

CITY OF ALBUQUERQUE



February 7, 2012

Mike J. Walla, P.E.
Walla Engineering, LTD
6100 Indian School NE, Suite 105
Albuquerque, NM 87110

Re: MCT Industries Paint Booth Replacement
Grading and Drainage Plan
Engineer's Stamp Dated 2-12-2012 (D17/D047)

DZ

Dear Mr. Walla,

Based upon the information provided in your submittal dated 2-02-2012, the above referenced plan is approved for Grading Permit and Building Permit. Please attach a copy of this approved plan to the construction sets prior to sign-off by Hydrology.

This project requires a National Pollutant Discharge Elimination System (NPDES) permit and a Topsoil Disturbance Permit. If you have any questions about this permit, please feel free to call the Municipal Development Department, Hydrology section at 768-3654 (Charles Caruso).

PO Box 1293

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

Albuquerque

If you have any questions, you can contact me at 924-3695.

NM 87103

Sincerely,

www.cabq.gov

Shahab Biazar, PE
Senior Engineer, Planning Dept.
Development and Building Services

C: RER/SB
E-Mail
file



LETTER OF TRANSMITTAL

TO CITY OF ALBU

DATE 2/2/12 JOB NO. _____
ATTENTION HYDROLOGY
RE: MCT PAINT BOOTH

WE ARE SENDING YOU ☒ Attached ☐ Under Separate Cover Via. _____ the following items:

- ☐ Plans ☐ Prints ☐ CD ☐ Specifications ☐ Calculations
☐ Report ☐ Copy of Letter ☐ Shop drawings ☐ Proposal Information
☐ Samples ☐ _____

COPIES	DATE	NO.	DESCRIPTION
<u>1</u> <u>2</u>			<u>INFORMATION SHEET</u> <u>CRANKING REPORT w/G+D PLAN</u>

THESE ARE TRANSMITTED as checked below:

- ☒ For Your Use ☒ For Review and Comment ☐ Returned After Loan To Us
☐ As Requested ☐ Correct and Resubmit ☐ Resubmittal Not Required, Revise Per Corrections Noted, If Any

REMARKS _____

RECEIVED

FEB 02 2012

HYDROLOGY
SECTION

COPIES TO: FILE

SIGNED: [Signature]

If enclosures are not as noted, kindly notify us at once

6100 Indian School Road NE • Suite 210
Albuquerque • New Mexico • 87110
(505) 881-3008 • Facsimile (505) 881-4025

Mike J. Walla P.E.

Larry E. Kennedy

**Drainage Report
For**

**MCT PAINT BOOTH
REPLACEMENT**

Prepared by:

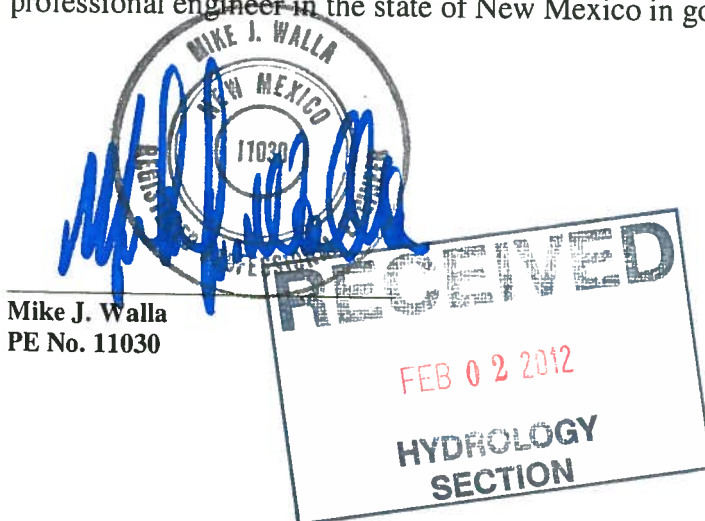
Walla Engineering, Ltd.
6100 Indian School Rd. NE
Suite 105
Albuquerque, New Mexico 87110

Prepared for:

MCT, Inc
7451 Pan American Freeway NE
Albuquerque, New Mexico 87109

February, 2012

I certify that this report was prepared under my supervision, and I am a registered professional engineer in the state of New Mexico in good standing.



