

# CITY OF ALBUQUERQUE

Planning Department  
Suzanne Lubar, Director



Mayor Richard J. Berry

September 28, 2015

Mark Goodwin, PE  
Mark Goodwin & Associates, PA.  
PO Box 90606  
Albuquerque, NM 87199

**Re: Massey Warehouse-Phase 2  
8410 Washington St.  
Grading and Drainage Plan  
Engineer's Stamp dated: 11/22/2016 (C17D003)**

Dear Mr. Goodwin,

Based on the information provided in your submittal received 11/23/2016, the above referenced Grading and Drainage Plan is approved for Building Permit.

PO Box 1293 Please attach a copy of this approved plan to the construction sets in the permitting process prior to sign-off by Hydrology.

Albuquerque Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist will be required.

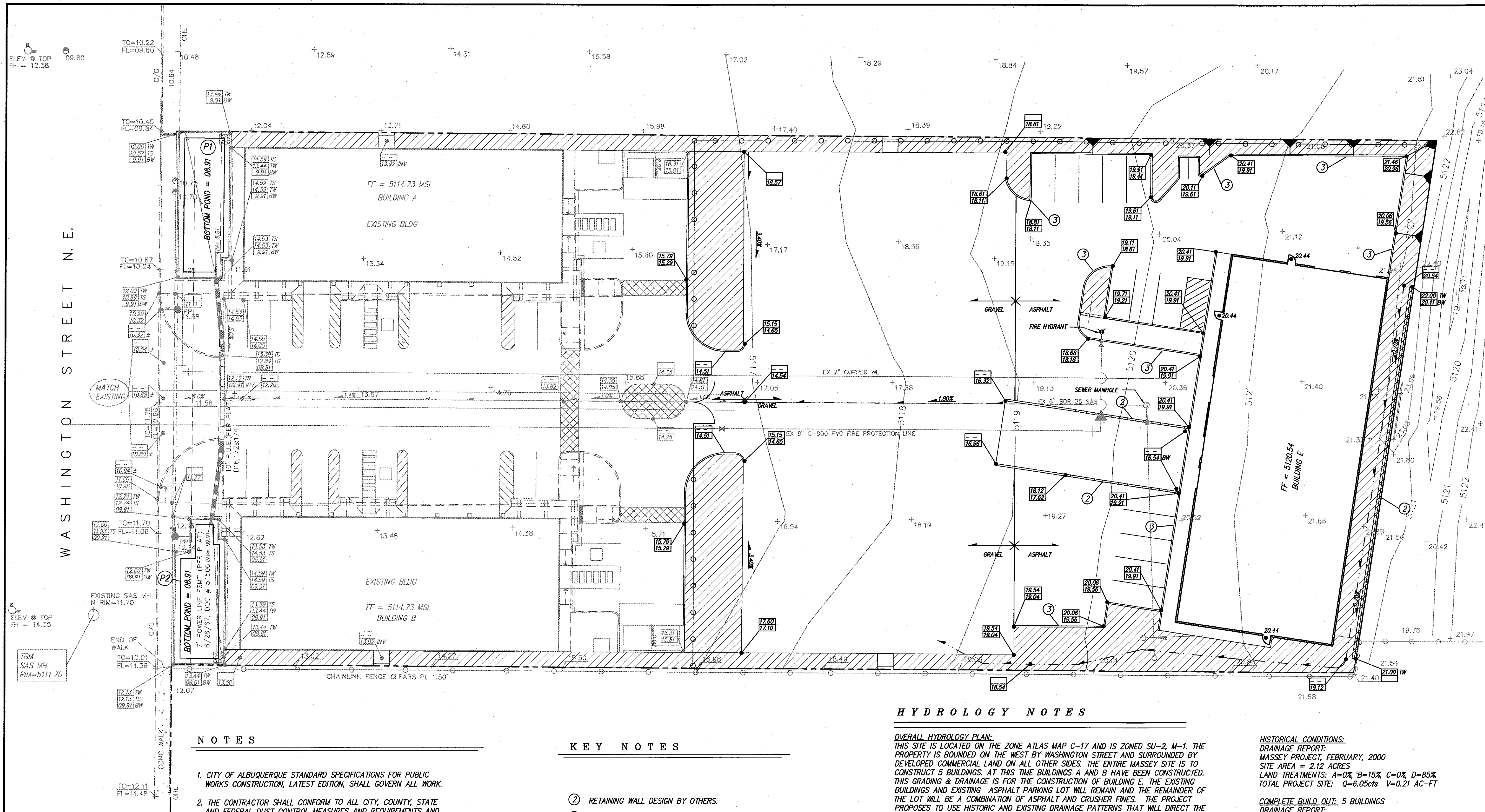
New Mexico 87103 If you have any questions, you can contact me at 924-3986 or Rudy Rael at 924-3977.

