



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

January 30, 1996

Mike DeLilla
Jeff Mortensen & Assoc.
6010-B Midway Park Blvd. NE
Albuquerque, NM 87109

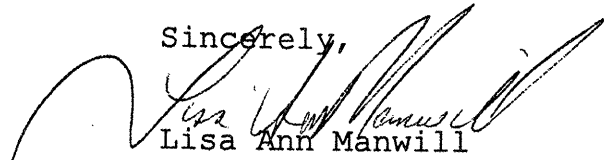
**RE: FRENCH MORTUARY (K21-D16J) ENGINEER'S CERTIFICATION FOR
CERTIFICATE OF OCCUPANCY APPROVAL. ENGINEER'S CERTIFICATION
STAMPED 1-19-96.**

Dear Mr. DeLilla:

Based on the information provided on your January 22, 1996
submittal, the above referenced project is approved for
Certificate of Occupancy.

If I can be of further assistance, please feel free to contact me
at 768-3622.

Sincerely,



Lisa Ann Manwill
Engineering Assoc./Hyd.

c: Andrew Garcia
File

941253

PROJECT TITLE: French Mortuary ZONE ATLAS/DRNG. FILE #: K21/D16j

DRB #: _____ EPC #: _____ WORK ORDER #: _____

LEGAL DESCRIPTION: Tract 1-CIA-3A-1 Horne Development Addition

CITY ADDRESS: S.W. Intersection of Lomas Blvd. N.E. & Hotel Circle N.E.

ENGINEERING FIRM: Jeff Mortensen & Assoc CONTACT: Mike DeLilla

ADDRESS: 6010-B Midway Park Blvd. N.E. PHONE: 345-4250

OWNER: French Mortuary CONTACT: Raul Loya

ADDRESS: P.O. Box 25126 Alb. N.M 87125 PHONE: 345-3536

ARCHITECT: De la Torre + Rainhart CONTACT: George Rainhart

ADDRESS: Bldg. 2, Suite 200 PHONE: 828-9611

ADDRESS: 7801 Academy N.E.

SURVEYOR: Harris Surveying CONTACT: A. Phony Harris

ADDRESS: 2412-D Monroe St. N.E. PHONE: 889-8056

CONTRACTOR: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

TYPE OF SUBMITTAL:

- ☐ DRAINAGE REPORT
- ☐ DRAINAGE PLAN
- ☐ CONCEPTUAL GRADING & DRAINAGE PLAN
- ☐ GRADING PLAN
- ☐ EROSION CONTROL PLAN
- ☒ ENGINEER'S CERTIFICATION
- ☐ OTHER

PRE-DESIGN MEETING:

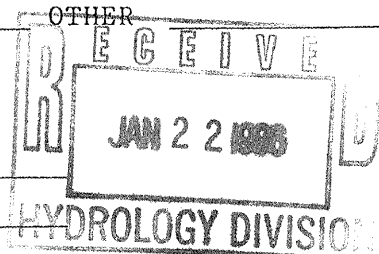
- ☒ YES (4/16/91) (K21/D16)
- ☐ NO
- ☐ COPY PROVIDED

CHECK TYPE OF APPROVAL SOUGHT:

- ☐ SKETCH PLAT APPROVAL
- ☐ PRELIMINARY PLAT APPROVAL
- ☐ S. DEV. PLAN FOR SUB'D. APPROVAL
- ☐ S. DEV. PLAN FOR BLDG. PERMIT APPROVAL
- ☐ SECTOR PLAN APPROVAL
- ☐ FINAL PLAT APPROVAL
- ☐ FOUNDATION PERMIT APPROVAL
- ☒ BUILDING PERMIT APPROVAL
- ☒ CERTIFICATE OF OCCUPANCY APPROVAL
- ☐ GRADING PERMIT APPROVAL
- ☐ PAVING PERMIT APPROVAL
- ☐ S.A.D. DRAINAGE REPORT
- ☐ DRAINAGE REQUIREMENTS

OTHER _____

(SPECIFY)

TE SUBMITTED: 01/18/96BY: Michelle (Mike) F. DeLilla



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

July 13, 1995

Jeff Mortensen
Jeff Mortensen & Associates
6010-B Midway Park Blvd. NE
Albuquerque, NM 87109

RE: DRAINAGE PLAN FOR FRENCH MORTUARY-EAST (K21-D16)
ENGINEER'S STAMP DATED 6/19/95.

