

# CITY OF ALBUQUERQUE



February 23, 2015

Matt Satches, E.I.  
Bohannon Huston, Inc.  
7600 Jefferson St NE  
Albuquerque, NM 87109

**Re: Smiles for Kids Dental Office  
Conceptual DMP and Conceptual Grading Plan  
Engineer's Stamp Date -no stamp- (C12D054)**

Dear Mr. Satches,

Based upon the information provided in your submittal received 2-17-15, the above referenced plans are approved for Site Plan for Building Permit action by the DRB with the condition that as access easement can be obtained across lot 10A1, which should be shown.

When submitting for Building Permit:

1. Provide the direction of roof flows.
2. Provide calculations for the channel and the sidewalk culvert.
3. Demonstrate, with a detail if necessary, how runoff from the landscape area on the east part of the site will enter the channel.
4. Explain why one building is hatched and the other is not.
5. Provided build notes for the curb cuts in the parking island that will receive the first flush.
6. Show curb, permanent or temporary, to be built on the access drive to Loma Fuente, at least on the downhill side.

PO Box 1293

Albuquerque

New Mexico 87103

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

[www.cabq.gov](http://www.cabq.gov)

Sincerely,

Curtis Cherne, P.E.  
Principal Engineer, Hydrology  
Planning Dept.

C: e-mail



# City of Albuquerque

Planning Department

Development & Building Services Division

## DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

Project Title: \_\_\_\_\_ Building Permit #: \_\_\_\_\_ City Drainage #: \_\_\_\_\_

DRB#: \_\_\_\_\_ EPC#: \_\_\_\_\_ Work Order#: \_\_\_\_\_

Legal Description: \_\_\_\_\_

City Address: \_\_\_\_\_

**Engineering Firm:** \_\_\_\_\_ Contact: \_\_\_\_\_

Address: \_\_\_\_\_

Phone#: \_\_\_\_\_ Fax#: \_\_\_\_\_ E-mail: \_\_\_\_\_

**Owner:** \_\_\_\_\_ Contact: \_\_\_\_\_

Address: \_\_\_\_\_

Phone#: \_\_\_\_\_ Fax#: \_\_\_\_\_ E-mail: \_\_\_\_\_

**Architect:** \_\_\_\_\_ Contact: \_\_\_\_\_

Address: \_\_\_\_\_

Phone#: \_\_\_\_\_ Fax#: \_\_\_\_\_ E-mail: \_\_\_\_\_

**Surveyor:** \_\_\_\_\_ Contact: \_\_\_\_\_

Address: \_\_\_\_\_

Phone#: \_\_\_\_\_ 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
- ☐ PAVING PERMIT APPROVAL
- ☐ WORK ORDER APPROVAL
- ☐ GRADING CERTIFICATION
- ☐ SO-19 APPROVAL
- ☐ ESC PERMIT APPROVAL
- ☐ ESC CERT. ACCEPTANCE
- ☐ OTHER (SPECIFY) \_\_\_\_\_

WAS A PRE-DESIGN CONFERENCE ATTENDED: \_\_\_\_\_ Yes \_\_\_\_\_ No \_\_\_\_\_ Copy Provided

DATE SUBMITTED: \_\_\_\_\_ By: \_\_\_\_\_

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 that are part of a larger common plan of development

February 17, 2015

Mr. Curtis Cherne, P.E.  
Principal Engineer, Hydrology  
Planning Department  
City of Albuquerque  
600 2nd St NW  
Albuquerque, NM 87102

Re: Smiles for Kids Dental Office, Hydrology Re-Submittal

Dear Mr. Cherne:

Enclosed for your review is a copy of the revised grading plan and drainage management plan. The revisions are based on comments that you provided in your letter dated February 6, 2015. Below is a brief description of how the comments were addressed:

1. The first flush pond was relocated to the parking lot as discussed. Due to site constraints such as building and parking setbacks, site steepness, and an existing utility easement, the pond volume provided does not entirely satisfy the first flush requirements.
2. The retaining wall running adjacent to the ribbon channel along the North property line, doesn't allow enough space for an effective first flush pond.
3. The first flush volume calculations are provided in the drainage narrative on the updated DMP.

