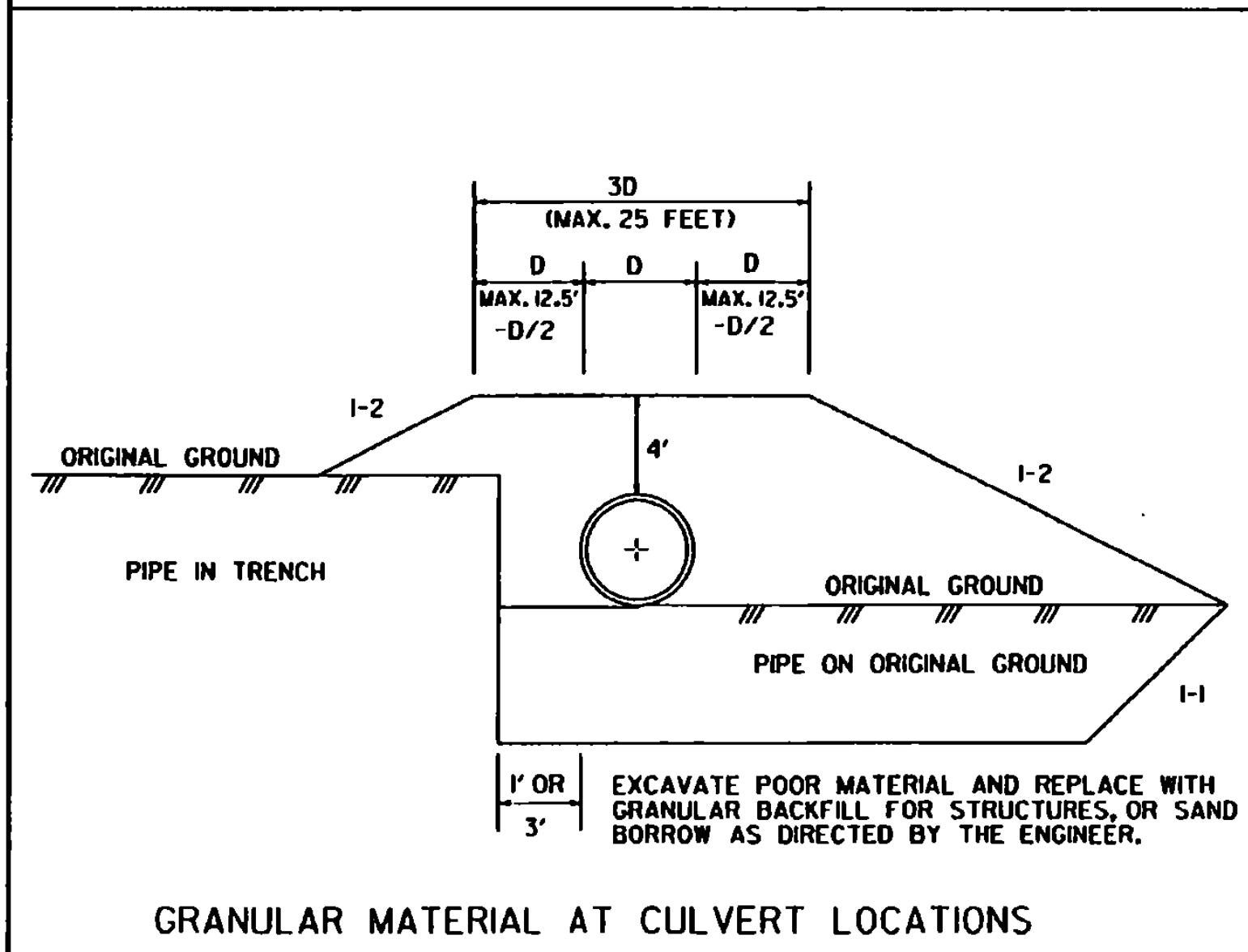
SIGN SYSTEMS



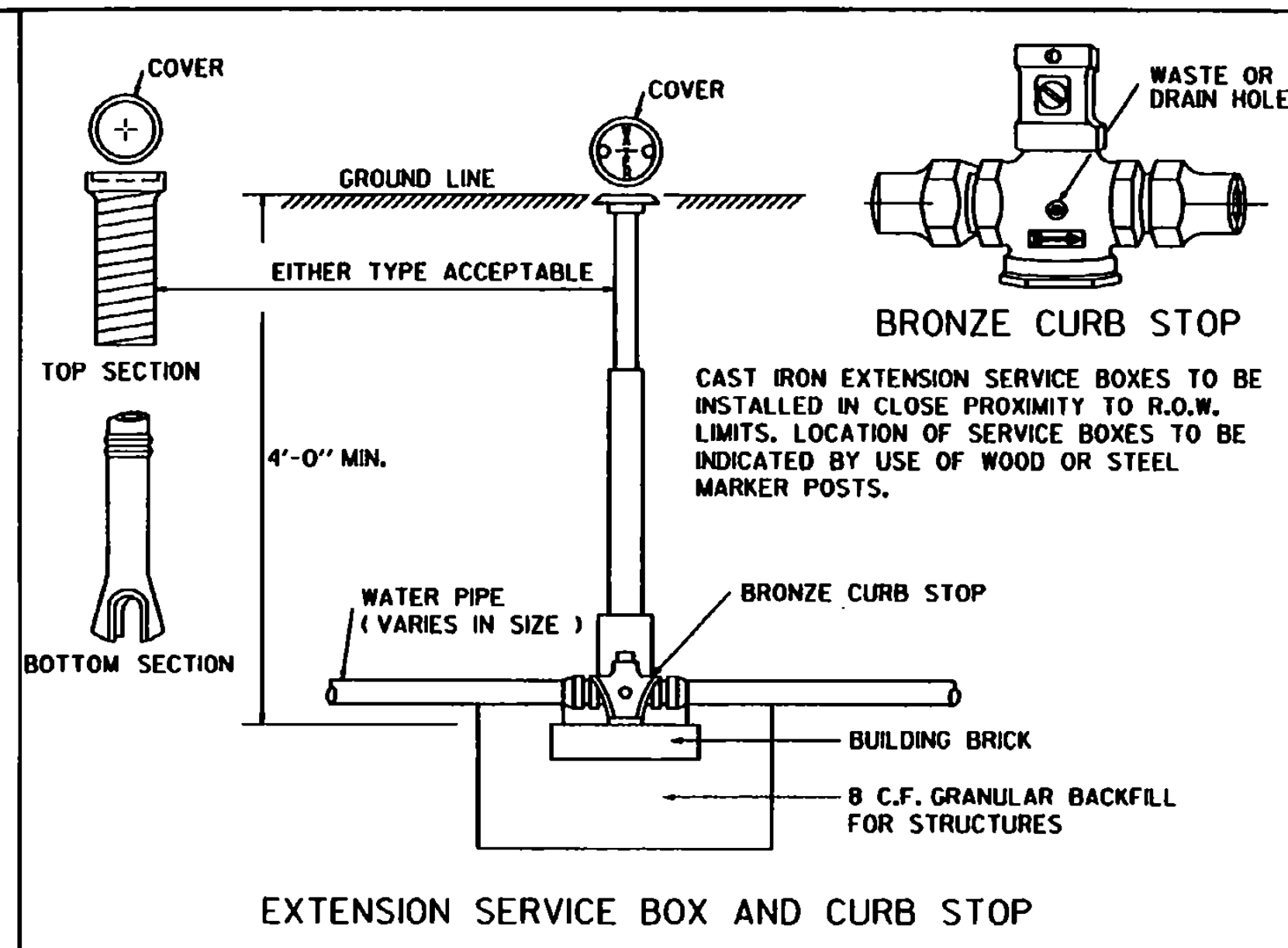
STANDARD
AP-12



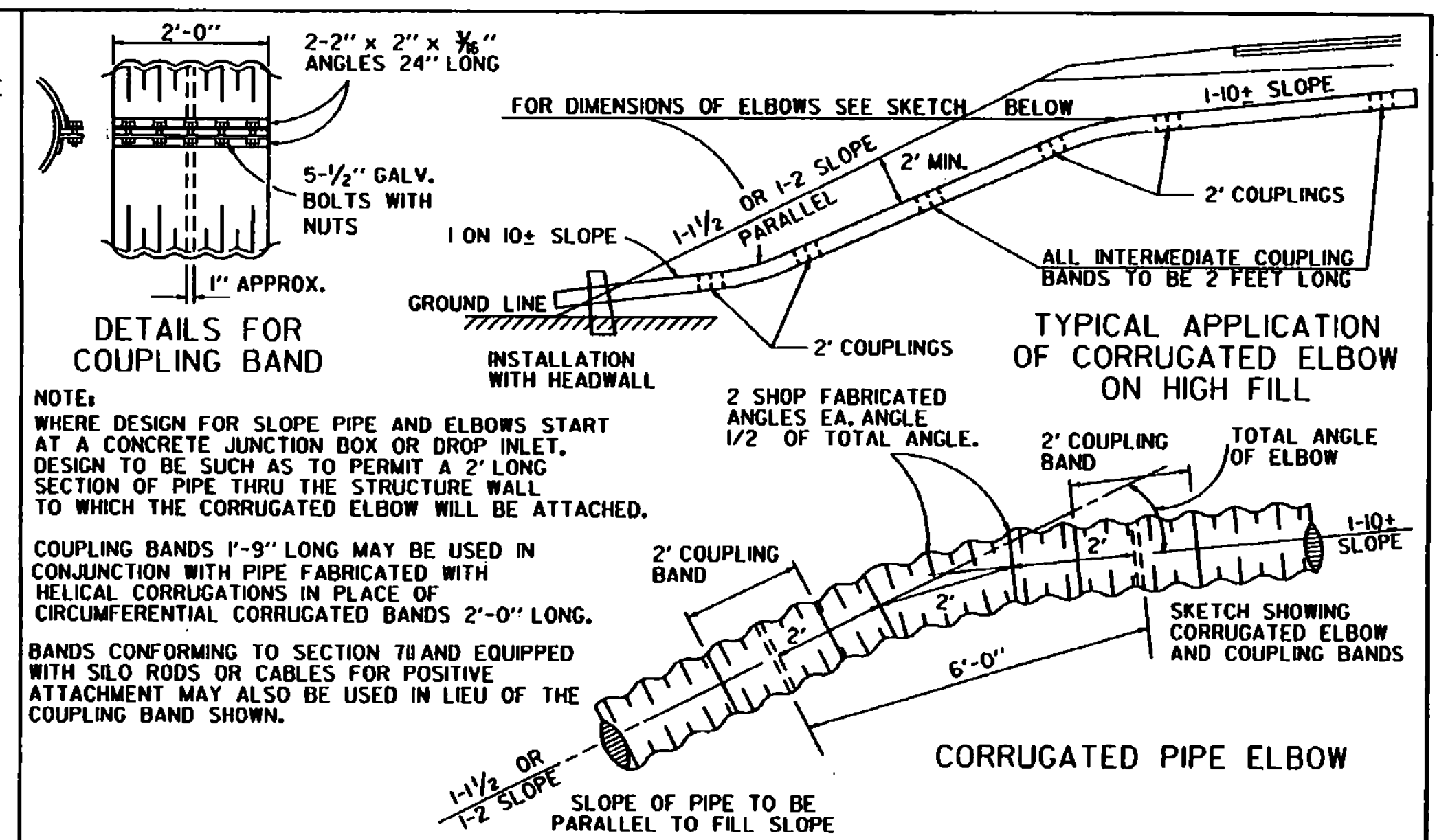
TYPICAL WATERFALL FOR CULVERT UP TO AND INCLUDING 48" DIAMETER



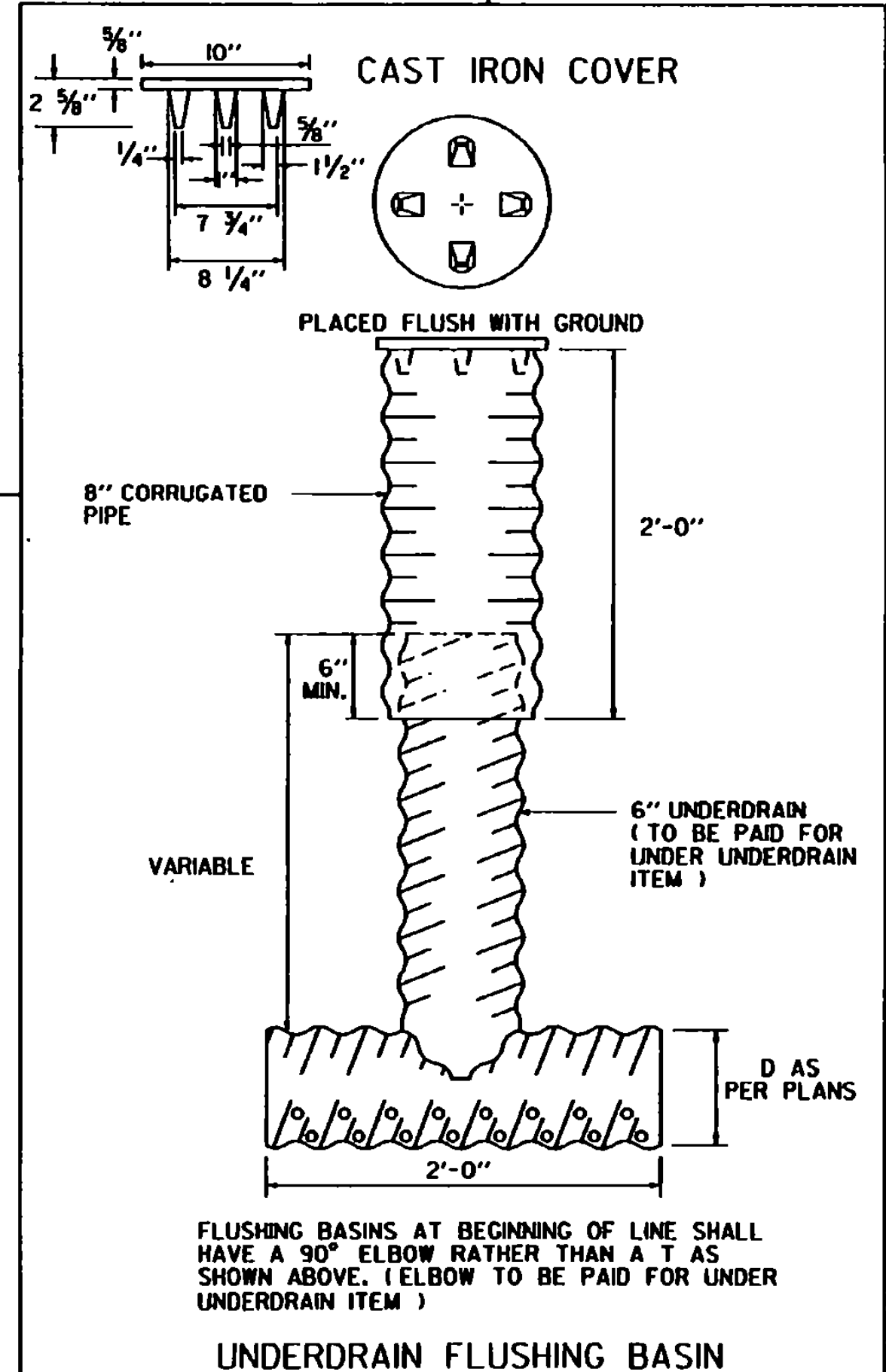
GRANULAR MATERIAL AT CULVERT LOCATIONS



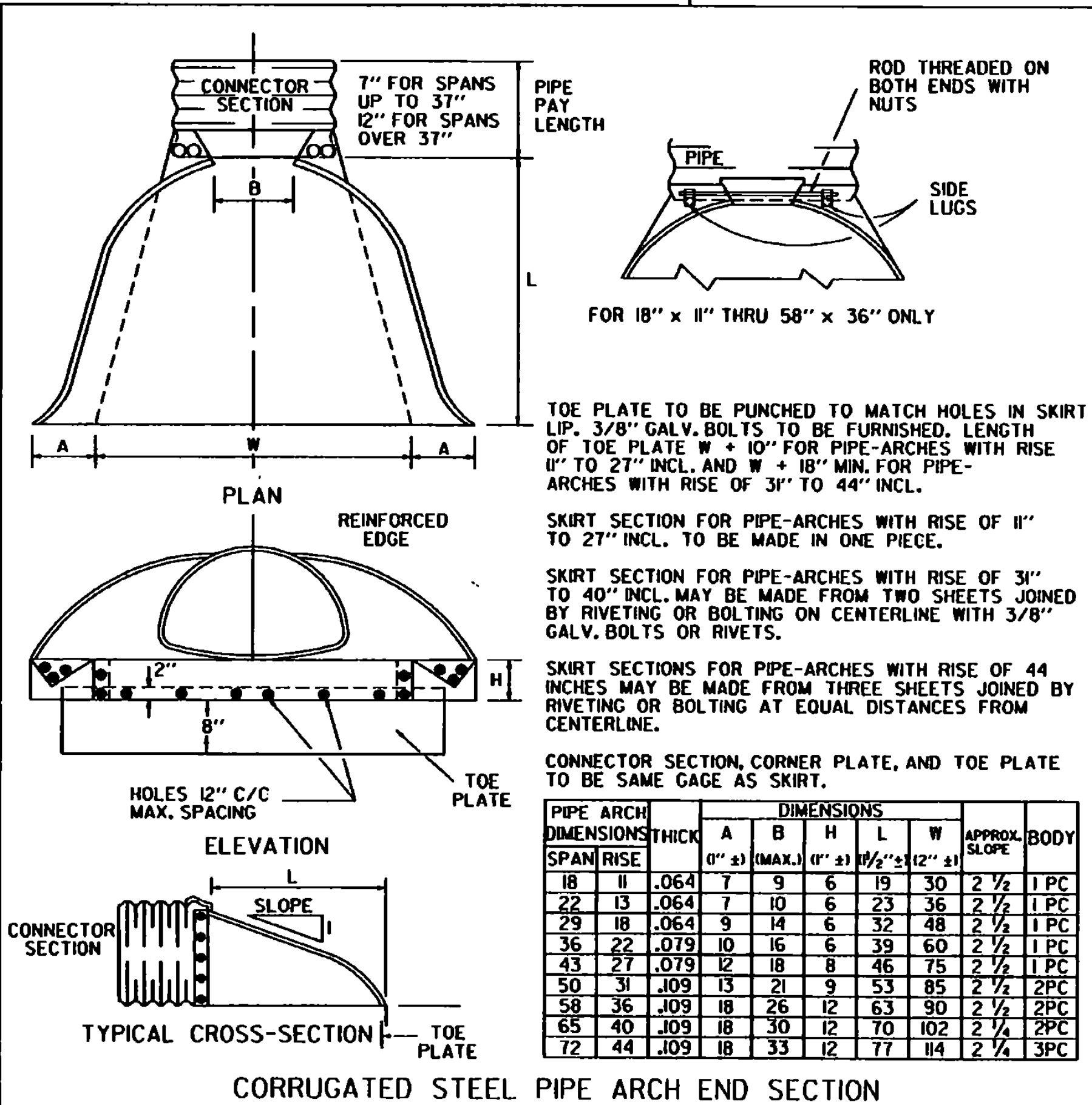
EXTENSION SERVICE BOX AND CURB STOP



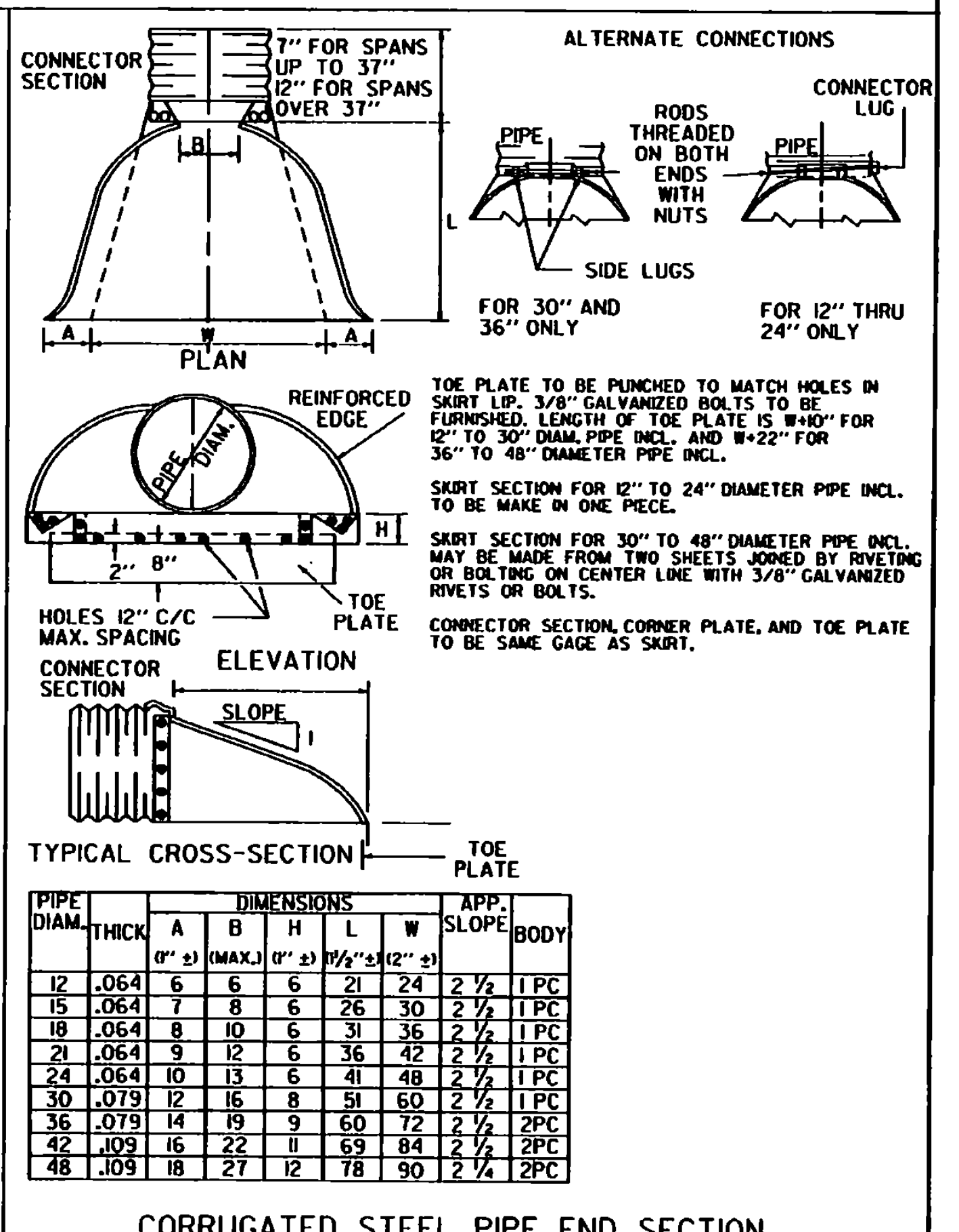
CORRUGATED PIPE ELBOW



UNDERDRAIN FLUSHING BASIN



CORRUGATED STEEL PIPE ARCH END SECTION



CORRUGATED STEEL PIPE END SECTION

REVISIONS AND CORRECTIONS
 DEC. 6, 1971 - ORIGINAL APPROVAL DATE
 JULY 17, 1972 - HELICAL CORRUGATED COUPLING NOTE ADDED
 JULY 24, 1975 - GRANULAR MATERIAL AT CULVERT LOCATIONS CORRECTED
 OCT. 30, 1985 - REVISED TO CONFORM TO 1986 SPECIFICATIONS
 JUNE 1, 1994 - REISSUED WITHOUT CHANGE, UNDER NEW SIGNATURES.

APPROVED
 APPROVED FOR THIS PROJECT AND/OR DESIGN IMPLEMENTATION. FHWA FINAL APPROVAL PENDING.
 Stephen D. McArthur, P.E.
 DIRECTOR OF ENGINEERING
 John D. Murphy, P.E.
 DESIGN ENGINEER

TYPICAL WATERFALL FOR CULVERTS UP TO AND INCLUDING 48" DIAMETER
 EXTENSION SERVICE BOX AND CURB STOP
 GRANULAR BORROW AT CULVERT LOCATIONS
 UNDERDRAIN FLUSHING BASIN
 CORRUGATED STEEL PIPE ARCH END SECTION
 CORRUGATED STEEL PIPE END SECTION

VERMONT AGENCY OF TRANSPORTATION
 STANDARD
 D-4

REINFORCED CONCRETE DROP INLET WITH GRATE (BOTTOM SECTION)

ANY OF THE COMBINATIONS OF TOPS, CURBS AND GRATES FOUND ON SHEETS D-6, D-9, D-10, D-11, D-15 AND D-16 CAN BE ADAPTED FOR USE WITH THIS STRUCTURE.