Dear Mr. Mortensen:

Based on the information provided on your June 20, 1995
submittal, the above referenced site is approved for Building
Permit.

Please attach a copy of this approved plan to the construction
sets prior to sign-off by Hydrology.

A separate permit is required for construction within City Right-
of-Way. A copy of this approval letter must be on hand when
applying for the excavation permit.

Prior to Certificate of Occupancy release, Engineer Certification
per the D.P.M. checklist will be required.

If I can be of further assistance, please feel free to contact me
at 768-2667.

Sincerely,

Bernie J. Montoya, CE
Engineering Associate

BJM/dl

c: Andrew Garcia
Arlene Portillo
File

AS-BUILT LEGEND

AS-BUILT = AS DESIGNED
 TC39.85.80 AS-BUILT TOP OF CURB
 TA39.38.30 AS-BUILT TOP OF ASPHALT
 FL38.4.54 AS-BUILT FLOW LINE

LEGEND

○ = SET #4 REBAR W/CAP
 ● = FND. #4 REBAR W/CAP
 —○— = POWER POLE W/OVERHEAD POWER LINE
 * = LIGHT POLE
 □ = TRAFFIC SIGNAL BOX
 —○— = GUY WIRE ANCHOR
 ◇ = ELECTRIC BOX
 ◇ = CABLE T.V. BOX
 4 = WATER VALVE
 ○ = FIRE HYDRANT
 W = TOP OF WALL
 TC = TOP OF CONCRETE CURB
 FL = FLOWLINE
 W = WATER LINE W/SIZE
 S = SANITARY SEWER LINE W/SIZE
 E = EAST
 W = WEST
 INV. = INVERT
 S = SOUTH
 NG = NATURAL GROUND
 ● = EXISTING SPOT ELEVATION
 ○ = PROPOSED SPOT ELEVATION
 —○— = EXISTING CONTOUR
 —○— = PROPOSED CONTOUR

LEGAL DESCRIPTION

TRACTS 1-C1A-2A AND 1-C1A-3A OF THE HORNE DEVELOPMENT, AN ADDITION TO THE CITY OF ALBUQUERQUE, NEW MEXICO, AS THE SAME ARE SHOWN AND DESIGNATED ON PLAT OF SAID ADDITION, FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO ON DECEMBER 22, 1993 IN VOLUME C93, FOLIO 364.

TRACT 1-C1A-3A-I, HORNE DEVELOPMENT ADDITION, AS SHOWN ON THE PLAT FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO ON JULY 13, 1995, BOOK 95C, PAGE 255.

BASIS OF BEARING IS THE PLAT OF TRACTS 1-A1, 1-C1A-2A AND 1-C1A-3A, HORNE DEVELOPMENT ADDITION FILED 12-22-93, VOL. C93, FOLIO 364.

BENCH MARK

STATION MARK IS A STANDARD ALUM. DISK STAMPED "11-K21", SET FLUSH WITH CONCRETE CURB, ELEVATION = 5467.171.

NOTE:

UTILITIES SHOWN HEREON ARE IN THEIR APPROXIMATE LOCATIONS BASED ONLY ON ABOVE GROUND EVIDENCE FOUND IN THE FIELD AND AS-BUILT INFORMATION PROVIDED BY THE CLIENT. UTILITIES SHOWN HEREON, WHETHER INDICATED AS ABANDONED OR NOT, SHALL BE VERIFIED BY OTHERS FOR EXACT LOCATION AND/OR DEPTH PRIOR TO EXCAVATION OR DESIGN CONSIDERATIONS.

I.B.M.

AN "X" SCRIBED ON CONCRETE IN THE FLOWLINE OF HOTEL CIRCLE N.E. NEAR THE S.E. CORNER OF THE SITE.

DRAINAGE CERTIFICATION

AS INDICATED BY THE AS-BUILT INFORMATION SHOWN HEREON, THE FRENCH MORTUARY HAS BEEN CONSTRUCTED IN SUBSTANTIAL COMPLIANCE WITH THE APPROVED GRADING PLAN. IT IS BASED UPON THIS EVALUATION THAT ACCEPTANCE OF THIS PROJECT AND ISSUANCE OF A PERMANENT CERTIFICATE OF OCCUPANCY ARE HEREBY RECOMMENDED. THE AS-BUILT INFORMATION HAS BEEN OBTAINED BY ME OR UNDER MY DIRECT SUPERVISION AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



