

# CITY OF ALBUQUERQUE



October 28, 2016

Dennis Lorenz, P.E.  
Lorenz Design & Consulting  
2501 Rio Grande Blvd. NW Suite A  
Albuquerque, New Mexico 87107

RE: **Bella Vista Assisted Living**  
**13101 Constitution NE**  
**Request Permanent C.O. – Accepted**  
**Engineers Stamp Date 5/14/15 (J22D067)**  
**Certification Dated: 10/13/16**

Dear Mr. Lorenz,

Based on the Certification received 10/13/2016, the site is acceptable for release of Certificate of Occupancy by Hydrology.

PO Box 1293

- The owner is to be advised that the splash blocks do not appear to direct the flows on to the sidewalk, but to each side therefore filling the area with water from 5 downspouts between the building and sidewalk. We recommend the owner monitor the drainage on the east side of the facility.

Albuquerque

If you have any questions please contact me at 924-3986 or Totten Elliott at 924-3982.

New Mexico 87103

Sincerely,

www.cabq.gov

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

TE/AC

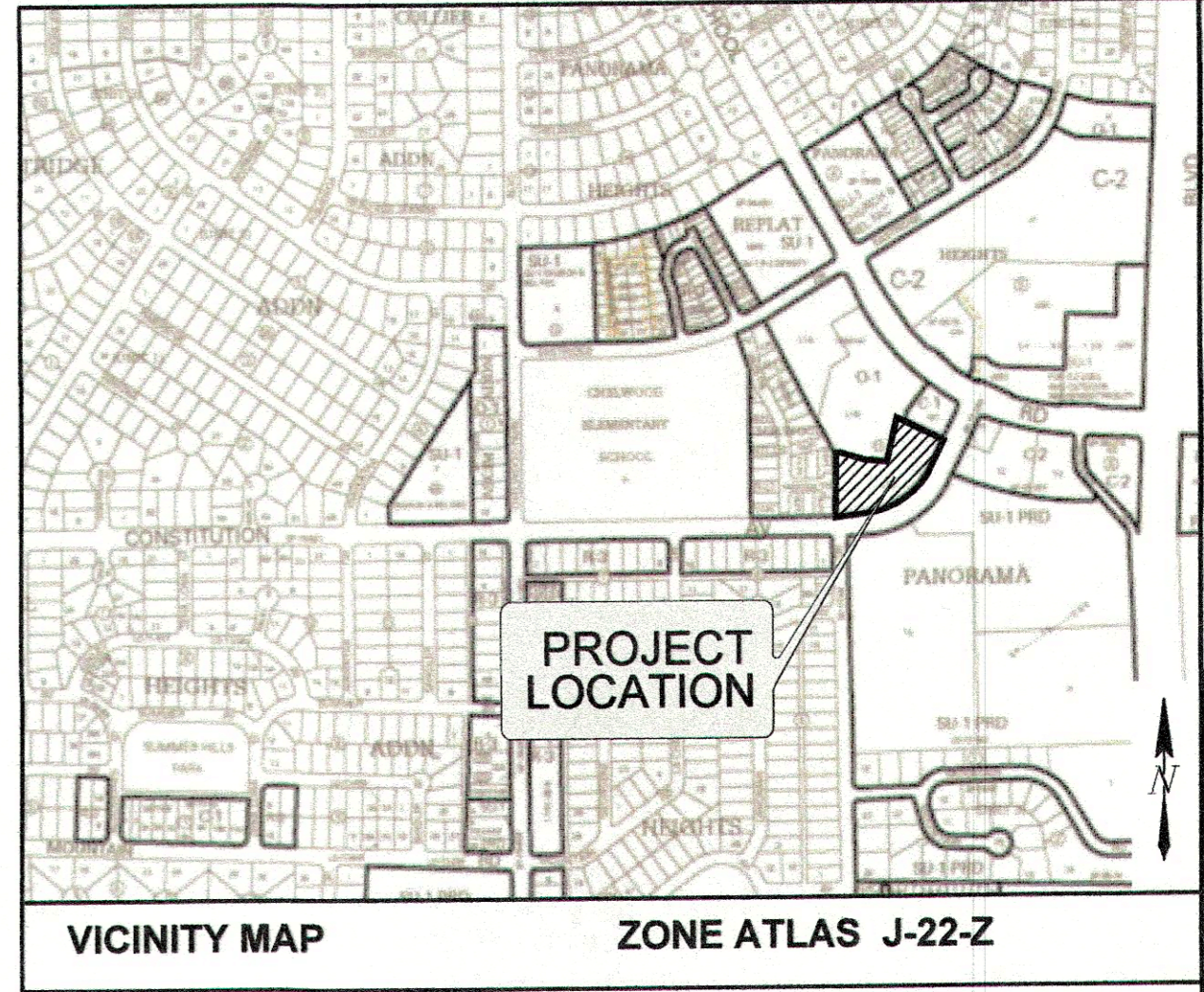
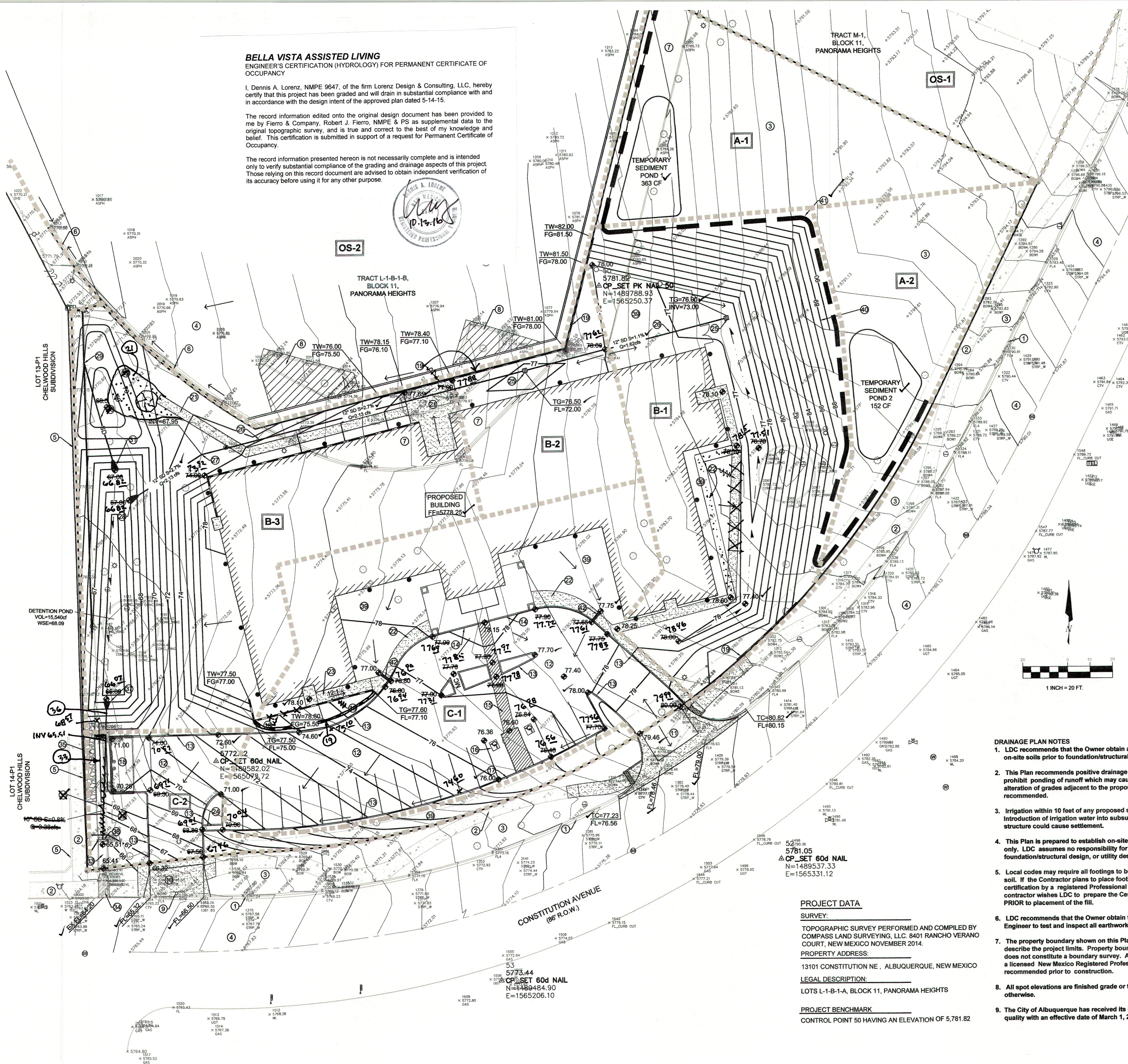
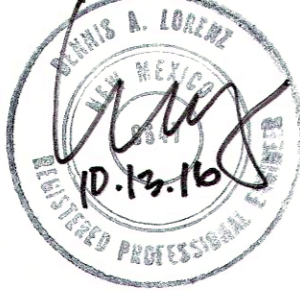
C: e-mail, Cordova, Camille C.; Miranda, Rachel; Sandoval, Darlene M.; Blocker, Lois

