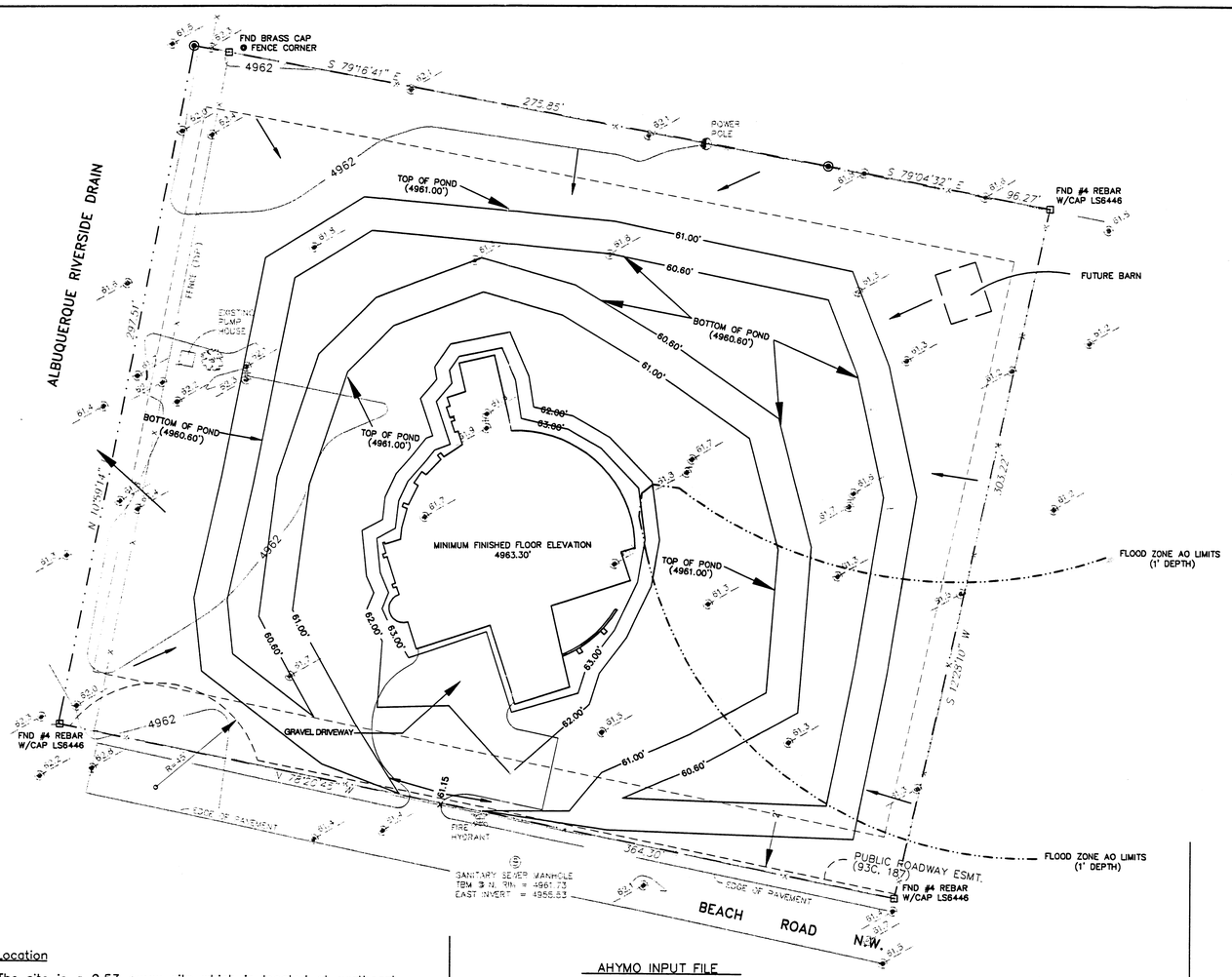


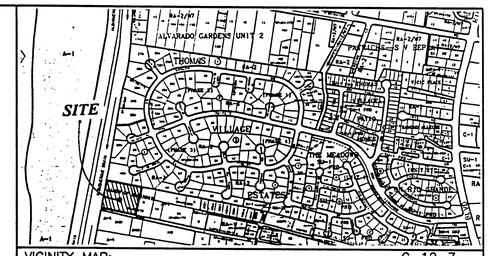
LEGEND

- EXISTING FENCE
- EXISTING POWER LINES
- EXISTING CURB & GUTTER
- BOUNDARY LINE
- EASEMENT
- PROPOSED SIDEWALK
- 61.3 PROPOSED GRADE
- 61.00' EXISTING GRADE
- (S) EXISTING MANHOLE
- PROPOSED CURB
- PROPOSED FLOOD WALL
- PROPOSED SPOT ELEVATION
- EXIST. WATER LINE
- PROPOSED RETAINING WALL

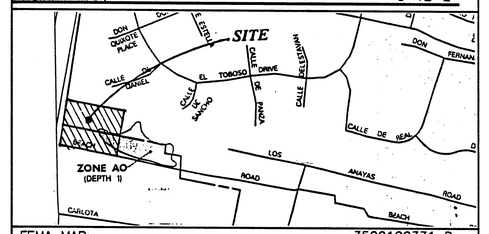
EXISTING CONDITIONS

THE ENGINEER HAS PERSONALLY INSPECTED THE LAND, AND NO GRADING, FILLING, OR EXCAVATION HAS OCCURRED THEREON SINCE THE EXISTING CONTOUR MAP WAS PREPARED.

