CITY OF ALBUQUERQUE

Richard J. Berry, Mayor

March 15, 2017

Dennis Lorenz, P.E.
Lorenz Design & Consulting
2501 Rio Grande NW, Suite A
Albuquerque, NM 87104

RE: Holiday Bowl- 7515 Lomas
Grading and Drainage Plan- Revised
Engineer's Stamp Date: 2/10/17
Hydrology File: J19D082A

Dear Mr. Lorenz:

Based upon the information provided in your submittal received on 2/14/17, the Grading and Drainage Plan is re-approved for Building Permit and SO-19 Permit.

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

New Mexico 87103

www.cabq.gov

Orig: Drainage File

City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 09/2015)

Project Title: HOLIDAY BOWL Building Permit #: _____ City Drainage #: J19-D082A

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

Legal Description: TRACT G, LA MESA DEL NORTE ADDITION

City Address: 7515 LOMAS NE

Engineering Firm: LORENZ DESIGN & CONSULTING LLC Contact: DENNIS LORENZ

Address: 2501 RIO GRANDE BLVD NW, SUITE A, ALBUQUERQUE, NM 87104

Phone#: 505-888-6088 Fax#: 505-242-6655 E-mail: DENNISL@LORENZNM.COM

Owner: GARY SKIDMORE Contact: G. SKIDMORE

Address: 7515 LOMAS NE, ALBUQUERQUE, NM 87110

Phone#: 505-268-3308 Fax#: _____ E-mail: _____

Architect: DAVID VESICA Contact: DAVID VESICA

Address: 1012 MARQUEZ PLACE, SANTA FE, NM 87505

Phone#: 512-294-1665 Fax#: _____ E-mail: VESICA@SONIC.NET

Other Contact: _____ Contact: _____

Address: _____

Phone#: _____ Fax#: _____ E-mail: _____

Check all that Apply:

DEPARTMENT:

XX HYDROLOGY/ DRAINAGE

_____ TRAFFIC/ TRANSPORTATION

_____ MS4/ EROSION & SEDIMENT CONTROL

TYPE OF SUBMITTAL:

_____ ENGINEER/ ARCHITECT CERTIFICATION

_____ CONCEPTUAL G & D PLAN

XX GRADING PLAN

_____ DRAINAGE MASTER PLAN

XX DRAINAGE REPORT

_____ CLOMR/LOMR

_____ TRAFFIC CIRCULATION LAYOUT (TCL)

_____ TRAFFIC IMPACT STUDY (TIS)

_____ EROSION & SEDIMENT CONTROL PLAN (ESC)

_____ OTHER (SPECIFY) _____

CHECK TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

XX 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

_____ PRE-DESIGN MEETING

_____ OTHER (SPECIFY) _____

IS THIS A RESUBMITTAL?: XX Yes _____ No

DATE SUBMITTED: 02-14-2017 By: DENNIS LORENZ

COA STAFF: ELECTRONIC SUBMITTAL RECEIVED: ___

LORENZ
DESIGN & CONSULTING, LLC
Civil Engineering | Construction Management

February 14, 2017

Shahab Biazar, PE
City Engineer
Development and Building Services
City of Albuquerque
Plaza Del Sol
Albuquerque, New Mexico 87102

SUBJECT: ***HOLIDAY BOWL - J19-D082A***
Revised Grading & Drainage Plan

Dear Shahab:

Submitted herewith are 2 copies of the revised Grading and Drainage Plan for the subject project. The Plan was approved for building permit on January 18, 2016. The proposed building addition was re-designed to reduce scope and cost. Minor site plan revisions were necessary to support the revised building. The submitted plan reflects those revisions. The revisions are very minor and do not impact the overall drainage concept, downstream property or drainage improvements.

If you have any questions regarding this request, please call me.

Sincerely,

LORENZ DESIGN & CONSULTING, LLC

Dennis A. Lorenz, PE

P\1-011\SB02142017

CITY OF ALBUQUERQUE

Richard J. Berry, Mayor

January 18, 2016

Dennis A. Lorenz, P.E.
Lorenz Design & Consulting, LLC
2501 Rio Grande Blvd NW, Suite A
Albuquerque, NM, 87104

RE: Holiday Bowl
Grading and Drainage Plan
Engineer's Stamp Date 12-15-2015 (File: J19D082A)

Dear Mr. Lorenz:

Based upon the information provided in your submittal received 12-16-2015, the above referenced Grading and Drainage Plan is approved for Building Permit and SO-19 Permit.

