

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Interim Director



Mayor Timothy M. Keller

October 6, 2022

Amit Pathak, P.E.
Bohannon Huston Inc.
7500 Jefferson St. NE Courtyard I
Albuquerque, NM 87109

**RE: Monte Vista Elementary School
3211 Monte Vista Dr. NE
Grading and Drainage Plan
Engineer's Stamp Date: 09/06/2022
Hydrology File: K16D017**

Dear Mr. Bohannon:

Based upon the information provided in your submittal received 9/12/2022, the Grading & Drainage Plan **is not** approved for Building Permit. The following comments need to be addressed for approval of the above referenced project:

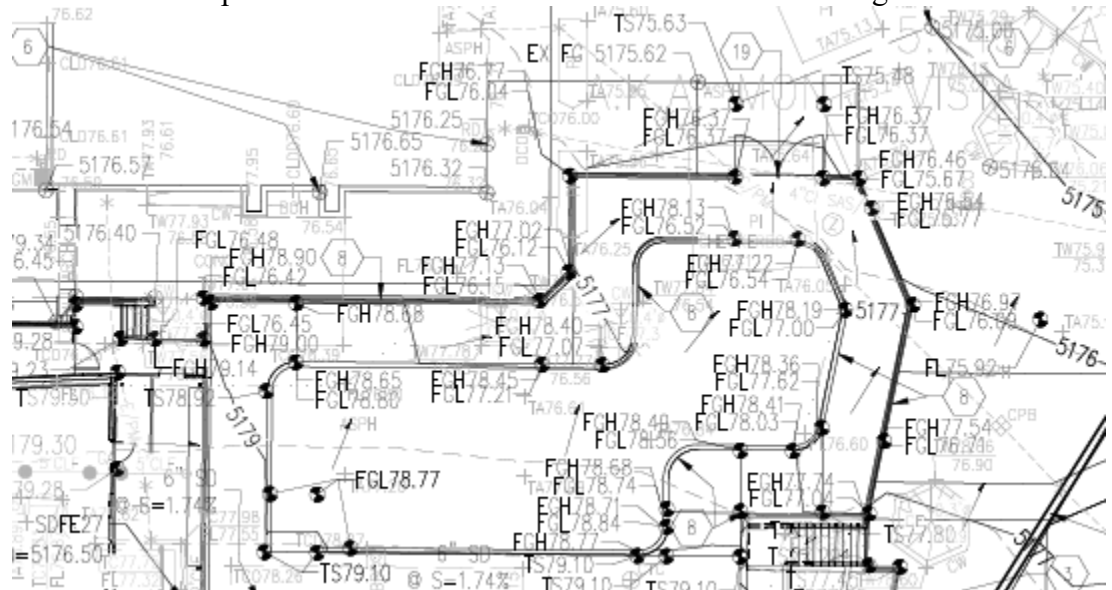
PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

1. Please clean the plan up. It is really overwhelmed with information and is hard to read.
 - a. See below example screen shot. Cannot make sense of what is being constructed.



- c. Please follow example G & D sent previously to assist in readability of a G & D.
2. Construction limits are not defined. Place a boundary for construction limits on the set.
3. It is difficult to tell what works and what does not with what is presented. I do not want to review this in this format.

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

CITY OF ALBUQUERQUE

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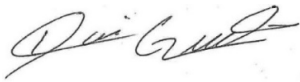


Mayor Timothy M. Keller

(ESC) Plan and Owner's certified Notice of Intent (NOI) is required to be submitted to the Stormwater Quality Engineer (Doug Hughes, PE, jhughes@cabq.gov, 924-3420) 14 days prior to any earth disturbance.

If you have any questions, please contact me at 924-3695 or dggutierrez@cabq.gov

Sincerely,



David G. Gutierrez, P.E.
Senior Engineer, Hydrology
Planning Department

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov



City of Albuquerque

Planning Department
Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

Project Title: _____ **Building Permit #:** _____ **Hydrology File #:** _____

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

Legal Description: _____

City Address: _____

Applicant: _____ **Contact:** _____

Address: _____

Phone#: _____ **Fax#:** _____ **E-mail:** _____

Other Contact: _____ **Contact:** _____

Address: _____

Phone#: _____ **Fax#:** _____ **E-mail:** _____

TYPE OF DEVELOPMENT: _____ PLAT (# of lots) _____ RESIDENCE _____ DRB SITE ☒ ADMIN SITE

IS THIS A RESUBMITTAL? _____ Yes _____ No

DEPARTMENT _____ TRANSPORTATION _____ HYDROLOGY/DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

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

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
- _____ FLOODPLAIN DEVELOPMENT PERMIT
- _____ OTHER (SPECIFY) _____

DATE SUBMITTED: _____ **By:** _____

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

September 7, 2022

Mr. David Gutierrez, PE
Senior Engineer, Hydrology
City of Albuquerque Planning Department
Plaza del Sol Building
600 Second NW
Albuquerque, NM 87102

Re: Monte Vista Elementary School, 3211 Monte Vista Dr. NE, Albuquerque, NM 87106
Grading and Drainage Plan, Hydrology File: K16D017
Comment Response/ Re-Submittal

Dear Mr. Gutierrez:

Enclosed for your review is a copy of the revised grading and drainage plan set. Below is a brief description of how the comments from your response letter (dated 02/18/2022) were addressed:

1. Please show how the site drainage is getting off-site.

Response: The drainage patterns are explained in the attached Drainage Management Plan (DMP)

2. Please provide a detail of the proposed swale.

Response: These construction details are provided in the landscape plans, attached.

- a. This appears to act more like a pond for water quality. Is that the intention? If so, please call this out and provide volume.

Response: This is shown and explained in the DMP.

3. Elaborate how you will treat the flow for the proposed parking lot for storm water quality.

Response: This is shown and explained in the DMP.

4. Please show how the site drainage is getting off-site.

Response: Putting all the information on the overall plan would not read clearly per that sheet's scale. Detailed elevations are defined on the individual grading sheets. Furthermore, the drainage patterns are explained in the DMP.

Engineering ▲

Spatial Data ▲

Advanced Technologies ▲

5. You are showing sections (A and B) on C-200 but do not show where these are on the site. Please show what location.

Response: This is shown on grading sheet C201.

6. Clearly delineate the affected construction area.

Response: Spot elevations on the grading plan clearly define the outline and limits of construction.

7. It is difficult to know what is being proposed vs what is existing. Is there any new pavement? If so show it.

Response: Existing features and survey information are depicted as gray, proposed items are depicted in black on the plans. Yes, there is new paving; the paving plan has been attached to this submittal for hydrology review.

8. Label all affected area and calculate what is proposed vs existing clearly in narrative.

Response: This is shown and explained in the revised DMP.