SHAHAB BIAZAR, P.E. — DATE 9-4-98



VICINITY MAP: G-12-Z



FEMA MAP: 35001C0331 D

LEGAL DESCRIPTION:
LOT A, LANDS OF McGINNIS

NOTES:
1. ALL SPOT ELEVATIONS PRESENT THE FLOWLINE ELEVATION UNLESS OTHERWISE NOTED
2. ADD 4900 TO ALL THE SPOT ELEVATIONS.

RESIDENCE = 4614 S.F.
PORTALES 929 S.F.
GARAGE 738 S.F.

GRAPHIC SCALE
30 15 0 15 30
SCALE: 1"=30'

Location

The site is a 2.53 acres site which is located at northeast corner of Beach Road and Albuquerque Riverside Drain. See attached vicinity map for location.

Purpose

The purpose of this report is to present a grading and drainage solution for the proposed house.

Existing Drainage Conditions

The site is fairly flat. The runoff at existing runoff conditions (3.96 cfs) ponds on site. There are no offsite runoff that enter this site. The entire site falls within a 500-year flood plain. Small portion of the site falls within a 100-year flood plain, Zone AO (1' depth). See attached FIRM Map 35001C0331 D for the location of the site.

Proposed Conditions and On-Site Drainage Management Plan

The site will be graded so all the runoff will pond on site. The house pad will be placed outside the 100-year (Zone AO) limits. The existing ground elevations inside the Zone AO is 4961.30'. The house pad will be placed two feet (@ 4963.30') above this elevation. The pond provided has a volume of 10,006.34 cf which is greater than required volume of 9,981.60 cf. See this sheet for volume calculations. The runoff was calculated using the 100-year, 24-hour storm. See this grading plan for AHYMO input and summary output file and ponding location.

Calculations

City of Albuquerque, Development Process Manual, Section 22.2, Hydrology Section, revised January, 1993, was used for the runoff calculations. A treatment of D=100 % was used for on site existing conditions. A treatment of D=13% C=13%, B=24% and A=50% was used for proposed conditions. The site falls under Zone 2 based on Figure A-1 of page A-1.

AHYMO INPUT FILE

```
* ZONE 2
* (100-YEAR, 24 HOUR, UNDER EXISTING CONDITIONS)
START                TIME=0.0
RAINFALL             TYPE=2 RAIN QUARTER=0.0 IN
                     RAIN ONE=2.01 IN RAIN SIX=2.35 IN
                     RAIN DAY=2.75 IN DT=0.03333 HR
COMPUTE NM HYD       ID=1 HYD NO=101.0 AREA=0.003968 SQ MI
                     PER A=100.00 PER B=0.00 PER C=0.00 PER D=0.00
                     TP=0.1333 HR MASS RAINFALL=-1
*
* (100-YEAR, 24 HOUR, UNDER PROPOSED CONDITIONS)
COMPUTE NM HYD       ID=1 HYD NO=102.0 AREA=0.003968 SQ MI
                     PER A=50.00 PER B=24.00 PER C=13.00 PER D=13.00
                     TP=0.1333 HR MASS RAINFALL=-1
*
* (10-YEAR, 24 HOUR, UNDER EXISTING CONDITIONS)
START                TIME=0.0
RAINFALL             TYPE=2 RAIN QUARTER=0.0 IN
                     RAIN ONE=1.34 IN RAIN SIX=1.57 IN
                     RAIN DAY=1.83 IN DT=0.03333 HR
COMPUTE NM HYD       ID=1 HYD NO=111.0 AREA=0.003968 SQ MI
                     PER A=100.00 PER B=0.00 PER C=0.00 PER D=0.00
                     TP=0.1333 HR MASS RAINFALL=-1
*
* (10-YEAR, 24 HOUR, UNDER PROPOSED CONDITIONS)
COMPUTE NM HYD       ID=1 HYD NO=112.0 AREA=0.003968 SQ MI
                     PER A=50.00 PER B=24.00 PER C=13.00 PER D=13.00
                     TP=0.1333 HR MASS RAINFALL=-1
*
FINISH
```

pond covenant required?

Note: reseeding all graded areas?

AHYMO SUMMERY OUTPUT FILE

AHYMO SUMMARY TABLE (AHYMO194)-AMAFCA Hydrologic Model-January,1994 RUN DATE (MON/DAY/YR) =09/07/1998
INPUT FILE = 9817 PAGE = 1

