

City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

May 16, 1995

**Donald S. Dixon, PE
Resource Technology, Inc
2129 Osuna Road NE Suite 200
Albuquerque, NM 87113**

**RE: ENGINEER'S CERTIFICATION FOR CHAPARRAL COURTYARD (F21-D61)
RECEIVED MAY 3, 1995 FOR SUBDIVISION CERTIFICATION
ENGINEER'S STAMP DATED 4/28/95**

Dear Mr. Dixon:

Based on the information included in the submittal referenced above, City Hydrology accepts the Engineer's Certification of grading & drainage and releases the Financial Guaranty for City Project Number 4774.90 & 4774.91. Contact the DRC Chairman, Billy Goolsby, for the actual Financial Guaranty Release.

If I can be of further assistance, You may contact me at 768-2727.

Sincerely,

**John P. Curtin, P.E.
Civil Engineer/Hydrology**

**c: Andrew Garcia
Billy Goolsby, CPN 4774.91
Curtis Bryant, Chaparral Corporation, 9311 Candelaria NE 87112**

DRAINAGE INFORMATION SHEET

PROJECT TITLE: Chaparral Courtyards ZONE ATLAS/DRNG. FILE #: F-21/D61
DRB #: 93-149 EPC #: _____ WORK ORDER #: 4774.91
LEGAL DESCRIPTION: Chaparral Courtyard Subdivision SW $\frac{1}{4}$ of SW $\frac{1}{4}$, Sec. 33 T.11N, R.4E. NMPM
CITY ADDRESS: Lagrima de Oro Pitt St. NE
ENGINEERING FIRM: Resource Technology, Inc. CONTACT: Donald S. Dixon, PE
ADDRESS: 2129 Osuna Rd. NE, Alb. NM PHONE: 345-3115
OWNER: Chaparral Corporation CONTACT: Curtis Bryant
ADDRESS: 9311 Candelaria NE, Alb. NM PHONE: 296-0711
ARCHITECT: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____
SURVEYOR: Southwest Surveying CONTACT: Frank Wilson
ADDRESS: 333 Lomas Blvd. NE, Alb. NM PHONE: 247-4444
CONTRACTOR: Chaparral Corporation CONTACT: Curtis Bryants
ADDRESS: 9311 Candelaria, NE, Alb. NM PHONE: 296-0711

TYPE OF SUBMITTAL:

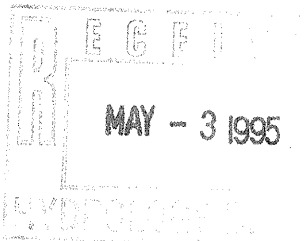
____ DRAINAGE REPORT
____ DRAINAGE PLAN
____ CONCEPTUAL GRADING & DRAINAGE PLAN
____ GRADING PLAN
____ EROSION CONTROL PLAN
X ENGINEER'S CERTIFICATION
____ OTHER _____

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
X SUBDIVISION CERTIFICATION
____ OTHER _____ (SPECIFY)

PRE-DESIGN MEETING:

____ YES
____ NO
____ COPY PROVIDED



DATE SUBMITTED: 4/26/95

BY: Donald S. Dixon, P.E.



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

November 30, 1994

Curtis Bryant
Chaparral Corp.
9311 Candelaria NE
Albuquerque, NM 87112

10. SV-94-64 Curtis Bryant, agent for Chaparral Corp., request a
 DRB-93-149 Sidewalk Variance for Lots 10, 11, 13, 14, 15, 16 and 18
 (S-93-34) through 27 Chaparral Courtyards zoned SU-1 (City) and
 located on the northeast corner of Pitt NE and La Grigma De
 Oro NE. (F-21)

At the November 29, 1994, Development Review Board meeting, a Sidewalk Variance for temporary deferral of installation of sidewalks for interior streets was approved with sidewalks to be constructed at the earlier of the two following dates:

- A. When a structure is constructed on a lot, on a lot by lot basis, or
- B. Four years following execution of the Subdivision Improvements Agreement, whichever comes first.

