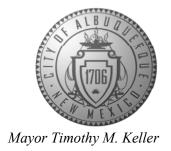
CITY OF ALBUQUERQUE

Planning Department Alan Varela, Director



July 12, 2024

James E. Lopez, P.E. Wilson & Company 440I Masthead St. NE Albuquerque, NM 87113

RE: Rail Trail Sawmill

Grading & Drainage Plan

Engineer's Stamp Date: 07/11/24

Hydrology File: J13D222

CPN: 758096

Dear Mr. Lopez:

Based upon the information provided in your submittal received 06/21/2024, the Grading & Drainage Plan is approved for Work Order. Please include the stamped approved Grading &

Drainage Plan in the Work Order drawing set.

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.

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

www.cabq.gov

NM 87103

PO Box 1293

Sincerely,

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

Renée C. Brissette



City of Albuquerque

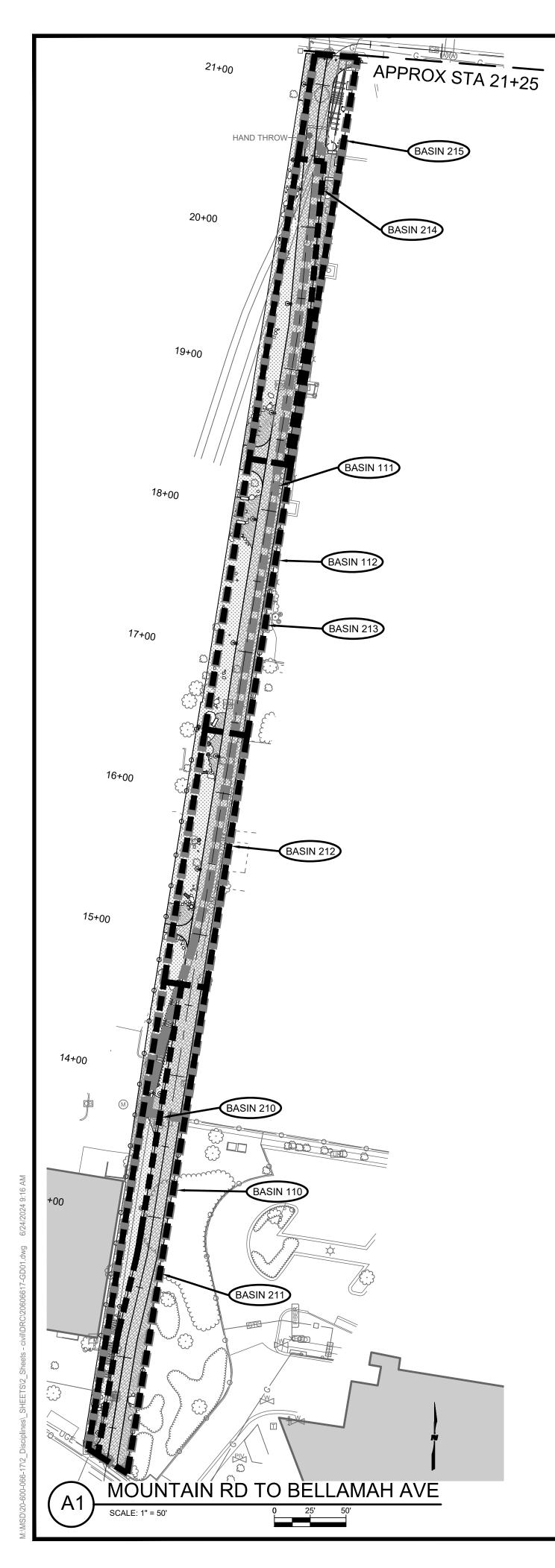
Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

	Hydrology File #: Work Order#:
Engineers & Archited	cts Contact: James Lopez, PE
	E-mail: james.lopez@wilsonco.cor
	Contact:
	E-mail:
AT (# of lots) RE	SIDENCE DRB SITE X ADMIN SITE
	OGY/DRAINAGE
TION — TION — TION — TIT APPLIC — TIT APPLIC —	YPE 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
	Engineers & Architecte 150, Albuquerque Fax#: Fax#: AT (# of lots) RE ES X No N X HYDROLO TOON IT APPLIC ETION TOTAL TOTAL

FEE PAID:



Drainage Narrative

LEGAL DESCRIPTION: The project site spans multiple parcels and will ultimately be composed of a combination of city owned properties and negotiated easements through the corridor. The trail alignment spans from Mountain Rd to Bellamah Ave and falls within the abandoned railroad spur easement. Listed below are the current lots that make up the proposed corridor. This segment of trail terminates at Bellamah Ave which will include improvements proposed in the Bellamah Streetscape project.