Please attach a copy of this approved plan in the construction sets when submitting for the building permit. Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist will be required.

A copy of this approval letter must be on hand when applying for the excavation/barricading permit. The work in the City ROW must be inspected and accepted. The Contractor must contact Jason Rodriguez at 235-8016 and Construction Coordination at 924-3416 to schedule an inspection.

If you have any questions, you can contact me at 924-3986.

Sincerely,

Abiel Carrillo, P.E.
Principal Engineer, Planning Dept.
Development Review Services

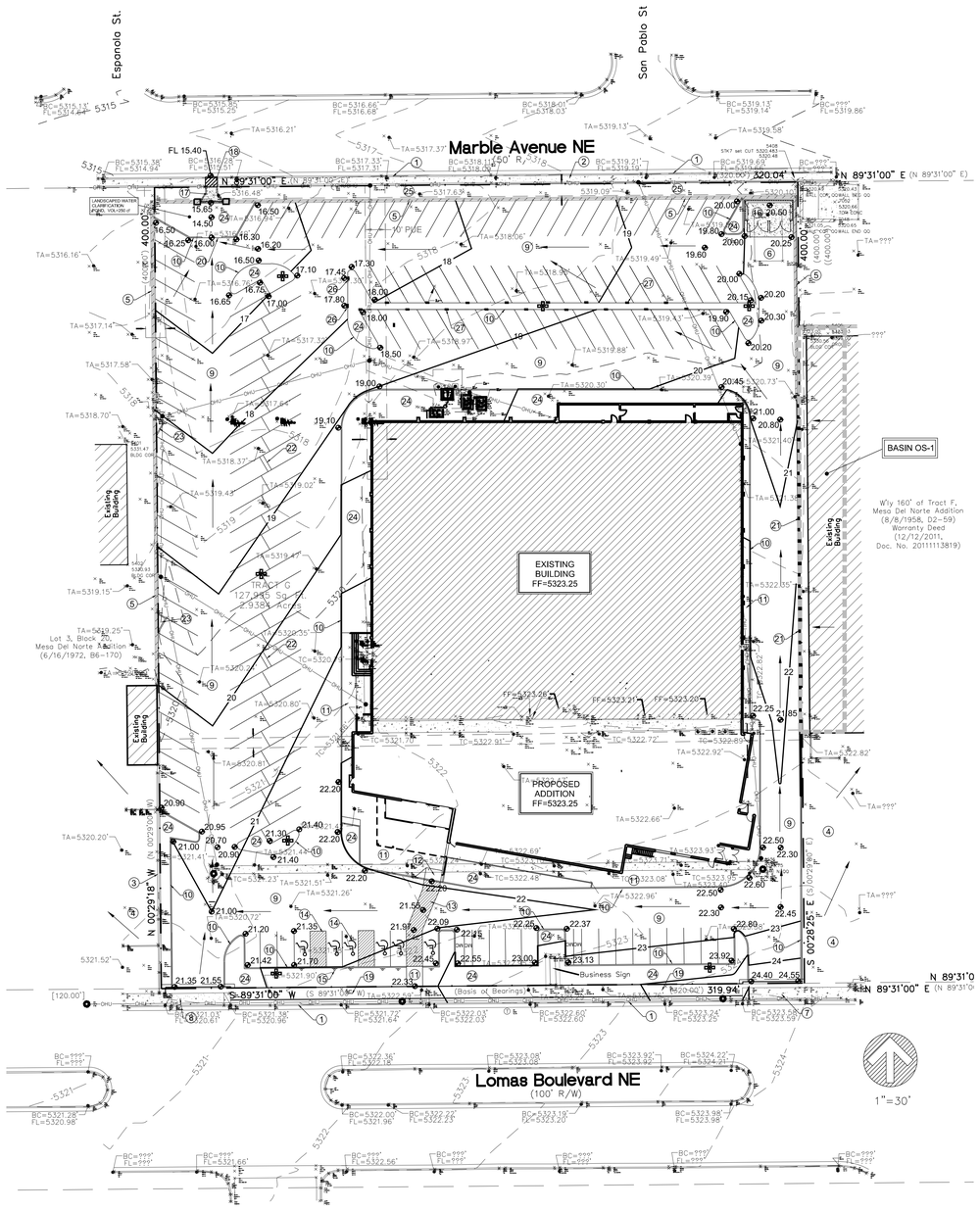
Orig: Drainage file

PO Box 1293

Albuquerque

New Mexico 87103

www.cabq.gov



DRAINAGE FACILITIES WITHIN CITY RIGHT-OF WAY
NOTICE TO CONTRACTOR

1. AN EXCAVATION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY.
2. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE "CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION", 1986 EDITION, AS AMENDED THROUGH UPDATE NO. 7.
3. THREE WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT LINE LOCATING SERVICE. 765-1234 FOR THE LOCATION OF EXISTING UTILITIES.
4. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE LOCATIONS OF ALL CONSTRUCTIONS. 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 SHALL BE PERFORMED ON A 24-HOUR BASIS.

APPROVALS :

INSPECTOR DATE

SEE SITE DEMOLITION PLAN FOR REMOVAL AND DISPOSAL LIMITS

IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE DRAINAGE ORDINANCE, EFFECTIVE MAY 12, 2014, ALL NEW DEVELOPMENT PROJECT S ARE REQUIRED TO MANAGE THE RUNOFF WHICH OCCURS DURING THE 90TH PERCENTILE STORM EVENT. IN ORDER TO COMPLY WITH THIS CRITERIA, WHERE PRACTICAL, ALL SURFACE DRAINAGE SHALL BE ROUTED THROUGH LANDSCAPED AREAS BEFORE RELEASE INTO DOWNSTREAM DRAINAGE FACILITIES. THIS PLAN RECOMMENDS ALL LANDSCAPED AREAS BE DEPRESSED A MINIMUM OF 3-INCHES BELOW THE ADJACENT PAVED SURFACE TO RETAIN THE FIRST FLUSH RUNOFF.

GRADING AND DRAINAGE PLAN

PURPOSE AND SCOPE

