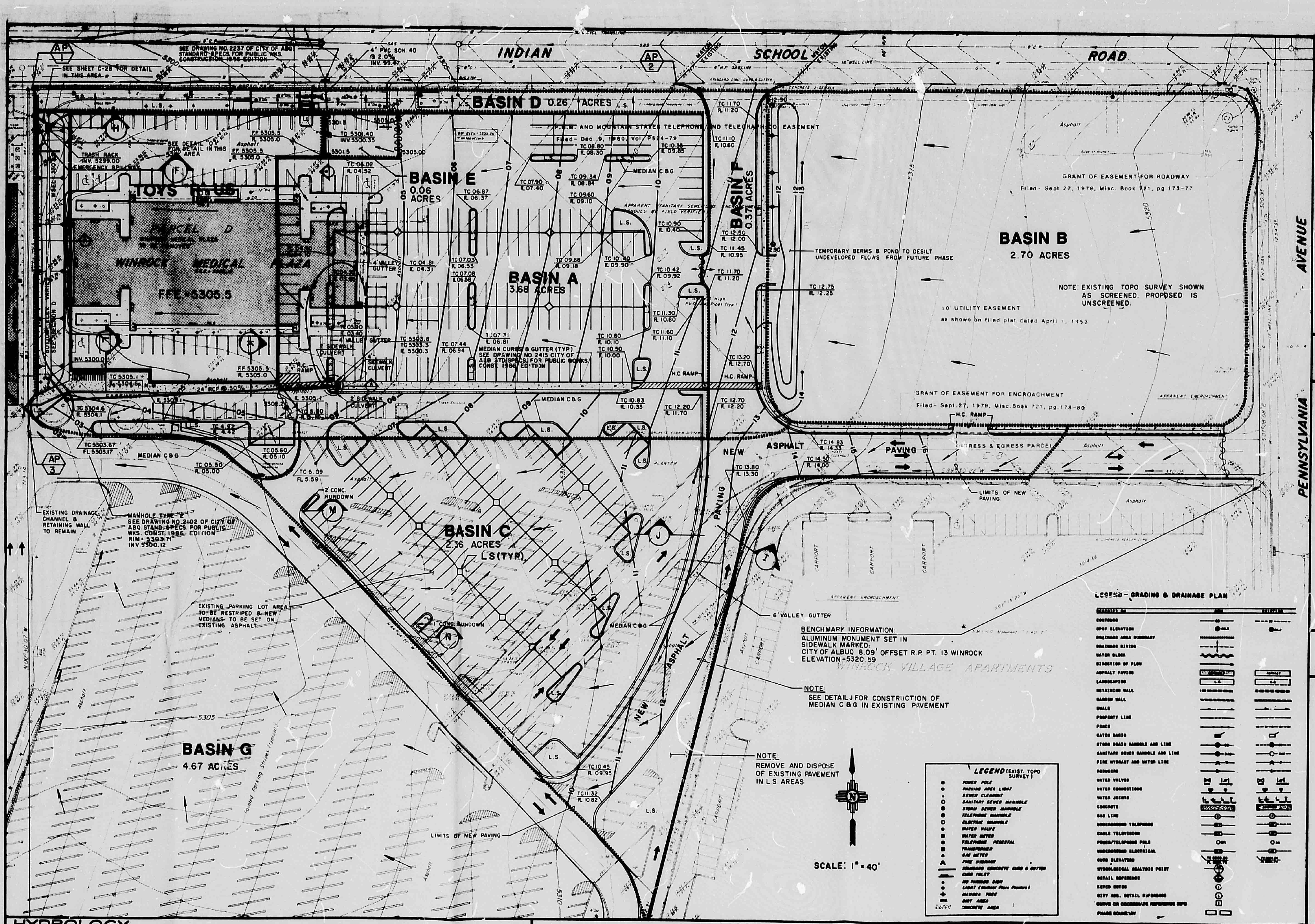
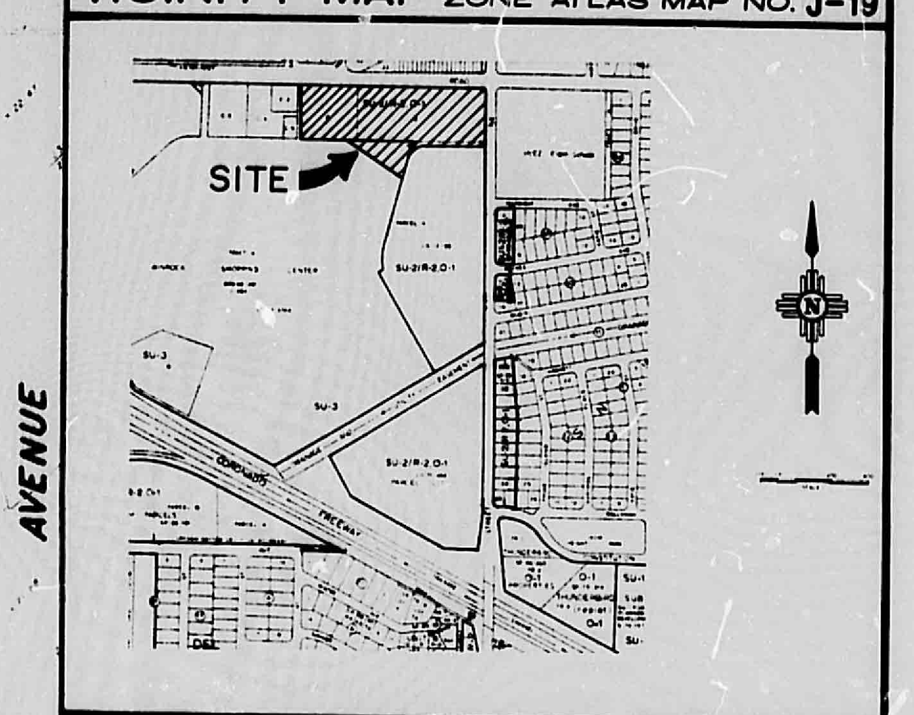
J-19/D048

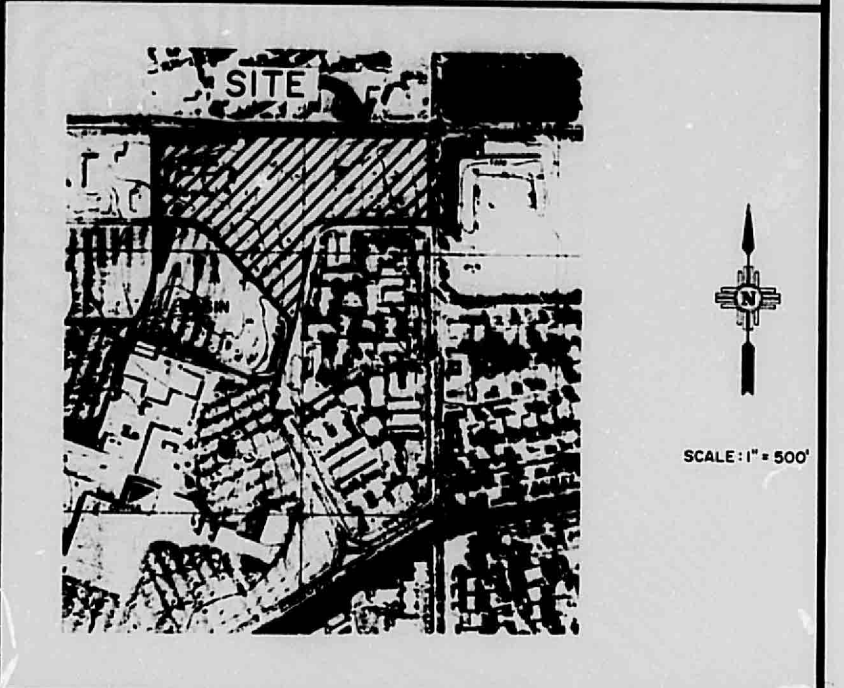

INDIAN SCHOOL ROAD
PENNSYLVANIA AVENUE
BASIN D 0.26 ACRES
BASIN E 0.06 ACRES
BASIN A 3.68 ACRES
BASIN F 0.37 ACRES
BASIN B 2.70 ACRES
BASIN C 2.36 ACRES
BASIN G 4.67 ACRES
TOYS "R" US
PARCEL D
WINROCK MEDICAL PLAZA
FFE=5305.5
GRANT OF EASEMENT FOR ROADWAY
TEMPORARY BERMS & POND TO DESILT UNDEVELOPED FLOWS FROM FUTURE PHASE
NOTE EXISTING TOPO SURVEY SHOWN AS SCREENED. PROPOSED IS UNSCREENED.
10' UTILITY EASEMENT
GRANT OF EASEMENT FOR ENCROACHMENT
INGRESS & EGRESS PARCEL
ASPHALT
PAVING
NEW PAVING
LIMITS OF NEW PAVING
MEDIAN C&G
EXISTING DRAINAGE CHANNEL & RETAINING WALL TO REMAIN
EXISTING PARKING LOT AREA TO BE RESTRIPED & NEW MEDIANS TO BE SET ON EXISTING ASPHALT
6' VALLEY GUTTER
BENCHMARK INFORMATION:
ALUMINUM MONUMENT SET IN SIDEWALK MARKED:
CITY OF ALBUQ 8-09 OFFSET R.P. PT. 13 WINROCK
ELEVATION=5320.59
WINROCK VILLAGE APARTMENTS
NOTE: SEE DETAIL J FOR CONSTRUCTION OF MEDIAN C&G IN EXISTING PAVEMENT
NOTE: REMOVE AND DISPOSE OF EXISTING PAVEMENT IN L.S. AREAS
SCALE: 1" = 40'
LEGEND (EXIST. TOPO SURVEY)
LEGEND - GRADING & DRAINAGE PLAN

VICINITY MAP ZONE ATLAS MAP NO. J-19



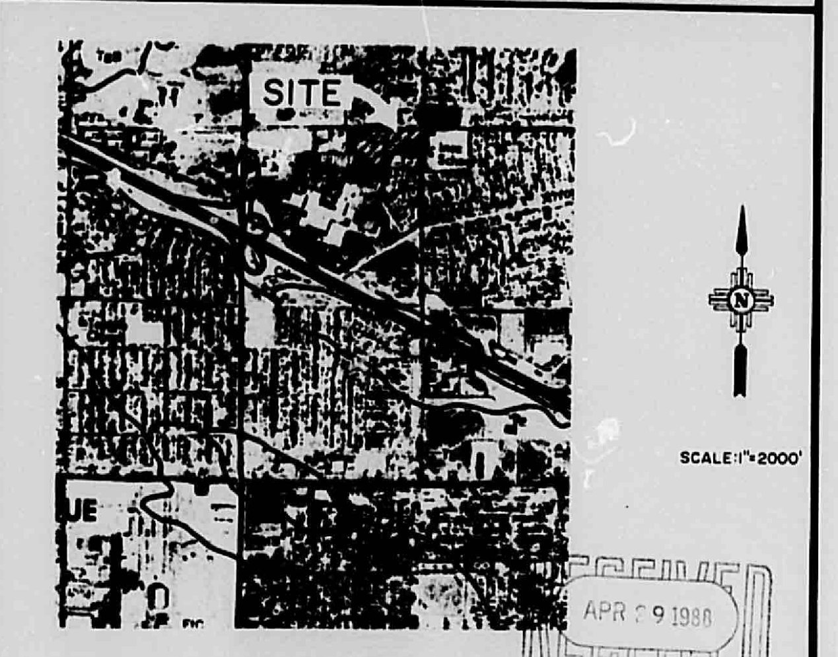
NO. 30

FLOOD HAZARD MAP & OFF-SITE FLOWS FROM F.E.M.A.


SITE
SCALE: 1" = 500'

NO. 31

SOILS MAP SOIL SURVEY U.S.D.A., S.C.S.


SITE
SCALE: 1" = 2000'

RECEIVED
APR 29 1988
HYDROLOGY SECTION

HYDROLOGY

HYDROLOGY SUMMARY SHEET FOR GRADING & DRAINAGE REPORT
PROJECT: TOYS R US (RESUBMITTAL PLAN NO. 2)

									RUNOFF PARAMETERS FOR 2 YEAR EVENT				RUNOFF PARAMETERS FOR 10 YEAR EVENT				RUNOFF PARAMETERS FOR 100 YEAR EVENT			
A.P. #	DESCRIPTION	AREA (ac.)	HT. (ft)	LGTH. (ft)	SLOPE (ft/ft)	Tc (min)	SOIL	CN	C	P	I	V	Q	P	I	V	Q	P	I	V	Q
1	BASIN A+B+C+D+E+F+G UND	14.1	25	1100	0.023	<10	B	70.0	0.40	1.05	2.21	407	12.5	1.54	3.26	5330	18.4	2.35	4.97	19744	28.0
1	BASIN A+B+C+D+E+F+G EXI	14.1	25	1100	0.023	<10	B	89.0	0.70	1.05	2.21	16043	21.8	1.54	3.26	35363	32.2	2.35	4.97	67786	49.0
1	BASIN A+B+C+D+E+F+G DEV	14.1	15	515	0.029	<10	B	95.5	0.85	1.05	2.21	32571	26.6	1.54	3.26	57697	39.3	2.35	4.97	95506	59.8
1	BASIN A+D+E DEVELOPED	4.0	13	1080	0.012	<10	B	94.5	0.83	1.05	2.21	8277	7.3	1.54	3.26	15156	10.8	2.35	4.97	25664	16.4
2	BASIN B+F DEVELOPED	3.1	12	560	0.021	<10	B	96.0	0.87	1.05	2.21	7460	5.9	1.54	3.26	12996	8.7	2.35	4.97	21268	13.3
3	BASIN C+G DEVELOPED	7.0	12	700	0.017	<10	B	95.5	0.87	1.05	2.21	16239	13.6	1.54	3.26	28766	20.0	2.35	4.97	47618	30.5

P = 6-HOUR RAINFALL VOLUMES - (Ref. DPM PLATE 22.2 D-1)
I = RAINFALL INTENSITY - INCHES FOR 6-HOUR EVENT. (Ref. DPM PLATE 22.2 D-2)
V = VOLUME OF RUNOFF - CUBIC FEET
Q = RATE OF RUNOFF - CUBIC FEET PER SECOND

POND VOLUME CALULATIONS

MAIN SECTION
LENGTH = 216'
AREA OF NORTH END = 45 S.F.
AREA OF SOUTH END = 42 S.F.
DIFFERENCE = 3 S.F.

216' X 45 S.F. = 9,720 C.F.
SLOPE DEDUCTION
216' x 3 S.F. = 648 C.F. / 2 = 324 C.F.
9,396 C.F.

END SECTIONS 1/3 h (B + b + √(B+b)) B = Area of top, b = Area of Bottom
SOUTH END
1/3 3.5' (283.5 + 19.6) + √(283.5 + 19.6) = 373.9 ÷ 2 = 186.9
NORTH END
1/3 4.5 (283.5 + .79 + √(283.5 + .79) = 426.4 ÷ 2 = 213.2 C.F.

9396 C.F.
186.9 C.F.
213.2 C.F.
TOTAL 9,796 C.F.

BY: DOUGLAS W. COPELAND DATE: 4/27/88

SOILS INFORMATION FROM SOIL SURVEY U.S.D.A., S.C.S.

	DEGREE AND KIND OF LIMITATIONS FOR						SUITABILITY AS SOURCE OF —				SOIL FEATURES AFFECTING —		
SOIL SERIES AND MAP SYMBOLS	SEPTIC TANK ABSORPTION FIELDS	SEWAGE LAGOONS	SHALLOW EXCAVATIONS	DWELLINGS WITHOUT BASEMENTS	SANITARY LANDFILL (TRENCH TYPE)	LOCAL ROAD AND STREETS	ROAD FILL	SAND	GRAVEL	TOPSOIL	POND RESERVOIR AREAS	DIKES, LEVEES, AND OTHER EMBANKMENTS	HYDROLOGIC SOIL GROUP
*Embudo: EmB, EtC. For Tijeras part of EtC, see Tijeras series.	Slight [3]	Severe: seepage.	Moderate: [3] small stones.	Slight [3]	Severe: seepage.	Slight	Good	Poor: excess fines.	Poor: excess fines.	Poor: small stones.	Seepage	Piping; compressible	B

EtC—Embudo-Tijeras complex, 0 to 9 percent slopes. This mapping unit is about 50 percent an Embudo gravelly fine sandy loam, 0 to 5 percent slopes, and about 35 percent a Tijeras gravelly fine sandy loam that has 1 to 9 percent slopes.

The Embudo soil is in drainageways and depressions, and the Tijeras soil is on low ridges in narrow undulations. The Tijeras soil has the profile described as representative of the Tijeras series. On both soils, runoff is medium and the hazard of water erosion is moderate.

Included in this unit in mapping are areas of Tesajo, Millett, and Wink soils, which make up about 15 percent of the unit.

This mapping unit is used for community development, watershed, wildlife habitat, and range. The Embudo part of this unit is subject to flooding. Control of moisture is required for proper compaction. Dryland capability subclass VIIe; native plant community 4.

LEGAL DESCRIPTION:

PORTIONS OF PARCELS A & D AND ALL OF PARCELS C-8 AND E OF WINROCK CENTER ADDITION, CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

NO.	REVISIONS	BY	DATE
1	REVISED PLAN TO SHOW DETAIL GRADES & HYDROLOGY	DWC	4/27/88

TOYS "R" US
GRADING AND DRAINAGE PLAN

Rev. 4/27/88
DOUGLAS W. COPELAND
REGISTERED PROFESSIONAL ENGINEER

EASTERLING & ASSOCIATES, INC.
CONSULTING ENGINEERS
5643 Paradise Blvd. N.W.
Albuquerque, New Mexico 87114

Designed: DWC	Drawn: JEL	Checked: DWC	Sheet
Job No: 2011.2	Date: MAR. 1988		of C-2A

R# 21 DATE 6-24-93 OP E.P.
CITY OF ALBUQUERQUE
This microimage is certified to be a complete and accurate copy of the original as it appears in the files of the PUBLIC WORKS DEPARTMENT - HYDROLOGY DIVISION and was filmed in the normal course of business.
The photographic processes used meet the Basic Microfilm Standards of the National Micrographics Association (MS115-1977).
Karen Aune
CITY CLERK RECORDER
OFFICIAL SEAL
NORBERTA SANCHEZ
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires: MAY 8 1995
Norberta Sanchez

THIS PLAN SHOT TWICE
ONCE ON LIGHT AND
ONCE ON DARK.

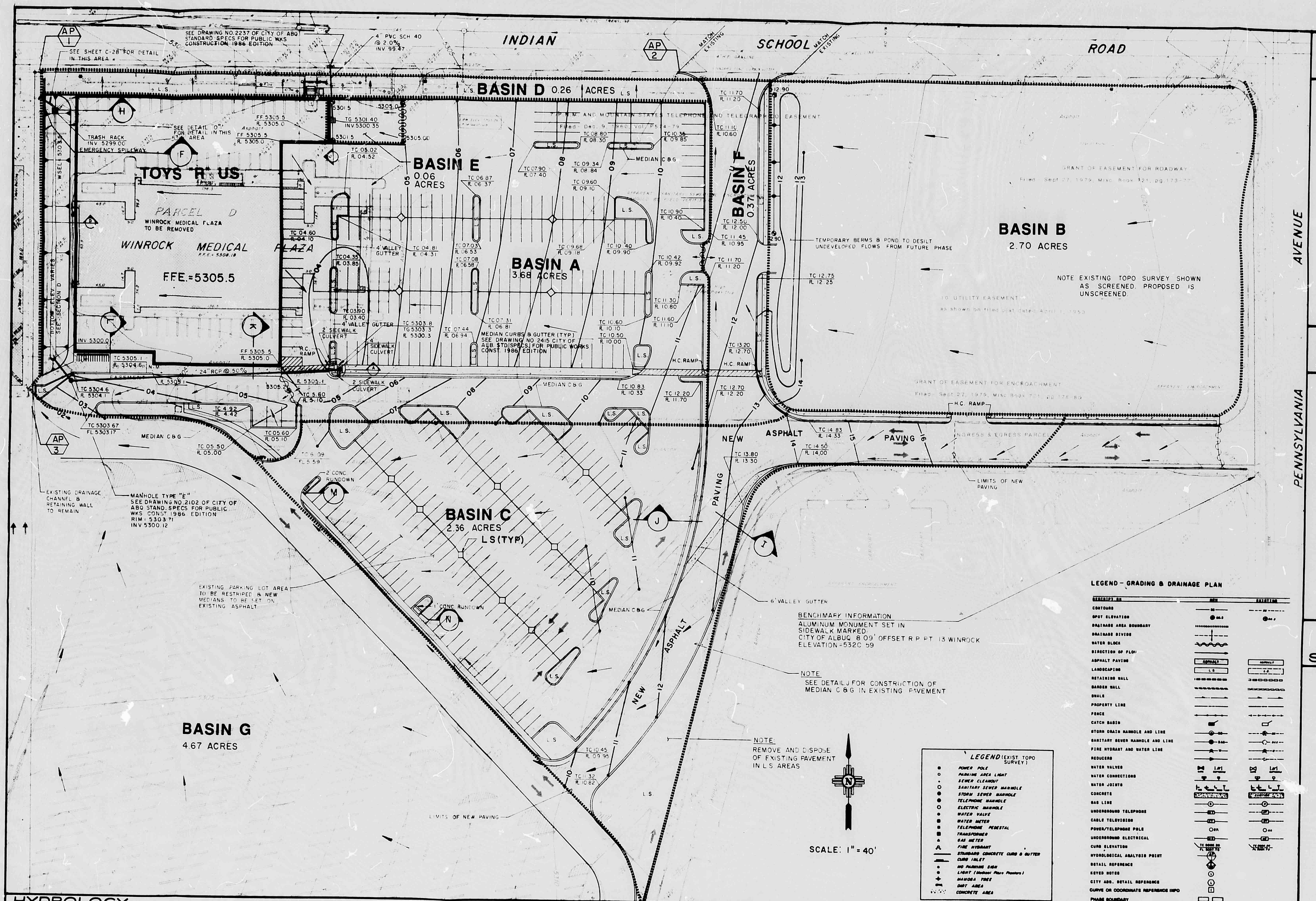
CITY OF ALBUQUERQUE
THIS MICROIMAGE IS THE BEST POSSIBLE REPRODUCTION DUE TO THE POOR QUALITY OF THE ORIGINAL DOCUMENT.

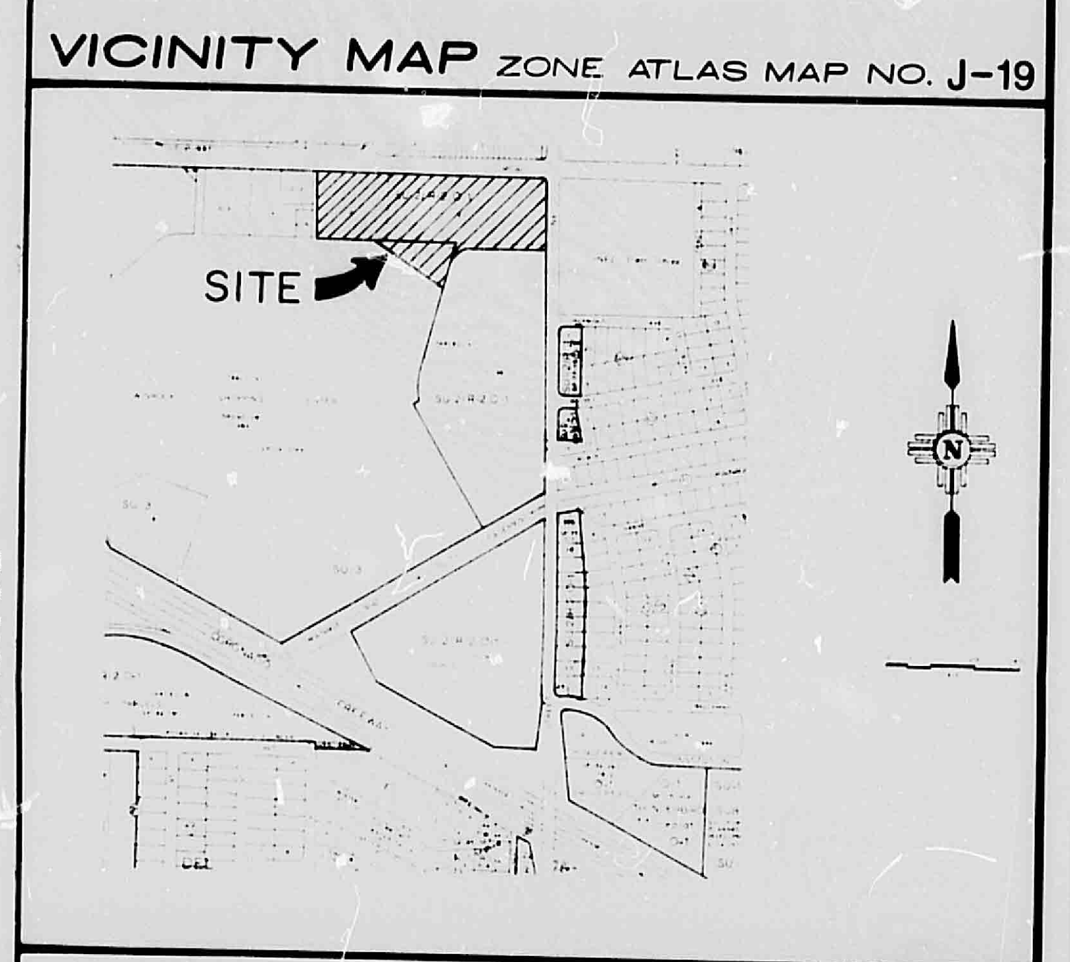
PLANS/PLATS ON FILE

FILE DESC: J-19/D048

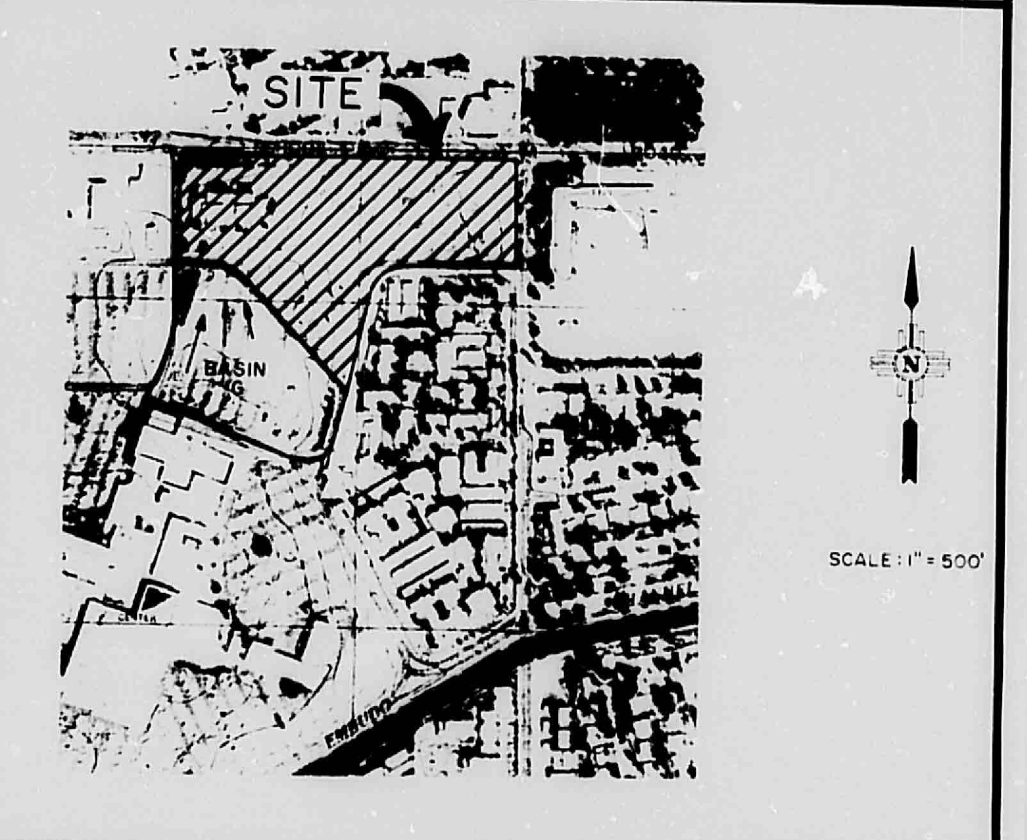
PLANS/PLATS 9

F 30 D 24 C 20 B 16 A 12 CITY OF ALBUQUERQUE C D F


INDIAN SCHOOL ROAD
PENNSYLVANIA AVENUE
AP 1
AP 2
AP 3
SEE DRAWING NO. 2237 OF CITY OF ABQ STANDARD SPECS FOR PUBLIC WKS CONSTRUCTION 1986 EDITION
SEE SHEET C-2B FOR DETAIL IN THIS AREA
BASIN D 0.26 ACRES
BASIN E 0.06 ACRES
BASIN A 3.68 ACRES
BASIN F 0.37 ACRES
BASIN B 2.70 ACRES
BASIN C 2.36 ACRES
BASIN G 4.67 ACRES
TOYS "R" US
PARCEL D
WINROCK MEDICAL PLAZA TO BE REMOVED
WINROCK MEDICAL PLAZA
F.F.E.=5305.5
TRASH RACK INV 5299.00 EMERGENCY SPILLWAY
MEDIAN CURBS & GUTTER (TYP) SEE DRAWING NO. 2415 CITY OF ALB. STD. SPECS FOR PUBLIC WORKS CONST. 1986 EDITION
TEMPORARY BERMS & POND TO DESILT UNDEVELOPED FLOWS FROM FUTURE PHASE
NOTE EXISTING TOPO SURVEY SHOWN AS SCREENED. PROPOSED IS UNSCREENED
GRANT OF EASEMENT FOR ROADWAY
GRANT OF EASEMENT FOR ENCROACHMENT
UTILITY EASEMENT
EXISTING DRAINAGE CHANNEL & RETAINING WALL TO REMAIN
MANHOLE TYPE "E" SEE DRAWING NO. 2102 OF CITY OF ABQ STAND. SPECS FOR PUBLIC WKS CONST 1986 EDITION RIM 5303.71 INV 5300.12
EXISTING PARKING LOT AREA TO BE RESTRIPED & NEW MEDIANS TO BE SET ON EXISTING ASPHALT
LIMITS OF NEW PAVING
6' VALLEY GUTTER
BENCHMARK INFORMATION ALUMINUM MONUMENT SET IN SIDEWALK MARKED CITY OF ALBUQ. 8-09' OFFSET R.P. PT. 13 WINROCK ELEVATION=5320.59
NOTE SEE DETAIL J FOR CONSTRUCTION OF MEDIAN C&G IN EXISTING PAVEMENT
NOTE REMOVE AND DISPOSE OF EXISTING PAVEMENT IN L.S. AREAS
NEW ASPHALT PAVING
L.S. (TYP)
MEDIAN C&G
SCALE: 1" = 40'
LEGEND - GRADING & DRAINAGE PLAN
LEGEND (EXIST TOPO SURVEY)



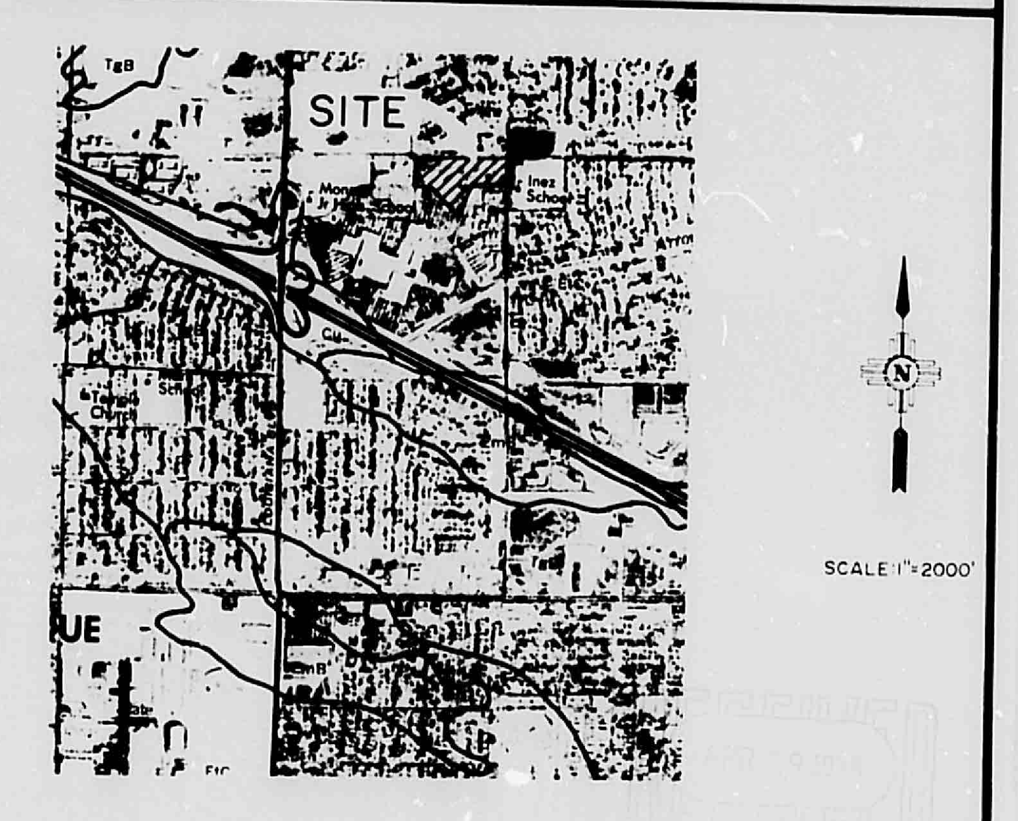
VICINITY MAP ZONE ATLAS MAP NO. J-19



NO. 30

FLOOD HAZARD MAP & OFF-SITE FLOWS FROM F.E.M.A.

SITE
SCALE: 1"=500'



NO. 31

SOILS MAP SOIL SURVEY U.S.D.A., S.C.S.

SITE
SCALE: 1"=2000'

HYDROLOGY

HYDROLOGY SUMMARY SHEET FOR GRADING & DRAINAGE REPORT
PROJECT TOYS R US (RESUBMITTAL PLAN NO. 2)

A.P. #	DESCRIPTION	AREA (ac)	HT (ft)	LGTH (ft)	SLOPE (ft/ft)	Tc (min)	SOIL	CN	C	2 YEAR EVENT P	I	V	Q	10 YEAR EVENT P	I	V	Q	100 YEAR EVENT P	I	V	Q
1	BASIN A+B+C+D+E+F+G UND	14.1	25	1100	0.023	<10	B	70.0	0.40	1.05	2.21	407	12.5	1.54	3.26	5330	18.4	2.35	4.97	19744	28.0
1	BASIN A+B+C+D+E+F+G EXI	14.1	25	1100	0.023	<10	B	89.0	0.70	1.05	2.21	16043	21.8	1.54	3.26	35363	32.2	2.35	4.97	67786	49.0
1	BASIN A+B+C+D+E+F+G DEV	14.1	15	515	0.029	<10	B	95.5	0.85	1.05	2.21	32571	26.6	1.54	3.26	57697	39.3	2.35	4.97	95506	59.8
1	BASIN A+D+E DEVELOPED	4.0	13	1080	0.012	<10	B	94.5	0.83	1.05	2.21	8277	7.3	1.54	3.26	15156	10.8	2.35	4.97	25664	16.4
2	BASIN B+F DEVELOPED	3.1	12	560	0.021	<10	B	96.0	0.87	1.05	2.21	7460	5.9	1.54	3.26	12996	8.7	2.35	4.97	21268	13.3
3	BASIN C+G DEVELOPED	7.0	12	700	0.017	<10	B	95.5	0.87	1.05	2.21	16239	13.6	1.54	3.26	28766	20.0	2.35	4.97	47618	30.5

P = 6-HOUR RAINFALL VOLUMES (Ref. DPM PLATE 22.2 D-1)
I = RAINFALL INTENSITY - INCHES FOR 6-HOUR EVENT (Ref. DPM PLATE 22.2 D-2)
V = VOLUME OF RUNOFF - CUBIC FEET
Q = RATE OF RUNOFF - CUBIC FEET PER SECOND

POND VOLUME CALULATIONS

MAIN SECTION
LENGTH = 216'
AREA OF NORTH END = 45 S.F.
AREA OF SOUTH END = 42 S.F.
DIFFERENCE = 3 S.F.

216' X 45 S.F. = 9,720 C.F.
SLOPE DEDUCTION
216' x 3 S.F. = 648 C.F. / 2 = 324 C.F.
9,396 C.F.

END SECTIONS 1/3 h (B + b + √(B·b)) B = Area of top, b = Area of Bottom
SOUTH END
1/3 3.5' (283.5 + 19.6) + √(283.5 + 19.6) = 373.9 ÷ 2 = 186.9
NORTH END
1/3 4.5 (283.5 + 79 + √(283.5 + 79) = 426.4 ÷ 2 = 213.2 C.F.

9396 C.F.
186.9 C.F.
213.2 C.F.
TOTAL 9,796 C.F.

BY DOUGLAS W. COPELAND DATE 4/27/88

SOILS INFORMATION FROM SOIL SURVEY U.S.D.A., S.C.S.

SOIL SERIES AND MAP SYMBOLS	DEGREE AND KIND OF LIMITATIONS FOR						SUITABILITY AS SOURCE OF —				SOIL FEATURES AFFECTING —		HYDROLOGIC SOIL GROUP
	SEPTIC TANK ABSORPTION FIELDS	SEWAGE LAGOONS	SHALLOW EXCAVATIONS	DWELLINGS WITHOUT BASEMENTS	SANITARY LANDFILL (TRENCH TYPE)	LOCAL ROAD AND STREETS	ROAD FILL	SAND	GRAVEL	TOPSOIL	POND RESERVOIR AREAS	DIKES, LEVEES, AND OTHER EMBANKMENTS	
*Embudo: EmB, EtC For Tijeras part of EtC, see Tijeras series.	Slight[1]	Severe: seepage.	Moderate:[1] small stones.	Slight[1]	Severe: seepage.	Slight	Good	Poor: excess fines.	Poor: excess fines.	Poor: small stones.	Seepage	Piping, compressible	B

EtC—Embudo-Tijeras complex, 0 to 9 percent slopes. This mapping unit is about 50 percent an Embudo gravelly fine sandy loam, 0 to 5 percent slopes, and about 35 percent a Tijeras gravelly fine sandy loam that has 1 to 9 percent slopes.

The Embudo soil is in drainageways and depressions, and the Tijeras soil is on low ridges in narrow undulations. The Tijeras soil has the profile described as representative of the Tijeras series. On both soils, runoff is medium and the hazard of water erosion is moderate.

Included in this unit in mapping are areas of Tesajo, Millett, and Wink soils, which make up about 15 percent of the unit.

This mapping unit is used for community development, watershed, wildlife habitat, and range. The Embudo part of this unit is subject to flooding. Control of moisture is required for proper compaction. Dryland capability subclass VIIe; native plant community 4.

LEGAL DESCRIPTION:

PORTIONS OF PARCELS A & D AND ALL OF PARCELS C-8 AND E OF WINROCK CENTER ADDITION, CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

NO	REVISIONS	BY	DATE
⚠	REVISED PLAN TO SHOW DETAIL GRADES & HYDROLOGY	DWC	4/27/88

TOYS "R" US
GRADING AND DRAINAGE PLAN

DOUGLAS W. COPELAND
NEW MEXICO
8498
REGISTERED PROFESSIONAL ENGINEER
Rev. 4/27/88

EASTERLING & ASSOCIATES, INC.
CONSULTING ENGINEERS
5643 Paradise Blvd. N.W.
Albuquerque, New Mexico 87114

Designed DWC	Drawn JEL	Checked DWC	Sheet
Job No. 2011.2	Date MAR. 1988		of C-2A

THIS PLAN SHOT TWICE
ONCE ON LIGHT AND
ONCE ON DARK.

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

R# 21 DATE 6-24-93 OP EJP

CITY OF ALBUQUERQUE

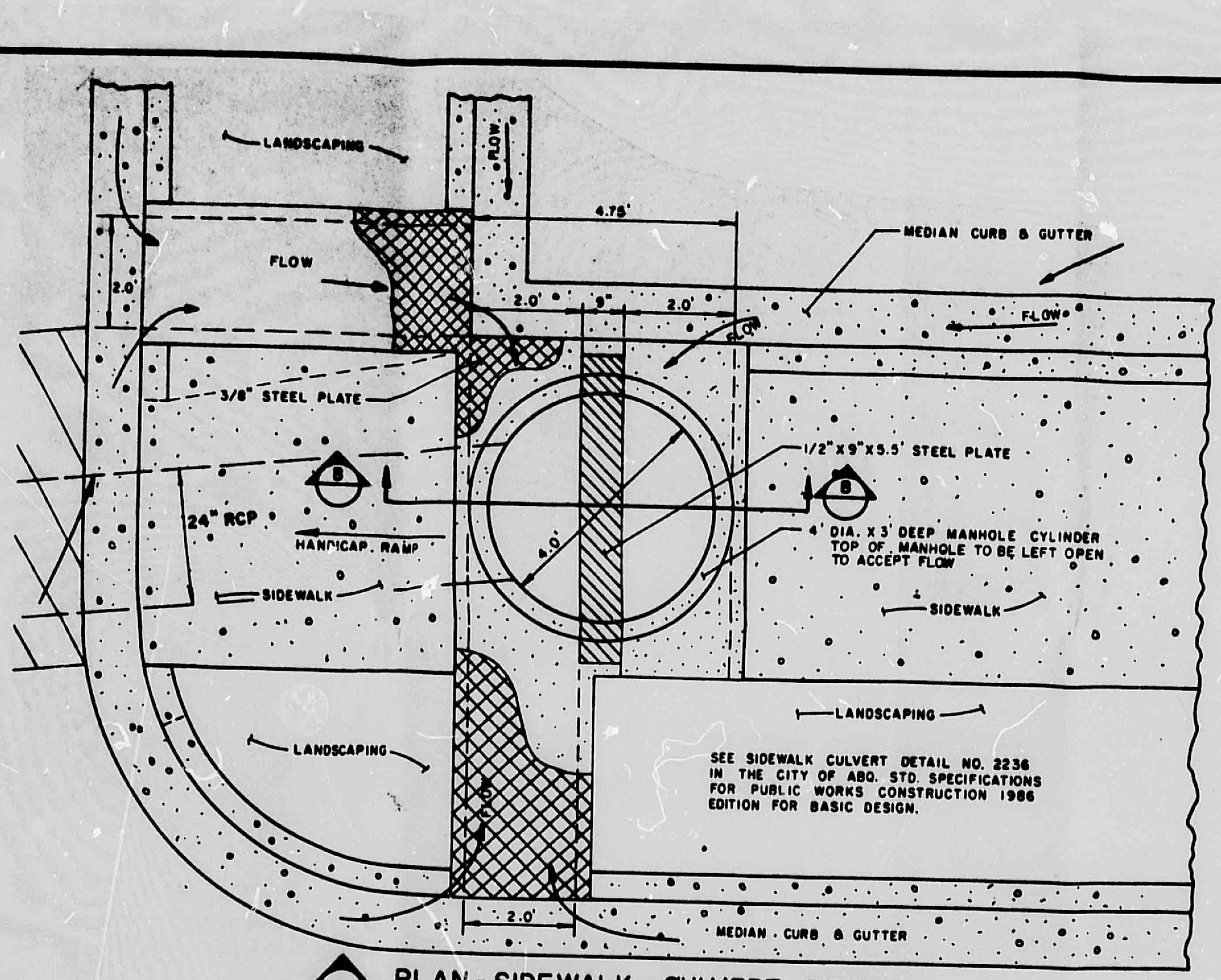
This microimage is certified to be a complete and accurate copy of the original as it appears in the files of the PUBLIC WORKS DEPARTMENT - HYDROLOGY DIVISION and was filmed in the normal course of business. The photographic processes used meet the Basic Microfilm Standards of the National Micrographics Association (MS115-1977).

Karen Reeves
CITY CLERK RECORDER

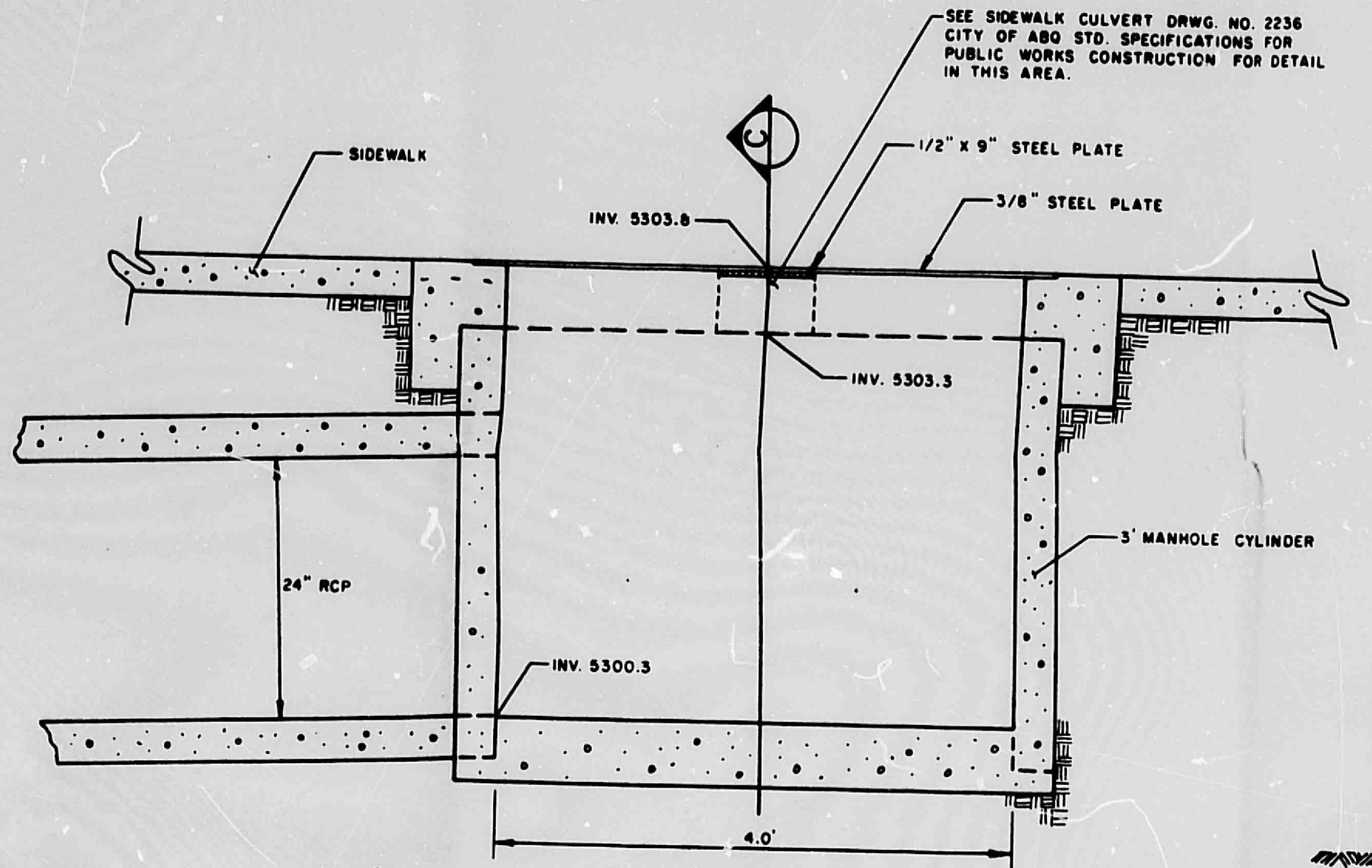
OFFICIAL SEAL
NORBERTA SANCHEZ
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires May 8 1995
Norberta Sanchez

D 24 C 20 B 16 A 12

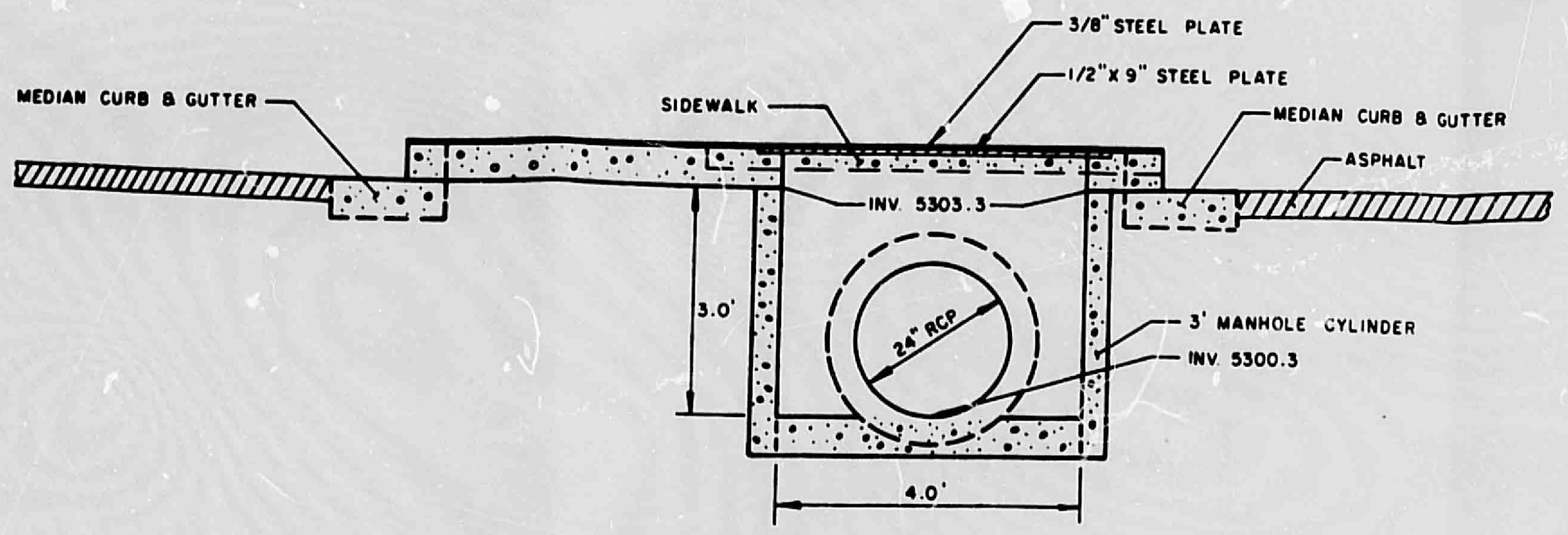
CITY OF ALBUQUERQUE C D


LANDSCAPING
FLOW
4.75'
MEDIAN CURB & GUTTER
2.0'
2.0'
9"
2.0'
FLOW
3/8" STEEL PLATE
1/2" X 9" X 5.5' STEEL PLATE
B
B
24" RCP
HANDICAP. RAMP
4.0'
4' DIA. X 3' DEEP MANHOLE CYLINDER TOP OF MANHOLE TO BE LEFT OPEN TO ACCEPT FLOW
SIDEWALK
SIDEWALK
LANDSCAPING
LANDSCAPING
SEE SIDEWALK CULVERT DETAIL NO. 2236 IN THE CITY OF ABQ. STD. SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION 1986 EDITION FOR BASIC DESIGN.
FLOW
2.0'
MEDIAN . CURB & GUTTER

