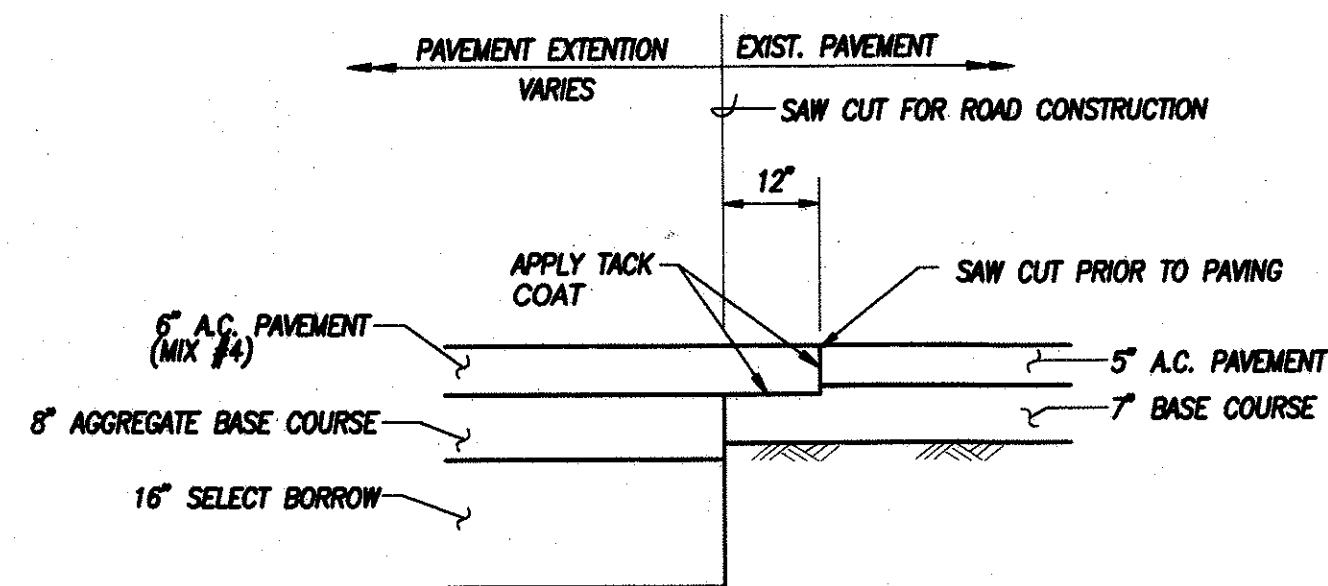
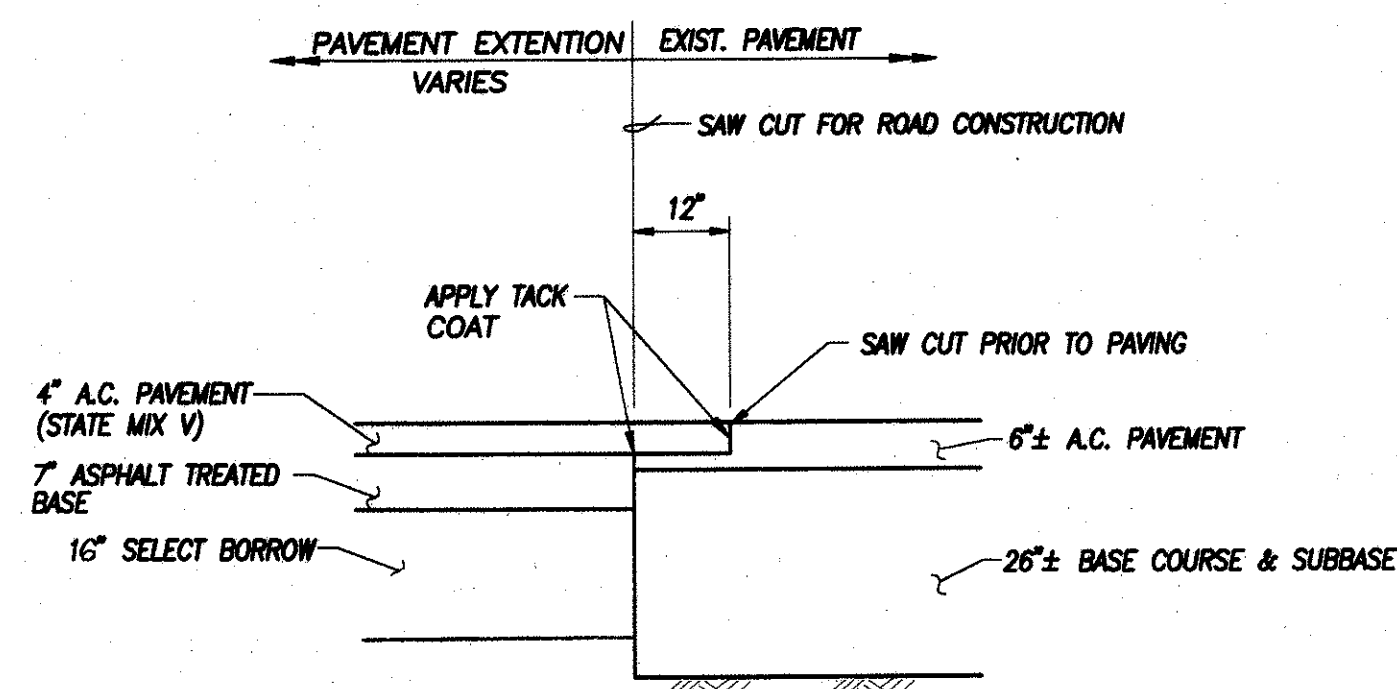
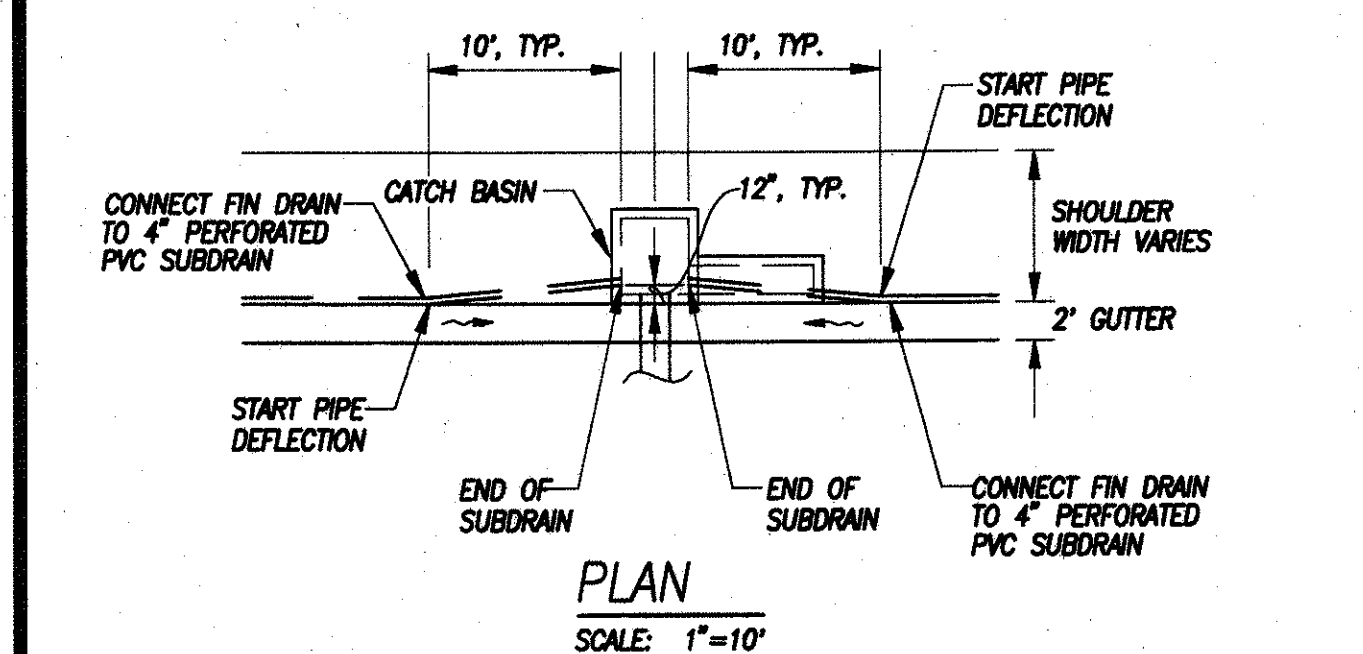
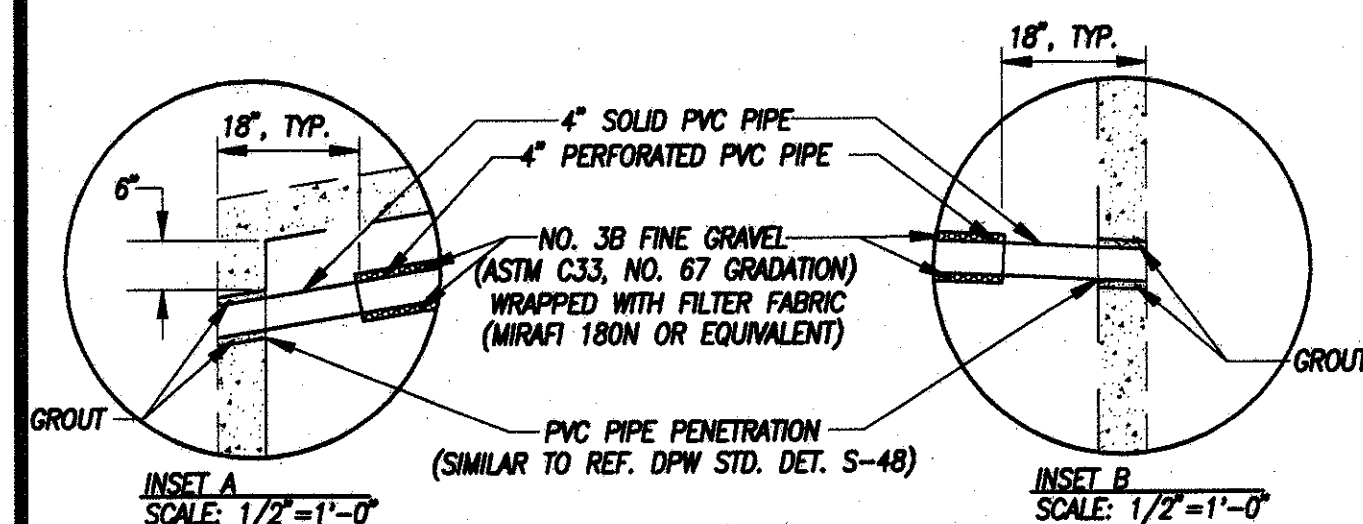
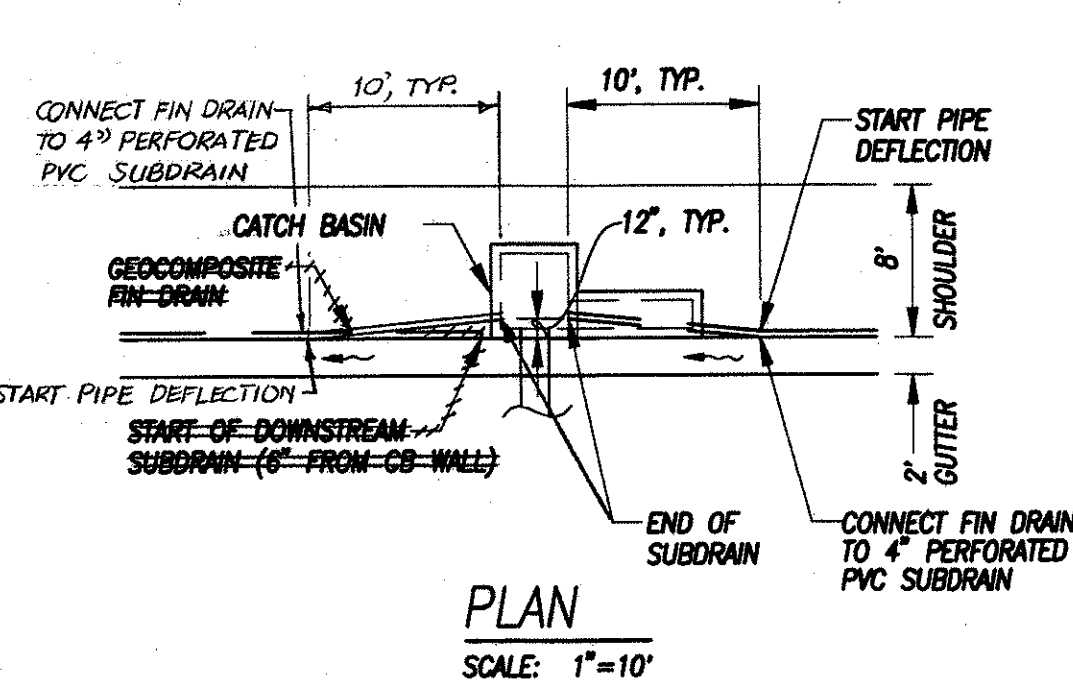
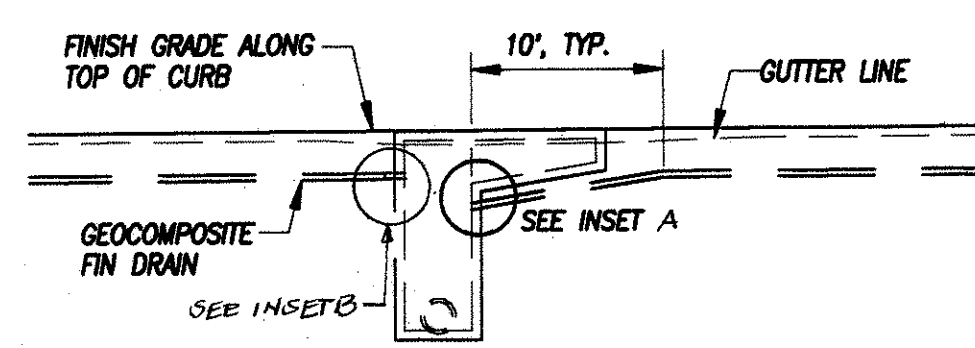
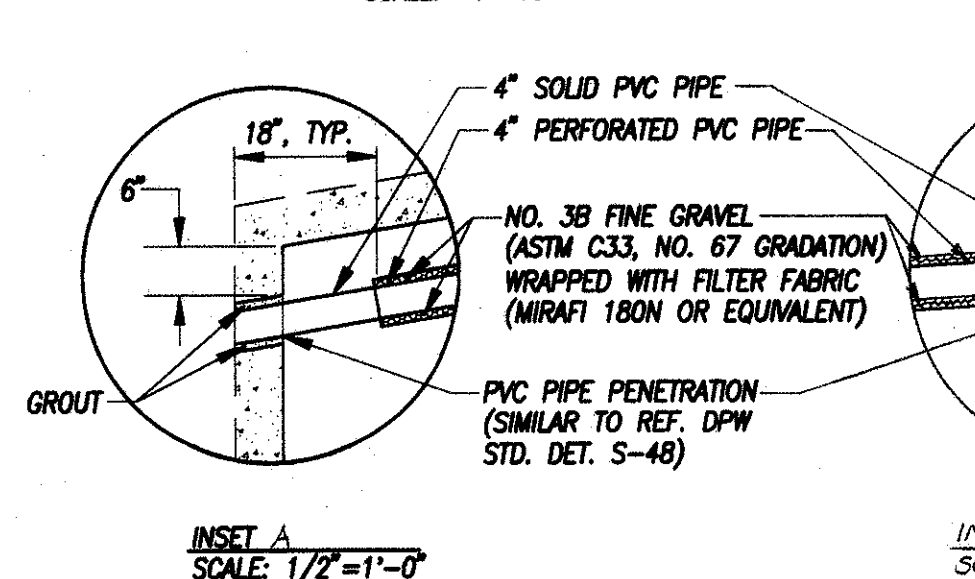
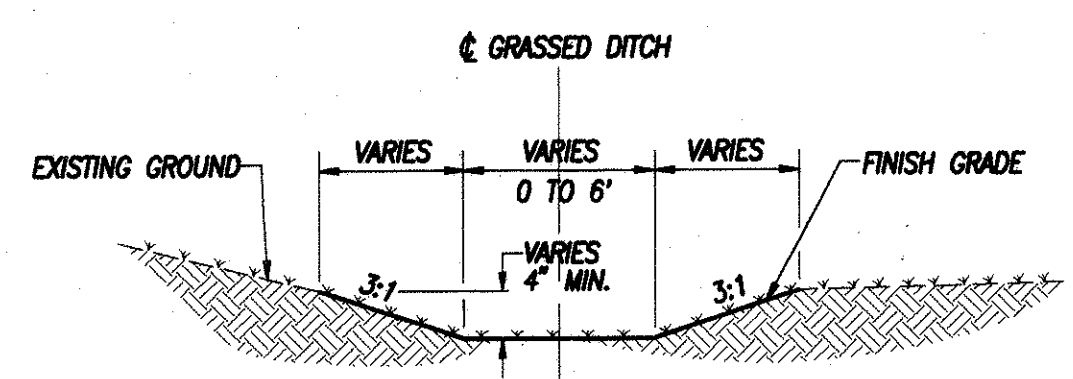