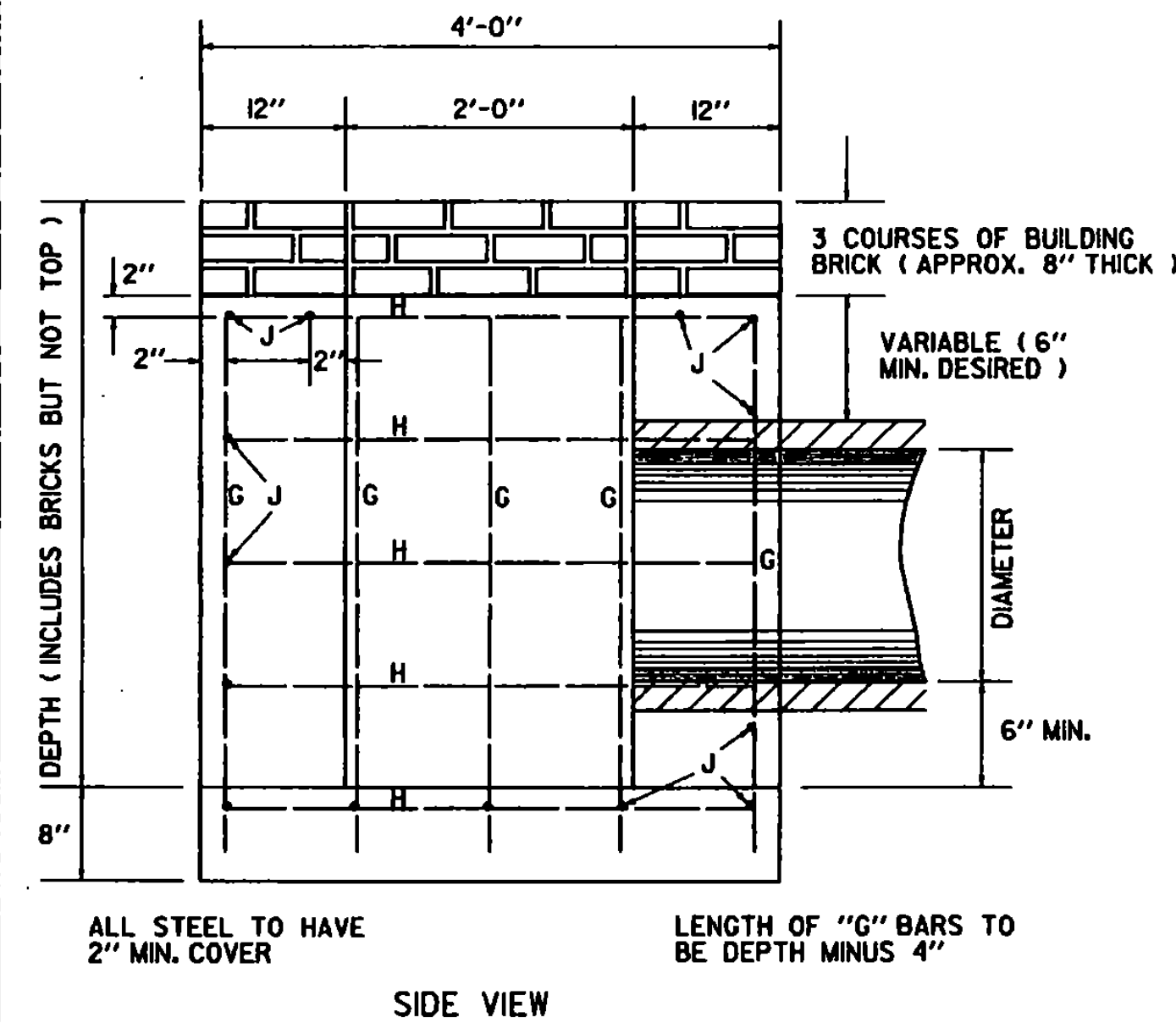
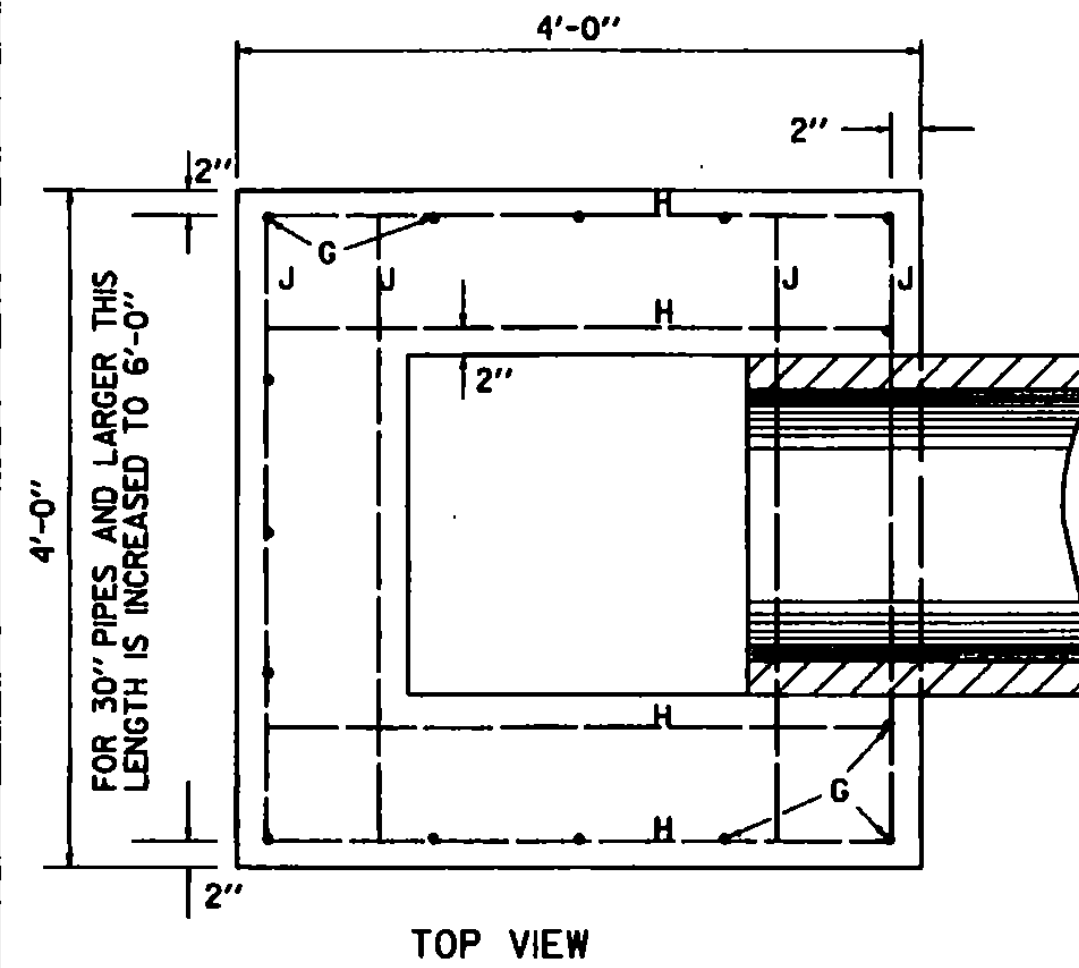
MINIMUM DEPTH FOR

15" 3'-6"
18" 3'-6"
24" 4'-0"

STEEL SCHEDULE FOR DROP INLET (BOTTOM SECTION ONLY)										
DEPTH	12" TO 24" DIAMETER 4' x 4' D.I.				30" DIAMETER 4' x 6' D.I.					
	NO. J	LENGTH	NO. H	LENGTH	NO. G	LENGTH	NO. J	LENGTH	NO. H	LENGTH
3'-0"	12	3'-8"	13	3'-8"	15	2'-8"				
3'-6"	12	3'-8"	13	3'-8"	15	3'-2"				
4'-0"	14	3'-8"	15	3'-8"	15	3'-8"				
4'-6"	14	3'-8"	15	3'-8"	15	4'-2"				
5'-0"	16	3'-8"	17	3'-8"	15	4'-8"				
5'-6"	16	3'-8"	17	3'-8"	15	5'-2"				
6'-0"	18	3'-8"	19	3'-8"	15	5'-8"				

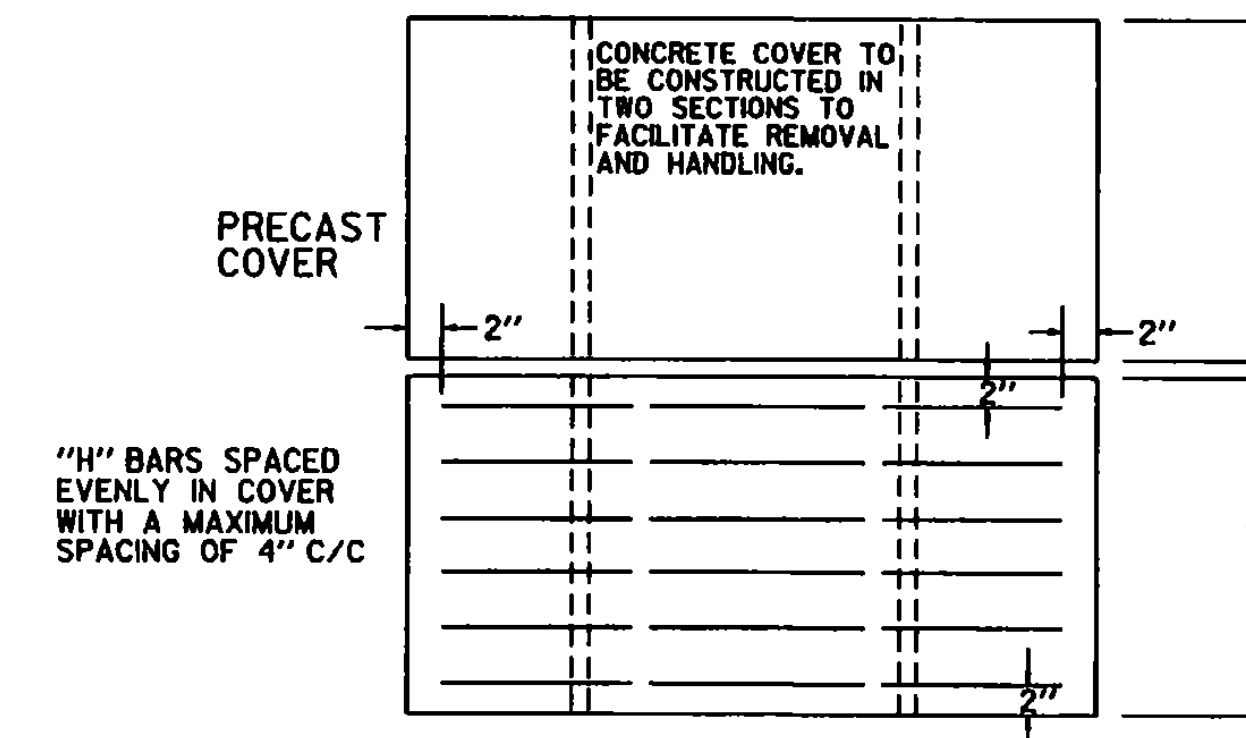
DEPTH	36" DIAMETER 4' x 6' D.I.			
	NO. J	LENGTH	NO. H	LENGTH
5'-0"	14	5'-8"	19	3'-8"
5'-6"	14	5'-8"	19	3'-8"
6'-0"	16	5'-8"	21	3'-8"

DEPTH	12"-24" DIA.		30" DIA.		36" DIA.	
	CONC BY C.Y.	STEEL	CONC BY C.Y.	STEEL	CONC BY C.Y.	STEEL
3'-0"	1.73	138				
3'-6"	1.95	145				
4'-0"	2.17	168				
4'-6"	2.40	176	3.08	210		
5'-0"	2.62	199	3.37	238	3.29	238
5'-6"	2.84	207	3.67	247	3.59	247
6'-0"	3.06	230	3.97	276	3.89	276



1. TO FIND VOLUME OF CONCRETE FOR THE ENTIRE STRUCTURE, ADD THE VOLUME FOR THE TOP USED, TO THE VOLUME IN THIS TABLE. FOR VOLUME IN TOP, SEE SHEETS D-9, D-10.
2. ALL REINFORCING STEEL TO BE NO. 5 O DEFORMED BARS, EVENLY SPACED WITH A MAXIMUM SPACING OF 12" CENTER TO CENTER.
3. DROP INLET TO BE CONSTRUCTED IN ACCORDANCE WITH STRUCTURAL CONCRETE, SECTION 501.
4. FURNISHING AND LAYING OF BRICKS FOR ADJUSTING ELEVATION OF GRATE, SHALL BE INCLUDED IN UNIT BID PRICE FOR CONCRETE, CLASS B AND THEIR VOLUME TO BE INCLUDED IN THE FINAL QUANTITIES.
5. MORTAR, TYPE II, TO BE USED FOR JOINT FILLER AND LAYING OF BRICK.
6. FOR PIPES OF 30" OR MORE IN DIAMETER, ALLOWANCE SHALL BE MADE FOR THE OPENING IN COMPUTING CONCRETE VOLUMES. THIS DEDUCTION WILL BE BASED ON THE RATED DIAMETER OF THE PIPE USED, WITH THE SAME DEDUCTION FOR CONCRETE AND METAL PIPE.

REINFORCED CONCRETE DROP INLET WITH PRECAST COVER
DROP INLET AND COVER TO BE CONSTRUCTED IN ACCORDANCE WITH STRUCTURAL CONCRETE, SECTION 501

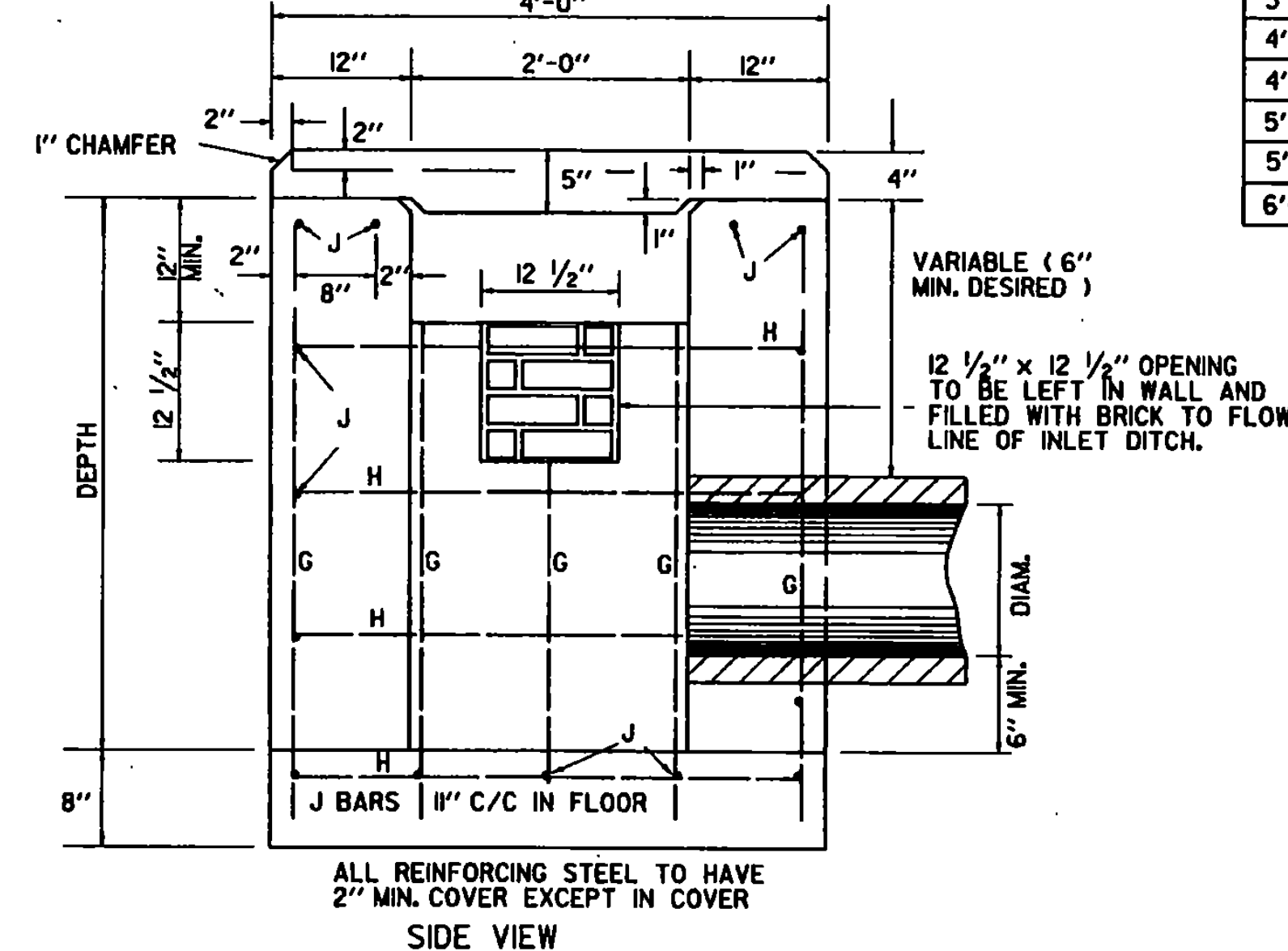
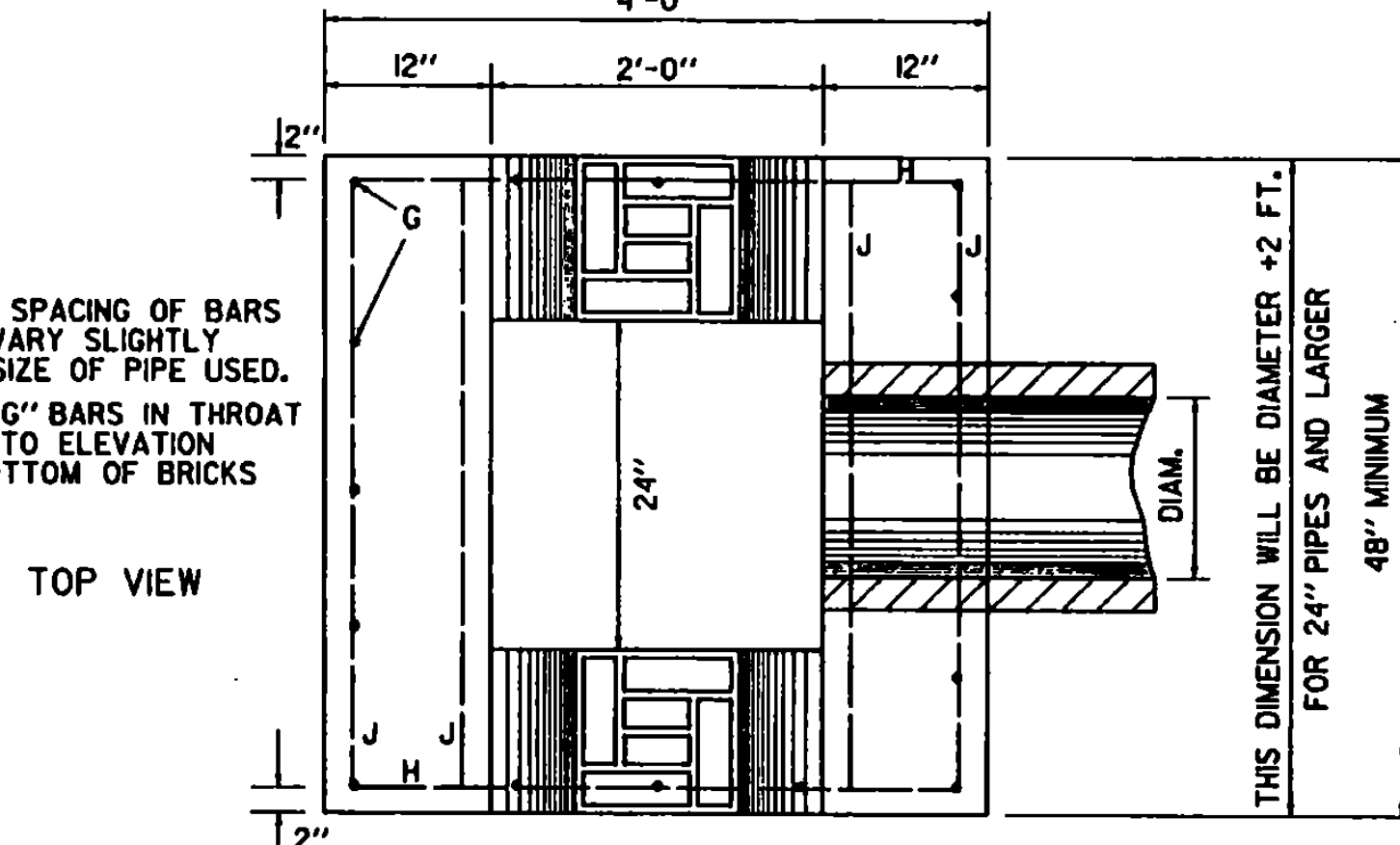


DEPTH	12" TO 24" DIAMETER			30" DIAMETER		
	G	LENGTH	H-J	LENGTH	G	LENGTH
2'-0"	15	2'-4"	31	3'-8"		
2'-6"	15	2'-10"	33	3'-8"		
3'-0"	15	3'-4"	36	3'-8"		
3'-6"	15	3'-10"	36	3'-8"	16	3'-10"
4'-0"	15	4'-4"	39	3'-8"	16	4'-4"
4'-6"	15	4'-10"	39	3'-8"	16	4'-10"
5'-0"	15	5'-4"	42	3'-8"	16	5'-4"
5'-6"	15	5'-10"	42	3'-8"	16	5'-10"
6'-0"	15	6'-4"	45	3'-8"	16	6'-4"

DEPTH	36" DIAMETER			
	G	LENGTH	J	LENGTH
4'-0"	16	4'-4"	14	4'-8"
4'-6"	16	4'-10"	14	4'-8"
5'-0"	16	5'-4"	16	4'-8"
5'-6"	16	5'-10"	16	4'-8"
6'-0"	16	6'-4"	18	4'-8"

NOTE: SPACING OF BARS WILL VARY SLIGHTLY WITH SIZE OF PIPE USED. CUT "G" BARS IN THROAT AREA TO ELEVATION AT BOTTOM OF BRICKS

TOP VIEW



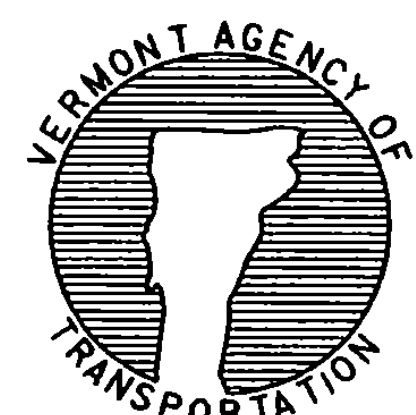
DEPTH	12" DIA.		15" DIA.		18" DIA.		24" DIA.		30" DIA.		36" DIA.	
	CONC BY C.Y.	STEEL LBS.	CONC BY C.Y.	STEEL LBS.	CONC BY C.Y.	STEEL LBS.	CONC BY C.Y.	STEEL LBS.	CONC BY C.Y.	STEEL LBS.	CONC BY C.Y.	STEEL LBS.
2'-0"	1.4	155										
2'-6"	1.6	171	1.6	171								
3'-0"	1.8	190	1.8	190								
3'-6"	2.0	198	2.0	198	2.1	204						
4'-0"	2.3	217	2.3	217	2.3	221	2.5	248				
4'-6"	2.5	225	2.5	225	2.6	237	2.7	256				
5'-0"	2.7	244	2.7	244	2.8	254	3.0	282				
5'-6"	2.9	252	2.9	252	3.0	270	3.2	290				
6'-0"	3.2	271	3.2	271	3.3	287	3.5	316				

ALL REINFORCING STEEL TO HAVE 2" MIN. COVER EXCEPT IN COVER
SIDE VIEW

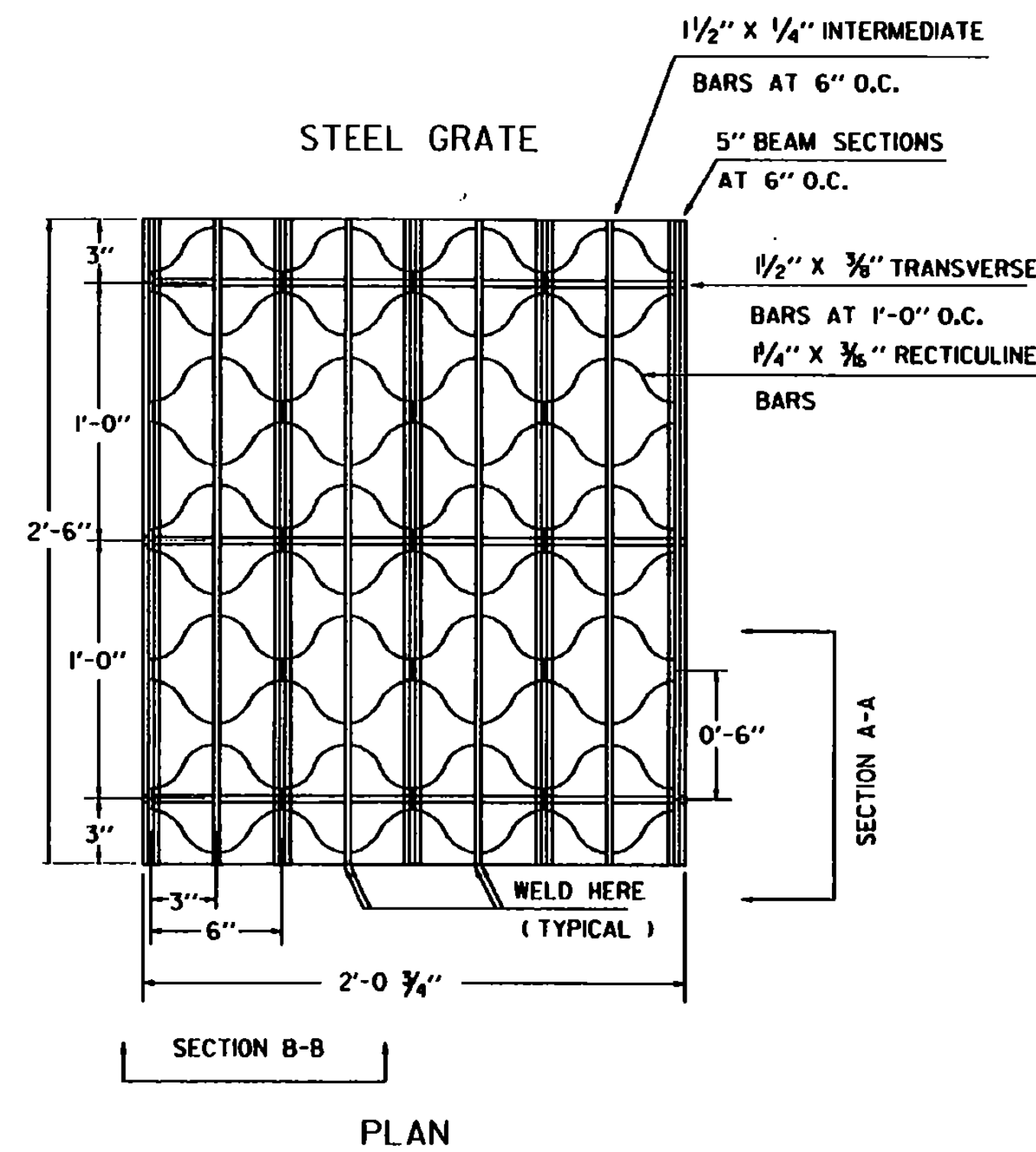
REVISIONS AND CORRECTIONS
DEC. 6, 1971 - ORIGINAL APPROVAL
JUNE 1, 1994 - REISSUED, WITHOUT CHANGE, UNDER NEW SIGNATURES.
JAN. 3, 2000 - CORRECTED TITLE AND MINOR EDITORIAL CHANGES

APPROVED
[Signature]
DIRECTOR OF PROJECT DEVELOPMENT
[Signature]
ROADWAY AND TRAFFIC DESIGN ENGINEER

REINFORCED CONCRETE DROP INLET WITH PRECAST COVER
REINFORCED CONCRETE DROP INLET WITH GRATE (BOTTOM SECTION)



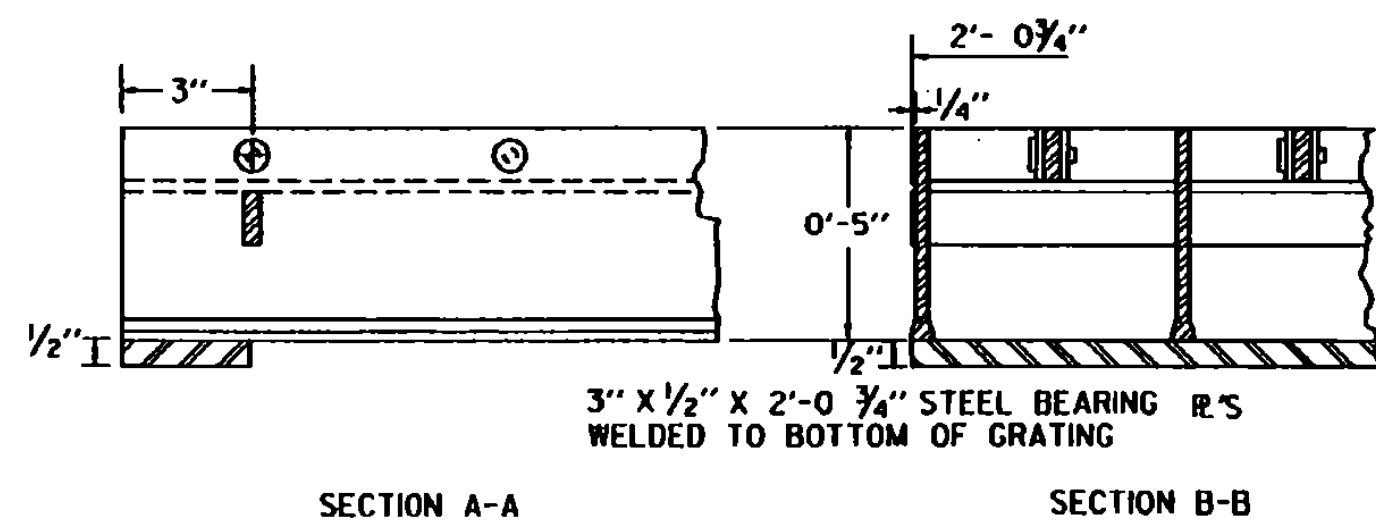
STANDARD
D-8



GRATE SIZE SINGLE 24 3/4" X 30"
DOUBLE 24 3/4" X 54"

WEIGHT 95 LBS OR MORE
GRATES SHALL BE CAPABLE OF SUPPORTING H-20 (32,000 LB. AXLE LOAD) INCLUDING 30% IMPACT.