COMMAND	HYDROGRAPH IDENTIFICATION	FROM ID NO.	TO ID NO.	AREA (SQ MI)	PEAK DISCHARGE (CFS)	RUNOFF VOLUME (AC-FT)	TIME TO RUNOFF (INCHES)	CFS PEAK (HOURS)	PER ACRE	NOTATION
START										TIME= .00
RAINFALL	TYPE= 2									RAIN24= 2.750
COMPUTE NM HYD	101.00	-	1	0.00397	3.96	0.112	0.53121	1.533	1.559	PER IMP= .00
COMPUTE NM HYD	102.00	-	1	0.00397	5.83	0.198	0.89492	1.500	2.294	PER IMP= 13.00
START										TIME= .00
RAINFALL	TYPE= 2									RAIN24= 2.070
COMPUTE NM HYD	111.00	-	1	0.00397	1.43	0.040	0.18834	1.533	0.562	PER IMP= .00
COMPUTE NM HYD	112.00	-	1	0.00397	3.01	0.100	0.47208	1.533	1.185	PER IMP= 13.00
FINISH										

VOLUME CALCULATIONS FOR 10-DAY STORM

ZONE = 2

SUB-BASIN	AREA (SF)	AREA (AC)	AREA (MI)
BASIN	86684.40	1.99000	0.003109

$$E = \frac{EA(AA)+EB(AB)+EC(AC)+ED(AD)}{AA+AB+AC+AD}$$

V-360 = E (AA+AB+AC+AD) / 12 in/ft

V-10,Day = V-360+AD(P-10,Day - P-360) / 12 in/ft

EA = 0.53
EB = 0.78
EC = 1.13
ED = 2.12

AA = 40.00%
AB = 24.00%
AC = 13.00%
AD = 13.00%

P-60 = 2.01
P-360 = 2.35
P-1440 = 2.75
P-10 Day = 3.95

E = 0.8178 IN
V-360 = 0.1731 AC-FT
AD = 0.3302 AC
V-10 Day = 0.2171 AC-FT
V-10 DAY = 9,457.03 CF

V-DISPLACED BY THE PAD = 0.00 CF

TOTAL REQUIRED VOLUME = 9,457.03 CF

VOLUME CALCULATIONS (PROVIDED)

AREA @ TOP SURFACE OF PONDING AREA (4961.00') = 14,815.01 SF
AREA @ BOTTOM SURFACE OF PONDING AREA (4960.60') = 6,253.96 SF
AVG. SURFACE AREA = (5961.00+4960.60)/2 = 25,015.85 SF
PONDING DEPTH = 0.40'
VOLUME PROVIDED = 25,015.85 x 0.40 = 10,006.34 CF

TOTAL VOLUME PROVIDED = 10,006.34 CF

4,214 cf

30/9817/9817GR.DWG/SBB/9-04-98

EROSION CONTROL PLAN AND POLLUTION PREVENTION NOTES

1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.
2. CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT OUT OF EXISTING RIGHT-OF-WAY.
3. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL STORM RUN OFF ON SITE.
4. REPAIR OF DAMAGED FACILITIES AND CLEAN-UP OF SEDIMENT ACCUMULATION ON ADJACENT PROPERTIES AND IN PUBLIC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.
5. ALL EXPOSED EARTH SURFACES MUST BE PROTECTED FROM WIND AND WATER EROSION PRIOR TO FINAL ACCEPTANCE OF ANY PROJECT.

RECEIVED SEP 1 0 1998 HYDROLOGY SECTION

ROUGH GRADING APPROVAL — DATE

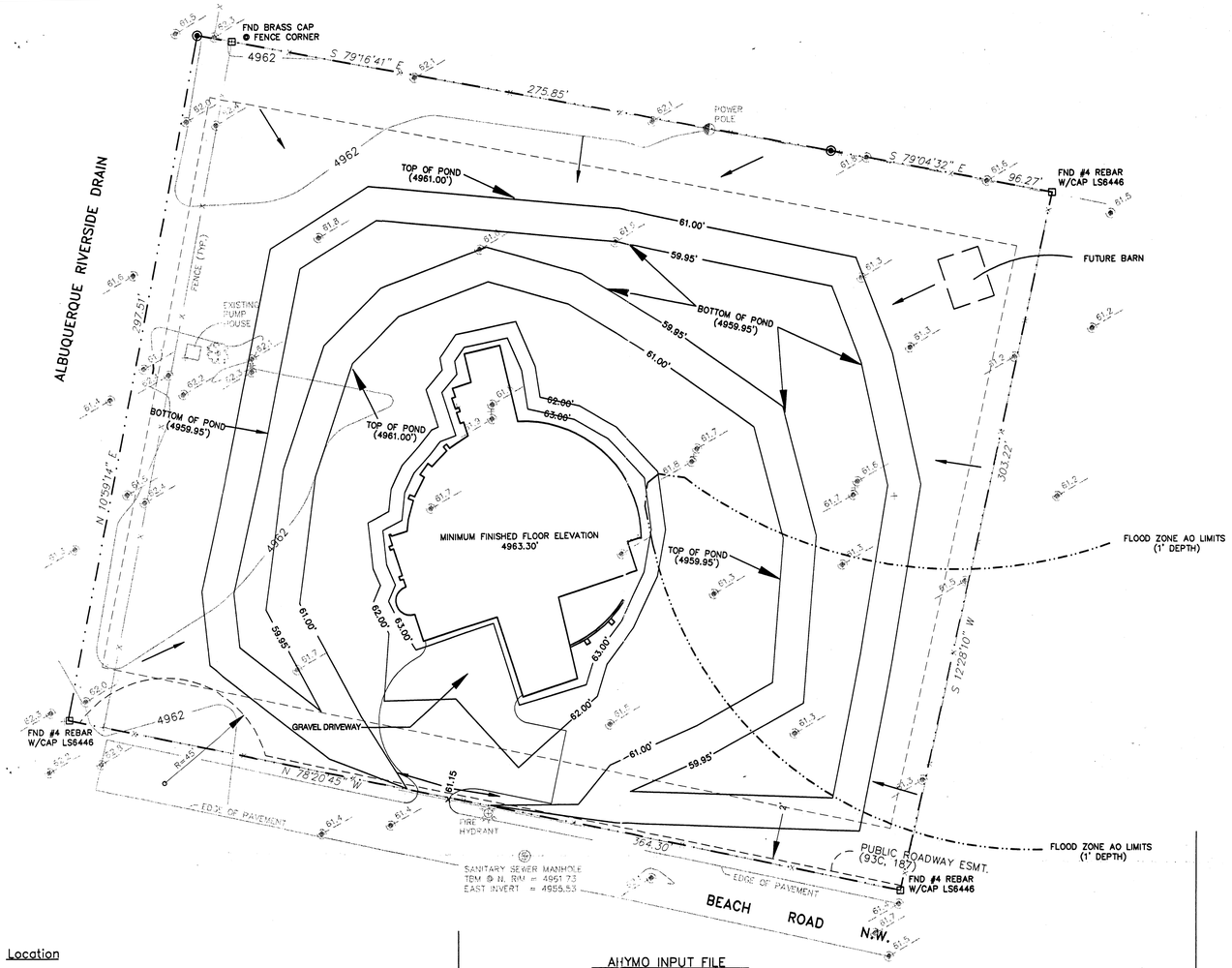
LOT A, LANDS OF McGINNIS GRADING AND DRAINAGE PLAN