9. Please calculate the water quality volume required (this will include the entire construction area that is affected/changed for redevelopment per DPM CH 6).

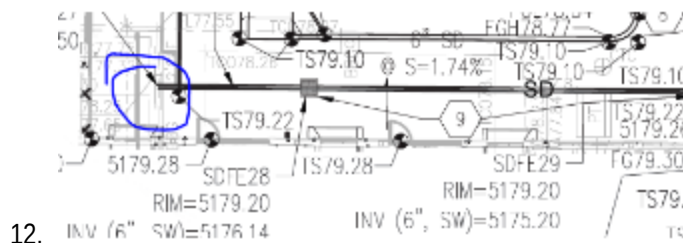
Response: This is shown and explained in the DMP

10. Please clean the plans up so it is clear how the elevations are changing.

Response: Elevations are defined in the grading plan. There is a lot of detailed definition needed so that it gets built correctly; therefore, a lot of spot elevations provided.

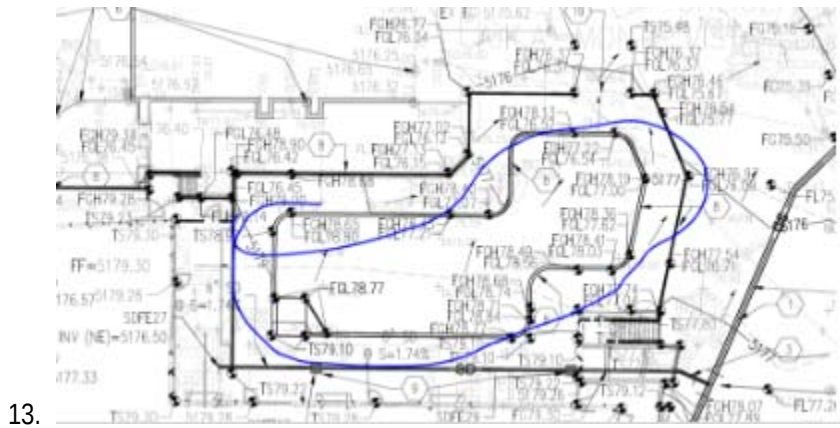
11. Clearly show how existing flows will be affected by the proposed building and drain system.

Response: The drainage patterns are explained in the DMP narrative.



Response: The keynote applied to this point calls out the connection to downspout.

Mr. David Gutierrez, PE
Senior Engineer, Hydrology
City of Albuquerque Planning Department
September 7, 2022
Page 3



Response: This area is an elevated play area with a ramped path/ tricycle track around it.

14. Overall, the site needs to clearly show how water is moving through the site and where it ends up.

Response: The drainage patterns are explained in the DMP. Furthermore, flow arrows are provided in the grading sheets.

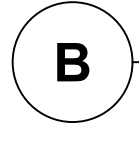
With this submittal, we are requesting Hydrology Approval. If you have any questions or require further information, please feel free to contact me.

Sincerely,

Patrick Sisneros, PE
Project Engineer
Community Development and Planning

Enclosures

Civil Plans, DMP, Landscape Plans



NTS

SHEET ____ OF ____

SEE SHEET C-202

GRADING KEYNOTES*

1. INSTALL HDPE (N12 WT, OR APPROVED EQUAL) STORM DRAIN PIPE, SIZE PER PLANS.
2. INSTALL 11.25" PRE-FABRICATED STORM DRAIN FITTING.
3. INSTALL 22.5" PRE-FABRICATED STORM DRAIN FITTING.
4. INSTALL 4" TYPE C MANHOLE PER COA STD DWG 2201.
5. ROOF DRAIN TO DISCHARGE AT WALL. REFER TO ARCHITECTURAL AND STRUCTURAL PLANS FOR MORE INFORMATION.
6. MATCH EXISTING ELEVATION.
7. INSTALL RIP RAP SWALE PER DETAIL "A" SHEET C200.
8. SITE RETAINING WALL; SEE STRUCTURAL PLANS FOR DETAILS.
9. INSTALL 12" H20 TRAFFIC RATED DRAIN INLET.
10. INSTALL 12" NYOPLAST DOME DRAIN INLET.
11. NOT USED.
12. INSTALL STORM DRAIN END SECTION (SIZE PER PLAN).
13. INSTALL STORM DRAIN TO WITHIN 5' OF BUILDING. SEE PLUMBING PLANS FOR CONTINUATION.
14. EXISTING CONCRETE PIPE END SECTION TO REMAIN.
15. SIDE SLOPES SHALL BE STABILIZED WITH NATIVE GRASS SEED (PER COA SPEC SECTION 1012) WITH AGGREGATE MULCH OR EQUAL (MUST SATISFY THE "FINAL STABILIZATION CRITERIA" CGP 2.2.14.B).
16. INSTALL PRE-FABRICATED TEE STORM DRAIN FITTING, SIZE PER PLANS.
17. INSTALL CURB CUT PER DETAIL "B" SHEET C200.
18. REUSE EXISTING SIDEWALK CULVERT.
19. INSTALL NEW MAINTENANCE ACCESS GATE. SEE ARCHITECTURAL PLANS FOR DETAILS.
20. NOT USED.
21. INSTALL 2'X2' NYLOPLAST STORM DRAIN INLET.
22. INSTALL 2'X2' NYLOPLAST CURB INLET WITH STANDARD GRATE AND MID HOOD SETTING.
23. CONNECT ROOF DRAIN TO SURFACE INLET RISER.

NOTE

REFER TO SHEET G-106 FOR BID DESCRIPTION AND CONSTRUCTION PHASING.

NOTE

HDPE PIPE AND FITTINGS SHALL BE INSTALLED AND BACKFILLED PER MANUFACTURER SPECIFICATIONS. CONNECTIONS TO CONCRETE MANHOLES AND CONCRETE DROP INLETS SHALL USE WATER STOP GASKETS AND SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS

NOTE

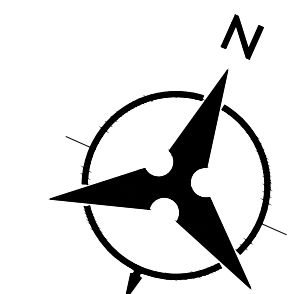
ENDS OF ALL STORM DRAIN PIPES, CULVERTS, & CMP END SECTIONS (LARGER THAN 12") SHALL BE COVERED WITH STEEL BARS (TO KEEP CHILDREN OUT) APPROXIMATELY 12" SQUARE. CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR REVIEW AND APPROVAL. HYDRAULIC INTEGRITY SHALL NOT BE COMPROMISED. BARS TO BE PAINTED TO MATCH BUILDING.

