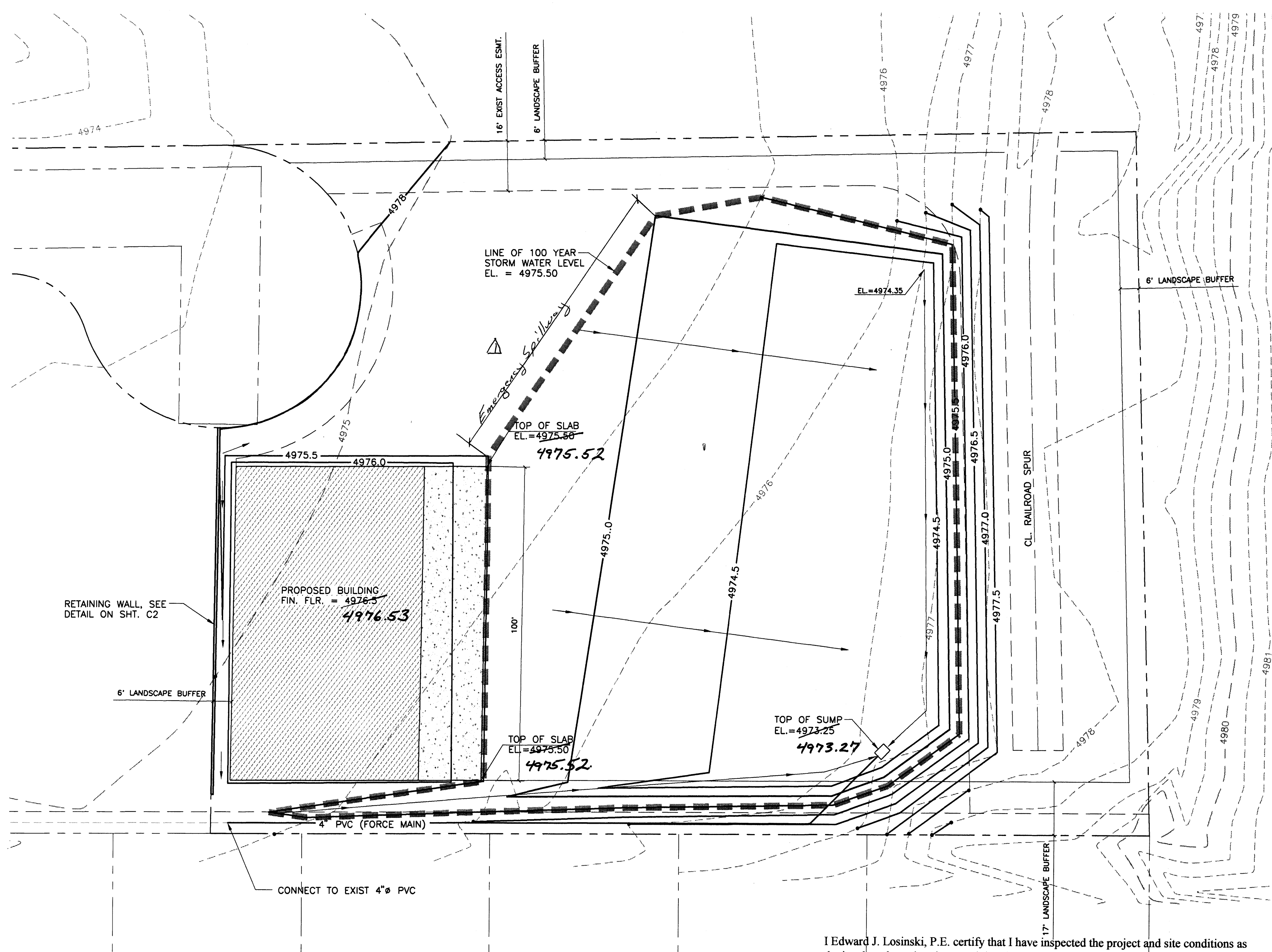


D:\LOSINSKI\ASOM-10708\ASOM-C1.dwg Wed Aug 12 16:05:05 1998 Technical Drafting Services  
HP 7600 Color (obsolete) Hewlett-Packard HP-GL/2 devices, MOI 4.3 - for Autodesks by HP