ENGINEER'S SEAL — SHAHAB BIAZAR NEW MEXICO REGISTERED P.E. #13479

SHAHAB BIAZAR
P.E. #13479

ADVANCED ENGINEERING and CONSULTING
10209 SNOWFLAKE CT., NW
ALBUQUERQUE, NEW MEXICO 87114
(505)899-5570

DRAWN BY SBB
DATE 8-30-98
9817GR.DWG
SHEET # 1
JOB # 9817



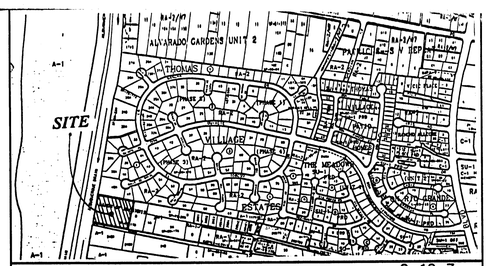
LEGEND

- EXISTING FENCE
- EXISTING POWER LINES
- EXISTING CURB & GUTTER
- BOUNDARY LINE
- EASEMENT
- PROPOSED SIDEWALK
- PROPOSED GRADE
- EXISTING GRADE
- EXISTING MANHOLE
- PROPOSED CURB
- PROPOSED FLOOD WALL
- PROPOSED SPOT ELEVATION
- EXIST. WATER LINE
- PROPOSED RETAINING WALL

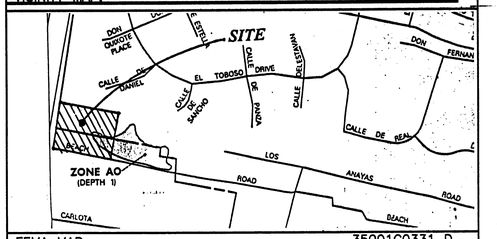
EXISTING CONDITIONS

THE ENGINEER HAS PERSONALLY INSPECTED THE LAND, AND NO GRADING, FILLING, OR EXCAVATION HAS OCCURRED THEREON SINCE THE EXISTING CONTOUR MAP WAS PREPARED.

SHAHAB BIAZAR, P.E. DATE



VICINITY MAP: G-12-Z



FEMA MAP: 35001C0331 D

LEGAL DESCRIPTION:
LOT A, LANDS OF McGINNIS

NOTES:
1. ALL SPOT ELEVATIONS PRESENT THE FLOWLINE ELEVATION UNLESS OTHERWISE NOTED
2. ADD 4900 TO ALL THE SPOT ELEVATIONS.
3. ALL THE DISTURBED AREAS HAVE TO BE RESEEDED.

RESIDENCE = 4614 S.F.
PORTALES 929 S.F.
GARAGE 738 S.F.

GRAPHIC SCALE
30 15 0 15 30
SCALE: 1"=30'

Location

The site is a 2.53 acres site which is located at northeast corner of Beach Road and Albuquerque Riverside Drain. See attached vicinity map for location.

Purpose

The purpose of this report is to present a grading and drainage solution for the proposed house.

Existing Drainage Conditions

The site is fairly flat. The runoff at existing runoff conditions (3.96 cfs) ponds on site. There are no offsite runoff that enter this site. The entire site falls within a 500-year flood plain. Small portion of the site falls within a 100-year flood plain, Zone AO (1' depth). See attached FIRM Map 35001C0331 D for the location of the site.