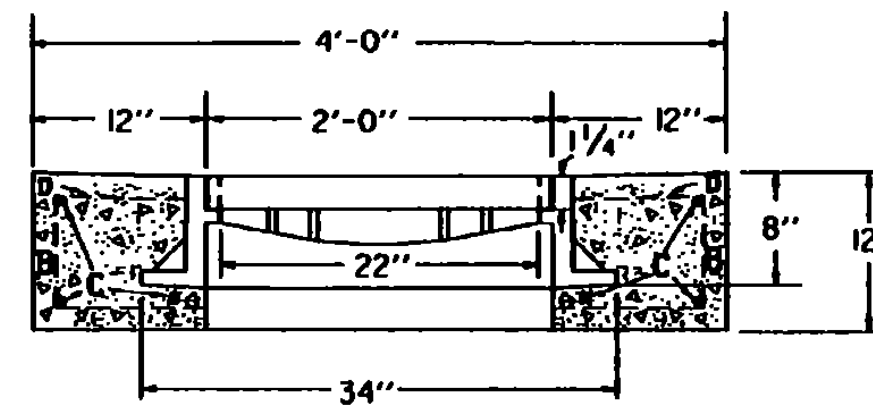
UNIT STRESSES (LBS PER SQ. IN.)	18,000	20,000
MAIN BAR PARALLEL TO TRAFFIC H-20	49"	53"
MAIN BAR PERPENDICULAR TO TRAFFIC H-20	39"	42"



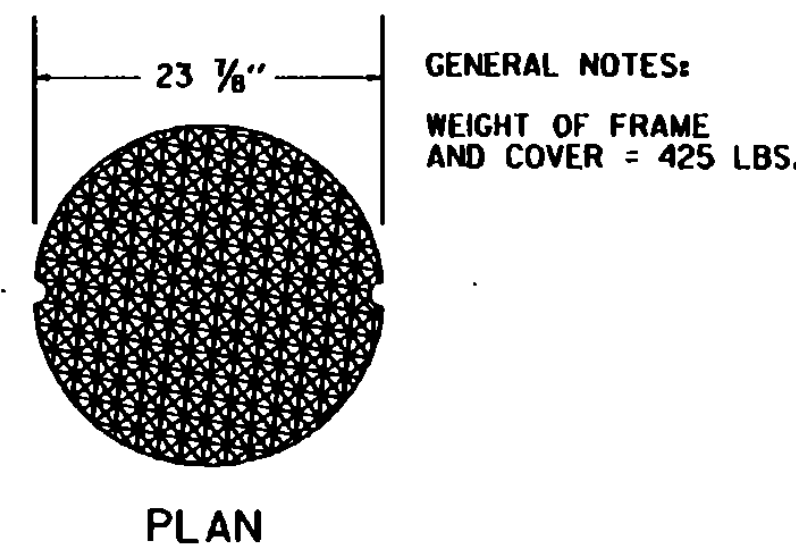
CAST IRON COVER WITH FRAME

BAR NO.	NO.	LENGTH	
B	4	8' 3'-8"	8"
C	6	3'-8"	STRAIGHT
D	4	3'-8"	STRAIGHT

ALL REINFORCING STEEL TO BE NO. 5 DEFORMED BARS

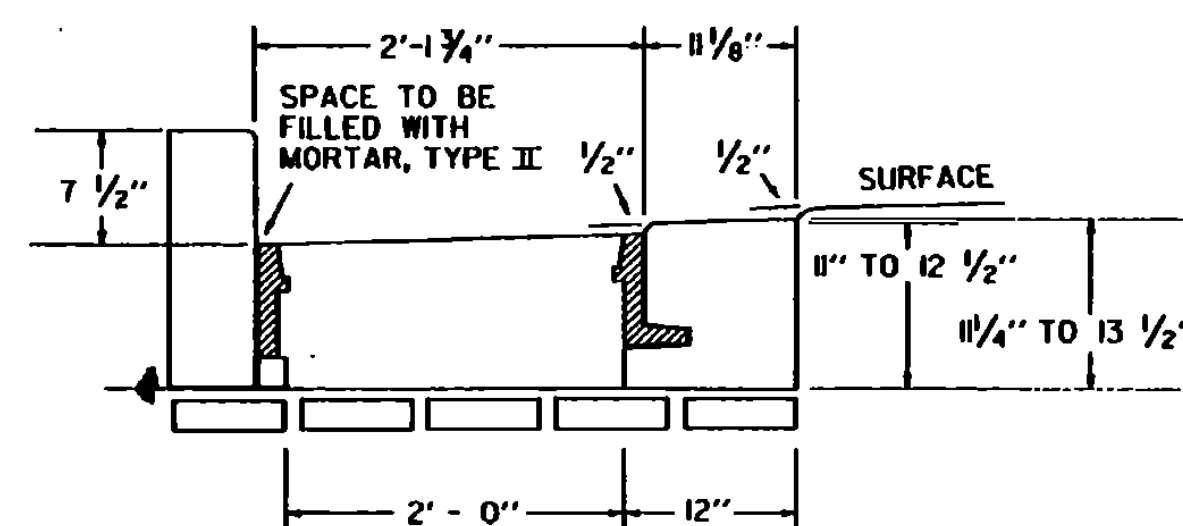


ELEVATION



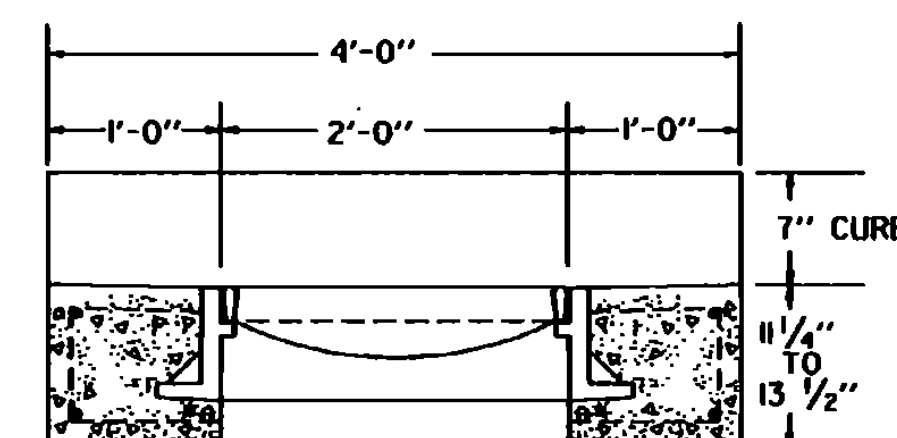
PLAN

CAST IRON GRATE WITH FRAME



ELEVATION OF REINFORCED CONCRETE DROP INLET WITH VERTICAL GRANITE CURB AND 3 FLANGE CAST IRON FRAME FOR CAST IRON GRATE

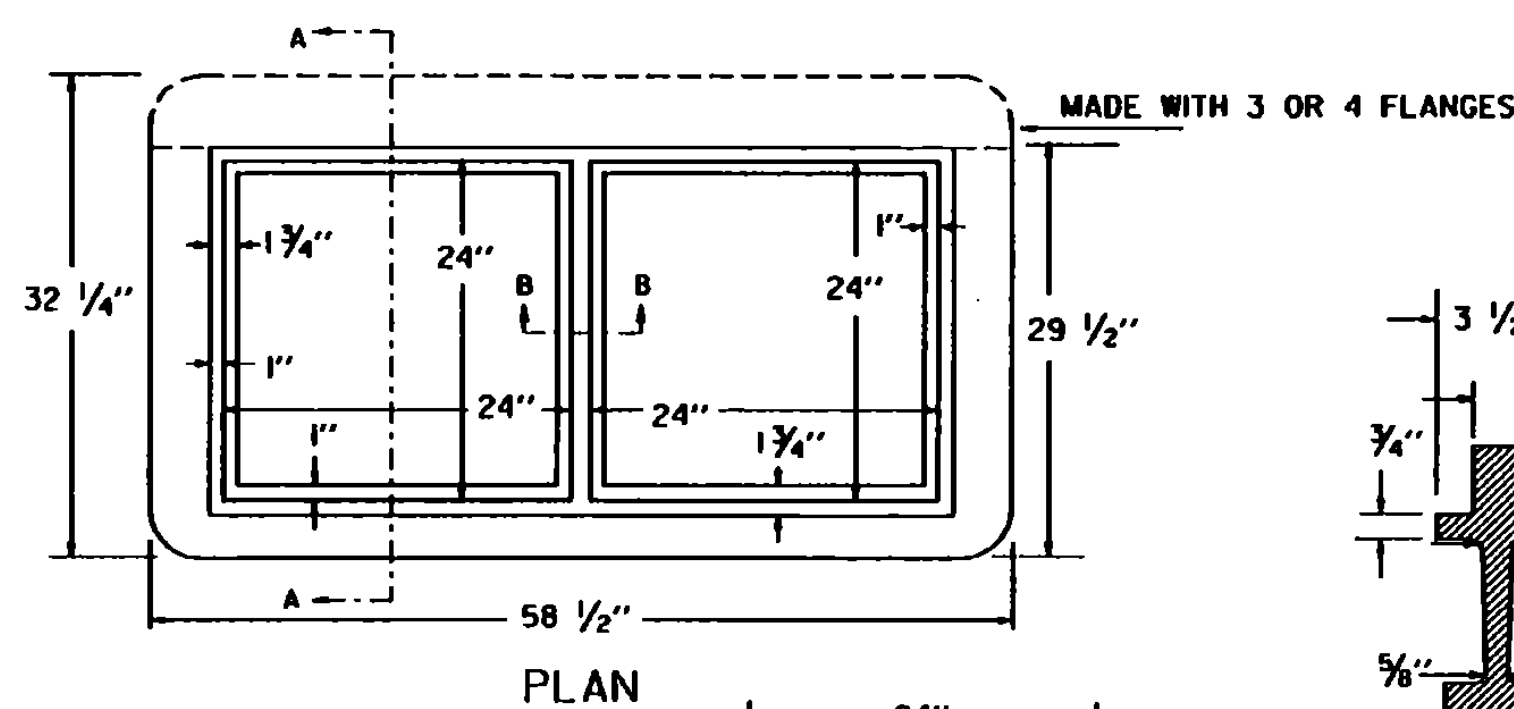
SEE STANDARD D-9 FOR CONCRETE VOLUME, REINFORCING STEEL SCHEDULE, AND CURB JOINT DETAIL.



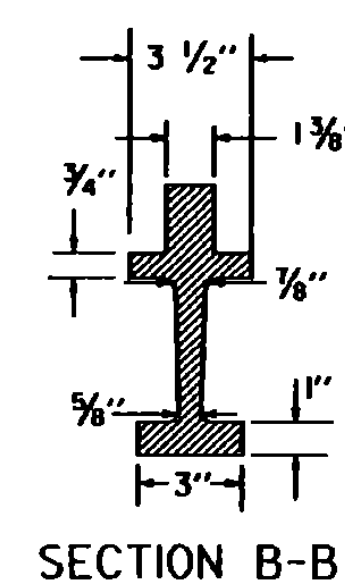
ELEVATION

WEIGHT OF 3 FLANGED FRAME AND GRATE

GRATE	220 LBS
FRAME	260 LBS
TOTAL	480 LBS

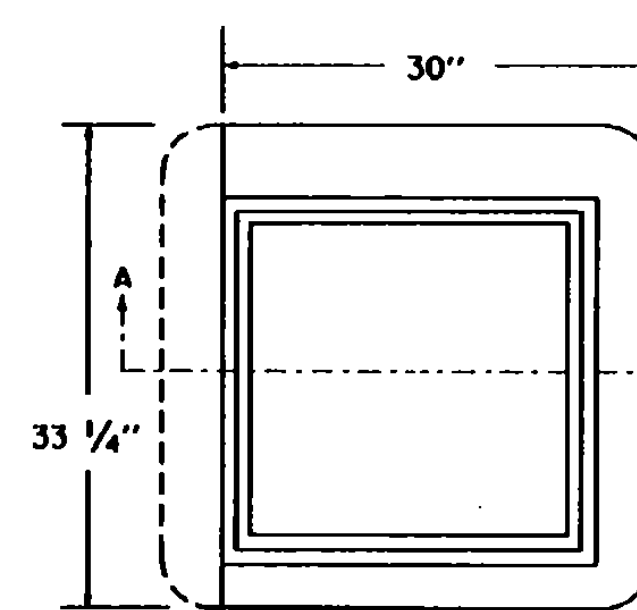


PLAN



SECTION B-B

RECTANGULAR CAST IRON FRAME FOR TWO 24" SQUARE CAST IRON GRATES

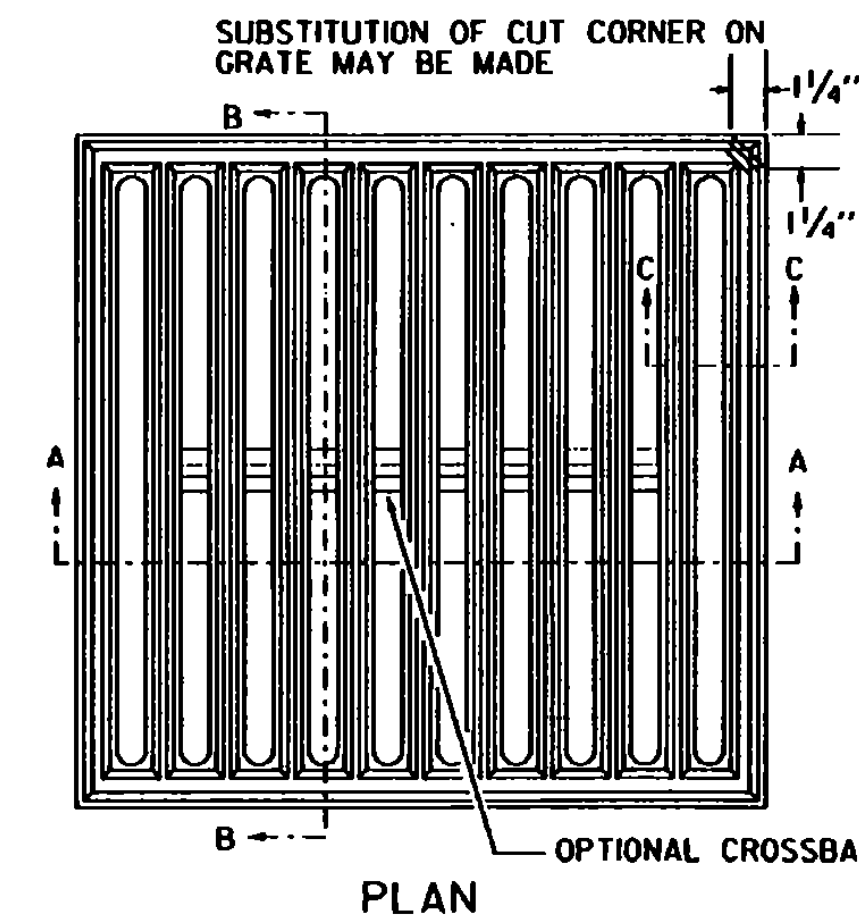


PLAN

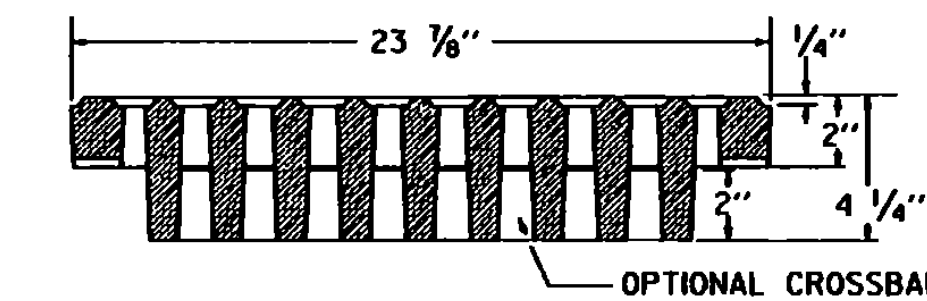
SQUARE CAST IRON FRAME FOR CAST IRON GRATE TYPE A

* NOTE: FRAME DEPTH TO BE "6" WHEN USED IN CONJUNCTION WITH DROP INLET DETAILED ON STANDARD D-6.

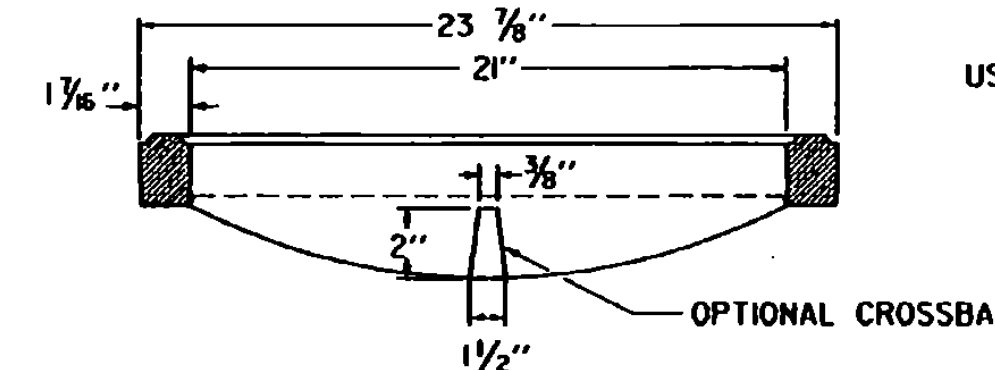
CAST IRON GRATE, TYPE A



PLAN

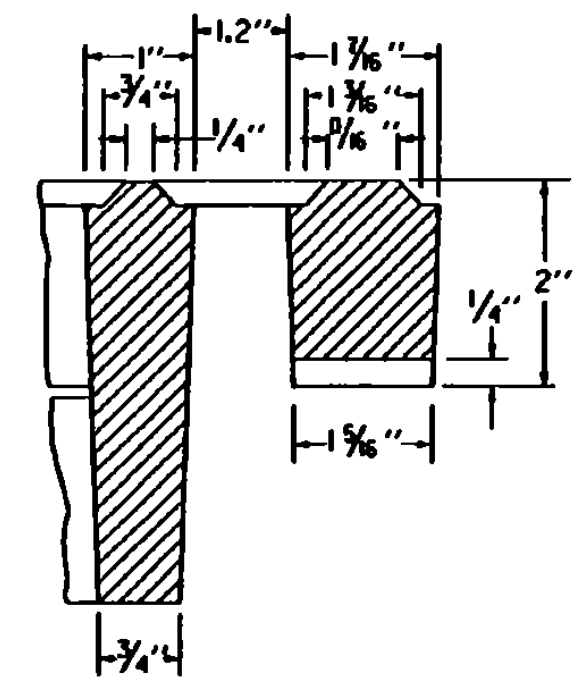


SECTION A-A



SECTION B-B

USE OF THE TYPE A GRATE IS PROHIBITED WHERE BICYCLE TRAFFIC IS EXPECTED



SECTION C-C

THIS FRAME TO BE PLACED IN DROP INLET TOP BEFORE CONCRETE IS POURED.
4 FLANGES UNLESS OTHERWISE INDICATED. FRAMES TO BE FURNISHED WITH 3 FLANGES WHEN USED IN CONJUNCTION WITH CURB OR AS DIRECTED BY THE ENGINEER.

REVISIONS AND CORRECTIONS

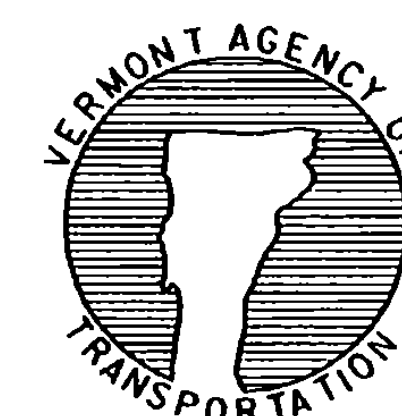
DEC. 6, 1971 - ORIGINAL APPROVAL
APR. 25, 1972 - CAST IRON COVER CHANGED FROM SQUARE TO CIRCULAR
SEPT. 4, 1980 - OPTIONAL CROSSBAR ADDED TO A GRATE; NOTE ADDED TO A GRATE FRAME DETAIL
AUG. 25, 1981 - NOTE ADDED RESTRICTING USE OF TYPE A GRATE
JUNE 4, 1994 - REISSUED, WITHOUT CHANGE, UNDER NEW SIGNATURES.

APPROVED

APPROVED FOR THIS PROJECT AND/OR DESIGN IMPLEMENTATION PER A FINAL APPROVAL PENDING.

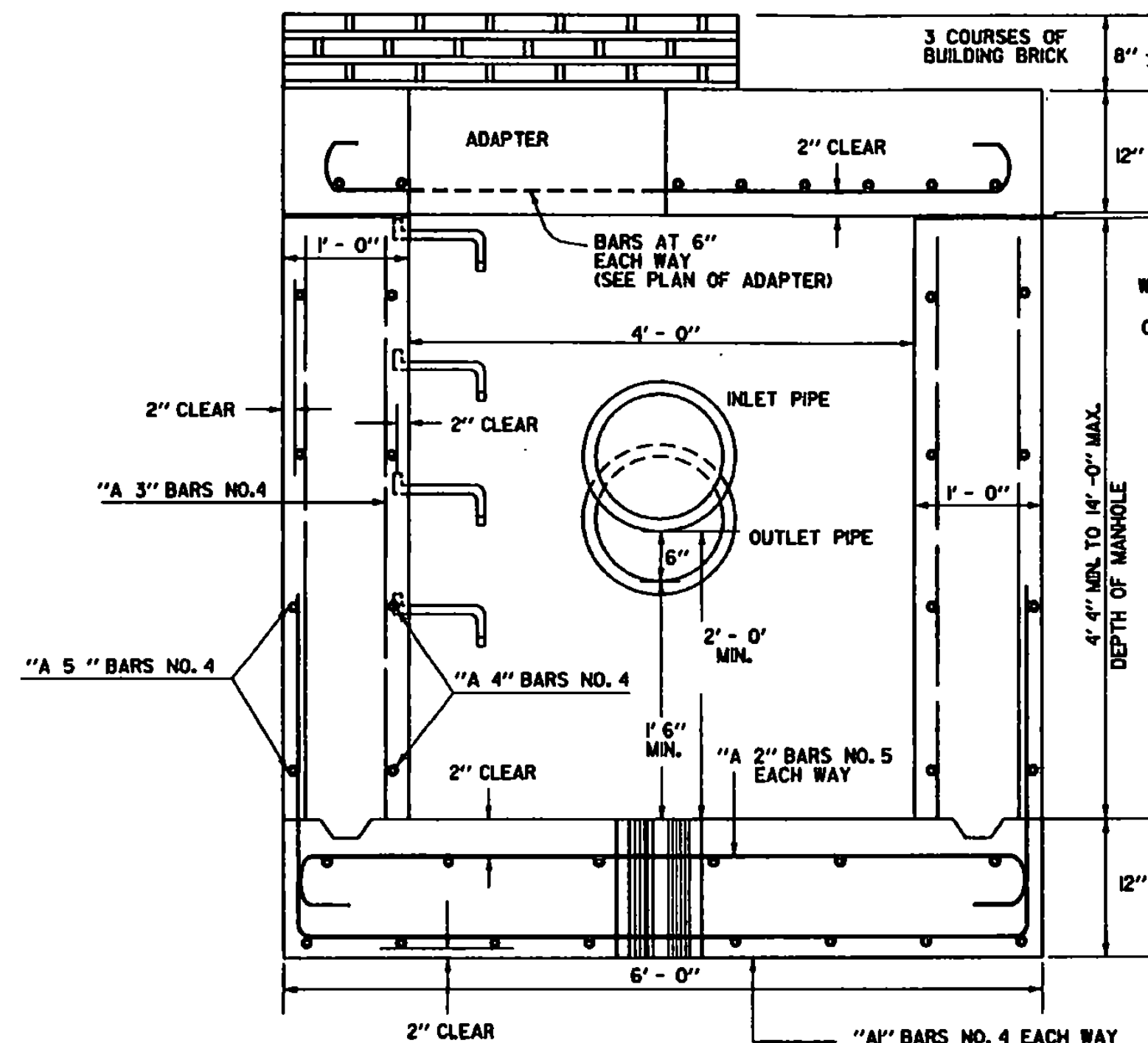
Robert M. Murphy, PE
DIRECTOR OF ENGINEERING
DESIGN ENGINEER

STEEL GRATE
CAST IRON GRATE TYPE A
CAST IRON COVER

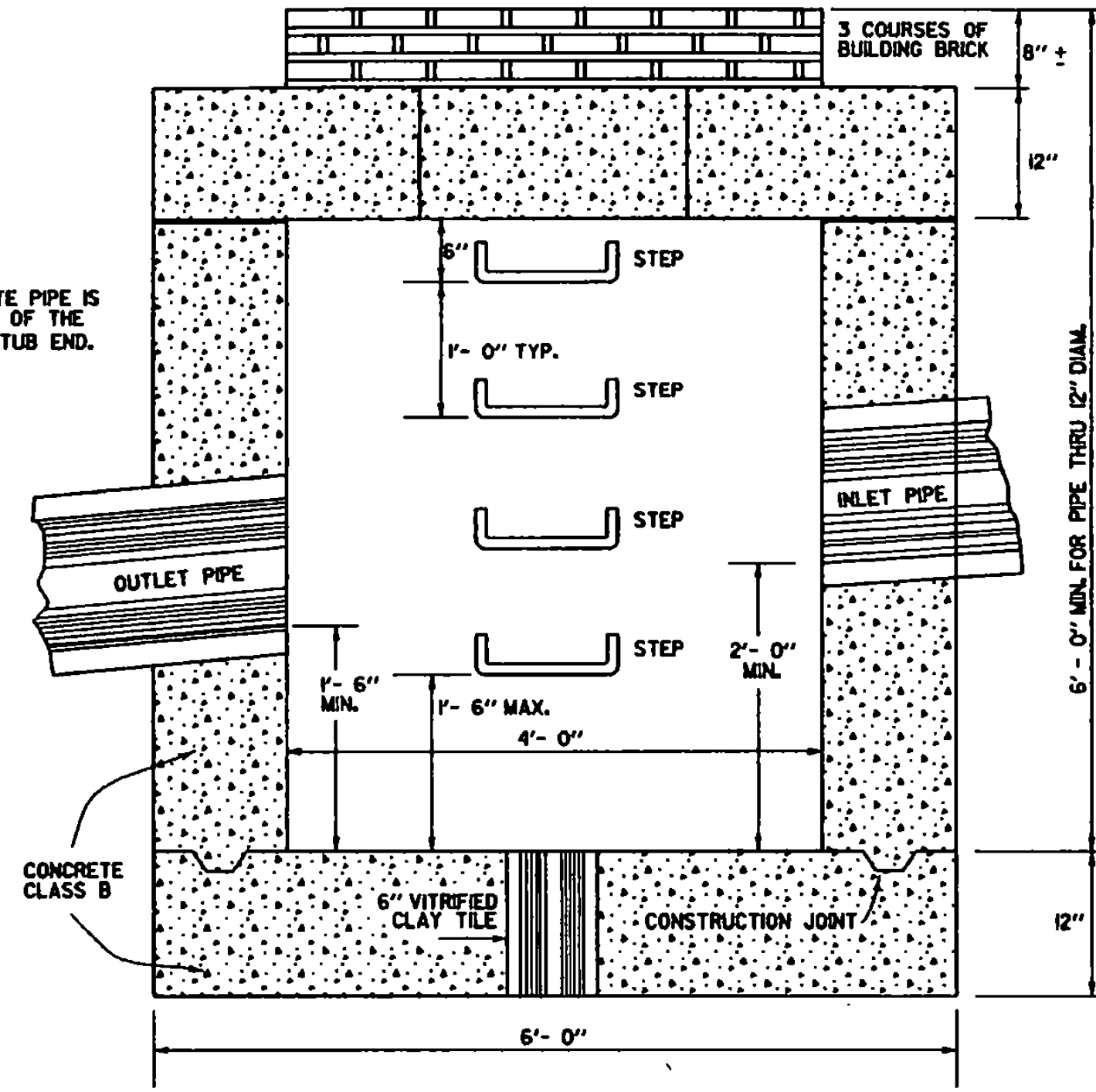


STANDARD
D-11

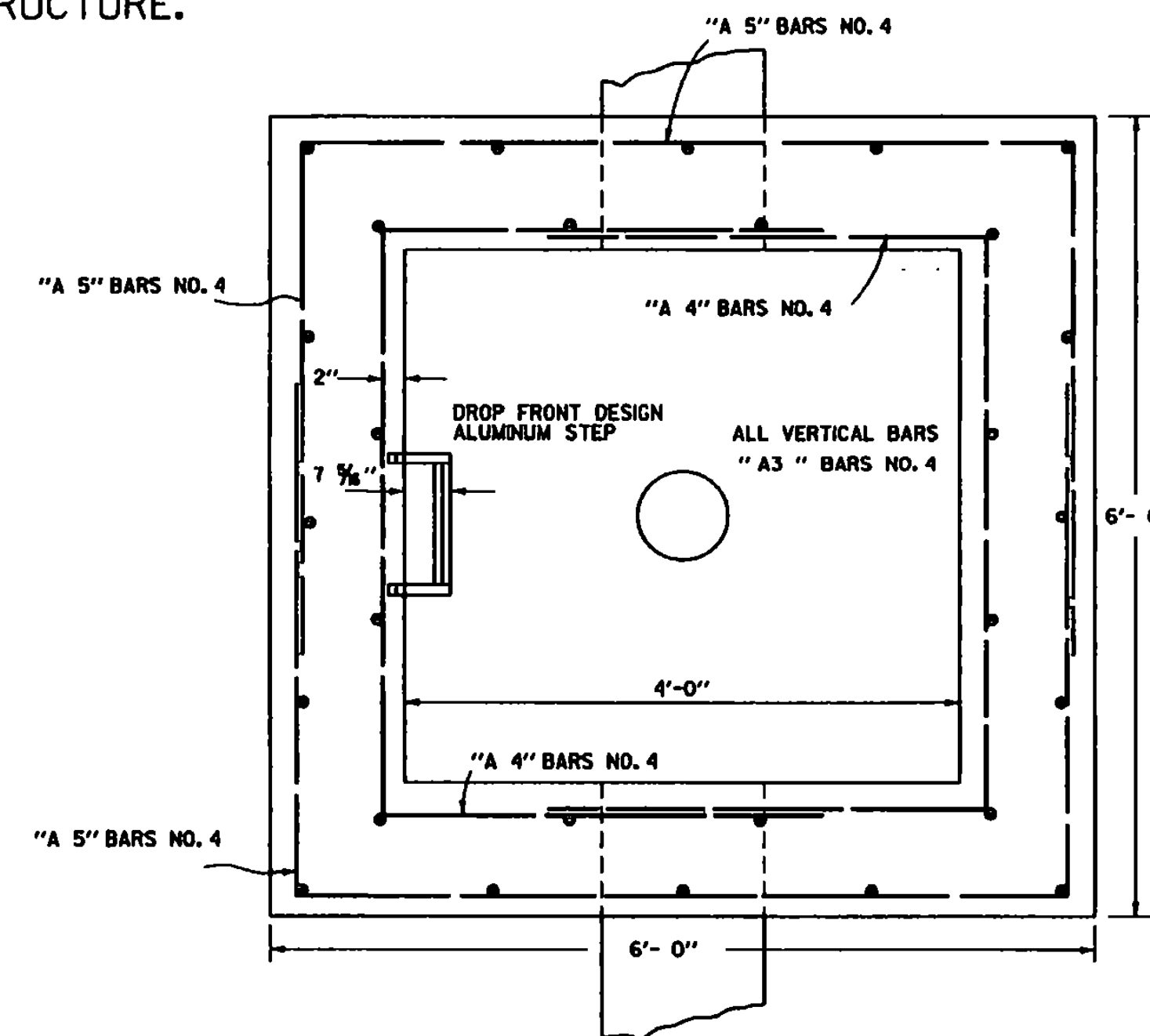
ANY OF THE COMBINATIONS OF TOPS, CURBS AND GRATES FOUND ON SHEETS D-6, D-9, D-10, D-11, D-15, AND D-16 CAN BE ADAPTED FOR USE WITH THIS STRUCTURE.



