

City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

Project Title: American Toyota Building Permit #: _____ City Drainage #: C18d012
DRB#: _____ EPC#: _____ Work Order#: _____
Legal Description: Tracts A1 and B-1, American Toyota and lots 15-18 tract a unit b NAA
City Address: 5995 Alameda NE

Engineering Firm: RIO GRANDE ENGINEERING Contact: DAVID SOULE
Address: PO BOX 93924, ALBUQUERQUE, NM 87199
Phone#: 505.321.9099 Fax#: 505.872.0999 E-mail: DAVID@RIOGRANDEENGINEERING.COM

Owner: milller family group Contact: _____
Address: _____
Phone#: _____ Fax#: _____ E-mail: _____

Architect: john mahony Contact: _____
Address: _____
Phone#: _____ Fax#: _____ E-mail: _____

Surveyor: CONSTRUCTION SURVEY INCORPORATED Contact: JOHN GALLEGOS
Address: _____
Phone#: 917.8921 Fax#: _____ E-mail: _____

Contractor: _____ Contact: _____
Address: _____
Phone#: _____ Fax#: _____ E-mail: _____

TYPE OF SUBMITTAL:

- ☐ DRAINAGE REPORT
☐ DRAINAGE PLAN 1st SUBMITTAL
☒ DRAINAGE PLAN RESUBMITTAL
☐ CONCEPTUAL G & D PLAN
☐ GRADING PLAN
☐ EROSION & SEDIMENT CONTROL PLAN (ESC)
☐ ENGINEER'S CERT (HYDROLOGY)
☐ CLOMR/LOMR
☐ TRAFFIC CIRCULATION LAYOUT (TCL)
☐ ENGINEER'S CERT (TCL)
☐ ENGINEER'S CERT (DRB SITE PLAN)
☐ ENGINEER'S CERT (ESC)
☐ SO-19
☐ OTHER (SPECIFY) _____

CHECK TYPE OF APPROVAL/ACCEPTANCE 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
☐ CERTIFICATE OF OCCUPANCY (PERM)
☐ CERTIFICATE OF OCCUPANCY (TCL TEMP)
☐ FOUNDATION PERMIT APPROVAL
☒ BUILDING PERMIT APPROVAL
☒ GRADING PERMIT APPROVAL ☐ SO-19 APPROVAL
☐ PAVING PERMIT APPROVAL ☐ ESC PERMIT APPROVAL
☐ WORK ORDER APPROVAL ☐ ESC CERT. ACCEPTANCE
☐ GRADING CERTIFICATION ☐ OTHER (SPECIFY) _____

WAS A PRE-DESIGN CONFERENCE ATTENDED: _____ Yes ☒ No _____ Copy Provided

DATE SUBMITTED: 3/17/15 By: [Signature]

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
4. **Erosion and Sediment Control Plan:** Required for any new development and redevelopment site with 1-acre or more of land disturbing area, including project less than 1-acre than are part of a larger common plan of development

June 3, 2015

Ms. Rita Harmon
Hydrology Department
Public Works Department
City of Albuquerque

**RE: Revised Grading Plan (C18-D012)
HLP Endodontics
Albuquerque, New Mexico**

Dear Ms. Harmon:

The purpose of this letter is to accompany the enclosed revised grading plan for the referenced project. The grading plan for this site has been revised to address your written comments dated 3/20/15. The following is a summary of your comment and the narrative as to how we addressed

1. Proposed runoff limited to 25 cfs

The grading plan as approved for site plan approval shows 25.5 cfs. The addition of the 3200 cubic feet of additional water quality tanks at the out falls will reduce the flow to below 25 cfs

2. Add first flush capture at outfalls 2,3,4

We have added 1600 cubic feet harvest chambers at each outfall. The water harvest from this site contains all the work area and exceeds the required volume.

3. Detail how first flush mechanism works

We have an inlet and holding tank just before the outfall. The inlet captures all the flow until the tanks are filled then the water passes over inlet to outfall

Should you have any questions regarding this matter, please do not hesitate to call me.

