

F-17-Z

Zone	TABLE A-9. PEAK DISCHARGE (cfs/acre)			
	A	B	C	D
1	1.29 [0.00, 0.24]	2.03 [0.03, 0.76]	2.87 [0.47, 1.49]	4.37 [1.89, 2.89]
2	1.56 [0.00, 0.39]	2.28 [0.06, 0.95]	3.14 [0.60, 1.71]	4.70 [2.21, 3.65]
3	1.87 [0.00, 0.58]	2.60 [0.21, 1.19]	3.45 [0.78, 2.00]	5.02 [2.04, 3.39]
4	2.20 [0.05, 0.87]	2.92 [0.36, 1.45]	3.73 [1.00, 2.26]	5.25 [2.17, 3.57]

Zone	TABLE A-10. PEAK INTENSITY (IN/HR. AT $t_c = 0.2$ HOUR)	
	Intensity	100-YR. (2-YR. 10-YR.)
1	4.70 [1.84, 3.14]	
2	5.05 [2.04, 3.41]	
3	5.38 [2.21, 3.65]	
4	5.61 [2.34, 3.83]	

DPM SECTION 22.2 - HYDROLOGY  
January, 1993 Page A-4

Treatment	Land Condition
A	Soil uncompacted by human activity with 0 to 10 percent slopes. Native grasses, weeds and shrubs in typical densities with minimal disturbance to grading, groundcover and infiltration capacity. Croplands. Unlined arroyos.
B	Irrigated lawns, parks and golf courses with 0 to 10 percent slopes. Native grasses, weeds and shrubs, and soil uncompacted by human activity with slopes greater than 10 percent and less than 20 percent.
C	Soil compacted by human activity. Minimal vegetation. Unpaved parking, roads, trails. Most vacant lots. Gravel or rock on plastic (desert landscaping). Irrigated lawns and parks with slopes greater than 10 percent. Native grasses, weeds and shrubs, and soil uncompacted by human activity with slopes at 20 percent or greater. Native grass, weed and shrub areas with clay or clay loam soils and other soils of very low permeability as classified by SCS Hydrologic Soil Group D.
D	Impervious areas, pavement and roofs.

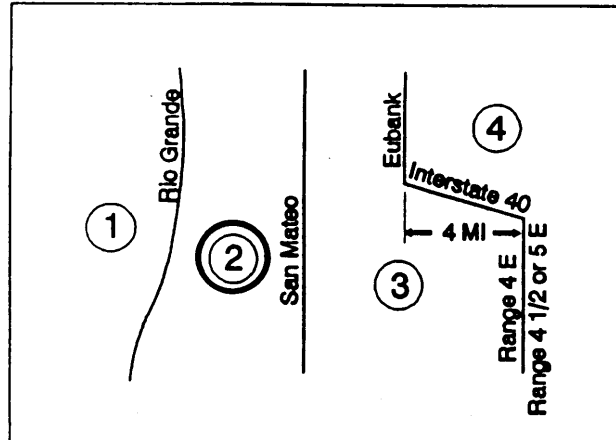
Most watersheds contain a mix of land treatments. To determine proportional treatments, measure respective subareas. In lieu of specific measurement for treatment D, the areal percentages in TABLE A-5 may be employed.

#### A.1 PRECIPITATION ZONES

Bernalillo County's four precipitation zones are indicated in TABLE A-1 and on FIGURE A-1.

Zone	Location
1	West of the Rio Grande
2	Between the Rio Grande and San Mateo
3	Between San Mateo and Eubank, North of Interstate 40; and between San Mateo and the East boundary of Range 4 East, South of Interstate 40
4	East of Eubank, North of Interstate 40; and East of the East boundary of Range 4 East, South of Interstate 40

FIGURE A-1



Where a watershed extends across a zone boundary, use the zone which contains the largest portion of the watershed.

#### LEGEND:

TOP OF CURB ELEVATION = 70'-45.57'  
CURB FLOWLINE ELEVATION = 68'-45.35'  
EXISTING SPOT ELEVATION = 68'-45.35'  
EXISTING CONTOUR ELEVATION = 68'-45.35'  
PROPOSED SPOT ELEVATION = 68'-45.50'  
PROPOSED CONTOUR ELEVATION = 68'-45.50'  
PROPOSED OR EXISTING CONCRETE SURFACE = [Symbol]  
EXISTING FENCE LINE = [Symbol]

#### NOTE:

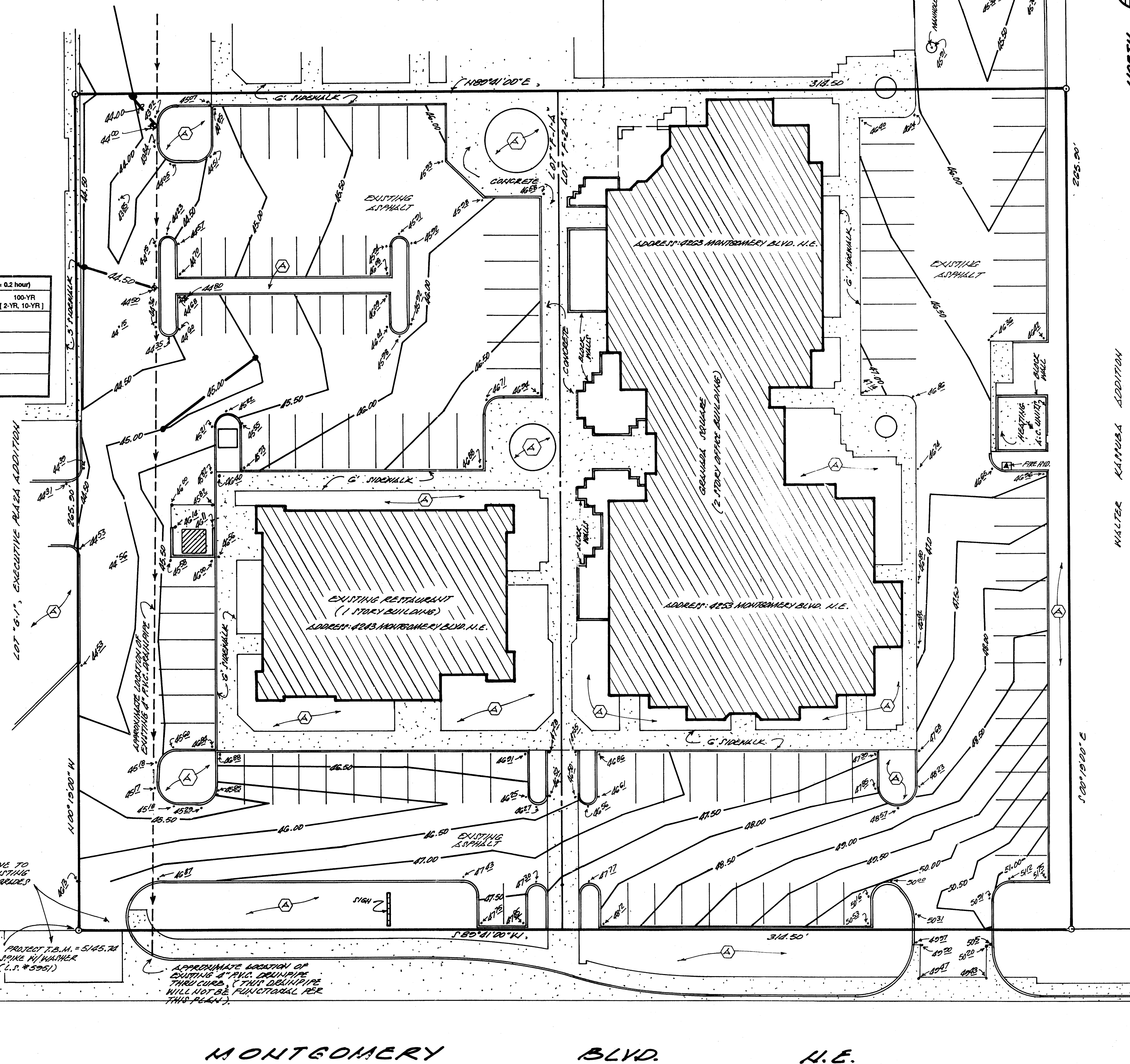
AT OWNER(S) OF THE SUBJECT PROPERTY AND PAVING CONTRACTOR'S DISCRETION, PORTIONS OF THE EXISTING ASPHALT PAVING SHOWN ON THE PLAN HEREON ARE TO BE REMOVED, (RE-GRADED IF NEEDED TO THE PROPOSED REVISED GRADES), AND RE-PAVED.

NOTE: REFER TO SHEET 2 OF 4 FOR THIS PORTION OF DRAINAGE PLAN.

EXECUTIVE PLAZA ADDITION

LOT F-2-A

LOT F-3-A



MONTGOMERY BLVD. N.E.

BLVD. N.E.

N.E.

SHEET 1 OF 4

#### LEGAL DESCRIPTION OF SUBJECT DEVELOPMENT:

LOTS "F-1-A", "F-2-A", "F-3-A", AND "F-4-A", OF THE EXECUTIVE PLAZA ADDITION, TO THE CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO, (PLAT FILED MARCH 21, 1988, BK. C36, FOLIO 29).

#### BENCH MARK REFERENCE:

A.C.S. STATION "M-5A", (1978 BRASS CAP), M.S.L.D. ELEVATION = 5154.46.

#### DRAINAGE COMMENTS AND CALCULATIONS:

AS SHOWN ON THE VICINITY MAP HEREON, THE SUBJECT SITE IS LOCATED ON THE NORTH SIDE OF MONTGOMERY BLVD., N.E. BETWEEN SAN MATEO BLVD., N.E. AND CARLISLE BLVD., N.E., IN THE CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO, (CITY ZONE ATLAS MAP "F-17-Z").