From Mountain to Bellamah, the site falls within the following lots: Tract A LANDS OF R.E.I.; Tract 238C1A2A2; Tract 370-A; Tract 238C-1-A-2-B; Tract 234 EXCL S'LY PORT; Tract 239 B1B; Tract 237-B; LT 1-A PLAT OF LTS 1-A & 1-B FREEWAY-OLD TOWN LIMITED.

AREA: 0.68 acres.

FLOOD HAZARD: Per FEMA Map Panel 35001C0331H (effective 8/16/12), the majority of this site is within Zone X, which is subject to 0.2% annual chance of flooding. There is a portion of the trail corridor between Mountain Rd and Bellamah Ave that is within Flood Zone AH, with base flood elevation of 4959 feet, subject to a 1% annual chance of flooding. The primary scope of this project is a pedestrian trail and does not include any inhabitable structures.

EXISTING CONDITIONS:

MOUNTAIN RD NW TO BELLAMAH AVE NW (BASINS 110-112):

The section connecting Mountain Rd NW and Bellamah Ave NW is undeveloped other than the abandoned rail line. Surface flows are split by the north-south oriented rail line within the segment. The project site is relatively flat. As such, smaller volumes of storm water runoff are typically captured in shallow ponding areas, while greater precipitation volumes drain towards neighboring lots. Basins 110 and 111 drain to the east while basin 112 drains to the west. Basin 110 drains towards the pond near the Natural History Museum, while basins 111 and 112 drain towards the bordering property lines.

OFFSITE FLOW: The Blue Lynx Warehouse parking lot (near the southeast corner of the intersection of the proposed trail alignment and Bellamah Ave) drains to the west into the trail easement and travels north to a pond within the Blue Lynx property. In the event of the 100-year, 6-hour storm, the site is anticipated to discharge 9190 CF of runoff at a peak rate of 5.6 CFS. The pond is sized to capture and treat the first flush volume (50 CF), and has an estimated capacity of 460 CF.

PROPOSED CONDITIONS:

MOUNTAIN RD NW TO BELLAMAH AVE NW (BASINS 210-215):

The project includes removing the majority of the existing disused rail line to construct a 14' wide mixed-used pedestrian and biking trail. This design will include landscaping improvements and pedestrian trail amenities. Some portions of the existing rail line will be left in place for aesthetic design purposes. The increase in impervious area in proposed conditions is approximately 0.33 acres. As part of a separate project, the design team has just been notified that the intersection of Mountain Rd and 19th St will be reconstructed to be a roundabout rather than a signaled intersection. The trail and the proposed roundabout are intended to interface seamlessly in order to maintain trail continuity. The drainage considerations of this roundabout will be addressed in a future submittal as the design progresses.

DRAINAGE APPROACH: When considering storm water management techniques for this project, it was determined that capturing flows in a storm drain system would be infeasible due to the flat grades and lack of suitable outfalls or connections. For this reason, we intend to capture runoff within the trail corridor in shallow landscape depressions along the trail. Our capacity to do this is limited by several factors, including the existing overall flat grades in the area, the narrow corridor within which the site is situated, and design directives that reduce the quantity of usable landscaping area for drainage storage (locations where existing rail will remain and guidance on maximum slopes bordering trails being chief among these).

At the intersection of Mountain Rd and 19th St, runoff will be collected by existing storm drain infrastructure beneath the roadways. The narrow trail corridor between Mountain and Bellamah presents space constraint challenges since there is limited viable space for shallow landscape depression retention basins. This space is further reduced in locations where the existing rail is to remain in place. There are two locations where this occurs: on the west side of the trail just north of Mountain Rd in basin 210 and on the west side of the trail just south of Bellamah Ave in basin 215. In general, the trail surface drains to the east in basins 211 and 215 and drains to the west in basins 212-214.

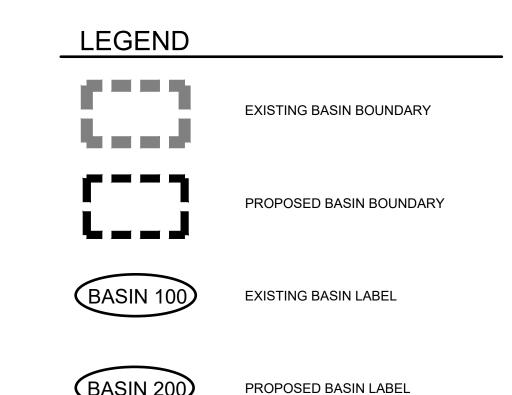
RUNOFF: (Precipitation Zone 2) Existing and proposed basins were determined by evaluating drainage patterns. The following calculations were performed in accordance with the City of Albuquerque Development Process Manual. See tables on this sheet for calculations and results.