CITY R.O.W.



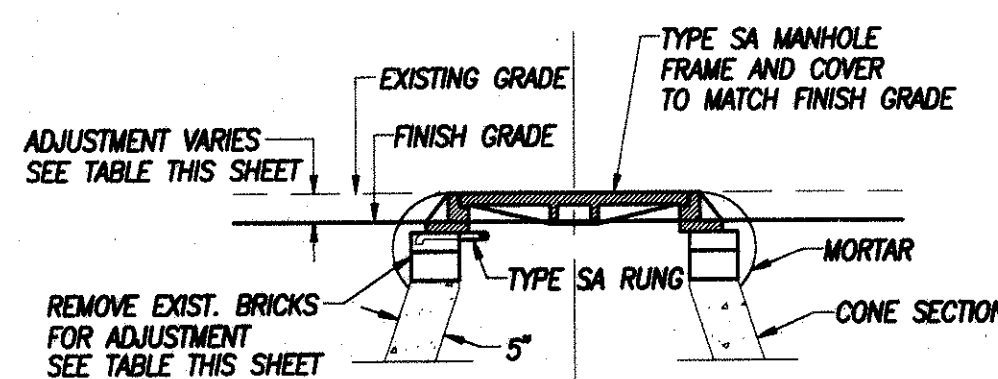
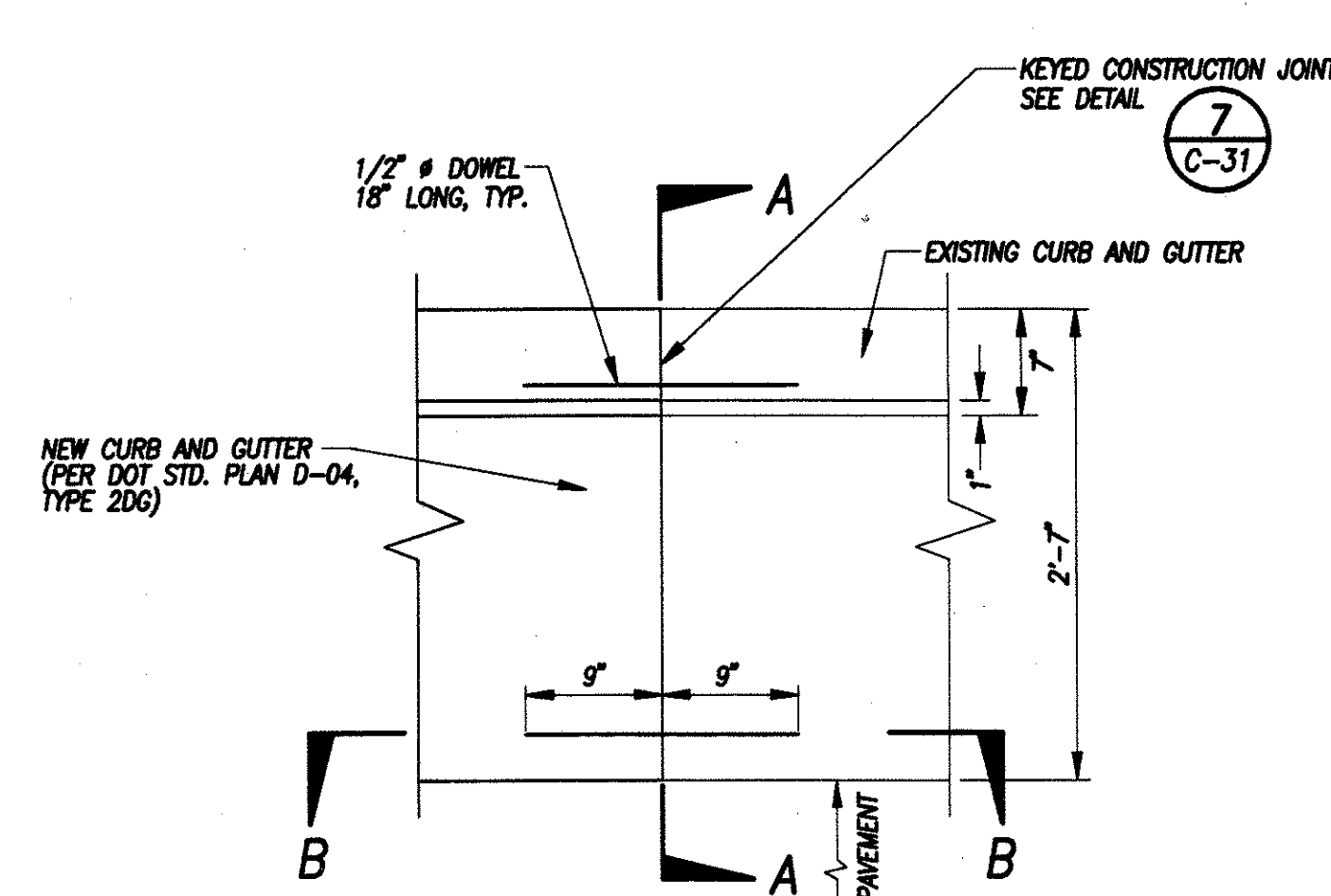
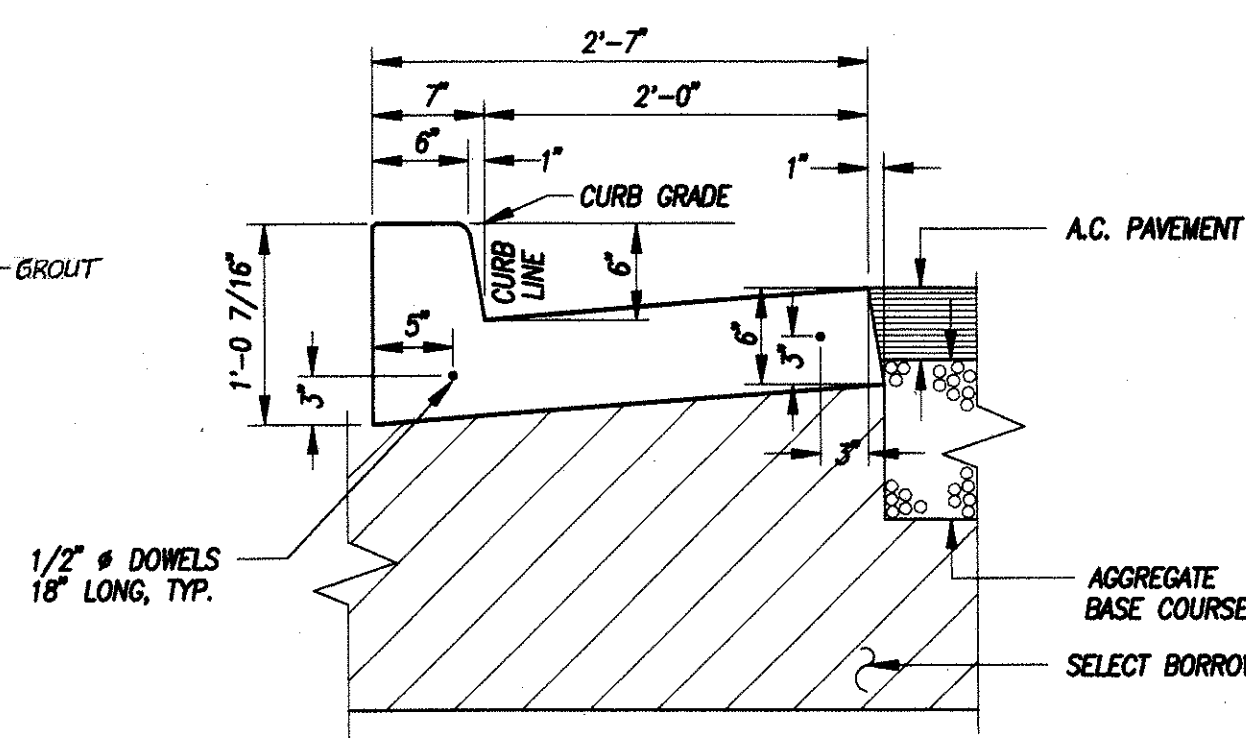
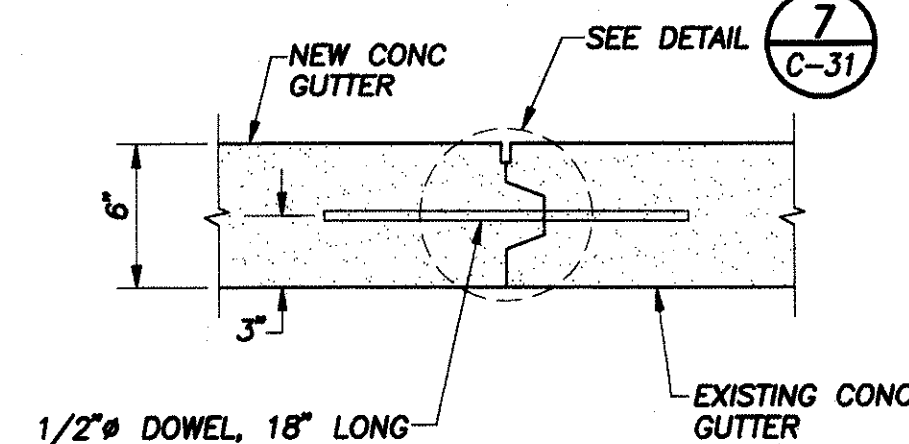
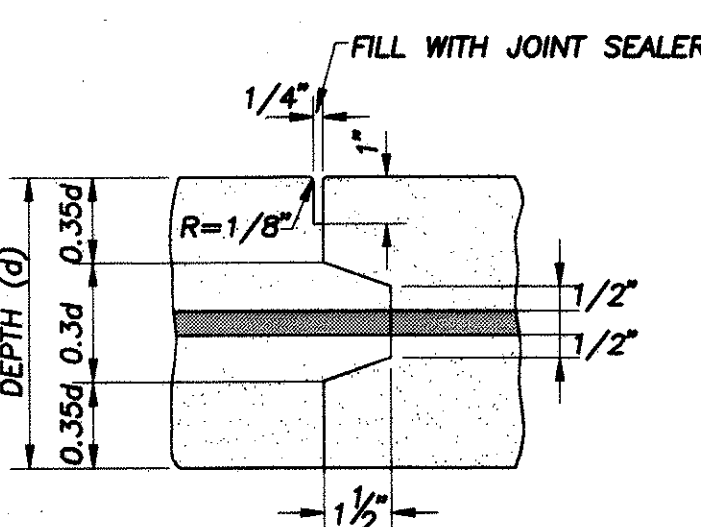
STATE R.O.W.