THE SUBJECT SITE, 1.) IS AN EXISTING FULLY DEVELOPED PROPERTY CONSISTING OF A RESTAURANT SITE AND PROFESSIONAL OFFICES AND ASSOCIATED IMPROVEMENTS THEREON, 2.) DOES NOT LIE WITHIN A DESIGNATED FLOODPLAIN, (RE: F.E.M.A. PANEL 138 OF 825, DATED SEPTEMBER 20, 1996), 3.) DOES NOT ACCEPT OFFSITE FLOWS FROM ADJACENT PROPERTIES, 4.) DOES NOT CONTRIBUTE TO THE OFFSITE FLOWS OF ADJACENT PROPERTIES, 5.) LIES ADJACENT TO A DESIGNATED AO-1.0' DEPTH ZONE THAT IS WITHIN THE FOREMENTIONED MONTGOMERY BLVD. N.E. RIGHT-OF-WAY, 6.) DOES NOT LIE ADJACENT TO AN ARTIFICIAL OR NATURAL WATER COURSE, 7.) PRESENTLY HAS AN EXISTING 100% RETENTION POND THAT ACCEPTS ALL DEVELOPED FLOWS GENERATED BY SAID DEVELOPMENT; SAID PROPERTY WAS ORIGINALLY DESIGNED AND CONSTRUCTED WITH SUMP PUMPS WITHIN A CONCRETE ENCLOSURE WITH A 4" P.V.C. DRAIN PIPE THAT DISCHARGED DEVELOPED FLOWS INTO MONTGOMERY BLVD. N.E.; THE PROPOSED PLAN IS TO FILL AND PAVE THE EXISTING POND AREA AND DISCHARGE THE DEVELOPED FLOWS ONTO THE ADJACENT PROPERTY THAT LIES WEST OF THE SUBJECT SITE. DRAINAGE EASEMENTS ALLOWING THESE RUNOFFS WILL BE EXECUTED WITH THIS PLAN.

#### CALCULATIONS:

PER SECTION 22.2, HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL, VOLUME 2, DESIGN CRITERIA FOR THE CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO, DATED JANUARY, 1993.

SITE AREA: 3.35 ACRES, (4 LOTS)

PRECIPITATION ZONE: TWO (2), TABLE A-1

PEAK INTENSITY: IN./HR. AT  $t_c$  = TWELVE (12) MINUTES, 100-YR. = 5.05

LAND TREATMENT METHOD FOR THE CALCULATION OF " $Q_p$ ", TABLES A-8 & A-9

"LAND TREATMENT FACTORS", TABLE A-4

#### EXISTING CONDITIONS:

TREATMENT	AREA/ACRES	FACTOR	CFS
C	0.51	X 3.14	= 1.60
D	2.84	X 4.70	= 13.35

" $Q_p$ " = 14.95 CFS

#### PROPOSED CONDITIONS:

TREATMENT	AREA/ACRES	FACTOR	CFS
C	0.38	X 3.14	= 1.19
D	2.97	X 4.70	= 13.96

" $Q_p$ " = 15.15 CFS \*\*\* INCREASE = 0.20 CFS

#### CALCULATION OF APPROXIMATE TIME TO DISCHARGE AND EMPTY 100-YR./6 HR. STORM:

15.15 CFS X 7.48 (GAL./CU. FT.) X 60 = 6,799.3 GALLONS

6,799.3 GALLONS/240 GALLONS PER MIN. (2 PUMPS) = 28.3 MINUTES

NOTE: EACH PUMP HAS CAPACITIES TO 120 GPM (REFER TO SHEET 3 OF 3 HERETO).

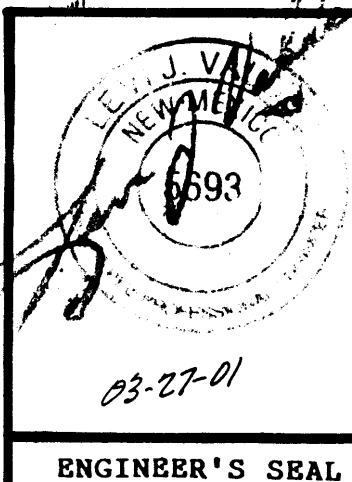
#### EROSION CONTROL MEASURES:

THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR MANAGEMENT OF STORM RUNOFF DURING CONSTRUCTION; HE SHALL INSURE THAT THE FOLLOWING MEASURES ARE TAKEN:

- 1.) ADJACENT PROPERTY SHALL BE PROTECTED AT ALL TIMES BY CONSTRUCTION OF BERMS, DIKES, SWALES, PONDS, AND OTHER TEMPORARY GRADING AS REQUIRED TO PREVENT STORM RUNOFF FROM LEAVING THE SUBJECT SITE AND ENTERING ADJACENT PROPERTIES.
- 2.) ADJACENT PUBLIC RIGHT-OF-WAYS SHALL BE PROTECTED AT ALL TIMES FROM STORM WATER RUNOFF FROM THE SUBJECT SITE. NO SEDIMENT BEARING WATER SHALL BE PERMITTED TO ENTER PUBLIC STREET RIGHT-OF-WAYS.
- 3.) THE CONTRACTOR SHALL IMMEDIATELY AND THOROUGHLY REMOVE ANY AND ALL SEDIMENT FROM PUBLIC STREETS THAT HAS BEEN ERODED FROM THE SUBJECT SITE AND DEPOSITED THEREON.

#### CONSTRUCTION NOTES:

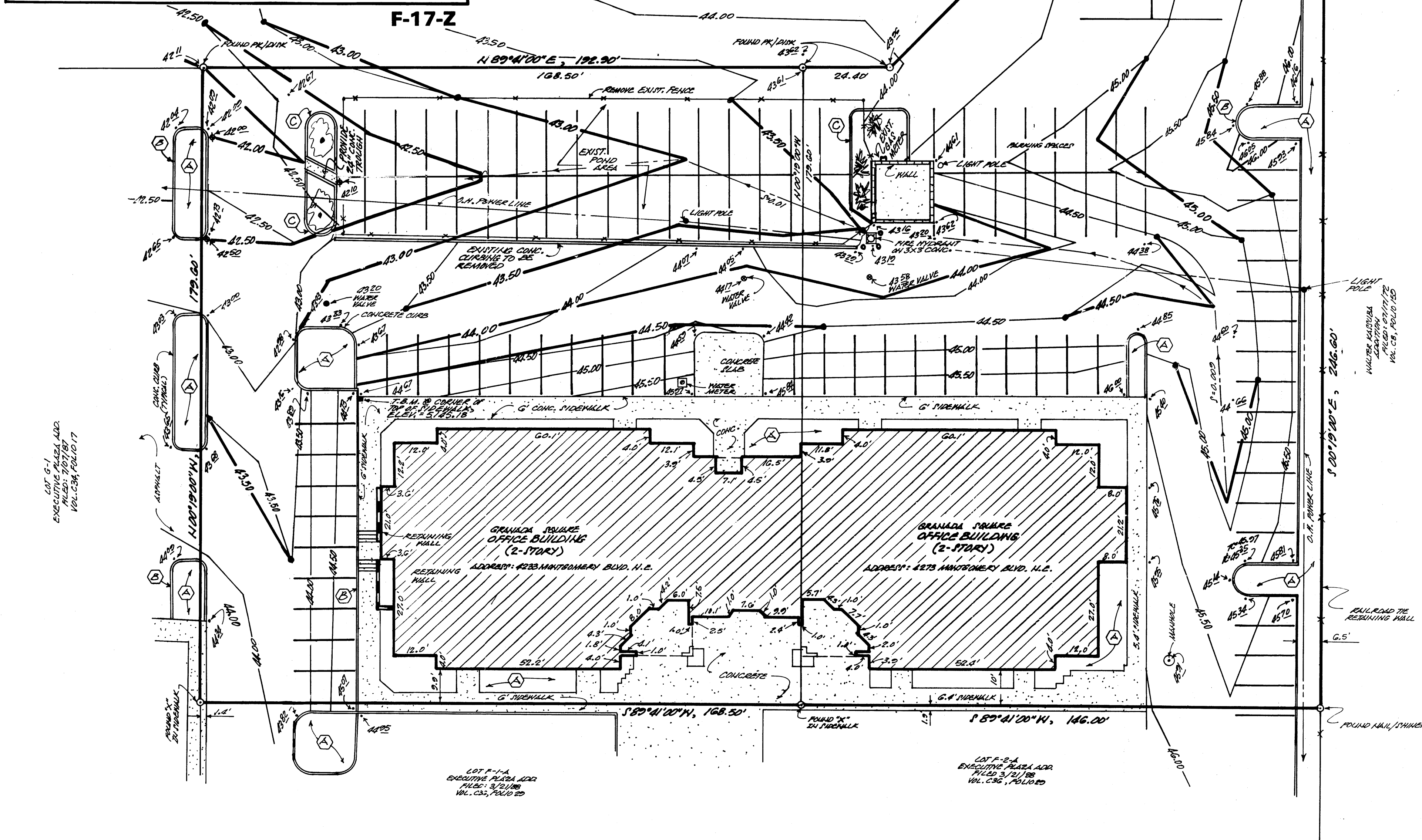
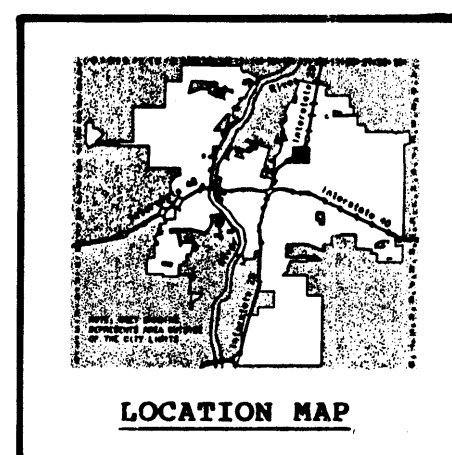
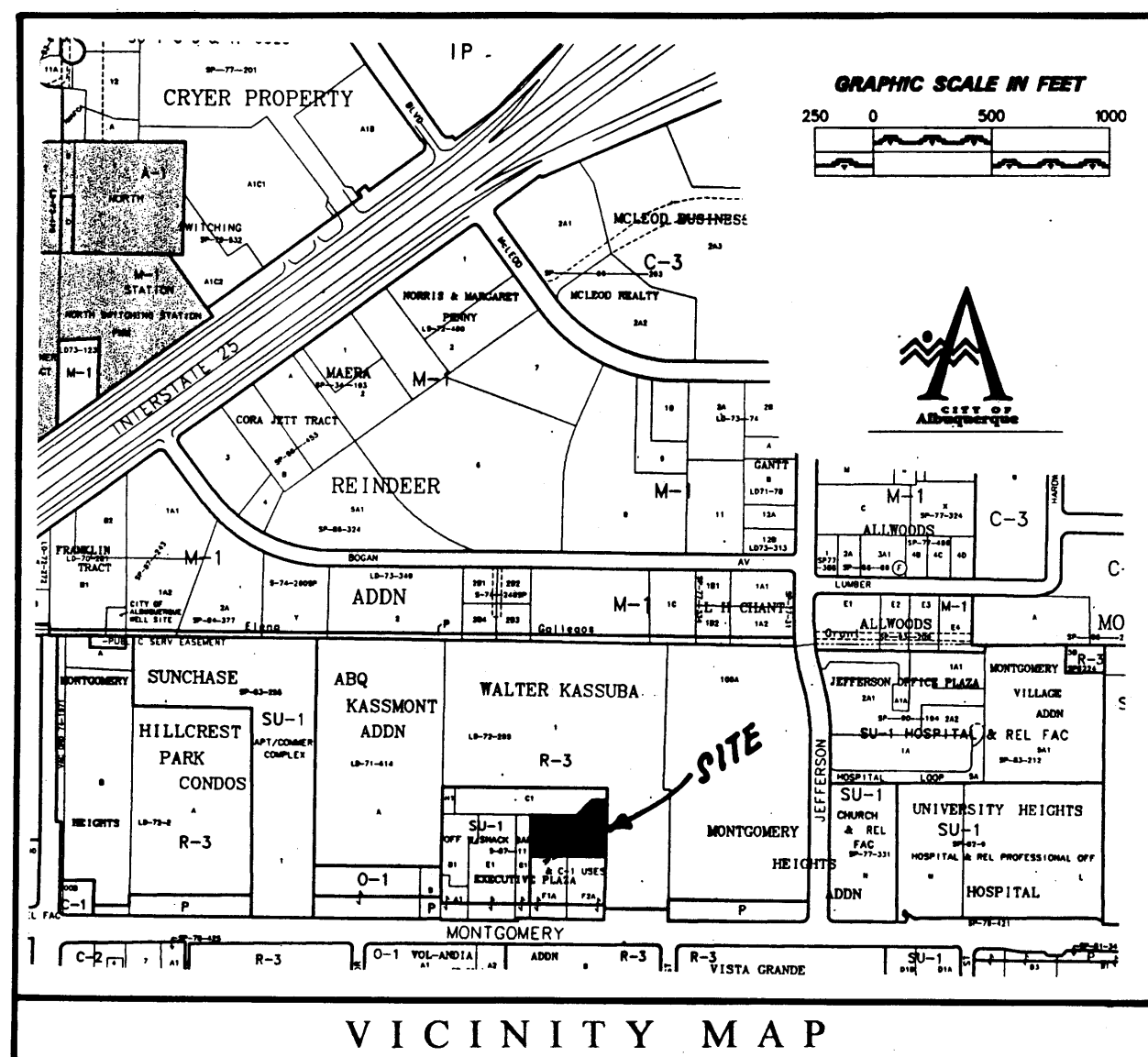
- 1.) TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE AT 260-1990 FOR THE ACTUAL FIELD LOCATION OF THE EXISTING SURFACE OR SUB-SURFACE UTILITIES.
- 2.) PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION(S) OF ALL POTENTIAL OBSTRUCTIONS; SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM OF DELAY.
- 3.) ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
- 4.) ALL CONSTRUCTION WITHIN PUBLIC STREET RIGHT-OF-WAY(S) SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE/BERNALILLO COUNTY STANDARDS AND PROCEDURES.



