CITY OF ALBUQUERQUE



April 18, 2018

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

RE: Holiday Bowl- 7515 Lomas NE

Grading and Drainage Plan- Revised Engineer's Stamp Date: 4/16/18 Hydrology File: J19D082A

Dear Mr. Lorenz:

PO Box 1293

Based on the information provided in your submittal received on 4/18/18, the Grading and Drainage Plan is re-approved for Building Permit and SO-19.

Albuquerque

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

NM 87103

Sincerely,

www.cabq.gov

Dana Peterson, P.E.

Senior Engineer, Planning Dept. Development Review Services



COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: ____

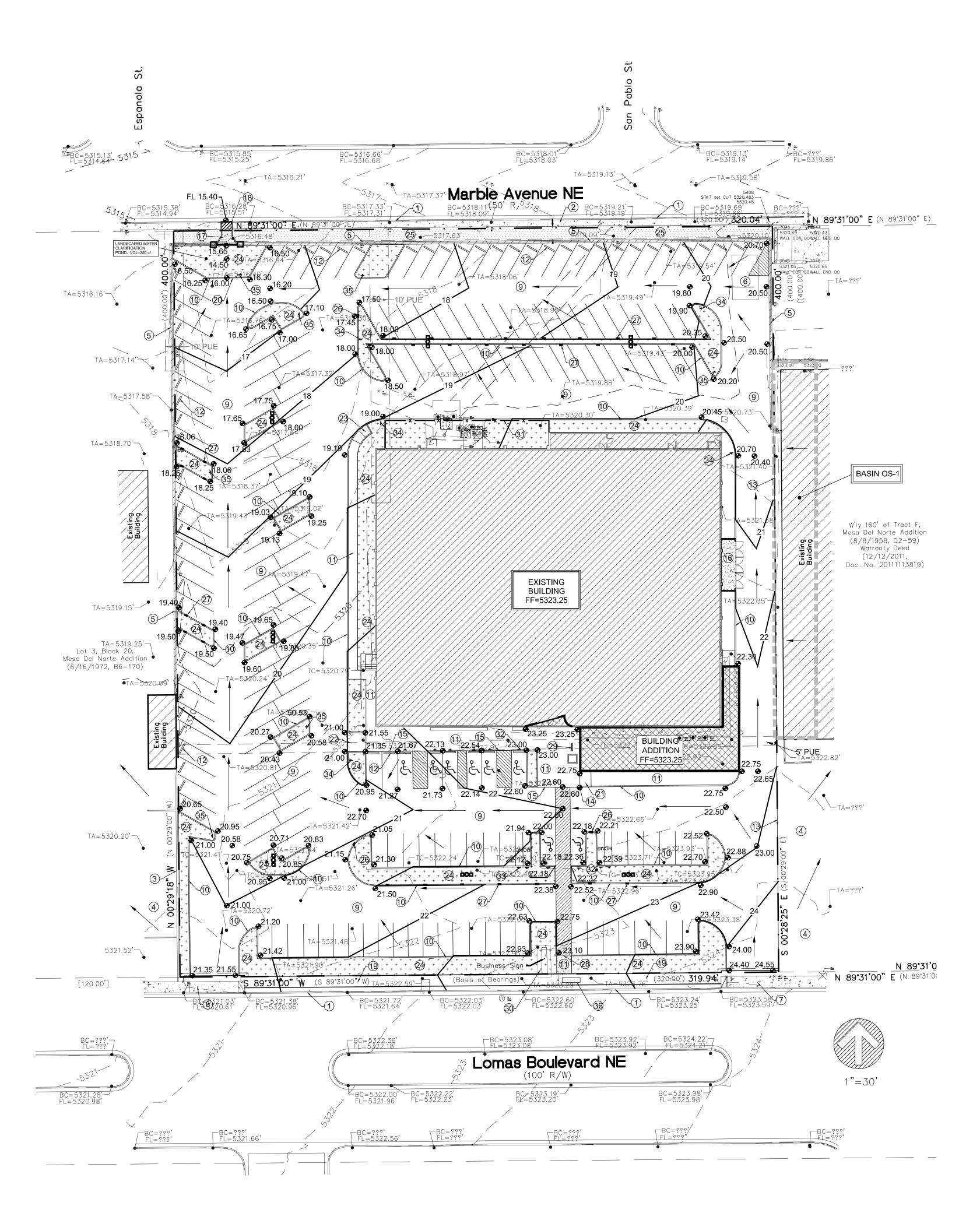
City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 09/2015)

Project Title:	Project Title:		City Drainage #:		
PPP "			Work Order#:		
Legal Description:					
City Address:					
Engineering Firm:		Cont	act:		
Address:					
Phone#:	Fax#:	E-ma	il:		
Owner:		Cont	act:		
Address:					
Phone#:	Fax#:	E-ma	il:		
Architect:		Cont	act:		
Address:					
Phone#:	Fax#:	E-ma	il:		
Other Contact:		Cont	act:		
Address:					
Phone#:	Fax#:	E-ma	il:		
Check all that Apply:					
DEPARTMENT:		CHECK TYPE OF APPR	OVAL/ACCEPTANCE SOUGHT:		
HYDROLOGY/ DRAINAGE TRAFFIC/ TRANSPORTATION		BUILDING PERMIT	BUILDING PERMIT APPROVAL		
MS4/ EROSION & SEDIMENT CONTROL		CERTIFICATE OF OCCUPANCY			
TYPE OF SUBMITTAL:		PRFI IMINARY PI	AT APPROVAL		
ENGINEER/ ARCHITECT CERTIFI	CATION		PRELIMINARY PLAT APPROVAL SITE PLAN FOR SUB'D APPROVAL		
			LDG. PERMIT APPROVAL		
CONCEPTUAL G & D PLAN		FINAL PLAT APPE	FINAL PLAT APPROVAL		
GRADING PLAN			SIA/ RELEASE OF FINANCIAL GUARANTEE		
DRAINAGE MASTER PLAN	DRAINAGE MASTER PLAN		FINANCIAL GUARANTEE		
DRAINAGE REPORT		FOUNDATION PE	RMIT APPROVAL		
DRAINAGE REPORT CLOMR/LOMR		FOUNDATION PEI	RMIT APPROVAL		
		FOUNDATION PEI GRADING PERMIT SO-19 APPROVAL	RMIT APPROVAL APPROVAL		
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Private 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-

