

CITY OF ALBUQUERQUE

Planning Department
Brennon Williams, Director



Mayor Timothy M. Keller

November 24, 2020

David Aube, P.E.
Hartman & Majewski Design Group
120 Vassar Dr SE, Suite 100
Albuquerque, NM 87106

**RE: BioPark – Asia Exhibit
903 10th Street SW
Grading and Drainage Plan
Engineer’s Stamp Date: 11/10/20
Hydrology File: K13D034I**

Dear Mr. Aube:

PO Box 1293

Based upon the information provided in your submittal received 11/10/2020, the Grading & Drainage Plan is approved for Building Permit.

Albuquerque

Please attach a copy of this approved plan in the construction sets for Building Permit processing along with a copy of this letter. Prior to approval in support of Permanent Release of Occupancy by Hydrology, Engineer Certification per the DPM checklist will be required.

NM 87103

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 (Doug Hughes, PE, jhughes@cabq.gov, 924-3420) 14 days prior to any earth disturbance.

www.cabq.gov

If you have any questions, please contact me at 924-3995 or rbrissette@cabq.gov.

Sincerely,

Renée C. Brissette, P.E. CFM
Senior Engineer, Hydrology
Planning Department



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 11/2018)

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

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

Legal Description: _____

City Address: _____

Applicant: _____ **Contact:** _____

Address: _____

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

Owner: _____ **Contact:** _____

Address: _____

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

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

IS THIS A RESUBMITTAL?: _____ Yes _____ No

DEPARTMENT: _____ TRAFFIC/ TRANSPORTATION _____ HYDROLOGY/ DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

- _____ ENGINEER/ARCHITECT CERTIFICATION
- _____ PAD CERTIFICATION
- _____ CONCEPTUAL G & D PLAN
- _____ 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?

TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

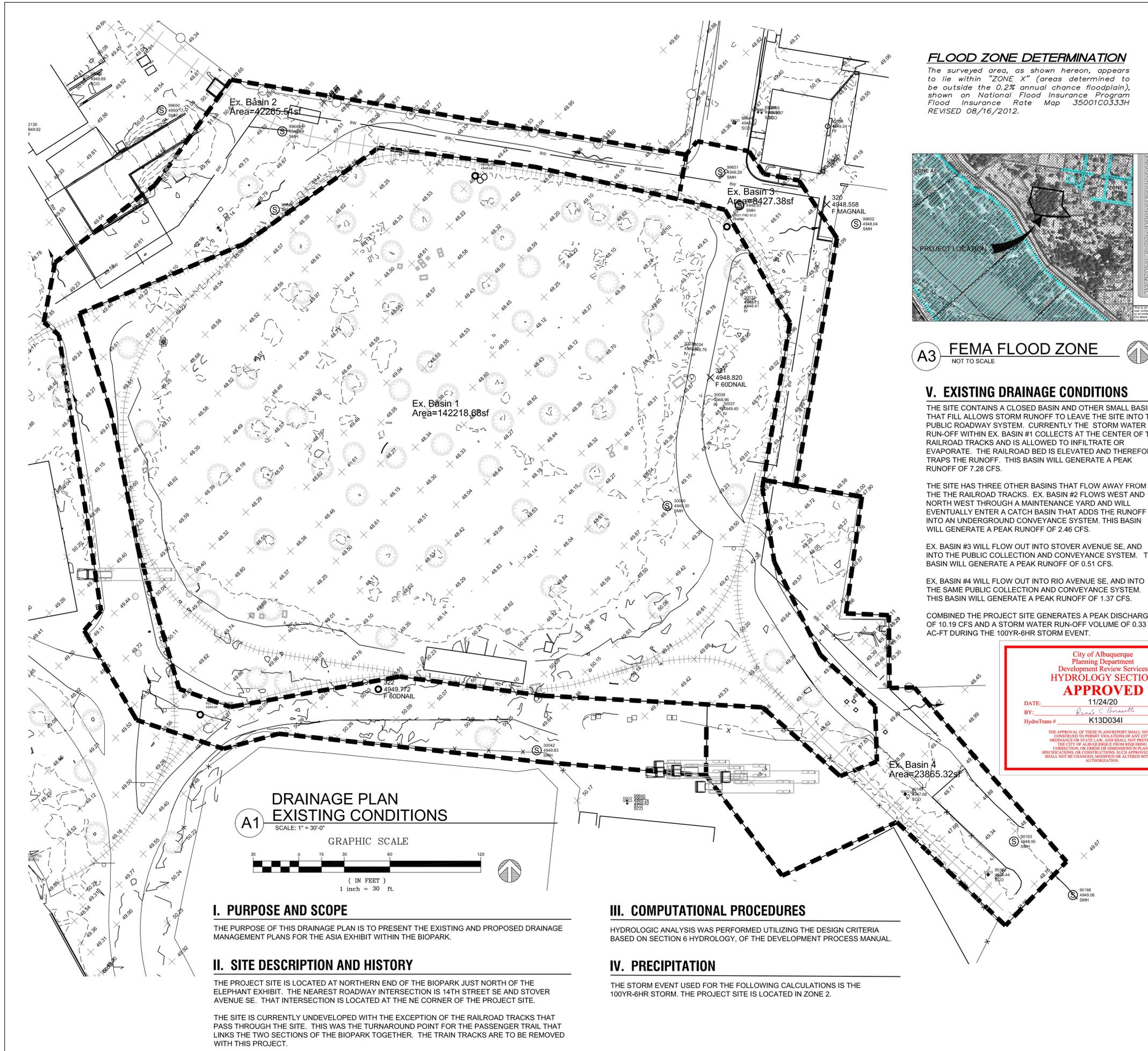
- _____ BUILDING PERMIT APPROVAL
- _____ CERTIFICATE OF OCCUPANCY
- _____ PRELIMINARY PLAT APPROVAL
- _____ SITE PLAN FOR SUB'D APPROVAL
- _____ SITE PLAN FOR BLDG. PERMIT APPROVAL
- _____ FINAL PLAT APPROVAL
- _____ SIA/ RELEASE OF FINANCIAL GUARANTEE
- _____ FOUNDATION PERMIT APPROVAL
- _____ GRADING 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: _____