Pursuant to the Drainage Ordinance for the City of Albuquerque and the Development Process Manual, this Grading and Drainage Plan outlines the drainage management criteria for controlling developed runoff from the project site. The project consists of the renovation of the Holiday Bowling Center, located at 7515 Lomas Blvd NE. The renovation includes a 14,165 square foot building addition with paving, landscaping, utility, grading, and drainage improvements to support the project. The purpose of this Plan is to support building permit approval. The scope of this plan is to present grading and drainage criteria for the safe management of excess runoff impacting the site from upstream drainage basins, and controlling excess runoff from the project site in a well-managed, non-erosive manner.

EXISTING CONDITIONS

The property is located at 7515 Lomas Blvd NE, between Pennsylania Street and Wyoming Blvd NE. The site is presently fully developed. The Holiday Bowling Center was developed in the 1950's. The existing 28,435 square foot building was developed in accordance with the criteria in force at the time. The site is fully surfaced with asphalt pavment. No Landscaing improvements are present.

Site topography slopes to the northwest. All excess runoff flows north by paved swales within the parking lot to the northwest corner of the site, where flows drain through an existing block wall to Marble Avenue NE. The existing drainage outlet has become clogged. There is no evidence that the site drains freely to Marble Avenue. It appears that excess runoff ponds at the northwest corner of the site. The east and west property boundaries are sealed by solid perimeter walls. A potion of the building located to the east drains into the side yard of the site (Basin OS-1). The remainder of the property to the east drains away from the site. No other off-site flows impact the site.

As shown by the FIRM Panel (Sheet C-3), the site does not lie within a mapped 100 year Flood Zone.

PROPOSED IMPROVEMENTS

As stated above, the project consists of the construction of a 14,165 square foot building addition with paving, landscaping, utility, grading, and drainage improvements. Where practical all developed runoff will be routed through landscaping to capture the first flush before release into the perimeter streets. All excess runoff will be managed by respecting historical drainage conditions. All excess runoff will drain the the northwest corner of the site . A new drainage structure will be provided to safely drain developed flows through a sidewalk culvert to Marble Avenue. SO-19 permitting will apply. First Flush volume is provided as required by Ordinance.