(Special Order 19 ("SO-19")

- 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 shall be performed on a 24-hour basis. 8. Contractor must contact Jason Rodriguez at 235-8016 and Construction Coordination at 924-3416 to schedule an inspection.

STREET MAINTENANCE INSPECTOR

APPROVAL

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 FACITLITIES. THIS PLAN RECOMMENDS ALL LANDSCAPED AREAS BE DEPRESSED A MINIMUM OF 3-INCHES BELOW THE ADJACENT PAVED SURFACE TO RETAIN THE FIRST FLUSH RUNOFF.

CONTRACTOR SHALL PREVENT DIRT FROM GETTING INTO THE STREET. IF DIRT IS PRESENT IN THE STREET, THE DIRT IS TO BE REMOVED AT THE END OF EACH DAY OR DURING THE DAY IF RAIN IS IMMINENT OR IF THE CONTRACTOR INTRODUCES WATER INTO THE STREET.

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 2,115 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 28,129 square foot building was developed in accordance with the criteria in force at the time. The site is fully surfaced with asphalt pavement. 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

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

PROPOSED IMPROVEMENTS

As stated above, the project consists of the construction of a 2,115 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.

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.

ZONE:	3	PROJECT HYDROLOGY						
P _{6HOUR}	2.60	HOLIDAY BOWL						
P _{10 DAY}	4.90	AHYMO						
EXISTING CONDITIONS								
BASIN	AREA (ac)	A (ac)	B (ac)	C (ac)	D (ac)	Е	Q (cfs)	VOL (ac ft)
SITE	2.94	0.00	0.04	0.00	2.90	2.34	14.66	0.573
OS-1	0.10	0.00	0.00	0.00	0.10	2.36	0.50	0.020
	•							
		Р	ROPOSE	ED CON	DITIONS			
BASIN	AREA (ac)	A (ac)	B (ac)	C (ac)	D (ac)	Ε	Q (cfs)	VOL (ac ft)
SITE	2.94	0.00	0.13	0.20	2.61	2.22	14.13	0.545
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"

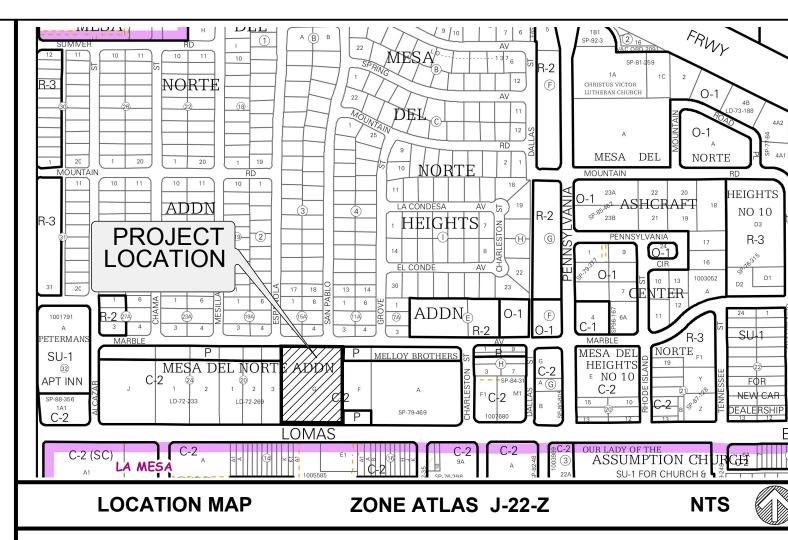
POND REQUIREMENT = Ad(0.34") = 2.61 AC(43,560sf/ac/12)(0.34") = 3,221 CFVOLUME PROVIDED = LANDSCAPED AREA X 0.25" = 14,893 sf X 0.25" = 3,723 cf PLUS ADDITIONAL VOLUME AT WATER CLARIFICATION POND = 250 cf TOTAL FIRST FLUSH VOLUME PROVIDED = 3,973 cf