## DRAINAGE AND PAVING PLAN EXECUTIVE PLAZA ADDITION

GRANADA SQUARE  
OFFICE PARK  
ALBUQUERQUE, NEW MEXICO





- (A) DESIGNATED EXISTING LANDSCAPED AREAS
- (B) DESIGNATED EXISTING CONCRETE CURBING
- (C) PROPOSED NEW CURBING

**LEGEND:**

TOP OF CURB ELEVATION = 70.00

CURB FLOWLINE ELEVATION = 69.35

EXISTING SPOT ELEVATION = 69.35

EXISTING CONTOUR ELEVATION = 69.50

PROPOSED SPOT ELEVATION = 69.50

PROPOSED CONTOUR ELEVATION = 69.50

PROPOSED OR EXISTING CONCRETE SURFACE = 69.50

EXISTING FENCE LINE = 69.50

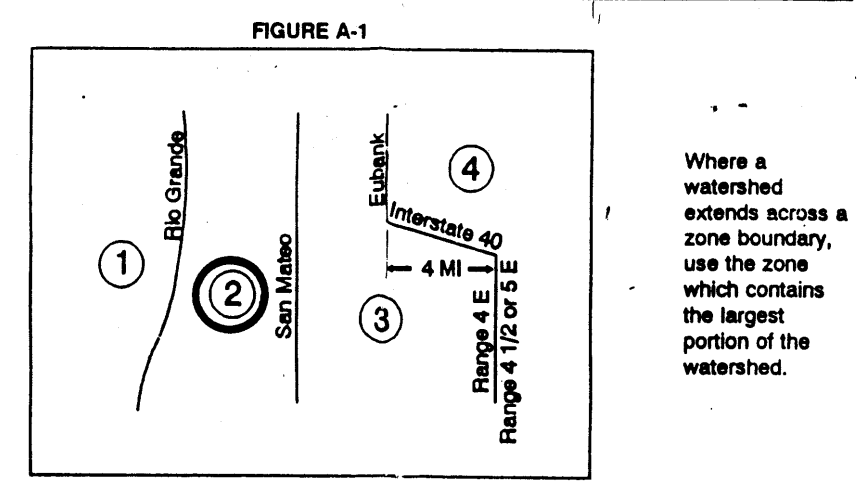
- CONSTRUCTION NOTES:**
- TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE AT 260-1990 FOR THE ACTUAL FIELD LOCATION OF THE EXISTING SURFACE OR SUB-SURFACE UTILITIES.
  - PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION(S) OF ALL POTENTIAL OBSTRUCTIONS; SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM OF DELAY.
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- EROSION CONTROL MEASURES:**
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- ADJACENT PROPERTY SHALL BE PROTECTED AT ALL TIMES BY CONSTRUCTION OF BERM, DIKES, SWALES, PONDS, AND OTHER TEMPORARY GRADING AS REQUIRED TO PREVENT STORM RUNOFF FROM LEAVING THE SUBJECT SITE AND ENTERING ADJACENT PROPERTIES.
  - ADJACENT PUBLIC RIGHT-OF-WAYS SHALL BE PROTECTED AT ALL TIMES FROM STORM WATER RUNOFF FROM THE SUBJECT SITE. NO SEDIMENT BEARING WATER SHALL BE PERMITTED TO ENTER PUBLIC STREET RIGHT-OF-WAYS.
  - THE CONTRACTOR SHALL IMMEDIATELY AND THOROUGHLY REMOVE ANY AND ALL SEDIMENT FROM PUBLIC STREETS THAT HAS BEEN ERODED FROM THE SUBJECT SITE AND DEPOSITED THEREON.

**A1 PRECIPITATION ZONES**

Bernalillo County's four precipitation zones are indicated in TABLE A-1 and on FIGURE A-1.

Zone	Location
1	West of the Rio Grande
2	Between the Rio Grande and San Mateo
3	Between San Mateo and Eubank, North of Interstate 40; and between San Mateo and the East boundary of Range 4 East, South of Interstate 40
4	East of Eubank, North of Interstate 40; and East of the East boundary of Range 4 East, South of Interstate 40



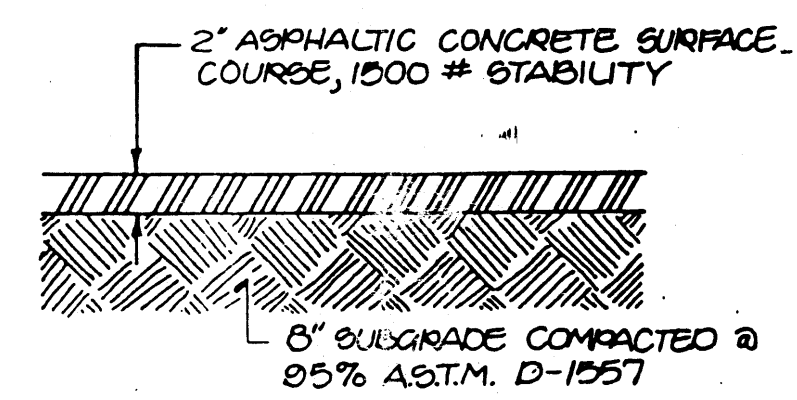
**DPM SECTION 22.2 - HYDROLOGY**  
January, 1993 Page A-4

Treatment	Land Condition
A	Soil uncompacted by human activity with 0 to 10 percent slopes. Native grasses, weeds and shrubs in typical densities with minimal disturbance to grading, groundcover and infiltration capacity. Croplands. Unlined arroyos.
B	Irrigated lawns, parks and golf courses with 0 to 10 percent slopes. Native grasses, weeds and shrubs, and soil uncompacted by human activity with slopes greater than 10 percent and less than 20 percent.
C	Soil compacted by human activity. Minimal vegetation. Unpaved parking, roads, trails. Most vacant lots. Gravel or rock on plastic (desert landscaping). Irrigated lawns and parks with slopes greater than 10 percent. Native grasses, weeds and shrubs, and soil uncompacted by human activity with slopes at 20 percent or greater. Native grass, weed and shrub areas with clay or clay loam soils and other soils of very low permeability as classified by SCS Hydrologic Soil Group D.
D	Impervious areas, pavement and roofs.

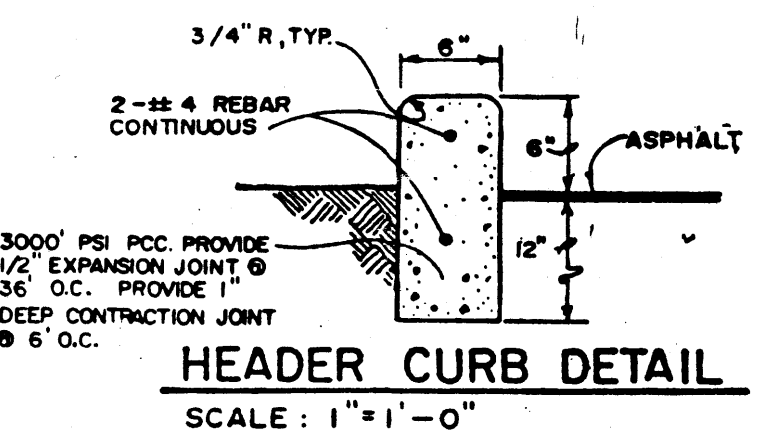
Most watersheds contain a mix of land treatments. To determine proportional treatments, measure respective subareas. In lieu of specific measurement for treatment D, the area percentages in TABLE A-5 may be employed.