By agreement with the adjoining property owner a new block wall will be constructed along the east property line to manage flows from Basin OS-1. These flows will drain north within Tract F and discharge to Marble Avenue NE.

Construction will disturb an area of more than 1.0 acres; therefore a Storm Water Pollution Prevention Plan will be required.

CALCULATIONS

The calculations shown hereon define the 100-year/6 hour design storm falling within the project area under existing and proposed conditions. The hydrology is per "Section 22.2, Part A, Development Process Manual, Vol 2", dated June 1997.

PROJECT HYDROLOGY
Holiday Bowling Center

ZONE	3
P_{6HOUR}	2.60
$P_{10\ DAY}$	4.90

AHYMO

EXISTING CONDITIONS

BASIN	AREA (ac)	A (ac)	B (ac)	C (ac)	D (ac)	E	Q (cfs)	VOL (ac ft)
SITE	2.94	0.00	0.04	0.00	2.94	2.34	**14.86**	**0.573**
OS-1	0.10	0.00	0.00	0.00	0.10	2.36	**0.50**	**0.020**

PROPOSED CONDITIONS

BASIN	AREA (ac)	A (ac)	B (ac)	C (ac)	D (ac)	E	Q (cfs)	VOL (ac ft)
SITE	2.94	0.00	0.10	0.18	2.66	2.25	**14.23**	**0.550**
OS-1	0.10	0.00	0.00	0.00	0.10	2.36	**0.50**	**0.020**

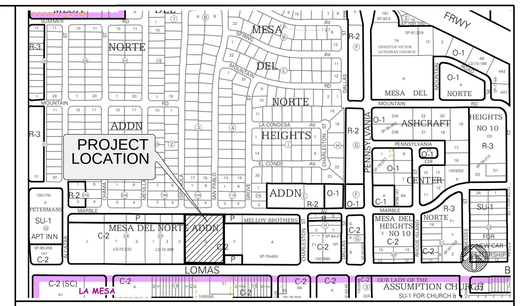
FIRST FLUSH CALCULATION

90TH Percentile depth = 0.44"
Less initial abstractions = -0.10"
Required retained depth = 0.34"

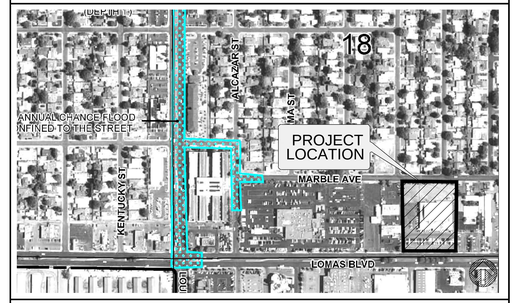
Pond requirement = Ad(0.34") = 2.66ac(43,560/12)(0.34") = 3,283 cf
Volume provided = Landscaped area x 0.25" = 12,220 sf(0.25") = 3,050 cf
Plus additional volume provide at water clarification pond = 250 cf
Total First Flush Volume Provided = 3,300 cf

DRAINAGE PLAN NOTES

1. **LDC recommends that the Owner obtain a Geotechnical Evaluation of the on-site soils prior to foundation/structural design.**
2. **This Plan recommends positive drainage away from all structures to prohibit ponding of runoff which may cause structural settlement. Future alteration of grades adjacent to the proposed structures is not recommended.**
3. **Irrigation within 10 feet of any proposed structure is not recommended. Introduction of irrigation water into subsurface soils adjacent to the structure could cause settlement.**
4. **This Plan is prepared to establish on-site drainage and grading criteria only. LDC assumes no responsibility for subsurface analysis, foundation/structural design, or utility design.**
5. **Local codes may require all footings to be placed in natural undisturbed soil. If the Contractor plans to place footings on engineered fill, a certification by a registered Professional Engineer will be required. If the contractor wishes LDC to prepare the Certification, we must be notified PRIOR to placement of the fill.**
6. **LDC recommends that the Owner obtain the services of a Geotechnical Engineer to test and inspect all earthwork aspects of the project.**
7. **The property boundary shown on this Plan is given for information only to describe the project limits. Property boundary information shown hereon does not constitute a boundary survey. A boundary survey performed by a licensed New Mexico Registered Professional Surveyor is recommended prior to construction.**
8. **All spot elevations are finished grade or top of pavement, unless noted otherwise.**
9. **The City of Albuquerque has received its EPA MS4 Permit for stormwater quality with an effective date of March 1, 2012.**



