CITY OF ALBUQUERQUE

Hydrology Section Planning Department
David S. Campbell, Director

Timothy M. Keller, Mayor

December 18, 2018

Diego M. Ruiz
Diego Hand Crafted Homes
8100 Wyoming Blvd. NE, Suite M4-511
Albuquerque, NM, 87113

RE: 6705 Emory Oak Pl. NE
Grading Plan Engineer's Stamp Date: 12/06/2018
Hydrology File: E24D006

Dear Mr. Ruiz,

Based upon the information provided in your submittal received 12/11/2018, the Grading and Drainage Plan is approved for Preliminary and Final Plat and for Building Permit. Please be sure to include a copy of the approved G&D Plan in the plan sets for Building Permit.

As a reminder, if the project total area of disturbance (including the staging area and any work within the adjacent Right-of-Way) is 1 acre or more, then an Erosion and Sediment Control (ESC) Plan and Owner's certified Notice of Intent (NOI) is required to be submitted to the Stormwater Quality Engineer (Curtis Cherne, PE, ccherne@cabq.gov, 924-3420) 14 days prior to any earth disturbance.

If you have any questions, please contact me at 924-3986 or e-mail jhughes@cabq.gov.

Sincerely,

James D. Hughes, P.E.
Principal Engineer, Planning Dept.
Development and Review Services

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

$160

City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 11/2018)

Project Title: SERSUN G & D Building Permit #:_____ Hydrology File #: E24D006

DRB#: _____ EPC#: _____ Work Order#: _____

Legal Description: LOT 59, MOUNTAIN HIGHLANDS @ HIGH DESERT, UNIT 2, BERNALILLO NM

City Address: 6705 EMORY OAK PLACE NE

Applicant: DIEGO HANDCRAFTED HOMES Contact: DIEGO M. RUIZ

Address: 8100 WYOMING BLVD NE, SUITE M4-511

Phone#: 505 999-8686 Fax#: _____ E-mail: DIEGOHANDCRAFTEDHOMES@GMAIL.COM

Owner: KENNETH & SUZANNE SERSUN Contact: KEN

Address: 6319 CALLA LILY CIRCLE, NE 87111

Phone#: 808-783-9421 Fax#: _____ E-mail: KSERSUN@YAHOO.COM

TYPE OF SUBMITTAL: ____ PLAT (___# OF LOTS) ____ RESIDENCE X DRB SITE ____ ADMIN SITE

IS THIS A RESUBMITTAL?: _____ Yes X No

DEPARTMENT: ____ TRAFFIC/ TRANSPORTATION X HYDROLOGY/ DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

____ ENGINEER/ARCHITECT CERTIFICATION
____ PAD CERTIFICATION
X CONCEPTUAL G & D PLAN
X GRADING PLAN
____ DRAINAGE MASTER PLAN
____ DRAINAGE REPORT
____ FLOODPLAIN DEVELOPMENT PERMIT APPLIC
____ ELEVATION CERTIFICATE
____ CLOMR/LOMR
____ TRAFFIC CIRCULATION LAYOUT (TCL)
____ TRAFFIC IMPACT STUDY (TIS)
____ OTHER (SPECIFY) _____
____ PRE-DESIGN MEETING?

RECEIVED
DEC 11 2018
LAND DEVELOPMENT SECTION

TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

X BUILDING PERMIT APPROVAL
____ CERTIFICATE OF OCCUPANCY
X PRELIMINARY PLAT APPROVAL
____ SITE PLAN FOR SUB'D APPROVAL
____ SITE PLAN FOR BLDG. PERMIT APPROVAL
X FINAL PLAT APPROVAL
____ SIA/ RELEASE OF FINANCIAL GUARANTEE
____ FOUNDATION PERMIT APPROVAL
X GRADING PERMIT APPROVAL
____ SO-19 APPROVAL
____ PAVING PERMIT APPROVAL
____ GRADING/ PAD CERTIFICATION
____ WORK ORDER APPROVAL
____ CLOMR/LOMR
____ FLOODPLAIN DEVELOPMENT PERMIT
____ OTHER (SPECIFY) _____

