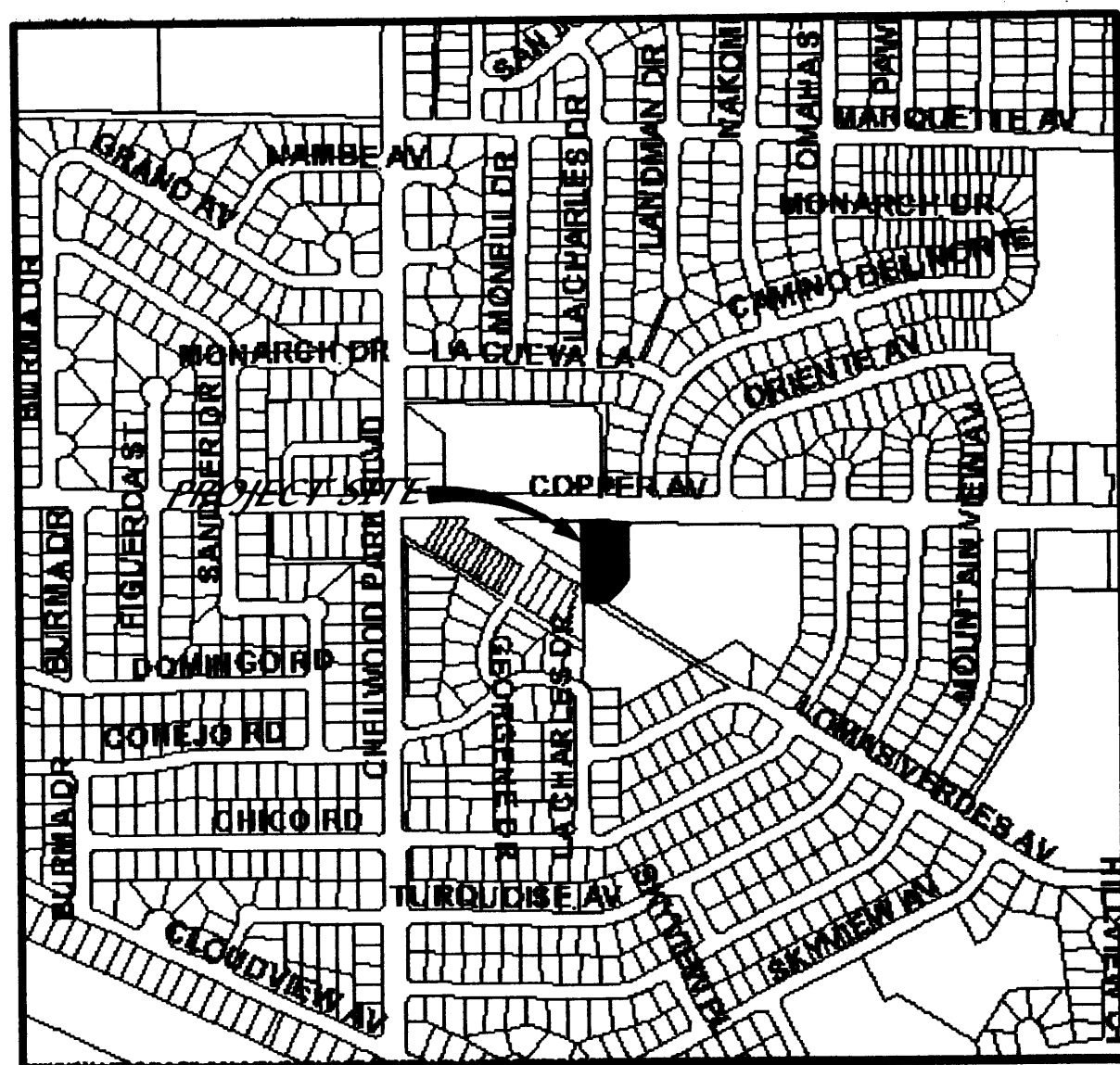


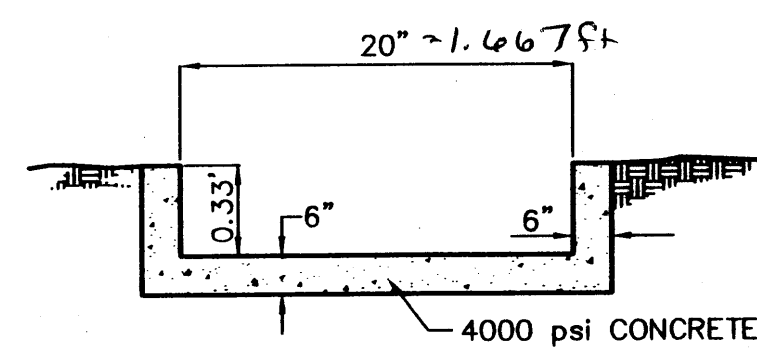