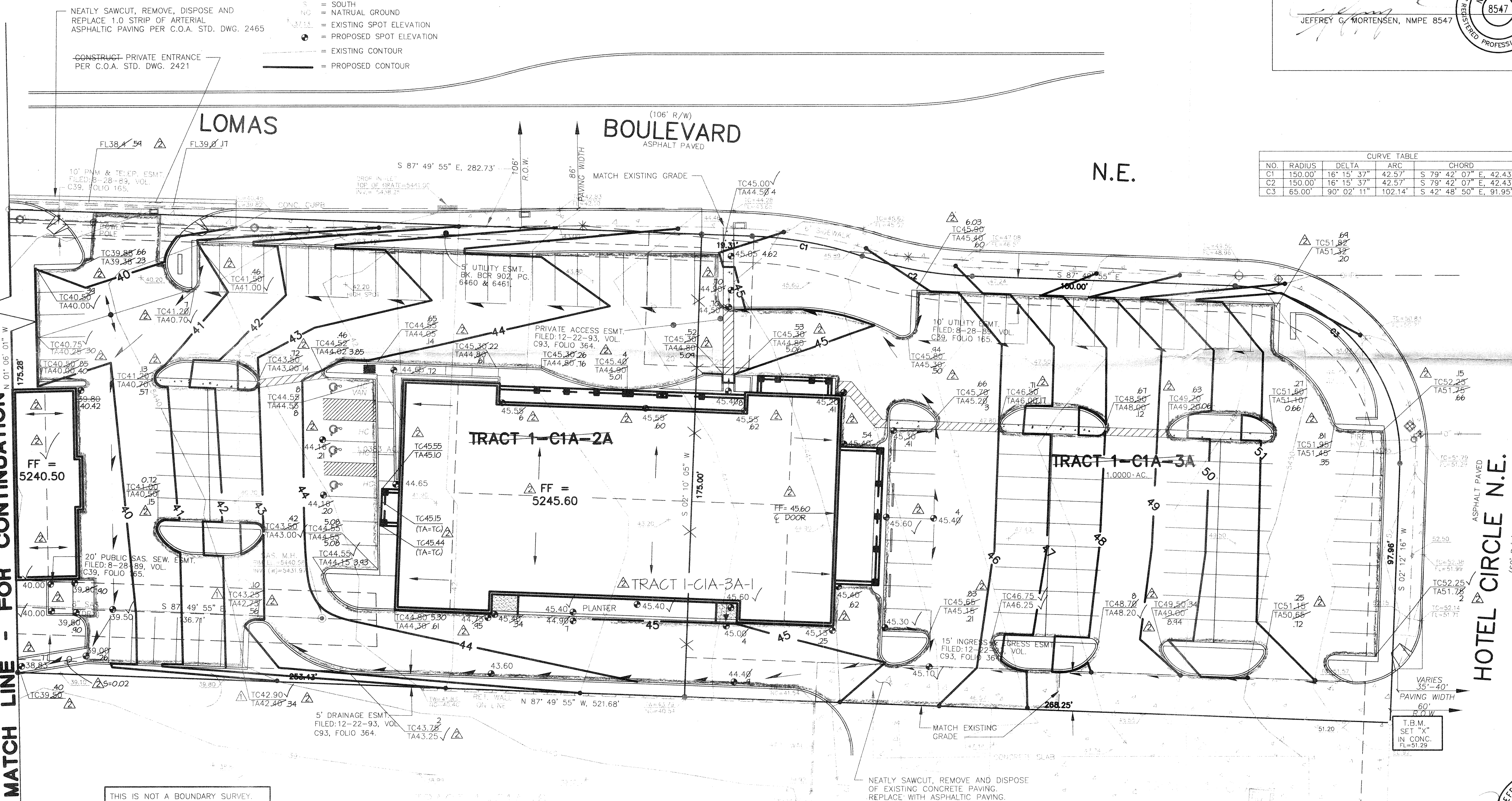
JEFFREY G. MORTENSEN, NMPE 8547

DATE 1-19-96

CURVE TABLE				
NO.	RADIUS	DELTA	ARC	CHORD
C1	150.00'	16° 15' 37"	42.57'	S 79° 42' 07" E, 42.43'
C2	150.00'	16° 15' 37"	42.57'	S 79° 42' 07" E, 42.43'
C3	65.00'	90° 02' 11"	102.14'	S 42° 48' 50" E, 91.95'

SEE SHEET 2

MATCH LINE - FOR CONTINUATION



THIS IS NOT A BOUNDARY SURVEY. APPARENT PROPERTY CORNERS ARE SHOWN FOR INFORMATION ONLY. INFORMATION SHOWN IS BASED ON PLAT OF TOPOGRAPHY BY ANTHONY L. HARRIS DATED APRIL 1995.