Sincerely,



David Soule, PE
RIO GRANDE ENGINEERING
PO Box 93924
ALBUQUERQUE, NM 87199
321-9099

Enclosures

CITY OF ALBUQUERQUE

PLANNING DEPARTMENT – Development Review Services



March 20, 2015

David Soule, P.E.
Rio Grande Engineering
P.O. Box 93924
Albuquerque, NM 87199

Richard J. Berry, Mayor

RE: American Toyota (File: C18D012)
Drainage Report, Engineer's Stamp Date 3-16-15
Grading and Drainage Plan, Engineer's Stamp Date 3-17-15

Dear Mr. Soule:

Based upon the information provided in your submittal received 3-18-15, the above referenced submittal is approved for action by the DRB on the Site Plan for for Building Permit with the following condition(s):

1. The proposed runoff to the Alameda Storm Drain is limited to 25 cfs. This is based on trying to reconcile the difference between the existing runoff of 33 cfs and the allowed runoff of 16 cfs from SAD #201(though this site is not a part of the hydrology report).
2. The "first flush" needs to be captured at Outfalls 2,3, and 4.
3. Details showing how the "first flush" mechanism will work need to be shown prior to approval for Building Permit.

If you have any questions, you can contact me at 924-3695.

Sincerely,

Rita Harmon, P.E.
Senior Engineer, Planning Dept.
Development Review Services

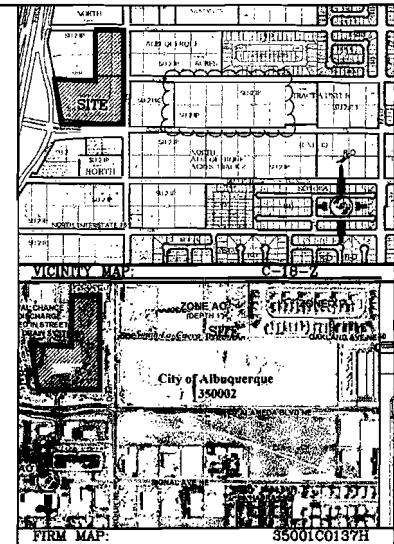
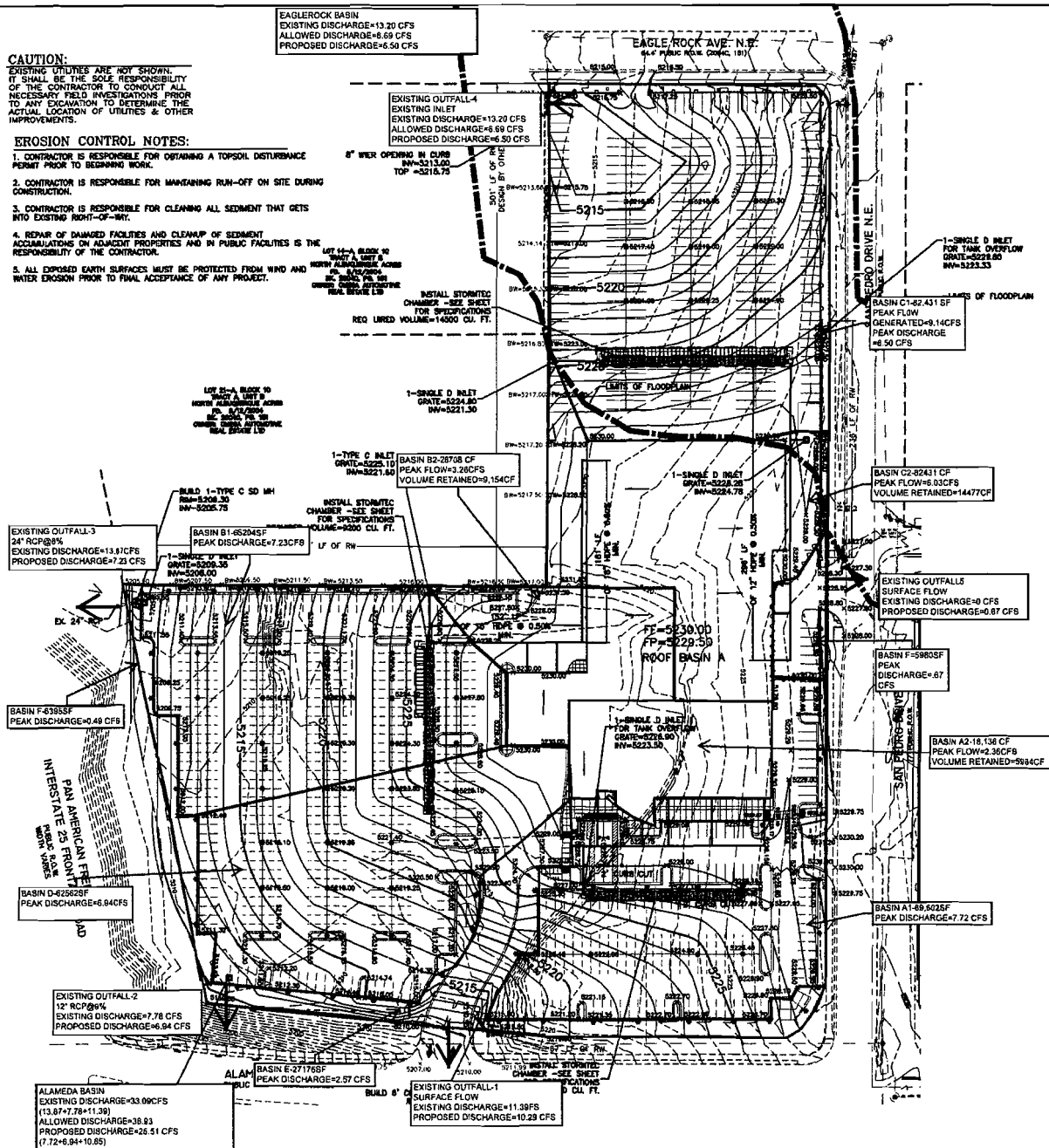
Orig: Drainage file
c.pdf: via Email: Recipient, Monica Ortiz

