CITY OF ALBUQUERQUE

Planning Department
David Campbell, Director

Mayor Timothy M. Keller

October 8, 2018

Hugh Floyd, P.E.
Respec
5971 Jefferson St. NE
Albuquerque, NM, 8710

RE: Legacy Uptown Apartments
Conceptual Grading and Drainage Plan
Engineer's Stamp Date: 10/02/18
Hydrology File: J18D033

Dear Mr. Floyd:

Based upon the information provided in your resubmittal received 10/04/2018, the Conceptual Grading and Drainage Plan is approved for action by the DRB on the Site Plan for Building Permit.

As a reminder, please provide a Private Facility Drainage Covenant per Chapter 17 of the DPM for the first flush ponds prior to Certificate of Occupancy.

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

Sincerely,

Renée C. Brissette

Renée C. Brissette, P.E. CFM
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: Legacy Uptown Apartments Building Permit #: _____ Hydrology File #: J18D033

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

Legal Description: Tract A-2-A-2-A, Park Square

City Address: _____

Applicant: Kassam Land Acquistion Contact: Faizel Kassam

Address: 6501 Eagle Rock NE, Suite B-5, Albuquerque, NM

Phone#: _____ Fax#: _____ E-mail: fkassam@legacydm.net

Other Contact: RESPEC, Inc. Contact: Jeremy Shell

Address: 5971 Jefferson St. NE , Suite 101, Albuquerque, NM 87109

Phone#: 505.253.9811 Fax#: _____ E-mail: jeremy.shell@respec.com

TYPE OF DEVELOPMENT: ____ PLAT (# of lots) ____ RESIDENCE __X__ DRB SITE ___ ADMIN SITE

IS THIS A RESUBMITTAL? __X__ Yes ____ No

DEPARTMENT ____ TRANSPORTATION __X__ HYDROLOGY/DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

____ ENGINEER/ARCHITECT CERTIFICATION
____ PAD CERTIFICATION
__X__ CONCEPTUAL G & D PLAN
__X__ GRADING PLAN
__X__ 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
__X__ 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: 10/04/18 By: Jeremy Shell

COA STAFF: ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

Hydrology Calculations

The following calcualtions are based on Albuquerque's Development Process Manual, Seciton 22.2

Runoff Rate:

Treatment Type Areas

Subbasin	$Area_A$ (ac)	$Area_B$ (ac)	$Area_C$ (ac)	$Area_D$ (ac)	Total (ac)
Subbasin 1	0.00	0.06	0.06	1.69	1.81
Subbasin 2	0.00	0.05	0.05	0.00	0.10
Subbasin 3.1	0.00	0.02	0.02	0.09	0.13
Subbasin 3.2	0.00	0.02	0.02	0.32	0.36
Total	0.00	0.15	0.28	2.09	2.40

Peak Discharge values based on Zone 3 from Table A-9

Q_A = 1.87 cfs/ac Q_B = 2.60 cfs/ac Q_C = 3.45 cfs/ac Q_D = 5.02 cfs/ac

Peak Discharge calculation for a 100-yr, 24-hr storm event from equation A-10

Subbasin	Discharge (cfs)
Subbasin 1	8.8
Subbasin 2	0.3
Subbasin 3.1	0.6
Subbasin 3.2	1.7
Total	11.4

Water Quality:

