·LEGEN		
MATERIALS		
CONCRETE		
RIP · RAP		
LINES		
SUBDIVISION BOUNDARY		
PROPERTY LINE (PLAN)		
PROPERTY LINE (SECTION)		
CENTERLINE		
EASEMENT LINE	=	
MATCH LINE		Α
SECTION CUT LINE		
EARTHWORK	EXISTING	NEW
CONTOUR LINE	25	 25
SPOT ELEVATION	\oplus	*
PROJECT / PHASE BOUNDARY		
SWALE	a a .	
DIRECTION OF FLOW		
MISCELLANEOUS UTILITIES		
GAS LINE	6	
UNDERGROUND TELEPHONE	— — UT — —	
UNDERGROUND ELECTRICAL	UE	
STORM DRAIN	——so——	\$0
STORM DRAIN MANHOLE		
STORM DRAIN INLET		
SANITARY SEWER		
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SANITARY SEWER MANHOLE		
SAS SERVICE CONNECTIONS		
SAS CAP OR PLUG	——— —	
ENCASEMENT	-===}-	
WATER		
WATER LINE	—— ₩ ——	
WATER SERVICE CONNECTIONS	_ПI_	
GATE VALVE	——₩——	—
FIRE HYDRANT		
BUTTERFLY VALVE	—- ø	
REDUCER		
WATER PRESSURE ZONE BOUNDARY		
WATER FITTINGS	١	
CAPS AND PLUGS		
ELBOW	ŧ₊_ - ‡ -	ŧ⊷ ⊸≛∽
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TEE	I	•
MISCELLANEOUS		
CHAINLINK FENCE	•	
FIELD FENCE	- -, , - - ★	× × × -
COMMON YARD WALL		
RETAINING WALL		· · ·
POWER OR TELEPHONE POLE	O	

CONSTRUCTION PLANS

FOR

BELL PARK VILLA

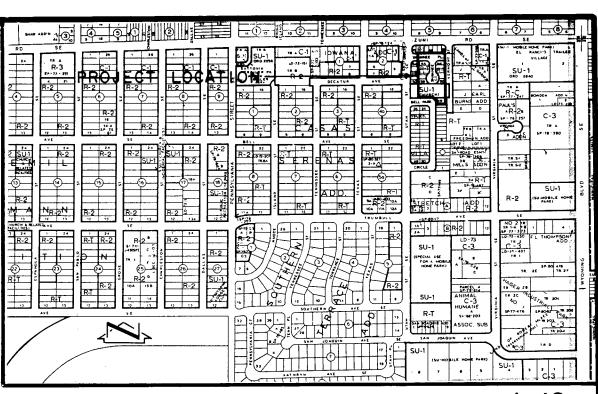
ALBUQUERQUE, NEW MEXICO AUGUST 1986

INDEX OF DRAWINGS

DESCRIPTION

520	
SHEET NO.	TITLE
١,	TITLE, LEGEND, VICINITY MAP, GENERAL NOTES, INDEX OF DRAWINGS
2.	FINAL PLAT
3.	GRADING PLAN (FOR INFORMATION ONLY)
4.	UTILITY PLAN & PROFILE

PAVING PLAN & PROFILE

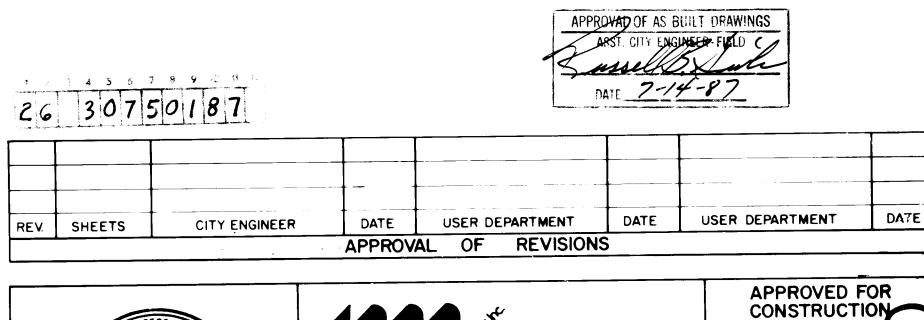


VICINITY MAP

<u>L-19</u>

GENERAL NOTES:

