



City of Albuquerque

September 13, 2000

Robert Ryals, P.E.
Ryals Engineering & Construction Services
4929 Idlewilde SE
Albuquerque, NM 87108

105
**RE: BLUEBIRD LEARNING CENTER, FORMER PORTION OF LOMAS AUTOMALL
(K19-D109). GRADING AND DRAINAGE PLAN FOR FINAL PLAT APPROVAL
AND BUILDING PERMIT APPROVAL. ENGINEER'S STAMP DATED
SEPTEMBER 6, 2000.**

Dear Mr. Ryals:

Based on the information provided on your September 6, 2000 submittal, the above referenced project is approved for Final Plat and for Building Permit.

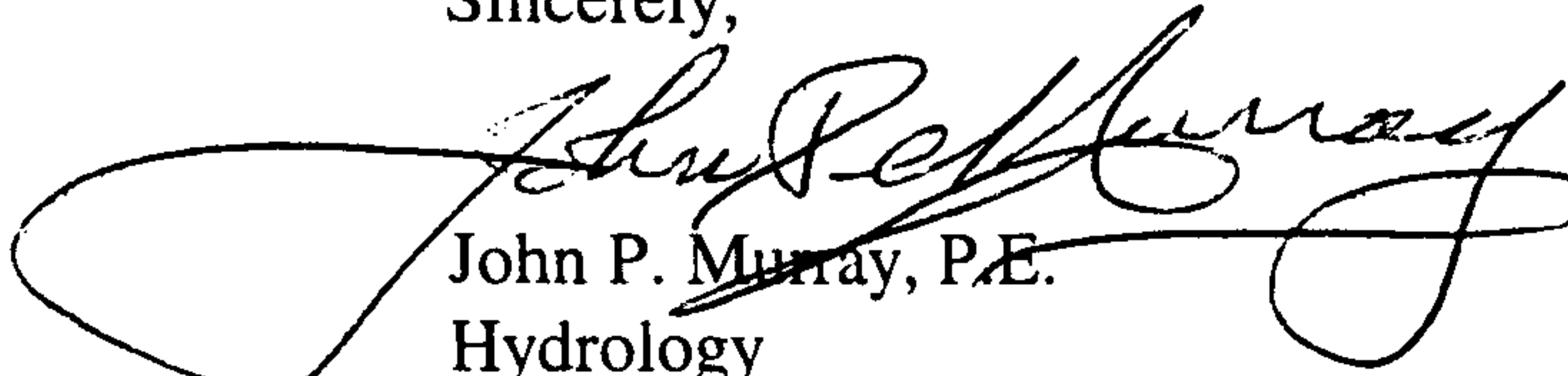
The former auto sales offices are being converted to a learning center. Since the property is being split up, a cross lot drainage easement should be made.

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

Prior to Certificate of Occupancy approval, an Engineer's Certification per the DPM will be required.

If I can be of further assistance, please feel free to contact me at 924-3984.

Sincerely,


John P. Murray, P.E.
Hydrology

c: ☒ Whitney Reiersen
☒ File

City of Albuquerque
Public Works Department
505-924-3900 (main number)
505-924-3864 (fax number)
Development and Building Services (One Stop Shop)
Plaza Del Sol Building, 2nd Floor
600 2nd Street NW
Albuquerque, NM 87102

**City of Albuquerque
Public Works Dept.
Dev. & Bldg. Svcs.**

Fax

To: KEN HOVEY From: J P MURRAY
Fax: 254-1809 Pages Sent: (including this page) 2
Phone: _____ Date: 9/13/00
Time: 9:55 AM

☐ Urgent ☐ For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

Comments:

FYI



City of Albuquerque

Ken Houey

September 13, 2000

Robert Ryals, P.E.
Ryals Engineering & Construction Services
4929 Idlewilde SE
Albuquerque, NM 87108

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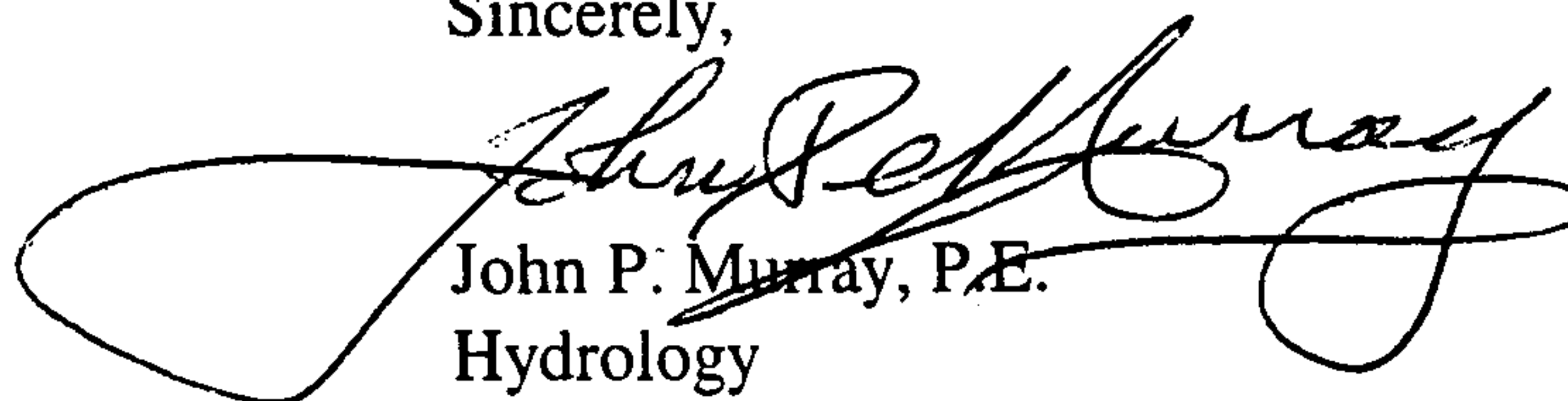
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Sincerely,


