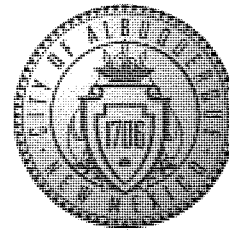


CITY OF ALBUQUERQUE



May 4, 2012

Scott M. McGee, P.E.
9700 Tanoan Dr NE
Albuquerque, NM 87111

Re: Eagle Vista Apartments
Grading and Drainage Plan
Engineer's Stamp dated 04-25-12 (B13/D002C)

Dear Mr. McGee,

Based upon the information provided in your submittal received 05-03-12, the above referenced plan is approved for Building Permit and SO-19 permit. Please attach a copy of this approved plan to the construction sets prior to sign-off by Hydrology. This project requires a National Pollutant Discharge Elimination System (NPDES) permit for storm water discharge as well as a Topsoil Disturbance Permit since it is disturbing $\frac{3}{4}$ of an acre or more.

A separate permit (SO 19) is required for construction within City ROW. A copy of this approval letter must be on hand when applying for the excavation/barricading permit. If there is a Work Order associated with this project, this work is to be included in the Work Order.

To obtain a permanent Certificate of Occupancy, the sidewalk culvert work in the City ROW must be inspected and accepted. Please contact Martin Pacheco, 235-8016, to schedule an inspection.

Albuquerque's MS4 Permit became effective March 1st, 2012. Grading and Drainage Plans and Drainage Reports will have to comply with the requirements of the new permit. The permit is available online at www.cabq.gov/planning/landcoord/Hydrology.html

If you have any questions, you can contact me at 924-3986.

Sincerely,

Curtis A. Cherne, P.E.
Principal Engineer, Planning Dept.
Development and Building Services

C: e-mail
Kathy Verhage, OMD

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 04/2009)

PROJECT TITLE: Eagle Vista Apartments ZONE MAP: B-13/D002C
DRB#: _____ EPC#: 1000771 WORK ORDER#: _____

LEGAL DESCRIPTION: Tract C Cottonwood Pointe
CITY ADDRESS: 9641 Eagle Ranch Road NW, ABQ, NM

ENGINEERING FIRM: Scott M McGee PE CONTACT: Scott McGee
ADDRESS: 9700 Tanoan Drive NE PHONE: 263-2905
CITY, STATE: ABQ, NM ZIP CODE: 87111

OWNER: Eagle Vista, LLC CONTACT: Brad Allen
ADDRESS: 2440 Louisiana Blvd NE, Ste 280 PHONE: 884-4609
CITY, STATE: ABQ, NM ZIP CODE: 87110

ARCHITECT: Dekker Perich Sabatini CONTACT: Ron Witherspoon
ADDRESS: 7601 Jefferson NE, Ste 100 PHONE: 761-9700
CITY, STATE: ABQ, NM ZIP CODE: 87109

SURVEYOR: CST, Inc CONTACT: David Vigil
ADDRESS: P O Box 65395 PHONE: 917-8921
CITY, STATE: ABQ, NM ZIP CODE: 87193

CONTRACTOR: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____
CITY, STATE: _____ ZIP CODE: _____

TYPE OF SUBMITTAL:

☐ DRAINAGE REPORT
☐ DRAINAGE PLAN 1st SUBMITTAL
☐ DRAINAGE PLAN RESUBMITTAL
☐ CONCEPTUAL G & D PLAN
☒ GRADING PLAN
☐ EROSION CONTROL PLAN
☐ ENGINEER'S CERT (HYDROLOGY)
☐ CLOMR/LOMR
☐ TRAFFIC CIRCULATION LAYOUT
☐ ENGINEER'S CERT (TCL)
☐ ENGINEER'S CERT (DRB SITE PLAN)
☐ OTHER (SPECIFY) _____

CHECK TYPE OF APPROVAL SOUGHT:

☐ SIA/FINANCIAL GUARANTEE RELEASE
☐ PRELIMINARY PLAT APPROVAL
☐ S. DEV. PLAN FOR SUB'D APPROVAL
☐ S. DEV. FOR BLDG. PERMIT APPROVAL
☐ SECTOR PLAN APPROVAL
☐ FINAL PLAT APPROVAL
☐ FOUNDATION PERMIT APPROVAL
☒ BUILDING PERMIT APPROVAL
☐ CERTIFICATE OF OCCUPANCY (PERM)
☐ CERTIFICATE OF OCCUPANCY (TEMP)
☒ GRADING PERMIT APPROVAL
☐ PAVING PERMIT APPROVAL
☐ WORK ORDER APPROVAL
☐ GRADING CERTIFICATION
☒ OTHER (SPECIFY) S.O. 19

WAS A PRE-DESIGN CONFERENCE ATTENDED:

☐ YES
☐ NO
☐ COPY PROVIDED

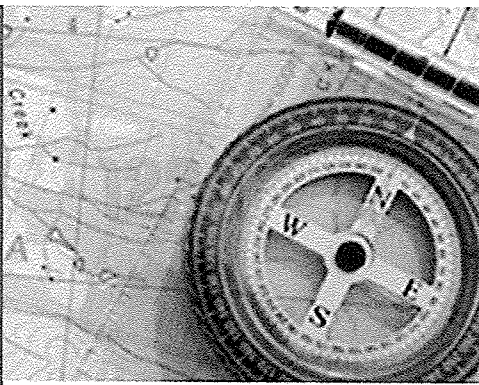
DATE SUBMITTED: 4/25/2012 BY: SMM

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location, and scope to the proposed development defines the degree of drainage detail. One or more of the following levels of submittal may be required based on the following:

1. **Conceptual Grading and Drainage Plan:** Required for approval of Site Development Plans greater than five (5) acres and Sector Plans.
2. **Drainage Plans:** Required for building permits, grading permits, paving permits and site plans less than five (5) acres.
3. **Drainage Report:** Required for subdivision containing more than ten (10) lots or constituting five (5) acres or more.

MAY 03 2012

HYDROLOGY
SECTION



SCOTT M MCGEE PE, LLC
CIVIL ENGINEER

FROM PROJECT INCEPTION TO
CONSTRUCTION COMPLETION

April 25, 2012

Curtis A. Cherne, PE
Principal Engineer, Planning Dept.
Development and Building Services
City of Albuquerque
Albuquerque, NM 87103

RE: Eagle Vista Apartments (B13/ D002C)


Dear Mr. Cherne,

I am submitting the revised Grading plan and drainage details for the proposed apartment project. Your review comments of April 10 have been addressed as follows:

- < Invert elevations have been provided for inlets, tees, and the water quality manhole.
- < The proposed sidewalk culvert has been noted as 18". The approved AA calls for the COA Std 2236. Public R/W notes have been added to the plan. Roof drain locations have been added to show only the east half of the building drains to this location. The slope between the building and the public sidewalk does not exceed 3:1.
- < Curb openings have been indicated where depressed landscaping accepts runoff.
- < A water quality unit (Stormceptor STC6000) has been added to comply with the MS4. Manufacturer's efficiency calculations can be provided to show anticipated water quality results.

*6000 gal 20' deep
Sediment, oil, strainer*

I can be reached either by phone or e-mail if needed to answer questions. Thank you.