LOCATION MAP ZONE ATLAS J-22-Z NTS



FIRM PANEL 35001C0357H NTS

LEGEND

ITEM	EXISTING	PROPOSED
CURB AND GUTTER		
6" CONCRETE CURB		
CURB ELEVATIONS	TOP CONC. ELEV. FLOWLINE ELEV.	TOP CONC. ELEV. FLOWLINE ELEV.
SPOT ELEV.		16.7
RIGHT OF WAY		
EASEMENT		
CENTERLINE		
RETAINING WALL	R/R	
TOP OF ASPHALT ELEV.	TA 16.2	TA 16.2
FLOWLINE ELEV	EX FL 16.2	FL 16.2
DRAINAGE SWALE		
STORM INLET		
STORM DRAIN PIPE		SD
DOWNSPOUT		
DRAINAGE BASIN DIVIDE		
DRAINAGE BASIN ID		A-1

KEYED NOTES

1. EXISTING CONCRETE STANDARD CURB AND GUTTER.
2. EXISTING PUBLIC SIDEWALK TO REMAIN.
3. EXISTING CONCRETE CURB.
4. EXISTING ASPHALT PAVEMENT.
5. EXISTING BLOCK WALL TO REMAIN.
6. EXISTING SHED TO BE RELOCATED. COORDINATE WITH OWNER.
7. EXISTING DRIVEPAD TO REMAIN. CONSTRUCT ACCESSIBLE SIDEWALK. SEE SHEET DETAIL H/C-3.
8. EXISTING DRIVEPAD TO REMAIN. CONSTRUCT ACCESSIBLE SIDEWALK. SEE SHEET DETAIL J/C-3.
9. REMOVE AND DISPOSE EXISTING ASPHALT. REPLACE WITH ASPHALT PAVEMENT PER SECTION A/C-3.
10. CONSTRUCT 6-INCH CONCRETE CURB. SEE DETAIL C/C-3.
11. CONSTRUCT CONCRETE SIDEWALK.
12. CONSTRUCT ACCESSIBLE RAMP AT 12:1 SLOPE MAX. SHEET DETAIL E/C-3.
13. PROVIDE STRIPED PEDESTRIAN CROSSING PER CODE.
14. PROVIDE HANDICAP PARKING PAVEMENT MARKINGS PER CODE - TYP.
15. INSTALL HANDICAP SIGN ASSEMBLY PER CODE - TYP. SEE DETAIL G/C-3.
16. CONSTRUCT NEW REFUSE ENCLOSURE. SEE DETAIL E/C-4.
17. CONSTRUCT 10' WIDE CONCRETE CHANNEL. SEE DETAIL A/C-4.
18. CONSTRUCT 2-24" SIDEWALK CULVERTS PER CITY STANDARD DETAIL 2236.
19. CONSTRUCT 6' PUBLIC SIDEWALK PER CITY STANDARD DETAIL.2430.
20. PROVIDE 10' CURB BLOCKOUT FOR DRAINAGE.
21. CONSTRUCT 6' CMU WALL TO LIMITS SHOWN.
22. CONSTRUCT PLANTER - TYPE 1. SEE DETAIL D/C-4.
23. CONSTRUCT PLANTER - TYPE 2. SEE DETAIL E/C-4.
24. NEW LANDSCAPING. SEE LANDSCAPE PLAN.
25. EXISTING LANDSCAPING TO REMAIN.
26. CONSTRUCT 12" CURB BLOCKOUT FOR DRAINAGE.
27. CONSTRUCT 6" CURB BLOCKOUT FOR DRAINAGE AT 10' ON CENTER ALONG MEDIAN LENGTH.