John P. Murray, P.E.
Hydrology

c: Whitney Reiersen
File

FAX
254-1809

DRAINAGE INFORMATION SHEET

PROJECT TITLE: Lomas Auto Mall & BLUE BIRD LEARNING Center ZONE ATLAS/DRNG. FILE #: K-199 D105

DRB #: _____ EPC #: _____ WORK ORDER #: N/A

LEGAL DESCRIPTION: TRACT A-2, BLK 15, LOMAS Addition

CITY ADDRESS: 7500 E 7508 LOMAS BLVD

ENGINEERING FIRM: Ryals Engineering CONTACT: Bob Ryals

ADDRESS: 4929 Idlewild St PHONE: 265-8267

OWNER: BLUE BIRD Learning Center Inc CONTACT: _____

ADDRESS: 7508 Lomas PHONE: _____

ARCHITECT: Ken Hovey CONTACT: Ken Hovey

ADDRESS: 3808 Sims St PHONE: 254-0083

SURVEYOR: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

CONTRACTOR: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

TYPE OF SUBMITTAL:

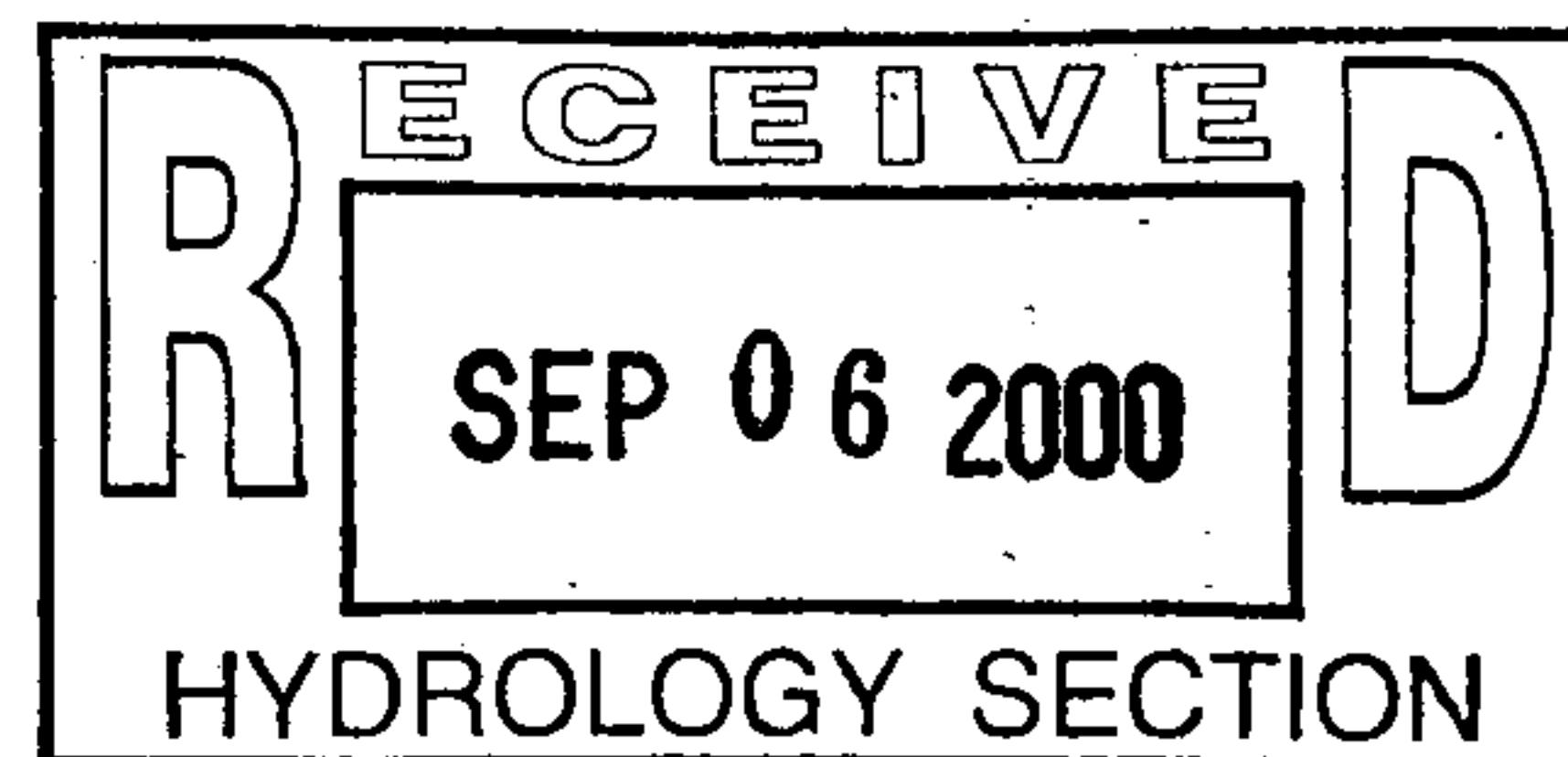
- ☐ DRAINAGE REPORT
- ☒ DRAINAGE PLAN
- ☐ CONCEPTUAL GRADING & DRAINAGE PLAN
- ☒ GRADING PLAN
- ☐ EROSION CONTROL PLAN
- ☐ ENGINEER'S CERTIFICATION
- ☐ OTHER

