

CITY OF ALBUQUERQUE

Planning Department
David Campbell, Director



Mayor Timothy M. Keller

June 19, 2019

Jean J. Bordenave, PE
PO Box 91194
Albuquerque, NM, 87199

RE: ABQ Self Storage
9501 Lomas Blvd NE
Permanent C.O. - Accepted
Engineer's Certification Dated 06/17/19
Engineer Stamp Date: 12/11/17
Hydrology File: J20D039

Dear Mr. Bordenave:

PO Box 1293

Based on the Certification received 06/17/19 and site visit on 06/05/19, this certification is approved in support of Permanent Release of Occupancy by Hydrology.

Albuquerque

If you have any questions, please contact me at 924-3995 or rbrissette@cabq.gov.

NM 87103

Sincerely,

www.cabq.gov

Renée C. Brissette, P.E. CFM
Senior Engineer, Hydrology
Planning Department



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 10/2015)

Project Title: ABQ Self Storage, Com Building Permit #: _____ Hydrology File #: 1200039
DRB#: _____ EPC#: _____ Work Order#: _____
Legal Description: LOT 1-A, Mesa Village
City Address: 9501 Lomas Blvd NE

Applicant: BORDENAVE DESIGNS Contact: JAKE
Address: PO Box 91194 ALB, NM 87199
Phone#: 505-823-1344 Fax#: _____ E-mail: jakebordenave@comcast.net
Other Contact: Dick Mann Contact: _____
Address: _____
Phone#: _____ Fax#: _____ E-mail: _____

Check all that Apply:

DEPARTMENT:

- ☒ HYDROLOGY/ DRAINAGE
☐ TRAFFIC/ TRANSPORTATION
☐ MS4/ EROSION & SEDIMENT CONTROL

TYPE OF SUBMITTAL:

- ☐ ENGINEER/ARCHITECT CERTIFICATION

☐ CONCEPTUAL G & D PLAN
☐ GRADING PLAN
☐ DRAINAGE MASTER PLAN
☐ DRAINAGE REPORT
☐ CLOMR/LOMR

☐ TRAFFIC CIRCULATION LAYOUT (TCL)
☐ TRAFFIC IMPACT STUDY (TIS)
☐ EROSION & SEDIMENT CONTROL PLAN (ESC)

☐ OTHER (SPECIFY) _____

TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

- ☒ BUILDING PERMIT APPROVAL
☒ CERTIFICATE OF OCCUPANCY

☐ PRELIMINARY PLAT APPROVAL
☐ SITE PLAN FOR SUB'D APPROVAL
☐ SITE PLAN FOR BLDG. PERMIT APPROVAL
☐ FINAL PLAT APPROVAL

☐ SIA/ RELEASE OF FINANCIAL GUARANTEE
☐ FOUNDATION PERMIT APPROVAL
☐ GRADING PERMIT APPROVAL
☐ SO-19 APPROVAL
☐ PAVING PERMIT APPROVAL
☐ GRADING/ PAD CERTIFICATION
☐ WORK ORDER APPROVAL
☐ CLOMR/LOMR

PRE-DESIGN MEETING?

☐ OTHER (SPECIFY) _____

IS THIS A RESUBMITTAL?: ☐ Yes ☒ No

DATE SUBMITTED: 06/13/19 By: [Signature]

COA STAFF: _____ ELECTRONIC SUBMITTAL RECEIVED: _____

**PRIVATE FACILITY
DRAINAGE COVENANT**

This Drainage Covenant ("Covenant"), between _____
 ("Owner"), whose address is _____,
 and whose telephone number is (____) _____ and the City of Albuquerque, New Mexico,
 a municipal corporation whose address is P.O. Box 1293, Albuquerque, New Mexico 87103, is
 made in Albuquerque, Bernalillo County, New Mexico and is entered into as of the date Owner signs
 this Covenant.

1. Recital. The Owner is the current owner of the following described real property
 located at [give legal description, and street address]

recorded on _____, pages ____ through ____, as Document No. _____
 in the records of the Bernalillo County Clerk, State of New Mexico (the "Property").

Pursuant to City ordinances, regulations and other applicable laws, the Owner is required to
 construct and maintain certain drainage facilities on the Property, and the parties wish to enter into
 this Covenant to establish the obligations and responsibilities of the parties.

2. Description and Construction of Drainage Facility. The Owner shall construct the
 following "Drainage Facility" within the Property at the at the Owner's sole expense in accordance
 with the standards, plans and specifications approved by the City: 3 WATER QUALITY PONDS

The Drainage Facility is more particularly described in Exhibit A attached hereto and
 made a part hereof.

3. Maintenance of Drainage Facility. The Owner shall maintain the Drainage Facility at
 Owner's sole cost in accordance with the approved Drainage Report and plans.

4. Benefit to Property. The Owner acknowledges and understands that the Drainage
 Facility required herein to be constructed on the Owner's property is for the private benefit and
 protection of the Owner's property and that failure to maintain such facility could result in damage or
 loss to the Property.

5. Inspection of Drainage Facility. The City shall have no duty or obligation whatsoever
 to perform any inspection, maintenance or repair of the Drainage Facility, it being the duty of the
 Owner, its heirs, successors and assigns to construct and maintain the facility in accordance with
 approved plans and specifications.

6. Liability of City. The Owner understands and agrees that the City shall not be liable
 to the Owner, its heirs, successors or assigns, or to any third parties for any damages resulting from

the Owner's failure to construct, maintain or repair the Drainage Facility.

7. Indemnification. The Owner owns and controls the Drainage Facility and shall not permit the Drainage Facility to constitute a hazard to the health or safety of the general public. The Owner agrees to indemnify, defend and hold harmless the City, its officials, agents and employees, from any claims, actions, suits or other proceedings arising from or out of the negligent acts or omissions of the Owner, its agents, representatives, contractors or subcontractors or arising from the failure of the Owner, its agents, representatives, contractors or subcontractors to perform any act or duty required of the Developer or Owner herein; provided, however, to the extent, if at all, Section 56-7-1 NMSA 1978 is applicable to this Covenant, this Covenant to indemnify will not extend to liability, claims, damages, losses or expenses, including attorneys' fees, arising out of (1) the preparation or approval of maps, drawings, opinions, reports, surveys, change orders, designs or specifications by the respective indemnitee, or the agents or employees of the respective indemnitee; or (2) the giving of or the failure to give direction or instructions by the respective indemnitee, where such giving or failure to give directions or instructions is the primary cause of bodily injury to persons or damage to property.

8. Assessment. Nothing in this Covenant shall be construed to relieve the Owner, its heirs, assigns and successors from an assessment against the Owner's property for improvements to the property under a duly authorized and approved Special Assessment District. The parties specifically agree that the value of the Drainage Facility will not reduce the amount assessed by the City.

9. Binding on Owner's Property. The covenants and obligations of the Owner set forth herein shall be binding on the Owner, its heirs, assigns and successors and on the Owner's property and constitute covenants running with the Owner's property until released by the City. This Covenant can only be released by the City's Chief Administrative Officer with concurrence of the City Engineer.

10. Entire Covenant. This Covenant contains the entire agreement of the parties and supersedes any and all other agreements or understandings, oral or written, whether previous to the execution hereof or contemporaneous herewith.

11. Changes to Covenant. Changes to this Covenant are not binding unless made in writing, signed by both parties.

12. Effective Date of Covenant. This Covenant shall be effective as of the date of signature of the Owner.

OWNER:

By [signature]: _____

Name [print]: _____

Title: _____

Dated: _____

CITY OF ALBUQUERQUE:

By: _____

Shahab Biazar, P.E., City Engineer

Dated: _____

OWNER'S ACKNOWLEDGMENT

STATE OF NEW MEXICO)
)ss
COUNTY OF BERNALILLO)

This instrument was acknowledged before me on this _____ day of _____,
20____, by _____ (name of person signing permit),
_____ (title of person signing permit) of
_____ (Owner).