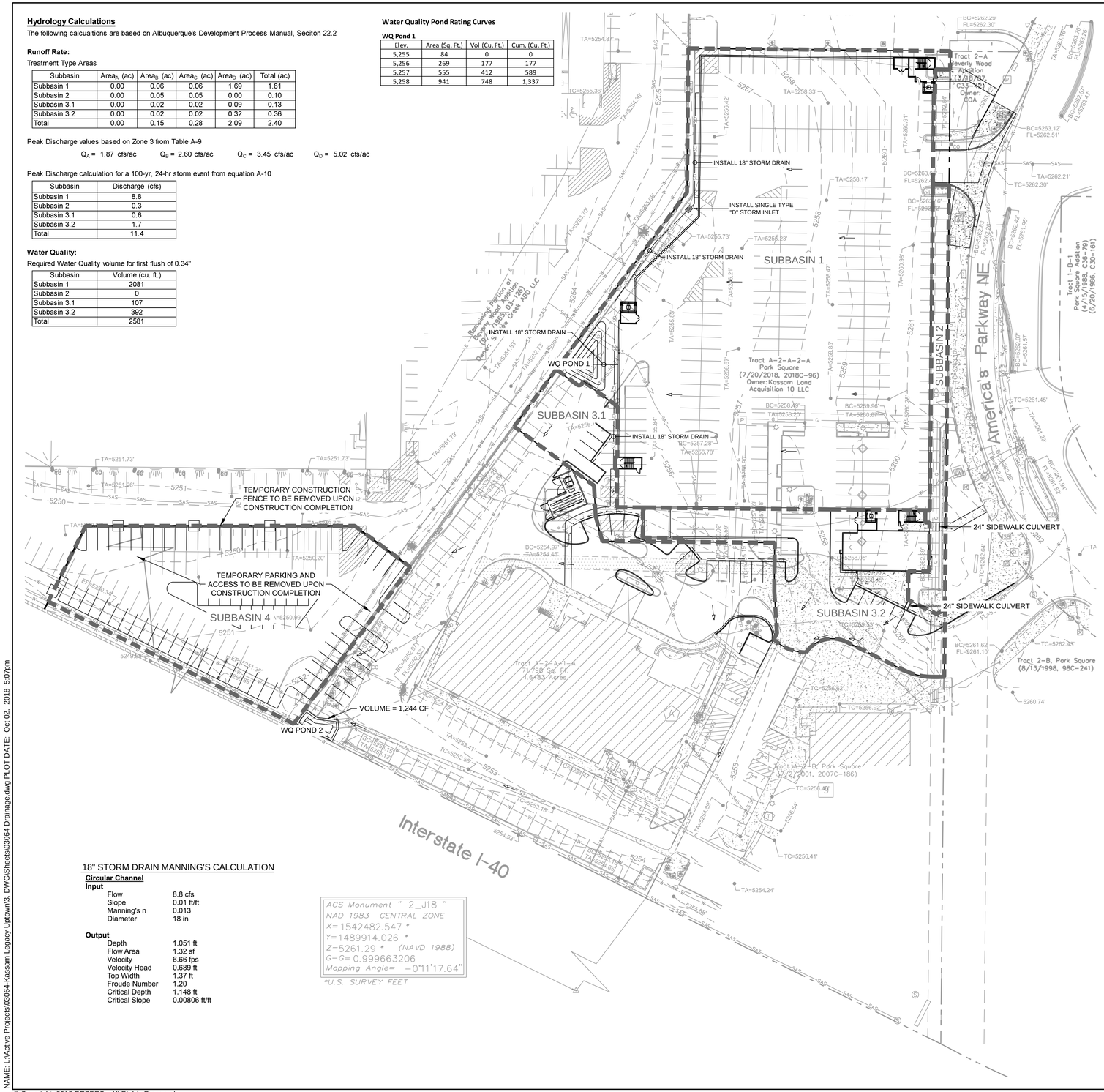
Required Water Quality volume for first flush of 0.34"

Subbasin	Volume (cu. ft.)
Subbasin 1	2081
Subbasin 2	0
Subbasin 3.1	107
Subbasin 3.2	392
Total	2581

Water Quality Pond Rating Curves

WQ Pond 1

Elev.	Area (Sq. Ft.)	Vol (Cu. Ft.)	Cum. (Cu. Ft.)
5,255	84	0	0
5,256	269	177	177
5,257	555	412	589
5,258	941	748	1,337



18" STORM DRAIN MANNING'S CALCULATION

Circular Channel

Input

Flow	8.8 cfs
Slope	0.01 ft/ft
Manning's n	0.013
Diameter	18 in

Output

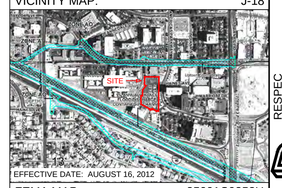
Depth	1.051 ft
Flow Area	1.32 sf
Velocity	6.66 fps
Velocity Head	0.689 ft
Top Width	1.37 ft
Froude Number	1.20
Critical Depth	1.148 ft
Critical Slope	0.00806 ft/ft

0 40 80
SCALE IN FEET

LEGEND

- EXISTING PROPERTY BOUNDARY
- PROPOSED PROPERTY BOUNDARY
- 4965 EXISTING MAJOR CONTOUR
- 4964 EXISTING MINOR CONTOUR
- SUBBASIN BOUNDARY

VICINITY MAP: J-18



EFFECTIVE DATE: AUGUST 16, 2012

FEMA MAP: 35001C0352H

BACKGROUND

TRACT A-2-A-2-A, PARK SQUARE IS APPROXIMATELY 2.4 ACRES IN THE CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO. THE PROPERTY IS LOCATED JUST WEST OF AMERICAS PARKWAY BETWEEN INDIAN SCHOOL ROAD AND INTERSTATE 40. THE SITECURRENTLY IS A PARKING LOT. THE PROPOSED PROJECT IS AN APARTMENT BUILDING. THIS PROPERTY RECEIVES NO OFFSITE FLOWS. THERE IS IS NO DESIGNATED 100-YEAR FLOODPLAIN SHOWN ON THE SITE. A GRADING PLAN WAS DONE FOR THE PARKING LOT BY AFRA CONSTRUCTION & DESIGN FOR TRACT A-2-A-2-A (J18-D33). THIS FILE CAN BE REFERENCED FOR GENERAL BACKGROUND RELATED TO THE PROPERTY.