Proposed Conditions and On-Site Drainage Management Plan

The site will be graded so all the runoff will pond on site. The house pad will be placed outside the 100-year (Zone AO) limits. The existing ground elevations inside the Zone AO is 4961.30'. The house pad will be placed two feet (@ 4963.30') above this elevation. The pond provided has a volume of 10,006.34 cf which is greater than required volume of 9,981.60 cf. See this sheet for volume calculations. The runoff was calculated using the 100-year, 24-hour storm. See this grading plan for AHYMO input and summary output file and ponding location.

Calculations

City of Albuquerque, Development Process Manual, Section 22.2, Hydrology Section, revised January, 1993, was used for the runoff calculations. A treatment of A=100 % was used for on site existing conditions. A treatment of D=13% C=13%, B=54% and A=20% was used for proposed conditions. The site falls under Zone 2 based on Figure A-1 of page A-1.

AHYMO INPUT FILE

```
*
* ZONE 2
* (100-YEAR, 24 HOUR, UNDER EXISTING CONDITIONS)
START              TIME=0.0
RAINFALL           TYPE=2 RAIN QUARTER=0.0 IN
                   RAIN ONE=2.01 IN RAIN SIX=2.35 IN
                   RAIN DAY=2.75 IN DT=0.03333 HR
COMPUTE NM HYD     ID=1 HYD NO=101.0 AREA=0.003968 SQ MI
                   PER A=100.00 PER B=0.00 PER C=0.00 PER D=0.00
                   TP=0.1333 HR MASS RAINFALL=-1
*
* (100-YEAR, 24 HOUR, UNDER PROPOSED CONDITIONS)
COMPUTE NM HYD     ID=1 HYD NO=102.0 AREA=0.003968 SQ MI
                   PER A=20.00 PER B=54.00 PER C=13.00 PER D=13.00
                   TP=0.1333 HR MASS RAINFALL=-1
*
* (10-YEAR, 24 HOUR, UNDER EXISTING CONDITIONS)
START              TIME=0.0
RAINFALL           TYPE=2 RAIN QUARTER=0.0 IN
                   RAIN ONE=1.34 IN RAIN SIX=1.57 IN
                   RAIN DAY=1.83 IN DT=0.03333 HR
COMPUTE NM HYD     ID=1 HYD NO=111.0 AREA=0.003968 SQ MI
                   PER A=100.00 PER B=0.00 PER C=0.00 PER D=0.00
                   TP=0.1333 HR MASS RAINFALL=-1
*
* (10-YEAR, 24 HOUR, UNDER PROPOSED CONDITIONS)
COMPUTE NM HYD     ID=1 HYD NO=112.0 AREA=0.003968 SQ MI
                   PER A=20.00 PER B=54.00 PER C=13.00 PER D=13.00
                   TP=0.1333 HR MASS RAINFALL=-1
*
FINISH
```

AHYMO SUMMERY OUTPUT FILE

AHYMO SUMMARY TABLE (AHYMO194)-AMAFCA Hydrologic Model-January,1994 RUN DATE (MON/DAY/YR) =10/17/1998
INPUT FILE = 9817

COMMAND	HYDROGRAPH IDENTIFICATION	FROM ID NO.	TO ID NO.	AREA (SQ MI)	PEAK DISCHARGE (CFS)	RUNOFF VOLUME (AC-FT)	TIME TO RUNOFF (INCHES)	CFS PEAK (HOURS)	CFS PER ACRE	NOTATION
START										TIME= .00
RAINFALL TYPE= 2										RAIN24= 2.750
COMPUTE NM HYD	101.00	-	1	0.00397	3.96	0.112	0.53121	1.533	1.559	PER IMP= .00
COMPUTE NM HYD	102.00	-	1	0.00397	6.43	0.206	0.97494	1.500	2.532	PER IMP= 13.00
START										TIME= .00
RAINFALL TYPE= 2										RAIN24= 2.070
COMPUTE NM HYD	111.00	-	1	0.00397	1.43	0.040	0.18834	1.533	0.562	PER IMP= .00
COMPUTE NM HYD	112.00	-	1	0.00397	3.51	0.111	0.52635	1.500	1.382	PER IMP= 13.00
FINISH										

VOLUME CALCULATIONS FOR 10-DAY STORM

ZONE = 2

SUB-BASIN	AREA (SF)	AREA (AC)	AREA (MI)
BASIN	110630.11	2.5397	0.003968

$$E = \frac{EA(AA)+EB(AB)+EC(AC)+ED(AD)}{AA+AB+AC+AD}$$

V-360 = E (AA+AB+AC+AD) / 12 in/ft

V-10,Day = V-360+AD(P-10,Day - P-360) / 12 in/ft

EA = 0.53
EB = 0.78
EC = 1.13
ED = 2.12

AA = 20.00%
AB = 54.00%
AC = 13.00%
AD = 13.00%

P-60 = 2.01
P-360 = 2.35
P-1440 = 2.75
P-10 Day = 3.95

E = 0.9497 IN
V-360 = 0.2010 AC-FT
AD = 0.3302 AC
V-10 Day = 0.2450 AC-FT
V-10 DAY = 10,673.04 CF

V-DISPLACED BY THE PAD = 0.00 CF

TOTAL REQUIRED VOLUME = 10,673.04 CF

VOLUME CALCULATIONS (PROVIDED)

