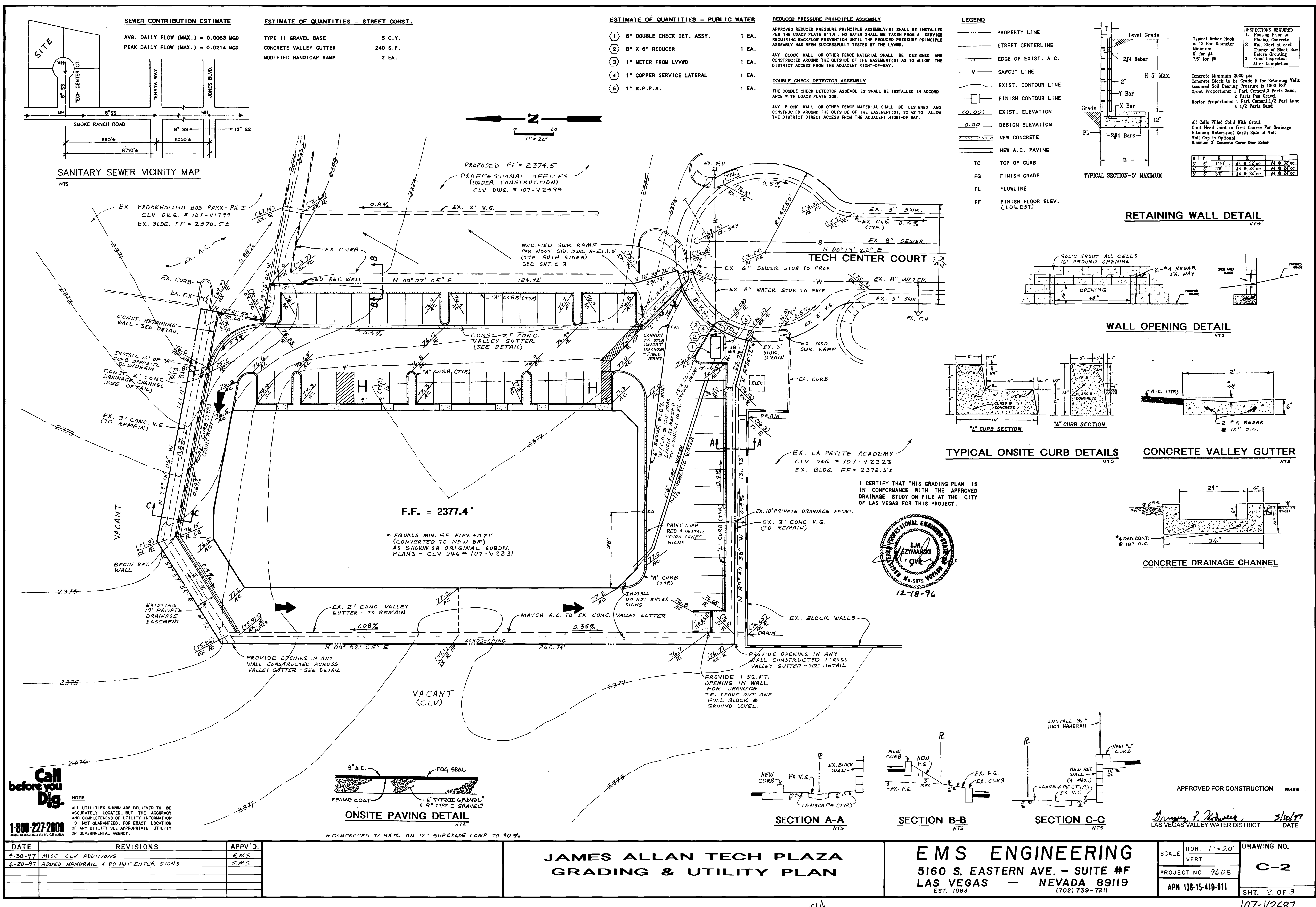




SEWER CONTRIBUTION ESTIMATE

AVG. DAILY FLOW (MAX.) = 0.0063 MGD  
PEAK DAILY FLOW (MAX.) = 0.0214 MGD

ESTIMATE OF QUANTITIES - STREET CONST.

TYPE II GRAVEL BASE 5 C.Y.  
CONCRETE VALLEY GUTTER 240 S.F.  
MODIFIED HANDICAP RAMP 2 EA.

ESTIMATE OF QUANTITIES - PUBLIC WATER

- 1 6" DOUBLE CHECK DET. ASSY. 1 EA.
- 2 8" X 6" REDUCER 1 EA.
- 3 1" METER FROM LVWD 1 EA.
- 4 1" COPPER SERVICE LATERAL 1 EA.
- 5 1" R.P.P.A. 1 EA.