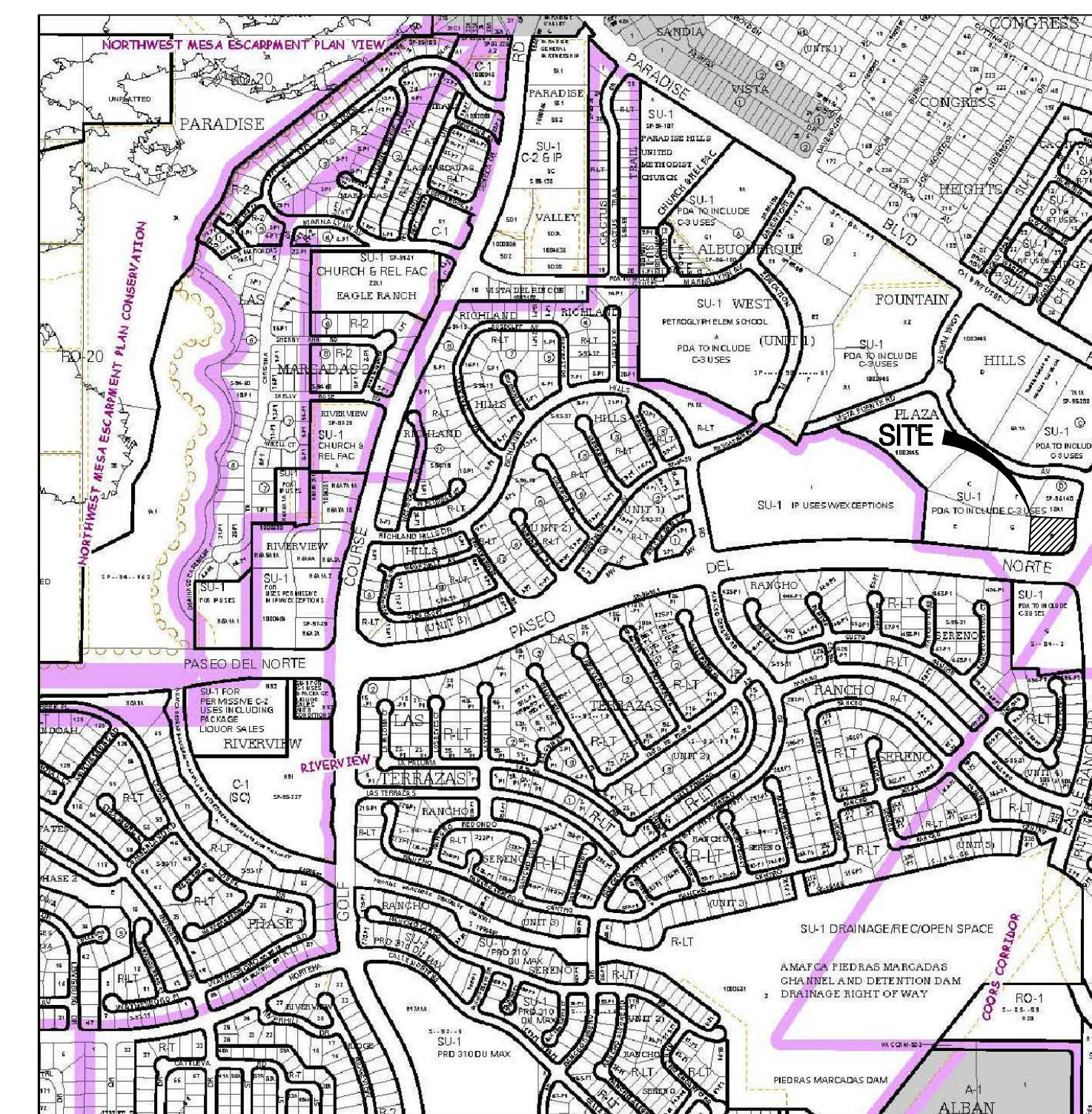
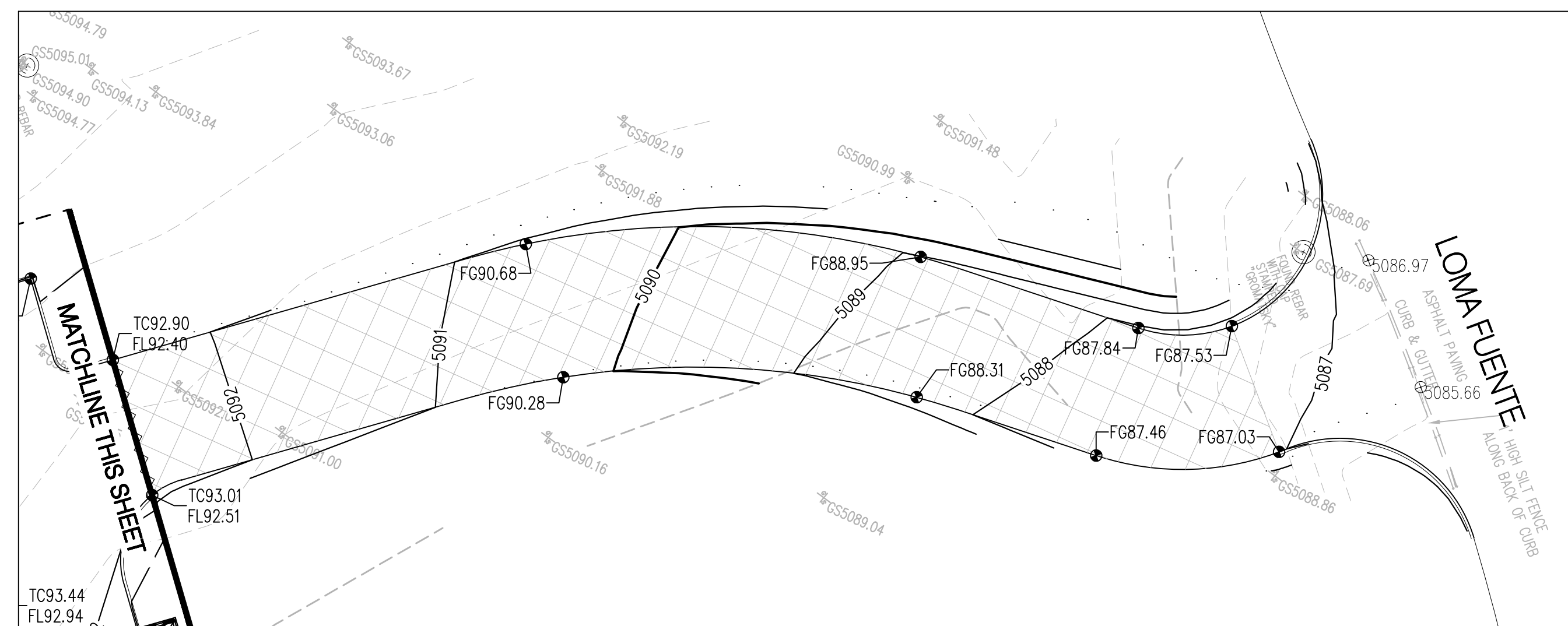
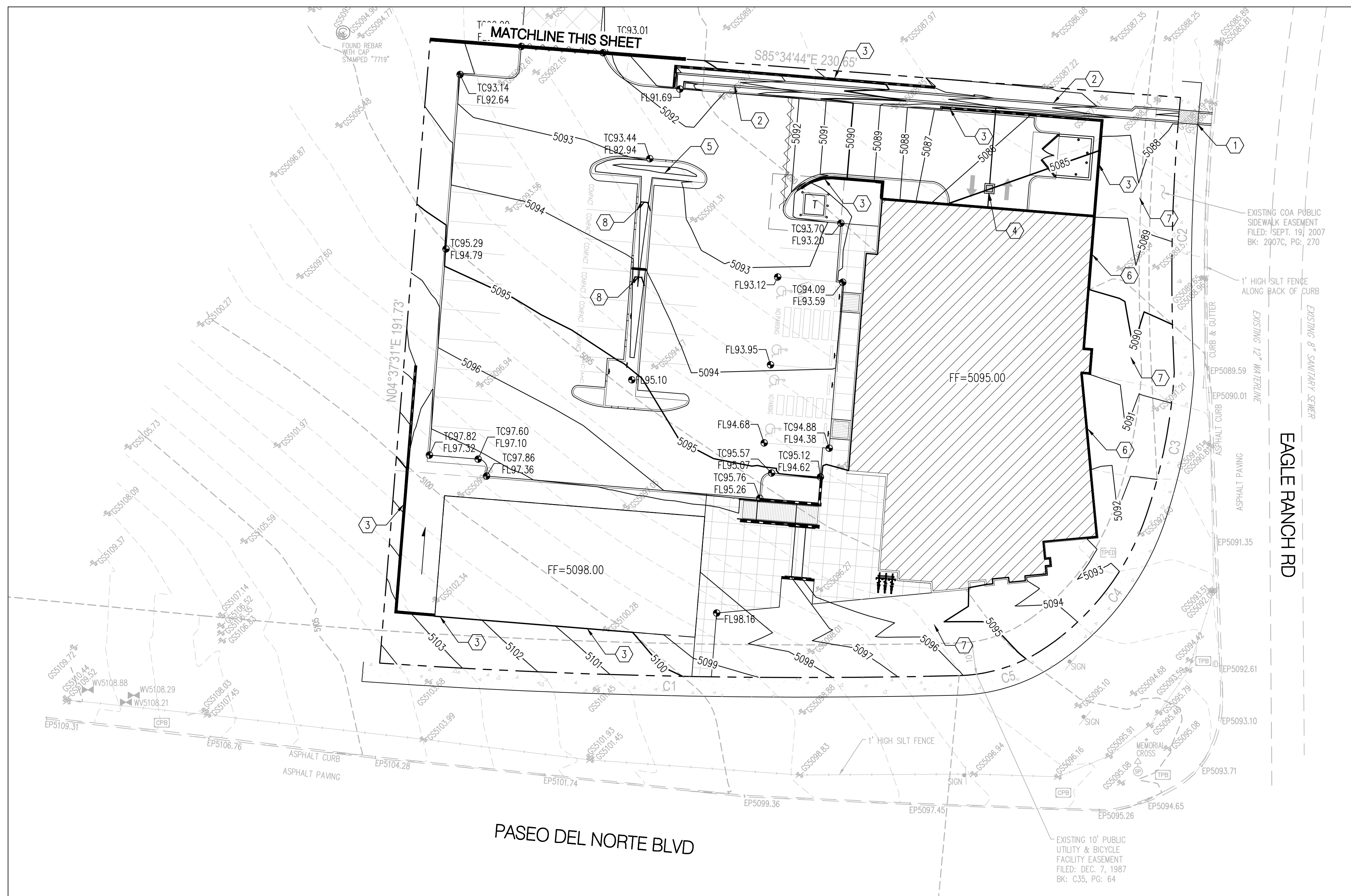
With this submittal we are requesting Hydrology Site Development Plan for Building Permit Approval. If you have any questions or require further information, please feel free to contact me.