NEATLY SAWCUT, REMOVE AND DISPOSE OF EXISTING CONCRETE PAVING. REPLACE WITH ASPHALTIC PAVING.

T.B.M. SET "X" IN CONC. FL=51.29

JAN 2 2 1996 HYDROLOGY DIVISION



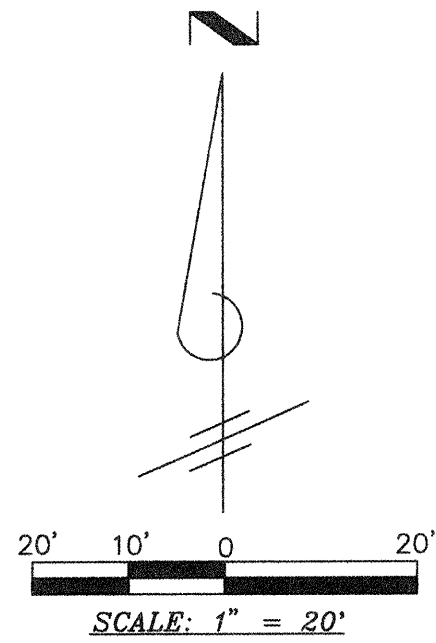
06-19-95



JEFF MORTENSEN & ASSOCIATES, INC.
 600-B MIDWAY PARK N.E.
 ALBUQUERQUE, N.M. 87109
 ENGINEERS & SURVEYORS (505) 345-4250

GRADING AND DRAINAGE PLAN FRENCH MORTUARY - EAST

DESIGNED BY	DATE	BY	REVISIONS		JOB NO.
M.F.D.	8/95	J.G.M.	CORRECT SPOT ELEVATIONS		941252
C.J.H.	1/96	M.F.D.	AS-BUILT AND CERTIFY		DATE 06-1995
J.G.M.					SHEET 1 OF 2