Handicap ramps may not be deferred. Financial guarantees for sidewalks will be required.

If you have any questions, please call me at 768-3860.

Jack Cloud, Chairman
Development Review Board

cc: Traffic Engineering
City Engineering
Public Works, Transportation Planning, 5th Floor
LyndaMichelle DeVanti, Public Works Department, 4th Floor
File

RECEIVED
MAY - 3 1995



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

November 30, 1993

Don Dixon, P.E.
Resource Technology Inc.
2129 Osuna NE Suite 200
Albuquerque, N.M. 87113

RE: GRADING, & DRAINAGE PLAN FOR CHAPARRAL COURTYARD (F21/D61)
ENGINEER'S STAMP DATED 11/18/93; RECEIVED NOVEMBER 29, 1993
FOR WORK ORDER & FINAL PLAT APPROVAL

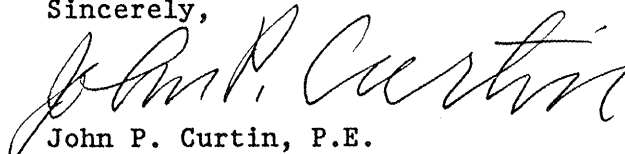
Dear Mr. Dixon:

Based on the information included in the submittal referenced above, City Hydrology APPROVES this project for Work Order & Final Plat.

Engineer's Certification of grading & drainage per DPM checklist on page 111 must be approved before the Financial Guaranty will be released.

If you have any questions about this project, you may contact me at 768-2727.

Sincerely,



John P. Curtin, P.E.
Civil Engineer/Hydrology

xc: Fred Aguirre
Alan Martinez

WPHYD/7793/jpc

PUBLIC WORKS DEPARTMENT

DRAINAGE INFORMATION SHEET

PROJECT TITLE: CHAPARRAL Courtyard, ZONE ATLAS/DRAINAGE FILE # F21/D61

LEGAL DESCRIPTION: SW 1/4 of SW 1/4 Section 33 T11N, R4E NMPM

CITY ADDRESS: Lagrima de Oro + Pitt St. NE

ENGINEERING FIRM: Resource Technology Inc CONTACT: Don Dixon

ADDRESS: 2129 OSUNA NE #200 87113 PHONE: 345-3115

OWNER: Conti's Bryant CONTACT: _____

ADDRESS: _____ PHONE: 296-0711

ARCHITECT: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

SURVEYOR: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

CONTRACTOR: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

PRE-DESIGN MEETING:

☒ YES

☐ NO

☐ COPY OF CONFERENCE
RECAP SHEET PROVIDED

DRB. NO. 93-149

EPC NO. _____

PROJECT NO. 4774.90

TYPE OF SUBMITTAL:

☐ DRAINAGE REPORT

☒ DRAINAGE PLAN

☐ CONCEPTUAL GRADING & DRAIN PLAN

☒ GRADING PLAN

☒ EROSION CONTROL PLAN

☐ ENGINEER'S CERTIFICATION

CHECK TYPE OF APPROVAL SOUGHT:

☐ SECTOR PLAN APPROVAL

☐ SKETCH PLAT APPROVAL

☒ PRELIMINARY PLAT APPROVAL

☐ SITE DEVELOPMENT PLAN APPROVAL

☐ FINAL PLAT APPROVAL

☐ BUILDING PERMIT APPROVAL

☐ FOUNDATION PERMIT APPROVAL

☐ CERTIFICATE OF OCCUPANCY
APPROVAL

☒ ROUGH GRADING PERMIT APPROVAL

☐ GRADING/PAVING PERMIT APPROVAL

☐ OTHER _____ (SPECIFY)