**BELLA VISTA ASSISTED LIVING**  
ENGINEER'S CERTIFICATION (HYDROLOGY) FOR PERMANENT CERTIFICATE OF  
OCCUPANCY

I, Dennis A. Lorenz, NMPE 9647, of the firm Lorenz Design & Consulting, LLC, hereby  
certify that this project has been graded and will drain in substantial compliance with and  
in accordance with the design intent of the approved plan dated 5-14-15.

The record information edited onto the original design document has been provided to  
me by Fierro & Company, Robert J. Fierro, NMPE & PS as supplemental data to the  
original topographic survey, and is true and correct to the best of my knowledge and  
belief. This certification is submitted in support of a request for Permanent Certificate of  
Occupancy.

The record information presented hereon is not necessarily complete and is intended  
only to verify substantial compliance of the grading and drainage aspects of this project.  
Those relying on this record document are advised to obtain independent verification of  
its accuracy before using it for any other purpose.



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

**KEYED NOTES**

- EXISTING CONCRETE STANDARD CURB AND GUTTER.
- EXISTING PUBLIC SIDEWALK TO REMAIN.
- EXISTING LANDSCAPING TO REMAIN.
- EXISTING ASPHALT PAVEMENT TO REMAIN.
- EXISTING BLOCK WALL TO REMAIN.
- EXISTING RETAINING WALL TO REMAIN.
- REMOVE AND DISPOSE EXISTING ASPHALT AND CURBING. SEE DEMOLITION PLAN.
- REMOVE AND DISPOSE EXISTING ASPHALT AND CURBING TO LIMITS SHOWN. REPLACE WITH ASPHALT PAVEMENT PER SECTION A/C2.0.
- RELOCATE EXISTING SPEED LIMIT SIGN PER COA TRAFFIC OPERATIONS.
- REMOVE EXISTING CURB, GUTTER AND SIDEWALK, REPLACE WITH CONCRETE DRIVEPAD. SEE DETAIL A/C3.0.
- REMOVE EXISTING CURB, GUTTER AND SIDEWALK, REPLACE WITH CONCRETE VALLEY GUTTER. SEE DETAIL B/C3.0.
- CONSTRUCT ASPHALT PAVEMENT. SEE SECTION A/C2.0.
- CONSTRUCT 6-INCH CONCRETE CURB. SEE DETAIL C/C2.0.
- CONSTRUCT TURN DOWN SIDEWALK. NO CURB. TOP OF CONCRETE AT TOP OF PAVEMENT. SEE DETAIL B/C2.0.
- PROVIDE STRIPED PEDESTRIAN CROSSING PER CODE.
- PROVIDE HANDICAP PARKING PAVEMENT MARKINGS PER CODE - TYP.
- INSTALL HANDICAP SIGN ASSEMBLY PER CODE - TYP. SEE DETAIL F/C2.0.
- CONSTRUCT NEW REFUSE ENCLOSURE. SEE DETAIL G/C2.0.
- CONSTRUCT RETAINING WALL. SEE DETAIL H/C2.0.
- NOT USED.
- CONSTRUCT CONCRETE FLATWORK. SEE SITE PLAN.
- CONSTRUCT CONCRETE SIDEWALK. SEE SITE PLAN.
- CONSTRUCT ACCESSIBLE RAMP AT 12:1 SLOPE MAX.
- CONSTRUCT 36-INCH CONCRETE CHANNEL. SEE DETAIL E/C2.0.
- CONSTRUCT TYPE 'D' INLET PER COA STD DWG 2206.
- CONSTRUCT 18-INCH SD.
- CONSTRUCT 18" X 30 DEGREE BEND.
- INSTALL 18-INCH END SECTION.
- CUT EXISTING 4-INCH SD. INSTALL 30 DEGREE BEND. REMOVE & DISPOSE SD PIPE DOWNSTREAM FROM CONNECTION.
- CONSTRUCT 4-INCH SD.
- INSTALL 4-INCH END SECTION.
- REMOVE & DISPOSE EXISTING CONCRETE CHANNEL.
- EXISTING 3.5' WIDE CHANNEL TO REMAIN.
- EXISTING SIDEWALK CULVERTS TO REMAIN.
- CONSTRUCT OVERFLOW SPILLWAY SEE DETAIL C/C3.0.
- CONSTRUCT 10 INCH SD.
- INSTALL 10 INCH END SECTION.
- CONSTRUCT CONCRETE HEADWALL SEE DETAIL E/C3.0.
- NEW LANDSCAPING. SEE LANDSCAPE PLAN.
- CONSTRUCT 3:1 CUT SLOPE. PROVIDE LANDSCAPING/EROSION CONTROL. SEE LANDSCAPE PLAN.
- PROVIDE EROSION CONTROL BERM OR SILT FENCE. SEE SWPPP.
- CONSTRUCT 12-INCH SIDEWALK CULVERT.

**DRAINAGE PLAN NOTES**

- LDC recommends that the Owner obtain a Geotechnical Evaluation of the on-site soils prior to foundation/structural design.
- 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.
- 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.
- 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.
- 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.
- LDC recommends that the Owner obtain the services of a Geotechnical Engineer to test and inspect all earthwork aspects of the project.
- 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.
- All spot elevations are finished grade or top of pavement, unless noted otherwise.
- The City of Albuquerque has received its EPA MS4 Permit for stormwater quality with an effective date of March 1, 2012.

**PROJECT DATA**

**SURVEY:**

TOPOGRAPHIC SURVEY PERFORMED AND COMPILED BY  
COMPASS LAND SURVEYING, LLC. 8401 RANCHO VERANO  
COURT, NEW MEXICO NOVEMBER 2014.