DATE SUBMITTED: 12/11/18 By: _____

COA STAFF: ELECTRONIC SUBMITTAL RECEIVED:_____

FEE PAID:_____

City of Albuquerque Planning Department

One Stop Shop – Development and Building Services

12/11/2018 Issued By: E08375 364339

Permit Number: **2018 060 657** **Category Code 970**

Application Number: **18REV-60657**, Review:Drain Plan-Lomr-Traffic Impact

Address:

Location Description: SERSUN G & D

Project Number: null

Applicant
DIEGO HANDCRAFTED HOMES
DIEGO RUIZ
8100 WYOMING BLVD NE STE M-4 #511
ALBUQUERQUE NM 87113
505-573-8888

Agent / Contact
DIEGO HANDCRAFTED HOMES
DIEGO RUIZ
8100 WYOMING BLVD NE STE M-4 #511
ALBUQUERQUE NM 87113
505-573-8888

Application Fees

REV Actions	$610.00
TOTAL:	**$610.00**

City of Albuquerque Treasury
Date:12/11/2018 Office:ANNEX
Stat ID: Cashier:TRSMAB
Batch: 9872 Trans #:25
Permit: 2018060657
Receipt Num 00537917
Payment Total:$610.00
0909 REV Actions $610.00
VISA Tendered : $610.00

LEGEND

TBM	TEMPORARY BENCHMARK
G	EXISTING GROUND
FF	FINISH FLOOR
FG	FINISH GRADE after lanscaping
FL	FLOWLINE
TA	TOP OF ASPHALT
TC	TOP OF CONCRETE
BC	TOP OF CURB
TS	TOP OF SIDEWALK
TRW	TOP RETAINING WALL
TW	TOP OF YARD WALL
FH	FIRE HYDRANT
WM	WATER METER
WV	WATER VALVE
MH	MANHOLE
CB	CATCH BASIN GRATE
GM	GAS MATER
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
	DIRECTION OF FLOW

YARD WALL
RETAINING WALL
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 Poly ethelyne, PVC– Polyvinyl Chloride, RCP–Reinforced Conc.

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

PROPOSED S,T,U,

STORM DRAIN JUNCTION BOX w/ SOLID LID & PVC SMOOTH WALL PIPE SIZE

STORM DRAIN JUNCTION BOX w/ GRATE LID & PVC SMOOTH WALL PIPE SIZE

MINIMUM PIPE SLOPES	
PIPE SIZE	SLOPE
4"	2%
6"	1%
8"	1%

SEE SHEET C–2 FOR PIPE SIZE/FL ELEV. AND JUNCTION BOX GRATE/LID ELEVATIONS

STORM DRAIN NOTES: ALL JUNCTION BOXES TO HAVE REMOVABLE TOPS (LIDS OR GRATES) FOR CLEANING PURPOSES. DO NOT USE CORRUGATED PIPE.

GRADING PLAN

CONSTRUCTION NOTES:

ELEVATIONS SHOWN ARE BASED ON CONTOUR MAP PREPARED BY SANDIA LAND SURVEYING, LLC. ELEVATION BASIS NAD 83.

CONCRETE OR STONE SPLASH PADS SHALL BE PLACED AT ALL CANALES.

ALL SURFACES BETWEEN THE BANCO OR YARD WALLS AND THE RESIDENCE SHALL BE GRADED TO DRAIN TO THE GRATED JUNCTION BOXES.

EXISTING GROUND ELEVATIONS SHALL REMAIN UNALTERED EXCEPT WHERE SHOWN TO BE ADJUSTED ON THIS GRADING PLAN.

TOPS OF RETAINING WALLS SHALL TRANSITION IN ELEVATION IN EIGHT INCH INCREMENTS AND SHALL BE AT LEAST ONE FOOT ABOVE HIGHEST ADJACENT GRADE. **SEE STRUCTURAL PLANS FOR RETAINING WALL DETAILS.**