Zone	A	B	C	D
1	1.28 [0.00, 0.24]	2.03 [0.03, 0.78]	2.87 [0.47, 1.49]	4.37 [1.89, 2.89]
2	1.58 [0.00, 0.38]	2.28 [0.08, 0.95]	3.14 [0.80, 1.71]	4.70 [1.88, 3.14]
3	1.87 [0.00, 0.58]	2.80 [0.21, 1.19]	3.45 [0.78, 2.00]	5.02 [2.04, 3.39]
4	2.20 [0.05, 0.87]	2.92 [0.38, 1.45]	3.73 [1.00, 2.26]	5.25 [2.17, 3.57]

Zone	Intensity [2-YR, 10-YR]
1	4.70 [1.84, 3.14]
2	5.05 [2.04, 3.41]
3	5.38 [2.21, 3.85]
4	5.81 [2.34, 3.83]

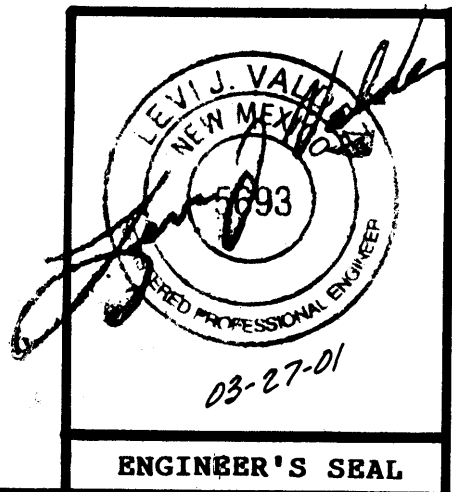


**TYPICAL PAVEMENT SECTION**  
SCALE: 1" = 1'-0"



- GENERAL NOTES:**
- AT OWNER(S) AND PAVING CONTRACTOR'S DISCRETION, PORTIONS OF THE EXISTING ASPHALT PAVING SHOWN ON THE PLAN HEREON ARE TO BE REMOVED, (RE-GRADED IF NEEDED TO THE PROPOSED REVISED GRADES), AND RE-PAVED.
  - THE EXISTING POND AREA FOR THE SUBJECT SITE IS TO BE FILLED, COMPACTED TO 95% A.S.T.M. D-1557, AND PAVED TO THE DESIGNED GRADES SHOWN ON THE PLAN HEREON.

**SHEET 2 OF 4**



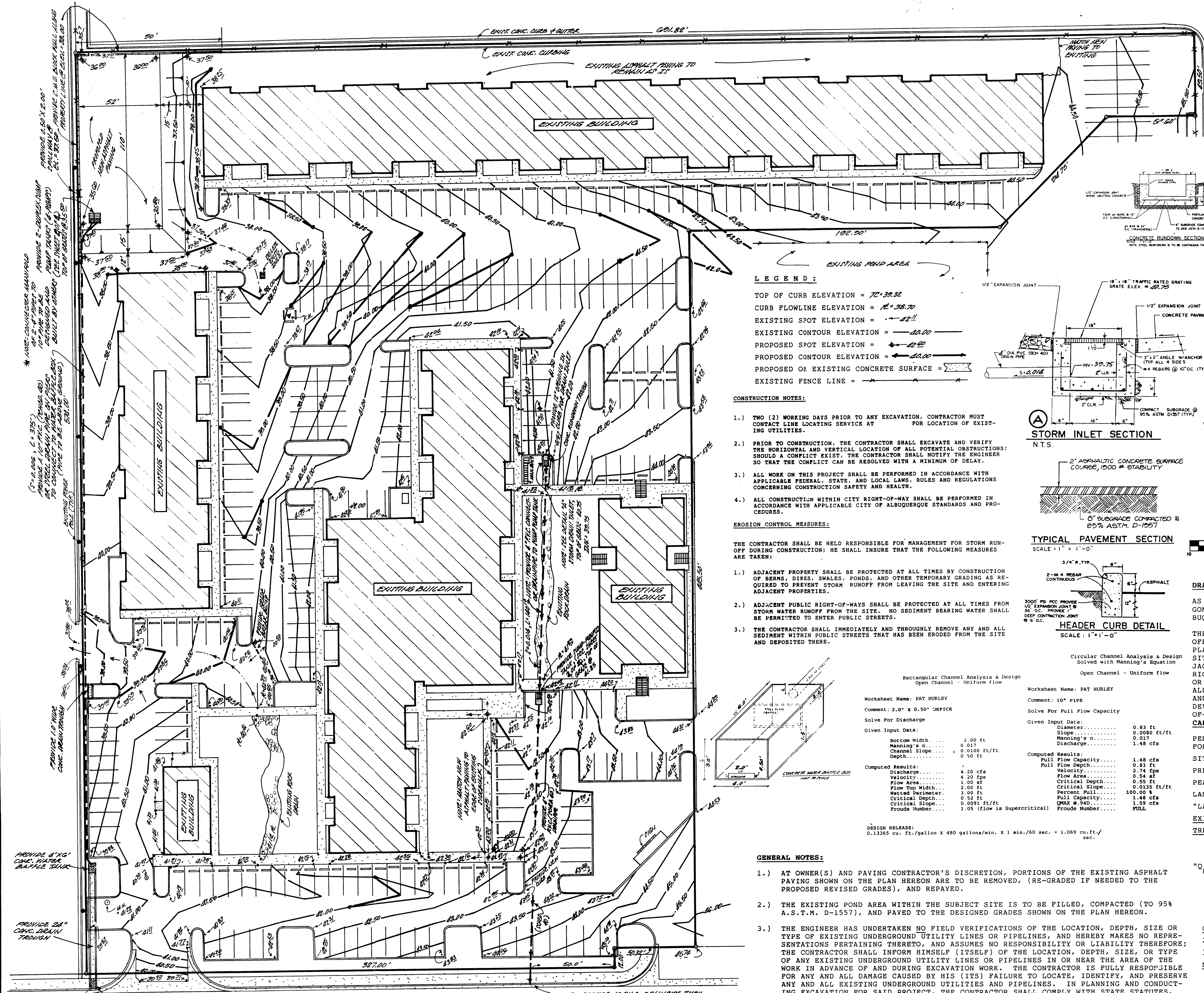
**DRAINAGE AND PAVING PLAN**

**EXECUTIVE PLAZA ADDITION**

**GRANADA SQUARE OFFICE PARK**

**ALBUQUERQUE, NEW MEXICO**





### LEGEND:

- TOP OF CURB ELEVATION = 72'-30.32'
- CURB FLOWLINE ELEVATION = 72'-30.70'
- EXISTING SPOT ELEVATION = 72'-32.2'
- EXISTING CONTOUR ELEVATION = 72'-30.00'
- PROPOSED SPOT ELEVATION = 72'-30.00'
- PROPOSED CONTOUR ELEVATION = 72'-30.00'
- EXISTING OR EXISTING CONCRETE SURFACE =
- EXISTING FENCE LINE =

### CONSTRUCTION NOTES:

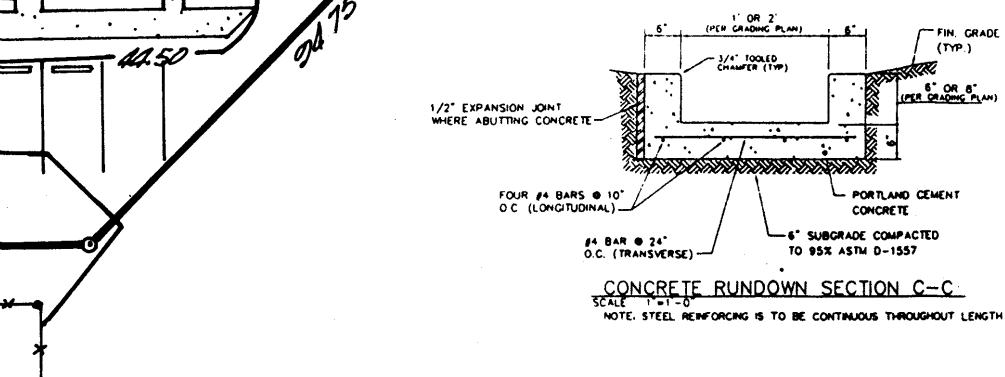
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- 2.) PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL POTENTIAL OBSTRUCTIONS: SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM OF DELAY.
- 3.) ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
- 4.) ALL CONSTRUCTION WITHIN CITY RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE STANDARDS AND PROCEDURES.

### EROSION CONTROL MEASURES:

- 1.) ADJACENT PROPERTY SHALL BE PROTECTED AT ALL TIMES BY CONSTRUCTION OF BARRIERS, Dikes, SHAKES, POUNDS, AND OTHER TEMPORARY GRADING AS REQUIRED TO PREVENT STORM RUNOFF FROM LEAVING THE SITE AND ENTERING ADJACENT PROPERTIES.
- 2.) ADJACENT PUBLIC RIGHT-OF-WAYS SHALL BE PROTECTED AT ALL TIMES FROM STORM WATER RUNOFF FROM THE SITE. NO SEDIMENT BEARING WATER SHALL BE PERMITTED TO ENTER PUBLIC STREETS.
- 3.) THE CONTRACTOR SHALL IMMEDIATELY AND THOROUGHLY REMOVE ANY AND ALL SEDIMENT WITHIN PUBLIC STREETS THAT HAS BEEN ERODED FROM THE SITE AND DEPOSITED THERE.