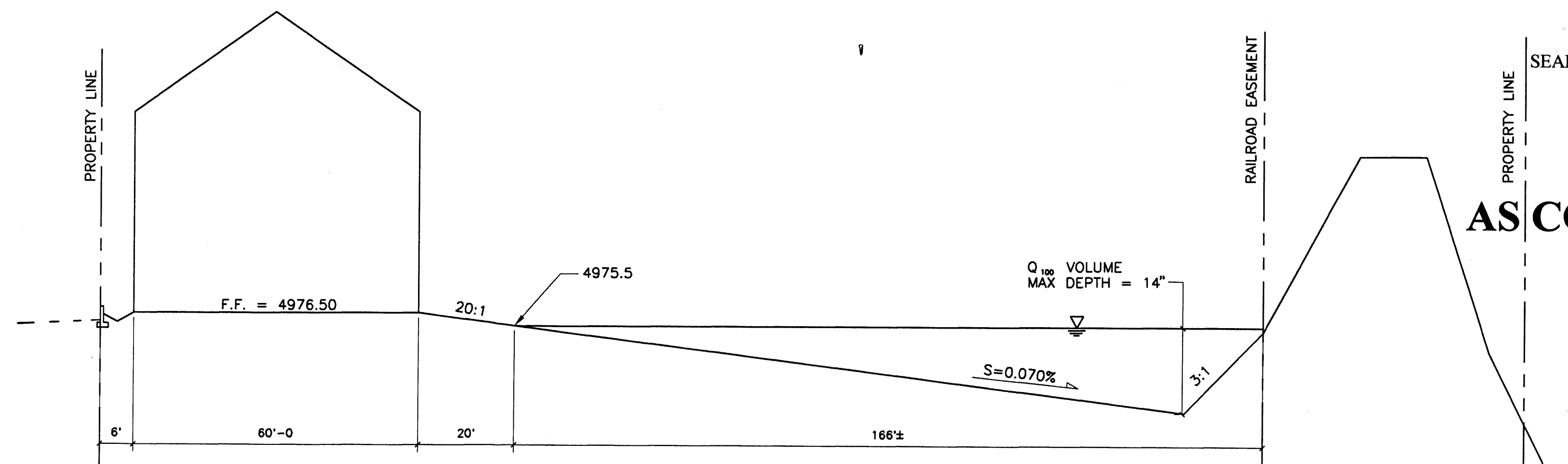


**SITE GRADING AND DRAINAGE PLAN**  
SCALE: 1" = 20'

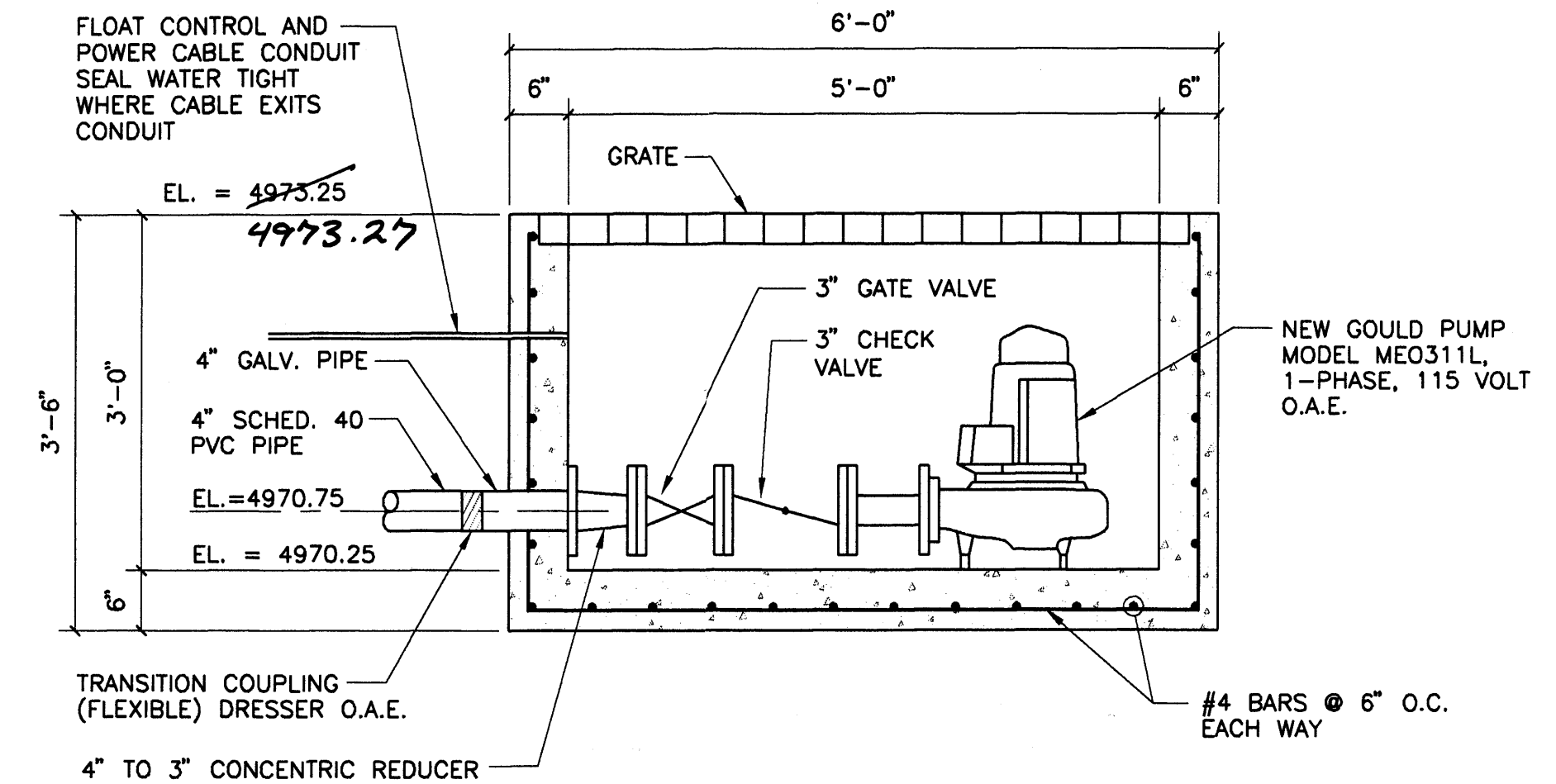
I Edward J. Losinski, P.E. certify that I have inspected the project and site conditions as depicted on these drawings, and that the completion of the construction is in substantial compliance with the approved Grading and Drainage Plan dated: 8-13, 1998  
*Edward J. Losinski*  
Signed: Edward J. Losinski, P.E.