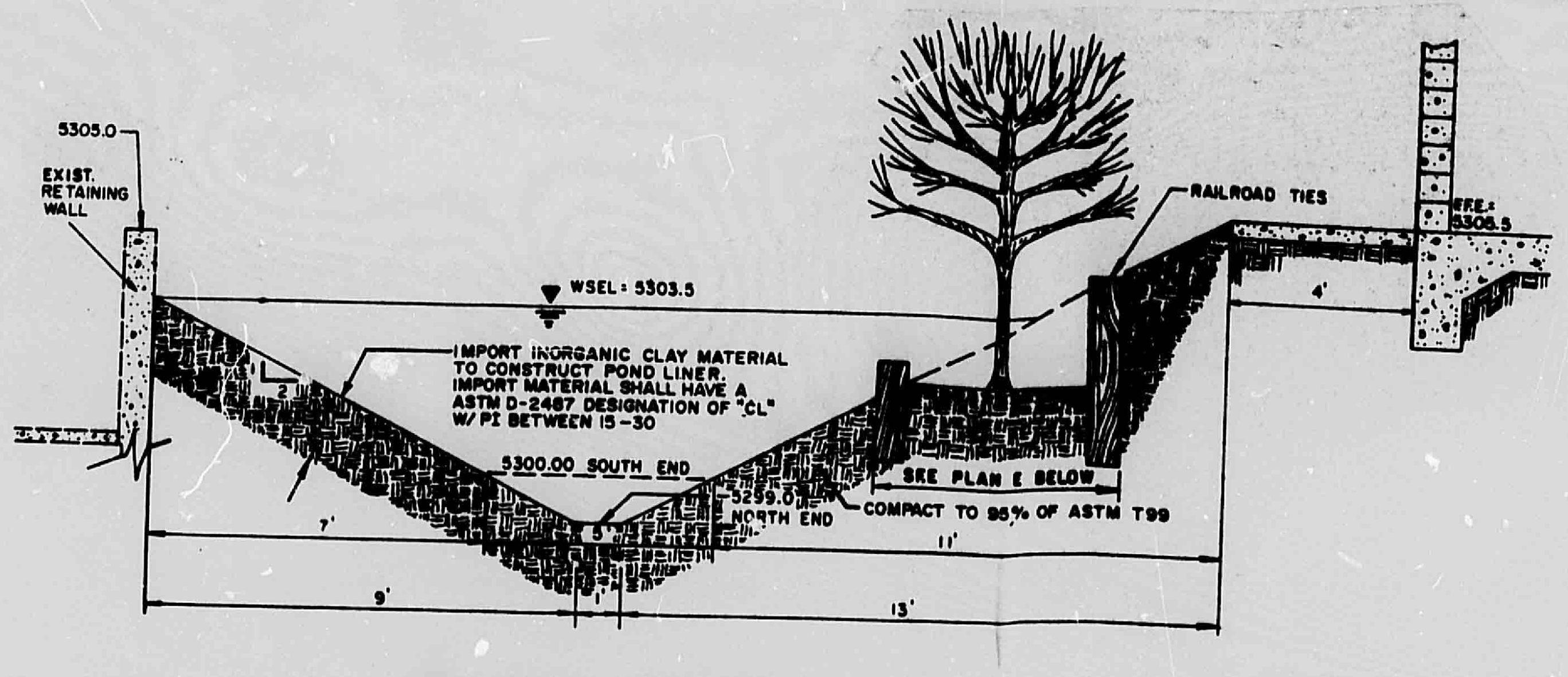
A PLAN - SIDEWALK CULVERT DETAILS
NO SCALE


SEE SIDEWALK CULVERT DRWG. NO. 2236 CITY OF ABQ STD. SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION FOR DETAIL IN THIS AREA.
C
SIDEWALK
1/2" X 9" STEEL PLATE
INV. 5303.8
3/8" STEEL PLATE
INV. 5303.3
3' MANHOLE CYLINDER
24" RCP
INV. 5300.3
4.0'

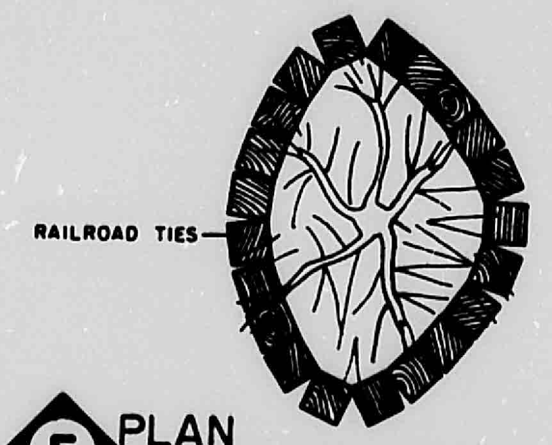
B SECTION
NO SCALE


3/8" STEEL PLATE
1/2" X 9" STEEL PLATE
MEDIAN CURB & GUTTER
SIDEWALK
MEDIAN CURB & GUTTER
ASPHALT
INV. 5303.3
3.0'
24" RCP
3' MANHOLE CYLINDER
INV. 5300.3
4.0'

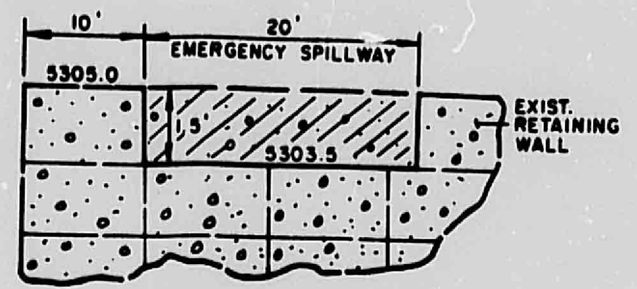
C SECTION
NO SCALE


5305.0
EXIST. RETAINING WALL
WSEL = 5303.5
IMPORT INORGANIC CLAY MATERIAL TO CONSTRUCT POND LINER. IMPORT MATERIAL SHALL HAVE A ASTM D-2487 DESIGNATION OF "CL" W/ PI BETWEEN 15-30
1
2
5300.00 SOUTH END
5299.0 NORTH END
RAILROAD TIES
FFE = 5305.5
4'
SEE PLAN E BELOW
COMPACT TO 95% OF ASTM T99
7'
5'
11'
9'
1'
13'

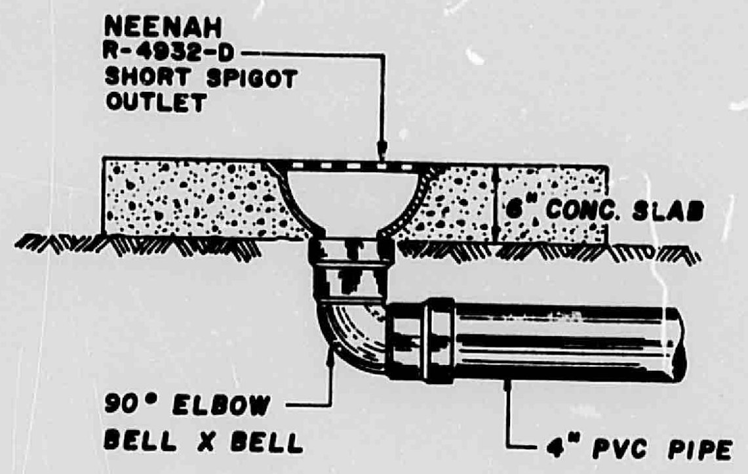
D POND SECTION
NO SCALE


RAILROAD TIES

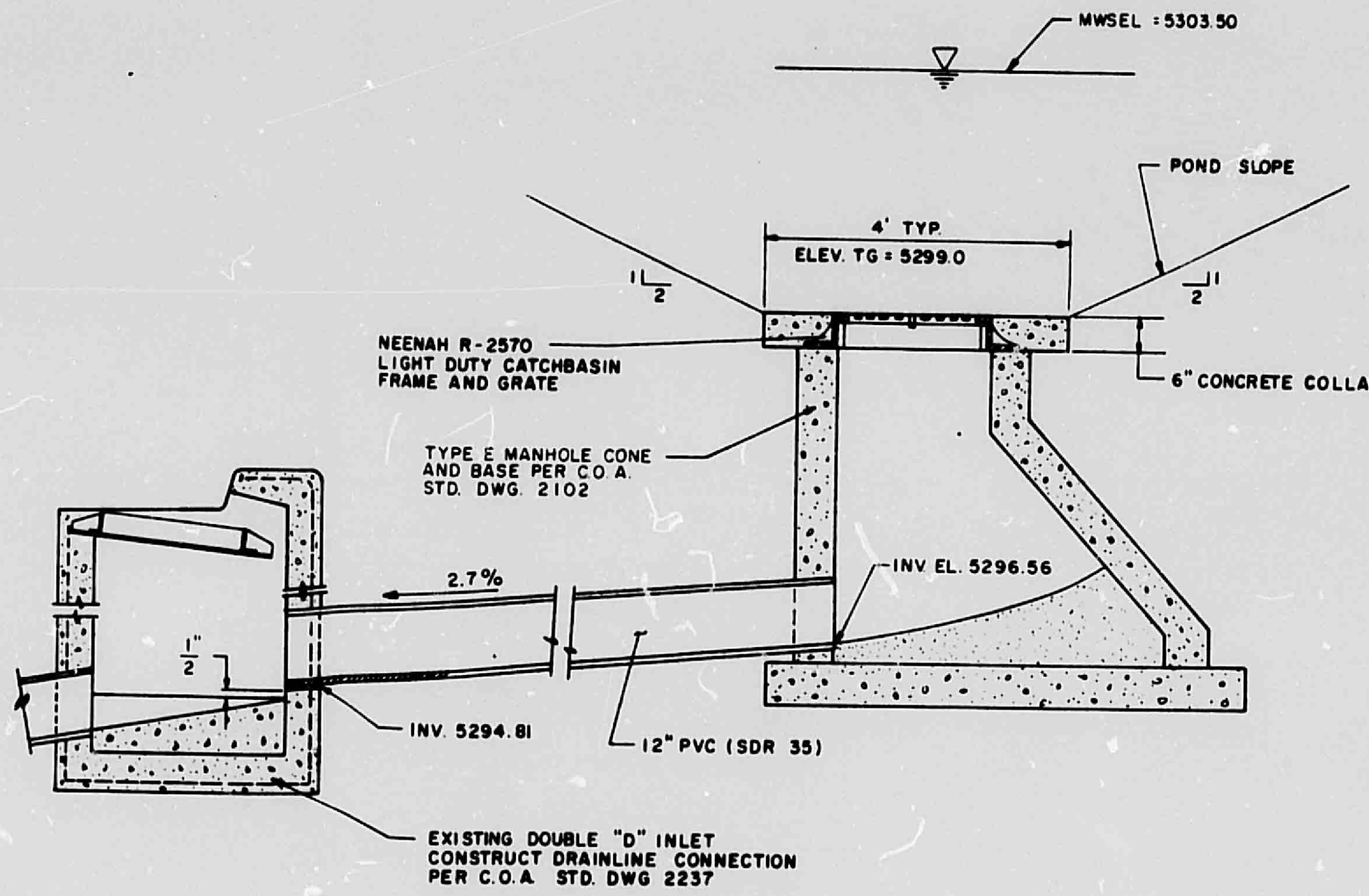
E PLAN


10'
20'
EMERGENCY SPILLWAY
5305.0
1.5'
5303.5
EXIST. RETAINING WALL

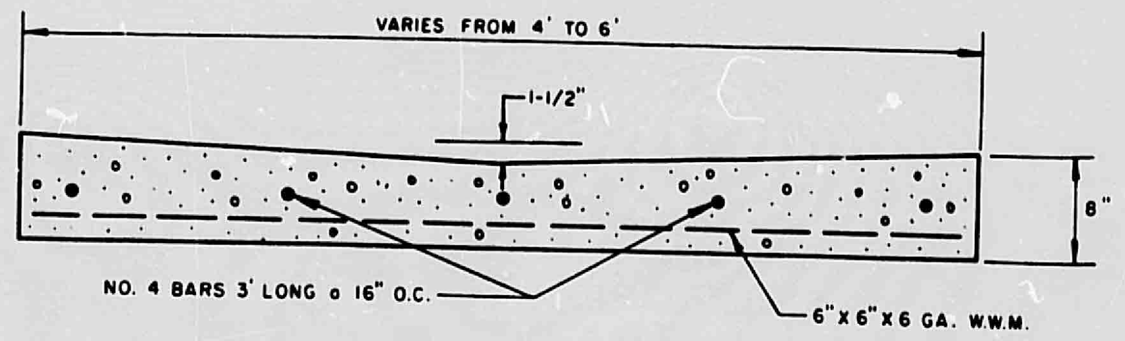
F EMERGENCY SPILLWAY
NO SCALE


NEENAH R-4932-D SHORT SPIGOT OUTLET
6" CONC. SLAB
90° ELBOW BELL X BELL
4" PVC PIPE

G DRAIN DETAIL
SCALE: 1"=1'

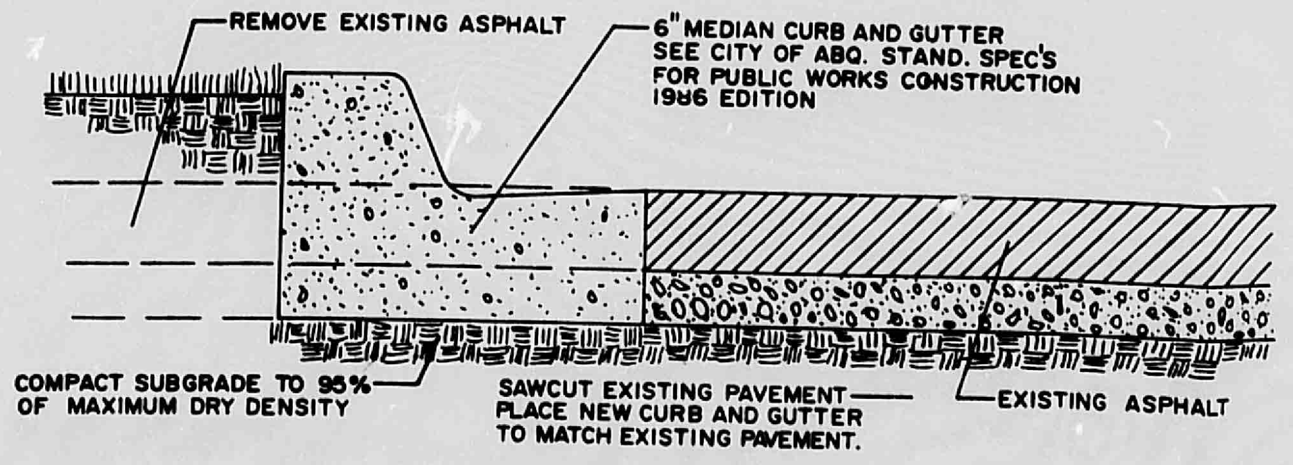

MWSEL = 5303.50
POND SLOPE
4' TYP.
ELEV. TG = 5299.0
1
2
2
1
NEENAH R-2570 LIGHT DUTY CATCHBASIN FRAME AND GRATE
6" CONCRETE COLLAR
TYPE E MANHOLE CONE AND BASE PER C.O.A. STD. DWG. 2102
2.7%
INV. EL. 5296.56
1"
2
INV. 5294.81
12" PVC (SDR 35)
EXISTING DOUBLE "D" INLET CONSTRUCT DRAINLINE CONNECTION PER C.O.A. STD. DWG 2237

H POND A OUTLET STRUCTURE
NOT TO SCALE:

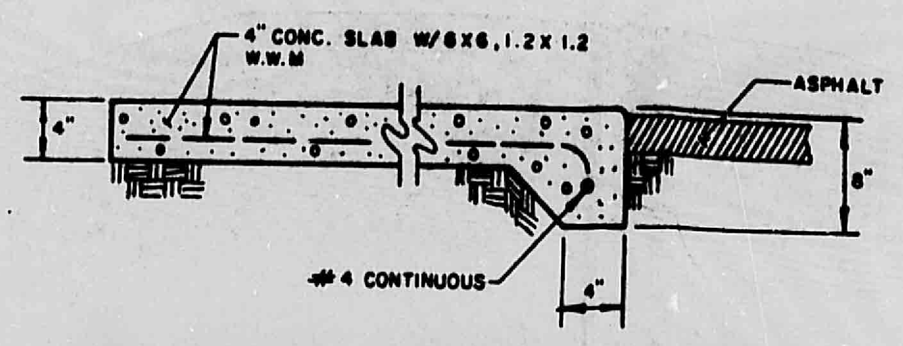

VARIES FROM 4' TO 6'
1-1/2"
8"
NO. 4 BARS 3' LONG @ 16" O.C.
6" X 6" X 6 GA. W.W.M.

I SECTION: VALLEY GUTTER
NOT TO SCALE

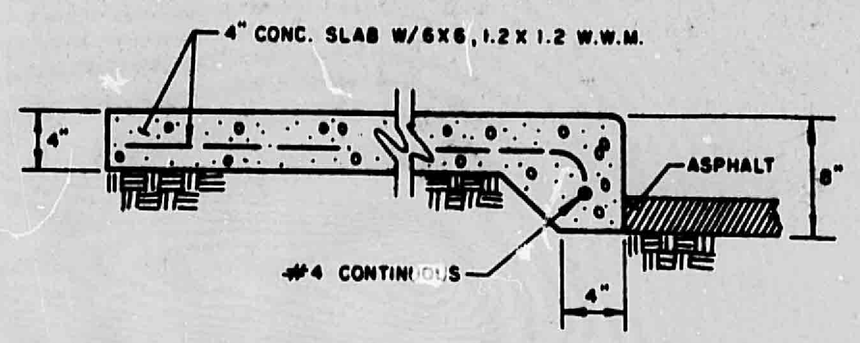
PRELIMINARY
NOT FOR CONSTRUCTION
APRIL 25,1988


REMOVE EXISTING ASPHALT
6" MEDIAN CURB AND GUTTER SEE CITY OF ABQ. STAND. SPEC'S FOR PUBLIC WORKS CONSTRUCTION 1986 EDITION
COMPACT SUBGRADE TO 95% OF MAXIMUM DRY DENSITY
SAWCUT EXISTING PAVEMENT PLACE NEW CURB AND GUTTER TO MATCH EXISTING PAVEMENT.
EXISTING ASPHALT

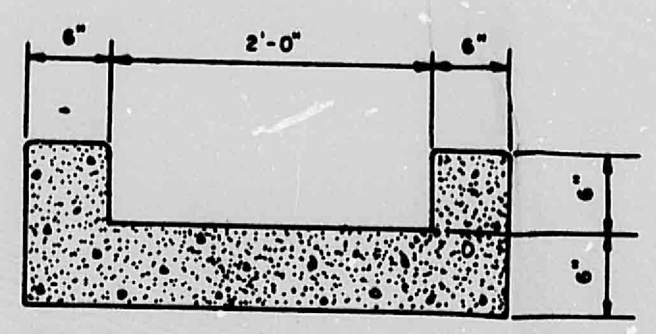
J TYP. SECTION: MEDIAN CURB MATCHING EXISTING PAVEMENT
NOT TO SCALE


4" CONC. SLAB W/6X6, 1.2 X 1.2 W.W.M
ASPHALT
4"
8"
#4 CONTINUOUS
4"

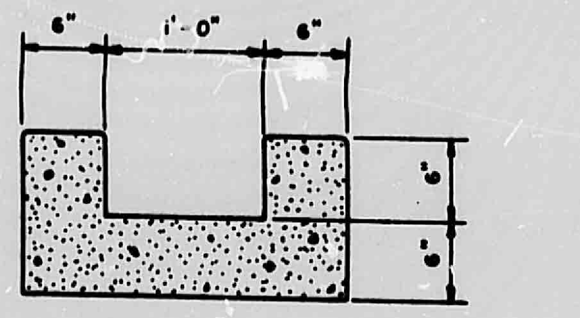
K SECTION: TURNDOWN SIDEWALK
NO SCALE


4" CONC. SLAB W/6X6, 1.2 X 1.2 W.W.M.
4"
ASPHALT
8"
#4 CONTINUOUS
4"

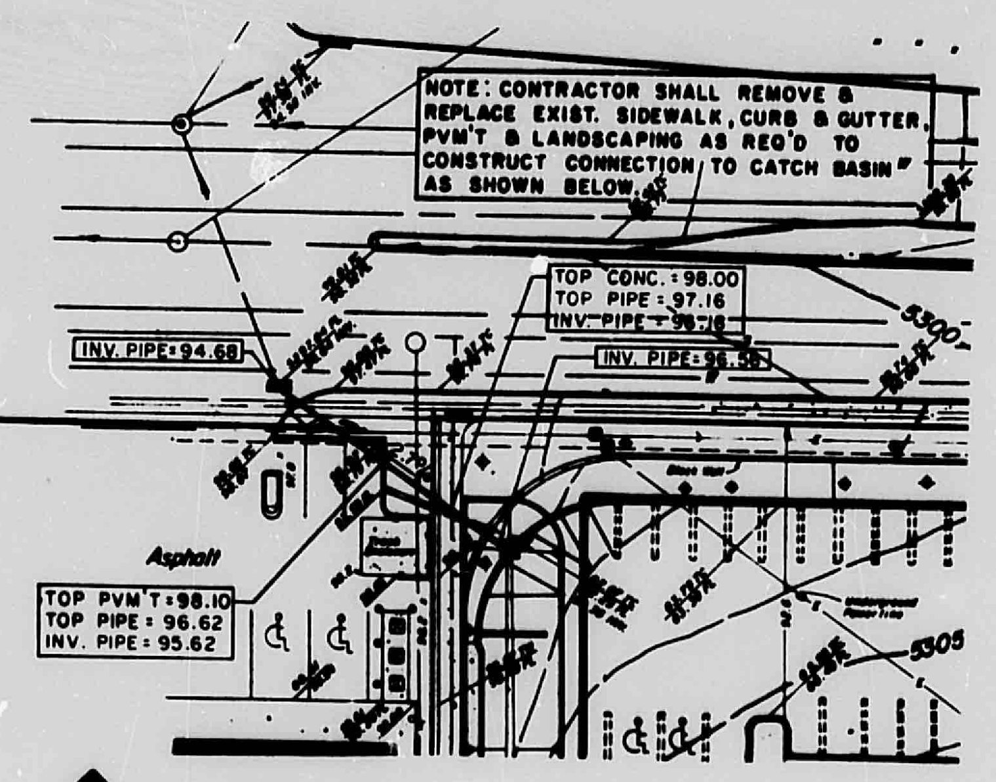
L SECTION: TURNDOWN SIDEWALK
NO SCALE



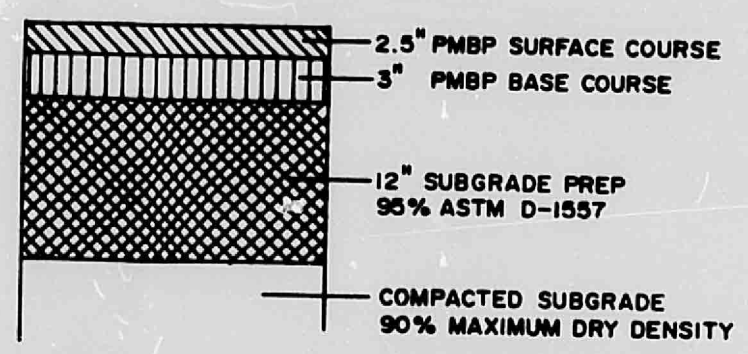
M CONCRETE RUNDOWN
SCALE: 1"=1'



N CONCRETE RUNDOWN
SCALE: 1"=1'

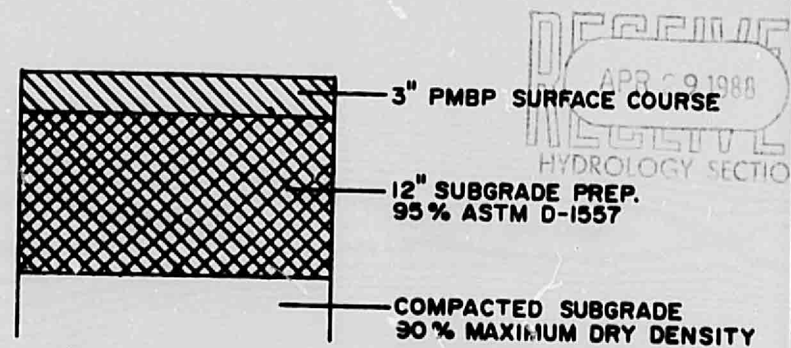

NOTE: CONTRACTOR SHALL REMOVE & REPLACE EXIST. SIDEWALK, CURB & GUTTER, PVM'T & LANDSCAPING AS REQ'D TO CONSTRUCT CONNECTION TO CATCH BASIN" AS SHOWN BELOW.
TOP CONC. = 98.00
TOP PIPE = 97.16
INV. PIPE = 96.16
INV. PIPE = 94.68
INV. PIPE = 96.56
5300
H
C-2B
Asphalt
TOP PVM'T = 98.10
TOP PIPE = 96.62
INV. PIPE = 95.62
5305

O PLAN VIEW:
DRAIN LINE TO EXISTING STORM INLET


2.5" PMBP SURFACE COURSE
3" PMBP BASE COURSE
12" SUBGRADE PREP 95% ASTM D-1557
COMPACTED SUBGRADE 90% MAXIMUM DRY DENSITY

P PAVING SECTION
HIGH USE AND HEAVY TRUCK
TRAFFIC AREAS

RECEIVED
APR 29 1988
HYDROLOGY SECTION


3" PMBP SURFACE COURSE
12" SUBGRADE PREP. 95% ASTM D-1557
COMPACTED SUBGRADE 90% MAXIMUM DRY DENSITY

Q PAVING SECTION
PARKING AND LIGHT VEHICLE
TRAFF!C AREAS

NO.	REVISIONS	BY	DATE

TOYS "R" US
DETAILS

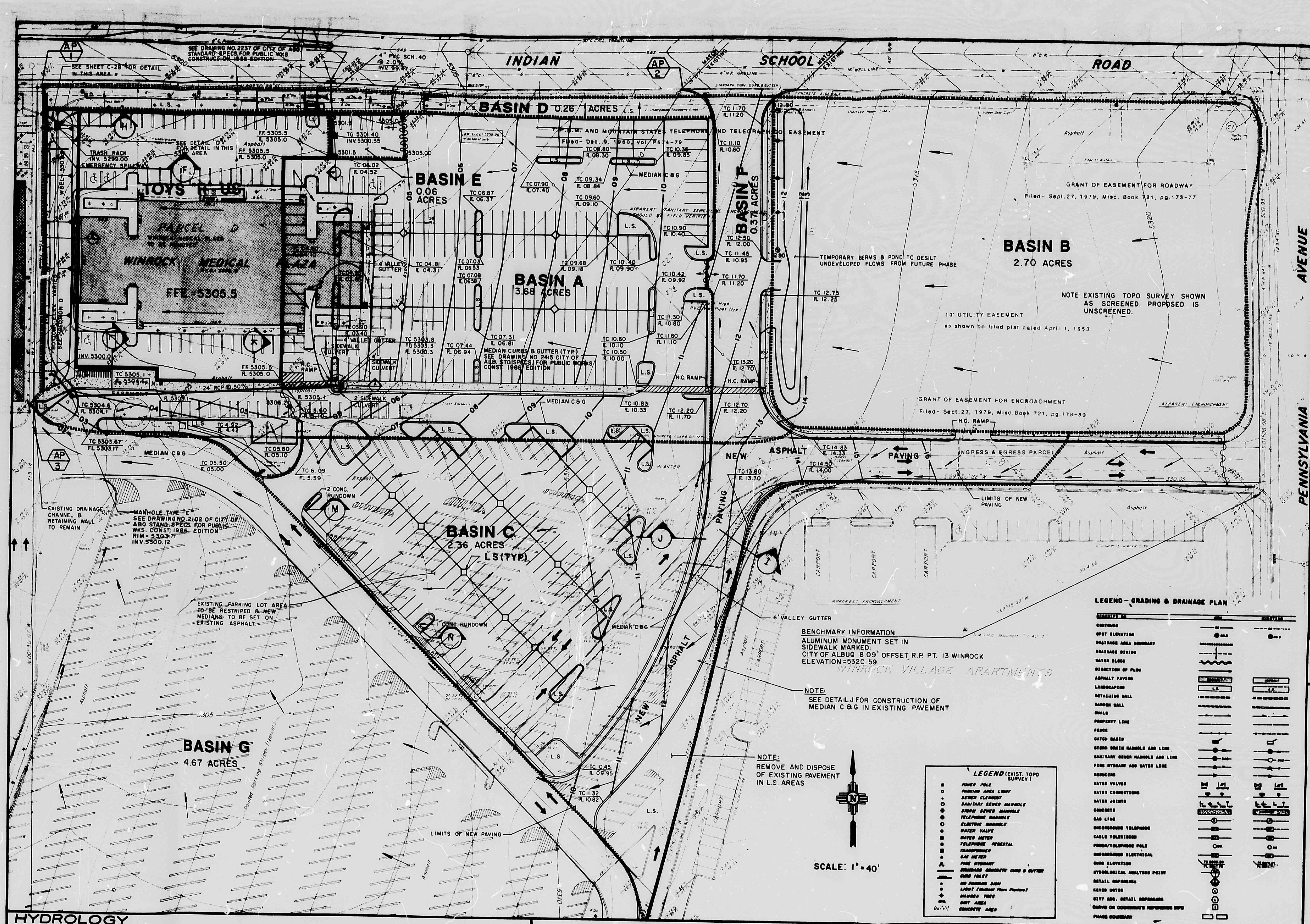
DOUGLAS W. COPELAND
NEW MEXICO
6578
REGISTERED PROFESSIONAL ENGINEER

EASTERLING & ASSOCIATES, INC.
CONSULTING ENGINEERS
5643 Paradise Blvd. N.W.
Albuquerque, New Mexico 87114

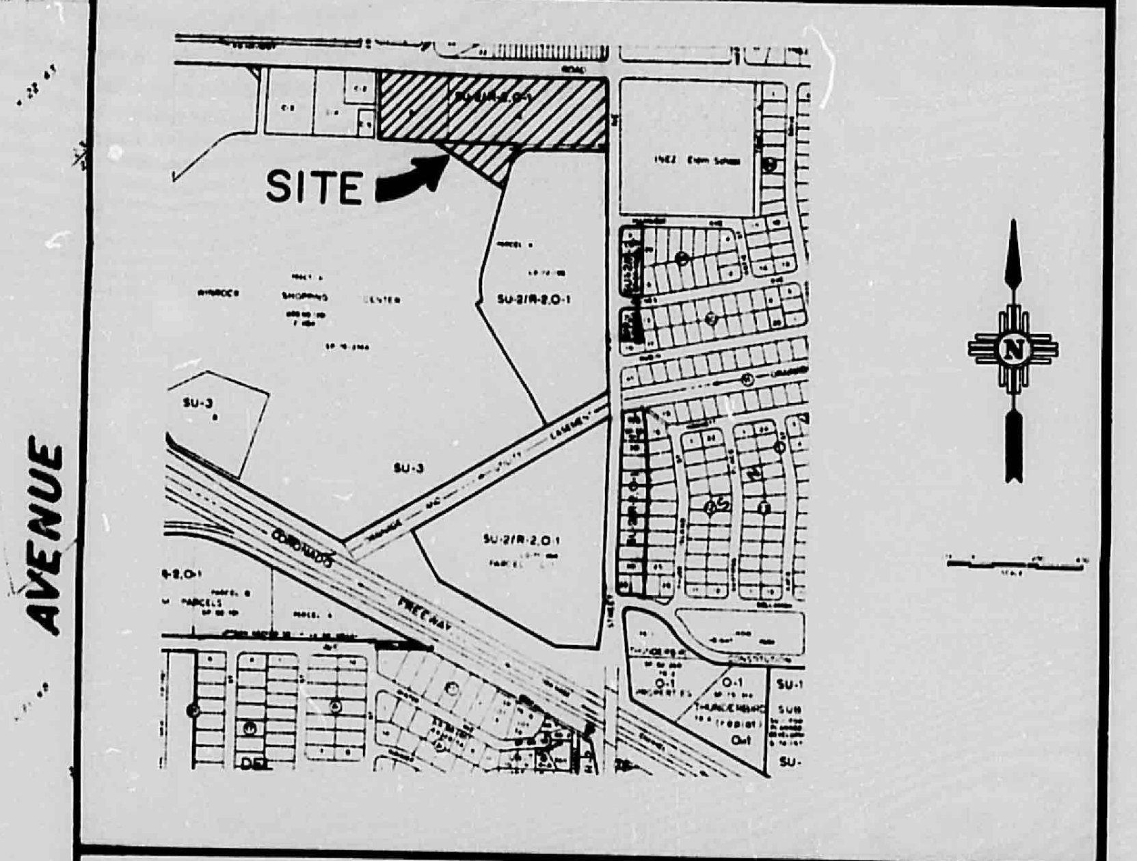
Designed: DLS	Drawn: BRG	Checked: DWC	Sheet C-2B
Job No: 2012	Date: APRIL, 1988		of

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

R# 21 DATE 6-24-93 OP E.J.P.
CITY OF ALBUQUERQUE
This microimage is certified
to be a complete and accurate
copy of the original as it
appears in the files of the
PUBLIC WORKS DEPARTMENT -
HYDROLOGY DIVISION
and was filmed in the normal
course of business.
The photographic processes
used meet the Basic Microfilm
Standards of the National
Micrographics Association
(MS115-1977).
Karen Arrow
CITY CLERK RECORDER
OFFICIAL SEAL
NORBERTA SANCHEZ
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires: MAY 8 1995
Norberta Sanchez

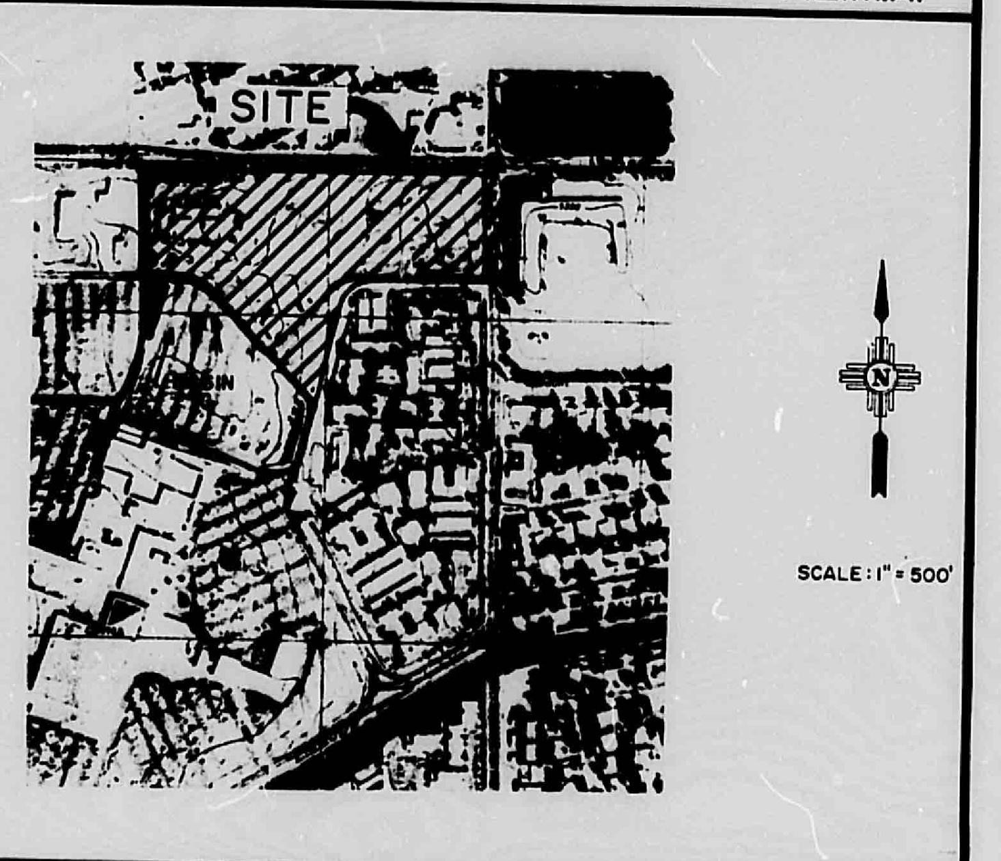

INDIAN SCHOOL ROAD
PENNSYLVANIA AVENUE
TOYS "R" US
PARCEL D
WINROCK MEDICAL PLAZA
FFE=5305.5
BASIN A 3.58 ACRES
BASIN B 2.70 ACRES
BASIN C 2.36 ACRES
BASIN D 0.26 ACRES
BASIN E 0.06 ACRES
BASIN F 0.37 ACRES
BASIN G 4.67 ACRES
GRANT OF EASEMENT FOR ROADWAY
GRANT OF EASEMENT FOR ENCROACHMENT
TEMPORARY BERMS & POND TO DESILT UNDEVELOPED FLOWS FROM FUTURE PHASE
NOTE: EXISTING TOPO SURVEY SHOWN AS SCREENED. PROPOSED IS UNSCREENED.
10' UTILITY EASEMENT
INGRESS & EGRESS PARCEL
WINROCK VILLAGE APARTMENTS
BENCHMARK INFORMATION: ALUMINUM MONUMENT SET IN SIDEWALK MARKED: CITY OF ALBUQ. 8.09' OFFSET R.P. PT. 13 WINROCK ELEVATION=5320.59
NOTE: SEE DETAIL J FOR CONSTRUCTION OF MEDIAN C&G IN EXISTING PAVEMENT
NOTE: REMOVE AND DISPOSE OF EXISTING PAVEMENT IN L.S. AREAS
EXISTING PARKING LOT AREA TO BE RESTRIPED & NEW MEDIANS TO BE SET ON EXISTING ASPHALT.
LIMITS OF NEW PAVING
SCALE: 1" = 40'
LEGEND - GRADING & DRAINAGE PLAN
LEGEND (EXIST. TOPO SURVEY)

VICINITY MAP ZONE ATLAS MAP NO. J-19



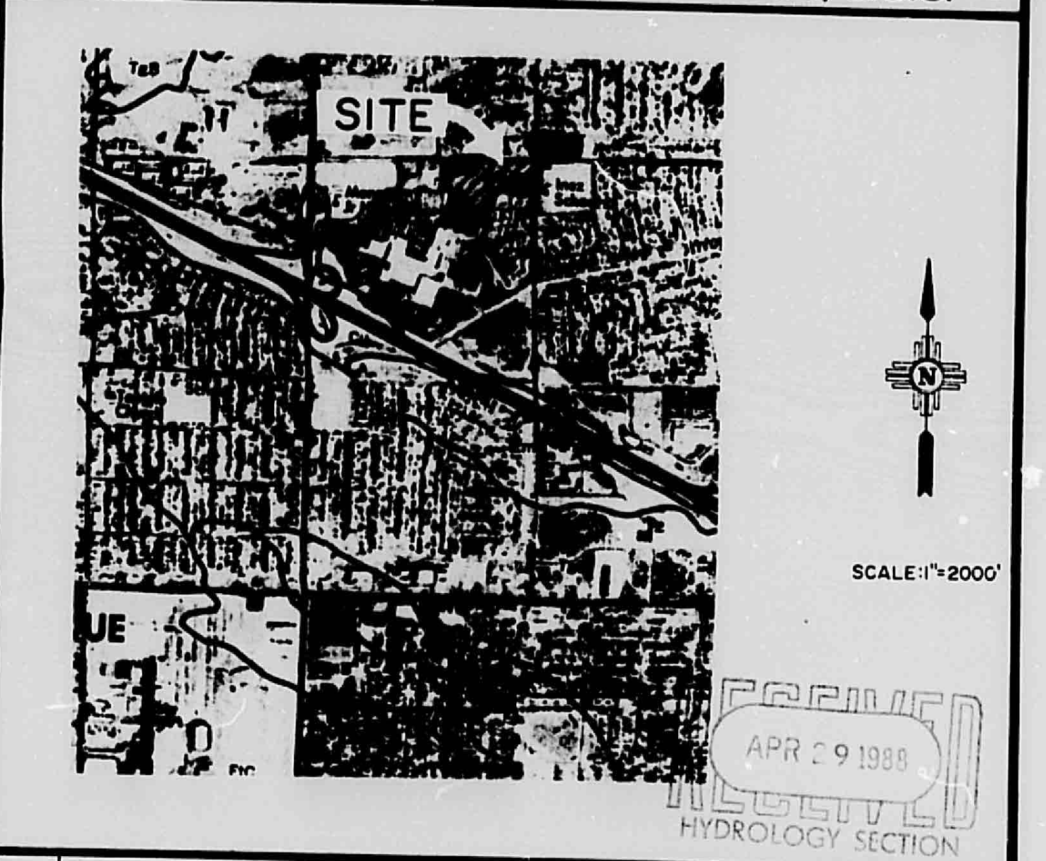
FLOOD HAZARD MAP & OFF-SITE FLOWS FROM F.E.M.A.

NO. 30


SITE
SCALE: 1" = 500'

SOILS MAP SOIL SURVEY U.S.D.A., S.C.S.

NO. 31


SITE
SCALE: 1" = 2000'

RECEIVED
APR 29 1988
HYDROLOGY SECTION

HYDROLOGY

HYDROLOGY SUMMARY SHEET FOR GRADING & DRAINAGE REPORT
PROJECT: TOYS R US (RESUBMITTAL PLAN NO. 2)

A.P. #	DESCRIPTION	AREA (ac.)	HT. (ft)	LGTH. (ft)	SLOPE (ft/ft)	Tc (min)	SOIL	CN	C	RUNOFF PARAMETERS FOR 2 YEAR EVENT P	I	V	Q	RUNOFF PARAMETERS FOR 10 YEAR EVENT P	I	V	Q	RUNOFF PARAMETERS FOR 100 YEAR EVENT P	I	V	Q
1	BASIN A+B+C+D+E+F+G UND	14.1	25	1100	0.023	<10	B	70.0	0.40	1.05	2.21	407	12.5	1.54	3.26	5330	18.4	2.35	4.97	19744	28.0
1	BASIN A+B+C+D+E+F+G EXI	14.1	25	1100	0.023	<10	B	89.0	0.70	1.05	2.21	16043	21.8	1.54	3.26	35363	32.2	2.35	4.97	67786	49.0
1	BASIN A+B+C+D+E+F+G DEV	14.1	15	515	0.029	<10	B	95.5	0.85	1.05	2.21	32571	26.6	1.54	3.26	57697	39.3	2.35	4.97	95506	59.8
1	BASIN A+D+E DEVELOPED	4.0	13	1080	0.012	<10	B	94.3	0.83	1.05	2.21	8277	7.3	1.54	3.26	15156	10.8	2.35	4.97	25664	16.4
2	BASIN B+F DEVELOPED	3.1	12	560	0.021	<10	B	96.0	0.87	1.05	2.21	7460	5.9	1.54	3.26	12996	8.7	2.35	4.97	21268	13.3
3	BASIN C+G DEVELOPED	7.0	12	700	0.017	<10	B	95.5	0.87	1.05	2.21	16239	13.6	1.54	3.26	28766	20.0	2.35	4.97	47618	30.5

P = 6-HOUR RAINFALL VOLUMES - (Ref. DPM PLATE 22.2 D-1)
I = RAINFALL INTENSITY - INCHES FOR 6-HOUR EVENT. (Ref. DPM PLATE 22.2 D-2)
V = VOLUME OF RUNOFF - CUBIC FEET
Q = RATE OF RUNOFF - CUBIC FEET PER SECOND

POND VOLUME CALULATIONS

MAIN SECTION
LENGTH = 216'
AREA OF NORTH END = 45 S.F.
AREA OF SOUTH END = 42 S.F.
DIFFERENCE = 3 S.F.

216' x 45 S.F. = 9,720 C.F.
SLOPE DEDUCTION
2[illegible] x 3 S.F. = 648 C.F. / 2 = 324 C.F.
9,396 C.F.

END SECTIONS 1/3h(B+b+√B+b) B = Area of top, b = Area of bottom
SOUTH END
1/3 3.5 (283.5+19.6) + √283.5+19.6 = 373.9 ÷ 2 = 186.9
NORTH END
1/3 4.5 (283.5 + .79 + √283.5 + .79 = 426.4 ÷ 2 = 213.2 C.F.

9396 C.F.
186.9 C.F.
213.2 C.F.
TOTAL 9,796 C.F.

BY: DOUGLAS W. COPELAND DATE: 4/27/88

SOILS INFORMATION FROM SOIL SURVEY U.S.D.A., S.C.S.

SOIL SERIES AND MAP SYMBOLS	DEGREE AND KIND OF LIMITATIONS FOR: SEPTIC TANK ABSORPTION FIELDS	SEWAGE LAGOONS	SHALLOW EXCAVATIONS	DWELLINGS WITHOUT BASEMENTS	SANITARY LANDFILL (TRENCH TYPE)	LOCAL ROAD AND STREETS	SUITABILITY AS SOURCE OF —: ROAD FILL	SAND	GRAVEL	TOPSOIL	SOIL FEATURES AFFECTING —: POND RESERVOIR AREAS	DIKES, LEVEES, AND OTHER EMBANKMENTS	HYDROLOGIC SOIL GROUP
*Embudo: EmB, EtC. For Tijeras part of EtC, see Tijeras series.	Slight ³	Severe: seepage.	Moderate: ³ small stones.	Slight ³	Severe: seepage.	Slight	Good	Poor: excess fines.	Poor: excess fines.	Poor: small stones.	Seepage	Piping; compressible	B

EtC—Embudo-Tijeras complex, 0 to 9 percent slopes. This mapping unit is about 50 percent an Embudo gravelly fine sandy loam, 0 to 5 percent slopes, and about 35 percent a Tijeras gravelly fine sandy loam that has 1 to 9 percent slopes.

The Embudo soil is in drainageways and depressions, and the Tijeras soil is on low ridges in narrow undulations. The Tijeras soil has the profile described as representative of the Tijeras series. On both soils, runoff is medium and the hazard of water erosion is moderate.

Included in this unit in mapping are areas of Tesajo, Millett, and Wink soils, which make up about 15 percent of the unit.

This mapping unit is used for community development, watershed, wildlife habitat, and range. The Embudo part of this unit is subject to flooding. Control of moisture is required for proper compaction. Dryland capability subclass VIIe; native plant community 4.

LEGAL DESCRIPTION:

PORTIONS OF PARCELS A & D AND ALL OF PARCELS C-8 AND E OF WINROCK CENTER ADDITION, CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

NO	REVISIONS	BY	DATE
⚠1	REVISED PLAN TO SHOW DETAIL GRADES & HYDROLOGY	DWC	4/27/88

TOYS "R" US

GRADING AND DRAINAGE PLAN

Rev. 4/27/88
DOUGLAS W. COPELAND
REGISTERED PROFESSIONAL ENGINEER

EASTERLING & ASSOCIATES, INC.
CONSULTING ENGINEERS
5643 Paradise Blvd. N.W.
Albuquerque, New Mexico 87114

Designed: DWC	Drawn: JEL	Checked: DWC	Sheet
Job No: 2011.2	Date: MAR. 1988		of C-2A

THIS PLAN SHOT TWICE
ONCE ON LIGHT AND
ONCE ON DARK.

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

R# 21 DATE 6-24-93 OP E.J.P.

CITY OF ALBUQUERQUE

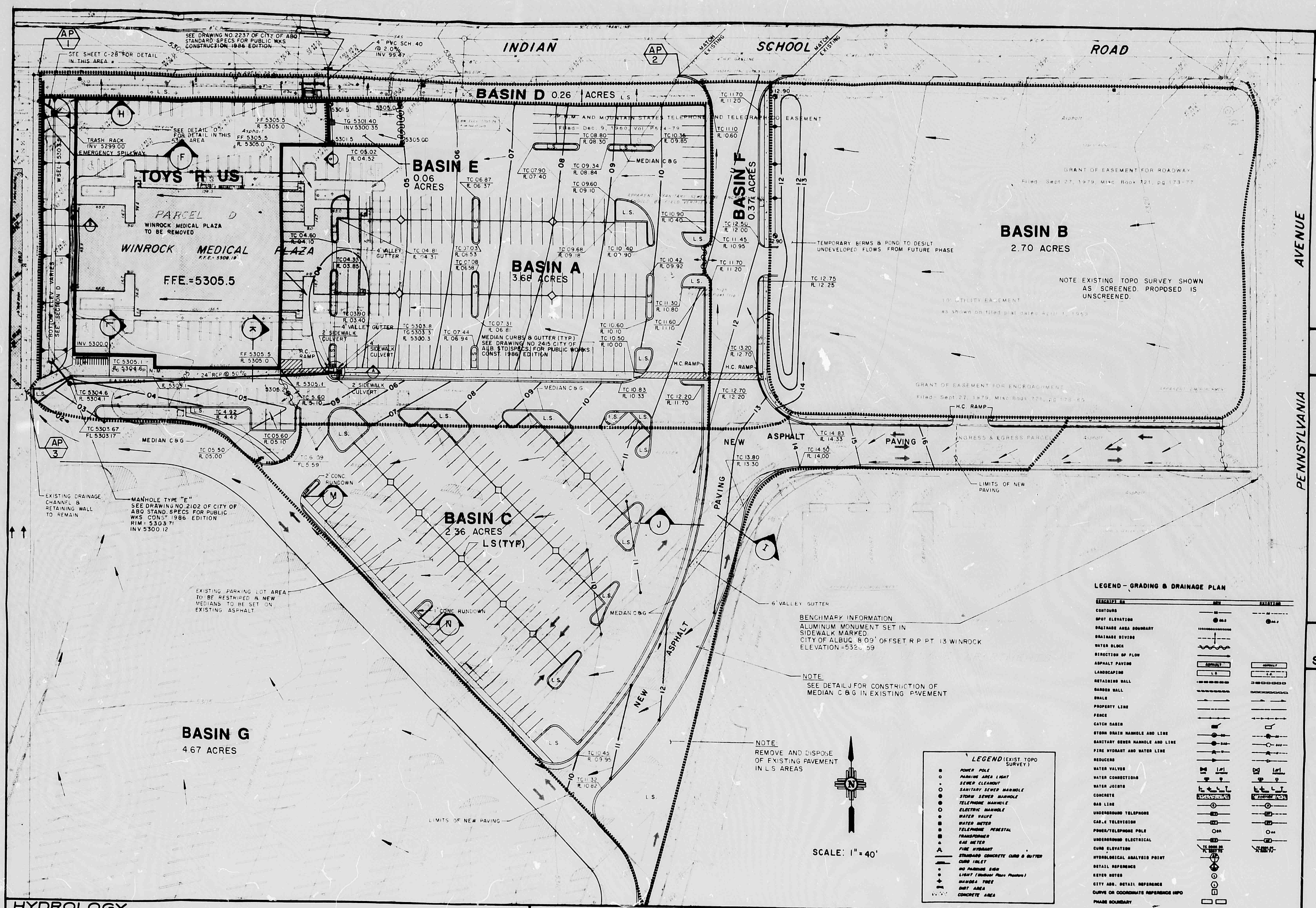
This microimage is certified to be a complete and accurate copy of the original as it appears in the files of the PUBLIC WORKS DEPARTMENT - HYDROLOGY DIVISION and was filmed in the normal course of business. The photographic processes used meet the Basic Microfilm Standards of the National Micrographics Association (MS115-1977).