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: 9-06-00BY: Bob Ryals



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

April 20, 2000

Bob Ryals, P.E.
Ryals Engineering
4929 Idlewilde S.E.
Albuquerque, NM 87108

RE: GRADING & DRAINAGE PLAN FOR LOMAS AUTOMALL, 7500 LOMAS AVENUE
(K-19/D105) ENGINEERS STAMP DATED 4/12/00 SUBMITTED FOR
BUILDING PERMIT APPROVAL

Dear Mr. Ryals,

Based upon the information provided in your April 14, 2000, submittal, the project referred to above is approved for Building Permit. Please attach a copy of this approved plan to the construction sets prior to sign-off by Hydrology.

Prior to release of the Certificate of Occupancy, an Engineer Certification, per the DPM checklist, will be required.

If you have any questions, please call me at 924-3988.

Sincerely,

Stuart Reeder, P.E.

Stuart Reeder, P.E.
Hydrology Division

xc: Whitney Reiersen
✓File

APPLICANT'S NAME: Ryals Engineering ZONE ATLAS/DRNG. FILE #: 1C-19 2105

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

LEGAL DESCRIPTION: TRACT A-2, BLK 15 THE DEL NORTE ADDITION

CITY ADDRESS: 7500 LOMAS AVE NE

ENGINEERING FIRM: Ryals Engineering CONTACT: Bob Ryals

ADDRESS: 4929 Idlewild St PHONE: 265-8267

OWNER: Micky Richardson CONTACT: _____

ADDRESS: 7500 LOMAS NE PHONE: _____

ARCHITECT: Ken Hovey CONTACT: Ken Hovey

ADDRESS: _____ PHONE: 254-0083

SURVEYOR: _____ CONTACT: _____

ADDRESS: _____ PHONE: 284-0083

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

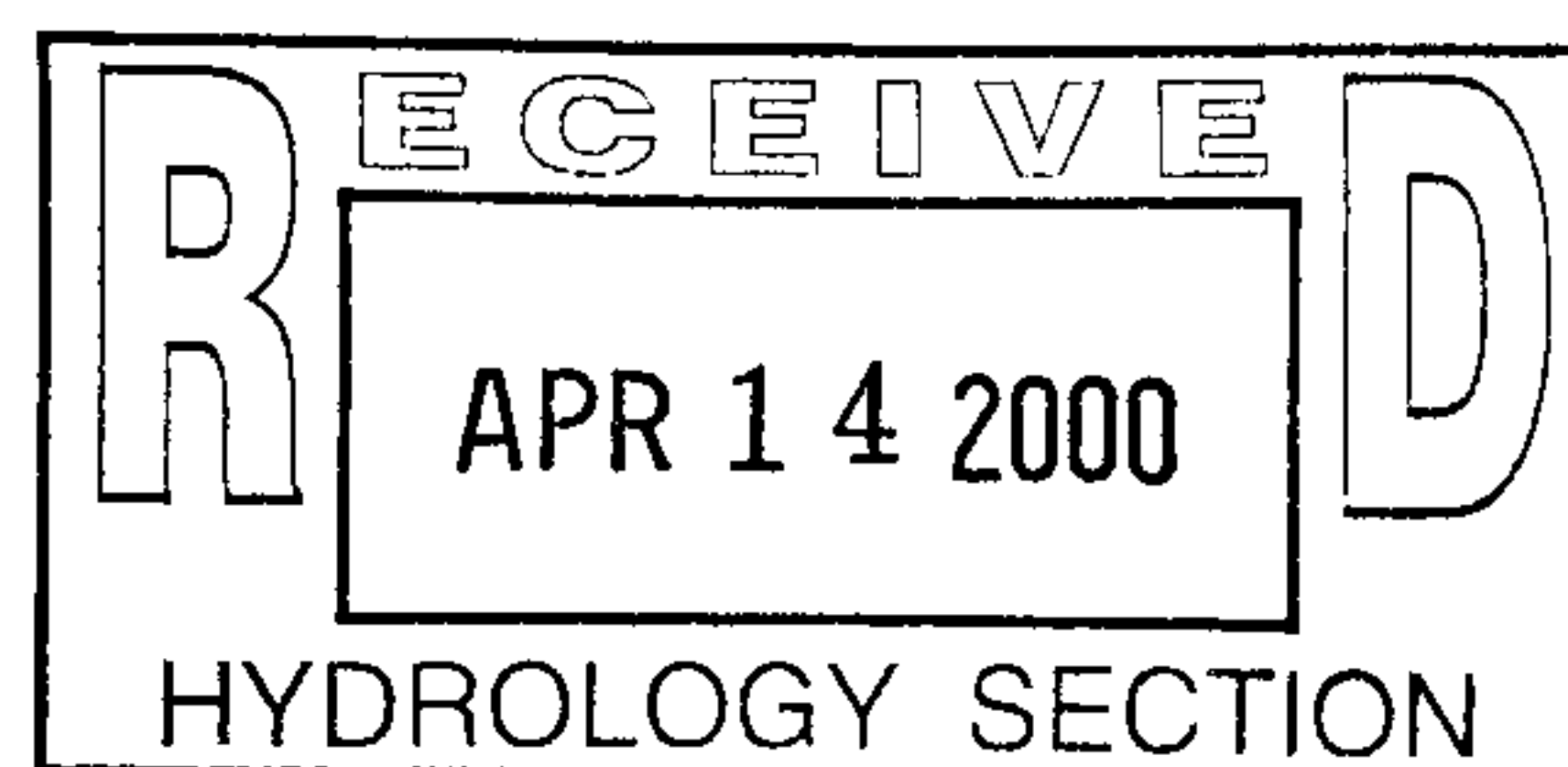
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☐ FINAL PLAT APPROVAL
☒ FOUNDATION PERMIT APPROVAL
☒ BUILDING PERMIT APPROVAL
☐ CERTIFICATE OF OCCUPANCY APPROVAL
☐ GRADING PERMIT APPROVAL
☐ PAVING PERMIT APPROVAL
☐ S.A.D. DRAINAGE REPORT
☐ DRAINAGE REQUIREMENTS
☐ SUBDIVISION CERTIFICATION