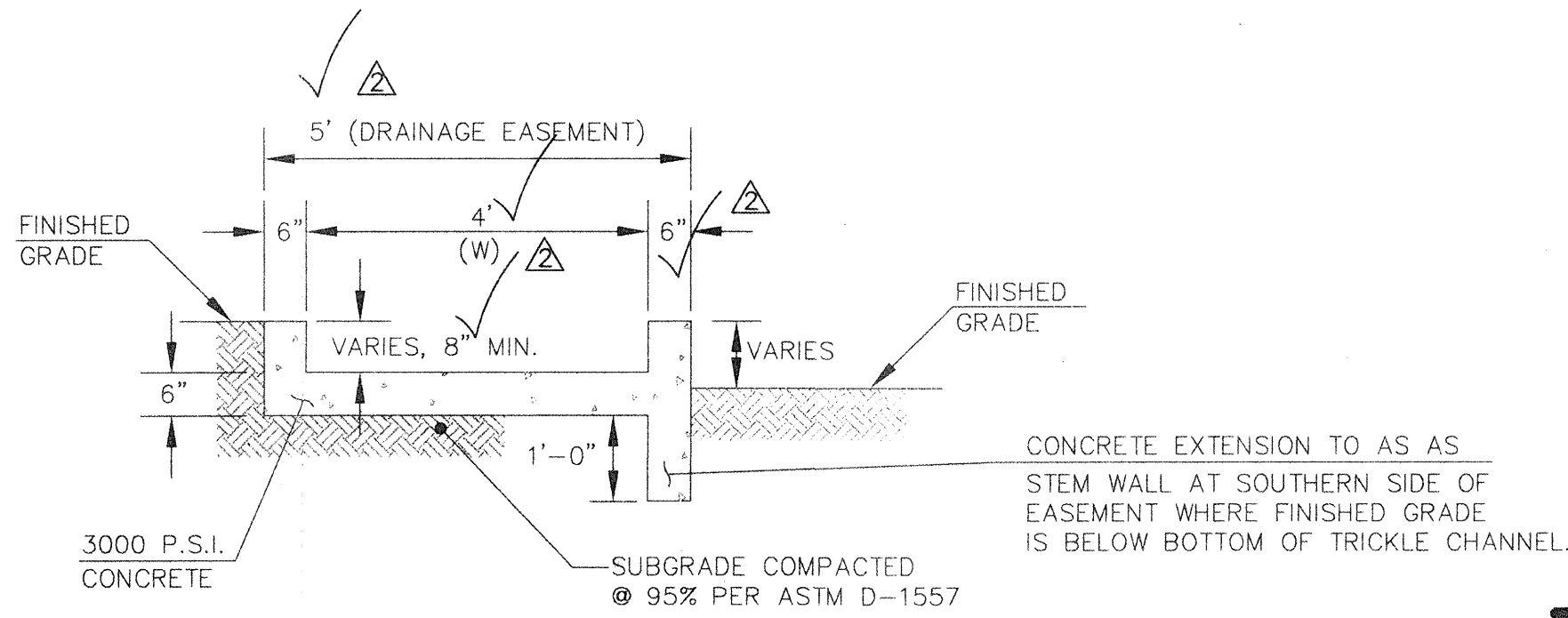


CONSTRUCTION NOTES:

- Two (2) working days prior to any excavation, contractor must contact New Mexico One Call System 260-1990, for location of existing utilities.
- 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 in writing so that the conflict can be resolved with a minimum amount of delay.
- 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.
- All construction within public right-of-way shall be performed in accordance with applicable City of Albuquerque Standards and Procedures.
- 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 construction commences. The engineer has conducted only preliminary investigation of the location, depth, size, or type of existing utility lines, pipelines, or underground utility lines. This investigation is not conclusive, and may not be complete, therefore, makes no representation pertaining thereto, and assumes no responsibility or liability therefor. The contractor shall inform itself of the location of any utility line, pipeline, or underground utility line 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 its failure to locate, identify and preserve any and all existing utilities, 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.
- 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.
- Backfill compaction shall be according to arterial street use.
- Maintenance of these facilities shall be the responsibility of the owner of the property served.
- The design of planters and landscaped areas is not part of this plan. All planters and landscaped areas adjacent to the building(s) shall be provided with positive drainage to avoid any ponding adjacent to the structure. For construction details, refer to landscaping plan.

Erosion Control Measures

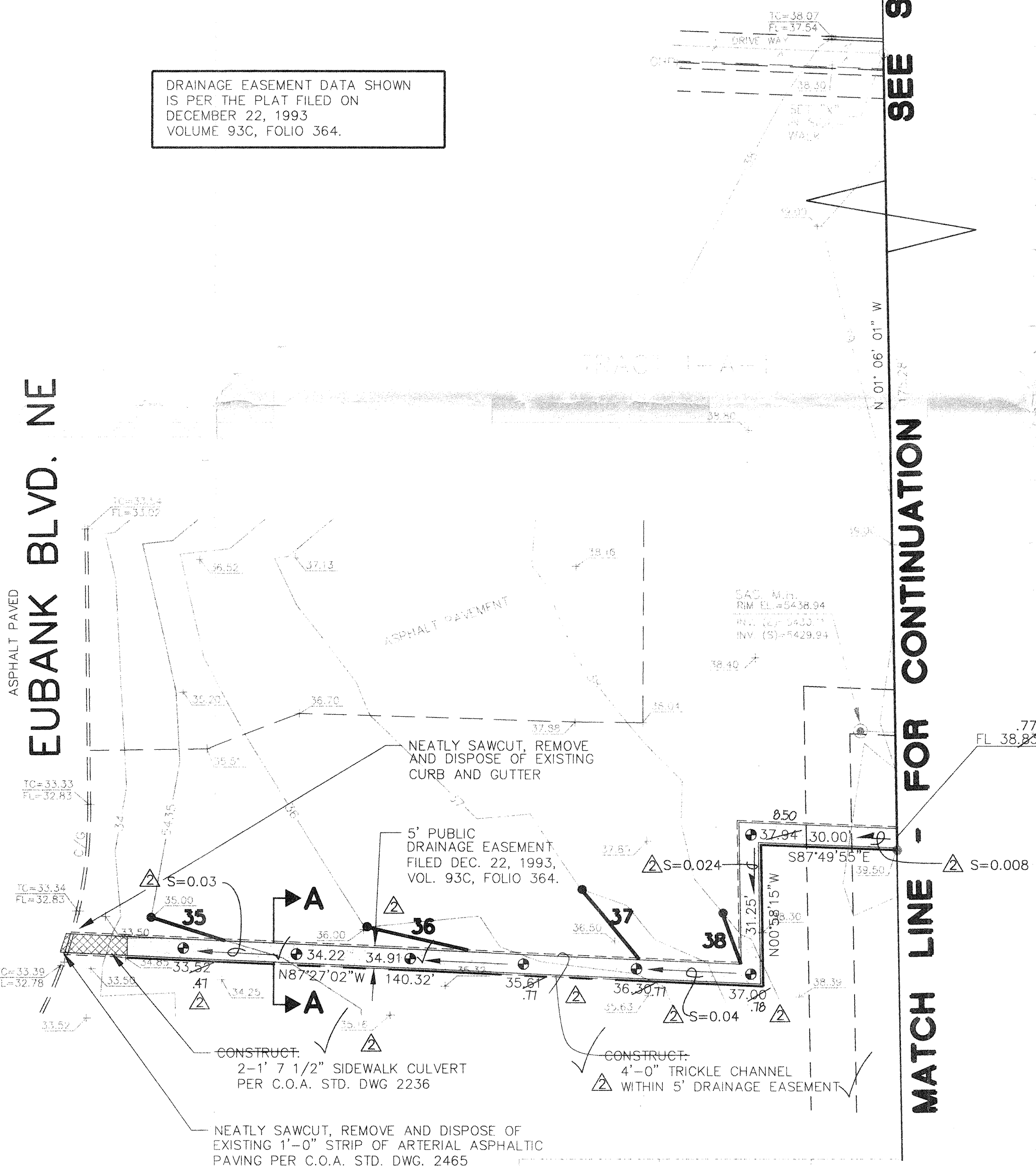
- The contractor shall ensure that no soil erodes from the site into public right-of-way or onto private property.
- The contractor shall promptly clean up any material excavated within the public right-of-way so that the excavated material is not susceptible to being washed down the street.
- The contractor shall secure 'Topsoil Disturbance Permit' prior to beginning construction.