REDUCED PRESSURE PRINCIPLE ASSEMBLY

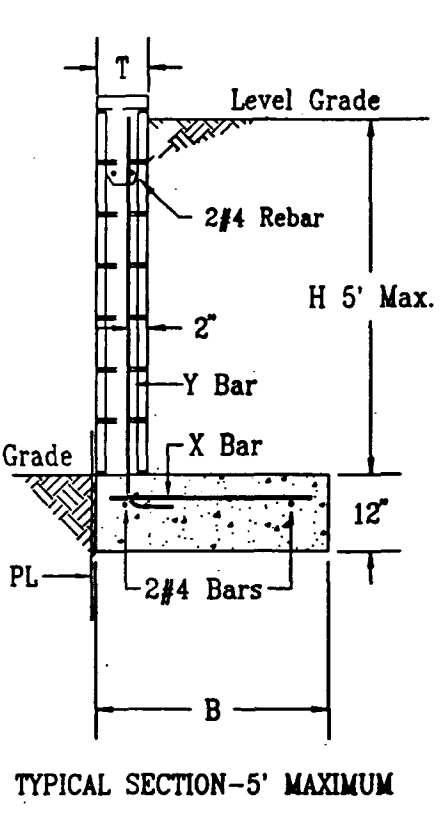
APPROVED REDUCED PRESSURE PRINCIPLE ASSEMBLY(S) SHALL BE INSTALLED PER THE UOACS PLATE #11A. NO WATER SHALL BE TAKEN FROM A SERVICE REQUIRING BACKFLOW PREVENTION UNTIL THE REDUCED PRESSURE PRINCIPLE ASSEMBLY HAS BEEN SUCCESSFULLY TESTED BY THE LVWD.

DOUBLE CHECK DETECTOR ASSEMBLY

THE DOUBLE CHECK DETECTOR ASSEMBLY SHALL BE INSTALLED IN ACCORDANCE WITH UOACS PLATE 20B.

LEGEND

- PROPERTY LINE
- STREET CENTERLINE
- EDGE OF EXIST. A.C.
- SAWCUT LINE
- EXIST. CONTOUR LINE
- (0.00) EXIST. ELEVATION
- 0.00 DESIGN ELEVATION
- NEW CONCRETE
- NEW A.C. PAVING
- TC TOP OF CURB
- FG FINISH GRADE
- FL FLOWLINE
- FF FINISH FLOOR ELEV. (LOWEST)



INSPECTIONS REQUIRED  
1. Footing Prior to Placing Concrete  
2. Wall Steel at each Change of Block Size Before Grouting  
3. Final Inspection After Completion

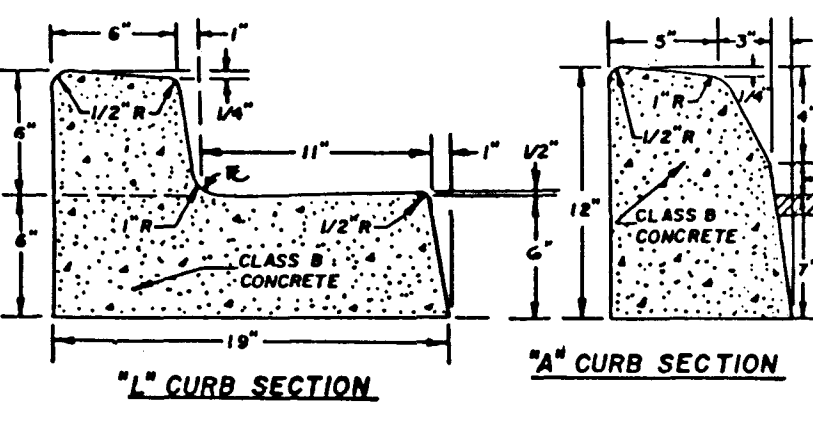
Concrete Minimum 2000 psi  
Omit Head Joint in First Course For Retaining Walls  
Assumed Soil Bearing Pressure is 1000 PSF  
Grout Proportions: 1 Part Cement, 3 Parts Sand, 2 Parts Fes Gravel  
Mortar Proportions: 1 Part Cement, 1/2 Part Lime, 4 1/2 Parts Sand

All Cells Filled Solid With Grout  
Omit Head Joint in First Course For Drainage  
Bitumen Waterproof Earth Side of Wall  
Wall Cap is Optional  
Minimum 3" Concrete Cover Over Rebar

| H  | T  | B     | X           | Y           |
|----|----|-------|-------------|-------------|
| 3' | 6" | 1'10" | #4 @ 32" oc | #4 @ 32" oc |
| 4' | 6" | 2'6"  | #4 @ 24" oc | #4 @ 24" oc |
| 5' | 6" | 3'0"  | #4 @ 24" oc | #4 @ 24" oc |