☐ OTHER _____ (SPECIFY)

DATE SUBMITTED: 04/14/00

BY: Bob Ryals

Revised 02/98





City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

August 17, 1994

Bob Ryals
Ryals Engineering
4929 Idlewilde SE
Albuquerque, NM 87108

RE: REVISED DRAINAGE PLAN FOR KURBSIDE MOTORS (K19-D105)
REVISION DATED 8/10/94.

Dear Mr. Ryals:

Based on the information provided on your August 11, 1994 resubmittal, the above referenced site is approved for Grading/Paving Permit.

Also, 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.

Please be advised that Engineer Certification is required after completion of project.

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

Sincerely,

Bernie J. Montoya, CE
Engineering Associate

BJM/d1/WPHYD/8729

c: Andrew Garcia
Arlene Portiollo
Jack Henderson
File

K19-D105

8/9/94

KURBSIDE MOTORS

VERBAL
GAVE COPY
TO TUCKER GREEN

1. Note #6 From S.O. 19 Notice To Contractor format
2. Check Q coming in from San Pablo 18.59 cfs & not 16.40 cfs.
3. New maintenance agreement
4. Two copies with resubmittal

DRAINAGE INFORMATION SHEET

PROJECT TITLE: KURBSIDE Motors ZONE ATLAS/DRNG. FILE #: K19/D105
 DRB #: N/A EPC #: N/A WORK ORDER #: N/A
 LEGAL DESCRIPTION: TRACT A-2, DE BLK 15 DEL NORTE SUBD.
 CITY ADDRESS: 7500 COMAS
 ENGINEERING FIRM: Ryals Engineering CONTACT: Bob Ryals
 ADDRESS: 4929 Idlewilda SE PHONE: 265-8267
 OWNER: Jack Henderson CONTACT: Jack Henderson
 ADDRESS: 7500 COMAS PHONE: 265-1142
 ARCHITECT: NA CONTACT: _____
 ADDRESS: _____ PHONE: _____
 SURVEYOR: N/A CONTACT: _____
 ADDRESS: _____ PHONE: _____
 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

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☒ GRADING PERMIT APPROVAL
☐ PAVING PERMIT APPROVAL
☐ S.A.D. DRAINAGE REPORT
☐ DRAINAGE REQUIREMENTS
☐ OTHER _____ (SPECIFY)

DATE SUBMITTED: 7/14/94

BY: [Signature]