SECTION A-A
SCALE: 1" = 2'-0"

DRAINAGE EASEMENT DATA SHOWN
IS PER THE PLAT FILED ON
DECEMBER 22, 1993
VOLUME 93C, FOLIO 364.

ASPHALT PAVED
EUBANK BLVD. NE



REVISIONS	DATE	BY
1. AS-BUILT	1-24	

SEE SHEET 1
MATCH LINE - FOR CONTINUATION

DRAINAGE PLAN

The following items concerning the Drainage Plan for the French Mortuary - Lomas Boulevard site contained herein:

- Vicinity Map
- Conceptual Grading Plan
- Calculations

As shown by the Vicinity Map, the site is located on the southwest corner of the intersection of Lomas Blvd. N.E. and Hotel Circle N.E. At present, the site is undeveloped. Much of the surrounding area is developed or developing in a commercial character making it an infill site. This site is controlled by Site Plan approval and a previously approved Master Drainage Plan (K21/D16).

As shown on Panel 31 of 50 of the National Flood Insurance Program, Flood Insurance Rate Maps for the City of Albuquerque dated October 14, 1983, this site does not lie in a designated flood hazard zone. The site lies upstream of a Zone A0 (Depth 1') within Eubank Blvd. NE. The above referenced Master Drainage Plan has clearly demonstrated that the free discharge from this site is appropriate. The detention of storm water runoff from this site would merely aggravate the downstream situation as opposed to alleviating the flooding. This is due to the fact the site is located at the downstream end of the contributing watershed. It is in the best interest of the downstream condition, as well as consistent with the previously approved plan, to free discharge from this site to public right-of-way.

The Grading Plan shows: 1) existing grades shown by contours at 2'0" intervals taken from previous topographic survey information provided by the architect, 2) proposed grades indicated by spot elevations and contours at 1'0" intervals, 3) the limit and character of the proposed improvements, and 4) continuity between existing and proposed grades. As shown by this plan, the proposed improvements consist of the construction of a new mortuary building, related facilities, a parking lot, and new landscaped areas. At present, the site drains from east to west toward the southwest corner of the site. An existing 5' private drainage easement created by plat filed December 22, 1993, Vol. 93C, Folio 364, serves this property. It is proposed to continue to drain the site to the southwest corner. This will require that a private drainage channel be constructed within the above referenced easement. Field observation verifies that sufficient grade does exist whereby gravity outfall to Eubank Blvd. NE can be achieved. This will require coordination and cooperation with the adjacent property owner. The private drainage easement, however, is in place and available for use by this project.