METHODOLOGY

HYDROLOGY CALCULATIONS FOR THE SITE ARE PERFORMED IN ACCORDANCE WITH THE ALBUQUERQUE DEVELOPMENT PROCESS MANUAL (DPM) SECTION 22.2 USING THE RATIONAL METHOD TO CALCULATE PEAK FLOW RATES IN ORDER TO ENSURE ALL FLOW PATHS ARE SUFFICIENT TO CARRY FLOWS. THE REQUIRED WATER QUALITY VOLUME WAS CALCULATED BY MULTIPLYING THE IMPERVIOUS AREA BY THE FIRST FLUSH RUNOFF VALUE OF 0.34". ALL HYDROLOGIC AND HYDRAULIC CALCULATIONS CAN BE FOUND ON THIS SHEET.

EXISTING CONDITIONS

THE AREA, IN GENERAL, SLOPES FROM EAST TO WEST AT AT AN APPROXIMATE SLOPE OF 3% - 4%. STORM WATER RUNOFF GENERATED BY TRACT A-2-A-2-A SHEET DRAINS INTO TRACT A-2-A-1-A, THE ADJACENT PROPERTY TO THE SOUTH, AND IS CONCENTRATED INTO A CONCRETE RUNDOWN AT THE SOUTHWEST CORNER OF TRACT A-2-A-1-A. THE CONCRETE RUNDOWN DIRECTS WATER INTO A DROP INLET, WHICH THEN FLOWS IN A RCP UNDER THE WEST BOUND LANES OF INTERSTATE 40 AND DISCHARGES INTO THE I-40 CHANNEL.

PROPOSED CONDITIONS

THE APARTMENT BUILDING WILL CONSIST OF A PARKING GARAGE AT GRADE, ANOTHER LEVEL OF PARKING GARAGE ABOVE, AND FOUR FLOORS OF APARTMENT UNITS ABOVE THE PARKING GARAGE LEVELS. THE BASIN HAS BEEN SPLIT INTO 3 SUBBASINS.

SUBBASIN 1 IS 1.81 ACRES AND GENERATES 8.8 CFS. THIS SUBBASIN CONSISTS PRIMARILY OF THE RUNOFF GENERATED BY THE ROOF OF THE BUILDING. THE ROOF WILL FLOW WEST AND FLOW INTO SCUPPERS. STORM WATER IS THEN ROUTED THROUGH A 18" STORM DRAIN THAT DISCHARGES INTO WATER QUALITY POND 1. THE MANNING'S CALCULATION FOR THE 18" STORM DRAIN IS INCLUDED ON THIS SHEET. THE REQUIRED WATER QUALITY VOLUME FOR THIS SUBBASIN IS 2,081 CUBIC FEET. WATER QUALITY POND 1 PROVIDES 1,337 CUBIC FEET. ONCE FULL, RUNOFF ENTERS THE PARKING LOT AND FLOWS TO THE SOUTHWEST CORNER OF THE PROPERTY ALONG THE PROPERTY LINE AS THE SITE HAS DONE HISTORICALLY.

SUBBASIN 2 IS 0.10 ACRES AND GENERATES 0.3 CFS. THIS SUBBASIN CONSISTS OF THE LANDSCAPING AREA EAST OF THE BUILDING. THIS LANDSCAPING AREA WILL FLOW SOUTH AND DISCHARGE INTO THE PARKING LOT THROUGH A 24" SIDEWALK CULVERT. IT THEN RUNS THROUGH SUBBASIN 3.2 TO THE EXISTING VALLEY GUTTER IN THE PARKING LOT EAST OF THE EXISTING HOTEL. THIS VALLEY GUTTER ROUTES WATER TO THE SOUTHWEST CORNER OF THE PROPERTY AS THE SITE HAS DONE HISTORICALLY. NO WATER QUALITY VOLUME IS REQUIRED FOR SUBBASIN 2 SINCE IT CONTAINS ONLY LANDSCAPING AREA AND NO IMPERVIOUS SURFACES.