(SEAL)

Notary Public
My Commission Expires: _____

CITY'S ACKNOWLEDGMENT

STATE OF NEW MEXICO)
)ss
COUNTY OF BERNALILLO)

This instrument was acknowledged before me on this _____ day of _____
20____, by Shahab Biazar, P.E., City Engineer, of the City of Albuquerque,
a municipal corporation, on behalf of said corporation.

(SEAL)

Notary Public
My Commission Expires: _____

(EXHIBIT A ATTACHED)

BORDENAVE DESIGNS
P.O. BOX 91194
ALBUQUERQUE, NM 87199-1194
(505)823-1344, FAX (505)821-9105
jakebordenave@comcast.net

LETTER OF TRANSMITTAL

TO: CITY OF ALBUQUERQUE HYDROLOGY DEVELOPMENT	DATE: 06/19/19	PROJECT NO: J20D039
	PROJECT NAME: ABQ Self Storage	

ATTN: CURTIS CHERNE

TRANSMITTED:

- ☒ HEREWITH
☐ UNDER SEPARATE COVER VIA

FOR YOUR:

- | | | |
|--|---|--------------------------------------|
| ☐ DISTRIBUTION TO PARTIES | ☐ APPROVAL | ☐ INFORMATION |
| ☐ REVIEW AND COMMENT | ☒ USE | ☐ RECORD |
| ☐ RECORDATION | | |

THE FOLLOWING:

- | | | |
|--|--|---|
| ☒ DRAWING(S) | ☐ SHOP DRAWING(S) | ☐ SEE BELOW |
| ☐ COPY OF LETTER | ☐ CALCULATIONS | ☐ SPECIFICATIONS |

COPIES	DATE	DESCRIPTION	ACTION CODE
1	06/17/19	Revised Grading and Drainage Plan. Sht 1 of 2	E
1	06/17/19	Drainage Facility Drainage Covenant	

ACTION CODES: A. Action indicated on item transmitted
B. No action required
C. Sign and return to this office
D. Sign and forward as directed under remarks
E. See remarks below

REMARKS:

Revised plan typo per your comment

COPIES TO: FILE	IF ENCLOSURE IS NOT AS NOTED, PLEASE NOTIFY ME
	FROM: JAKE BORDENAVE

**PRIVATE FACILITY
DRAINAGE COVENANT**

This Drainage Covenant ("Covenant"), between Richard Mann ("Owner"), whose address is 9501 Lomas NE, Albuquerque NM 87112, and whose telephone number is (505) 296-6699 and the City of Albuquerque, New Mexico, a municipal corporation whose address is P.O. Box 1293, Albuquerque, New Mexico 87103, is made in Albuquerque, Bernalillo County, New Mexico and is entered into as of the date Owner signs this Covenant.

1. Recital. The Owner is the current owner of the following described real property located at [give legal description, and street address]

See attached Legal Description
9501 Lomas Blvd NE Albuquerque NM 87112
Lot 1A Block A Summary plat of Lts 1A, 2B, 2C Block mesa Village Addn
 recorded on 07/19/1982, pages 211 through 212, as Document No. 982 036934
 in the records of the Bernalillo County Clerk, State of New Mexico (the "Property").

VOLUME C19

Pursuant to City ordinances, regulations and other applicable laws, the Owner is required to construct and maintain certain drainage facilities on the Property, and the parties wish to enter into this Covenant to establish the obligations and responsibilities of the parties.

2. Description and Construction of Drainage Facility. The Owner shall construct the following "Drainage Facility" within the Property at the at the Owner's sole expense in accordance with the standards, plans and specifications approved by the City: 3 WATER QUALITY PONDS

The Drainage Facility is more particularly described in Exhibit A attached hereto and made a part hereof.

3. Maintenance of Drainage Facility. The Owner shall maintain the Drainage Facility at Owner's sole cost in accordance with the approved Drainage Report and plans.

4. Benefit to Property. The Owner acknowledges and understands that the Drainage Facility required herein to be constructed on the Owner's property is for the private benefit and protection of the Owner's property and that failure to maintain such facility could result in damage or loss to the Property.

5. Inspection of Drainage Facility. The City shall have no duty or obligation whatsoever to perform any inspection, maintenance or repair of the Drainage Facility, it being the duty of the Owner, its heirs, successors and assigns to construct and maintain the facility in accordance with approved plans and specifications.

6. Liability of City. The Owner understands and agrees that the City shall not be liable to the Owner, its heirs, successors or assigns, or to any third parties for any damages resulting from

the Owner's failure to construct, maintain or repair the Drainage Facility.

7. Indemnification. The Owner owns and controls the Drainage Facility and shall not permit the Drainage Facility to constitute a hazard to the health or safety of the general public. The Owner agrees to indemnify, defend and hold harmless the City, its officials, agents and employees, from any claims, actions, suits or other proceedings arising from or out of the negligent acts or omissions of the Owner, its agents, representatives, contractors or subcontractors or arising from the failure of the Owner, its agents, representatives, contractors or subcontractors to perform any act or duty required of the Developer or Owner herein; provided, however, to the extent, if at all, Section 56-7-1 NMSA 1978 is applicable to this Covenant, this Covenant to indemnify will not extend to liability, claims, damages, losses or expenses, including attorneys' fees, arising out of (1) the preparation or approval of maps, drawings, opinions, reports, surveys, change orders, designs or specifications by the respective indemnitee, or the agents or employees of the respective indemnitee; or (2) the giving of or the failure to give direction or instructions by the respective indemnitee, where such giving or failure to give directions or instructions is the primary cause of bodily injury to persons or damage to property.

8. Assessment. Nothing in this Covenant shall be construed to relieve the Owner, its heirs, assigns and successors from an assessment against the Owner's property for improvements to the property under a duly authorized and approved Special Assessment District. The parties specifically agree that the value of the Drainage Facility will not reduce the amount assessed by the City.

9. Binding on Owner's Property. The covenants and obligations of the Owner set forth herein shall be binding on the Owner, its heirs, assigns and successors and on the Owner's property and constitute covenants running with the Owner's property until released by the City. This Covenant can only be released by the City's Chief Administrative Officer with concurrence of the City Engineer.

10. Entire Covenant. This Covenant contains the entire agreement of the parties and supersedes any and all other agreements or understandings, oral or written, whether previous to the execution hereof or contemporaneous herewith.

11. Changes to Covenant. Changes to this Covenant are not binding unless made in writing, signed by both parties.

12. Effective Date of Covenant. This Covenant shall be effective as of the date of signature of the Owner.

OWNER:

By [signature]: [Signature]
Name [print]: Richard D Mann
Title: owner
Dated: 6/17/19

CITY OF ALBUQUERQUE:

By: _____
Shahab Biazar, P.E., City Engineer
Dated: _____

OWNER'S ACKNOWLEDGMENT

STATE OF NEW MEXICO)
)ss
COUNTY OF BERNALILLO)

This instrument was acknowledged before me on this 17 day of JUNE,
2019, by RICHARD D MANN (name of person signing permit),
owner (title of person signing permit) of
ABQSELFSTORAGE.COM (Owner).



My Commission Expires 09/27/2020

[Signature]
Notary Public

My Commission Expires: 09/27/2020

CITY'S ACKNOWLEDGMENT

STATE OF NEW MEXICO)
)ss
COUNTY OF BERNALILLO)

This instrument was acknowledged before me on this _____ day of _____, 20____, by Shahab Biazar, P.E., City Engineer, of the City of Albuquerque, a municipal corporation, on behalf of said corporation.