Karen Acree
CITY CLERK RECORDER

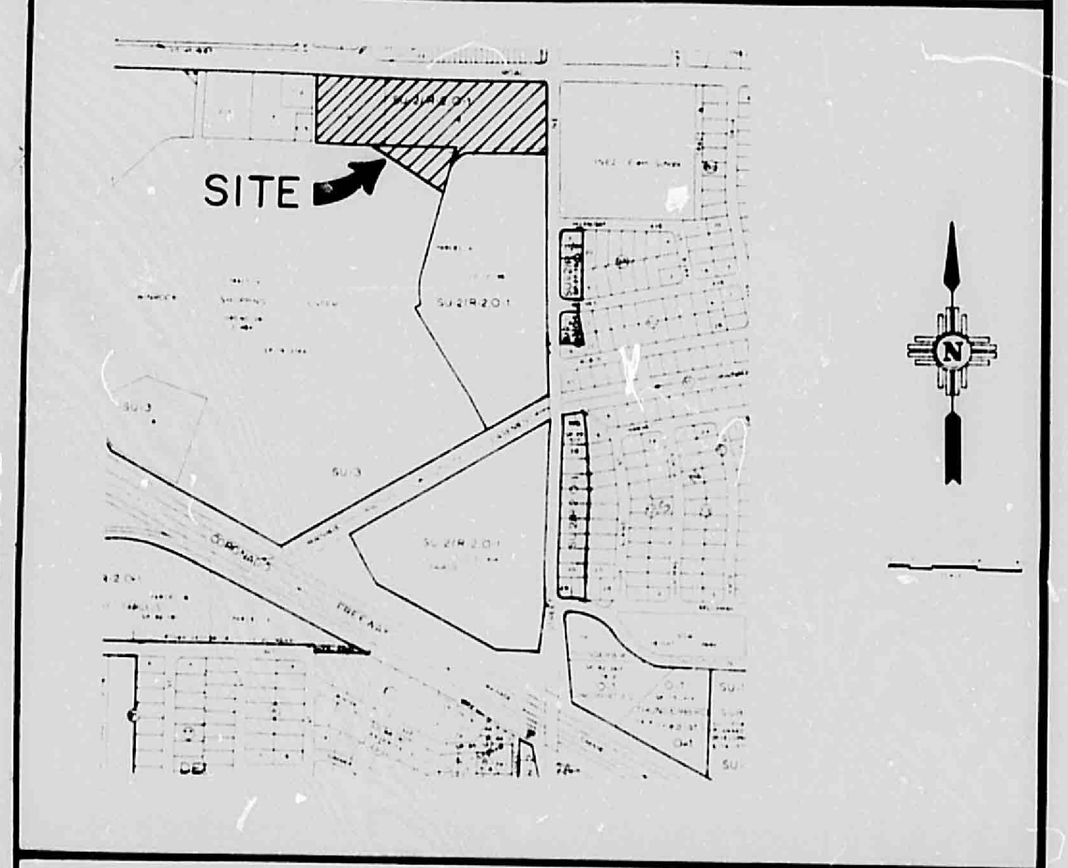
OFFICIAL SEAL
NORBERTA SANCHEZ
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires: MAY 8 1995
Norberta Sanchez

D 24 C 20 B 16 A 12 CITY OF ALBUQUERQUE C D

Hydrology File No. J-19/D048 2 of 4

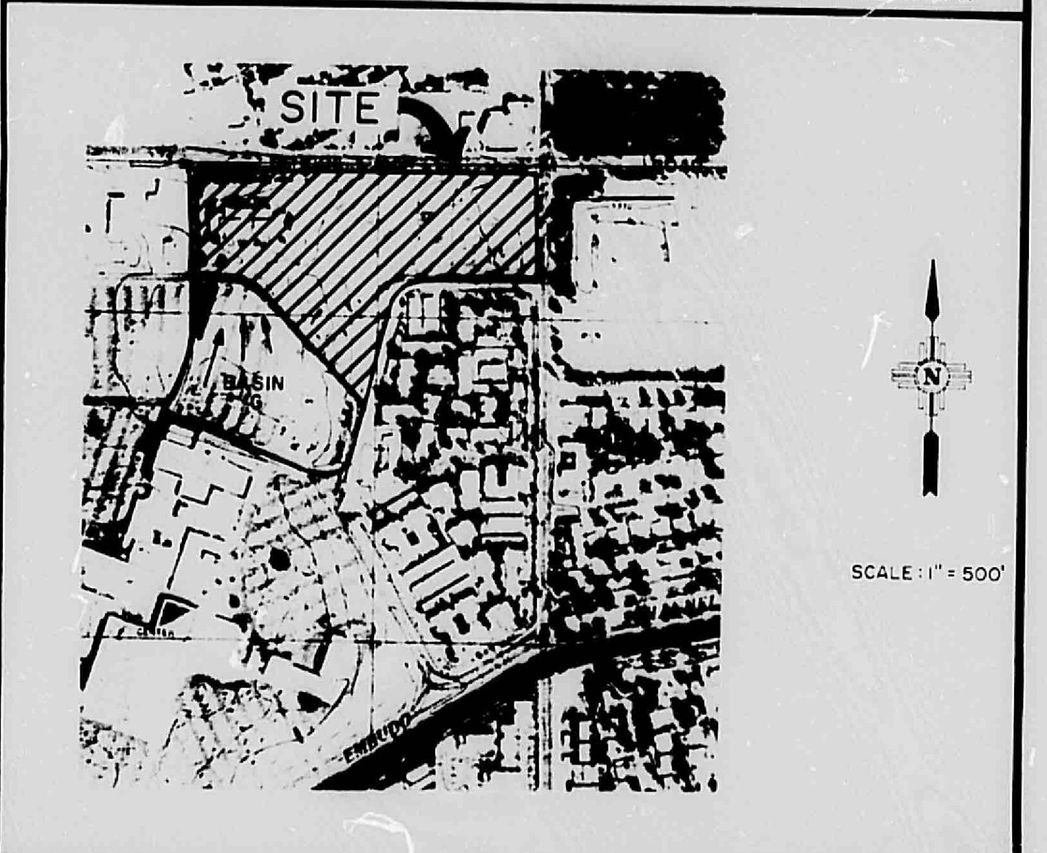

INDIAN SCHOOL ROAD
PENNSYLVANIA AVENUE
BASIN D 0.26 ACRES
BASIN E 0.06 ACRES
BASIN A 3.68 ACRES
BASIN F 0.37 ACRES
BASIN B 2.70 ACRES
BASIN C 2.36 ACRES
BASIN G 4.67 ACRES
TOYS "R" US
PARCEL D
WINROCK MEDICAL PLAZA
F.F.E.=5305.5
TEMPORARY BERMS & POND TO DESILT UNDEVELOPED FLOWS FROM FUTURE PHASE
NOTE: EXISTING TOPO SURVEY SHOWN AS SCREENED. PROPOSED IS UNSCREENED.
GRANT OF EASEMENT FOR ROADWAY
NEW ASPHALT PAVING
LIMITS OF NEW PAVING
EXISTING DRAINAGE CHANNEL & RETAINING WALL TO REMAIN
MANHOLE TYPE "E" SEE DRAWING NO. 2102 OF CITY OF ABQ STAND. SPECS FOR PUBLIC WKS CONST. 1986 EDITION
EXISTING PARKING LOT AREA TO BE RESTRIPED & NEW MEDIANS TO BE SET ON EXISTING ASPHALT
BENCHMARK INFORMATION: ALUMINUM MONUMENT SET IN SIDEWALK MARKED "CITY OF ALBUQ. 8-09" OFFSET R.P. PT. 13 WINROCK ELEVATION=5324.59
NOTE: SEE DETAIL J FOR CONSTRUCTION OF MEDIAN C&G IN EXISTING PAVEMENT
NOTE: REMOVE AND DISPOSE OF EXISTING PAVEMENT IN L.S. AREAS
SCALE: 1"=40'
LEGEND - GRADING & DRAINAGE PLAN
LEGEND (EXIST. TOPO SURVEY)

VICINITY MAP ZONE ATLAS MAP NO. J-19



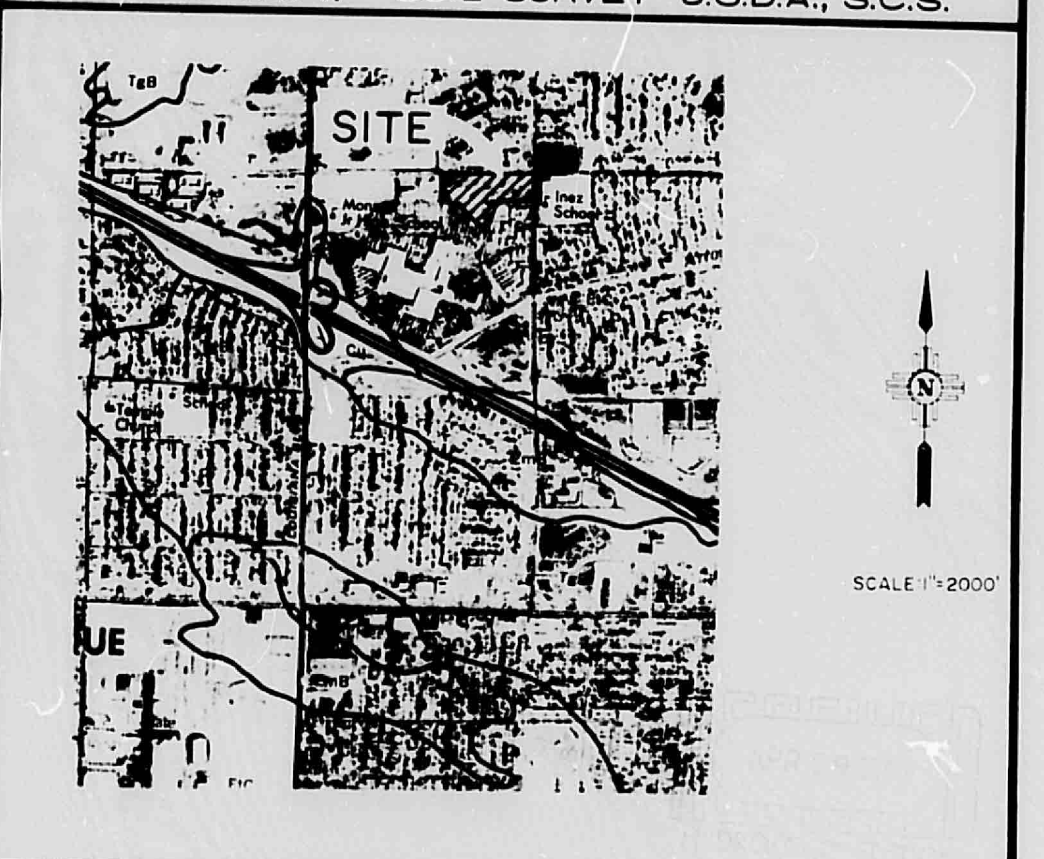
NO. 30

FLOOD HAZARD MAP & OFF-SITE FLOWS FROM F.E.M.A.


SITE
SCALE 1"=500'

NO. 31

SOILS MAP SOIL SURVEY U.S.D.A., S.C.S.


SITE
SCALE 1"=2000'

HYDROLOGY

HYDROLOGY SUMMARY SHEET FOR GRADING & DRAINAGE REPORT
PROJECT TOYS R US (RESUBMITTAL PLAN NO. 2)

A P #	DESCRIPTION	AREA (ac)	HT (ft)	LGTH (ft)	SLOPE (ft/ft)	Tc (min)	SOIL	CN	C	RUNOFF PARAMETERS FOR 2 YEAR EVENT P	I	V	Q	RUNOFF PARAMETERS FOR 10 YEAR EVENT P	I	V	Q	RUNOFF PARAMETERS FOR 100 YEAR EVENT P	I	V	Q
1	BASIN A+B+C+D+E+F+G UND	14.1	25	1100	0.023	<10	B	70.0	0.40	1.05	2.21	407	12.5	1.54	3.26	5330	18.4	2.35	4.97	19744	28.0
1	BASIN A+B+C+D+E+F+G EXI	14.1	25	1100	0.023	<10	B	89.0	0.70	1.05	2.21	16043	21.8	1.54	3.26	35363	32.2	2.35	4.97	67786	49.0
1	BASIN A+B+C+D+E+F+G DEV	14.1	15	515	0.029	<10	B	95.5	0.85	1.05	2.21	32571	26.6	1.54	3.26	57697	39.3	2.35	4.97	95506	59.6
1	BASIN A+D+E DEVELOPED	4.0	13	1080	0.012	<10	B	94.5	0.83	1.05	2.21	8277	7.3	1.54	3.26	15156	10.8	2.35	4.97	25664	16.4
2	BASIN B+F DEVELOPED	3.1	12	560	0.021	<10	B	96.0	0.87	1.05	2.21	7460	5.9	1.54	3.26	12996	8.7	2.35	4.97	21268	13.3
3	BASIN C+G DEVELOPED	7.0	12	700	0.017	<10	B	95.5	0.87	1.05	2.21	16239	13.6	1.54	3.26	28766	20.0	2.35	4.97	47618	30.5

P = 6-HOUR RAINFALL VOLUMES - (Ref. DPM PLATE 22.2 D-1)
I = RAINFALL INTENSITY - INCHES FOR 6-HOUR EVENT (Ref. DPM PLATE 22.2 D-2)
V = VOLUME OF RUNOFF - CUBIC FEET
Q = RATE OF RUNOFF - CUBIC FEET PER SECOND

POND VOLUME CALULATIONS

MAIN SECTION
LENGTH = 216'
AREA OF NORTH END = 45 S.F.
AREA OF SOUTH END = 42 S.F.
DIFFERENCE = 3 S.F.

216' x 45 S.F. = 9,720 C.F.
SLOPE DEDUCTION
216' x 3 S.F. = 648 C.F. / 2 = 324 C.F.
9,396 C.F.

END SECTIONS 1/3 h (B + b + √(B·b)) B = Area of top, b = Area of Bottom
SOUTH END
1/3 3.5 (283.5 + 19.6) + √(283.5 · 9.6) = 373.9 ÷ 2 = 186.9
NORTH END
1/3 4.5 (283.5 + 79 + √(283.5 · 79) = 426.4 ÷ 2 = 213.2 C.F.

9396 C.F.
186.9 C.F.
213.2 C.F.
TOTAL 9,796 C.F.

BY DOUGLAS W. COPELAND DATE 4/27/88

SOILS INFORMATION FROM SOIL SURVEY U.S.D.A., S.C.S.

SOIL SERIES AND MAP SYMBOLS	DEGREE AND KIND OF LIMITATIONS FOR: SEPTIC TANK ABSORPTION FIELDS	SEWAGE LAGOONS	SHALLOW EXCAVATIONS	DWELLINGS WITHOUT BASEMENTS	SANITARY LANDFILL (TRENCH TYPE)	LOCAL ROAD AND STREETS	SUITABILITY AS SOURCE OF —: ROAD FILL	SAND	GRAVEL	TOPSOIL	SOIL FEATURES AFFECTING —: POND RESERVOIR AREAS	DIKES, LEVEES, AND OTHER EMBANKMENTS	HYDROLOGIC SOIL GROUP
*Embudo: EmB, EtC. For Tijeras part of EtC, see Tijeras series.	Slight¹	Severe: seepage.	Moderate:¹ small stones.	Slight¹	Severe: seepage.	Slight	Good	Poor: excess fines.	Poor: excess fines.	Poor: small stones.	Seepage	Piping, compressible	B

EtC—Embudo-Tijeras complex, 0 to 9 percent slopes. This mapping unit is about 50 percent an Embudo gravelly fine sandy loam, 0 to 5 percent slopes, and about 35 percent a Tijeras gravelly fine sandy loam that has 1 to 9 percent slopes.

The Embudo soil is in drainageways and depressions, and the Tijeras soil is on low ridges in narrow undulations. The Tijeras soil has the profile described as representative of the Tijeras series. On both soils, runoff is medium and the hazard of water erosion is moderate.

Included in this unit in mapping are areas of Tesajo, Millett, and Wink soils, which make up about 15 percent of the unit.

This mapping unit is used for community development, watershed, wildlife habitat, and range. The Embudo part of this unit is subject to flooding. Control of moisture is required for proper compaction. Dryland capability subclass VIIe; native plant community 4.

LEGAL DESCRIPTION:

PORTIONS OF PARCELS A & D AND ALL OF PARCELS C-8 AND E OF WINROCK CENTER ADDITION, CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

NO	REVISIONS	BY	DATE
△	REVISED PLAN TO SHOW DETAIL GRADES & HYDROLOGY	DWC	4/27/88

TOYS "R" US

GRADING AND DRAINAGE PLAN

Rev. 4/27/88
DOUGLAS W. COPELAND
NEW MEXICO
8498
REGISTERED PROFESSIONAL ENGINEER

EASTERLING & ASSOCIATES, INC.
CONSULTING ENGINEERS
5643 Paradise Blvd. N.W.
Albuquerque, New Mexico 87114

Designed DWC	Drawn JEL	Checked DWC	Sheet
Job No. 2011.2	Date MAR. 1985		of C-2A

THIS PLAN SHOT TWICE
ONCE ON LIGHT AND
ONCE ON DARK.

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

R# 21 DATE 2-24-93 OP LP

CITY OF ALBUQUERQUE

This microimage is certified to be a complete and accurate copy of the original as it appears in the files of the PUBLIC WORKS DEPARTMENT - HYDROLOGY DIVISION and was filmed in the normal course of business. The photographic processes used meet the Basic Microfilm Standards of the National Micrographics Association (MS115-1977).

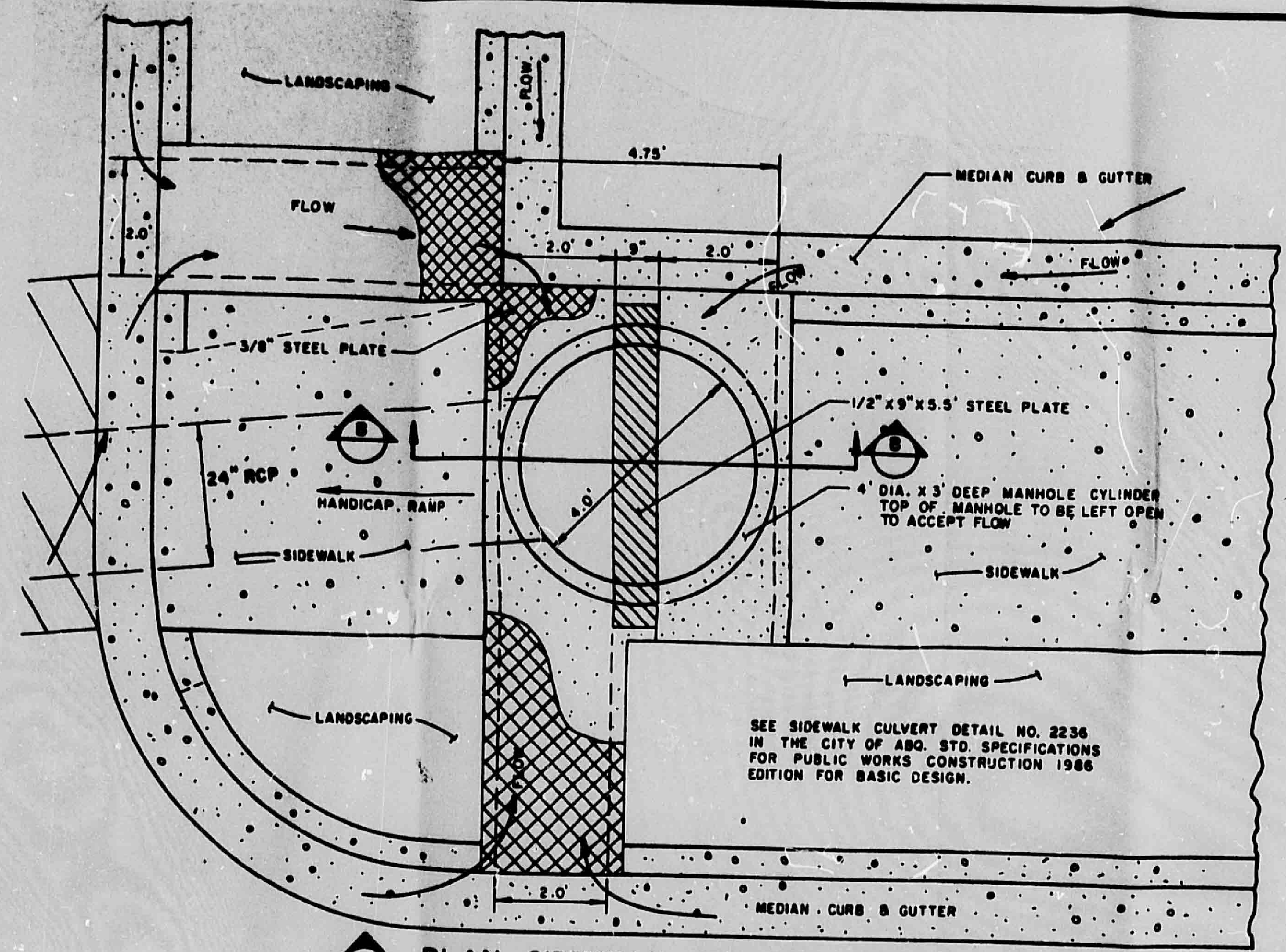
Karen Reeves
CITY CLERK RECORDER

OFFICIAL SEAL
NORBERTA SANCHEZ
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires MAY 8 1995
Norberta Sanchez

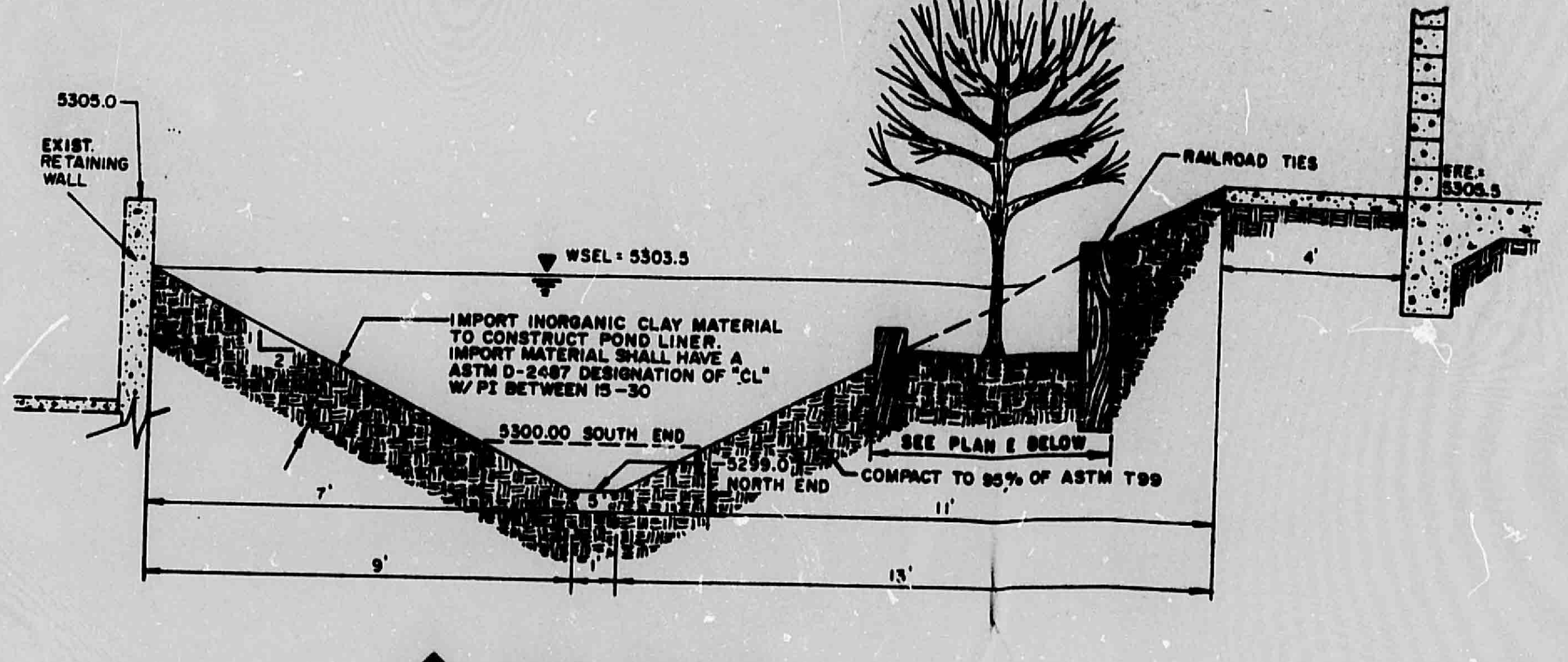
D 24 C 20 B 16 A 12

CITY OF ALBUQUERQUE

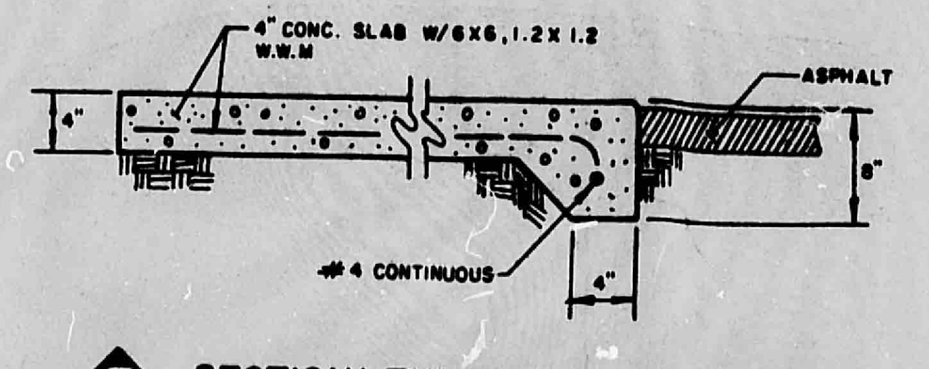
C D


LANDSCAPING
FLOW
4.75'
MEDIAN CURB & GUTTER
2.0'
9"
2.0'
FLOW
3/8" STEEL PLATE
1/2" X 9" X 5.5' STEEL PLATE
B
24" RCP
HANDICAP. RAMP
4.0'
4' DIA. X 3' DEEP MANHOLE CYLINDER TOP OF MANHOLE TO BE LEFT OPEN TO ACCEPT FLOW
SIDEWALK
SIDEWALK
LANDSCAPING
LANDSCAPING
SEE SIDEWALK CULVERT DETAIL NO. 2236 IN THE CITY OF ABQ. STD. SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION 1986 EDITION FOR BASIC DESIGN.
2.0'
MEDIAN CURB & GUTTER

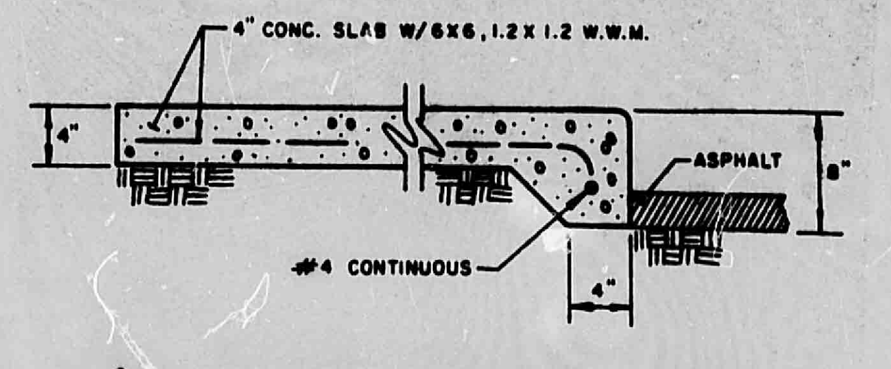
A PLAN - SIDEWALK CULVERT DETAILS
NO SCALE


5305.0
EXIST. RETAINING WALL
WSEL = 5303.5
IMPORT INORGANIC CLAY MATERIAL TO CONSTRUCT POND LINER. IMPORT MATERIAL SHALL HAVE A ASTM D-2487 DESIGNATION OF "CL" W/ PI BETWEEN 15-30
5300.00 SOUTH END
5299.0 NORTH END
SEE PLAN E BELOW
COMPACT TO 95% OF ASTM T99
RAILROAD TIES
ELE. = 5305.5
4'
7'
5'
11'
9'
1'
13'

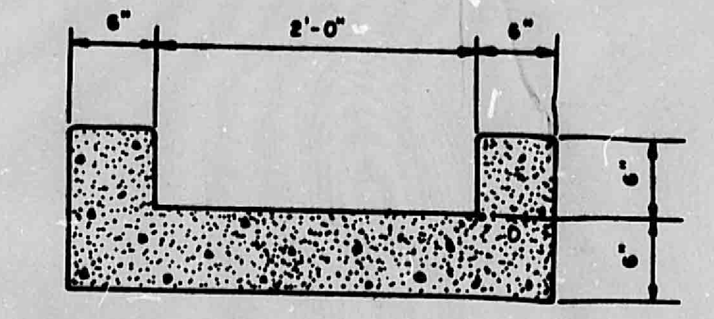
D POND SECTION
NO SCALE


4" CONC. SLAB W/6X6, 1.2 X 1.2 W.W.M
ASPHALT
4"
8"
#4 CONTINUOUS
4"

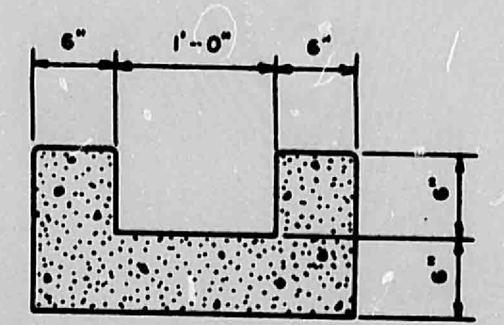
K SECTION: TURNDOWN SIDEWALK
NO SCALE


4" CONC. SLAB W/6X6, 1.2 X 1.2 W.W.M.
ASPHALT
4"
8"
#4 CONTINUOUS
4"

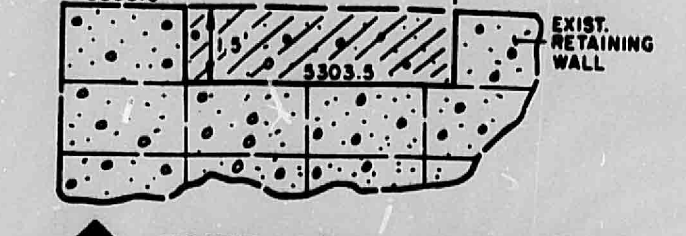
L SECTION: TURNDOWN SIDEWALK
NO SCALE



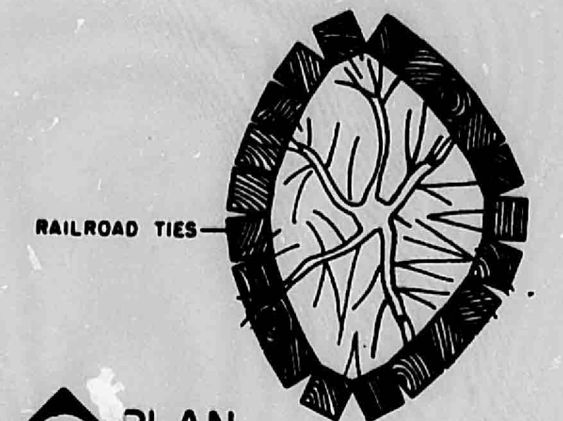
M CONCRETE RUNDOWN
SCALE: 1"=1'



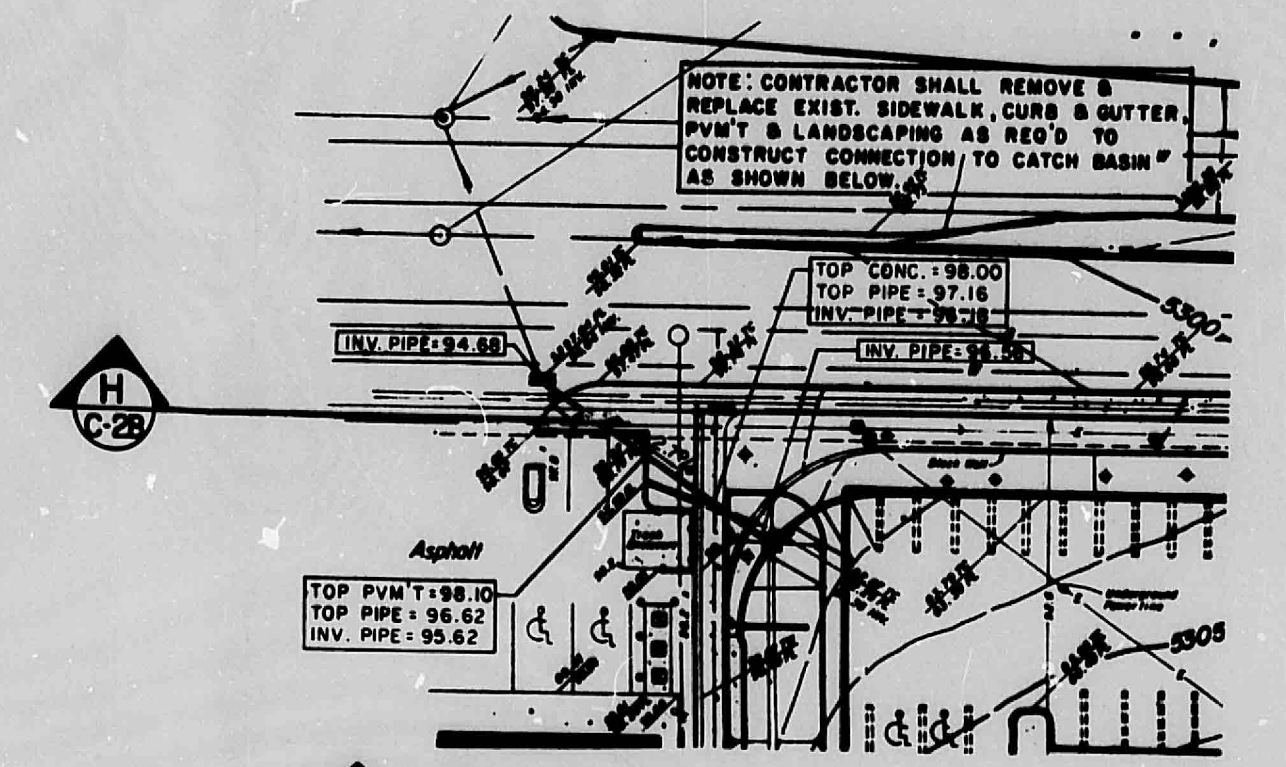
N CONCRETE RUNDOWN
SCALE: 1"=1'


10'
20'
EMERGENCY SPILLWAY
5305.0
1.5'
5303.5
EXIST. RETAINING WALL

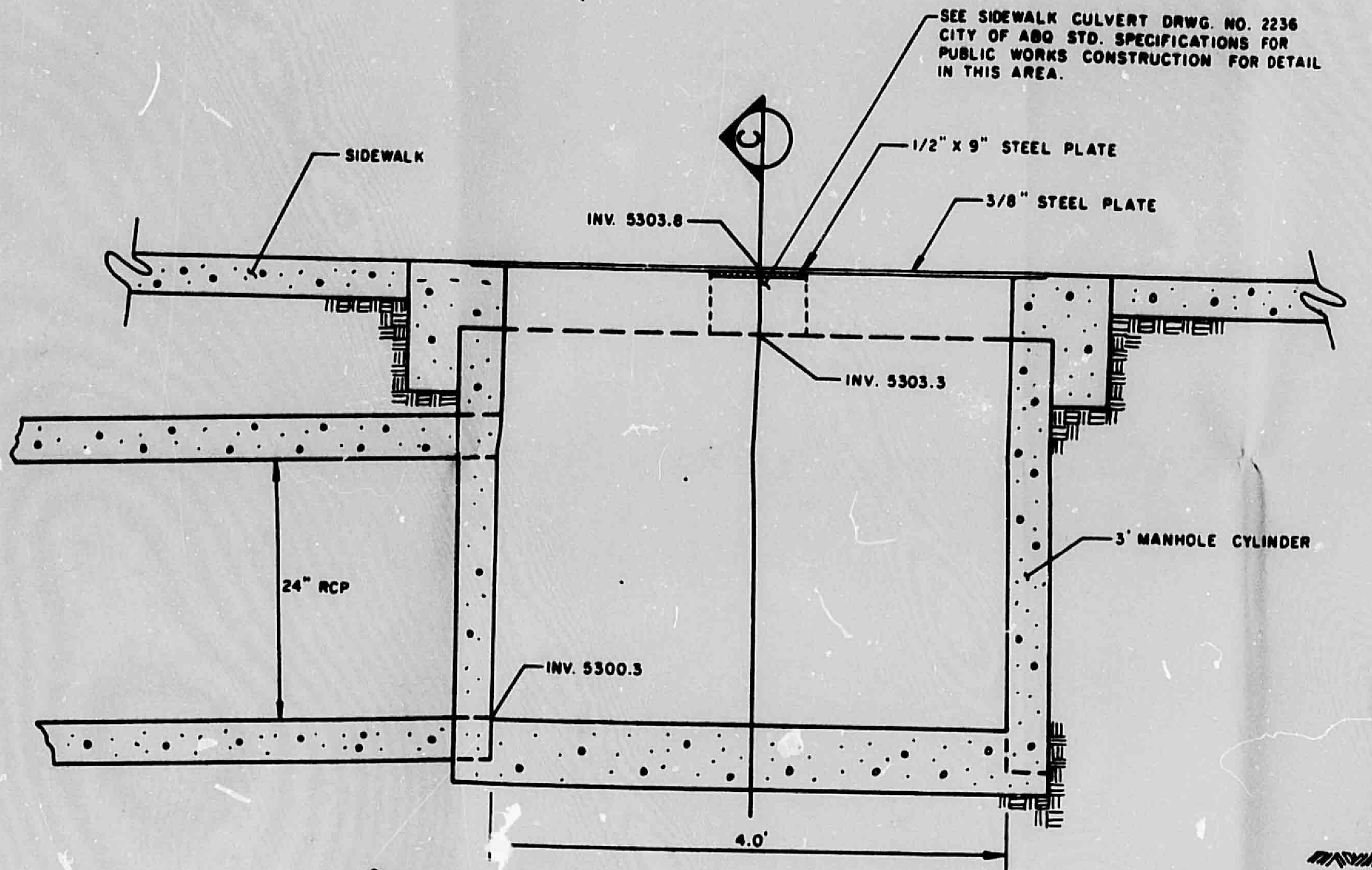
F EMERGENCY SPILLWAY
NO SCALE


RAILROAD TIES

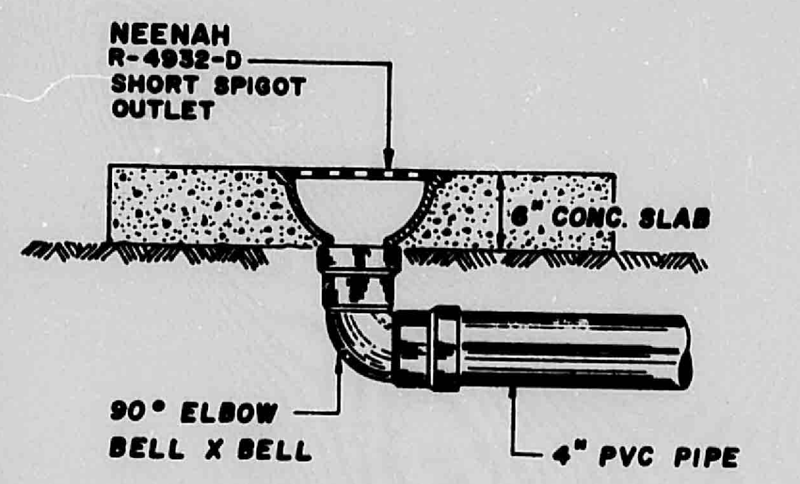
E PLAN


NOTE: CONTRACTOR SHALL REMOVE & REPLACE EXIST. SIDEWALK, CURB & GUTTER, PVM'T & LANDSCAPING AS REQ'D TO CONSTRUCT CONNECTION TO CATCH BASIN AS SHOWN BELOW.
TOP CONC. = 98.00
TOP PIPE = 97.16
INV. PIPE = 96.16
INV. PIPE = 94.68
INV. PIPE = 96.56
5300
H
C-2B
Asphalt
TOP PVM'T = 98.10
TOP PIPE = 96.62
INV. PIPE = 95.62
5305

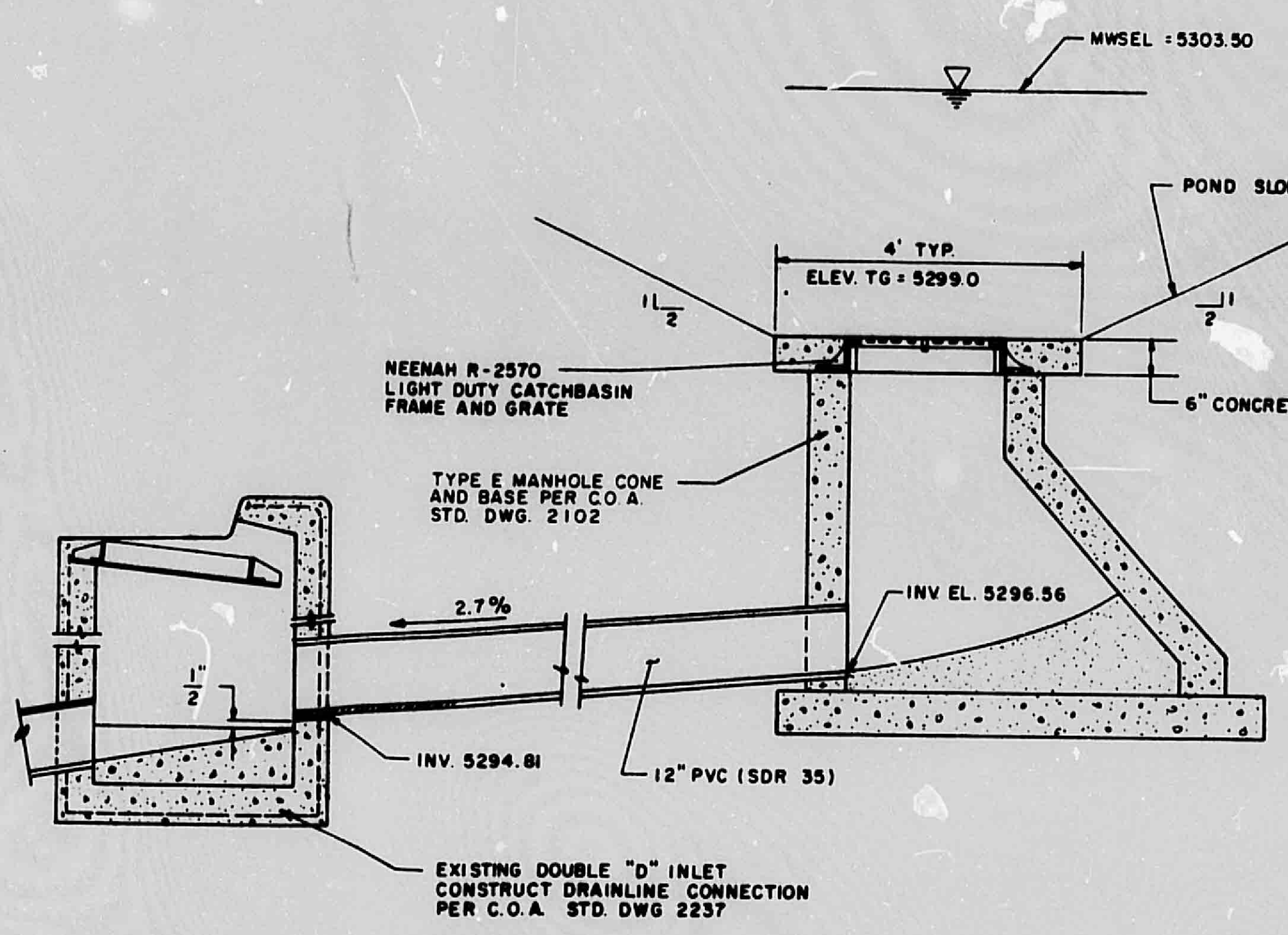
O PLAN VIEW:
DRAIN LINE TO EXISTING STORM INLET


SEE SIDEWALK CULVERT DRWG. NO. 2236 CITY OF ABQ STD. SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION FOR DETAIL IN THIS AREA.
C
1/2" X 9" STEEL PLATE
3/8" STEEL PLATE
SIDEWALK
INV. 5303.8
INV. 5303.3
3' MANHOLE CYLINDER
24" RCP
INV. 5300.3
4.0'

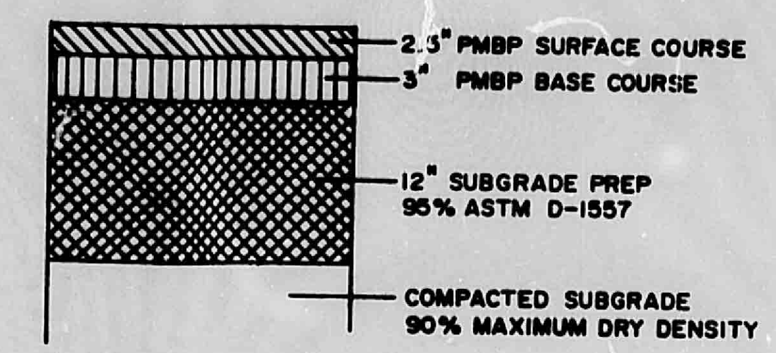
B SECTION
NO SCALE


NEENAH R-4932-D SHORT SPIGOT OUTLET
6" CONC. SLAB
90° ELBOW BELL X BELL
4" PVC PIPE

G DRAIN DETAIL
SCALE: 1"=1'

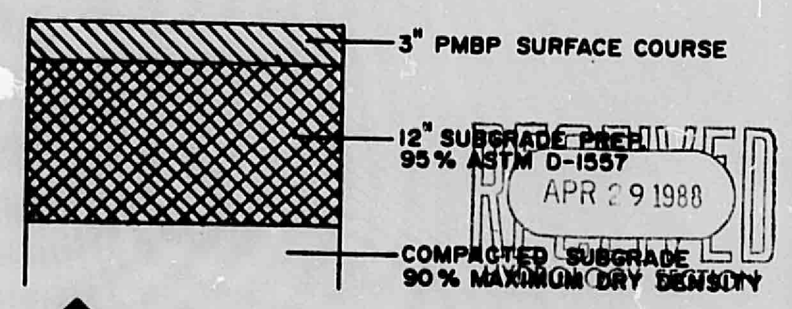

MWSEL = 5303.50
POND SLOPE
4' TYP.
ELEV. TG = 5299.0
1
2
NEENAH R-2570 LIGHT DUTY CATCHBASIN FRAME AND GRATE
6" CONCRETE COLLAR
TYPE E MANHOLE CONE AND BASE PER C.O.A. STD. DWG. 2102
2.7%
INV EL. 5296.56
1/2"
INV. 5294.81
12" PVC (SDR 35)
EXISTING DOUBLE "D" INLET CONSTRUCT DRAINLINE CONNECTION PER C.O.A. STD. DWG 2237

H POND A OUTLET STRUCTURE
NOT TO SCALE:


2.5" PMBP SURFACE COURSE
3" PMBP BASE COURSE
12" SUBGRADE PREP 95% ASTM D-1557
COMPACTED SUBGRADE 90% MAXIMUM DRY DENSITY

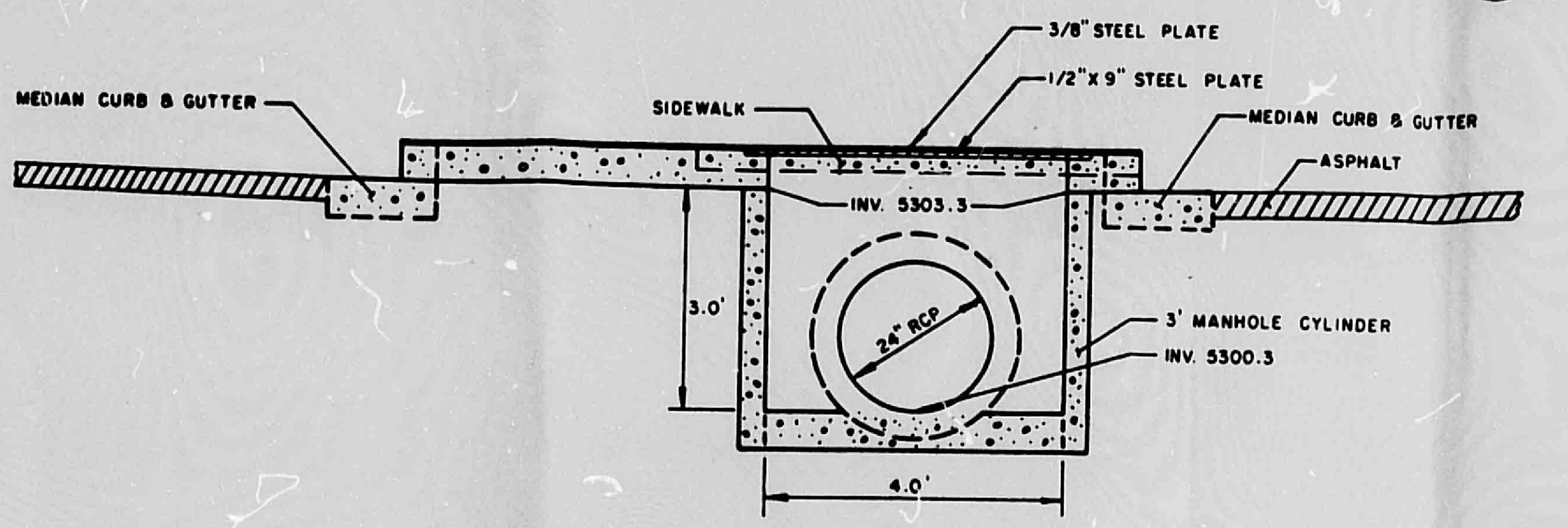
P PAVING SECTION
HIGH USE AND HEAVY TRUCK TRAFFIC AREAS

PRELIMINARY
NOT FOR CONSTRUCTION
APRIL 25, 1988

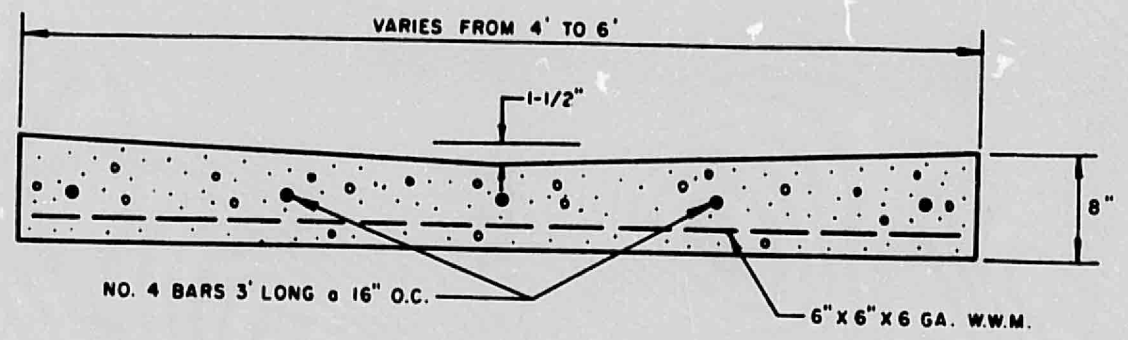

3" PMBP SURFACE COURSE
12" SUBGRADE PREP 95% ASTM D-1557
COMPACTED SUBGRADE 90% MAXIMUM DRY DENSITY

RECEIVED
APR 29 1988
HYDROLOGY SECTION

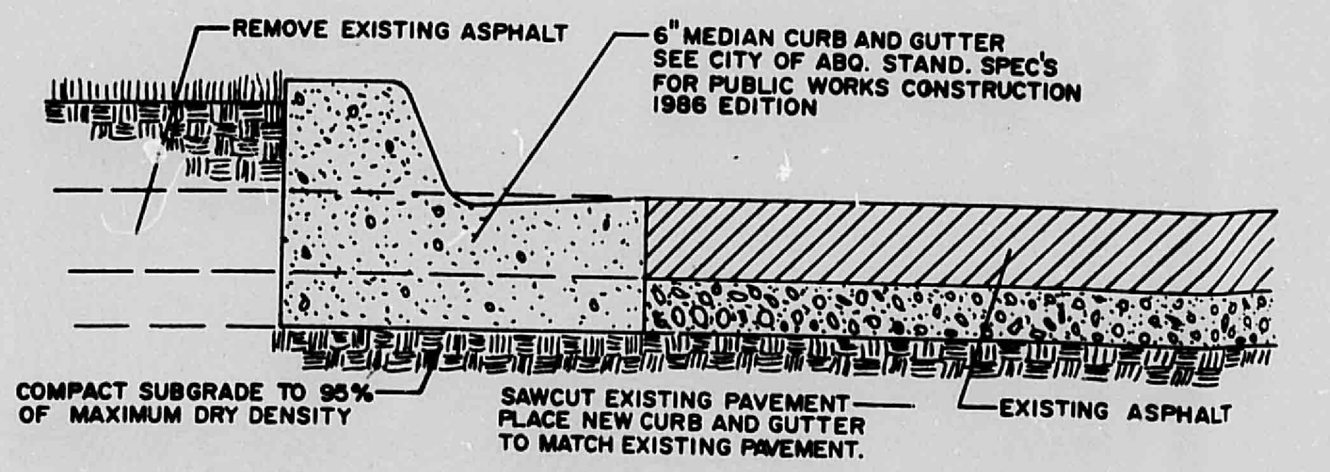
Q PAVING SECTION
PARKING AND LIGHT VEHICLE TRAFFIC AREAS


MEDIAN CURB & GUTTER
SIDEWALK
3/8" STEEL PLATE
1/2" X 9" STEEL PLATE
MEDIAN CURB & GUTTER
ASPHALT
INV. 5303.3
3.0'
24" RCP
3' MANHOLE CYLINDER
INV. 5300.3
4.0'

C SECTION
NO SCALE


VARIES FROM 4' TO 6'
1-1/2"
8"
NO. 4 BARS 3' LONG @ 16" O.C.
6" X 6" X 6 GA. W.W.M.

