CITY OF ALBUQUERQUE

Planning Department
David Campbell, Director

Mayor Timothy M. Keller

October 31, 2018

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

RE: Sawmill Market
1909 Bellamah NW
Grading and Drainage Plan
Engineer's Stamp Date: 10/22/18
Hydrology File: J13D017A

Dear Mr. Aube:

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

Based on the submittal received on 10/23/18, the Grading and Drainage Plan cannot be approved for Building Permit and SO-19 Permit until the following corrections are made:

Prior to Building Permit/SO-19 Permit:

1. The ponds described on the drainage plan need to be shown on the grading plan, supported with top of pond elevations, and bottom of pond elevations.

2. Build notes for the areas of new paving, paving to remain, gravel-pave, and concrete work also need to be provided on the grading plan. Alternatively, if a separate paving plan was prepared to describe this work, please provide it.

3. Provide/show waterblocks on the NE and SE curb cuts. The spot elevation should show the maximum height, flowline in the public road, and show that the paved drive aisles slope back from the high point to retain the first flush volume. Please include the finished floor elevation of the building(s) and make sure the waterblocks will overtop first in the event they need to be used as an emergency overflow.

4. Provide a section/detail on the grading (or paving) plan for the gravel-pave parking/ponds.

Prior to Certificate of Occupancy (For Information):

5. Engineer's Certification, per the DPM Chapter 22.7: *Engineer's Certification Checklist For Non-Subdivision* is required.

6. The sidewalk culverts must be inspected and approved by storm drain maintenance (Jason Rodriguez, jtrodriguez@cabq.gov or 857-8607).

7. A Bernalillo County Recorded Private Facility Drainage Covenant is required for the stormwater quality ponds. The original notarized form, exhibit A (legible on 8.5x11 paper), and recording fee ($25, payable to Bernalillo County) must be turned into DRC (4th, Plaza del Sol) for routing. Please contact Charlotte LaBadie (clabadie@cabq.gov, 924-3996) or Madeline Carruthers (mtafoya@cabq.gov, 924-3997) regarding the routing and recording process for covenants. The routing and recording process for covenants can take a month or longer; Hydrology recommends beginning this process as soon as possible as to not delay approval for certificate of occupancy.

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

Sincerely,

Dana Peterson, P.E.
Senior Engineer, Planning Dept.
Development Review Services

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 11/2016)

Project Title: Sawmill Market Building Permit #: _____ Hydrology File #: H13Z

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

Legal Description: Track 340A2A1C, PORTION OF TRACT 340A2A1A2B, AND PORITON OF 340A2A2B MRGCD MAP NO 35

City Address: 1909 Bellamah

Applicant: Heritage Hotels and Resorts Contact: Jason Cosyleon

Address: 201 Third Street NW, Suite 1140

Phone#: 505-836-6700 Fax#: _____ E-mail: jcosyleon@hhandr.com

Other Contact: The Design Group Contact: David Aube

Address: 120 Vassar Street SE, Albuq, NM 87106

Phone#: 505-998-6430 Fax#: 505-242-6881 E-mail: daube@designgroupnm.com

TYPE OF DEVELOPMENT: ___ PLAT ____ RESIDENCE ___ DRB SITE _X_ ADMIN SITE

Check all that Apply:

DEPARTMENT:

x HYDROLOGY/ DRAINAGE

____ TRAFFIC/ TRANSPORTATION

TYPE OF SUBMITTAL:

____ ENGINEER/ARCHITECT CERTIFICATION

____ CONCEPTUAL G & D PLAN

x GRADING PLAN

____ DRAINAGE MASTER PLAN

____ DRAINAGE REPORT

____ CLOMR/LOMR

____ TRAFFIC CIRCULATION LAYOUT (TCL)

____ TRAFFIC IMPACT STUDY (TIS)

____ OTHER (SPECIFY) _____

____ PRE-DESIGN MEETING?

IS THIS A RESUBMITTAL?: x Yes ____ No

TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

x 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

x SO-19 APPROVAL

____ PAVING PERMIT APPROVAL

____ GRADING/ PAD CERTIFICATION

____ WORK ORDER APPROVAL

____ CLOMR/LOMR

____ OTHER (SPECIFY) _____

DATE SUBMITTED: 10-22-18 By: David Aube

COA STAFF: ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

SAWMILL MARKET, PHASE 1

Drainage Summary

Project:	Sawmill Market		
Project Numbe:	2543		
Date:	03/30/18		
By:	Dave A		
Site Location	1903 Bellamah Avevnue NW		
Precipitaion Zone	2	Per Table A-1 COA DPM Section 22.2	
Existing summary			
Basin Name	EX 1	EX 2	
Area (sf)	56530	74548	
Area (acres)	1.30	1.71	
%A Land treatment	0	0	
%B Land treatment	5	5	
%C Land treatment	0	0	
%D Land treatment	95	95	
Soil Treatment (acres)			
Area "A"	0.00	0.00	
Area "B"	0.06	0.09	
Area "C"	0.00	0.00	
Area "D"	1.23	1.63	
Excess Runoff (acre-feet)			
100yr. 6hr.	0.2220	0.2928	
10yr. 6hr.	0.1392	0.1835	
2yr. 6hr.	0.0813	0.1072	
100yr. 24hr.	0.2631	0.3470	
Peak Discharge (cfs)			
100 yr.	5.94	7.84	
10yr.	3.93	5.19	
2yr.	2.30	3.03	