NOTE

SIDEWALK CROSS-SLOPES SHALL BE AT A MINIMUM OF 1.0% AND A MAXIMUM OF 2.0%

LEGEND

- PROPERTY LINE
- LIMITS OF GRADING
- EXISTING INDEX CONTOUR
- EXISTING INTERMEDIATE CONTOUR
- EXISTING GROUND SPOT ELEVATION
- PROPOSED INDEX CONTOUR
- PROPOSED INTERMEDIATE CONTOUR
- PROPOSED FINISHED GRADE SPOT ELEVATION
- TC=TOP OF CURB, FL=FLOW LINE, TS=TOP OF SIDEWALK, TG=TOP OF GRATE, FGH=FINISH GRADE HIGH, FGL=FINISH GRADE LOW
- PROPOSED CURB & GUTTER
- PROPOSED RETAINING WALL
- DIRECTION OF FLOW
- WATER BLOCK/GRADE BREAK
- PROPOSED STORM DRAIN LINE
- PROPOSED STORM DRAIN MANHOLE
- PROPOSED STORM DRAIN INLETS



SCALE: 1"=20'

2415 PRINCETON DR. NE, SUITE G-2
ALBUQUERQUE, NM 87107
505.843.7587
www.designplusllc.com

DESIGN PLUS LLC

ALBUQUERQUE PUBLIC SCHOOLS
MONTE VISTA ELEMENTARY SCHOOL
CLASSROOM ADDITION
3211 MONTE VISTA BLVD. NE
ALBUQUERQUE, NEW MEXICO 87106

DATE: MARCH 2018

REVISIONS

PROJECT NO:

CAD DWG FILE:

DRAWN BY: LS

CHECKED BY:

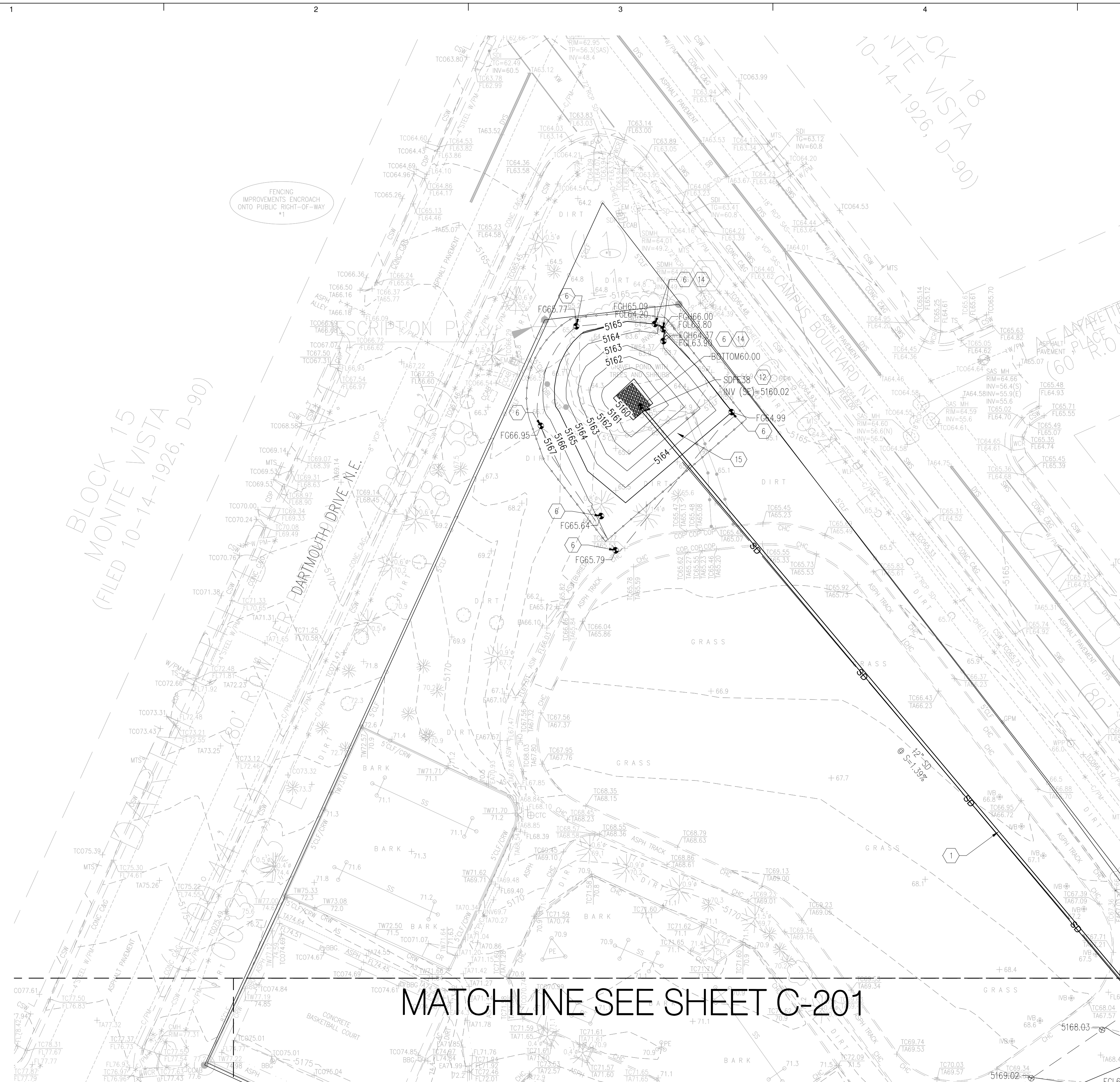
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SHEET TITLE