PROJECT INFORMATION:

PROPERTY ADDRESS:
7515 LOMAS BLVD NE , ALBUQUERQUE, NEW MEXICO

LEGAL DESCRIPTION:
TRACT G, LA MESA DEL NORTE ADDITION

PROJECT SURVEY
BOUNDARY AND TOPOGRAPHIC SURVEY BY CARTESIAN SURVEYS, INC., MAY 1, 2015

PROJECT BENCHMARK
ACS MONUMENT "26-K19"
ELEVATION = 5329.456 FEET MSLD (NAVD 1988)

HOLIDAY BOWL BUILDING ADDITION

7515 LOMAS BOULEVARD N.E.,ALBUQUERQUE, N.M., 87110

David Vesica, Architect
1012 Marquez Place, #310B
Santa Fe, New Mexico, 87505
david@davidvesica.com
tel. 512.294.1665

Structural Engineer
RME ABQ Structural Engineers
Dave Sullens
2715 Broadbent Parkway, Suite D
Albuquerque, NM 87107
Tel. 505-889-3004

Electrical Engineer
Stone Electrical Design
2325 San Pedro Dr. NE, Suite 2F
Albuquerque, NM 87110
Tel. 505-8886266

Civil Engineer
Dennis Lorenz
2501 Rio Grande Blvd. N.W., Suite A
Albuquerque, NM 87104
Tel. 505-888-6088

Mechanical Engineer
Walker Consulting Engineers
Terry Walker P.E.
1172 Laurel Loop NE
Albuquerque, NM 87112
Tel. 505-856-1783

General Contractor
Snyder Construction
6501 Palomas Avenue NE
Albuquerque, NM 87109
505-923-3181

Owner
Eve and Gary Skidmore
7515 Lomas Blvd. NE
Albuquerque, N.M. 87110

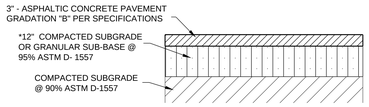
Stamp: JOHN A. LORENZ, NEW MEXICO, 9647, REGISTERED PROFESSIONAL ENGINEER

#	Issue	Date

HOLIDAY BOWL ADDITION

GRADING & DRAINAGE PLAN
SCALE: 1" = 30'-0"

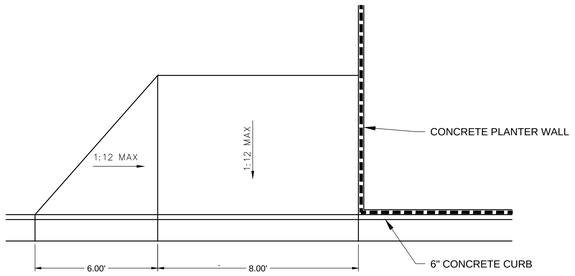
C-1



ASPHALT PAVEMENT SECTION — A / C-3

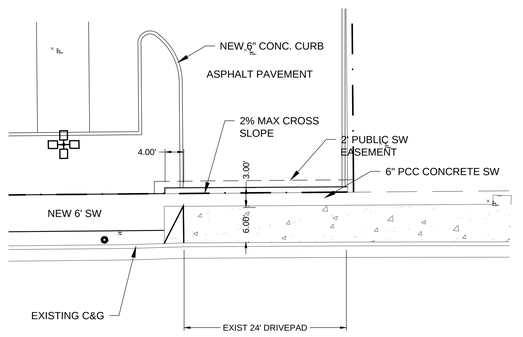
AUTO/PICKUP TRUCK

NTS



HANDICAP RAMP DETAIL - TYPE I — E / C-3

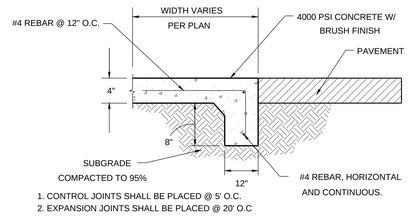
NTS



LOMAS BLVD NE

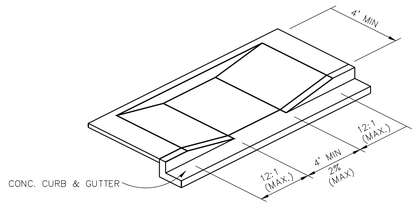
EAST DRIVEPAD ADA PLAN — H / C-3

NTS



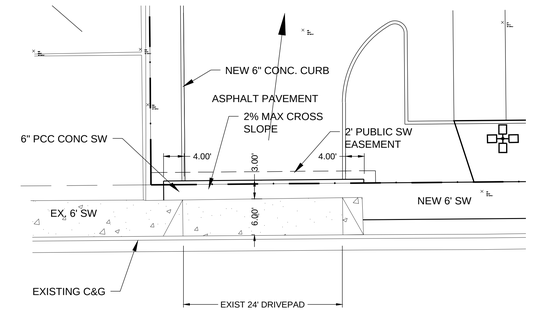
TURN DOWN SIDEWALK AT ACCESSIBLE ZONES — B / C-3