Private Drainage Facilities within City Right-of-Way
Notice to Contractor
(Special Order 19 ~ "SO-19")

1. An excavation permit will be required before beginning any work within City Right-Of-Way.
2. All work on this project shall be performed in accordance with applicable federal, state and local laws, rules and regulations concerning construction safety and health.
3. Two working days prior to any excavation, the contractor must contact New Mexico One Call, dial "811" [or (505) 260-1990] for the location of existing utilities.
4. Prior to construction, the contractor shall excavate and verify the locations of all obstructions. Should a conflict exist, the contractor shall notify the engineer so that the conflict can be resolved with a minimum amount of delay.
5. Backfill compaction shall be according to traffic/street use.
6. Maintenance of the facility shall be the responsibility of the owner of the property being served.
7. Work on arterial streets may be required on a 24-hour basis.
8. Contractor must contact Jason Rodriguez at 235-8016 and Construction Coordination at 924-3416 to schedule an inspection.

Drainage Summary

Project:	Sawmill Market												
Project Numbe:	2543												
Date:	03/30/18												
By:	Dave A												
Site Location	1903 Bellamah Avevnue NW												
Precipitaion Zone	2	Per Table A-1 COA DPM Section 22.2											
Proposed summary													
Basin Name	Pro 1.1	Pro 1.2	Pro 1.3	Pro 1.4	Pro 1.5	Pro 2.1	Pro 2.2	Pro 2.3	Pro 2.4	Pro 2.5	Pro 2.6	Pro 1.6	
Area (sf)	7379	7634	4977	10064	5767	28392	2231	5562	9840	8370	7184	33639	
Area (acres)	0.169	0.175	0.114	0.231	0.132	0.652	0.051	0.128	0.226	0.192	0.165	0.772	
%A Land treatment	0	0	0	0	0	0	0	0	0	0			
%B Land treatment	40	30	30	35	0	10	0	15	10	15		10	
%C Land treatment	0	0	0	0	0	10	0	0	30	7	0	30	
%D Land treatment	60	70	70	65	100	80	100	85	60	78	100	60	
Soil Treatment (acres)													
Area "A"	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Area "B"	0.07	0.05	0.03	0.08	0.00	0.07	0.00	0.02	0.02	0.03	0.00	0.08	
Area "C"	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.07	0.01	0.00	0.23	
Area "D"	0.10	0.12	0.08	0.15	0.13	0.52	0.05	0.11	0.14	0.15	0.16	0.46	
Excess Runoff (acre-feet)													
100yr. 6hr.	0.0224	0.0251	0.0164	0.0318	0.0234	0.1025	0.0090	0.0204	0.0318	0.0296	0.03	0.11	acre-ft.
10yr. 6hr.	0.0129	0.0149	0.0097	0.0187	0.0148	0.0626	0.0057	0.0126	0.0186	0.0180	0.02	0.06	acre-ft.
2yr. 6hr.	0.0068	0.0082	0.0053	0.0100	0.0087	0.0353	0.0034	0.0072	0.0098	0.0101	0.01	0.03	acre-ft.
100yr. 24hr.	0.0257	0.0292	0.0190	0.0368	0.0278	0.1199	0.0108	0.0240	0.0363	0.0346	0.03	0.12	acre-ft.
Peak Discharge (cfs)													
100 yr.	0.63	0.70	0.45	0.89	0.62	2.80	0.24	0.55	0.90	0.81	0.78	3.08	cfs
10yr.	0.38	0.44	0.28	0.55	0.42	1.81	0.16	0.36	0.56	0.52	0.52	1.92	cfs
2yr.	0.19	0.23	0.15	0.29	0.25	1.01	0.10	0.20	0.29	0.29	0.31	1.01	cfs
Exisitng Roof Area or paving to remain	2983	2983	0	2983	2983	4746	0	4727.7	3518	4741.6	7184	0	
First Flush Ponding Voulme (cf)	40.9	66.9	98.7	100.8	78.9	509.1	63.2	0.0	67.6	50.6	0.0	571.9	
Excess Runoff (Cubic feet)	974	1093	713	1385	1019	4465	394	889	1385	1290	1269	4735	
Allowed Free Discharge	1235	1235	1235	1235	1235	838	0	889	1235	838	1269	0	
Volume to be detained to 0.1 cfs	-261	-142	713	150	-216	3626	394	0	150	452	0	4735	

I. PURPOSE AND SCOPE

The purpose of this drainage plan is to present the existing and proposed drainage management plans for the proposed Sawmill Market Facility located at the NE Corner of Bellamah Avenue NW and 19th Street NW. The site is located in Zone Atlas Page H-13-Z. The site is currently fully developed and was the former site for Paxton Lumber.

II. SITE DESCRIPTION AND HISTORY

The site has been previously developed with a large warehouse for Paxton Lumber. The building is currently vacant, but surrounding asphalt pavement is still in good condition.