GRADING PLAN SOUTH

C-201

SHEET OF



GRADING KEYNOTES*

1. INSTALL HDPE (N12 WT. OR APPROVED EQUAL) STORM DRAIN PIPE, SIZE PER PLANS.
 2. INSTALL 11.25" PRE-FABRICATED STORM DRAIN FITTING.
 3. INSTALL 22.5" PRE-FABRICATED STORM DRAIN FITTING.
 4. INSTALL 4" TYPE C MANHOLE PER COA STD DWG 2201.
 5. ROOF DRAIN TO DISCHARGE AT WALL. REFER TO ARCHITECTURAL AND STRUCTURAL PLANS FOR MORE INFORMATION.
 6. MATCH EXISTING ELEVATION.
 7. INSTALL RIP RAP SWALE PER DETAIL "A" SHEET C200.
 8. SITE RETAINING WALL; SEE STRUCTURAL PLANS FOR DETAILS.
 9. INSTALL 12" H2O TRAFFIC RATED DRAIN INLET.
 10. INSTALL 12" NYOPLAST DOME DRAIN INLET.
 11. NOT USED.
 12. INSTALL STORM DRAIN END SECTION (SIZE PER PLAN).
 13. INSTALL STORM DRAIN TO WITHIN 5' OF BUILDING. SEE PLUMBING PLANS FOR CONTINUATION.
 14. EXISTING CONCRETE PIPE END SECTION TO REMAIN.
 15. SIDE SLOPES SHALL BE STABILIZED WITH NATIVE GRASS SEED (PER COA SPEC SECTION 1012) WITH AGGREGATE MULCH OR EQUAL (MUST SATISFY THE "FINAL STABILIZATION CRITERIA" CGP 2.2.14.B).
 16. INSTALL PRE-FABRICATED TEE STORM DRAIN FITTING, SIZE PER PLANS.
 17. INSTALL CURB CUT PER DETAIL "B" SHEET C200.
 18. REUSE EXISTING SIDEWALK CULVERT.
 19. INSTALL NEW MAINTENANCE ACCESS GATE. SEE ARCHITECTURAL PLANS FOR DETAILS.
 20. NOT USED.
 21. INSTALL 2'x2' NYOPLAST STORM DRAIN INLET.
 22. INSTALL 2'x2' NYOPLAST CURB INLET WITH STANDARD GRATE AND MID HOD SETTING.
 23. CONNECT ROOF DRAIN TO SURFACE INLET RISER.
- * - NOT ALL KEYNOTED USED ON THIS SHEET

NOTE

REFER TO SHEET G-106 FOR BID DESCRIPTION AND
CONSTRUCTION PHASING.

NOTE

HDPE PIPE AND FITTINGS SHALL BE INSTALLED AND BACKFILLED PER MANUFACTURER SPECIFICATIONS. CONNECTIONS TO CONCRETE MANHOLES AND CONCRETE DROP INLETS SHALL USE WATER STOP GASKETS AND SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS

NOTE

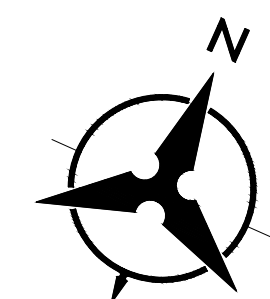
ENDS OF ALL STORM DRAIN PIPES, CULVERTS, & CMP END SECTIONS (LARGER THAN 12") SHALL BE COVERED WITH STEEL BARS (TO KEEP CHILDREN OUT) APPROXIMATELY 12" SQUARE. CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR REVIEW AND APPROVAL. HYDRAULIC INTEGRITY SHALL NOT BE COMPROMISED. BARS TO BE PAINTED TO MATCH BUILDING.

NOTE

SIDEWALK CROSS-SLOPES SHALL BE AT A MINIMUM OF 1.0%
AND A MAXIMUM OF 2.0%

LEGEND

	PROPERTY LINE
	LIMITS OF GRADING
 -5025	EXISTING INDEX CONTOUR
 -5024	EXISTING INTERMEDIATE CONTOUR
 5025.25	EXISTING GROUND SPOT ELEVATION
 -5025	PROPOSED INDEX CONTOUR
 -5024	PROPOSED INTERMEDIATE CONTOUR
 26.75	PROPOSED FINISHED GRADE SPOT ELEVATION
	TS=TOP OF CURB, FL=FLOW LINE, TS=TOP OF SIDEWALK TG=TOP OF GRATE, FGH=FINISH GRADE HIGH, FGL=FINISH GRADE LOW
	PROPOSED CURB & GUTTER
	PROPOSED RETAINING WALL
 S=2.0%	DIRECTION OF FLOW
	WATER BLOCK/GRADE BREAK
	PROPOSED STORM DRAIN LINE
	PROPOSED STORM DRAIN MANHOLE
	PROPOSED STORM DRAIN INLETS



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MONTE VISTA ELEMENTARY SCHOOL
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3211 MONTE VISTA BLVD NE
ALBUQUERQUE, NEW MEXICO 87106

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REVISIONS

PROJECT NO:

CAD DWG FILE:

DRAWN BY: LS

CHECKED BY:

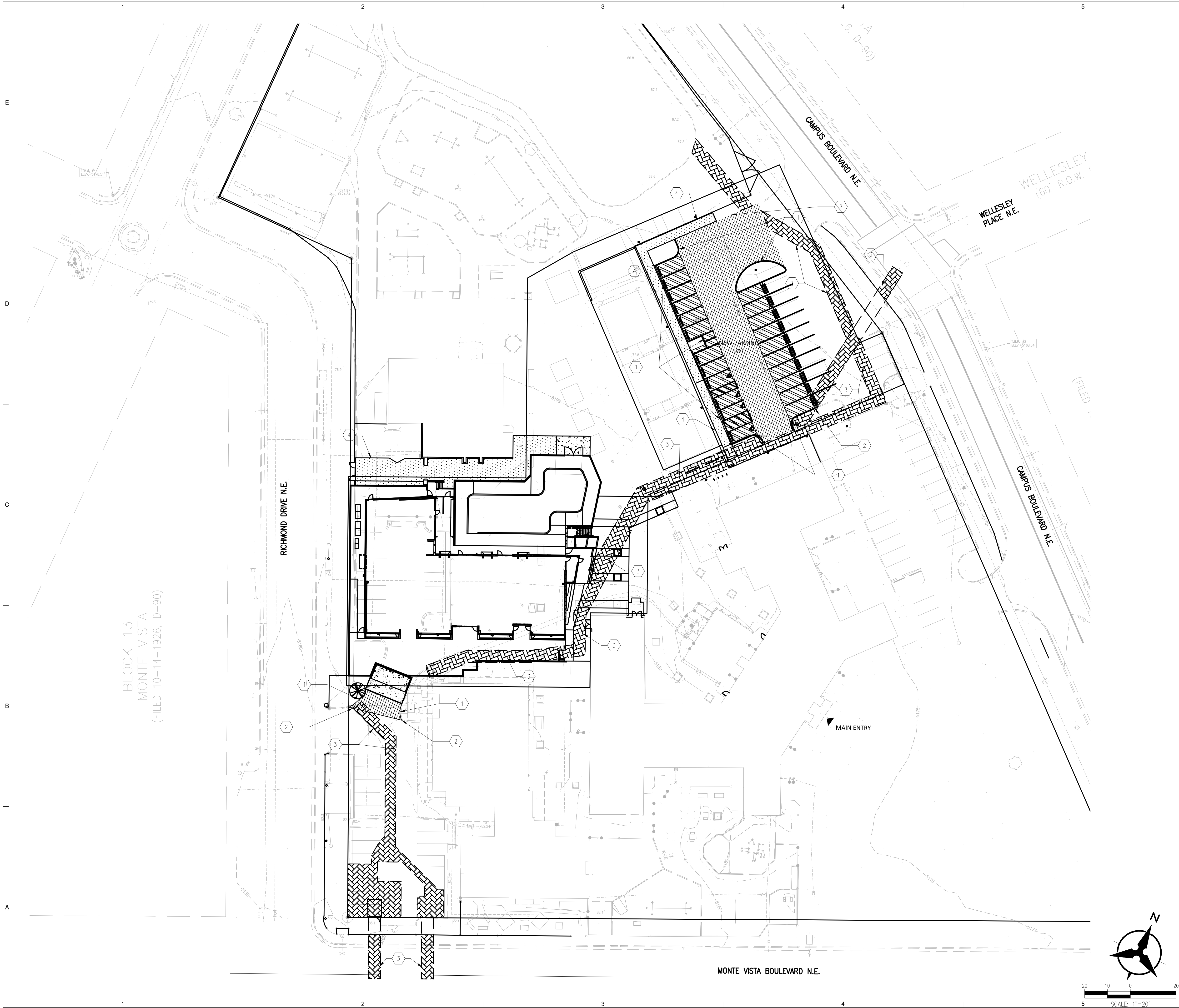
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SHEET TITLE