LOCATION MAP

SCALE: NONE

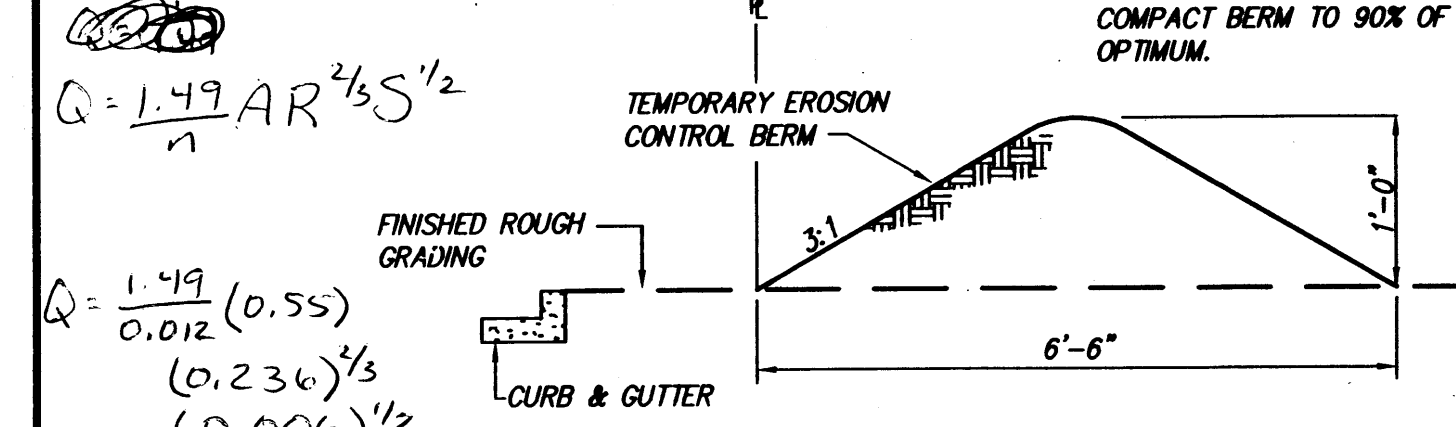
Calcs of channel capacity?