Sincerely,



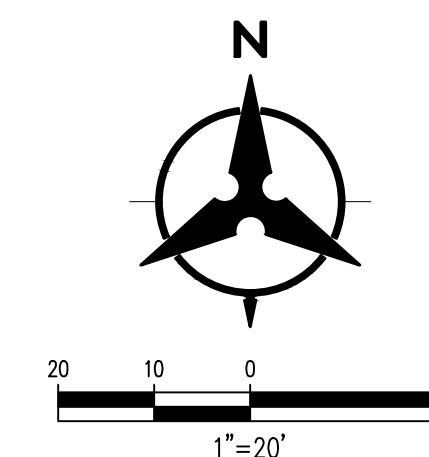
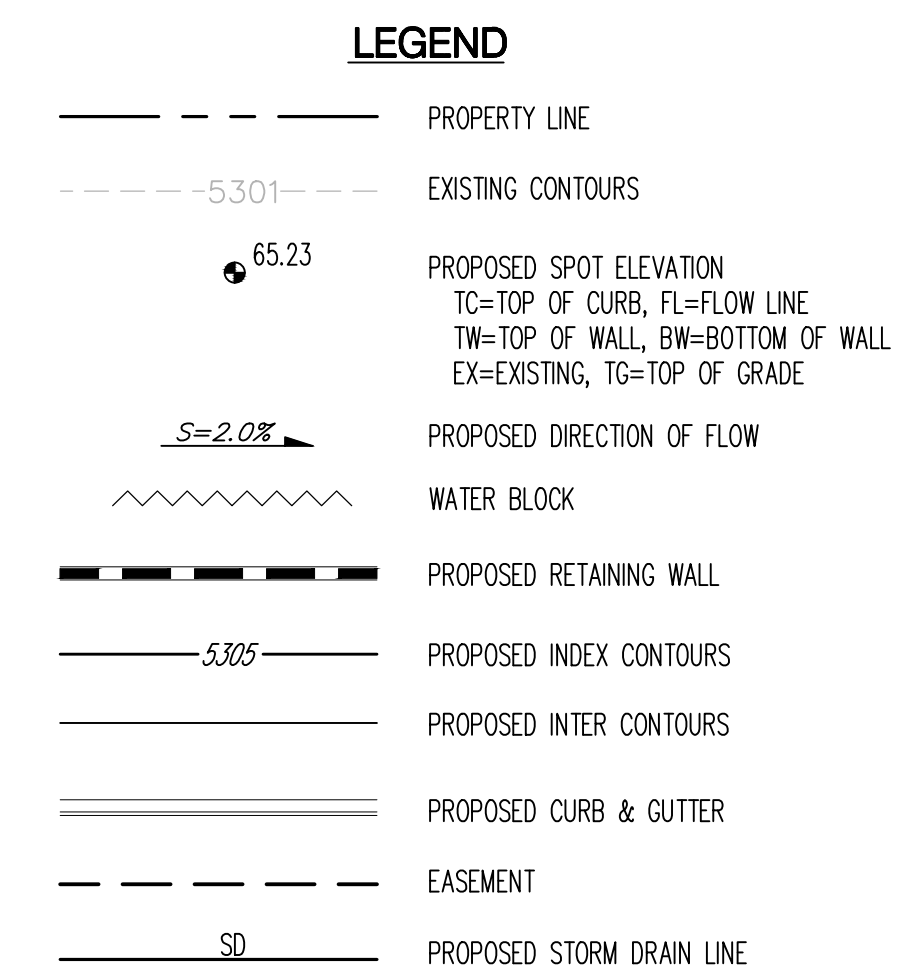
Matthew Satches, E.I.  
Engineer Intern  
Community Development & Planning