**PROPERTY ADDRESS:**

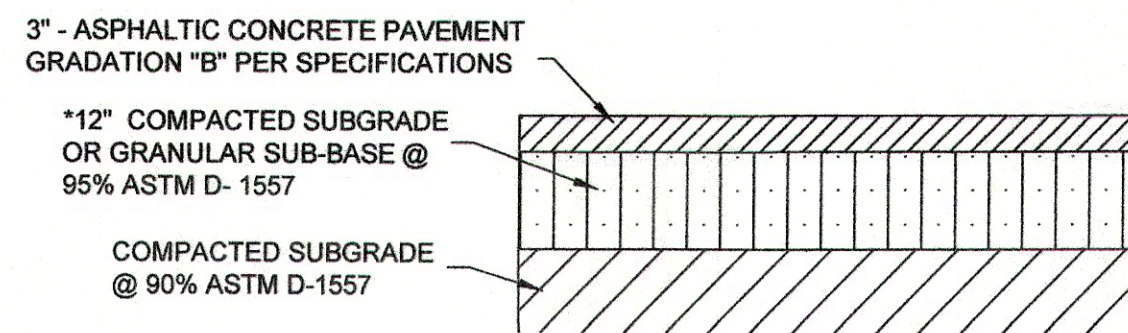
13101 CONSTITUTION NE, ALBUQUERQUE, NEW MEXICO

**LEGAL DESCRIPTION:**

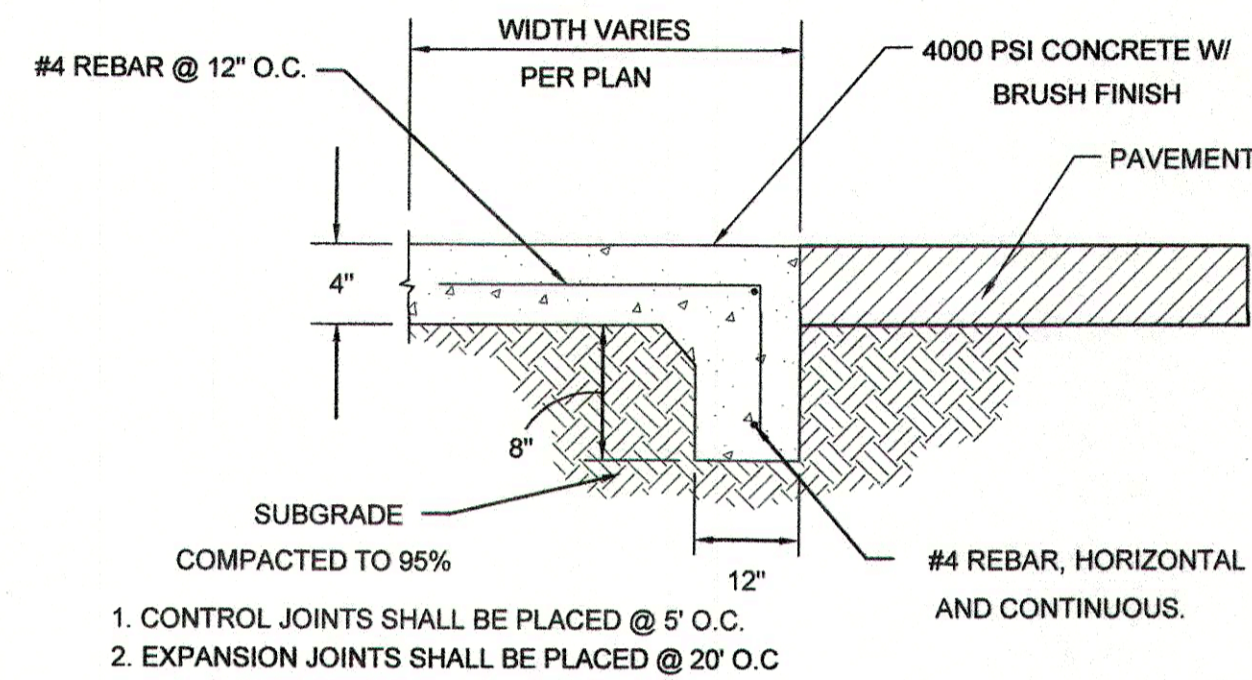
LOTS L-1-B-1-A, BLOCK 11, PANORAMA HEIGHTS

**PROJECT BENCHMARK**

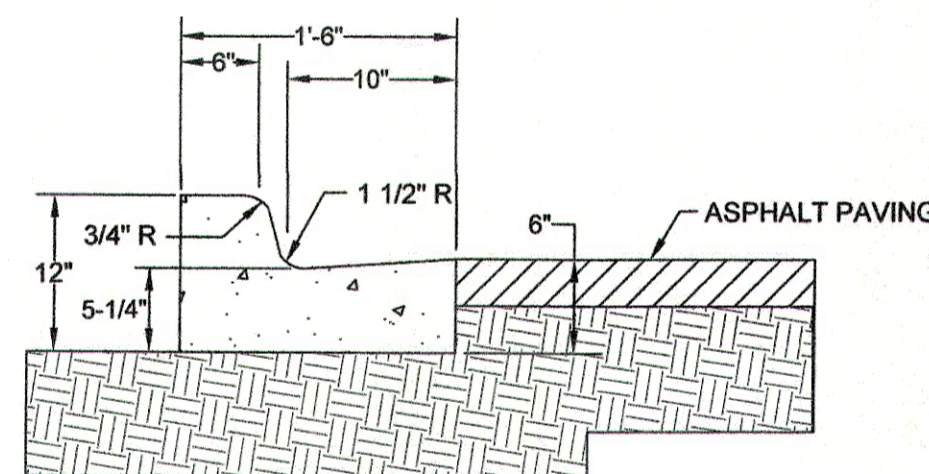
CONTROL POINT 50 HAVING AN ELEVATION OF 5,781.82



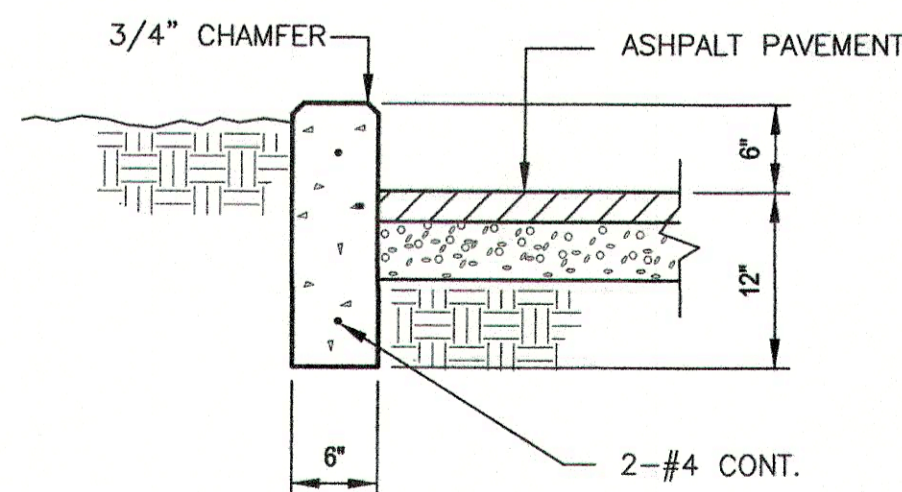
ASPHALT PAVEMENT SECTION A  
AUTO/PICKUP TRUCK  
NTS C-2.0