Scott M McGee PE

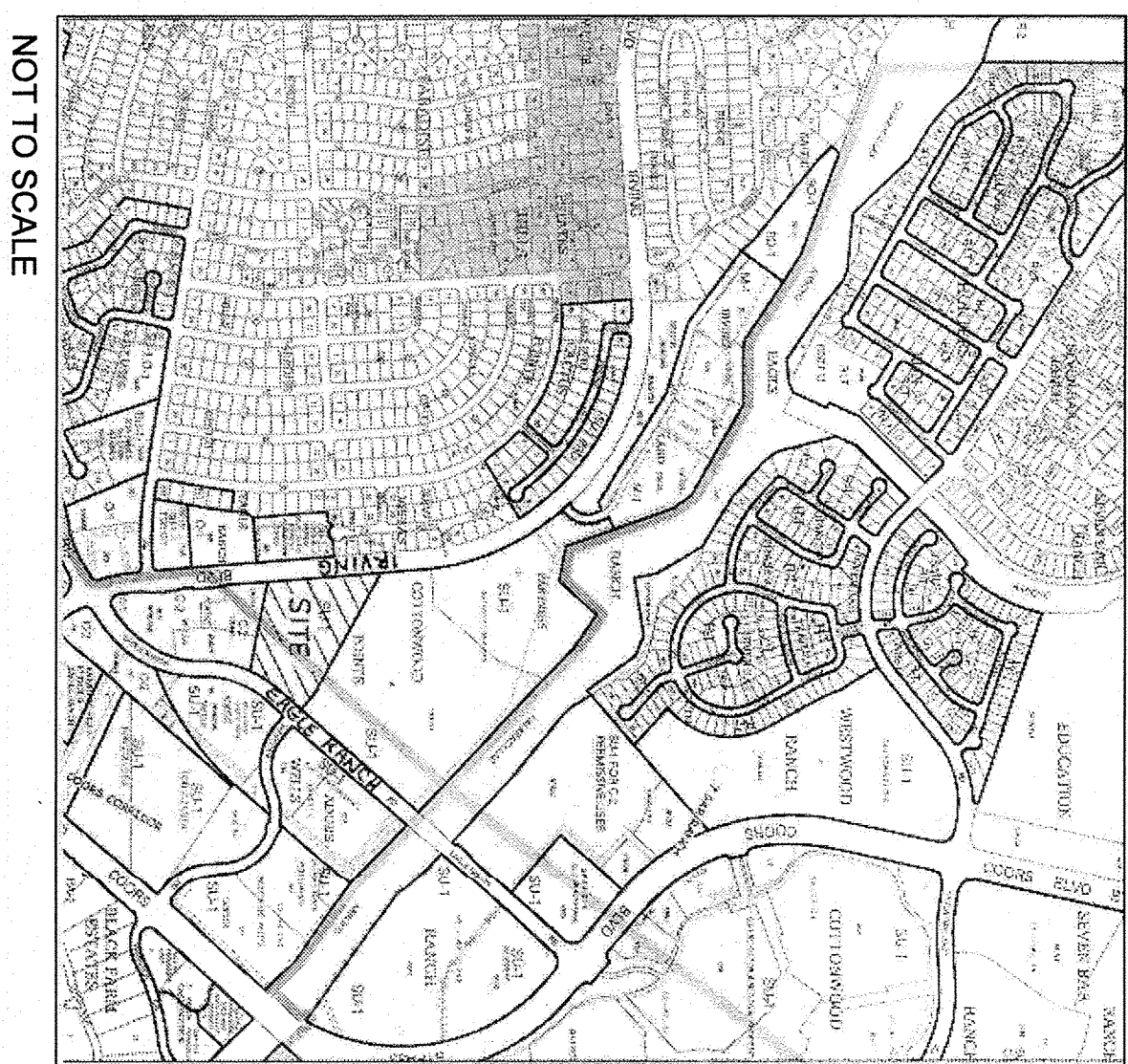
RECEIVED
APR 25 2012

EAGLE VISTA APARTMENTS

9641 Eagle Ranch Road
Albuquerque, NM 87114

REVISIONS
1
2
3
4
5
6
7
8
9
10

DRAWN BY	
REVIEWED BY	
DATE	4/25/12
PROJECT NO.	12-0020
DRAWING NAME	GRADING PLAN



NOT TO SCALE

LEGEND	
50'	PROPOSED STORM DRAIN
---	EXISTING CONTOUR LINE
---	NEW CONTOUR LINE
---	DRAIN BASIN LINE
---	RETAINING WALL
---	TOP OF WALL
---	EXISTING RETAINING WALL
---	NEW RETAINING WALL
---	DRAINAGE BASIN
---	FINISH FLOOR ELEVATION
---	ROOF DRAIN
---	12" SIDEWALK CULVERT
---	TRENCH DRAIN
---	CARPORT
---	AREA DRAIN
---	TOP OF GRADE
---	INVERT ELEV.
---	COVERED PORCH

FF = 5079.0

AD

TG

INW

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

AREA DRAIN

TOP OF GRADE

INVERT ELEV.