1 PAVEMENT CONNECTION DETAIL
C-31 SCALE: 1"=2'-0"PLAN
SCALE: 1"=10'-0"PROFILE
SCALE: 1"=10'-0"2 DOUBLE SUBDRAIN CONNECTION (TYP.)
C-31 SCALE: AS SHOWN
AT LOW POINTS
(CITY R.O.W. ONLY)PLAN
SCALE: 1"=10'-0"PROFILE
SCALE: 1"=10'-0"3 SINGLE SUBDRAIN CONNECTION (TYP.)
C-31 SCALE: AS SHOWN
AT CONTINUOUS SLOPES
(CITY R.O.W. ONLY)

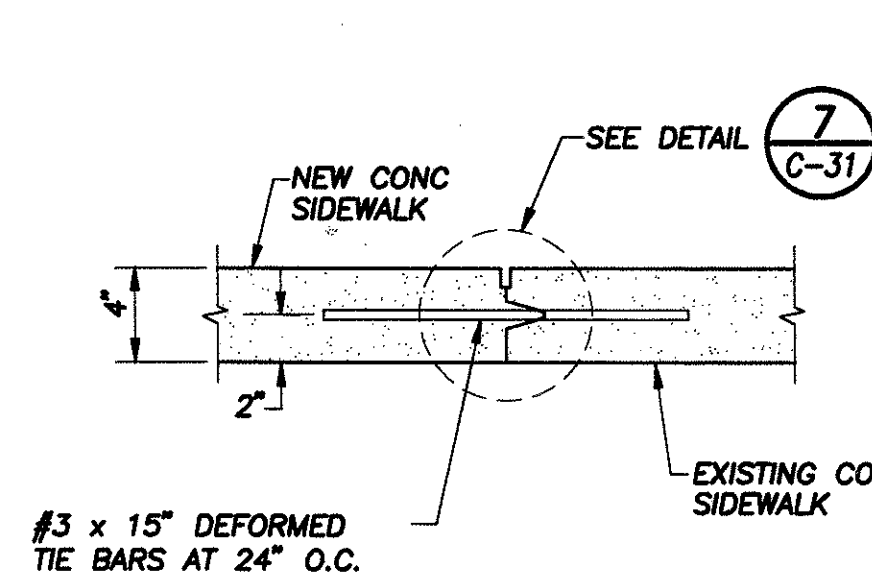
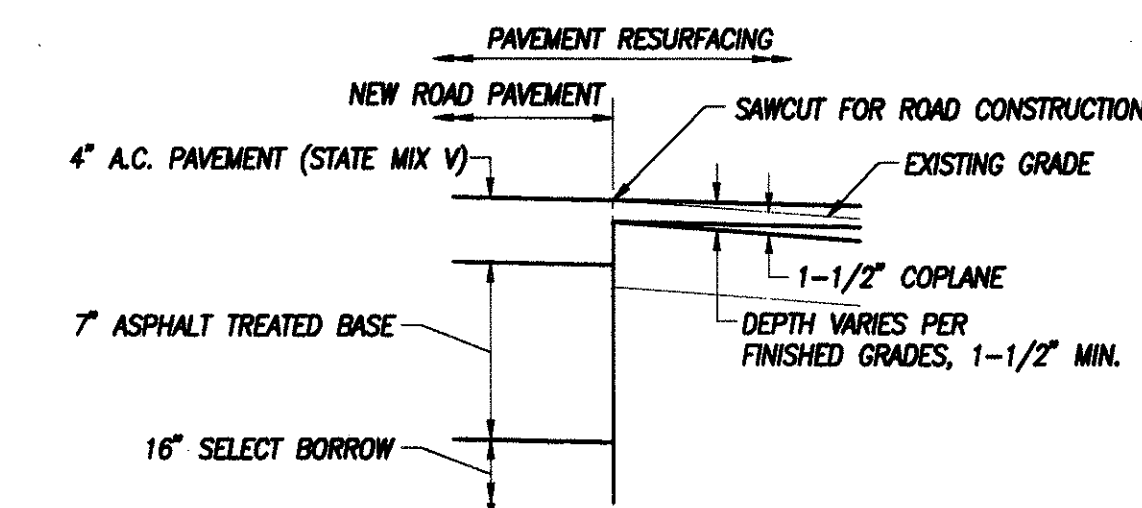
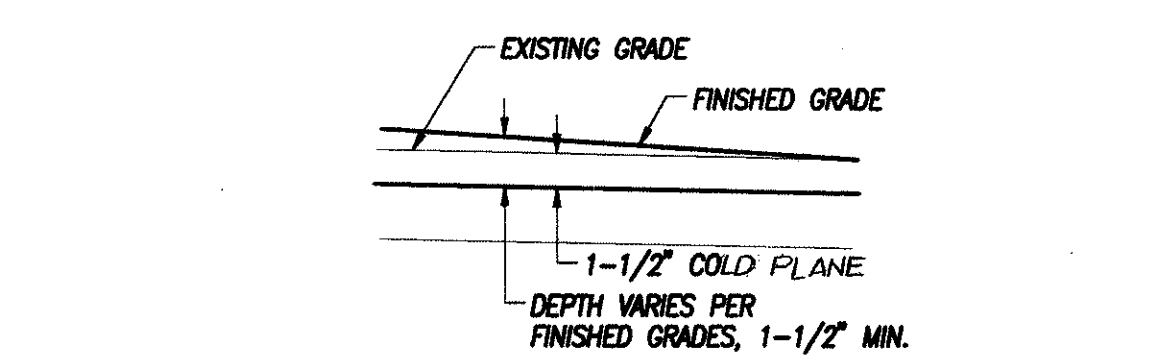
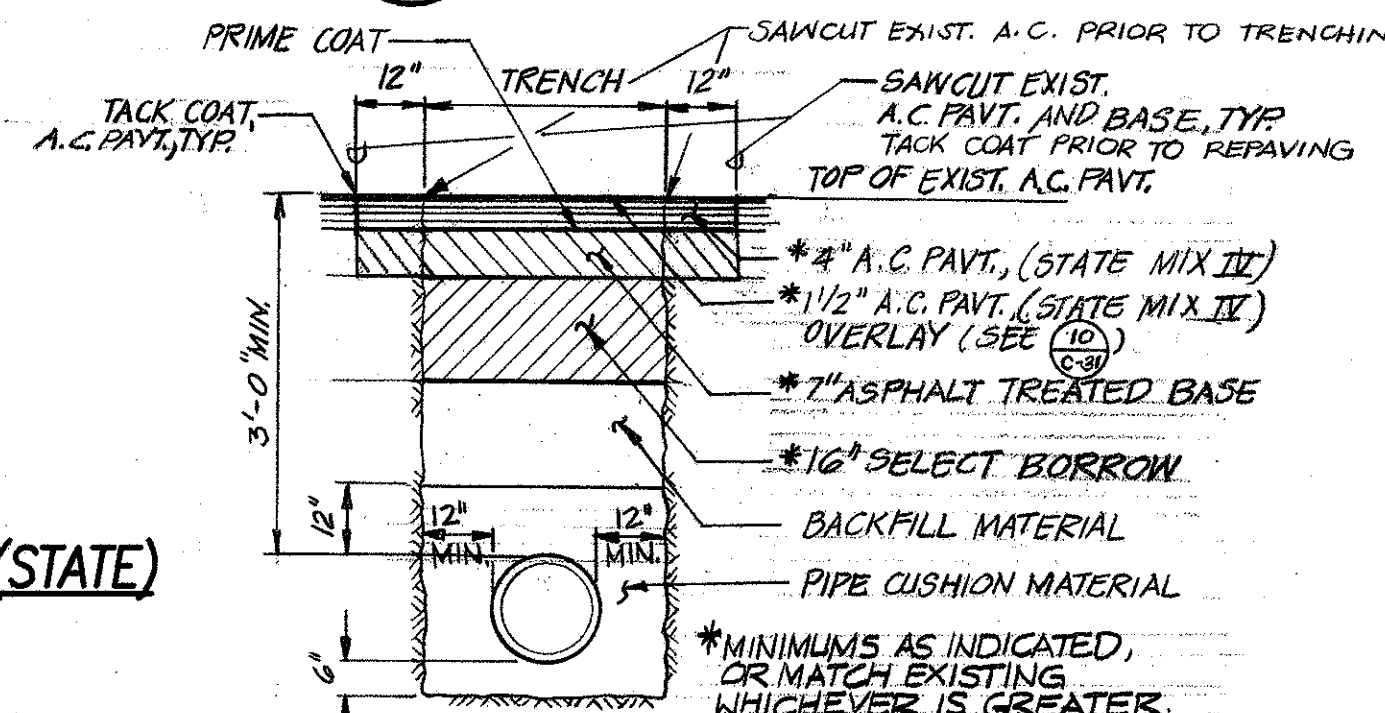
NOTE: CHANNEL SHALL HAVE A MINIMUM LONGITUDINAL SLOPE OF 0.5%

4 GRASSED TRAPEZOIDAL DITCH
C-31 SCALE: 1/2"=1'-0"

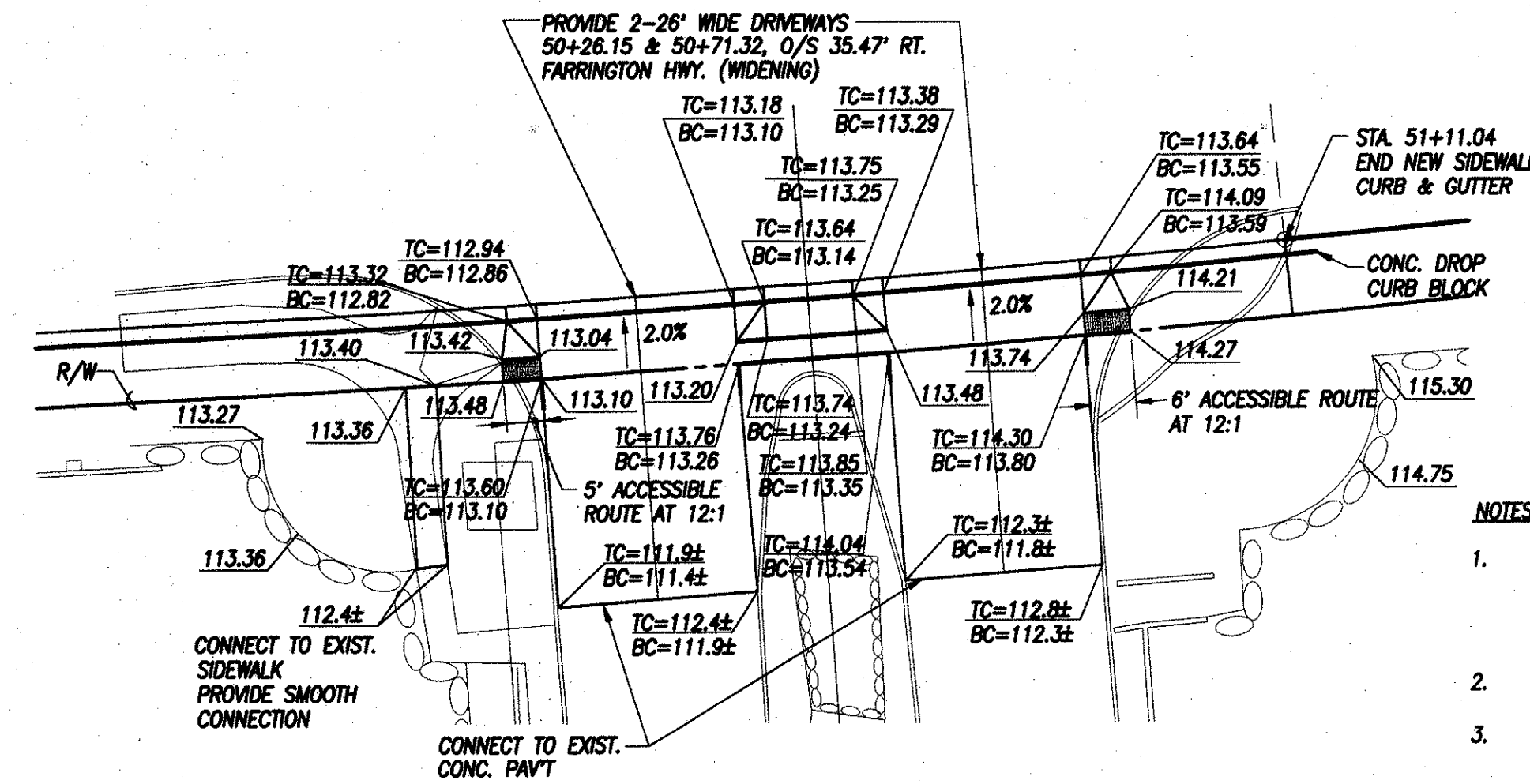
SMH #	EXISTING TOP ELEV.	FINISH TOP ELEV.	ADJUSTMENT
2 (0 30+52±)	104.4±	104.31	1"±
3 (0 30+71±)	104.4±	104.13	3-1/4"±