CAUTION:
EXISTING UTILITIES ARE NOT SHOWN.
IT SHALL BE THE SOLE RESPONSIBILITY
OF THE CONTRACTOR TO CONDUCT ALL
NECESSARY FIELD INVESTIGATIONS PRIOR
TO ANY EXCAVATION TO DETERMINE THE
ACTUAL LOCATION OF UTILITIES & OTHER
IMPROVEMENTS.

EROSION CONTROL NOTES:

1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.
2. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RUN-OFF ON SITE DURING CONSTRUCTION.
3. CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY.
4. REPAIR OF DAMAGED FACILITIES AND CLEANUP OF SEDIMENT ACCUMULATIONS 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.

EAGLE ROCK BASIN
EXISTING DISCHARGE=13.20 CFS
ALLOWED DISCHARGE=6.69 CFS
PROPOSED DISCHARGE=6.50 CFS



LEGAL DESCRIPTION:

NOTES:

1. ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.
2. ALL CURB AND GUTTER TO 6" HEADER UNLESS OTHERWISE NOTED.
3. ALL RETAINING WALL DESIGN SHALL BE BY OTHERS.
4. ALL LANDSCAPE MEDIAN WILL BE DEEPENED 6" FROM FLOW LINE AND 1' CURB OPENING PROVIDED ON THE HIGH SIDE, FOR WATER QUALITY.

LEGEND

---	EXISTING CONTOUR
---	EXISTING INDEX CONTOUR
---	PROPOSED CONTOUR
---	PROPOSED INDEX CONTOUR
---	SLOPE TIE
---	EXISTING SPOT ELEVATION
---	PROPOSED SPOT ELEVATION
---	BOUNDARY
---	CENTERLINE
---	RIGHT-OF-WAY
---	PROPOSED CURB AND GUTTER
---	EXISTING CURB AND GUTTER
---	PROPOSED SIDEWALK
---	PROPOSED SETBACK
---	PROPOSED LOT LINE
---	PROPOSED SCREEN WALL
---	PROPOSED RETAINING WALL
---	LIMITS OF FLOODPLAIN



