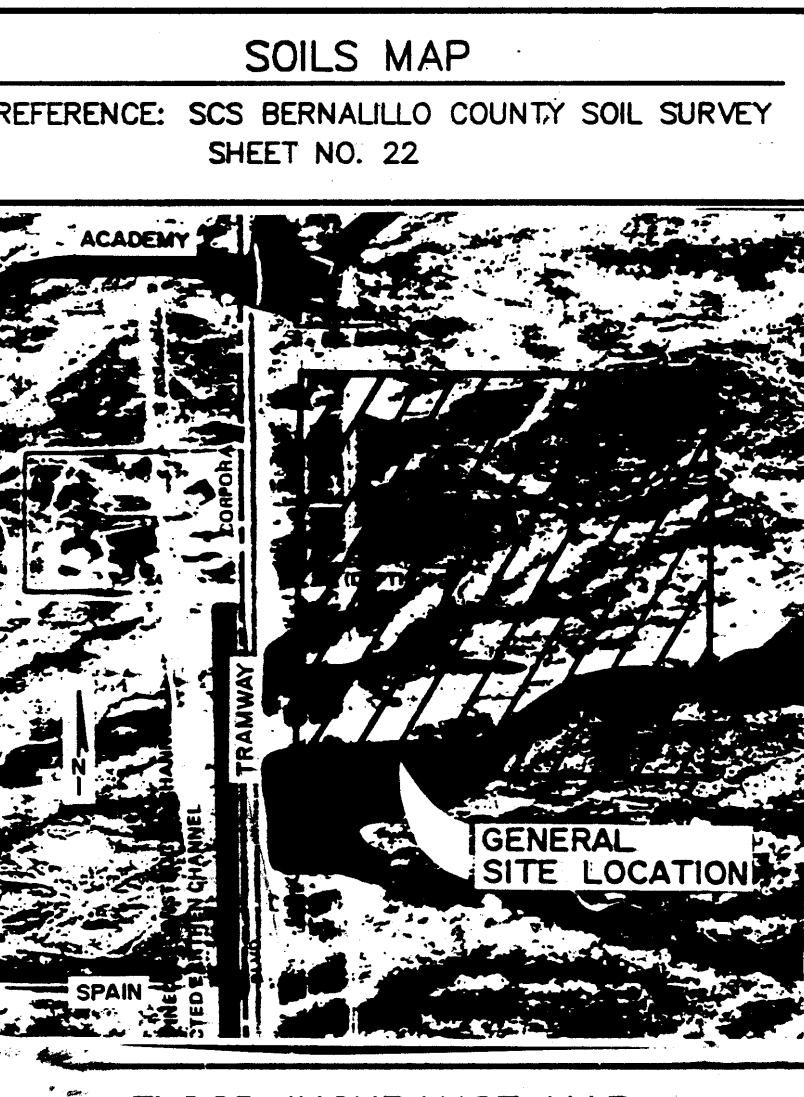
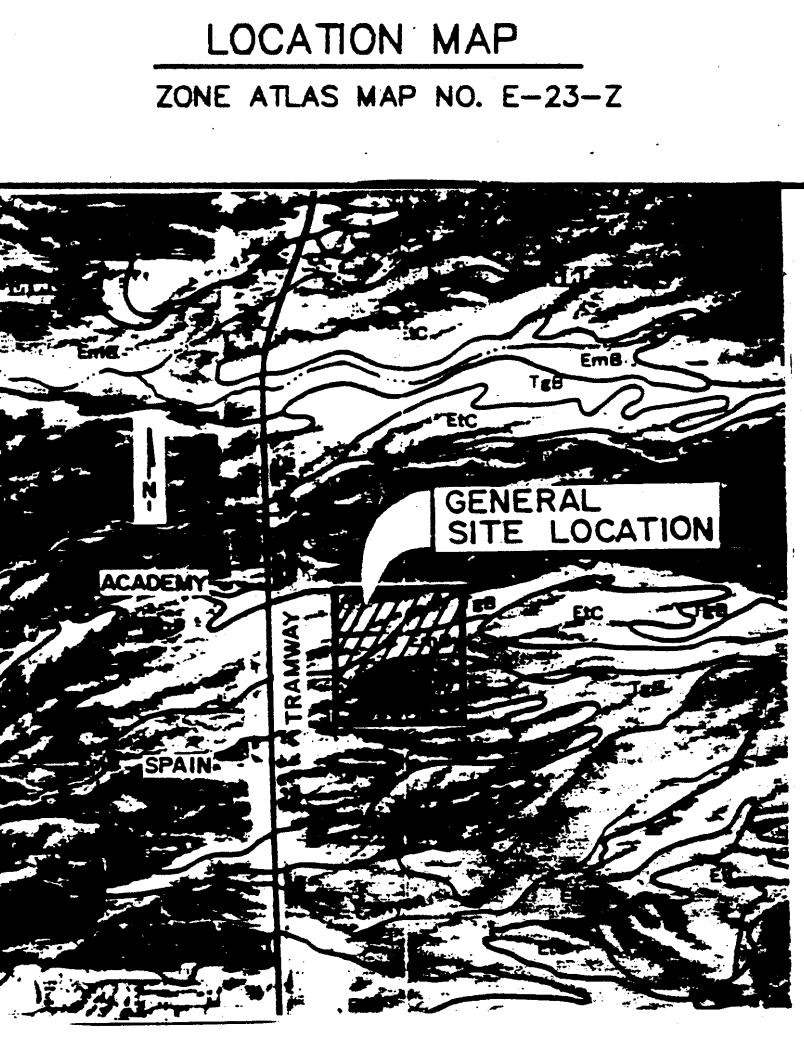
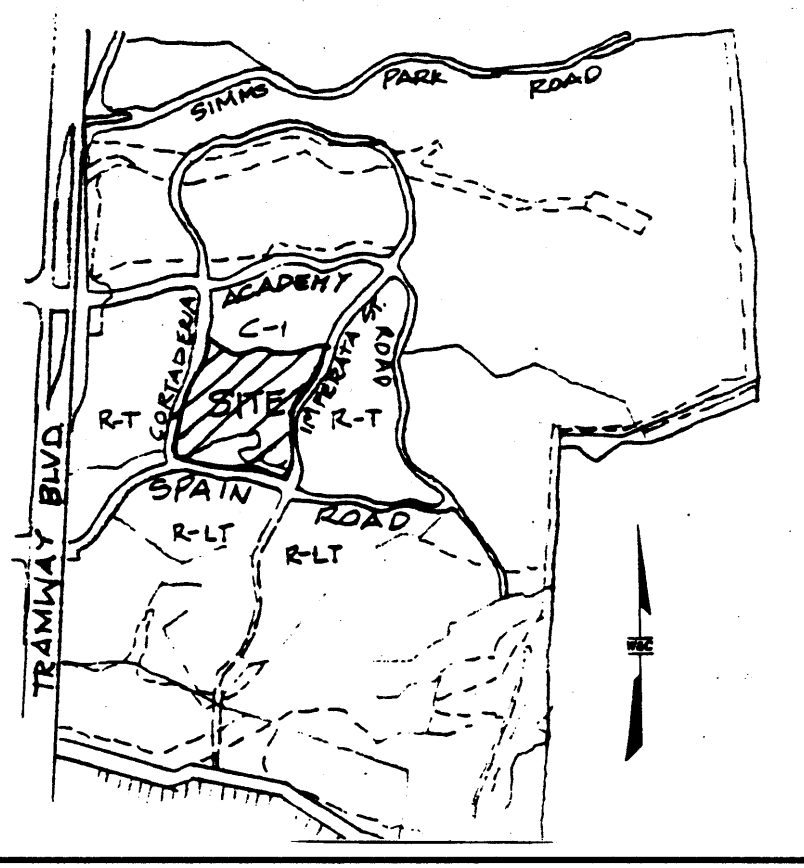
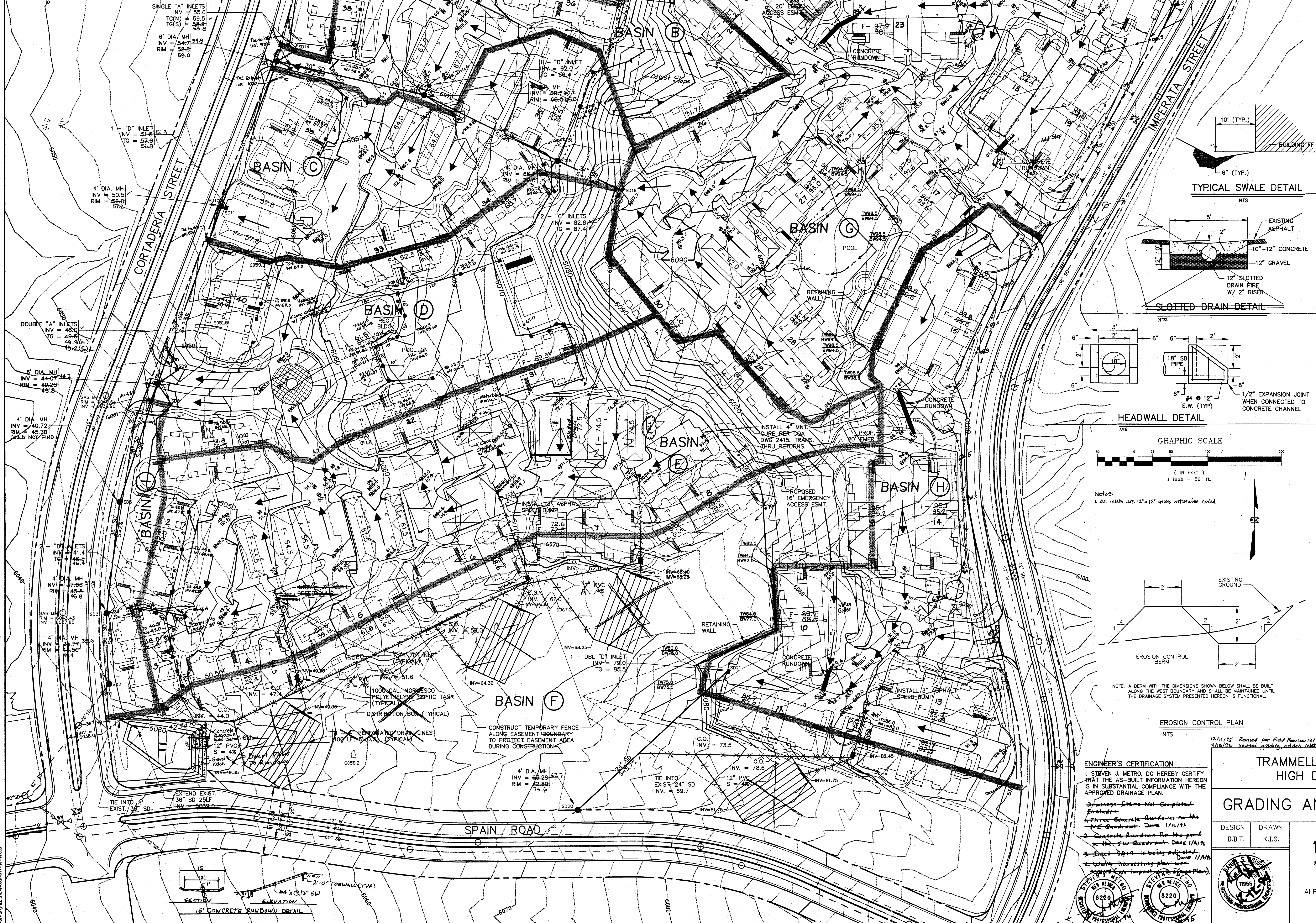


