HYDROLOGY E17/D25 WESTERN PROPERTIES OFFICE BLDG.

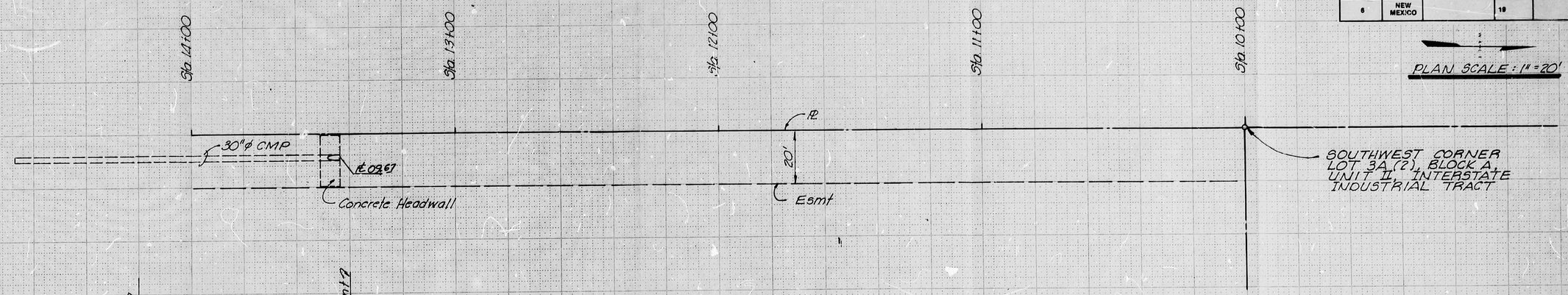
E17/D45

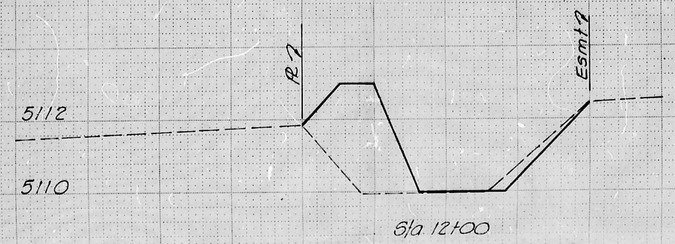
WESTERN PROPERTIES OFFICE BLDG.

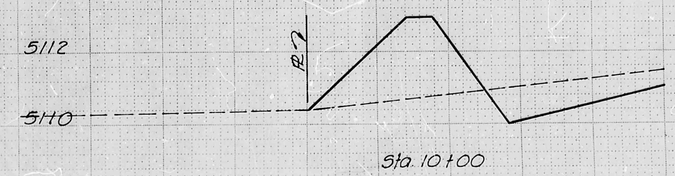
4 PLANS

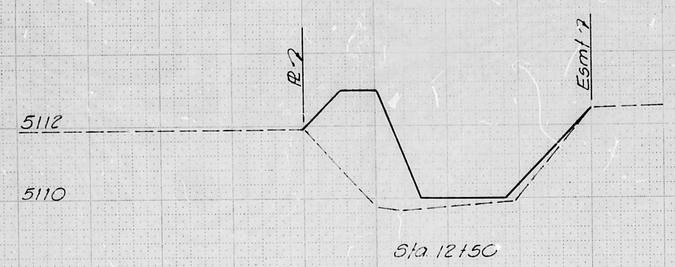
F H W A REGION NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	NEW MEXICO		19		

PLAN SCALE : 1" = 20'



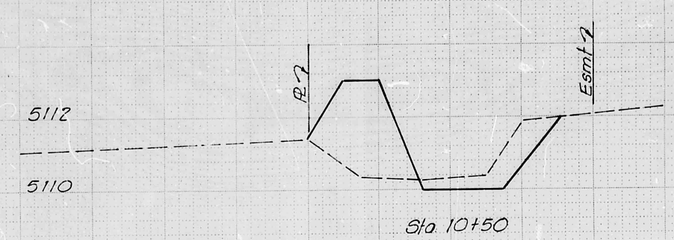


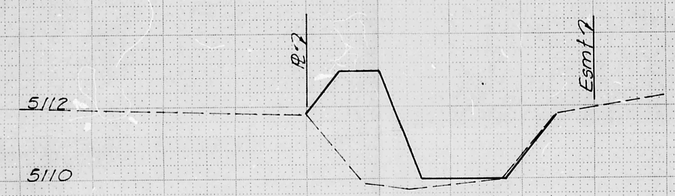


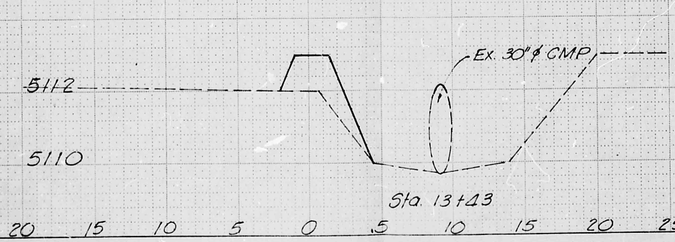


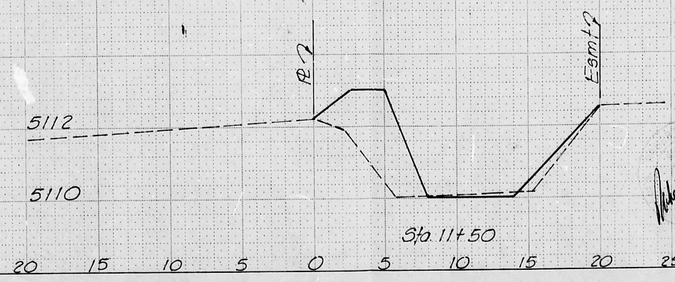
CROSS SECTION SCALE

1" = 5' HORIZ.
1" = 2' VERT.









FINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		
NOTE BOOK NO.		

ORIGINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		
NOTE BOOK NO.		

CITY OF ALBUQUERQUE

NEW OFFICE BUILDING FOR
WESTERN PROPERTIES
ALBUQUERQUE NEW MEXICO

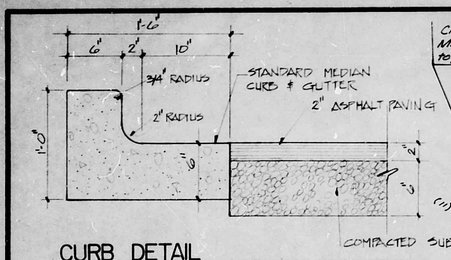
RECEIVED FEB 28 1984 HYDROLOGY SECTION

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer			Liquid Waste		
A.C.E.-Design			Traffic		
A.C.E.-Hydrology			Water		

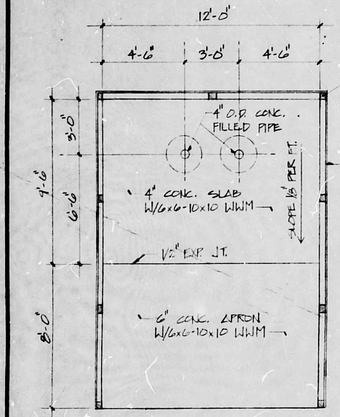
DRAWING NO.	MAP NO.	SHEET	OF
		C-1a	

WILSON & COMPANY
ENGINEERS & ARCHITECTS
ALBUQUERQUE, NEW MEXICO

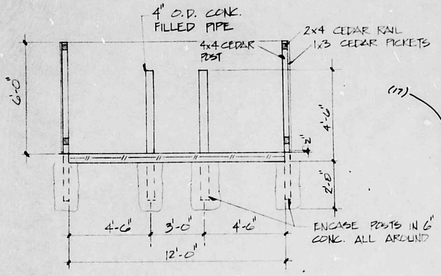
E17/D45



CURB DETAIL
1 1/2"



REFUSE BIN ENCLOSURE-PLAN
1/4"



REFUSE BIN ENCLOSURE-SECTION
1/4"

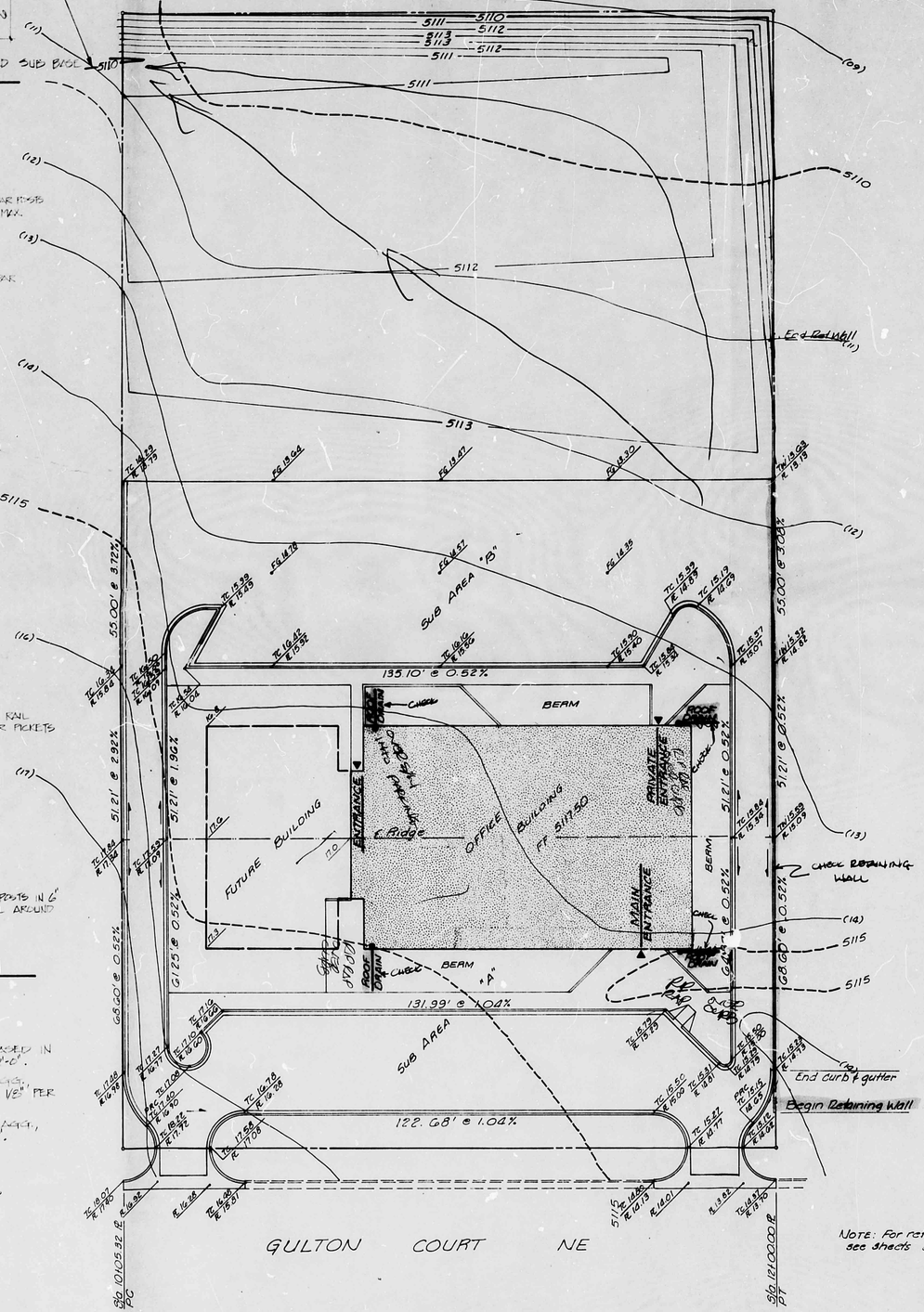
SPECIFICATIONS:

1. 4" O.D. CONCRETE FILLED PIPE SHALL BE ENCASED IN 6" CONCRETE ALL AROUND AND EMBEDDED 2'-0".
2. CONCRETE SLAB: 4" THICK; 3000 P.S.I., 3/4" AGGS., W/6x6-10x10 WWM OR EQUAL. SLOPE TO DRAIN 1/8" PER FOOT. 12'-0"x4'-6"x4".
3. CONCRETE APRON: 6" THICK, 3000 P.S.I., 3/4" AGGS., W/6x6-10x10 WWM OR EQUAL. 12'-0"x8'-0"x6".
4. 1/2" EXPANSION JOINT
5. FOOTING AS REQUIRED FOR 4"x4" POSTS
6. ENCLOSURE WALLS: 1"x 3" CEDAR PICKETS

Clean existing ditch 50 to 30' CMP. Maintain 10' bottom width @ elev. 5110.0 & top west bank @ elev. 5113.00

NOTE

All earth work to be compacted to minimum of 90% maximum density. Top 6" to be compacted to minimum of 95% maximum density (ASTM D 1557)



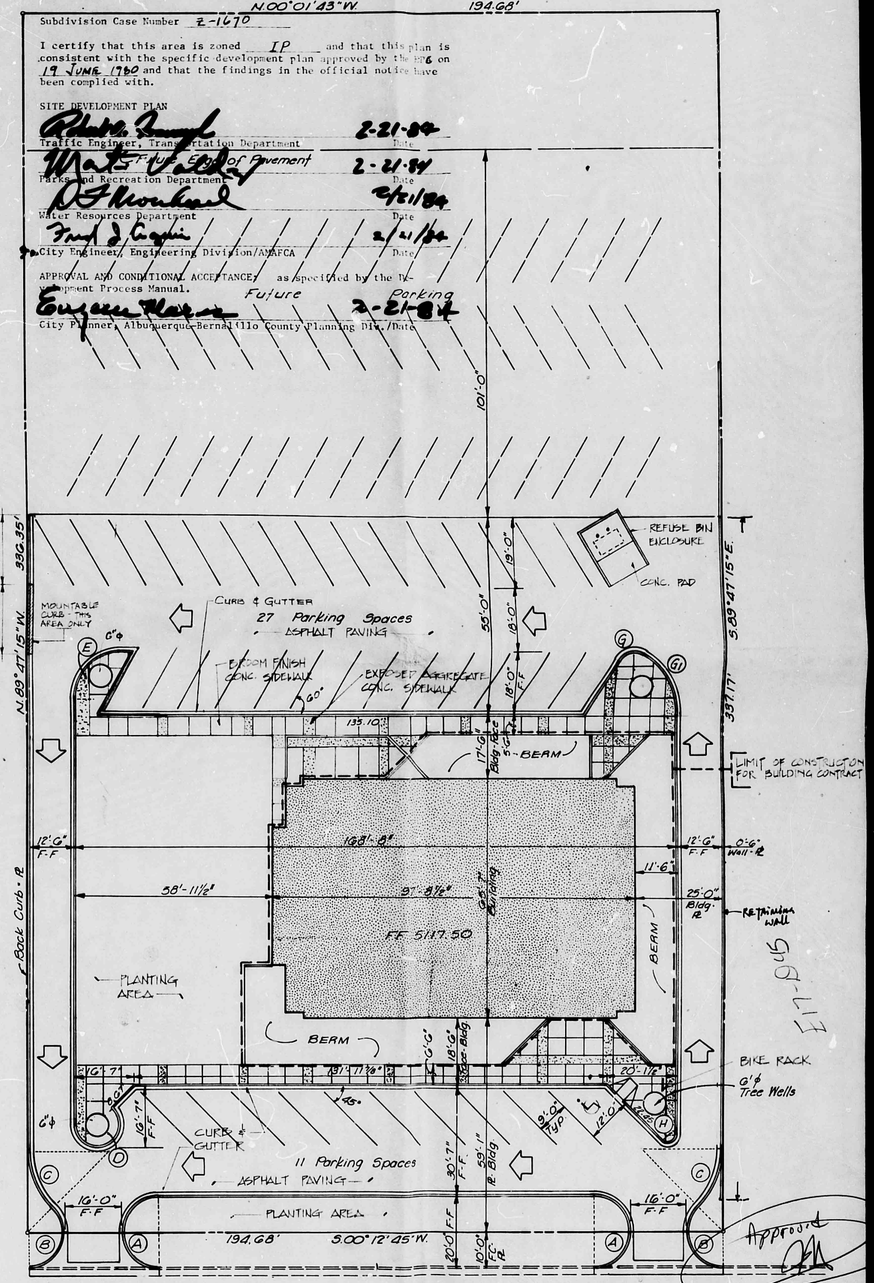
Note: For retaining wall details see sheets C-1b & C-1c.