JUL 18 1994

DRAINAGE INFORMATION SHEET

PROJECT TITLE: KURBSIDE Motors ZONE ATLAS/DRNG. FILE #: K19 / D105
DRB #: N/A EPC #: N/A WORK ORDER #: N/A
LEGAL DESCRIPTION: TRACT A-2, DE BLK 15 DEL NORTE SUBD.
CITY ADDRESS: 7500 COMAS
ENGINEERING FIRM: Ryals Engineering CONTACT: Bob Ryals
ADDRESS: 4929 Idlewilda SE PHONE: 265-8267
OWNER: Jack Henderson CONTACT: Jack Henderson
ADDRESS: 7500 COMAS PHONE: 265-1142
ARCHITECT: NA CONTACT: _____
ADDRESS: _____ PHONE: _____
SURVEYOR: N/A CONTACT: _____
ADDRESS: _____ PHONE: _____
CONTRACTOR: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____

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☒ DRAINAGE PLAN
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☐ OTHER _____

PRE-DESIGN MEETING:

☒ YES
☐ NO
☐ COPY PROVIDED

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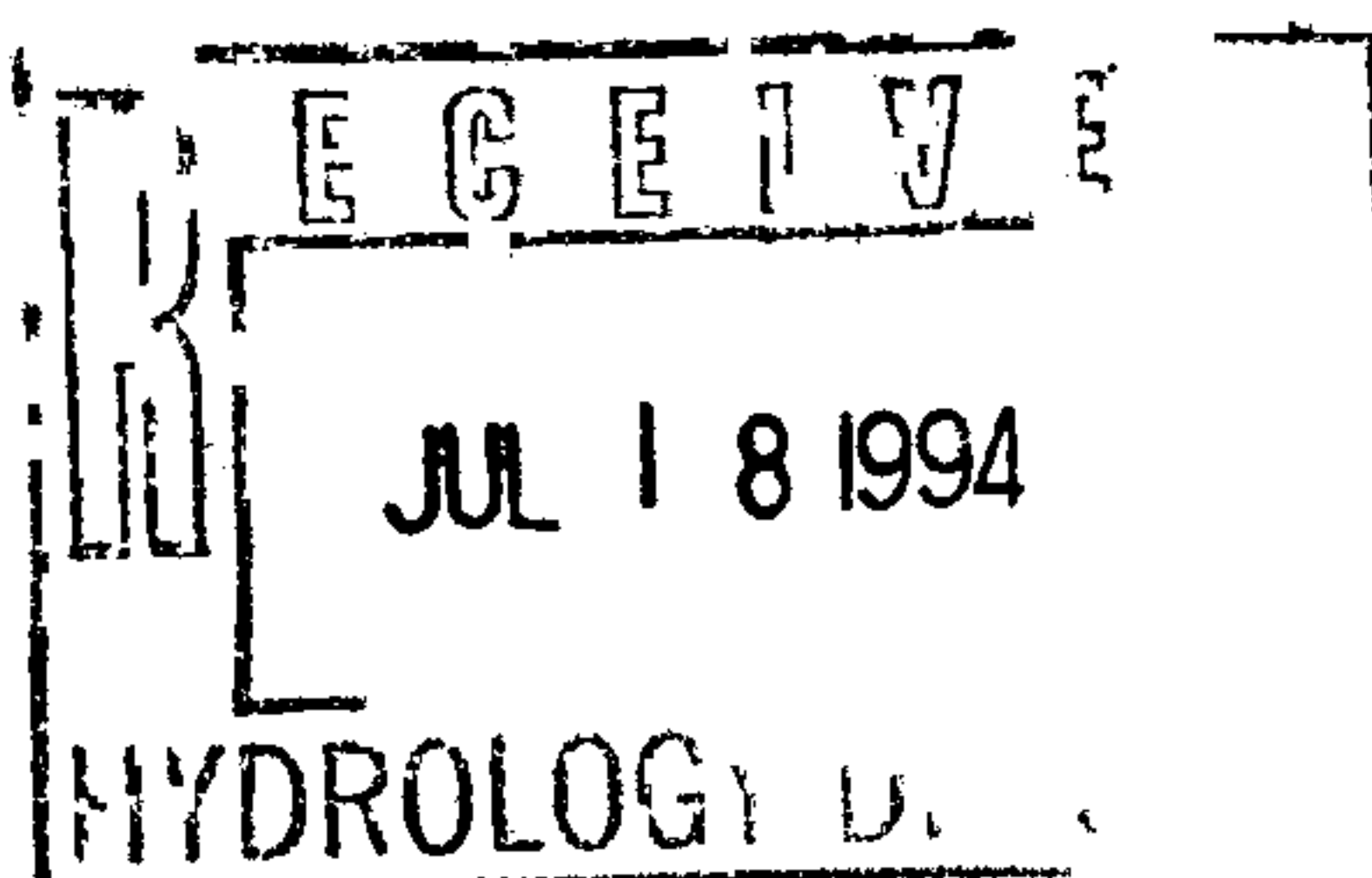
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☐ S.A.D. DRAINAGE REPORT
☐ DRAINAGE REQUIREMENTS
☐ OTHER _____ (SPECIFY)

DATE SUBMITTED: 8/10/94BY: [Signature]