Notary Public
My Commission Expires: _____

(EXHIBIT A ATTACHED)

EXHIBIT 'A'

GLORIETA

CR NE

EASTERDAY DRIVE NE

SIDEWALK
CULVERT

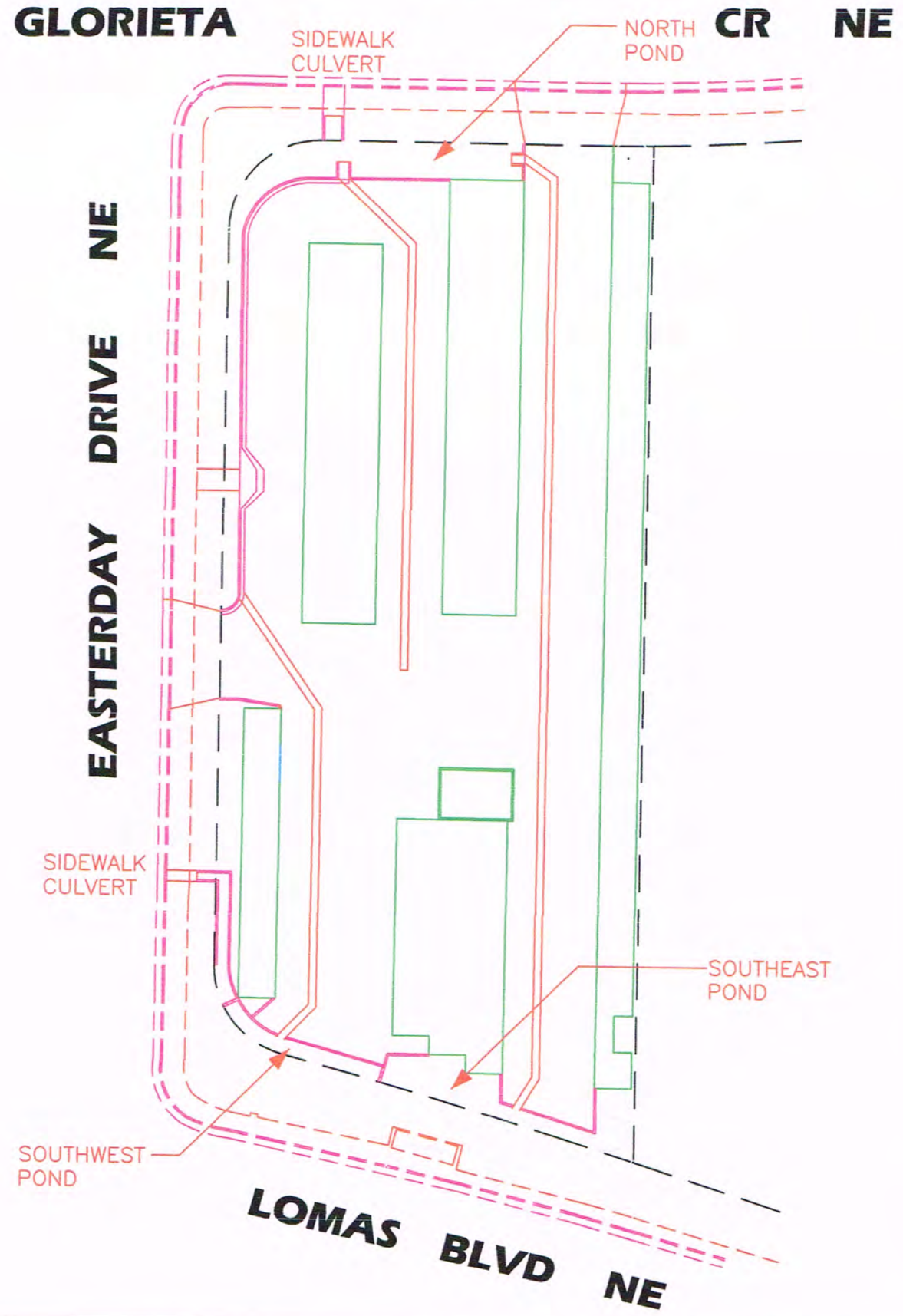
NORTH
POND

SIDEWALK
CULVERT

SOUTHEAST
POND