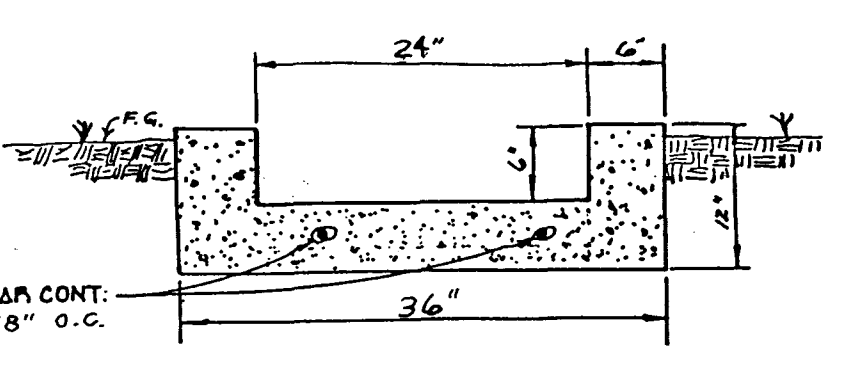
RETAINING WALL DETAIL

WALL OPENING DETAIL



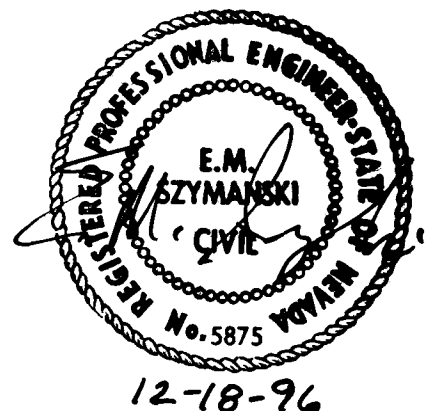
TYPICAL ONSITE CURB DETAILS

CONCRETE VALLEY GUTTER



CONCRETE DRAINAGE CHANNEL

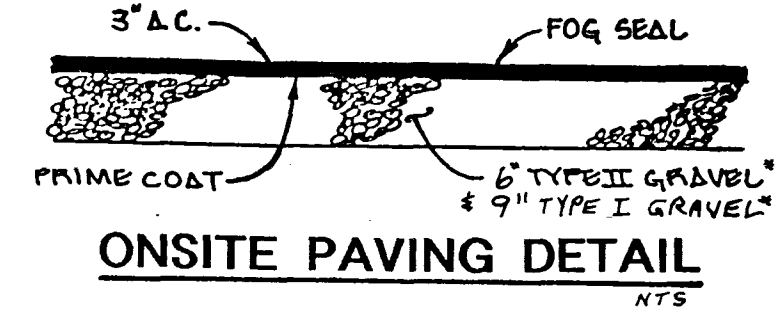
I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED DRAINAGE STUDY ON FILE AT THE CITY OF LAS VEGAS FOR THIS PROJECT.



Call before you Dig.

NOTE  
ALL UTILITIES SHOWN ARE BELIEVED TO BE ACCURATELY LOCATED, BUT THE ACCURACY AND COMPLETENESS OF UTILITY INFORMATION IS NOT GUARANTEED. FOR EXACT LOCATION OF ANY UTILITY SEE APPROPRIATE UTILITY OR GOVERNMENTAL AGENCY.

| DATE    | REVISIONS                           | APPV'D. |
|---------|-------------------------------------|---------|
| 4-30-97 | MISC. CLV ADDITIONS                 | E.M.S.  |
| 6-20-97 | ADDED HANDRAIL & DO NOT ENTER SIGNS | E.M.S.  |



ONSITE PAVING DETAIL

\* COMPACTED TO 95% ON 12" SUBGRADE COMP. TO 90%.

JAMES ALLAN TECH PLAZA  
GRADING & UTILITY PLAN

EMS ENGINEERING  
5160 S. EASTERN AVE. - SUITE #F  
LAS VEGAS - NEVADA 89119  
EST. 1983 (702) 739-7211

APPROVED FOR CONSTRUCTION  
James P. Johnson  
LAS VEGAS VALLEY WATER DISTRICT  
3/10/97  
DATE

| SCALE       | HOR. 1"=20'    | VERT. |
|-------------|----------------|-------|
| PROJECT NO. | 9608           |       |
| APN         | 138-15-410-011 |       |

DRAWING NO. C-2  
SHT. 2 OF 3