www.cabq.gov

Sincerely,

Abiel Carrillo, P.E.  
Principal Engineer, Hydrology  
Planning Department

C: RR/AC  
File



### NOTES

- CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION, SHALL GOVERN ALL WORK.
- THE CONTRACTOR SHALL CONFORM TO ALL CITY, COUNTY, STATE AND FEDERAL DUST CONTROL MEASURES AND REQUIREMENTS AND WILL BE RESPONSIBLE FOR PREPARING AND OBTAINING ALL NECESSARY APPLICATIONS AND APPROVALS.
- THE CONTRACTOR SHALL ENSURE THAT THE NO TOPSOIL ERODES FROM LOTS INTO PUBLIC RIGHT OF WAY. THIS CAN BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMS AND WETTING SOIL TO KEEP IT FROM BLOWING. SEE DETAIL THIS SHEET.
- THE SITE DOES NOT LIE WITHIN 100 YR FLOOD ZONE.
- THERE ARE NO OFFSITE FLOWS COMING ONTO THIS SITE.

### KEY NOTES

- RETAINING WALL DESIGN BY OTHERS.
- 6" HEADER CURB PER COA DETAIL 2415B

### FIRST FLUSH

THE "FIRST FLUSH" IS BEING ACCOMPLISHED THROUGH THE DETENTION POND AS SHOWN ON THE PLAN.

REQUIRED VOLUME =  $0.34' \times \text{IMPERVIOUS AREA}$   
=  $0.34' \times 12 \times (51,745 \text{ SF})$   
= 1466 CF

VOLUME PROVIDED = 1640 CF

- (P1) FIRST FLUSH PORTION:  
POND BOTTOM = 08.91'  
DEPTH = 1'  
BOTTOM AREA = 734 SF  
2:1 SIDE SLOPES  
VOLUME = 868 CF
- (P2) FIRST FLUSH PORTION:  
POND BOTTOM = 08.91'  
DEPTH = 1'  
BOTTOM AREA = 639 SF  
2:1 SIDE SLOPES  
VOLUME = 772 CF

### HYDROLOGY NOTES

**OVERALL HYDROLOGY PLAN:**  
THIS SITE IS LOCATED ON THE ZONE ATLAS MAP C-17 AND IS ZONED SU-2, M-1. THE PROPERTY IS BOUNDED ON THE WEST BY WASHINGTON STREET AND SURROUNDED BY DEVELOPED COMMERCIAL LAND ON ALL OTHER SIDES. THE ENTIRE MASSEY SITE IS TO CONSTRUCT 5 BUILDINGS. AT THIS TIME BUILDINGS A AND B HAVE BEEN CONSTRUCTED. THIS GRADING & DRAINAGE IS FOR THE CONSTRUCTION OF BUILDING E. THE EXISTING BUILDINGS AND EXISTING ASPHALT PARKING LOT WILL REMAIN AND THE REMAINDER OF THE LOT WILL BE A COMBINATION OF ASPHALT AND CRUSHER FINES. THE PROJECT PROPOSES TO USE HISTORIC AND EXISTING DRAINAGE PATTERNS THAT WILL DIRECT THE PROJECT'S FLOWS TO THE WEST OF THE PROJECT SITE. THIS DRAINAGE PLAN WILL ALSO ADDRESS THE STORM WATER QUALITY FOR THE RUNOFF GENERATED BY THE DISTURBED AREA.