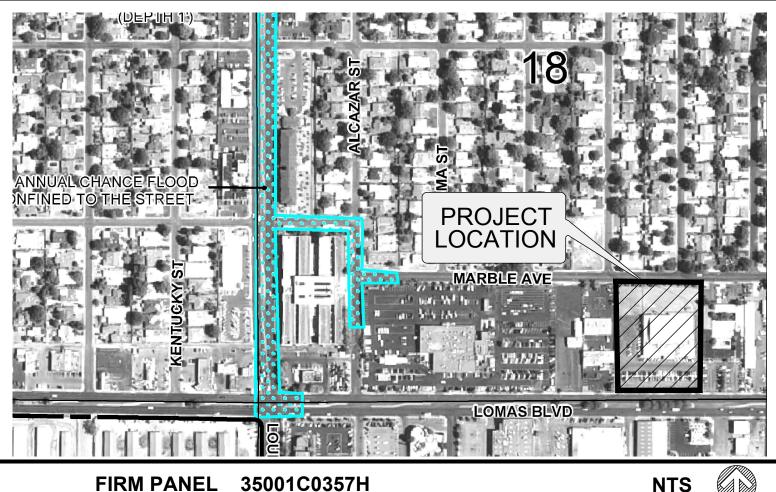
DRAINAGE PLAN NOTES

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
- 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
- 9. The City of Albuquerque has received its EPA MS4 Permit for stormwater quality with an effective date of March 1, 2012.





LEGEND			
ITEM	EXISTING	PROPOSED	
CURB AND GUTTER 6" CONCRETE CURB			
CURB ELEVATIONS SPOT ELEV.	TOP CONC. ELEV. FLOWLINE ELEV	TOP CONC. ELEV. FLOWLINE 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 INLET STORM DRAIN PIPE DOWNSPOUT	иши	SD	
DRAINAGE BASIN DIVIDE			
DRAINAGE BASIN ID		A-1	
LIGHT POLE AND FIXTURE			

() 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.4.
- 8. EXISTING DRIVEPAD TO REMAIN. CONSTRUCT ACCESSIBLE SIDEWALK. SEE SHEET DETAIL J/C.4. REMOVE AND DISPOSE EXISTING ASPHALT. REPLACE WITH ASPHALT PAVEMENT PER SECTION A/C.4.
- 10. CONSTRUCT 6-INCH CONCRETE CURB. SEE DETAIL C/C.4. 11. CONSTRUCT CONCRETE SIDEWALK.
- 12. INSTALL CONCRETE TIRE STOP TYPICAL. 13. EDGE OF NEW PAVEMENT.
- 14. END CONCRETE CURB. 15. CONSTRUCT CONCRETE TURN DOWN SIDEWALK SEE DETAIL B/C.4. NO RAISED CURB AT THIS LOCATION.
- 16. CONSTRUCT NEW REFUSE ENCLOSURE. SEE DETAIL F/C.5.
- 17. CONSTRUCT 10' WIDE CONCRETE CHANNEL. SEE DETAIL C/C.5. 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 ACCESSIBLE RAMP TYPE 'A'. SHEET DETAIL E/C.4. 22. CONSTRUCT ACCESSIBLE RAMP TYPE 'B'. SHEET DETAIL F/C.4.
- 23. CONSTRUCT ACCESSIBLE RAMP TYPE 'C'. SHEET DETAIL G/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 20' ON CENTER ALONG MEDIAN LENGTH.
- 28. CONSTRUCT 8' CURB BLOCKOUT AT SIDEWALK. 29. BICYCLE RACK - 10 SPACES.
- 30. EXISTING SIGN TO REMAIN.
- 31. CONSTRUCT 8' HIGH CHAIN LINK FENCE AT UTILITY YARD WITH GATE PER PNM STANDARDS. 32. CONSTRUCT ADA ACCESSIBLE PARKING SIGN ASSEMBLY. SEE DETAIL K/C.4.
- 33. CONSTRUCT MOTORCYCLE PARKING SIGN. SEE DETAIL A/C.5. 34. CONSTRUCT "DO NOT ENTER" SIGN. SEE DETAIL B/C.5.
- 35. CONSTRUCT "ONE WAY" SIGN. SEE DETAIL B/C.5. 36. EXISTING BUS BENCH AND SIGN TO BE RELOCATED. COORDINATE WITH TRANSIT.

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)

1 04-16-2018 CODE COMMENTS NO DATE DESCRIPTION 04-16-2018 DRAWN BY: DAL CH'D BY: DAL Copyright:

PRINCIPLES OF DESIGN.