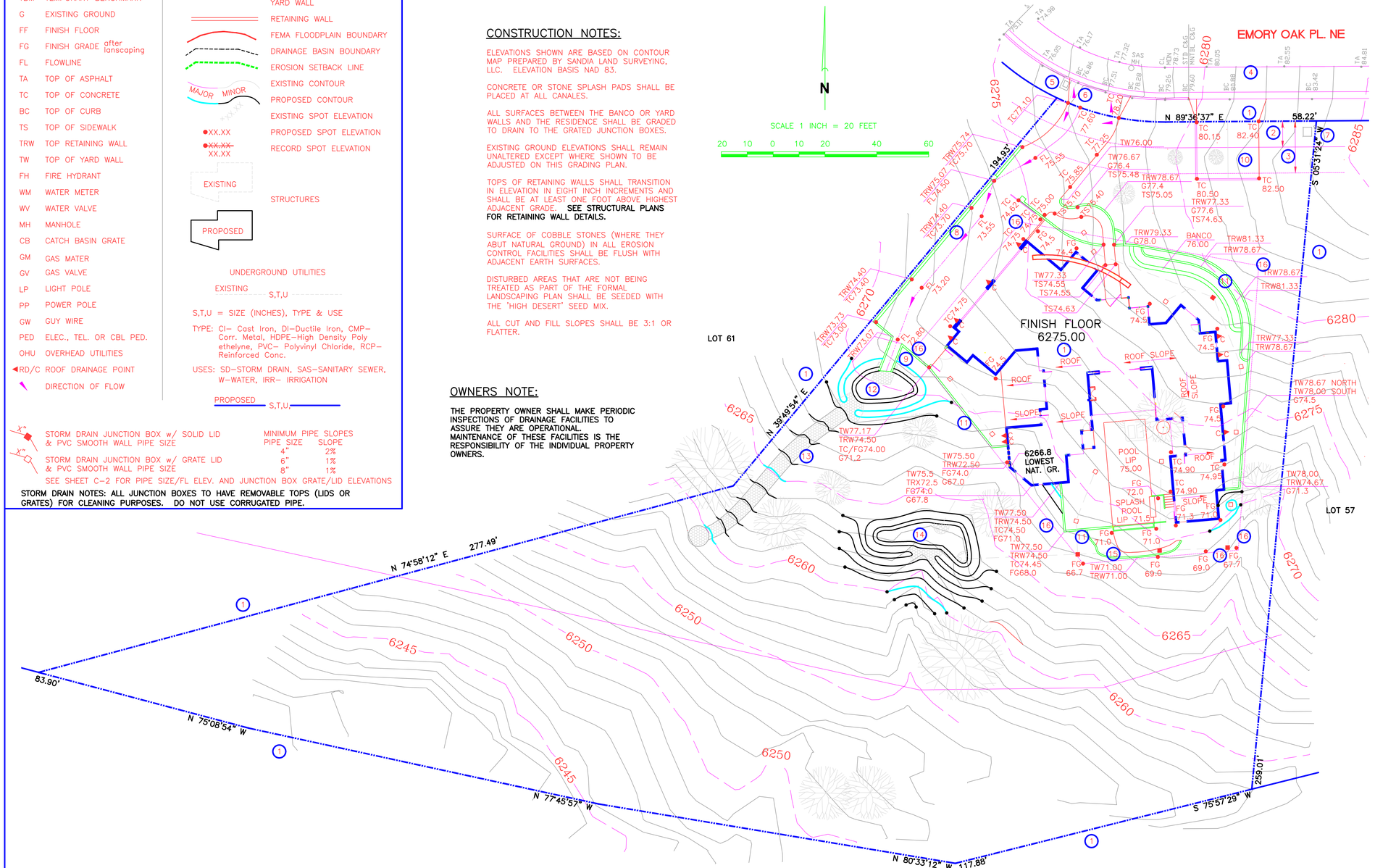
SURFACE OF COBBLE STONES (WHERE THEY ABUT NATURAL GROUND) IN ALL EROSION CONTROL FACILITIES SHALL BE FLUSH WITH ADJACENT EARTH SURFACES.

DISTURBED AREAS THAT ARE NOT BEING TREATED AS PART OF THE FORMAL LANDSCAPING PLAN SHALL BE SEEDED WITH THE 'HIGH DESERT' SEED MIX.

ALL CUT AND FILL SLOPES SHALL BE 3:1 OR FLATTER.