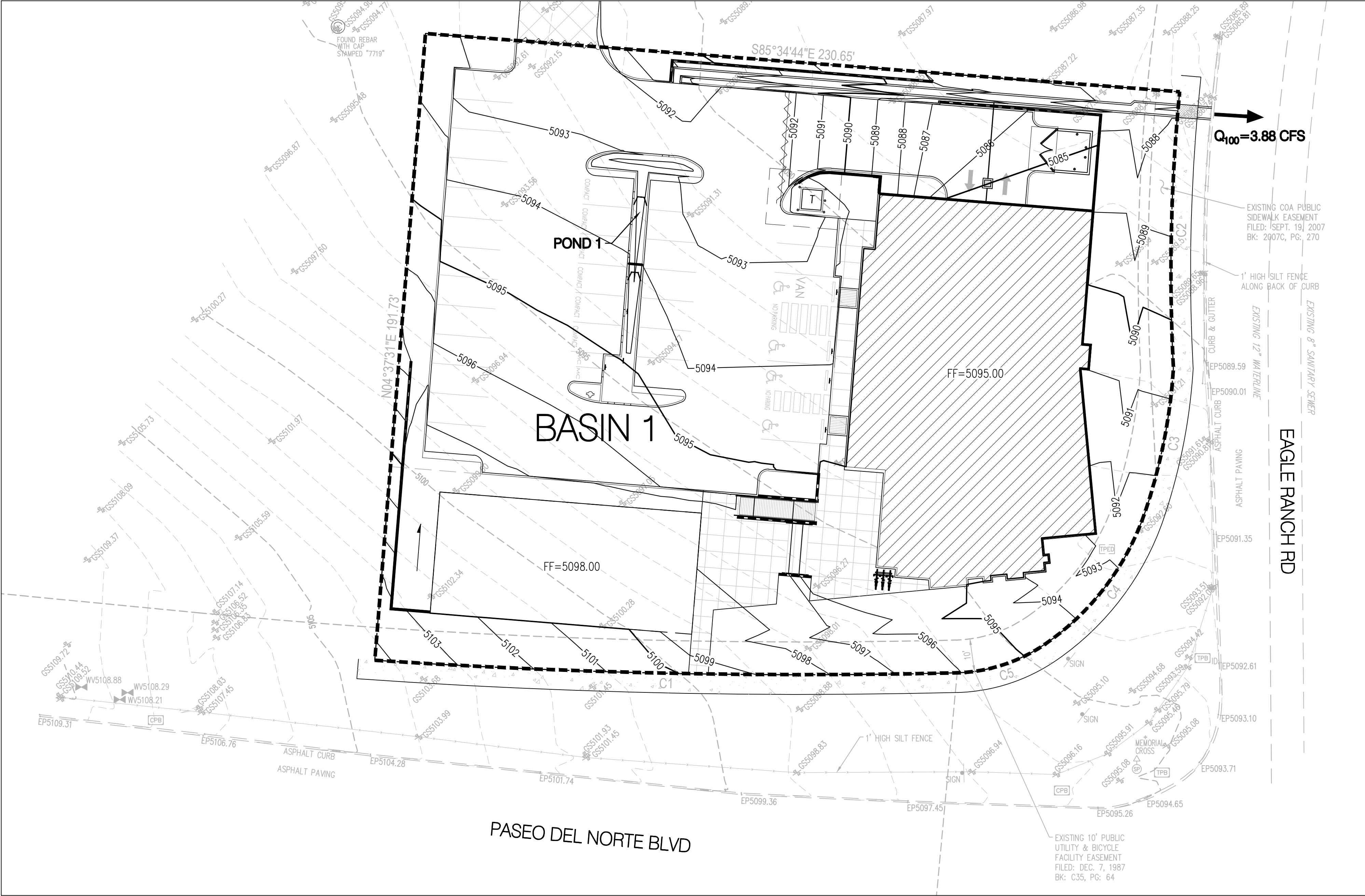
MHS/jcm  
Enclosures



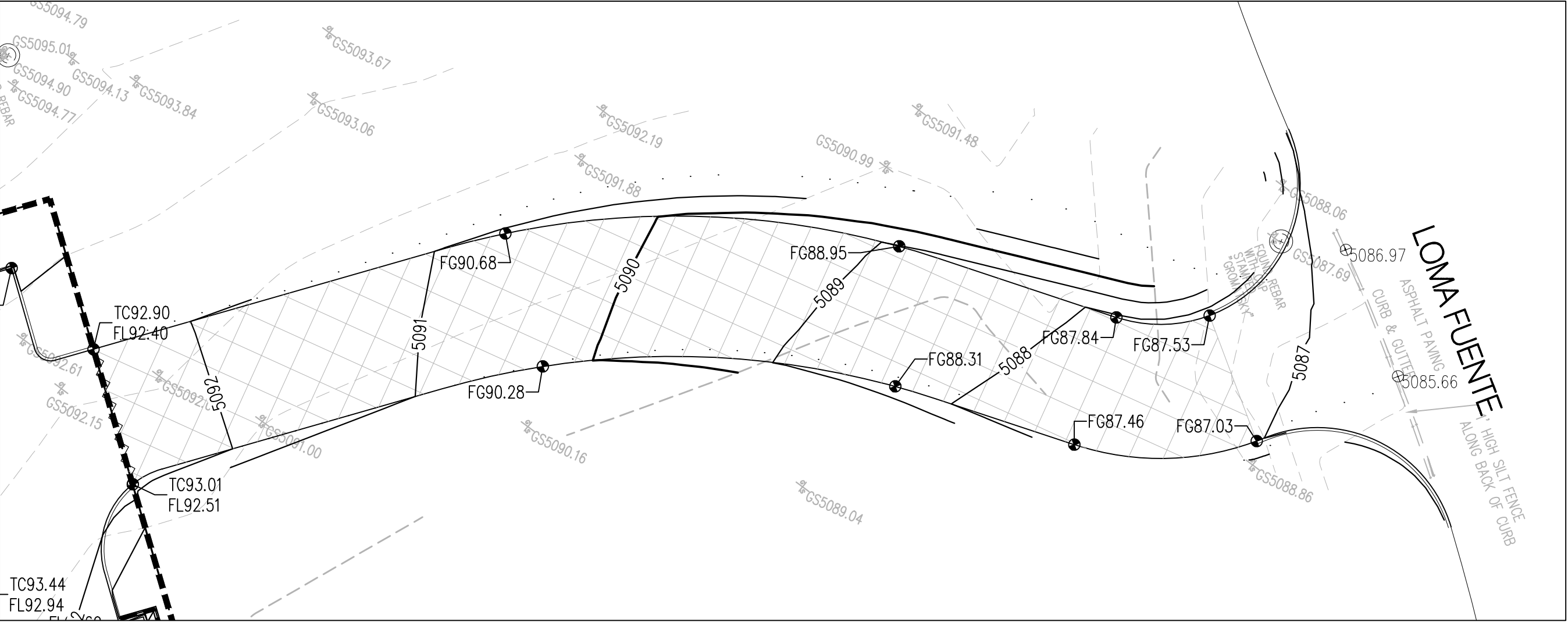
## GRADING KEYED NOTES

1. INSTALL SIDEWALK CULVERT
2. INSTALL RIBBON CHANNEL
3. INSTALL RETAINING WALL
4. INSTALL SUMP PUMP
5. POND FOR FIRST FLUSH
6. BUILDING STEM WALL
7. SWALE TO KEEP RUNOFF AWAY FROM BUILDING AND RETAINING WALLS
8. CHECK DAM