AREA @ TOP SURFACE OF PONDING AREA (4961.00') = 14,815.01 SF
AREA @ BOTTOM SURFACE OF PONDING AREA (4960.60') = 6,253.96 SF
AVG. SURFACE AREA = (14,815.01+6,253.96)/2 = 10,534.49 SF
PONDING DEPTH = 1.05'
VOLUME PROVIDED = 10,534.49 x 1.05 = 11,061.21 CF

TOTAL VOLUME PROVIDED = 11,061.21 CF

30/9817/9817GR.DWG/SBB/10-17-98

EROSION CONTROL PLAN AND POLLUTION PREVENTION NOTES

1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.
2. CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT OUT OF EXISTING RIGHT-OF-WAY.
3. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL STORM RUN OFF ON SITE.
4. REPAIR OF DAMAGED FACILITIES AND CLEAN-UP OF SEDIMENT ACCUMULATION ON ADJACENT PROPERTIES AND IN PUBLIC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.
5. ALL EXPOSED EARTH SURFACES MUST BE PROTECTED FROM WIND AND WATER EROSION PRIOR TO FINAL ACCEPTANCE OF ANY PROJECT.

ROUGH GRADING APPROVAL DATE

LOT A, LANDS OF McGINNIS GRADING AND DRAINAGE PLAN

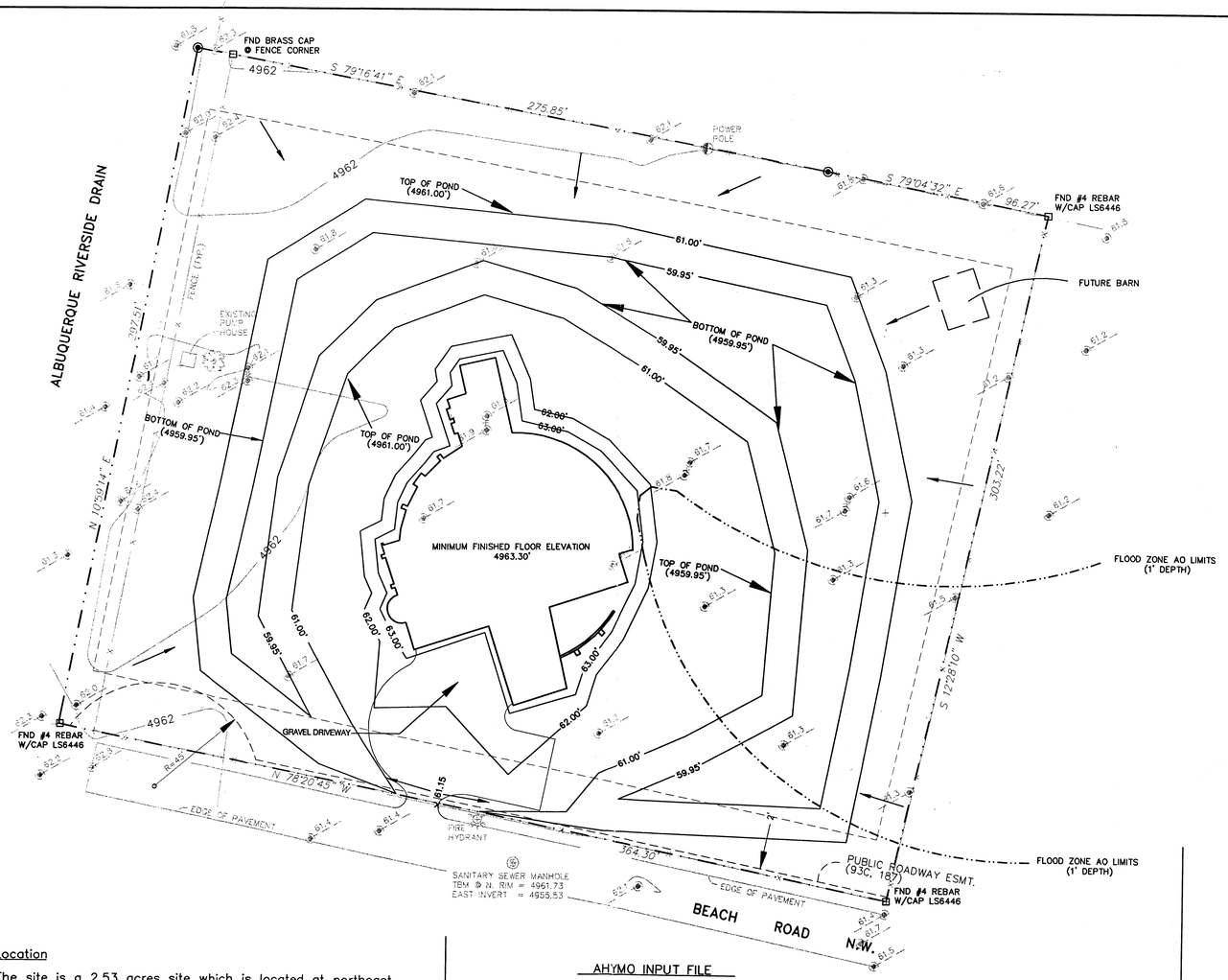
ENGINEER'S SEAL
SHAHAB BIAZAR NEW MEXICO 13479 REGISTERED PROFESSIONAL ENGINEER 10-17-98

SHAHAB BIAZAR
P.E. #13479

ADVANCED ENGINEERING and CONSULTING
10209 SNOWFLAKE CT., NW
ALBUQUERQUE, NEW MEXICO 87114
(505)899-5570

RECEIVED OCT 19 1998 HYDROLOGY SECTION

DRAWN BY SBB
DATE 9-30-98
9817GR.DWG
SHEET # 1
JOB # 9817



Location

The site is a 2.53 acres site which is located at northeast corner of Beach Road and Albuquerque Riverside Drain. See attached vicinity map for location.