III. COMPUTATIONAL PROCEDURES

Hydrologic analysis was performed utilizing the design criteria found in the COA-DPM Section 22.2 released in June 1997.

IV. PRECIPITATION

The 100-yr. 6-hr duration storm was used as the design storm for this analysis. This site is within Zone 2 as identified in the DPM Section 22.2. Tables within the section were used to establish the 6-hr precipitation, excess precipitation and peak discharge.

V. EXISTING DRAINAGE CONDITIONS OVERVIEW

The existing site is divided into two drainage basins. One basin drains toward the south into Bellamah Avenue NW. The basin contains $\frac{1}{2}$ of the roof area as well as the parking and drive lanes on the southern parts of the site. This basin identified in the plan as EX1 contains 56,530sf and generates a peak runoff rate of 5.94cfs into Bellamah Avenue NW. This discharge is divided between the multiple driveways along the southern edge. For the purpose of this report we have used the discharge into Bellamah as an Analysis Point even though it is discharge through multiple driveways.

The second basin contains the north $\frac{1}{2}$ of the building roof area, as well as parking areas and drive lanes. Basin EX2 drains toward the north west corner of the site and discharges into the old Railroad ROW at that corner. Basin EX2 contains a total of 74,548sf and generates a peak discharge of 7.84cfs.

Currently there are no on-site ponding areas to reduce the excess storm runoff. The Northwest corner of the site contains a mound of soil that will be removed during the construction activities proposed by this project.

Per FEMA, the site is in a Zone X (recurrence period of 500 years). Areas to the north and south have defined flooding depths, but those defined AH Zones to not touch the subject property.

VI. DRAINAGE MANAGEMENT PLAN

The site overall drainage patterns will change slightly with the reconstruction. The existing roof is generally flat and slopes both north and south from the middle. A new built up roof framing will be added to create the $\frac{1}{4}$" per foot slope and allow for the addition of roof insulation to meet current Energy Codes. The roof will still be split with a ridge creating runoff to the north and south following Historic runoff patterns.

The Plan also shows areas where the existing building, asphalt pavement, and concrete pavement will be removed to allow for the construction of the patio/terrace surrounding the existing building. The development team has determined that it is preferable to remove the existing asphalt and replace it with a combination of asphalt, concrete and pervious gravel surfaces as on the plans.

Because of the size and complexity of the project site, we propose to limit runoff overall from the site back to historic rates. Some areas will show a reduction and others a minor increase to make this balance out overall.

Shallow flat terraced ponds are located on the south side of the building. These ponding areas will receive the first flush and excess runoff from the existing roof areas as well as new impervious terrace surfaces.

Basin Pro 1.1 contains 1/8 of the existing roof, but also contains portions of the new terrace. This basin will produce an excess runoff amount of 974cf. Historically this basin would have produced 1,235cf. Available ponding in Ponds G and H is 504cf. This also contains the first flush volume of 41cf. The ponding area and the reduction of excess runoff of (-261-504+41) -724cf will act as excess retention to offset one of the other basins that will exceed historic limits.

Proposed Basin 1.2 also contains a portion of the roof, and terrace creating a excess runoff of 1,093 cf with a historic rate of 1,235 cf giving a reduction in excess runoff of 142 cf. Available ponding in Pond F of 129 cf of which 67cf is used for first flush also reduces the historic runoff. The reduction of (-142-129+67) -204 cubic feet will be used to offset one of the other basins.

Proposed Basin 1.3 is primarily terrace surface and sidewalks along Bellamah. This basin generates 713cf of excess runoff including the 99cf or first flush. Available ponding in Ponds D and E is limited to 248f, and the remaining 465 cf of excess runoff will need to be contained in basins 1.6 and 2.1.

VI. DRAINAGE MANAGEMENT PLAN (CONTINUED)

Proposed Basin 1.4 also contains a portion of the roof, and terrace creating a excess runoff of 1,385cf with a historic rate of 1,235cf. This will create an increase in excess runoff of 150 cf. The available ponding in Ponds A, B and C of 481cf of which 101cf is used for first flush. The remaining (150-481+101) -432cf is a reduction and will be used to offset one of the other basin.

Proposed Basin 1.5 also contains a portion of the roof, and terrace creating a net excess runoff of (1019-1235) 216cf with 79cf required for the first flush. The basin drains directly into Basin 1.6 and first flush volume and containment of excess runoff will be within Basin 1.6.

Proposed Basin 1.6 contains a portion of the site where the existing surface was removed and replaced with a mix of concrete, asphalt and gravel parking. This basin generates an excess runoff of 4,735cf. This basin also receives runoff from Basin 1.5 of 216cf giving a total of 4,951 cf. Once the ponding volumes are reached the excess runoff will reach the height of a overflow valley gutter allowing the remaining runoff to pass toward Bellamah. The peak runoff from this basin will be the 0.79cfs from the existing roof, plus the 0.07cfs from the new paving restricted to 0.1cfs/acre. Combined this creates a peak runoff into Bellamah of 0.86cfs.

This basin contains many gravel surface parking areas that have been designed to have a total of 6" of gravel (4" below the Gravel Pave2 and 2" within the Gravel Pave) giving a storage volume of 1.5" in each area. The total surface of these sub-areas is 9,548sf giving a below the surface of the gravel parking water storage volume of 1,194cf.