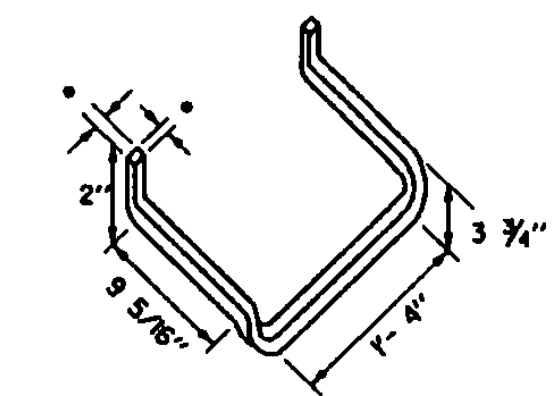
FRONT ELEVATION



SIDE ELEVATION

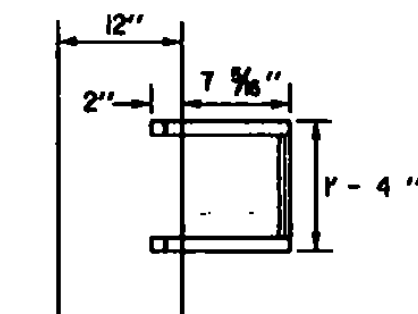


PLAN VIEW



ALUMINUM STEP (DROP FRONT)

INDIVIDUAL METAL RINGS SHALL HAVE A MINIMUM DIMENSION OF 1" AND SHALL BE PAINTED OR OTHERWISE TREATED TO RESIST CORROSION AND RUSTING.

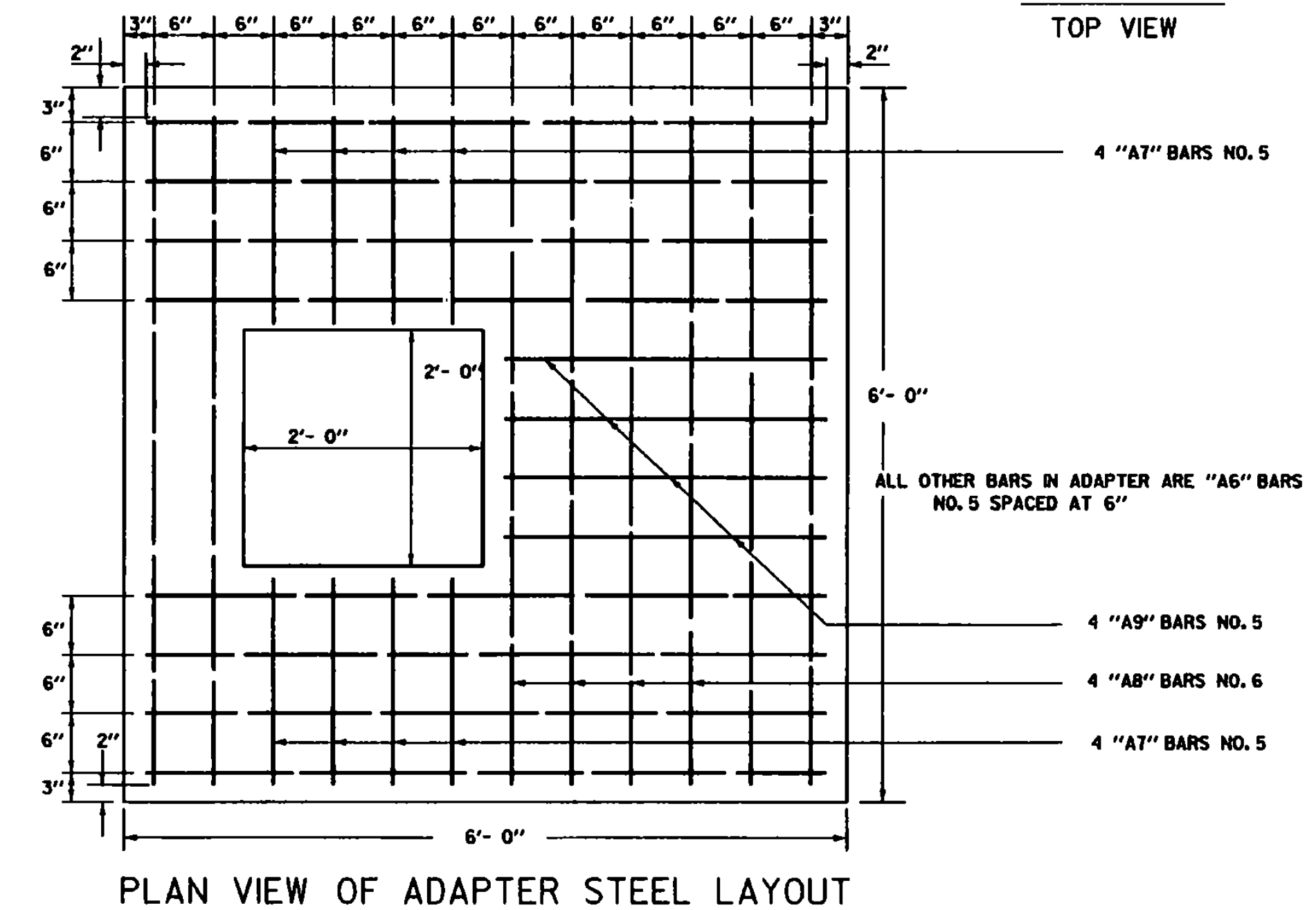


STEP DETAIL TOP VIEW

BAR	REINFORCING STEEL SCHEDULE FOR CATCH BASIN	HEIGHT					
		4'-4" MIN.	6'-0"	8'-0"	10'-0"	12'-0"	14'-0"
A 1	16 BARS NO. 4 AT 9"	16	16	16	16	16	16
A 2	12 BARS NO. 5 AT 15"	12	12	12	12	12	12
A 3	28 BARS NO. 4 AT 18"	28	28	28	28	28	28
A 4	8 BARS NO. 4 AT 15"	8	8	8	8	8	8
A 5	8 BARS NO. 4 AT 15"	8	8	8	8	8	8
A 6	12 BARS NO. 5 AT 6"	12	12	12	12	12	12
A 7	8 BARS NO. 5 AT 6"	8	8	8	8	8	8
A 8	4 BARS NO. 6 AT 6"	4	4	4	4	4	4
A 9	4 BARS NO. 5 AT 6"	4	4	4	4	4	4
TOTAL WEIGHT(LBS)		576	654	756	873	954	1060

- MORTAR TYPE II TO BE USED FOR JOINT FILLER AND LAYING OF BRICK.
- THREE COURSES OF BUILDING BRICK TO BE PLACED ON TOP OF CONCRETE ADAPTER PRIOR TO PLACING CONCRETE SEAT TO FACILITATE CHANGING ELEVATION OF CATCH BASIN OR MANHOLE
- ALL REINFORCING BARS SPACED AS SHOWN OR NOTED, FOR SIZE AND LENGTH, SEE SCHEDULE. ALL REINFORCING STEEL TO BE ROUND DEFORMED BARS.
- THE ADAPTER SHALL BE PLACED ON THE CATCH BASIN SO AS TO PROVIDE DIRECT ACCESS TO STEPS.
- A7 AND A9 BARS MAY BE CUT FROM A6 BARS IN ORDER TO REDUCE THE NUMBER OF DIFFERENT BAR MARKS.

A1 BARS NO. 4		A2 BARS NO. 5		A3 BARS NO. 4 STRAIGHT		A4 BARS NO. 4		A5 BARS NO. 4		A6 BARS NO. 5		A7 BARS NO. 5		A8 BARS NO. 6		A9 BARS NO. 5	
TOTAL LENGTH 11'- 3"	TOTAL LENGTH 6'- 10"	HEIGHT	LENGTH	TOTAL LENGTH 10'- 11"	TOTAL LENGTH 13'- 4"	TOTAL LENGTH 6'- 10"	TOTAL LENGTH 2'- 3"	TOTAL LENGTH 6'- 10"	TOTAL LENGTH 3'- 3"	TOTAL LENGTH 6'- 10"	TOTAL LENGTH 2'- 3"	TOTAL LENGTH 6'- 10"	TOTAL LENGTH 3'- 3"	TOTAL LENGTH 6'- 10"	TOTAL LENGTH 3'- 3"	TOTAL LENGTH 6'- 10"	TOTAL LENGTH 3'- 3"
B=2'-10"	D=2'-10"	4'- 4"	4'- 2"	B=3'-3"	D=3'-3"	6'- 0"	A= 7"	B=3'-10"	A= 7"	B=5'- 8"	A= 7"	B=5'- 8"	A= 7"	B=5'- 8"	A= 7"	B=5'- 8"	A= 7"
C = 5'- 7"	B=5'- 8"	8'- 0"	7'- 10"	C = 4'- 5"	C = 5'- 8"	10'- 0"	B=7'- 8"	C = 5'- 8"	B=7'- 8"	B=5'- 8"	B=7'- 8"	B=5'- 8"	B=7'- 8"	B=5'- 8"	B=7'- 8"	B=5'- 8"	B=7'- 8"
		12'- 0"	11'- 10"			14'- 0"											



PLAN VIEW OF ADAPTER STEEL LAYOUT

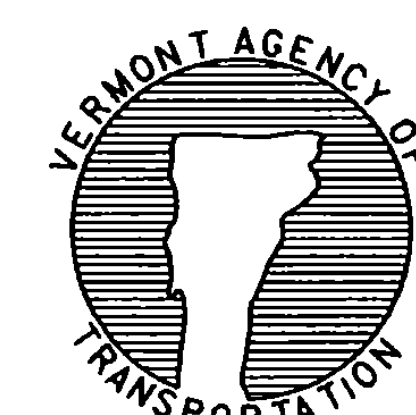
REVISIONS AND CORRECTIONS
 DEC. 14, 1971 - ORIGINAL APPROVAL
 AUG. 10, 1981 - REVISED STEP AND ADAPTER DESIGN
 MAR. 23, 1994 - ADDED STEP DETAIL
 JUNE 1, 1994 - REISSUED, WITHOUT CHANGE, UNDER NEW SIGNATURES.
 JAN 3, 2000 - CORRECTED TITLE AND MINOR EDITORIAL CHANGES

APPROVED

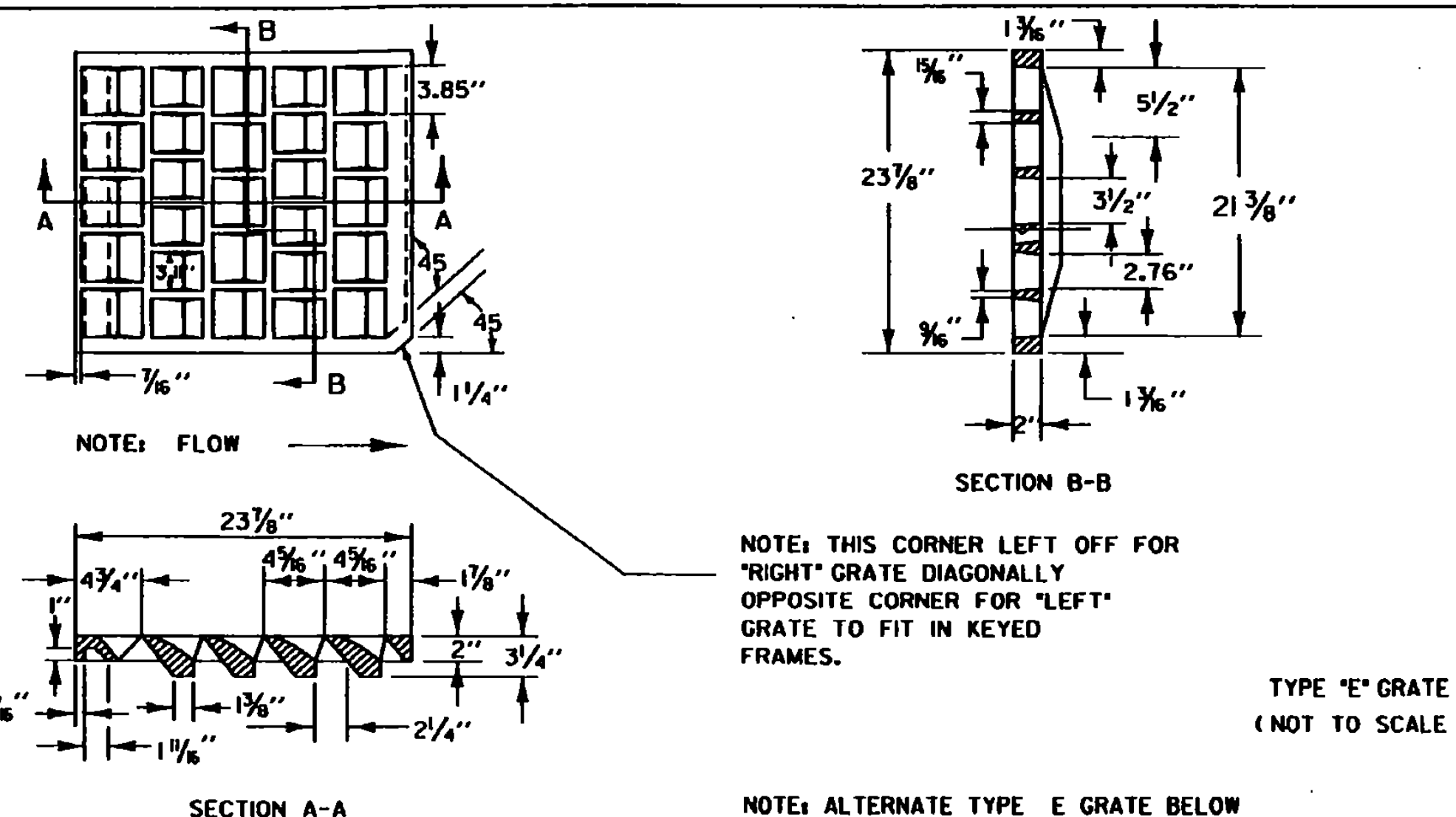
 DIRECTOR OF PROJECT DEVELOPMENT

 ROADWAY AND TRAFFIC DESIGN ENGINEER

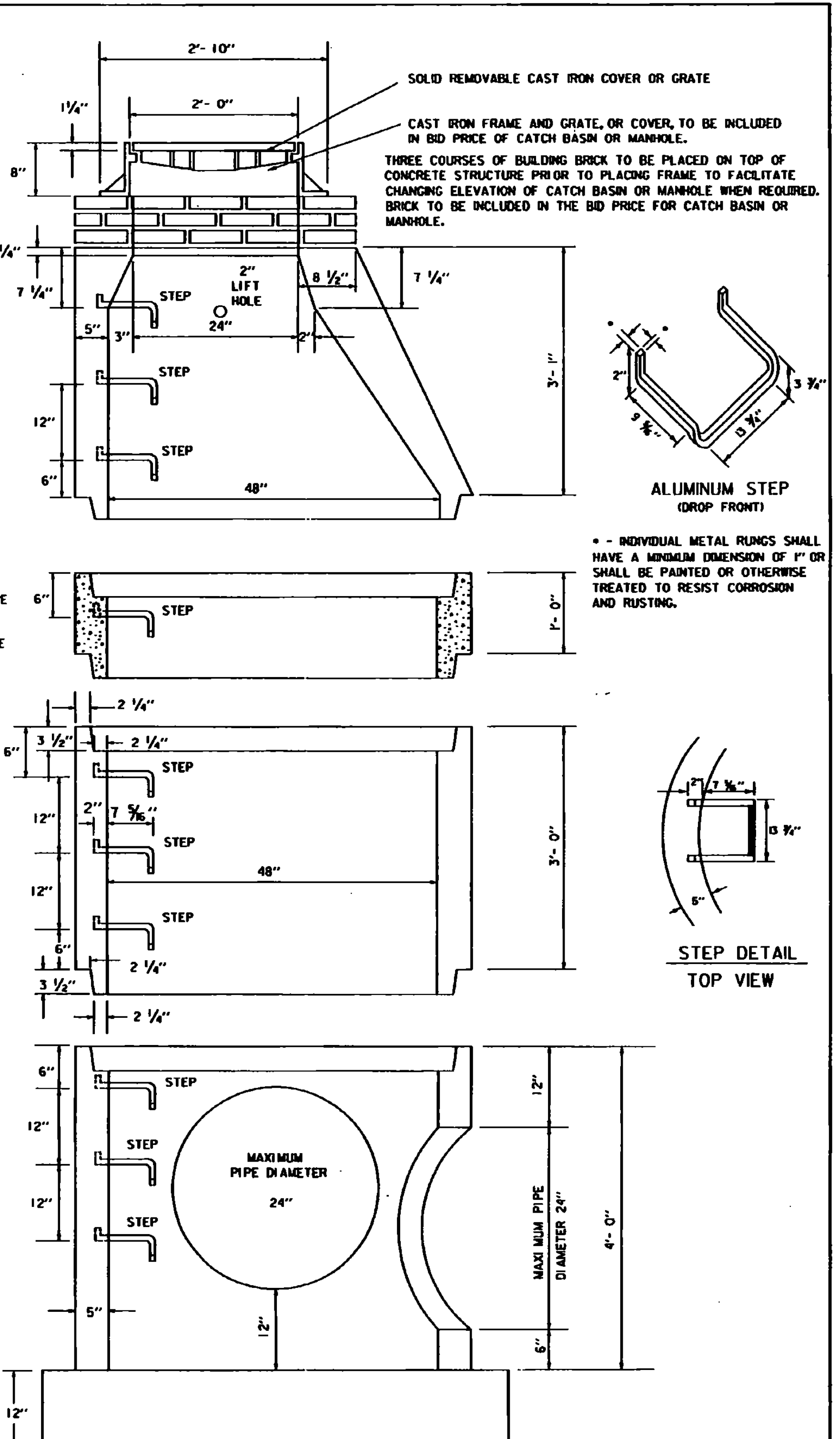
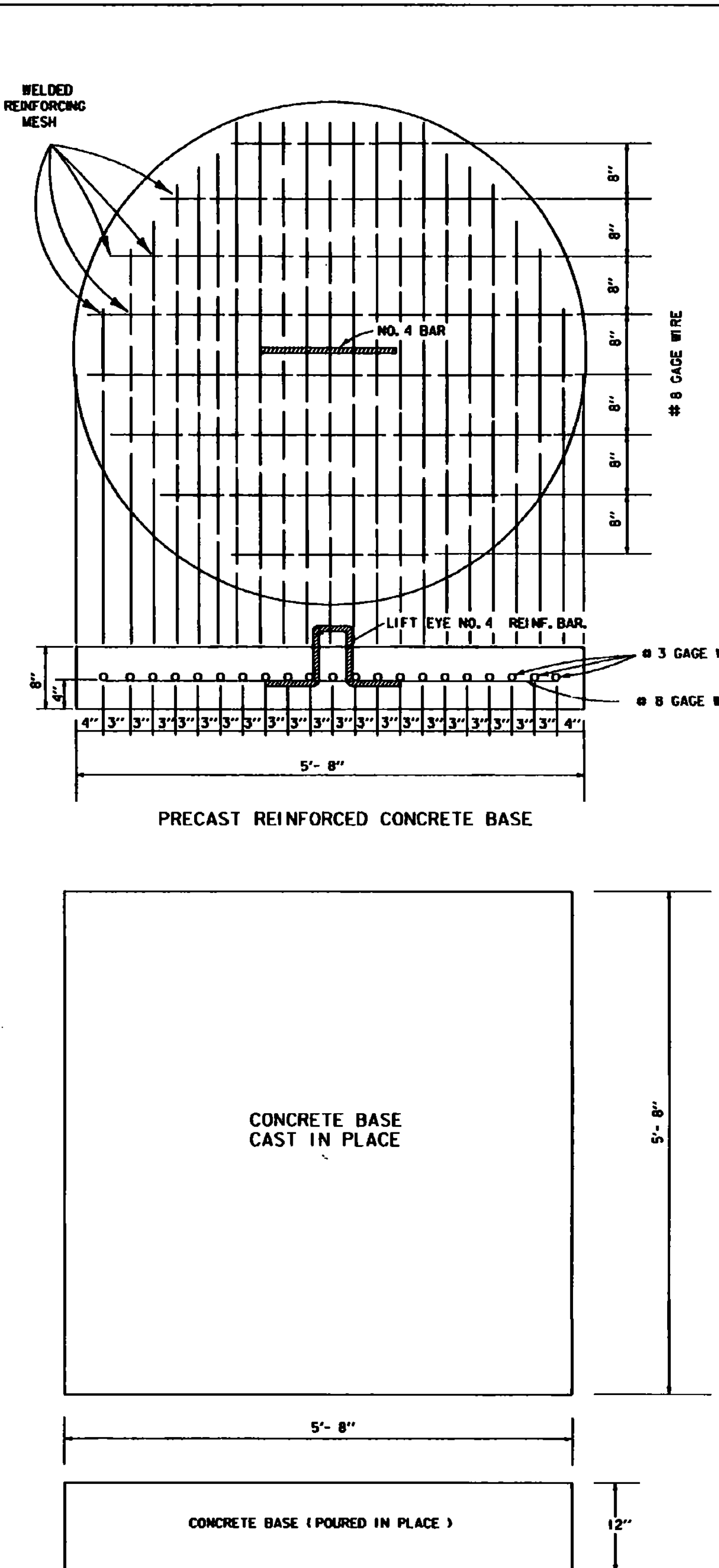
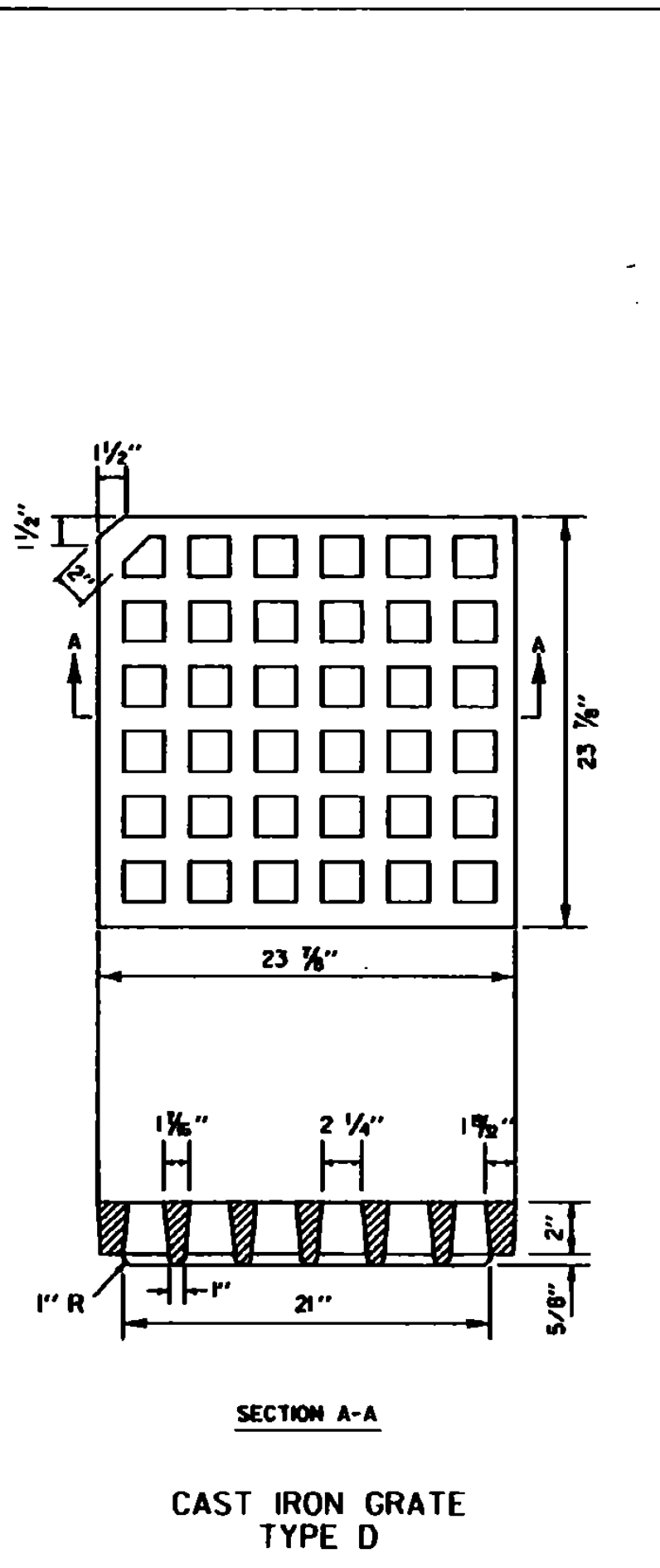
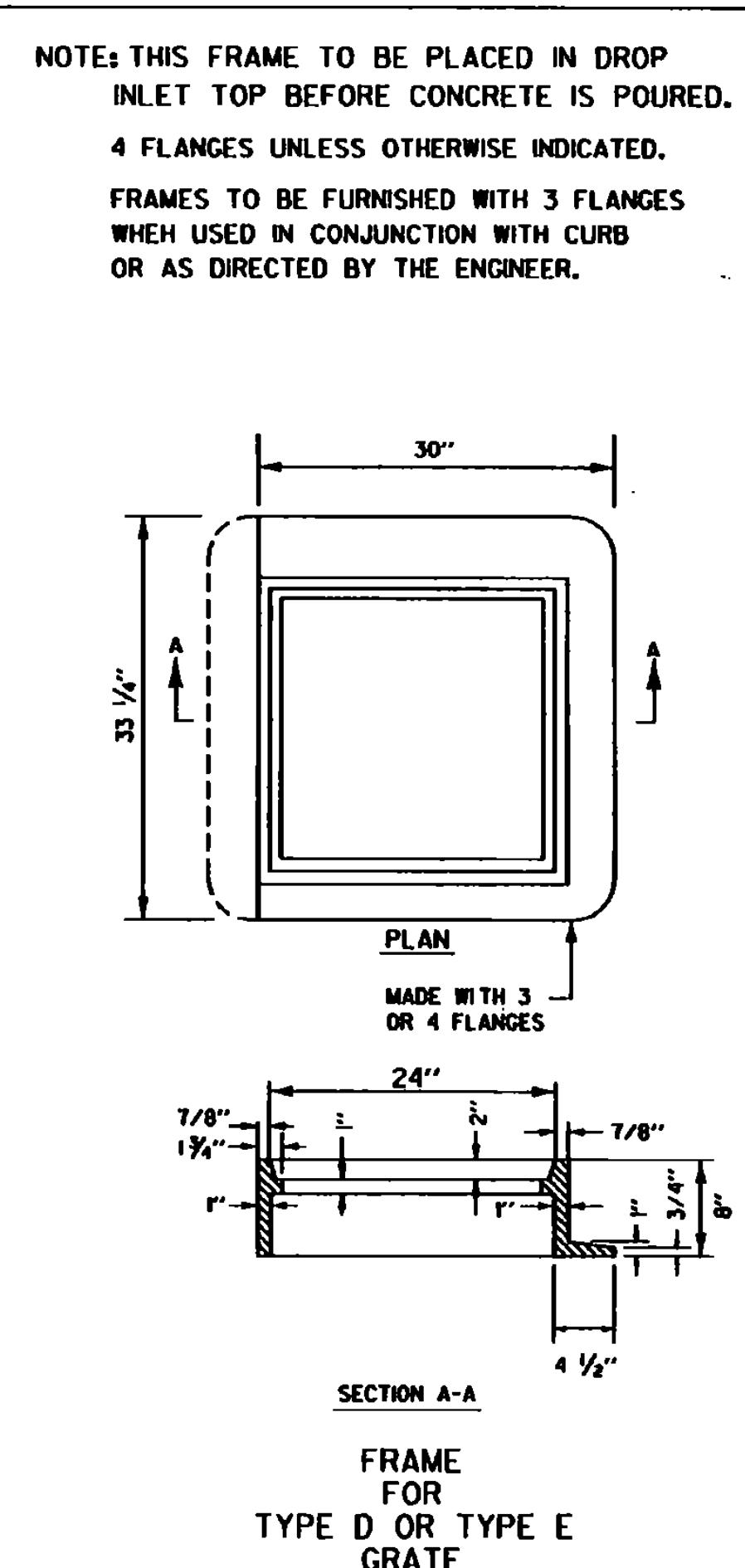
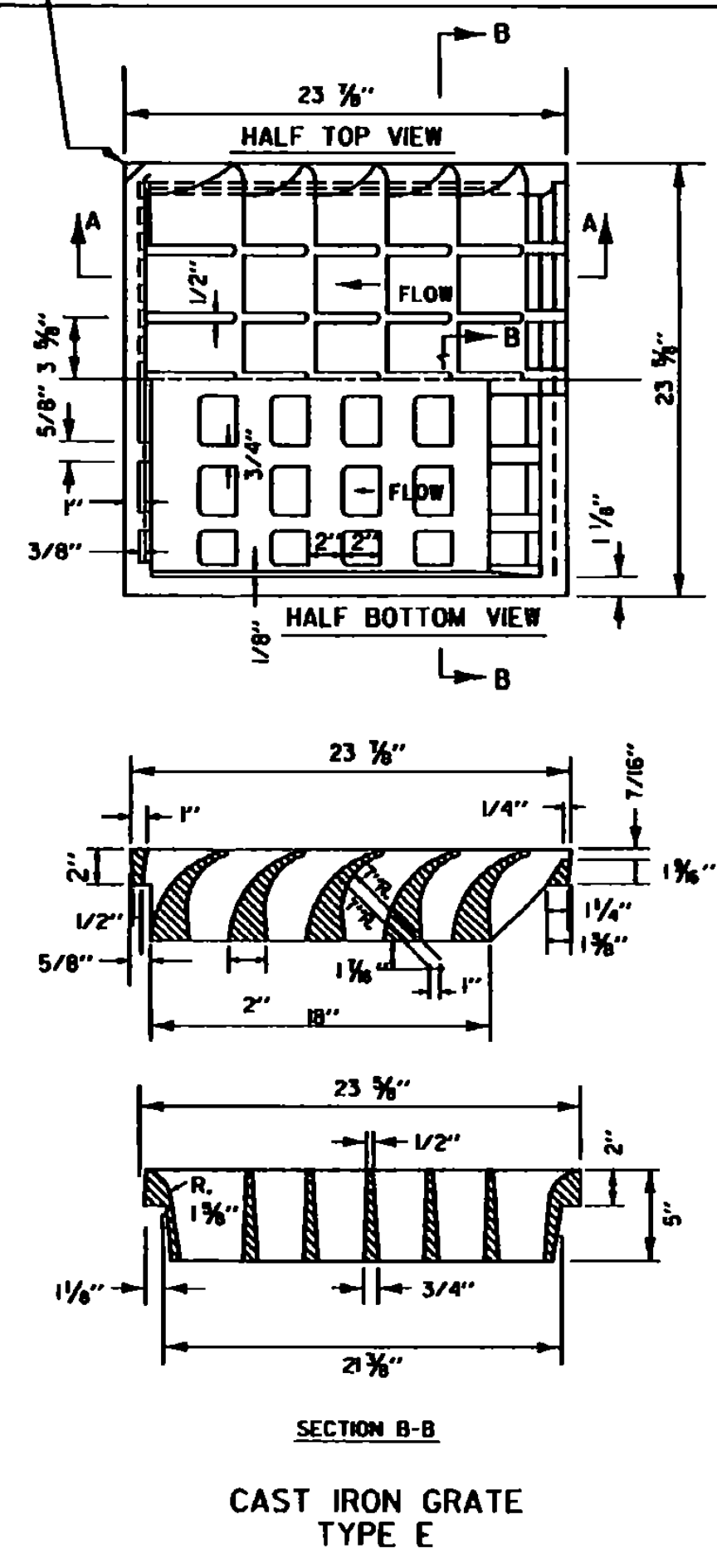
CONCRETE CATCH BASIN