5 EXIST. SMH WITH GRADE RING
C-31 NOT TO SCALE
TOP ADJUSTMENT DETAIL
(FOR PLAN, SEE SHT. C-12)PLAN
SCALE: 1"=1'-0"SECTION "A-A"
SCALE: 1"=1'-0"SECTION "B-B"
SCALE: 1 1/2"=1'-0"6 TYPICAL CURB & GUTTER CONNECTION (STATE)
C-31 SCALE: AS SHOWN

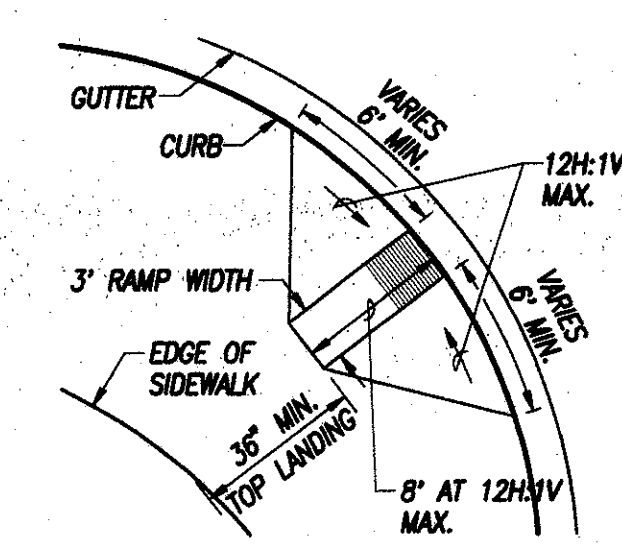
NOTE: ALL JOINTS SHALL BE SLIGHTLY UNDER FILLED WITH JOINT SEALER PAVING ASPHALT, GRADE 85-100, ASSHTO DESIGNATION: M-20.

7 KEYED CONSTRUCTION JOINT
C-31 SCALE: 3"=1'-0"8 TYPICAL SIDEWALK CONNECTION (STATE)
C-31 SCALE: 1 1/2"=1'-0"9 CONNECTION OF NEW ROAD PAVEMENT
C-31 NOT TO SCALE
TO RESURFACED PAVEMENT10 PAVEMENT RESURFACING DETAIL
C-31 NOT TO SCALE11 TRENCH RESTORATION DETAIL
C-31 (STATE)
NOT TO SCALEApproved: *[Signature]*
Chief, Division of Engineering DPW 45
(for construction within proposed city R.O.W. only)Date: 2/25/98
Date: 5/7/98

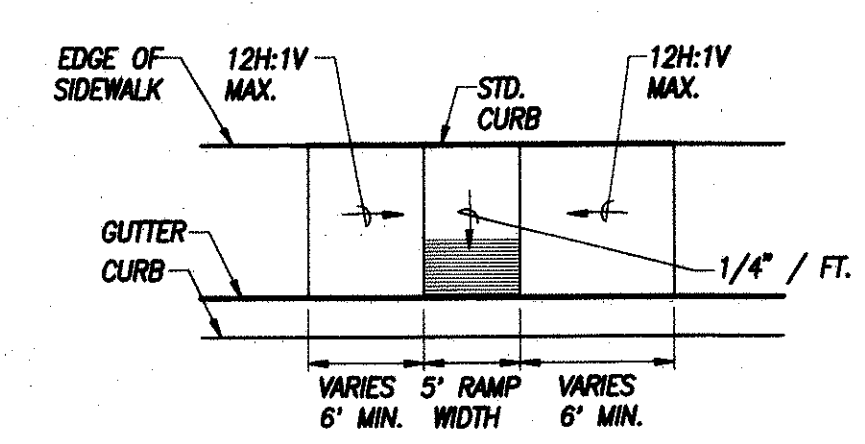
ENGINEER	HG	REVISION	12/15/97	REVISOR	REPLACES SHEET C-31	DATE	12/15/97	BY	APPROVED
DRAFTSMAN	PCN/HG								
CHECKED BY	GHH								
R. M. TOWILL CORPORATION ENGINEERS • PLANNERS • SURVEYORS • PHOTOGRAMMETRISTS CONSTRUCTION MANAGERS 420 Waiakamilo Road Honolulu, Hawaii 96817-4941									
THE ESTATE OF JAMES CAMPBELL FINANCE REALTY COMPANY AND HOUSING FINANCE AND DEVELOPMENT CORPORATION, STATE OF HAWAII FARRINGTON HIGHWAY IMPROVEMENTS EWA, OAHU, HAWAII TMS - (1ST DIVISION) PORTION OF 9-1-16									
MISCELLANEOUS DETAILS - 1									
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION. <i>[Signature]</i> 1/26/98 SIGNATURE DATE									
HFDC JOB NO.	DEV 93-41	SCALE	AS SHOWN	DATE	JAN 1998				
FILE	POCKET	FOLDER	NO.						



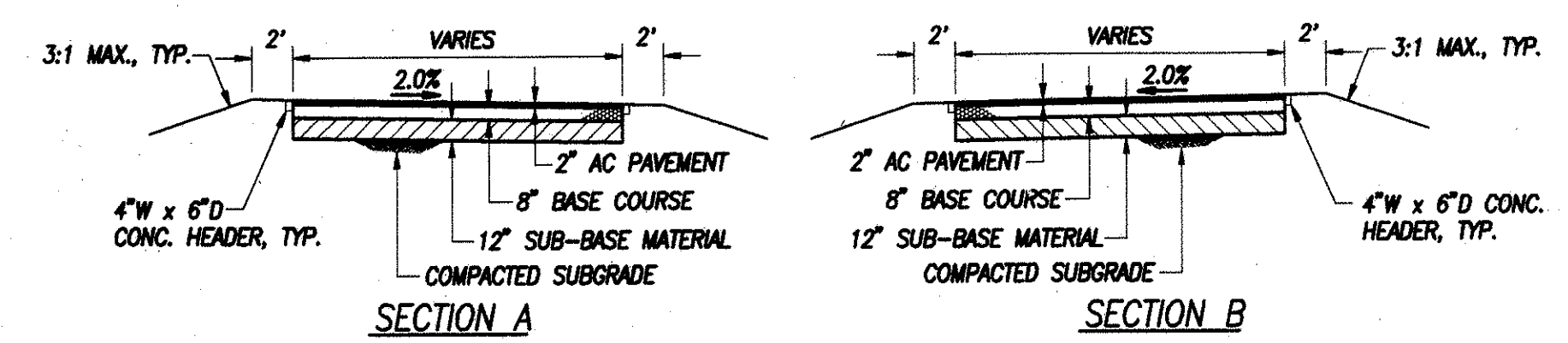
1 PLAN - KAPOLEI GOLF COURSE DRIVEWAY CONNECTION - CITY
C-32 SCALE: 1" = 20"



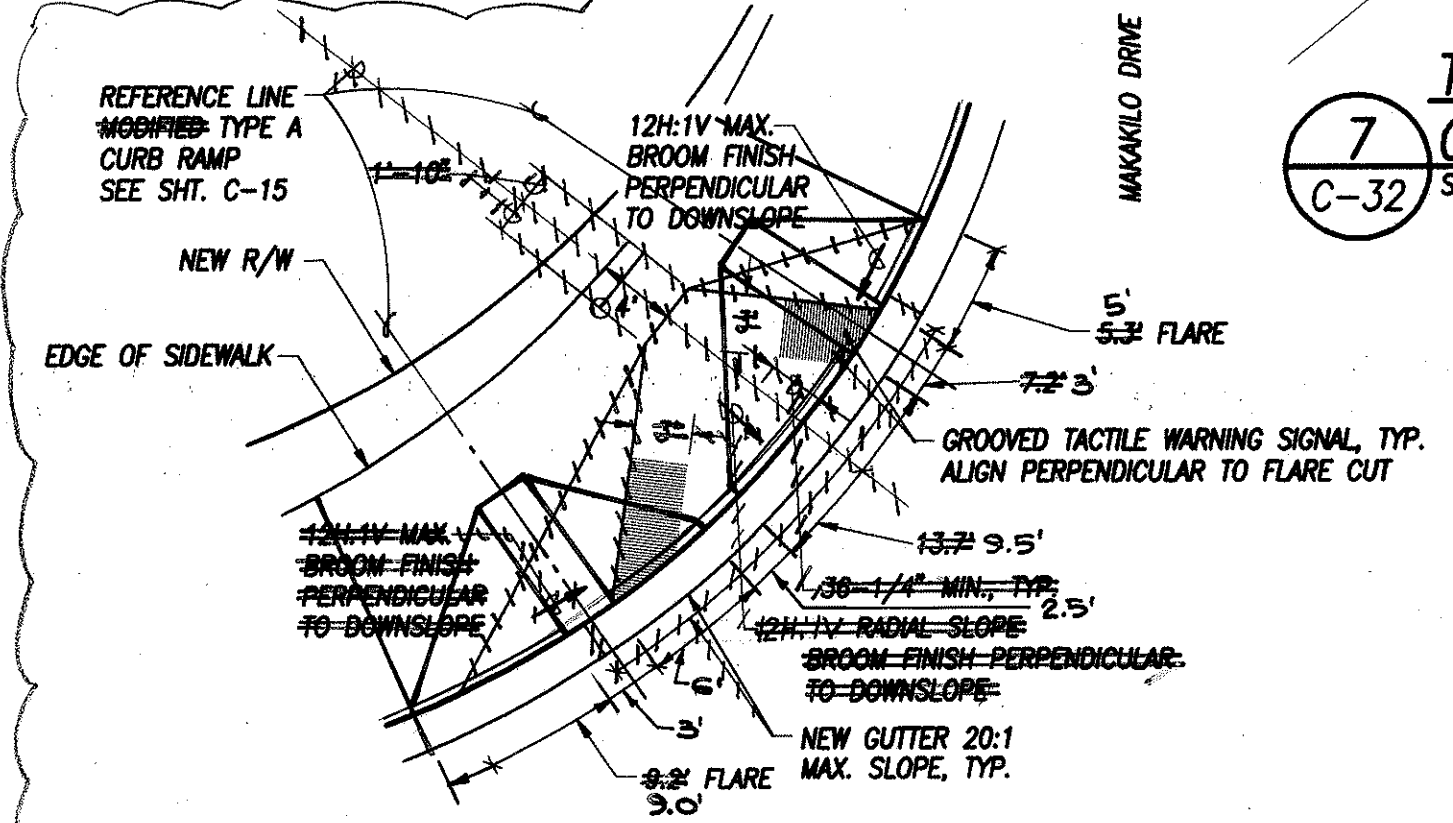
2 WHEELCHAIR CURB RAMP WITH TOP LANDING FOR CITY RIGHT-OF-WAY
C-32 SCALE: 1" = 10"