SOUTHWEST
POND

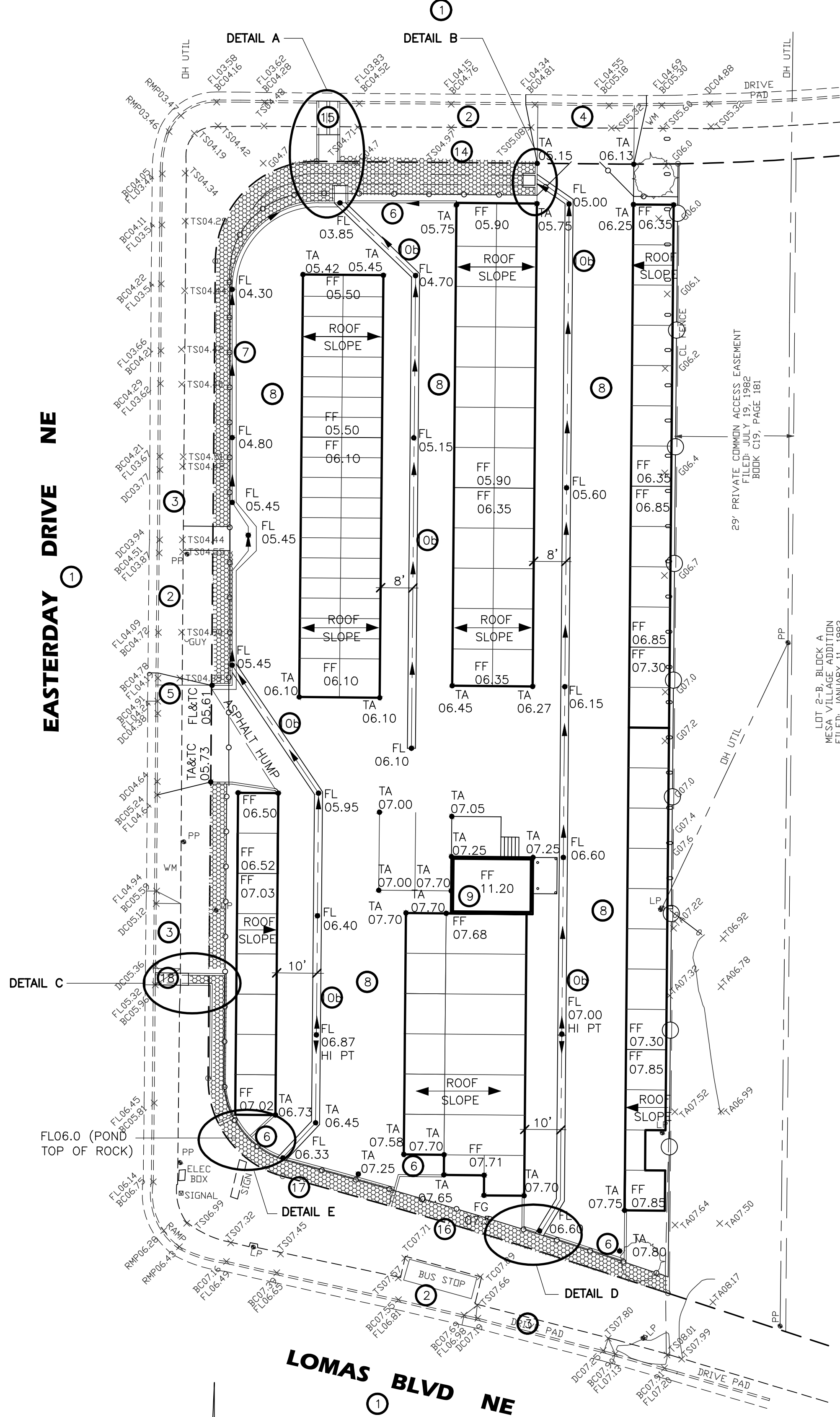
LOMAS BLVD NE



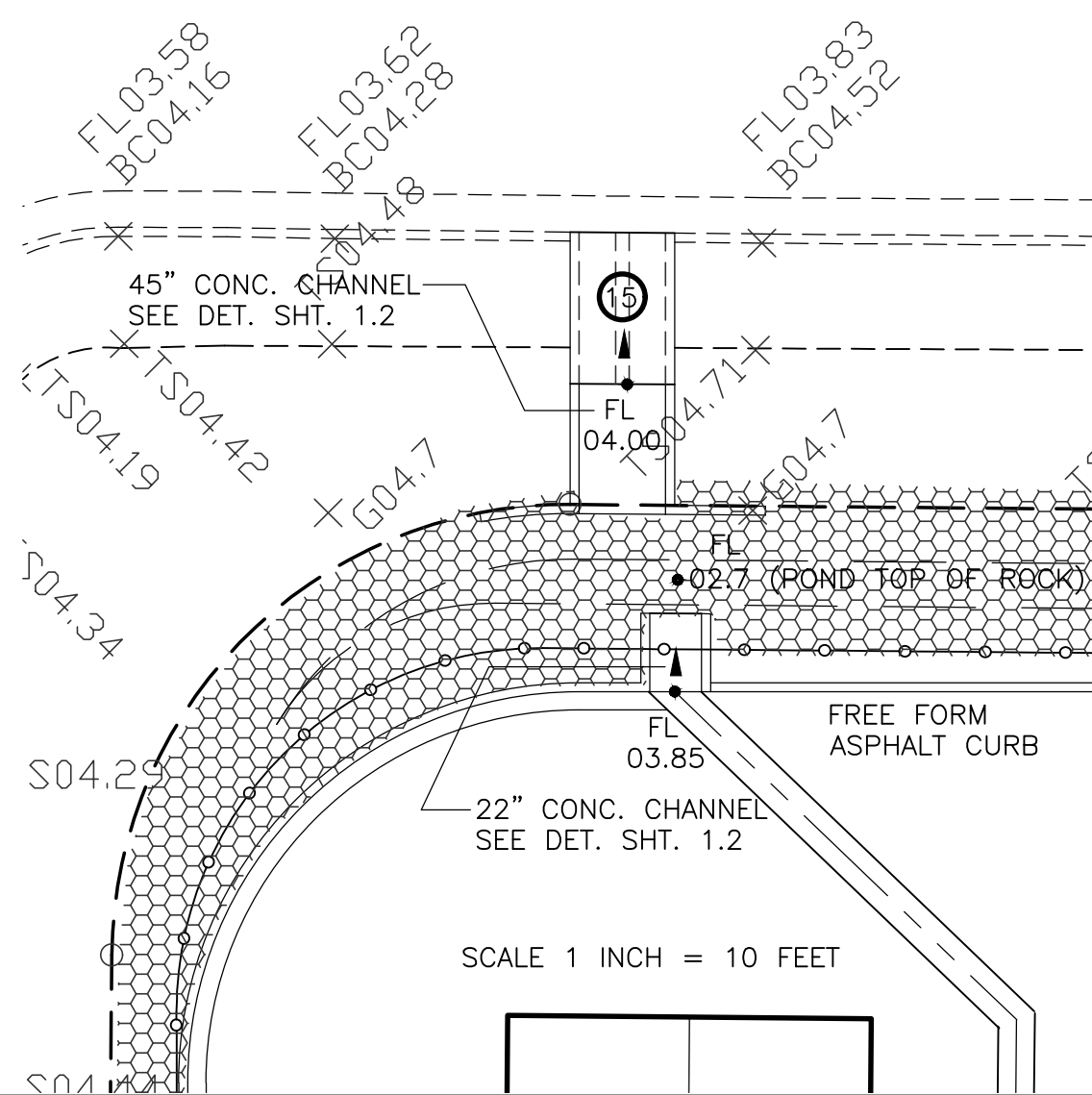
GRADING PLAN

NOTE:
CHAIN LINK FENCE IS 4' TO 5' INSIDE NORTH, SOUTH
AND WEST OF ACTUAL PROPERTY LINES.