Existing Conditions

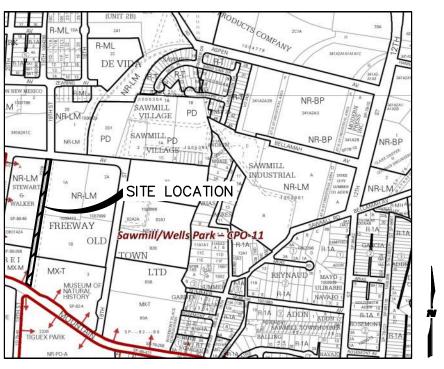
Existing Conditions																
Basin	Total Area (sq ft)	Total Area (Ac)		Α			С		D	Peak Discharge, Q	Excess Frecip.	Volume	Volume	Volume	Volume	OUTFALL
	` ' '	' '	%	Ac	%	Ac	%	Ac	%	Ac ` ´	(Weighted)	(6 _{hr} , acre-ft)	(24 _{hr} , acre-ft)	(10 _{day} , acre-ft)	(10 _{day} , CF)	
	EXISTING BASINS															
	MOUNTAIN TO BELLAMAH															
110	7259.72	0.17	0	0.00	0	0.00	100	0.17	0 (0.00	1.03	0.0143	0.0143	0.0143	623	E. TO N.H.M. POND
111	11951.18	0.27	0	0.00	0	0.00	100	0.27	0 (0.00	1.03	0.0235	0.0235	0.0235	1026	W. OFFSITE
112	10279.36	0.24	0	0.00	0	0.00	100	0.24	0 (0.00	1.03	0.0203	0.0203	0.0203	882	SHALLOW PONDING
SUM	29490.26	0.68	0	0.00	0	0.00	100	0.68	0 (0.00 2.1		0.0581	0.0581	0.0581	2531	-

4 Camalist

Proposed Cond	itions																
Basin	Total Area	Total Area		A		В	(;	l	D Peak Discharge, Q % Ac (cfs)	Peak Discharge, Q	Excess Precip.	Volume	Volume	Volume	Volume	OUTFALL
	(sq ft)	(Ac)	%	Ac	%	Ac	%	Ac	%		(Weighted)	(6 _{hr} , acre-ft)	(24 _{hr} , acre-ft)	(10 _{day} , acre-ft)	(10 _{day} , CF)	OUTFALL	
									PF	ROPO	SED BASINS						
									MOUI	MIAT	TO BELLAMAH						
210	3515.62	0.08	0	0.00	0	0.00	100	0.08	0	0.00	0.2	1.03	0.0069	0.0069	0.0069	302	LANDSCAPE DEPRESSIONS
211	6485.87	0.15	0	0.00	0	0.00	26	0.04	74	0.11	0.6	1.99	0.0247	0.0277	0.0406	1770	E. TOWARD N.H.M. POND
212	5293.31	0.12	0	0.00	0	0.00	54	0.07	46	0.06	0.4	1.63	0.0165	0.0181	0.0247	1076	W. TO LANDSCAPE DEPRESSIONS
213	5674.46	0.13	0	0.00	0	0.00	51	0.07	49	0.06	0.5	1.67	0.0182	0.0199	0.0274	1195	W. TO LANDSCAPE DEPRESSIONS
214	5157.51	0.12	0	0.00	0	0.00	40	0.05	60	0.07	0.5	1.82	0.0179	0.0198	0.0282	1229	W. TO LANDSCAPE DEPRESSIONS
215	3370.08	0.08	0	0.00	0	0.00	59	0.05	41	0.03	0.3	1.56	0.0100	0.0109	0.0146	634	LANDSCAPE DEPRESSIONS
SUM	29496.84	0.68	0	0.00	0	0.00	51	0.34	49	0.33	2.5		0.0943	0.1032	0.1424	6205	-



Development Review Services HYDROLOGY SECTION APPROVED 07/12/24



LOCATION ZONE ATLAS MAP NO J-13 & H-13



FLOOD INSURANCE RATE MAP REFERENCE: FLOOD INSURANCE STUDY PANEL NO. #35001C0331H EFFECTIVE 8/16/2012

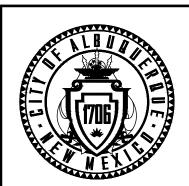


SOILS MAP REFERENCE: HTTP://WEBSOILSURVEY.NRCS.USDA.GOV



CALL NM ONE-CALL SYSTEM SEVEN (7) DAYS PRIOR TO ANY EXCAVATION

DRAWN BY: DY



CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT **ENGINEERING DIVISION**

> RAIL TRAIL: SAWMILL **OVERALL GRADING &** DRAINAGE PLAN

CITY ENGINEER APPROVAL ZONE MAP NO. DESIGN REVIEW COMMITTEE H-13 & J-13 CITY PROJECT NO.

758093 SHEET NO. C-103

07/11/2024