GRADING PLAN
SCALE: 1" = 20'-0"

CURVE DATA

CURVE A	CURVE B	CURVE C	CURVE D	CURVE E	CURVE G	CURVE H
Δ = 180°	Δ = 135°	Δ = 45	Δ = 225°	Δ = 90°	Δ = 90°	Δ = 135°
R = 10'	R = 10'	R = 2220'	R = 6.12'	R = 19.47'	R = 5'	R = 2.5'

CURVE G1
Δ = 60°
R = 20'



SITE PLAN
SCALE: 1" = 20'-0"

Approved

RECEIVED MAR 21 1984 HYDROLOGY SECTION

Rev Mar 1984
Rev Jan 86

E17/D45

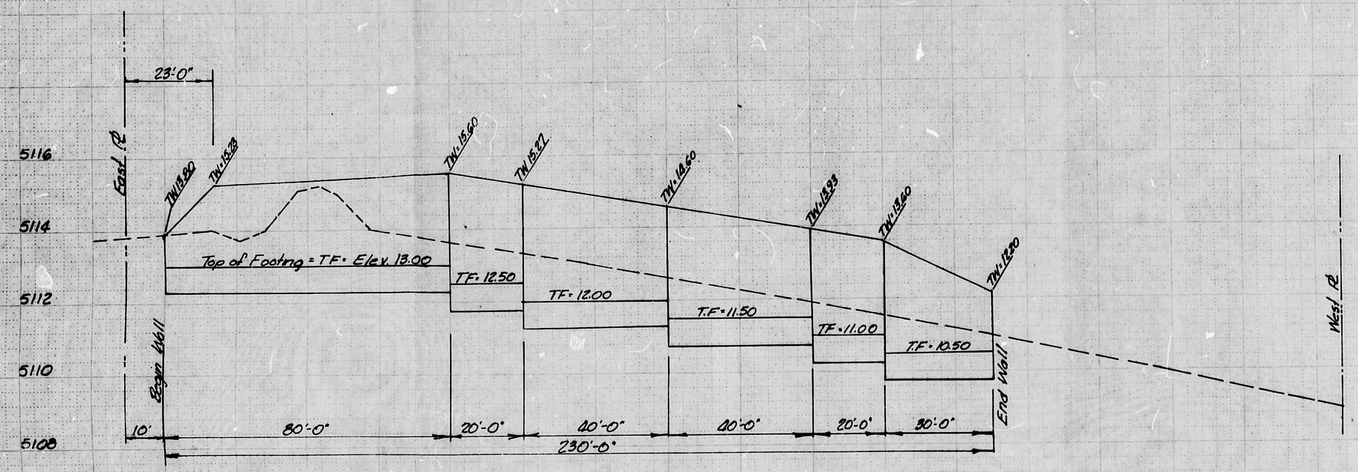
WILSON & COMPANY
ENGINEERS & ARCHITECTS
ALBUQUERQUE NEW MEXICO

NEW OFFICE BUILDING FOR:
WESTERN PROPERTIES
ALBUQUERQUE, NM

DESIGN	RFS
DRAWN	MDJ
DATE	OCT. 3, 1983
FILE NO.	G.O.
SHEET NO.	C-1

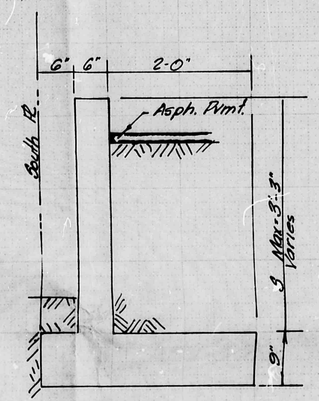
WILSON & COMPANY ENGINEERS & ARCHITECTS

F H W A REGION NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	NEW MEXICO		19		



PROPOSED RETAINING WALL ALONG SOUTH PROPERTY LINE

Scale 1" = 20' Horiz
1" = 2' Vert.



RETAINING WALL SECTION
1" = 1'-0"

NOTE:
For construction details for retaining wall see sheet C-1c

FINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		
NOTE BOOK NO.		

ORIGINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		
NOTE BOOK NO.		