I SECTION: VALLEY GUTTER
NOT TO SCALE


REMOVE EXISTING ASPHALT
6" MEDIAN CURB AND GUTTER SEE CITY OF ABQ. STAND. SPEC'S FOR PUBLIC WORKS CONSTRUCTION 1986 EDITION
COMPACT SUBGRADE TO 95% OF MAXIMUM DRY DENSITY
SAWCUT EXISTING PAVEMENT PLACE NEW CURB AND GUTTER TO MATCH EXISTING PAVEMENT.
EXISTING ASPHALT

J TYP. SECTION: MEDIAN CURB MATCHING EXISTING PAVEMENT
NOT TO SCALE

NO.	REVISIONS	BY	DATE

TOYS "R" US

DETAILS

DOUGLAS W. COPELAND
NEW MEXICO
REGISTERED PROFESSIONAL ENGINEER

EASTERLING & ASSOCIATES, INC.
CONSULTING ENGINEERS
5643 Paradise Blvd. N.W.
Albuquerque, New Mexico 87114

Designed: DLS	Drawn: BRG	Checked: DWC	Sheet
Job No: 2012	Date: APRIL, 1988		of C-2B

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

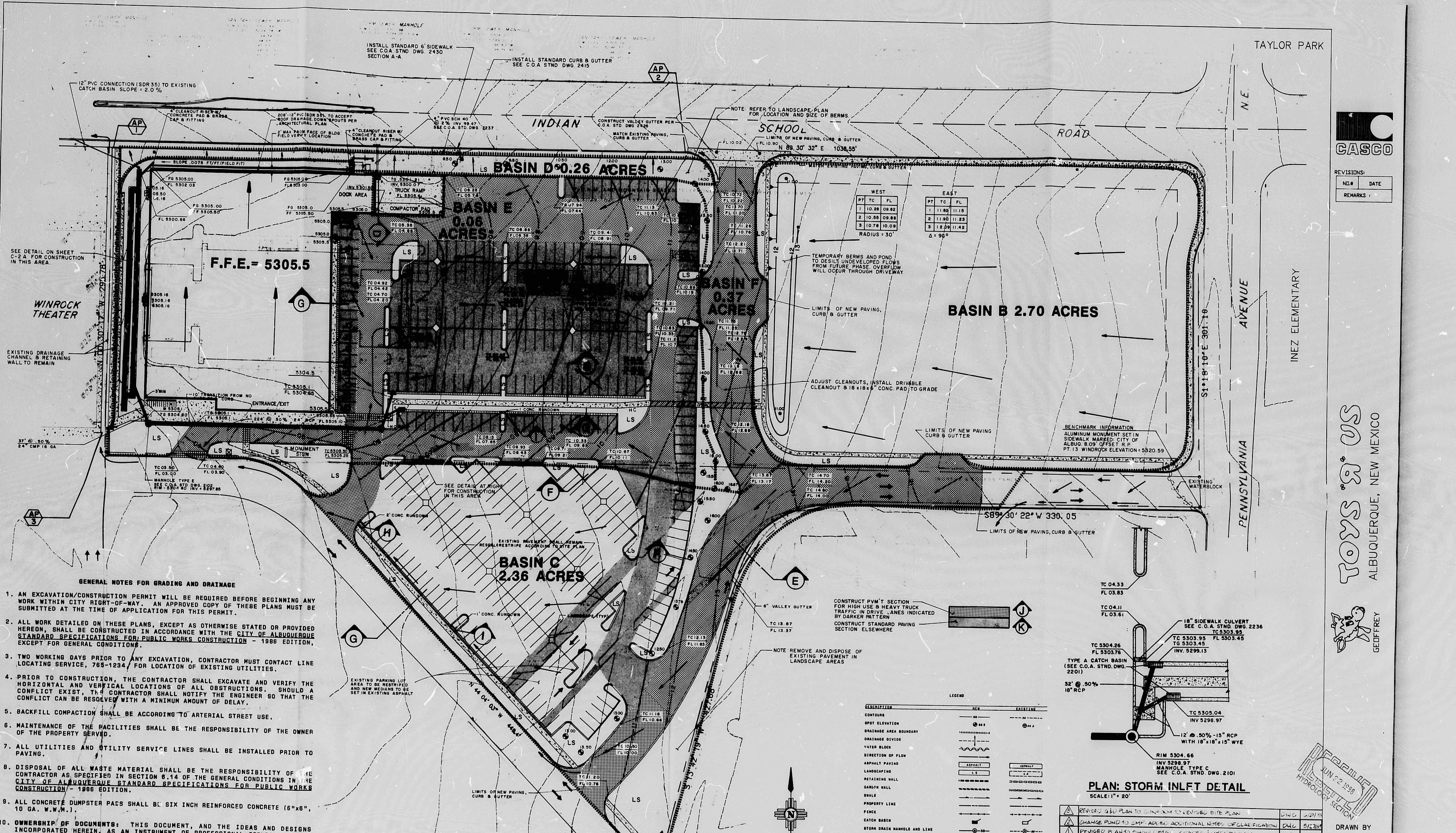
R# 21 DATE 6-24-93 OP E.J.P.

CITY OF ALBUQUERQUE

This microimage is certified to be a complete and accurate copy of the original as it appears in the files of the PUBLIC WORKS DEPARTMENT - HYDROLOGY DIVISION and was filmed in the normal course of business. The photographic processes used meet the Basic Microfilm Standards of the National Micrographics Association (MS115-1977).

Karen Aeree
CITY CLERK RECORDER

OFFICIAL SEAL
NORBERTA SANCHEZ
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires: MAY 8 1995
Norberta Sanchez


TAYLOR PARK
INDIAN SCHOOL ROAD
N.E.
PENNSYLVANIA AVENUE
INEZ ELEMENTARY
WINROCK THEATER
BASIN D 0.26 ACRES
BASIN E 0.06 ACRES
BASIN F 0.37 ACRES
BASIN B 2.70 ACRES
BASIN C 2.36 ACRES
F.F.E.= 5305.5
CASCO
TOYS "R" US
ALBUQUERQUE, NEW MEXICO
GEOFFREY
N 89°30' 32" E 1038.55'
S1°18'10"E 381.18
S89°30' 22" W 330.05
N 44°04' 03" W 448.41'
S 13°42' 19" W 427.08'
12" PVC CONNECTION (SDR 35) TO EXISTING CATCH BASIN. SLOPE = 2.0%
INSTALL STANDARD 6' SIDEWALK SEE C.O.A. STND DWG. 2430 SECTION A-A
INSTALL STANDARD CURB & GUTTER SEE C.O.A. STND DWG. 2415
NOTE: REFER TO LANDSCAPE PLAN FOR LOCATION AND SIZE OF BERMS.
TEMPORARY BERMS AND POND TO DESILT UNDEVELOPED FLOWS FROM FUTURE PHASE. OVERFLOW WILL OCCUR THROUGH DRIVEWAY
LIMITS OF NEW PAVING, CURB & GUTTER
ADJUST CLEANOUTS, INSTALL DRIVABLE CLEANOUT 8 18 x18 x6" CONC. PAD TO GRADE
BENCHMARK INFORMATION ALUMINUM MONUMENT SET IN SIDEWALK MARKED: CITY OF ALBUQ. 8-09 OFFSET R.P. PT. 13 WINROCK ELEVATION = 5320.59
SEE DETAIL ON SHEET C-2A FOR CONSTRUCTION IN THIS AREA
EXISTING DRAINAGE CHANNEL & RETAINING WALL TO REMAIN
EXISTING PAVEMENT SHALL REMAIN. RESEAL/RESTRIPE ACCORDING TO SITE PLAN
6" VALLEY GUTTER
CONSTRUCT PVM'T SECTION FOR HIGH USE & HEAVY TRUCK TRAFFIC IN DRIVE LANES INDICATED BY DARKER PATTERN
CONSTRUCT STANDARD PAVING SECTION ELSEWHERE
NOTE: REMOVE AND DISPOSE OF EXISTING PAVEMENT IN LANDSCAPE AREAS
EXISTING WATERBLOCK
DOCK AREA
TRUCK RAMP
COMPACTOR PAD
ENTRANCE/EXIT
MONUMENT SIGN
18" SIDEWALK CULVERT SEE C.O.A. STND. DWG. 2236
TYPE A CATCH BASIN (SEE C.O.A. STND. DWG. 2201)
32' @ .50% 18" RCP
TC 5305.04 INV 5298.97
12" @ .50% -15" RCP WITH 18"x18"x15" WYE
RIM 5304.66
INV 5298.97
MANHOLE TYPE C
SEE C.O.A. STND. DWG. 2101

PLAN: STORM INLET DETAIL

SCALE: 1" = 20'

SCALE: 1" = 40'

ABBREVIATIONS

TC - TOP OF CURB
FL - FLOW LINE
FG - FINISH GRADE
TG - TOP OF GRATE
C.O.A. - CITY OF ALBUQUERQUE
C.M.P. - CORRIGATED METAL PIPE
INV - INVERT

LEGEND

DESCRIPTION	NEW	EXISTING
CONTOURS	—— 88 ——	- - - 88 - - -
SPOT ELEVATION	● 88.2	⊕ 88.2
DRAINAGE AREA BOUNDARY	··········	
DRAINAGE DIVIDE	- - -┼- - -	
WATER BLOCK	∿∿∿∿	
DIRECTION OF FLOW	——→	
ASPHALT PAVING	ASPHALT	ASPHALT
LANDSCAPING	LS	LS
RETAINING WALL	▬▬▬▬	▭▭▭▭
GARDEN WALL	▬▬▬▬	▭▭▭▭
SWALE	——→	——→
PROPERTY LINE	—— - ——	—— - ——
FENCE	—•—•—•—	-•-•-•-
CATCH BASIN	▰	▭
STORM DRAIN MANHOLE AND LINE	——◎—SD—	- - -◎- SD - -
SANITARY SEWER MANHOLE AND LINE	——●—SAS—	- - -○- SAS - -
FIRE HYDRANT AND WATER LINE	——★—W—	- - -★- W - -
REDUCERS	——▶——	- - -▷- - -
WATER VALVES	⋈	⋈
WATER CONNECTIONS		
WATER JOINTS		
CONCRETE		EXISTING
GAS LINE	——Ⓖ——	- - -Ⓖ- - -
UNDERGROUND TELEPHONE	——UT——	- - -UT- - -
CABLE TELEVISION	——CT——	- - -CT- - -
POWER/TELEPHONE POLE	○PP	○PP
UNDERGROUND ELECTRICAL	——UE——	- - -UE- - -
CURB ELEVATION	TC 5088.28 FL 5087.78	TC 5088.28 FL 5087.78
HYDROLOGICAL ANALYSIS POINT	△AP	
DETAIL REFERENCE	⬡	
KEYED NOTES	①	
CITY ABQ. DETAIL REFERENCE	⬡	

GENERAL NOTES FOR GRADING AND DRAINAGE

1. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY. AN APPROVED COPY OF THESE PLANS MUST BE SUBMITTED AT THE TIME OF APPLICATION FOR THIS PERMIT.
2. ALL WORK DETAILED ON THESE PLANS, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION - 1986 EDITION, EXCEPT FOR GENERAL CONDITIONS.
3. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, 765-1234, FOR LOCATION OF EXISTING UTILITIES.
4. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
5. BACKFILL COMPACTION SHALL BE ACCORDING TO ARTERIAL STREET USE.
6. MAINTENANCE OF THE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.
7. ALL UTILITIES AND UTILITY SERVICE LINES SHALL BE INSTALLED PRIOR TO PAVING.
8. DISPOSAL OF ALL WASTE MATERIAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AS SPECIFIED IN SECTION 6.14 OF THE GENERAL CONDITIONS IN THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION - 1986 EDITION.
9. ALL CONCRETE DUMPSTER PADS SHALL BE SIX INCH REINFORCED CONCRETE (6"x6", 10 GA. W.W.M.).
10. **OWNERSHIP OF DOCUMENTS:** THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF **EASTERLING & ASSOCIATES, INC.** AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF **EASTERLING & ASSOCIATES, INC.**
11. **CONSTRUCTION SAFETY:** THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH SHALL REMAIN THE CONTRACTOR'S RESPONSIBILITY.
12. **EROSION CONTROL:** THE SITE WILL BE FULLY DEVELOPED IMMEDIATELY. EROSION PROBLEMS GENERATED BY PHASED DEVELOPMENT WILL NOT, THEREFOR, BE A PROBLEM.
13. **CONSTRUCTION PHASE:** THE CONTRACTOR SHALL EXERCISE REASONABLE CARE DURING CONSTRUCTION TO PREVENT THE MOVEMENT OF SEDIMENT FROM THE SITE INTO THE STREET. LOOSE SOIL STOCKPILES IN THE STREET DURING UTILITY CONNECTION ACTIVITIES SHALL BE PROTECTED FROM BEING CARRIED DOWNSTREAM BY FLOWING WATER IN THE STREET.

NO.	REVISIONS	BY	DATE
3	REVISED G&D PLAN TO CONFORM TO REVISED SITE PLAN	DWC	6/21/88
2	CHANGE POND TO CMP. ADDED ADDITIONAL NOTES OF CLARIFICATION	DWC	5/27/88
1	REVISED PLAN TO SHOW DETAIL GRADES & HYDROLOGY	DWC	4/27/88

TOYS "R" US
GRADING & DRAINAGE PLAN

DOUGLAS W. COPELAND
NEW MEXICO
REGISTERED PROFESSIONAL ENGINEER
6198

EASTERLING & ASSOCIATES, INC.
CONSULTING ENGINEERS
5643 Paradise Blvd. N.W.
Albuquerque, New Mexico 87114

Designed: DLS	Drawn: JEL	Checked: DWC	Sheet of C-2B
Job No: 2012 C-2	Date: JUNE 1988		

JUN 22 1988
HYDROLOGY SECTION

DRAWN BY

CHECKED BY

PROJECT NO.
88638

DATE

SHEET NUMBER

THIS PLAN SHOT TWICE
ONCE ON LIGHT AND
ONCE ON DARK.

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

R# 21 DATE 6-24-93 OP K.J.P.

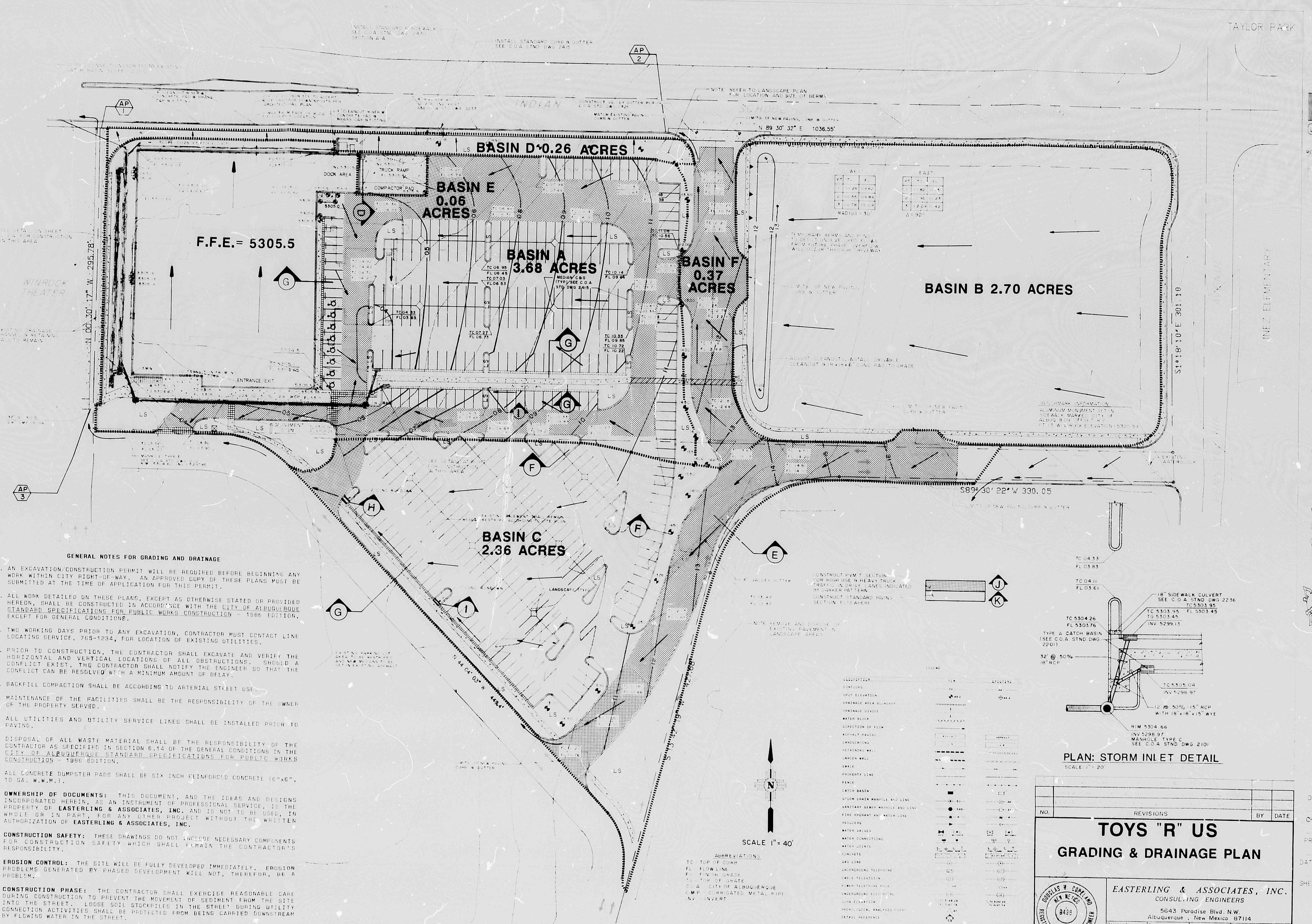
CITY OF ALBUQUERQUE

This microimage is certified to be a complete and accurate copy of the original as it appears in the files of the PUBLIC WORKS DEPARTMENT - HYDROLOGY DIVISION and was filmed in the normal course of business. The photographic processes used meet the Basic Microfilm Standards of the National Micrographics Association (MS115-1977).

CITY CLERK RECORDER

OFFICIAL SEAL
NORBERTA SANCHEZ
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires: May 8 1995
Norberta Sanchez

D 24 C 20 B 16 A 12
CITY OF ALBUQUERQUE C D


TAYLOR PARK
INDIAN SCHOOL
N 89° 30' 32" E 1036.55'
BASIN D 0.26 ACRES
BASIN E 0.06 ACRES
BASIN A 3.68 ACRES
BASIN F 0.37 ACRES
BASIN B 2.70 ACRES
BASIN C 2.36 ACRES
F.F.E.= 5305.5
DOCK AREA
TRUCK RAMP
COMPACTOR PAD
ENTRANCE/EXIT
WINROCK THEATER
N 00° 30' 17" W 295.78'
S 00° 18' 10" E 381.10
S 89° 30' 22" W 330.05
INEZ ELEMENTARY
AP 1
AP 2
AP 3
SCALE 1"= 40'
TC 04.33
FL 03.83
TC 04.11
FL 03.61
18" SIDEWALK CULVERT SEE C.O.A. STND DWG 2236
TC 5303.95
FL 5303.45
TC 5303.95
TG 5303.45
INV 5299.13
TC 5304.26
FL 5303.76
TYPE A CATCH BASIN (SEE C.O.A. STND DWG 2201)
32' @ .50% 18" RCP
TC 5305.04
INV 5298.97
12' @ .50% - 15" RCP WITH 18" x 18" x 15" WYE
RIM 5304.66
INV 5298.97
MANHOLE TYPE C
SEE C.O.A. STND DWG 2101

PLAN: STORM INLET DETAIL

SCALE: 1" = 20'

GENERAL NOTES FOR GRADING AND DRAINAGE

1. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY. AN APPROVED COPY OF THESE PLANS MUST BE SUBMITTED AT THE TIME OF APPLICATION FOR THIS PERMIT.
2. ALL WORK DETAILED ON THESE PLANS, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION - 1986 EDITION, EXCEPT FOR GENERAL CONDITIONS.
3. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, 765-1234, FOR LOCATION OF EXISTING UTILITIES.
4. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
5. BACKFILL COMPACTION SHALL BE ACCORDING TO ARTERIAL STREET USE.
6. MAINTENANCE OF THE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.
7. ALL UTILITIES AND UTILITY SERVICE LINES SHALL BE INSTALLED PRIOR TO PAVING.
8. DISPOSAL OF ALL WASTE MATERIAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AS SPECIFIED IN SECTION 6.14 OF THE GENERAL CONDITIONS IN THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION - 1986 EDITION.
9. ALL CONCRETE DUMPSTER PADS SHALL BE SIX INCH REINFORCED CONCRETE (6"x6", 10 GA. W.W.M.).
10. **OWNERSHIP OF DOCUMENTS:** THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF **EASTERLING & ASSOCIATES, INC.** AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF **EASTERLING & ASSOCIATES, INC.**
11. **CONSTRUCTION SAFETY:** THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH SHALL REMAIN THE CONTRACTOR'S RESPONSIBILITY.
12. **EROSION CONTROL:** THE SITE WILL BE FULLY DEVELOPED IMMEDIATELY. EROSION PROBLEMS GENERATED BY PHASED DEVELOPMENT WILL NOT, THEREFOR, BE A PROBLEM.
13. **CONSTRUCTION PHASE:** THE CONTRACTOR SHALL EXERCISE REASONABLE CARE DURING CONSTRUCTION TO PREVENT THE MOVEMENT OF SEDIMENT FROM THE SITE INTO THE STREET. LOOSE SOIL STOCKPILES IN THE STREET DURING UTILITY CONNECTION ACTIVITIES SHALL BE PROTECTED FROM BEING CARRIED DOWNSTREAM BY FLOWING WATER IN THE STREET.

NO.	REVISIONS	BY	DATE

TOYS "R" US
GRADING & DRAINAGE PLAN

DOUGLAS W. COPELAND
NEW MEXICO
8498
REGISTERED PROFESSIONAL ENGINEER

EASTERLING & ASSOCIATES, INC.
CONSULTING ENGINEERS
5643 Paradise Blvd. N.W.
Albuquerque, New Mexico 87114

Designed: DLS	Drawn: JEL	Checked: DWC	Sheet C-2B
Job No: 2012 C-2		Date: JUNE 1988	of

DRAWN BY

CHECKED BY

PROJECT NO.
88638

DATE

SHEET NUMBER

THIS PLAN SHOT TWICE
ONCE ON LIGHT AND
ONCE ON DARK.

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

R# 21 DATE 2-24-93 OP LJP

CITY OF ALBUQUERQUE

This microimage is certified to be a complete and accurate copy of the original as it appears in the files of the PUBLIC WORKS DEPARTMENT - HYDROLOGY DIVISION and was filmed in the normal course of business.
The photographic processes used meet the Basic Microfilm Standards of the National Micrographics Association (MS115-1977).

Karen Aceves
CITY CLERK RECORDER

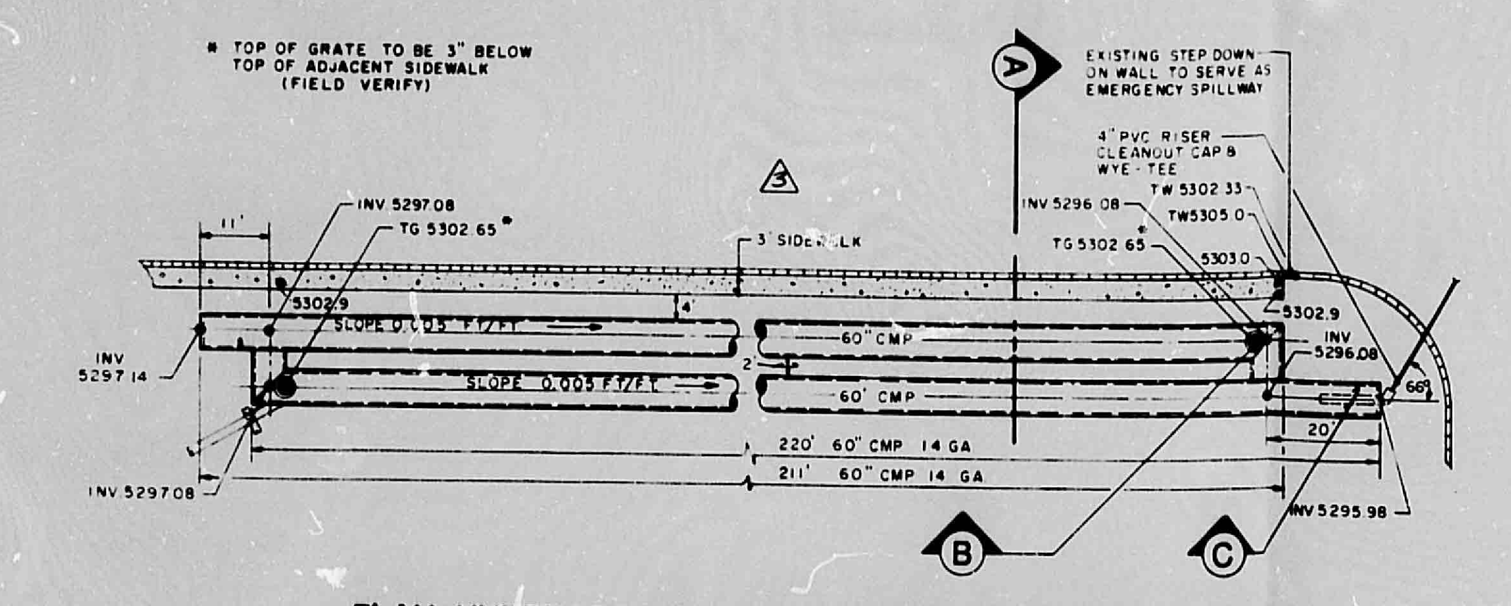
OFFICIAL SEAL
NORBERTA SANCHEZ
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires May 8 1995
Norberta Sanchez

D 24 C 20 B 16 A 12

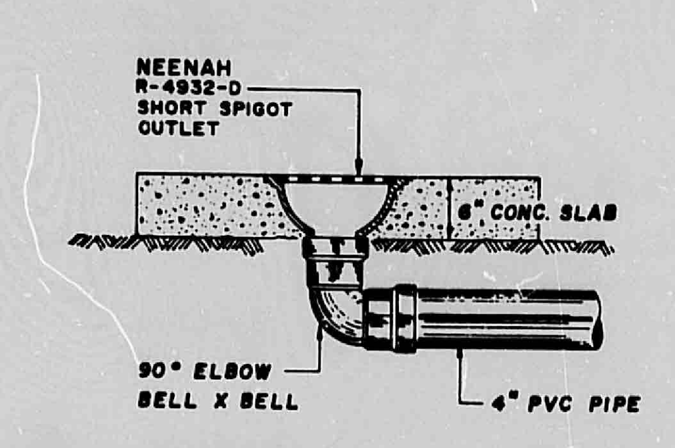
CITY OF ALBUQUERQUE C D

NOTE: SLOPE AREAS TO DRAIN INTO THE OPEN GRATE MANHOLE COVERS

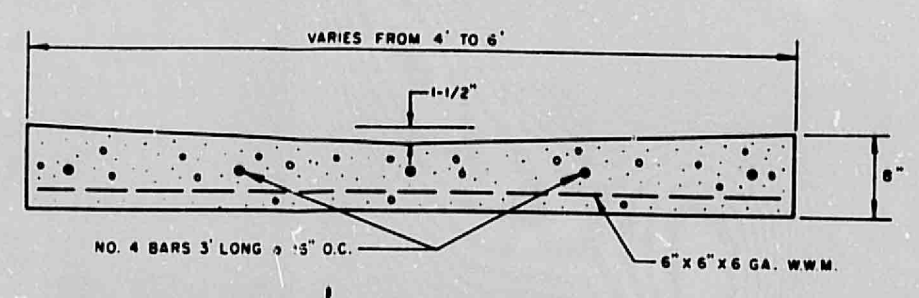
* TOP OF GRATE TO BE 3" BELOW TOP OF ADJACENT SIDEWALK (FIELD VERIFY)


EXISTING STEP DOWN ON WALL TO SERVE AS EMERGENCY SPILLWAY
4" PVC RISER CLEANOUT CAP & WYE-TEE
TW 5302.33
TW 5305.0
5303.0
INV 5296.08
TG 5302.65
INV 5297.08
TG 5302.65 *
3' SIDEWALK
11'
5302.9
4'
SLOPE 0.005 FT/FT
60" CMP
2'
INV 5297.14
INV 5296.08
66°
20'
220' 60" CMP 14 GA
211' 60" CMP 14 GA
INV 5297.08
INV 5295.98
A
B
C
3

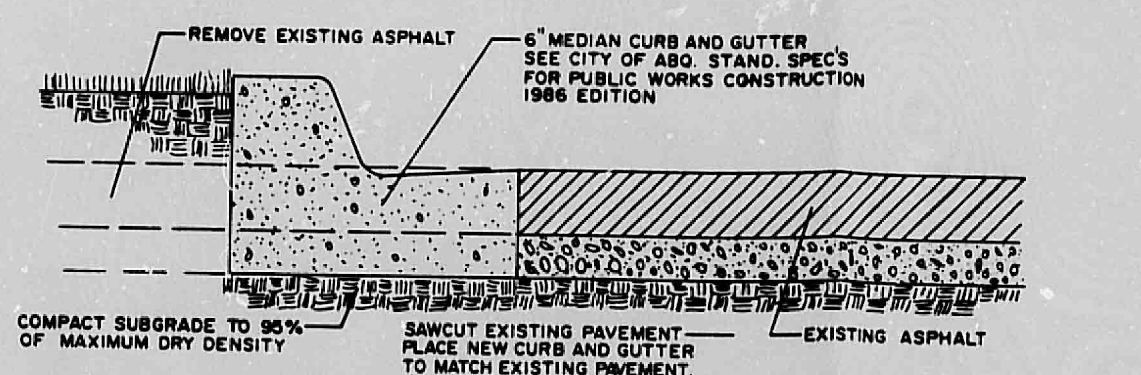
PLAN-UNDERGROUND STORM WATER DETENTION FACILITY


NEENAH R-4932-D SHORT SPIGOT OUTLET
6" CONC. SLAB
90° ELBOW BELL X BELL
4" PVC PIPE

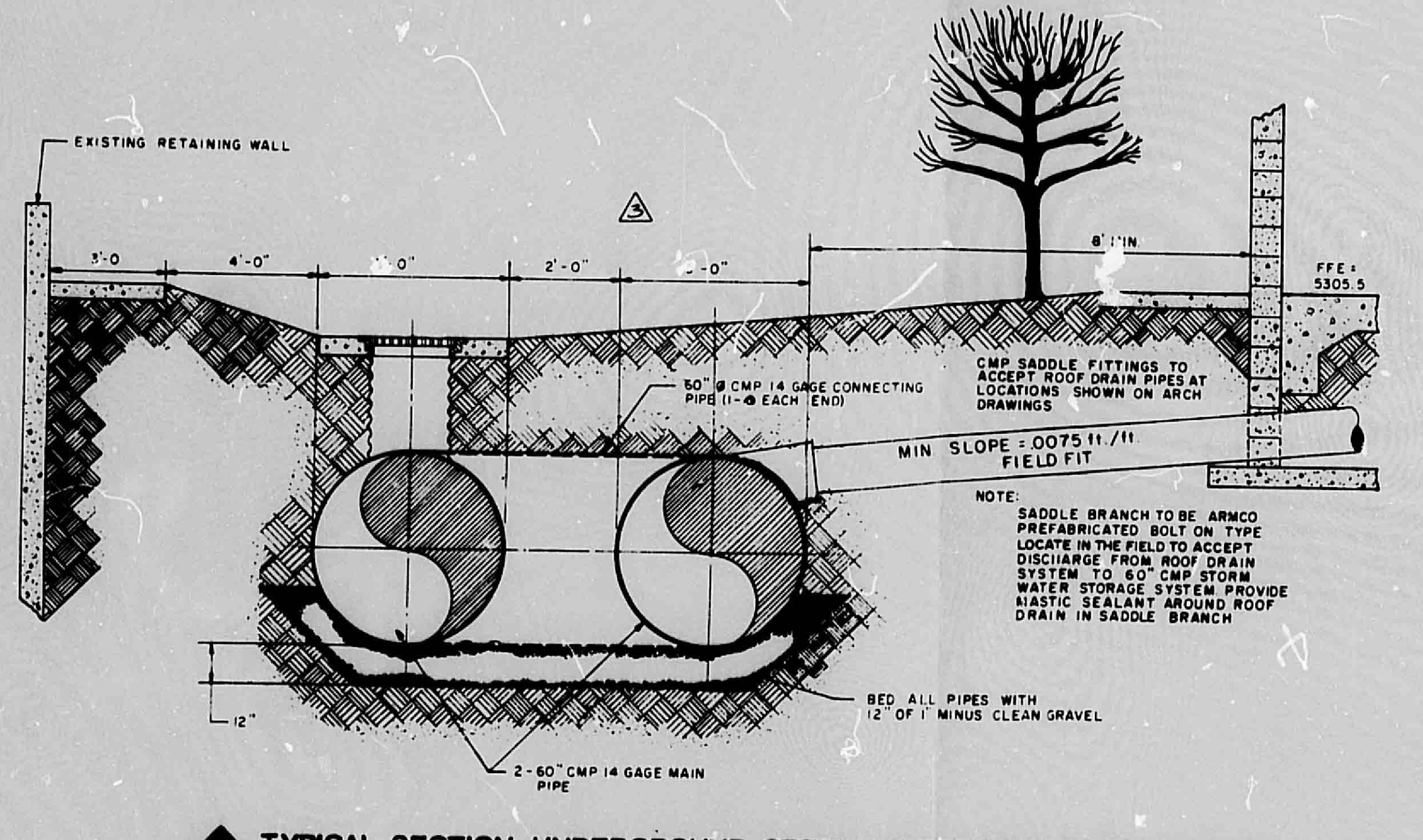
D DRAIN DETAIL
SCALE: 1"=1'


VARIES FROM 4' TO 6'
1-1/2"
8"
NO. 4 BARS 3' LONG @ 15" O.C.
6"X6"X6 GA. W.W.M.

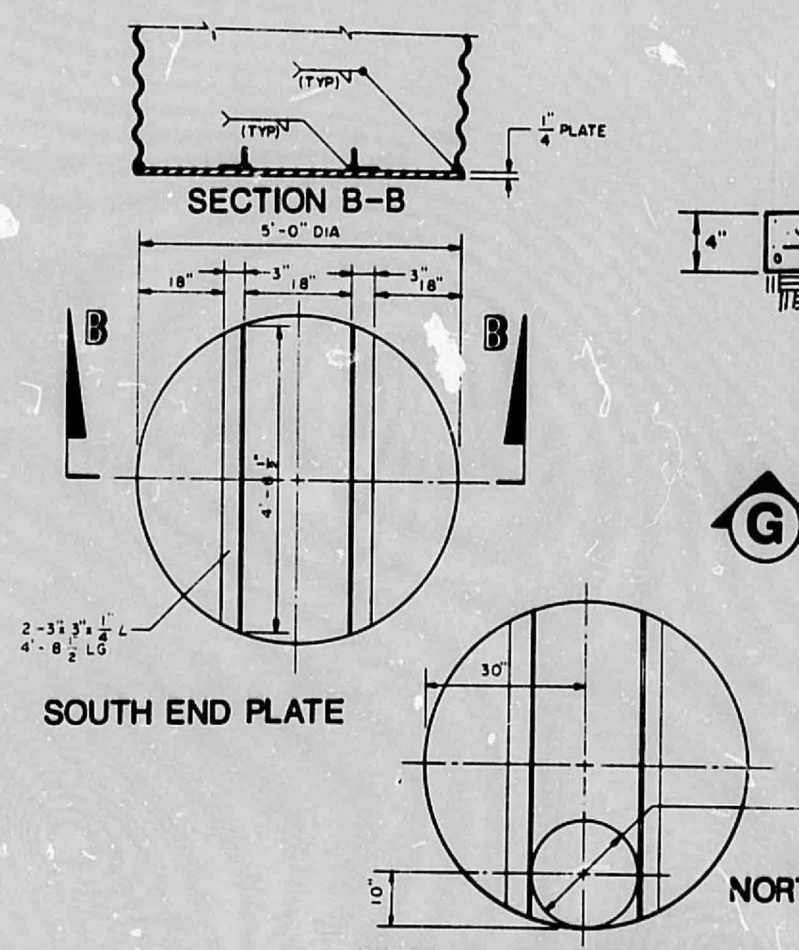
E SECTION: VALLEY GUTTER
NOT TO SCALE


REMOVE EXISTING ASPHALT
6" MEDIAN CURB AND GUTTER SEE CITY OF ABQ. STAND. SPEC'S FOR PUBLIC WORKS CONSTRUCTION 1986 EDITION
COMPACT SUBGRADE TO 95% OF MAXIMUM DRY DENSITY
SAWCUT EXISTING PAVEMENT PLACE NEW CURB AND GUTTER TO MATCH EXISTING PAVEMENT.
EXISTING ASPHALT

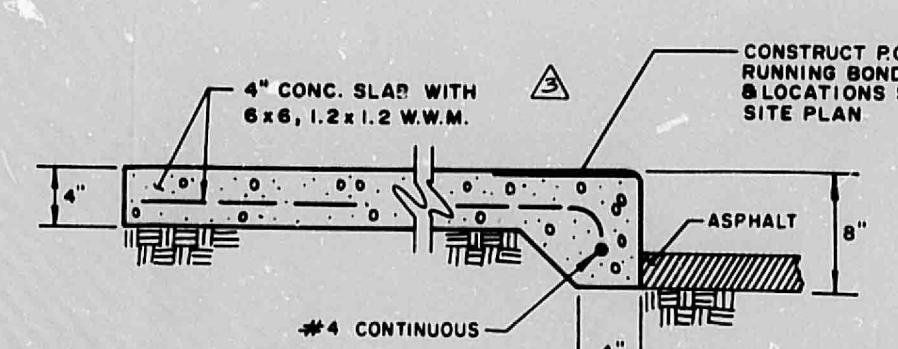
F TYP. SECTION: MEDIAN CURB MATCHING EXISTING PAVEMENT
NOT TO SCALE


EXISTING RETAINING WALL
3
3'-0
4'-0"
2'-0"
8' MIN.
FFE = 5305.5
60" Ø CMP 14 GAGE CONNECTING PIPE (1-Ø EACH END)
CMP SADDLE FITTINGS TO ACCEPT ROOF DRAIN PIPES AT LOCATIONS SHOWN ON ARCH DRAWINGS
MIN SLOPE = .0075 ft./ft. FIELD FIT
NOTE: SADDLE BRANCH TO BE ARMCO PREFABRICATED BOLT ON TYPE LOCATE IN THE FIELD TO ACCEPT DISCHARGE FROM ROOF DRAIN SYSTEM TO 60" CMP STORM WATER STORAGE SYSTEM PROVIDE MASTIC SEALANT AROUND ROOF DRAIN IN SADDLE BRANCH
BED ALL PIPES WITH 12" OF 1" MINUS CLEAN GRAVEL
12"
2-60" CMP 14 GAGE MAIN PIPE

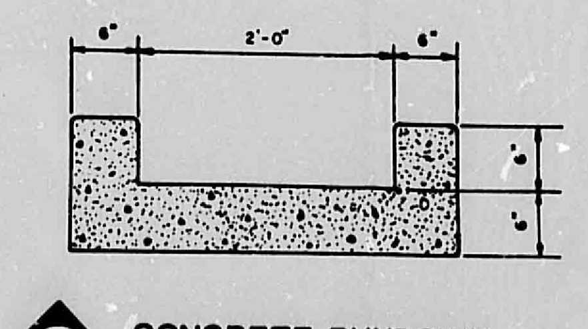
A TYPICAL SECTION-UNDERGROUND STORM WATER DETENTION FACILITY
NOT TO SCALE


(TYP)
1/4" PLATE
SECTION B-B
5'-0" DIA
18"
3"
B
2-3"x3"x1/4" L 4'-8 1/2" LG
SOUTH END PLATE
30"
10"
18" DIA ± TO ACCEPT 18" CMP
NORTH END PLATE

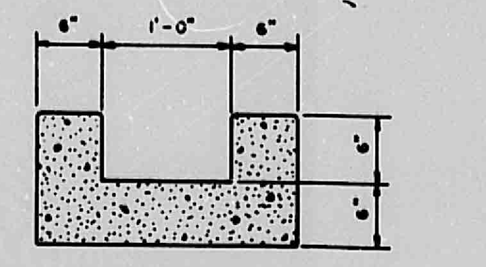
DETAILS BULKHEAD END PLATE


4" CONC. SLAB WITH 6x6, 1.2x1.2 W.W.M.
3
CONSTRUCT P.C. TEXTURED CONCRETE RUNNING BOND PATTERN TO THE WIDTHS & LOCATIONS SHOWN ON ARCHITECTS SITE PLAN
4"
ASPHALT
8"
#4 CONTINUOUS
4"

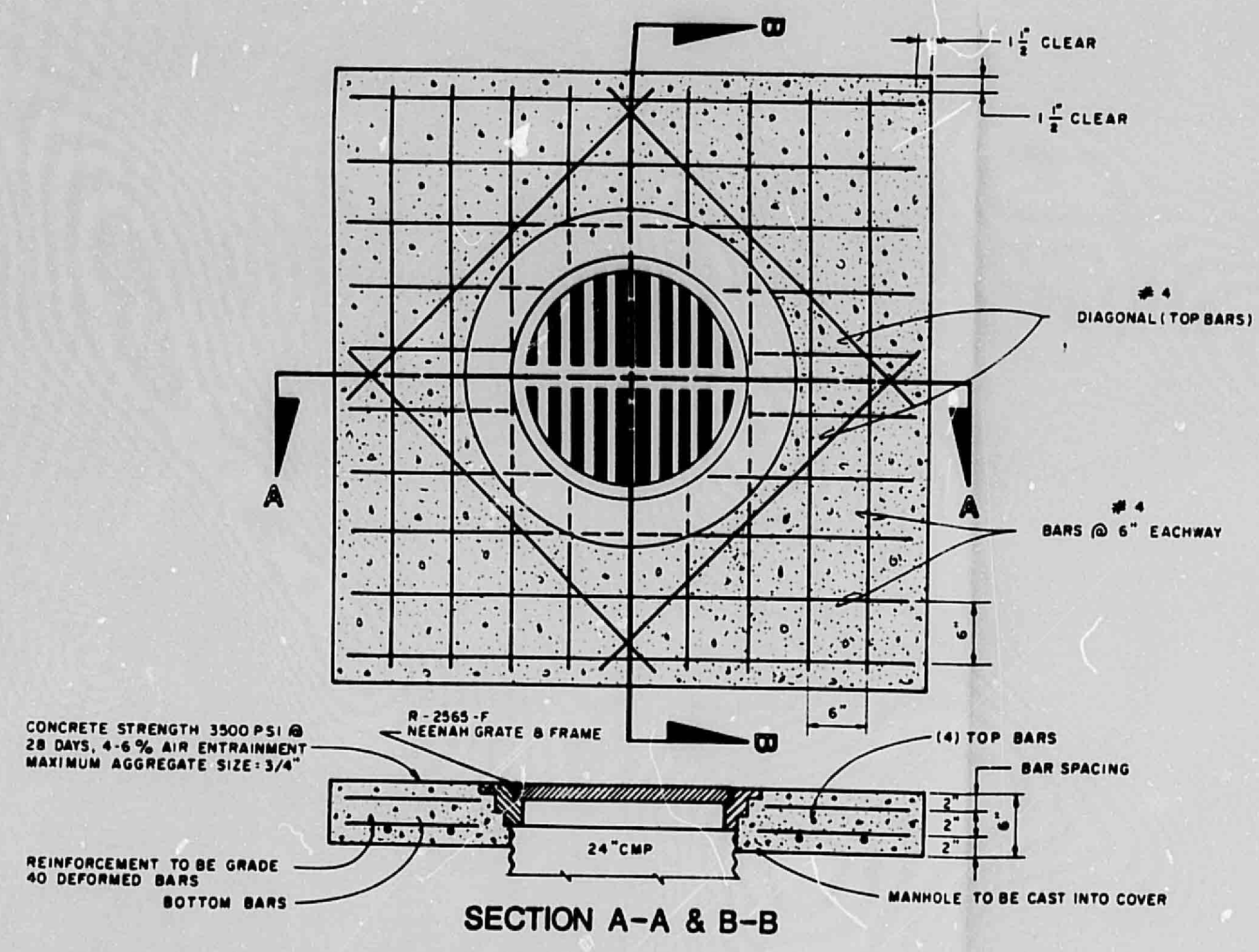
G SECTION: TURNDOWN SIDEWALK
NO SCALE



H CONCRETE RUNDOWN
SCALE: 1"=1'

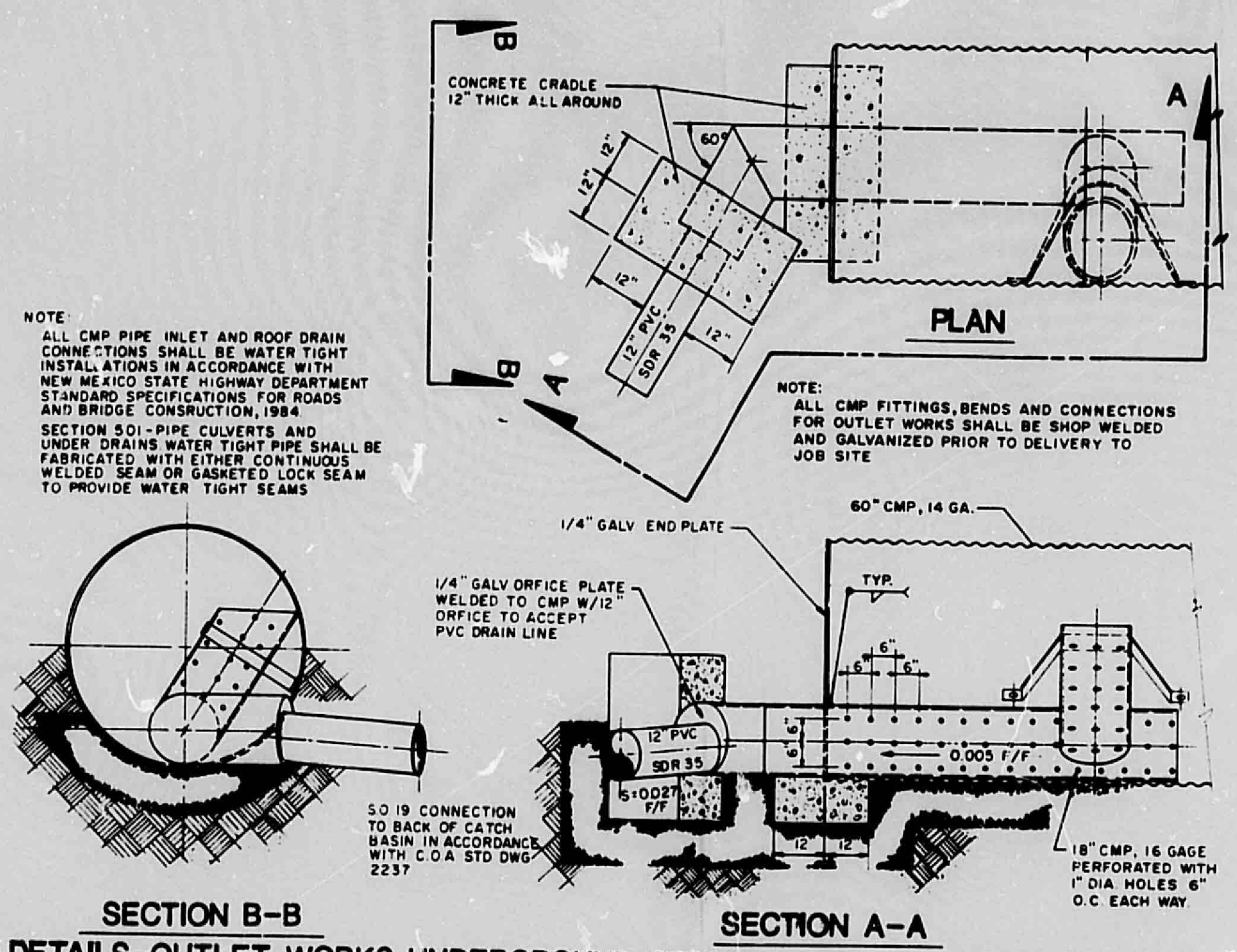


I CONCRETE RUNDOWN
SCALE: 1"=1'

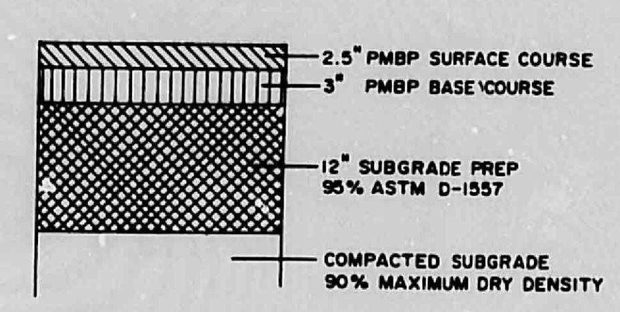

B
1 1/2" CLEAR
1 1/2" CLEAR
#4 DIAGONAL (TOP BARS)
A
#4 BARS @ 6" EACHWAY
6"
CONCRETE STRENGTH 3500 PSI @ 28 DAYS, 4-6% AIR ENTRAINMENT MAXIMUM AGGREGATE SIZE: 3/4"
R-2565-F NEENAH GRATE & FRAME
(4) TOP BARS
BAR SPACING
2"
24" CMP
REINFORCEMENT TO BE GRADE 40 DEFORMED BARS
BOTTOM BARS
MANHOLE TO BE CAST INTO COVER

SECTION A-A & B-B

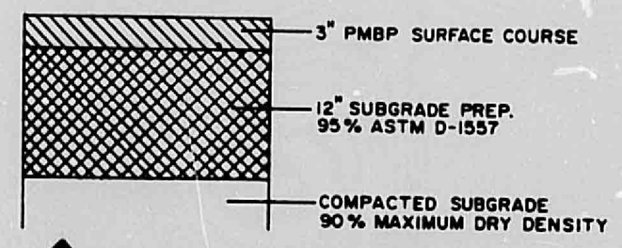
B GRATE AND FRAME DETAILS


B
CONCRETE CRADLE 12" THICK ALL AROUND
60°
12"
12" PVC SDR 35
A
PLAN
NOTE: ALL CMP FITTINGS, BENDS AND CONNECTIONS FOR OUTLET WORKS SHALL BE SHOP WELDED AND GALVANIZED PRIOR TO DELIVERY TO JOB SITE
NOTE: ALL CMP PIPE INLET AND ROOF DRAIN CONNECTIONS SHALL BE WATER TIGHT INSTALLATIONS IN ACCORDANCE WITH NEW MEXICO STATE HIGHWAY DEPARTMENT STANDARD SPECIFICATIONS FOR ROADS AND BRIDGE CONSRUCTION, 1984. SECTION 501-PIPE CULVERTS AND UNDER DRAINS WATER TIGHT PIPE SHALL BE FABRICATED WITH EITHER CONTINUOUS WELDED SEAM OR GASKETED LOCK SEAM TO PROVIDE WATER TIGHT SEAMS
1/4" GALV END PLATE
60" CMP, 14 GA.
1/4" GALV ORFICE PLATE WELDED TO CMP W/12" ORFICE TO ACCEPT PVC DRAIN LINE
TYP.
6"
12" PVC SDR 35
S=0.027 F/F
0.005 F/F
SO 19 CONNECTION TO BACK OF CATCH BASIN IN ACCORDANCE WITH C.O.A STD DWG 2237
18" CMP, 16 GAGE PERFORATED WITH 1" DIA HOLES 6" O.C. EACH WAY
SECTION B-B
SECTION A-A

C DETAILS-OUTLET WORKS UNDERGROUND STORM WATER DETENTION FACILITY

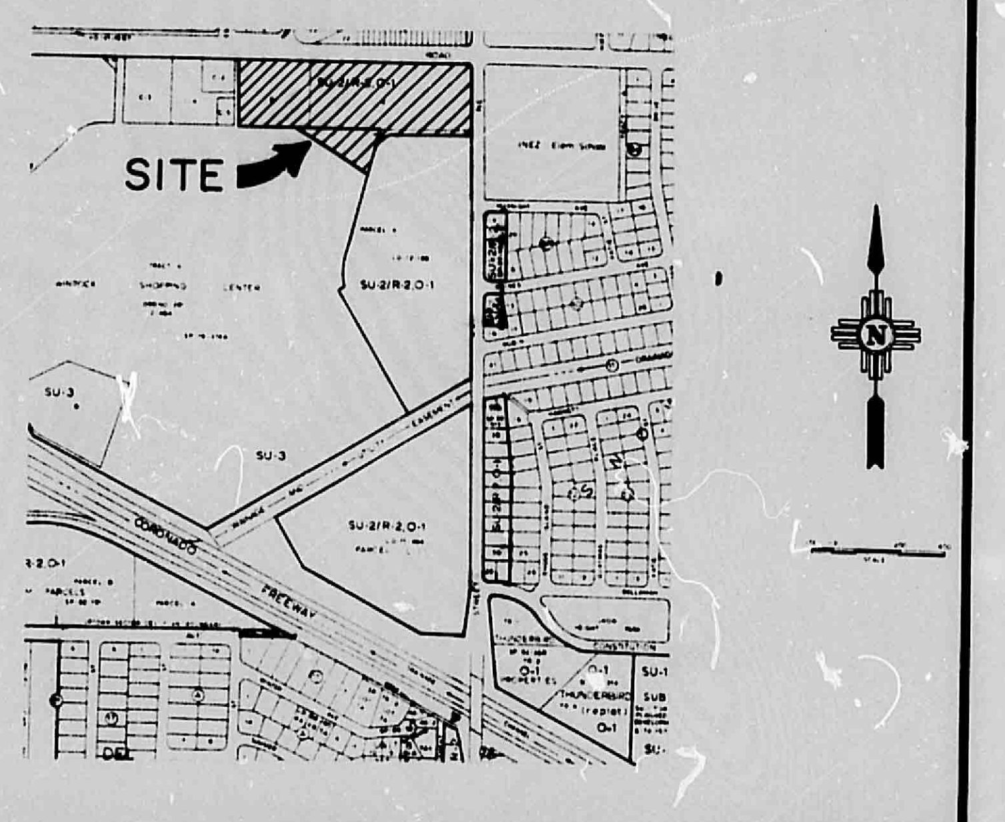

2.5" PMBP SURFACE COURSE
3" PMBP BASE COURSE
12" SUBGRADE PREP 95% ASTM D-1557
COMPACTED SUBGRADE 90% MAXIMUM DRY DENSITY

J PAVING SECTION
HIGH USE AND HEAVY TRUCK TRAFFIC AREAS


3" PMBP SURFACE COURSE
12" SUBGRADE PREP. 95% ASTM D-1557
COMPACTED SUBGRADE 90% MAXIMUM DRY DENSITY

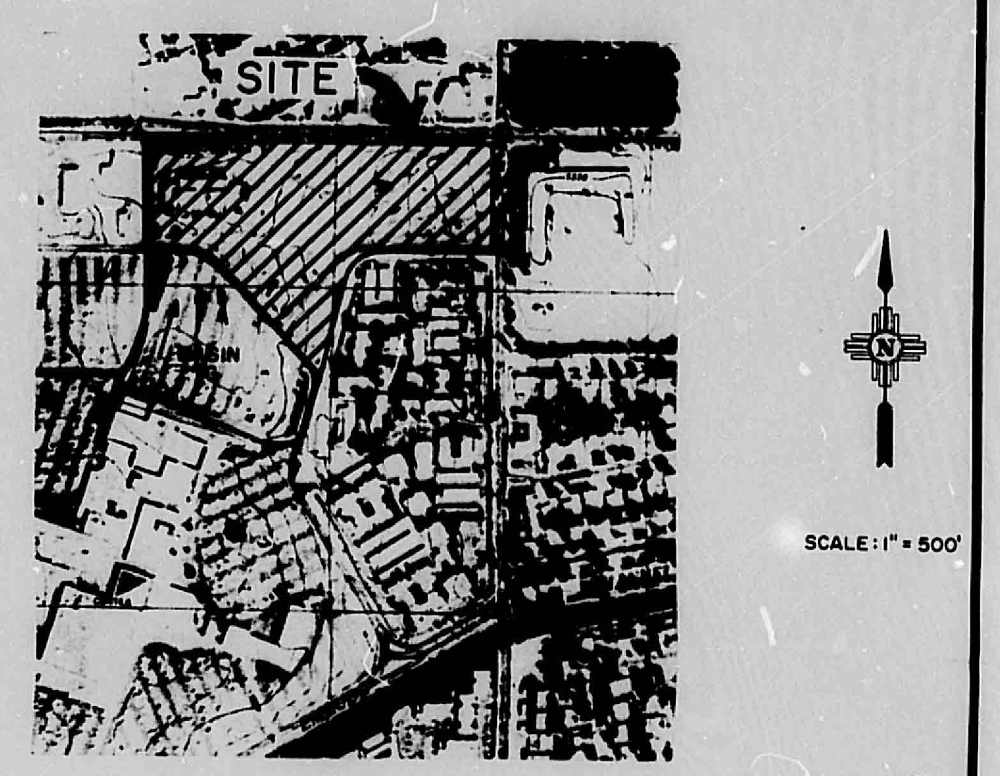
K PAVING SECTION
PARKING AND LIGHT VEHICLE TRAFFIC AREAS

VICINITY MAP ZONE ATLAS MAP NO. J-19


SITE
SU-3
SU-2/R-2,O-1
CORONADO
FREEWAY
N

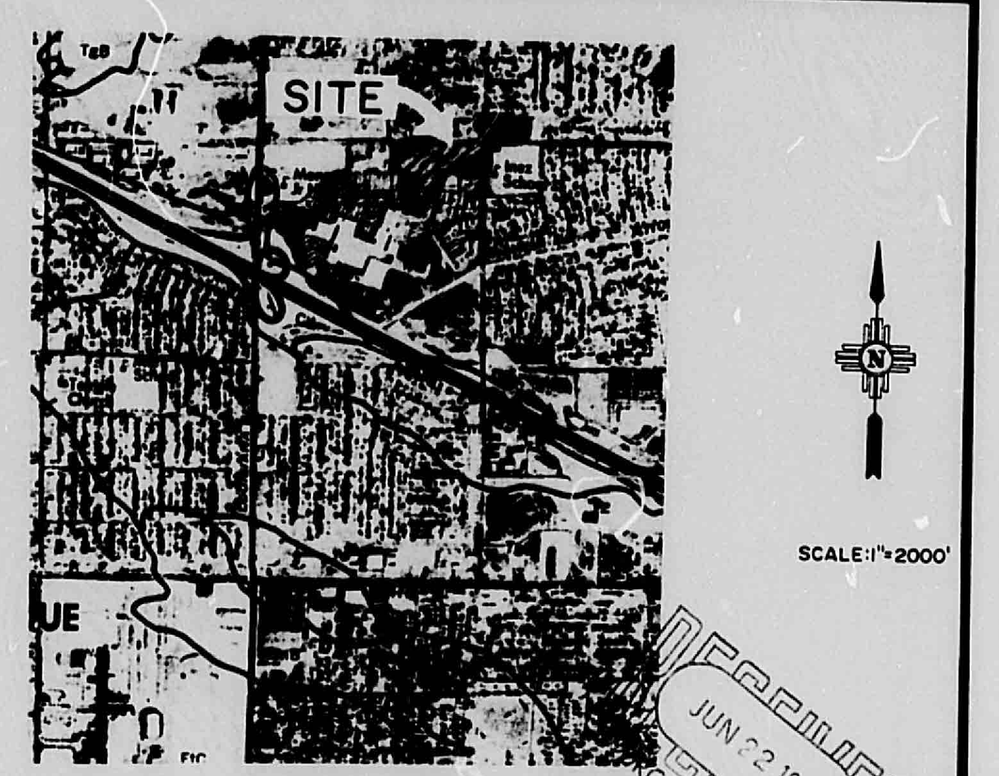
NO. 30

FLOOD HAZARD MAP & OFF-SITE FLOWS FROM F.E.M.A.