STORM DRAIN COORDINATE TABLE			
POINT	NORTHING	EASTING	DESCRIPTION
SD1	150983.28	427508.84	AT PROPERTY LINE
SD2	150984.46	427517.47	MH
SD3	150994.43	427514.12	MH
SD4	150995.24	427564.42	BEND
SD5	150994.18	427617.25	AT INLET
SD6	151004.94	427531.83	MH
SD7	151004.48	427583.00	MH
SD8	151022.72	427600.05	AT INLET
SD9	151027.84	427666.22	MH
SD10	151032.00	427666.30	MH
SD11	151049.51	427674.18	AT INLET
SD12	151060.74	427744.51	AT INLET
SD13	151068.57	427758.21	AT INLET
SD14	151070.34	427767.39	AT INLET
PROPERTY CORNER COORDINATE TABLE			
POINT	NORTHING	EASTING	DESCRIPTION
PC1	151099.07	427792.47	NW PROPERTY CORNER
PC2	151099.83	428038.83	NE PROPERTY CORNER



LEGAL DESCRIPTION
TRACT 7, HIGH DESERT

BENCH MARK
STANDARD USC & GS BRASS TABLET STAMPED "TUMBLE 1969", SET IN CONCRETE PROJECTING 0.2 FEET ABOVE GROUND, LOCATED ON THE NORTH SIDE OF SAN ANTONIO DRIVE, APPROX. 500 FEET WEST OF THE INTERSECTION OF TENNYSON STREET AND SAN ANTONIO DRIVE.

NOTES:
THE CONTRACTOR SHALL INSURE THAT NO SOIL ERODES FROM THE SITE INTO PUBLIC ROW OR ONTO PRIVATE PROPERTY.
THE CONTRACTOR MUST OBTAIN A "TOPSOIL DISTURBANCE PERMIT" PRIOR TO BEGINNING EARTHWORK.
THE CONTRACTOR SHALL PROMPTLY CLEAN UP ANY MATERIAL EXCAVATED WITHIN THE PUBLIC ROW SO THAT THE MATERIAL IS NOT SUSCEPTIBLE TO BEING WASHED DOWN THE STREET.
THE CONTRACTOR SHALL ENSURE THAT THE EROSION CONTROL MEASURES OUTLINED ON THIS SHEET ARE ADHERED TO DURING AND AFTER EARTHWORK.

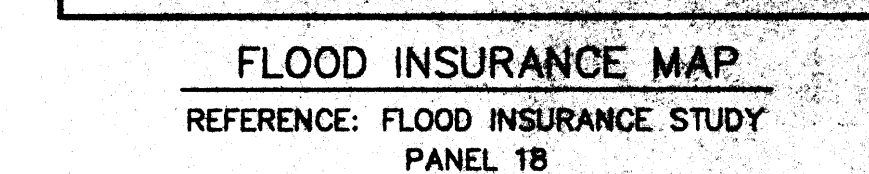
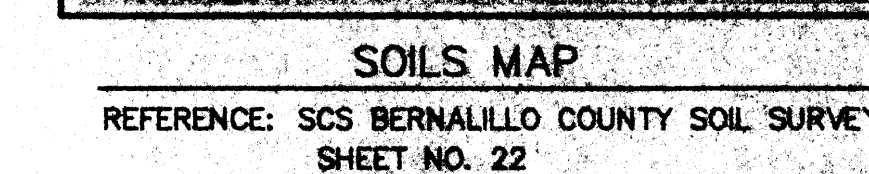
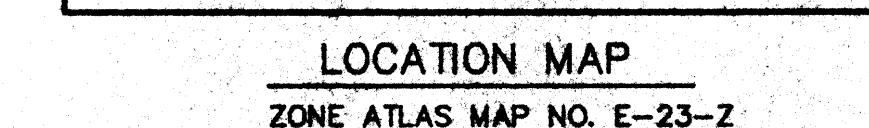
ENGINEER'S CERTIFICATION
I, STEVEN J. METRO, DO HEREBY CERTIFY THAT THE AS-BUILT INFORMATION HEREON IS IN SUBSTANTIAL COMPLIANCE WITH THE APPROVED DRAINAGE PLAN.
Drawings: Plans, Sections, Details, Erosion Control, Runoff, and Grading. Date: 1/1/1994.
1. Concrete Runoffs for the pond in the storm drain. Date: 1/1/1994.
2. Steel 30" is being ordered. Date: 1/1/1994.
3. Water harvesting plan was approved for implementation. Date: 1/1/1994.