- 1. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE INTERIM STANDARD SPECIFICATIONS PUBLIC WORKS CONSTRUCTION 1985.
- 2. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, 765-1234, FOR LOCATION OF EXISTING UTILITIES.
- 3. 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 UNDERTAKEN NO FIELD VERIFICATION OF THE LOCATION, DEPTH, SIZE, OR TYPE OF EXISTING UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES, 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.
- 4. SHOULD A CONFLICT EXIST BETWEEN THESE PLANS AND ACTUAL FIELD CONDITIONS, THE CONTRACTOR SHALL PROMPTLY NOTIFY THE ENGINEER IN WRITING SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY FOR ALL PARTIES.
- 5. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ADJACENT PROPERTIES DURING CONSTRUCTION.
- 6. 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.
- 7. THE CONTRACTOR MUST SUBMIT A CONSTRUCTION SIGNING AND BARRICADING PLAN TO TRAFFIC ENGINEERING TO RECEIVE A BARRICADING PERMIT 48 HOURS PRIOR TO CONSTRUCTION.
- 8. ALL UTILITIES AND UTILITY SERVICE LINES SHALL BE INSTALLED PRIOR TO PAVING.
- 9. BACKFILL COMPACTION SHALL BE ACCORDING TO SPECIFIED STREET USE.
- 10. TACK COAT REQUIREMENTS SHALL BE DETERMINED BY THE CITY ENGINEER.
- 11. SIDEWALKS AND WHEELCHAIR RAMPS WITHIN THE CURB RETURNS SHALL BE CONSTRUCTED WHEREVER A NEW CURB RETURN IS CONSTRUCTED.
- 12. IF CURB IS DEPRESSED FOR A DRIVEPAD OR A HANDICAP RAMP,
 THE DRIVEPAD OR RAMP SHALL BE CONSTRUCTED PRIOR TO
 ACCEPTANCE OF THE CURB AND GUTTER.
- 13. ALL STORM DRAINAGE FACILITIES SHALL BE COMPLETED PRIOR TO FINAL ACCEPTANCE.







APPROVED FOR CONSTRUCTION

3075

SHEET I OF 5

and Lot 62-A, plus dedicate additional public right-of-way and grant additional easements as

811 DALLAS, N.E. • ALBUQUERQUE • NEW MEXICO • 87110

JOB NO. 61081

ENGINEERS

shown hereon.

OF

O

SUBDIVISION PLAT OF BELL PARK VILLA TOWNHOUSES, UNIT 2 A REPLAT OF

LOTS 19, 57-62, VACATED PUBLIC RIGHT-OF-WAY IN SHAWNEE COURT S.E., AND THE ADJOINING UNPLATTED PARCEL BELL PARK VILLA TOWNHOUSES ALBUQUERQUE, NEW MEXICO JULY, 1986

DESCRIPTION

A certain tract of land located within the Corporate Limits of the City of Albuquerque, comprising Lots 19, 57 through 62, a portion of Shawnee Court S.E., vacated by V-86-104, and the adjoining unplatted parcel of land, Bell Park Villa Townhouses, as shown on the plat filed in the Office of the County Clerk of Bernalillo County, New Mexico on July 25, 1983, Book C-21, Page 164, and being more particularly described as follows:

Beginning at the northeast corner of the parcel herein described, being the northeast corner of said Lot 62, and also being a point on the west rightof-wav line of Vermont Street S.E.; thence S 00°31'00" W a distance of 267.65 feet along said right-of-way line; thence N 89°29'00" W a distance of 79.00 feet to a point on the east right-of-way line of Bell Park Circle S.E.; thence N 00°31'00" E a distance of 14.55 feet along said right-of-way line; thence along the arc of a curve to the left with DELTA = 90°15'00", R = 25.00 feet, and L = 39.38 feet along said right-of-way line; thence N 89°44'00" W a distance of 174.63 feet along said right-of-way line to a point on the east right-of-way line of Utah Street S.E.; thence N 00°31'00" E a distance of 110.00 feet along said right-of-way line; thence S 89°44'00" E a distance of 76.87 feet; thence N 00°31'00" E a distance of 42.00 feet; thence N 02°57'59" E a distance of 32.03 feet; thence N 00°31'00"E a distance of 44.00 feet; thence S 89°29'00" E a distance of 99.50 feet to the centerline of Shawnee Court S.E.; thence N 00°31'00" E a distance of 0.53 feet along said centerline; thence S 89°29'00" E a distance of 101.00 feet to the point of beginning and containing 1.3234 acres more or less.

JEDICATION and FREE CONSENT The undersigned owners of the land shown hereon do hereby consent to the subdivision of said land in the manner shown on this plat and do hereby dedicate the rights-of-way and grant the easements shown including the rights of ingress and egress and the right to trim intering traces. LOT 62, JOHN DUFAY LOT 19, ANNA MARIE ELISABETH PALMEI LOT 51-61, AND EASTERLY PORTION OF UNPLATTED PARCEL

ACKNOWLEDGEMENT

COUNTY OF BERNALILLO) 1-17-90

C 33

STATE OF NEW MEXICO

Cityof Albuquerque, N.M.

ager, City of Albuquerque, N.M. 9-24-86

I, Thomas T. Mann, Jr., a registered Land Surveyor under the laws of the State of New Mexico, do hereby certify that this plat was prepared by me or under my supervision; shows all easements noted in a title report prepared by <u>SOUTHWEST GUARANTY & TITLE CO.</u>