SITE
N
SCALE: 1" = 500'

NO. 31

SOILS MAP SOIL SURVEY U.S.D.A., S.C.S.


SITE
N
SCALE: 1"=2000'

HYDROLOGY

HYDROLOGY SUMMARY SHEET FOR GRADING & DRAINAGE REPORT
PROJECT: TOYS R US (RESUBMITTAL PLAN NO. 2)

A P	DESCRIPTION	AREA (ac.)	HT (ft)	LGTH (ft)	SLOPE (ft/ft)	Tc (min)	SOIL	CN	C	RUNOFF PARAMETERS FOR 2 YEAR EVENT				RUNOFF PARAMETERS FOR 10 YEAR EVENT				RUNOFF PARAMETERS FOR 100 YEAR EVENT			
										P	I	V	Q	P	I	V	Q	P	I	V	Q
1	BASIN A+B+C+D+E+F+G UND	14.1	25	1100	0.023	<10	B	70.0	0.40	1.05	2.21	407	12.5	1.54	3.26	5330	18.4	2.35	4.97	19744	28.0
1	BASIN A+B+C+D+E+F+G EXI	14.1	25	1100	0.023	<10	B	89.0	0.70	1.05	2.21	16043	21.8	1.54	3.26	35363	32.2	2.35	4.97	67786	49.0
1	BASIN A+B+C+D+E+F+G DEV	14.1	15	515	0.029	<10	B	95.5	0.85	1.05	2.21	32571	26.6	1.54	3.26	57697	39.3	2.35	4.97	95506	59.8
1	BASIN A+D+E DEVELOPED	4.0	13	1080	0.012	<10	B	94.5	0.83	1.05	2.21	8277	7.3	1.54	3.26	15156	10.8	2.35	4.97	25664	16.4
2	BASIN B+F DEVELOPED	3.1	12	560	0.021	<10	B	96.0	0.87	1.05	2.21	7460	5.9	1.54	3.26	12996	8.7	2.35	4.97	21268	13.3
3	BASIN C+G DEVELOPED	7.0	12	700	0.017	<10	B	95.5	0.87	1.05	2.21	16239	13.6	1.54	3.26	28766	20.0	2.35	4.97	47618	30.5

P = 6-HOUR RAINFALL VOLUMES - (Ref. DPM PLATE 22.2 D-1)
I = RAINFALL INTENSITY - INCHES FOR 6-HOUR EVENT (Ref. DPM PLATE 22.2 D-2)
V = VOLUME OF RUNOFF - CUBIC FEET
Q = RATE OF RUNOFF - CUBIC FEET PER SECOND

POND VOLUME CALULATIONS
440 LF OF 60" CMP ≃ 8639 C.F.

BY: DOUGLAS W. COPELAND DATE: 4/27/88

SOILS INFORMATION FROM SOIL SURVEY U.S.D.A., S.C.S.

SOIL SERIES AND MAP SYMBOLS	DEGREE AND KIND OF LIMITATIONS FOR						SUITABILITY AS SOURCE OF —				SOIL FEATURES AFFECTING —		HYDROLOGIC SOIL GROUP
	SEPTIC TANK ABSORPTION FIELDS	SEWAGE LAGOONS	SHALLOW EXCAVATIONS	DWELLINGS WITHOUT BASEMENTS	SANITARY LANDFILL (TRENCH TYPE)	LOCAL ROAD AND STREETS	ROAD FILL	SAND	GRAVEL	TOPSOIL	POND RESERVOIR AREAS	DIKES, LEVEES, AND OTHER EMBANKMENTS	
*Embudo: EmB, EtC. For Tijeras part of EtC, see Tijeras series.	Slight[2]	Severe: seepage.	Moderate:[3] small stones.	Slight[3]	Severe: seepage.	Slight	Good	Poor: excess fines.	Poor: excess fines.	Poor: small stones.	Seepage	Piping; compressible	B

EtC—Embudo-Tijeras complex, 0 to 9 percent slopes. This mapping unit is about 50 percent an Embudo gravelly fine sandy loam, 0 to 5 percent slopes, and about 35 percent a Tijeras gravelly fine sandy loam that has 1 to 9 percent slopes.

The Embudo soil is in drainageways and depressions, and the Tijeras soil is on low ridges in narrow undulations. The Tijeras soil has the profile described as representative of the Tijeras series. On both soils, runoff is medium and the hazard of water erosion is moderate.

Included in this unit in mapping are areas of Tesajo, Millett, and Wink soils, which make up about 15 percent of the unit.

This mapping unit is used for community development, watershed, wildlife habitat, and range. The Embudo part of this unit is subject to flooding. Control of moisture is required for proper compaction. Dryland capability subclass VIIe; native plant community 4.

LEGAL DESCRIPTION:

PORTIONS OF PARCELS A & D AND ALL OF PARCELS C-8 AND E OF WINROCK CENTER ADDITION, CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

NO	REVISIONS	BY	DATE
3	REVISED G&D PLAN TO CONFORM TO REVISED SITE PLAN	DWC	6/21/88
2	Changed POND TO CMP-ADDED ADDITIONAL NOTES OF CLARIFICATION	DWC	5/12/88
1	REVISED PLAN TO SHOW DETAIL GRADES & HYDROLOGY	DWC	4/27/88

RECEIVED JUN 22 1988 HYDROLOGY SECTION

TOYS "R" US

GRADING AND DRAINAGE PLAN

Rev. 5/12/88
Rev. 4/27/88
DOUGLAS W. COPELAND
7498

EASTERLING & ASSOCIATES, INC.
CONSULTING ENGINEERS
5643 Paradise Blvd. N.W.
Albuquerque, New Mexico 87114

Designed: DWC	Drawn: JEL	Checked: DWC	Sheet
Job No: 2011.2	Date: MAR. 1988		of C-2A

THIS PLAN SHOT TWICE
ONCE ON LIGHT AND
ONCE ON DARK.

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

R# 21 DATE 6-24-93 OP E.J.P.

CITY OF ALBUQUERQUE

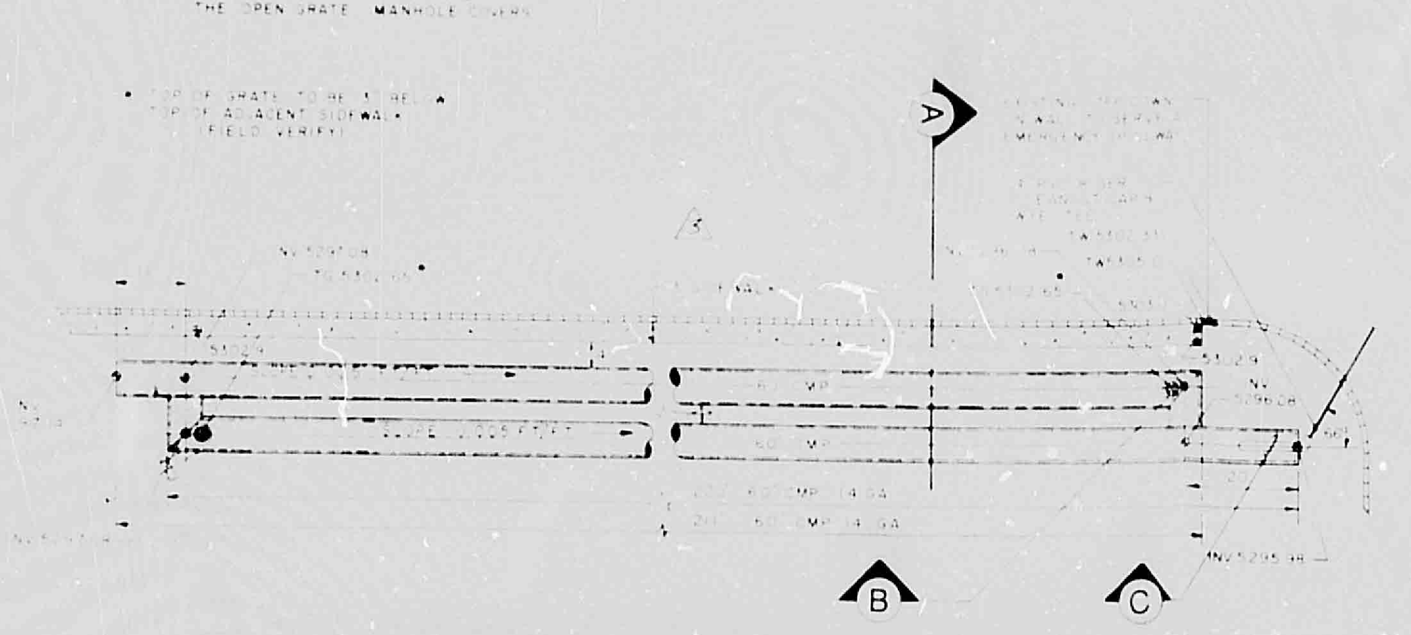
This microimage is certified to be a complete and accurate copy of the original as it appears in the files of the PUBLIC WORKS DEPARTMENT - HYDROLOGY DIVISION and was filmed in the normal course of business. The photographic processes used meet the Basic Microfilm Standards of the National Micrographics Association (MS115-1977).

Karen Anaya
CITY CLERK RECORDER

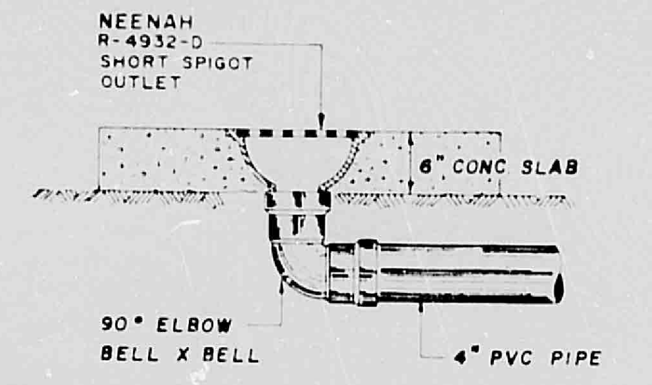
OFFICIAL SEAL
NORBERTA SANCHEZ
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires: MAY 8 1995
Norberta Sanchez

D 24 C 20 B 16 A 12

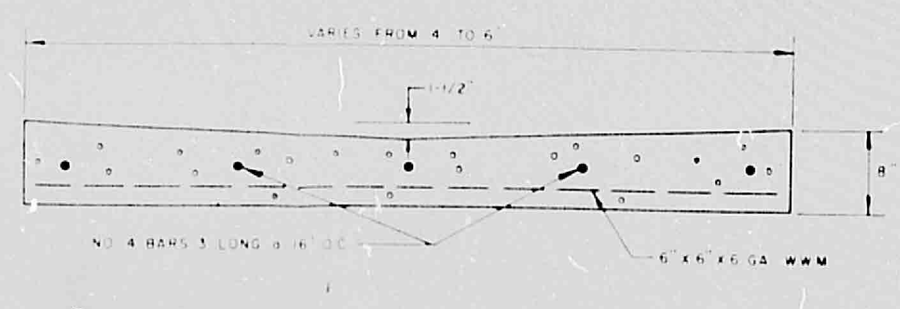
CITY OF ALBUQUERQUE C D



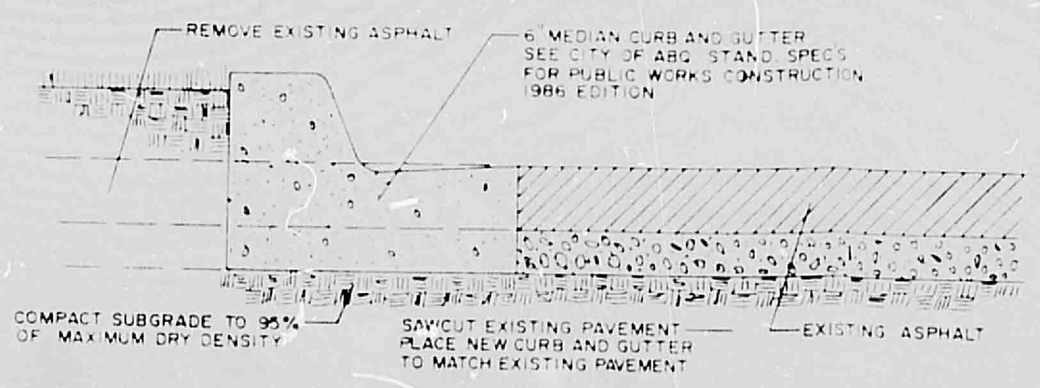
PLAN-UNDERGROUND STORM WATER DETENTION FACILITY


NEENAH R-4932-D SHORT SPIGOT OUTLET
6" CONC SLAB
90° ELBOW BELL X BELL
4" PVC PIPE

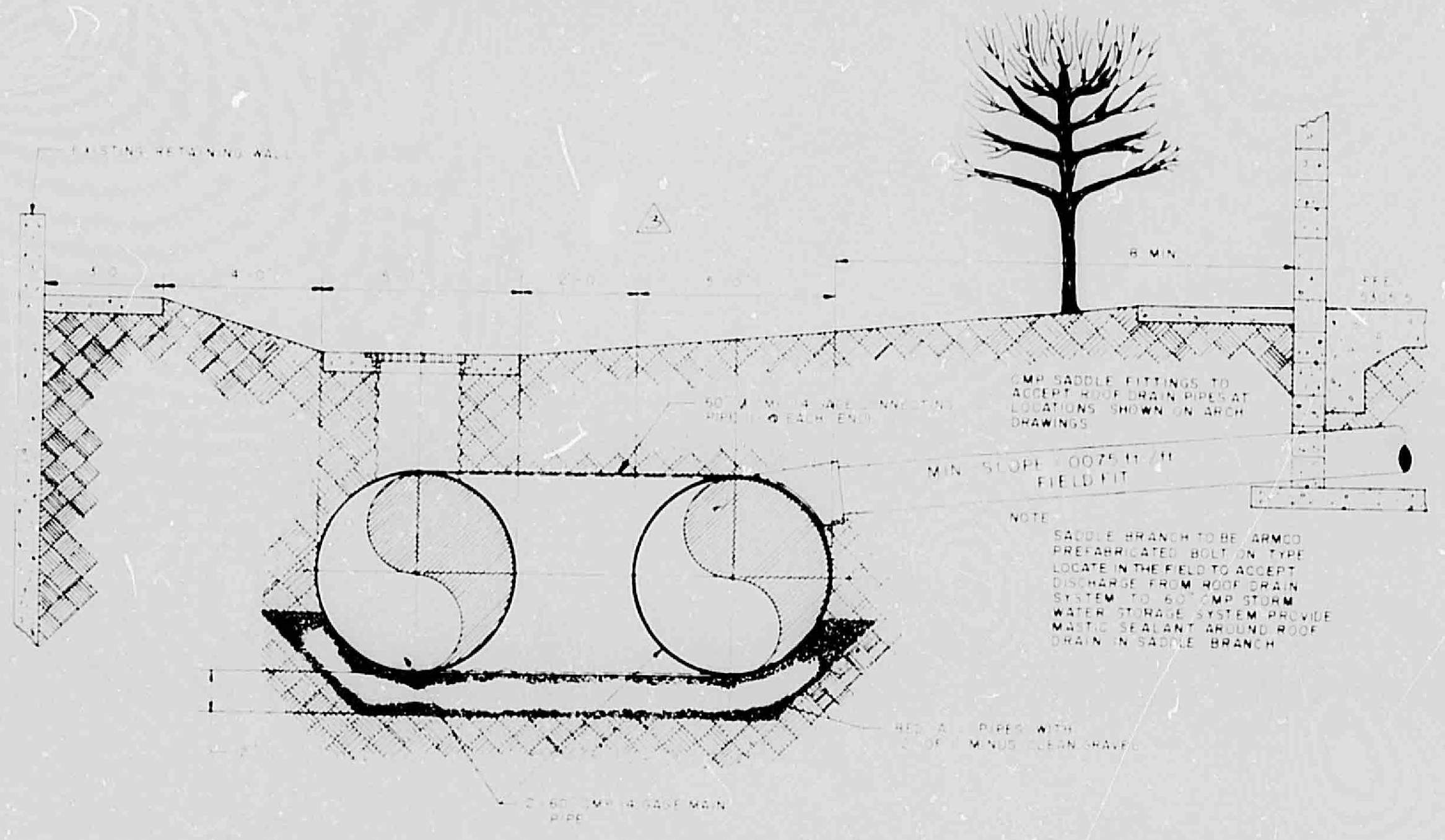
D DRAIN DETAIL



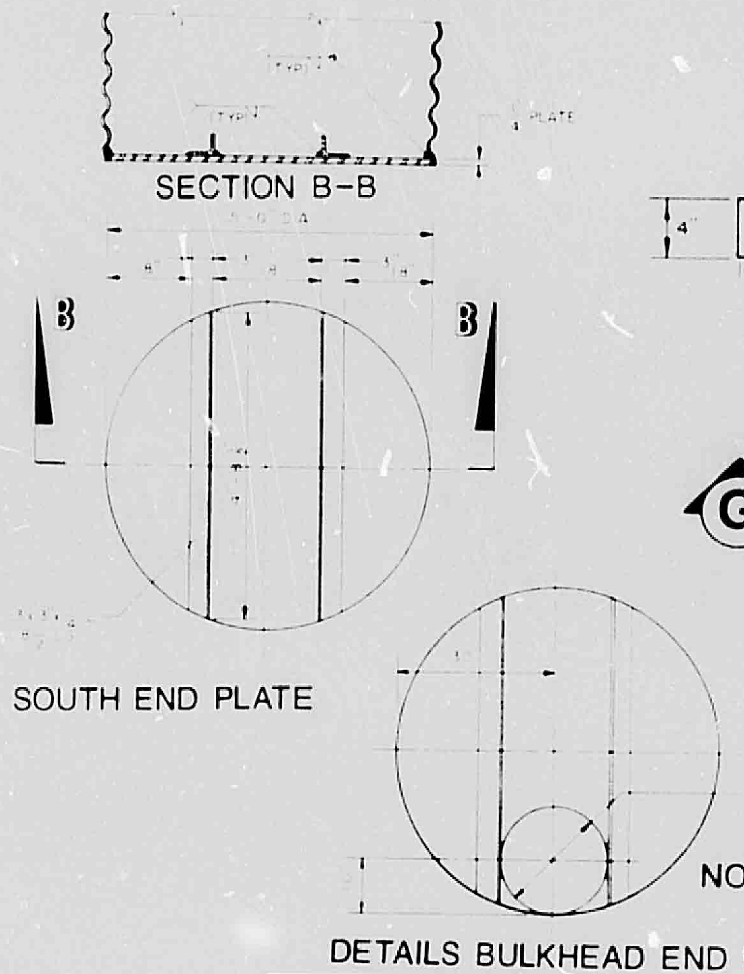
E SECTION: VALLEY GUTTER
NOT TO SCALE


REMOVE EXISTING ASPHALT
6" MEDIAN CURB AND GUTTER SEE CITY OF ABQ. STAND. SPECS FOR PUBLIC WORKS CONSTRUCTION 1986 EDITION
COMPACT SUBGRADE TO 95% OF MAXIMUM DRY DENSITY
SAWCUT EXISTING PAVEMENT PLACE NEW CURB AND GUTTER TO MATCH EXISTING PAVEMENT
EXISTING ASPHALT

F TYP. SECTION: MEDIAN CURB MATCHING EXISTING PAVEMENT
NOT TO SCALE

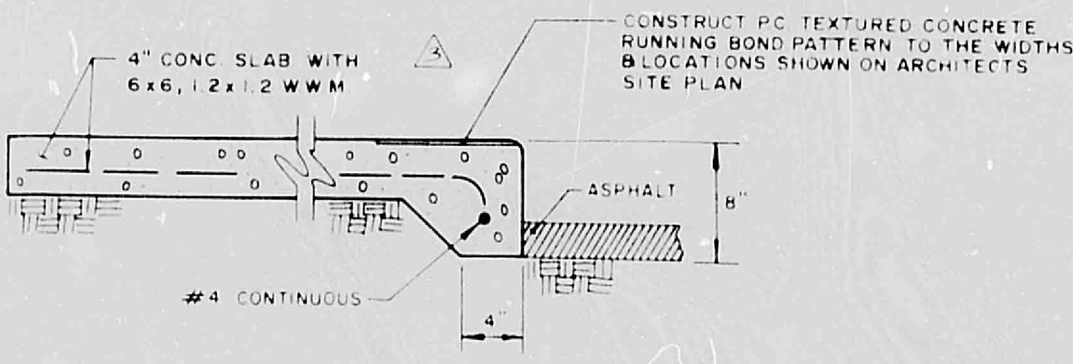


A TYPICAL SECTION-UNDERGROUND STORM WATER DETENTION FACILITY

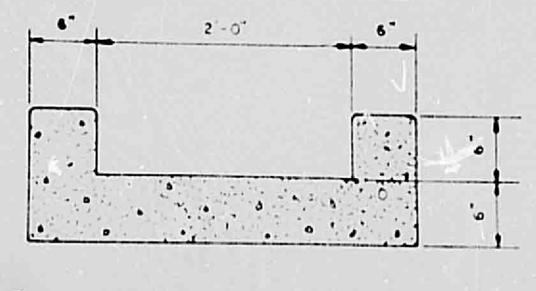

SECTION B-B
B
B
SOUTH END PLATE

NORTH END PLATE

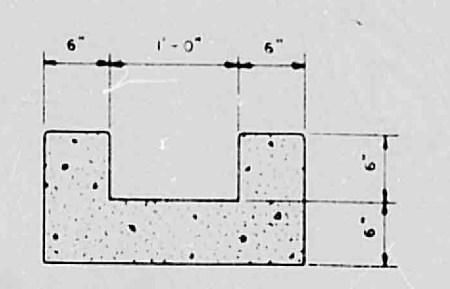
DETAILS BULKHEAD END PLATE


4" CONC SLAB WITH 6x6, 12x12 WWM
CONSTRUCT P.C. TEXTURED CONCRETE RUNNING BOND PATTERN TO THE WIDTHS & LOCATIONS SHOWN ON ARCHITECTS SITE PLAN
ASPHALT
#4 CONTINUOUS

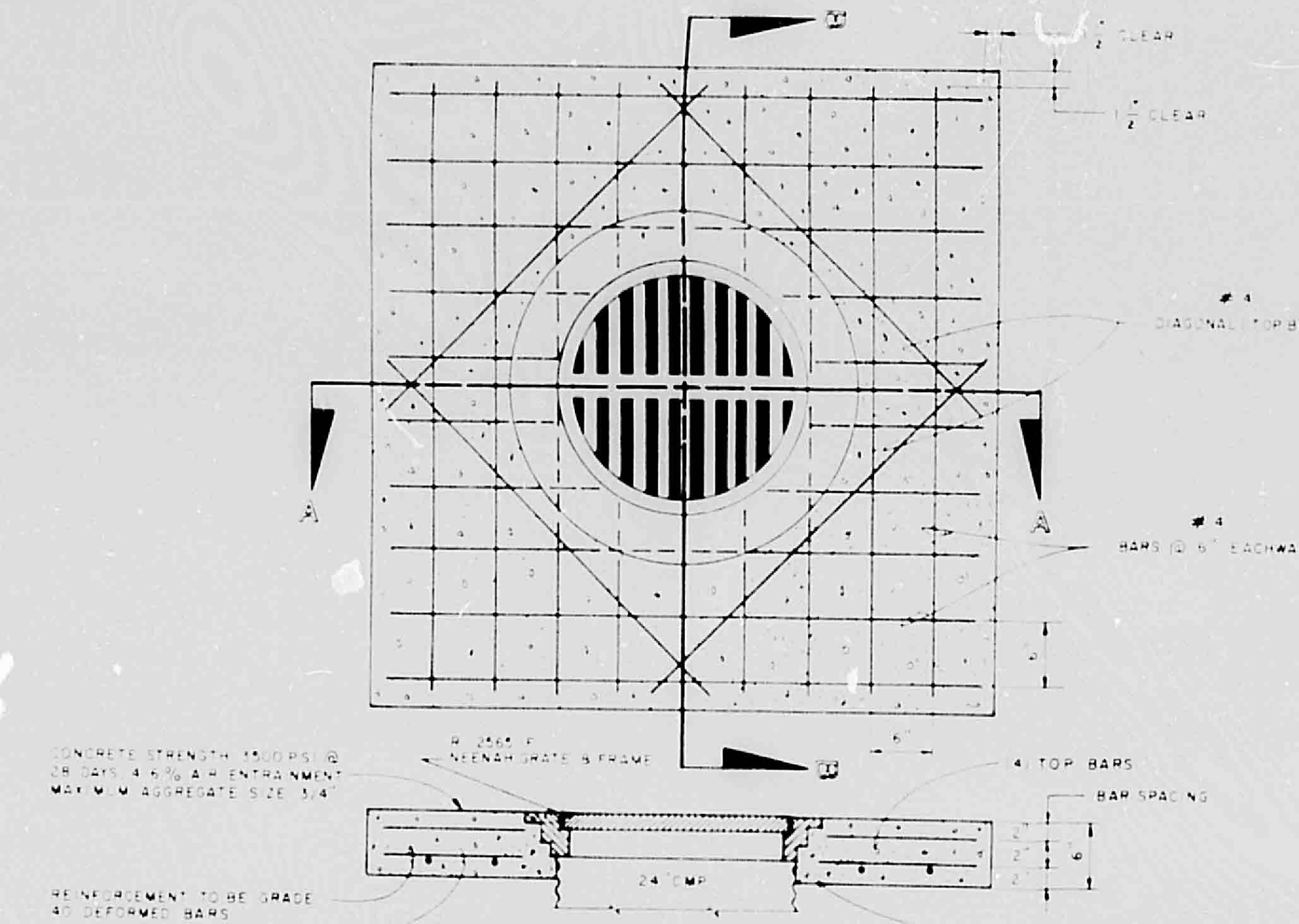
G SECTION TURNDOWN SIDEWALK
NO SCALE



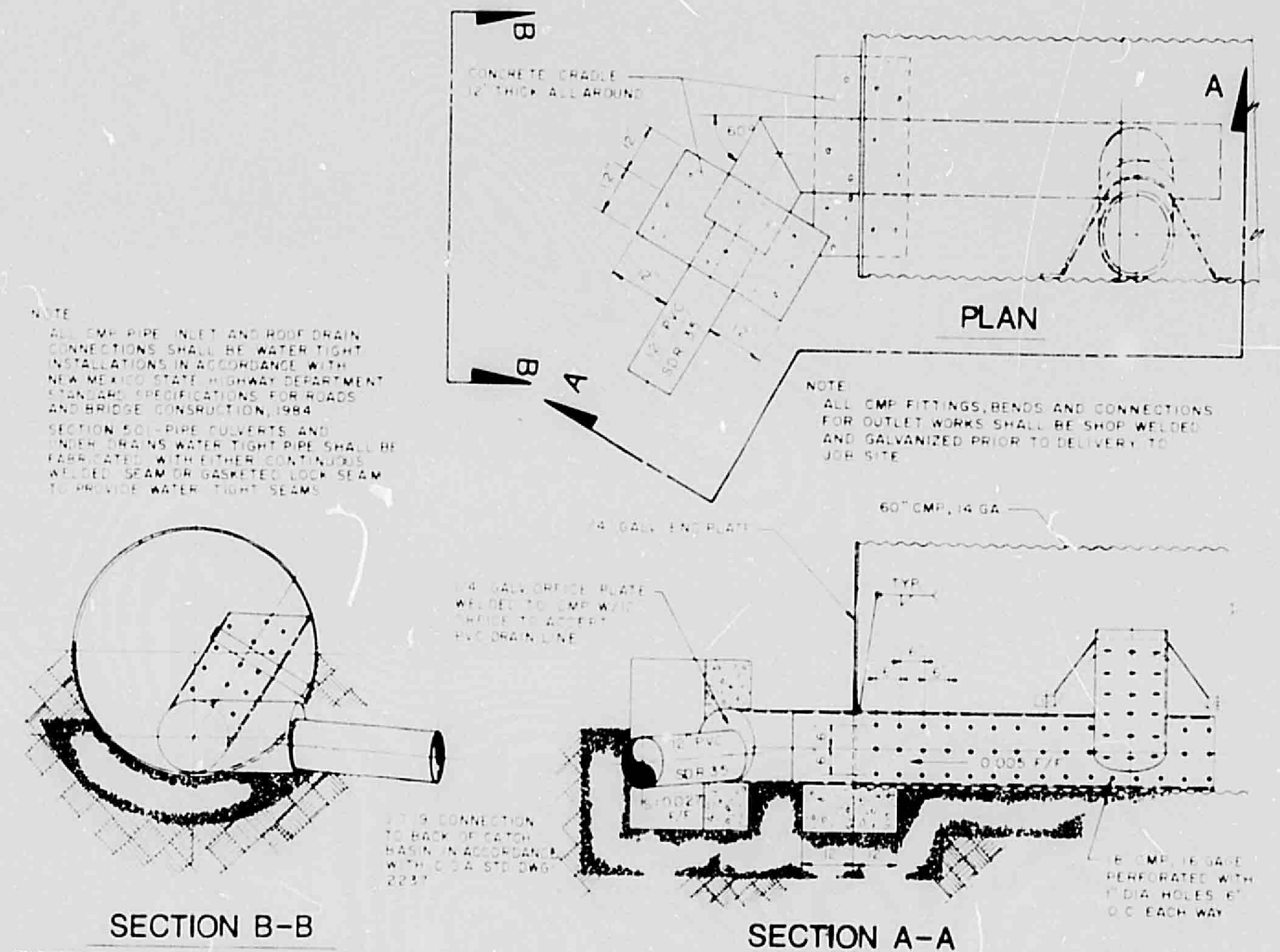
H CONCRETE RUNDOWN



I CONCRETE RUNDOWN


SECTION A-A & B-B

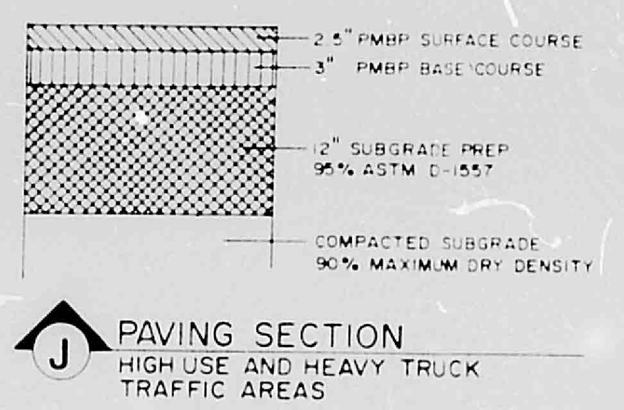
B GRATE AND FRAME DETAILS



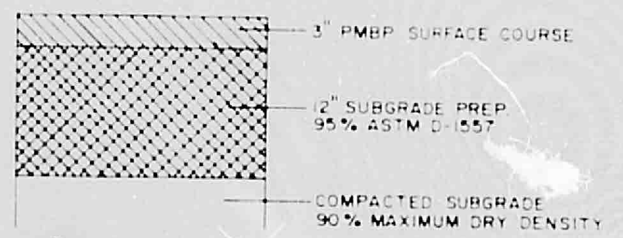
SECTION B-B

SECTION A-A

C DETAILS-OUTLET WORKS UNDERGROUND STORM WATER DETENTION FACILITY

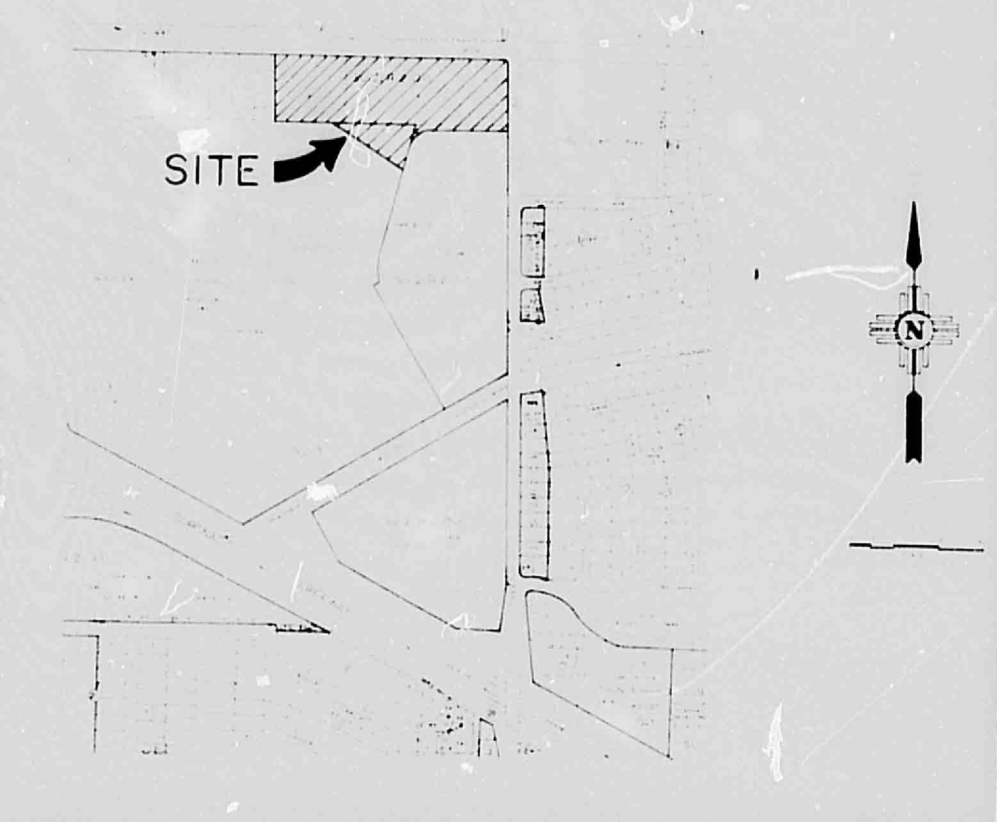

2.5" PMBP SURFACE COURSE
3" PMBP BASE COURSE
12" SUBGRADE PREP 95% ASTM D-1557
COMPACTED SUBGRADE 90% MAXIMUM DRY DENSITY

J PAVING SECTION
HIGH USE AND HEAVY TRUCK TRAFFIC AREAS


3" PMBP SURFACE COURSE
12" SUBGRADE PREP 95% ASTM D-1557
COMPACTED SUBGRADE 90% MAXIMUM DRY DENSITY

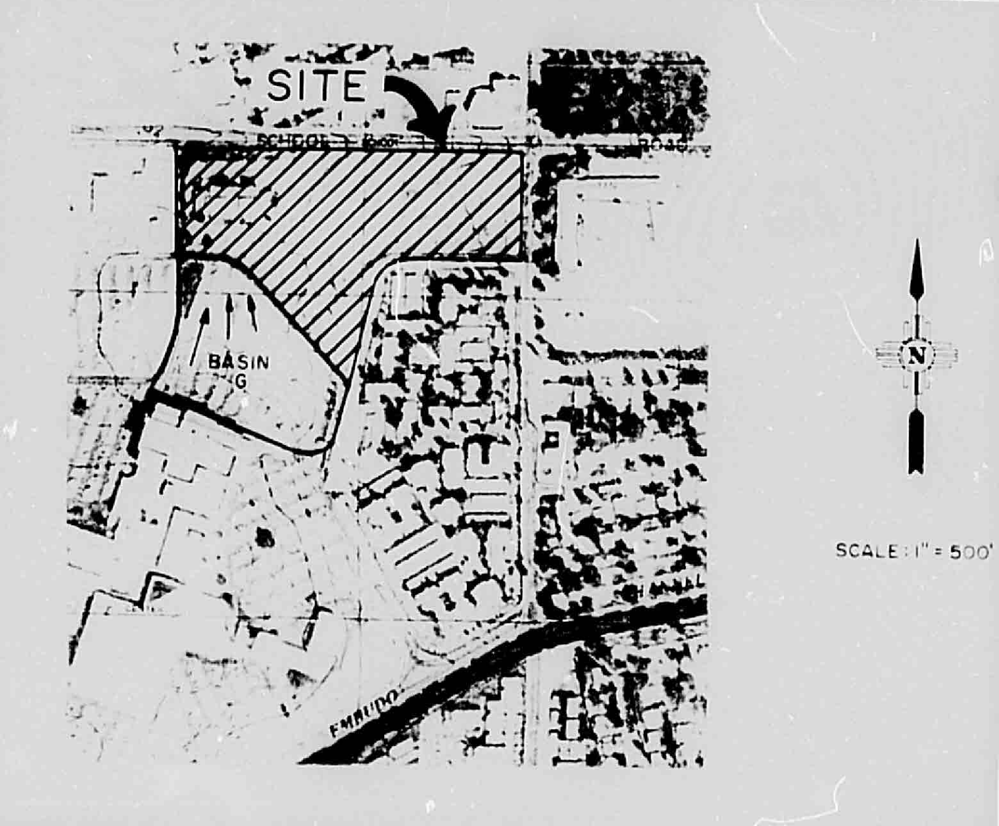
K PAVING SECTION
PARKING AND LIGHT VEHICLE TRAFFIC AREAS

VICINITY MAP ZONE ATLAS MAP NO. J-19



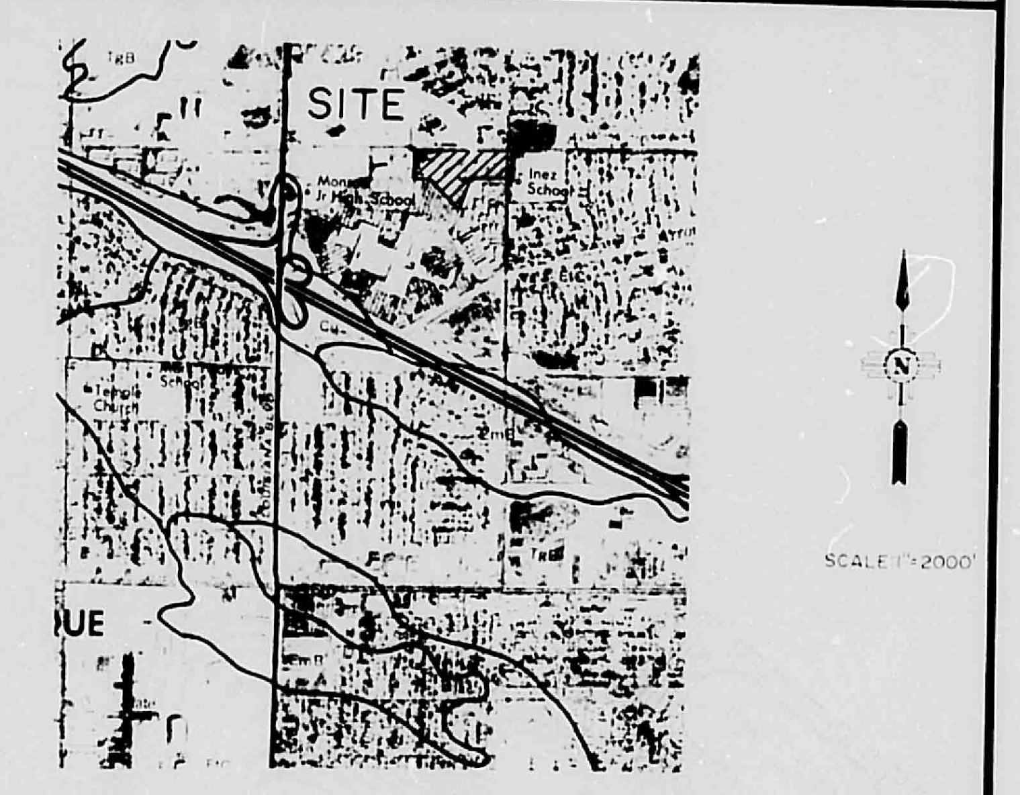
FLOOD HAZARD MAP & OFF-SITE FLOWS FROM F.E.M.A.

NO. 30


SITE
BASIN
N
SCALE 1"=500'

SOILS MAP SOIL SURVEY U.S.D.A., S.C.S.

NO. 31


SITE
UE
N
SCALE 1"=2000'

HYDROLOGY

DESCRIPTION	AREA	[illegible]
BASIN A+B+C+D+E+F+G UND	14.1	[illegible]
BASIN A+B+C+D+E+F+G EXI	14.1	[illegible]
BASIN A+B+C+D+E+F+G DEV	14.1	[illegible]
BASIN A+D+E DEVELOPED	[illegible]	[illegible]
BASIN B+F DEVELOPED	[illegible]	[illegible]
BASIN C+G DEVELOPED	[illegible]	[illegible]

P = 6 HOUR RAINFALL VOLUMES
I = RAINFALL INTENSITY - INCHES FOR 6 HOUR EVENT
V = VOLUME OF RUNOFF - CUBIC FEET
Q = RATE OF RUNOFF - CUBIC FEET PER SECOND

POND VOLUME CALCULATIONS

BY: DOUGLAS W. COPELAND DATE: 4/27/88

SOILS INFORMATION FROM SOIL SURVEY U.S.D.A., S.C.S.

SOIL SERIES AND MAP SYMBOLS	DEGREE AND KIND OF LIMITATIONS FOR: SEPTIC TANK ABSORPTION FIELDS	SEWAGE LAGOONS	SHALLOW EXCAVATIONS	DWELLINGS WITHOUT BASEMENTS	SANITARY LANDFILL (TRENCH TYPE)	LOCAL ROADS AND STREETS	SUITABILITY AS SOURCE OF: ROAD FILL	SAND	GRAVEL	TOPSOIL	SOIL FEATURES AFFECTING: POND RESERVOIR AREAS	DIKES, LEVEES, AND OTHER EMBANKMENTS	HYDROLOGIC SOIL GROUP
*Embudo: EmB, EtC. For Tijeras part of EtC, see Tijeras series.	Slight [2]	Severe: seepage.	Moderate: [2] small stones.	Slight [2]	Severe: seepage.	Slight	Good	Poor: excess fines.	Poor: excess fines.	Poor: small stones.	Seepage	Piping, compressible	B

EtC—Embudo-Tijeras complex, 0 to 9 percent slopes. This mapping unit is about 50 percent an Embudo gravelly fine sandy loam, 0 to 5 percent slopes, and about 35 percent a Tijeras gravelly fine sandy loam that has 1 to 9 percent slopes.

The Embudo soil is in drainageways and depressions, and the Tijeras soil is on low ridges in narrow undulations. The Tijeras soil has the profile described as representative of the Tijeras series. On both soils, runoff is medium and the hazard of water erosion is moderate.

Included in this unit in mapping are areas of Tesajo, Millett, and Wink soils, which make up about 15 percent of the unit.

This mapping unit is used for community development, watershed, wildlife habitat, and range. The Embudo part of this unit is subject to flooding. Control of moisture is required for proper compaction. Dryland capability subclass VIIe; native plant community 4.

LEGAL DESCRIPTION:

PORTIONS OF PARCELS A & D AND ALL OF PARCELS C-8 AND E OF WINROCK CENTER ADDITION, CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

	REVISIONS	BY	DATE
3	REVISED G&D PLAN TO CONFORM TO REVISED SITE PLAN	DWC	6/21/88
2	CHANGED POND TO CMP ADDED ADDITIONAL NOTES OF CLARIFICATION	DWC	5/12/88
1	REVISED PLAN TO SHOW DETAIL GRADES & HYDROLOGY	DWC	4/27/88

TOYS "R" US

GRADING AND DRAINAGE PLAN

Rev 5/12/88
4/27/88

DOUGLAS W. COPELAND 8498

EASTERLING & ASSOCIATES, INC.
CONSULTING ENGINEERS
5643 Paradise Blvd. N.W.
Albuquerque, New Mexico 87114

Designed DWC	Drawn JEL	Checked DWC	Sheet
Job No. 2011.2	Date MAR. 1988		of C-2A

THIS PLAN SHOT TWICE
ONCE ON LIGHT AND
ONCE ON DARK.

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

R# 21 DATE 2-24-93 OP LJP

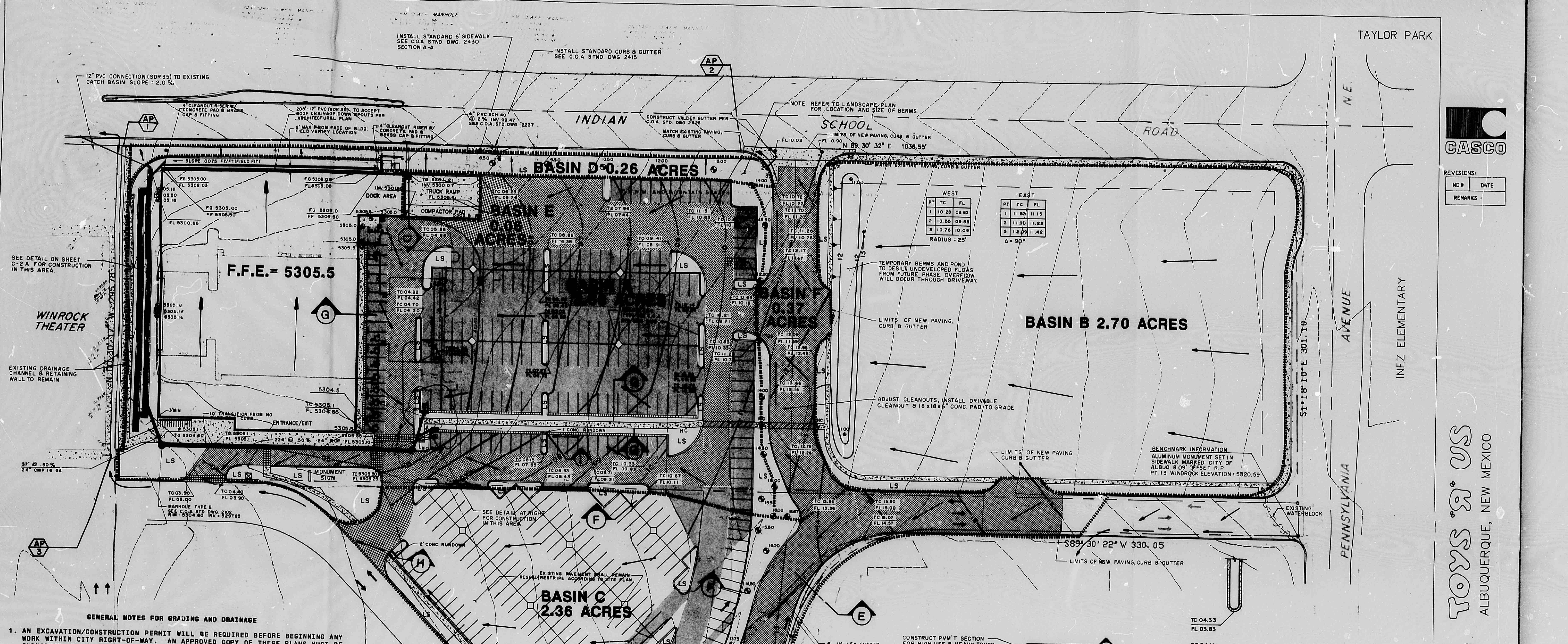
CITY OF ALBUQUERQUE

This microimage is certified to be a complete and accurate copy of the original as it appears in the files of the PUBLIC WORKS DEPARTMENT - HYDROLOGY DIVISION and was filmed in the normal course of business. The photographic processes used meet the Basic Microfilm Standards of the National Micrographics Association (MS115-1977).