ROUGH GRADING APPROVAL		DATE
ENGINEER'S SEAL	AMERICAN TOYOTA	DESIGN BY WCM
	PROPOSED BASIN MAP	DATE 3-12-15
	<i>Rio Grade Engineering</i>	PROJECT NO. 15-011
DAVID SOULE P.E. #14522	1000 COTTON AVENUE SE SUITE 200 ALBUQUERQUE, NM 87102 (505) 425-7000	SHEET # JOB # 21403

Weighted E Method

AMERICAN TOYOTA

OUTFALL #1

PROPOSED Developed Basins

Basin	Area (sf)	Area (acres)	Treatment A		Treatment B		Treatment C		Treatment D		100-Year, 6-hr.			10-DAY
											Weighted E (ac-ft)	Volume (ac-ft)	Flow cfs	Volume (ac-ft)
			%	(acres)	%	(acres)	%	(acres)	%	(acres)				
BASIN A1	69602	1.598	0%	0	4.0%	0.064	6.0%	0.09587	90%	1.438	2.238	0.298	7.72	0.490
BASIN A2	18136	0.416	0%	0	0.0%	0.000	0.0%	0	100%	0.416	2.360	0.082	2.09	0.137
BASIN E	27176	0.624	0%	0	0.0%	0.000	0.0%	0	100%	0.624	2.360	0.123	3.13	0.206

WATER QUALITY 2288.704

Equations:

Weighted E = $E_a \cdot A_a + E_b \cdot A_b + E_c \cdot A_c + E_d \cdot A_d$ / (Total Area)

Volume = Weighted D * Total Area

Flow = $Q_a \cdot A_a + Q_b \cdot A_b + Q_c \cdot A_c + Q_d \cdot A_d$

Where for 100-year, 6-hour storm (zone 3)

Ea= 0.66
Eb= 0.92
Ec= 1.29
Ed= 2.36

Qa= 1.87
Qb= 2.6
Qc= 3.45
Qd= 5.02

STORAGE PROVIDED 6000 CF 0.137741047

STORAGE REQUIRED 5984.88

FIRST FLUSH 2288.704

TOTAL FIRST FLUSH PROVIDED

6000 UPPER
1600 LOWER
7600 TOTAL

RESULTANT DISCHARGE 10.85 CFS
EXISTING 11.39 CFS

Weighted E Method

AMERICAN TOYOTA

OUTFALL#2

PROPOSED Developed Basins

											100-Year, 6-hr.		10-day	
Basin	Area (sf)	Area (acres)	Treatment A		Treatment B		Treatment C		Treatment D		Weighted E (ac-ft)	Volume (ac-ft)	Flow cfs	Volume (ac-ft)
			%	(acres)	%	(acres)	%	(acres)	%	(acres)				
BASIN D	62562	1.436	0%	0	4.0%	0.057	6.0%	0.08617	90%	1.293	2.238	0.268	6.94	0.440

Equations:

Weighted E = $E_a \cdot A_a + E_b \cdot A_b + E_c \cdot A_c + E_d \cdot A_d$ / (Total Area)

Volume = Weighted D * Total Area

Flow = $Q_a \cdot A_a + Q_b \cdot A_b + Q_c \cdot A_c + Q_d \cdot A_d$

Where for 100-year, 6-hour storm (zone 3)

$E_a = 0.66$

$E_b = 0.92$

$E_c = 1.29$

$E_d = 2.36$

$Q_a = 1.87$

$Q_b = 2.6$

$Q_c = 3.45$

$Q_d = 5.02$

RESULTANT DISCHARGE 6.94 CFS

EXISTING 7.78 CFS

FIRST FLUSH 1591.668624

FIRST FLUSH PROVIDED 1600

Weighted E Method

AMERICAN TOYOTA

OUTFALL 3

PROPOSED Developed Basins

											100-Year, 6-hr.			10-day
Basin	Area (sf)	Area (acres)	Treatment A		Treatment B		Treatment C		Treatment D		Weighted E (ac-ft)	Volume (ac-ft)	Flow cfs	Volume (ac-ft)
			%	(acres)	%	(acres)	%	(acres)	%	(acres)				
BASIN B1	65204	1.497	0%	0	4.0%	0.060	6.0%	0.08981	90%	1.347	2.238	0.279	7.23	0.459
BASIN B2	28708	0.659	0%	0	0.0%	0.000	5.0%	0.03295	95%	0.626	2.307	0.127	3.26	0.210