TRAMMELL CROW RESIDENTIAL
HIGH DESERT, TRACT 7

GRADING AND DRAINAGE PLAN

DESIGN: D.B.T. DRAWN: K.I.S. DATE: JULY 1994 FILE NO: 94-514 SHEET NO: C-1

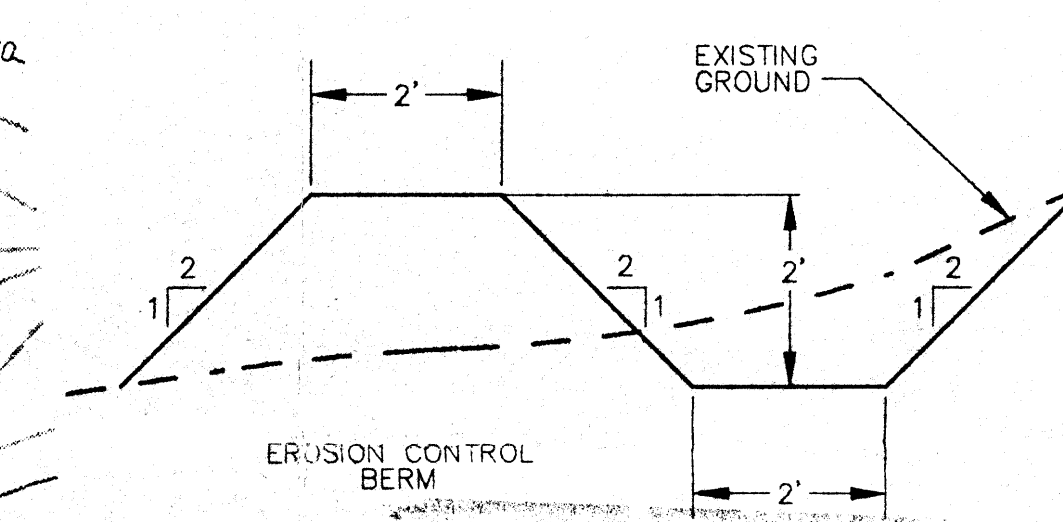
WILSON & COMPANY
6611 GULTON CT
ALBUQUERQUE, NEW MEXICO 87109
(505) 345-5345



TRACT 7, HIGH DESERT

BENCH MARK

STANDARD USC & GS BRASS TABLE
STAMPED "TUMBLE 1969", SET IN
CONCRETE PROJECTING 0.2 FEET ABOVE
GROUND, LOCATED ON THE NORTH SIDE
OF SAN ANTONIO DRIVE, APPROX. 500
FEET WEST OF THE INTERSECTION OF
TENNYSON STREET AND SAN ANTONIO
DRIVE.



NOTES:
THE CONTRACTORS SHALL INSURE THAT NO SOIL
ERODES FROM THE SITE INTO PUBLIC ROW OR
ONTO PRIVATE PROPERTY.

THE CONTRACTOR MUST OBTAIN A "TOPSOIL DISTURBANCE PERMIT" PRIOR TO BEGINNING EARTHWORK.

THE CONTRACTOR SHALL PROMPTLY CLEAN UP ANY MATERIAL EXCAVATED WITHIN THE PUBLIC ROW SO THAT THE MATERIAL IS NOT SUSCEPTIBLE TO BEING WASHED DOWN THE STREET.

THE CONTRACTOR SHALL ENSURE THAT THE EROSION CONTROL MEASURES OUTLINED ON THIS SHEET ARE ADHERED TO DURING AND AFTER EARTHWORK.

EROSION CONTROL PLAN

TRAMMELL CROW RESIDENTIAL
HIGH DESERT, TRACT 7

GRADING AND DRAINAGE PLAN

DESIGN	DRAWN
D.B.T.	K.I.S.

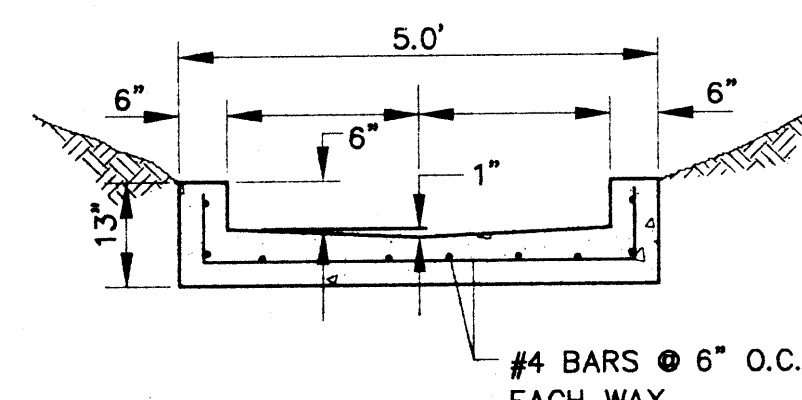
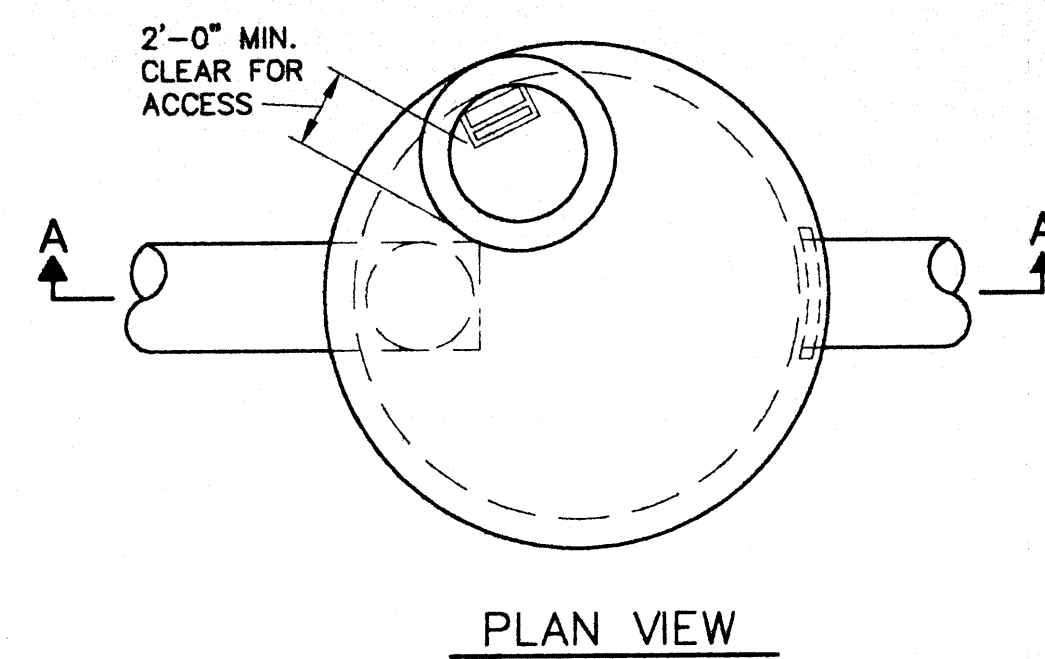
**WILSON
& COMPANY**