OWNERS NOTE:

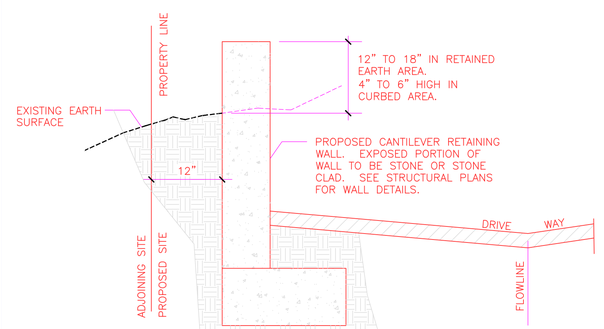
THE PROPERTY OWNER SHALL MAKE PERIODIC INSPECTIONS OF DRAINAGE FACILITIES TO ASSURE THEY ARE OPERATIONAL. MAINTENANCE OF THESE FACILITIES IS THE RESPONSIBILITY OF THE INDIVIDUAL PROPERTY OWNERS.



KEYED NOTES

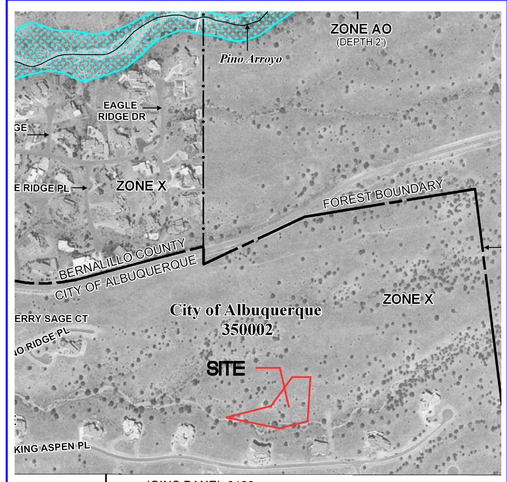
1. PROPERTY LINE.
2. 10' UTILITY EASEMENT.
3. 20' PRIVATE LANDSCAPE EASEMENT.
4. EXISTING ASPHALT STREET WITH ROLL TYPE MOUNTABLE AND STANDARD CONCRETE CURB.
5. EXISTING WATER METER.
6. EXISTING SANITARY SEWER SERVICE.
7. EXISTING DRY UTILITY PEDESTALS/CABINETS.
8. NEW CONCRETE DRIVEWAY w/ VARYING HEIGHT RETAINING WALL ON WEST SIDE OF DRIVE. RETAINING WALL TO BE STONE OR STONE FACED.
9. NEW 2' WIDE CONCRETE CHANNEL PER DETAIL ON SHEET C–2.
10. NEW CONCRETE PARKING PAD w/ 6" HIGH CONCRETE HEADER CURB ON SOUTH AND WEST SIDES. SEE CURB DETAIL ON SHEET C–2.
11. VARIABLE HEIGHT RETAINING WALL. TOP OF WALL PER ELEVATION SHOWN ON GRADING PLAN. WALL FINISH TO MATCH BUILDING FINISH.
12. WATER HARVESTING POND w/ 3:1 CUT AND FILL SLOPES. FORM A 6' WIDE x 3" DEEP OVERFLOW SECTION. POND SHALL RETAIN A MINIMUM 12" DEPTH OF WATER (15" DEPTH SHOWN) AND SHALL STORE APPROXIMATELY 299 CUBIC FEET OF WATER. POND BOTTOM ELEVATION 6268.5 INSTALL COBBLE AT INLETS AND OUTLETS AS SHOWN ON THE DETAIL ON SHEET C–2. **DO NOT LINE POND WITH COBBLE.**
13. CONSTRUCT 80 FEET LONG BY 3' BOTTOM WIDTH DRY STREAM PER DETAIL AS SHOWN ON SHEET C–2.
14. WATER HARVESTING POND w/ 3:1 CUT AND FILL SLOPES. FORM A 5' WIDE x 3" DEEP OVERFLOW SECTION. POND SHALL RETAIN A MINIMUM 12" DEPTH OF WATER (15" DEPTH SHOWN) AND SHALL STORE APPROXIMATELY 443 CUBIC FEET OF WATER. POND BOTTOM ELEVATION 6262.5. INSTALL COBBLE AT INLETS AND OUTLETS AS SHOWN ON THE DETAIL ON SHEET C–2. **DO NOT LINE POND WITH COBBLE.**
15. RAISED PLANTER. TOP OF WALL 71.00.
16. BUILDING ENVELOPE.