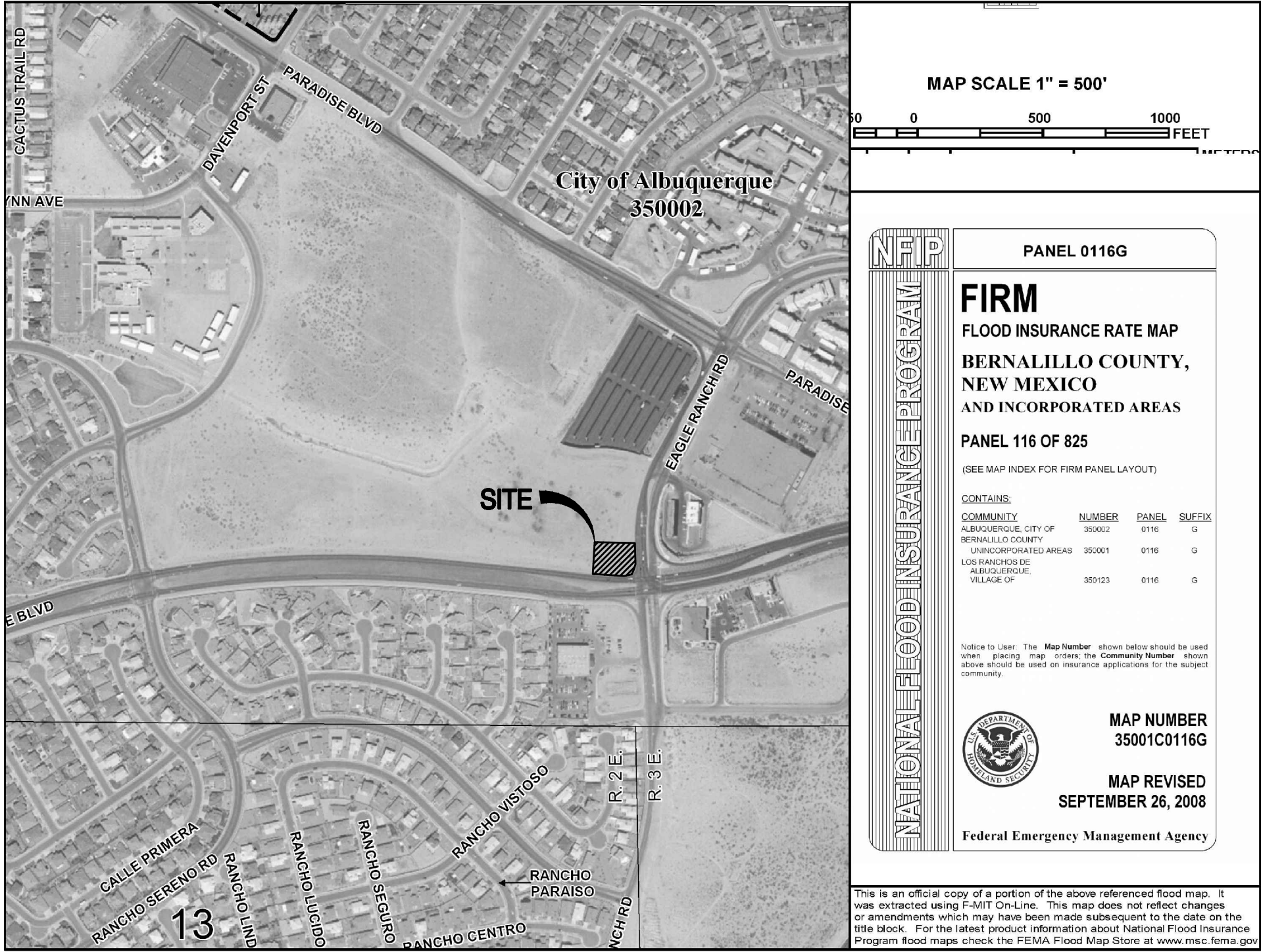


SITE CONCEPTUAL DRAINAGE MANAGEMENT PLAN



ACCESS ROAD CONCEPTUAL GRADING PLAN

- LEGEND**
- PROPERTY LINE
  - EXISTING CONTOURS
  - PROPOSED SPOT ELEVATION  
TC=TOP OF CURB, FL=FLOW LINE  
TW=TOP OF WALL, BW=BOTTOM OF WALL  
EX=EXISTING, TG=TOP OF GRADE
  - PROPOSED DIRECTION OF FLOW
  - WATER BLOCK
  - PROPOSED RETAINING WALL
  - PROPOSED INDEX CONTOURS
  - PROPOSED INTER CONTOURS
  - PROPOSED CURB & GUTTER
  - EASEMENT
  - PROPOSED STORM DRAIN LINE



FEMA FIRM MAP # 35001C0116G

Smiles for Kids Dental Office										
Proposed Ultimate Development Conditions Basin Data Table										
This table is based on the DPM Section 22.2, Zone: 1										
Basin ID	Area (SQ. FT)	Area (AC.)	Land Treatment Percentages				Q(100yr)	Q(100yr-6hr)	WT E	V(100yr-6hr)
			A	B	C	D	(cfs/ac.)	(CFS)	(inches)	(CF)
Proposed										
1	42493	0.98	0.0%	0.0%	26.0%	74.0%	3.98	3.88	1.72	6074
TOTAL	42493	**0.98						3.88		9926

PROPOSED BASIN DATA TABLE

INTRODUCTION:

THE PROJECT IS LOCATED ON THE NORTHWEST INTERSECTION OF PASEO DEL NORTE BLVD AND EAGLE RANCH RD. THIS SITE IS NOT WITHIN A DEFINED FLOOD ZONE AS SHOWN ON FIRM MAP NUMBER 35001C0116G (THIS SHEET). THE PURPOSE OF THIS SUBMITTAL IS TO PROVIDE A DRAINAGE MANAGEMENT PLAN FOR THE DEVELOPMENT OF SMILES FOR KIDS DENTIST OFFICE AND REQUEST SITE DEVELOPMENT PLAN FOR BUILDING PERMIT APPROVAL.