JULY 1,1986(GF NO.5105 MD-Se) : meets th

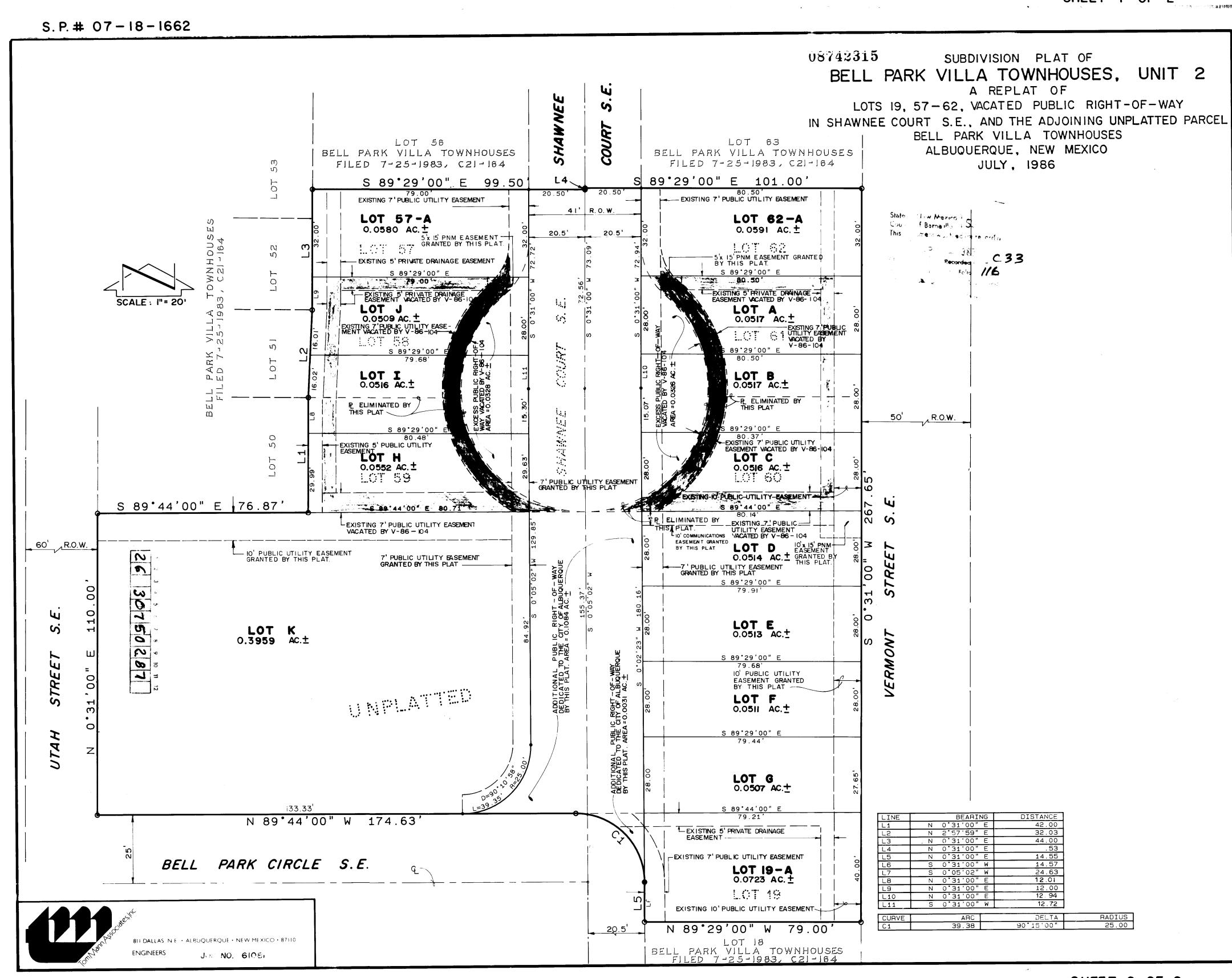
knowledge and belief.▲

requirements of monumentation and surveys of the Albuquerque

ACKNOWLEDGEMENT STATE OF NEW MEXICO COUNTY OF BERNALILLO 1-17-90

m. Cle

SHEET 1 OF 2



L-19

VICINITY MAP

SCALE : 1" = 800'

CONSTRUCTION NOTES:

1. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE 765-1234, 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 NOTTEY 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
- 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 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, 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. 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
- 6. BACKFILL COMPACTION SHALL BE ACCORDING TO ARTERIAL STREET USE.
- MAINTENANCE OF THE 4" PVC CURB DRAIN ON SHAWNEE PLACE S.E. AS SHOWN HEREON SHALL BE THE RESPONSIBILITY OF THE OWNER OF LOTS 62A, 63, AND 64, BELL PARK VILLA.

EROSION CONTROL MEASURES

CONSTRUCTION.

FACILITIES.

- 1. 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 PERMIT" PRIOR TO BEGINNING

NOTICE 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 hereon, be constructed in accordance with the City of Albuquerque Interim Standard Specifications - Public Works Construction - 1985.
- 3. Two (2) working days prior to any excavation, contractor must contact Line Locating Service, 765-1234, for location of existing utilities.
- Prior to construction, the contractor shall excavate and verify the horizontal and vertical locations 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. Backfill compaction shall be according to RESIDENTIAL
- 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	,	

- LEGEND

EXISTING SHOT ELEVATION PROPOSED CONTOUR

T.C.8G.50

F.L.8G.00

PRIVATE DRAIN SYSTEM FOR LOTS

EXISTING CONTOUR _-5386--

TOP OF CURB ELEVATION FLOW LINE ELEVATION

PROPOSED SPOT ELEVATION The following items concerning the Bell Park Villa Drainage Plan are contained hereon: 1. Vicinity Map 2. Grading Plan

As depicted by the Vicinity Map, the proposed improvements are located at Shawnee Court S.E., east of Utah Street and south of Zuni Road. This site is described specifically as Lot 19, Lot 57 through 62, and the unplatted tract (existing church site) Bell Park Villa. This site is presently undeveloped and it is proposed that Shawnee Court S.E. be extended southward to Bell Park Circle S.E. in order to serve this subdivision. The area surrounding the proposed subdivision is fully developed.