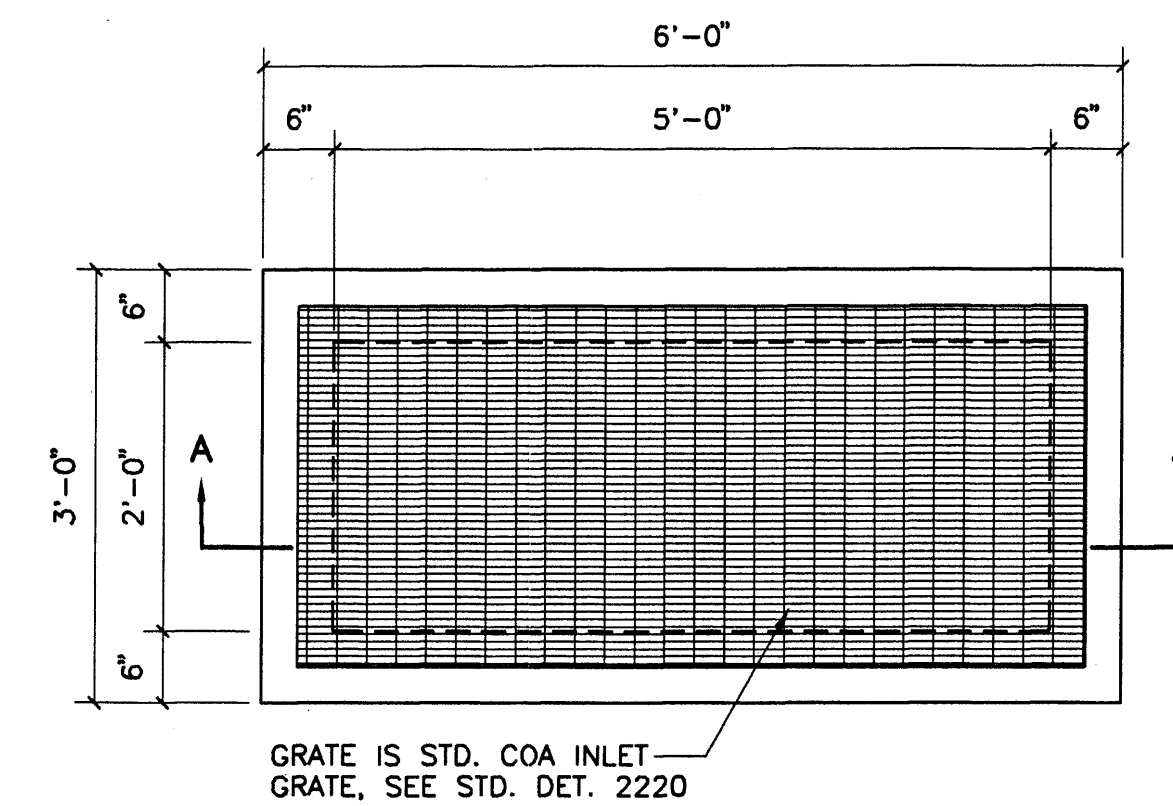
AS CONSTRUCTED



**LOT CROSS SECTION - EAST/WEST**  
SCALE: 1" = 20'



**INLET SECTION A-A**  
SCALE: 3/4" = 1'-0"

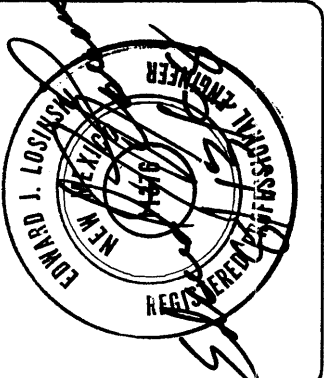


**INLET PLAN**  
SCALE: 3/4" = 1'-0"

**GENERAL NOTES**

- PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE LOCATION OF ALL POTENTIAL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AS SOON AS POSSIBLE TO RESOLVE THE CONFLICT WITH A MINIMUM AMOUNT OF DELAY.
- ALL WORK ON THIS PLAN SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
- IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE LOCATION ONLY, AND LINES MAY EXIST WHERE NONE ARE SHOWN, THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE UTILITY OWNER OR FROM EXISTING PLANS, AND THIS INFORMATION MAY BE INCOMPLETE, OR OBSOLETE AT THE TIME OF CONSTRUCTION. THE ENGINEER HAS NOT UNDERTAKEN ANY FIELD VERIFICATION OF THESE LOCATIONS, LINE SIZES OR MATERIAL TYPE, MAKES NO REPRESENTATION THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFOR. THE CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ANY UTILITY LINE, PIPELINE OR UNDERGROUND INSTALLATION IN OR NEAR THE AREA IN ADVANCE OF AND DURING ANY EXCAVATION WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, PIPELINES AND UNDERGROUND FACILITIES. IN PLANNING AND CONDUCTING EXCAVATIONS, THE CONTRACTOR SHALL COMPLY WITH ALL STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES.
- THE CONTRACTOR SHALL INSURE THAT NO SOIL ERODES FROM THE SITE INTO PUBLIC RIGHTS-OF-WAY OR INTO PRIVATE PROPERTY. THIS CAN BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMS AND BY WETTING THE SOIL TO KEEP IT FROM BLOWING.
- THE CONTRACTOR SHALL OBTAIN ANY AND ALL PERMITS REQUIRED BY THE CITY OF ALBUQUERQUE FOR THE COMPLETION OF THE WORK PRIOR TO BEGINNING CONSTRUCTION.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION AND ALL CURRENT UPDATES.
- AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING WORK WITHIN CITY RIGHT-OF-WAY. AN APPROVED COPY OF THESE PLANS MUST BE SUBMITTED AT THE TIME OF APPLICATION FOR PERMIT.
- TWO WORKING DAYS PRIOR TO AN EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATION SERVICE AT 260-1990 FOR LOCATION OF EXISTING UTILITIES.
- BACKFILL COMPACTION SHALL BE ACCORDING TO COLLECTOR STREET USE.
- MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.