prev design
 $A = 2\left(\frac{1}{2}\right)(0.55)(0.665) = 0.3325 \text{ ft}^2$



CONCRETE CHANNEL SECTION

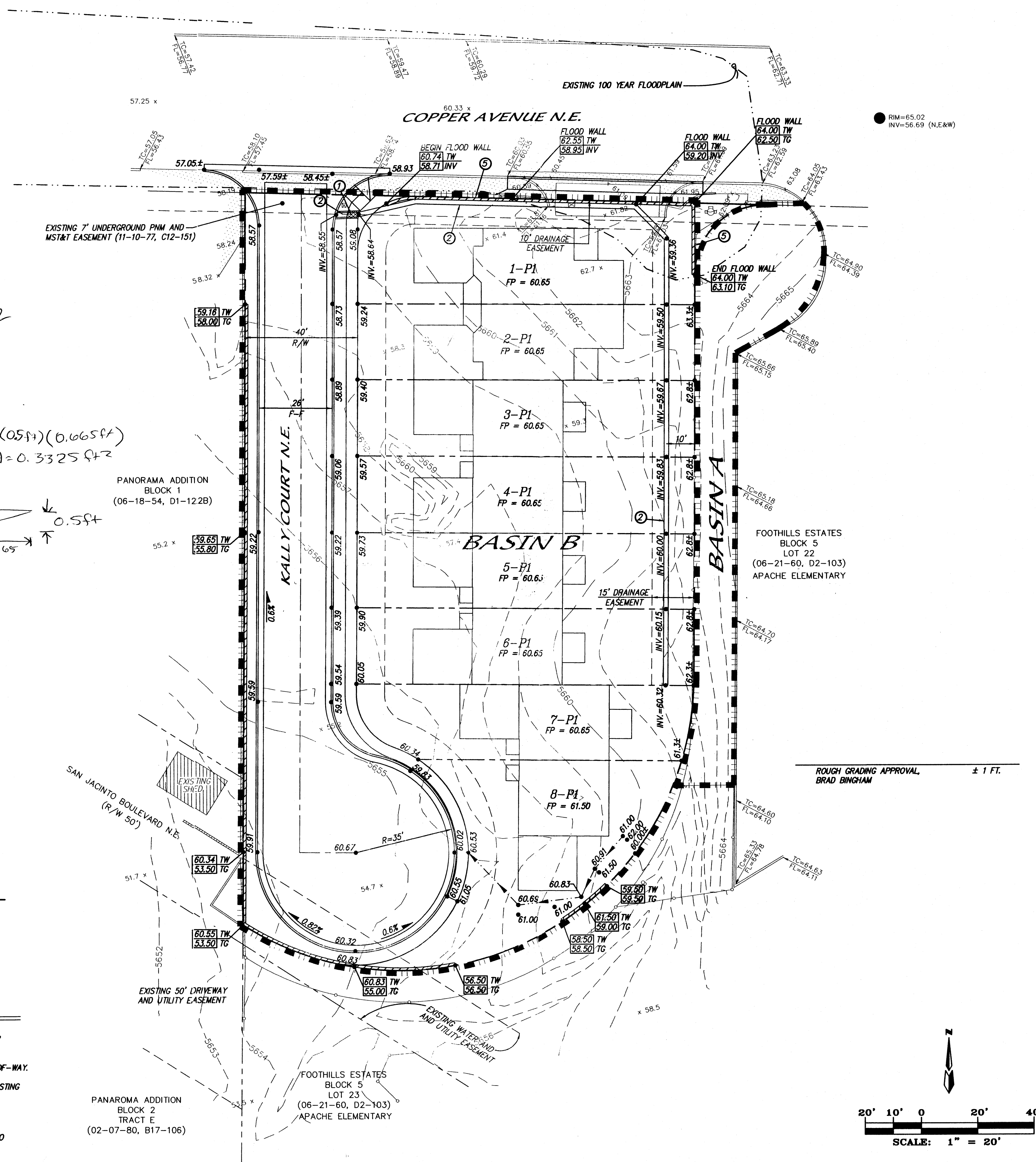
N.T.S.
 $A = (0.33 \text{ ft})(20 \text{ ft})\left(\frac{1 \text{ ft}}{12 \text{ in}}\right) = 0.55 \text{ ft}^2$
Assume $S_{\text{still}} = 0.006$
Assume $n = 0.012$ (finished concrete)



EROSION CONTROL BERM DETAIL

N.T.S.
 $Q = 1.49 AR^{2/3} S^{1/2}$
 $Q = 1.49 (0.55)^{2/3} (0.006)^{1/2} = 0.236 \text{ cfs}$
 $Q = 2.02 \text{ cfs}$
 $Q_{\text{req}} = 0.93 \text{ cfs}$