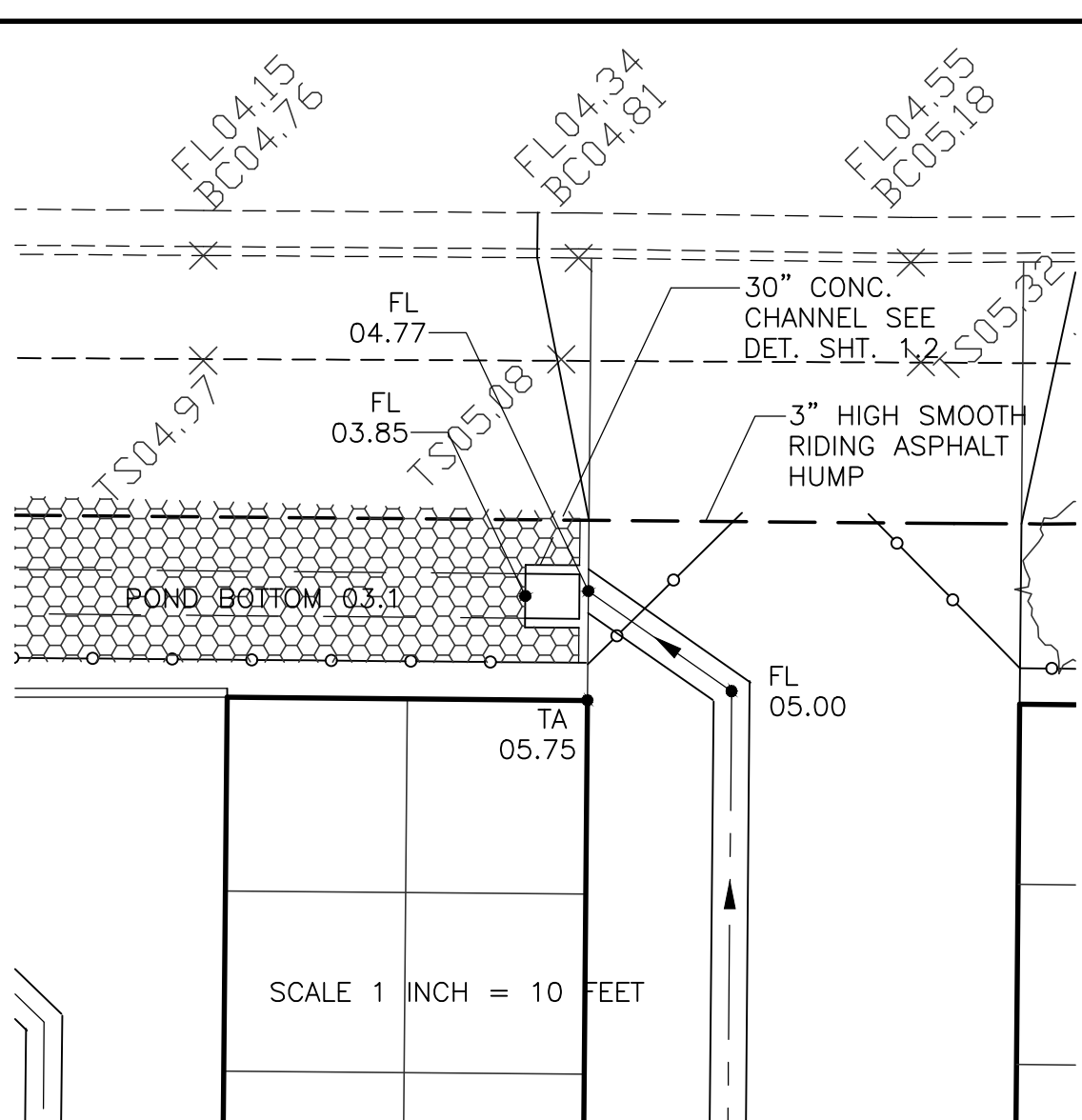
GLORIETA CIRCLE NE



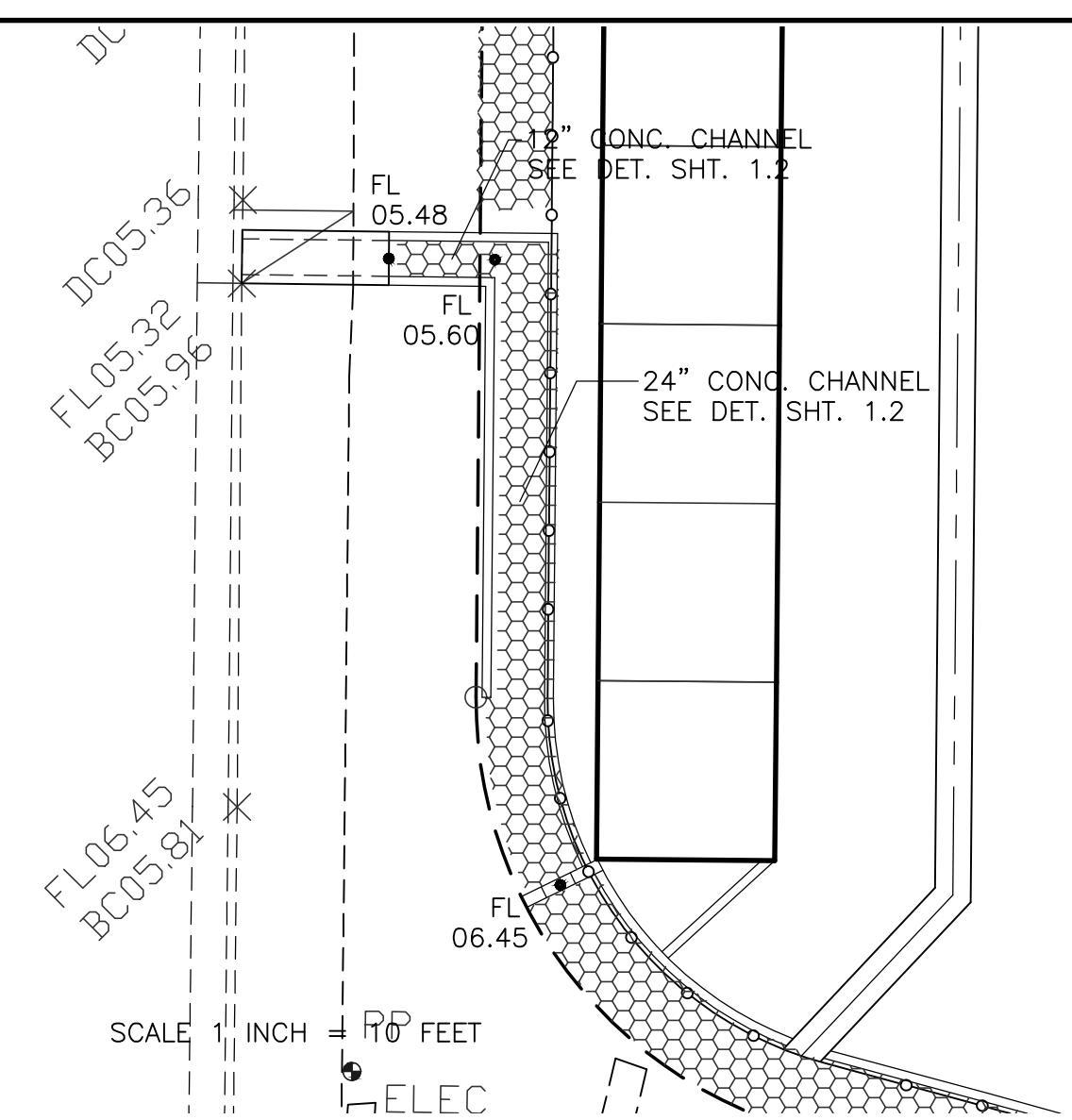
DETAIL A



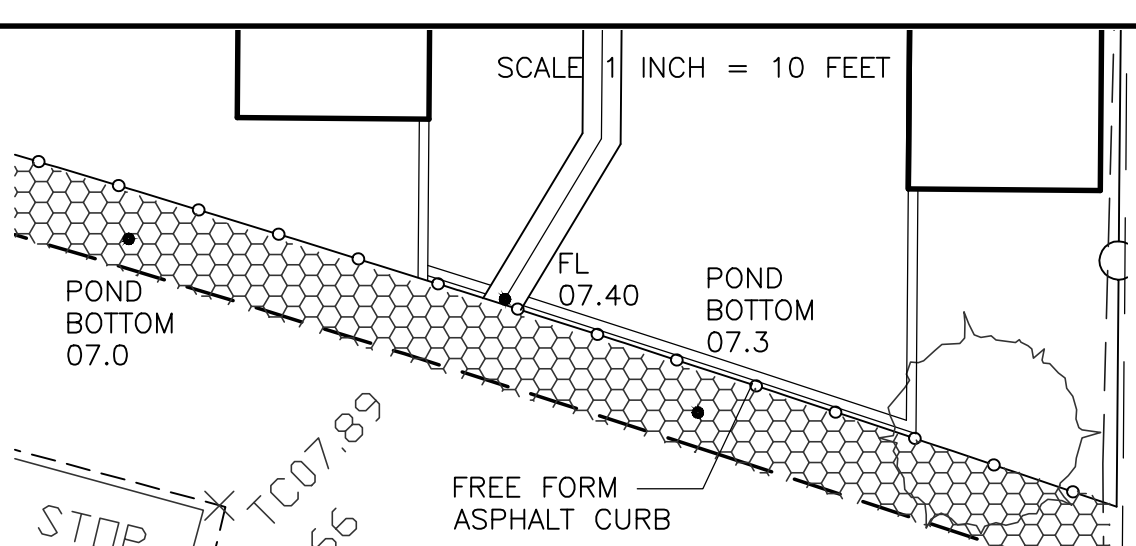
DETAIL B



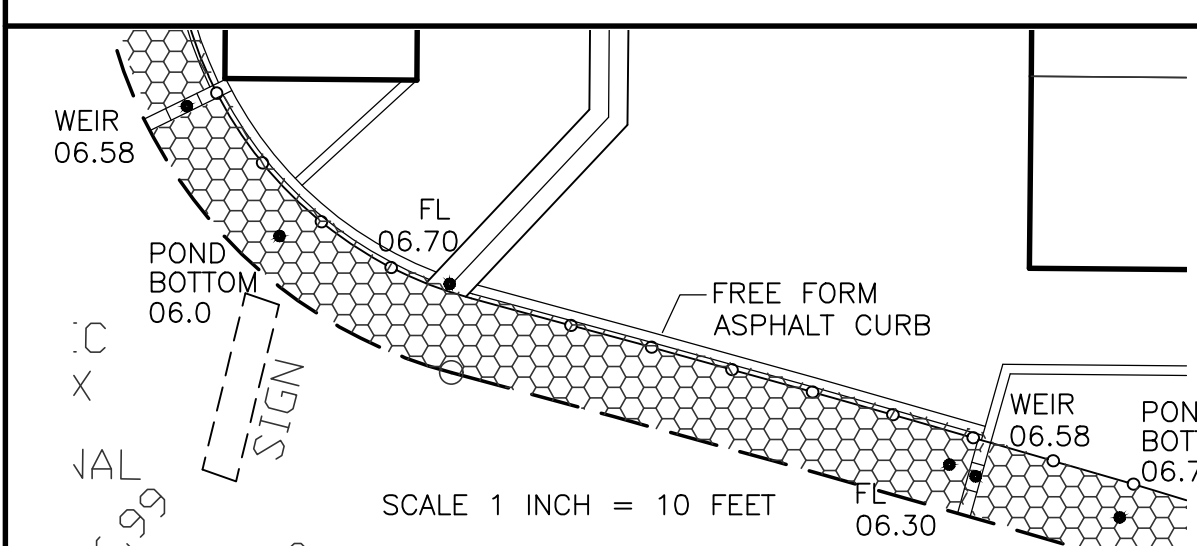
DETAIL C



DETAIL D



DETAIL E



KEYED NOTES

- EXISTING PAVED PUBLIC STREET.
- EXISTING 6' WIDE CONCRETE PUBLIC SIDEWALK.
- EXISTING CONCRETE DRIVE PAD. REMOVE DRIVE PAD AND CONSTRUCT STD. C&G AND 6' WIDE CONC SIDEWALK PER COA STD. DET. 5 2415B & 2430 RESPECTIVELY. CONSTRUCT 6' ADA SIDEWALK FROM EXISTING WALK TO NEW FENCE. INSTALL 4' WALK GATE AT FENCE.
- REMOVE CONCRETE CURB & GUTTER AND CONCRETE SIDEWALK. CONSTRUCT 24' CONCRETE DRIVE PAD PER COA STD. DET. 2425, SECTION D-D.
- EXISTING 16' CONCRETE DRIVE PAD. REMOVE DRIVE PAD AND WIDEN TO 24' NORTH TO CREATE A 24' DRIVE PAD. CONSTRUCT NEW DRIVE PAD PER COA STD. DET. 2425, SECTION D-D.
- ASPHALT CURB. SEE ARCHITECTURAL SITE PLAN AND/OR TCL PLAN FOR GEOMETRY.
- PROPOSED 18"x6" HIGH CONCRETE CURB. SEE DETAIL SHEET C1.2. SEE ARCHITECTURAL SITE PLAN AND/OR TCL PLAN FOR GEOMETRY.
- PROPOSED ASPHALT PAVEMENT. SEE DETAIL SHEET C1.2.
- EXISTING FRAME OFFICE BUILDING. LOWER TO NEW GRADE.
- VOID
- CONCRETE VALLEY GUTTER. SEE DETAIL SHEET C1.2.
- SEE DETAIL A ON THIS SHEET.
- SEE DETAIL B ON THIS SHEET.
- SEE DETAIL C ON THIS SHEET.
- PROPOSED WATER HARVESTING POND. BOTTOM OF POND 03.10 W/ 2:1 SIDE SLOPES. MINIMUM STORAGE VOLUME=643 C.F.
- PROPOSED SIDEWALK CULVERT, PEAK DISCHARGE 2.67 CFS. (2-18" BARRELS) PER COA STD. DET. 2236. APPROX. INLET INV. 03.96 AND OUTLET INV. 03.80.
- PROPOSED WATER HARVESTING POND. BOTTOM OF POND 03.30 W/ 2:1 SIDE SLOPES. MINIMUM STORAGE VOLUME=63 C.F.
- PROPOSED SIDEWALK CULVERT, PEAK DISCHARGE 0.55 CFS. (1-12" BARREL) PER COA STD. DET. 2236. APPROX. INLET INV. 03.96 AND OUTLET INV. 03.80.
- INSTALL CHAIN LINK FENCE AT NORTH, SOUTH AND WEST SIDES OF DEVELOPED AREA. INSTALL 12" DOUBLE SWINGING GATES AT NORTH DRIVE ENTRY AND 24" SLIDING GATE AT WEST DRIVE ENTRY.