DESIGNED BY: E.L.	DATE: 8/19/98
DRAWN BY: T.D.S.	REVISION
CHECKED BY:	BY

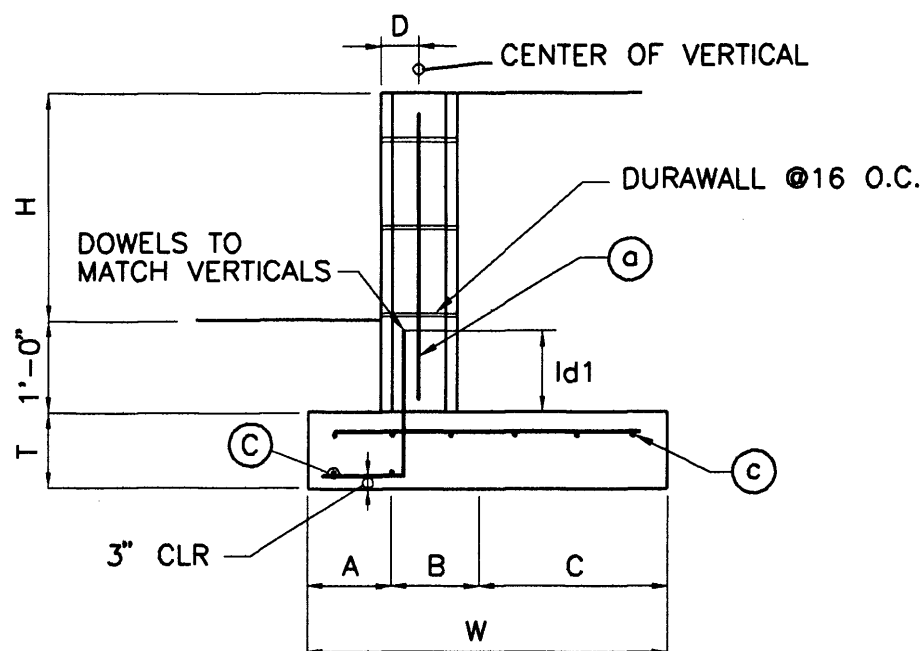


**JEL & ASSOCIATES**  
6605 HARPER N.E.  
ALBUQUERQUE, NEW MEXICO 87109  
PHONE: (505) 823-1556

LANDS OF MEL SANCHEZ  
**GRADING & DRAINAGE PLAN**  
REPLAT OF TRACT C, LOT 7  
LANDS OF MEL SANCHEZ

DRAWING NUMBER  
**C1**





**TYPICAL RETAINING WALL OVER 15'**  
N.T.S.

RETAINING WALL DIMENSIONS & REINFORCEMENT												
MIN. DIMENSIONS							STEEL REINFORCEMENT					
H	T	A	B	C	D	W	a	b	c	Id1		
2'	1'-0"	0'-6"	0'-8"	0'-10"	5 1/4"	2'-0"	#5@24" o.c.	#5@16"	#4@16"	1'-6"		
3'	1'-0"	0'-6"	0'-8"	1'-3"	5 1/4"	2'-5"	#5@16" o.c.	#5@16"	#4@16"	1'-6"		
4'	1'-0"	1'-0"	0'-8"	1'-2"	6 1/4"	2'-10"	#5@16" o.c.	#5@16"	#4@16"	1'-6"		
5'	1'-0"	1'-0"	0'-8"	1'-9"	6 1/4"	3'-5"	#5@8" o.c.	#5@16"	#4@16"	1'-6"		
6'	1'-0"	1'-0"	0'-8"	2'-6"	6 1/4"	4'-2"	#5@8" o.c.	#5@16"	#4@16"	1'-6"		

Hydrologic Calculations - COA DPM 22.2									
Lot 7 - Lands of Mel Sanchez, Developed by Lawrence Olguin.									
Precipitation Zone 2	(inches)	P80	P360	P1440	P4days	P10days			
Excess		2.01	2.35	2.75	3.3	3.95			
Precipitation	(inches)	0.53	0.78	1.13	2.12	0.53	0.78	1.13	2.12
Peak	(cfs/acre)	1.56	2.28	3.14	4.7	1.56	2.28	3.14	4.7
Discharge									
Offsite Areas					Land Treatments - Existing Conditions				
NONE					A	B	C	D	Area (ac)
					0.00	0.00	0.00	0.00	0.00
Onsite Areas					Land Treatments - Developed Conditions				
Subbasin 1					A	B	C	D	Area (sf)
					51,945	0	13,395	0	65,340
Offsite Discharge					Peak Flow Rate - Existing Conditions				
NONE					A	B	C	D	Q (cfs)
					0.00	0.00	0.00	0.00	0.00
Onsite Discharge					Peak Flow Rate - Existing Conditions				
Subbasin 1					A	B	C	D	Q (cfs)
					1.86	0.00	0.97	0.00	2.83
Volume Six Hour					Runoff Volume - Existing Conditions				
Subbasin 1					A	B	C	D	V (cu-ft)
					2,294	0	1,261	0	3,556
Volume Ten Day					Runoff Volume - Existing Conditions				
Subbasin 1					A	B	C	D	V (cu-ft)
					0	0	0	0	0
					3,556				Detention Volume: 16,263 cu-ft