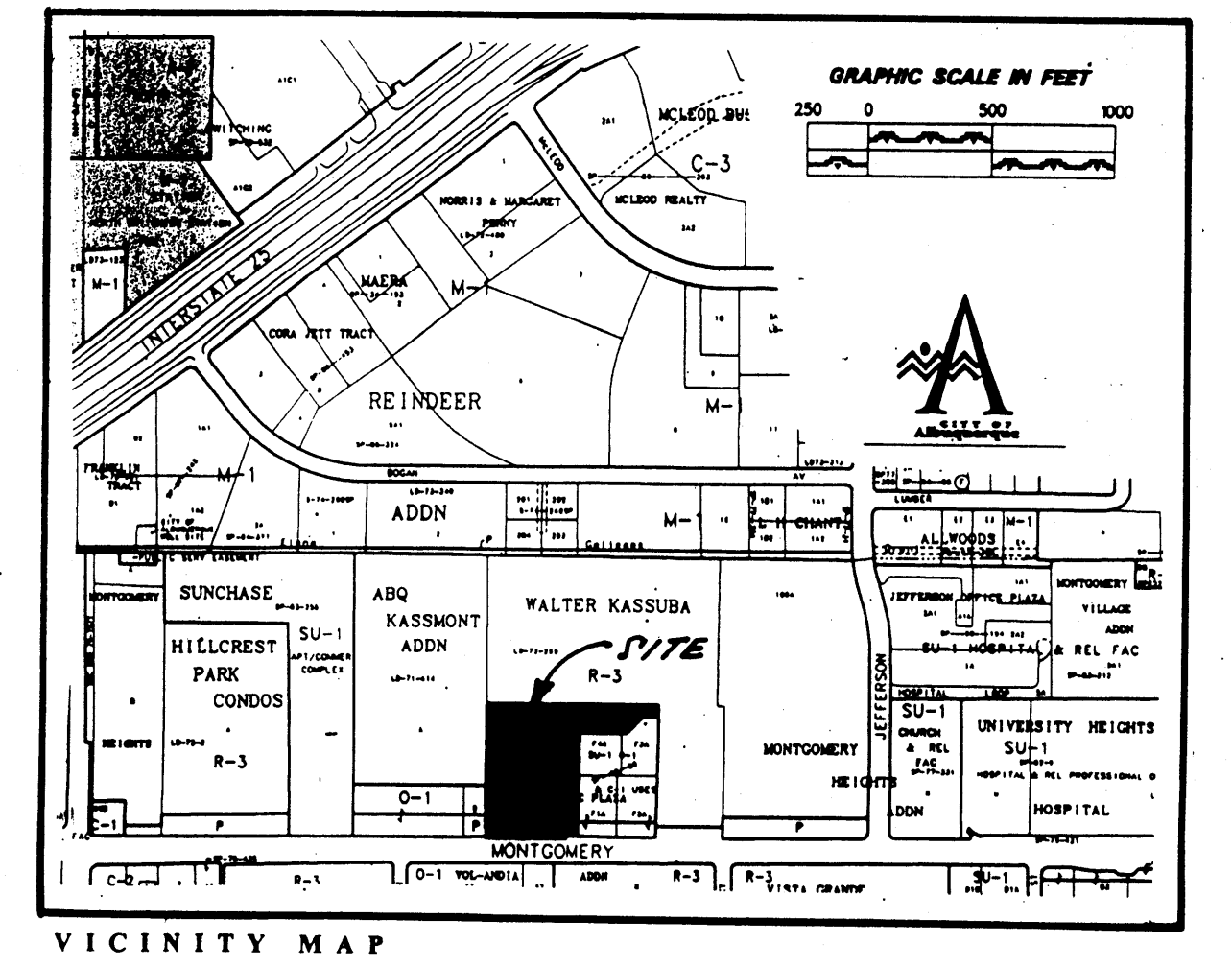
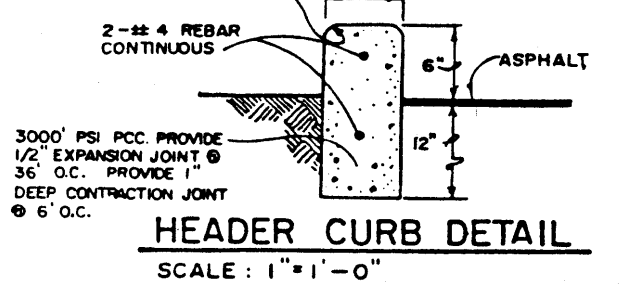
### GENERAL NOTES:

- 1.) AT OWNER(S) AND PAVING CONTRACTOR'S DISCRETION, PORTIONS OF THE EXISTING ASPHALT PAVING SHOWN ON THE PLAN HEREON ARE TO BE REMOVED, (RE-GRADED IF NEEDED TO THE PROPOSED REVISED GRADES), AND REPAVED.
- 2.) THE EXISTING POND AREA WITHIN THE SUBJECT SITE IS TO BE FILLED, COMPACTED (TO 95% A.S.T.M. D-1557), AND PAVED TO THE DESIGNED GRADES SHOWN ON THE PLAN HEREON.
- 3.) THE ENGINEER HAS UNDERTAKEN NO FIELD VERIFICATIONS OF THE LOCATION, DEPTH, SIZE OR TYPE OF EXISTING UNDERGROUND UTILITY LINES OR PIPELINES, AND HEREBY MAKES NO REPRESENTATIONS PERTAINING THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFOR; THE CONTRACTOR SHALL INFORM HIMSELF (ITSELF) OF THE LOCATION, DEPTH, SIZE, OR TYPE OF ANY EXISTING UNDERGROUND UTILITY LINES OR PIPELINES IN OR NEAR THE AREA OF THE WORK IN ADVANCE OF AND DURING EXCAVATION WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY HIS (ITS) FAILURE TO LOCATE, IDENTIFY, AND PRESERVE ANY AND ALL EXISTING UNDERGROUND UTILITIES AND PIPELINES. IN PLANNING AND CONDUCTING EXCAVATION FOR SAID PROJECT, THE CONTRACTOR SHALL COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION(S) OF THESE LINES AND FACILITIES.
- 4.) THE CONTRACTOR SHALL RETAIN THE SERVICES OF A REGISTERED PROFESSIONAL LAND SURVEYOR FOR THE REFERENCE AND RE-ESTABLISHMENT OF EXISTING PROPERTY CORNERS WITHIN THE SUBJECT SITE THAT MAY BE DISTURBED OR DESTROYED IN THE PROCESS OF ASPHALT REMOVAL OR REPAVING.



### TYPICAL PAVEMENT SECTION

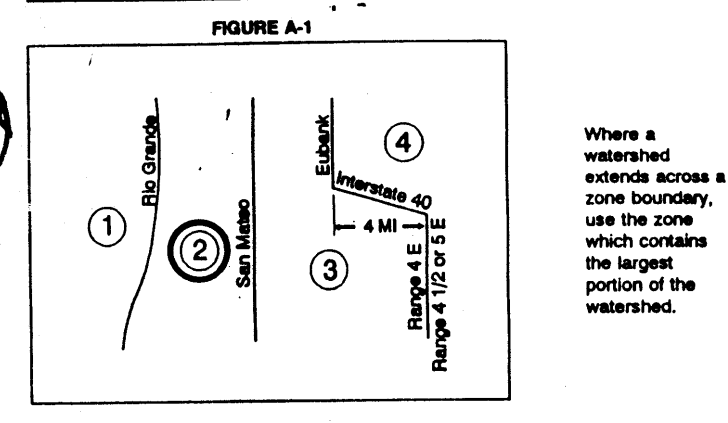
SCALE: 1" = 1'-0"



### A-1 PRECIPITATION ZONES

Bernillo County's four precipitation zones are indicated in TABLE A-1 and on FIGURE A-1.

Zone	Location
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2	Between the Rio Grande and San Mateo
3	Between San Mateo and Eubank, North of Interstate 40; and between San Mateo and the East boundary of Range 4 East, South of Interstate 40
4	East of Eubank, North of Interstate 40; and East of the East boundary of Range 4 East, South of Interstate 40



### TABLE A-10. PEAK INTENSITY (IN./HR. AT T<sub>c</sub> = 12 MIN.)

Zone	Intensity
1	1.70 (1.84, 2.14)
2	2.06 (2.04, 2.41)
3	2.21 (2.21, 2.45)
4	2.51 (2.24, 2.82)

### DRAINAGE COMMENTS AND CALCULATIONS:

AS SHOWN ON THE VICINITY MAP HEREON, THE SUBJECT SITE IS LOCATED ON THE NORTH SIDE OF MONTGOMERY BLVD. N.E., BETWEEN SAN MATEO BLVD. N.E. AND CARLISLE BLVD. N.E., IN THE CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO, (CITY ZONE ATLAS MAP "F-17-2").

THE SUBJECT SITE, 1.) IS AN EXISTING FULLY DEVELOPED PROPERTY CONSISTING OF PROFESSIONAL OFFICES AND ASSOCIATED IMPROVEMENTS THERETO, 2.) DOES NOT LIE WITHIN A DESIGNATED FLOOD-PLAIN (RE: F.E.M.A. PANEL 138 OF 825, DATED SEPTEMBER 20, 1996, 3.) DOES NOT ACCEPT OFF-SITE FLOWS FROM ADJACENT PROPERTIES, 4.) DOES NOT CONTRIBUTE TO THE OFFSITE FLOWS OF ADJACENT PROPERTIES, 5.) LIES ADJACENT TO A DESIGNATED AO-1.0' DEPTH ZONE THAT IS WITHIN THE RIGHT-OF-WAY OF AFOREMENTIONED MONTGOMERY BLVD. N.E., 6.) DOES NOT LIE ADJACENT TO A NATURAL OR ARTIFICIAL WATER COURSE, 7.) PRESENTLY HAS AN EXISTING 100% RETENTION POND THAT ACCEPTS ALL DEVELOPED FLOWS GENERATED BY SAID DEVELOPMENT, 8.) HAS A PROPOSED PLAN TO FILL, COMPACT, AND PAVE THE EXISTING POND AREA, AND PROVIDE SUNP-PUMPS IN AN ENCLOSURE TO DISCHARGE SAID DEVELOPED FLOWS VIA A 10" P.V.C. DRAIN PIPE TOWARD AND INTO THE MONTGOMERY BLVD. N.E. RIGHT-OF-WAY.

### CALCULATIONS:

PER SECTION 22.2, HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL, VOLUME 2., DESIGN CRITERIA FOR THE CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO, DATED JANUARY 1993.

SITE AREA: 5.66 ACRES

PRECIPITATION ZONE: TWO (2), TABLE A-1.