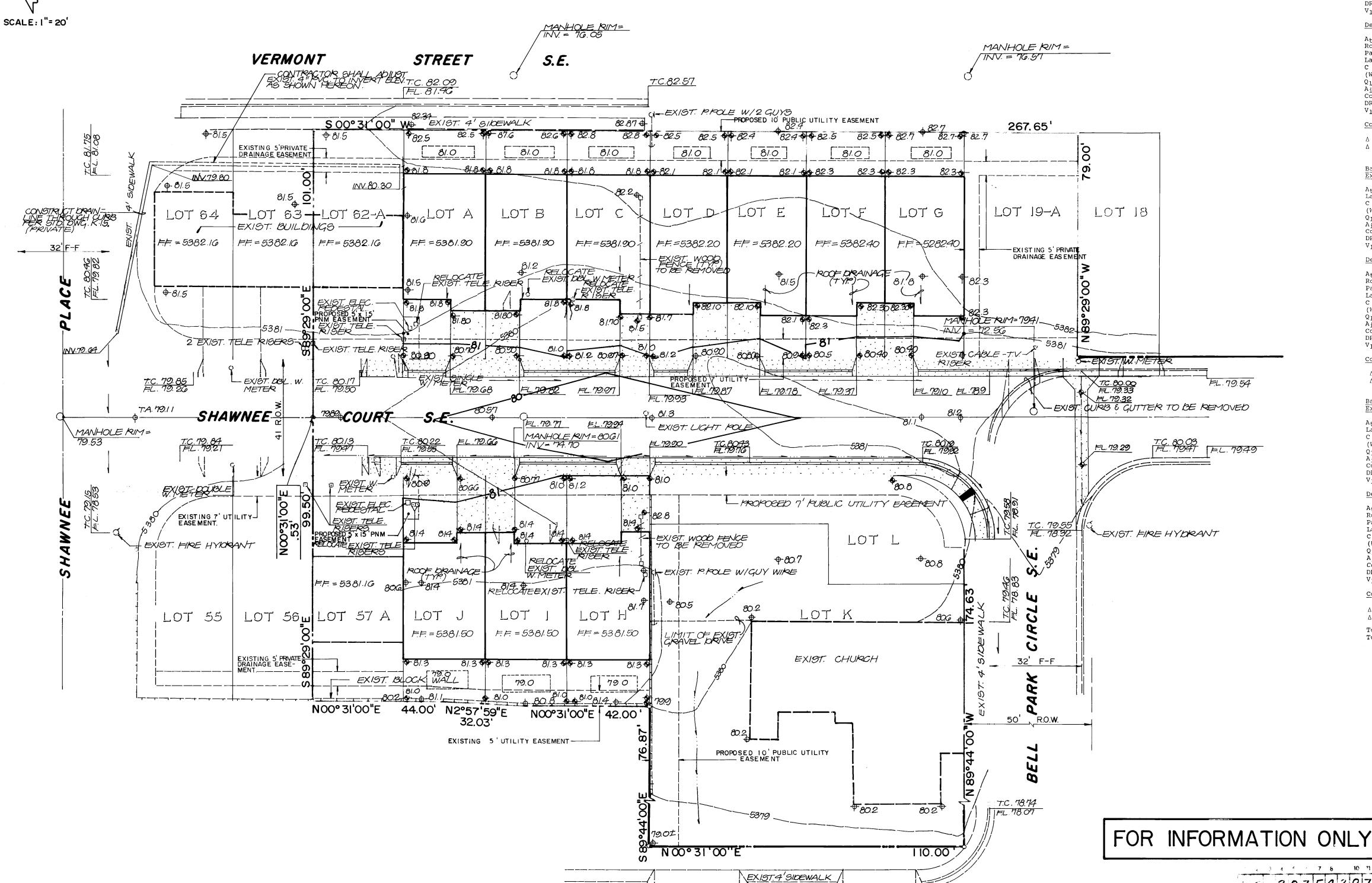
DRAINAGE PLAN

3. Calculations

A review of Plate L-19 of the Albuquerque Master Drainage Study, indicates that the subject site does not lie within a designated Flood Hazard Zone. At present, about half the site drains to Shawnee Court S.E. and the rest of the site drains to Bell Park Circle S.E.