Excess runoff from Basins Pro 1.1, 1.2, 1.3, 1.4 and 1.5 create an reduction in ponding volume of 895. When combined with the 4,951 cf generated within Basins 1.5 and 1.6, minus the 895cf of excess volume contained in the shallow depression along Bellamah gives a total volume to be detained is 4,056cf of which the 1194cf is contained below ground giving a surface water storage volume of 2,862cf.

The Max Water Surface Elevation (MWSEL) to contain this volume in the basin is approximately 0.024 inches deep in the outer gravel parking areas and 2.024 inches deep in the central parking stalls. This gives a MWSEL of 4960.92.

A speed table has been included to allow pedestrians to enter the site from 19th street along a surface that is set at 4961.23 (above the MWSEL line). The valet drop off area is also located above the overflow elevation for the ponding area.

Two Sidewalk culverts will be constructed along Ballamah to allow for excess runoff from the shallow ponding areas (Pond C and Pond G). These ponds area sized to contain as much water as possible but will allow passage of the existing roof runoff from the building. Peak runoff from Pond G will be 2.03cfs and Pond C will discharge 1.27cfs.

Combined the peak discharge into Bellamah will be 4.13cfs which is less than current conditions of 5.50cfs.

Starting at the west side of the site, Pro. Basin 2.1 generates an excess runoff volume of 4465cf of excess runoff but due to the existing roof being allowed free discharge of 838cf the remaining excess runoff is 3626cf. This basin similar to Basin 1.6 has had the asphalt parking removed and replaces with a mix of concrete, asphalt and gravel parking. Ponding within the gravel parking total 493cf with the remainder being contained as surface ponding within the back service yard located at the north west corner of the project site. This basin generates 509cf of First Flush Volume requirements.

Basin Pro 2.2 is a new building addition of 2210sf generating a peak runoff of 0.24cfs and excess runoff of 394cf with first flush volume of 63cf.

Basin Pro 2.4 is the back patio area of the site. This area contains a concrete slab that will be overtopped with crusher fines surfaces, artificial turf and in a small area at the terrace will be replaced with new concrete surfacing.

This basin will generate a excess runoff volume of 150cf (1385 -1235) with a first flush requirements of 68cf. This basin will flow west into Basin Pro 2.1.

Basin 2.1 has a excess runoff volume of 3626+394+150+378=4170cf. Ponding within the gravel parking accounts for 493cf of this volume, giving 3,955cf that will need to be contained surface ponding. The area of the back service yard is 9130sf which will limit the depth of the storm water during the 100 year rainfall event to 0.43' deep.

There will be a header curb to contain the ponding area in the north west corner with a4' wide notch set at the 0.43' deep (4960.33) to set the MWSEL.

Basin Pro 2.3 is an existing roof that flows directly to the north. This location is allowed free discharge and is not subject to first flush requirements.

Basin Pro 2.5 flows directly north both from the roof surface and the parking areas. To accommodate the built up pavement sections within the back patio areas a water block is being created at the gate location. This basin will generate a first flush volume of 51cf and has capacity of 74cf within the gravel parking area. The excess runoff from this basin is 452cf with 74cf being contained in the parking giving a volume of 378cf that will need to be offset by excess detention in Basin Pro 2.1.

VII. CONCLUSIONS

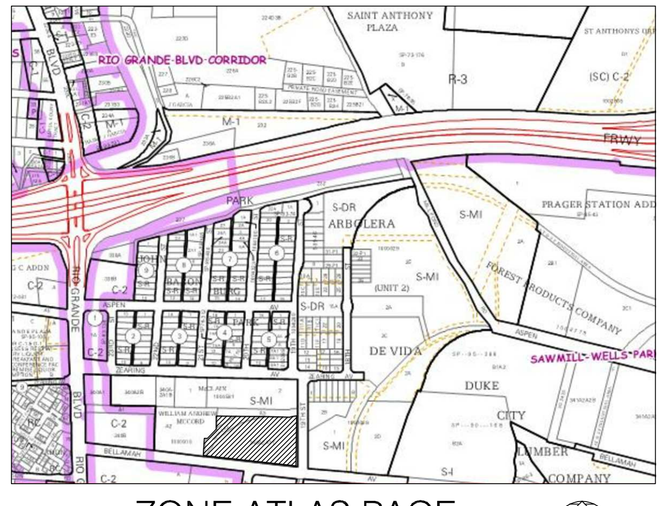
Based on the pre-design conference, ponding areas have been sized to retain both the first flush and excess runoff from the new impervious surfaces. Ponding is located throughout the site in gravel parking areas as well as shallow depressions in the landscaping areas. Excess runoff that cannot be captured by the shallow ponds on the south side of the building from roof and patio/terrace runoff will be detained/retained in the parking areas. The plan has been set to allow for offsetting the location of the ponding and to provide an overall plan that restricts excess runoff from leaving the site.