AUG 11 1994

CALCULATIONS
FOR
JACK'S KURBSIDE MOTORS

PREPARED BY RYALS ENGINEERING
JULY, 1994



Robert B. Ryals 7-13-94
ROBERT B. RYALS



FILE=DPMHYD-11-11 JACK HEND, WQ1
 ALBUQUERQUE, NM, DPM (1/93) CRITERIA - SIMPLE PROCEDURE FOR <= 40 ACRES
 PX100-6 = PRECIPITATION EXCESS FROM 100-YEAR 6-HOUR STORM
 VOL10D = VOLUME OF RUNOFF FROM 100-YEAR 10-DAY STORM
 TRTMT CLASS A=UNDISTURBED, B=LAWNS, C=UNPAVED ROADS, D=ROOFS, PAVEMENT: SEE DPM P 22.5-5

***** PROJECT INFO *****

JACK HENDERSON'S CURBSIDE MOTORS
 SE CORNER LOMAS & MESILLA (VACATED)

RAIN ZONE 3 SEE DPM P 22.2-2

100-YEAR PRECIPITATION (P) DEPTHS, INCHES

1 HR	6 HR	24 HR	4 DAY	10 DAY
2.14	2.60	3.10	3.95	4.90

07/12/94 01:46 PM OFFSITE ABOVE SAN PABLO #1

TRTMT CLASS	AREA SQUARE FEET	AREA ACRES	PX100-6 IN/AC	QP100-6 CFS/AC	QP100-6 CFS	VOL6HR AC-FT	VOL1D AC-FT	VOL4D AC-FT	VOL10D AC-FT	TRTMT PERCENT
A	0.00	0.0000	0.66	1.87	0.000	0.000	0.000	0.000	0.000	0.00
B	70360.00	1.6152	0.92	2.60	4.200	0.124	0.124	0.124	0.124	34.52
C	27500.00	0.6313	1.29	3.45	2.178	0.068	0.068	0.068	0.068	13.49
D	105940.00	2.4320	2.36	5.02	12.209	0.478	0.580	0.752	0.944	51.98
TOTAL	203800.00	4.6786			18.587	0.670	0.771	0.944	1.136	100.00
					CU FT	29185	33600	41104	49491	

07/12/94 01:46 PM ADDL OFFSITE @ ESPANOLA FROM 2 DIRT LOTS #2

TRTMT CLASS	AREA SQUARE FEET	AREA ACRES	PX100-6 IN/AC	QP100-6 CFS/AC	QP100-6 CFS	VOL6HR AC-FT	VOL1D AC-FT	VOL4D AC-FT	VOL10D AC-FT	TRTMT PERCENT
A	0.00	0.0000	0.66	1.87	0.000	0.000	0.000	0.000	0.000	0.00
B	0.00	0.0000	0.92	2.60	0.000	0.000	0.000	0.000	0.000	0.00
C	28000.00	0.6428	1.29	3.45	2.218	0.069	0.069	0.069	0.069	100.00
D	0.00	0.0000	2.36	5.02	0.000	0.000	0.000	0.000	0.000	0.00
TOTAL	28000.00	0.6428			2.218	0.069	0.069	0.069	0.069	100.00
					CU FT	3010	3010	3010	3010	

07/12/94 01:46 PM ALLEY + REAR 1/2 OF SITE TO CL VACATED ST #3

TRTMT CLASS	AREA SQUARE FEET	AREA ACRES	PX100-6 IN/AC	QP100-6 CFS/AC	QP100-6 CFS	VOL6HR AC-FT	VOL1D AC-FT	VOL4D AC-FT	VOL10D AC-FT	TRTMT PERCENT
A	0.00	0.0000	0.66	1.87	0.000	0.000	0.000	0.000	0.000	0.00
B	0.00	0.0000	0.92	2.60	0.000	0.000	0.000	0.000	0.000	0.00
C	0.00	0.0000	1.29	3.45	0.000	0.000	0.000	0.000	0.000	0.00
D	19800.00	0.4545	2.36	5.02	2.282	0.089	0.108	0.141	0.177	100.00
TOTAL	19800.00	0.4545			2.282	0.089	0.108	0.141	0.177	100.00
					CU FT	3894	4719	6122	7689	

JACK HYD. WQ1

07/12/94 01:51 PM FRONT 1/2 OF SITE TO CL VACATED ST. #8

TRTMT CLASS	AREA SQUARE FEET	AREA ACRES	PX100-6 IN/AC	QP100-6 CFS/AC	QP100-6 CFS	VOL6HR AC-FT	VOL10 AC-FT	VOL4D AC-FT	VOL10D AC-FT	TRTMT PERCENT
A	0.00	0.0000	0.66	1.97	0.000	0.000	0.000	0.000	0.000	0.00
B	0.00	0.0000	0.92	2.60	0.000	0.000	0.000	0.000	0.000	0.00
C	0.00	0.0000	1.29	3.45	0.000	0.000	0.000	0.000	0.000	0.00
D	14850.00	0.3409	2.36	5.02	1.711	0.067	0.081	0.105	0.132	100.00
TOTAL	14850.00	0.3409			1.711	0.067	0.081	0.105	0.132	100.00
					CU FT	2920	3539	4591	5767	