NEW OFFICE BUILDING FOR
WESTERN PROPERTIES

Received
3/21/84

SHEET C-1b

WILSON & COMPANY
ENGINEERS & ARCHITECTS
ALBUQUERQUE, NEW MEXICO

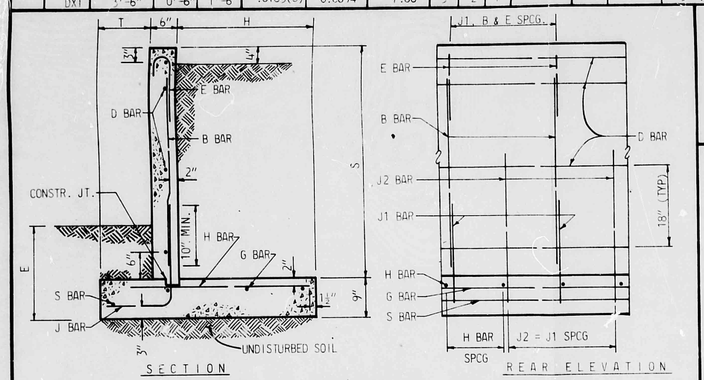
E17/D4.5

TYPE X RETAINING WALLS

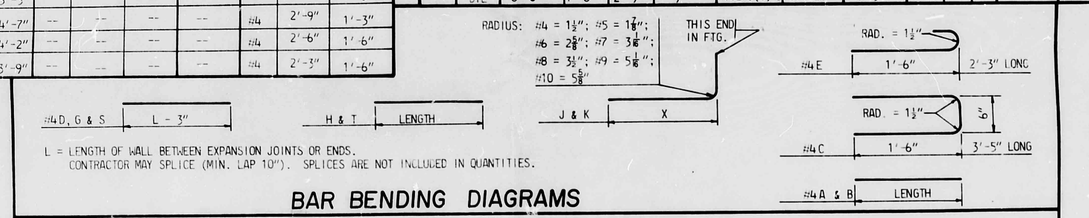
LOAD	RET. WALL CODE	DIMENSIONS MAX. STEM HT. S	TOE T	HEEL H	QUANTITIES PER LIN. FT. CONCRETE (CU.YDS.) STEM	FOOTING	REINF. STEEL (LBS.)	REINFORCING BAR DETAILS NO. REQD. D	G	S	J, B & E SPACING	J1 BAR SIZE	X	LENGTH	J2 BAR SIZE	X	LENGTH	B BAR LENGTH	H BAR SIZE	LENGTH	SPACING
A	AXA	7'-0"	1'-0"	2'-6"	.0185(S)	0.1111	18.11	6	3	1	1'-6"	#4	1'-6"	2'-8"	#5	3'-1"	4'-3"	5'-11"	#5	3'-6"	1'-0"
	AXB	6'-9"	0'-9"	2'-6"	.0185(S)	0.1042	15.86	5	3	1	1'-6"	#4	1'-6"	2'-5"	#4	2'-9"	3'-7"	5'-8"	#5	3'-6"	1'-0"
	AXC	5'-10"	0'-9"	2'-0"	.0185(S)	0.0903	12.97	5	2	1	1'-0"	#4	5'-5"	6'-4"	--	--	--	--	#4	2'-10"	1'-0"
	AXD	5'-1"	0'-6"	2'-0"	.0185(S)	0.0833	9.63	4	2	1	1'-6"	#4	4'-8"	5'-4"	--	--	--	--	#4	2'-9"	1'-2"
	AXE	4'-8"	0'-6"	1'-9"	.0185(S)	0.0764	8.98	4	2	1	1'-6"	#4	4'-3"	4'-11"	--	--	--	--	#4	2'-6"	1'-6"
	AXF	4'-3"	0'-6"	1'-6"	.0185(S)	0.0694	8.68	4	2	1	1'-6"	#4	3'-10"	4'-6"	--	--	--	--	#4	2'-3"	1'-6"
	AXG	3'-9"	0'-6"	1'-3"	.0185(S)	0.0625	7.68	3	2	1	1'-6"	#4	3'-4"	4'-0"	--	--	--	--	#4	2'-0"	1'-6"
	AXH	3'-3"	0'-6"	1'-0"	.0185(S)	0.0556	7.35	3	2	1	1'-6"	#4	2'-10"	3'-6"	--	--	--	--	#4	1'-9"	1'-6"
B	BXA	4'-5"	0'-9"	2'-6"	.0185(S)	0.1042	12.87	4	3	1	1'-0"	#4	4'-0"	4'-11"	--	--	--	--	#5	3'-6"	1'-4"
	BXB	3'-9"	0'-6"	2'-3"	.0185(S)	0.0903	9.46	3	3	1	1'-6"	#4	3'-4"	4'-0"	--	--	--	--	#4	3'-0"	1'-0"
	BXC	3'-3"	0'-6"	2'-0"	.0185(S)	0.0833	7.87	3	2	1	1'-6"	#4	2'-10"	3'-6"	--	--	--	--	#4	2'-9"	1'-5"
C	CXA	7'-0"	1'-9"	3'-0"	.0185(S)	0.1458	26.13	6	3	2	1'-6"	#4	1'-6"	3'-5"	#7	4'-7"	6'-6"	5'-11"	#5	4'-0"	0'-10"