The peak runoff into Bellamah will be decreased by 1.37 cfs while the discharge at the north-west corner is reduced by 7.40cfs, giving a net reduction in peak discharge of 8.77cfs. Ponding areas have been set to contain the First Flush volume and up to the 100 year 6 hour storm for the new impervious surfaces. Sidewalk culverts will be constructed to convey the excess beyond the retained volume of into Bellamah in two locations. The surface parking lot on the east side will contain water up to a depth of 2.02" in the center and will flow through a valley gutter as overflow into Bellamah.

The service yard area will contain excess runoff up to a depth of 0.43' and will allow excess to then runoff to the north west corner following historic drainage patterns.

The peak discharge has been reduced, runoff from new surfaces are retained on site, excess runoff is restricted to 0.1cfs per acre for the new impervious surfaces.

B5 FEMA FLOOD MAP
SCALE: NOT TO SCALE



A5 ZONE ATLAS PAGE
SCALE: NOT TO SCALE

HERITAGE
HOTELS & RESORTS, INC

ERIC HASKINS, AIA
ARCHITECT

201 THIRD STREET NW
SUITE 1140
ALBUQUERQUE, NM
87102

505.212.9148

Consultant

THE HARTMAN • MAJEWSKI
DESIGN GROUP
120 Vassar Dr SE Suite 100
Albuquerque New Mexico 87106
T 505 242 6880 • F 505 242 6881

Stamp

DAVID A. AUGE
STATE OF
14221
NEW MEXICO
REGISTERED PROFESSIONAL ENGINEER
10-22-18

SAWMILL MARKET, PHASE 1
SITE, SHELL, COMMON AREAS
1909 BELLAMAH AVENUE NW
ALBUQUERQUE, NEW MEXICO

Date 7-11-2018

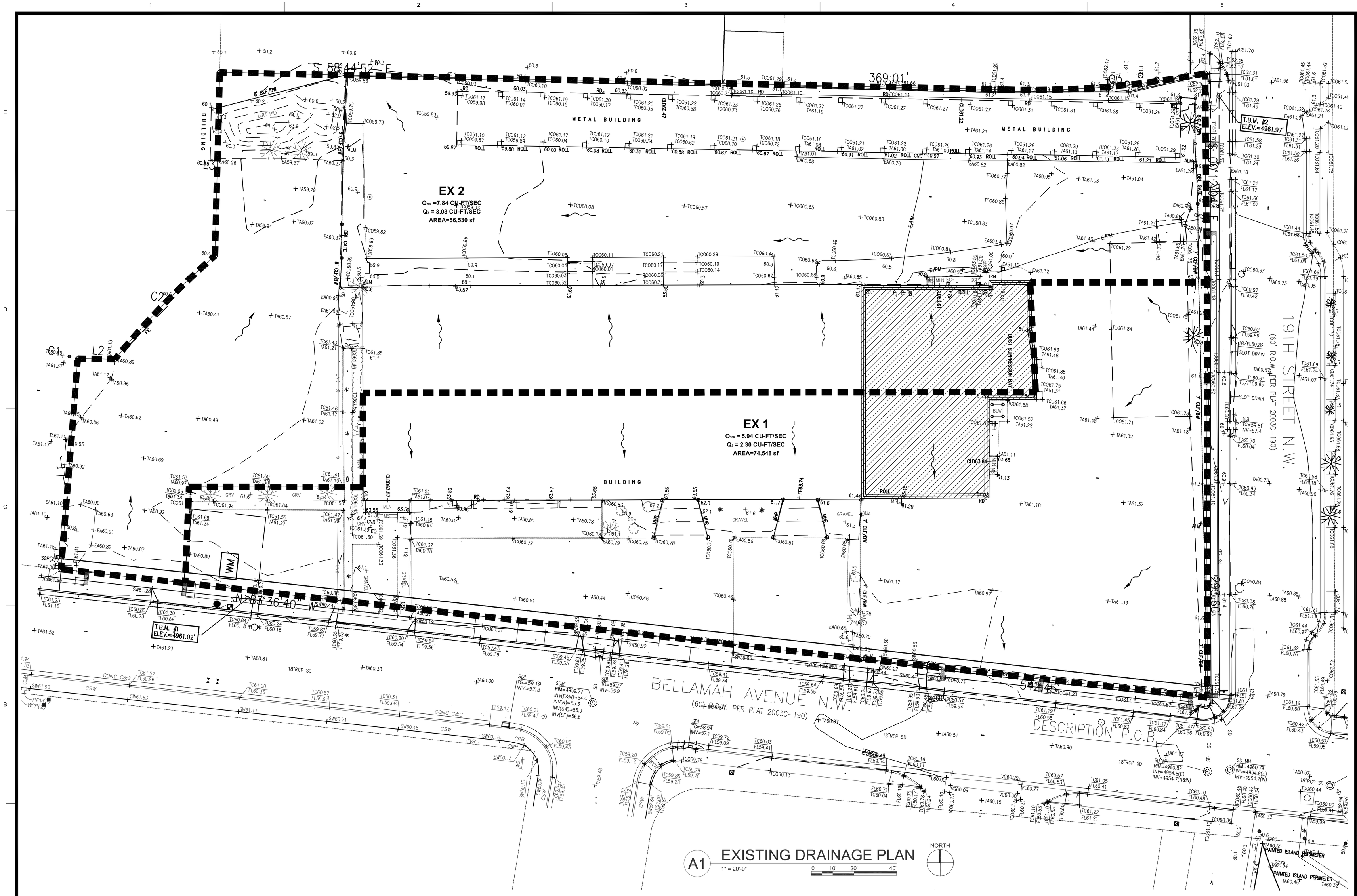
Revised
1 ADDENDUM 001
CITY COMMENTS AND OWNER REVISIONS, 8-28-2018
2 ADDENDUM 002
CITY COMMENTS AND OWNER REVISIONS, 10-22-2018