RETAINING WALL ALONG WEST PROPERTY LINE



VICINITY MAP

FEMA FIRM PANEL NO. 161–G



LEGAL DESCRIPTION

LOT 59, MOUNTAIN HIGHLANDS HIGH DESERT

SUBDIVISION BENCHMARK

ALUMINUM DISC ON CENTERLINE PC OF EMORY OAK PL.
ELEVATION 6278.83 (NAVD 1988)

no.	date	remarks	by
		REVISIONS	

REGISTERED PROFESSIONAL ENGINEER AND LAND SURVEYOR NEW MEXICO JEAN J. BORDENAVE 9110
12/06/18

project title
SERSUN RESIDENCE
6705 EMORY OAK PL. NE
ALBUQUERQUE, NM

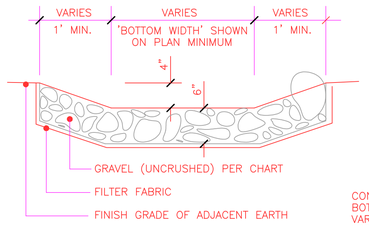
sheet title
GRADING AND DRAINAGE PLAN

drawn by	design by	project no.
METO	JJB	1806

BORDENAVE DESIGNS
P.O. BOX 91194, ALBUQUERQUE, NM 87199
ph (505)823–1344 cell (505)480–6812
fax(505)821–9105 email jakebordenave@comcast.net

sheet **C–1** of

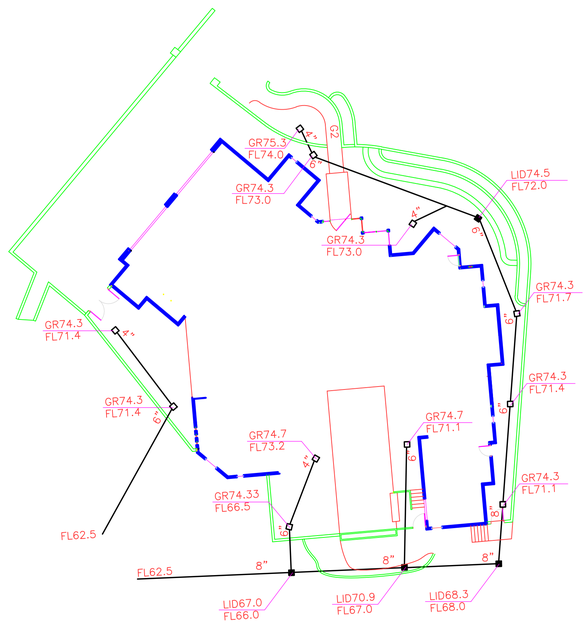
DRY STREAM



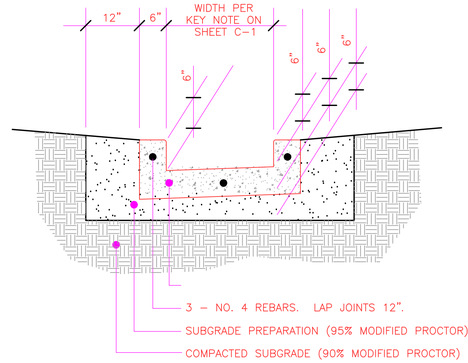
PERCENT BY VOL.	PERCENT BY VOL.
> 6"	0–5
3"–6"	40–60
1"–3"	10–30
3/8"–1"	10–15
< 3/8"	0–5

CONSTRUCTION NOTES:
BOTTOM AND BANK WIDTHS SHALL VARY TO SIMULATE A NATURAL STREAM. CONSTRUCTED BOTTOM WIDTH SHALL BE AT LEAST AS WIDE AS NOTED IN THE BUILD NOTE. STONES GREATER THAN 4" SHALL BE LIMITED TO BANK AREAS.