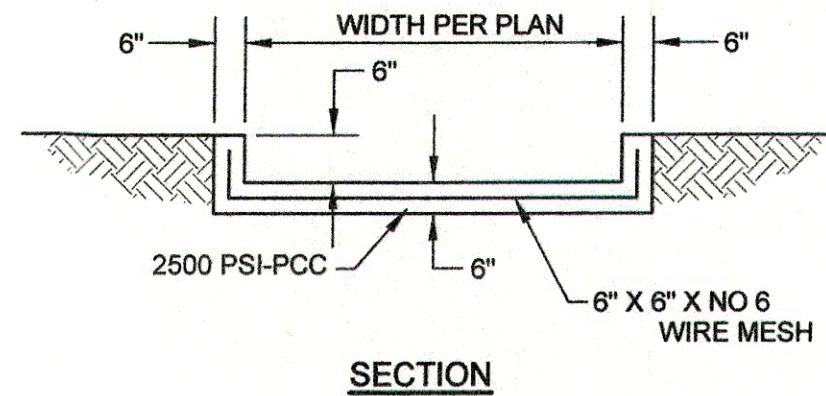
TURN DOWN SIDEWALK AT ACCESSIBLE ZONES B  
NTS C-2.0



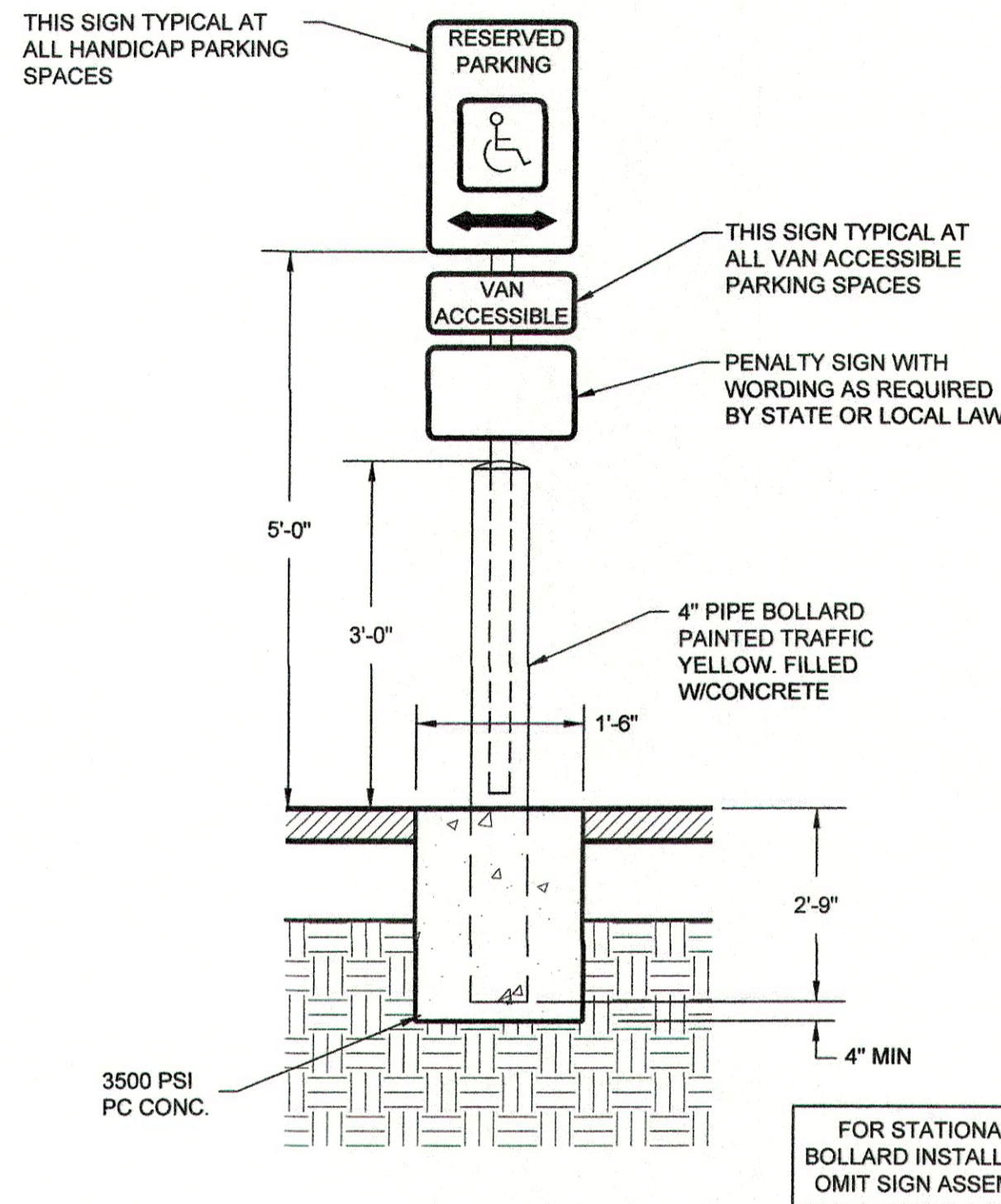
CONCRETE CURB AND GUTTER C  
NTS C-2.0



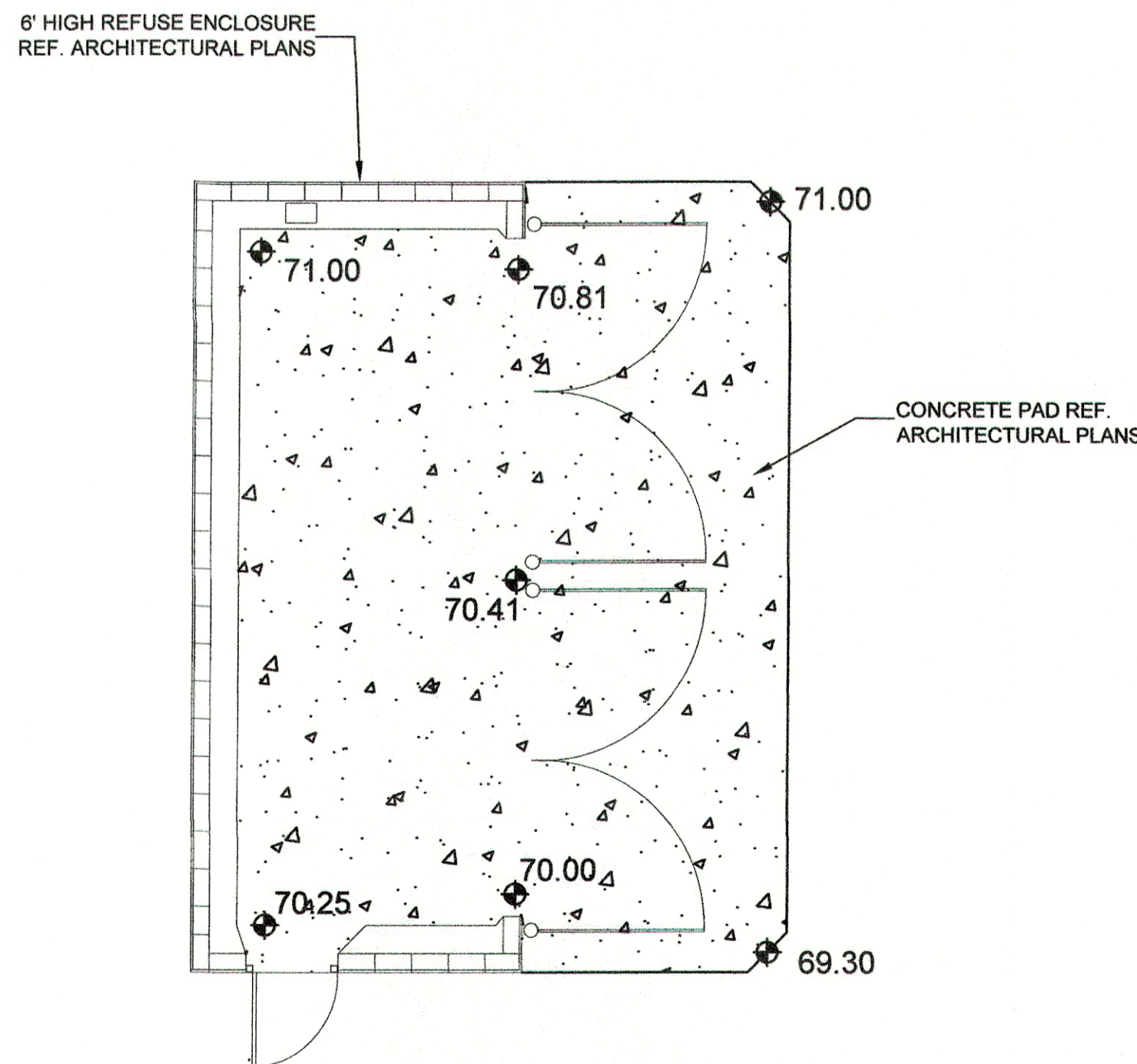
HEADER CURB DETAIL D  
NTS C-2.0



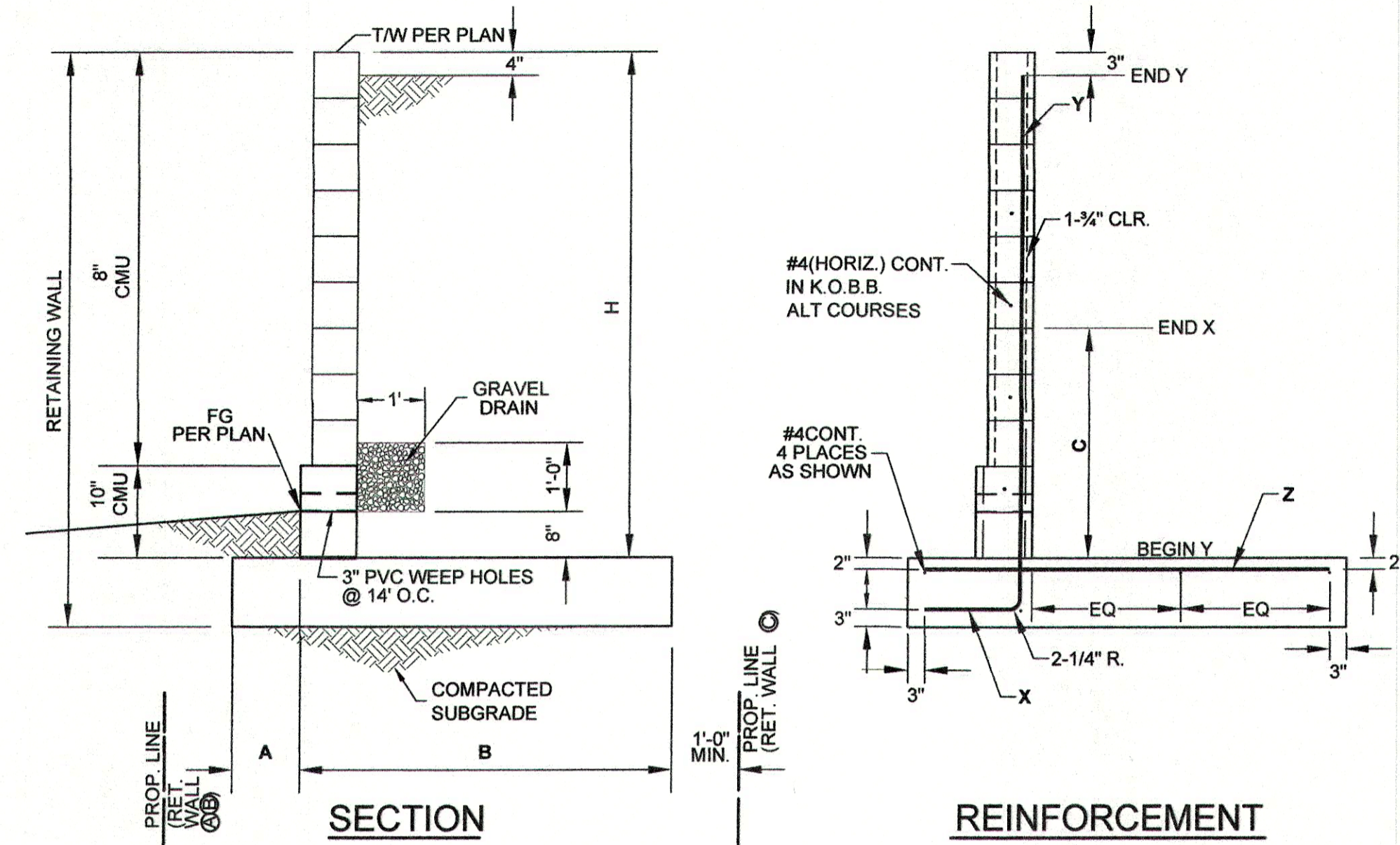
CONCRETE DRAINAGE CHANNEL DETAIL E  
NTS C-2.0



HC SIGN ASSEMBLY / BOLLARD DETAIL F  
NTS C-2.0



REFUSE ENCLOSURE SLAB PLAN G  
NTS C-2.0



H	A	B	C	10" CMU	8" CMU	X	Y	Z
4'-8"	1'-0"	2'-8"	1'-4"	-	7 CRSES	#5@16"	#4@16"	#4@16"
4'-0"	1'-0"	2'-0"	1'-4"	-	6 CRSES	#4@16"	#4@16"	#4@16"
3'-4"	1'-0"	1'-8"	3'-0"	-	5 CRSES	#4@16"	-	-
2'-8"	1'-0"	1'-8"	2'-4"	-	4 CRSES	#4@16"	-	-
2'-0"	1'-0"	1'-8"	1'-8"	-	3 CRSES	#4@16"	-	-

#### RETAINING WALL NOTES:

- All cells shall be completely filled with concrete
- All wall sections are designed based on special inspection per UBC.
- Contractor shall submit to Owner results of masonry test prisms built and tested per UBC STD 24-26, UBC SEC 2405.
- Footing subgrade and base shall be compacted to 95% modified proctor per ASTM D-1557.
- 1/2" felt expansion joints shall be installed at 30 feet on center and at section changes.
- All masonry shall be laid in running bond only.
- All masonry surfaces to be backfilled shall be coated with emulsified asphalt, or other moisture barrier as approved by the Engineer.
- All reinforced concrete and CMU walls are designed per the following:

$f'_c=4000$  psi; maximum aggregate size = 3/4"  
 $f_y=60,000$  psi (ASTM A-615 GR 60)  
 $f_m=1500$  psi  
 Unit weight of backfill = 110 pcf  
 Concrete/soil coeff of friction = 0.30  
 Allowable soil bearing pressure = 1500 psf  
 Acting pressure = 44 psf/ft  
 Slope active pressure = 44 psf/ft  
 Passive pressure = 360 psf/ft