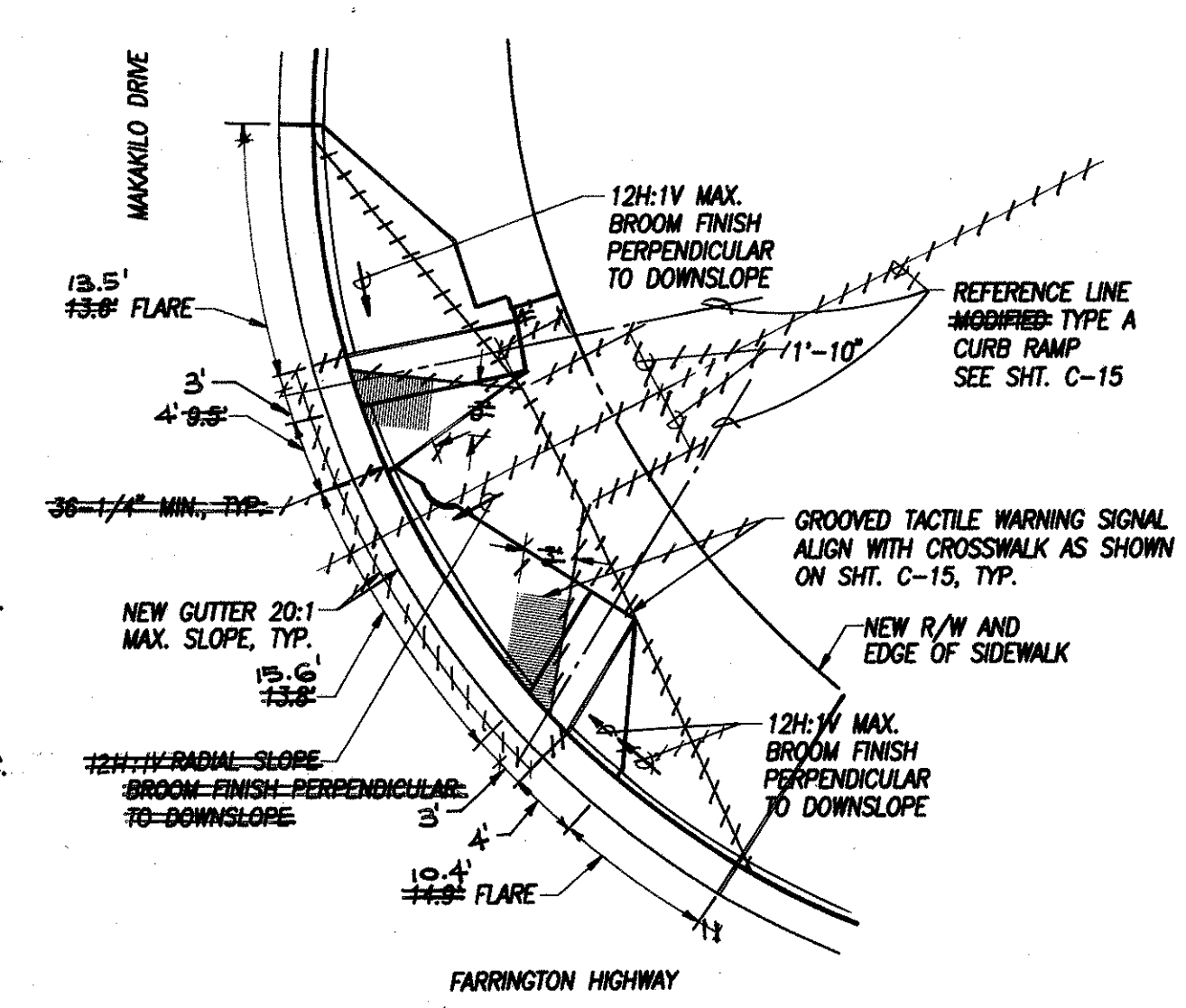
3 WHEELCHAIR CURB RAMP WITHOUT TOP LANDING FOR CITY RIGHT-OF-WAY
C-32 SCALE: 1" = 10"



4 TYPICAL DRIVEWAY AT 11+27, 14+53 & 46+58 - CITY
C-32 SCALE: NOT TO SCALE

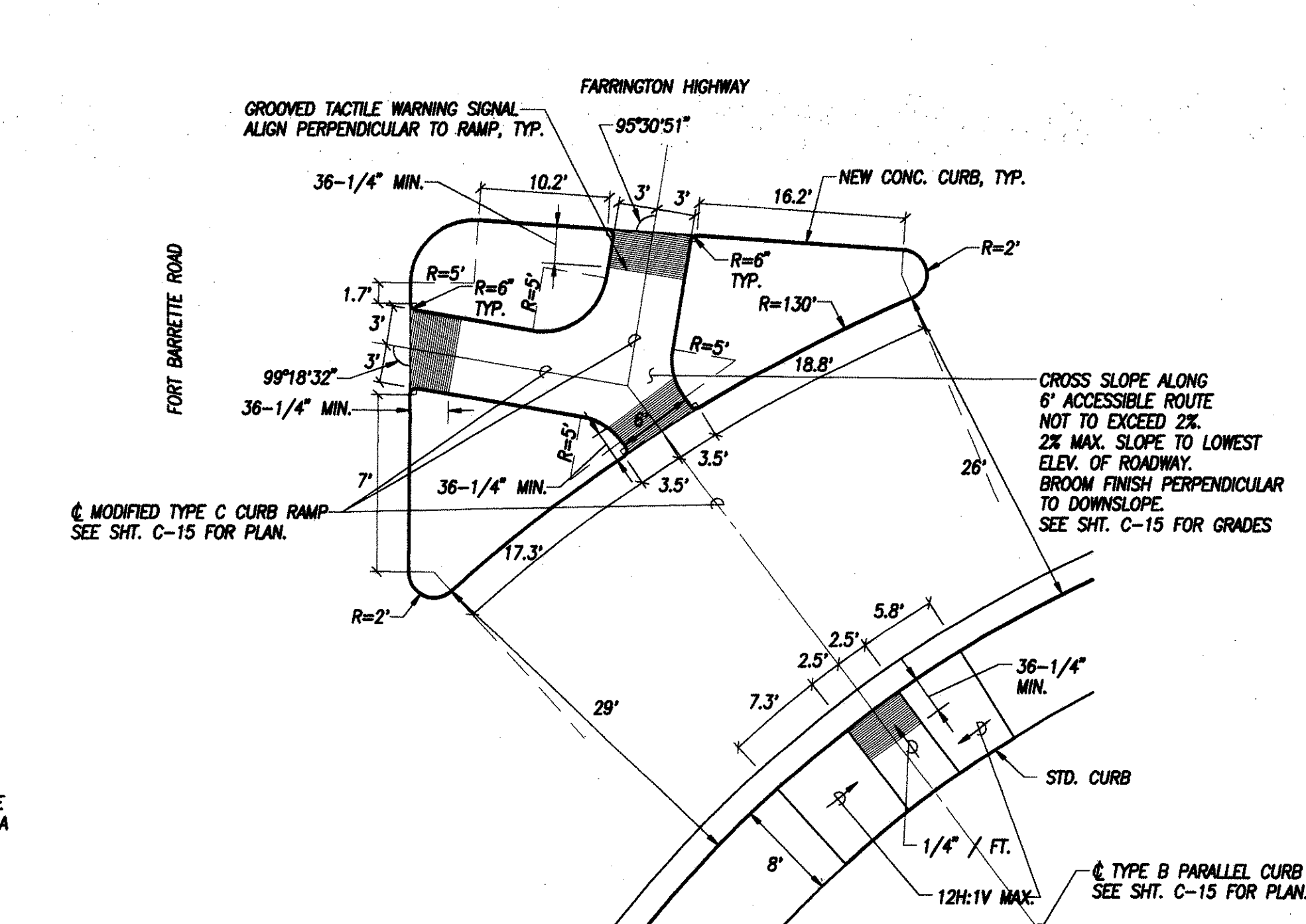


5 TYPE A CURB RAMP (MODIFIED) AT NORTHWEST CORNER OF MAKAKILO DRIVE INTERSECTION
C-32 SCALE: 1" = 10"

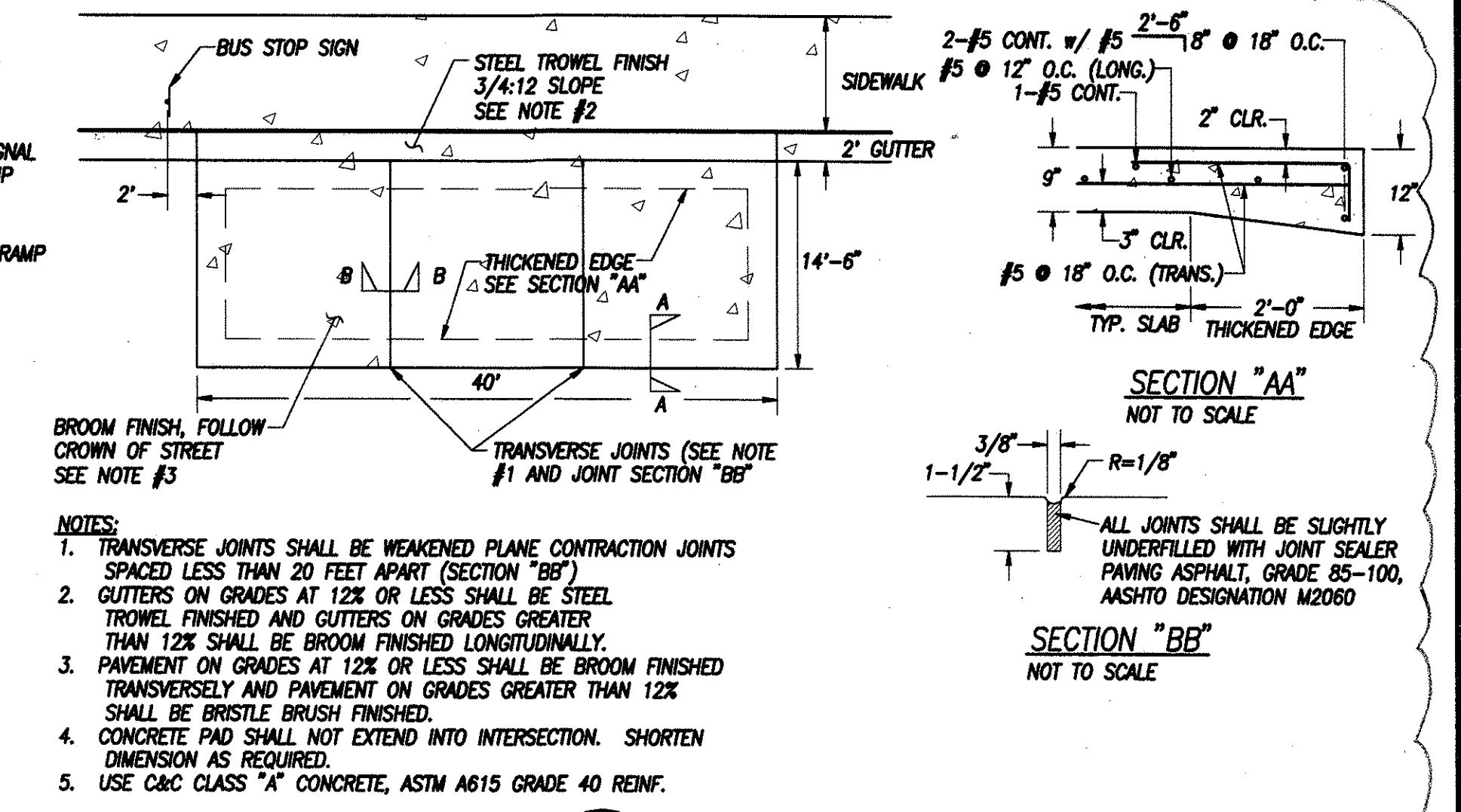
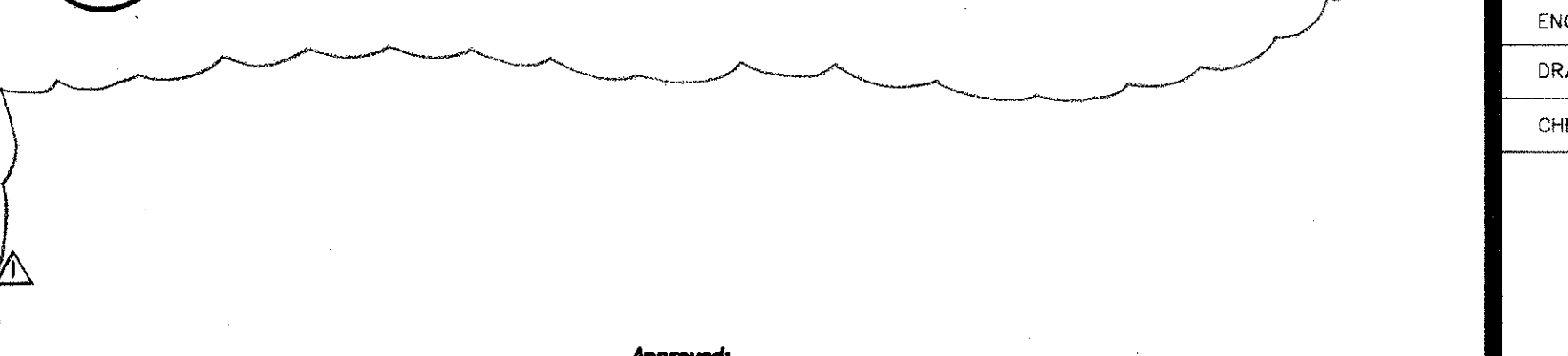