Karen Reeves
CITY CLERK RECORDER

OFFICIAL SEAL
NORBERTA SANCHEZ
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires MAY 8 1995
Norberta Sanchez

D 24 C 20 B 16 A 12 CITY OF ALBUQUERQUE C D


TAYLOR PARK
INDIAN SCHOOL ROAD N.E.
PENNSYLVANIA AVENUE
INEZ ELEMENTARY
WINROCK THEATER
BASIN D 0.26 ACRES
BASIN E 0.06 ACRES
BASIN F 0.37 ACRES
BASIN B 2.70 ACRES
BASIN C 2.36 ACRES
F.F.E.= 5305.5
S89°30'22"W 330.05
S1°18'10"E 301.18
N 89°30'32"E 1038.55'
SEE DETAIL ON SHEET C-2A FOR CONSTRUCTION IN THIS AREA
EXISTING DRAINAGE CHANNEL & RETAINING WALL TO REMAIN
TEMPORARY BERMS AND POND TO DESILT UNDEVELOPED FLOWS FROM FUTURE PHASE. OVERFLOW WILL OCCUR THROUGH DRIVEWAY
LIMITS OF NEW PAVING, CURB & GUTTER
ADJUST CLEANOUTS, INSTALL DRIVABLE CLEANOUT 8 18x18x6 CONC PAD TO GRADE
BENCHMARK INFORMATION ALUMINUM MONUMENT SET IN SIDEWALK MARKED CITY OF ALBUQ 8.09 OFFSET R.P. PT. 13 WINROCK ELEVATION = 5320.59
EXISTING WATERBLOCK
INSTALL STANDARD 6' SIDEWALK SEE C.O.A. STND. DWG. 2430 SECTION A-A
INSTALL STANDARD CURB & GUTTER SEE C.O.A. STND. DWG. 2415
NOTE: REFER TO LANDSCAPE PLAN FOR LOCATION AND SIZE OF BERMS
12" PVC CONNECTION (SDR 35) TO EXISTING CATCH BASIN SLOPE = 2.0%
SEE DETAIL AT RIGHT FOR CONSTRUCTION IN THIS AREA
EXISTING PAVEMENT SHALL REMAIN RESEAL & RESTRIPE ACCORDING TO SITE PLAN
EXISTING PARKING LOT AREA TO BE RESTRIPED AND NEW MEDIANS TO BE SET IN EXISTING ASPHALT
6' VALLEY GUTTER
CONSTRUCT PVM'T SECTION FOR HIGH USE & HEAVY TRUCK TRAFFIC IN DRIVE LANES INDICATED BY DARKER PATTERN
CONSTRUCT STANDARD PAVING SECTION ELSEWHERE
NOTE: REMOVE AND DISPOSE OF EXISTING PAVEMENT IN LANDSCAPE AREAS
N 44°04'03" W

I HEREBY CERTIFY THAT THE BELOW GROUND STORM DRAIN AND STORM WATER DETENTION/FACILITIES HAVE BEEN CONSTRUCTED IN SUBSTANTIAL CONFORMANCE WITH THE PLANS SHOWN HEREIN WITH EXCEPTIONS TAKEN AS NOTED.

DOUGLAS W. COPELAND
NEW MEXICO
8498
REGISTERED PROFESSIONAL ENGINEER

GENERAL NOTES FOR GRADING AND DRAINAGE

1. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY. AN APPROVED COPY OF THESE PLANS MUST BE SUBMITTED AT THE TIME OF APPLICATION FOR THIS PERMIT.
2. ALL WORK DETAILED ON THESE PLANS, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION - 1986 EDITION, EXCEPT FOR GENERAL CONDITIONS.
3. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, 765-1234, FOR LOCATION OF EXISTING UTILITIES.
4. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
5. BACKFILL COMPACTION SHALL BE ACCORDING TO ARTERIAL STREET USE.
6. MAINTENANCE OF THE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.
7. ALL UTILITIES AND UTILITY SERVICE LINES SHALL BE INSTALLED PRIOR TO PAVING
8. DISPOSAL OF ALL WASTE MATERIAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AS SPECIFIED IN SECTION 6.14 OF THE GENERAL CONDITIONS IN THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION - 1986 EDITION.
9. ALL CONCRETE DUMPSTER PADS SHALL BE SIX INCH REINFORCED CONCRETE (6"x6", 10 GA. W.W.M.).
10. **OWNERSHIP OF DOCUMENTS:** THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF **EASTERLING & ASSOCIATES, INC.** AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF **EASTERLING & ASSOCIATES, INC.**
11. **CONSTRUCTION SAFETY:** THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH SHALL REMAIN THE CONTRACTOR'S RESPONSIBILITY.
12. **EROSION CONTROL:** THE SITE WILL BE FULLY DEVELOPED IMMEDIATELY. EROSION PROBLEMS GENERATED BY PHASED DEVELOPMENT WILL NOT, THEREFOR, BE A PROBLEM.
13. **CONSTRUCTION PHASE:** THE CONTRACTOR SHALL EXERCISE REASONABLE CARE DURING CONSTRUCTION TO PREVENT THE MOVEMENT OF SEDIMENT FROM THE SITE INTO THE STREET. LOOSE SOIL STOCKPILES IN THE STREET DURING UTILITY CONNECTION ACTIVITIES SHALL BE PROTECTED FROM BEING CARRIED DOWNSTREAM BY FLOWING WATER IN THE STREET.

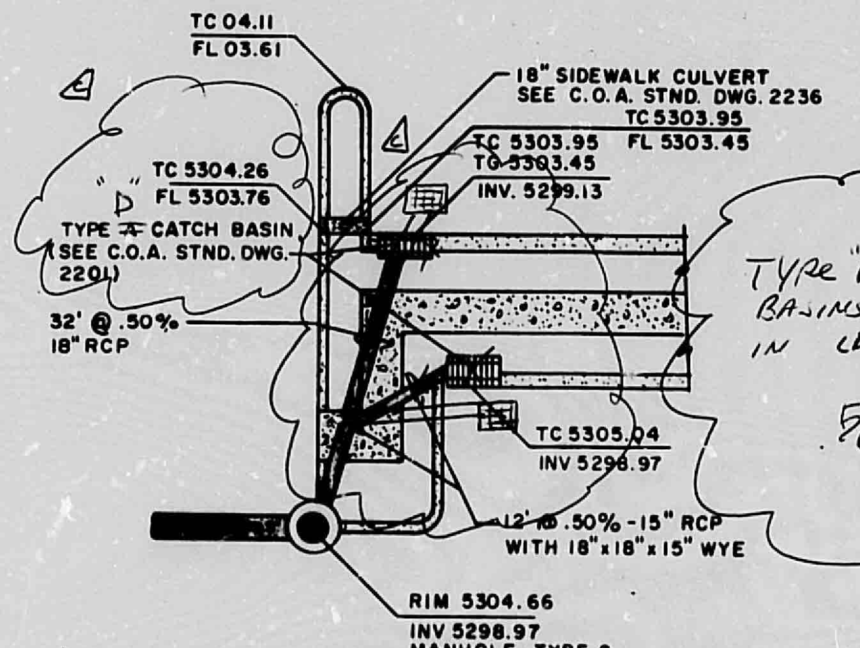
SCALE: 1" = 40'

ABBREVIATIONS

TC - TOP OF CURB
FL - FLOW LINE
FG - FINISH GRADE
TG - TOP OF GRATE
C.O.A. - CITY OF ALBUQUERQUE
C.M.P. - CORRIGATED METAL PIPE
INV. - INVERT

LEGEND

DESCRIPTION	NEW	EXISTING
CONTOURS	—— 88 ——	- - - 88 - - -
SPOT ELEVATION	⊕ 88.2	⊕ 88.2
DRAINAGE AREA BOUNDARY	··················	
DRAINAGE DIVIDE	- - -┼- - -	
WATER BLOCK	∿∿∿∿	
DIRECTION OF FLOW	——→	
ASPHALT PAVING	ASPHALT	ASPHALT
LANDSCAPING	L S	L S
RETAINING WALL	▬▬▬▬	▭▭▭▭
GARDEN WALL	▬▬▬▬	▭▭▭▭
SWALE	—→···—→	—→ —→
PROPERTY LINE	—— ——	————
FENCE	—•—•—•—	—•—•—•—
CATCH BASIN	▭	▭
STORM DRAIN MANHOLE AND LINE	—◎— SD —	- - -◎- SD - - -
SANITARY SEWER MANHOLE AND LINE	—●— SAS —	- - -○- SAS - - -
FIRE HYDRANT AND WATER LINE	—★— W —	- - -★- W - - -
REDUCERS	—▶—	- - -▷- - -
WATER VALVES	⋈ GATE |▱| BUTTERFLY	⋈ GATE |▱| BUTTERFLY
WATER CONNECTIONS	┬ ┬	┬ ┬
WATER JOINTS	├ ┼ └ ┬	├ ┼ └ ┬
CONCRETE	▨	EXISTING ▨
GAS LINE	—Ⓖ—	- - -Ⓖ- - -
UNDERGROUND TELEPHONE	—UT—	- - -UT- - -
CABLE TELEVISION	—CT—	- - -CT- - -
POWER/TELEPHONE POLE	○ PP	○ PP
UNDERGROUND ELECTRICAL	—UE—	- - -UE- - -
CURB ELEVATION	TC 5088.28 / FL 5087.78	TC 5088.28 / FL 5087.78
HYDROLOGICAL ANALYSIS POINT	△ AP	
DETAIL REFERENCE	⬡	
KEYED NOTES	①	
CITY ABQ. DETAIL REFERENCE	⬡	


TC 04.33
FL 03.83
TC 04.11
FL 03.61
18" SIDEWALK CULVERT SEE C.O.A. STND. DWG. 2236
TC 5303.95 FL 5303.45
TC 5303.95
TG 5303.45
INV. 5299.13
TC 5304.26
FL 5303.76
TYPE "D" ~~A~~ CATCH BASIN (SEE C.O.A. STND. DWG. 2201)
32' @ .50% 18" RCP
TC 5305.04
INV 5298.97
12' @ .50% - 15" RCP WITH 18"x18"x15" WYE
RIM 5304.66
INV 5298.97
MANHOLE TYPE C SEE C.O.A. STND. DWG. 2101

TYPE "D" CATCH BASINS CONSTRUCTED IN LIEU OF TYPE "A".
5/2/89
DWC

ENGINEERING CERTIFICATION

PLAN: STORM INLET DETAIL

SCALE: 1" = 20'

Dwc 5/2/89

RECEIVED
MAY 02 1989
HYDROLOGY SECTION

NO.	REVISIONS	BY	DATE
4	REVISED ACCESS STREET ELEVATIONS.	D.L.S.	8/17/88
3	REVISED G&D PLAN TO CONFORM TO REVISED SITE PLAN	DWC	6/21/88
2	CHANGE POND TO CMP. ADDED ADDITIONAL NOTES OF CLARIFICATION	DWC	5/27/88
1	REVISED PLAN TO SHOW DETAIL GRADES & HYDROLOGY	DWC	4/27/88

TOYS "R" US
GRADING & DRAINAGE PLAN

DOUGLAS W. COPELAND
NEW MEXICO
8498
REGISTERED PROFESSIONAL ENGINEER

EASTERLING & ASSOCIATES, INC.
CONSULTING ENGINEERS
5643 Paradise Blvd. N.W.
Albuquerque, New Mexico 87114

Designed: DLS	Drawn: JEL	Checked: DWC	Sheet of C-2B
Job No: 2012 C-2	Date: JUNE 1988		

CASCO

REVISIONS:

NO.#	DATE
REMARKS	

TOYS "R" US
ALBUQUERQUE, NEW MEXICO
GEOFFREY

DRAWN BY

CHECKED BY

PROJECT NO. 88638

DATE

SHEET NUMBER

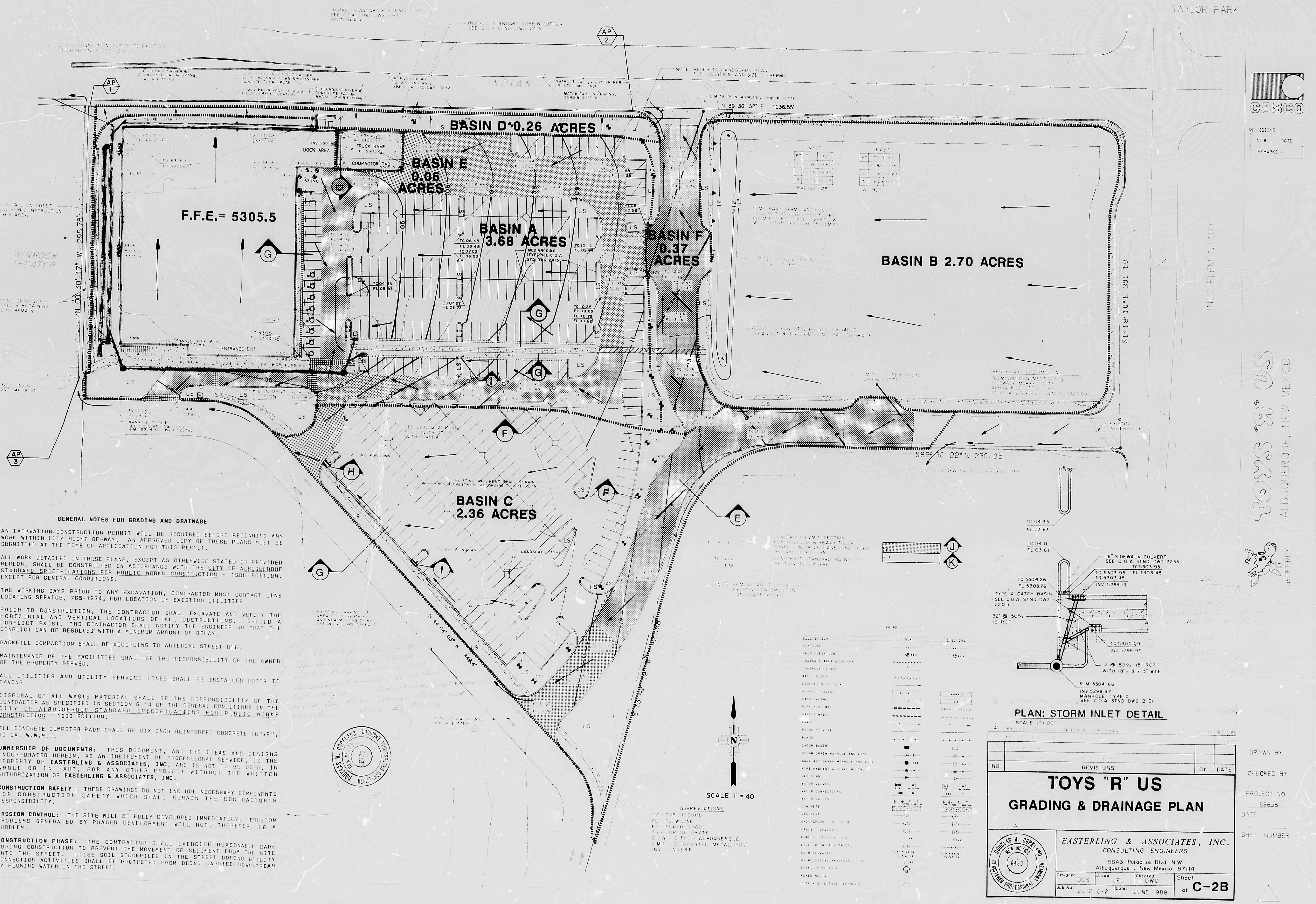
THIS PLAN SHOT TWICE
ONCE ON LIGHT AND
ONCE ON DARK.

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

R# 21 DATE 6-24-93 OP E.J.P.
CITY OF ALBUQUERQUE
This microimage is certified to be a complete and accurate copy of the original as it appears in the files of the PUBLIC WORKS DEPARTMENT - HYDROLOGY DIVISION and was filmed in the normal course of business.
The photographic processes used meet the Basic Microfilm Standards of the National Micrographics Association (MS115-1977).
Karen Aceves
CITY CLERK RECORDER

OFFICIAL SEAL
NORBERTA SANCHEZ
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires: MAY 8 1995
Norberta Sanchez

D 24 C 20 B 16 A 12
CITY OF ALBUQUERQUE C D


TAYLOR PARK
INDIAN
N 89°30'32" E 1036.55'
BASIN D 0.26 ACRES
BASIN E 0.06 ACRES
BASIN A 3.68 ACRES
BASIN F 0.37 ACRES
BASIN B 2.70 ACRES
BASIN C 2.36 ACRES
F.F.E.= 5305.5
WINROCK THEATER
N 00°30'17" W 295.78'
S 89°30'22" W 330.05
DOCK AREA
COMPACTOR PAD
ENTRANCE EXIT
LANDSCAPE
AP 1
AP 2
AP 3
CASCO
TOYS "R" US
ALBUQUERQUE, NEW MEXICO
SCALE 1" = 40'
N
ABBREVIATIONS
TC 5305.04
INV 5298.97
12' @ .50% - 15" RCP WITH 18" x 18" x 15" WYE
RIM 5304.66
INV 5298.97
MANHOLE TYPE C
SEE C.O.A. STND DWG 2101

GENERAL NOTES FOR GRADING AND DRAINAGE

1. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY. AN APPROVED COPY OF THESE PLANS MUST BE SUBMITTED AT THE TIME OF APPLICATION FOR THIS PERMIT.
2. ALL WORK DETAILED ON THESE PLANS, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION - 1986 EDITION, EXCEPT FOR GENERAL CONDITIONS.
3. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, 765-1234, FOR LOCATION OF EXISTING UTILITIES.
4. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
5. BACKFILL COMPACTION SHALL BE ACCORDING TO ARTERIAL STREET USE.
6. MAINTENANCE OF THE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.
7. ALL UTILITIES AND UTILITY SERVICE LINES SHALL BE INSTALLED PRIOR TO PAVING.
8. DISPOSAL OF ALL WASTE MATERIAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AS SPECIFIED IN SECTION 6.14 OF THE GENERAL CONDITIONS IN THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION - 1986 EDITION.
9. ALL CONCRETE DUMPSTER PADS SHALL BE SIX INCH REINFORCED CONCRETE (6"x6", 10 GA. W.W.M.).
10. **OWNERSHIP OF DOCUMENTS:** THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF **EASTERLING & ASSOCIATES, INC.** AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF **EASTERLING & ASSOCIATES, INC.**
11. **CONSTRUCTION SAFETY:** THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH SHALL REMAIN THE CONTRACTOR'S RESPONSIBILITY.
12. **EROSION CONTROL:** THE SITE WILL BE FULLY DEVELOPED IMMEDIATELY. EROSION PROBLEMS GENERATED BY PHASED DEVELOPMENT WILL NOT, THEREFOR, BE A PROBLEM.
13. **CONSTRUCTION PHASE:** THE CONTRACTOR SHALL EXERCISE REASONABLE CARE DURING CONSTRUCTION TO PREVENT THE MOVEMENT OF SEDIMENT FROM THE SITE INTO THE STREET. LOOSE SOIL STOCKPILES IN THE STREET DURING UTILITY CONNECTION ACTIVITIES SHALL BE PROTECTED FROM BEING CARRIED DOWNSTREAM BY FLOWING WATER IN THE STREET.

PLAN: STORM INLET DETAIL

SCALE 1" = 20'

NO.	REVISIONS	BY	DATE

TOYS "R" US

GRADING & DRAINAGE PLAN

DOUGLAS W. COPELAND
NEW MEXICO
8498
REGISTERED PROFESSIONAL ENGINEER

EASTERLING & ASSOCIATES, INC.
CONSULTING ENGINEERS
5643 Paradise Blvd. N.W.
Albuquerque, New Mexico 87114

Designed: DLS	Drawn: JEL	Checked: DWC	Sheet of C-2B
Job No: 2012 C-2	Date: JUNE 1988		

DRAWN BY

CHECKED BY

PROJECT NO.
88638

DATE

SHEET NUMBER

THIS PLAN SHOT TWICE
ONCE ON LIGHT AND
ONCE ON DARK.

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

R# 21 DATE 2-24-93 OP LP

CITY OF ALBUQUERQUE

This microimage is certified to be a complete and accurate copy of the original as it appears in the files of the PUBLIC WORKS DEPARTMENT - HYDROLOGY DIVISION and was filmed in the normal course of business.
The photographic processes used meet the Basic Microfilm Standards of the National Micrographics Association (MS115-1977).

Karen Aceves
CITY CLERK RECORDER

OFFICIAL SEAL
NORBERTA SANCHEZ
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires May 8 1995
Norberta Sanchez

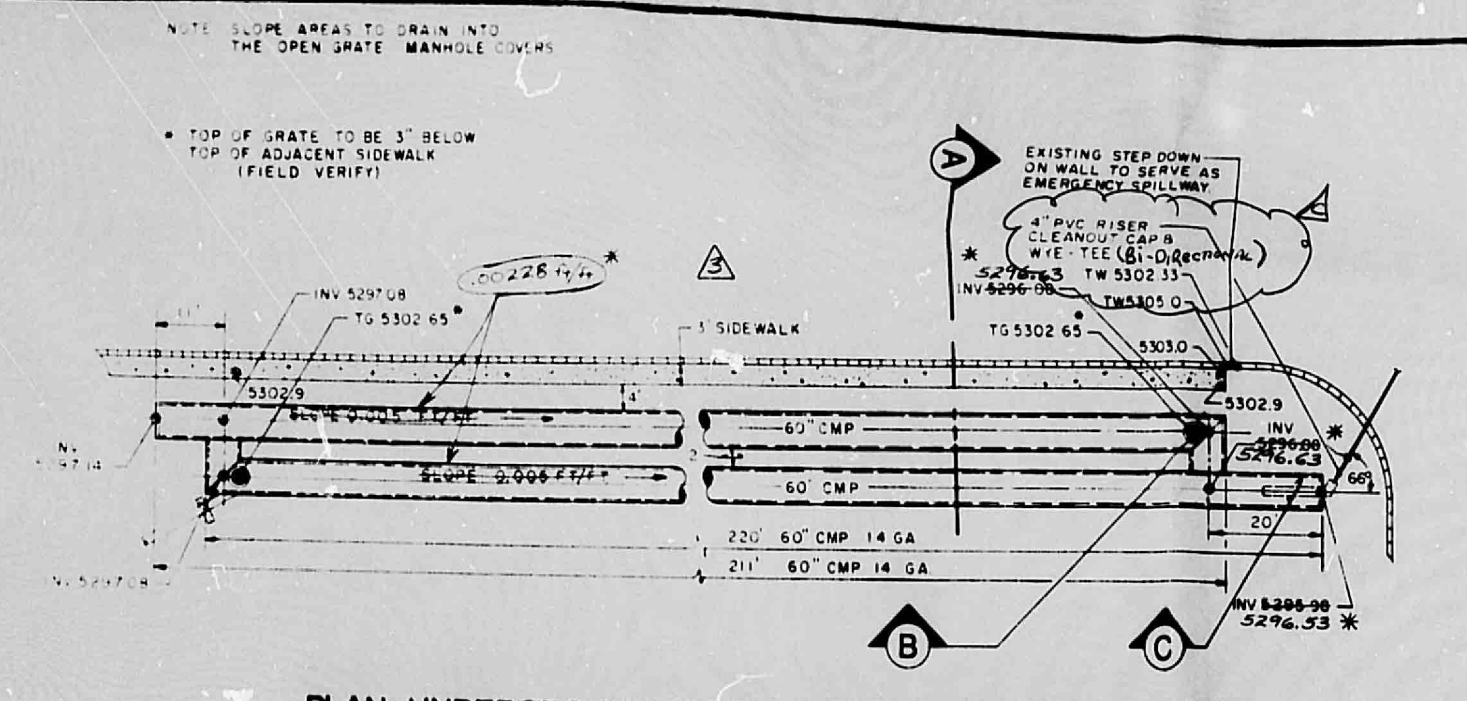
D 24 C 20 B 16 A 12

CITY OF ALBUQUERQUE

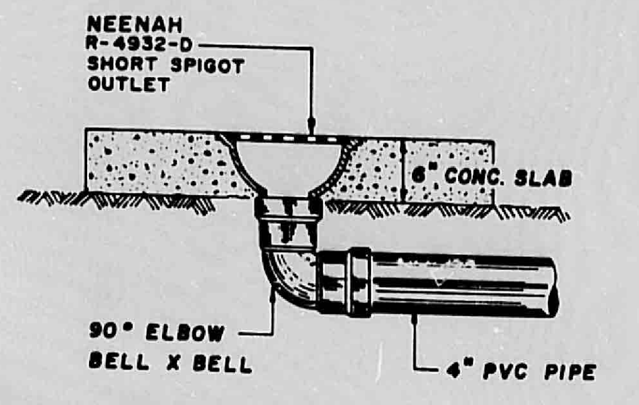
C D

NOTE: SLOPE AREAS TO DRAIN INTO THE OPEN GRATE MANHOLE COVERS

* TOP OF GRATE TO BE 3" BELOW TOP OF ADJACENT SIDEWALK (FIELD VERIFY)

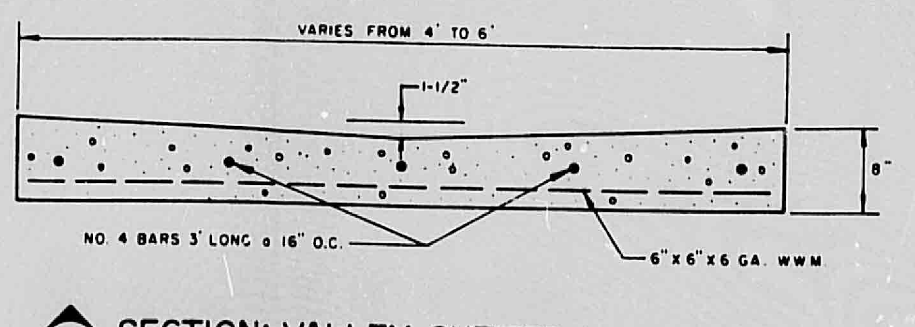

EXISTING STEP DOWN ON WALL TO SERVE AS EMERGENCY SPILLWAY
4" PVC RISER CLEANOUT CAP & WYE-TEE (Bi-Directional)
.00228 ft/ft *
INV 5297.08
TG 5302.65 *
3' SIDEWALK
5296.63
INV 5296.08
TW 5302.33
TW 5305.0
TG 5302.65
5303.0
5302.9
SLOPE 0.005 FT/FT
60" CMP
60" CMP
INV 5296.08 5296.63 *
220' 60" CMP 14 GA
211' 60" CMP 14 GA
20'
66°
INV 5296.98 5296.53 *
A
B
C

PLAN-UNDERGROUND STORM WATER DETENTION FACILITY


NEENAH R-4932-D SHORT SPIGOT OUTLET
6" CONC. SLAB
90° ELBOW BELL X BELL
4" PVC PIPE

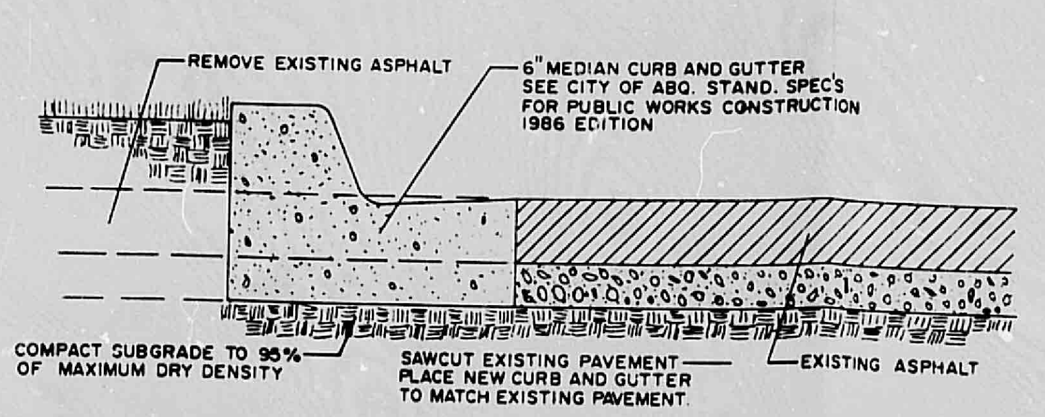
D DRAIN DETAIL

SCALE 1"=1'


VARIES FROM 4' TO 6'
1-1/2"
8"
NO. 4 BARS 3' LONG @ 16" O.C.
6"x6"x6 GA. WWM

E SECTION: VALLEY GUTTER

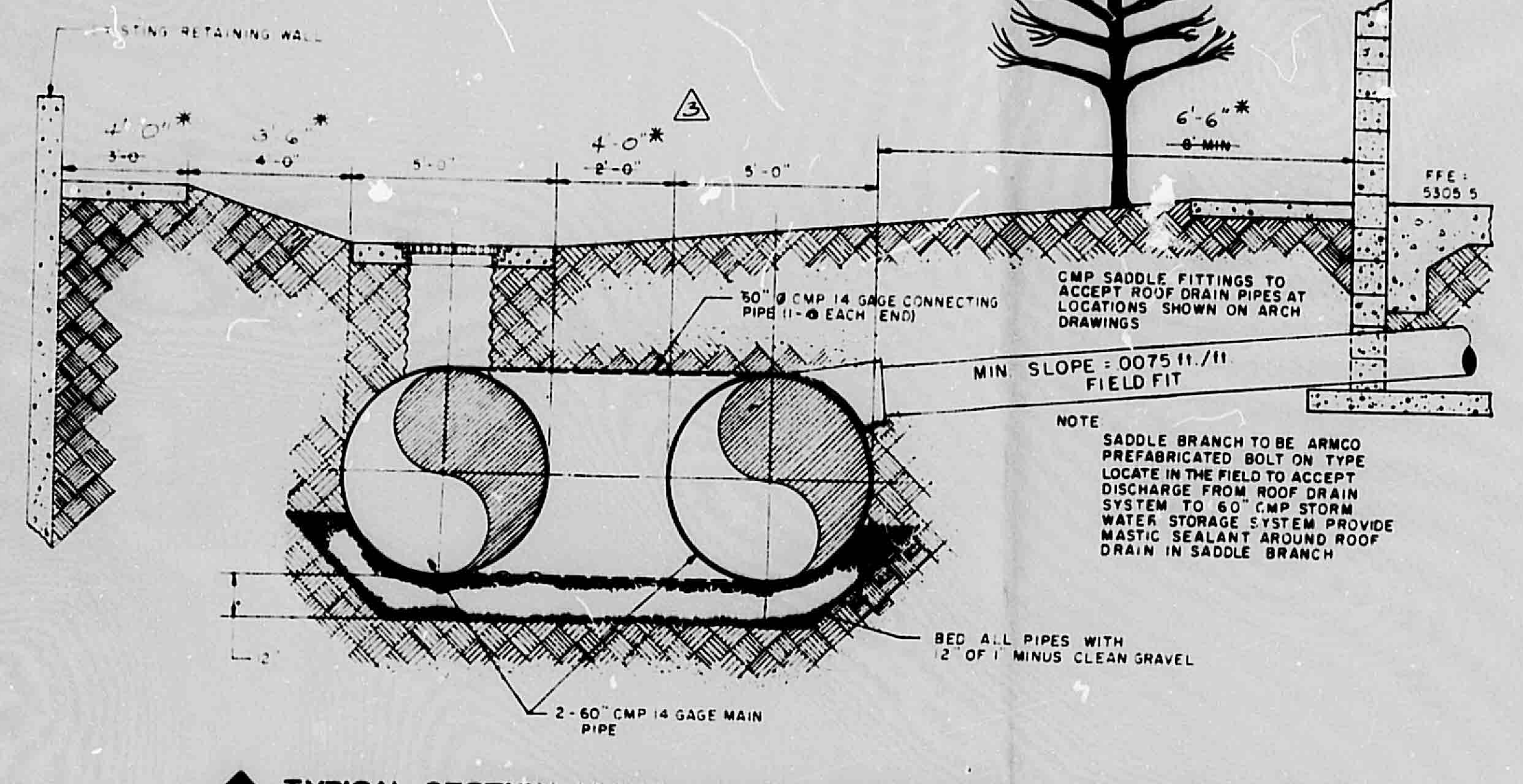
NOT TO SCALE


REMOVE EXISTING ASPHALT
6" MEDIAN CURB AND GUTTER SEE CITY OF ABQ. STAND. SPEC'S FOR PUBLIC WORKS CONSTRUCTION 1986 EDITION
COMPACT SUBGRADE TO 95% OF MAXIMUM DRY DENSITY
SAWCUT EXISTING PAVEMENT PLACE NEW CURB AND GUTTER TO MATCH EXISTING PAVEMENT.
EXISTING ASPHALT

F TYP. SECTION: MEDIAN CURB MATCHING EXISTING PAVEMENT

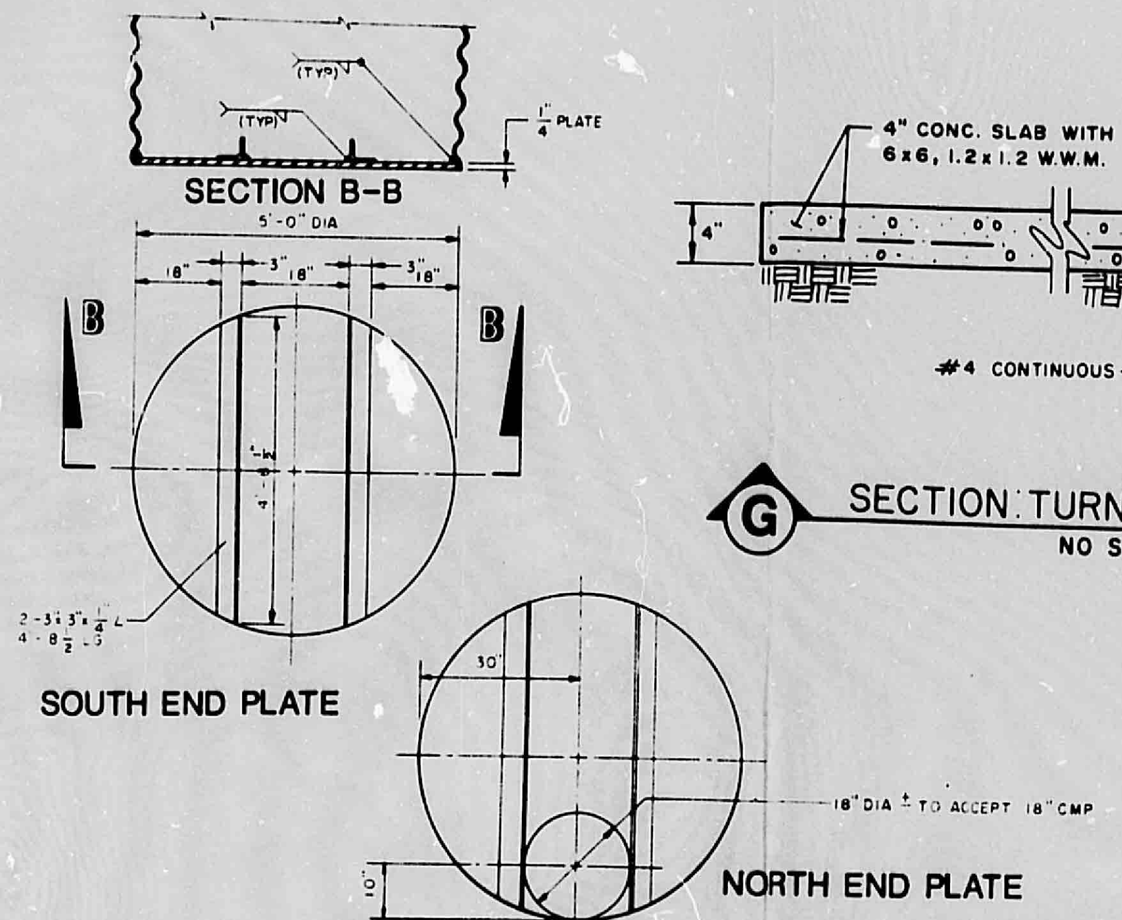
NOT TO SCALE

* AS BUILT INFORMATION 9-27-88 BY DAVID SMITH

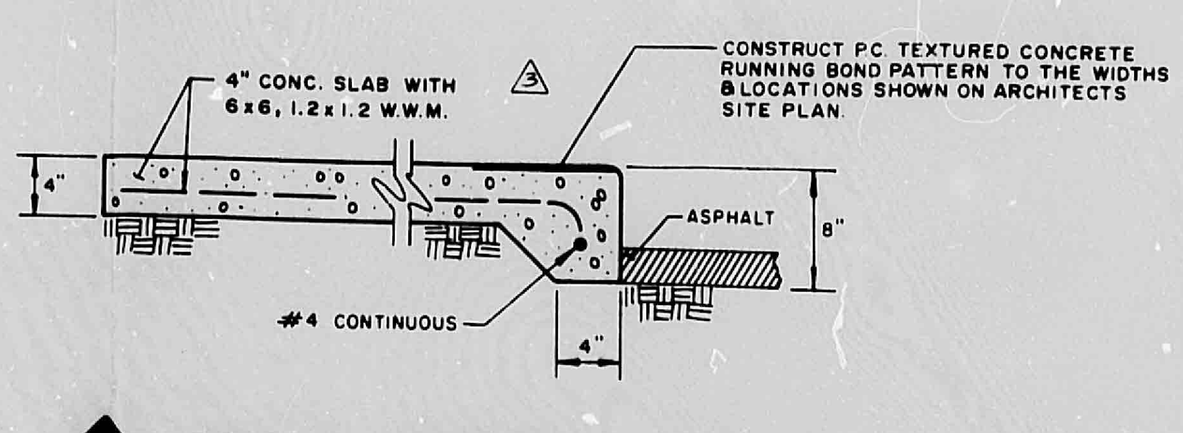

EXISTING RETAINING WALL
4'0" *
3'-0"
3'6" *
4'-0"
5'-0"
4'-0" *
2'-0"
5'-0"
6'-6" *
8' MIN
FFE: 5305.5
60" Ø CMP 14 GAGE CONNECTING PIPE (1-Ø EACH END)
CMP SADDLE FITTINGS TO ACCEPT ROOF DRAIN PIPES AT LOCATIONS SHOWN ON ARCH DRAWINGS
MIN. SLOPE = .0075 ft./ft. FIELD FIT
NOTE
SADDLE BRANCH TO BE ARMCO PREFABRICATED BOLT ON TYPE LOCATE IN THE FIELD TO ACCEPT DISCHARGE FROM ROOF DRAIN SYSTEM TO 60" CMP STORM WATER STORAGE SYSTEM PROVIDE MASTIC SEALANT AROUND ROOF DRAIN IN SADDLE BRANCH
BED ALL PIPES WITH 12" OF 1" MINUS CLEAN GRAVEL
2-60" CMP 14 GAGE MAIN PIPE
12"

A TYPICAL SECTION-UNDERGROUND STORM WATER DETENTION FACILITY

NOT TO SCALE

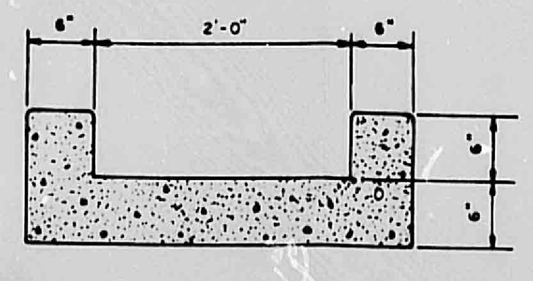

SECTION B-B
1/4" PLATE
5'-0" DIA
B
SOUTH END PLATE
NORTH END PLATE
18" DIA ± TO ACCEPT 18" CMP
10"

DETAILS BULKHEAD END PLATE


4" CONC. SLAB WITH 6x6, 1.2x1.2 W.W.M.
CONSTRUCT P.C. TEXTURED CONCRETE RUNNING BOND PATTERN TO THE WIDTHS & LOCATIONS SHOWN ON ARCHITECTS SITE PLAN.
4"
8"
ASPHALT
#4 CONTINUOUS
4"

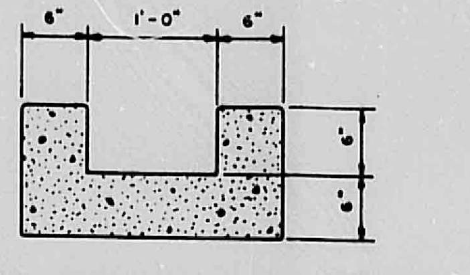
G SECTION: TURNDOWN SIDEWALK

NO SCALE



H CONCRETE RUNDOWN

SCALE: 1"=1'



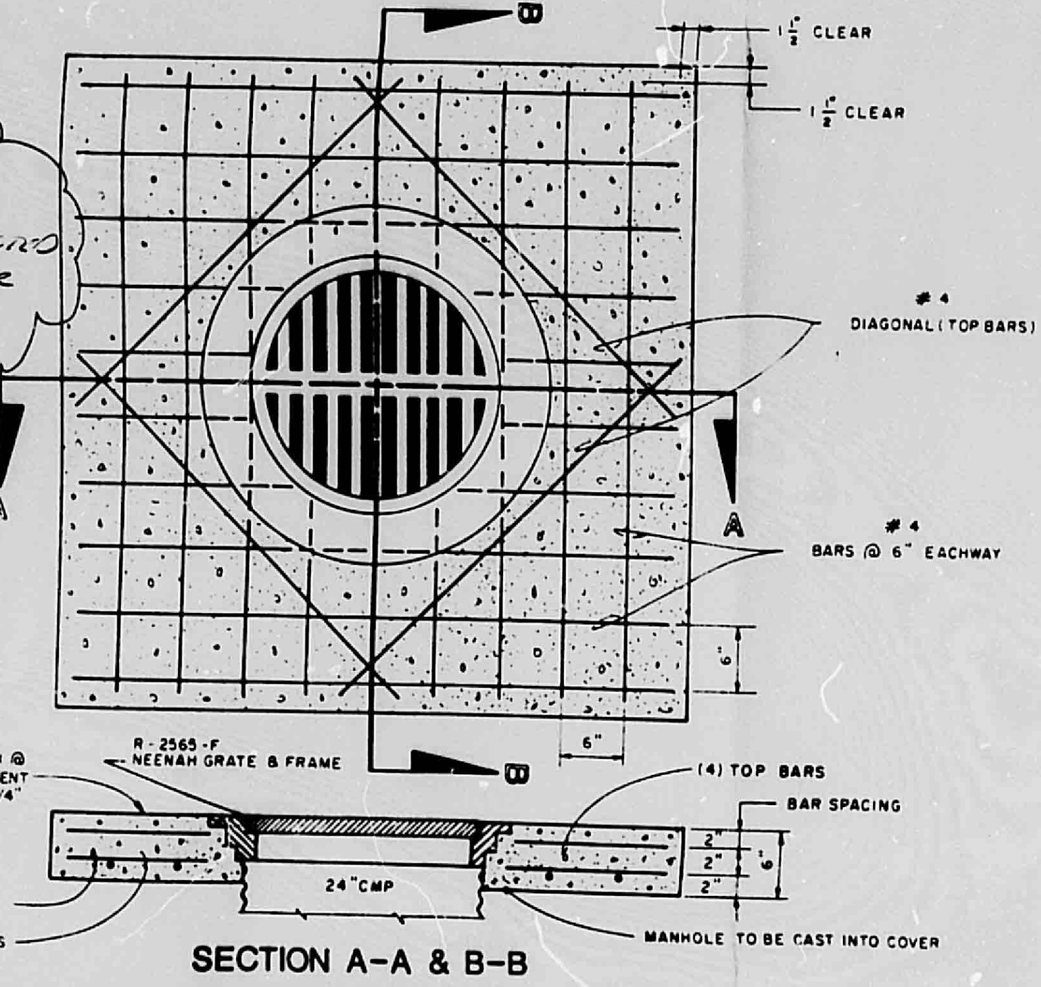
I CONCRETE RUNDOWN

SCALE: 1"=1'

I HERE BY CERTIFY THAT THE BELOW GROUND STORM DRAIN AND STORM WATER DETENTION FACILITIES HAVE BEEN CONSTRUCTED IN SUBSTANTIAL CONFORMANCE WITH THE PLANS SHOWN HEREIN WITH EXCEPTIONS TAKEN AS NOTED-

DOUGLAS W. COPELAND 8498

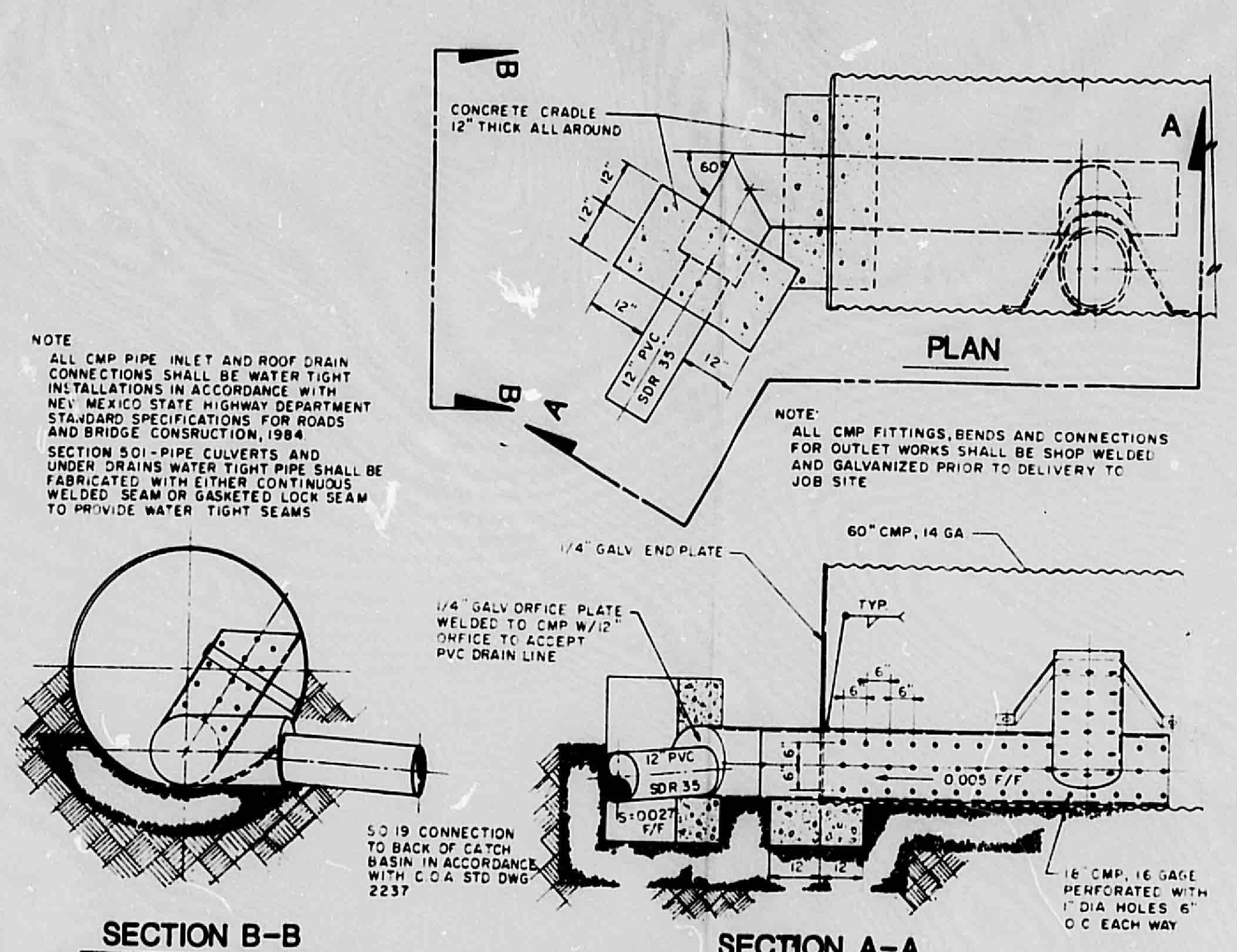
12/1/89


B
1½" CLEAR
1½" CLEAR
#4 DIAGONAL (TOP BARS)
A
#4 BARS @ 6" EACHWAY
6"
6"
CONCRETE STRENGTH 3500 PSI @ 28 DAYS, 4-6% AIR ENTRAINMENT MAXIMUM AGGREGATE SIZE: 3/4"
R-2565-F NEENAH GRATE & FRAME
(4) TOP BARS
BAR SPACING
2"
2"
2"
6"
24" CMP
REINFORCEMENT TO BE GRADE 40 DEFORMED BARS
BOTTOM BARS
MANHOLE TO BE CAST INTO COVER
SECTION A-A & B-B

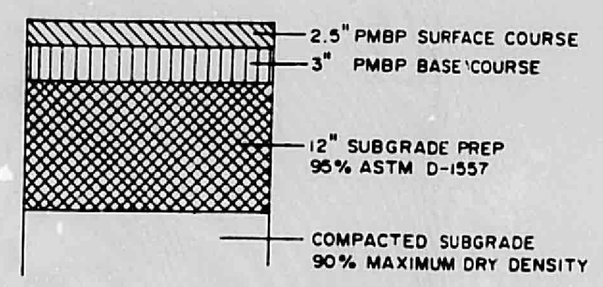
B GRATE AND FRAME DETAILS

NOTE
ALL CMP PIPE INLET AND ROOF DRAIN CONNECTIONS SHALL BE WATER TIGHT INSTALLATIONS IN ACCORDANCE WITH NEW MEXICO STATE HIGHWAY DEPARTMENT STANDARD SPECIFICATIONS FOR ROADS AND BRIDGE CONSRUCTION, 1984
SECTION 501-PIPE CULVERTS AND UNDER DRAINS WATER TIGHT PIPE SHALL BE FABRICATED WITH EITHER CONTINUOUS WELDED SEAM OR GASKETED LOCK SEAM TO PROVIDE WATER TIGHT SEAMS

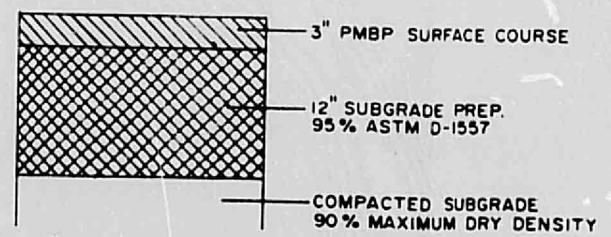
NOTE:
ALL CMP FITTINGS, BENDS AND CONNECTIONS FOR OUTLET WORKS SHALL BE SHOP WELDED AND GALVANIZED PRIOR TO DELIVERY TO JOB SITE


B
CONCRETE CRADLE 12" THICK ALL AROUND
60°
12"
12"
12"
12"
12" PVC SDR 35
A
PLAN
1/4" GALV END PLATE
60" CMP, 14 GA
TYP.
1/4" GALV ORFICE PLATE WELDED TO CMP W/12" ORFICE TO ACCEPT PVC DRAIN LINE
6"
6"
6"
12" PVC SDR 35
0.005 F/F
S=.0027 F/F
12
12
SD 19 CONNECTION TO BACK OF CATCH BASIN IN ACCORDANCE WITH C.O.A. STD DWG 2237
18" CMP, 16 GAGE PERFORATED WITH 1" DIA HOLES 6" O.C. EACH WAY
SECTION B-B
SECTION A-A

C DETAILS-OUTLET WORKS UNDERGROUND STORM WATER DETENTION FACILITY

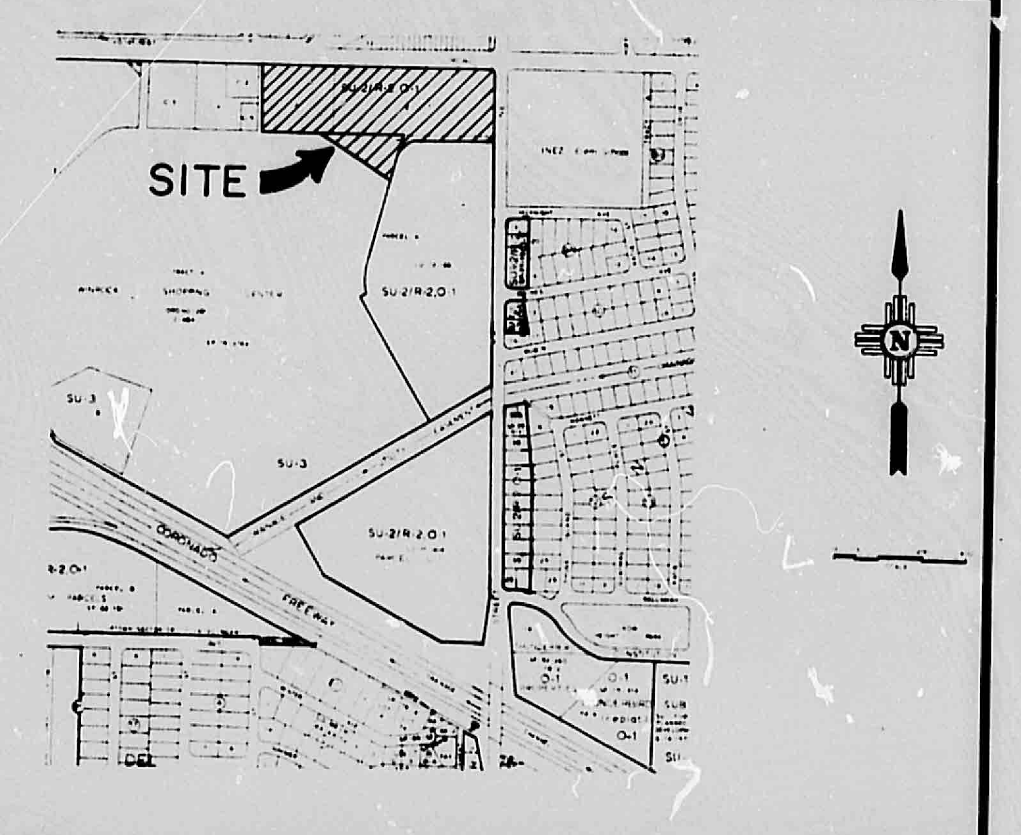

2.5" PMBP SURFACE COURSE
3" PMBP BASE COURSE
12" SUBGRADE PREP 95% ASTM D-1557
COMPACTED SUBGRADE 90% MAXIMUM DRY DENSITY

J PAVING SECTION
HIGH USE AND HEAVY TRUCK TRAFFIC AREAS


3" PMBP SURFACE COURSE
12" SUBGRADE PREP. 95% ASTM D-1557
COMPACTED SUBGRADE 90% MAXIMUM DRY DENSITY

K PAVING SECTION
PARKING AND LIGHT VEHICLE TRAFFIC AREAS

VICINITY MAP ZONE ATLAS MAP NO. J-19



NO. 30

FLOOD HAZARD MAP & OFF-SITE FLOWS FROM F.E.M.A.