6611 GULTON CT
ALBUQUERQUE, NEW MEXICO
87109
(505) 345-5345

DATE	MAY 1984
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FILE NO.
94-514

SHEET NO.
C-

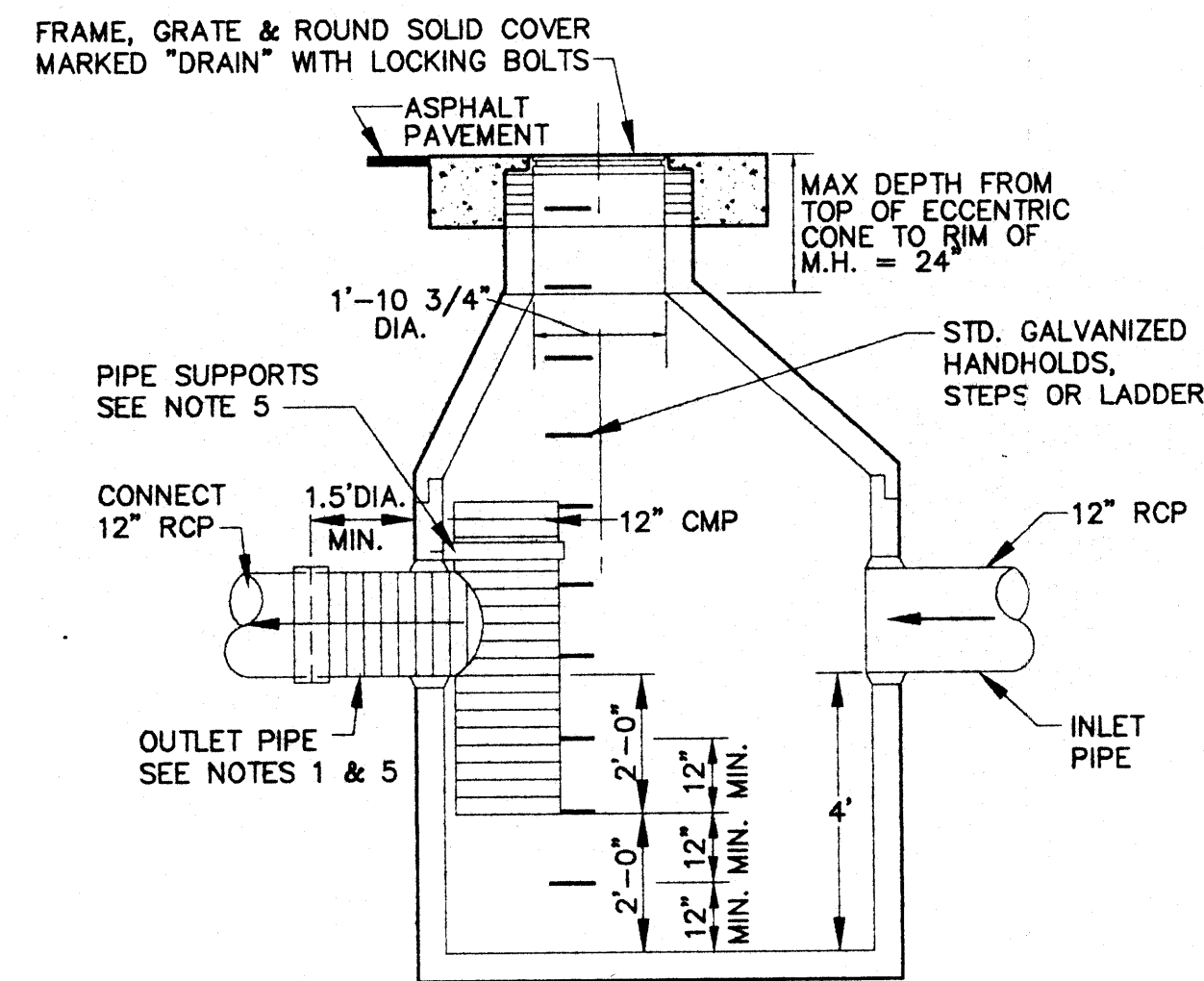


CONCRETE RUNDOWN DETAIL

NTS

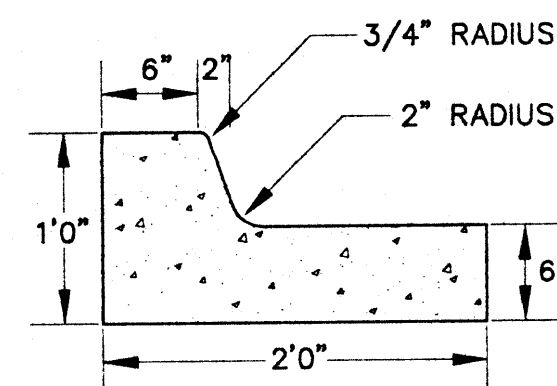
NOTES:

- USE MIN. 48" DIA. TYPE "E" MANHOLE WITH FORMED BOTTOM AS SHOWN.
- OUTLET CAPACITY: DEVELOPED DESIGN FLOW.
- FRAME AND LADDER OR STEPS OFFSET SO:
 - CLIMB-DOWN SPACE IS CLEAR OF RISER AND CLEANOUT GATE.
 - FRAME IS CLEAR OF CURB.
- IF METAL OUTLET PIPE CONNECTS TO CEMENT CONCRETE PIPE: OUTLET PIPE TO HAVE SMOOTH O.D. EQUAL TO CONCRETE PIPE I.D. LESS 1/4".
- PROVIDE AT LEAST ONE 3"x0.90 GAGE SUPPORT BRACKET ANCHORED CONCRETE WALL (MAX. 3'-0" VERTICAL SPACING).