07/12/94 01:51 PM OFFSITE FROM ESPANOLA & BOWLING ALLEY

5+6+7

TRTMT CLASS	AREA SQUARE FEET	AREA ACRES	PX100-6 IN/AC	QP100-6 CFS/AC	QP100-6 CFS	VOL6HR AC-FT	VOL10 AC-FT	VOL4D AC-FT	VOL10D AC-FT	TRTMT PERCENT
A	0.00	0.0000	0.66	1.97	0.000	0.000	0.000	0.000	0.000	0.00
B	0.00	0.0000	0.92	2.60	0.000	0.000	0.000	0.000	0.000	0.00
C	67450.00	1.5484	1.29	3.45	5.342	0.166	0.166	0.166	0.166	39.50
D	103300.00	2.3714	2.36	5.02	11.905	0.466	0.565	0.733	0.921	60.50
TOTAL	170750.00	3.9199			17.247	0.633	0.732	0.900	1.087	100.00
					CU FT	27567	31871	39188	47366	

This is a detailed plat map of a 120x330 foot area, divided into 19 blocks. The map includes street names like Lomas, Vickers, and Blake's Blvd. It shows various lots with dimensions, easements, and annotations such as 'PAVED', 'DIRT', and 'CNU WALL'. A large 'X' is drawn across the map, and a '120x330' label is in the bottom right corner.

LOMAS

6/29/94

EXIST DEV TO SOUTH
SINGLE FAMILY RESIDENCE

TO SAN PABLO

$$330 \times 410 = 135,300 \approx 3,106 \text{ AC}$$

$$2 \times 6 + 1 + 1 = 14 \text{ DG}$$

TO ESPANOLA - SIMILAR

$$135,000, 3,106 \text{ AC}$$

$$2 \times 6 + 1 + 1 = 14 \text{ DG}$$

TO MESILLA

NOT NEEDED, NOT COMPUTED

CULDE SACS

ALMOST FULL CIRCLE, ASSUME FULL, PAVED

R=40 A=5026.5 SAY 5000 SF PAVED

CHECK RESIDENTIAL

% IMPERVO

$$g_{imp} = 7 \sqrt{N \times N + 5 \times N}$$

$$N = \frac{DG}{\text{GROSS AC}}$$

$$= \frac{14}{3.106} = 4.507$$

$$= 45.8 \sim 46\%$$

ASSUME 56% B 44% D RESIDENTIAL

LOANS

6/29/94

① TO ALLEY AT SAN PABLO

VICKERS & DR, PAVED, TO SOF ALLEY,
 $120 \times 300 = 36,000$ "D"

VACANT LOTS - DIRT PARKIN -
 $100 \times 300 - 5000/2 = 27,500$ "C"

CUL-DE-SAC
 5000 SF "D"

CONTRIBUTING RES AREA - 135,300

$\times .52 = 70360$ B
 $\times .48 = 64940$ D

FROM GPS
JKXHP, WQ1

TOTAL B 70360
 C 27500
 D 105940

18.56 CFS

B/W SAN PABLO & ESPANOLA

(2) ADD TO ALLEY FROM 2 DIRT LOTS SOUTH OF ALLEY &
 $330 \times 100 - 2 \times 1/2 \times 5000 = 28,000$ "C" AT ESPANOLA
2.22 CFS

(3) ALLEY & REAR HALF OF SITE
 $(135 + 60/2) \times 120 = 19,800$ "D" 2.28 CFS

(4) NOT USED

(5) CUL-DE-SAC @ ESPANOLA 6000 SF "D"

(6) CONTRIBUTING RES AREA FROM ESPANOLA

$120,450$ SF
 $\times .56 = 67,450$ "B"
 $\times .44 = 53,000$ "D"

(7) PAVED PARKING & ROOF OF BOWLING ALLEY TO
 100' S OF ALLEY

$240 \times 220 - 500/2 = 50,300$ "D"

(8) FRONT 1/2 OF SITE - TO R @ Q VARNED ST
 $(135 + 30) \times (70) = 14,850$ "D" 1.71 CFS

LOHAS

6/29/94

$$\begin{array}{l} (2+3) \quad 30000 \text{ "E"} \\ \quad \quad 19,300 \text{ "D"} \end{array} \quad \Sigma = 5.50 \text{ CFS}$$

$$\begin{array}{l} (5+6+7) \quad 67450 \text{ "B"} \\ \quad \quad 103300 \text{ "D"} \end{array} \quad 17.25 \text{ CFS}$$