CMU RETAINING WALL DETAIL H  
NTS C-2.0

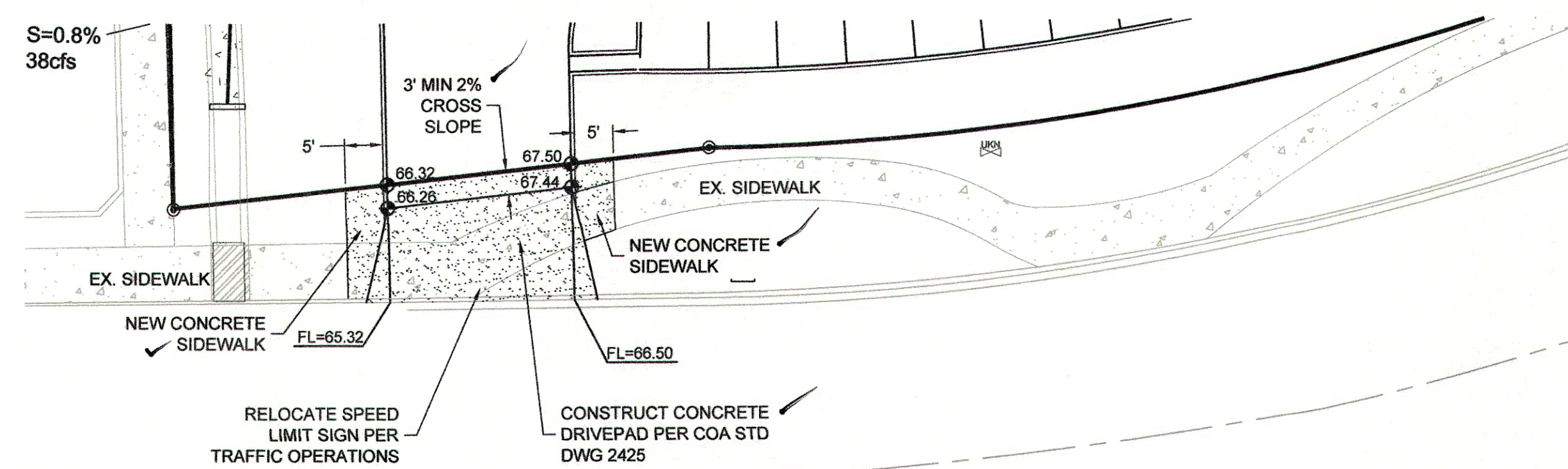
#### BELLA VISTA ASSISTED LIVING

ENGINEER'S CERTIFICATION (HYDROLOGY) FOR PERMANENT CERTIFICATE OF OCCUPANCY

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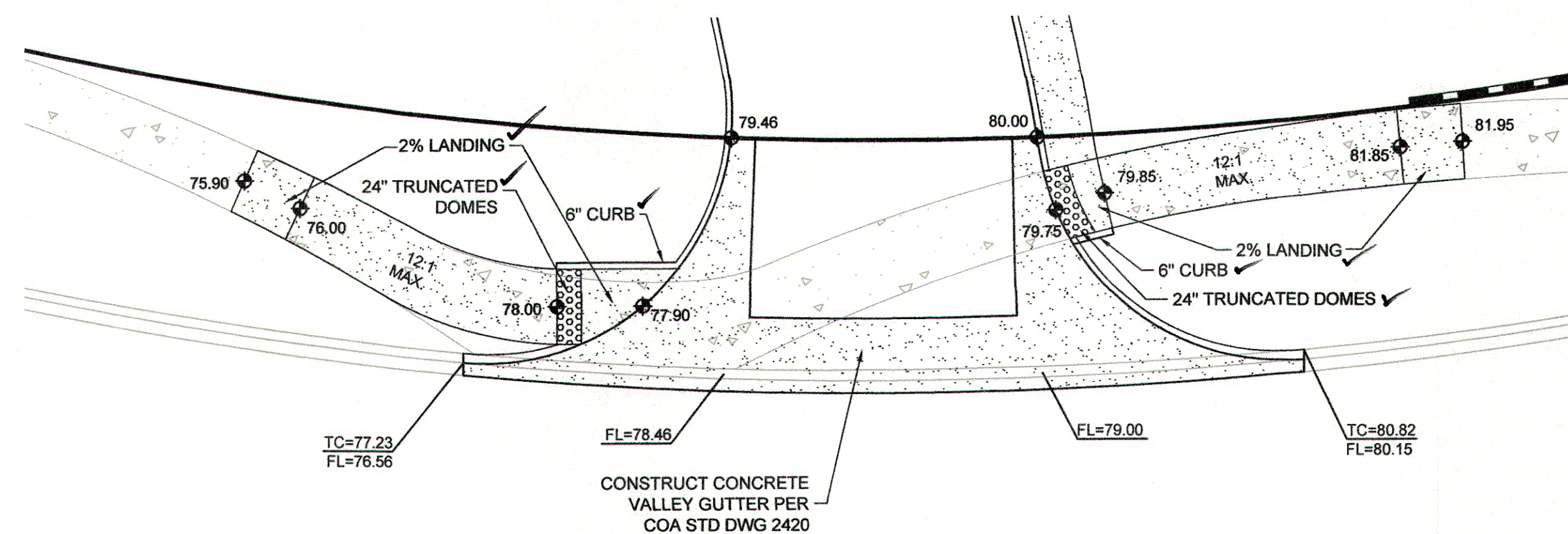
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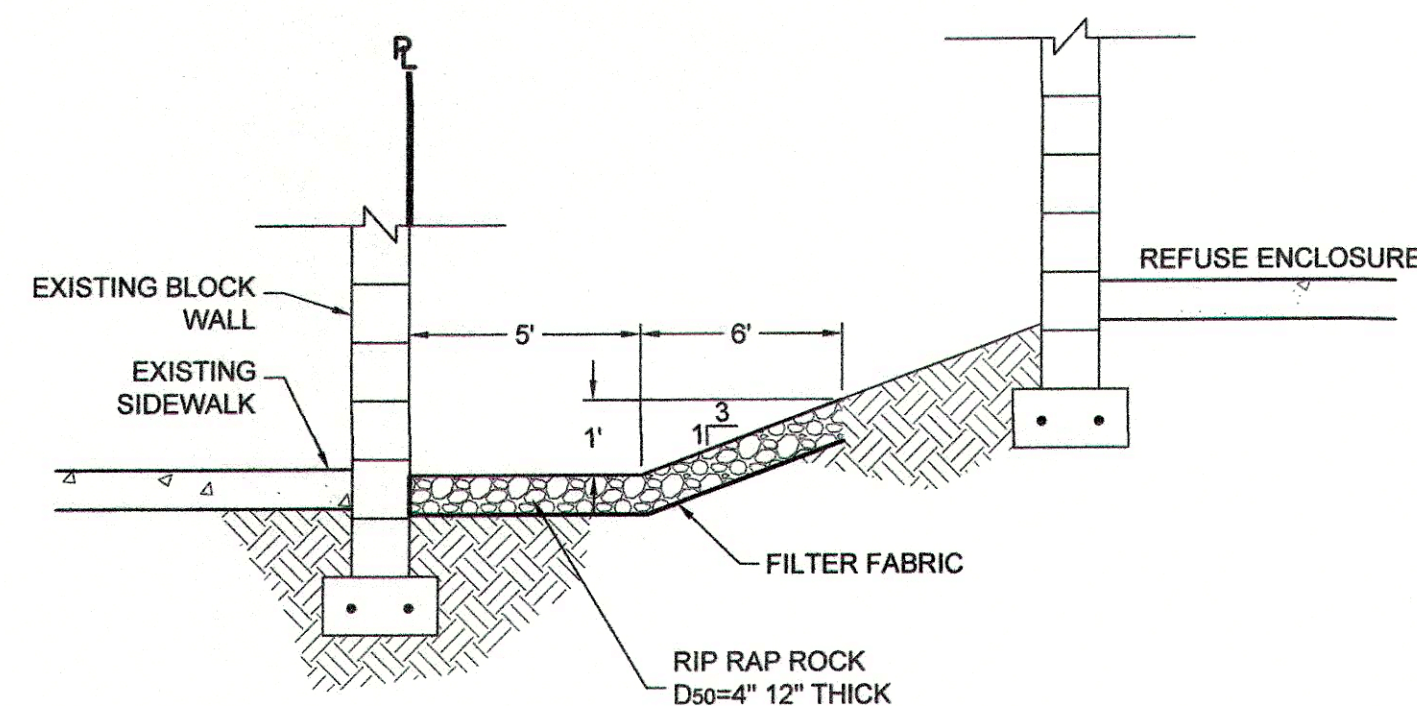
DRIVEWAY DETAIL  
SCALE: 1"=10'