GRADING PLAN NORTH

C-202

SHEET _____ OF _____



PAVING KEYED NOTES

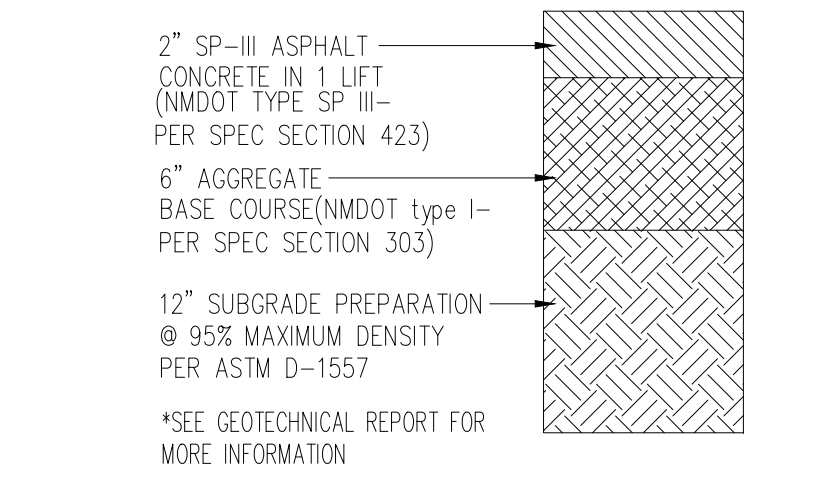
1. INSTALL 6" STANDARD CONCRETE CURB & GUTTER PER COA STD DWG 2415.
2. CONNECT 6" STANDARD CURB & GUTTER TO EXISTING CURB & GUTTER.
3. REMOVE AND REPLACE ASPHALT AND CONCRETE FOR UTILITY INSTALLATION PER COA STD DWG. 2465 AND 2430.
4. INSTALL TURNED DOWN SIDEWALK EDGE. SEE GRADING PLAN FOR ELEVATIONS. SEE ARCHITECTURAL PLANS FOR CONCRETE SIDEWALK INFORMATION.

NOTE: REFER TO SHEET G-106 FOR BID DESCRIPTION AND CONSTRUCTION PHASING.

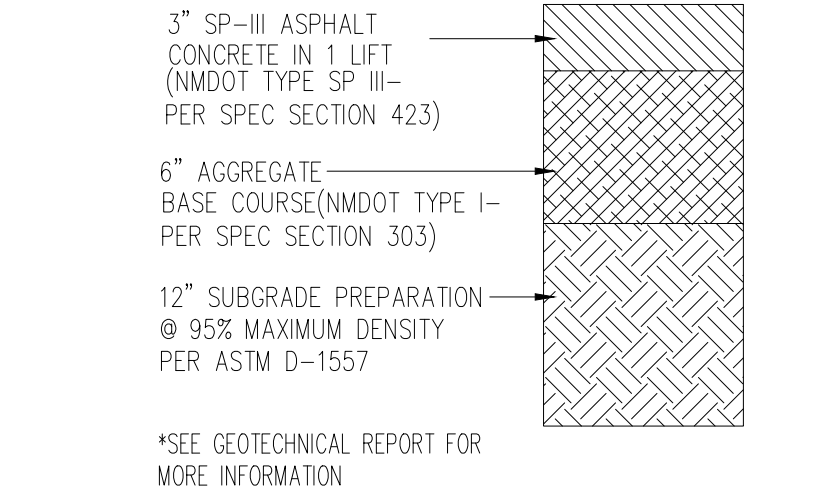
NOTE: SEE LANDSCAPE ARCHITECTURAL PLANS FOR SIDEWALK AND COURTYARD PAVING.

PAVING LEGEND

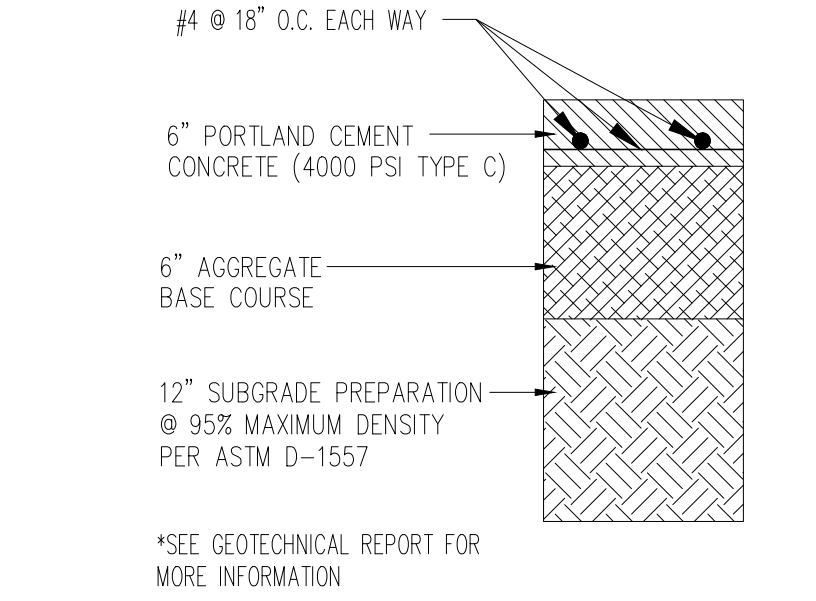
- REMOVE AND REPLACE SURFACE PAVING INFRASTRUCTURE FOR UTILITY INSTALLATION
- HEAVY DUTY ASPHALT PAVEMENT SECTION SEE DETAIL THIS SHEET
- LIGHT DUTY ASPHALT PAVEMENT SECTION SEE DETAIL THIS SHEET
- HEAVY DUTY CONCRETE PAVEMENT SECTION SEE DETAIL THIS SHEET
- SEE ARCHITECTURAL PLANS FOR CONCRETE SIDEWALK INFORMATION