The Calculations which appear hereon analyze both the existing and developed conditions for the 100-year, 6-hour rainfall event. The Procedure for 40-acre and Smaller Basins, as set forth in the Revision of Section 22.2, Hydrology of the Development Process Manual, Volume 2, Design Criteria, dated January, 1993, has been used to quantify the peak rate of discharge and volume of runoff generated. As shown by these calculations, the proposed development will result in an increase in runoff generated by the site. The hydraulic capacity of the private drainage channel has been analyzed using the Orifice Equation for the entrance condition and the Manning Equation to evaluate the channel hydraulics. As shown by these calculations, the proposed channel improvements will have adequate hydraulic capacity to serve this site.

CALCULATIONS

Site Characteristics

- Precipitation Zone = 4
 $P_{6,100} = P_{360} = 2.90$ in.
- Total Area (A_T) = 2.03 Acres
- Existing Land Treatment
Treatment Area (sf/ac) %
C 85,240/1.95 96.3
D 3,290/0.08 03.7
- Developed Land Treatment
Treatment Area (sf/ac) %
B 13,020/0.30 14.7
D 75,510/1.73 85.3

Existing Condition

- Volume

$$E_W = (E_A A_A + E_B A_B + E_C A_C + E_D A_D) / A_T$$

$$E_W = [(1.46)(1.93) + (2.64)(0.08)] / (2.03) = 1.51 \text{ in.}$$

$$V_{100} = (E_W / 12) A_T$$

$$V_{100} = (1.51 / 12)(2.03) = 0.2549 \text{ ac.ft.}; 11,100 \text{ cf}$$

- Peak Discharge

$$Q_p = Q_{PA} A_A + Q_{PB} A_B + Q_{PC} A_C + Q_{PD} A_D$$

$$Q_p = Q_{100} = (3.73)(1.95) + (5.25)(0.08) = 7.7 \text{ cfs}$$

Developed Condition

- Volume