A  
C-3.0



DRIVEWAY DETAIL  
SCALE: 1"=10'

B  
C-3.0



POND OVERFLOW SPILLWAY  
NTS

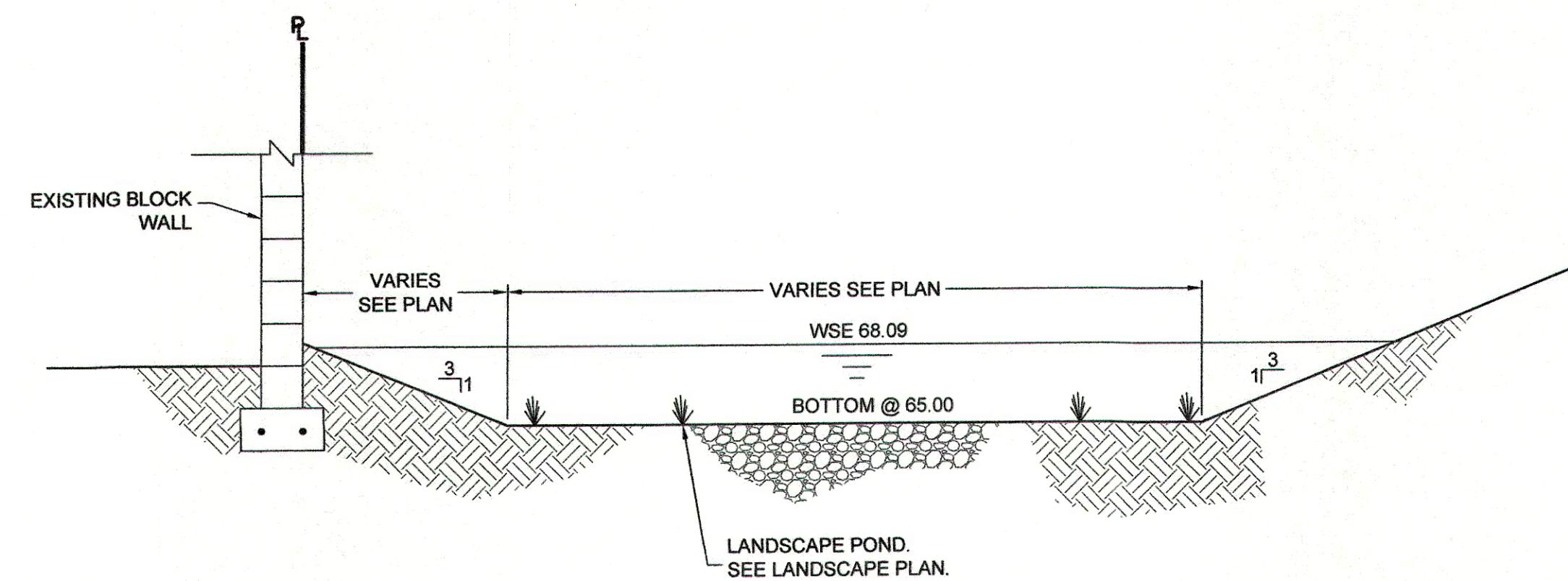
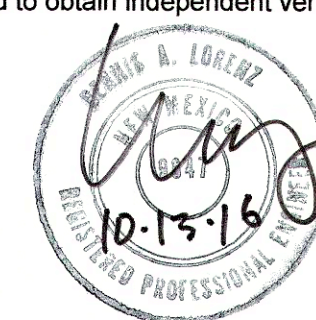
C  
C-3.0