STORM DRAIN DATA & RETAINING WALL MAP

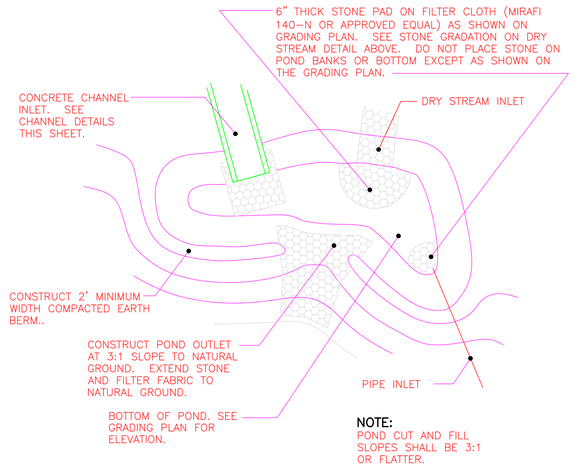


CONCRETE CHANNEL



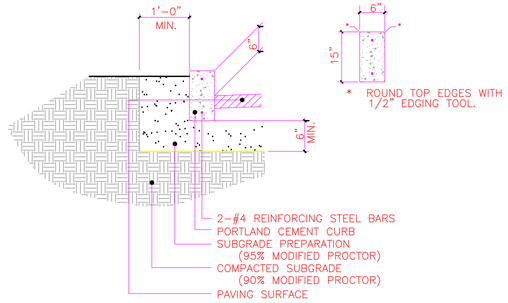
NOTE:
AT INSTALLATIONS WHERE THE SIDEWALK PENETRATES A CURB FACE THE GUTTER SHALL BE POURED MONOLITHICALLY WITH SIDEWALK CULVERT.

TYPICAL WATER HARVESTING POND DETAILS



NOTE:
POND CUT AND FILL SLOPES SHALL BE 3:1 OR FLATTER.

HEADER CURB



NOTE:

PROVIDE CONTRACTION JOINTS AT 5 FEET ON CENTER AND EXPANSION JOINTST AT 50 FEET ON CENTER UNLESS OTHERWISE STATED ON SITE PLANS OR IF CURB ABUTS SIDEWALK; WHERE CURB JOINTS SHALL MATCH SIDEWALK JOINTS.

GRADING CERTIFICATION

I, JEAN J. BORDENAVE, NEW MEXICO PROFESSIONAL ENGINEER AND LAND SURVEYOR NO. 5110, HEREBY CERTIFY THAT I HAVE PERSONALLY INSPECTED THE PROPERTY SHOWN HEREON AND THAT IT APPEARS THAT NO GREADING, FILLING OR EXCAVATION HAS OCCURRED THEREON SINCE THE CONTOUR MAP SHOWN HEREON WAS PREPARED.

Jean J Bordenave 11/09/18
JEAN J. BORDENAVE, NM PE & PLS NO. 5110

DRAINAGE NOTES

1. THE SITE IS PRESENTLY IN IT'S NATURAL STATE, RELATIVELY STEEP AND ROCKY. VEGETATION IS DENSE WITH NATIVE GRASSES, BUSHES AND JUNIPER TREES. THERE ARE SEVERAL MINOR ARROYOS TRAVELING ACROSS THE PROPERTY FROM THE STREET TO A LARGE ARROYO AT AND ALONG THE REAR OF THE PROPERTY. THE LARGE ARROYO IS LOCATED IN A PLATTED DRAINAGE EASEMENT AND IS AT LEAST 35 FEET FROM THE DESIGNATED BUILDING ENVELOPE.

2. THERE WILL BE A FLOW INCREASE DUE TO PROPOSED DEVELOPMENT. THE DEVELOPED FLOW RATES WILL BE 2.22 AND 4.43 CFS FOR THE 10 YEAR AND 100 YEAR STORMS RESPECTIVELY AND THE 6 HOUR RUNOFF VOLUMES FOR THE 10 YEAR AND 100 YEAR STORMS WILL BE 3113 AND 6577 CUBIC FEET RESPECTIVELY.