219 CENTRAL AVE. NW,

www.smpcarchitects.com

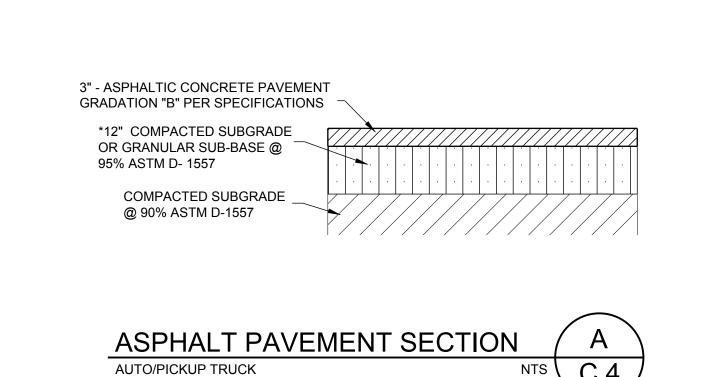
F 505 268 6665

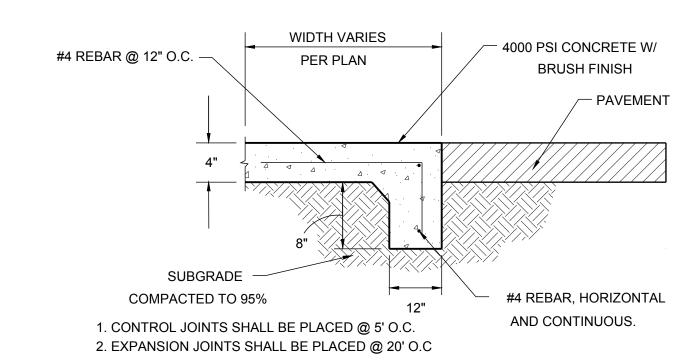
Albuquerque, New Mexico 87102

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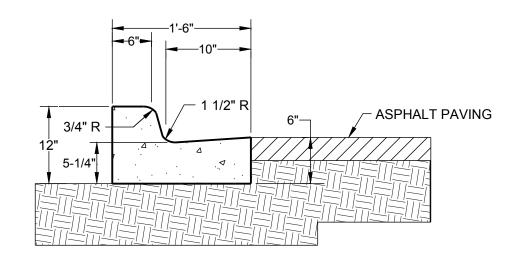
GRADING & DRAINAGE PLAN