Mike J. Walla
PE No. 11030

Project # M47-0111

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SECTION I

REPORT

Introduction

The site is located on Albuquerque's far north industrial corridor at 7451 Pan American Freeway NE. The site is on the west side of Interstate 25 and has existed for over 30 years. It was one of the first developed sites in the area and has historic site drainage features which will be upgraded in this construction. The proposed development is the construction of a new building that will replace two existing smaller buildings that have been become antiquated. Some existing concrete paving will be replaced as well due to poor drainage issues causing some storm drainage directed back toward adjacent buildings. The site is bordered by two properties to the east, as well as properties north, south and west that are adjacent to this facility. The site is accessed from the southbound I-25 frontage road via an access drive. The attached City of Albuquerque Zone Atlas Map, D-17-Z indicates the site location. The purpose of this report is to describe onsite drainage conditions and how the new work will improve the handling of historically developed flows.

Existing Drainage Conditions & Offsite Flows

The existing site is an industrial facility with 3 buildings and an outdoor crane that is partially paved with some dirt parking on a site sloping from east to west. The buildings are concentrated on the west end of the site and most of the runoff currently sheet flows across the site to the lowest end of the site along the west border. The east border is approximately 3 feet lower than the adjacent two (2) properties. These adjacent properties collect site drainage at their western border and direct runoff to the north thru a sloping concrete channel to downstream facilities in the property north of MCT where it continues north on the parking lot surface to COA facilities in Masthead Street and then Jefferson Blvd. All other properties adjacent to MCT are lower than the elevations of the MCT site and therefore do not influence MCT site drainage. Therefore, the only offsite drainage that affects the MCT site is a slim dirt area along the east border for approximately 150 feet at south end of the property and is not significant.

PANEL # 137
MAP # 35001C0137F

1% ANNUAL CHANCE
FLOOD DISCHARGE
CONTAINED IN CHANNEL

SAN FRANCISCO RD NE

SUN AVE NE

SUN LN NE

PINO

ZON
(DEI

ZONE X

ZONE A

LIMIT OF DETAILED STUDY

MASTHEAD ST NE

ZONE A

SITE

HAWKINS ST NE

REDWOOD NE

JUNIPER NE

LOCUST NE

DEL REY AVE NE

LAUREL NE

WILLOW NE

OAK NE

SYCAMORE NE

ALDER NE

CYPRESS NE

CHESTNUT NE

BAYBERRY NE

WALNUT NE

JACGRANDE NE

JEFFERSON ST NE

1% ANNUAL CHANCE
FLOOD DISCHARGE
CONTAINED IN CHANNEL

ZONE A

LIMIT OF DETAILED STUDY

ZONE X

ZONE X

GRUBER AVE NE

ZONE X

PAN AMERICAN PL NE

ZONE AO
(DEPTH 1')