SITE
N
SCALE: 1" = 500'

NO. 31

SOILS MAP SOIL SURVEY U.S.D.A., S.C.S.

SITE
UE
N
SCALE: 1"=2000'

RECEIVED
MAY 02 1989
HYDROLOGY SECTION

HYDROLOGY

HYDROLOGY SUMMARY SHEET FOR GRADING & DRAINAGE REPORT
PROJECT: TOYS R US (RESUBMITTAL PLAN NO. 2)

A.P. #	DESCRIPTION	AREA (ac)	HT (ft)	LGTH (ft)	SLOPE (ft/ft)	Tc (min)	SOIL	CN	C	RUNOFF PARAMETERS FOR 2 YEAR EVENT				RUNOFF PARAMETERS FOR 10 YEAR EVENT				RUNOFF PARAMETERS FOR 100 YEAR EVENT			
										P	I	V	Q	P	I	V	Q	P	I	V	Q
1	BASIN A+B+C+D+E+F+G UND	14.1	25	1100	0.023	<10	B	70.0	0.40	1.05	2.21	407	12.5	1.54	3.26	5330	18.4	2.35	4.97	19744	28.0
1	BASIN A+B+C+D+E+F+G EXI	14.1	25	1100	0.023	<10	B	89.0	0.70	1.05	2.21	16043	21.8	1.54	3.26	35363	32.2	2.35	4.97	67786	49.0
1	BASIN A+B+C+D+E+F+G DEV	14.1	15	515	0.029	<10	B	95.5	0.85	1.05	2.21	32571	26.6	1.54	3.26	57697	39.3	2.35	4.97	95506	59.8
1	BASIN A+D+E DEVELOPED	4.0	13	1080	0.012	<10	B	94.5	0.83	1.05	2.21	8277	7.3	1.54	3.26	15156	10.8	2.35	4.97	25664	16.4
2	BASIN B+F DEVELOPED	3.1	12	560	0.021	<10	B	96.0	0.87	1.05	2.21	7460	5.9	1.54	3.26	12996	8.7	2.35	4.97	21268	13.3
3	BASIN C+G DEVELOPED	7.0	12	700	0.017	<10	B	95.5	0.87	1.05	2.21	16239	13.6	1.54	3.26	28766	20.0	2.35	4.97	47618	30.5

P = 6-HOUR RAINFALL VOLUMES - (Ref. DPM PLATE 22.2 D-1)
I = RAINFALL INTENSITY - INCHES FOR 6-HOUR EVENT. (Ref. DPM PLATE 22.2 D-2)
V = VOLUME OF RUNOFF - CUBIC FEET
Q = RATE OF RUNOFF - CUBIC FEET PER SECOND

POND VOLUME CALULATIONS
440 LF OF 60" CMP ≃ 8639 C.F.

BY: DOUGLAS W. COPELAND DATE: 4/27/88

SOILS INFORMATION FROM SOIL SURVEY U.S.D.A., S.C.S.

SOIL SERIES AND MAP SYMBOLS	DEGREE AND KIND OF LIMITATIONS FOR						SUITABILITY AS SOURCE OF—				SOIL FEATURES AFFECTING—		HYDROLOGIC SOIL GROUP
	SEPTIC TANK ABSORPTION FIELDS	SEWAGE LAGOONS	SHALLOW EXCAVATIONS	DWELLINGS WITHOUT BASEMENTS	SANITARY LANDFILL (TRENCH TYPE)	LOCAL ROAD AND STREETS	ROAD FILL	SAND	GRAVEL	TOPSOIL	POND RESERVOIR AREAS	DIKES, LEVEES, AND OTHER EMBANKMENTS	
*Embudo: EmB, EtC. For Tijeras part of EtC, see Tijeras series.	Slight¹	Severe: seepage.	Moderate:¹ small stones.	Slight¹	Severe: seepage.	Slight	Good	Poor: excess fines.	Poor: excess fines.	Poor: small stones.	Seepage	Piping; compressible	B

EtC—Embudo-Tijeras complex, 0 to 9 percent slopes. This mapping unit is about 50 percent an Embudo gravelly fine sandy loam, 0 to 5 percent slopes, and about 35 percent a Tijeras gravelly fine sandy loam that has 1 to 9 percent slopes.

The Embudo soil is in drainageways and depressions, and the Tijeras soil is on low ridges in narrow undulations. The Tijeras soil has the profile described as representative of the Tijeras series. On both soils, runoff is medium and the hazard of water erosion is moderate.

Included in this unit in mapping are areas of Tesajo, Millett, and Wink soils, which make up about 15 percent of the unit.

This mapping unit is used for community development, watershed, wildlife habitat, and range. The Embudo part of this unit is subject to flooding. Control of moisture is required for proper compaction. Dryland capability subclass VIIe; native plant community 4.

LEGAL DESCRIPTION:

PORTIONS OF PARCELS A & D AND ALL OF PARCELS C-8 AND E OF WINROCK CENTER ADDITION, CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

NO	REVISIONS	BY	DATE
4	ENGINEERING CERTIFICATION	DWC	5/1/89
3	REVISED G&D PLAN TO CONFORM TO REVISED SITE PLAN	DWC	11/21/88
2	Changed POND TO CMP-ADDED ADDITIONAL NOTES OF CLARIFICATION	DWC	5/12/88
1	REVISED PLAN TO SHOW DETAIL GRADES & HYDROLOGY	DWC	4/27/88

TOYS "R" US

GRADING AND DRAINAGE PLAN

Rev 5/12/88
Rev. 4/27/88

DOUGLAS W. COPELAND 8498

EASTERLING & ASSOCIATES, INC.
CONSULTING ENGINEERS
5643 Paradise Blvd. N.W.
Albuquerque, New Mexico 87114

Designed: DWC	Drawn: JEL	Checked: DWC	Sheet
Job No: 2011.2	Date: MAR. 1988		of C-2A

THIS PLAN SHOT TWICE
ONCE ON LIGHT AND
ONCE ON DARK.

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

R# 21 DATE 6-24-93 OP E.J.P.

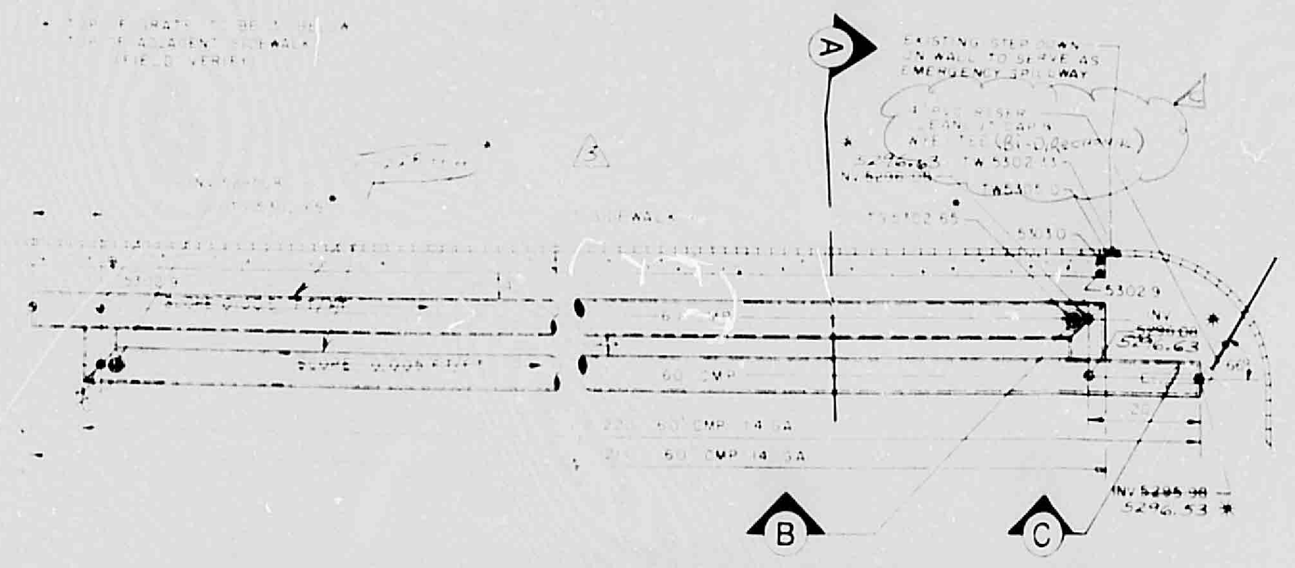
CITY OF ALBUQUERQUE

This microimage is certified to be a complete and accurate copy of the original as it appears in the files of the PUBLIC WORKS DEPARTMENT - HYDROLOGY DIVISION and was filmed in the normal course of business. The photographic processes used meet the Basic Microfilm Standards of the National Micrographics Association (MS115-1977).

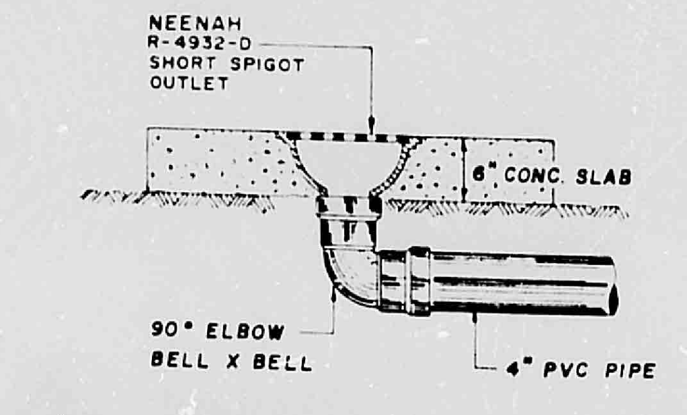
Karen Anaya
CITY CLERK RECORDER

OFFICIAL SEAL
NORBERTA SANCHEZ
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires: MAY 8 1995
Norberta Sanchez

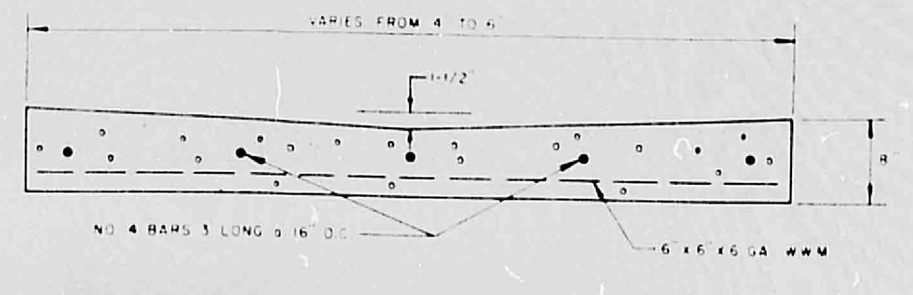
D 24
C 20
B 16
A 12
CITY OF ALBUQUERQUE
C
D



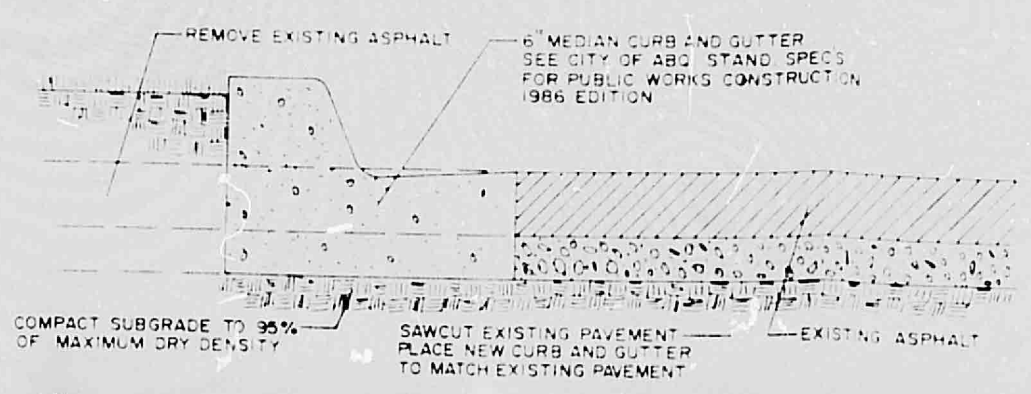
PLAN-UNDERGROUND STORM WATER DETENTION FACILITY


NEENAH
R-4932-D
SHORT SPIGOT
OUTLET
6" CONC SLAB
90° ELBOW
BELL X BELL
4" PVC PIPE

D DRAIN DETAIL

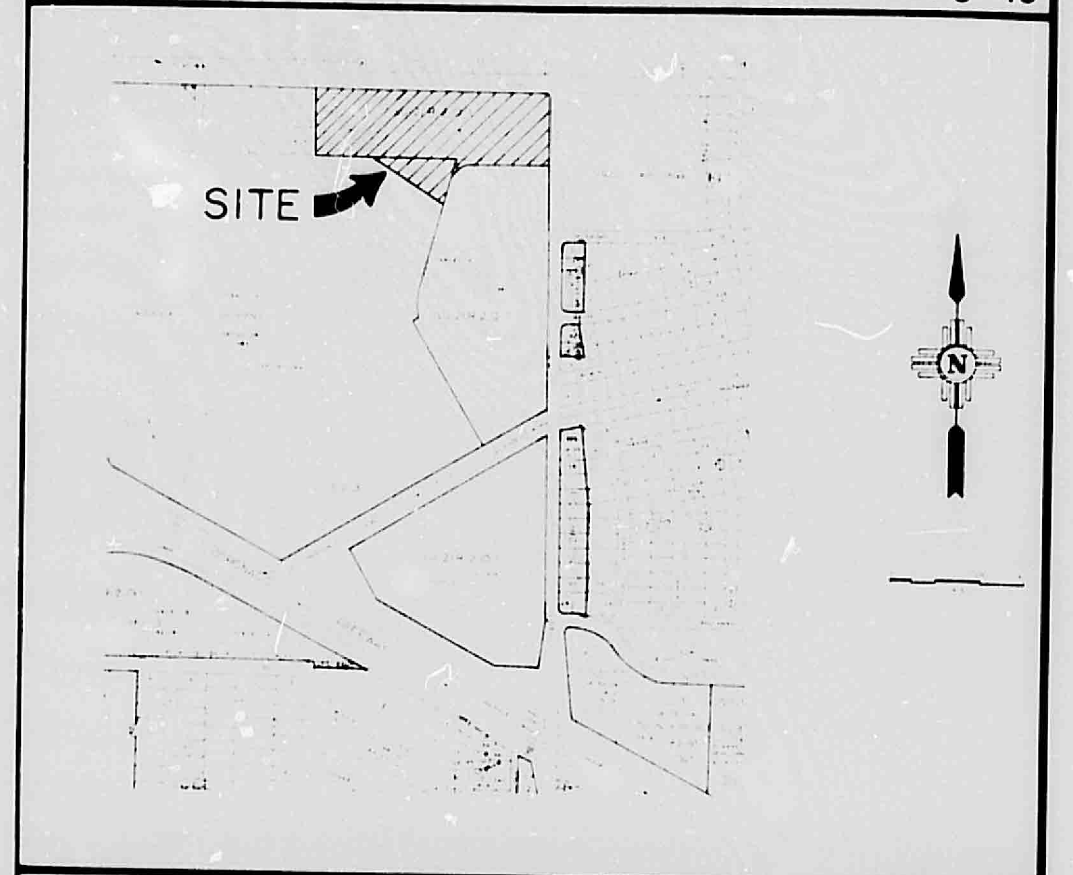


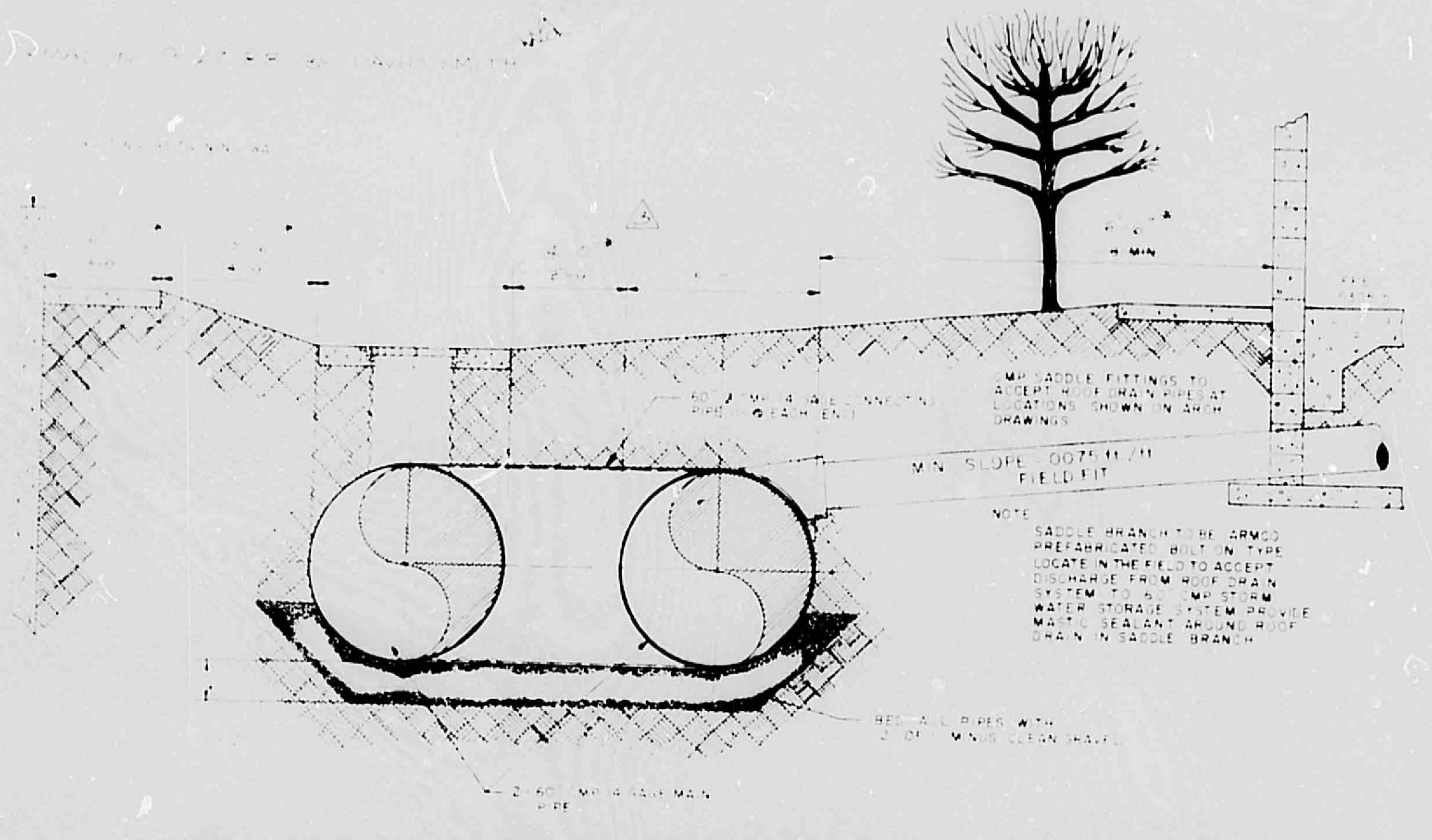
E SECTION: VALLEY GUTTER
NOT TO SCALE


REMOVE EXISTING ASPHALT
COMPACT SUBGRADE TO 95% OF MAXIMUM DRY DENSITY
SAWCUT EXISTING PAVEMENT
EXISTING ASPHALT

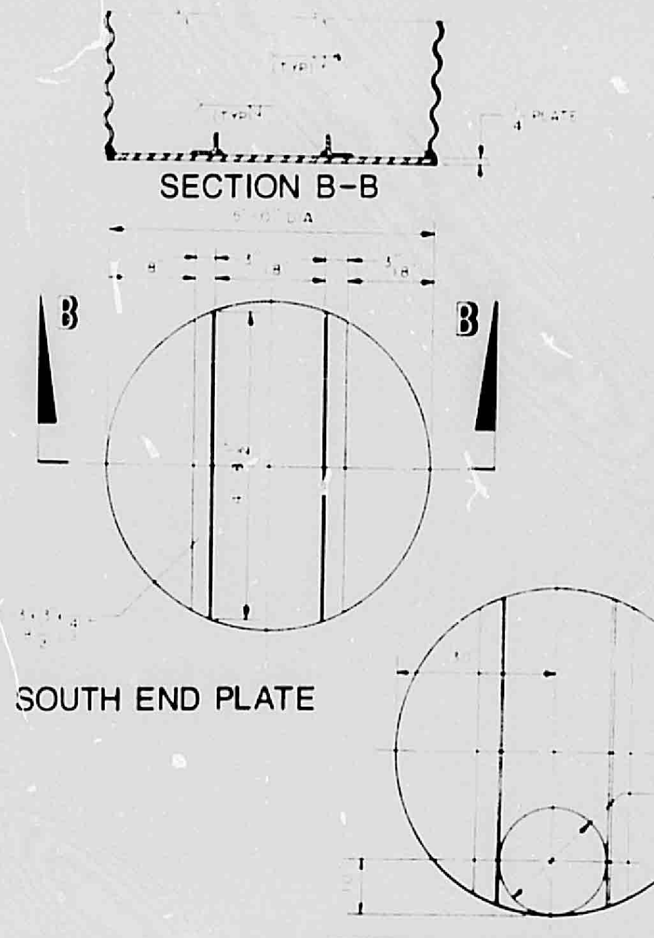
F TYP. SECTION: MEDIAN CURB MATCHING EXISTING PAVEMENT
NOT TO SCALE

VICINITY MAP ZONE ATLAS MAP NO. J-19

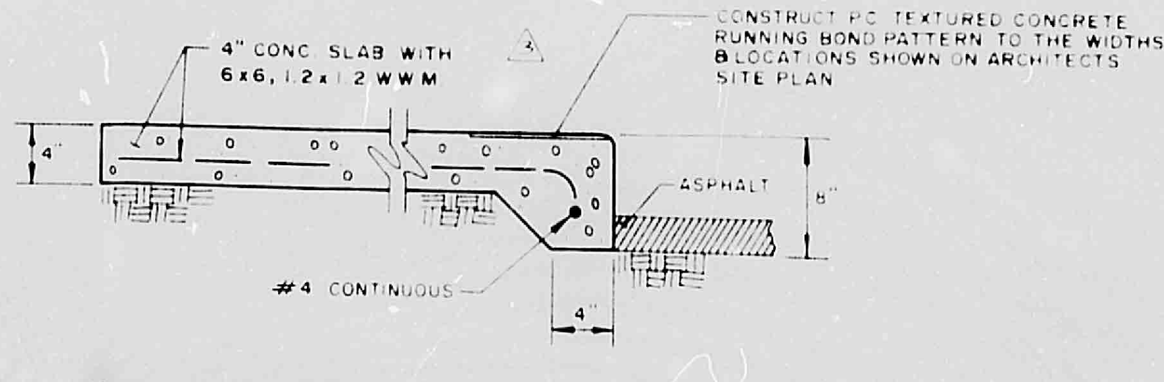




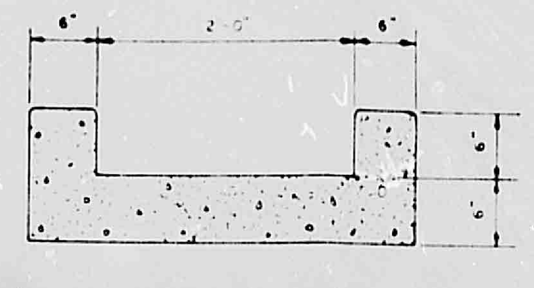
A TYPICAL SECTION-UNDERGROUND STORM WATER DETENTION FACILITY


SECTION B-B
SOUTH END PLATE
NORTH END PLATE

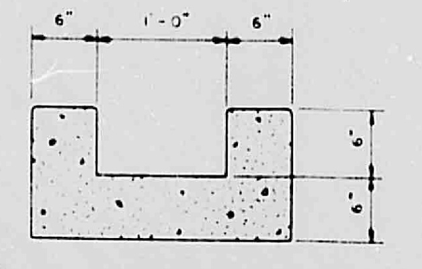
DETAILS BULKHEAD END PLATE


4" CONC SLAB WITH 6x6 / 2x / 2 W.W.M.
#4 CONTINUOUS
ASPHALT

G SECTION TURNDOWN SIDEWALK
NO SCALE



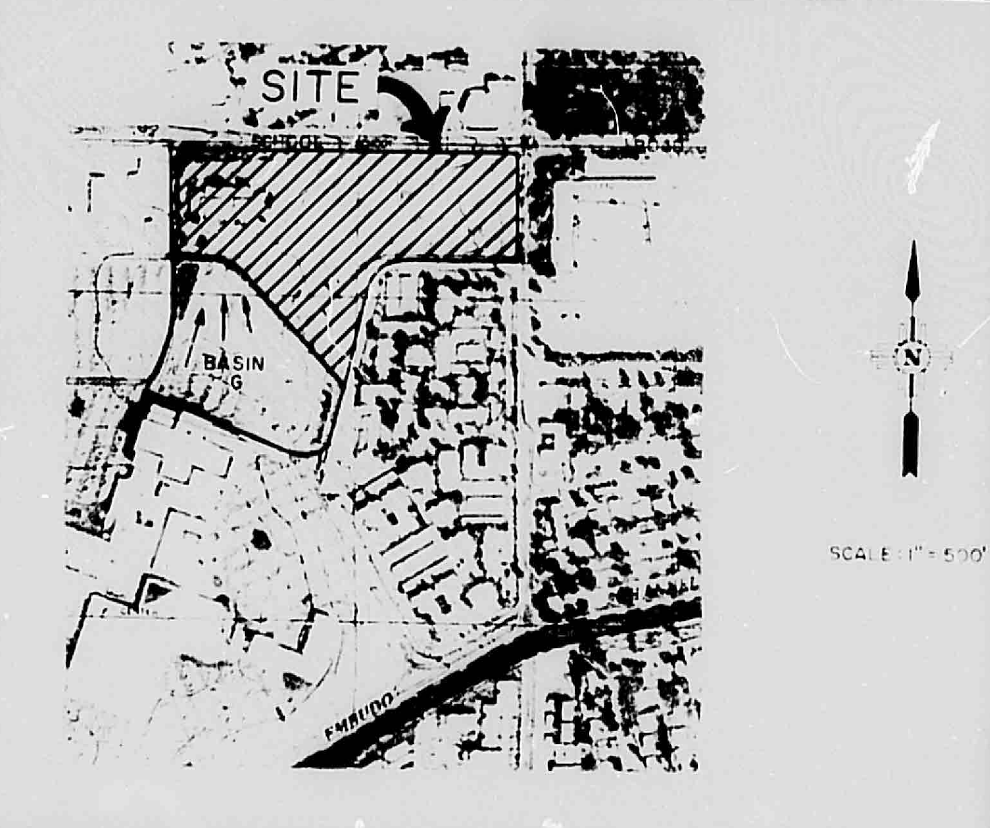
H CONCRETE RUNDOWN

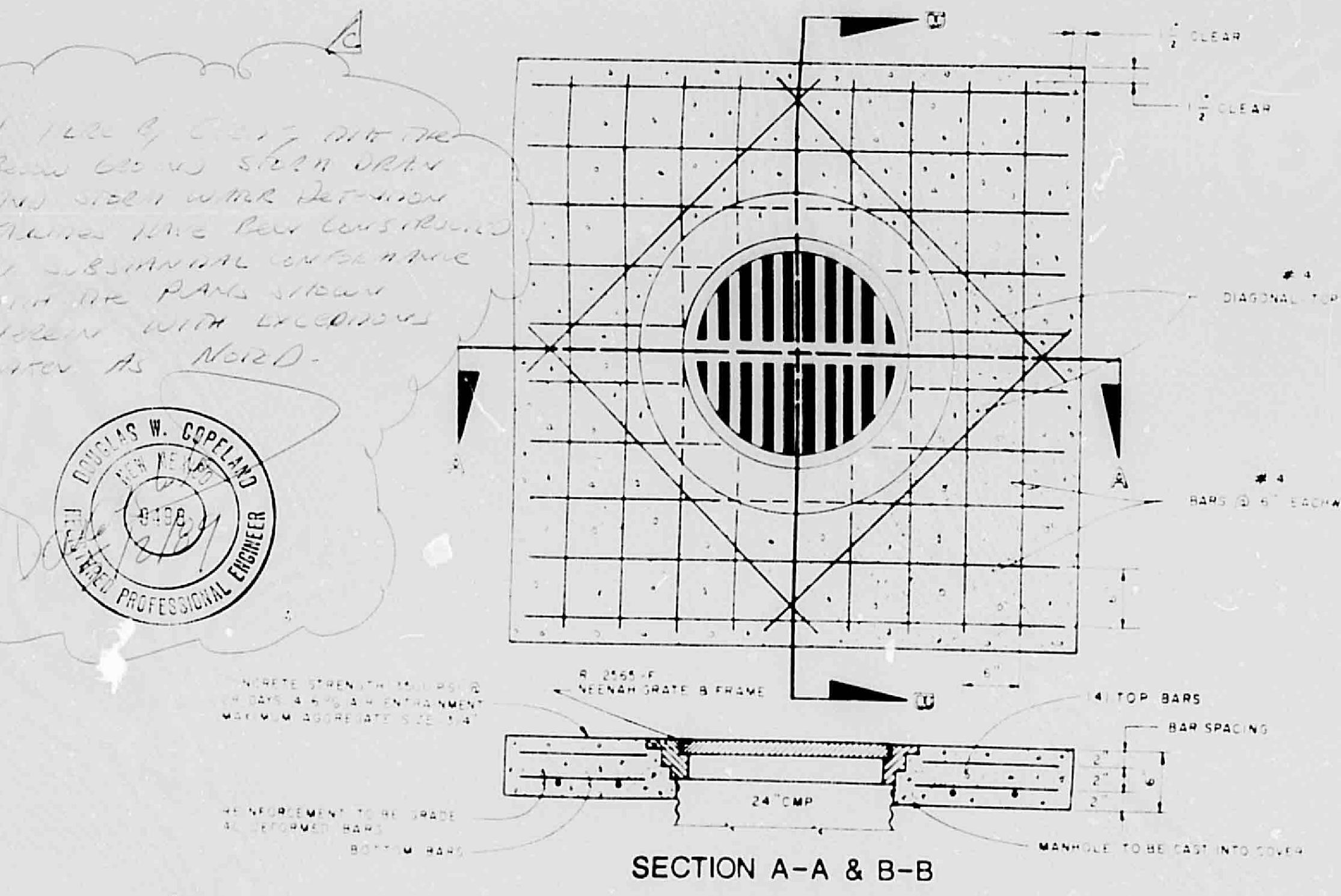


I CONCRETE RUNDOWN

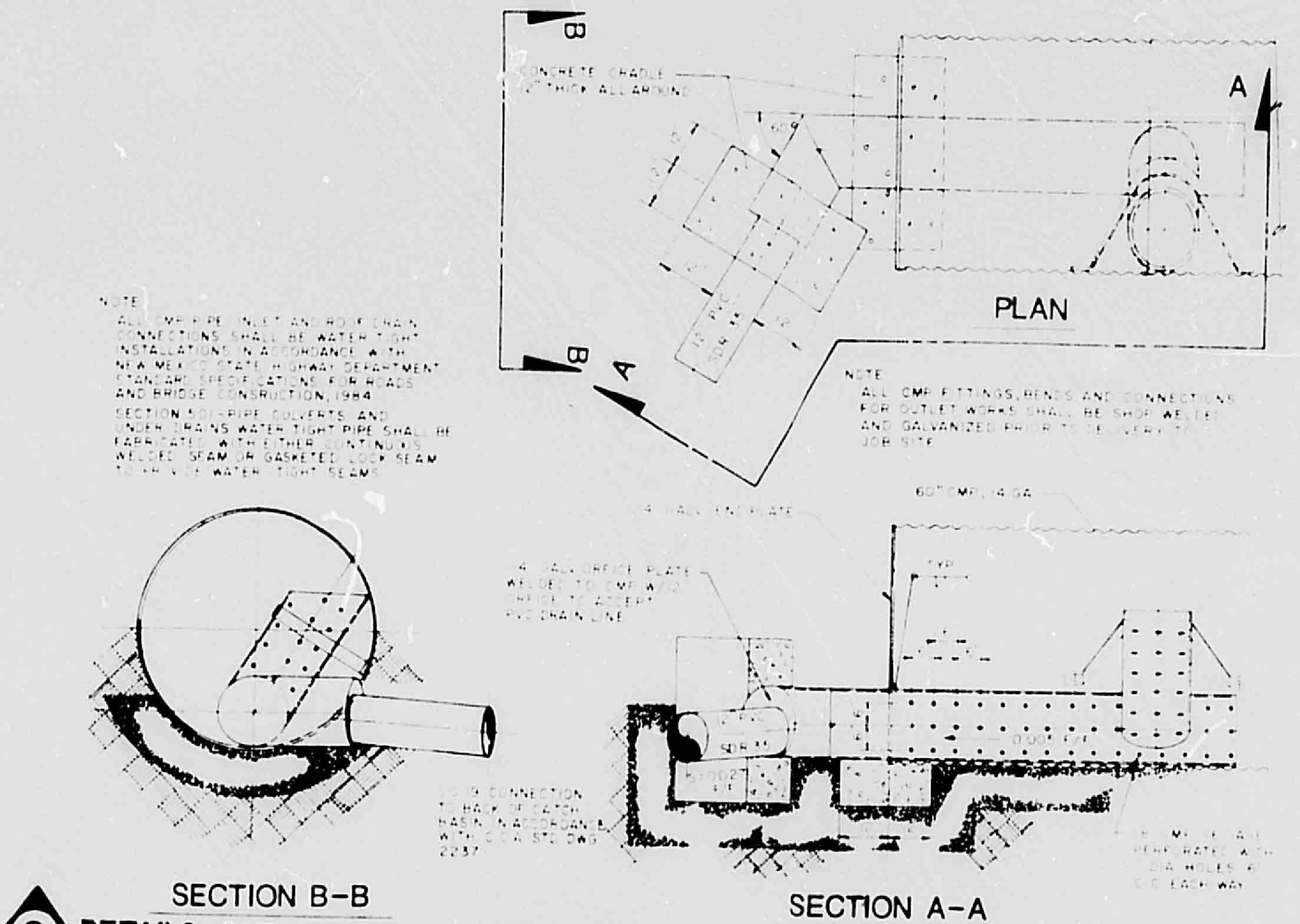
NO. 30

FLOOD HAZARD MAP & OFF-SITE FLOWS FROM F.E.M.A.

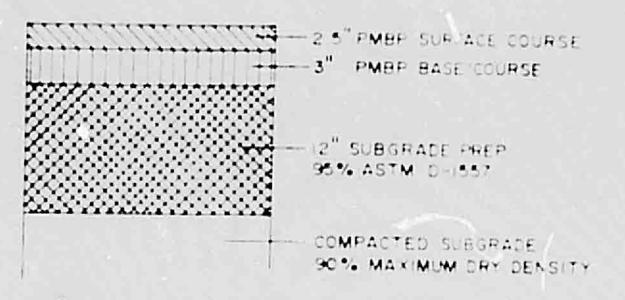



SECTION A-A & B-B

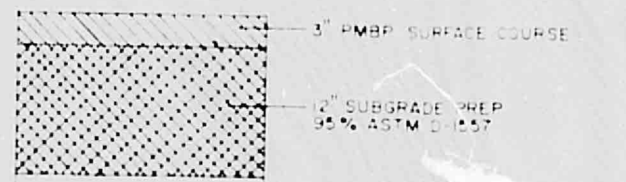
B GRATE AND FRAME DETAILS


PLAN
SECTION B-B
SECTION A-A

C DETAILS-OUTLET WORKS UNDERGROUND STORM WATER DETENTION FACILITY



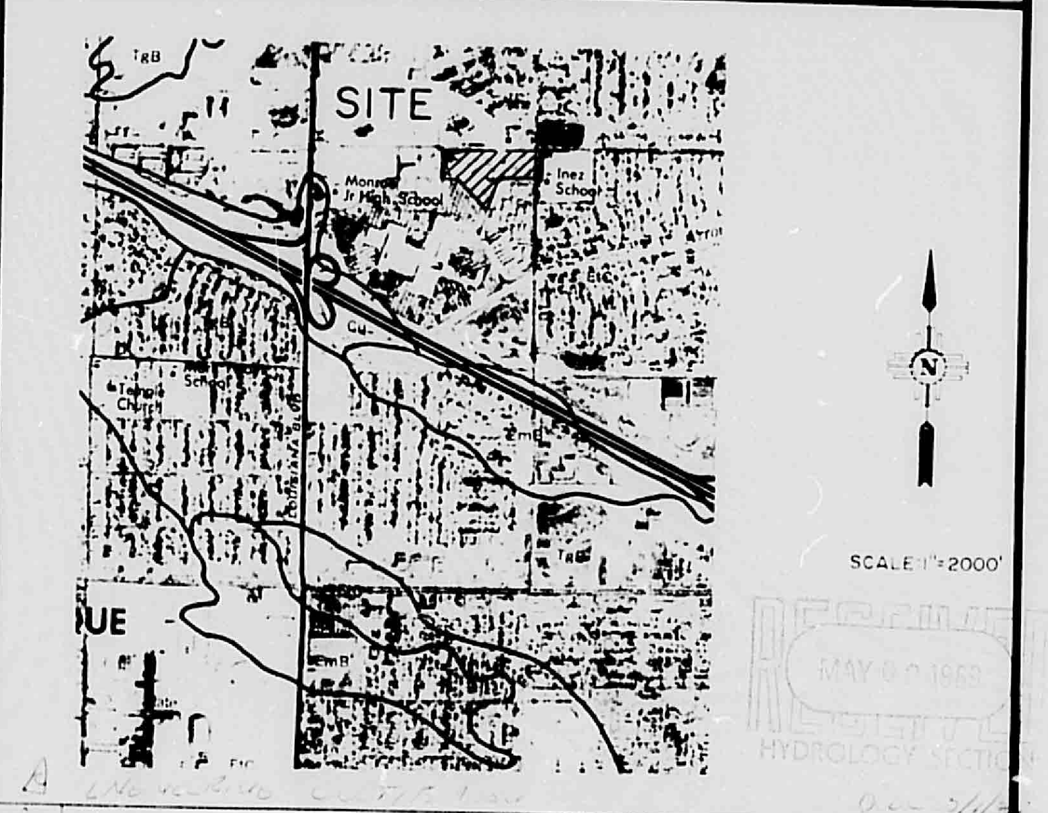
J PAVING SECTION
HIGH USE AND HEAVY TRUCK TRAFFIC AREAS


COMPACTED SUBGRADE 90 % MAXIMUM DRY DENSITY

K PAVING SECTION
PARKING AND LIGHT VEHICLE TRAFFIC AREAS

NO. 31

SOILS MAP SOIL SURVEY U.S.D.A., S.C.S.


SITE
SCALE 1"=2000'

HYDROLOGY

[illegible]

SOILS INFORMATION FROM SOIL SURVEY U.S.D.A., S.C.S.

SOIL SERIES AND MAP SYMBOLS	DEGREE AND KIND OF LIMITATIONS FOR						SUITABILITY AS SOURCE OF—				SOIL FEATURES AFFECTING—		HYDROLOGIC SOIL GROUP
	SEPTIC TANK ABSORPTION FIELDS	SEWAGE LAGOONS	SHALLOW EXCAVATIONS	DWELLINGS WITHOUT BASEMENTS	SANITARY LANDFILL (TRENCH TYPE)	LOCAL ROADS AND STREETS	ROAD FILL	SAND	GRAVEL	TOPSOIL	POND RESERVOIR AREAS	DIKES, LEVEES, AND OTHER EMBANKMENTS	
*Embudo: EmB, EtC. For Tijeras part of EtC, see Tijeras series	Slight²	Severe: seepage.	Moderate:² small stones.	Slight¹	Severe: seepage.	Slight	Good	Poor: excess fines.	Poor: excess fines.	Poor: small stones.	Seepage	Piping, compressible	B

EtC—Embudo-Tijeras complex, 0 to 9 percent slopes. This mapping unit is about 50 percent an Embudo gravelly fine sandy loam, 0 to 5 percent slopes, and about 35 percent a Tijeras gravelly fine sandy loam that has 1 to 9 percent slopes.

The Embudo soil is in drainageways and depressions, and the Tijeras soil is on low ridges in narrow undulations. The Tijeras soil has the profile described as representative of the Tijeras series. On both soils, runoff is medium and the hazard of water erosion is moderate.

Included in this unit in mapping are areas of Tesajo, Millett, and Wink soils, which make up about 15 percent of the unit.

This mapping unit is used for community development, watershed, wildlife habitat, and range. The Embudo part of this unit is subject to flooding. Control of moisture is required for proper compaction. Dryland capability subclass VIIe, native plant community 3.

LEGAL DESCRIPTION:

PORTIONS OF PARCELS A & D AND ALL OF PARCELS C-8 AND E OF WINROCK CENTER ADDITION, CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

NO.	REVISIONS	BY	DATE
	REVISED G&D PLAN TO CONFORM TO REVISED SITE PLAN	DWC	6/21/88
	CHANGED POND TO CMP ADDED ADDITIONAL NOTES OF CLARIFICATION	DWC	5/12/88
	REVISED PLAN TO SHOW DETAIL GRADES & HYDROLOGY	DWC	4/27/88

HYDROLOGY SECTION

TOYS "R" US

GRADING AND DRAINAGE PLAN

Rev 5/12/88

DOUGLAS W. COPELAND 8498

EASTERLING & ASSOCIATES, INC.
CONSULTING ENGINEERS
5643 Paradise Blvd. N.W.
Albuquerque, New Mexico 87114

Designed DWC	Drawn JEL	Checked DWC	Sheet
Job No 2011.2	Date MAR. 1988		of C-2A

THIS PLAN SHOT TWICE
ONCE ON LIGHT AND
ONCE ON DARK.

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

R# 21 DATE 6-24-93 OP EJP

CITY OF ALBUQUERQUE

This microimage is certified to be a complete and accurate copy of the original as it appears in the files of the PUBLIC WORKS DEPARTMENT - HYDROLOGY DIVISION and was filmed in the normal course of business. The photographic processes used meet the Basic Microfilm Standards of the National Micrographics Association (MS115-1977).

Karen Reeves
CITY CLERK RECORDER

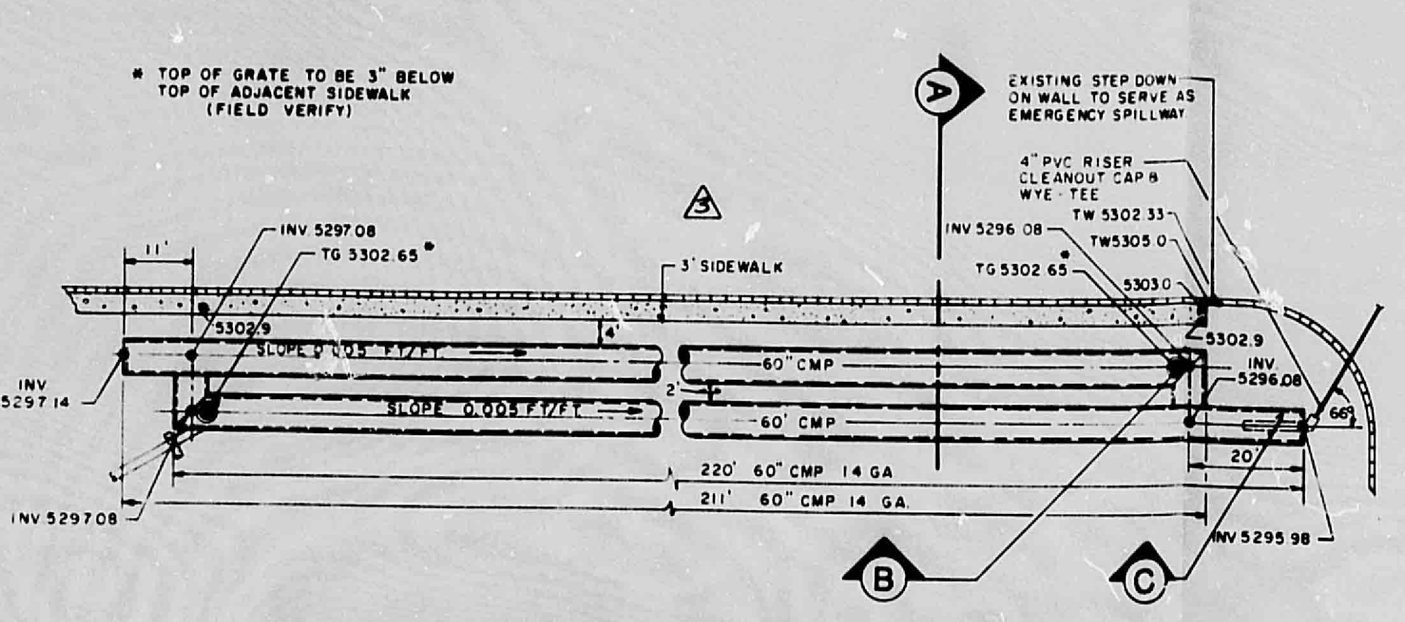
OFFICIAL SEAL
NORBERTA SANCHEZ
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires MAY 8 1995
Norberta Sanchez

D 24 C 20 B 16 A 12

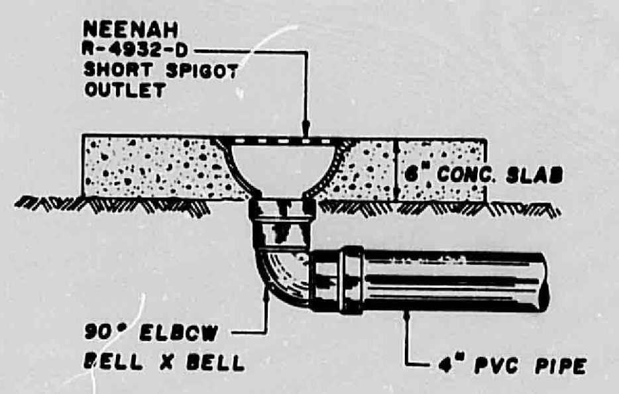
CITY OF ALBUQUERQUE C D

NOTE SLOPE AREAS TO DRAIN INTO THE OPEN GRATE MANHOLE COVERS

* TOP OF GRATE TO BE 3" BELOW TOP OF ADJACENT SIDEWALK (FIELD VERIFY)

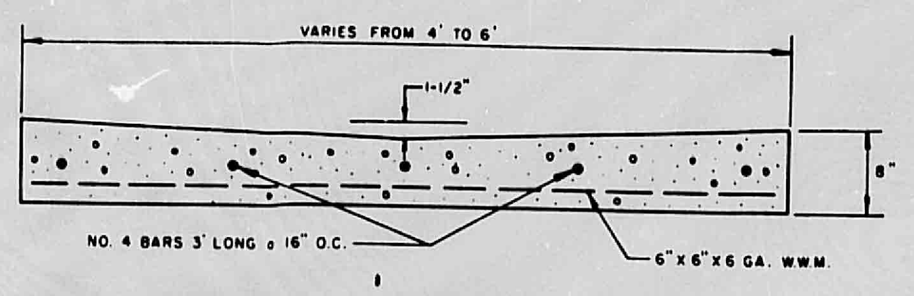

A
EXISTING STEP DOWN ON WALL TO SERVE AS EMERGENCY SPILLWAY
4" PVC RISER CLEANOUT CAP & WYE TEE
TW 5302.33
TW5305.0
5303.0
5302.9
INV 5296.08
INV 5297.08
TG 5302.65 *
3' SIDEWALK
5302.9
INV 5297.14
SLOPE 0.005 FT/FT
60" CMP
4'
2'
20'
66°
220' 60" CMP 14 GA
211' 60" CMP 14 GA.
INV 5297.08
INV 5295.98
B
C

PLAN–UNDERGROUND STORM WATER DETENTION FACILITY


NEENAH R-4932-D SHORT SPIGOT OUTLET
6" CONC. SLAB
90° ELBOW BELL X BELL
4" PVC PIPE

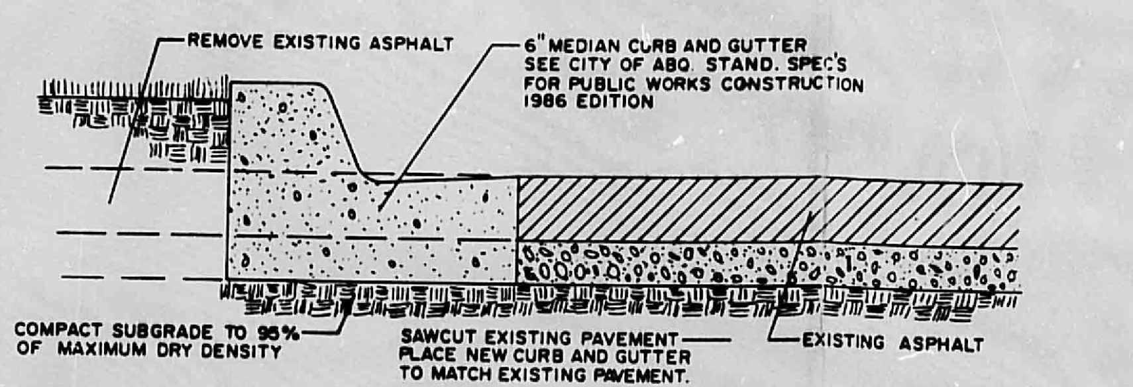
D DRAIN DETAIL

SCALE: 1"=1'


VARIES FROM 4' TO 6'
1-1/2"
8"
NO. 4 BARS 3' LONG @ 16" O.C.
6"x6"x6 GA. W.W.M.