C.02

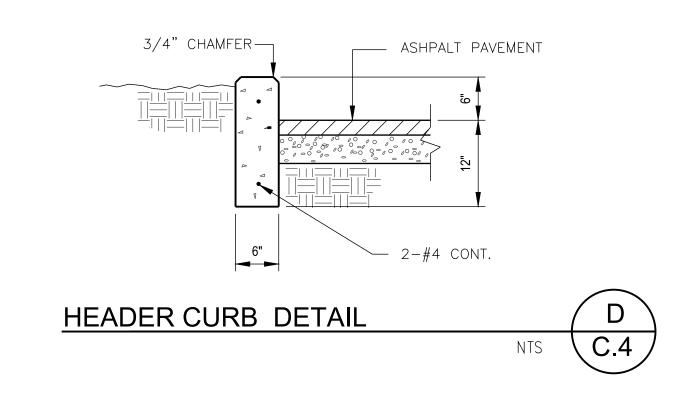


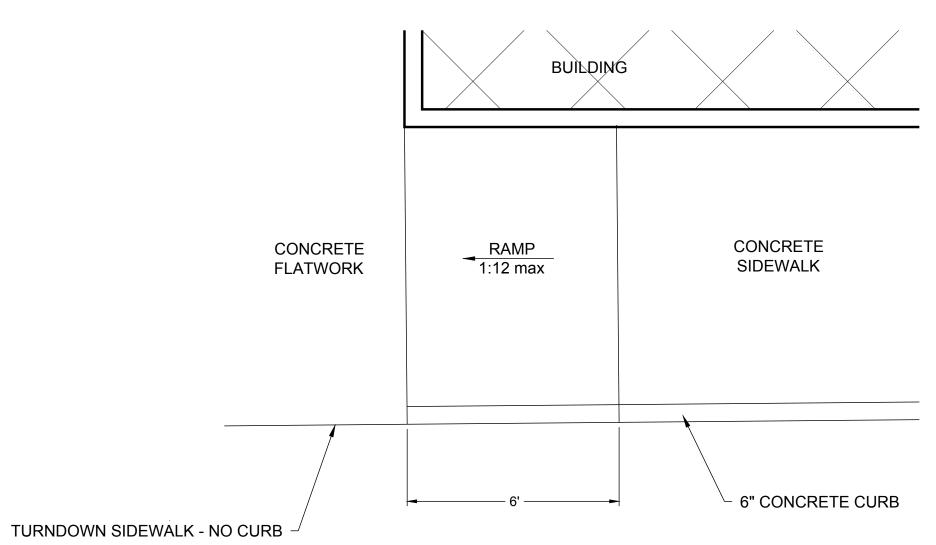




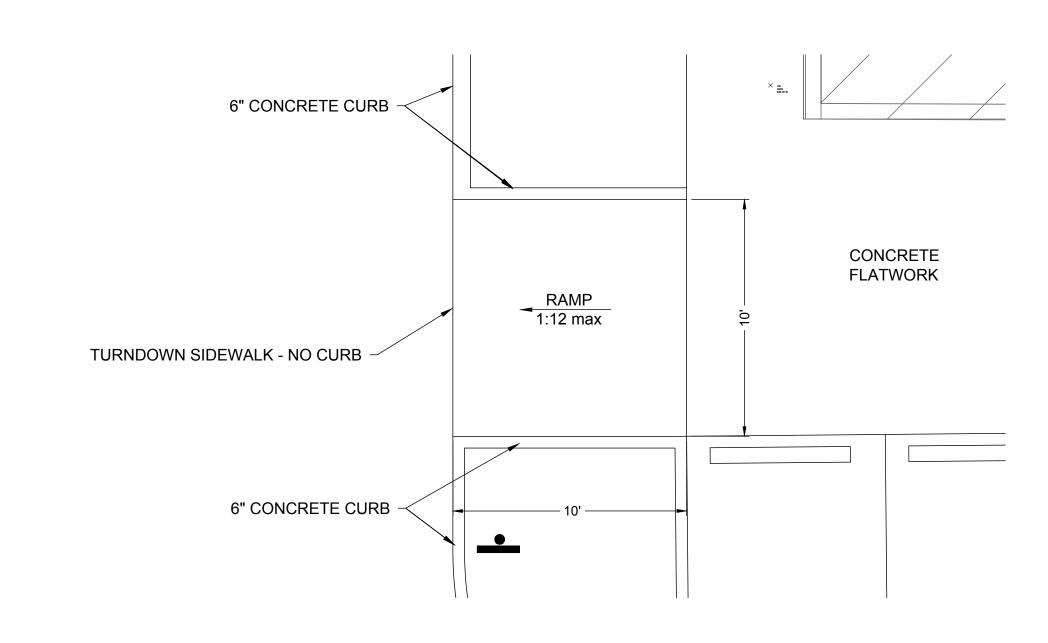




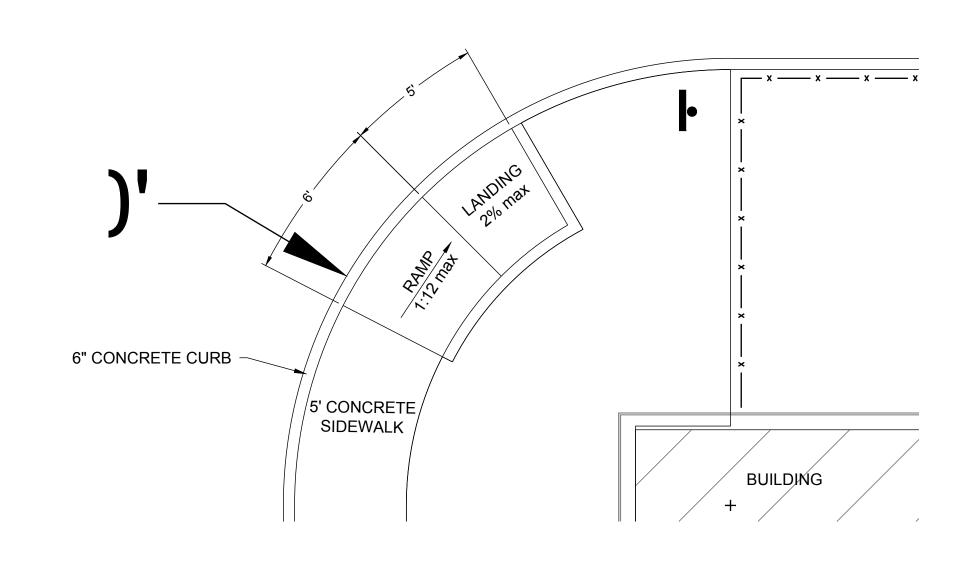






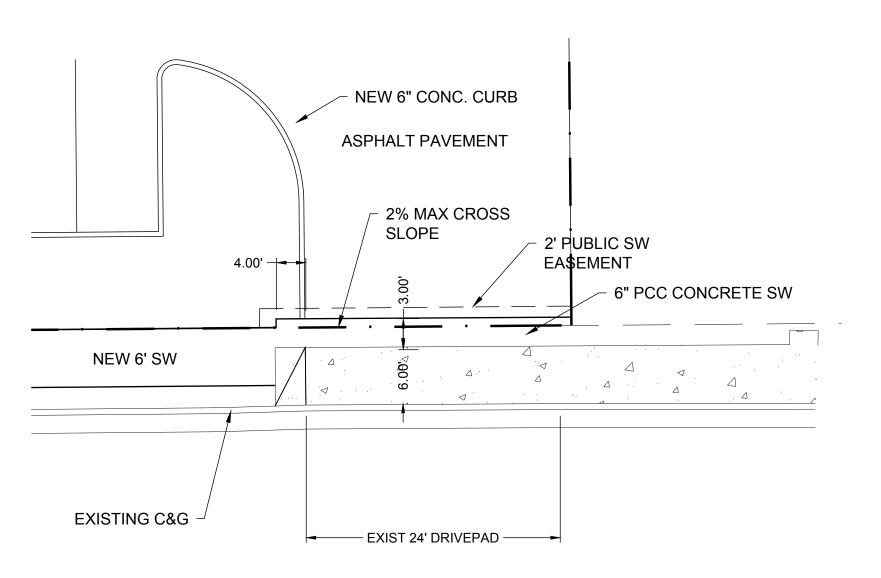