SUBBASIN 3 IS 0.49 ACRES AND GENERATES 2.3 CFS. THIS SUBBASIN CONSISTS OF THE PARKING LOT LOCATED ON THE SUBJECT PROPERTY. SUBBASIN 3.1 FLOWS SOUTH ALONG THE WEST BOUNDARY OF THE SITE AND SUBBASIN 3.2 FLOWS SOUTH INTO THE VALLEY GUTTER TO THE SOUTHWEST CORNER OF THE PROPERTY AS THE SITE HAS HISTORICALLY DONE. THE REQUIRED WATER QUALITY VOLUME FOR THIS SUBBASIN IS 499 CUBIC FEET. WATER QUALITY POND 3 PROVIDES 1,244 CUBIC FEET. THIS AMOUNT ACCOUNTS FOR THE ENTIRETY OF SUBBASIN 3 AND ALSO MAKES UP FOR THE REMAINING VOLUME REQUIRED FOR SUBBASIN 1.

SUBBASIN 4 WILL BE RESTORED TO PRE-CONSTRUCTION CONDITIONS. SUBBASIN 4 DISCHARGES WEST INTO THE EXISTING PARKING LOT AND DOES NOT CONTRIBUTE TO THE DROP INLET LOCATED ON TRACT A-2-A-1-A.

REVISION

DESIGNED	RB	
DRAWN	JS	
CHECKED	HF	
DATE	10.02.2018	

RESPEC
9971 JEFFERSON STREET
SUITE 101
ALBUQUERQUE, NM 87109
PHONE (505) 243-2287

STAMP

HUGH W. FLOYD NEW MEXICO 15633 REGISTERED PROFESSIONAL ENGINEER

PRELIMINARY
NOT FOR CONSTRUCTION
10/2018

THIS DRAWING IS INCOMPLETE AND NOT TO BE USED FOR CONSTRUCTION UNLESS IT IS STAMPED, SIGNED AND DATED

nm811 Know what's below. Call before you dig.