STANDARD
 D-13



THIS CORNER LEFT OFF FOR "RIGHT" GRATE, DIAG. OPPOSITE CORNER FOR "LEFT" GRATE, TO FIT IN KEYED FRAMES.



REVISIONS AND CORRECTIONS

DEC. 6, 1971 - ORIGINAL APPROVAL.

OCT. 22, 1976 - CAST IRON GRATE WITH FRAME, TYPE E ADDED

OCT. 6, 1978 - TYPE D GRATE ADDED

OCT. 30, 1985 - IMPERFECT TRENCH DETAILS DELETED

FEB. 17, 1993 - SECOND CAST IRON GRATE TYPE E ADDED.

MAR. 23, 1994 - ADDED NOTE FOR STEP DETAILS

JUNE 1, 1994 - REISSUED, WITHOUT CHANGE, UNDER NEW SIGNATURES.

APPROVED

APPROVED FOR THIS PROJECT AND/OR DESIGN IMPLEMENTATION, FHWA FINAL APPROVAL PENDING.

Robert D. McArthur
DIRECTOR OF ENGINEERING

Robert D. McArthur
DESIGN ENGINEER

PRECAST REINFORCED CONCRETE CATCH BASIN W/ CAST IRON GRATE

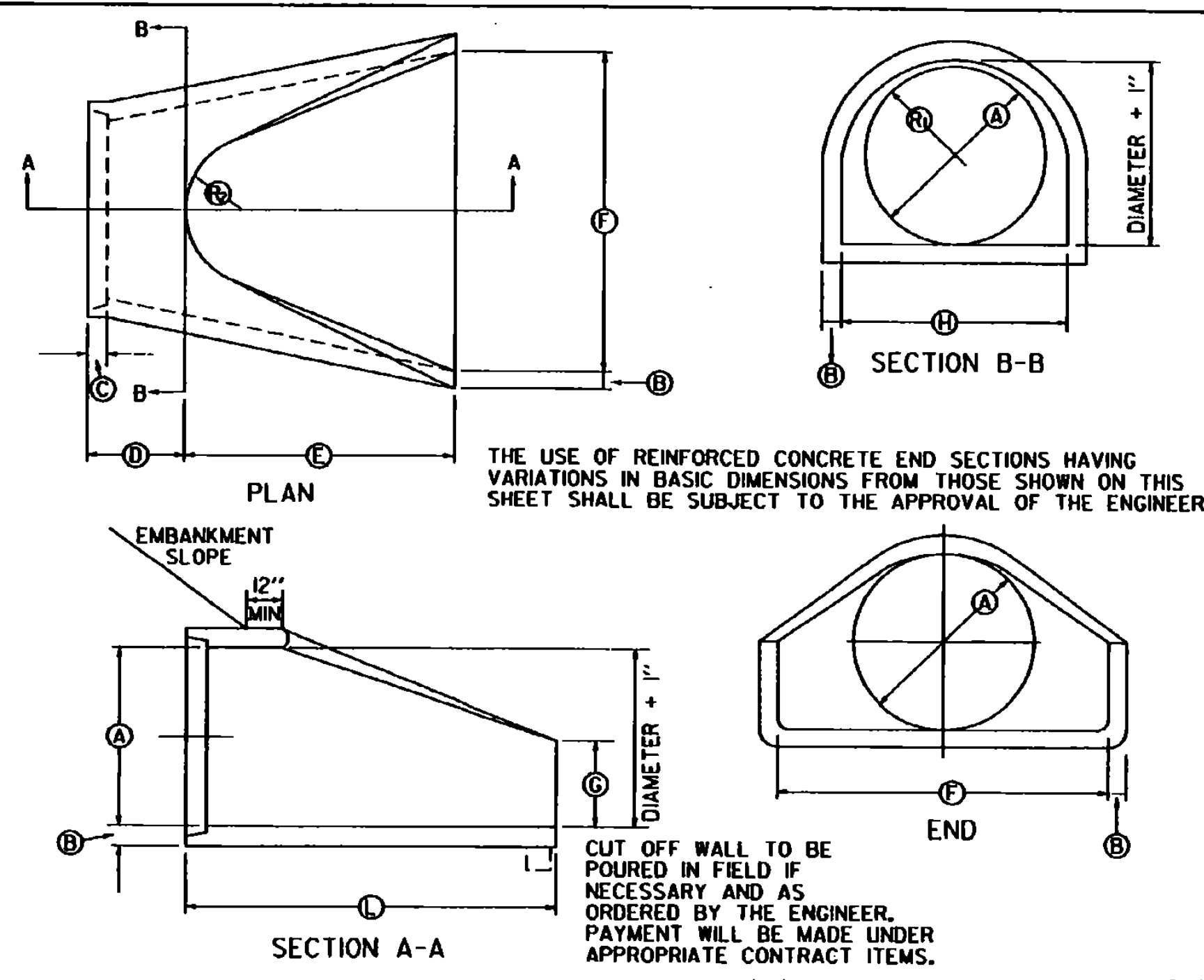
PRECAST REINFORCED CONCRETE MANHOLE W/ CAST IRON COVER

CAST IRON GRATE WITH FRAME, TYPE D

CAST IRON GRATE WITH FRAME, TYPE E

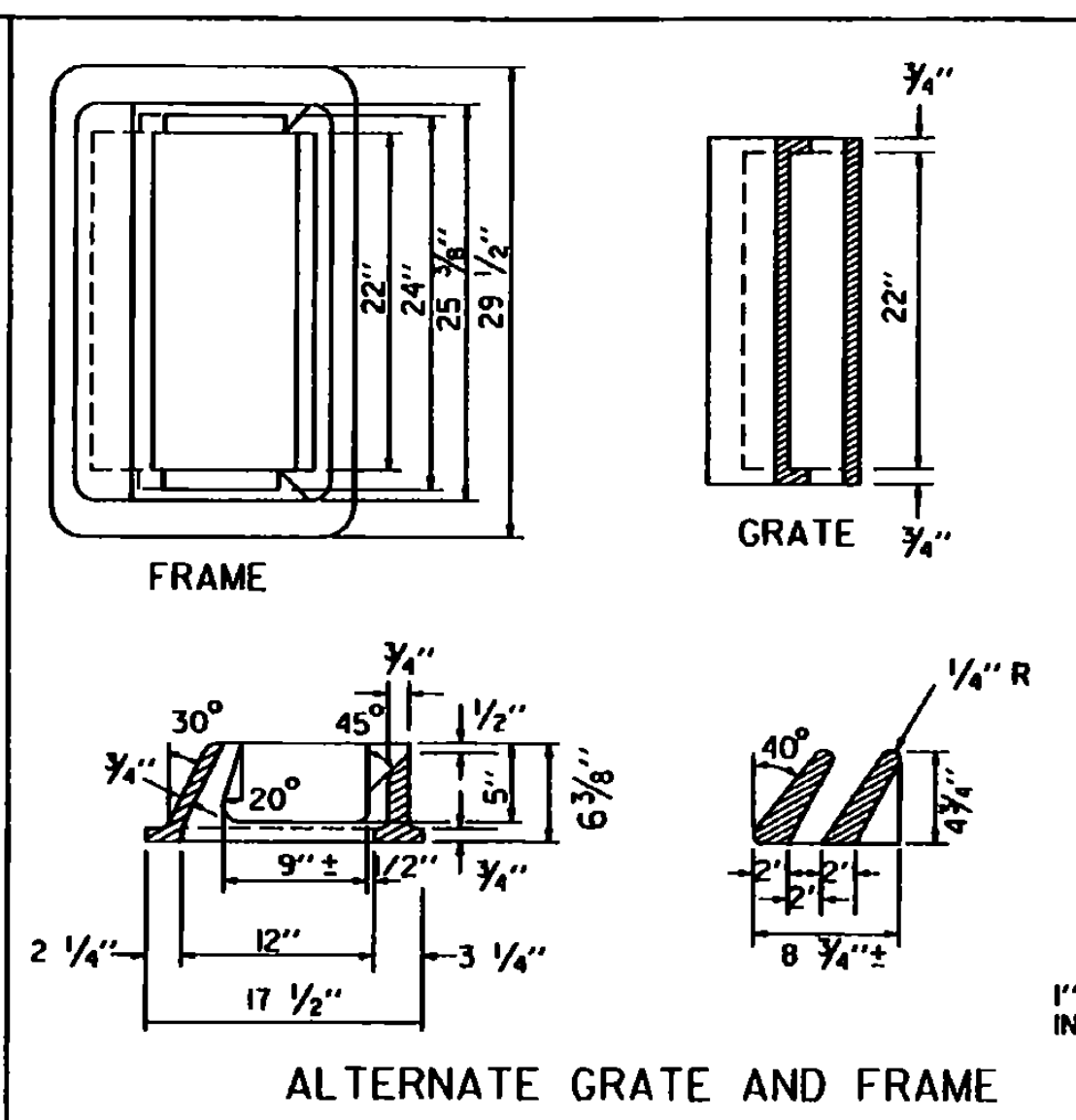
VERMONT AGENCY OF TRANSPORTATION

STANDARD D-15



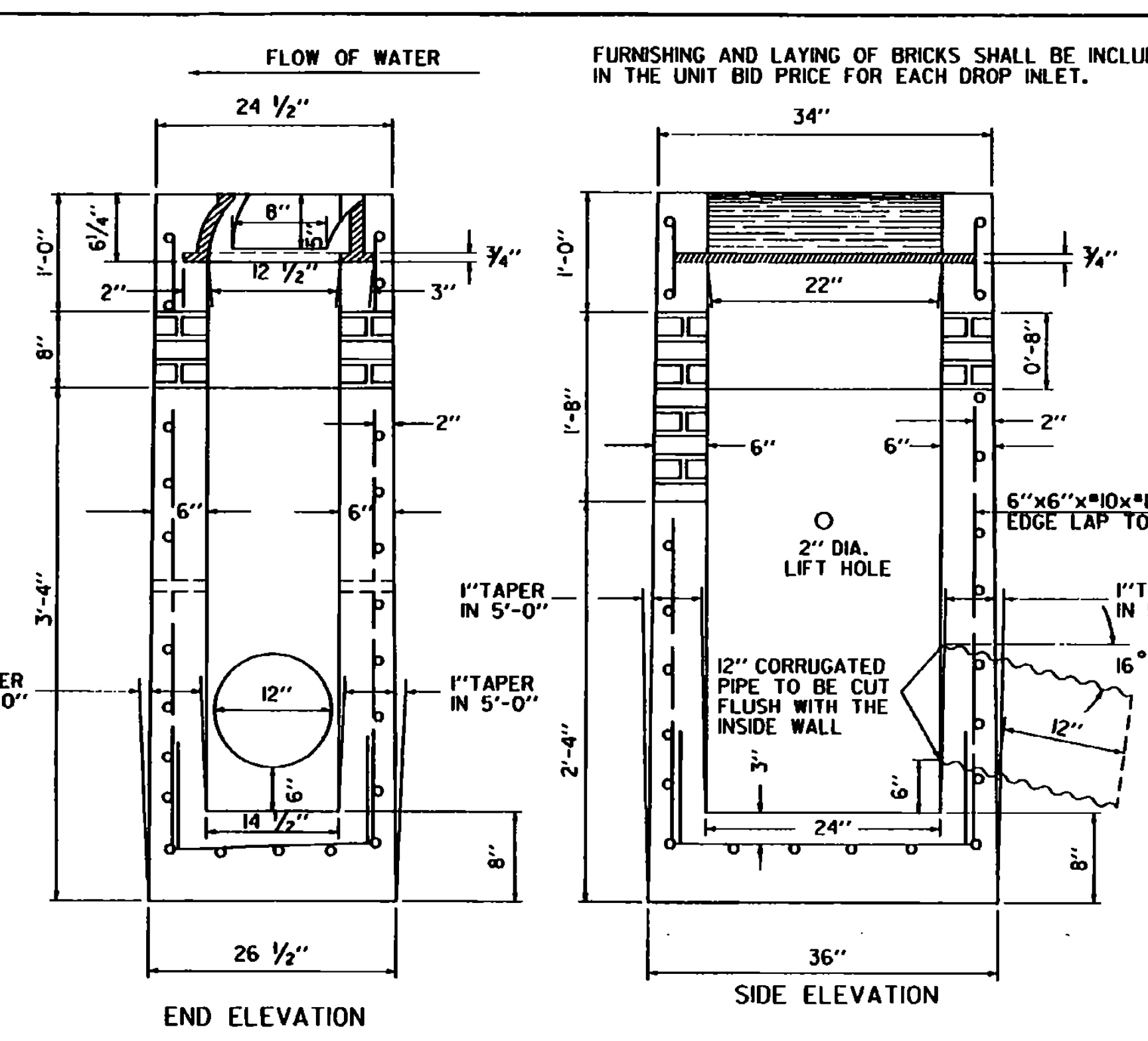
BASIC DIMENSIONS

A	B	C	D	E	F	G	H	DIAMETER	SLOPE	R	R ₂	RATIO	L
12"	2"	48 1/2"	24"	24"	4"	19 3/4"	13"	2.7 ± 1	10 1/8"	9"	1.92	6'-0 3/4"	
18"	2 1/2"	46"	27"	24"	4"	19"	13"	2.7 ± 1	15 1/2"	12"	1.88	6'-4"	
24"	3"	30"	43 1/2"	48"	9 1/2"	33 3/4"	25"	2.8 ± 1	16 1/2"	14"	1.58	6'-7 1/2"	
30"	3 1/2"	19 1/2"	54"	60"	12"	37"	31"	2.8 ± 1	18 1/2"	15"	1.41	6'-11 1/2"	
36"	4"	34 1/2"	63"	72"	15"	47 1/2"	37"	2.9 ± 1	24 1/2"	20"	1.50	8'-1 1/2"	
42"	4 1/2"	35"	63"	78"	21"	53 1/2"	43"	2.9 ± 1	27 1/2"	22"	1.46	8'-2"	
48"	5"	26"	72"	87"	24"	59 1/2"	49"	2.9 ± 1	30"	22"	1.40	8'-2"	