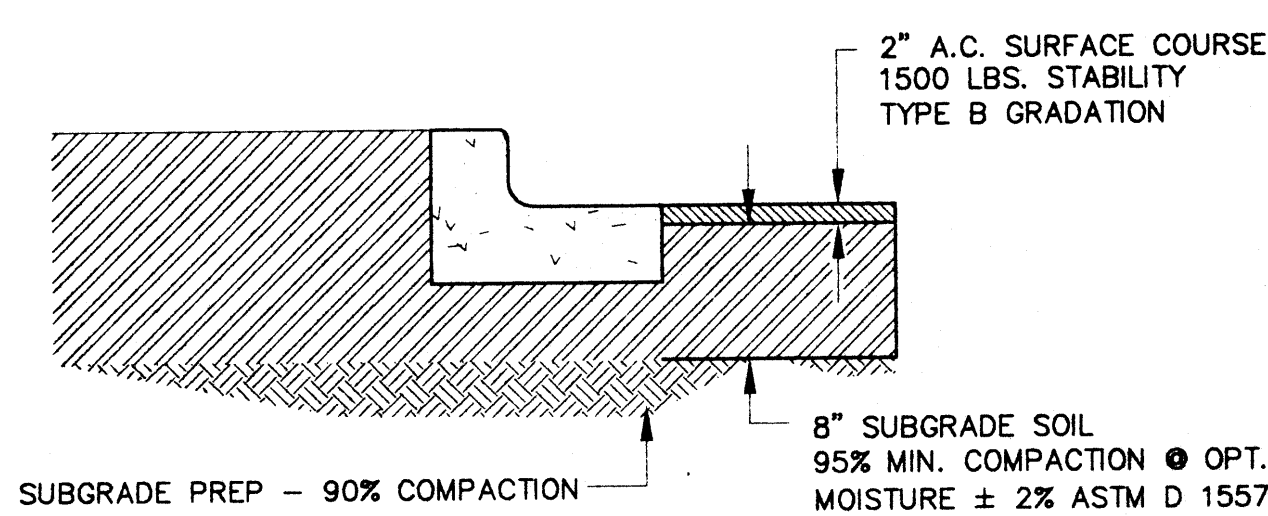
SECTION A-A
OIL/WATER SEPARATOR DETAIL

NTS



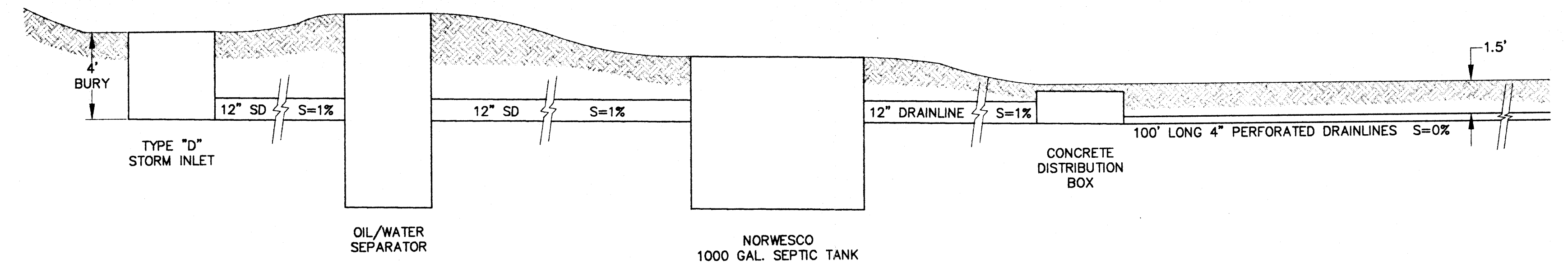
TYPICAL CURB & GUTTER DETAIL

NTS



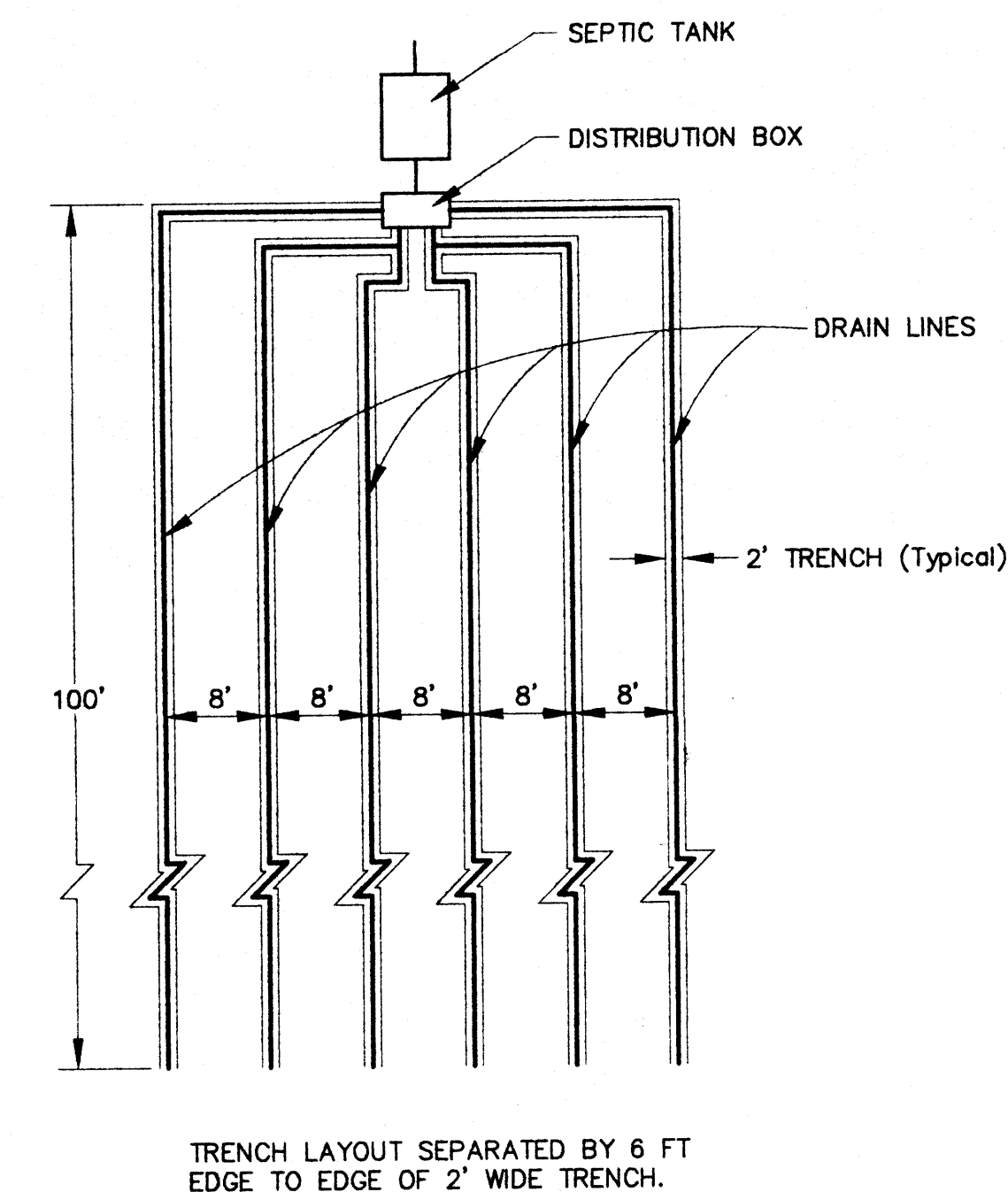
PAVEMENT SECTION DETAIL

NTS



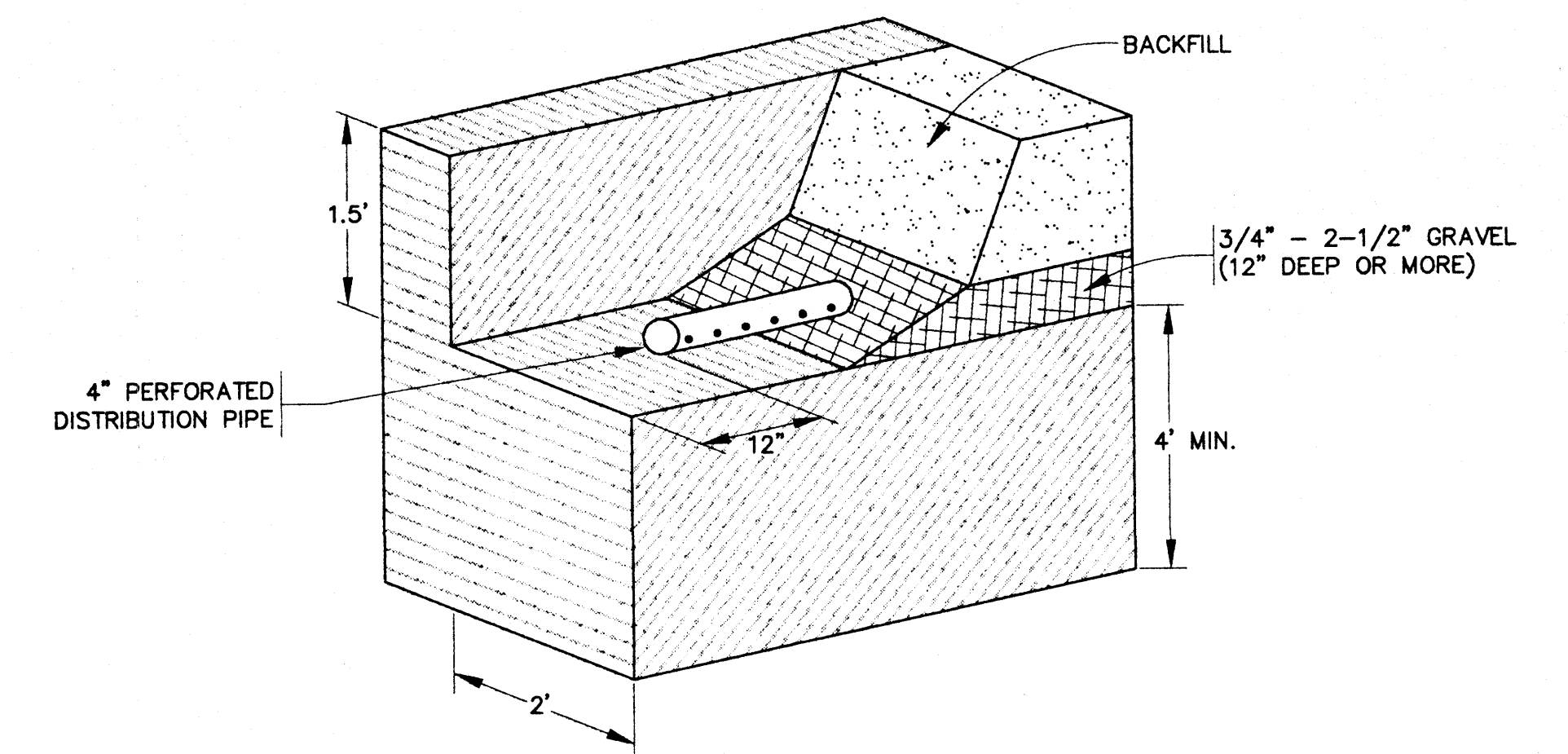