**DRAINAGE PLAN**

**Site Location** - As shown by the Vicinity Map F-15, the 1.5 acre site is located approximately 1/4 mile south of the intersection of Montano Road and Second Street, within the city of Albuquerque, New Mexico. The property is approximately 223 feet wide by 297 feet long. At present, the site is undeveloped. The vast majority of the surrounding area is currently undeveloped however, some single family dwellings are located south of the subject property. The proposed improvements consist of the addition of paved parking and a 6000 square foot shop building.

**Legal Description** - Lot C-8, Lands of Mel Sanchez and Lath and Plaster Supply Co., Inc., MRGCD Map No. 32, Filed June 12, 1998, Book 98C, Page 163, Bernalillo County, New Mexico. The property boundary shown on this Plan is given for information only to describe the project limits. Property boundary information shown hereon does not constitute a boundary survey.

**Benchmark** - The benchmark for this plan was based on the City of Albuquerque A.C.S. Monument "NM47-8" Central Zone, Y=1505845.86, X=384597.97, Elevation=4974.639, NAD 27, a NMSHTD brass cap located in the median of Second Street NW north of Montano Road at Second Street.

**Flood Zone** - As shown by the included panel of the National Flood Insurance Program Flood Boundary and Floodway Maps for the City of Albuquerque, New Mexico, dated September 20, 1996, this site lies outside areas designated of inundation due to flooding for the 100-yr and 500-yr events.

**Hydrologic Methods** - The calculations which appear hereon analyze both existing and developed conditions for the 100-year, 6-hour rainfall event and the resulting volume generated by the 100-yr 10 day event. The process outlined in the DPM, Section 22.2 for Zone 2 was used to quantify the peak flow rates and volumes. As shown by these calculations, the proposed improvements will detain 100% of the 100-yr, 10-day event. Flows will be discharged from the site via a 4' dia. PVC pipe over a 24 hour period. This is consistent with the approved Grading and Drainage Plan for the subject property prepared by Kemper-Vaughan Consulting Engineers dated 4/1/98. The approved plan was prepared in connection with COA, DRB-98-002 and the subsequent filing of plat SP-98-113.

**Existing Conditions** - As demonstrated in the previously noted Grading and Drainage Plan no off-site basins impact the subject property. The boundaries of Lot C represent the on-site basin. This basin is approximately 1.5 acres in size and is currently undeveloped. The basin is rectangular measuring 296 feet in length and 196 feet in width. All flows generated on the subject site are conveyed from east to west. Flows generated on the subject property are calculated to be 2.83 cfs in total.

**Proposed Conditions** - Under fully developed conditions the site will develop 6.25 cfs in total or approximately 16,263 cubic feet for the 100-yr 10-day storm. This calculation was based on a land treatment of 0% A, 14% B, 12.5% C, and 73.5% D. The area included in land treatment B is for the landscaped areas, the area included in land treatment C was considered to be that area within the railroad easement which has not been disturbed by human activity and has natural ground cover. All other areas were considered to be impervious and were assigned land treatment D. Onsite improvements consist of the regrading of the site to create a detention basin which will not exceed 14 inches in depth under the 100-yr 10-day storm (See lot cross section on sheet 1 of 2). The total available detention provided by the proposed grading is 18,010 cubic feet. The maximum water surface elevation under this condition is 4975.5 which is 1 foot below the proposed finish floor elevation of 4976.5. Flows collected within the on-site detention basin will be conveyed to the southeast portion of the lot where a sump will be installed and equipped with a submersible pump. In order to evacuate the detention basin within 24 hours the pump must be capable of discharging 84.5 gallons per minute against 4 feet of TDH. The TDH for this lot was reduced by installing a 4 inch diameter PVC pipe in lieu of the initially proposed 2.5 inch PVC pipe. This decision was made in order to reduce the TDH and allow for a lower horsepower pumping system which operates on single phase power. The pump selected is a Gould Model MEO311L, which is capable of delivering 90 gpm against 25 feet of TDH.