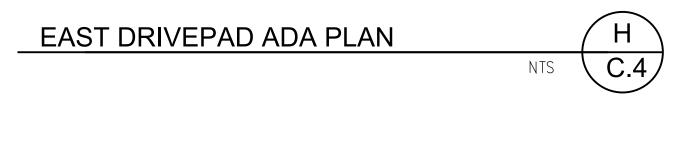


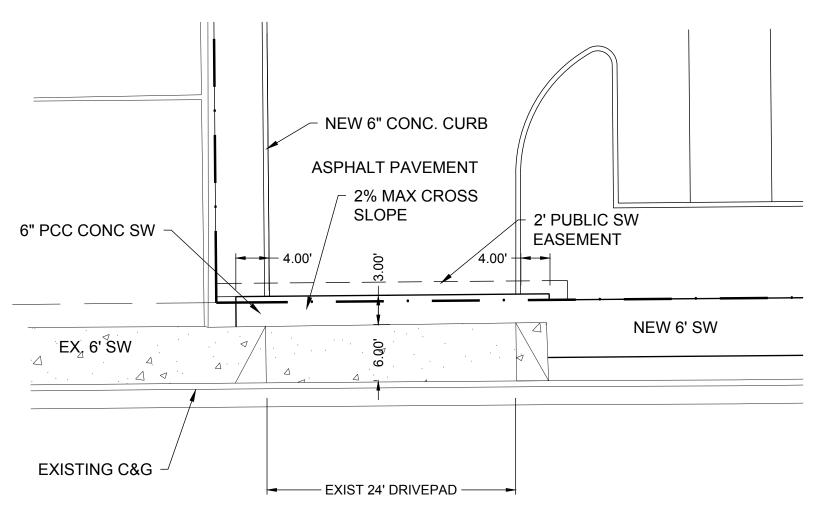
HANDICAP RAMP DETAIL - TYPE III G

NTS C.4



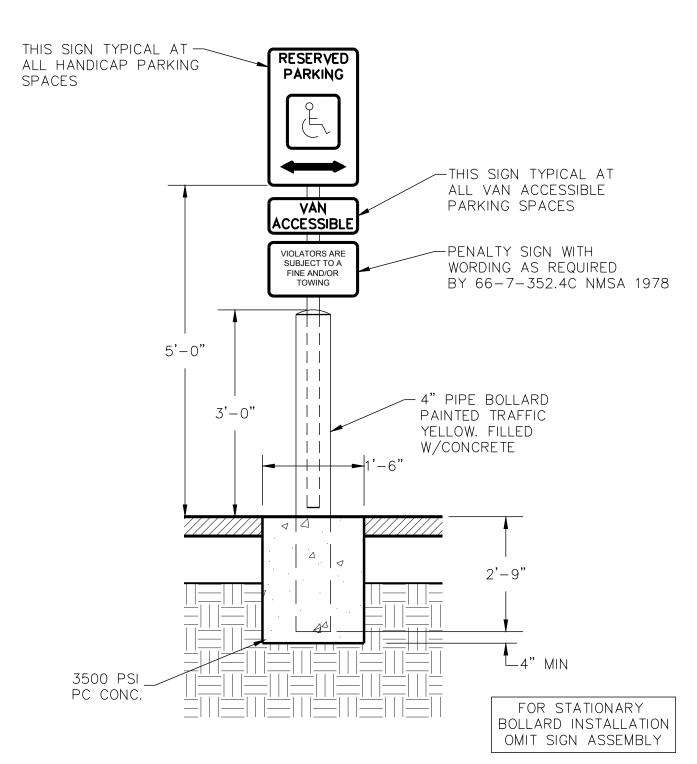
LOMAS BLVD NE