DRAINAGE NOTES

- THE SITE IS CURRENTLY DEVELOPED. THE EXISTING DEVELOPMENT IS TO BE REMOVED AND THE SITE WILL BE REGRADED. ONE OF THE THREE EXISTING DRIVEPADS LOCATED ON EASTERDAY WILL BE RECONSTRUCTED AND USED IN THE NEW SITE. A NEW DRIVEWAY WILL BE CONSTRUCTED ON THE NORTH SIDE OF THE SITE. THERE IS AN EXISTING CONCRETE SIDEWALK IN ALL THE STREET RIGHTS-OF-WAY.
- THE SITE IS LOCATED IN RAINFALL ZONE 3. THERE WILL BE AN INCREASE (ABOVE NATIVE CONDITIONS) IN RUNOFF VOLUMES AND FLOW RATES DUE TO DEVELOPMENT. SEE TABLE ON SHEET C1.2 FOR EXISTING AND DEVELOPED FLOW RATES AND RUNOFF VOLUMES.
- RUNOFF FROM IMPERVIOUS AREAS IS ROUTED TO SHALLOW RETENTION PONDS. THE PONDS ARE SIZED TO CONTAIN THE CALCULATED REQUIRED WATER HARVESTING VOLUME.
- THE SITE IS LOCATED IN AN AREA DESIGNATED "ZONE X" PER FEMA FIRM MAP NO. 114H, DATED AUGUST, 2012.
- EXISTING TOPOGRAPHY FOR THE SITE WAS OBTAINED BY HARRIS SURVEYING, INC. IN APRIL, 2017.

GRADING NOTES

- TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT THE NEW MEXICO ONE CALL SYSTEM AT 811 FOR LOCATION OF EXISTING UTILITIES.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
- ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH THE APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
- ALL CONSTRUCTION WITHIN THE PUBLIC RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE STANDARDS AND PROCEDURES.

EROSION CONTROL NOTES

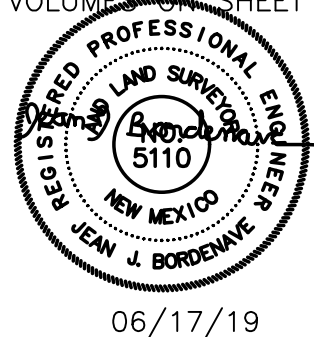
- THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE ONTO PUBLIC RIGHT-OF-WAY OR PRIVATE PROPERTY. THIS CAN BE ACHIEVED BY THE CONSTRUCTION OF TEMPORARY SOIL BERMS OR SILT FENCES AT PROPERTY LINES AND WETTING SOIL TO PREVENT IT FROM BLOWING. IF THE SITE IS CONTROLLED BY A SWPPP PLAN, EROSION CONTROL SHALL BE ACCOMPLISHED ACCORDING TO THE PLAN.
- 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 THE APPROPRIATE BARRICADING, TOP SOIL DISTURBANCE AND ACCESS PERMITS FROM THE CITY PRIOR TO BEGINNING CONSTRUCTION.