The Grading Plan shows 1) existing and proposed grades indicated by spot elevations at 1' intervals, 2) interface and continuity of existing improvements, 3) limit and character of the existing improvements, and 4) limit and character of proposed improvements. Since the project area qualifies as an infill site, it is proposed to grade all lots to discharge onto Shawnee Court. The Fairground System Phase II is in place, thereby eliminating any flooding potential downstream. The development of the proposed project site will create minimal impact on downstream facilities as the total increase in peak flow is less than 1.5 cfs. Modification of the existing subsurface drainage system along the rear yards of Lots 62, 63, and 64 together with the addition of a curb drain on Shawnee Place will eliminate the need for the 5' private drainage easement on Lots A, B, and C. The vacation of the existing 5' drainage easement on Lots H, I, and J will not affect the existing subsurface drainage system north of the project area.

The Calculations which appear hereon analyze both the existing and developed conditions for the 100-year, 6-hour rainfall event. The SCS Method has been used for this analysis in accordance with the City of Albuquerque Development Process Manual, Volume II. The Calculations shown hereon should adequately quantify the developed runoff volumes. The Grading and Drainage concept presented here is consistent with the predesign conference recap which accompanies this submittal.



CALCULATIONS

Ground Cover Information

From SCS Bernalillo County Soil Survey, Hydrologic Soil Group: B (Embudo, EtC) Existing Pervious CN = 70 (DPM Plate 22.2 C-2 Pasture or Range Land: fair condition) Developed Pervious CN = 69 (DPM Plate 22.2 C-2)

Time of Concentration/Time to Peak $T_c = 0.0078 L^{0.77}/S^{0.385}$ (Kirpich Equation)

 $T_p = T_C = 10 \text{ min.}$ Point Rainfall

 $P_6 = 2.4$ in. (DPM Plate 22.2 D-1)

Rational Method Discharge: Q = CiA

where C varies $i = P_6 (6.84) T_C^{-0.51} = 5.07 in/hr$ $P_6 = 2.4 \text{ in (DPM Plate 22.2D-1)}$ $T_C = 10 \text{ min (minimum)}$

SCS Method

Volume: V = 3630(DRO) AWhere DRO = Direct runoff in inches A = area, acres

A = area, acres

Basin A - Lots A, B, and C Existing Condition

Atotal = 4,480 sf = 0.10 Ac Landscaped area = 4,480 sf = (100%) (Weighted average per Emergency Rule, 1/14/86) $Q_{100} = CiA = 0.13$ cfs Aimp = -0- sf; % impervious = -0- % Composite CN = 70 (DPM Plate 22.2 C-3) DRO = 0.50 in (DPM Plate 22.2 C-4) $V_{100} = 3630 \text{ (DRO)} A = 182 \text{ cf}$

Developed Condition

 $A_{total} = 6,756 \text{ sf} = 0.16 Ac$ Roof area = 3,700 sf = (55%)Paved area = 600 sf = (9%)Landscaped area = 2,456 sf = (36%)(Weighted average per Emergency Rule, 1/14/86) $Q_{100} = CiA = 0.54 cfs$ $A_{\text{imp}} = 4,300 \text{ sf}$; % impervious = 64 % Composite CN = 87 (DPM Plate 22.2 C-3) DRO = 1.30 in (DPM Plate 22.2 C-4) $V_{100} = 3630$ (DRO) A = 697 cf

Comparison

 $\Delta Q_{100} = (0.54 - 0.13) = 0.41 \text{ cfs (increase)}$ $\Delta V_{100} = (697 - 182) = 515 \text{ cf (increase)}$