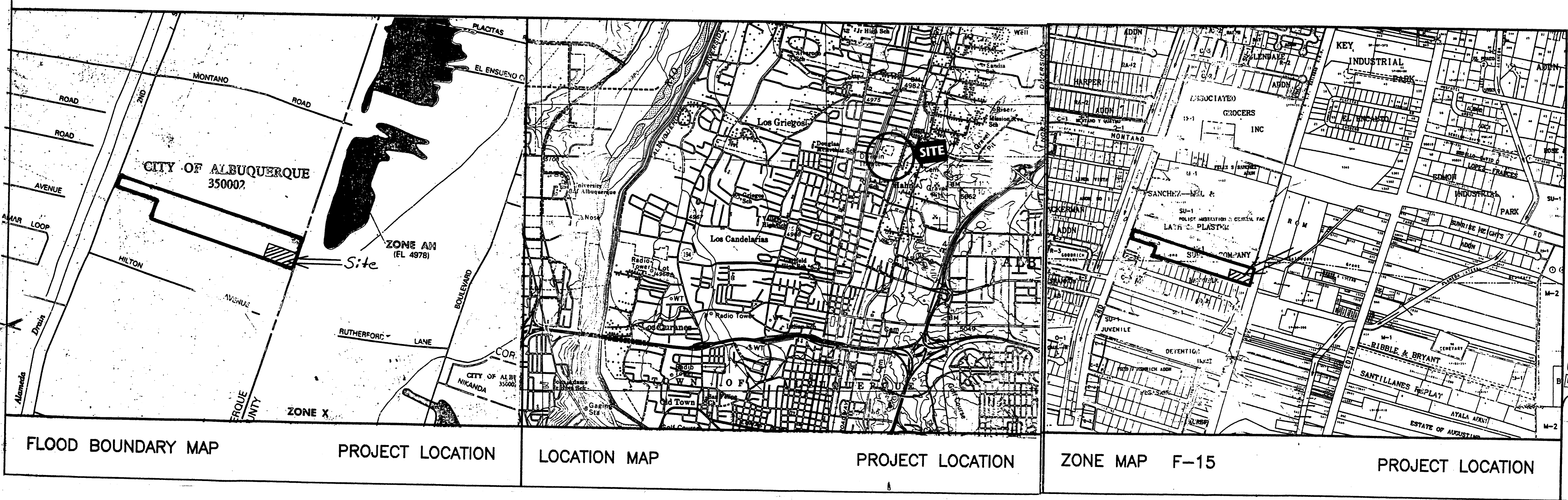
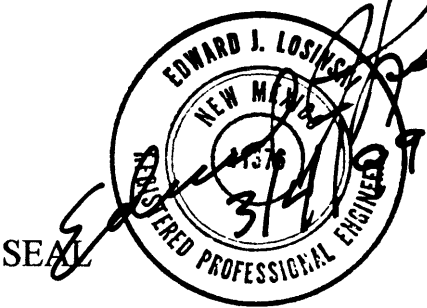
**Erosion Control Measures** - The contractor shall ensure that no soil erodes from the site into public right-of-way or onto private property. This can be achieved by constructing temporary berms at the property lines and wetting the soil to keep it from blowing. The contractor shall promptly clean up any material excavated within the public right-of-way so that the excavated material is not susceptible to being washed down the street. The contractor shall secure "Topsoil Disturbance Permits" prior to beginning construction.

**SURVEY INFORMATION** - The existing survey information shown hereon was prepared from a field survey done by Rio Grande Surveying Co., Inc., in January of 1998. A subsequent field review by this office revealed that the information shown hereon is consistent with the actual conditions that exist in the field.

**AS CONSTRUCTED**

I Edward J. Losinski, P.E. certify that I have inspected the project and site conditions as depicted on these drawings, and that the completion of the construction is in substantial compliance with the approved Grading and Drainage Plan dated: **8-13**, 19**98**

Signed: Edward J. Losinski, P.E.



DESIGNED BY: E.L.

DRAWN BY: T.D.S.

CHECKED BY:

**JEL & Associates**  
6605 HARPER N.E.  
ALBUQUERQUE, NEW MEXICO 87109  
PHONE: (505) 823-1556

**CALCULATIONS & NOTES**

DRAWING NUMBER  
**C2**

20F 2

REVISION  
BY  
DATE  
MARK