NTS



HANDICAP RAMP DETAIL - TYPE II — F / C-3

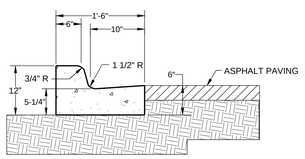
NTS



LOMAS BLVD NE

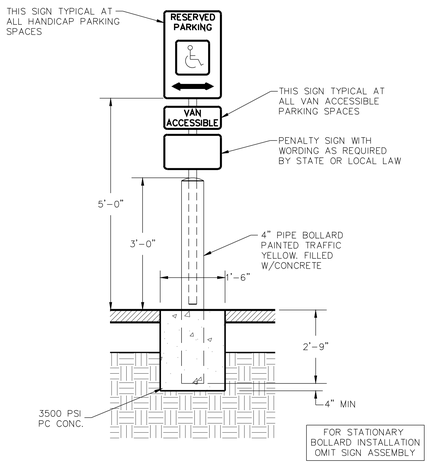
WEST DRIVEPAD ADA PLAN — J / C-3

NTS



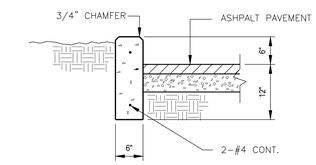
CONCRETE CURB AND GUTTER — C / C-3

NTS



HC SIGN ASSEMBLY / BOLLARD DETAIL — G / C-3

NTS



HEADER CURB DETAIL — D / C-3

NTS

HOLIDAY BOWL BUILDING ADDITION

7515 LOMAS BOULEVARD N.E.,ALBUQUERQUE, N.M., 87110

David Vesica, Architect
1012 Marquez Place, #310B
Santa Fe, New Mexico, 87505
david@davidvesica.com
tel. 512.294.1665

Structural Engineer
RME ABQ Structural Engineers
Dave Sullens
2715 Broadbent Parkway, Suite D
Albuquerque, NM 87107
Tel. 505-889-3004

Electrical Engineer
Stone Electrical Design
2325 San Pedro Dr. NE, Suite 2F
Albuquerque, NM 87110
Tel. 505-8886266

Civil Engineer
Dennis Lorenz
2501 Rio Grande Blvd. N.W.,
Suite A
Albuquerque, NM 87104
Tel. 505-888-6088

Mechanical Engineer
Walker Consulting Engineers
Terry Walker P.E.
1172 Laurel Loop NE
Albuquerque, NM 87112
Tel. 505-856-1783

General Contractor
Snyder Construction
6501 Palomas Avenue NE
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505-923-3181