PEAK INTENSITY: IN./HR. AT T<sub>c</sub> = TWELVE (12) MINUTES, 100-YR. = 5.05

LAND TREATMENT METHOD FOR THE CALCULATION OF "Q<sub>p</sub>", TABLES A-8 & A-9

"LAND TREATMENT FACTORS", TABLE A-4

### EXISTING CONDITIONS:

TREATMENT	AREA/ACRES	FACTOR	CFS
C	0.95	X 3.14	= 2.98
D	4.71	X 4.70	= 22.14

"Q<sub>p</sub>" = 25.12 CFS

### PROPOSED DEVELOPED CONDITIONS:

TREATMENT	AREA/ACRES	FACTOR	CFS
C	0.81	X 3.14	= 2.54
D	4.85	X 4.70	= 22.80
*** INCREASE = 0.22 CFS			

### CALCULATION OF APPROXIMATE TIME TO DISCHARGE AND EMPTY 100-YR./6 HR. STORM:

25.34 CFS X 7.48 (GAL./CU. FT.) X 60 = 11,373.0 GALLONS  
11,373.0 GALLONS/240 GALLONS PER MIN. (2 PUMPS) = 47.4 MINUTES

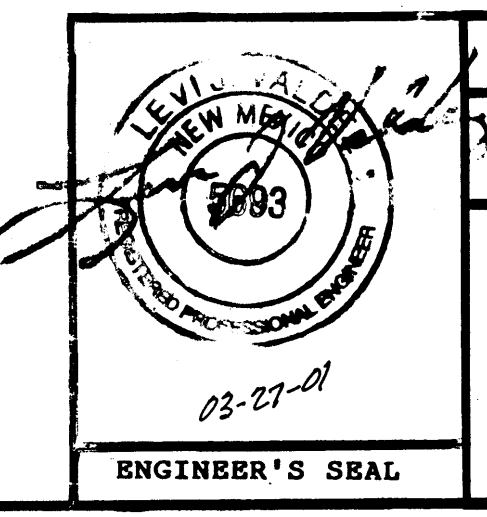
NOTE: EACH PUMP HAS CAPACITIES TO 120 GPM (REFER TO SHEET 2 OF 2 HERETO).

### LEGAL DESCRIPTION:

LOTS "A-1", "B-1", "C-1", "E-1", "G-1", & "H-1", EXECUTIVE PLAZA ADDITION, ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO.

### BENCH MARK REFERENCE:

A.C.S. STATION "M-5A", (1978 BRASS CAP), M.S.L.D. ELEVATION = 5154.46; PROJECT T.B.M. AS SHOWN ON THE PLAN HEREON.



## DRAINAGE AND PAVING PLAN

### EXECUTIVE PLAZA ADDITION

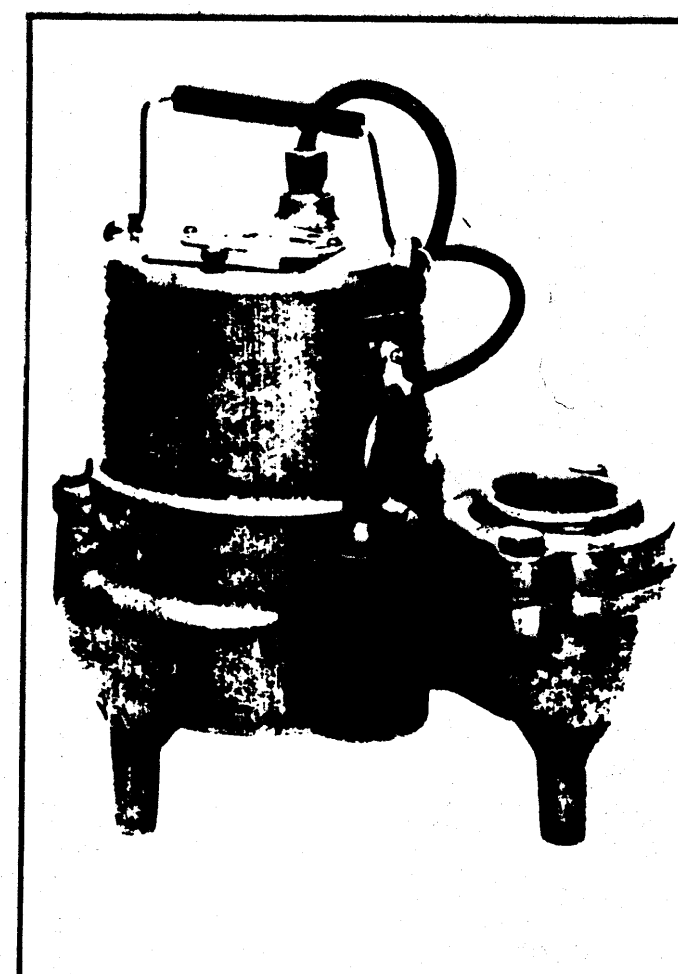
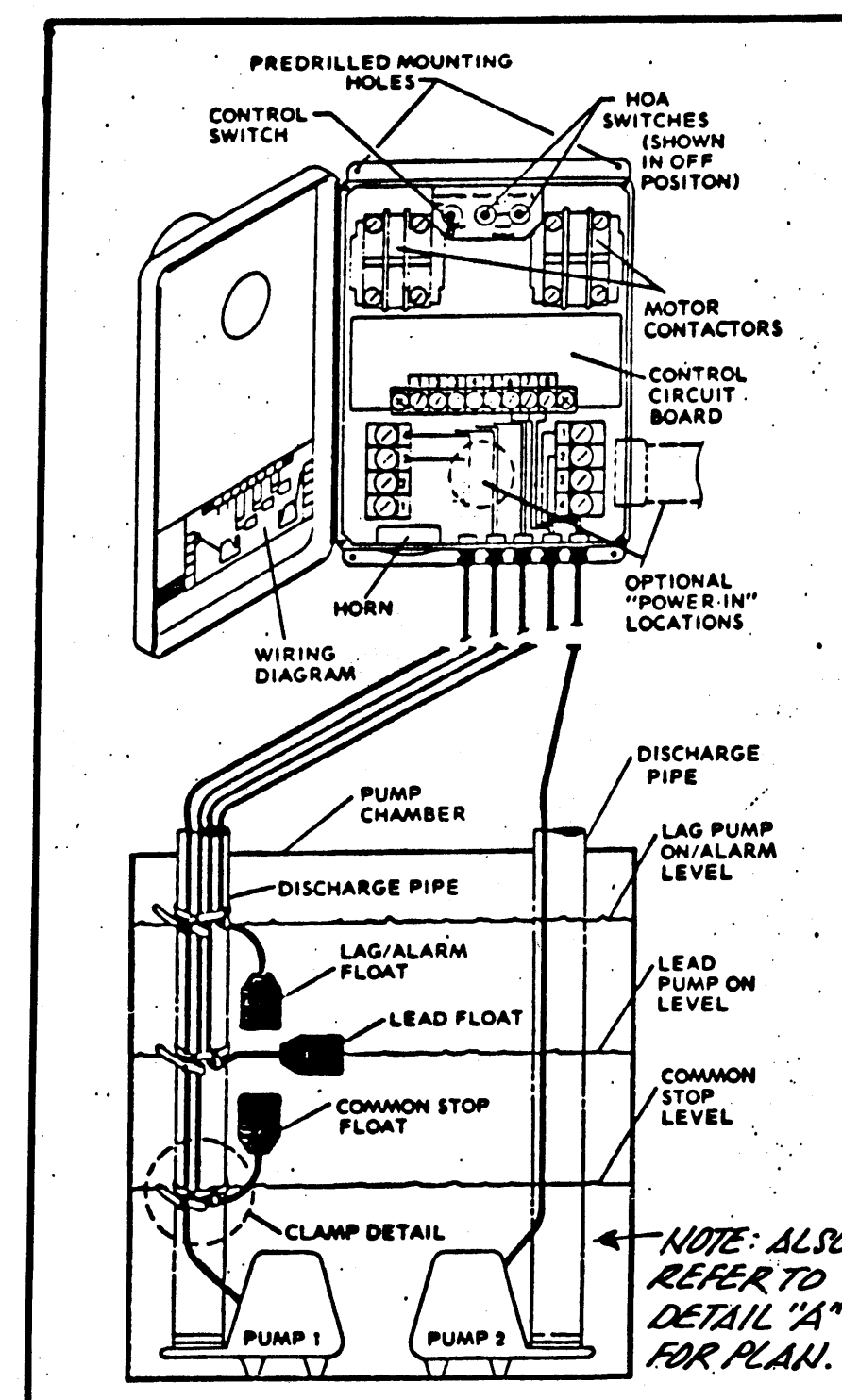
### GRANADA SQUARE OFFICE PARK

### ALBUQUERQUE, NEW MEXICO

03-27-01  
ENGINEER'S SEAL  
-03-13-01 (REVISED: JANUARY 1998) NOVEMBER 2000



# "ULTRA" NATOR™ Alternating Pump Control/Alarm System



**SK50 Submersible Sewage Ejector Pump**

**HYDROMATIC PUMPS**  
A Marley Pump Company

The SK50 is designed for high capacity sump service and for transferring raw sewage from basements, stores, and small businesses to the main sewer system.