- EROSION CONTROL NOTES
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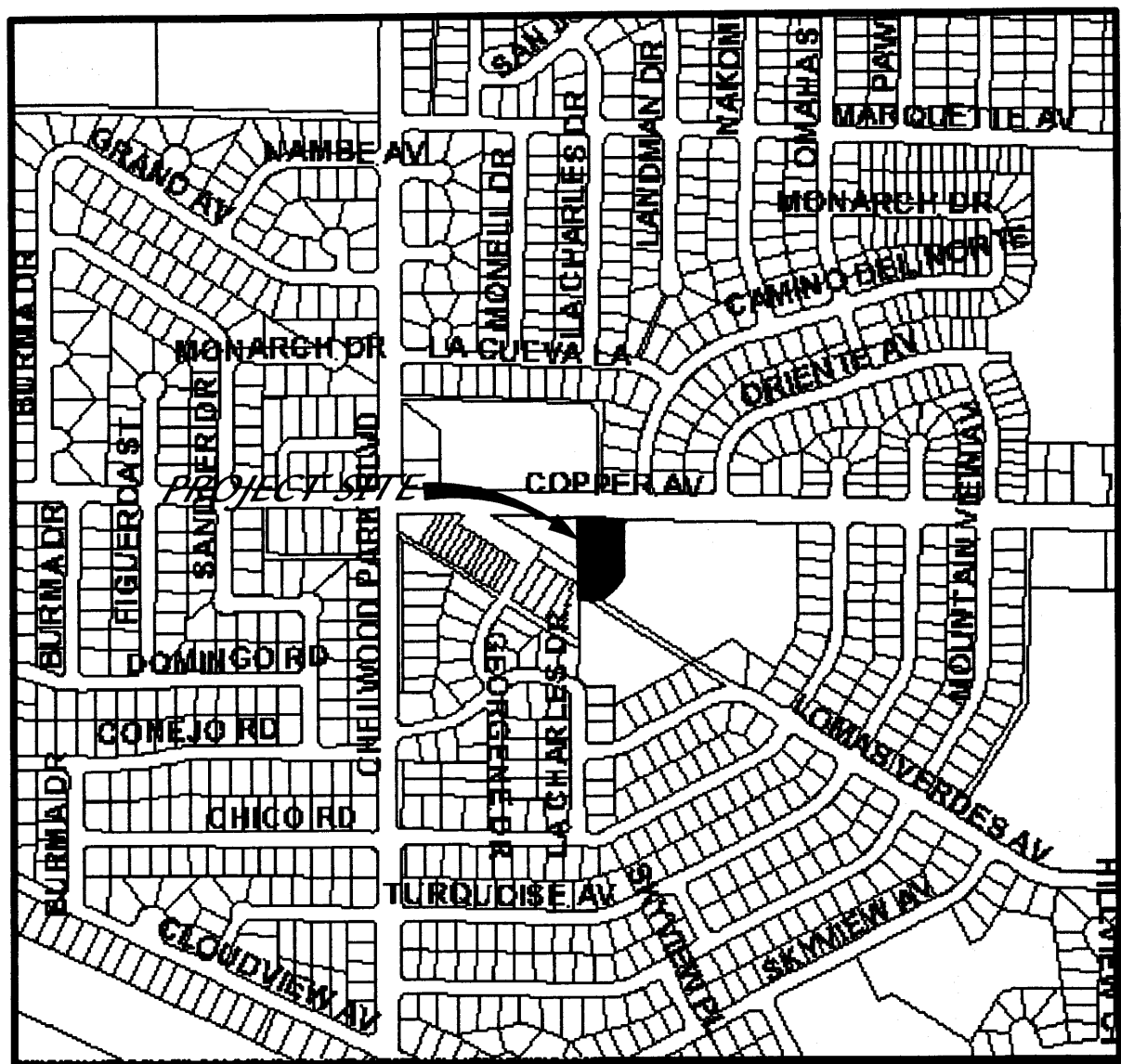
NOTES