Drawn by DAA
Checked by DAA

Sheet Title
DRAINAGE
NARRATIVE

Job Number ----

Sheet No. 2
CD1



A1 EXISTING DRAINAGE PLAN

1" = 20'-0"

HERITAGE
HOTELS & RESORTS, INC

ERIC HASKINS, AIA
ARCHITECT

201 THIRD STREET NW
SUITE 1140
ALBUQUERQUE, NM
87102

505.212.9148

Consultant

THE HARTMAN-MAJEWSKI
DESIGN GROUP
120 Vassar Dr SE Suite 100
Albuquerque New Mexico 87106
T 505 242 6880 • F 505 242 6881

Stamp

DAVID A. AUBE
STATE OF
14221
NEW MEXICO
REGISTERED
PROFESSIONAL ENGINEER
10-22-18

SAWMILL MARKET, PHASE 1
SITE, SHELL, COMMON AREAS

1909 BELLAMAH AVENUE NW
ALBUQUERQUE, NEW MEXICO

Date	7-11-2018
Revised	⚠ ADDENDUM 001 CITY COMMENTS AND OWNER REVISIONS, 8-28-2018
Drawn by	DAA
Checked by	DAA
Sheet Title	EXISTING DRAINAGE PLAN
Job Number	----
Sheet No.	⚠ CD2