DATE SUBMITTED: 10/18/93

BY: Donald S. Dineen

PROJECT TITLE: Chaparral Courtyards ZONE ATLAS/DRNG. FILE #: F-21/0 ⁶¹

DRB #: _____ EPC #: 293-77 WORK ORDER #: _____

LEGAL DESCRIPTION: N 1/2 SE 1/4 NE 1/4 SW 1/4 SW 1/4 & S 1/2 SE 1/4 NE 1/4 SW 1/4 SW 1/4
Sec 33 T11N R11E AM PM

CITY ADDRESS: Pitt And Laguna Dr Dec NE

ENGINEERING FIRM: Resource Technology CONTACT: Elviedo Dinez
OR Don Dixon

ADDRESS: 2129 Osuna NE PHONE: 345-3115

OWNER: Curtis Bryant CONTACT: Curtis Bryant

ADDRESS: 9311 Candelaria NE PHONE: 931-296-0211

ARCHITECT: Max Cabber CONTACT: max Cabber

ADDRESS: _____ PHONE: 292-0216

SURVEYOR: Southwest Survey CONTACT: Frank Wilson

ADDRESS: Lomas NE PHONE: 247-4144

CONTRACTOR: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

TYPE OF SUBMITTAL:

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

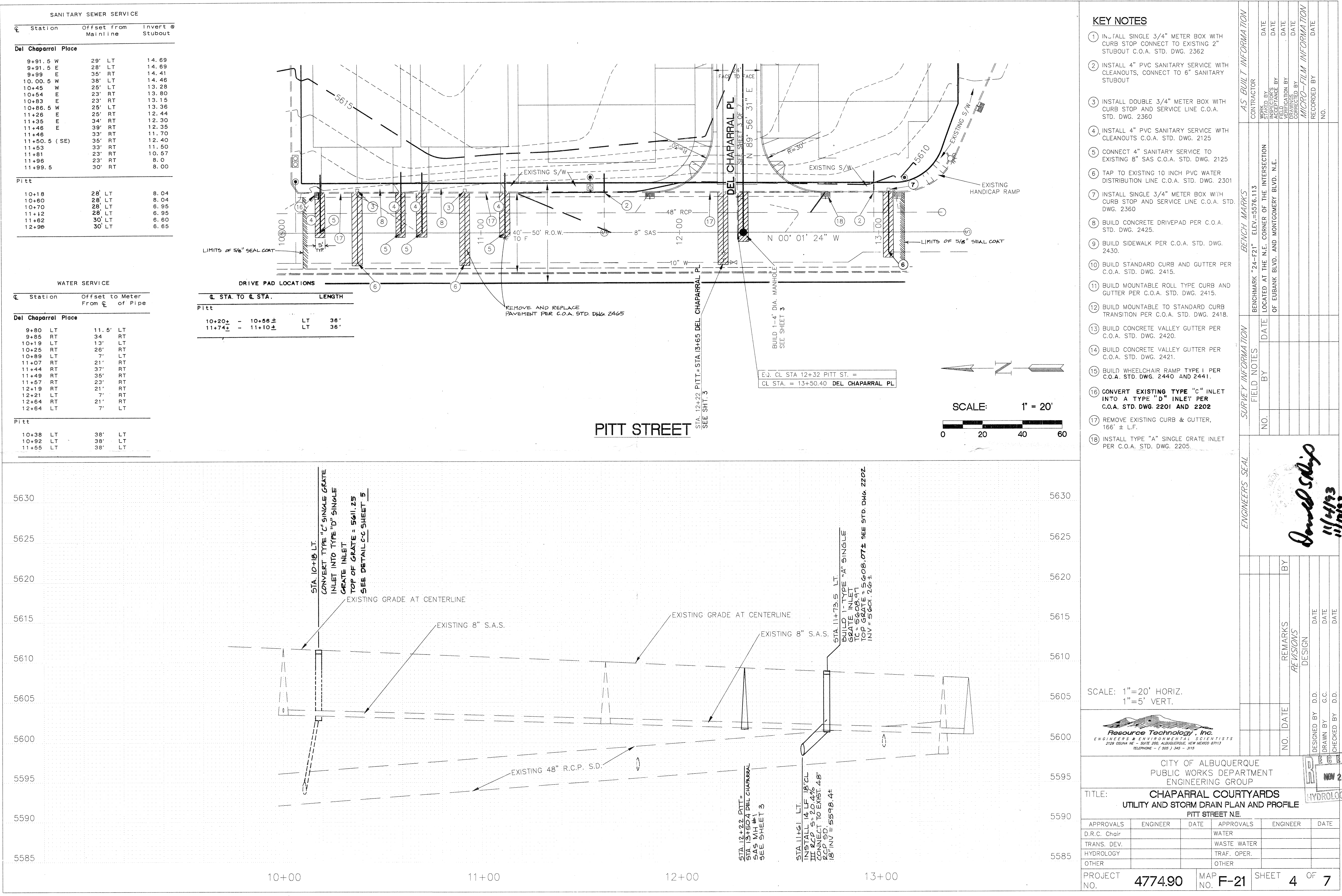
PRE-DESIGN MEETING:

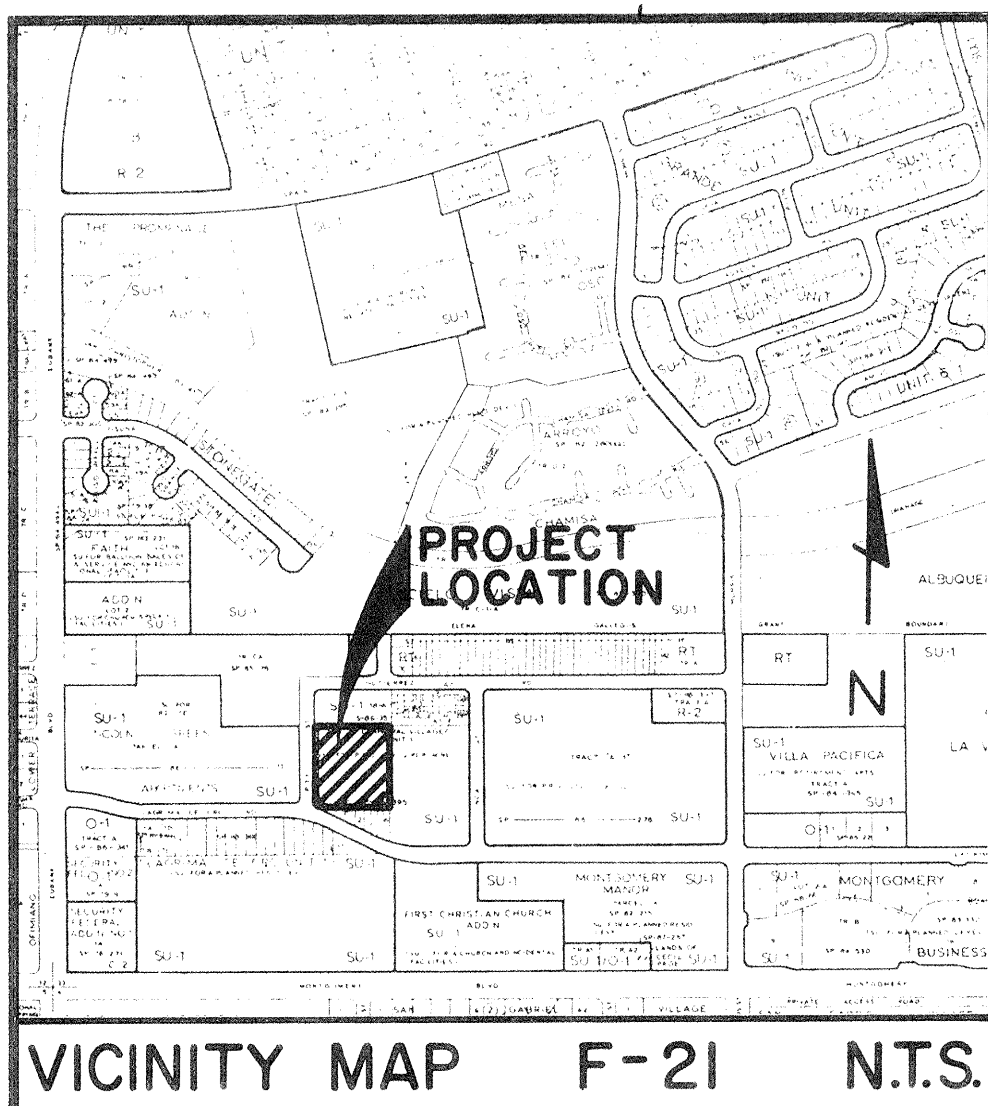
- ☒ YES
- ☐ NO
- ☐ COPY PROVIDED

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)