Owner
Eve and Gary Skidmore
7515 Lomas Blvd. NE
Albuquerque, N.M. 87110

Stamp

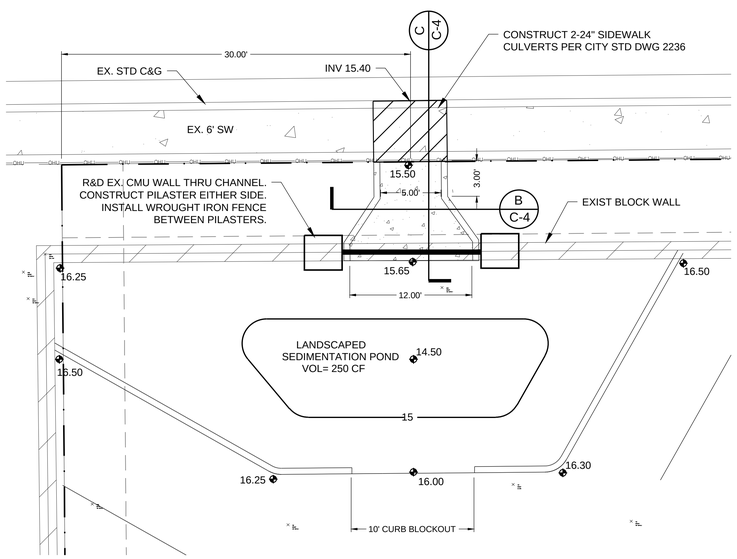
DENNIS A. LORENZ
NEW MEXICO
9647
REGISTERED PROFESSIONAL ENGINEER

#	Issue	Date

HOLIDAY BOWL ADDITION

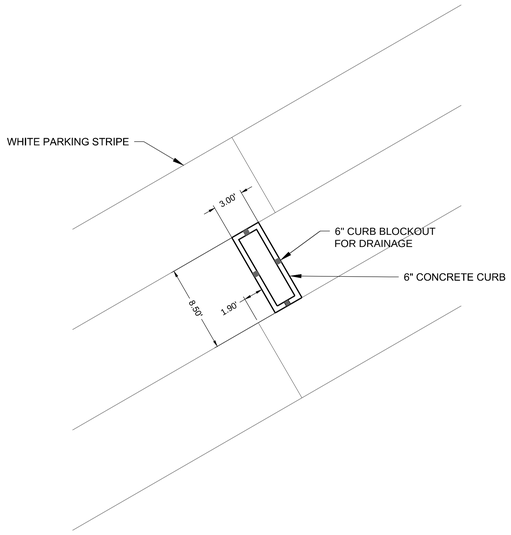
SITE DETAILS

C-3



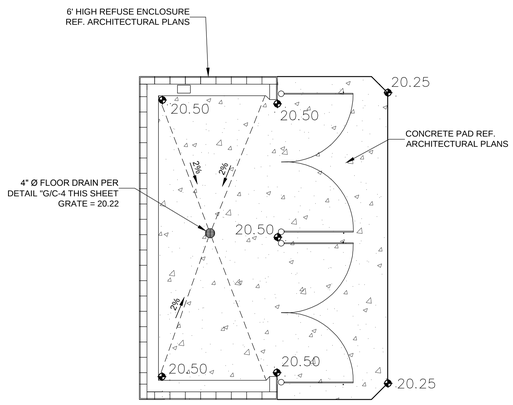
DRAINAGE CHANNEL PLAN — A / C-4

NTS



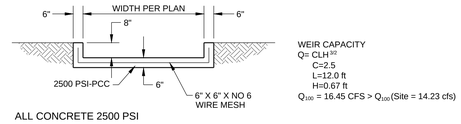
LANDSCAPE PLANTER DETAIL TYPE 1 — D / C-4

NTS



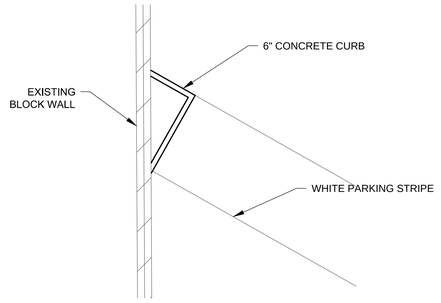
REFUSE ENCLOSURE SLAB PLAN — F / C-4

NTS



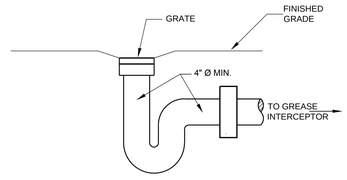
CONCRETE DRAINAGE CHANNEL DETAIL — B / C-4

NTS



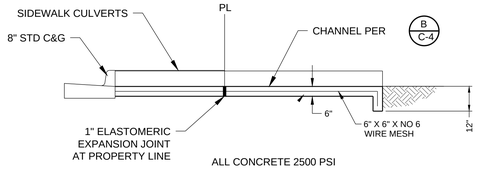
LANDSCAPE PLANTER DETAIL TYPE 2 — E / C-4

NTS



4" SANITARY SEWER DRAIN FOR REFUSE ENCLOSURE — G / C-4

NTS



CONCRETE DRAINAGE CHANNEL SECTION — C / C-4

NTS

HOLIDAY BOWL BUILDING ADDITION

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Stamp

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#	Issue	Date

HOLIDAY BOWL ADDITION

SITE DETAILS

C-4