LIGHT DUTY ASPHALT PAVEMENT SECTION
NOT TO SCALE



HEAVY DUTY ASPHALT PAVEMENT SECTION
NOT TO SCALE



HEAVY DUTY CONCRETE PAVEMENT SECTION
NOT TO SCALE

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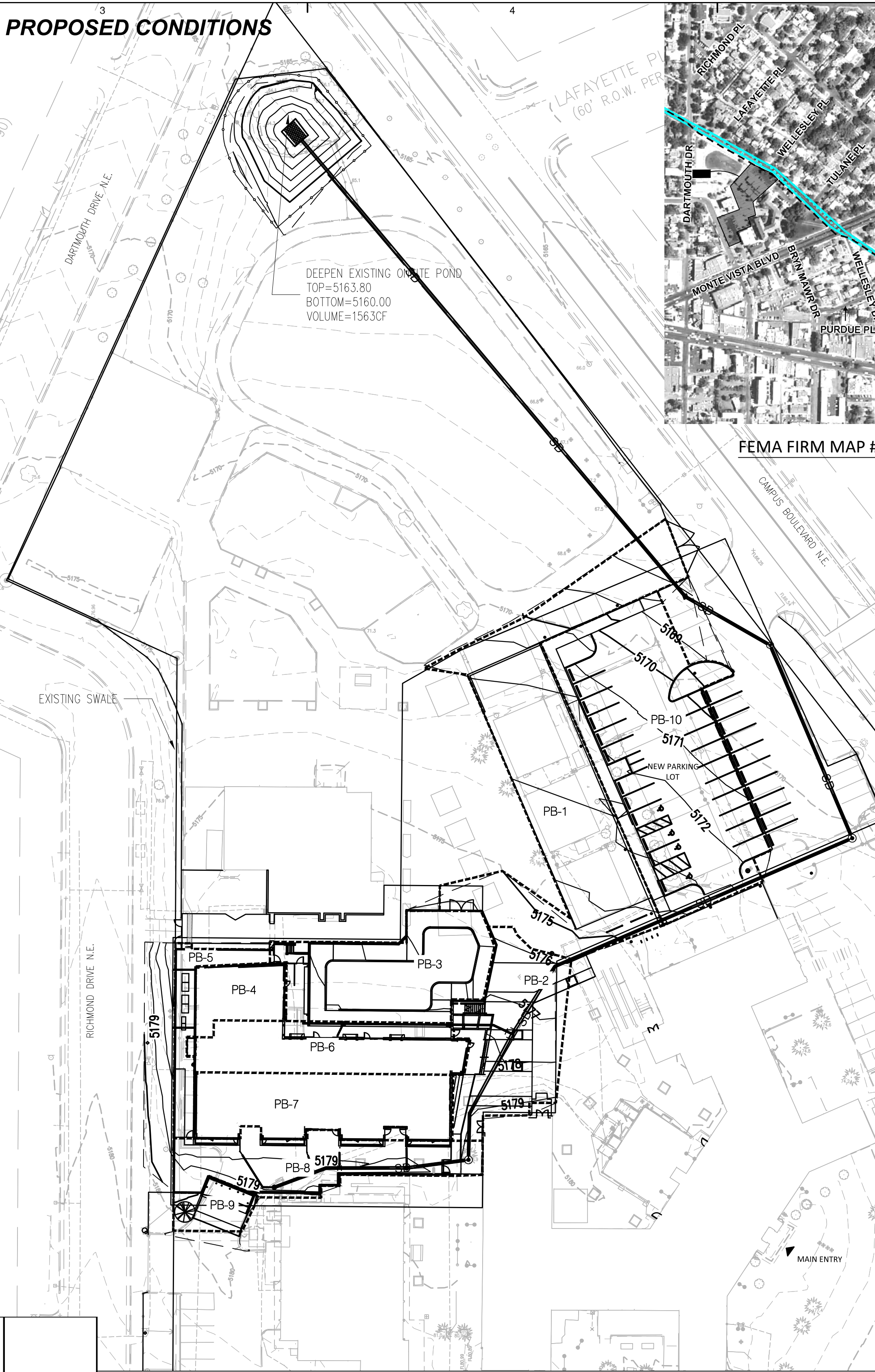
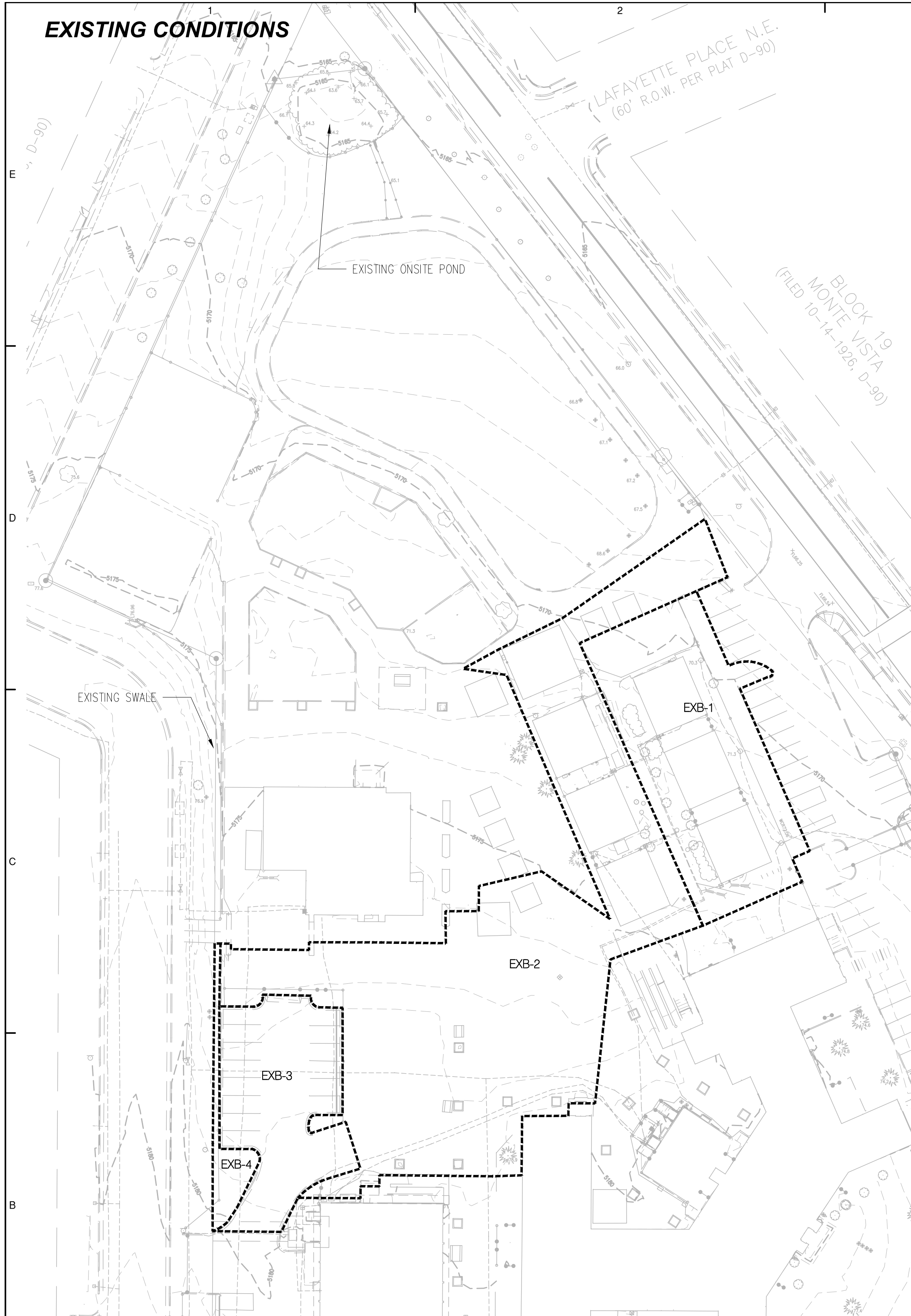
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SHEET TITLE