ENGINEER'S CERTIFICATION

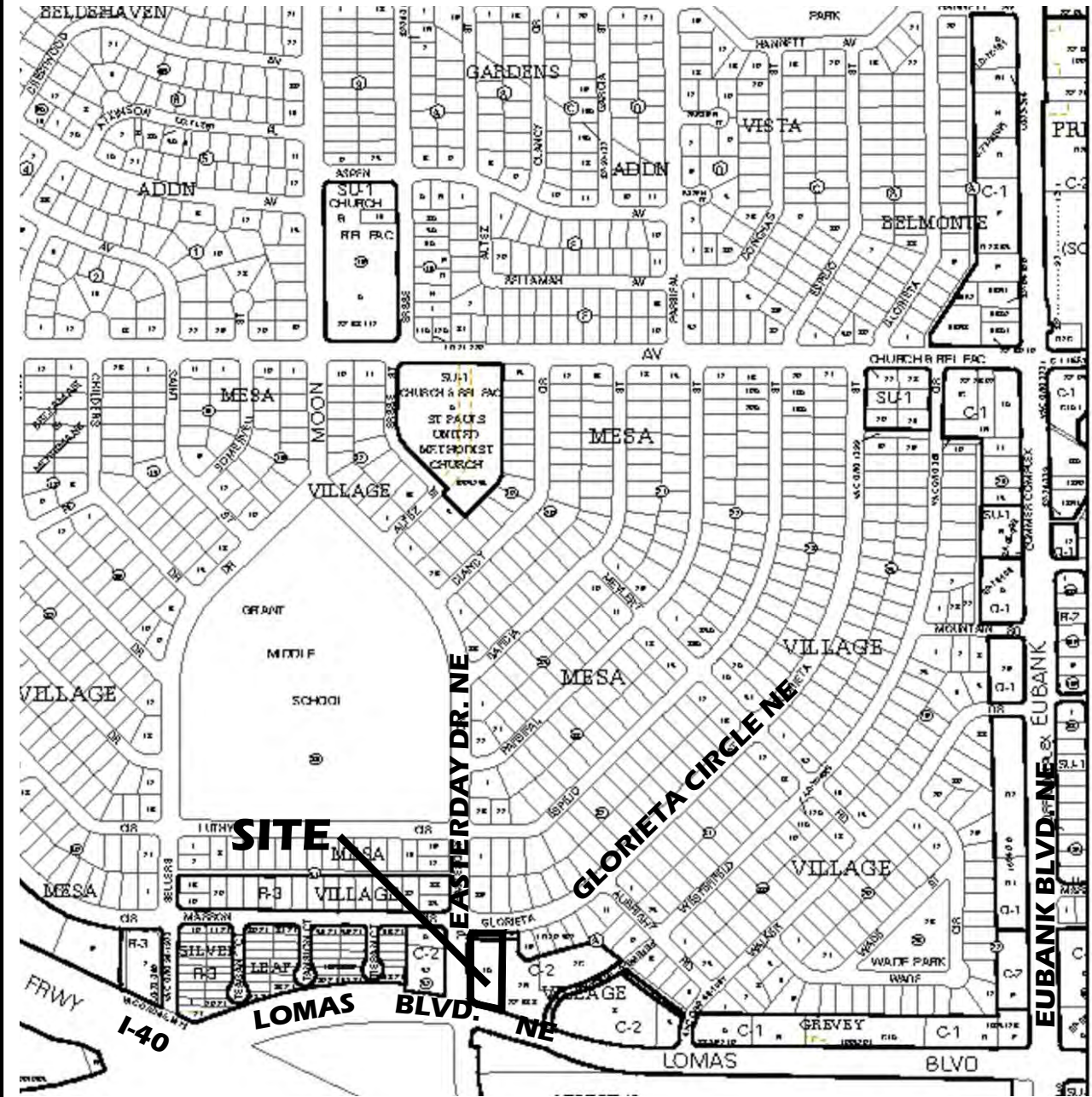
I, JEAN J. BORDENAVE, NM PE&LS NO. 5110, OF THE FIRM BORDENAVE DESIGNS, HEREBY CERTIFY THAT THIS PROJECT HAS BEEN GRADED AND WILL DRAIN IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED 02/11/17 BY JEAN J. BORDENAVE. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY ME AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR CERTIFICATE OF OCCUPANCY.

EXCEPTIONS AND/OR QUALIFICATIONS: MINOR ELEVATION DIFFERENCES AS SHOWN. REVISION OF THE POND CONSTRUCTION AS SHOWN ON THIS SHEET, USE OF COBBLE INSTEAD OF CONCRETE FOR CHANNEL LINING AND ADDITION OF A CONCRETE ACCESS FOR THE DISABLED. REVISION OF POND VOLUMES ON SHEET 2 OF 2.

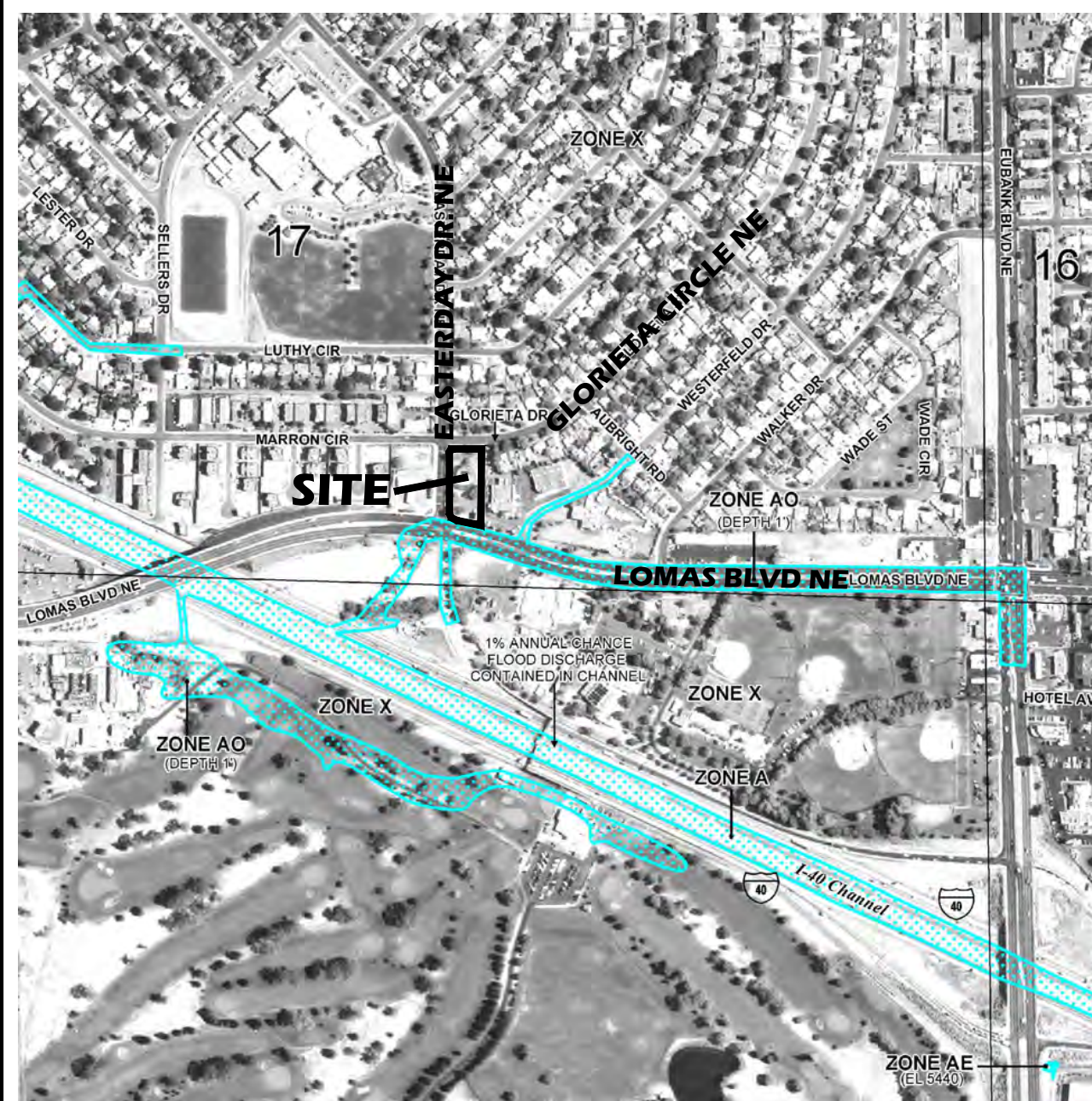
THE RECORD INFORMATION PRESENTED ON THE EDITED DESIGN DOCUMENT IS NOT NECESSARILY COMPLETE AND INTENDED ONLY TO VERIFY SUBSTANTIAL COMPLIANCE OF THE GRADING AND DRAINAGE ASPECTS OF THIS PROJECT. THOSE RELYING ON THE EDITED DESIGN DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE.



VICINITY MAP NO.



FEMA FIRM PANEL NO.



LEGEND

SEE LEGEND ON SHEET C1.2

LEGAL DESCRIPTION

LOT 1-A, MESA VILLAGE

PERMANENT BENCHMARK

ACS STATION 10-J20, ELEVATION 5406.977 (NAVD 1988)

no.	date	remarks	by
REVISIONS			
project title ABOSELFSTORAGE.COM 9501 LOMAS BLVD. NE ALBUQUERQUE, NM			
sheet title GRADING & DRAINAGE PLAN			
drawn by	METO	design by	JJB
project no.	1711	sheet	C1.1
12/11/17			
BORDENAVE DESIGNS P.O. BOX 91194, ALBUQUERQUE, NM 87199 Office (505)823-1344 Cell (505)480-6812 Email JakeBordenave@comcast.net			

CONCRETE CHANNEL

* ROUND EXPOSED EDGES WITH 1/2" EDGING TOOL.