DATE SUBMITTED: 6/8/93BY: Curtis Bryant





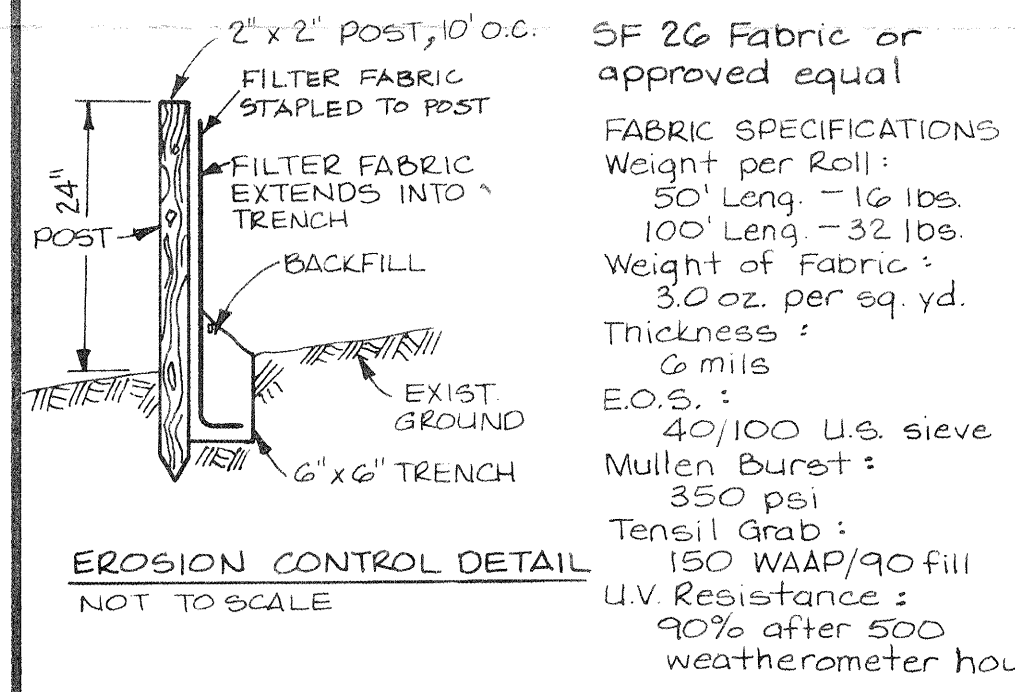
CATCH BASIN CAPACITY CALCULATIONS

THE METHODS PRESENTED IN FHWA "DRAINAGE OF HIGHWAY PAVEMENTS" (1984) WERE USED FOR CATCH BASIN CALCULATIONS. RESULTS ARE SUMMARIZED BELOW.

CB NO. & TYPE	D (CFS)	CAPACITY (CFS)	CARRYOVER (CFS)
EXISTING			
1, TYPE C	3.0*	2.37	.63
2, TYPE C	5.73	3.77	1.96
4, TYPE C	7.06	4.31	2.75
PROPOSED			
1, TYPE D	3.0*	1.54	1.46
2, TYPE C	2.48	2.06	.42
3, TYPE A	9.59	6.66	2.93
4, TYPE C	2.53	2.40	.13