WATER HARVESTING SYSTEM PROFILE

NTS



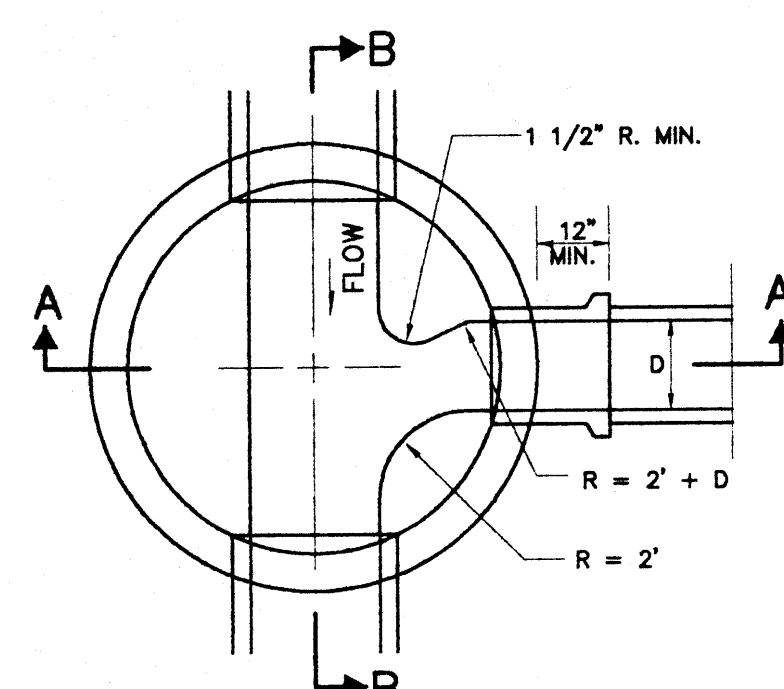
DRAINFIELD DIMENSIONS DETAIL

NTS

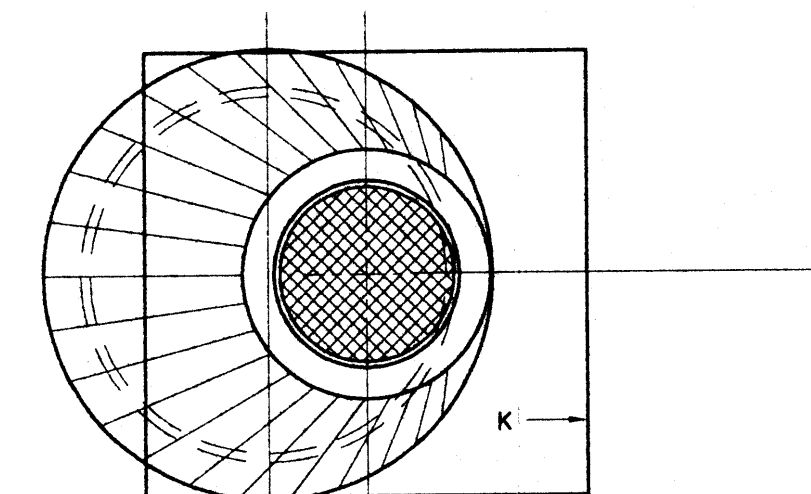


WATER HARVESTING
DRAINLINE TRENCH DETAIL

NTS



PLAN AT C-C



PLAN AT D-D

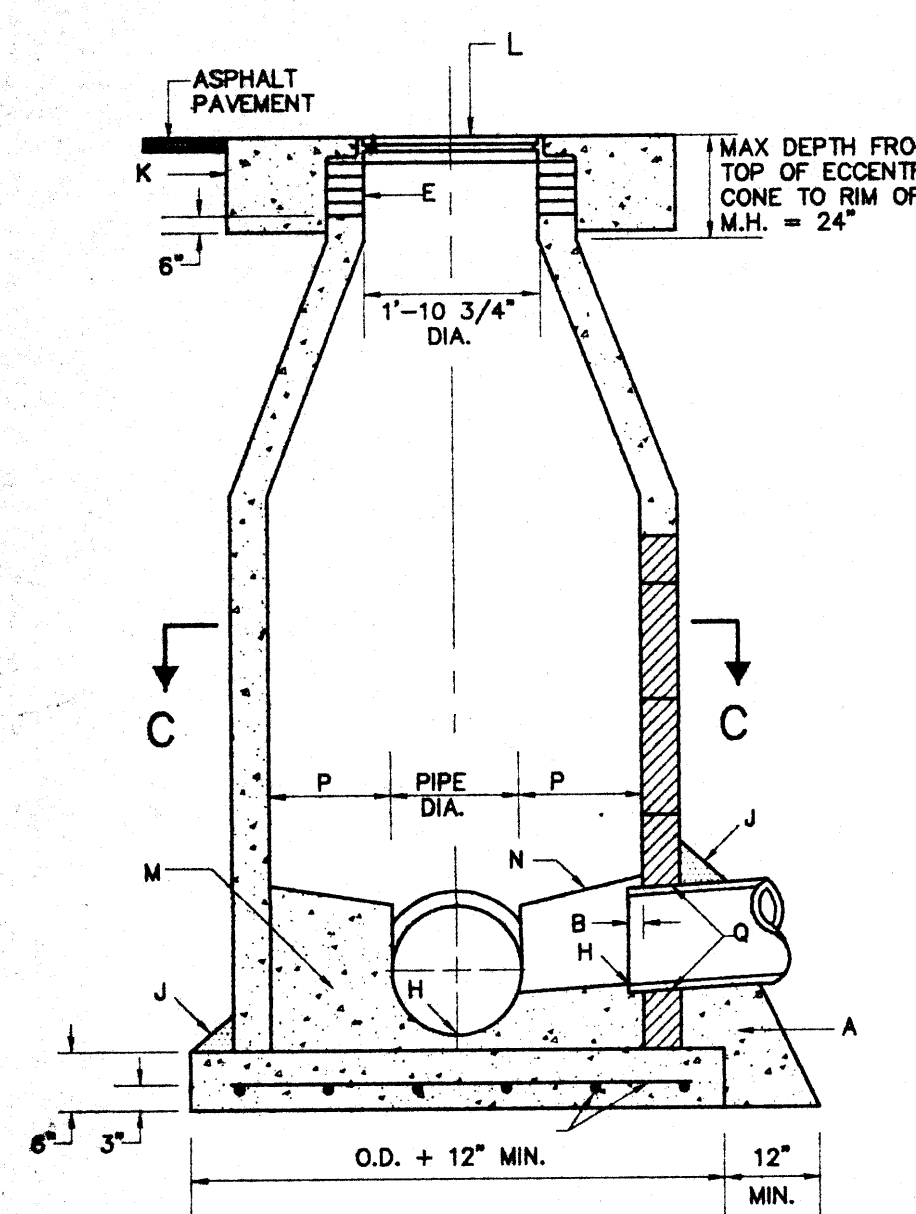
MANHOLE TYPE "E"