	CXB	6'-7"	1'-6"	3'-0"	.0185(S)	0.1389	24.04	5	3	2	1'-6"	#4	1'-6"	3'-2"	#7	4'-2"	5'-10"	5'-6"	#5	4'-0"	0'-11"
	CXC	5'-9"	1'-3"	2'-9"	.0185(S)	0.1250	16.48	5	3	1	1'-6"	#4	1'-6"	2'-11"	#5	2'-10"	4'-3"	4'-8"	#5	3'-9"	1'-3"
	CXD	5'-4"	1'-0"	2'-9"	.0185(S)	0.1181	13.95	4	3	1	1'-6"	#4	1'-6"	2'-8"	#4	2'-3"	3'-5"	4'-3"	#4	3'-9"	0'-10"
	CXE	5'-0"	1'-0"	2'-6"	.0185(S)	0.1111	13.03	4	3	1	1'-0"	#4	4'-7"	5'-9"	--	--	--	--	#4	3'-6"	1'-0"
	CXF	4'-6"	0'-9"	2'-6"	.0185(S)	0.1042	11.52	4	3	1	1'-0"	#4	4'-1"	5'-0"	--	--	--	--	#4	3'-0"	1'-6"
	CXG	3'-10"	0'-9"	2'-0"	.0185(S)	0.0903	8.28	3	2	1	1'-6"	#4	3'-5"	4'-4"	--	--	--	--	#4	3'-0"	1'-6"
	CXH	3'-5"	0'-6"	2'-0"	.0185(S)	0.0833	7.87	3	2	1	1'-6"	#4	3'-0"	3'-8"	--	--	--	--	#4	2'-9"	1'-6"
D	DXA	7'-10"	1'-6"	3'-0"	.0185(S)	0.1389	26.74	6	3	2	1'-6"	#4	1'-6"	3'-2"	#7	4'-11"	6'-7"	6'-9"	#5	4'-0"	0'-10"
	DXB	7'-1"	1'-6"	2'-6"	.0185(S)	0.1250	20.94	6	3	2	1'-6"	#4	1'-6"	3'-2"	#6	3'-11"	5'-7"	6'-0"	#5	3'-6"	1'-3"
	DXC	6'-7"	1'-3"	2'-6"	.0185(S)	0.1181	16.69	5	3	1	1'-6"	#4	1'-6"	2'-11"	#5	3'-2"	4'-7"	5'-6"	#5	3'-6"	1'-4"
	DXD	6'-1"	1'-0"	2'-6"	.0185(S)	0.1111	14.64	5	3	1	1'-6"	#4	1'-6"	2'-8"	#4	2'-6"	3'-8"	5'-0"	#5	3'-6"	1'-5"
	DXE	5'-3"	0'-9"	2'-6"	.0185(S)	0.1042	13.43	4	3	1	1'-0"	#4	4'-10"	5'-9"	--	--	--	--	#5	3'-6"	1'-4"
	DXF	4'-9"	0'-9"	2'-0"	.0185(S)	0.0903	9.53	4	2	1	1'-6"	#4	4'-4"	5'-3"	--	--	--	--	#4	2'-10"	1'-3"
	DXG	4'-4"	0'-6"	2'-0"	.0185(S)	0.0833	9.19	4	2	1	1'-6"	#4	3'-11"	4'-7"	--	--	--	--	#4	2'-9"	1'-3"
	DXH	3'-11"	0'-6"	1'-9"	.0185(S)	0.0764	7.98	3	2	1	1'-6"	#4	3'-6"	4'-2"	--	--	--	--	#4	2'-6"	1'-6"
	DXI	3'-6"	0'-6"	1'-6"	.0185(S)	0.0694	7.68	3	2	1	1'-6"	#4	3'-1"	3'-9"	--	--	--	--	#4	2'-3"	1'-6"