Purpose

The purpose of this report is to present a grading and drainage solution for the proposed house.

Existing Drainage Conditions

The site is fairly flat. The runoff at existing runoff conditions (3.96 cfs) ponds on site. There are no offsite runoff that enter this site. The entire site falls within a 500–year flood plain. Small portion of the site falls within a 100–year flood plain, Zone AO (1' depth). See attached FIRM Map 35001C0331 D for the location of the site.

Proposed Conditions and On–Site Drainage Management Plan

The site will be graded so all the runoff will pond on site. The house pad will be placed outside the 100–year (Zone AO) limits. The existing ground elevations inside the Zone AO is 4961.30'. The house pad will be placed two feet (@ 4963.30') above this elevation. The pond provided has a volume of 10,006.34 cf which is greater than required volume of 9,981.60 cf. See this sheet for volume calculations. The runoff was calculated using the 100–year, 24–hour storm. See this grading plan for AHYMO input and summary output file and ponding location.

Calculations

City of Albuquerque, Development Process Manual, Section 22.2, Hydrology Section, revised January, 1993, was used for the runoff calculations. A treatment of A=100 % was used for on site existing conditions. A treatment of D=13% C=13%, B=54% and A=20% was used for proposed conditions. The site falls under Zone 2 based on Figure A–1 of page A–1.

AHYMO INPUT FILE

```
* ZONE 2
* (100–YEAR, 24 HOUR, UNDER EXISTING CONDITIONS)
START                TIME=0.0
RAINFALL             TYPE=2 RAIN QUARTER=0.0 IN
                     RAIN ONE=2.01 IN RAIN SIX=2.35 IN
                     RAIN DAY=2.75 IN DT=0.03333 HR
COMPUTE NM HYD       ID=1 HYD NO=101.0 AREA=0.003968 SQ MI
                     PER A=100.00 PER B=0.00 PER C=0.00 PER D=0.00
                     TP=0.1333 HR MASS RAINFALL=–1
*
* (100–YEAR, 24 HOUR, UNDER PROPOSED CONDITIONS)
COMPUTE NM HYD       ID=1 HYD NO=102.0 AREA=0.003968 SQ MI
                     PER A=20.00 PER B=54.00 PER C=13.00 PER D=13.00
                     TP=0.1333 HR MASS RAINFALL=–1
*
* (10–YEAR, 24 HOUR, UNDER EXISTING CONDITIONS)
START                TIME=0.0
RAINFALL             TYPE=2 RAIN QUARTER=0.0 IN
                     RAIN ONE=1.34 IN RAIN SIX=1.57 IN
                     RAIN DAY=1.83 IN DT=0.03333 HR
COMPUTE NM HYD       ID=1 HYD NO=111.0 AREA=0.003968 SQ MI
                     PER A=100.00 PER B=0.00 PER C=0.00 PER D=0.00
                     TP=0.1333 HR MASS RAINFALL=–1
*
* (10–YEAR, 24 HOUR, UNDER PROPOSED CONDITIONS)
COMPUTE NM HYD       ID=1 HYD NO=112.0 AREA=0.003968 SQ MI
                     PER A=20.00 PER B=54.00 PER C=13.00 PER D=13.00
                     TP=0.1333 HR MASS RAINFALL=–1
*
FINISH
```

AHYMO SUMMERY OUTPUT FILE

AHYMO SUMMARY TABLE (AHYMO194)–AMAFCA Hydrologic Model–January,1994 RUN DATE (MON/DAY/YR) =10/17/1998
INPUT FILE = 9817 PAGE = 1

COMMAND	HYDROGRAPH IDENTIFICATION	FROM ID NO.	TO ID NO.	AREA (SQ MI)	PEAK DISCHARGE (CFS)	RUNOFF VOLUME (AC–FT)	TIME TO RUNOFF (INCHES)	CFS PEAK (HOURS)	PER ACRE	NOTATION
START										TIME= .00
RAINFALL TYPE= 2										RAIN24= 2.750
COMPUTE NM HYD	101.00	–	1	0.00397	3.96	0.112	0.53121	1.533	1.559	PER IMP= .00
COMPUTE NM HYD	102.00	–	1	0.00397	6.43	0.206	0.97494	1.500	2.532	PER IMP= 13.00
START										TIME= .00
RAINFALL TYPE= 2										RAIN24= 2.070
COMPUTE NM HYD	111.00	–	1	0.00397	1.43	0.040	0.18834	1.533	0.562	PER IMP= .00
COMPUTE NM HYD	112.00	–	1	0.00397	3.51	0.111	0.52635	1.500	1.382	PER IMP= 13.00
FINISH										