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- EXISTING FIRE HYDRANT
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- PROPOSED CURB & GUTTER
- FP = 60.65 PROPOSED FINISHED PAD ELEVATION
- INV.=60.00 PROPOSED INVERT ELEVATION
- 59.90 PROPOSED SPOT ELEVATION
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- 55.00 TG PROPOSED TOP GROUND ELEVATION
- 0.6% PROPOSED SLOPE
- PROPOSED VALLEY GUTTER

KEYED NOTES

- 20" WIDE SIDEWALK CULVERT PER C.O.A. STANDARD DWG #2236.
- 20" WIDE X 0.33' HIGH CONCRETE CHANNEL PER DETAIL THIS SHEET.
- STRUCTURAL DESIGN OF FLOOD WALL BY OTHERS.

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT	
TITLE: COPPER PARK SUBDIVISION GRADING & DRAINAGE PLAN	
DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL
MO./DAY/YR.	MO./DAY/YR.
LAST DESIGN UPDATE	HYDROLOGY SECTION
CITY PROJECT NO.	ZONE MAP NO. K-22-Z
SHEET 1 OF 1	



LOCATION MAP

ZONE ATLAS H-10

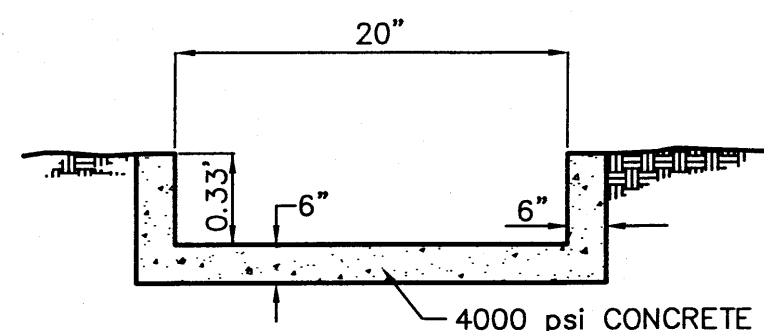
SCALE: NONE

COPPER PARK SUBDIVISION
DRAINAGE CERTIFICATION

I, Diane Hoelzer, NMPE 11967, of the firm Mark Goodwin & Associates, P.A., hereby certify that this project has been graded and will drain in substantial compliance with and in accordance with the design intent of the approved plan dated 10/27/2004. The record information edited onto the original design document has been obtained by Timothy Aldrich, of the firm ALS, Inc., I further certify that I have personally visited the project site on 2/8/06, and have determined by visual inspection that the survey data provided is representative of actual site conditions and is true and correct to the best of my knowledge and belief. This certification is submitted in support of a request for Grading Certification approval.

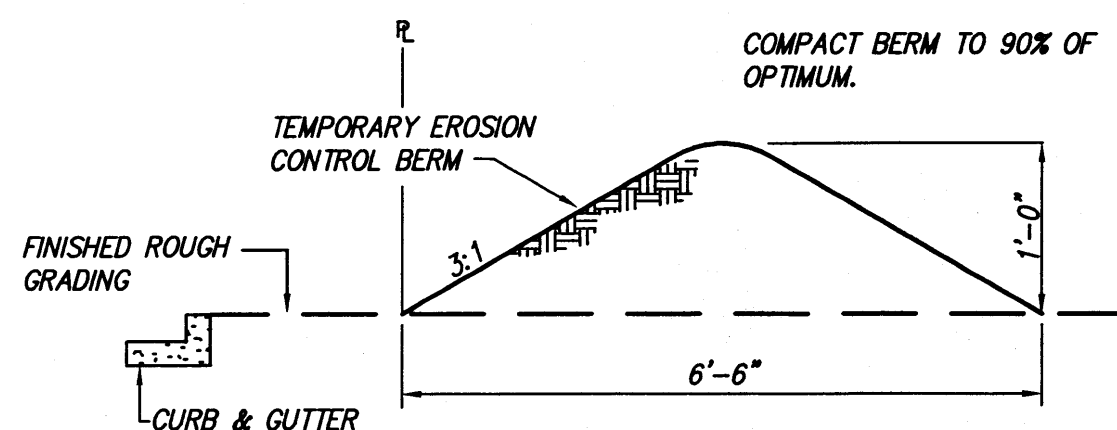
The record information presented hereon is not necessarily complete and intended only to verify substantial compliance of the grading and drainage aspects of this project. Those relying on the record document are advised to obtain independent verification of its accuracy before using it for any other purpose.