GENERAL NOTES:

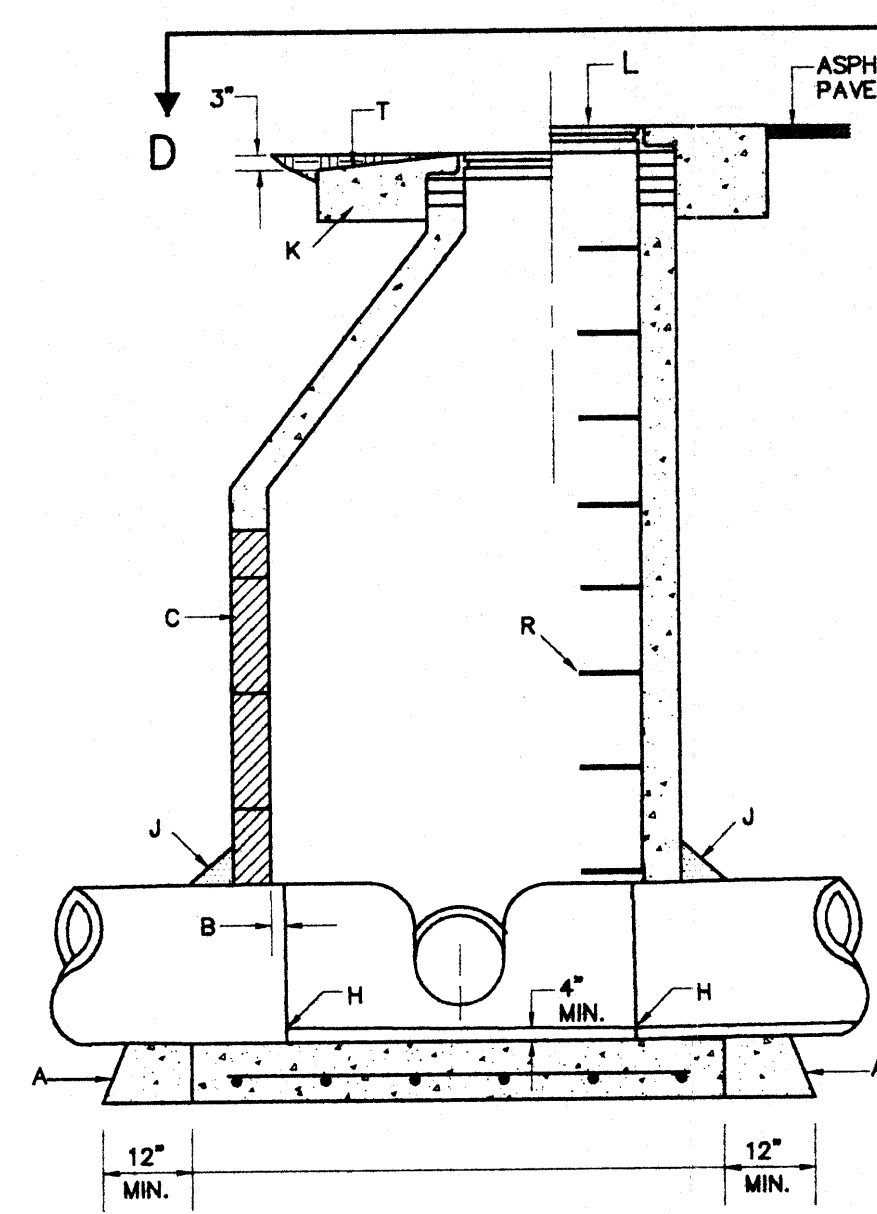
- TYPE "E" MANHOLE NOT TO BE USED FOR DEPTHS LESS THAN 6' MEASURED FROM INVERT TO RIM.
- MANHOLES GREATER THAN 18' IN DEPTH SHALL BE OF PRECAST CONCRETE SECTIONS ONLY.
- DESIGN APPLIES TO 4' AND 6' I.D. MANHOLES.
- USE NON-SHRINK GROUT FOR JOINTS, FILLETS AND PIPE PENETRATIONS.
- COMPACT ALL BACKFILL AROUND MANHOLE TO 95%.
- POSITION MANHOLE OPENING OVER THE UPSTREAM SIDE OF MAIN LINE.

CONSTRUCTION NOTES:

- CONCRETE PIPE SUPPORTS SHALL EXTEND OUTSIDE OF MANHOLE TO BELL OF FIRST JOINT AND SHALL CRADLE PIPE TO SPRING LINE NOT APPLICABLE FLEXIBLE PIPE.
- PIPE PENETRATION INTO MANHOLE SHALL BE FLUSH TO 2" MAXIMUM, MEASURED AT SPRINGLINE OF PIPE.
- MANHOLE MAY BE CONSTRUCTED OF CONCRETE BLOCK, OR MS BRICK, POURED CONCRETE OR PRECAST REINFORCED CONCRETE. IF BLOCK OR BRICK PLASTER INSIDE AND OUT WITH 1/2" MORTAR. SEE DWG. 2118 FOR DETAILS.
- PRECAST REINFORCED CONCRETE ECCENTRIC CONE. THE CONTRACTOR SHALL PROVIDE SHOP DWGS. FOR APPROVAL.
- USE MAXIMUM 4 COURSES GRADE MS BRICK ON UNPAVED STREET FOR FUTURE ADJUSTMENT OF FRAME TO PAVEMENT GRADE. PLASTER INSIDE WITH 1/2" MORTAR.
- BASE TO BE POURED IN PLACE USING NO. 4 BARS AT 6" O.C. EACH WAY FOR MANHOLES DEPTHS OF 16' OR GREATER. USE NO. 4 BARS AT 12" O.C. EACH WAY FOR MANHOLES LESS THAN 16' DEEP.
- INVERT ELEVATION OF STUB OR LATERAL AS SHOWN ON PLANS.
- 6" GROUT FILLET ON UPPER HALF OF PIPE AND AROUND BASE.
- USE A 5' X 5' CONCRETE PAD IN ALL AREAS.
- MANHOLE FRAME AND COVER, SEE DWG. 2110.
- CONCRETE, SEE SECTION 101.
- SLOPE 1" PER FOOT FROM PIPE CROWN.
- SHELF TO BE 9" WIDE MINIMUM.
- APPROVED WATERSTOP TO BE WITH TYPE OF PIPE.
- STEPS TO BE INSTALLED AS PER SPEC. SECTION 920.
- EMD (IN UNPAVED AREAS).
- IN UNPAVED AREAS SET FRAME TO GRADE AND SLOPE TOP OF PAD.