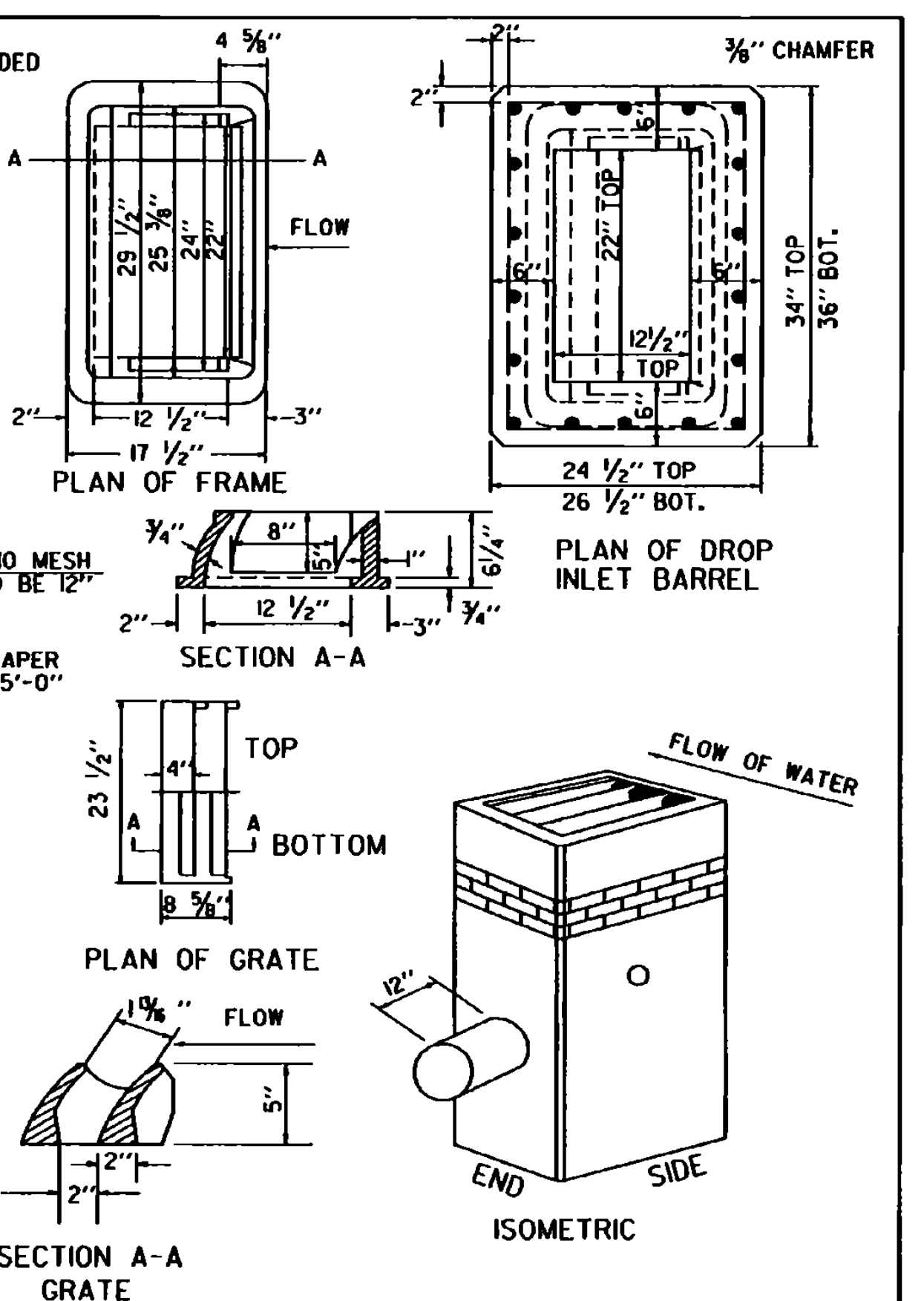


REINFORCED CONCRETE PIPE END SECTION

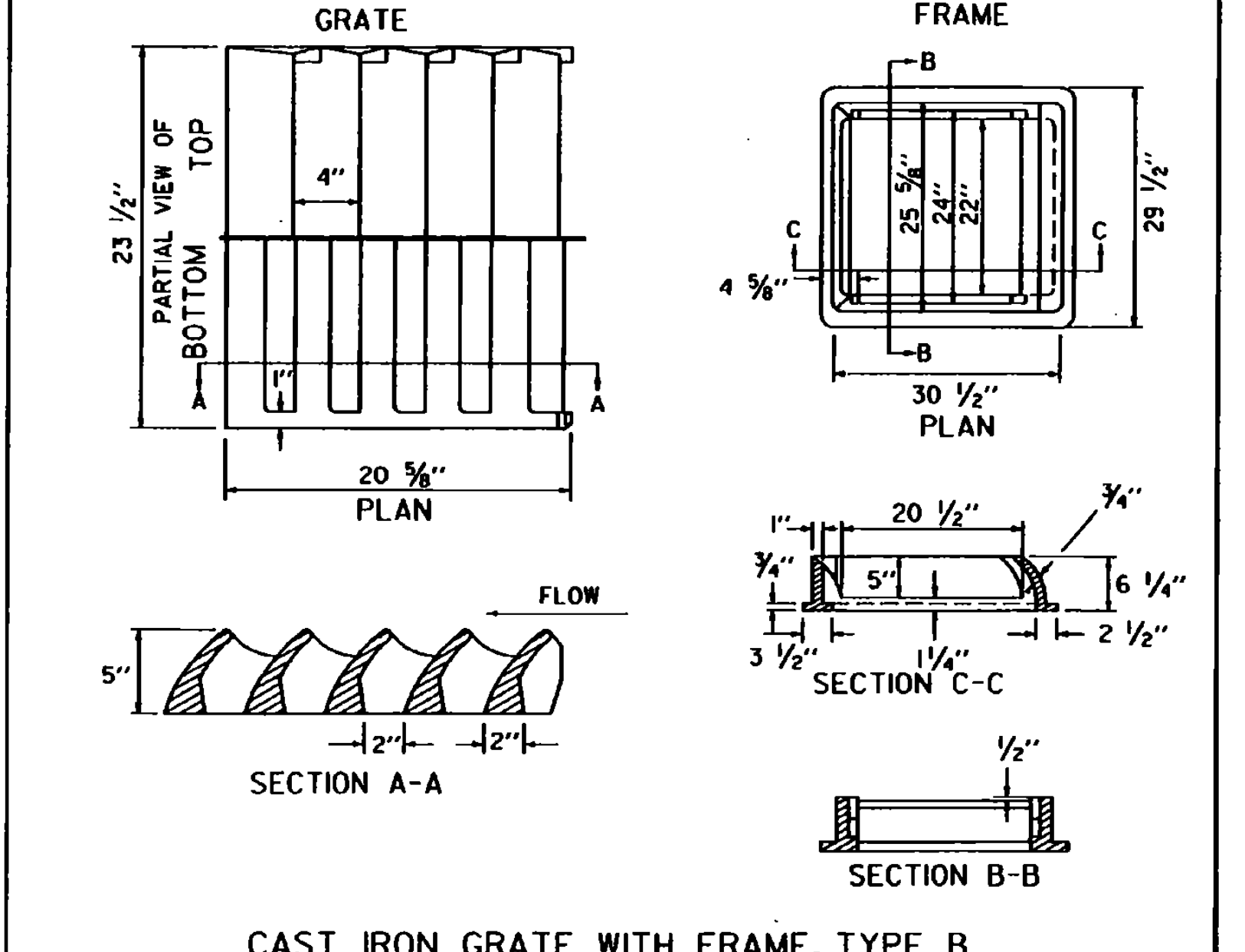
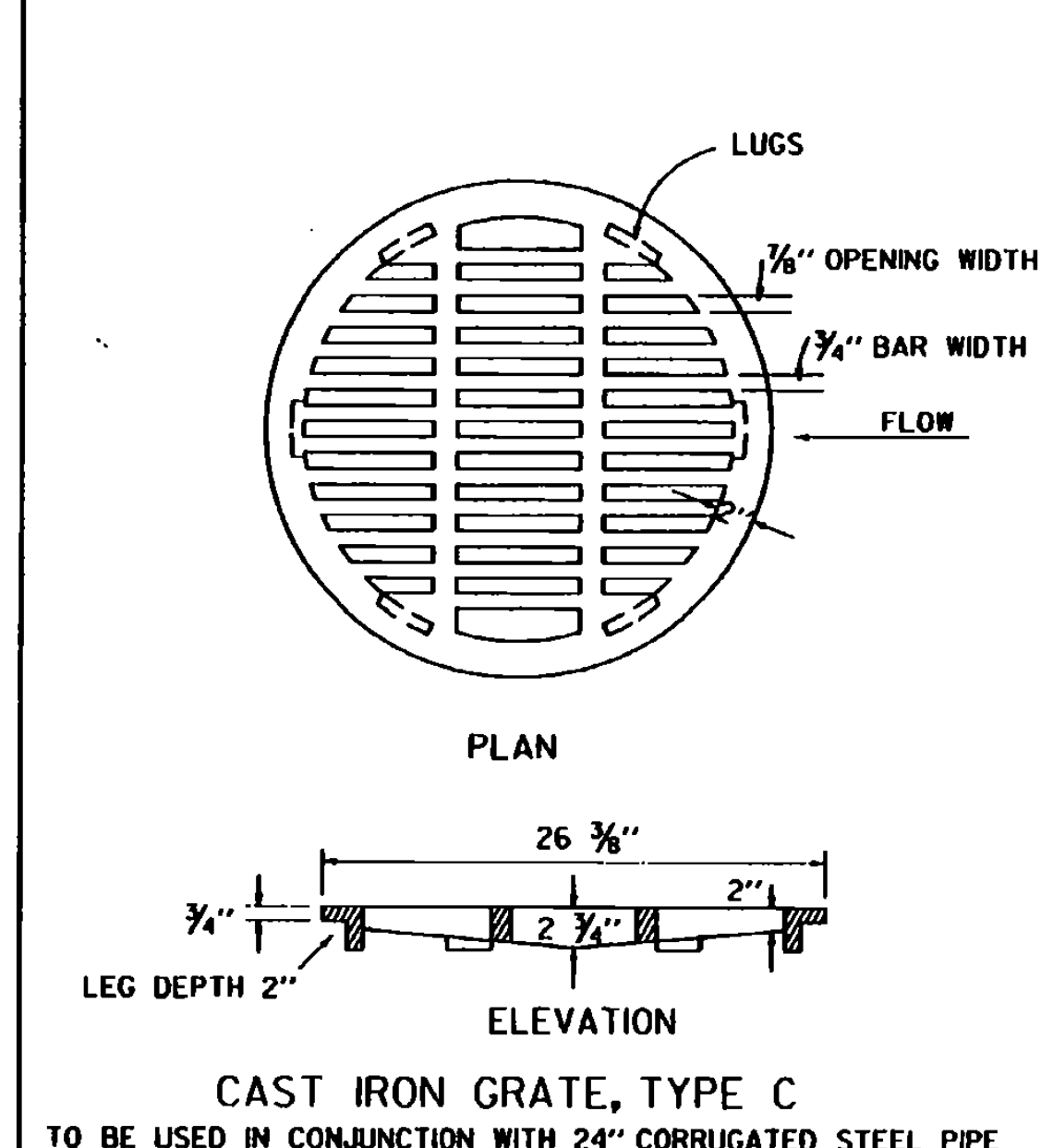
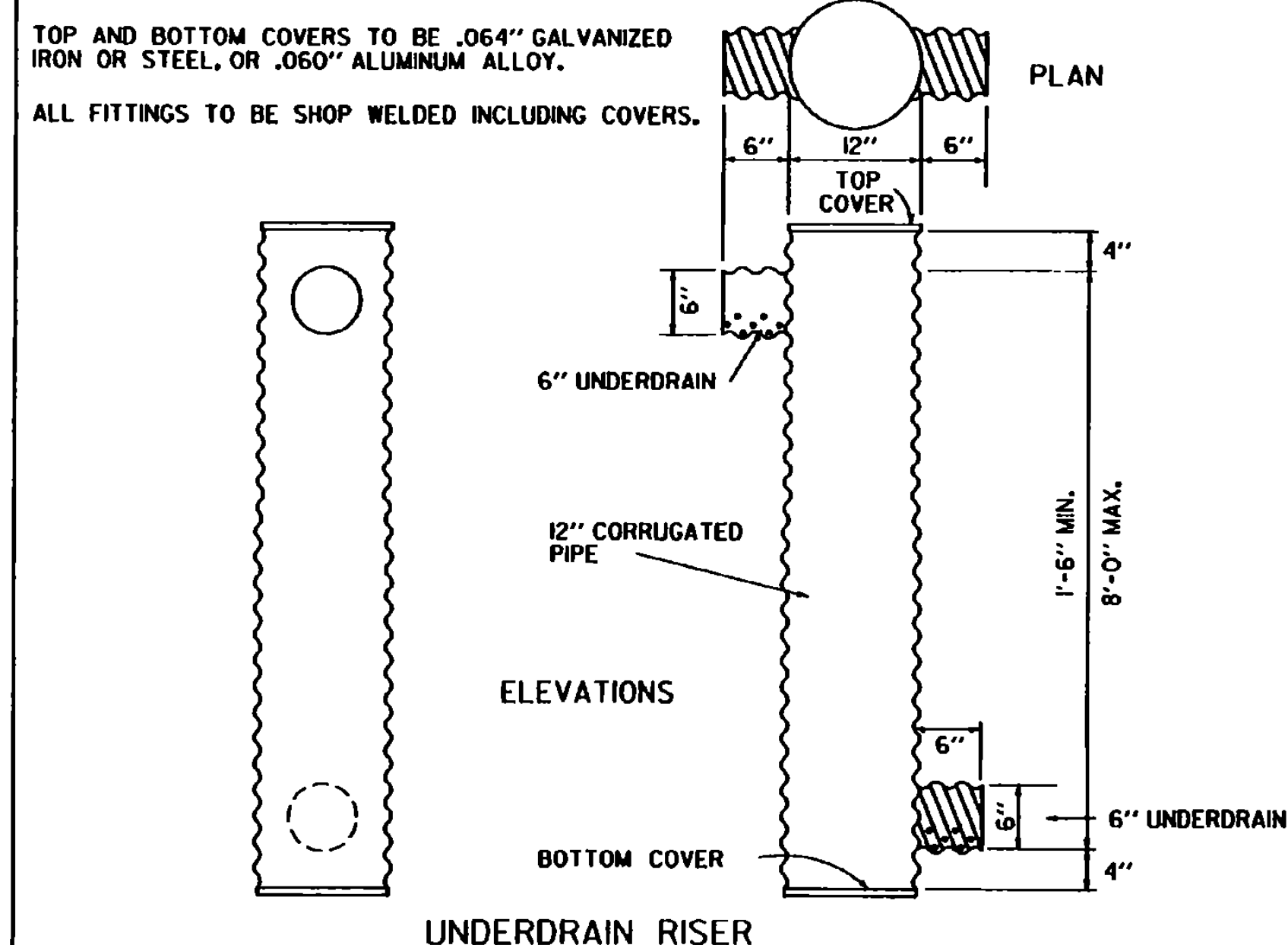
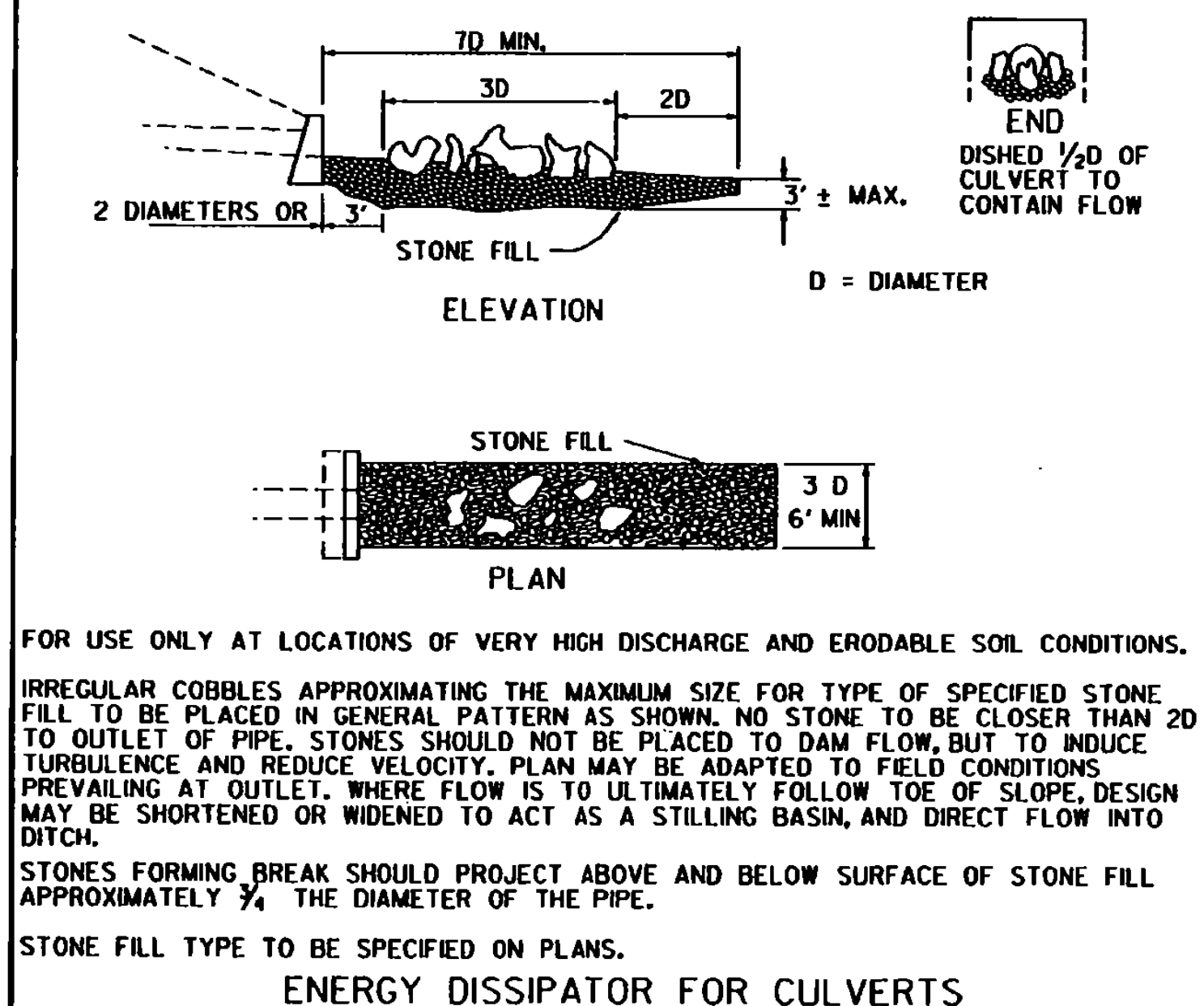
AREA-1 = AREA OF NOMINAL DIAMETER
AREA-2 = AREA THRU SECTION B-B



PRECAST REINFORCED CONCRETE CURB DROP INLET WITH CAST IRON GRATE



CAST IRON GRATE WITH FRAME, TYPE B



REVISIONS AND CORRECTIONS

DEC. 8, 1971 - ORIGINAL APPROVAL
NOV. 14, 1972 - RCP END SECTION DIMENSION VARIANCE NOTE ADDED
OCT. 30, 1985 - REVISED TO CONFORM WITH 1986 SPECIFICATIONS
JUNE 1, 1994 - REISSUED, WITHOUT CHANGE, UNDER NEW SIGNATURES.

APPROVED

APPROVED FOR THIS PROJECT AND/OR DESIGN IMPLEMENTATION. FHWA FINAL APPROVAL PENDING.

Donald P. MacArthur, P.E.
DIRECTOR OF ENGINEERING

John M. Murphy, P.E.
DESIGN ENGINEER

PRECAST REINFORCED CONCRETE CURB DROP INLET WITH CAST IRON GRATE

CAST IRON GRATE, TYPE B

CAST IRON GRATE, TYPE C

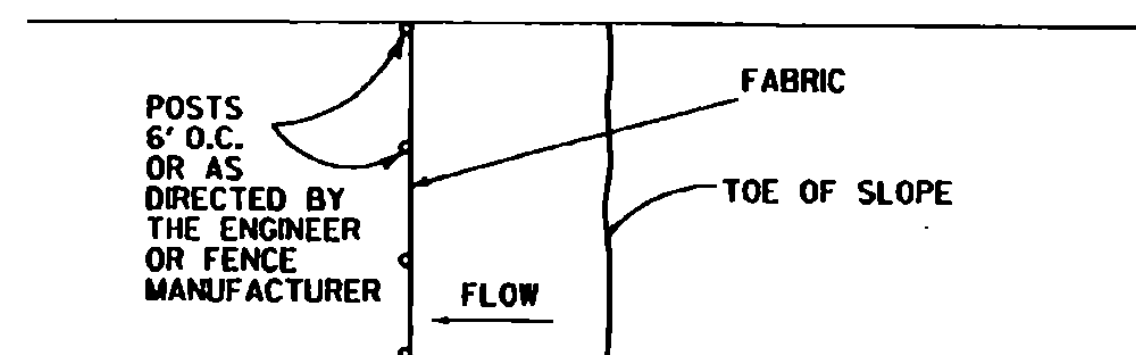
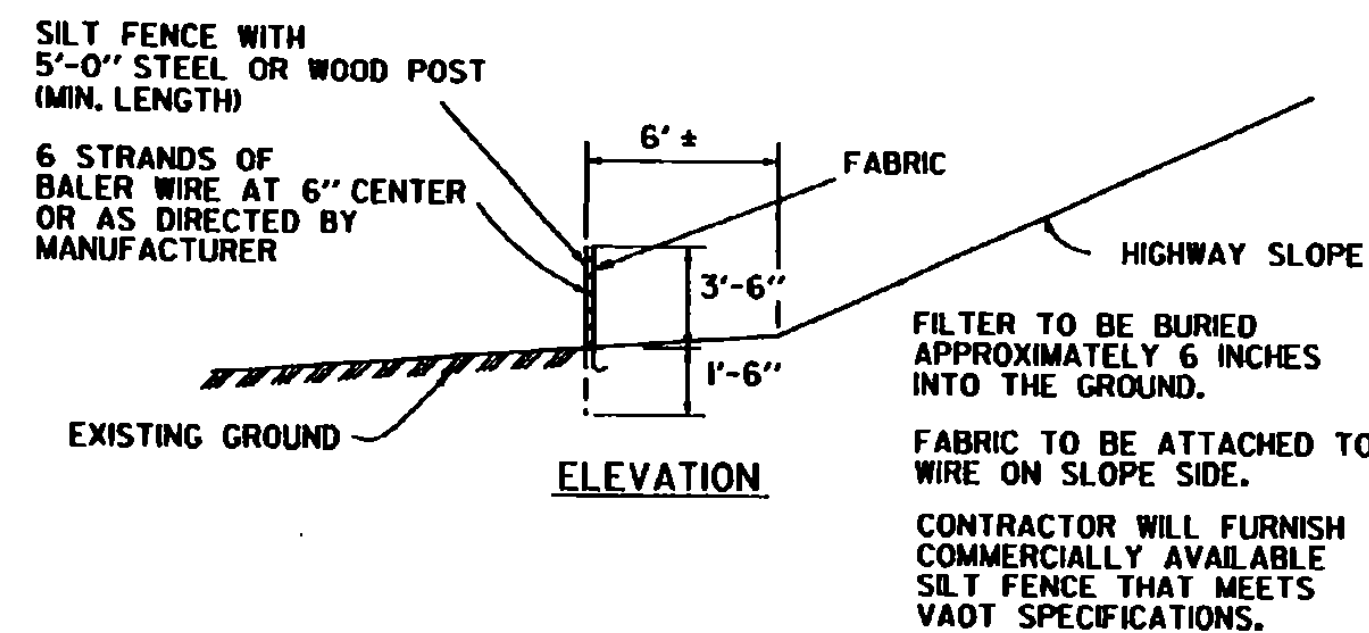
UNDERDRAIN RISER