EXISTING CONDITIONS:

THE 0.98 ACRE SITE IS CURRENTLY UNDEVELOPED. THE SITE SLOPES TO THE NORTH / NORTHEAST WHERE THE RUNOFF OPENLY DISCHARGES INTO EAGLE RANCH RD.

BASED ON THE DRAINAGE STUDY FOR FOUNTAIN HILLS (CITY OF ALBUQUERQUE DRAINAGE FILE #C12/D3B), THE ALLOWABLE PEAK DISCHARGE FROM THE SITE IS APPROXIMATELY 4.08 CFS.

METHODOLOGY:

THE HYDROLOGIC ANALYSIS PROVIDED WITH THIS DRAINAGE MANAGEMENT PLAN HAS BEEN PREPARED IN ACCORDANCE WITH SECTION 22.2 OF THE DPM. THE SITE IS LOCATED WEST OF THE RIO GRANDE WITHIN PRECIPITATION ZONE 1. LAND TREATMENT PERCENTAGES WERE CALCULATED BASED ON THE ACTUAL CONDITIONS IN EACH ONSITE BASIN AND ARE SUMMARIZED IN THE "PROPOSED BASIN DATA TABLE" (THIS SHEET).

PROPOSED CONDITIONS:

THIS DRAINAGE MANAGEMENT PLAN WAS DEVELOPED IN ACCORDANCE WITH A FULLY DEVELOPED SITE. IT WAS DETERMINED THAT THE MAXIMUM ALLOWABLE PEAK DISCHARGE FROM THE SITE IS APPROXIMATELY 4.08 CFS (AS MENTIONED ABOVE). THIS IS A SMALL SITE AND ACTS AS ONE DRAINAGE BASIN (BASIN 1).

THE ULTIMATE OUTFALL LOCATION IS EAGLE RANCH ROAD THROUGH MEANS OF RIBBON CHANNEL AND A SMALL POND (POND 1) IN THE PARKING LOT USED TO MITIGATE THE FIRST FLUSH. A PORTION OF THE SITE DRAINS INTO THE PARKING GARAGE, THAT FLOW IS THEN DIRECTED INTO A SUMP PUMP WHERE IT DISCHARGES INTO SANITARY SEWER.

OFFSITE PRIVATE ACCESS ROAD IS NOT INCLUDED IN THE CALCULATION. RUNOFF FROM TRACT 10-A-1 WILL BE ADDRESSED WITH THE DEVELOPMENT OF THAT TRACT.

FIRST FLUSH CALCULATIONS:

IMPERVIOUS AREA: 28,868 SF  
VOLUME REQUIRED: 1,058 CF  
VOLUME PROVIDED: 315 CF

THERE WERE MANY CONTRIBUTING FACTORS THAT LIMITED THE VOLUME THAT COULD BE INCORPORATED INTO THE SITE DESIGN. THE SITE HAS AN EXISTING SLOPE OF APPROXIMATELY 10.00% STEEP SLOPE SITES MAKE IT CHALLENGING TO INCORPORATE SHALLOW RETENTION AREAS IN THE LANDSCAPE DESIGN AND REDUCE THE ACTUAL VOLUME INTERCEPTED. IN ADDITION, BUILDING SET BACKS LIMITED THE AREA AVAILABLE TO PROVIDE RETENTION PONDS WHERE THEY WOULD BE MOST EFFECTIVE AT TREATING THE FIRST FLUSH. ANOTHER SITE CONSTRAINT IS AN EXISTING UTILITY EASEMENT (ALONG EAGLE RANCH AND PASEO DEL NORTE) CONTAINING COMMUNICATION AND GAS LINES. GIVEN THE SITE CONSTRAINTS, THIS DESIGN MAXIMIZED THE FIRST FLUSH RETAINED WITHIN THE PARKING LOT PONDING AREA.

CONCLUSION:

THE PEAK DISCHARGE FROM THE SITE IS 3.88 CFS WHICH IS LESS THAN THE ALLOWABLE PEAK DISCHARGE RATE, THEREFORE WE ARE IN CONFORMANCE WITH CITY OF ALBUQUERQUE HYDROLOGY REQUIREMENTS AND REQUEST SITE DEVELOPMENT PLAN FOR BUILDING PERMIT APPROVAL.