COVERED PORCH

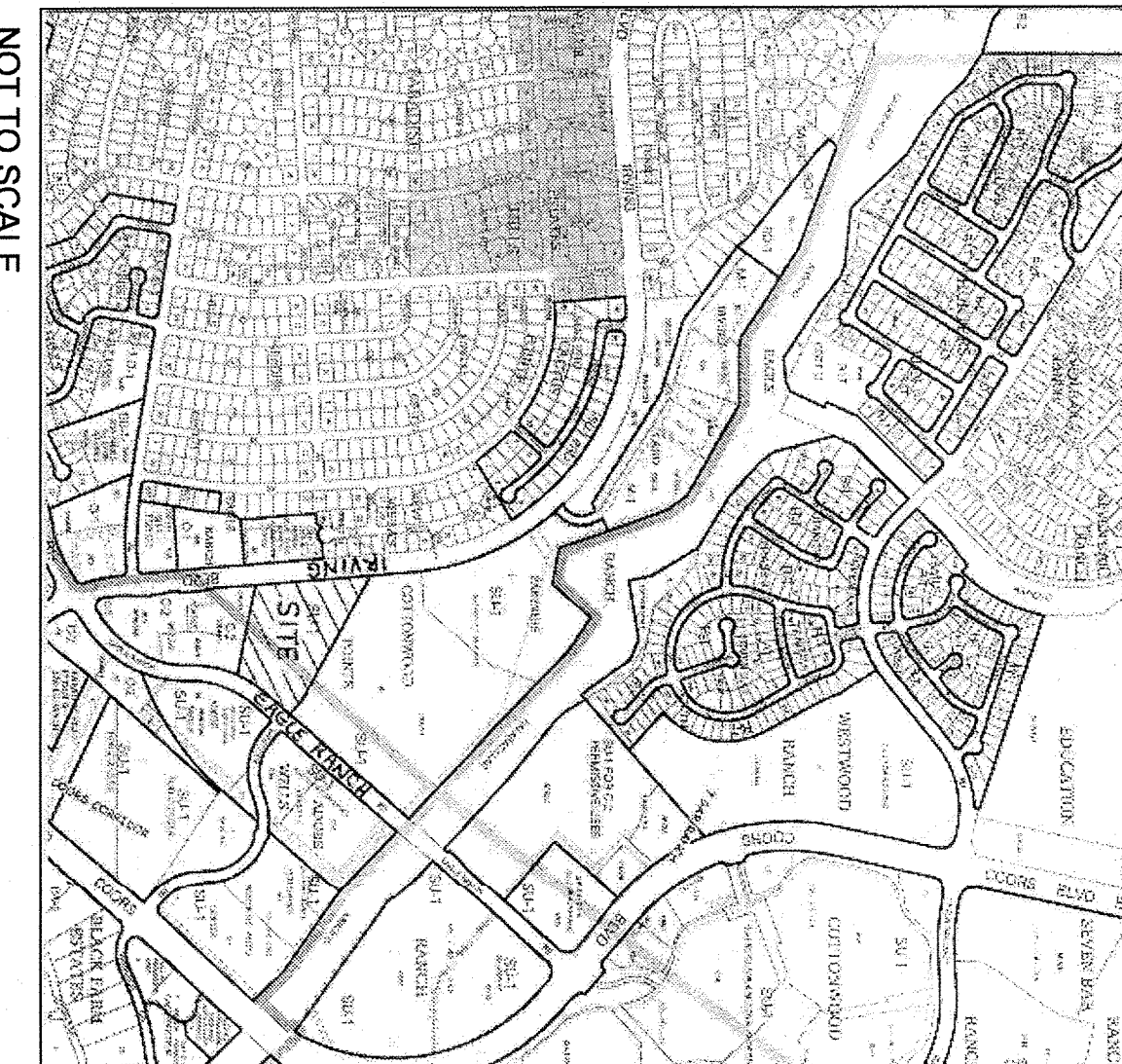
AREA DRAIN

EAGLE VISTA APARTMENTS

9641 Eagle Ranch Road
Albuquerque, NM 87114

GRADING PLAN

DRAWN BY
REVIEWED BY
DATE 4/25/12
PROJECT NO. 12-0020
DRAWING NAME



NOT TO SCALE

DRAINAGE INFORMATION

LEGAL: Tract C Cottonwood Pointe
AREA: 6.77 acres
BENCHMARK: ACS Benchmark NM-448-N10 located on the east side of Coors Road NW 1900 south of Westside Blvd. ELEV = 5046.205 (NAVD 1988).
SURVEYOR: Construction Survey Technologies, Inc. (David Vigil PLS # 8911) dated January 2012
FLOOD HAZARD: From FEMA Panel 108 (dated 9/28/08), this site is identified as being within Zone X, which is an area of 0.2% annual chance flood.
OFFSITE FLOW: No runoff enters this site from adjacent property.