REINFORCED CONCRETE PIPE END SECTION

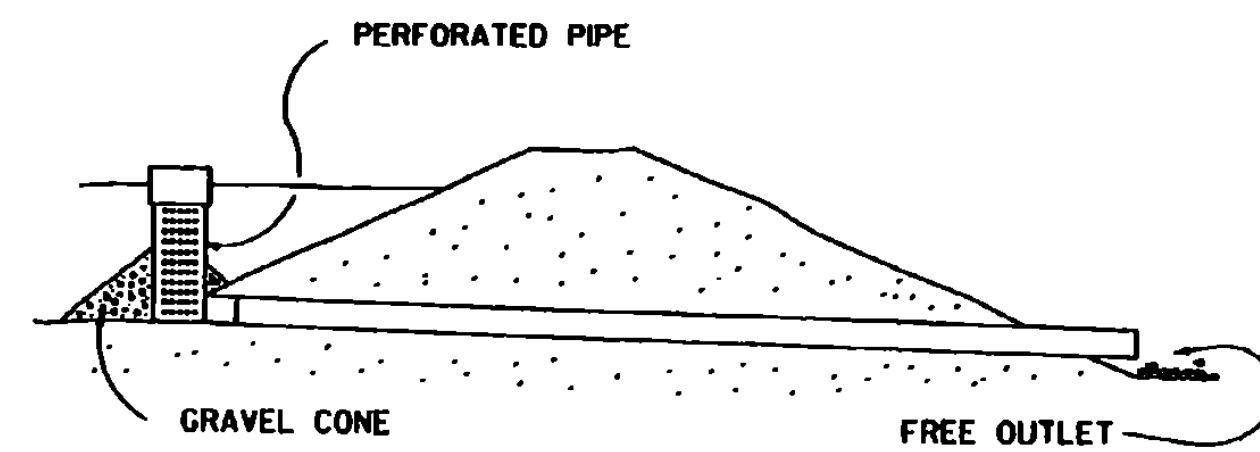
ENERGY DISSIPATOR FOR CULVERT

VERMONT AGENCY OF TRANSPORTATION

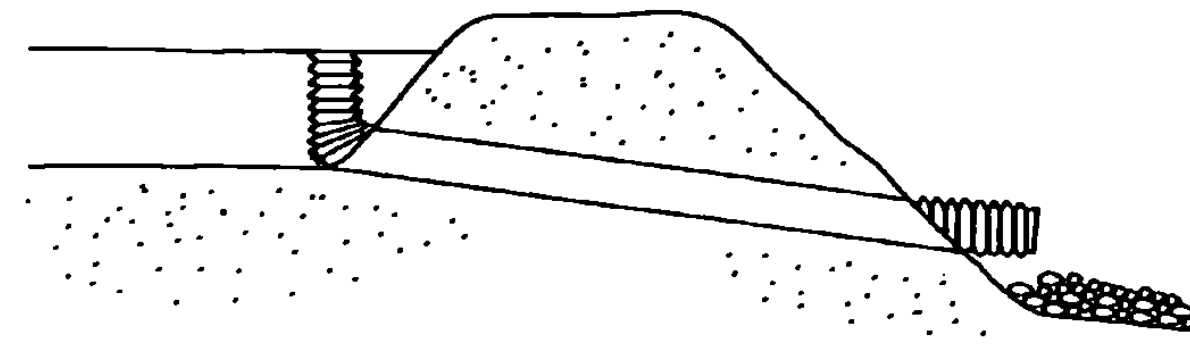
STANDARD D-16



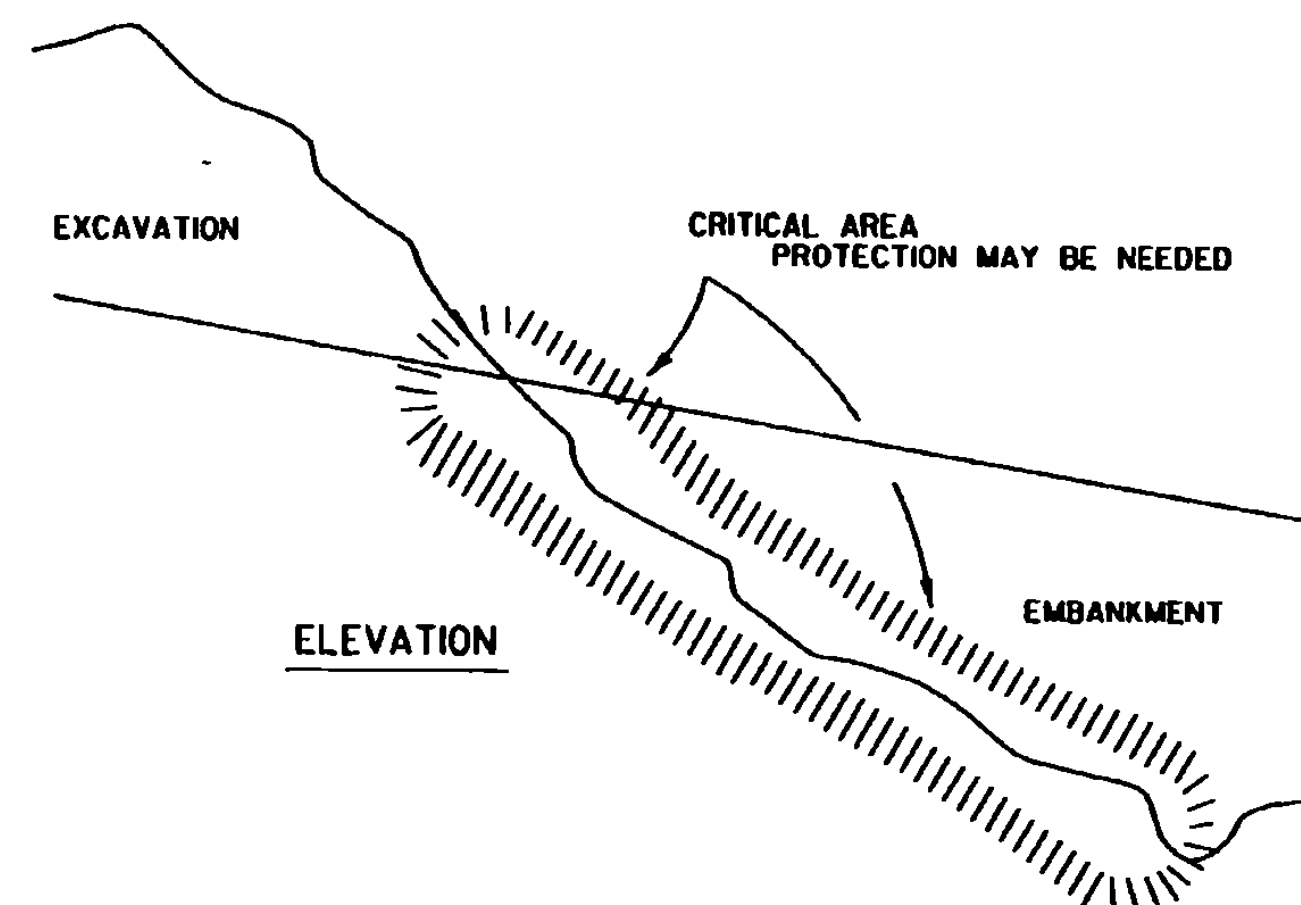
PLAN
SILT FENCE



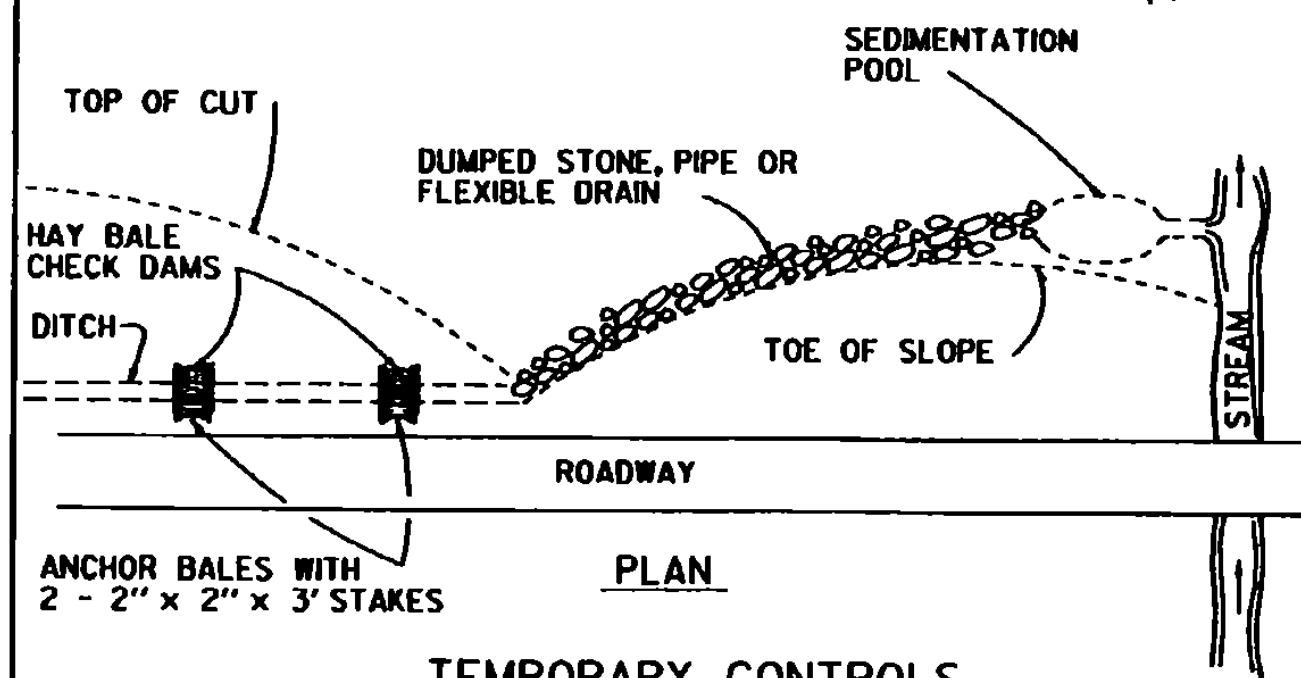
LARGE - PERMANENT INSTALLATION
PIPE RISER - STONE OUTLET



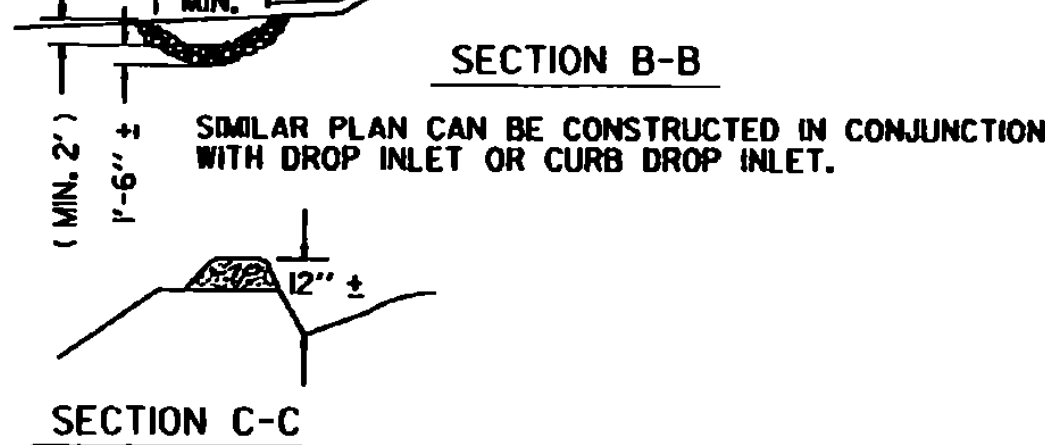
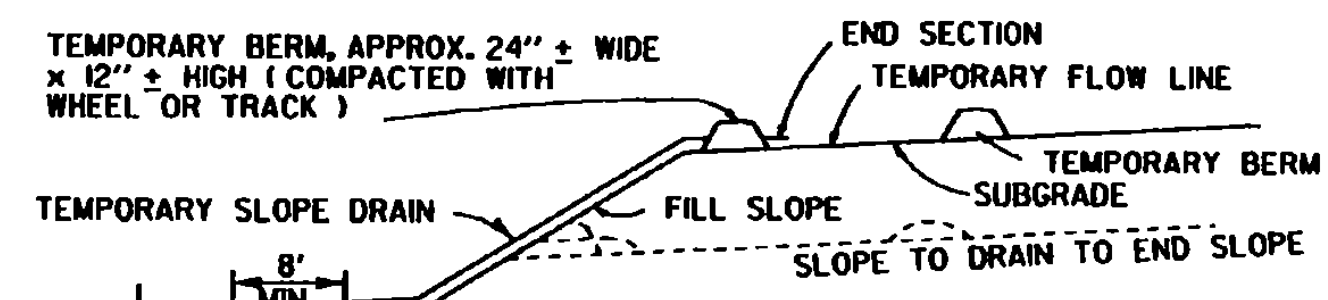
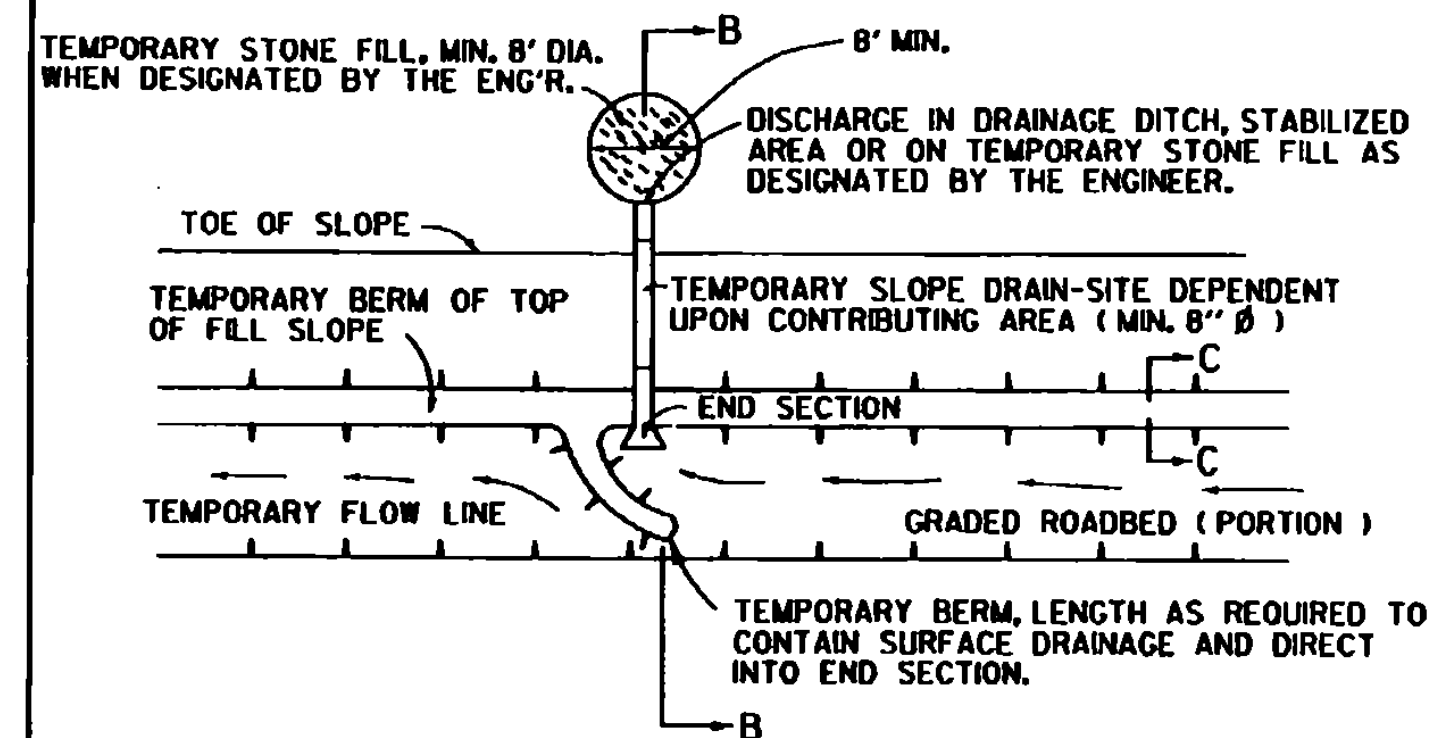
SEDIMENT DAMS



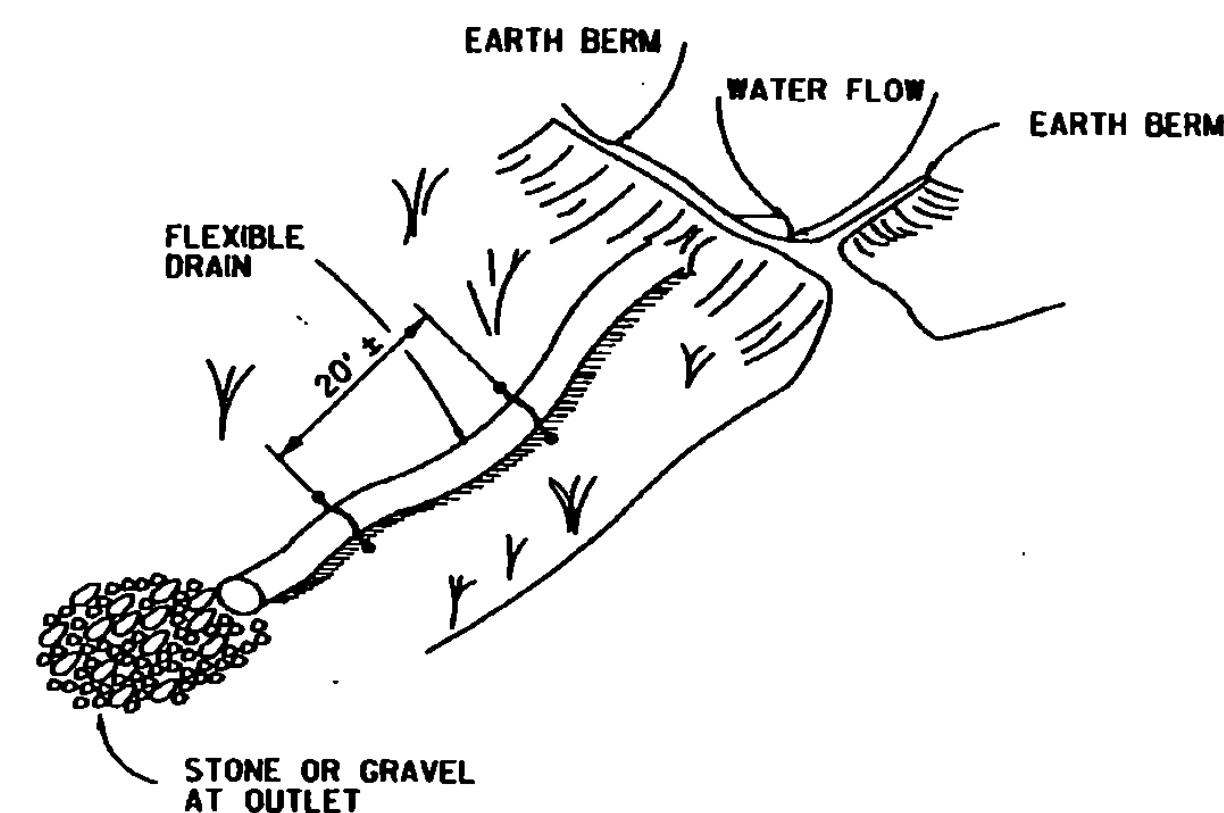
ELEVATION



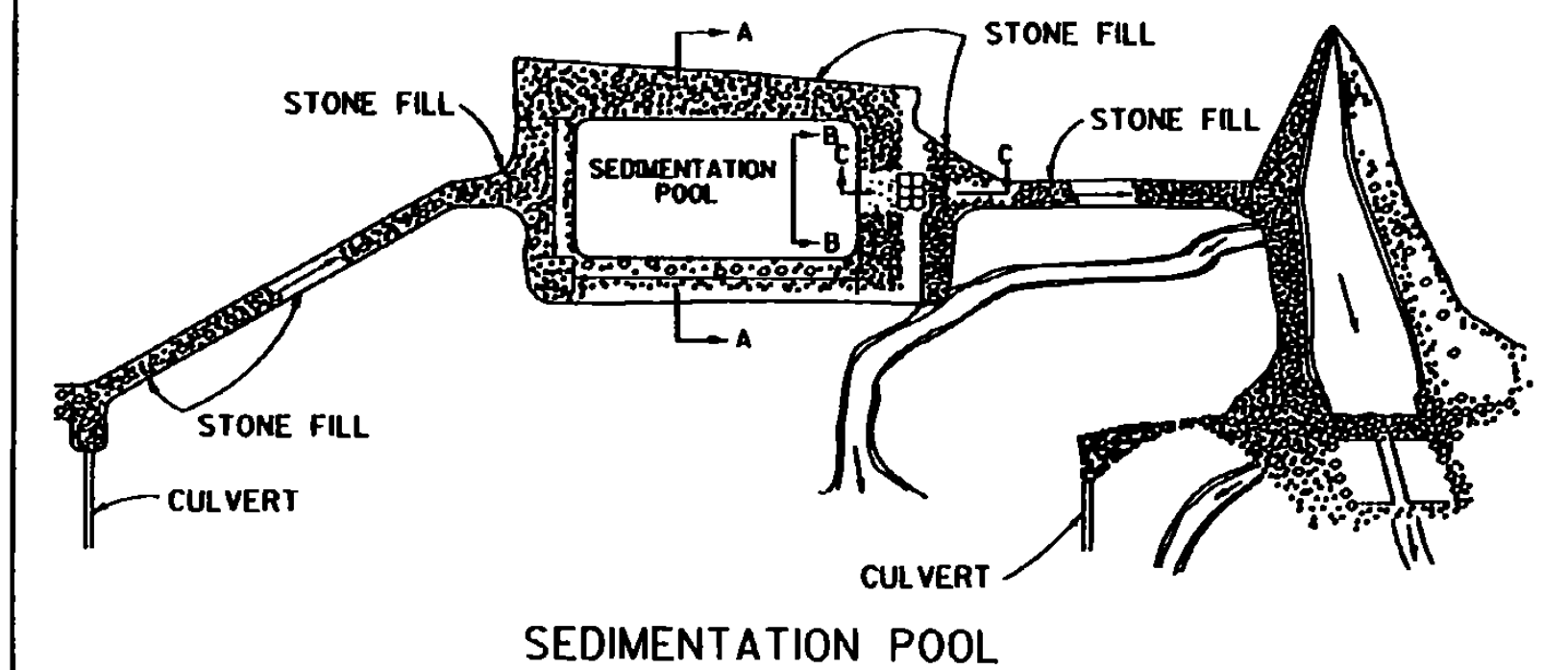
PLAN
TEMPORARY CONTROLS
CUT TO FILL SLOPE



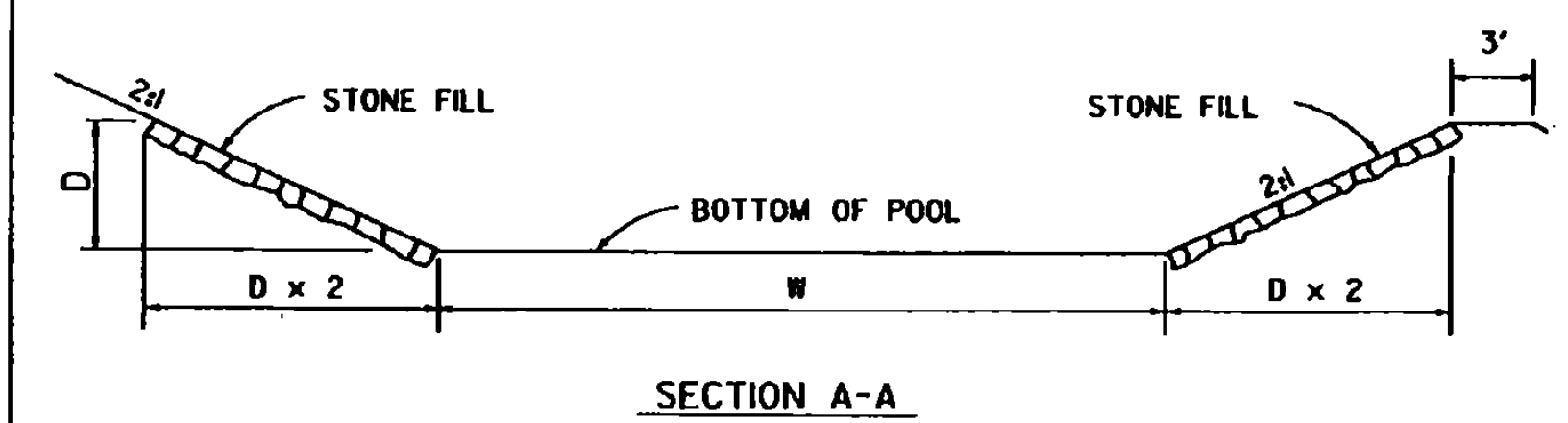
TEMPORARY BERMS AND SLOPE DRAINS
FOR FILL SLOPES



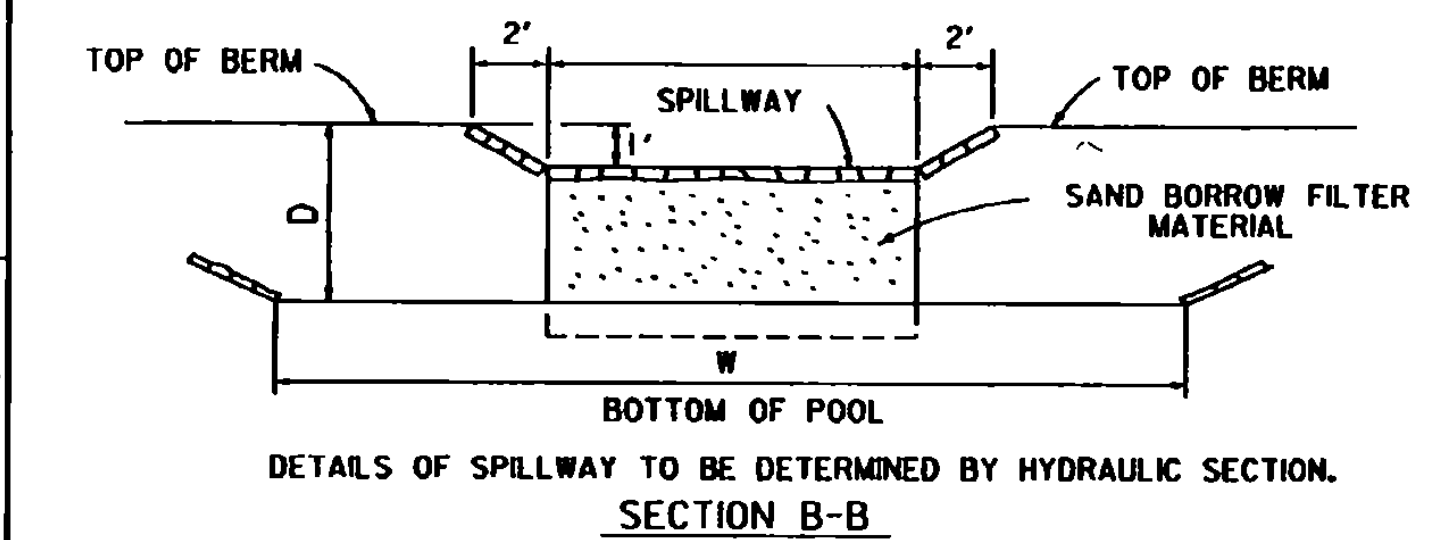
TEMPORARY FLEXIBLE SLOPE DRAIN



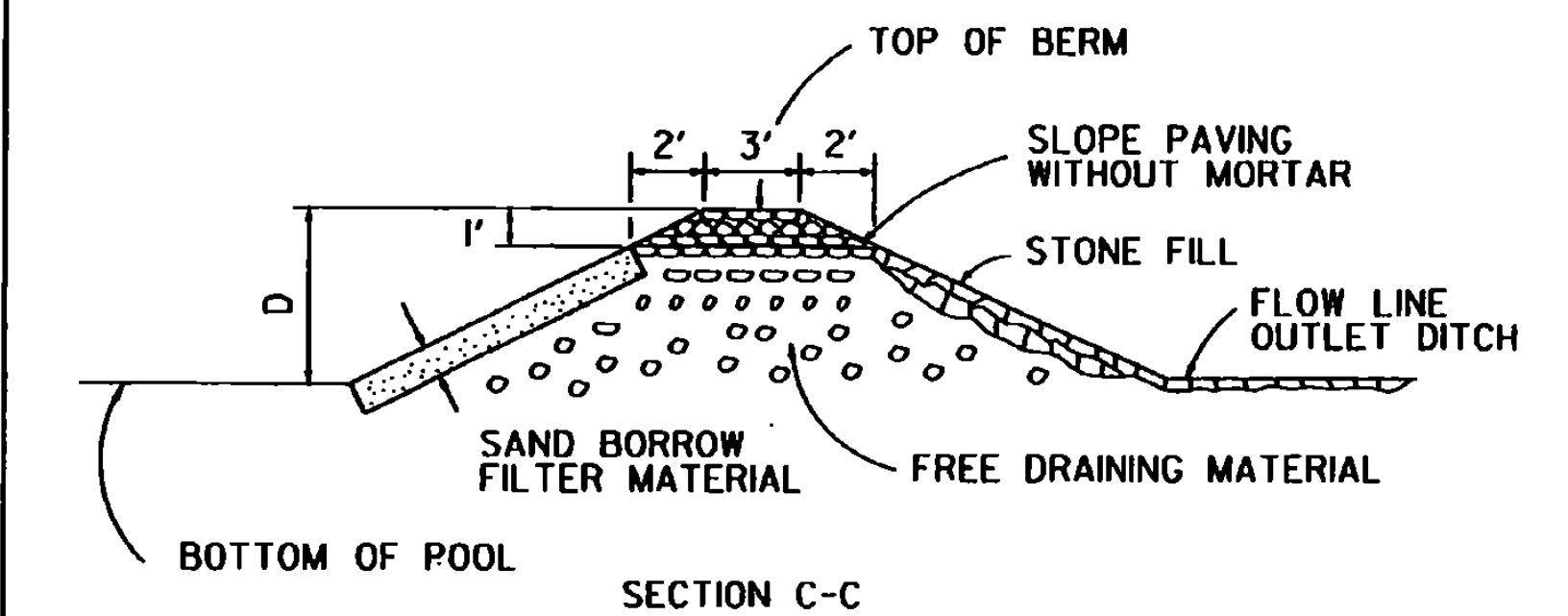
SEDIMENTATION POOL



SECTION A-A



DETAILS OF SPILLWAY TO BE DETERMINED BY HYDRAULIC SECTION.
SECTION B-B



SECTION C-C

REVISIONS AND CORRECTIONS

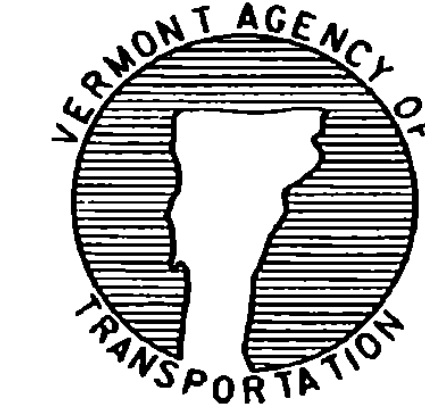
- JUL. 5, 1972 - ORIGINAL APPROVAL
- JUN. 14, 1973 - SEDIMENT TRAPS REMOVED FROM TEMPORARY BERMS & SLOPE DRAINS FOR FILL SLOPES
- FEB. 26, 1976 - SILT FENCE ADDED
- DEC. 7, 1976 - HAY BALE ANCHOR NOTE ADDED
- JUN. 1, 1994 - SILT FENCE NOTES AND DIMENSIONS CHANGED