Diane Hoelzer 5-23-06
DIANE HOELZER NMPE 11967



CONCRETE CHANNEL SECTION

N.T.S.

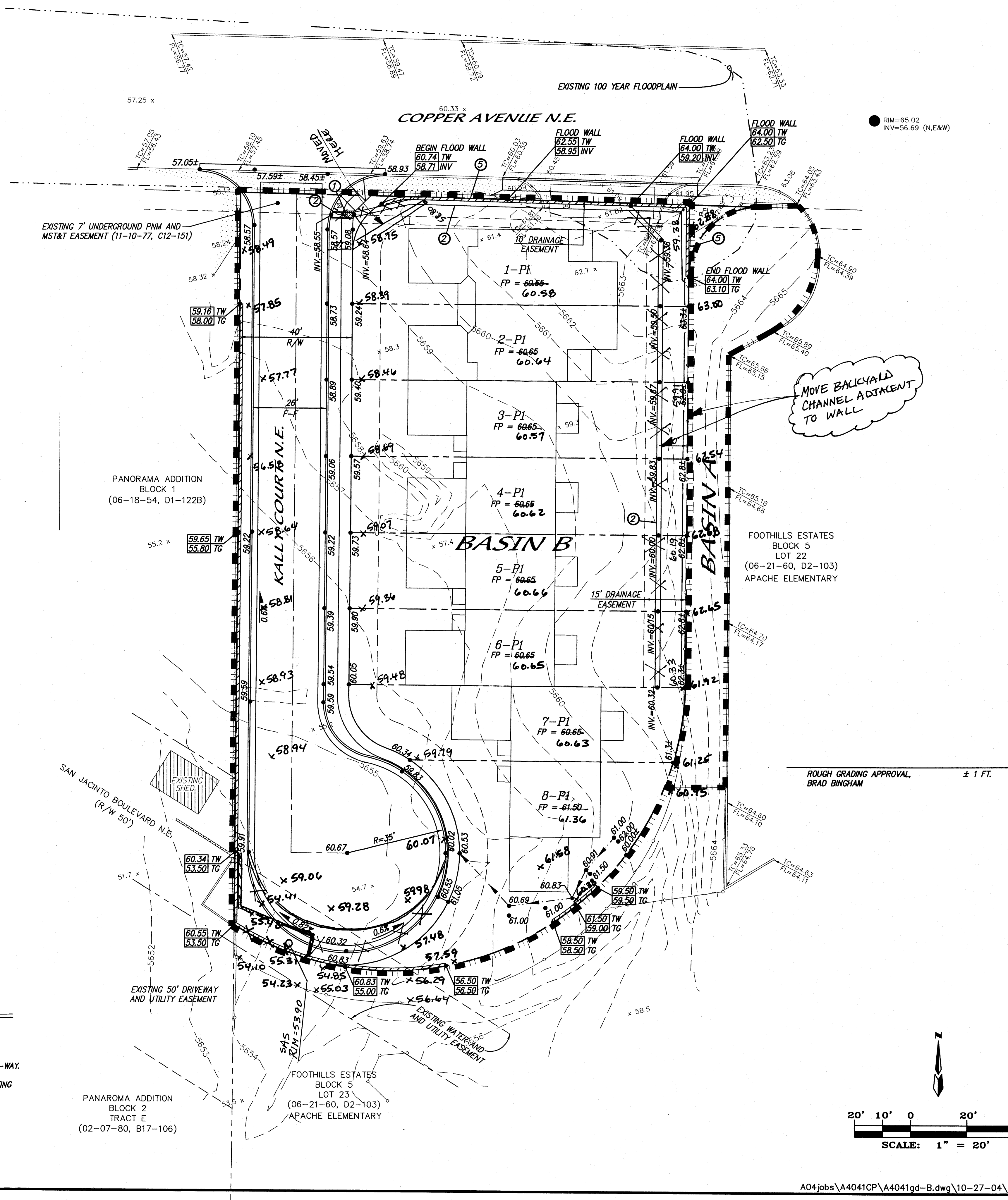


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MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

TITLE: **COPPER PARK SUBDIVISION
GRADING & DRAINAGE PLAN**

DESIGN REVIEW COMMITTEE CITY ENGINEER APPROVAL
LAST DESIGN UPDATE MO./DAY/YR. MO./DAY/YR.

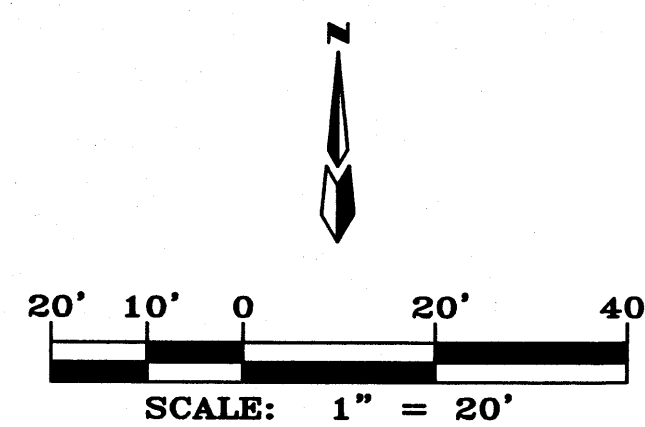
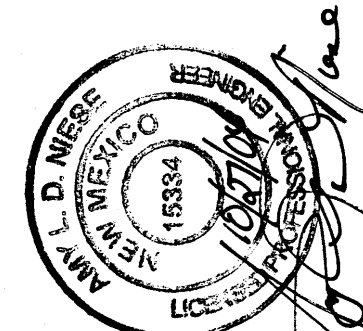
CITY PROJECT NO. ZONE MAP NO. SHEET OF

AS BUILT INFORMATION			
CONTRACTOR	WORK	DATE	NO.
INSPECTOR	DATE	DATE	DATE
VERIFICATION BY	DATE	DATE	DATE
RECORDING BY	DATE	DATE	DATE
MICRO-FILM INFORMATION			
RECORDED BY	DATE	DATE	NO.

BENCH MARKS			
ACCS STATION "9-C18"	TO REACH STATION FROM INT. OF I-40 & LOUISIANA BOULEVARD, GO NORTH ON LOUISIANA 5.8 MI. TO WILSHIRE AVE., THEN GO WEST 0.5 MI. TO SAN PEDRO & STATION IS ON LEFT. STATION IS STANDARD ACS ALUMINUM CAP STAMPED "9-C18 1985" AND IS RIVETED TO A 2 1/2" ALUMINUM TUBE WITH CAP PROJECTING 0.05 FT BELOW GROUND.	Y = 402,255.61, X = 1,521,435.08, ELEV. = 5232.47 (NAVD83)	NO.

SURVEY INFORMATION			
DATE	BY	NO.	NO.

ENGINEER'S SEAL			
NO.	DATE	REMARKS	BY
NO.	DATE	REVISIONS	DESIGN
DESIGNED BY	DATE	07/04	
DRAWN BY	DATE	07/04	
CHECKED BY	DATE	07/04	



A04jobs\A0404CP\A0404gd-B.dwg\10-27-04\DER NHE