AP 4
Q_{100} = 1.44 CU-FT/SEC

AP 3
Q_{100} = 1.36 CU-FT/SEC

AP 2
Q_{100} = 1.59 CU-FT/SEC

AP 5
Q_{100} = 0.083 CU-FT/SEC

4' WIDE NOTCH IN CURB
FOR OVERFLOW.
FL CURB 59.90
TC=60.40
NOTCH ELEVATION 60.33

AP 4
Q_{100} = 3.52 CU-FT/SEC

AP1
Q_{100} = 0.90 CU-FT/SEC
Q_2 = 0.29 CU-FT/SEC

PRO 2.3
Q_{100} = 0.55 CU-FT/SEC
Q_2 = 0.20 CU-FT/SEC
FF Vol. = 0cf

PRO 2.5
Q_{100} = 0.81 CU-FT/SEC
Q_2 = 0.29 CU-FT/SEC
FF Vol.=50.6 cf

PRO 2.4
Q_{100} = 0.90 CU-FT/SEC
Q_2 = 0.29 CU-FT/SEC
FF Vol.=67.6 cf

PRO 2.2
Q_{100} = 0.24 CU-FT/SEC
Q_2 = 0.09 CU-FT/SEC
FF Vol.= 63 cf

PRO 2.1
Q_{100} = 2.80 CU-FT/SEC
Q_2 = 1.01 CU-FT/SEC
FF Vol.=520cf

PRO 2.6
Q_{100} = 0.78 CU-FT/SEC
Q_2 = 0.31 CU-FT/SEC
FF Vol.=0 cf

PRO 1.1
Q_{100} = 0.63 CU-FT/SEC
Q_2 = 0.19 CU-FT/SEC
FF Vol.=42.6 cf

PRO 1.2
Q_{100} = 0.70 CU-FT/SEC
Q_2 = 0.23 CU-FT/SEC
FF Vol.=68.5 cf

PRO 1.4
Q_{100} = 0.89 CU-FT/SEC
Q_2 = 0.29 CU-FT/SEC
FF Vol.=102.5 cf

PRO 1.5
Q_{100} =0.62CU-FT/SEC
Q_2 = 0.25 CU-FT/SEC
FF Vol.=80.5 cf

PRO 1.3
Q_{100} = 0.45 CU-FT/SEC
Q_2 = 0.15 CU-FT/SEC
FF Vol.=99 cf

PRO 1.6
Q_{100} =3.08 CU-FT/SEC
Q_2 = 1.01 CU-FT/SEC
FF Vol.=526 cf

AP 7
Q_{100} = 2.03 CU-FT/SEC

PRO Q_{100} = 4.13CU-FT/SEC
EX Q_{100} = 5.50 CU-FT/SEC

AP 8
Q_{100} =1.27 CU-FT/SEC

AP 9 OVERFLOW
Q_{100} =0.86 CU-FT/SEC

GRAVEL 2.1A
Area=594 sf
V= 74 CU-FT

GRAVEL 2.1B
Area=1482 sf
V= 195 CU-FT

GRAVEL 2.1C
Area=594 sf
V= 74 CU-FT

GRAVEL 2.1D
Area=1188 sf
V= 148 CU-FT

GRAVEL 2.1A
Area=606 sf
V= 76 CU-FT

GRAVEL 1.6A
Area=1038 sf
V= 130 CU-FT

GRAVEL 1.6B
Area=889 sf
V= 111 CU-FT

GRAVEL 1.6C
Area=1146 sf
V= 143 CU-FT

GRAVEL 1.6D
Area=1146 sf
V= 143 CU-FT

GRAVEL 1.6E
Area=890 sf
V= 111 CU-FT

GRAVEL 1.6F
Area=890 sf
V= 111 CU-FT

GRAVEL 1.6G
Area=892 sf
V= 111 CU-FT

GRAVEL 1.6H
Area=1651 sf
V= 206 CU-FT

GRAVEL 1.6J
Area=1006 sf
V= 126 CU-FT

POND A
Area=1057 sf
V= 176 CU-FT

POND B
Area=970 sf
V= 162 CU-FT

POND C
Area=860
V= 143 CU-FT

POND D
Area=638sf
V= 106 CU-FT

POND E
Area = 855sf
V= 142 CU-FT

POND F
Area=776 sf
V= 129 CU-FT

POND G
Area=1090sf
V= 182 CU-FT

POND H
Area=1935 sf
V= 322 CU-FT

T.B.M. #1
ELEV.=4961.02'

T.B.M. #2
ELEV.=4961.97'

METAL BUILDING

BUILDING

MWSEL 4960.92

MWSEL 4960.36

19TH STREET N.W.
(60' R.O.W. PER PLAT 2003C-190)

BELLAMAH AVENUE N.W.
(60' R.O.W. PER PLAT 2003C-190)

DESCRIPTION P.O.B.

Private Drainage Facilities within City Right-of-Way
Notice to Contractor
(Special Order 19 ~ "SO-19")

1. An excavation permit will be required before beginning any work within City Right-Of-Way.
2. All work on this project shall be performed in accordance with applicable federal, state and local laws, rules and regulations concerning construction safety and health.
3. Two working days prior to any excavation, the contractor must contact New Mexico One Call, dial "811" [or (505) 260-1990] for the location of existing utilities.
4. Prior to construction, the contractor shall excavate and verify the locations of all obstructions. Should a conflict exist, the contractor shall notify the engineer so that the conflict can be resolved with a minimum amount of delay.
5. Backfill compaction shall be according to traffic/street use.
6. Maintenance of the facility shall be the responsibility of the owner of the property being served.
7. Work on arterial streets may be required on a 24-hour basis.
8. Contractor must contact Jason Rodriguez at 235-8016 and Construction Coordination at 924-3416 to schedule an inspection.

SURFACE LEGEND
- ASPHALT PAVEMENT
- GRAVEL PAVEMENT
- CONCRETE PAVEMENT

A1 PROPOSED DRAINAGE PLAN
1" = 20'-0"
0 10' 20' 40'
NORTH

HERITAGE
HOTELS & RESORTS, INC

ERIC HASKINS, AIA
ARCHITECT
201 THIRD STREET NW
SUITE 1140
ALBUQUERQUE, NM
87102
505.212.9148

Consultant
THE HARTMAN - MAJEWSKI
DESIGN GROUP
120 Vassar Dr SE Suite 100
Albuquerque New Mexico 87106
T 505 242 6880 • F 505 242 6881

Stamp
DAVID A. AUBE
STATE OF NEW MEXICO
14221
REGISTERED PROFESSIONAL ENGINEER
10-22-18

SAWMILL MARKET, PHASE 1 SITE, SHELL, COMMON AREAS

1909 BELLAMAH AVENUE NW
ALBUQUERQUE, NEW MEXICO

Date 7-11-2018

Revised
1 ADDENDUM 001
CITY COMMENTS AND OWNER REVISIONS, 8-28-2018
2 ADDENDUM 002
CITY COMMENTS AND OWNER REVISIONS, 10-22-2018

Drawn by DAA
Checked by DAA

Sheet Title
PROPOSED DRAINAGE PLAN

Job Number ----

Sheet No. 2
CD3

SEE ENLARGED GRADING PLAN ON SHEET C-202

T.B.M. #2 ELEV.=4961.97'

T.B.M. #1 ELEV.=4961.02'

METAL BUILDING

BUILDING

19TH STREET N.W.

BELLAMAH AVENUE N.W.

GENERAL SHEET NOTES

1. NO WORK SHALL BE PERFORMED IN THE PUBLIC ROW WITHOUT AS APPROVED WORK ORDER OR EXCAVATION PERMIT

SHEET KEYED NOTES

1. CONSTRUCT 2' WIDE SIDEWALK CULVERT PER COA STD DWG 2236. SO-19 IS REQUIRED FOR THE INSTALLATION AND INSPECTION OF THESE CULVERTS.

Private Drainage Facilities within City Right-of-Way
Notice to Contractor
(Special Order 19 ~ "SO-19")

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8. Contractor must contact Jason Rodriguez at 235-8016 and Construction Coordination at 924-3416 to schedule an inspection.