## Features:

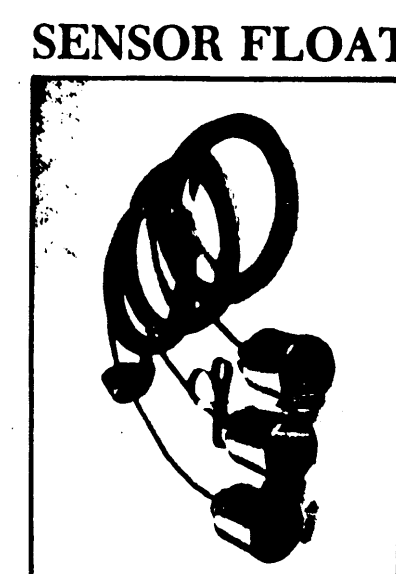
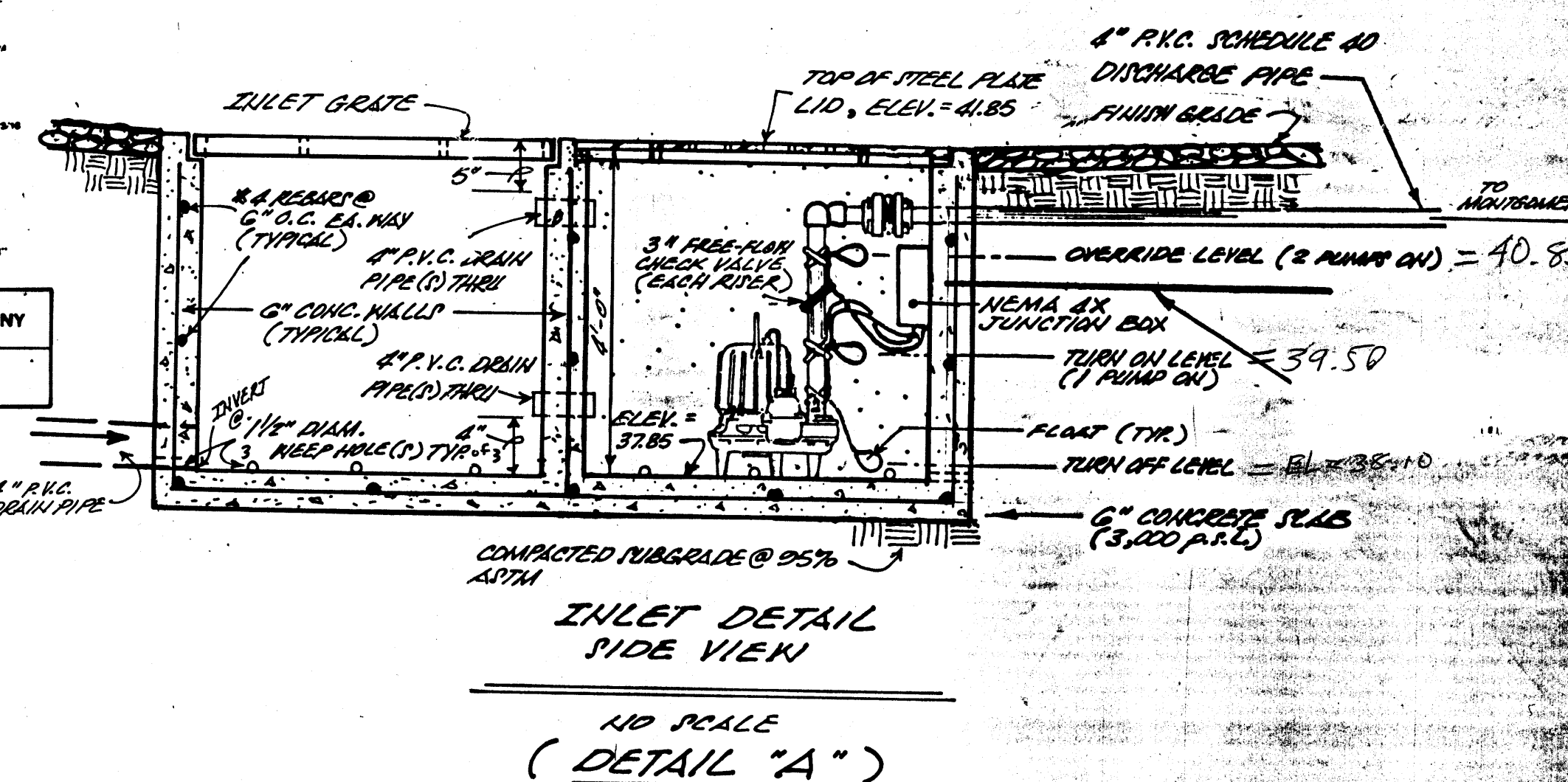
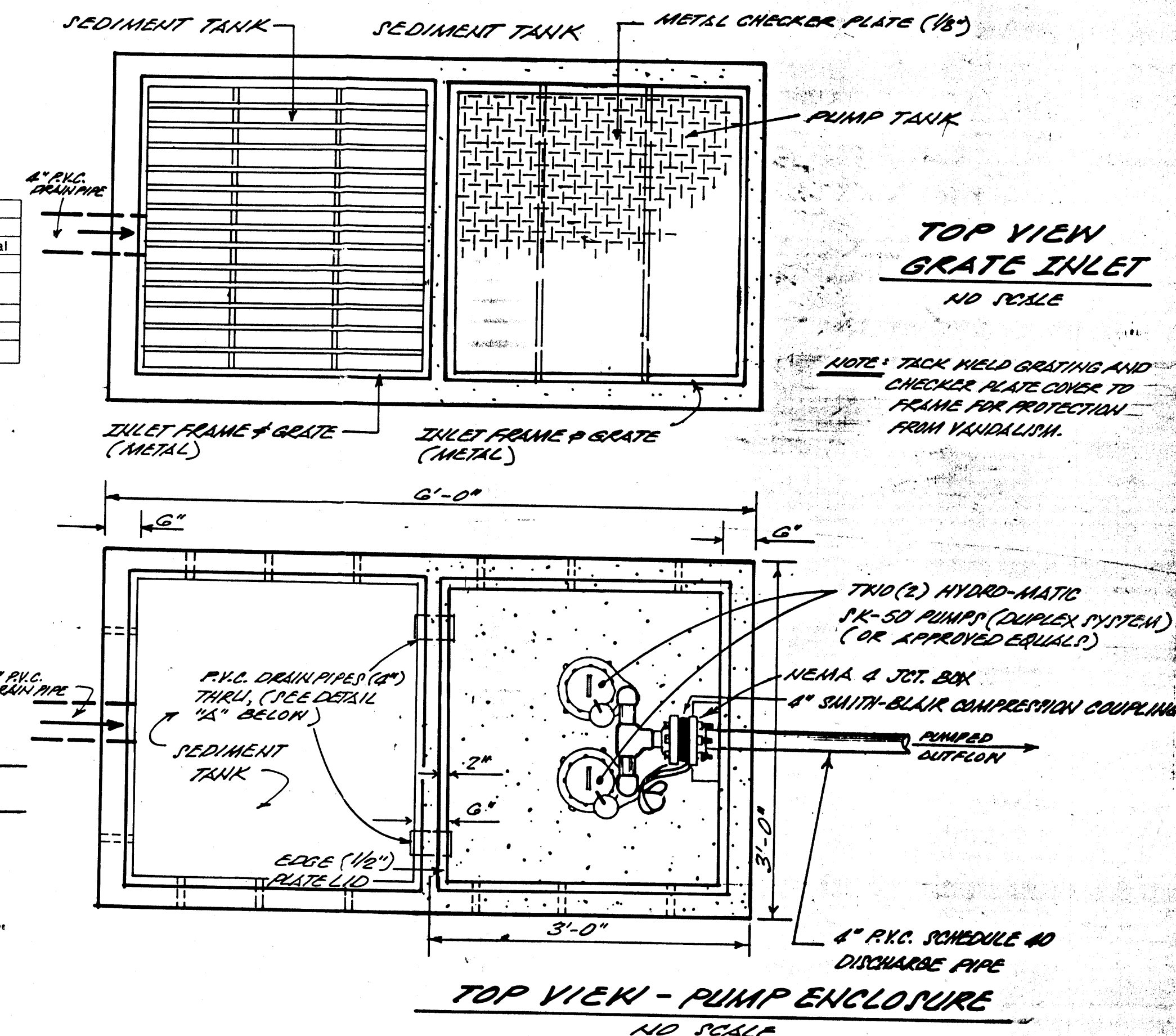
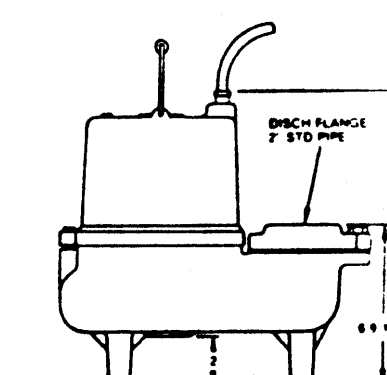
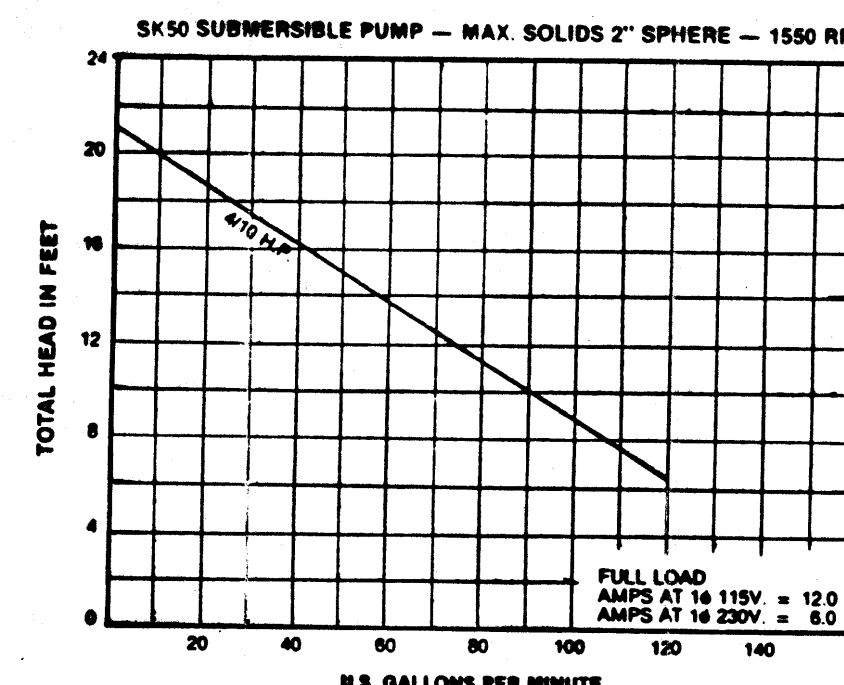
- Non-clog, two-vane, semi-open impeller passes 2-inch solids.
- Pump-out vanes on rear shroud of impeller prevent stringy material and grit from building up in the seal area.
- Heavy-duty, oil-filled motor has superior cooling and bearing lubrication for long, trouble-free life.
- Thermal overload protection is built into motor windings.
- 2-inch NPT discharge standard.
- Completely field serviceable.
- Cast iron construction.
- 10-foot cord with molded plug furnished as standard.
- Wide angle mercury switch (auto models) produces a greater pumping range, therefore the pump cycles less frequently, prolonging pump life. Can also operate automatic models manually by simply unplugging the pump from the plug-back switch plug and then plug in direct to power.