THE INTENT OF THIS PLAN IS TO MAINTAIN THE SAME DRAINAGE PATHS FOR THE PROJECT SITE AS DETERMINED FROM HISTORIC CONDITIONS AND EXISTING TOPOGRAPHY. THE SITE WILL BE GRADED TO DIRECT FLOWS TO THE PONDS WEST OF THE SITE. THE EXISTING PONDS HAVE BEEN SIZED FOR FULL BUILD-OUT AND WILL SERVE AS A DETENTION POND. THE PONDS WILL RELEASE THE FULLY DEVELOPED FLOWS AT THE HISTORIC RATE. THE STORM WATER WILL BE RELEASED AT THE NORTHWEST CORNER OF THE NORTHERN MOST DETENTION POND AT A MAXIMUM RATE OF 6.02 CFS THROUGH A 0.7 FOOT OPENING IN THE WALL OF THE DETENTION POND. THE RUNOFF WILL THEN DISCHARGE INTO WASHINGTON STREET WHICH DRAINS TO THE ALAMEDA STORM DRAIN, THAT IS SIZED FOR THE 10 YEAR STORM. THE SAME PONDS WILL HAVE AN INCREASED DEPTH OF 1' FOOT BELOW THE OUTFALL AT A 2:1 SLOPE. THIS ALLOW FOR ENOUGH VOLUME TO RETAIN THE "FIRST FLUSH".

THE HISTORIC RATE OF 6.05 CFS AND THE COMPLETE BUILD OUT WITH 5 BUILDINGS OF 9.42 CFS, WAS DETERMINED FROM THE MASSEY PROJECT DRAINAGE REPORT FROM FEBRUARY 2000.

THERE ARE NO OFFSITE FLOWS ENTERING THE SITE.

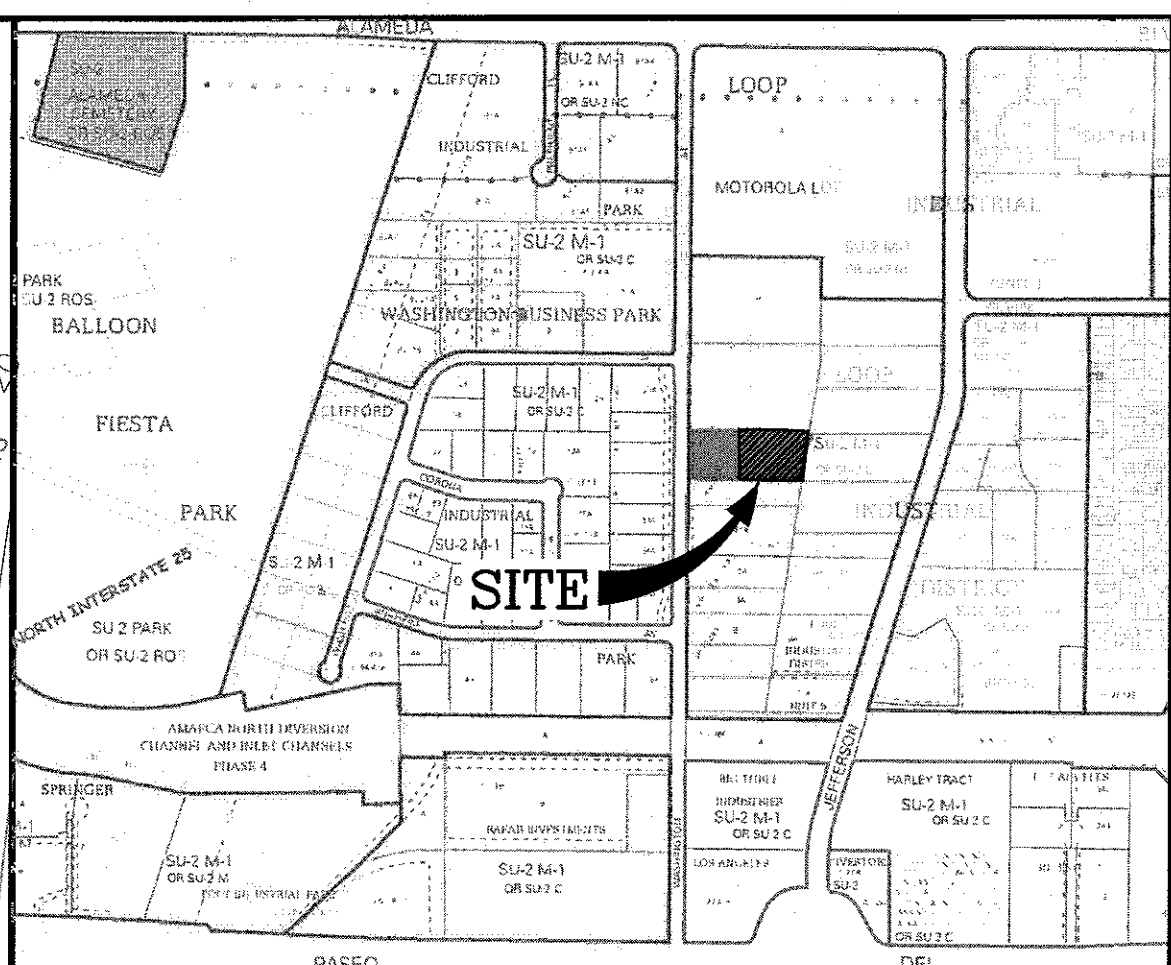
THE SITE IS NOT WITHIN THE 100 YEAR FLOOD PLAIN.