TYPE Y AND Z RETAINING WALLS

LOAD	RET. WALL CODE	DIMENSIONS MAX. STEM HT. S	TOE T	HEEL H	STEM WIDTH W	QUANTITIES PER LIN. FT. CONCRETE (CU.YDS.) STEM	FOOTING	REINF. STEEL (LBS.)	REINFORCING BAR DETAILS NO. REQD. D	G	S	K, B, C & E SPACING	K1 BAR SIZE	X	LENGTH	K2 BAR SIZE	X	LENGTH	A BAR LENGTH	B BAR LENGTH	H BAR SIZE	LENGTH	SPACING	T BAR SIZE	LENGTH	SPACING
A	AYA	10'-0"	1'-9"	2'-9"	9"	.0278(S)	0.2315	41.85	16	3	2	1'-6"	#4	2'-9"	3'-4"	#7	6'-8"	7'-5"	8'-8"	8'-11"	#6	4'-0"	1'-1"	#4	2'-6"	1'-3"
	AYB	9'-5"	1'-6"	2'-9"	9"	.0278(S)	0.2222	35.75	14	3	2	1'-6"	#4	2'-9"	3'-4"	#6	5'-10"	6'-7"	8'-1"	8'-4"	#6	4'-0"	1'-2"	#4	2'-3"	1'-6"
	AYC	9'-0"	1'-6"	2'-6"	9"	.0278(S)	0.2130	33.47	14	3	2	1'-6"	#4	2'-9"	3'-4"	#6	5'-5"	6'-2"	7'-8"	7'-11"	#5	3'-6"	1'-0"	#4	2'-3"	1'-6"
	AZD	8'-5"	1'-6"	2'-6"	6"	.0185(S)	0.2037	25.42	6	3	2	1'-6"	#4	2'-9"	3'-4"	#7	5'-1"	5'-10"	--	7'-4"	#5	3'-6"	1'-1"	#4	2'-3"	1'-6"
	AZE	7'-10"	1'-3"	2'-6"	6"	.0185(S)	0.1944	21.20	6	3	1	1'-6"	#4	2'-9"	3'-4"	#6	4'-3"	5'-0"	--	6'-9"	#5	3'-6"	1'-2"	#4	2'-0"	1'-6"
B	BYA	10'-0"	2'-3"	3'-0"	9"	.0278(S)	0.2593	56.63	16	3	2	1'-6"	#4	2'-9"	3'-4"	#9	8'-8"	9'-5"	8'-8"	8'-11"	#6	4'-3"	0'-10"	#5	3'-1"	1'-2"
	BYB	9'-5"	2'-0"	3'-0"	9"	.0278(S)	0.2500	47.42	14	3	2	1'-6"	#4	2'-9"	3'-4"	#8	7'-10"	8'-7"	8'-1"	8'-4"	#6	4'-3"	0'-10½"	#4	2'-9"	1'-0"
	BYC	8'-3"	1'-9"	2'-9"	9"	.0278(S)	0.2315	36.79	12	3	2	1'-6"	#4	2'-9"	3'-4"	#7	6'-5"	7'-2"	6'-11"	7'-2"	#5	3'-9"	0'-9"	#4	2'-6"	1'-5"
	BYD	7'-2"	1'-6"	2'-6"	9"	.0278(S)	0.2130	27.92	12	3	2	1'-6"	#4	2'-9"	3'-4"	#5	4'-10"	5'-7"	5'-10"	6'-1"	#5	3'-6"	1'-1"	#4	2'-3"	1'-6"
	BZE	7'-0"	1'-6"	2'-9"	6"	.0185(S)	0.2130	25.80	6	3	2	1'-6"	#4	2'-9"	3'-4"	#7	5'-2"	5'-11"	--	5'-11"	#5	3'-9"	0'-11"	#4	2'-3"	1'-6"
	BZF	6'-6"	1'-6"	2'-6"	6"	.0185(S)	0.2037	22.88	5	3	2	1'-6"	#4	2'-9"	3'-4"	#7	4'-8"	5'-5"	--	5'-5"	#5	3'-6"	1'-3"	#4	2'-3"	1'-6"
	BZG	5'-11"	1'-3"	2'-6"	6"	.0185(S)	0.1944	19.05	5	3	1	1'-6"	#4	2'-9"	3'-4"	#6	3'-10"	4'-7"	--	4'-10"	#5	3'-6"	1'-3"	#4	2'-0"	1'-6"
	BZH	5'-4"	1'-0"	2'-6"	6"	.0185(S)	0.1852	15.85	4	3	1	1'-6"	#4	2'-9"	3'-4"	#5	3'-0"	3'-9"	--	4'-3"	#5	3'-6"	1'-4"	#4	1'-9"	1'-6"
C	CYA	10'-0"	3'-6"	3'-0"	9"	.0278(S)	0.3056	66.40	16	3	3	1'-6"	#4	2'-9"	3'-4"	#10	9'-0"	9'-9"	8'-8"	5'-11"	#6	4'-3"	1'-1"	#6	4'-8"	1'-0"
	CYB	9'-4"	3'-0"	3'-0"	9"	.0278(S)	0.2870	53.22	14	3	3	1'-6"	#4	2'-9"	3'-4"	#9	7'-9"	8'-6"	8'-0"	8'-3"	#6	4'-3"	1'-1"	#5	3'-11"	0'-11"
	CYC	9'-0"	2'-9"	3'-0"	9"	.0278(S)	0.2778	47.11	14	3	3	1'-6"	#4	2'-9"	3'-4"	#8	7'-2"	7'-11"	7'-8"	7'-11"	#6	4'-3"	1'-1"	#5	3'-8"	1'-0"
	CYD	8'-7"	2'-6"	3'-0"	9"	.0278(S)	0.2685	44.43	14	3	3	1'-6"	#4	2'-9"	3'-4"	#8	6'-9"	7'-6"	7'-3"	7'-6"	#6	4'-3"	1'-2"	#5	3'-5"	1'-4"
	CYE	8'-3"	2'-3"	3'-0"	9"	.0278(S)	0.2593	38.20	12	3	3	1'-6"	#4	2'-9"	3'-4"	#7	6'-2"	6'-11"	6'-11"	7'-2"	#6	4'-3"	1'-2"	#4	3'-0"	1'-0"
	CYF	7'-10"	2'-0"	3'-0"	9"	.0278(S)	0.2500	33.46	12	3	2	1'-6"	#4	2'-9"	3'-4"	#6	5'-6"	6'-3"	6'-6"	6'-9"	#6	4'-3"	1'-2"	#4	2'-9"	1'-3"
	CYG	7'-5"	1'-9"	3'-0"	9"	.0278(S)	0.2407	31.95	12	3	2	1'-6"	#4	2'-9"	3'-4"	#6	5'-1"	5'-10"	6'-1"	6'-4"	#6	4'-3"	1'-3"	#4	2'-6"	1'-6"
D	DYA	10'-0"	2'-3"	3'-0"	9"	.0278(S)	0.2593	49.36	16	3	3	1'-6"	#4	2'-9"	3'-4"	#8	7'-6"	8'-3"	8'-8"	8'-11"	#6	4'-3"	0'-11½"	#5	3'-2"	1'-4"
	DYB	9'-6"	2'-0"	3'-0"	9"	.0278(S)	0.2500	44.96	14	3	2	1'-6"	#4	2'-9"	3'-4"	#8	7'-0"	7'-9"	8'-2"	8'-5"	#6	4'-3"	1'-0"	#4	2'-9"	1'-1"
	DYC	9'-0"	1'-9"	3'-0"	9"	.0278(S)	0.2407	39.74	14	3	2	1'-6"	#4	2'-9"	3'-4"	#7	6'-3"	7'-0"	7'-8"	7'-11"	#6	4'-3"	1'-0"	#4	2'-6"	1'-5"
	DYD	8'-6"	1'-9"	2'-9"	9"	.0278(S)	0.2315	33.83	14	3	2	1'-6"	#4	2'-9"	3'-4"	#6	5'-6"	6'-3"	7'-2"	7'-5"	#5	3'-9"	0'-11"	#4	2'-6"	1'-6"
	DYE	8'-0"	1'-6"	2'-9"	9"	.0278(S)	0.2222	29.52	12	3	2	1'-6"	#4	2'-9"	3'-4"	#5	4'-9"	5'-6"	6'-8"	6'-11"	#5	3'-9"	0'-11½"	#4	2'-3"	1'-6"