3. THE SITE IS LOCATED IN A 'ZONE X' PER FEMA FIRM MAP NO. 161–G, DATED SEPTEMBER 26, 2008.

4. TOPO SURVEY DATA SHOWN ON THIS DRAWING WAS PREPARED BY SANDIA LAND SURVEYING, LLC. DATED MAY, 2018.

DRAINAGE DATA

	A S I N	RETURN PERIOD	TYPE (table 4)	AREA	PRECIPITATION (table 8)	RUNOFF (table 9)	VOLUME	RATE
-	-	year	-	sq. ft.	in.	cfs/acre	cu. ft.	cfs
EXISTING	S	10	A	48154	0.28	0.87	1124	0.96
	I		B	20220	0.46	1.45	775	0.67
	T		C	0	0.73	2.26	0	0.00
	E		D	0	1.69	3.57	0	0.00
			TOTAL	68374			1899	1.63
		100	A	48154	0.80	2.20	3210	2.43
			B	20220	1.08	2.92	1820	1.36
			C	0	1.46	3.73	0	0.00
			D	0	2.64	5.25	0	0.00
			TOTAL	68374			5030	3.79
DEVELOPED	S	10	A	46610	0.28	0.87	1088	0.93
	I		B	10142	0.46	1.45	389	0.34
	T		C	0	0.73	2.26	0	0.00
	E		D	11622	1.69	3.57	1637	0.95
			TOTAL	68374			3113	2.22
		100	A	46610	0.80	2.20	3107	2.35
			B	10142	1.08	2.92	913	0.68
			C	0	1.46	3.73	0	0.00
			D	11622	2.64	5.25	2557	1.40
			TOTAL	68374			6577	4.43
	P	100	A	0	0.80	2.20	0	0.00
	O		B	4116	1.08	2.92	370	0.28
	N		C	0	1.46	3.73	0	0.00
	D		D	5315	2.64	5.25	1169	0.64
	12		TOTAL	9431			1540	0.92
	P	100	A	0	0.80	2.20	0	0.00
	O		B	3506	1.08	2.92	316	0.24
	N		C	0	1.46	3.73	0	0.00
	D		D	4939	2.64	5.25	1087	0.60
	13		TOTAL				1402	0.83

POND 12

INLET TO CONCRETE CHANNEL
SHARP CRESTED WEIR
$Q=CLH^{3/2}$
where Q from table, C=wier coefficient, L=curb opening length, H=water depth,
$0.92 = (3)L(0.33)^{1.5}$
therefore L = 1.6 use 2' wide curb opening

COBBLE OUTLET FROM POND
BROAD CRESTED WEIR
$Q=CLH^{3/2}$
where Q from table, C=wier coefficient, L=curb opening length, H=water depth,
$0.92 = (2.5)L(0.17)^{1.5}$
therefore L = 5.3 use 6' wide pond outlet opening

POND 13

COBBLE OUTLET FROM POND
BROAD CRESTED WEIR
$Q=CLH^{3/2}$
where Q from table, C=wier coefficient, L=curb opening length, H=water depth,
$0..83 = (2.5)L(0.17)^{1.5}$
therefore L = 4.7 use 5' wide pond outlet opening

GRADING NOTES

1. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT THE NM811 FOR LOCATION OF EXISTING UTILITIES. DIAL 811 TO SUBMIT REQUEST OR 505–260–1165 WITH QUESTIONS.

2. 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.

3. 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.

4. ALL CONSTRUCTION WITHIN THE PUBLIC RIGHT–OF–WAY SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE STANDARDS AND PROCEDURES.

EROSION CONTROL NOTES

1. 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.

2. 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 TRACKED DOWN THE STREET.

no.	date	remarks	by

REVISIONS

REGISTERED PROFESSIONAL ENGINEER AND LAND SURVEYOR NEW MEXICO JEAN J. BORDENAVE NO. 5110
11/24/18

project title
SERSUN RESIDENCE
6705 EMORY OAK PL. NE
ALBUQUERQUE, NM

sheet title
DETAILS, NOTES, + DRAINAGE CALCS

drawn by	design by	project no.
METO	JJB	1713

BORDENAVE DESIGNS
P.O. BOX 91194, ALBUQUERQUE, NM 87199
ph (505)823–1344 cell (505)480–6812
fax(505)821–9105 email jakebordenave@comcast.net

sheet **C–2** of