TOTAL FLOW ALLEY
E END OF SITE

$$18.56 + \frac{2.22}{2} = 19.67 \sim \underline{19.7}$$

TOTAL FLOW ALLEY
W END OF SITE

$$19.67 + 2.28 = 23.06 \sim \underline{23.1}$$
$$+ \frac{2.22}{2}$$

TOTAL ALLEY + OFF SITE
ESPANOLA + BOWLING

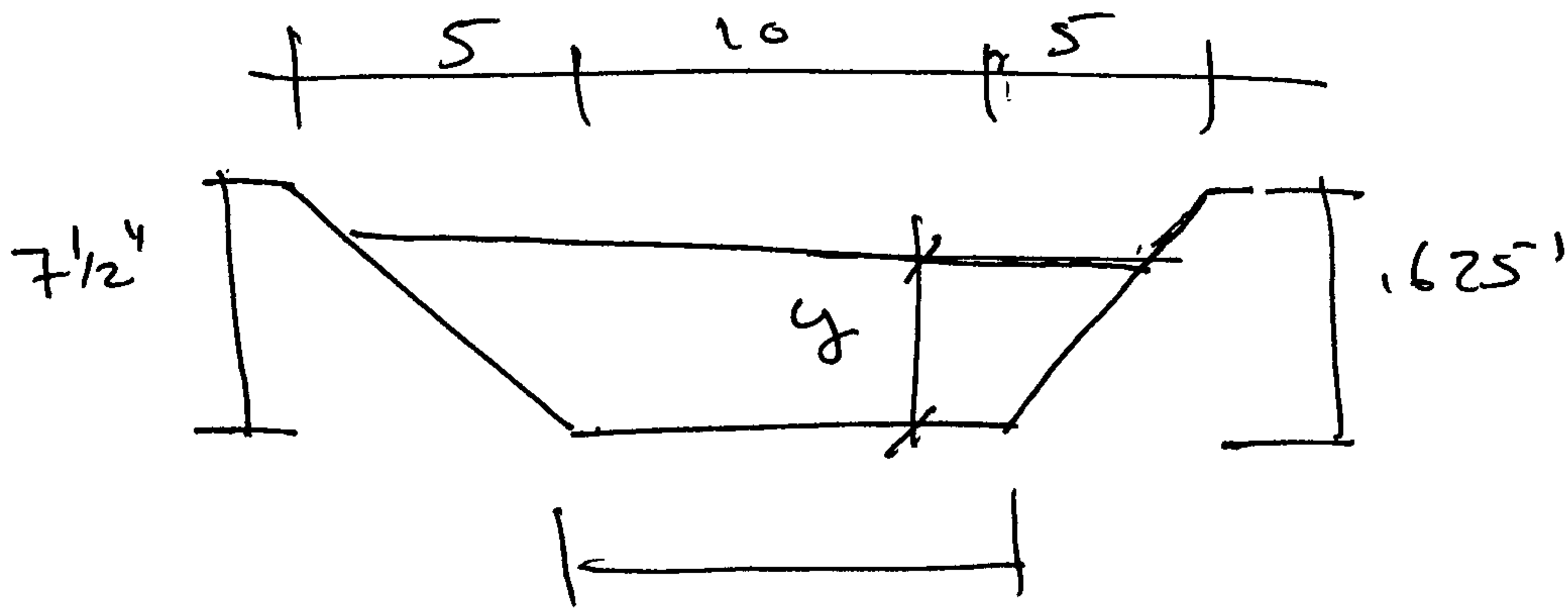
$$23.06 + 17.25 = 40.31 \sim 40.3$$

TOTAL VULNERED ESPANOLA
@ FRONT OF SITE, NO
ADD'L CALC'D FROM BOWLING

$$40.31 + 1.71 = 42.02 \sim 42.0$$

JACK'S KURB SIDE METERS - LOMAS

7/13/94



ASPHALT SWALE

$n = 0.017$

$S = 0.007\%$

$Q_{peak} = 23.06 \text{ CFS}$

FROM MANDRAP. WQ1 ATTACHED

$y = 0.46'$

$E_s \sim 0.67$

$V = 3.70 \text{ fps}$

$Fr \sim 1.0 \rightarrow 1.1$

file=mantrap (Manning's equation for normal flow in trapezoidal channels)
 b=bottom width (=0 for triangles), m=sideslope H:V (=0 for rectangles)
 P=wetted perimeter; R=A/P; Q=flow(cfs); Ev=velocity energy; Fr=Froude no.
 Es=specific energy= $y+v^2/2g$; Ms=specific momentum= $Q^2/gA+A*ybar$

COMMENT JACK HENDERSON KURBSIDE MOTORS

COMMENT LOMAS @ ESPANOLA

COMMENT ASPHALT ALLEY SWALE

07/13/94 10:26 AM

n	0.0170	0.0250
S	0.0070	0.0070
M1	8.0000	8.0000
M2	8.0000	8.0000
B	10.0000	10.0000
Y	0.4569	0.5629
T	17.3107	19.0072
A	6.2394	8.1648
P	17.3676	19.0773
R	0.3593	0.4280
Q	23.060	23.060
V	3.6959	2.8243
Ev	0.2123	0.1240
Es	0.6692	0.6869
Fr (Y)	0.9640	0.6637
Fr (A/T)	1.0854	0.7598
Ms	3.95	4.08

^A
 P USE FOR COMPARISON ONLY