LEGEND

- EXISTING FENCE
- EXISTING POWER LINES
- EXISTING CURB & GUTTER
- BOUNDARY LINE
- EASEMENT
- PROPOSED SIDEWALK
- 61.2 PROPOSED GRADE
- 61.00' EXISTING GRADE
- (S) EXISTING MANHOLE
- PROPOSED CURB
- PROPOSED FLOOD WALL
- PROPOSED SPOT ELEVATION
- EXIST. WATER LINE
- PROPOSED RETAINING WALL

EXISTING CONDITIONS

THE ENGINEER HAS PERSONALLY INSPECTED THE LAND, AND NO GRADING, FILLING, OR EXCAVATION HAS OCCURRED THEREON SINCE THE EXISTING CONTOUR MAP WAS PREPARED.

SHAHAB BIAZAR, P.E. DATE

VOLUME CALCULATIONS FOR 10–DAY STORM

ZONE = 2

SUB–BASIN	AREA (SF)	AREA (AC)	AREA (MI)
BASIN	110630.11	2.5397	0.003968

$$E = \frac{EA(AA)+EB(AB)+EC(AC)+ED(AD)}{AA+AB+AC+AD}$$

V–360 = E (AA+AB+AC+AD) / 12 in/ft

V–10,Day = V–360+AD(P–10,Day – P–360) / 12 in/ft

EA = 0.53
EB = 0.78
EC = 1.13
ED = 2.12

AA = 20.00%
AB = 54.00%
AC = 13.00%
AD = 13.00%

P–60 = 2.01
P–360 = 2.35
P–1440 = 2.75
P–10 Day = 3.95

E = 0.9497 IN
V–360 = 0.2010 AC–FT
AD = 0.3302 AC
V–10 Day = 0.2450 AC–FT
V–10 DAY = 10,673.04 CF

V–DISPLACED BY THE PAD = 0.00 CF

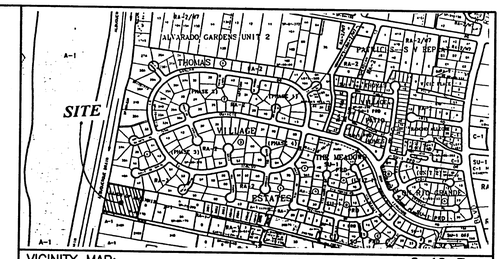
TOTAL REQUIRED VOLUME = 10,673.04 CF

VOLUME CALCULATIONS (PROVIDED)

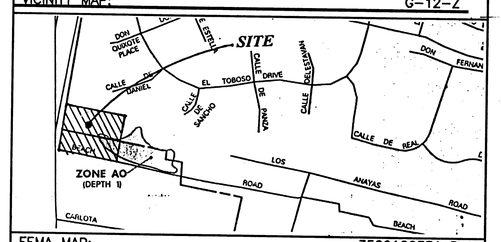
AREA @ TOP SURFACE OF PONDING AREA (4961.00') = 14,815.01 SF
AREA @ BOTTOM SURFACE OF PONDING AREA (4960.60') = 6,253.96 SF
AVG. SURFACE AREA = (14,815.01+6,253.96)/2 = 10,534.49 SF
PONDING DEPTH = 1.05'
VOLUME PROVIDED = 10,534.49 x 1.05 = 11,061.21 CF

TOTAL VOLUME PROVIDED = 11,061.21 CF

30/9817/9817GR.DWG/SBB/10–17–98



VICINITY MAP: G–12–Z



FEMA MAP: 35001C0331 D

LEGAL DESCRIPTION:
LOT A, LANDS OF McGINNIS

NOTES:
1. ALL SPOT ELEVATIONS PRESENT THE FLOWLINE ELEVATION UNLESS. OTHERWISE NOTED
2. ADD 4900 TO ALL THE SPOT ELEVATIONS.
3. ALL THE DISTURBED AREAS HAVE TO BE RESEEDED.

RESIDENCE = 4614 S.F.
PORTALES 929 S.F.
GARAGE 738 S.F.

GRAPHIC SCALE
30 15 0 15 30
SCALE: 1"=30'

EROSION CONTROL PLAN AND POLLUTION PREVENTION NOTES

1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.
2. CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT OUT OF EXISTING RIGHT–OF–WAY.
3. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL STORM RUN OFF ON SITE.
4. REPAIR OF DAMAGED FACILITIES AND CLEAN–UP OF SEDIMENT ACCUMULATION ON ADJACENT PROPERTIES AND IN PUBLIC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.
5. ALL EXPOSED EARTH SURFACES MUST BE PROTECTED FROM WIND AND WATER EROSION PRIOR TO FINAL ACCEPTANCE OF ANY PROJECT.

ROUGH GRADING APPROVAL DATE

LOT A, LANDS OF McGINNIS GRADING AND DRAINAGE PLAN

ENGINEER'S SEAL

SHAHAB BIAZAR NEW MEXICO 13479 REGISTERED PROFESSIONAL ENGINEER 10-17-98

SHAHAB BIAZAR
P.E. #13479

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DRAWN BY SBB
DATE 8–30–98
9817GR.DWG
SHEET # 1
JOB # 9817