Equations:

Weighted E = $E_a \cdot A_a + E_b \cdot A_b + E_c \cdot A_c + E_d \cdot A_d$ / (Total Area)

Volume = Weighted D * Total Area

Flow = $Q_a \cdot A_a + Q_b \cdot A_b + Q_c \cdot A_c + Q_d \cdot A_d$

Where for 100-year, 6-hour storm (zone 3)

$E_a = 0.66$

$E_b = 0.92$

$E_c = 1.29$

$E_d = 2.36$

$Q_a = 1.87$

$Q_b = 2.6$

$Q_c = 3.45$

$Q_d = 5.02$

STORAGE PROVIDED

STORAGE REQUIRED

FIRST FLUSH

FIRST FLUSH PROVIDED

9200 CF

9154.2635 CF

2435.42567 CF

9200 UPPER

1600 LOWER

10800 TOTAL

RESULTANT DISCHARGE

7.23 CFS

EXISTING

13.87 CFS

Weighted E Method

AMERICAN TOYOTA

OUTFALL 4

PROPOSED Developed Basins

											100-Year, 6-hr.			24 hour
Basin	Area (sf)	Area (acres)	Treatment A		Treatment B		Treatment C		Treatment D		Weighted E (ac-ft)	Volume (ac-ft)	Flow cfs	Volume (ac-ft)
			%	(acres)	%	(acres)	%	(acres)	%	(acres)				
BASIN C	82431	1.892	0%	0	4.0%	0.076	6.0%	0.11354	90%	1.703	2.238	0.353	9.14	0.489
BASIN C1	52325	1.201	0%	0	0.0%	0.000	0.0%	0	100%	1.201	2.360	0.236	6.03	0.332
WATER QUALITY	2101.9905	1.8923554												

Equations:

Weighted E = $E_a \cdot A_a + E_b \cdot A_b + E_c \cdot A_c + E_d \cdot A_d / (\text{Total Area})$

Volume = Weighted D * Total Area

Flow = $Q_a \cdot A_a + Q_b \cdot A_b + Q_c \cdot A_c + Q_d \cdot A_d$

Where for 100-year, 6-hour storm (zone 3)

$E_a = 0.66$

$E_b = 0.92$

$E_c = 1.29$

$E_d = 2.36$

$Q_a = 1.87$

$Q_b = 2.6$

$Q_c = 3.45$

$Q_d = 5.02$

DIRECT DISCHARGE

EXISTING

ALLOWED

ROUTED DISCHARGE

9.14 CFS

13.22 CFS

6.69

6.5

STORAGE PROVIDED 10000CF 0.229568411

STORAGE REQUIRED 14476.5833 CF

FIRST FLUSH(total) 3584.53217 CF

TOTAL FIRST FLUSH PROVIDED

10000 UPPER

1600 LOWER

11600 TOTAL

Weighted E Method

AMERICAN TOYOTA

OUTFALL 5

PROPOSED Developed Basins

											100-Year, 6-hr.			24 hour
Basin	Area (sf)	Area (acres)	Treatment A		Treatment B		Treatment C		Treatment D		Weighted E (ac-ft)	Volume (ac-ft)	Flow cfs	Volume (ac-ft)
			%	(acres)	%	(acres)	%	(acres)	%	(acres)				
BASIN G	5985	0.137	0%	0	0.0%	0.000	10.0%	0.01374	90%	0.124	2.253	0.026	0.67	0.036
WATER QUALITY	152.6175	0.1373967												

Equations:

DIRECT DISCHARGE 0.67 CFS
EXISTING 0.00 CFS

Weighted E = $E_a \cdot A_a + E_b \cdot A_b + E_c \cdot A_c + E_d \cdot A_d$ / (Total Area)

Volume = Weighted D * Total Area

Flow = $Q_a \cdot A_a + Q_b \cdot A_b + Q_c \cdot A_c + Q_d \cdot A_d$

Where for 100-year, 6-hour storm (zone 3)

$E_a = 0.66$

$Q_a = 1.87$

$E_b = 0.92$

$Q_b = 2.6$

$E_c = 1.29$

$Q_c = 3.45$

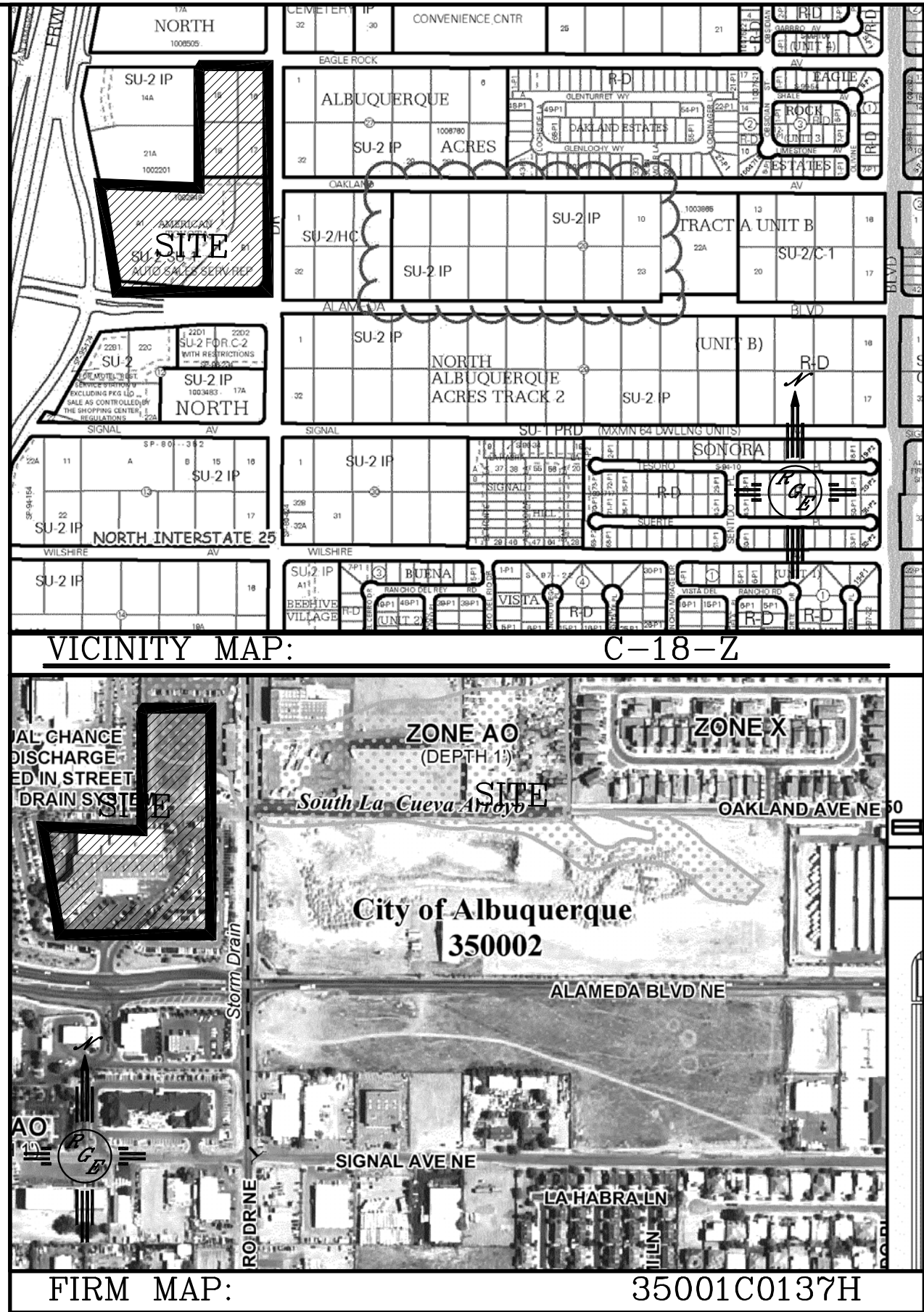
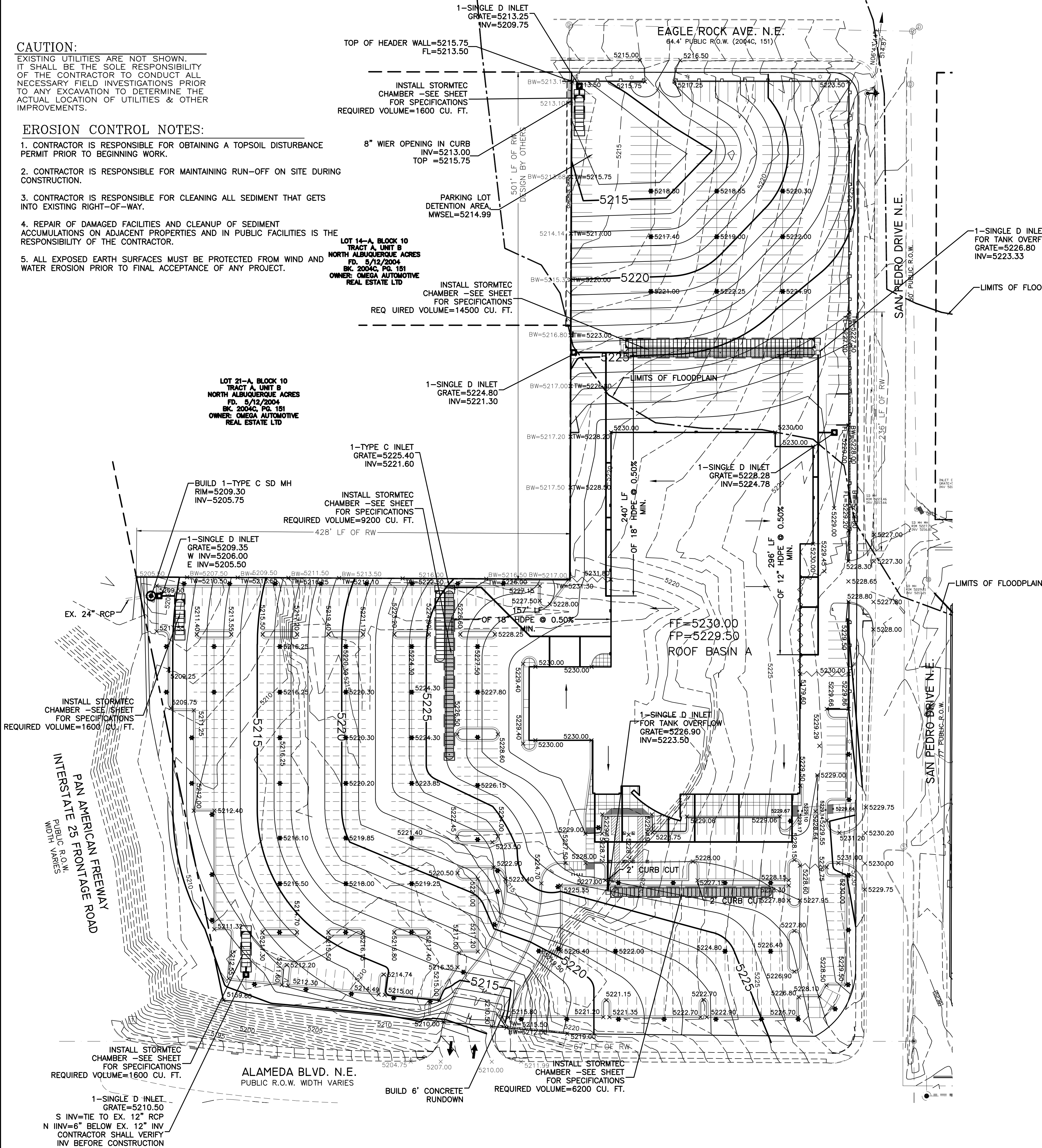
$E_d = 2.36$