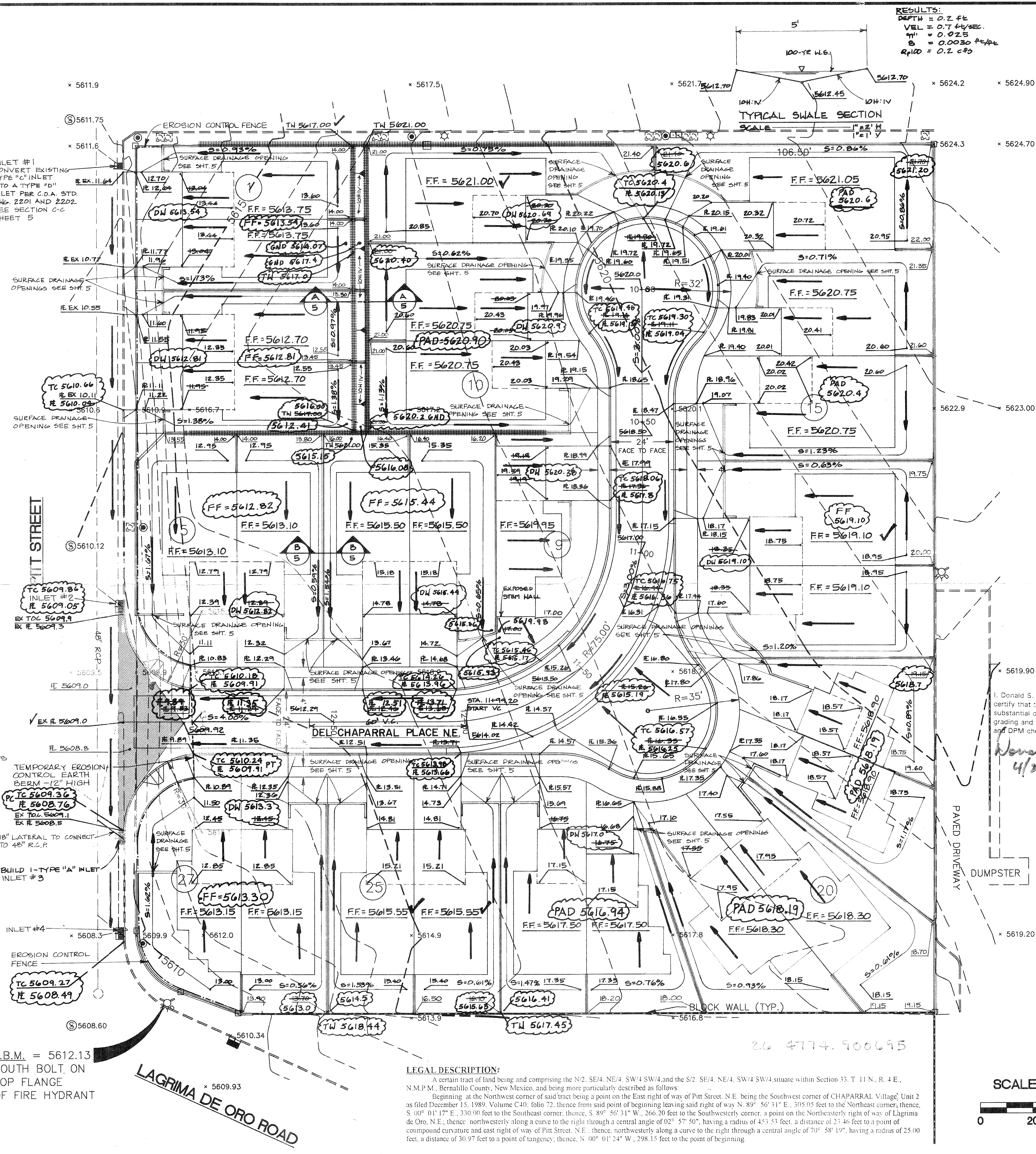
* ASSUMED OFFSITE STREET FLOW FROM UPSTREAM

TOTAL EXISTING CAPACITY: 10.45 CFS
TOTAL PROPOSED CAPACITY: 12.66 CFS
INCREASE +/DECREASE: +2.21 CFS



BENCHMARK:
T.B.M. IS TIED TO BENCHMARK "24" LOCATED AT THE NE CORNER OF THE INTERSECTION OF EUBANK BLVD AND MONTGOMERY BLVD. N.E.
ELEVATION = 5576.113, FIRST CORNER