PAVING PLAN

C-400

SHEET ____ OF ____



FEMA FIRM MAP # 35001C0353H

20180367 APS - MVES												
Basin Data Table												
This table is based on page 6-10 of the DPM, Zone: 2												
Basin ID	Area (SQ. FT)	Area (AC.)	Land Treatment Percentages				Q(100yr) (cfs/ac.)	Q(100yr) (CFS)	V(100yr) (inches)	V _(100yr-6hr) (CF)	V _(100yr-10d) (CF)	SW Quality (CF)
			A	B	C	D						
EXISTING												
EXB-1	10424	0.24	0.0%	0.0%	10.0%	90.0%	4.21	1.01	2.20	1911	2951	
EXB-2	28120	0.65	0.0%	0.0%	5.0%	95.0%	4.28	2.76	2.27	5308	8268	
EXB-3	6259	0.14	0.0%	0.0%	0.0%	100.0%	4.34	0.62	2.33	1215	1909	
EXB-4	1008	0.02	0.0%	80.0%	20.0%	0.0%	2.50	0.06	0.85	71	71	
TOTAL	45811	1.05	-	-	-	-	-	4.45	-	8505	13199	-
PROPOSED												
PB-1	10846	0.25	0.0%	0.0%	40.0%	60.0%	3.82	0.95	1.81	1636	2357	141
PB-2	4470	0.10	0.0%	0.0%	0.0%	100.0%	4.34	0.45	2.33	868	1363	97
PB-3	4784	0.11	0.0%	0.0%	90.0%	10.0%	3.18	0.35	1.16	462	515	10
PB-4	1420	0.03	0.0%	0.0%	0.0%	100.0%	4.34	0.14	2.33	276	433	31
PB-5	1280	0.03	0.0%	0.0%	40.0%	60.0%	3.82	0.11	1.81	193	278	17
PB-6	3609	0.08	0.0%	0.0%	0.0%	100.0%	4.34	0.36	2.33	701	1101	78
PB-7	4342	0.10	0.0%	0.0%	0.0%	100.0%	4.34	0.43	2.33	843	1324	94
PB-8	3747	0.09	0.0%	0.0%	10.0%	90.0%	4.21	0.36	2.20	687	1061	73
PB-9	888	0.02	0.0%	0.0%	0.0%	100.0%	4.34	0.09	2.33	172	271	19
PB-10	10424	0.24	0.0%	0.0%	5.0%	95.0%	4.28	1.02	2.27	1968	3065	215
TOTAL	45810	1.05	-	-	-	-	-	4.27	-	7806	11769	775

BASIN	V REQUIRED (CF)	V PROVIDED (CF)
PB (1-10)	775	-
EXG STORAGE	600	-
POND TOTAL	1375	1563

LEGEND

- PROPERTY LINE
- LIMITS OF GRADING
- EXISTING INDEX CONTOUR
- EXISTING INTERMEDIATE CONTOUR
- PROPOSED INDEX CONTOUR
- PROPOSED INTERMEDIATE CONTOUR
- DRAINAGE BASIN

DRAINAGE NARRATIVE

INTRODUCTION AND METHODOLOGY:

THE PURPOSE OF THIS SUBMITTAL IS TO PRESENT A DRAINAGE AND GRADING PLAN FOR THE MONTE VISTA ELEMENTARY SCHOOL (MVES) BUILDING ADDITION AND PARKING LOT RENOVATION. THIS PROJECT WILL CONSIST OF THE REMOVAL AND REPLACEMENT OF EXISTING WEST PARKING LOT AND COURTYARD. IN ADDITION, THE EXISTING PORTABLE BUILDINGS WILL BE REMOVED AND THE NORTH PARKING LOT WILL BE EXPANDED. THE SCHOOL IS LOCATED ON THE NORTHWEST CORNER OF MONTE VISTA BLVD AND CAMPUS BLVD NE. PER FEMA COMMUNITY MAP PANEL #35001C0353H, THE SITE IS NOT LOCATED WITHIN A FLOODPLAIN. CAMPUS DRIVE NW IS IDENTIFIED AS BEING IN ZONE AO WITH A DEPTH OF 1-FT. THE SITE IS IN RAINFALL ZONE 2. THE LIMITS OF CONSTRUCTION ARE 1.05 ACRES.

THE HYDROLOGIC ANALYSIS PROVIDED WITH THIS DRAINAGE SUBMITTAL HAS BEEN PREPARED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL, CHAPTER 6 (DRAINAGE, FLOOD CONTROL, AND EROSION CONTROL). LAND TREATMENT PERCENTAGES WERE CALCULATED BASED ON THE EXISTING AND PROPOSED CONDITIONS IN EACH ONSITE BASIN AND ARE SUMMARIZED IN THE "APS-MVES BASIN DATA TABLE" (THIS SHEET). THIS SITE WAS ANALYZED FOR THE 100-YEAR, 6-HOUR AND THE 100-YEAR, 10-DAY STORM EVENTS. THE STORM DRAIN IS SIZED TO CONVEY THE 100-YR, 10-DAY STORM EVENT AND THE PROPOSED POND IS SIZED TO RETAIN THE FIRST FLUSH VOLUME.