LOMAS BLVD NE



HC SIGN	ASSEMBLY / BOLLARD DETAIL	K
	NTS	C.4





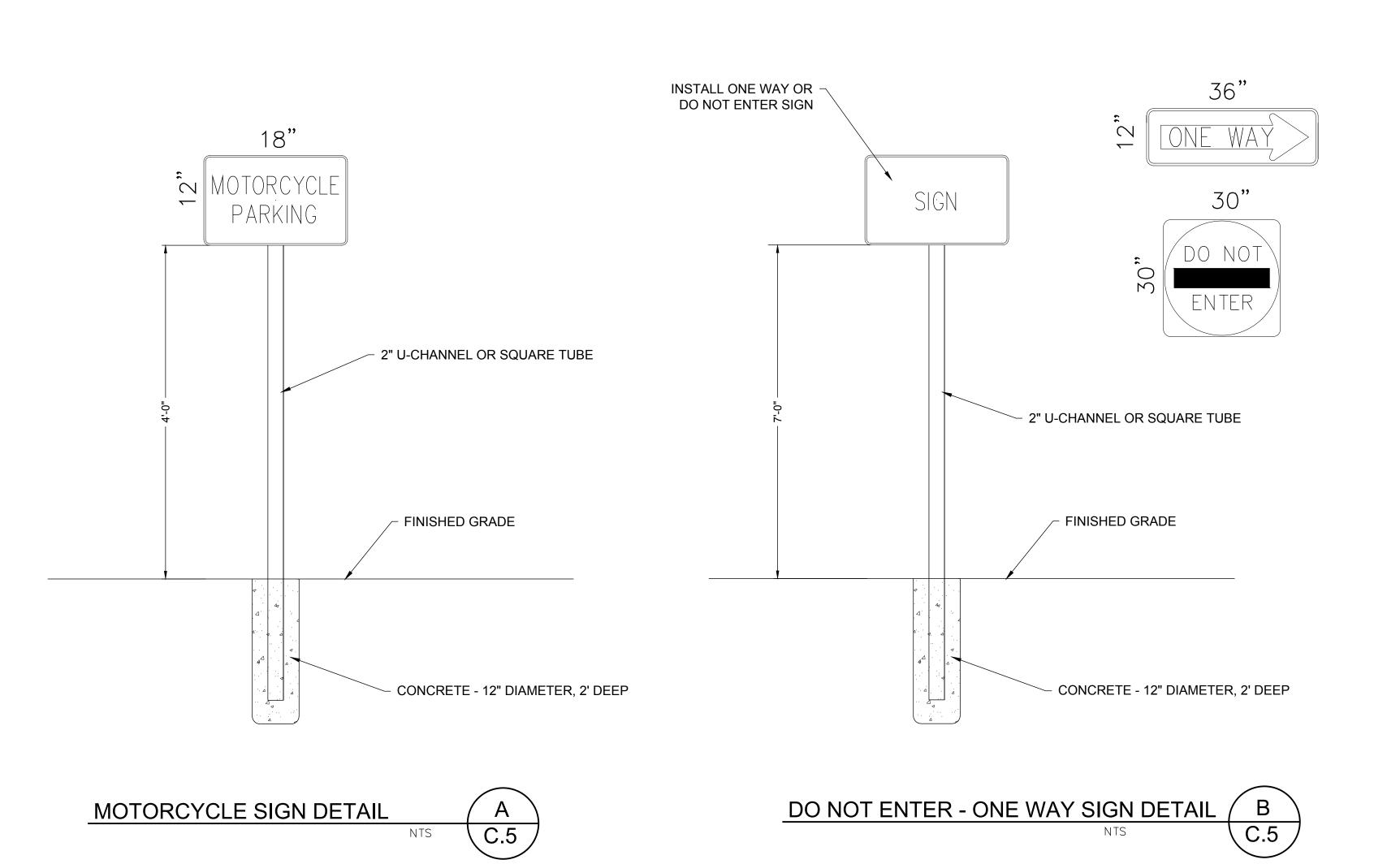


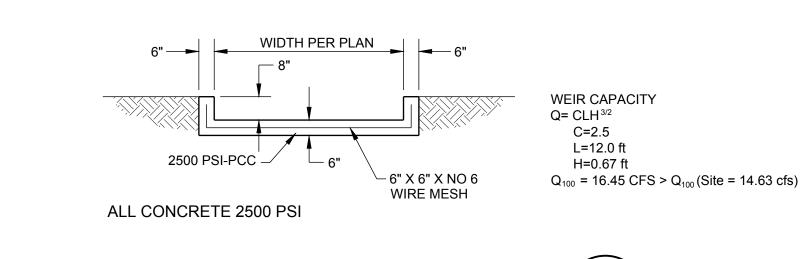
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SITE DETAILS