NO. 4 REBAR (2 MIN.) AT 18" O.C. MAX.

SUBGRADE PREPARATION (95% MODIFIED PROCTOR)

COMPACTED SUBGRADE (90% MODIFIED PROCTOR)

18" x 6" HIGH CONCRETE CURB

CUT SLOPE (SEE GRADING PLAN)

PREFERRED CUT SLOPE

FILL SLOPE

PORTLAND CEMENT CONCRETE CURB AND GUTTER

SUBGRADE PREPARATION (95% MODIFIED PROCTOR)

COMPACTED SUBGRADE (90% MODIFIED PROCTOR)

PAVING SURFACE (SEE PAVING SECTION)

NOTE:
PROVIDE CONTRACTION JOINTS AT 5 FEET ON CENTER AND EXPANSION JOINTS AT 40 FEET ON CENTER UNLESS OTHERWISE STATED ON SITE PLANS OR IF CURB ABUTS SIDEWALK WHERE CURB JOINTS SHALL MATCH SIDEWALK JOINTS.

POND WEIRS

#4 REINFORCING STEEL

* ROUND EXPOSED EDGES WITH 1/2" EDGING TOOL.

PORTLAND CEMENT CONCRETE

SUBGRADE PREPARATION (95% MODIFIED PROCTOR)

COMPACTED SUBGRADE

4" COBBLE

CONCRETE CHANNEL & DISSIPATOR

ROUND EXPOSED EDGES WITH 1/2" EDGING TOOL.

NO. 4 REBAR (2 MIN.) AT 18" O.C. MAX.

SUBGRADE PREPARATION (95% MODIFIED PROCTOR)

COMPACTED SUBGRADE (90% MODIFIED PROCTOR)

ENERGY DISSIPATOR

PERCENT BY VOL.	PERCENT BY VOL.
> 6"	10-25
3"-6"	40-70
1"-3"	10-25
3/8"-1"	5-10
< 3/8"	0

DISSIPATOR CONSTRUCTION NOTES:
DISSIPATOR SHALL BE FLAT. INCREASE STONE PORTION OF SECTION TO 10" THICKNESS.
WIDTH OF DISSIPATOR TO BE AT LEAST 6" BEYOND THE APPROACH CHANNEL WIDTH AND 3' LONG IN THE DIRECTION OF TRAVEL.

ASPHALT PAVEMENT

3" ASPHALT SURFACE COURSE

4" AGGREGATE BASE COURSE

12" SUBGRADE PREPARATION (2-6" COURSES)

(95% MODIFIED PROCTOR)

COMPACTED SUBGRADE (90% MODIFIED PROCTOR)

NOTES:
1. ASPHALT MIX DESIGN TO USE CITY OF ALBUQUERQUE AGGREGATE CLASS C AND HAVE A MARSHALL STABILITY GREATER THAN 1800 LBS.
2. ASPHALT CONCRETE COURSES GREATER THAN 3" IN THICKNESS SHALL BE PLACED WITH MULTIPLE LIFTS. MINIMUM LIFT THICKNESS 1 1/2".

CONCRETE VALLEY GUTTER

VALLEY GUTTER (3000 PSI P. C. CONCRETE)

6" SUBGRADE PREPARATION (95% MODIFIED PROCTOR)

COMPACTED SUBGRADE (90% MODIFIED PROCTOR)

DRAINAGE DATA

WATER HARVESTING DESIGN

WATER HARVESTING VOLUME

NORTH BASIN

VOLUME = IMPERVIOUS AREA X (0.44-0.10)/12
= (22616)(0.34)/12
= 642 C.F. required
= 643 C.F. @ 18" deep provided

SOUTHEAST BASIN

VOLUME = IMPERVIOUS AREA X (0.44-0.10)/12
= (2306)(0.34)/12
= 65 C.F. required
= 128 C.F. @ 3" deep provided

SOUTHWEST BASIN

VOLUME = IMPERVIOUS AREA X (0.44-0.10)/12
= (1559)(0.34)/12
= 44 C.F. required
= 81 C.F. @ 4" deep provided

WATER HARVESTING AS BUILT

AS BUILT SOUTHEAST AND SOUTHWEST WATER QUALITY BASINS ARE SIMILAR TO DESIGN VALUES. NORTH BASIN IS SMALLER THAN DESIGN.

BASIN	REQ'D VOL.	PLAN VOL.	ACTUAL VOL.
NORTH	642	643	513
SOUTHEAST	65	128	164
SOUTHWEST	44	81	94
TOTAL	751	852	771

SITE RUNOFF VIA PONDS

POND INLETS

BASIN A

CHANNEL INLET, SHARP CRESTED WEIR
Q = CLH^{1.5} where Q=1.17 cfs, C=3.2, H=0.25 ft
therefore L = 2.92, USE 36" curb cut and channel.

BASIN B

CHANNEL INLET, SHARP CRESTED WEIR
Q = CLH^{1.5} where Q=1.44 cfs, C=3.2, H=0.4 ft
therefore L = 1.78, USE 22" curb cut and channel.

BASIN D

CHANNEL INLET, SHARP CRESTED WEIR
Q = CLH^{1.5} where Q=0.32 cfs, C=3.2, H=0.4 ft
therefore L = 0.40, USE 12" curb cut and channel.

BASIN E

CHANNEL INLET, SHARP CRESTED WEIR
Q = CLH^{1.5} where Q=0.23 cfs, C=3.2, H=0.4 ft
therefore L = 0.28, USE 12" curb cut and channel.

POND OUTLETS

DISCHARGE TO GLORIETA CIRCLE

CHANNEL INLET, BROAD CRESTED WEIR
Q = CL(H^{3/2}) where Q=2.67 cfs, C=2.6, H=0.4 ft
therefore L = 2.98, USE DBL 18" SIDEWALK CULVERT

DISCHARGE TO EASTERDAY DRIVE

CHANNEL INLET, BROAD CRESTED WEIR
Q = CL(H^{3/2}) where Q=0.55 cfs, C=2.6, H=0.4 ft
therefore L = 0.84, USE DBL 12" SIDEWALK CULVERT

Basin Area Summary

Basin	Area (S.F.)
Basin A	10,119
Basin B	12,497
Basin C	877
Basin D	14,289
Basin E	14,289
Basin F	409
Basin G	882

Basin Volume Summary

Basin	Volume (S.F.)
Basin A	10,119
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Basin C	877
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Basin Discharge Summary

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LEGEND

TBM TEMPORARY BENCHMARK

G GROUND

FF FINISH FLOOR

FG FINISH GRADE after landscaping

FL FLOWLINE

TA TOP OF ASPHALT

TC TOP OF CONCRETE

BC TOP OF CURB

TP TOP OF EARTH PAD

TS TOP OF SIDEWALK

TW TOP OF WALL

FH FIRE HYDRANT

WM WATER METER

WV WATER VALVE

MH MANHOLE

CB CATCH BASIN GRATE

GM GAS METER

GV GAS VALVE

LP LIGHT POLE

PP POWER POLE

GW GUY WIRE

PED ELEC., TEL. OR CBL PED.

OHU OVERHEAD UTILITIES

◀RD/C ROOF DRAINAGE POINT

FEMA FLOODPLAIN BOUNDARY

DRAINAGE BASIN BOUNDARY

EROSION SETBACK LINE

EXISTING CONTOUR

PROPOSED CONTOUR

EXISTING SPOT ELEVATION

PROPOSED SPOT ELEVATION

RECORD SPOT ELEVATION

STRUCTURES

UNDERGROUND UTILITIES

EXISTING S,T,U

S,T,U - SIZE (INCHES), TYPE & USE

TYPE: CI- Cast Iron, DI-Ductile Iron, CMP-Corr. Metal, HDPE-High Density Polyethylene, PVC- Polyvinyl Chloride, RCP-Reinforced Conc.

USES: SD-STORM DRAIN, SAS-SANITARY SEWER, W-WATER, IRR- IRRIGATION

PROPOSED S,T,U

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