THE HYDROLOGY FOR THE PROJECT SITE WAS CALCULATED USING AHYMO FOR THE 100 YEAR 24 HOUR STORM EVENT FOR ZONE 2. THE RESULTS ARE SUMMARIZED BELOW:

**HISTORICAL CONDITIONS:**  
DRAINAGE REPORT:  
MASSEY PROJECT, FEBRUARY, 2000  
SITE AREA = 2.12 ACRES  
LAND TREATMENTS: A=0% B=15% C=0% D=85%  
TOTAL PROJECT SITE: Q=6.05cfs V=0.21 AC-FT

**COMPLETE BUILD OUT: 5 BUILDINGS**  
DRAINAGE REPORT:  
MASSEY PROJECT, FEBRUARY, 2000  
SITE AREA = 2.12 ACRES  
LAND TREATMENTS: A=0% B=15% C=0% D=85%  
TOTAL PROJECT SITE: Q=9.42cfs V=0.35 AC-FT

**DEVELOPED CONDITIONS: 3 BUILDINGS**  
DRAINAGE REPORT:  
MASSEY PROJECT, FEBRUARY, 2000  
SITE AREA = 2.12 ACRES  
LAND TREATMENTS: A=0% B=5% C=32% D=63%  
TOTAL PROJECT SITE: Q=8.01cfs V=0.34 AC-FT



### VICINITY MAP ZONE MAP: C-17-Z

### T B M (TEMPORARY BENCHMARK)

SANITARY SEWER MANHOLE ON WASHINGTON STREET NE RIM ELEV. = 5111.70

### BENCHMARK

"NDC-7", AMAFCA BRASS TABLET  
X COORDINATE = 394,094.80  
Y COORDINATE = 1,522,635.84  
ELEVATION = 5062.60

### LEGAL DESCRIPTION

LOT F-1, LANDS OF LOS ANGELES INVESTORS, SECTION 14, T 11 N, R 3 E, NMPM, CITY OF ALBUQUERQUE, BERNALILLO COUNTY, STATE OF NEW MEXICO.

### LEGEND

- EXISTING CONCRETE
- EXISTING PHONE RISER
- EXISTING FIRE HYDRANT
- EXISTING WATER METER
- EXISTING SANITARY SEWER MANHOLE
- EXISTING POWER POLE W/OVERHEAD ELECTRIC
- EXISTING CHAINLINK FENCE
- EXISTING CURB
- EXISTING CONTOUR
- PROPOSED TOP OF WALL AND BOTTOM OF WALL SPOT ELEVATION
- PROPOSED TOP OF CURB AND FLOWLINE SPOT ELEVATION
- PROPOSED ROOF DRAIN
- FLOW DIRECTION
- 3:1 SLOPE OR LESS
- PROPOSED SWALE
- PROPOSED RETAINING WALL

### MASSEY - PHASE 2 GRADING & DRAINAGE AND UTILITY PLAN

**dmg** MARK GOODWIN & ASSOCIATES, P.A.  
CONSULTING ENGINEERS  
P.O. BOX 90606  
ALBUQUERQUE, NEW MEXICO 87199  
(505)828-2200, FAX (505)797-9539

Designed: HLC Drawn: HLC Checked: DMG Sheet C1  
Scale: 1" = 20' Date: 10-7-16 Job: A16056