# **BELLA VISTA ASSISTED LIVING** ENGINEER'S CERTIFICATION (HYDROLOGY) FOR PERMANENT CERTIFICATE OF OCCUPANCY

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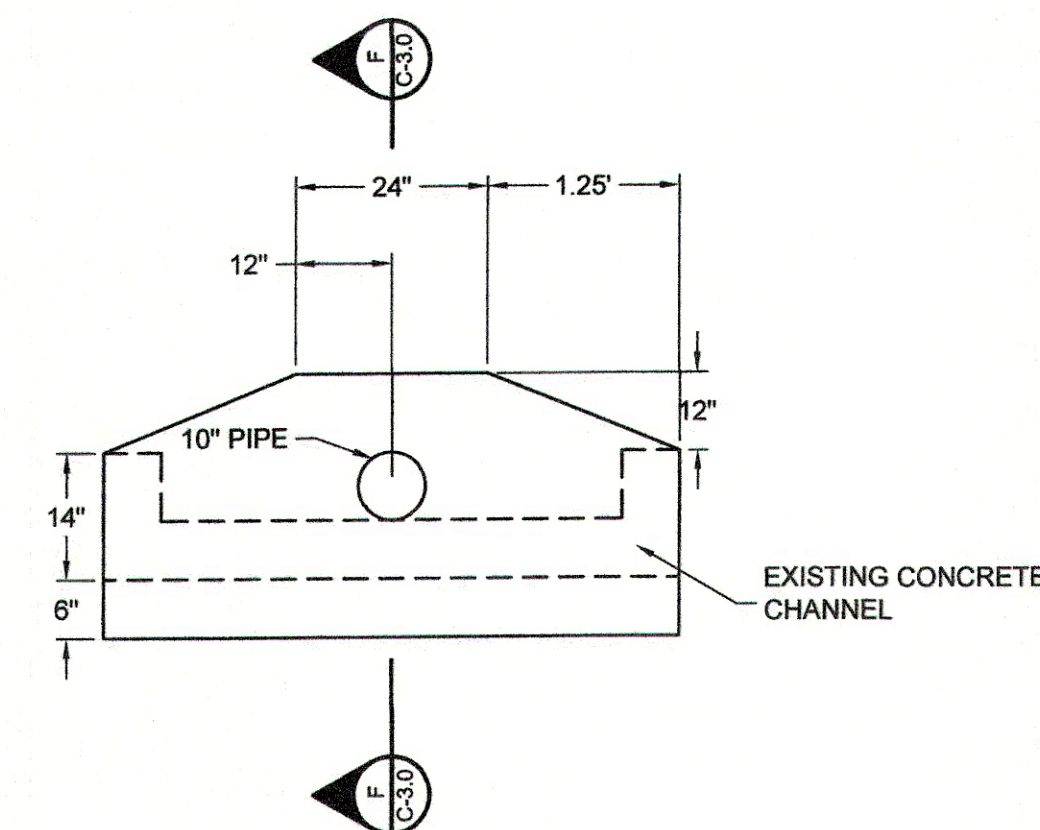
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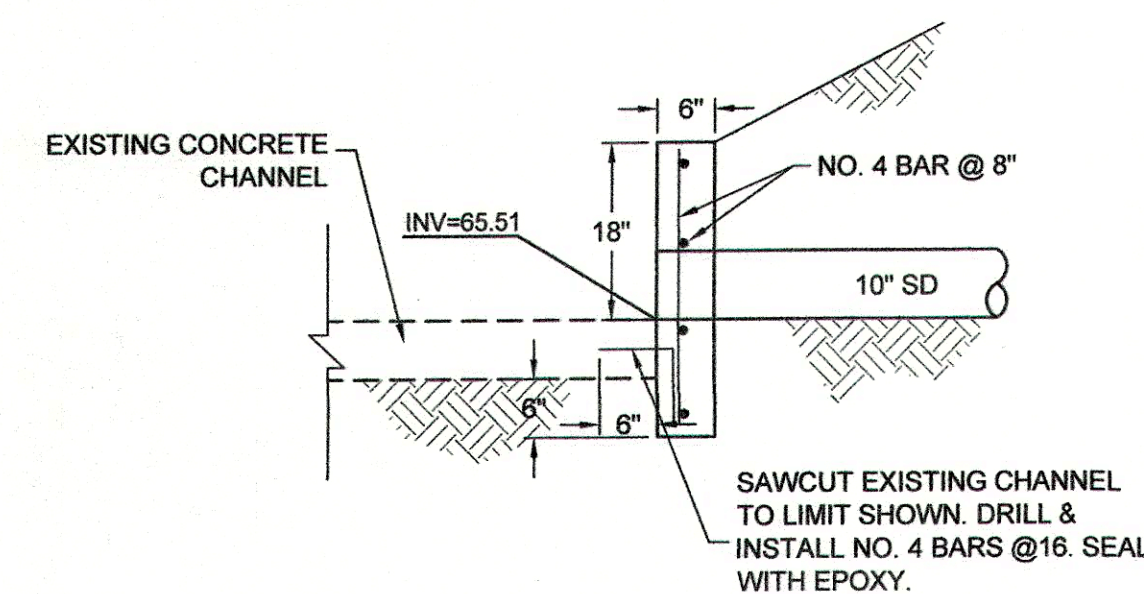
POND SECTION  
NTS

D  
C-3.0



CONCRETE HEADWALL  
NTS

E  
C-3.0



SECTION  
NTS

F  
C-3.0

## DRAINAGE AND TRANSPORTATION INFORMATION SHEET

PROJECT TITLE: BELLA VISTA ASSISTED LIVING ZONE MAP: J-22/D067  
DRB#: NA EPC#: NA WORK ORDER#: NA

LEGAL DESCRIPTION: LOT L-1-B-1-A, BLOCK 11 PANORAMA HEIGHTS

CITY ADDRESS: 13101 CONSTITUTION NE

ENGINEERING FIRM: LORENZ DESIGN & CONSULTING CONTACT: DENNIS LORENZ  
ADDRESS: 2501 RIO GRANDE BLVD. NW SUITE A PHONE: 888-6088  
CITY, STATE: ALBUQUERQUE, NEW MEXICO ZIP CODE: 87104

OWNER: CONSTRUCT SOUTHWEST CONTACT: BILL SMITH  
ADDRESS: 333 RIO RANCHO BLVD NE PHONE: 891-3695  
CITY, STATE: RIO RANCHO, NEW MEXICO ZIP CODE: 87123

ARCHITECT: RICK BENNETT ARCHITECTS CONTACT: R. BENNETT  
ADDRESS: 1104 PARK AVENUE SW PHONE: 242-1859  
CITY, STATE: ALBUQUERQUE, NEW MEXICO ZIP CODE: 87103

SURVEYOR: COMPASS LAND SURVEYING CONTACT: LYNN LANTZ  
ADDRESS: 8401 RANCHO VERANO NW PHONE: 274-1711  
CITY, STATE: ALBUQUERQUE, NM ZIP CODE: 87120

CONTRACTOR: CONSTRUCT SOUTHWEST CONTACT: BILL SMITH  
ADDRESS: 333 RIO RANCHO BLVD NE PHONE: 891-3695  
CITY, STATE: RIO RANCHO, NEW MEXICO ZIP CODE: 87123

### TYPE OF SUBMITTAL:

☐ DRAINAGE REPORT  
☐ DRAINAGE PLAN 1<sup>st</sup> SUBMITTAL  
☐ DRAINAGE PLAN RESUBMITTAL  
☐ CONCEPTUAL G & D PLAN  
☐ GRADING PLAN  
☐ EROSION CONTROL PLAN  
☒ ENGINEER'S CERT (HYDROLOGY)  
☐ CLOMR/LOMR  
☐ TRAFFIC CIRCULATION LAYOUT  
☐ ENGINEER'S CERT (TCL)  
☐ ENGINEER'S CERT (DRB SITE PLAN)  
☐ OTHER (SPECIFY)

### CHECK TYPE OF APPROVAL SOUGHT:

☐ SIA/FINANCIAL GUARANTEE RELEASE  
☐ PRELIMINARY PLAT APPROVAL  
☐ S. DEV. PLAN FOR SUB'D APPROVAL  
☐ S. DEV. 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  
☐ GRADING CERTIFICATION  
☐ OTHER (SPECIFY) SO-19

### WAS A PRE-DESIGN CONFERENCE ATTENDED:

☐ YES  
☐ NO  
☐ COPY PROVIDED

DATE SUBMITTED: 10-13-2016 BY: DENNIS A. LORENZ

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location, and scope to 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 subdivision containing more than ten (10) lots or constituting five (5) acres or more.

# CITY OF ALBUQUERQUE



May 29, 2015

Dennis Lorenz, PE  
Lorenz Design and Consulting, Inc.  
2501 Rio Grande Blvd. NW Suite A  
Albuquerque, NM 87104

**RE: Bella Vista Assisted Living, 13101 Constitution Avenue NE  
Grading Plan and Drainage Plan (C-1.0)  
Engineer's Stamp Date 5-14-2015 (File: J22-D067)**

Dear Mr. Lorenz:

Based upon the information provided in your submittal received 5-15-15, the above referenced plans are approved for Building Permit. Please attach a copy of this approved plan in the construction sets when submitting for a building permit.

Prior to Certificate of Occupancy release, Engineer Certification per the DPM Checklist will be required. Also, at that time, when making a submittal for request of Certificate of Occupancy, label the two first flush volumes from the drainage report in addition to the detention pond capacity information on the Grading and Drainage Plan itself.

If you have any questions, you can contact me at 924-3924.

Sincerely,

Jeanne Wolfenbarger, P.E.  
Senior Engineer, Planning Dept.  
Development Review Services

Orig: Drainage file  
c.pdf Addressee via Email