Basin B - Lots H, I, and J Existing Condition

 $A_{total} = 5,560 \text{ sf} = 0.13 Ac$ Landscaped area = 5,560 sf = (100%)(Weighted average per Emergency Rule, 1/14/86) $Q_{100} = CiA = 0.16 cfs$ $A_{imp} = -0-$ sf; % impervious = -0- % Composite CN = 70 (DPM Plate 22.2 C-3) DRO = 0.50 in (DPM Plate 22.2 C-4) $V_{100} = 3630 \text{ (DRO)A} = 236 \text{ cf}$

Developed Condition

 $A_{total} = 6,870 \text{ sf} = 0.16 \text{ Ac}$ Roof area = 3,700 sf = (54%) Paved area = 600 sf = (9%)Landscaped area = 2,570 sf = (37%)(Weighted average per Emergency Rule, 1/14/86) $Q_{100} = CiA = 0.54 cfs$ $A_{imp} = 4,300 \text{ sf}; % impervious = 63 %$ Composite CN = 87 (DPM Plate 22.2 C-3) DRO = 1.20 in (DPM Plate 22.2 C-4) $V_{100} = 3630$ (DRO) A = 697 cf

Comparison

 $\Delta Q_{100} = (0.54 - 0.16) = 0.38 \text{ cfs (increase)}$ $\Delta V_{100} = (697 - 236) = 461 \text{ cf (increase)}$

Basin C - Lots D, E, F, and G Existing Condition

 $A_{total} = 8,910 \text{ sf} = 0.20 \text{ Ac}$ Landscaped area = 8,910 sf = (100%)(Weighted average per Emergency Rule, 1/14/86) $Q_{100} = CiA = 0.25 cfs$ $A_{imp} = -0$ sf; % impervious = -0- % Composite CN = 70 (DPM Plate 22.2 C-3) DRO = 0.50 in (DPM Plate 22.2 C-4) $V_{100} = 3630 \text{ (DRO)}A = 363 \text{ cf}$

Developed Condition

 $A_{total} = 8,910 \text{ sf} = 0.20 Ac$ Roof area = 4,930 sf = (55%)Paved area = 800 sf = (9%)Landscaped area = 3,180 sf = (36%)C = 0.67 (Weighted average per Emergency Rule, 1/14/86) $Q_{100} = CiA = 0.68 cfs$ $A_{imp} = 5,730 \text{ sf}; % impervious = 64 %$ Composite CN = 87 (DPM Plate 22.2 C-3) DRO = 1.20 in (DPM Plate 22.2 C-4) $V_{100} = 3630$ (DRO) A = 871 cf

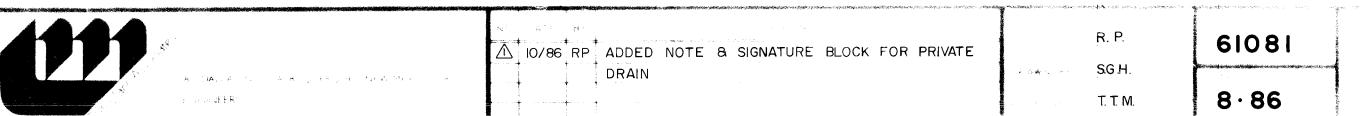
Comparison

 $\Delta Q_{100} = (0.68 - 0.25)' = 0.43 \text{ cfs (increase)}$ $\Delta V_{100} = (871 - 363) = 508 \text{ cf (increase)}$

Total $\Delta Q_{100} = (0.41 + 0.38 + 0.43) = 1.22$ cfs (increase) Total $\Delta V_{100} = (515 + 461 + 508) = 1,484$ cf (increase)



7 6 10 11 13



TEMPORARY BENCHMARK TOP OF MANHOLE RIM LOCATED @ THE INTERSEC TION OF SHAWNEE PL. S.E. & SHAWNEE COURT S.E. AS SHOWN BELOW. ELEVATION = 5379.33 ft. (M.S.L.D.)

GRADING & DRAINAGE PLAN BELL PARK VILLA

UTAH ST. S.E.

T.C. 78.36 F.L. 77.69