EXISTING CONDITIONS:

THE SITE IS CURRENTLY DEVELOPED AND ALMOST ENTIRELY IMPERVIOUS. THE SITE CONTAINS PORTABLE BUILDINGS, A COURTYARD, SMALL LANDSCAPED ISLANDS, AND PARKING AREAS. THE SITE GENERALLY SLOPES FROM SOUTHEAST TO NORTHWEST. THERE IS NO EXISTING ONSITE STORM DRAINAGE INFRASTRUCTURE. EXISTING STORM RUNOFF SHEET FLOWS TO A SHALLOW STORM WATER QUALITY POND LOCATED AT THE NORTHWEST BOUNDARY OF THE MVES PROPERTY. THE ONSITE GENERATED RUNOFF IS RELEASED TO EXISTING STORM DRAIN INFRASTRUCTURE WITHIN CAMPUS BLVD NE. THE EXISTING INFRASTRUCTURE IS PART OF A PREVIOUSLY APPROVED DRAINAGE MANAGEMENT PLAN.

THE EXISTING 1.05 ACRE SITE DISCHARGES APPROXIMATELY 4.45 CFS TO THE NORTH POND AND INTO THE EXISTING STORMWATER INFRASTRUCTURE OF COLLEGE BLVD.

PROPOSED:

THIS DRAINAGE MANAGEMENT PLAN IS PROVIDED FOR THE FULLY DEVELOPED SITE TO SAFELY MANAGE THE DESIGN STORM EVENTS USING ONSITE LID MEASURES. THE PROPOSED IMPROVEMENTS INCLUDE THE CONSTRUCTION OF A NEW BUILDING AND THE REPLACEMENT OF ASSOCIATED PARKING, PORTABLE BUILDINGS, AND COURTYARD AREAS. THESE IMPROVEMENTS WILL REQUIRE REFINEMENT OF EXISTING GRADIES AND THE IMPLEMENTATION OF STORM DRAIN INFRASTRUCTURE. IN PROPOSED CONDITIONS, DEVELOPED PEAK FLOWS WILL DISCHARGE AT A RATE EQUAL TO THE EXISTING PEAK FLOWS FOR THE 100-YEAR, 6-HOUR STORM EVENT. THE PROPOSED SITE WILL MAINTAIN EXISTING DRAINAGE PATTERNS. THE SITE IS DIVIDED INTO 10 ONSITE BASINS, WHICH ARE MANAGED BY STORM DRAINS AND STORMWATER QUALITY POND. THE LAND TREATMENTS AND VOLUME CALCULATIONS FOR THE CONTRIBUTING BASINS ARE SHOWN IN TABLE FORMAT ON THIS SHEET.

STORM DRAIN INFRASTRUCTURE WILL BE INSTALLED AROUND THE PROPOSED BUILDING AND WITHIN THE PARKING LOT TO CONVEY FLOWS TO THE POND. STORM RUNOFF FROM BASINS PB3, PB6-PB8, AND PB10 (WHICH INCLUDES THE COURTYARD, BUILDING ROOF DRAINS, NEW PARKING LOT, AND NEW PLAY AREAS) ARE COLLECTED BY A SERIES OF STORM DRAINS AND INLETS. STORM RUNOFF WITHIN BASINS PB-1 AND PB-2 SHEET FLOW NORTHEAST TO THE POND. BASINS PB4, PB5, AND PB9 ARE DIRECTED TO THE EXISTING ROADSIDE SWALE ALONG THE WEST PROPERTY EDGE BY RE-GRADING. THE RUNOFF FROM THE PROPOSED IMPROVEMENTS IS CONVEYED TO THE MODIFIED POND AT THE NORTH SITE BOUNDARY.

THE NORTH POND HAS BEEN DEEPEND AND EXPANDED TO AUGMENT THE DETENTION CAPACITY, ALLOWING THE FULL FIRST FLUSH VOLUME OF THE PROPOSED IMPROVEMENTS TO BE RETAINED ON SITE. AN EXISTING STORM DRAIN PIPE CONVEYS DISCHARGE FROM THE EXISTING POND TO OFFSITE STORM DRAIN INFRASTRUCTURE. THE PROPOSED IMPROVEMENTS TO THE NORTH POND ACCOMMODATE THIS EXISTING STORM DRAIN PIPE AND ALLOW FOR THE PIPE TO REMAIN IN PLACE, CONVEYING DISCHARGE AT HISTORIC RATES.

THE TOTAL STORM RUNOFF FROM THE SITE IS 4.27 CFS. THIS IS LESS THAN THE 4.45 CFS IN EXISTING CONDITIONS. THE PROPOSED SITE IS REQUIRED TO INCORPORATE 775 CF OF STORM WATER QUALITY PONDING ONSITE (0.26 INCHES OVER THE IMPERVIOUS AREA). STORM WATER QUALITY PONDING IS A BEST PRACTICE. THERE IS CURRENTLY 600 CF OF STORM WATER QUALITY VOLUME PROVIDED IN THE EXISTING POND. THE EXISTING ONSITE POND AT THE NORTHWEST CORNER OF THE PROPERTY IS EXPANDED TO PROVIDE STORAGE FOR THE ADDITIONAL 775 CF OF STORM WATER QUALITY VOLUME. REGRADING OF THE ONSITE POND PROVIDES A TOTAL STORAGE VOLUME OF 1563 CF. THIS IS GREATER THAN THE TOTAL REQUIRED STORAGE VOLUME OF 1375 CF.

CONCLUSION:

THE ONSITE STORM DRAIN NETWORK AND ASSOCIATED INLETS ARE SIZED TO FULLY ACCOMMODATE THE DESIGN STORM EVENT. THE DETENTION PONDS HAVE ADEQUATE CAPACITY TO FULLY RETAIN THE REQUIRED FIRST-FLUSH VOLUME. THIS DRAINAGE MANAGEMENT PLAN DEMONSTRATES THAT THE PROPOSED DEVELOPMENT IS IN CONFORMANCE WITH CITY OF ALBUQUERQUE HYDROLOGY REQUIREMENTS. THIS DRAINAGE MANAGEMENT PLAN IS BEING SUBMITTED IN SUPPORT OF HYDROLOGY APPROVAL.

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SHEET TITLE

DRAINAGE MANAGEMENT PLAN

DMP-00

SHEET ____ OF ____

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