$Q_d = 5.02$

CAUTION:
EXISTING UTILITIES ARE NOT SHOWN.
IT SHALL BE THE SOLE RESPONSIBILITY
OF THE CONTRACTOR TO CONDUCT ALL
NECESSARY FIELD INVESTIGATIONS PRIOR
TO ANY EXCAVATION TO DETERMINE THE
ACTUAL LOCATION OF UTILITIES & OTHER
IMPROVEMENTS.

EROSION CONTROL NOTES:

1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.
2. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RUN-OFF ON SITE DURING CONSTRUCTION.
3. CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY.
4. REPAIR OF DAMAGED FACILITIES AND CLEANUP OF SEDIMENT ACCUMULATIONS 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.



LEGAL DESCRIPTION:

NOTES:


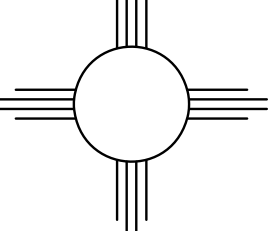
1. ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.
2. ALL CURB AND GUTTER TO 6" HEADER UNLESS OTHERWISE NOTED.
3. ALL RETAINING WALL DESIGN SHALL BE BY OTHERS.
4. ALL LANDSCAPE MEDIANS WILL BE DEPRESSED 8" FROM FLOW LINE AND 1' CURB OPENING PROVIDED ON THE HIGH SIDE, FOR WATER QUALITY.

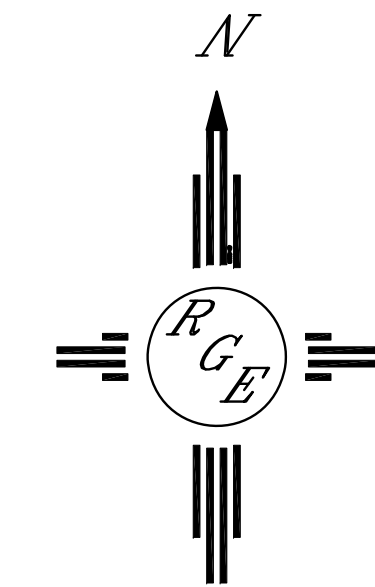
LEGEND

- 5414--- EXISTING CONTOUR
- 5415--- EXISTING INDEX CONTOUR
- 5414--- PROPOSED CONTOUR
- 5415--- PROPOSED INDEX CONTOUR
- SLOPE TIE---
- X 4048.25 EXISTING SPOT ELEVATION
- X 4048.25 PROPOSED SPOT ELEVATION
- BOUNDARY---
- CENTERLINE---
- RIGHT-OF-WAY---
- PROPOSED CURB AND GUTTER---
- EXISTING CURB AND GUTTER---
- PROPOSED SIDEWALK---
- PROPOSED SETBACK---
- PROPOSED LOT LINE---
- PROPOSED SCREEN WALL---
- PROPOSED RETAINING WALL---
- LIMITS OF FLOODPLAIN---

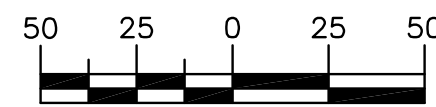
ROUGH GRADING APPROVAL

DATE

ENGINEER'S SEAL  3/27/15 DAVID SOULE P.E. #14522	AMERICAN TOYOTA GRADING AND DRAINAGE PLAN  1806 CENTRAL AVENUE SE SUITE 201 ALBUQUERQUE, NM 87106 (505) 872-0999	DRAWN BY WCWJ
		DATE 3-27-15
		21403-LAYOUT-1-25-14
		SHEET #
		JOB # 21403



GRAPHIC SCALE



SCALE: 1"=50'