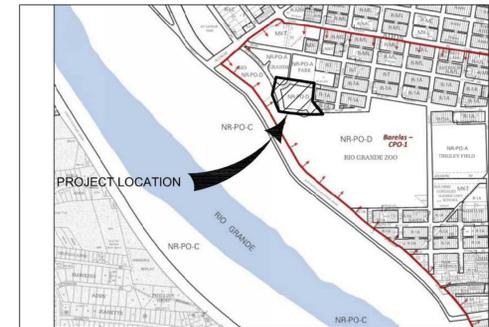


FLOOD ZONE DETERMINATION

The surveyed area, as shown hereon, appears to lie within "ZONE X" (areas determined to be outside the 0.2% annual chance floodplain), shown on National Flood Insurance Program Flood Insurance Rate Map 35001C0333H REVISED 08/16/2012.



A3 FEMA FLOOD ZONE
NOT TO SCALE



A5 ZONE ATLAS PAGE K-13
NOT TO SCALE

V. EXISTING DRAINAGE CONDITIONS

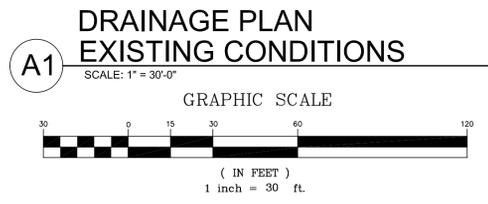
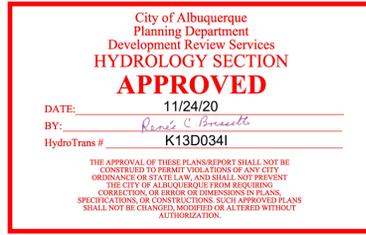
THE SITE CONTAINS A CLOSED BASIN AND OTHER SMALL BASINS THAT FILL. STORM RUNOFF TO LEAVE THE SITE INTO THE PUBLIC ROADWAY SYSTEM. CURRENTLY THE STORM WATER RUN-OFF WITHIN EX. BASIN #1 COLLECTS AT THE CENTER OF THE RAILROAD TRACKS AND IS ALLOWED TO INFILTRATE OR EVAPORATE. THE RAILROAD BED IS ELEVATED AND THEREFORE TRAPS THE RUNOFF. THIS BASIN WILL GENERATE A PEAK RUNOFF OF 7.28 CFS.

THE SITE HAS THREE OTHER BASINS THAT FLOW AWAY FROM THE RAILROAD TRACKS. EX. BASIN #2 FLOWS WEST AND NORTH WEST THROUGH A MAINTENANCE YARD AND WILL EVENTUALLY ENTER A CATCH BASIN THAT ADDS THE RUNOFF INTO AN UNDERGROUND CONVEYANCE SYSTEM. THIS BASIN WILL GENERATE A PEAK RUNOFF OF 2.46 CFS.

EX. BASIN #3 WILL FLOW OUT INTO STOVER AVENUE SE, AND INTO THE PUBLIC COLLECTION AND CONVEYANCE SYSTEM. THIS BASIN WILL GENERATE A PEAK RUNOFF OF 0.51 CFS.

EX. BASIN #4 WILL FLOW OUT INTO RIO AVENUE SE, AND INTO THE SAME PUBLIC COLLECTION AND CONVEYANCE SYSTEM. THIS BASIN WILL GENERATE A PEAK RUNOFF OF 1.37 CFS.