- LEGEND**
- Fire Hydrant
 - Light Pole
 - Manhole
 - Telephone Riser
 - Transformer
 - TV Riser
 - Water Meter
 - Erosion Control Fence
 - Temporary Erosion Control Earth Berm
 - Retaining Wall
 - Block Wall



RESULTS:
DEPTH = 0.2 FT
VEL = 0.744 SEC.
M = 0.025
S = 0.0030 FT/FT
R₁₀₀ = 0.2 CFS

SITE DESCRIPTION
Existing Condition: The property at the N.E. Quadrant of the intersection of Pitt Street & La Grima De Oro Road is currently undeveloped. The existing ground cover consists of native weeds with steep slopes. The site slopes from the northeast to the southwest with approximately 15 foot of relief across the extent of the property. The existing runoff discharges into Pitt Street and into an existing drop inlet downstream of this site.

OFF-SITE FLOWS: None

Future Condition: Future development will consist of a new 27 dwelling unit subdivision. There will be an asphalt residential street added with associated sidewalks and landscaping. There will also be a new 5'6" concrete masonry unit wall added along all property lines of the subdivision. The on-site flow on each of the lots will be intercepted by a sod lined swale draining through the new 5'6" C.M.U. wall and onto Chaparral Court Street. NE Chaparral Court Street is draining onto Pitt Street where a new type "A" inlet will be constructed to intercept flows from this site. A Type D inlet will replace a Type C inlet on Pitt where the existing inlet conflicts with a proposed driveway. The new Type A inlet plus the Type D inlet will increase the total interception capacity of the storm drain by approximately 1.0 cfs. The total runoff from this site is within the limits anticipated by the SAD 204 storm drain project.

Q_p (SAD 204) = 9.57 cfs; Q_p (this analysis) = 10.17 cfs. The slight increase in runoff will be accommodated by the additional inlet and will have computed effect on the hydraulic grade line.

DRAINAGE CALCULATIONS
100 year P60 = 2.17 inches
Area = 2.3 Acres

Existing Conditions
Off-site flow: 0 (approx.)
On-site flow: Land Treatment Conditions
50% A
50% C

Q_p = 2.3 acres * (0.5(2.20 cfs/acre) + 0.5 (3.73 cfs/acre)) = 6.8 cfs

Future Conditions
Off-site flow: 0 (approx.)
On-site flow: Land Treatment Conditions
15% B
15% C
70% D

ANYMO SUMMARY TABLE
ANYMO SUMMARY TABLE (ANYMO93) - ANYMO VERSION OF HYMO - SEPTEMBER, 1993
USER: NO. 1, JSTEWART, J01
RUN DATE (MM/DD/YY): 04/09/1993
USERS: NO. 1, JSTEWART, J01

COMMAND	IDENTIFICATION	FROM NO.	TO NO.	AREA (SQ. FT.)	PEAK DISCHARGE (CFS)	RUNOFF VOLUME (AC-FT)	RUNOFF (INCHES)	TIME TO PEAK (HOURS)	CFS PER ACRE	NOTATION
RAINFALL	TYPE 1	100.00	-	1	0.00360	10.19	.384	1.9957	1.500	4.423 PER IMP = 70.00
COMPUTE	NR HYD									

EROSION CONTROL PLAN
1. Upon the completion of rough grading, erosion control fence and berms shall be maintained by the Contractor to control site runoff. The berm on Chaparral Court shall divert flows in unpaved street to areas behind erosion control fence. As site development takes place it may be necessary for the Contractor to modify fence/berm locations.
2. Erosion control plan shall be maintained until all drainage improvements, grading, paving and landscape improvement have been made.

APPROVED FOR ROUGH GRADING
John A. Carter
DATE 10-21-93

UTILITIES AND STORM DRAINS ONLY

CHAPARRAL COURTYARDS GRADING and DRAINAGE PLAN

DESIGNED BY: DD.GC. DRAWN BY: GC. CHECKED BY: DD. DATE: 5/2/93

JOB NO. 93 - 160
SHEET NO. 6 of 7