EXISTING CONDITIONS: This site is undeveloped with steep slopes ranging from 5-35% sloping down towards Eagle Ranch Road. A 36" storm drain was stubbed into this site from Eagle Ranch Road with SAD 224 to capture site runoff.

PROPOSED IMPROVEMENTS: The proposed improvements include seven apartment buildings and a community building with an outdoor recreation area. Parking and landscape areas make up the balance of the site. The storm drain will be extended as shown throughout the site as a private storm drain.

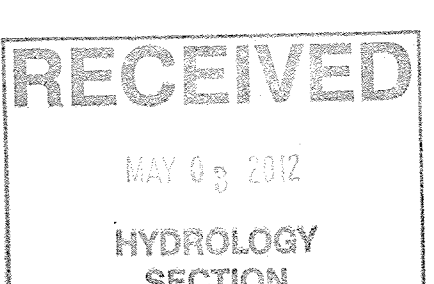
DRAINAGE APPROACH: The proposed drainage plan follows the prior conceptual drainage plan. The site is split into 8 drainage basins, of which 2 discharge 3.2 CFS to Eagle Ranch as surface flow. The remaining 6 basins are captured by the private storm drain and discharge 22.5 CFS to the existing 36" storm drain stub.

EXISTING RUNOFF: The land treatment for this site is 20% A, 30% B and 50% C based on existing slopes. The undeveloped site discharge (Zone 1) is then:
Q = ((20(1.29)+30(2.03)+50(2.87)) (6.77) = 15.6 CFS
Q = ((30(2.03)+20(1.29)+70(4.57)) (6.77) = 26.2 CFS

PROPOSED RUNOFF: The land treatment for this site is 5% B, 24% C and 70% D which gives a Q = 3.67 CFS/acre. The overall developed site discharge is then:
Q = ((30(2.03)+24(3.67)+70(4.57)) (6.77) = 26.2 CFS

Basin	Area	Q(CFS)
A	1.58	6.1
B	1.48	5.7
C	0.40	1.6
D	0.32	1.2
E	0.38	1.5
F	0.57	2.2
G	1.05	4.1
H	0.99	3.8
Storm drain capacities below are based on Manning's equation: C=149/0.015 ft R ^{2/3} S ^{1/2} :		26.2

Diameter (Inches)	Capacity (CFS)
8	1.7
12	5.0
18	14.8
24	32.0



AREA DRAIN		
#	TOP OF GRATE	INVERT EL.
1	78.5	76.5
2	78.0	75.4
3	79.0	76.2
4	81.5	78.2
5	82.5	80.1
6	78.0	75.7

LEGEND

- PROPOSED STORM DRAIN
- EXISTING CONTOUR LINE
- NEW CONTOUR LINE
- DRAIN BASIN LINE
- RETAINING WALL
- TOP OF WALL
- EXISTING RETAINING WALL
- TOP OF WALL
- NEW RETAINING WALL
- DRAINAGE BASIN
- FINISH FLOOR ELEVATION
- ROOF DRAIN
- 12" SIDEWALK CULVERT
- TRENCH DRAIN
- CARPORIT
- AREA DRAIN
- TOP OF GRATE
- INVERT ELEV.
- COVERED PORCH



WORK WITHIN CITY RIGHT-OF-WAY NOTICE to CONTRACTOR

1. An excavation permit will be required before beginning any work within City R/W.
2. All work on this project shall be performed in accordance with applicable federal, state and local laws, rules and regulations concerning construction safety and health.
3. Two working days prior to any excavation, the contractor must contact the line locating service, New Mexico One Call 280-1990, (NM one call) 811 for the location of existing utilities.
4. Prior to construction, the contractor shall excavate and verify the locations 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.
5. Backfill compactor shall be according to traffic/street use.
6. Maintenance of the facility shall be the responsibility of the owner of the property being constructed.
7. Work on arterial streets shall be performed on a 24-hour basis.

GRADING PLAN