## Capabilities

Specification	4/10 HP
Capacities to	120 gpm
Discharge NPT	2" Std. 3" Flange optional
Solids Handling	2"
Electrical	115V, 12.0 Amps
115V, 60 HZ	230V, 6.0 Amps
Pump Cord	10' Std. 20' Option
Switch Cord	10' Lqth. 20' Option
Construction	Cast Iron

Specifications subject to change without notice.

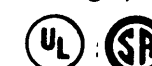
## SK50 Performance and Dimensional Data



## SENSOR FLOAT® Control Switch

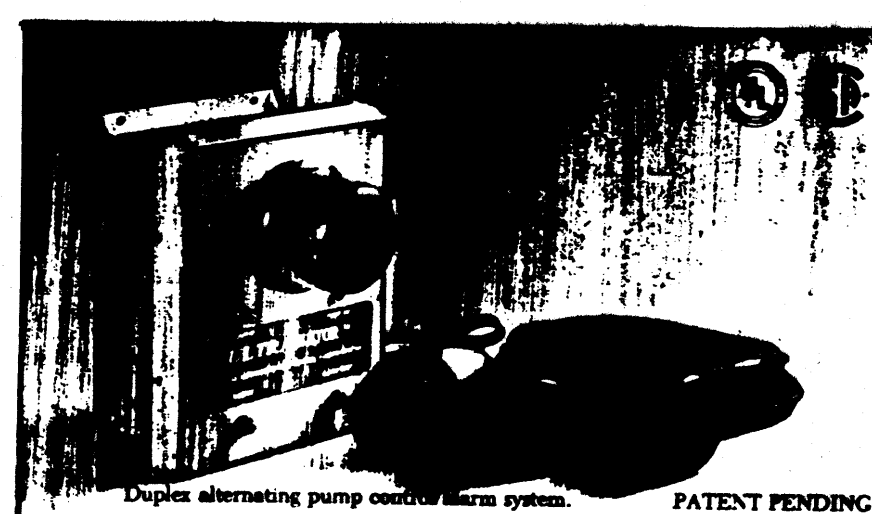
SENSOR FLOAT® control switches accurately monitor liquid levels. They are commonly used to activate alarm and pump control panels, solenoids, and relays.

Three models are available:  
PC (Pipe Clamp)  
SWI (Internal Weight)  
SWE (External Weight)



## JUNCTION BOX

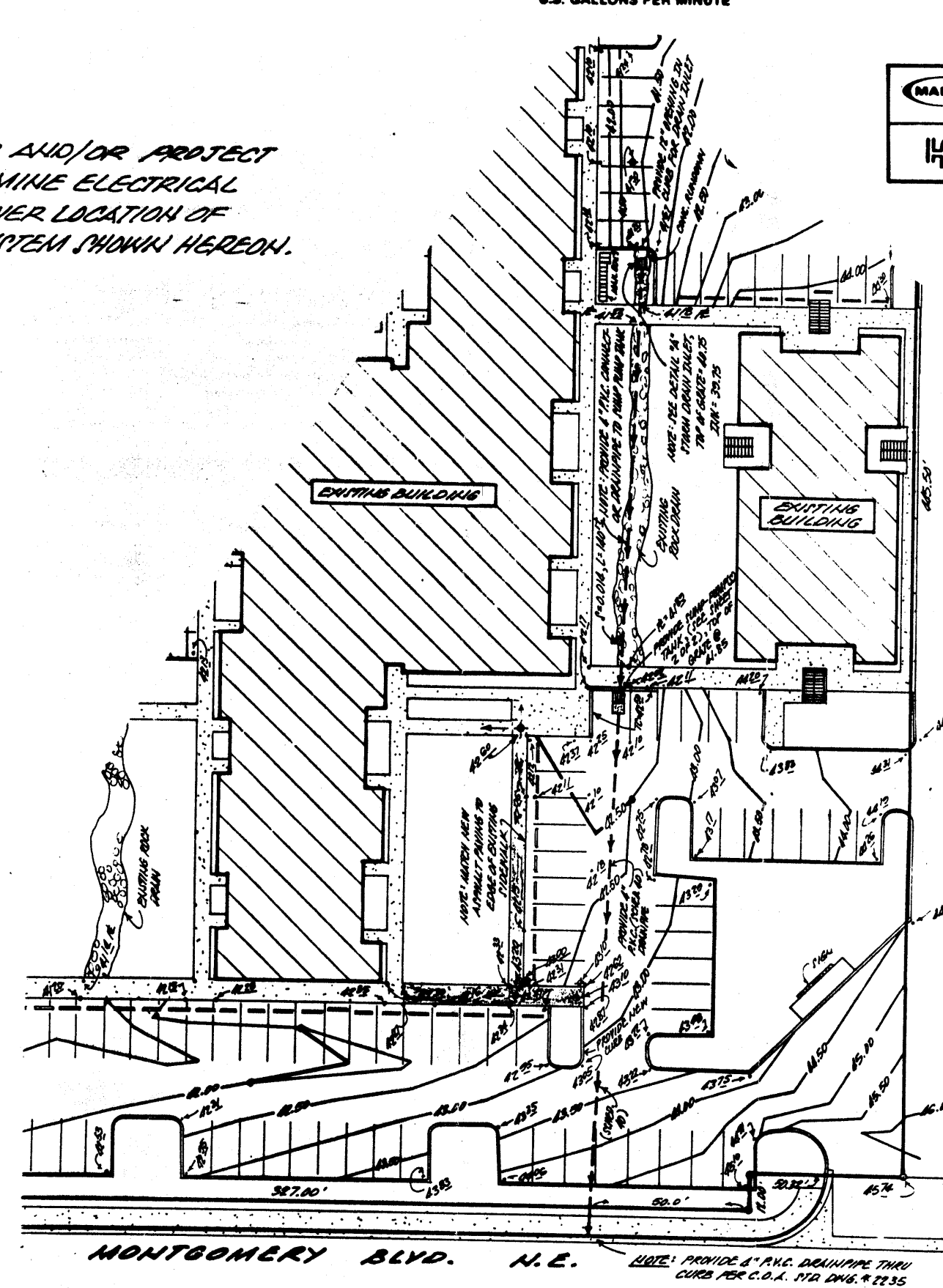
This NEMA 4X, non-corrosive PVC junction box provides a home for various electrical connections including those that may require water-proof protection. It is easily modified in the field. The JB10 may be ordered with or without liquid-tight connectors. It is available with up to six liquid-tight connectors installed and sealed to the junction box.



The "ULTRA" NATOR™ provides a means of controlling a duplex (two pumps) system in water and sewage installations. It is designed for both residential and commercial applications. The NEMA 4X (indoor or outdoor) control panel, plus three Sensor Floats alternately control two pumps and activate the alarm.

- Controls 120V and/or 230V pumps
- Simple, illustrated wiring diagram allows for easy installation
- Accurately controls two pumps and warns of high or low liquid levels
- Alarm section and each pump section are wired independently of each other (If either pump should fail, the alarm and other pump will activate.)

NOTE: ELECTRICAL CONTRACTOR AND/OR ARCHITECT ARE TO DETERMINE ELECTRICAL SOURCE LOCATION FOR POWER LOCATION OF PROPOSED PUMP/PUMP SYSTEM SHOWN HEREON.



## CONSTRUCTION NOTES:

1. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE 785-1234, FOR LOCATION OF EXISTING UTILITIES.
2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL POTENTIAL OBSTRUCTIONS, SHOWING A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
3. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
4. ALL CONSTRUCTION WITHIN PUBLIC RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE STANDARDS AND PROCEDURES.
5. IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE MANNER ONLY, AND SUCH LINES MAY EXIST WHERE NONE ARE SHOWN. IF ANY SUCH EXISTING LINES ARE SHOWN, THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE OWNER OF SAID UTILITY, AND THE INFORMATION MAY BE INCOMPLETE, OR MAY BE OBSOLETE BY THE TIME THE CONSTRUCTION COMMENCES. THE ENGINEER HAS UNDERTAKEN NO FIELD VERIFICATION OF THE LOCATION, DEPTH, SIZE, OR TYPE OF EXISTING UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING, IDENTIFYING AND PRESERVING ANY AND ALL EXISTING UTILITY LINES, PIPELINES, AND UNDERGROUND UTILITY LINES IN PLANNING AND CONDUCTING EXCAVATION. THE CONTRACTOR SHALL COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES.

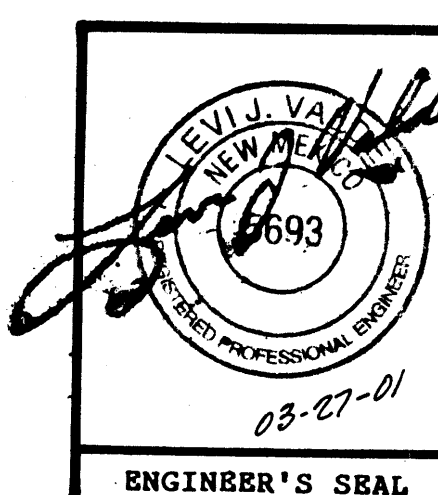
(ALSO FOR SHEET 3 OF 4 SHEETS)

RELISE TO CONTRACTOR

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 to be performed under contract shall, except as otherwise stated or provided for herein, be constructed in accordance with the City of Albuquerque Interim Standard Specifications - Public Works Construction - 1995.
3. Two (2) working days prior to any excavation, contractor must contact Line Locating Service, 785-1234, for location of existing utilities.
4. Prior to construction, the contractor shall excavate and verify the horizontal and vertical location of all obstructions. Should a conflict exist, the contractor shall notify the engineer or surveyor so that the conflict can be resolved with a minimum amount of delay.
5. Shovel/cut connection shall be according to ARTERIAL street use.
6. Maintenance of these facilities shall be the responsibility of the Owner of the property served.

APPROVALS	NAME	DATE
A.C.E./DESIGN		
INSPECTOR		
A.C.E./FIELD		

NOTE: ALL WORK WITHIN PUBLIC EASEMENT SHALL BE PERFORMED UNDER SEPARATE PERMIT.



**DRAINAGE AND PAVING PLAN**  
**EXECUTIVE PLAZA ADDITION**

**GRANADA SQUARE**  
**OFFICE PARK**  
**ALBUQUERQUE, NEW MEXICO**

4  
of  
4