6 TYPE A CURB RAMP (MODIFIED) AT NORTHEAST CORNER OF MAKAKILO DRIVE INTERSECTION
C-32 SCALE: 1" = 10"

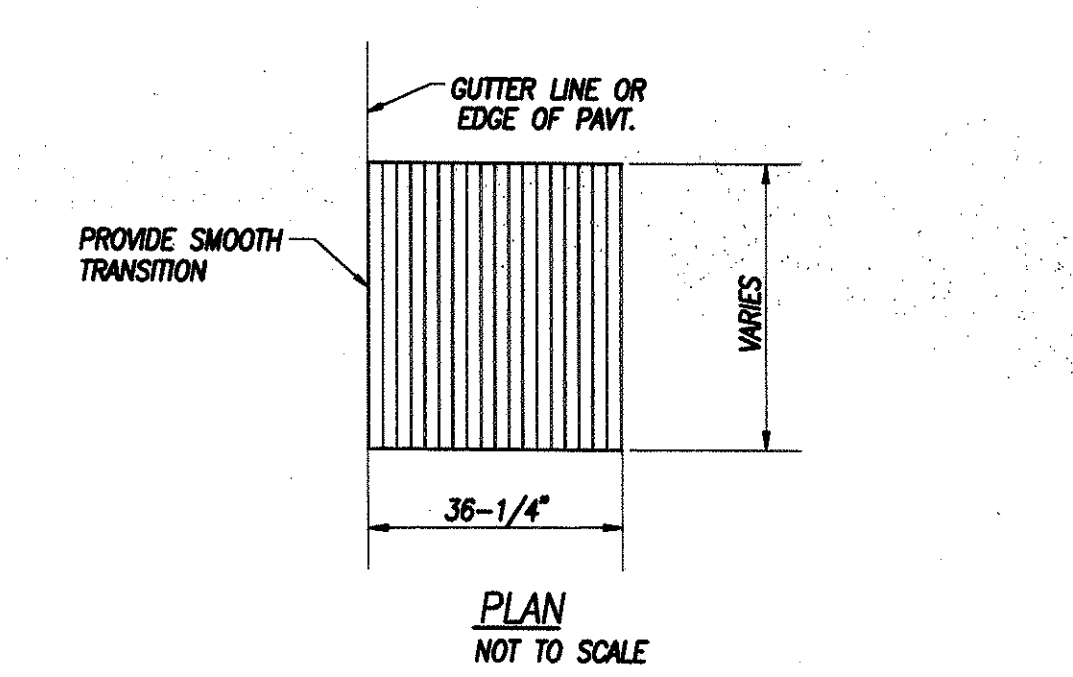
7 TYPE C (MODIFIED) AND TYPE B CURB RAMPS AT SOUTHWEST CORNER OF FORT BARRETTE ROAD INTERSECTION
C-32 SCALE: 1" = 10"



8 TYPE C (MODIFIED) AND TYPE B CURB RAMPS AT NORTHEAST CORNER OF FORT BARRETTE ROAD INTERSECTION
C-32 SCALE: 1" = 10"



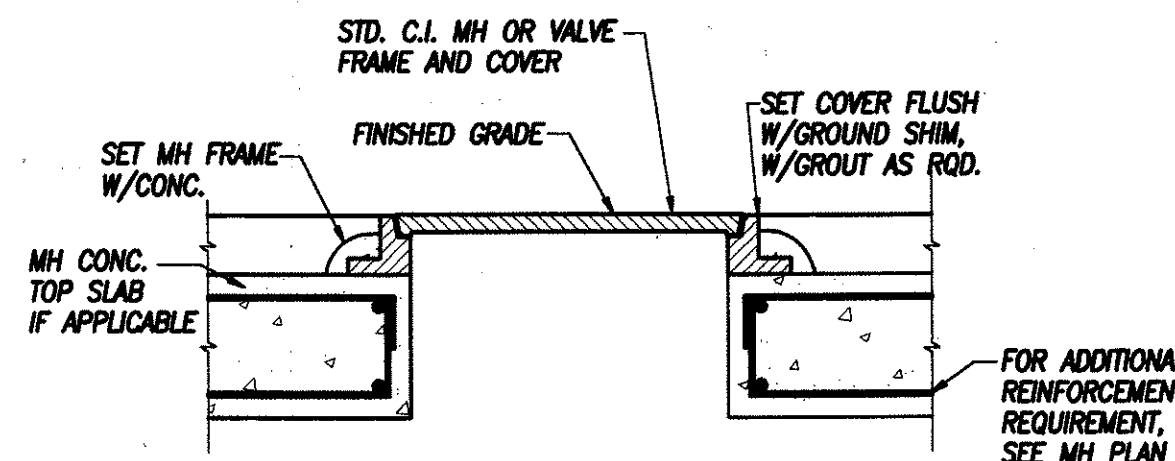
9 CONCRETE BUS PAD
C-32 SCALE: 1" = 10"



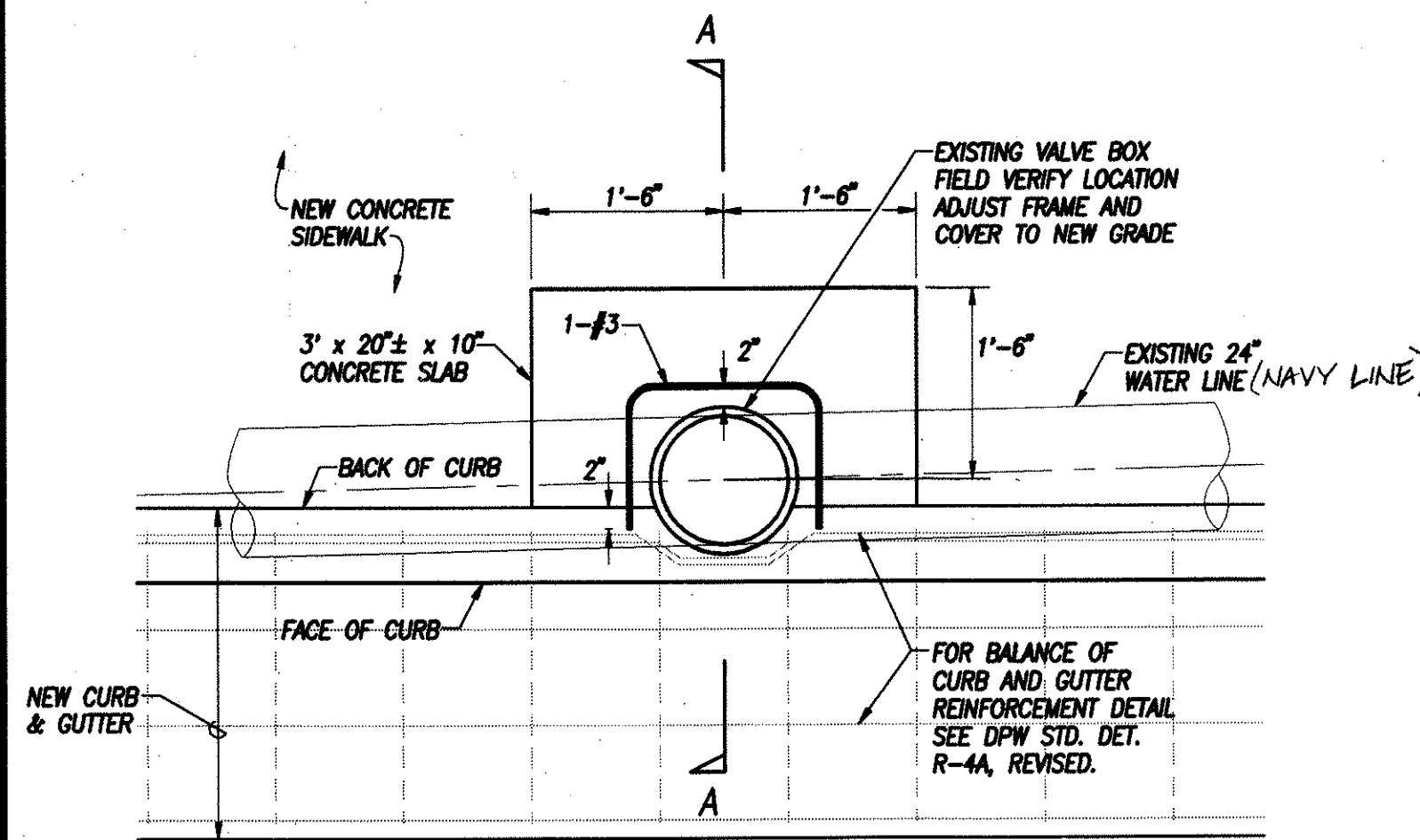
10 GROOVED TACTILE WARNING SIGNAL
C-32 NOT TO SCALE

Approved: *[Signature]*
Chief, Division of Engineering DPW 65
(for construction within proposed city R.O.W. and grading only)

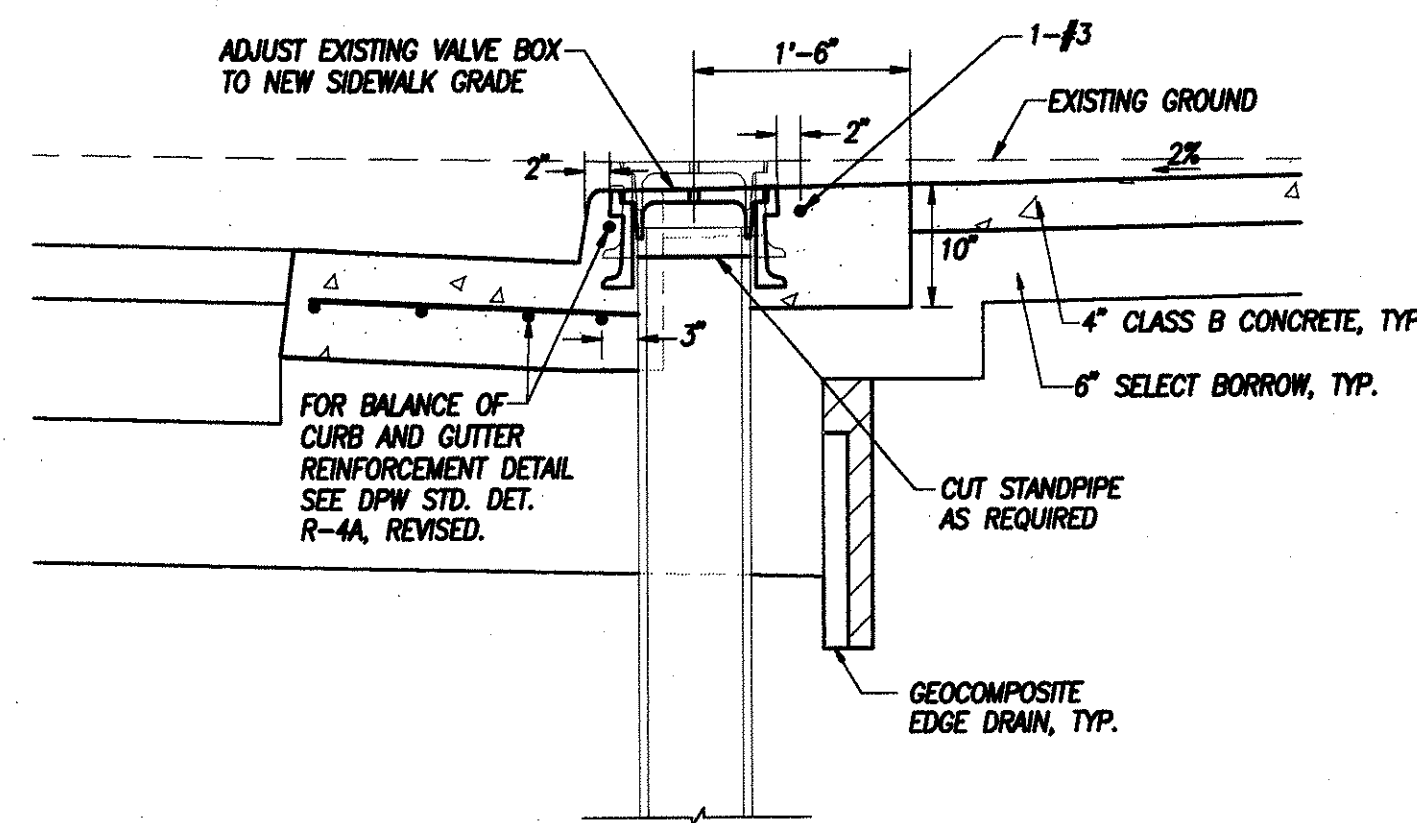
ENGINEER	HG	REVISION	DATE	REVISION	DATE	REVISION	DATE	REVISION	DATE
DRAFTSMAN	HG/PCN	1/13/98							
CHECKED BY	GHH								
R. M. TOWILL CORPORATION ENGINEERS • PLANNERS • SURVEYORS • PHOTOGRAMMETRISTS CONSTRUCTION MANAGERS 420 Waiakamilo Road Honolulu, Hawaii 96817-4941		THE ESTATE OF JAMES CAMPBELL, FINANCE REALTY COMPANY, AND HOUSING FINANCE AND DEVELOPMENT CORPORATION, STATE OF HAWAII FARRINGTON HIGHWAY IMPROVEMENTS EWA, OAHU, HAWAII TMK: (1ST DIVISION) PORTION OF 9-1-16							
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION. <i>[Signature]</i> DATE 1/13/98		HPCD JOB NO. DEV 93-41 SCALE AS SHOWN DATE JAN 1998							