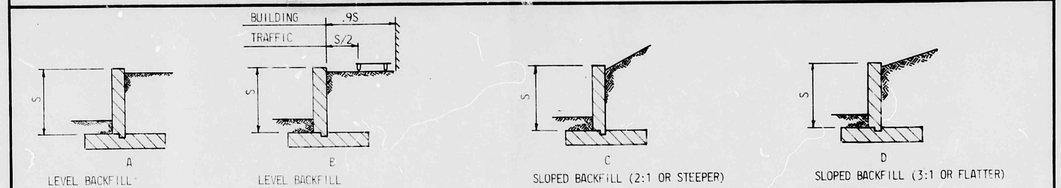


TYPE X RETAINING WALLS

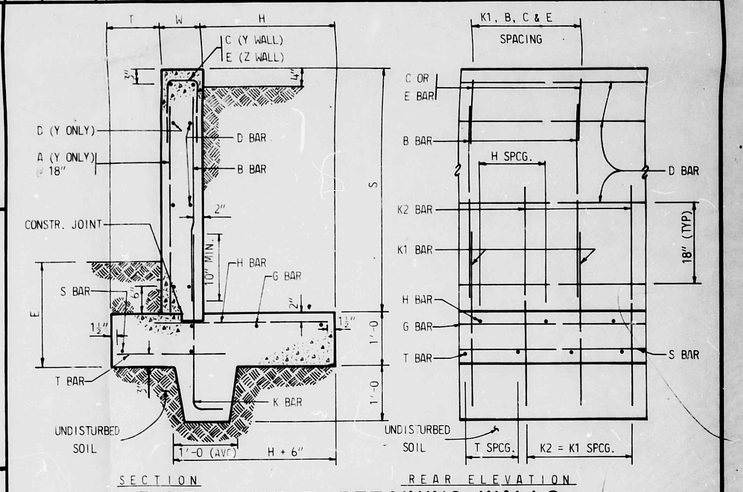


L = LENGTH OF WALL BETWEEN EXPANSION JOINTS OR ENDS.
CONTRACTOR MAY SPLICE (MIN. LAP 10"). SPLICES ARE NOT INCLUDED IN QUANTITIES.

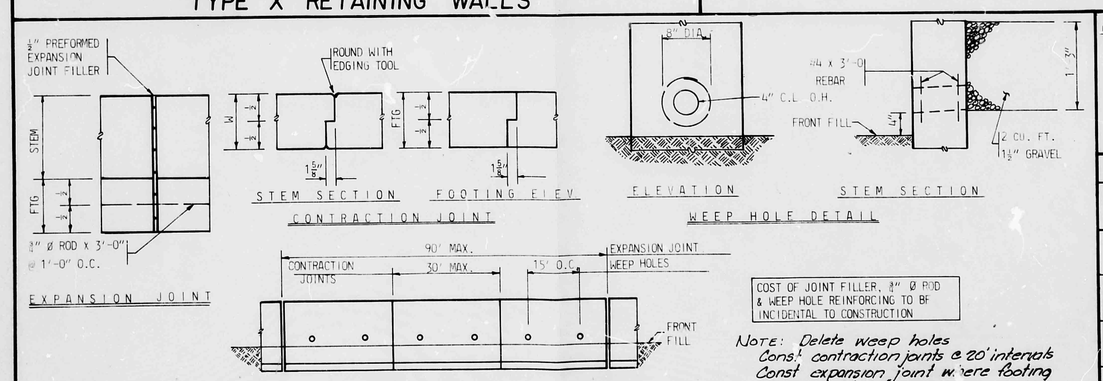
BAR BENDING DIAGRAMS



LOADS



TYPE Y AND Z RETAINING WALLS



COST OF JOINT FILLER, ¾" Ø ROD & WEEP HOLE REINFORCING TO BE INCIDENTAL TO CONSTRUCTION

Note: Delete weep holes
Cons.t contraction joints @ 20' intervals
Const expansion joint where footing changes elevation.

CONSTRUCTION DETAILS

GENERAL NOTES: CHAMFER ALL EXPOSED EDGES OF CONCRETE ¾". DIMENSIONS OF REINFORCING BARS ARE TO C.L. OF BAR. FOR EACH CODE THE REINFORCING STEEL QUANTITY PER FT. APPLIES FOR HEIGHTS TO "S" - (1'-1"). ADJUST FOR LOWER HEIGHTS. MINIMUM DEPTH E WHERE THERE IS NO SIDEWALK IS 6" COVER OVER FOOTING.

DESIGN DATA: CONCRETE - MIN. COMPRESSIVE STRENGTH AT 28 DAYS = 3000 P.S.I. (fc= 1200 P.S.I.)
REINFORCING BARS - ASTM A615, GRADE 40 (fs= 20,000 P.S.I.; n= 10)
MAXIMUM COMPUTED TOE PRESSURE = 1830 P.S.F. (RESULTANTS WITHIN KERN)

RETAINING WALLS ON THIS PROJECT

LOCATION	STATIONS	STEM HT. S	LENGTH	WALL CODE	DEPTH E	QUANTITIES CONCRETE (CU.YDS.)	REINFORCING (LBS)
South property line (See Sheet C-1b)	BEG.	3'3" Max	230'	BXC	6" Min.	30.96	1810
	END						
	BEG.						
	END						
	BEG.						
	END						
	BEG.						
	END						

CITY OF ALBUQUERQUE
THIS MICROIMAGE IS THE BEST POSSIBLE REPRODUCTION DUE TO THE POOR QUALITY OF THE ORIGINAL DOCUMENT

CANTILEVER RETAINING WALLS
NEW OFFICE BUILDING FOR WESTERN PROPERTIES
Received 3/21/84

DESIGN	DRAWN	
WJC		WILSON & COMPANY ENGINEERS ALBUQUERQUE, NEW MEXICO

DATE: 6/75
FILE NO.
SHEET NO. C-1c OF

E17/D45