APPROVED

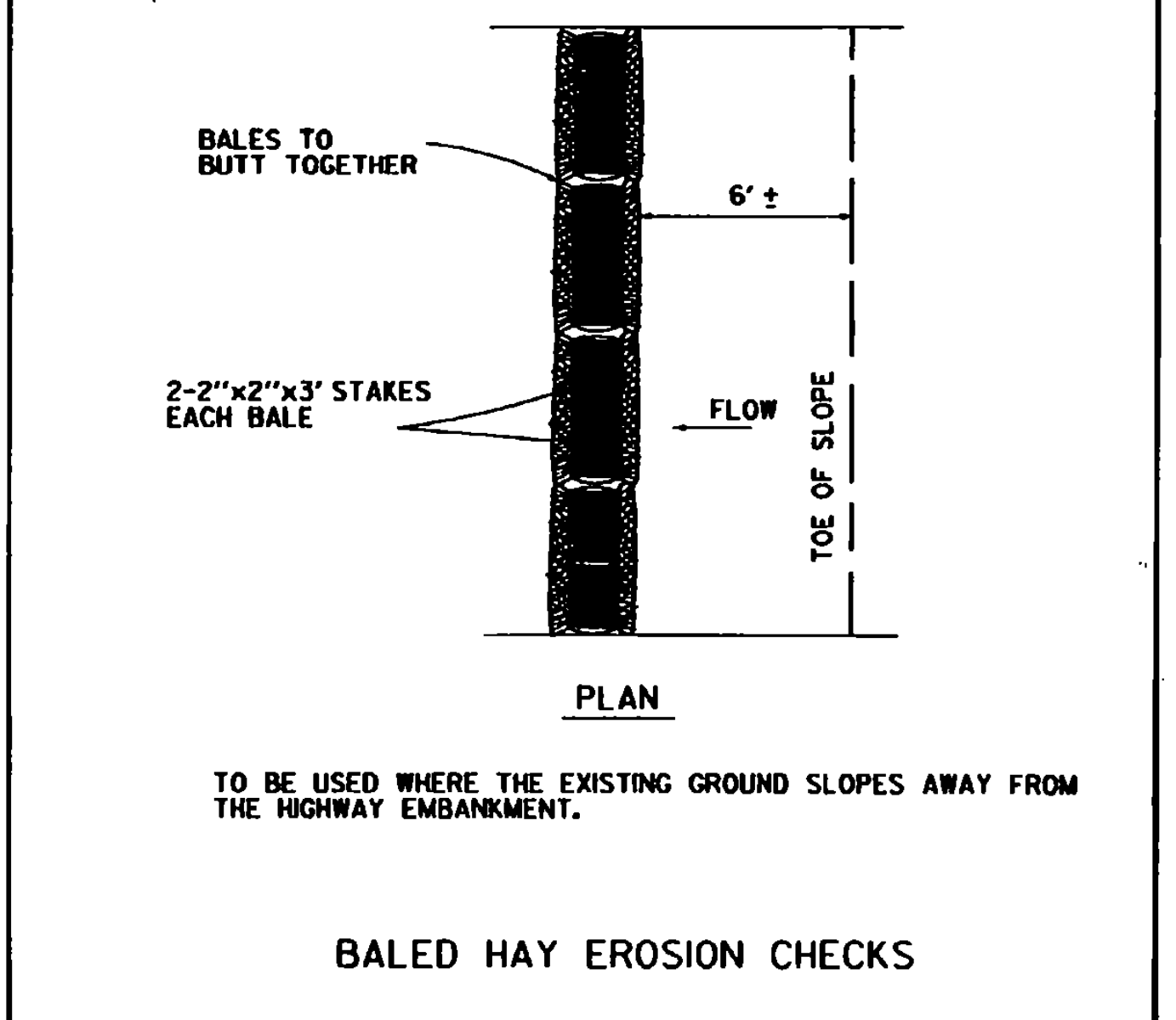
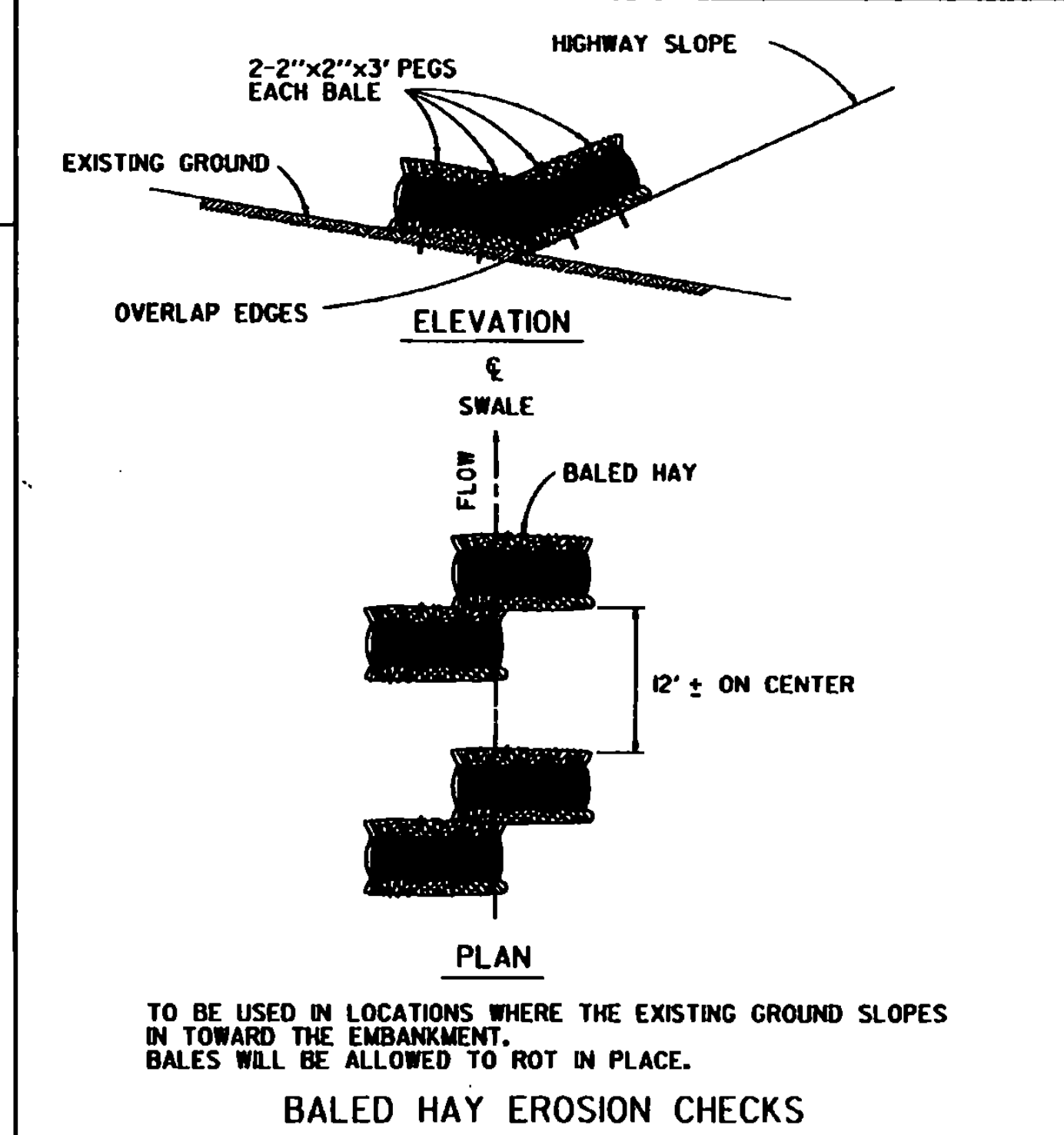
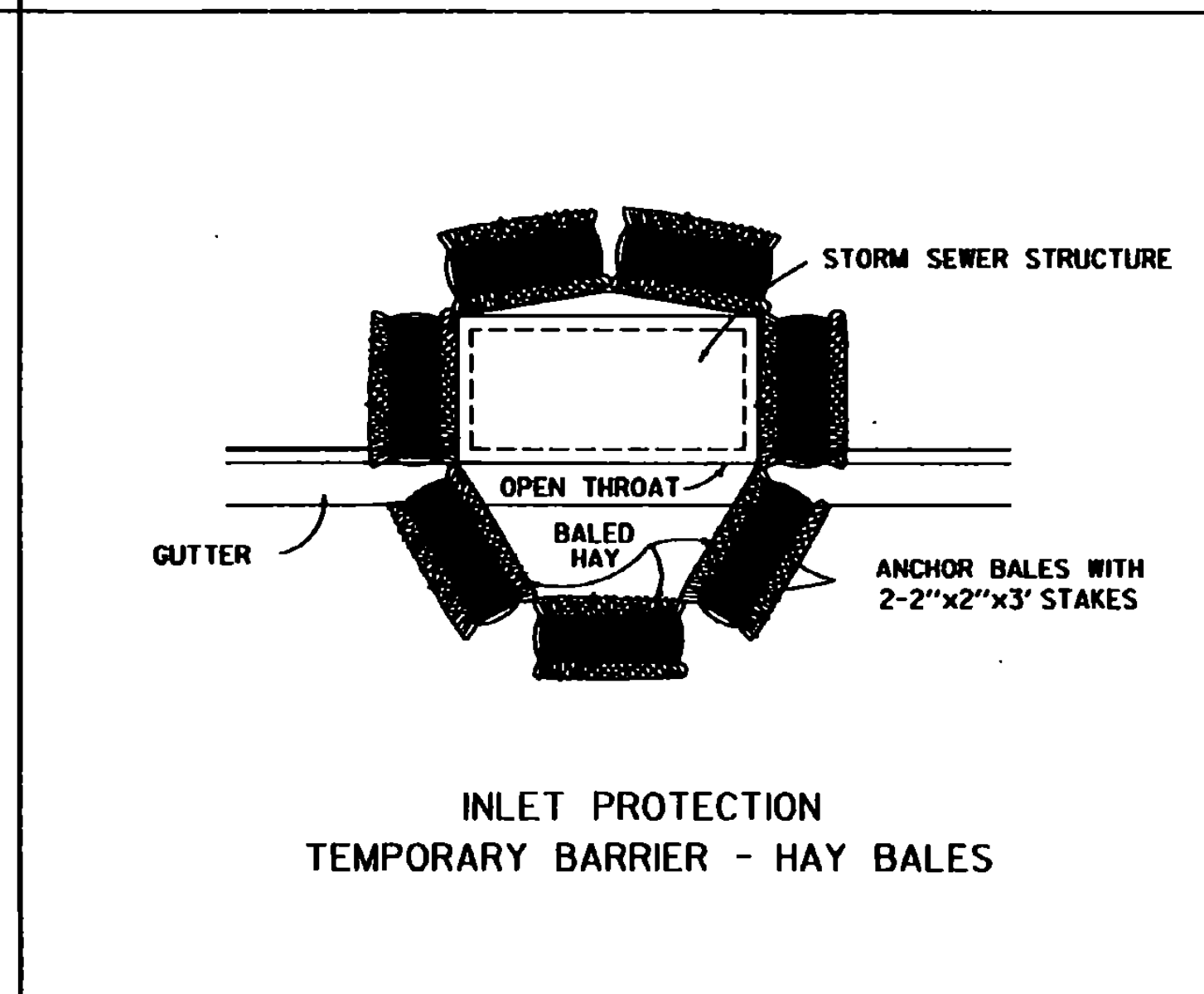
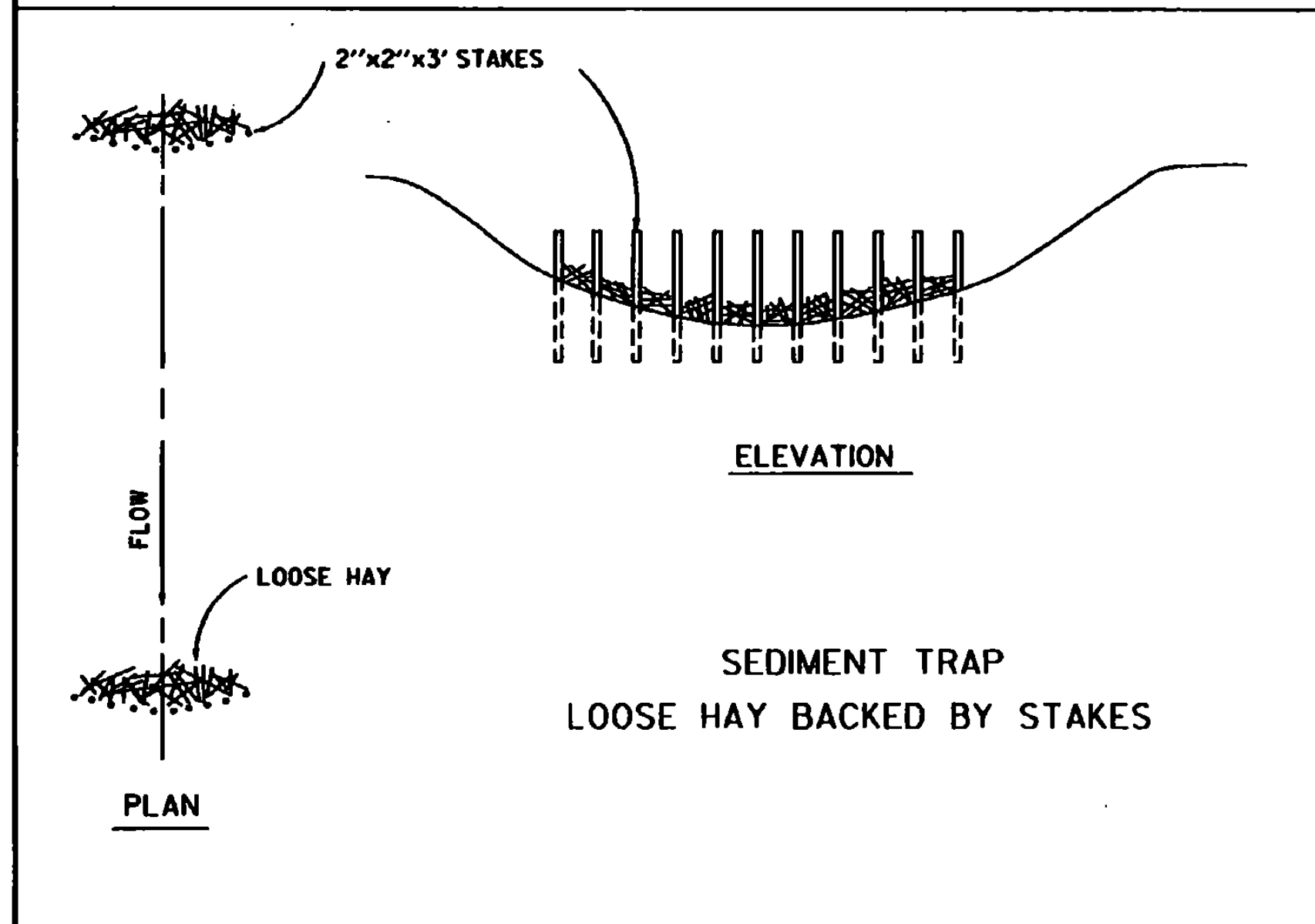
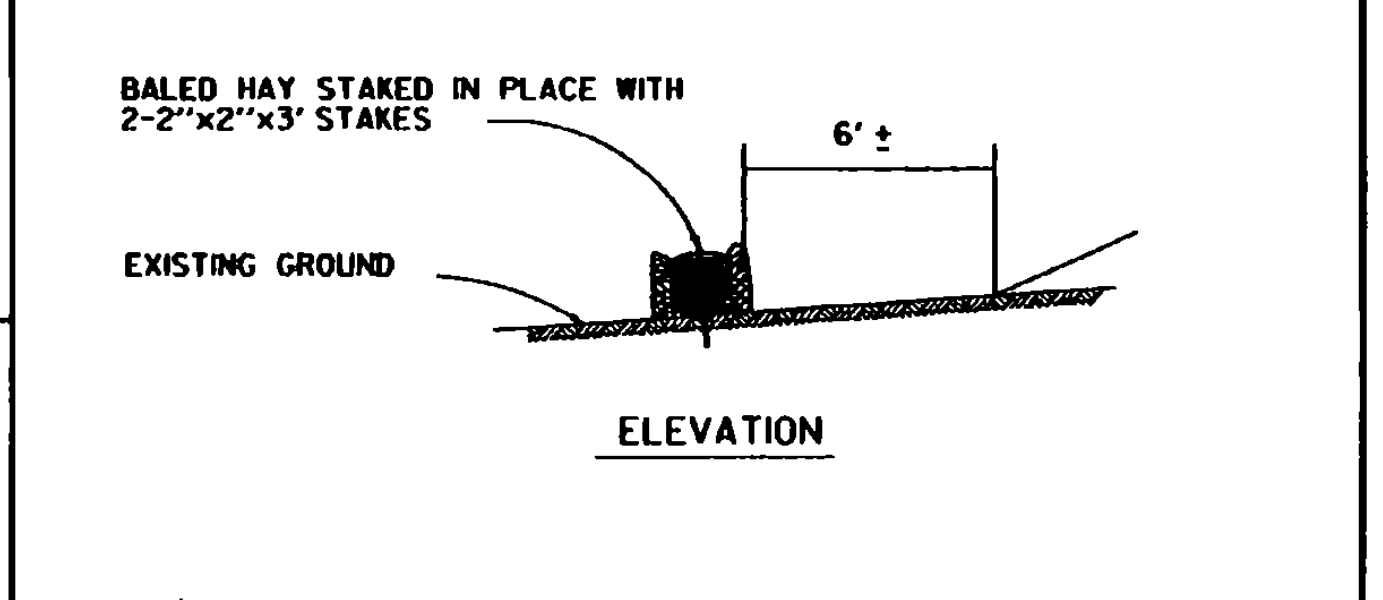
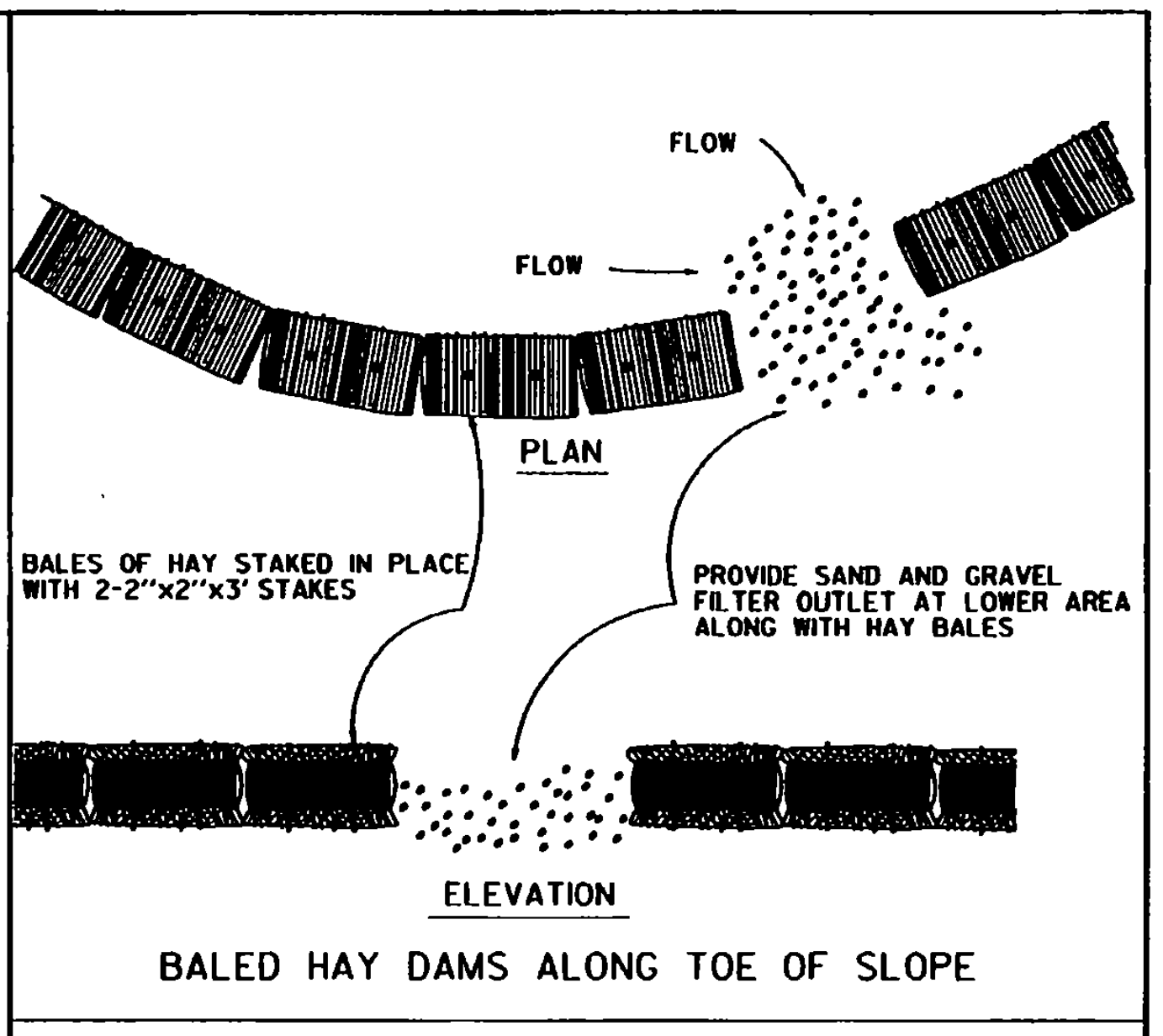
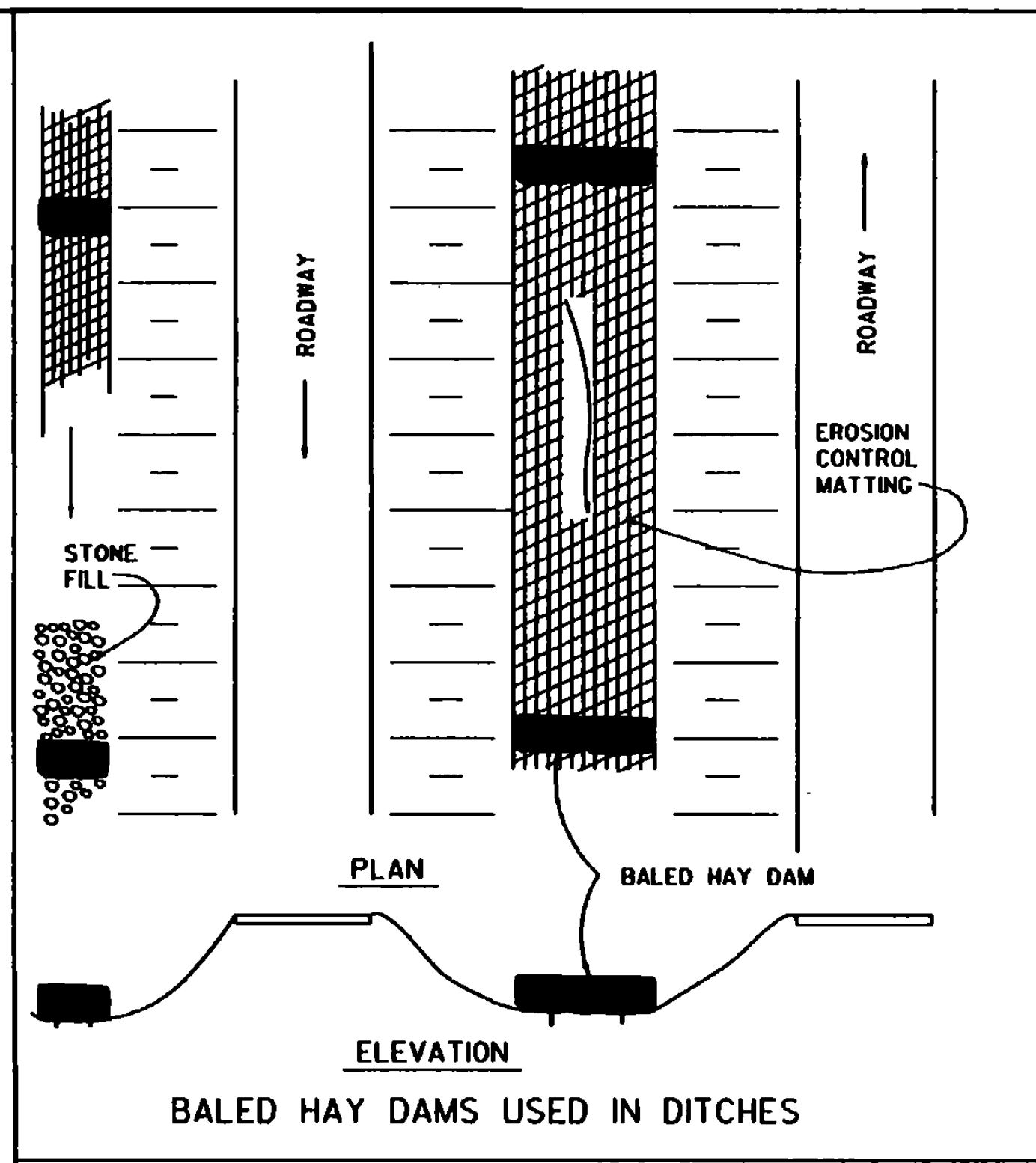
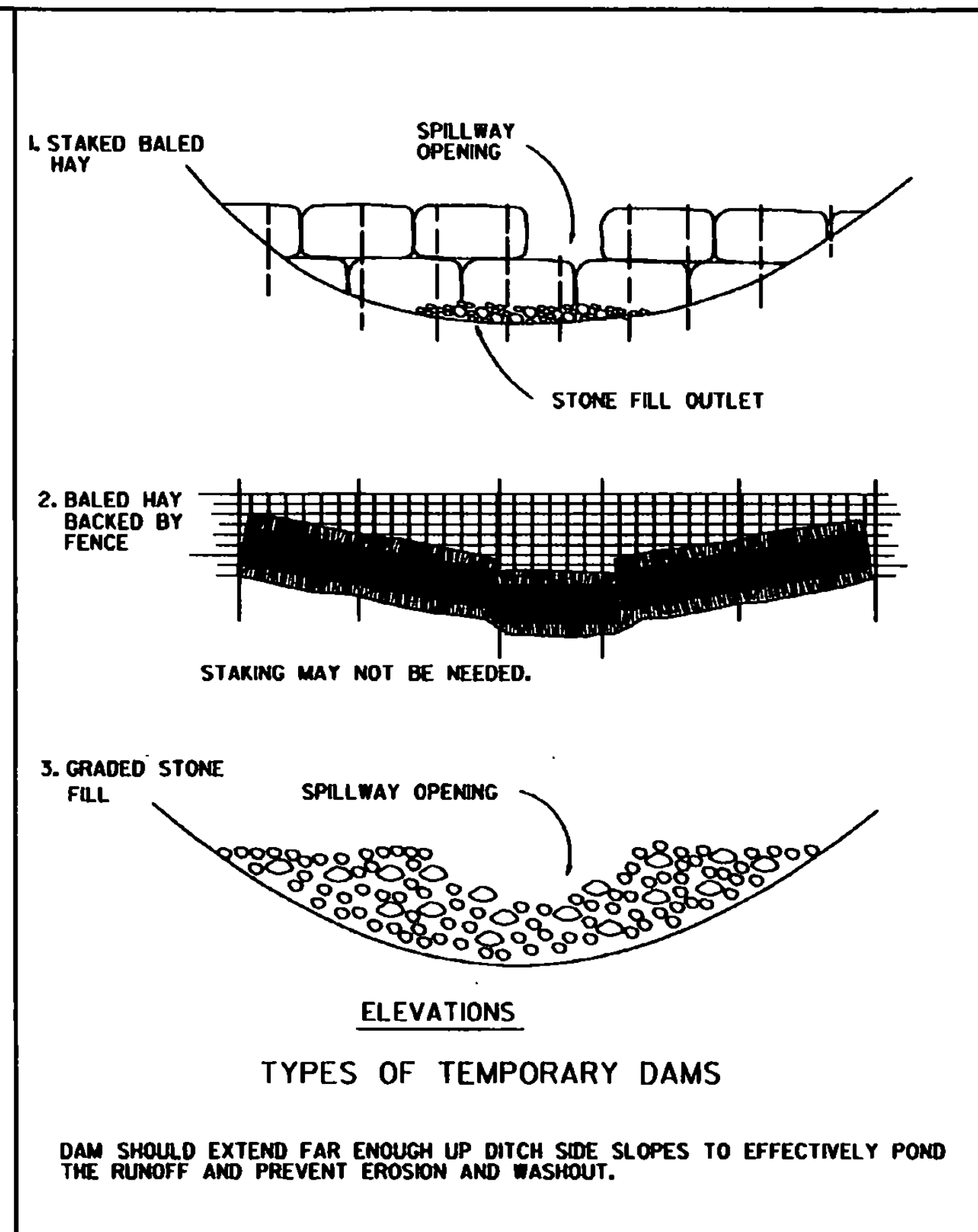
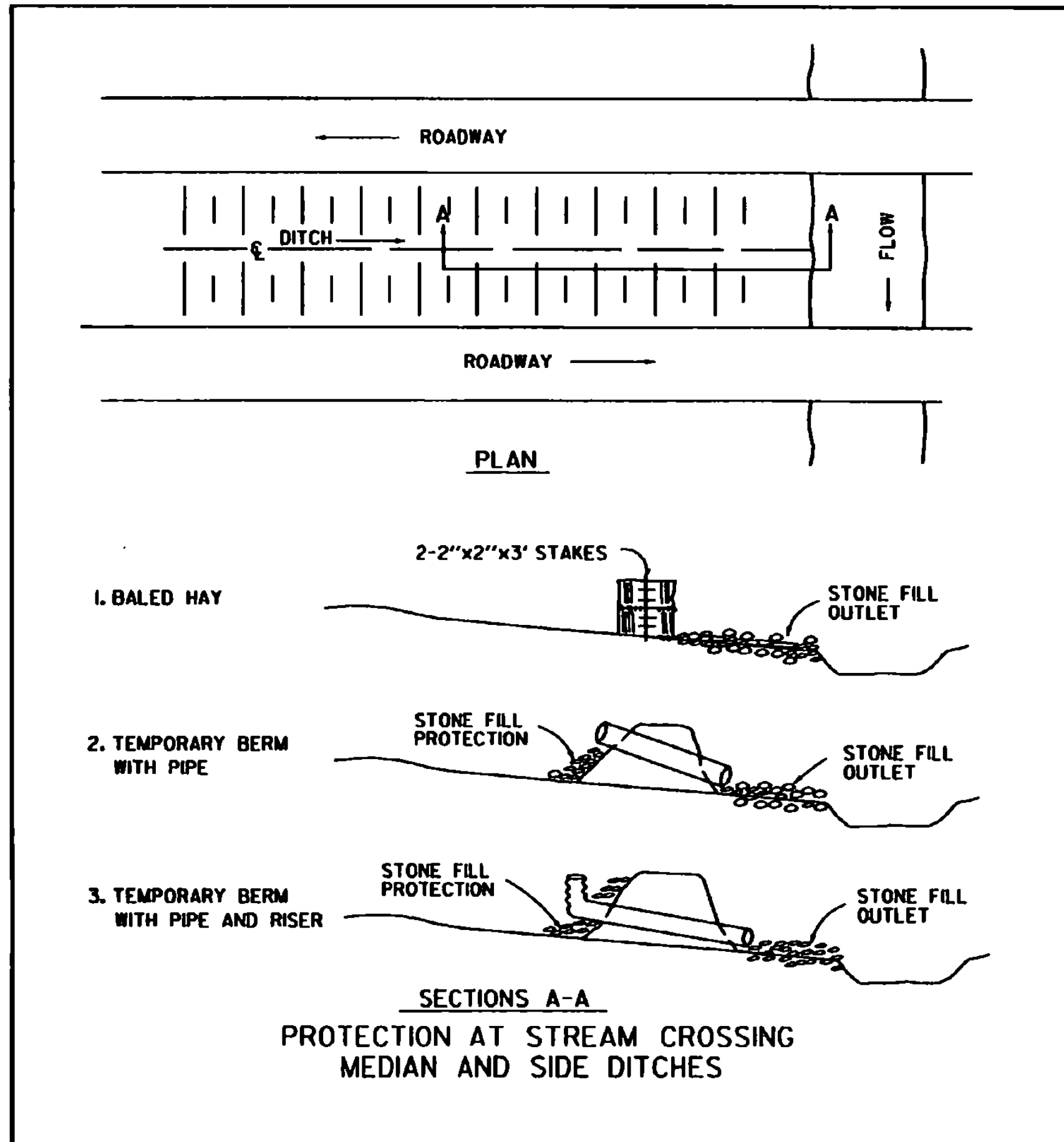
APPROVED FOR THIS PROJECT
AND/OR DESIGN IMPLEMENTATION,
FHWA FINAL APPROVAL PENDING.

Ernest B. Theobald
DIRECTOR OF ENGINEERING
John M. Mungy
DESIGN ENGINEER

TEMPORARY EROSION CONTROL DETAILS



STANDARD
T-1



REVISIONS AND CORRECTIONS
 JUL. 5, 1972 - ORIGINAL APPROVAL
 JUNE 1, 1994 - REISSUED, WITHOUT CHANGE, UNDER NEW SIGNATURES.

APPROVED

APPROVED FOR THIS PROJECT AND/OR DESIGN IMPLEMENTATION FROM FINAL APPROVAL PENDING.

Stephen D. MacCallum
 DIRECTOR OF ENGINEERING

John M. Murphy
 DESIGN ENGINEER

TEMPORARY EROSION CONTROL DETAILS

VERMONT AGENCY OF
TRANSPORTATION

STANDARD T-2