CROSS SECTION AT A-A



CROSS SECTION AT B-B

TYPE "E" MANHOLE DETAIL

NTS

NOTE TO THE CONTRACTOR

THESE DRAWINGS REFLECT INFORMATION ON UTILITIES GATHERED BY SITE INSPECTION, DISCUSSION WITH LOCAL UTILITIES, ENGINEERING OFFICIALS, AND PREVIOUS CONSTRUCTION DRAWINGS PROVIDED TO OR OBTAINED BY THE ENGINEER. IT IS POSSIBLE THAT THE EXACT LOCATION OF LINES IN THE IMMEDIATE VICINITY OF THE PROJECT MAY BE SLIGHTLY DIFFERENT FROM THE LOCATION SHOWN ON THIS DRAWING. IF ADDITIONAL LINES ARE ENCOUNTERED, THEY SHALL BE EXPOSED AND IDENTIFIED BY THIS CONTRACTOR. WHERE ADDITIONAL LINES AND/OR DIFFERING LOCATIONS ARE ENCOUNTERED, THIS CONTRACTOR SHALL REQUEST THAT THE ENGINEER MAKE A RULING AS TO ANY NECESSARY CHANGE OF MATERIALS, RE-ROUTING, ABANDONING OR RELOCATING OF SUCH LINES. GAS COMPANY, PNM, US WEST AND/OR CABLE TV SHALL BE THE SOLE AUTHORITY IN RULING ON THE DISPOSITION OF THEIR EXISTING LINES. ALL LINES ENCOUNTERED THAT INTERFERE WITH CONSTRUCTION SHALL BE RELOCATED TO CLEAR CONSTRUCTION (IF ACTIVE) AND SHALL BE REMOVED (IF INACTIVE) BY THIS CONTRACTOR UNDER THIS CONTRACT. ALL BIDDERS ARE CAUTIONED TO INVESTIGATE SITE CONDITIONS BEFORE SUBMITTING THEIR BIDS. ALL EXISTING PIPING SHALL HAVE A MINIMUM EARTH COVERAGE AND DEPTHS SHALL BE ADJUSTED AS REQUIRED TO PROVIDE MINIMUM COVERAGE DUE TO NEW GRADES OR CONSTRUCTION. CONTRACTOR SHALL PAY FOR ANY AND ALL COSTS OF PERMITS, LINE EXTENSIONS, FIRELINES, METER INSTALLATION, ETC., AS REQUIRED BY LOCAL GOVERNING UTILITIES ENGINEERING OFFICIALS.

GRADING NOTES

- ALL GRADING AND CONSTRUCTION UNDER THIS PLAN TO BE CONSTRUCTED IN ACCORDANCE WITH THE "NEW MEXICO STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION", LATEST EDITION.
- CONSTRUCTION ACTIVITY SHALL BE LIMITED TO THE PROPERTY AND/OR PROJECT LIMITS. ANY DAMAGE TO ADJACENT PROPERTIES RESULTING FROM THE CONSTRUCTION PROCESS IS THE RESPONSIBILITY OF THE CONTRACTOR. ANY COSTS INCURRED FOR REPAIRS SHALL BE THE COST OF THE CONTRACTOR.
- THE CONTRACTOR SHALL REFER TO GEOTECHNICAL INVESTIGATION PINNACLE APARTMENT COMPLEX AT HIGH DESERT BY VINEYARD & ASSOCIATES. FOR INFORMATION RELATED TO GRADING, EXISTING SITE CONDITIONS, SUBSURFACE SOILS AND FOUNDATION CONSTRUCTION CONSIDERATIONS. ALL SCARIFYING, EXCAVATION, COMPACTION AND REPLATTED SOILS WORK SHALL BE DONE UNDER SUPERVISION OF THE SOILS ENGINEER AND IN ACCORDANCE WITH THE ABOVE REFERENCED SITE SOILS REPORT.
- EXCEPT AS PROVIDED HEREIN, GRADING SHALL BE PERFORMED TO THE ELEVATIONS AND IN ACCORDANCE WITH THE TYPICAL SECTIONS SHOWN ON THIS PLAN.
- THIS PLAN IS FOR THE EXCAVATION, PLACEMENT AND COMPACTION OF NATURAL EARTH MATERIALS AND THE CONSTRUCTION OF REQUIRED RETAINING WALLS ONLY.
- CONTRACTOR SHALL ABIDE BY ALL LOCAL, STATE, AND FEDERAL REGULATIONS WHICH APPLY TO THE CONSTRUCTION OF THESE IMPROVEMENTS AND GRADING OPERATIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL CONSTRUCTION PERMITS AND INSPECTION APPROVALS NECESSARY FOR THE CONSTRUCTION OF THESE FACILITIES AND ALL GRADING OPERATIONS.

- THE COST FOR REQUIRED CONSTRUCTION DUST AND EROSION CONTROL MEASURES SHALL BE INCIDENTAL TO THE PROJECT COST.
- UNDERGROUND STORM DRAIN LINES AND/OR OTHER STORM DRAINAGE FACILITIES SHALL BE REVIEWED AND APPROVED IN PLACE IN THE TRENCH BY THE CITY OF ALBUQUERQUE HYDROLOGY DIVISION REPRESENTATIVE PRIOR TO BACKFILL OPERATION.
- ALL RIM ELEVATIONS FOR SANITARY SEWER AND STORM DRAIN MANHOLES ARE APPROXIMATE ONLY. RIMS SHALL BE ADJUSTED FLUSH TO GRADE AT FINAL PAVING.
- BOULDERS, GREATER THAN 3' IN DIAMETER, EXCAVATED DURING GRADING ACTIVITIES SHALL BE STOCKPILED AND DISPOSED OF AT THE DISCRETION OF THE OWNER.
- UNLESS OTHERWISE SHOWN, DRAINAGE SWALES SHALL HAVE A MINIMUM 1% SLOPE IN THE DIRECTION OF THE FLOW.
- ALL SCARIFYING, EXCAVATION, COMPACTION, AND REPLATTED SOILS WORK SHALL BE DONE UNDER SUPERVISION OF THE SOILS ENGINEER AND IN ACCORDANCE WITH THE SITE SOILS REPORT AS PROVIDED BY THE OWNER.
- MAXIMUM SLOPES OUTSIDE THE BUILDING PAD ENVELOPES SHALL BE 3:1 (HORIZONTAL TO VERTICAL).
- THE CONTRACTOR SHALL NOT DISTURB THE AREAS IN WHICH NO GRADING IS INDICATED.
- ALL STORM SEWER LINES SHALL BE CORRUGATED HDPE PIPE.
- ALL STORM INLETS SHALL CONFORM TO CITY OF ALBUQUERQUE STANDARDS.

TRAMMELL CROW RESIDENTIAL
HIGH DESERT, TRACT 7

DRAINAGE DETAILS

DESIGN D.B.T.	DRAWN L.S.K.	DATE MAY 1994
		FILE NO. 94-514
6611 GULTON CT. ALBUQUERQUE, NEW MEXICO 87109 (505) 345-5345		SHEET NO. C-3