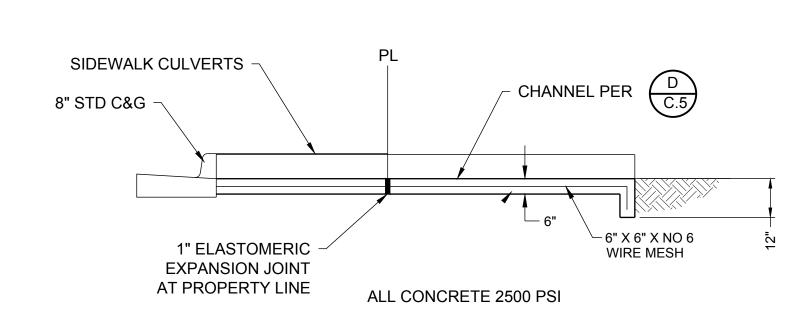
SHEET TITLE

C.04

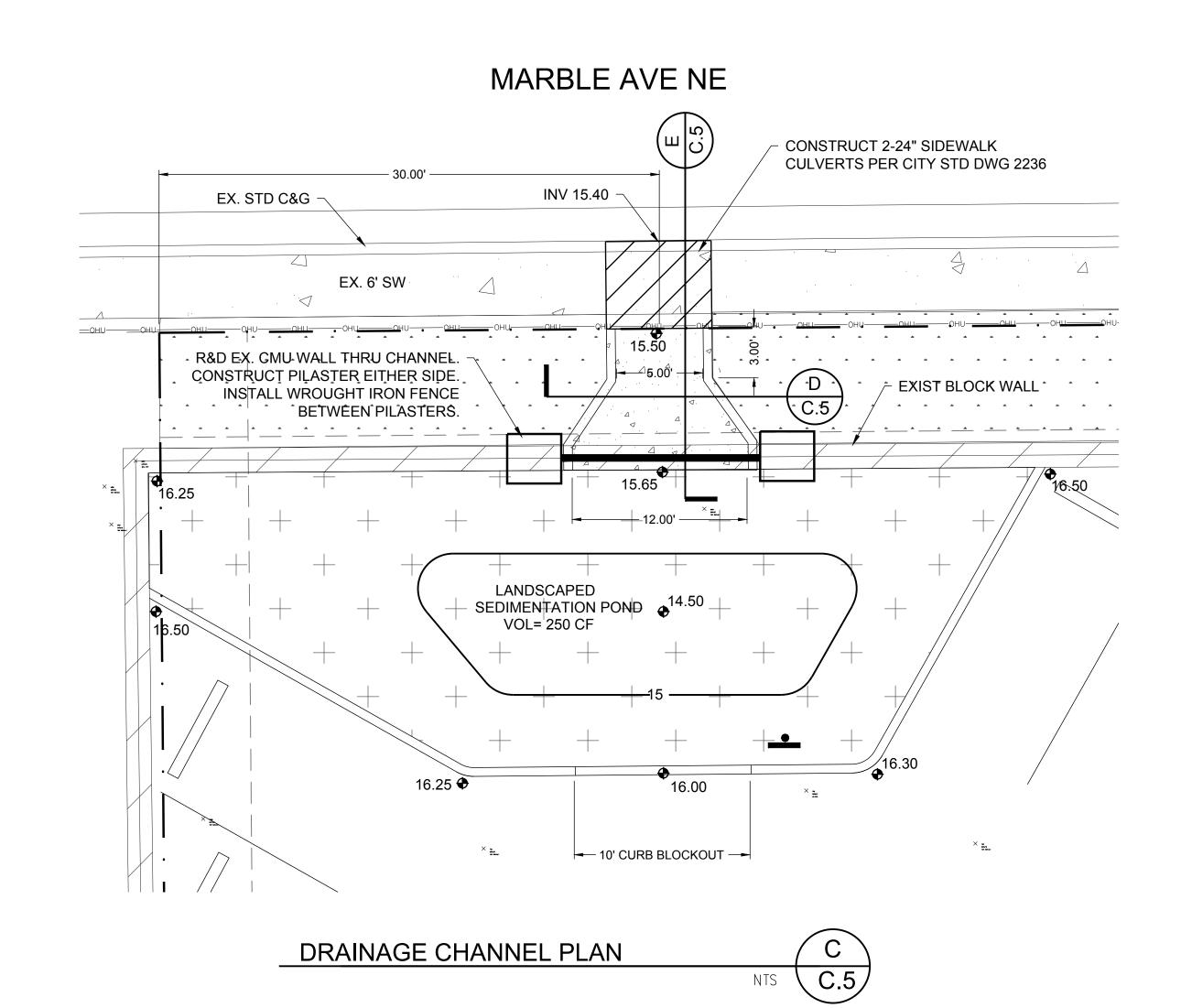


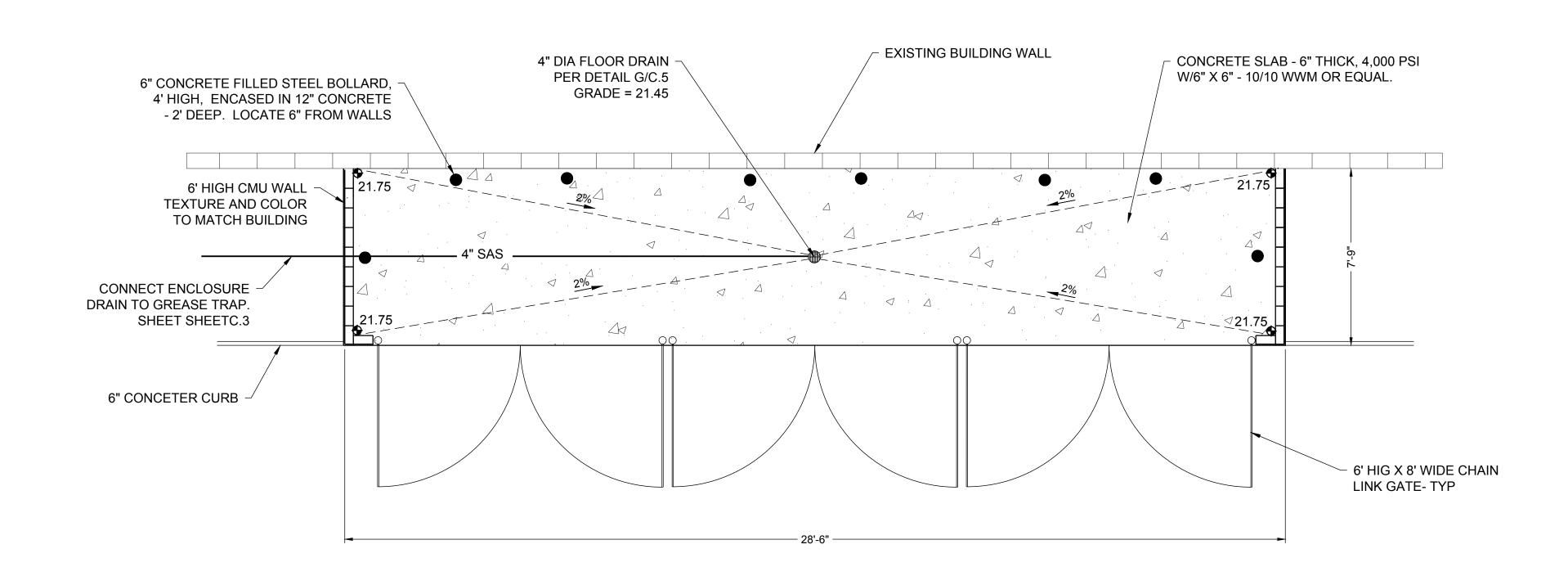


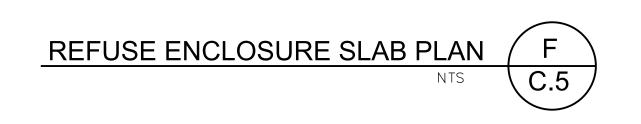


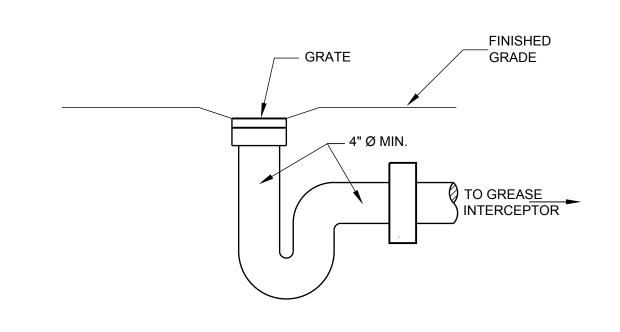












4" SANITARY SEWER DRAIN FOR REFUSE ENCLOSURE		G
	NTS	C.5

	Albuquerque, New Mexico 87102 T 505 255 8668 F 505 268 6665 www.smpcarchitects.com
DESIGNER:	DEVELOPMENT 28035 DOROTHY DRIVE, SUITE 100 AGOURA HILLS, CA 91301 AGOURA HILLS, CA 91301 AGOURA HILLS, CA 91301

219 CENTRAL AVE, NW,





HOLIDAY BOWL

100% Permit Documents

7515 Lomas Boulevard Northeast

1 04-16-2018 CODE COMMENTS
NO DATE DESCRIPTION

DATE: 04-16-2018

PROJECT #: LDC 15-011

DRAWN BY: DAL

CH'D BY: DAL

Copyright:

SHEET TITLE

SITE DETAILS

C.05