1 STANDARD MANHOLE OR VALVE FRAME & COVER SETTING DETAIL
C-33 NOT TO SCALE

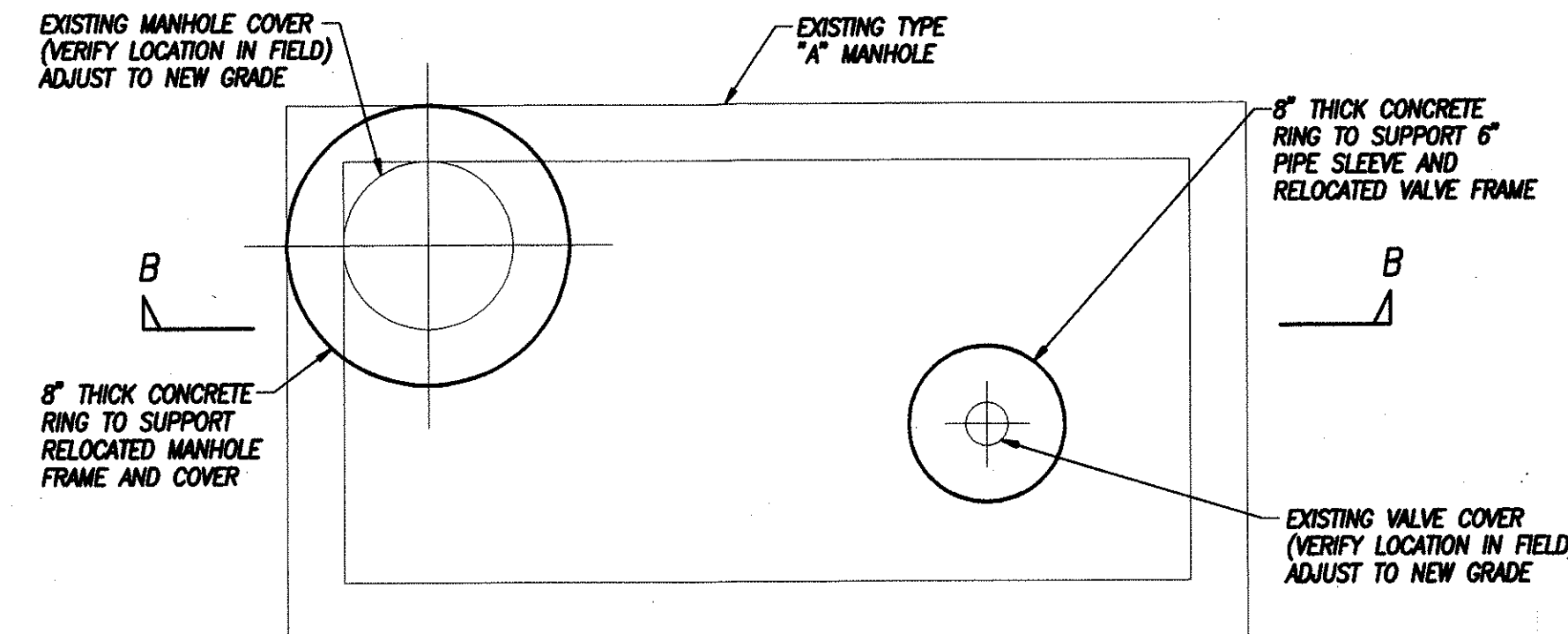


PLAN
NOT TO SCALE

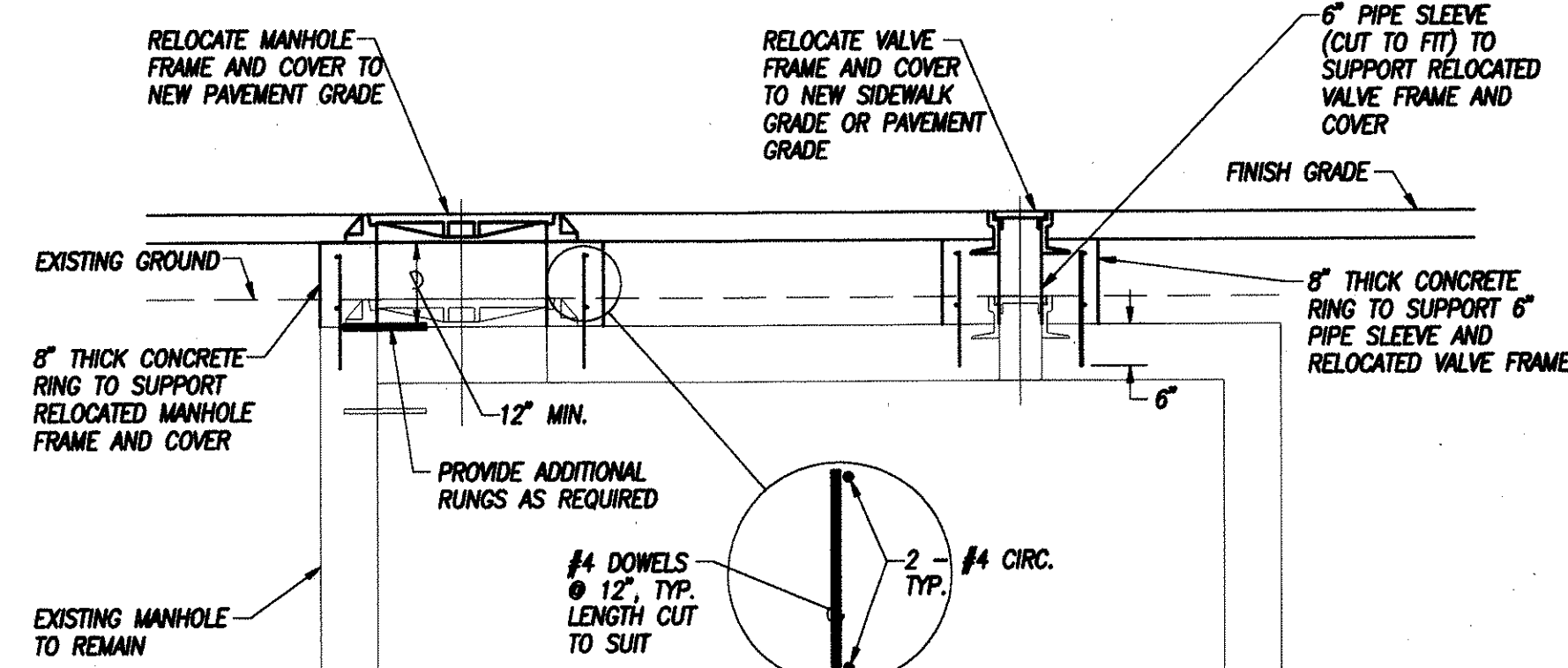


SECTION A-A
NOT TO SCALE

2 VALVE BOX GRADE ADJUSTMENT AT STA. 30+85
C-33 NOT TO SCALE

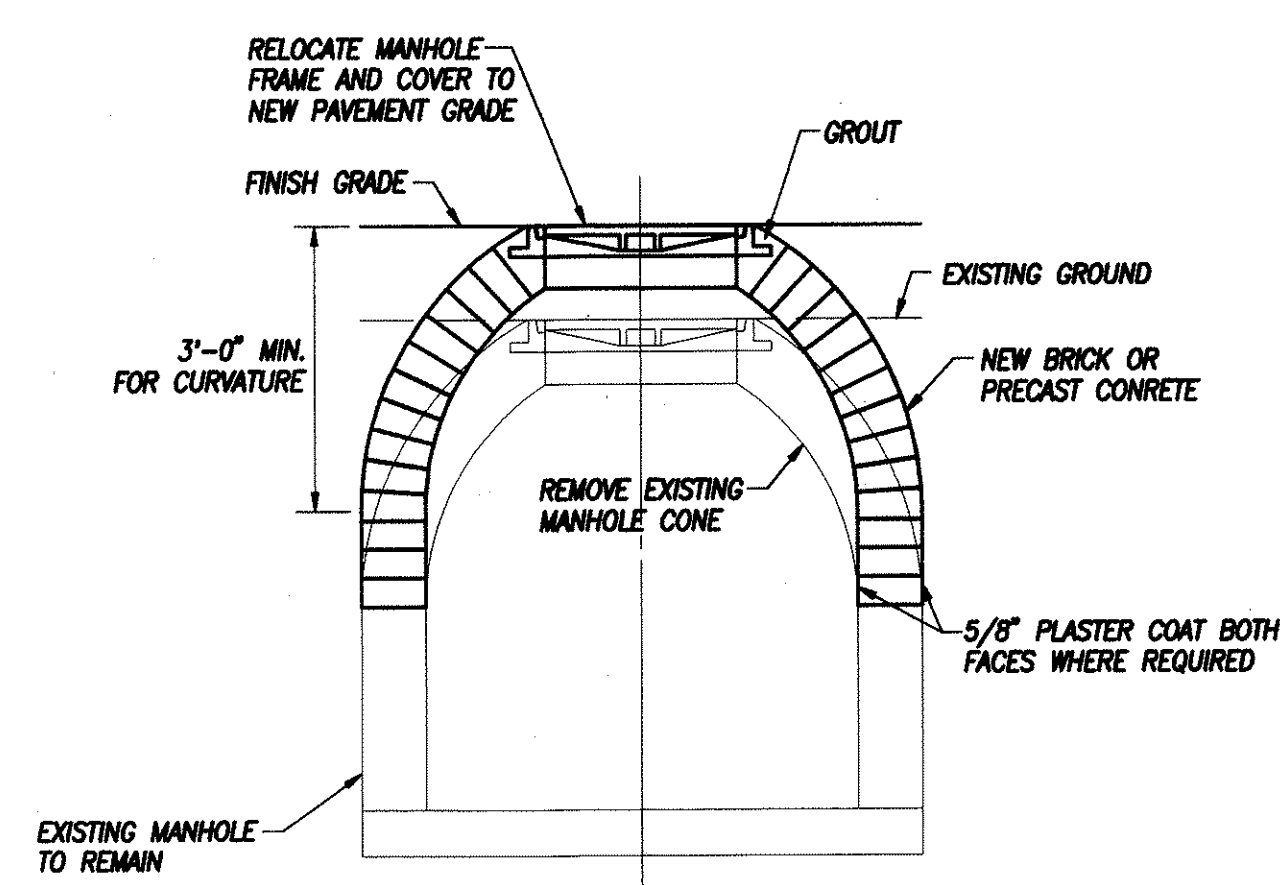


PLAN
NOT TO SCALE

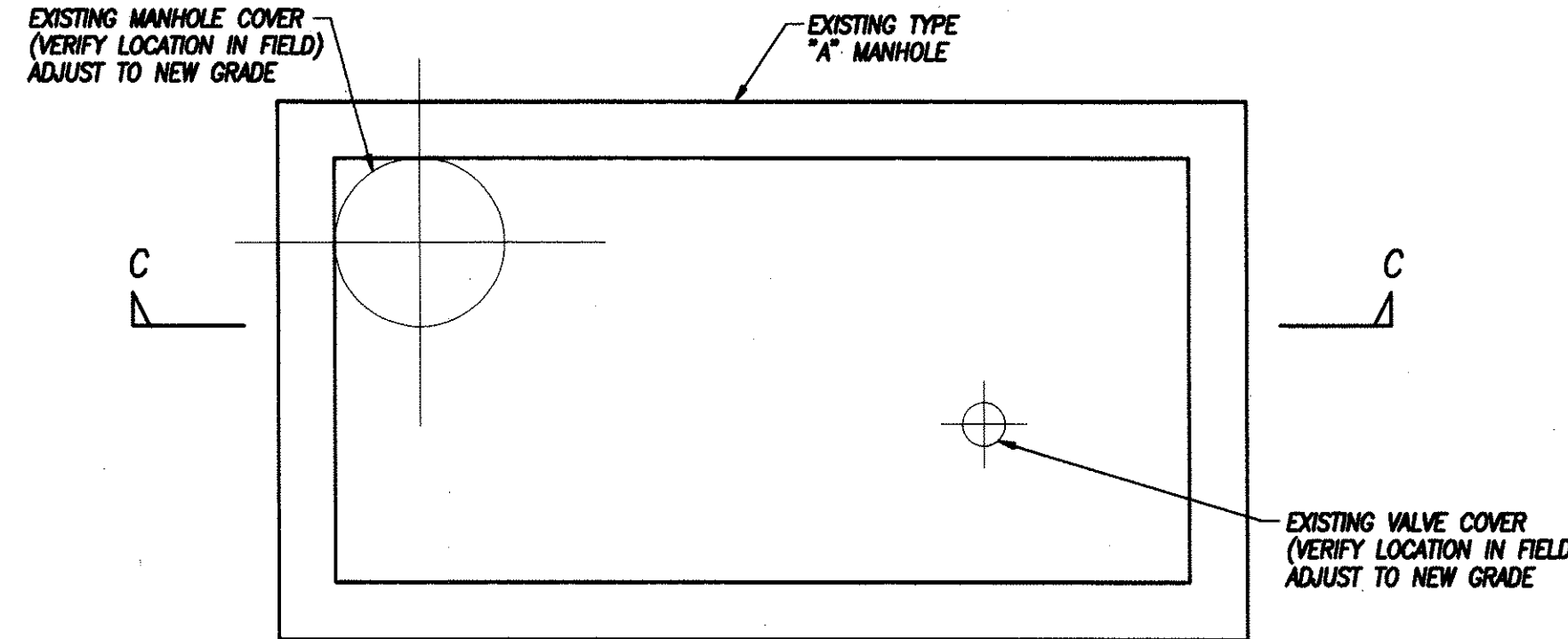


SECTION B-B
NOT TO SCALE

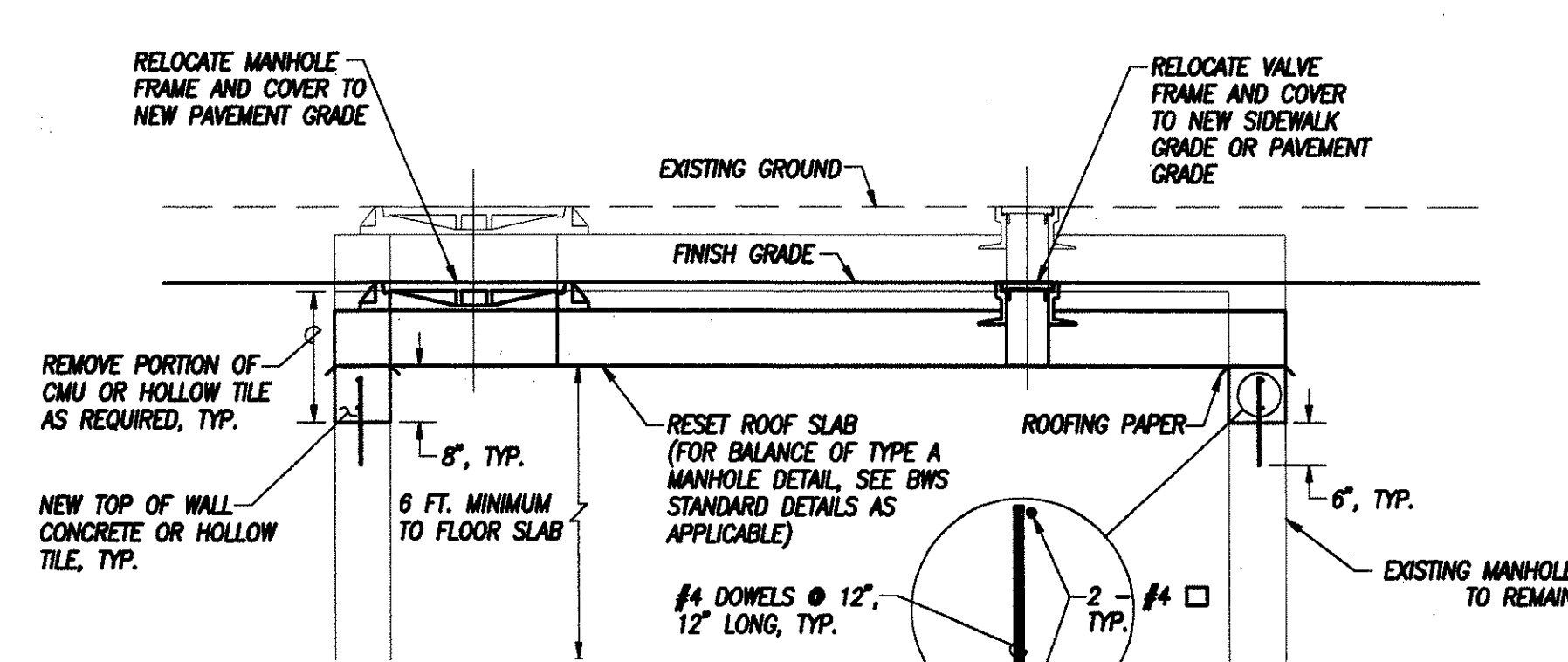
3 ADJUSTMENT OF TYPE 'A' MANHOLE FRAME AND COVERS (RAISING)
C-33 NOT TO SCALE



5 ADJUSTMENT OF TYPE B OR C MANHOLE FRAME AND COVER (RAISING)
C-33 NOT TO SCALE

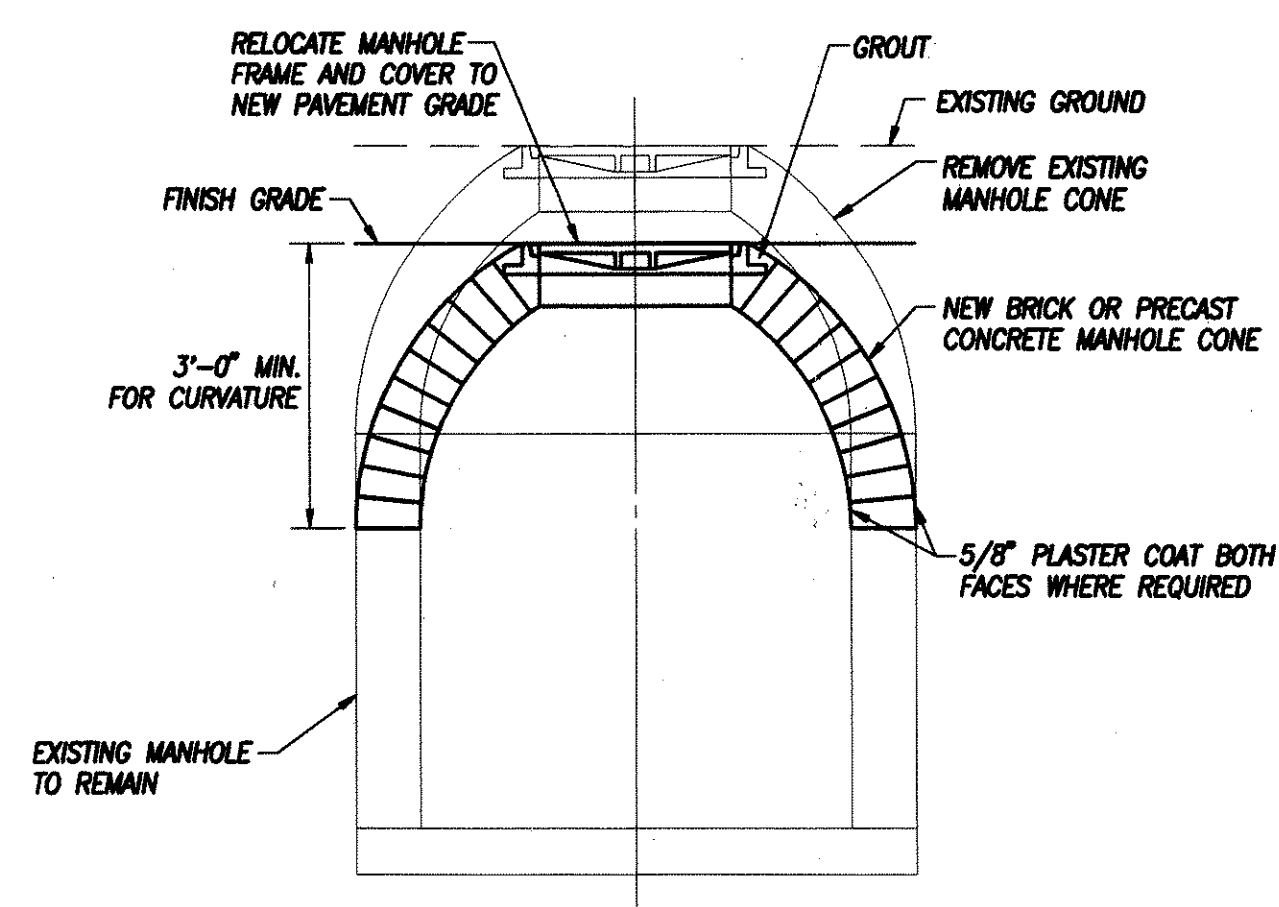


PLAN
NOT TO SCALE

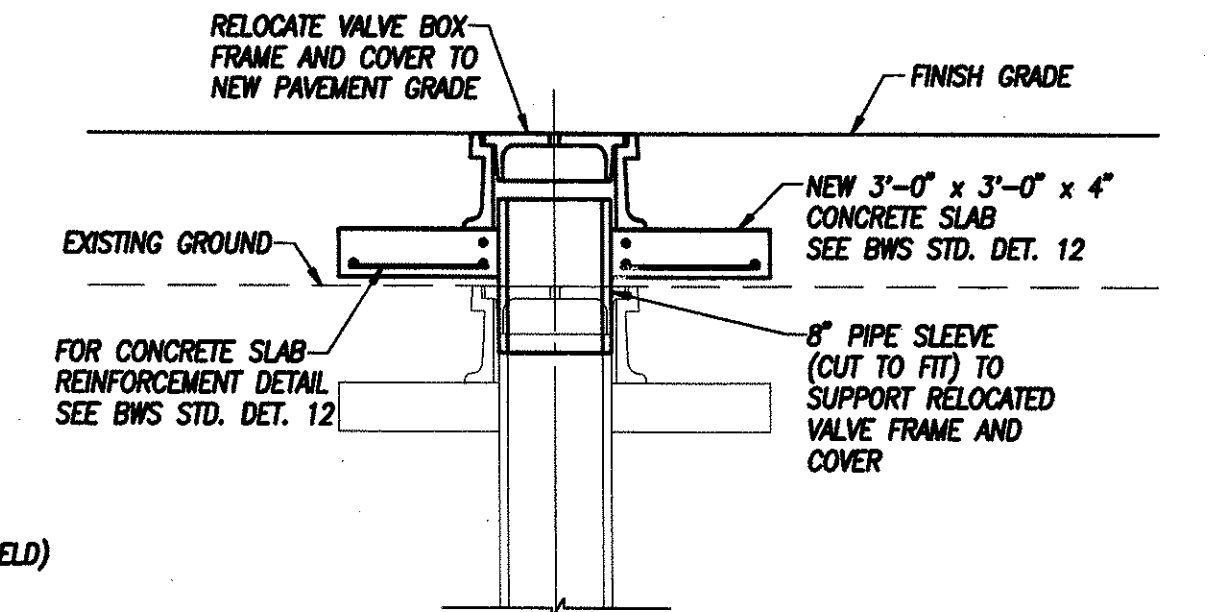


SECTION C-C
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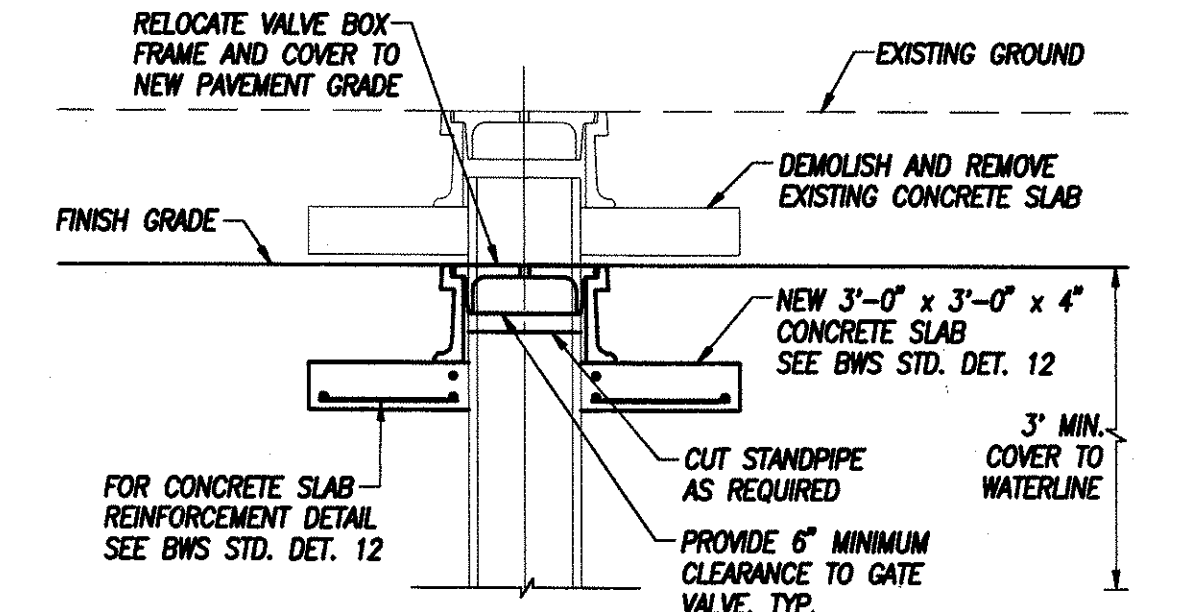
4 ADJUSTMENT OF TYPE 'A' MANHOLE FRAME AND COVERS (LOWERING)
C-33 NOT TO SCALE



6 ADJUSTMENT OF TYPE B OR C MANHOLE FRAME AND COVER (LOWERING)