$$E_W = (E_A A_A + E_B A_B + E_C A_C + E_D A_D) / A_T$$

$$E_W = [(1.08)(0.30) + (2.64)(1.73)] / (2.03) = 2.41 \text{ in.}$$

$$V_{100} = (E_W / 12) A_T$$

$$V_{100} = (2.41 / 12)(2.03) = 0.4076 \text{ ac.ft.}; 17,755 \text{ cf}$$

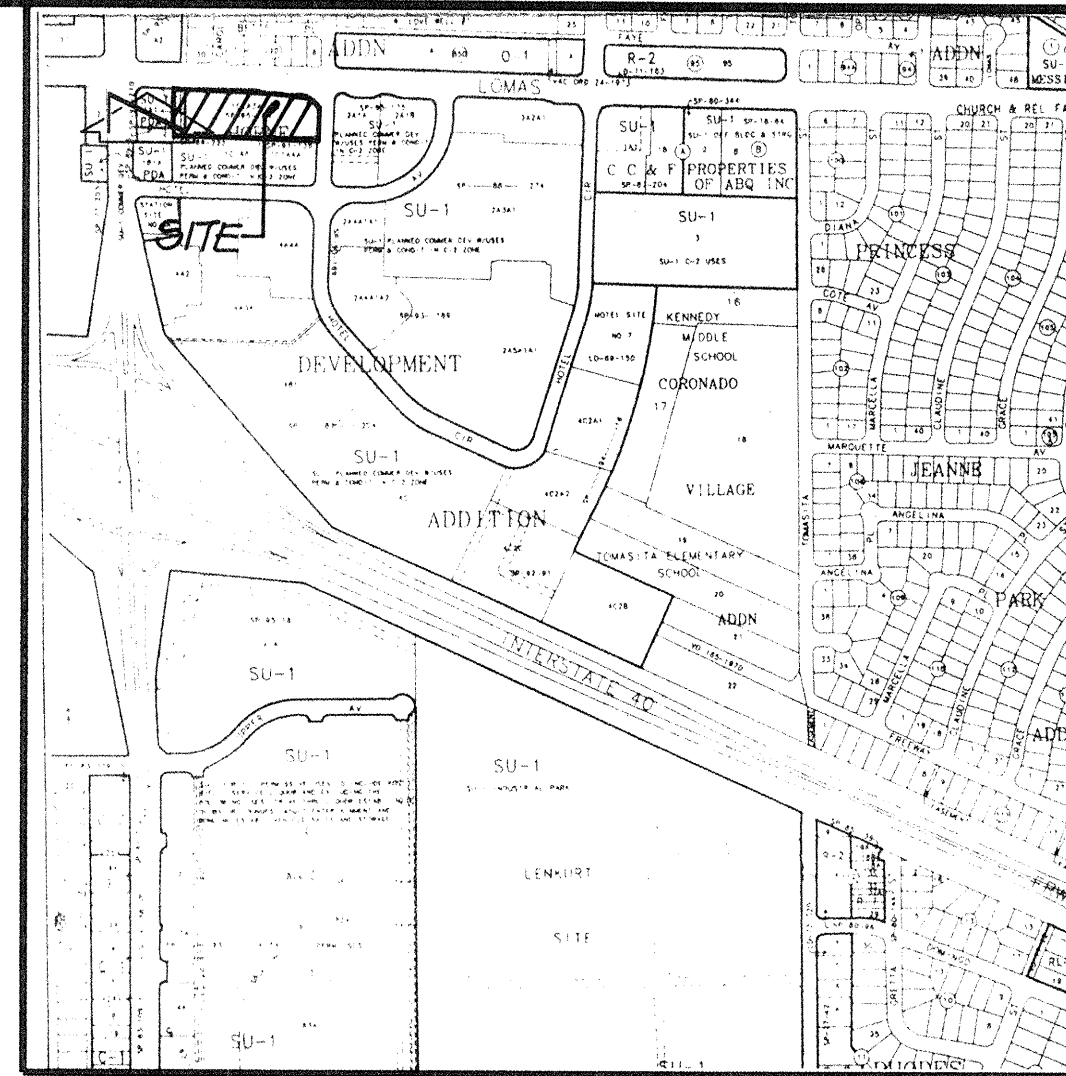
- Peak Discharge

$$Q_p = Q_{PA} A_A + Q_{PB} A_B + Q_{PC} A_C + Q_{PD} A_D$$

$$Q_p = Q_{100} = (2.92)(0.30) + (5.25)(1.73) = 10.0 \text{ cfs}$$

Comparison

- $\Delta V_{100} = 17,755 - 11,100 = 6,655 \text{ cf (increase)}$
- $\Delta Q_{100} = 10.0 - 7.7 = 2.3 \text{ cfs (increase)}$



VICINITY MAP
SCALE: 1" = 750'

K-21

Entrance Hydraulics

$$Q = CA (2gh)^{1/2}$$

Where $Q = 10$ cfs

$$C = 0.6$$

$$A = 0.67 \text{ w}$$

$$g = 32.2 \text{ ft/sec}^2$$

$$h = 0.67$$

Channel Hydraulics

$$Q = (1.49/n) A R^{2/3} S^{1/2}$$

Where $n = 0.013$

$$A = 0.67(4) = 2.68 \text{ sf}$$

$$p = 0.67 + 4 + 0.67 = 5.34 \text{ ft}$$

$$R = A/p = 0.50;$$

$$R^{2/3} = 0.63$$

$$S = 0.0065 \text{ min. (onsite)}$$

$$Q_{\text{capacity}} = 15.6 \text{ cfs} < Q_{100}$$

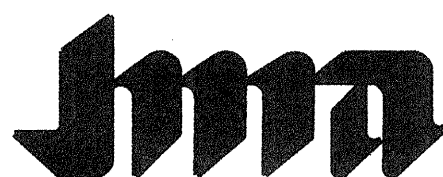
DRAINAGE CERTIFICATION

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JEFFREY G. MORTENSEN, NMPE 8547
DATE 06-19-95

RECEIVED
JAN 22 1996
HYDROLOGY DIVISION

JEFFREY G. MORTENSEN, NMPE 8547
DATE 06-19-95



JEFF MORTENSEN & ASSOCIATES, INC.
600-3 MIDWAY PARK BLVD. NE
ALBUQUERQUE, N.M. 87109
ENGINEERS SURVEYORS (505) 345-4250

GRADING AND DRAINAGE PLAN - WEST FRENCH MORTUARY

DESIGNED BY	NO.	DATE	BY	REVISIONS	JOB NO.
M.F.D.	1	1/96	M.F.D.	AS-BUILT AND CERTIFY	941252
C.J.H.					DATE 06-1995
J.G.M.					SHEET 2 OF 2