Arroyo Del Pino

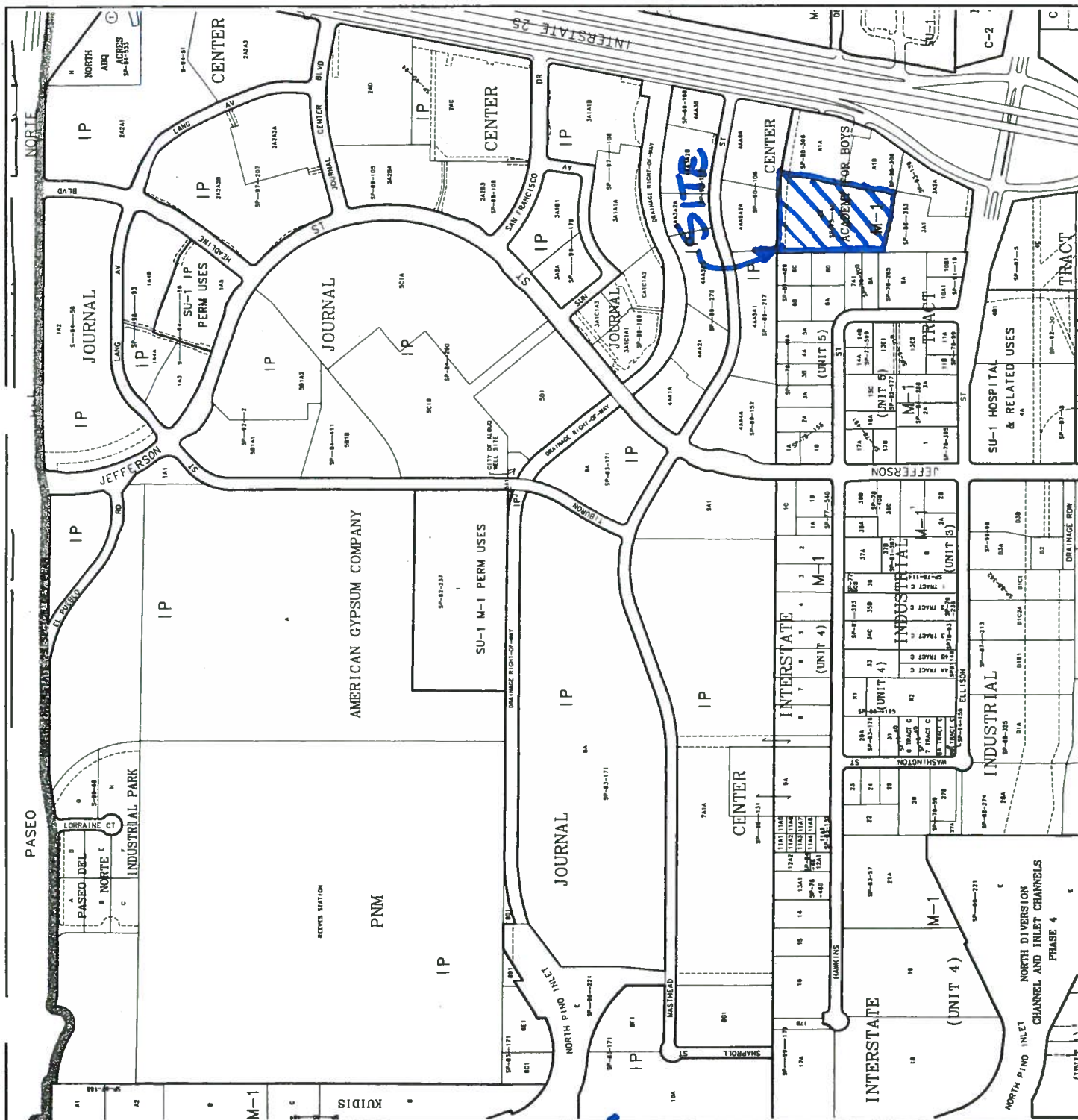
FOREST HILLS DR N

LESLIE PL NE

BARNHART
ST NE

JOINS P

5



Proposed Drainage Management

The proposed on-site drainage management plan is to continue the surface flow pattern from east to west across the site using surface grading and a new concrete valley gutter to direct runoff to retention ponds at the north and south ends of the site. Because the new work will affect the south pond the project will regrade this pond to hold more runoff. The pond will have an outfall swale that will direct overflow drainage to the north pond along the west side of the existing building. New grading will create dirt berms to protect adjacent properties west of the site from any runoff developed on the MCT site. The north retention pond has capacity for some runoff storage but has an existing concrete outfall/overflow structure which has historically directed runoff north to a downstream parking lot and then over the paved surface to Masthead Street and then Jefferson Blvd.

Calculations

The weighted E method from the “City of Albuquerque Development Process Manual Volume 11 – Design Criteria, 1997 Revision” was used to calculate runoff volumes from the project site. The 6-hr, 100-yr storm volume of runoff was calculated to be 7,065 cubic feet for the south basin. The new south pond grading will provide approximately 7,475 CF of runoff storage. These volumes are calculated on the plan sheet C-101 and are included in the Appendix of this report.

Summary

The site will be graded to direct surface runoff from east to west to match historic flow conditions. The new construction on the site will not appreciably change the historic developed flow volumes or flow rate to downstream facilities, in fact the regading along the west perimeter of the site may reduce flows to adjacent properties during large storm events. The area of impermeable surfaces will not increase as a result of this project. The south pond regrading will create more runoff capacity onsite and the proposed valley gutter should resolve some erosion issues onsite and prevent silt accumulation in the south pond.