E SECTION: VALLEY GUTTER

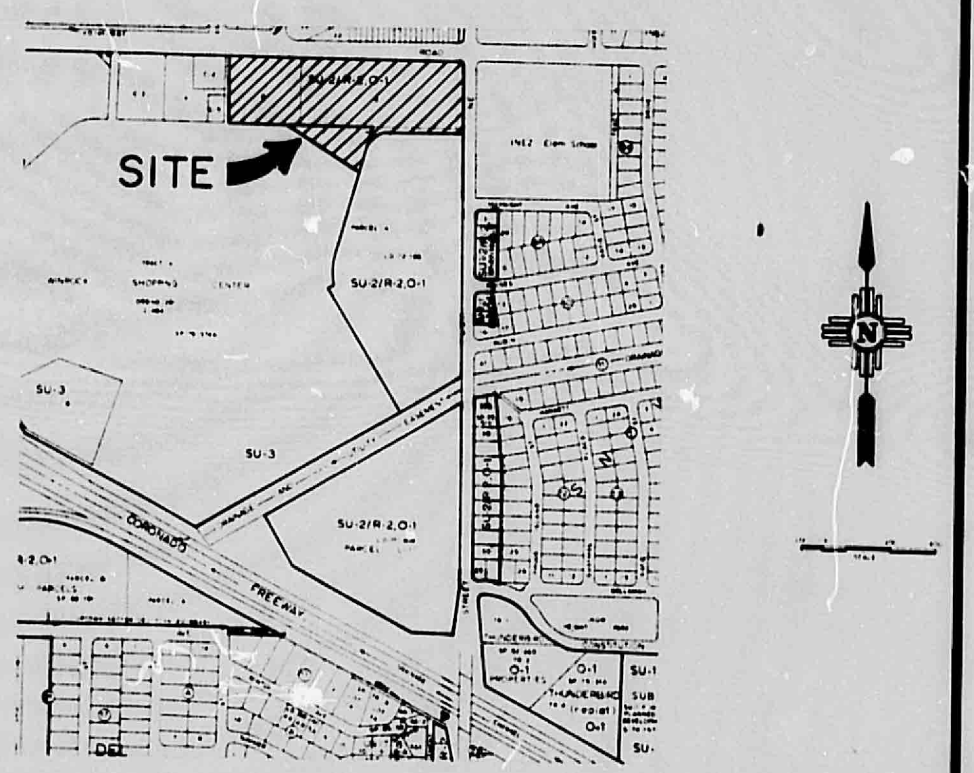
NOT TO SCALE

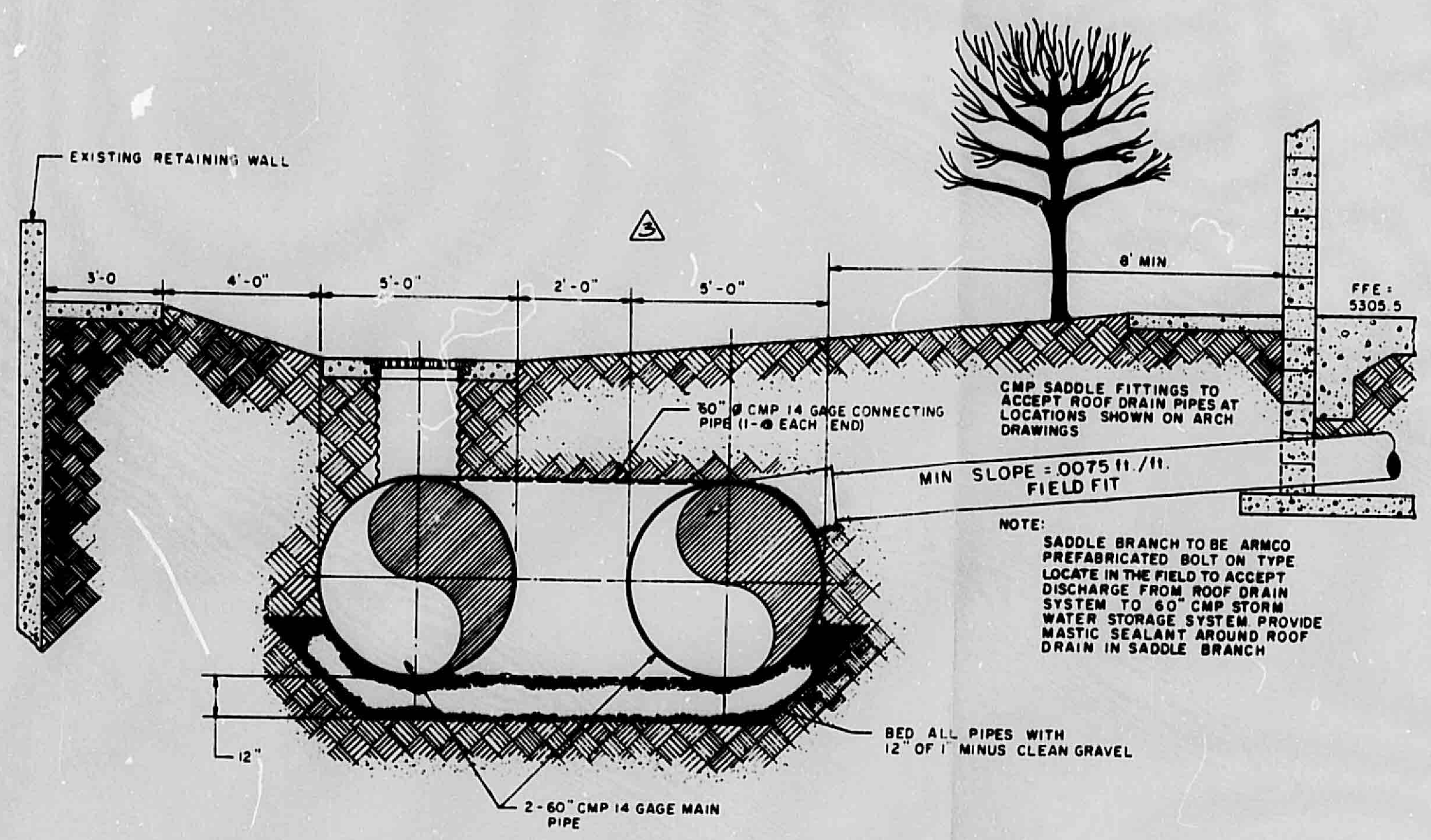

REMOVE EXISTING ASPHALT
6" MEDIAN CURB AND GUTTER SEE CITY OF ABQ. STAND. SPEC'S FOR PUBLIC WORKS CONSTRUCTION 1986 EDITION
COMPACT SUBGRADE TO 95% OF MAXIMUM DRY DENSITY
SAWCUT EXISTING PAVEMENT PLACE NEW CURB AND GUTTER TO MATCH EXISTING PAVEMENT.
EXISTING ASPHALT

F TYP. SECTION: MEDIAN CURB MATCHING EXISTING PAVEMENT

NOT TO SCALE

VICINITY MAP ZONE ATLAS MAP NO. J-19

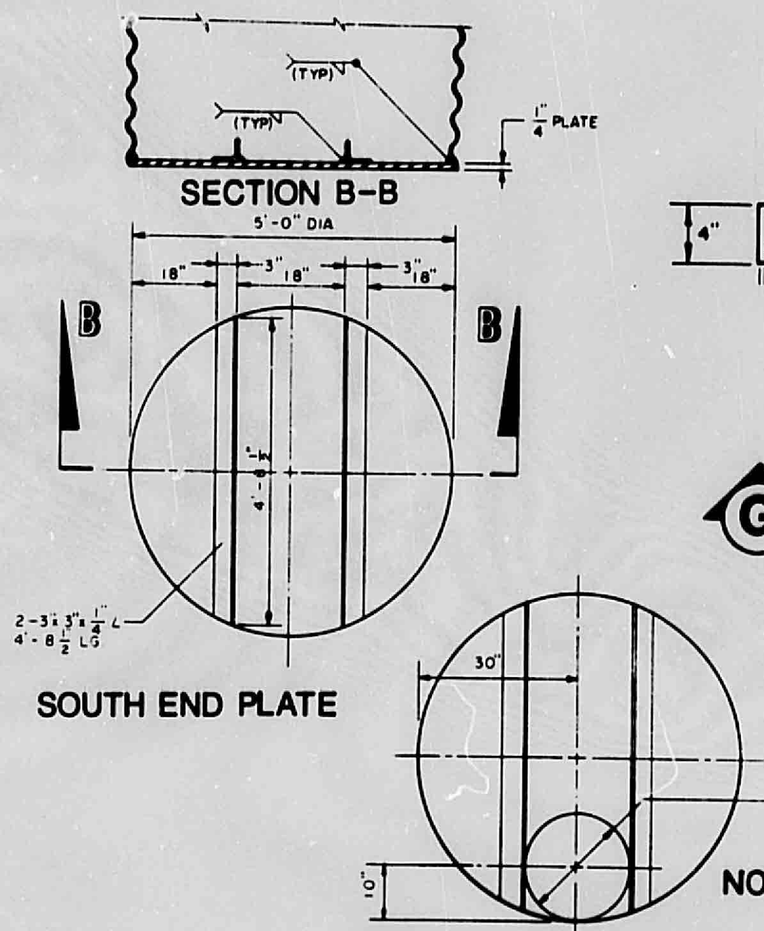



EXISTING RETAINING WALL
3
3'-0
4'-0"
5'-0"
2'-0"
5'-0"
8' MIN
FFE = 5305.5
60" Ø CMP 14 GAGE CONNECTING PIPE (1-@ EACH END)
CMP SADDLE FITTINGS TO ACCEPT ROOF DRAIN PIPES AT LOCATIONS SHOWN ON ARCH DRAWINGS
MIN SLOPE = .0075 ft./ft. FIELD FIT
12"
BED ALL PIPES WITH 12" OF 1" MINUS CLEAN GRAVEL
2-60" CMP 14 GAGE MAIN PIPE

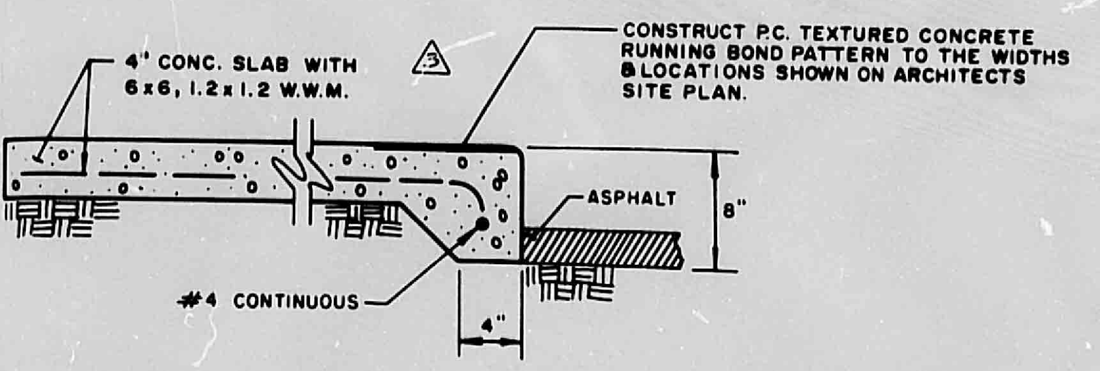
NOTE:
SADDLE BRANCH TO BE ARMCO PREFABRICATED BOLT ON TYPE LOCATE IN THE FIELD TO ACCEPT DISCHARGE FROM ROOF DRAIN SYSTEM TO 60" CMP STORM WATER STORAGE SYSTEM PROVIDE MASTIC SEALANT AROUND ROOF DRAIN IN SADDLE BRANCH

A TYPICAL SECTION–UNDERGROUND STORM WATER DETENTION FACILITY

NOT TO SCALE

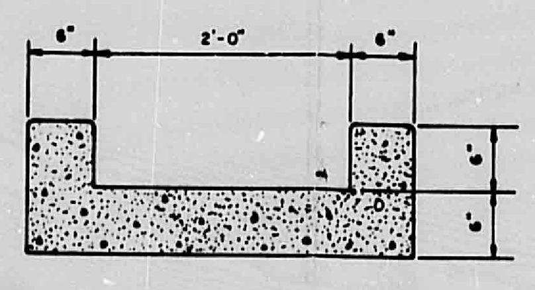

(TYP)
1/4" PLATE
SECTION B-B
5'-0" DIA
18"
3"
18"
3"
18"
B
B
4'-8"
2-3"x3"x1/4" L 4'-8 1/2" LG
SOUTH END PLATE
30"
10"
18" DIA ± TO ACCEPT 18" CMP
NORTH END PLATE

DETAILS BULKHEAD END PLATE


4" CONC. SLAB WITH 6x6, 1.2x1.2 W.W.M.
3
CONSTRUCT P.C. TEXTURED CONCRETE RUNNING BOND PATTERN TO THE WIDTHS & LOCATIONS SHOWN ON ARCHITECTS SITE PLAN.
4"
ASPHALT
8"
#4 CONTINUOUS
4"

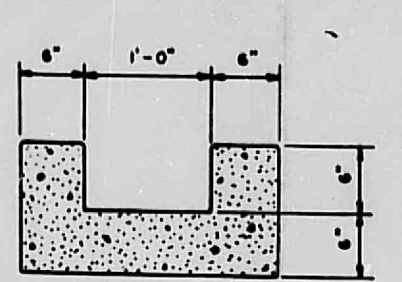
G SECTION: TURNDOWN SIDEWALK

NO SCALE



H CONCRETE RUNDOWN

SCALE: 1"=1'

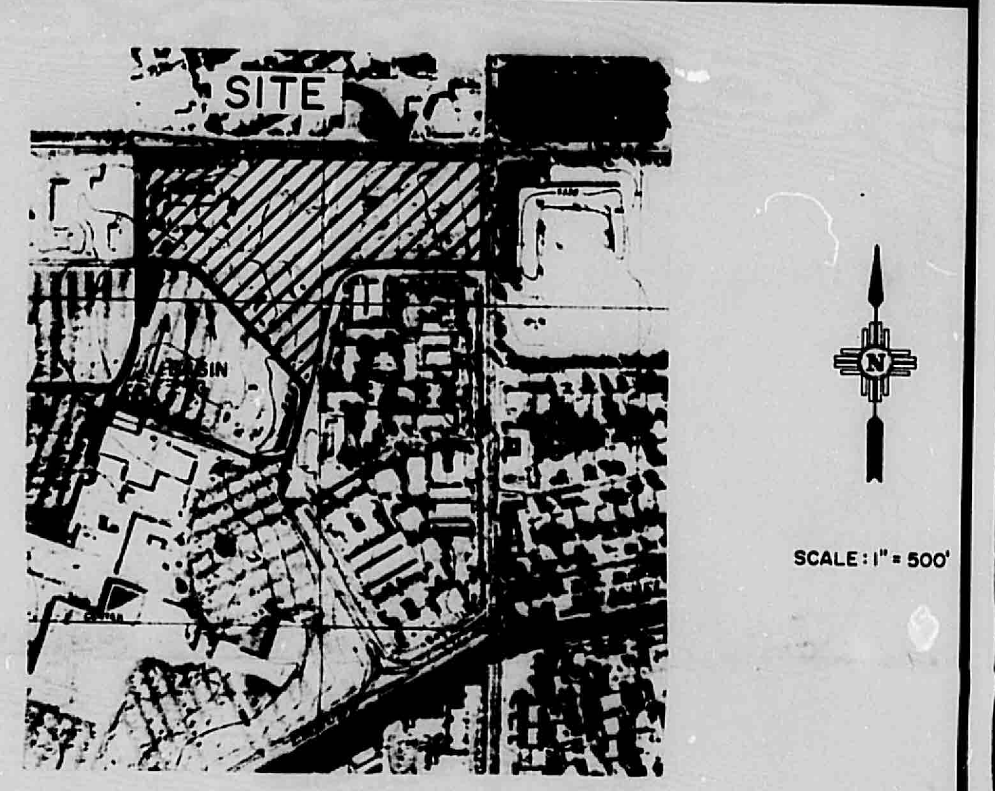


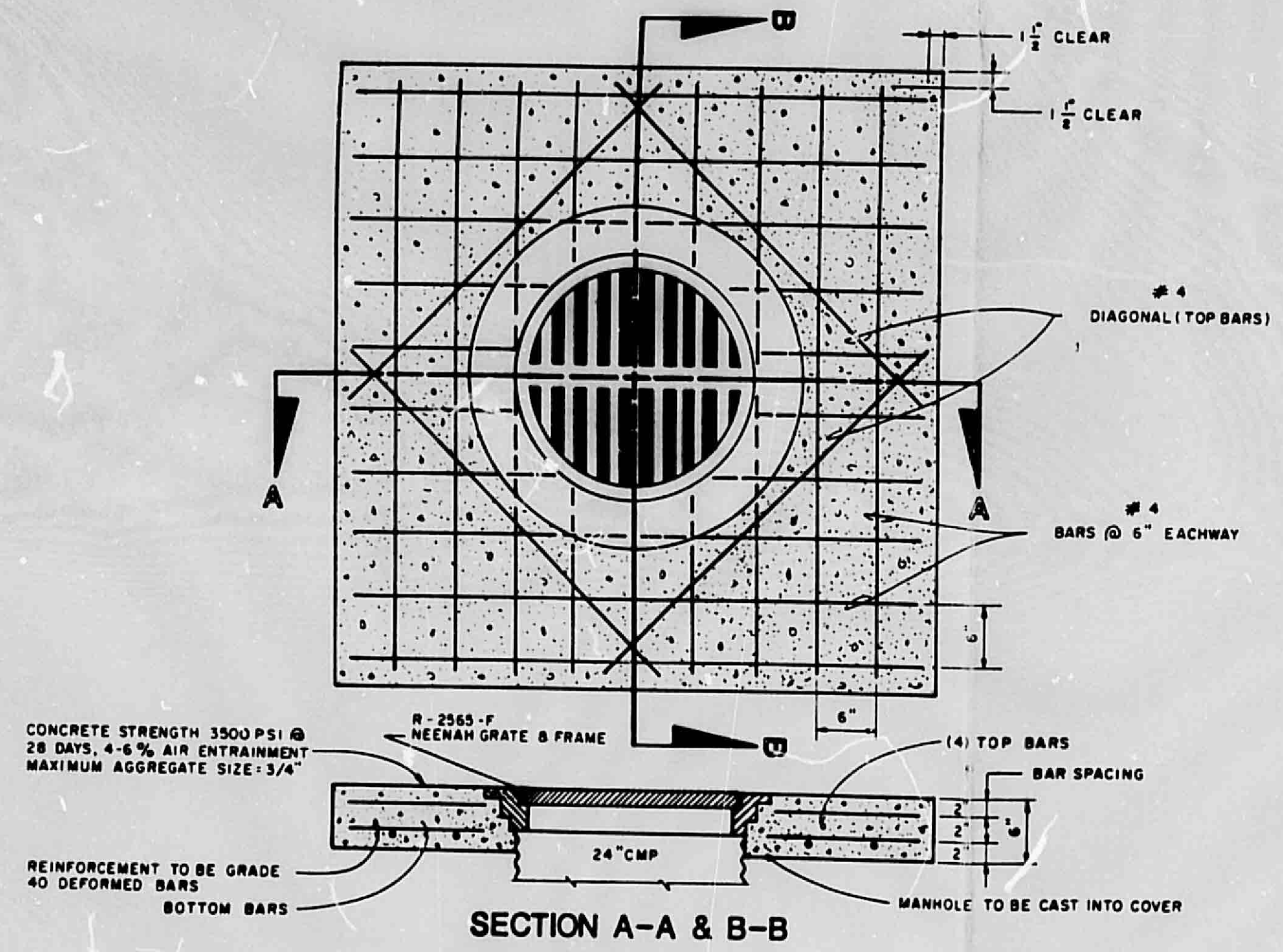
I CONCRETE RUNDOWN

SCALE: 1"=1'

NO. 30

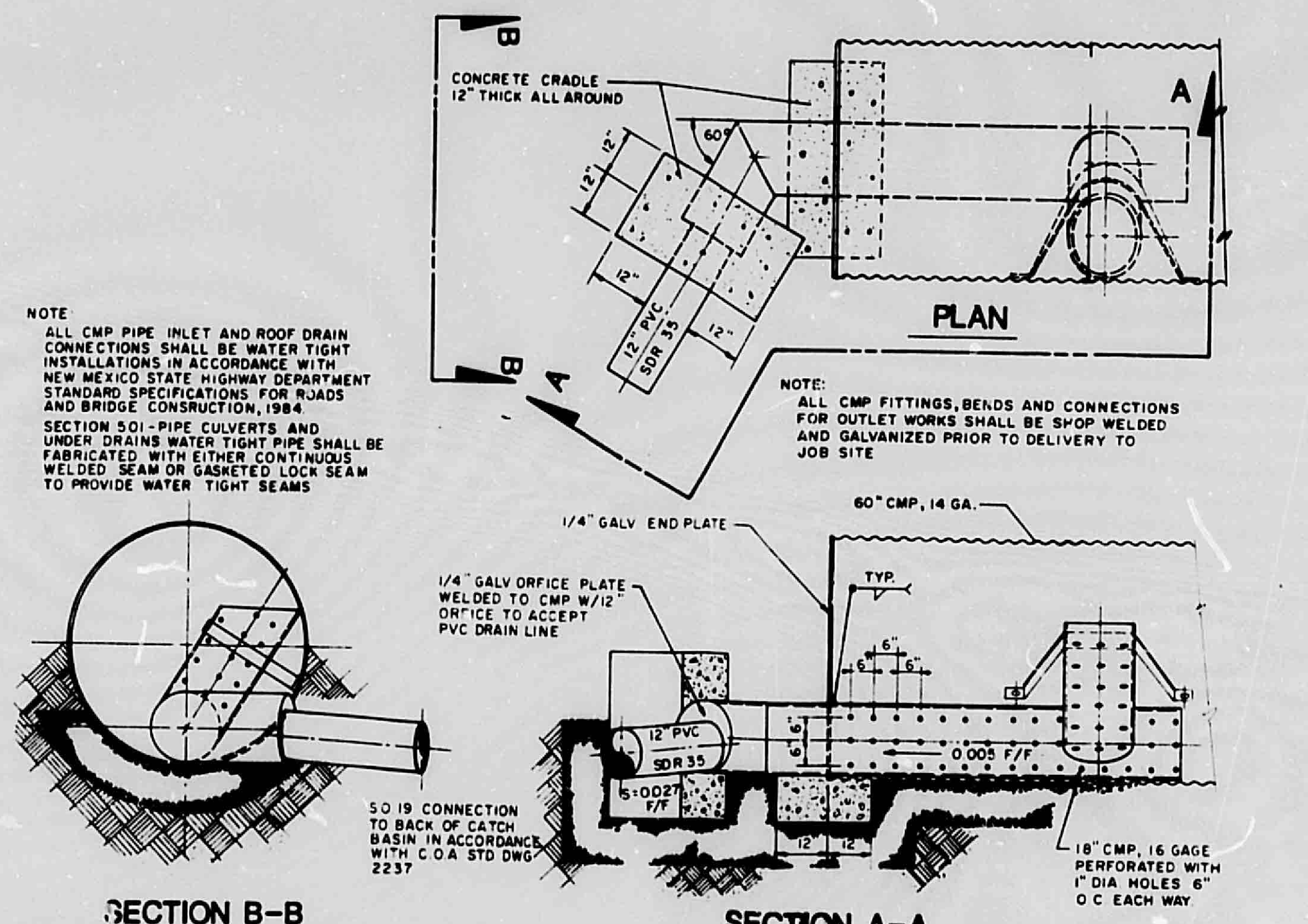
FLOOD HAZARD MAP & OFF-SITE FLOWS FROM F.E.M.A.


SITE
N
SCALE: 1"= 500'


B
1 1/2" CLEAR
1 1/2" CLEAR
#4 DIAGONAL (TOP BARS)
A
A
#4 BARS @ 6" EACHWAY
6"
6"
B
CONCRETE STRENGTH 3500 PSI @ 28 DAYS, 4-6% AIR ENTRAINMENT MAXIMUM AGGREGATE SIZE: 3/4"
R-2565-F NEENAH GRATE & FRAME
(4) TOP BARS
BAR SPACING
2"
2"
2"
24" CMP
REINFORCEMENT TO BE GRADE 40 DEFORMED BARS
BOTTOM BARS
MANHOLE TO BE CAST INTO COVER
SECTION A-A & B-B

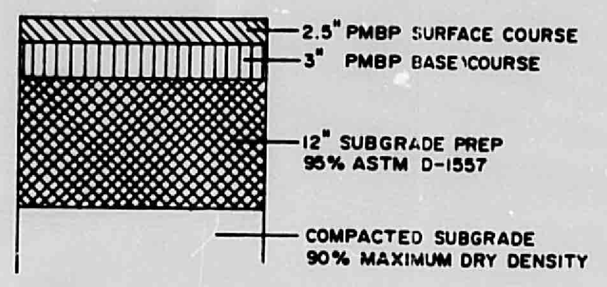
B GRATE AND FRAME DETAILS

NOTE
ALL CMP PIPE INLET AND ROOF DRAIN CONNECTIONS SHALL BE WATER TIGHT INSTALLATIONS IN ACCORDANCE WITH NEW MEXICO STATE HIGHWAY DEPARTMENT STANDARD SPECIFICATIONS FOR ROADS AND BRIDGE CONSRUCTION, 1984.
SECTION 501-PIPE CULVERTS AND UNDER DRAINS WATER TIGHT PIPE SHALL BE FABRICATED WITH EITHER CONTINUOUS WELDED SEAM OR GASKETED LOCK SEAM TO PROVIDE WATER TIGHT SEAMS


B
CONCRETE CRADLE 12" THICK ALL AROUND
60°
12"
12"
12"
12" PVC SDR 35
12"
A
A
B
PLAN
1/4" GALV END PLATE
60" CMP, 14 GA.
TYP.
1/4" GALV ORFICE PLATE WELDED TO CMP W/12" ORFICE TO ACCEPT PVC DRAIN LINE
6"
6"
6"
12" PVC SDR 35
S=0027 F/F
0.005 F/F
12
12
SO 19 CONNECTION TO BACK OF CATCH BASIN IN ACCORDANCE WITH C.O.A STD DWG 2237
18" CMP, 16 GAGE PERFORATED WITH 1" DIA HOLES 6" O.C. EACH WAY
SECTION B-B
SECTION A-A

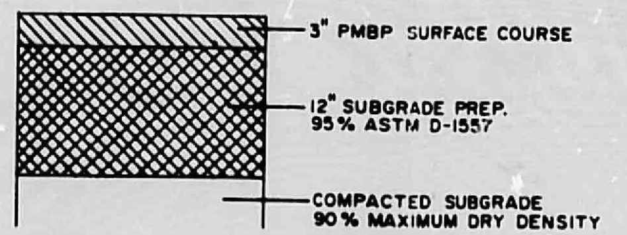
NOTE:
ALL CMP FITTINGS, BENDS AND CONNECTIONS FOR OUTLET WORKS SHALL BE SHOP WELDED AND GALVANIZED PRIOR TO DELIVERY TO JOB SITE

C DETAILS-OUTLET WORKS UNDERGROUND STORM WATER DETENTION FACILITY


2.5" PMBP SURFACE COURSE
3" PMBP BASE COURSE
12" SUBGRADE PREP 95% ASTM D-1557
COMPACTED SUBGRADE 90% MAXIMUM DRY DENSITY

J PAVING SECTION

HIGH USE AND HEAVY TRUCK TRAFFIC AREAS


3" PMBP SURFACE COURSE
12" SUBGRADE PREP. 95% ASTM D-1557
COMPACTED SUBGRADE 90% MAXIMUM DRY DENSITY

K PAVING SECTION

PARKING AND LIGHT VEHICLE TRAFFIC AREAS

NO. 31

SOILS MAP SOIL SURVEY U.S.D.A., S.C.S.

SITE
N
SCALE: 1"= 2000'

RECEIVED
JUN 22 1988
HYDROLOGY SECTION

HYDROLOGY

HYDROLOGY SUMMARY SHEET FOR GRADING & DRAINAGE REPORT
PROJECT: TOYS R US (RESUBMITTAL PLAN NO. 2)

A.P. #	DESCRIPTION	AREA (ac.)	HT. (ft)	LGTH (ft)	SLOPE (ft/ft)	Tc (min)	SOIL	CN	C	RUNOFF PARAMETERS FOR 2 YEAR EVENT P	I	V	Q	RUNOFF PARAMETERS FOR 10 YEAR EVENT P	I	V	Q	RUNOFF PARAMETERS FOR 100 YEAR EVENT P	I	V	Q
1	BASIN A+B+C+D+E+F+G UND	14.1	25	1100	0.023	<10	B	70.0	0.40	1.05	2.21	407	12.5	1.54	3.26	5330	18.4	2.35	4.97	19744	28.0
1	BASIN A+B+C+D+E+F+G EXI	14.1	25	1100	0.023	<10	B	89.0	0.70	1.05	2.21	16043	21.8	1.54	3.26	35363	32.2	2.35	4.97	67786	49.0
1	BASIN A+B+C+D+E+F+G DEV	14.1	15	515	0.029	<10	B	95.5	0.85	1.05	2.21	32571	26.6	1.54	3.26	57697	39.3	2.35	4.97	95506	59.8
1	BASIN A+D+E DEVELOPED	4.0	13	1080	0.012	<10	B	94.5	0.83	1.05	2.21	8277	7.3	1.54	3.26	15156	10.8	2.35	4.97	25664	16.4
2	BASIN B+F DEVELOPED	3.1	12	560	0.021	<10	B	96.0	0.87	1.05	2.21	7460	5.9	1.54	3.26	12996	8.7	2.35	4.97	21268	13.3
3	BASIN C+G DEVELOPED	7.0	12	700	0.017	<10	B	95.5	0.87	1.05	2.21	16239	13.6	1.54	3.26	28766	20.0	2.35	4.97	47618	30.5

P = 6-HOUR RAINFALL VOLUMES - (Ref. DPM PLATE 22.2 D-1)
I = RAINFALL INTENSITY - INCHES FOR 6-HOUR EVENT. (Ref. DPM PLATE 22.2 D-2)
V = VOLUME OF RUNOFF - CUBIC FEET
Q = RATE OF RUNOFF - CUBIC FEET PER SECOND

POND VOLUME CALULATIONS
440 LF OF 60" CMP ≃ 8639 C.F.

BY: DOUGLAS W. COPELAND DATE: 4/27/88

SOILS INFORMATION FROM SOIL SURVEY U.S.D.A., S.C.S.

SOIL SERIES AND MAP SYMBOLS	DEGREE AND KIND OF LIMITATIONS FOR: SEPTIC TANK ABSORPTION FIELDS	SEWAGE LAGOONS	SHALLOW EXCAVATIONS	DWELLINGS WITHOUT BASEMENTS	SANITARY LANDFILL (TRENCH TYPE)	LOCAL ROAD AND STREETS	SUITABILITY AS SOURCE OF—: ROAD FILL	SAND	GRAVEL	TOPSOIL	SOIL FEATURES AFFECTING—: POND RESERVOIR AREAS	DIKES, LEVEES, AND OTHER EMBANKMENTS	HYDROLOGIC SOIL GROUP
*Embudo: EmB, EtC.............. For Tijeras part of EtC, see Tijeras series.	Slight³......	Severe: seepage.	Moderate:³ small stones.	Slight³......	Severe: seepage.	Slight......	Good......	Poor: excess fines.	Poor: excess fines.	Poor: small stones.	Seepage........	Piping; compressible	B

EtC—Embudo-Tijeras complex, 0 to 9 percent slopes. This mapping unit is about 50 percent an Embudo gravelly fine sandy loam, 0 to 5 percent slopes, and about 35 percent a Tijeras gravelly fine sandy loam that has 1 to 9 percent slopes.

The Embudo soil is in drainageways and depressions, and the Tijeras soil is on low ridges in narrow undulations. The Tijeras soil has the profile described as representative of the Tijeras series. On both soils, runoff is medium and the hazard of water erosion is moderate.

Included in this unit in mapping are areas of Tesajo, Millett, and Wink soils, which make up about 15 percent of the unit.

This mapping unit is used for community development, watershed, wildlife habitat, and range. The Embudo part of this unit is subject to flooding. Control of moisture is required for proper compaction. Dryland capability subclass VIIe; native plant community 4.

LEGAL DESCRIPTION:

PORTIONS OF PARCELS A & D AND ALL OF PARCELS C-8 AND E OF WINROCK CENTER ADDITION, CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

8-22-88
Permit 45925

NO	REVISIONS	BY	DATE
3	REVISED G&D PLAN TO CONFORM TO REVISED SITE PLAN	DWC	6/21/88
2	Changed POND TO CMP-ADDED ADDITIONAL NOTES OF CLARIFICATION	DWC	5/12/88
1	REVISED PLAN TO SHOW DETAIL GRADES & HYDROLOGY	DWC	4/27/88

TOYS "R" US
GRADING AND DRAINAGE PLAN

Rev 5/12/88
Rev. 6/27/88

DOUGLAS W. COPELAND

EASTERLING & ASSOCIATES, INC.
CONSULTING ENGINEERS
5643 Paradise Blvd. N.W.
Albuquerque, New Mexico 87114

Designed: DWC	Drawn: JEL	Checked: DWC	Sheet
Job No: 2011.2	Date: MAR. 1988		of C-2A

J19-D48

THIS PLAN SHOT TWICE
ONCE ON LIGHT AND
ONCE ON DARK.

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

R# 21 DATE 6-24-93 OP E.J.P.

CITY OF ALBUQUERQUE

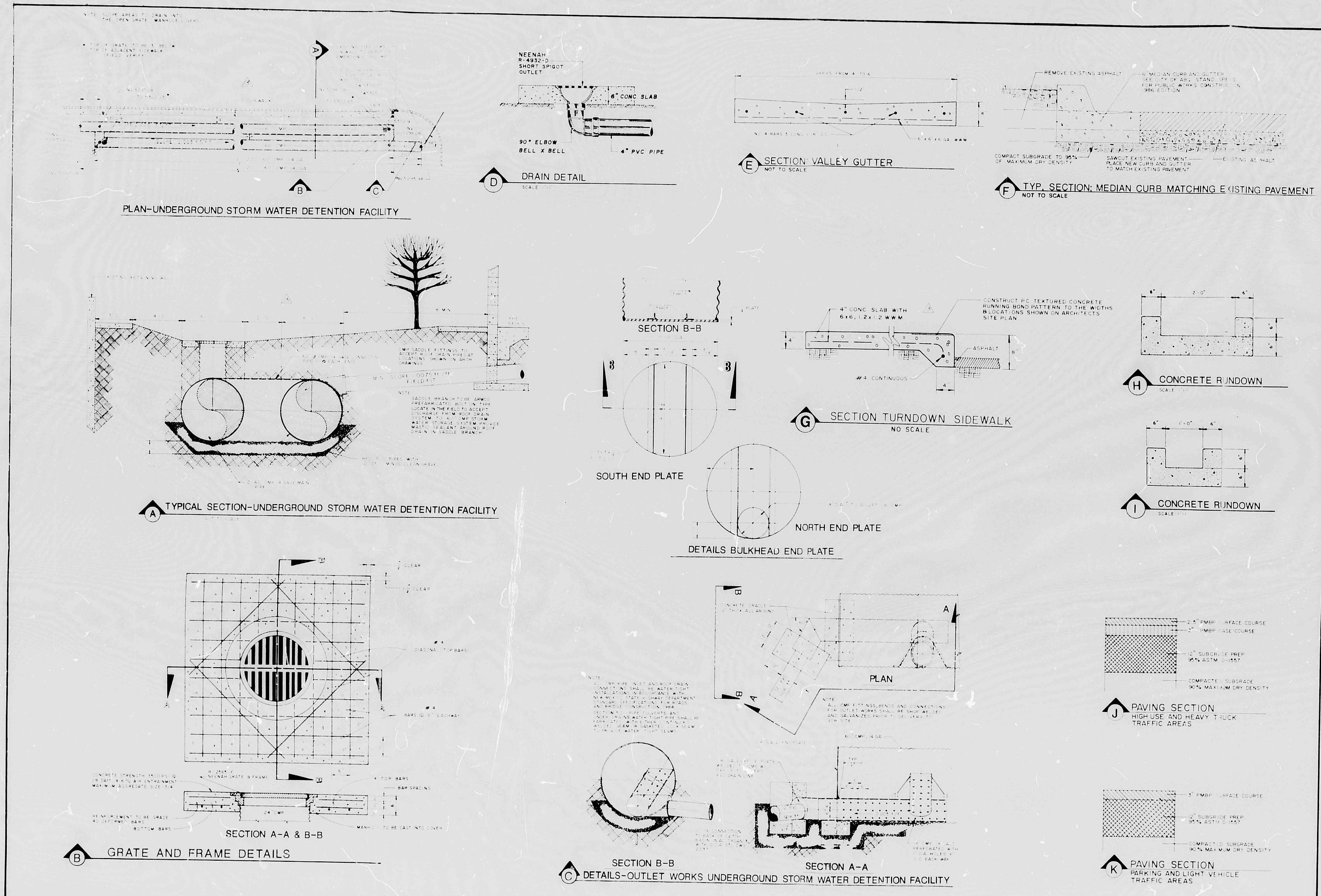
This microimage is certified to be a complete and accurate copy of the original as it appears in the files of the PUBLIC WORKS DEPARTMENT - HYDROLOGY DIVISION and was filmed in the normal course of business.
The photographic processes used meet the Basic Microfilm Standards of the National Micrographics Association (MS115-1977).

CITY CLERK RECORDER

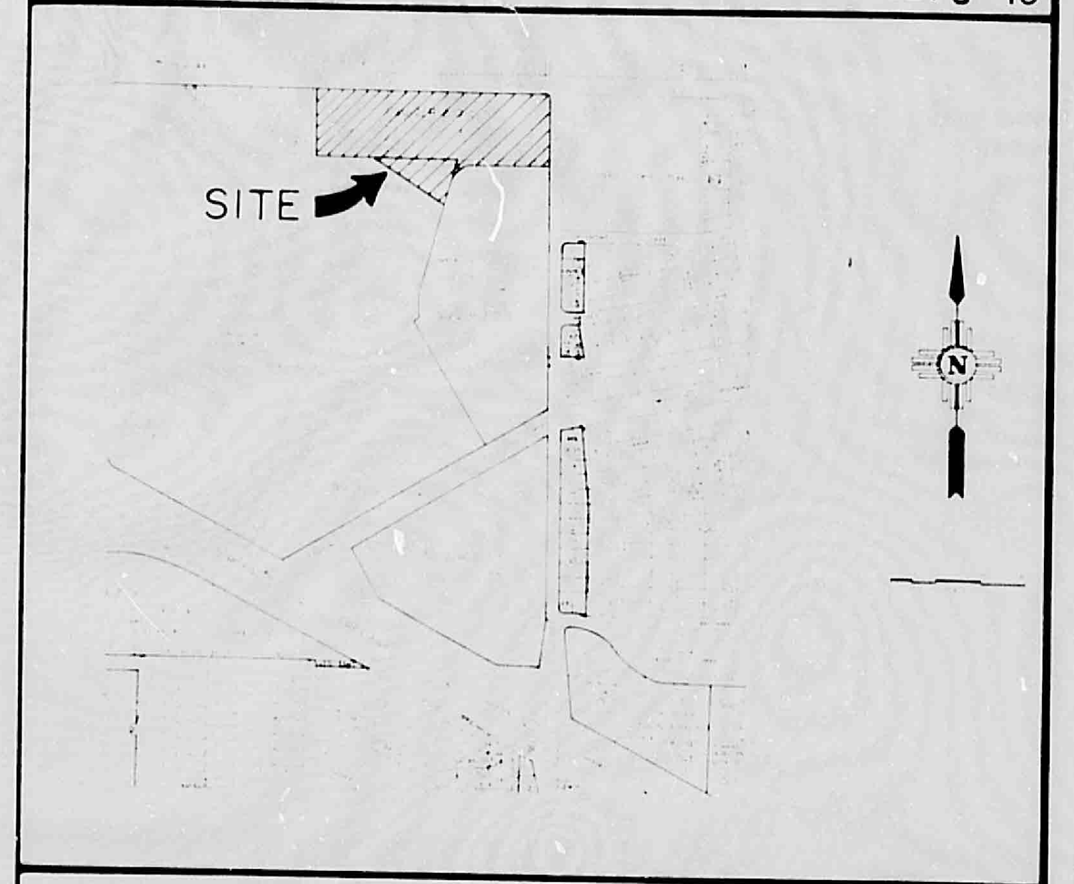
OFFICIAL SEAL
NORBERTA SANCHEZ
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires: MAY 8 1995
Norberta Sanchez

D 24 C 20 B 16 A 12

CITY OF ALBUQUERQUE C D

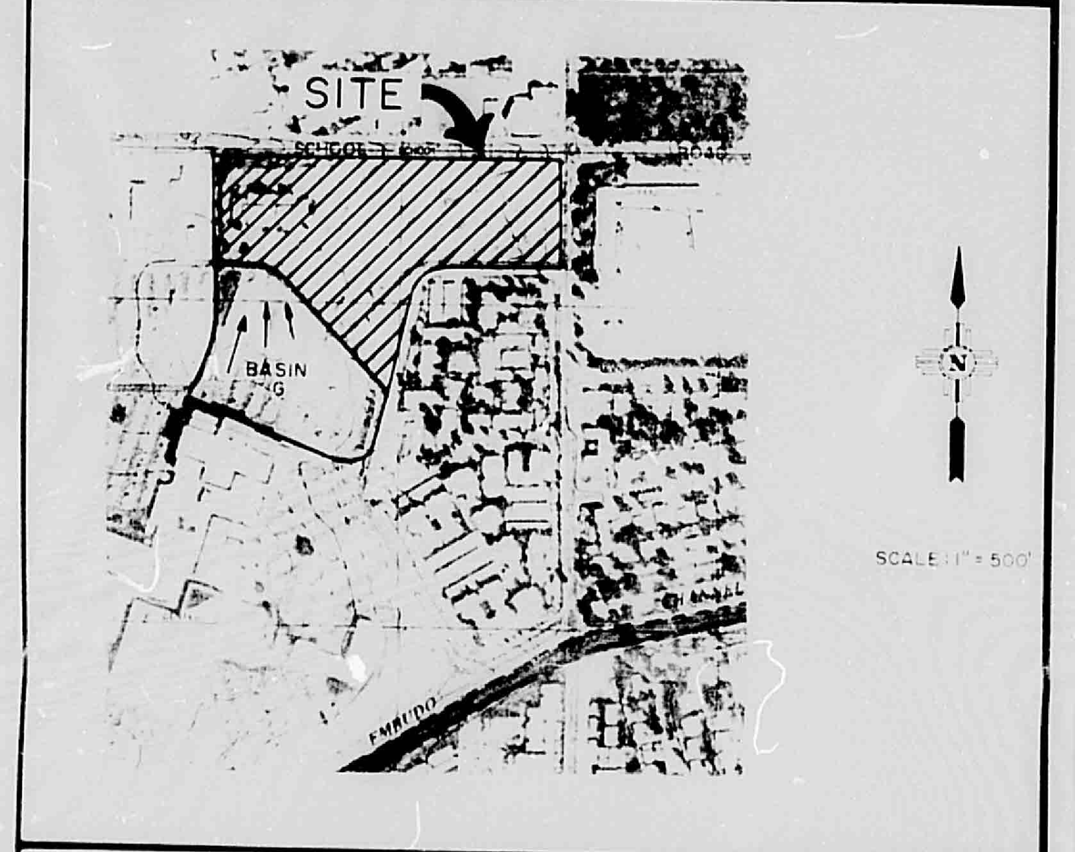

PLAN-UNDERGROUND STORM WATER DETENTION FACILITY
NEENAH R-4932-D SHORT SPIGOT OUTLET
6" CONC SLAB
90° ELBOW BELL X BELL
4" PVC PIPE
D DRAIN DETAIL
E SECTION VALLEY GUTTER
NOT TO SCALE
REMOVE EXISTING ASPHALT
COMPACT SUBGRADE TO 95% OF MAXIMUM DRY DENSITY
SAWCUT EXISTING PAVEMENT
EXISTING ASPHALT
F TYP. SECTION: MEDIAN CURB MATCHING EXISTING PAVEMENT
NOT TO SCALE
A TYPICAL SECTION-UNDERGROUND STORM WATER DETENTION FACILITY
SECTION B-B
SOUTH END PLATE
NORTH END PLATE
DETAILS BULKHEAD END PLATE
4" CONC SLAB WITH 6x6 1.2x1.2 WWM
CONSTRUCT P.C. TEXTURED CONCRETE RUNNING BOND PATTERN TO THE WIDTHS & LOCATIONS SHOWN ON ARCHITECTS SITE PLAN
ASPHALT
#4 CONTINUOUS
G SECTION TURNDOWN SIDEWALK
NO SCALE
H CONCRETE RUNDOWN
I CONCRETE RUNDOWN
SECTION A-A & B-B
B GRATE AND FRAME DETAILS
PLAN
SECTION B-B
SECTION A-A
C DETAILS-OUTLET WORKS UNDERGROUND STORM WATER DETENTION FACILITY
J PAVING SECTION
HIGH USE AND HEAVY TRUCK TRAFFIC AREAS
K PAVING SECTION
PARKING AND LIGHT VEHICLE TRAFFIC AREAS
COMPACTED SUBGRADE 90% MAXIMUM DRY DENSITY

VICINITY MAP ZONE ATLAS MAP NO. J-19



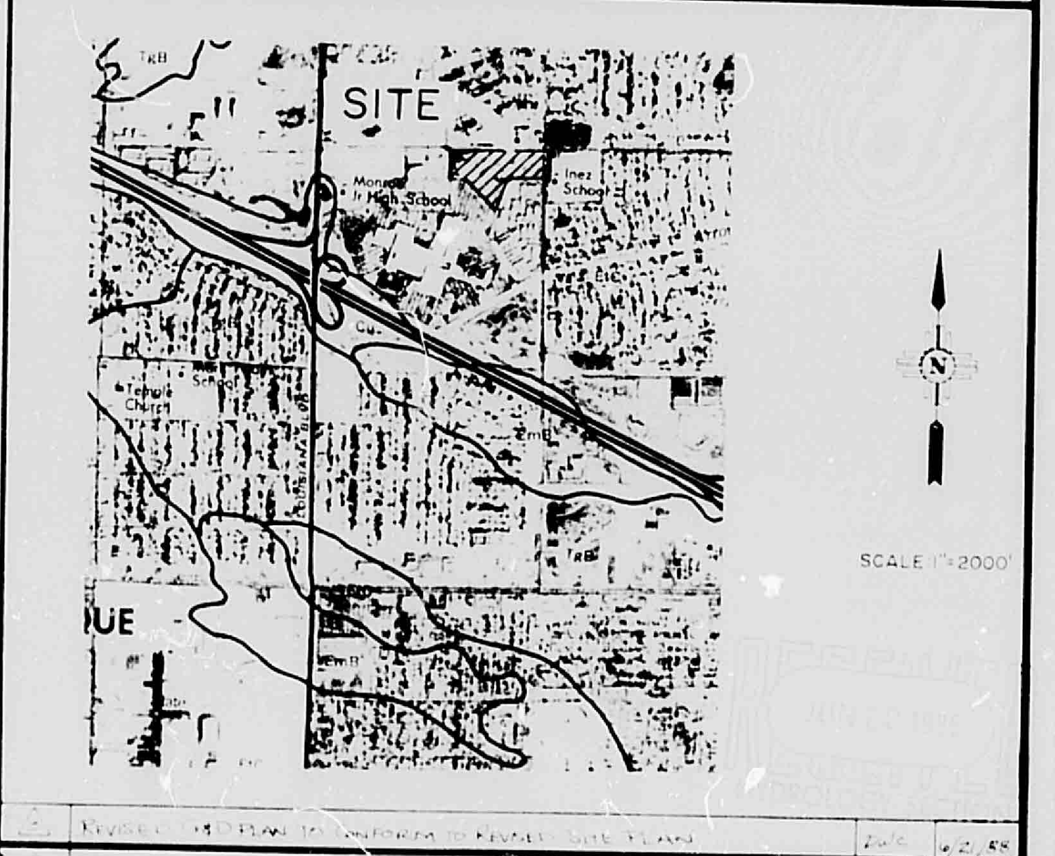
NO. 30

FLOOD HAZARD MAP & OFF-SITE FLOWS FROM F.E.M.A.


SITE
BASIN
N

NO. 31

SOILS MAP SOIL SURVEY U.S.D.A., S.C.S.



HYDROLOGY

A.P. #	DESCRIPTION	AREA (AC)	HT (FT)	LENGTH (FT)	SLOPE (FT/FT)	TC (HOURS)	SOIL	CN		RUNOFF PARAMETERS FOR 2 YEAR EVENT				RUNOFF PARAMETERS FOR 10 YEAR EVENT				RUNOFF PARAMETERS FOR 100 YEAR EVENT			
										P	I	V	Q	P	I	V	Q	P	I	V	Q
1	BASIN A+B+C+D+E+F+G UND	14.1	25	1100	0.023	.10	B	70.0	0.40	1.05	2.21	407[illegible]	12.5	1.51	3.26	5330	18.4	2.35	4.97	19741	28.0
1	BASIN A+B+C+D+E+F+G EXI	14.1	25	1100	0.023	.10	B	89.0	0.70	1.05	2.21	15041	21.3	1.51	3.26	[illegible]	32.2	2.35	4.97	67786	47.0
1	BASIN A+B+C+D+E+F+G DEV	14.1	15	515	0.029	.10	B	95.5	0.95	1.05	2.21	32571	25.6	1.51	3.26	57692	39.3	2.35	4.97	95506	59.4
1	BASIN A+D+E DEVELOPED	4.0	[illegible]	1080	0.012	.10	B	91.5	0.81	1.05	2.21	8277	7.3	1.51	3.26	15156	10.8	2.35	4.97	25661	16.1
2	BASIN B+F DEVELOPED	3.1	12	[illegible]	0.021	.10	B	96.0	0.87	1.05	2.21	7460	5.9	1.51	3.26	12996	8.7	2.35	4.97	21264	13.1
3	BASIN C+G DEVELOPED	7.0	12	700	0.017	.10	B	95.5	0.87	1.05	2.21	16239	13.6	1.51	3.26	28766	20.0	2.35	4.97	47614	30.5

P = 6 HOUR RAINFALL VOLUMES (Ref. DPM PLATE 22.2 D-1)
I = RAINFALL INTENSITY - INCHES FOR 6 HOUR EVENT (Ref. DPM PLATE 22.2 D-1)
V = VOLUME OF RUNOFF - CUBIC FEET
Q = RATE OF RUNOFF - CUBIC FEET PER SECOND

POND VOLUME CALCULATIONS
440 LF OF 6[illegible] CMP = 8639 C.F.

BY: DOUGLAS W. COPELAND DATE: 4/27/88

SOILS INFORMATION FROM SOIL SURVEY U.S.D.A., S.C.S.

SOIL SERIES AND MAP SYMBOLS	DEGREE AND KIND OF LIMITATIONS FOR—						SUITABILITY AS SOURCE OF—				SOIL FEATURES AFFECTING—		HYDROLOGIC SOIL GROUP
	SEPTIC TANK ABSORPTION FIELDS	SEWAGE LAGOONS	SHALLOW EXCAVATIONS	DWELLINGS WITHOUT BASEMENTS	SANITARY LANDFILL (TRENCH TYPE)	LOCAL ROADS AND STREETS	ROAD FILL	SAND	GRAVEL	TOPSOIL	POND RESERVOIR AREAS	DIKES, LEVEES, AND OTHER EMBANKMENTS	
*Embudo: EmB, EtC. For Tijeras part of EtC, see Tijeras series.	Slight²	Severe: seepage.	Moderate: ² small stones.	Slight¹	Severe: seepage.	Slight	Good	Poor: excess fines.	Poor: excess fines.	Poor: small stones.	Seepage	Piping, compressible	B

EtC—Embudo-Tijeras complex, 0 to 9 percent slopes. This mapping unit is about 50 percent an Embudo gravelly fine sandy loam, 0 to 5 percent slopes, and about 35 percent a Tijeras gravelly fine sandy loam that has 1 to 9 percent slopes.

The Embudo soil is in drainageways and depressions, and the Tijeras soil is on low ridges in narrow undulations. The Tijeras soil has the profile described as representative of the Tijeras series. On both soils, runoff is medium and the hazard of water erosion is moderate.

Included in this unit in mapping are areas of Tesajo, Millett, and Wink soils, which make up about 15 percent of the unit.

This mapping unit is used for community development, watershed, wildlife habitat, and range. The Embudo part of this unit is subject to flooding. Control of moisture is required for proper compaction. Dryland capability subclass VIIe, native plant community 4.

LEGAL DESCRIPTION

PORTIONS OF PARCELS A & D AND ALL OF PARCELS C-8 AND E OF WINROCK CENTER ADDITION, CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

Al Cruz 8-22-88
Permit 45925

NO.	REVISIONS	BY	DATE
	REVISED G&D PLAN TO CONFORM TO REVISED SITE PLAN	DWC	6/21/88
	CHANGED POND TO CMP ADDED ADDITIONAL NOTES FOR CLARIFICATION	DWC	5/12/88
	REVISED PLAN TO SHOW DETAIL GRADES & HYDROLOGY	DWC	4/27/88

TOYS "R" US

GRADING AND DRAINAGE PLAN

Rev 5/12/88

DOUGLAS W. COPELAND 8498

EASTERLING & ASSOCIATES, INC.
CONSULTING ENGINEERS
5643 Paradise Blvd. N.W.
Albuquerque, New Mexico 87114

Designed	Drawn	Checked	Sheet
DWC	JEL	DWC	C-2A
Job No 2011.2	Date MAR. 1988		

J19-D48

THIS PLAN SHOT TWICE
ONCE ON LIGHT AND
ONCE ON DARK.

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

R# 21 DATE 2-24-93 OP LP

CITY OF ALBUQUERQUE

This microimage is certified to be a complete and accurate copy of the original as it appears in the files of the PUBLIC WORKS DEPARTMENT - HYDROLOGY DIVISION and was filmed in the normal course of business. The photographic processes used meet the Basic Microfilm Standards of the National Micrographics Association (MS115-1977).

Karen Reeves
CITY CLERK RECORDER

OFFICIAL SEAL
NORBERTA SANCHEZ
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires MAY 8 1995
Norberta Sanchez

D 24 C 20 B 16 A 12
CITY OF ALBUQUERQUE C D