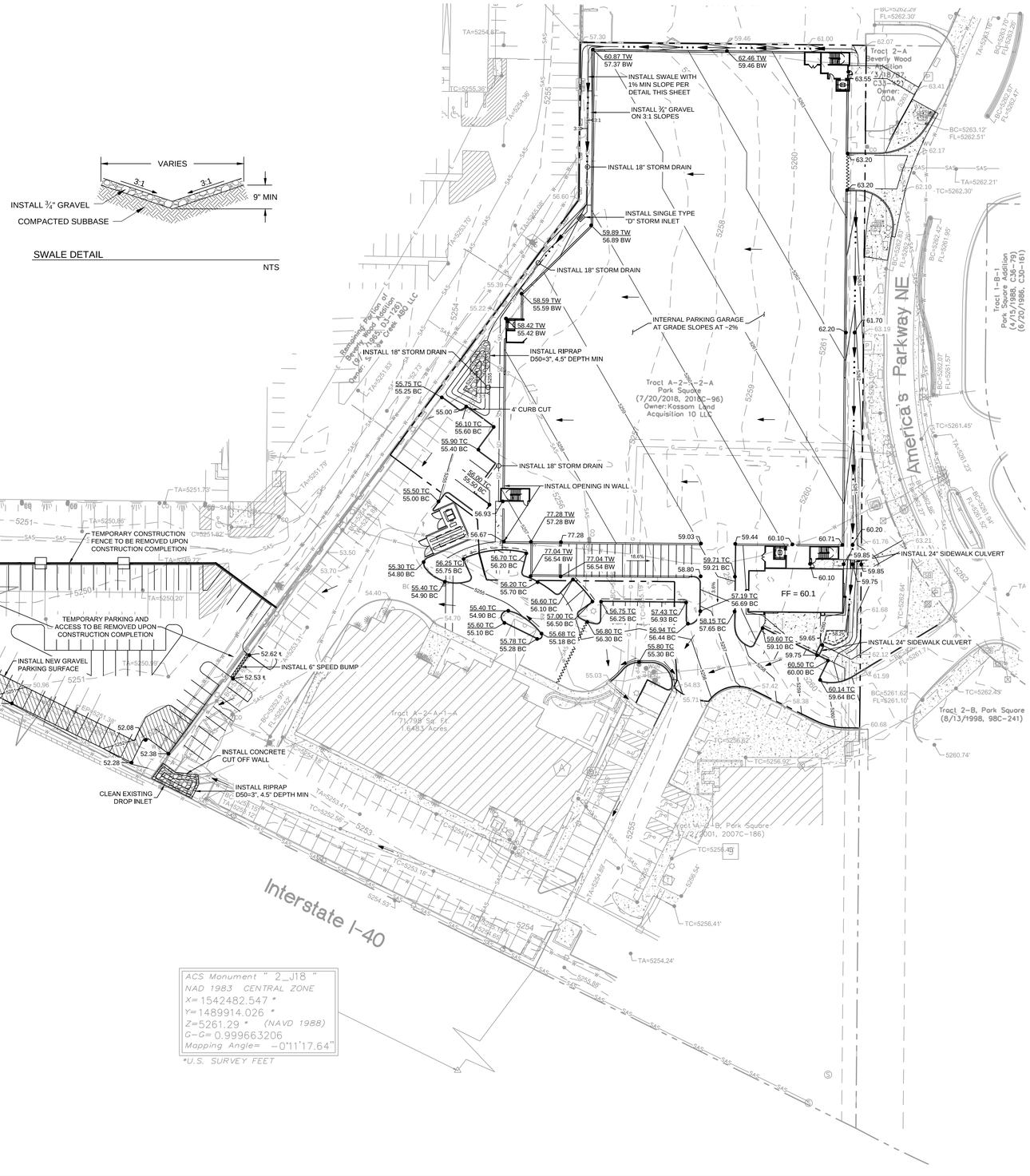
PROJECT NAME:
MARKANA UPTOWN
AMERICAS PARKWAY NE
ALBUQUERQUE, NEW MEXICO

SHEET TITLE:
CONCEPTUAL
DRAINAGE PLAN

ISSUED FOR:
SITE PLAN FOR
BUILDING PERMIT

SHEET NUMBER:
C-1

NAME: L:\Active Projects\03064-Kassam Legacy Uptown\3. DWG\Sheets\03064 Drainage.dwg PLOT DATE: Oct 02, 2018 5:07pm

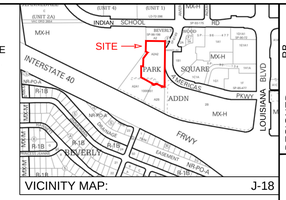


SWALE DETAIL

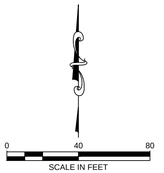
NTS

GENERAL NOTE:

1. ALL EXISTING UNDERGROUND UTILITY INFRASTRUCTURE THAT INTERFERES WITH THE NEW CONSTRUCTION WILL BE RELOCATED.

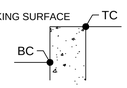


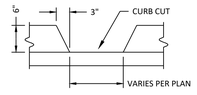
VICINITY MAP: J-18



LEGEND

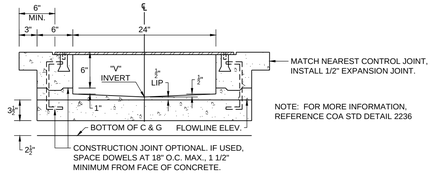
- EXISTING PROPERTY BOUNDARY
- PROPOSED PROPERTY BOUNDARY
- 4965 EXISTING MAJOR CONTOUR
- 4964 EXISTING MINOR CONTOUR
- 4966 PROPOSED CONTOUR
- PROPOSED WATER BLOCK
- PROPOSED FLOW LINE
- PROPOSED RIPRAP
- PROPOSED GRAVEL PARKING SURFACE
- xx.xx PROPOSED SPOT ELEV
- xx.xx EXISTING SPOT ELEV





CURB CUT DETAIL

NTS



SIDEWALK CULVERT DETAIL

NTS

DESIGNED	RB
DRAWN	JS
CHECKED	HF
DATE	10.02.2018

REVISION

RESPEC
5971 JEFFERSON STREET NE
SUITE 101
ALBUQUERQUE, NM 87109
PHONE (505) 243-2287

STAMP

HUGH W. FLOYD NEW MEXICO 15633 REGISTERED PROFESSIONAL ENGINEER 10/2018

PRELIMINARY
NOT FOR CONSTRUCTION
10/2018

THIS DRAWING IS INCOMPLETE AND NOT TO BE USED FOR CONSTRUCTION UNLESS IT IS STAMPED, SIGNED AND DATED

nm811 Know what's below. Call before you dig.

PROJECT NAME:
MARKANA UPTOWN
AMERICAS PARKWAY NE
ALBUQUERQUE, NEW MEXICO

SHEET TITLE:
CONCEPTUAL GRADING PLAN

ISSUED FOR:
SITE PLAN FOR BUILDING PERMIT

SHEET NUMBER:
C-2

NAME: L:\Active Projects\03064-Kassam Legacy Uptown\3. DWG\Sheets\03064 Grading.dwg PLOT DATE: Oct 02, 2018 5:01pm