SECTION II

Runoff Calculations

PRECIPITATION ZONE 2

DESIGN STORM: (IN) 1hr 6hr 24hr 4day 10day
 2.01 2.35 2.75 3.30 3.95

EXISTING AND PROPOSED CONDITIONS - BASIN I

LAND TRTMNT	AREA (ACRE)	AREA %	P6	Q (CFS/AC)	Q (CFS)	V6 (CF)	V24 (CF)	V4day (CF)	V10day (CF)
A	0.00	0%	0.53	1.56	0.00	0	0	0	0
B	0.000	0%	0.78	2.28	0.00	0	0	0	0
C	0.578	49%	1.13	3.14	1.81	2,371	2,371	2,371	2,371
D	0.610	51%	2.12	4.70	2.87	4,694	5,580	6,798	8,237
TOTALS	1.188	100%			4.68	7,065	7,951	9,169	10,608

EXISTING CONDITIONS - BASIN II

LAND TRTMNT	AREA (ACRE)	AREA %	P6	Q (CFS/AC)	Q (CFS)	V6 (CF)	V24 (CF)	V4day (CF)	V10day (CF)
A	0.000	0%	0.53	1.56	0.00	0	0	0	0
B	0.000	0%	0.78	2.28	0.00	0	0	0	0
C	0.578	49%	1.13	3.14	1.81	2,371	2,371	2,371	2,371
D	0.610	51%	2.12	4.70	2.87	4,694	5,580	6,798	8,237
TOTALS	1.188	100%			4.68	7,065	7,951	9,169	10,608

PROJECT TITLE: MCT - PAINT BOOTH REPAIRMENT ZONE MAP/DRG. FILE #: D-17/4047
 DRB #: _____ EPC#: _____ WORK ORDER#: _____
 LEGAL DESCRIPTION: PARCEL "A-2" PORTION OF LAND OF ACADEMY FOR BOYS WITH ELEM. GARDENS
 CITY ADDRESS: 7451 PAN AMERICAN FRWY NE, ALBUQ, NM SAN JUAN CO, NM
 ENGINEERING FIRM: WALLA ENGINEERING, LTD CONTACT: MIKE WALLA
 ADDRESS: 600 INDIAN SCHOOL RD. NE PHONE: 831-3008
 CITY, STATE: ALBUQ, NM ZIP CODE: 87110
 OWNER: MCT INDUSTRIES CONTACT: BENNY MARTINEZ
 ADDRESS: 7451 PAN AMERICAN FRWY NE PHONE: 315-8651
 CITY, STATE: ALBUQ, NM ZIP CODE: 87109
 ARCHITECT: N/A CONTACT: _____
 ADDRESS: _____ PHONE: _____
 CITY, STATE: _____ ZIP CODE: _____
 SURVEYOR: CARTESIAN SURVEYS, INC. CONTACT: WILL ROYNER, JR.
 ADDRESS: P.O. BOX 44414 PHONE: 876-3050
 CITY, STATE: ALBUQ, NM ZIP CODE: 87174
 CONTRACTOR: _____ CONTACT: _____
 ADDRESS: _____ PHONE: _____
 CITY, STATE: _____ ZIP CODE: _____

CHECK TYPE OF SUBMITTAL:

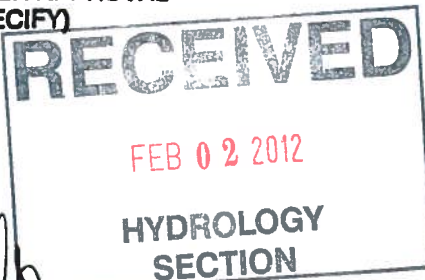
- ☒ DRAINAGE REPORT
☒ DRAINAGE PLAN 1st SUBMITTAL, *REQUIRES TCL or equal*
☒ DRAINAGE PLAN RESUBMITTAL
☒ CONCEPTUAL GRADING & DRAINAGE PLAN
☒ GRADING PLAN
☐ EROSION CONTROL PLAN
☐ ENGINEER'S CERTIFICATION (HYDROLOGY)
☐ CLOMR/LOMR
☐ TRAFFIC CIRCULATION LAYOUT (TCL)
☐ ENGINEERS CERTIFICATION (TCL)
☐ ENGINEERS CERTIFICATION (DRB APPR. SITE PLAN)
☐ OTHER

CHECK TYPE OF APPROVAL SOUGHT:

- ☐ SIA / FINANCIAL GUARANTEE RELEASE
☐ PRELIMINARY PLAT APPROVAL
☐ S. DEV. PLAN FOR SUB'D. APPROVAL
☐ S. DEV. PLAN FOR BLDG. PERMIT APPROVAL
☐ SECTOR PLAN APPROVAL
☐ FINAL PLAT APPROVAL
☐ FOUNDATION PERMIT APPROVAL
☒ BUILDING PERMIT APPROVAL
☐ CERTIFICATE OF OCCUPANCY (PERM.)
☐ CERTIFICATE OF OCCUPANCY (TEMP.)
☐ GRADING PERMIT APPROVAL
☐ PAVING PERMIT APPROVAL
☐ WORK ORDER APPROVAL
☐ OTHER (SPECIFY)

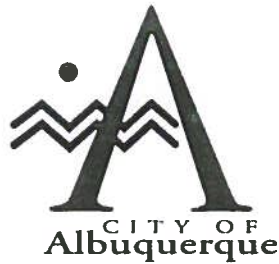
WAS A PRE-DESIGN CONFERENCE ATTENDED:

- ☐ YES
☐ NO
☐ COPY PROVIDED

DATE SUBMITTED: 2/2/12BY: [Signature]

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location and scope of the proposed development defines the degree of drainage detail. One or more of the following levels of submittal may be required based on the following:

1. Conceptual Grading and Drainage Plan: Required for approval of Site Development Plans greater than five (5) acres and Sector Plans.
2. Drainage Plans: Required for building permits, grading permits, paving permits and site plans less than five (5) acres.
3. Drainage Report: Required for subdivisions containing more than ten (10) lots or constituting five (5) acres or more.



Martin J. Chávez, Mayor

June 10, 1997

R.G. Lee
Lee Engineering
2316 Calle De Rafael NE
Albuquerque, New Mexico 87122

RE: DRAINAGE PLAN FOR AN ADDITION TO MCT INDUSTRIES (D17-D47)
ENGINEER'S STAMP DATED 6/5/97

Dear Mr. Lee:

Based on the information provided on your June 9, 1997 submittal, the above referenced site is approved for Building Permit.

Please attach a copy of this approved plan to the construction sets prior to sign-off by Hydrology.

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

Please be advised that any further development within the site will require downstream analysis for discharge.

If I can be of further assistance, please feel free to contact me 924-3986.

C: Andrew Garcia
File

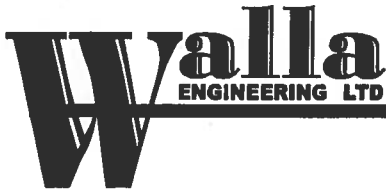
Sincerely

Bernie J. Montoya
Bernie J. Montoya CE
Associate Engineer

Good for You, Albuquerque!

P.O. Box 1293, Albuquerque, New Mexico 87103





Structural Engineering • Civil Engineering

LETTER OF TRANSMITTAL

TO CITY OF ALBUQUERQUE

DATE 11/8/11 JOB NO. _____
ATTENTION HYDROLOGY
RE: MCT - ALBUQUERQUE
PAINT BOOTH REPL. BLDG

WE ARE SENDING YOU ☒ Attached ☐ Under Separate Cover Via. _____ the following items:

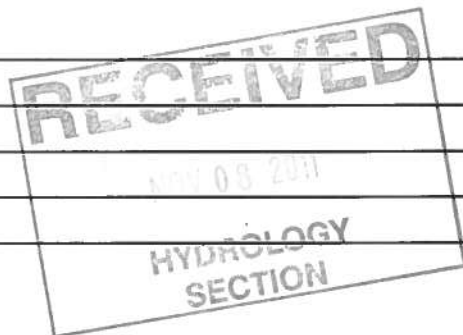
- ☐ Plans ☐ Prints ☐ CD ☐ Specifications ☐ Calculations
☐ Report ☐ Copy of Letter ☐ Shop drawings ☐ Proposal Information
☐ Samples ☐ _____

COPIES	DATE	NO.	DESCRIPTION
1 EA			INFORMATION SHEET
2 EA			C-101 & C-201
1 EA			PLAN REVIEW FEE

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☐ As Requested ☐ Correct and Resubmit ☐ Resubmittal Not Required, Revise Per Corrections Noted, If Any

REMARKS _____



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Albuquerque • New Mexico • 87110
(505) 881-3008 • Facsimile (505) 881-4025
Mike J. Walla P.E. • Larry E. Kennedy