COMBINED THE PROJECT SITE GENERATES A PEAK DISCHARGE OF 10.19 CFS AND A STORM WATER RUN-OFF VOLUME OF 0.33 AC-FT DURING THE 100YR-6HR STORM EVENT.



I. PURPOSE AND SCOPE

THE PURPOSE OF THIS DRAINAGE PLAN IS TO PRESENT THE EXISTING AND PROPOSED DRAINAGE MANAGEMENT PLANS FOR THE ASIA EXHIBIT WITHIN THE BIOPARK.

II. SITE DESCRIPTION AND HISTORY

THE PROJECT SITE IS LOCATED AT NORTHERN END OF THE BIOPARK JUST NORTH OF THE ELEPHANT EXHIBIT. THE NEAREST ROADWAY INTERSECTION IS 14TH STREET SE AND STOVER AVENUE SE. THAT INTERSECTION IS LOCATED AT THE NE CORNER OF THE PROJECT SITE.

THE SITE IS CURRENTLY UNDEVELOPED WITH THE EXCEPTION OF THE RAILROAD TRACKS THAT PASS THROUGH THE SITE. THIS WAS THE TURNAROUND POINT FOR THE PASSENGER TRAIL THAT LINKS THE TWO SECTIONS OF THE BIOPARK TOGETHER. THE TRAIN TRACKS ARE TO BE REMOVED WITH THIS PROJECT.

III. COMPUTATIONAL PROCEDURES

HYDROLOGIC ANALYSIS WAS PERFORMED UTILIZING THE DESIGN CRITERIA BASED ON SECTION 6 HYDROLOGY, OF THE DEVELOPMENT PROCESS MANUAL.

IV. PRECIPITATION

THE STORM EVENT USED FOR THE FOLLOWING CALCULATIONS IS THE 100YR-6HR STORM. THE PROJECT SITE IS LOCATED IN ZONE 2.

Drainage Summary

Project:	BioPark Asia
Project Number:	2555
Date:	11/02/20
By:	Dave A
Site Location:	
Precipitation Zone:	2 Per COA DPM Chapter 6
Existing summary:	

Basin Name	Ex Basin 1	Ex Basin 2	Ex Basin 3	Ex Basin 4
Area (sf)	142218.68	42265.51	8427.38	23865.32
Area (acres)	3.26	0.97	0.19	0.55
%A Land treatment	0	0	0	0
%B Land treatment	95	75	60	80
%C Land treatment	5	25	40	20
%D Land treatment	0	0	0	0
Soil Treatment (acres)				
Area "A"	0.00	0.00	0.00	0.00
Area "B"	3.10	0.73	0.12	0.44
Area "C"	0.16	0.24	0.08	0.11
Area "D"	0.00	0.00	0.00	0.00
Excess Runoff (acre-feet)				
100yr. 6hr.	0.2208	0.0663	0.0144	0.0386
10yr. 6hr.	0.0841	0.0279	0.0080	0.0153
2yr. 6hr.	0.0073	0.0044	0.0012	0.0022
100yr. 24hr.	0.2208	0.0663	0.0144	0.0386
Peak Discharge (cfs)				
100 yr.	7.82	2.46	0.51	1.37
10 yr.	3.21	1.08	0.23	0.59
2 yr.	0.35	0.21	0.06	0.10

AS-BUILT INFORMATION		CONTRACTOR		BENCH MARK		SURVEY INFORMATION	
WORK MARKED BY:	DATE	CONTRACTOR:		Albuquerque Control Survey	DATE	FIELD NOTES	
FIELD ACCEPTANCE BY:	DATE	WORK MARKED BY:		Monument "6-K13"	BY	NO.	
DATE		DATE		New Mexico State Plane Coordinates			
DATE		DATE		(Central Zone - NAD 83)			
DATE		DATE		North= 1,485,023.666 feet			
DATE		DATE		East= 1,515,142.466 feet			
DATE		DATE		Elevation= 4959.622feet (NAVD 1988)			
DATE		DATE		Delta Alpha= -00'14"26.38"			
DATE		DATE		Ground To Grid Factor= 0.999684647			
DESIGNED BY: DAA	DATE: Aug. 21, 2020	REVISIONS	BY	DATE	REMARKS	BY	DATE
DRAWN BY: DAA	DATE: Aug. 21, 2020	1			DESIGN		
CHECKED BY: DAA	DATE: Aug. 21, 2020						
CITY OF ALBUQUERQUE CAPITAL IMPLEMENTATION PROGRAM							
PROJECT TITLE:				ABQ BIOPARK ASIA			
DRAWING TITLE: DRAINAGE PLAN EXISTING CONDITIONS							
Design Review Committee	City Engineer Approval	Mo./Day/Yr.		Mo./Day/Yr.			
CONSTRUCTION DOCUMENTS		City Project No.	Zone Map No.	DWG.	Sheet		
		7303.95	K-13-Z	CD-1			