C-33 NOT TO SCALE



7 ADJUSTMENT OF VALVE BOXES (RAISING)
C-33 NOT TO SCALE



8 ADJUSTMENT OF VALVE BOXES (LOWERING)
C-33 NOT TO SCALE

RANGE OF ADJUSTMENTS:	
STRUCTURE	RANGE
TYPE 'A' MANHOLE	-0.5' TO +0.6'
TYPE B OR C MANHOLE	-1.0' TO +0.9'
VALVE BOX	-1.0' TO +0.4'

Approved: *[Signature]*
Chief, Planning & Engineering, BWS

10/20/07
Date

ENGINEER HG	REVISION	DATE	BRIEF	BY	APPROVED
DRAFTSMAN HG					
CHECKED BY GHH					
	R. M. TOWILL CORPORATION ENGINEERS • PLANNERS • SURVEYORS • PHOTOGRAMMETRISTS CONSTRUCTION MANAGERS 420 Waiakamilo Road Honolulu, Hawaii 96817-4941				
	THE ESTATE OF JAMES CAMPBELL, FINANCE REALTY COMPANY, AND HOUSING FINANCE AND DEVELOPMENT CORPORATION, STATE OF HAWAII				
	FARRINGTON HIGHWAY IMPROVEMENTS EWA, OAHU, HAWAII TMK: (1ST DIVISION) PORTION OF 9-1-16				
	MISCELLANEOUS DETAILS - 3				
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION. <i>[Signature]</i> DATE 10/20/07	HFDG JOB NO. DEV 93-41 SCALE AS SHOWN DATE OCT 1997				