A1 OVERALL SITE GRADING PLAN
1" = 20'-0"
0 10' 20' 40'
NORTH

HERITAGE HOTELS & RESORTS, INC

ERIC HASKINS, AIA
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DAVID A. AUBE STATE OF NEW MEXICO 14221 REGISTERED PROFESSIONAL ENGINEER
10-22-18

SAWMILL MARKET, PHASE 1 SITE, SHELL, COMMON AREAS

1909 BELLAMAH AVENUE NW
ALBUQUERQUE, NEW MEXICO

Date 7-11-2018

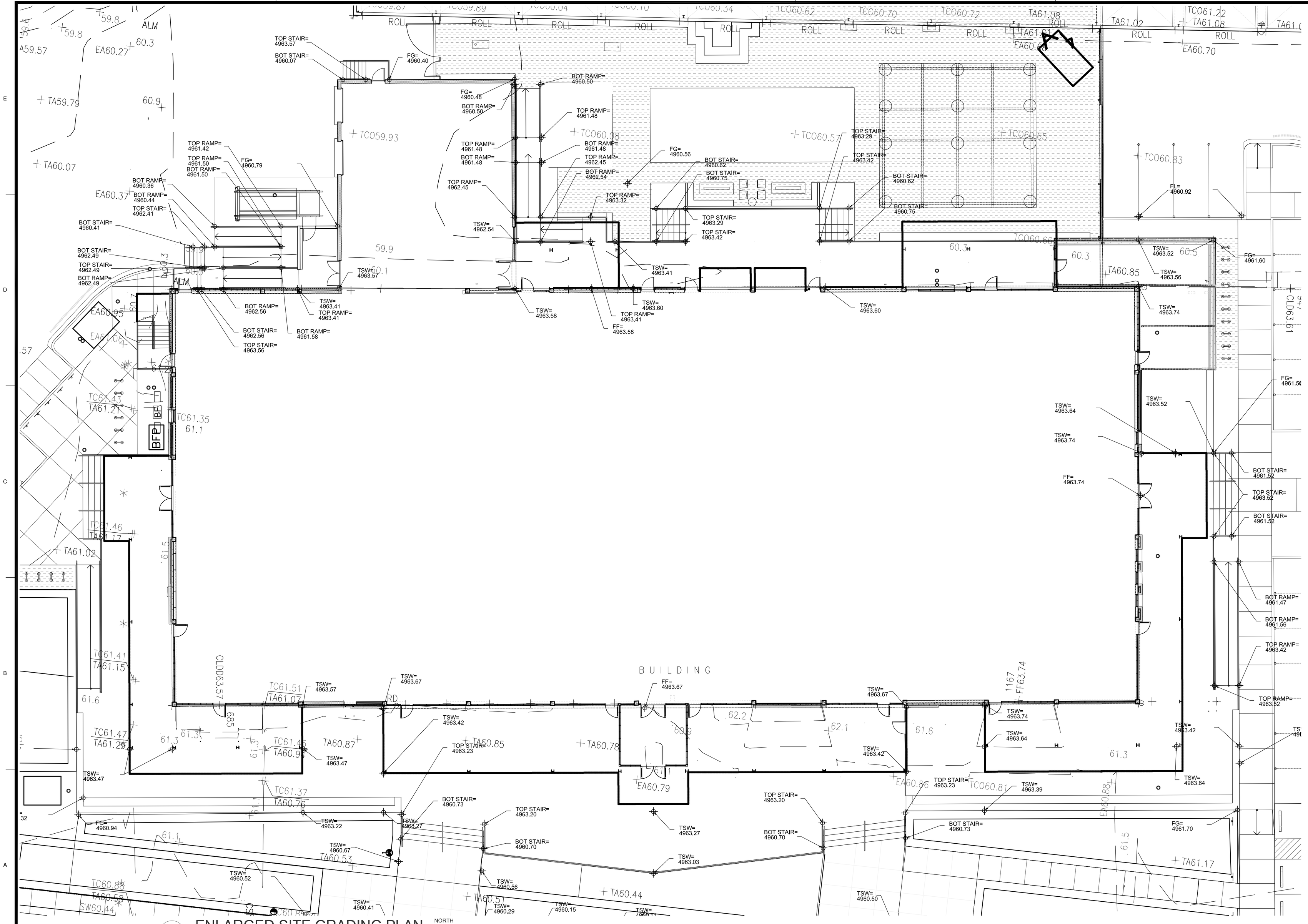
Revised
1 ADDENDUM 001 CITY COMMENTS AND OWNER REVISIONS, 8-28-2018
2 ADDENDUM 002 CITY COMMENTS AND OWNER REVISIONS, 10-22-2018

Drawn by DAA
Checked by DAA

Sheet Title
OVERALL SITE GRADING PLAN

Job Number ----

Sheet No.
C-201



HERITAGE
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DAVID A. AUBE
STATE OF NEW MEXICO
14221
REGISTERED PROFESSIONAL ENGINEER
10-22-18

SAWMILL MARKET, PHASE 1
SITE, SHELL, COMMON AREAS

1909 BELLAMAH AVENUE NW
ALBUQUERQUE, NEW MEXICO

Date	7-11-2018

Revised
1 ADDENDUM 001 CITY COMMENTS AND OWNER REVISIONS, 8-26-2018
2 ADDENDUM 002 CITY COMMENTS AND OWNER REVISIONS, 10-22-2018

Drawn by	DAA
Checked by	DAA

Sheet Title
ENLARGED SITE GRADING PLAN

Job Number ----

Sheet No. 2
C-202