

CITY OF ALBUQUERQUE



April 11, 2017

Richard J. Berry, Mayor

Martin J. Garcia, PE.
Anchor Engineering LLC
1035 South Bosque Loop
Bosque Farms, NM 87068

RE: Fast Food Restaurant
Grading and Drainage Plan
Engineer's Stamp Date 4-7-2017 (File: B14D001)

Dear Mr. Garcia:

Based upon the information provided in your submittal received 4-7-2017, the above referenced Grading and Drainage Plan is approved for grading permit.

When submitting for building permit please address the following comments:

1. Provide size for the existing storm drain on the west side of the site.
2. Provide calculation for emergency overflow.
3. Provide more spot elevations along the curb and between curb cut on the south side of the pond.
4. Are sidewalk culverts being proposed at the same down spots? Roof flows should not discharge directly onto the sidewalk.
5. Provide details for the trash enclosure to ensure runoff will remain within the enclosure. Included a note that the drain must be connected to a Grease Trap then to the sewer system. Show the location of the Grease Trap and the inverts for the pipe.

PO Box 1293

Albuquerque

New Mexico 87103

www.cabq.gov

If you have any questions, you can contact me at 924-3999.

Sincerely,

Shahab Biazar, P.E.
City Engineer, Planning Dept.
Development Review Services

MA/SB



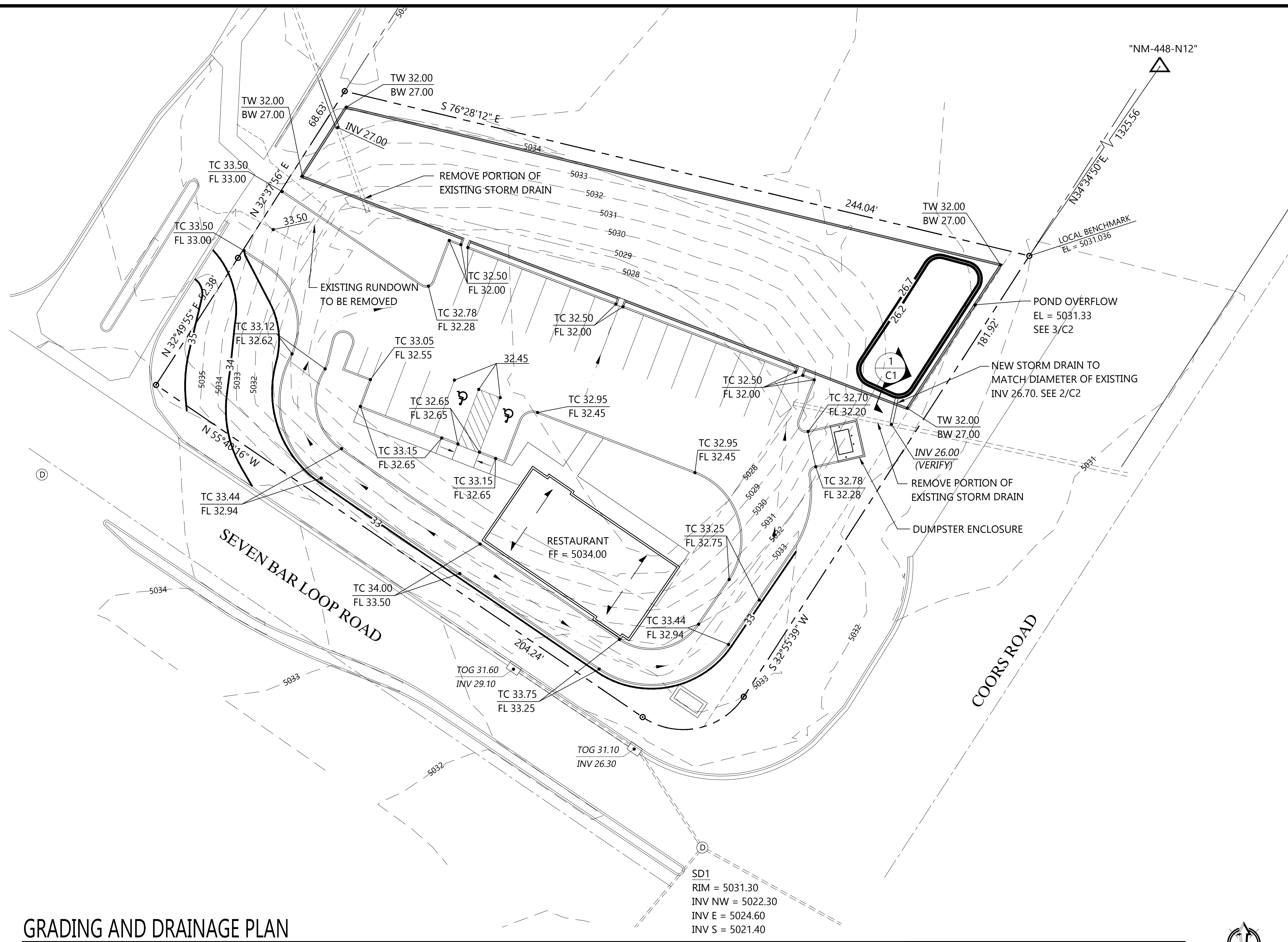
For more current information and details visit: www.cabq.gov/gis

Address Map Page:
B-14-Z
 Map Amended through:
 1/29/2016

Note: Gray Shading Represents Area Outside of the City Limits

These addresses are for informational purposes only and are not intended for address verification.

0 750 1,500 Feet



GRADING AND DRAINAGE PLAN

SCALE: 1" = 20'

Legend

| | | |
|--|-------|------------------------|
| | 5005 | EXISTING CONTOUR |
| | 05 | NEW CONTOUR |
| | FF EL | FINISH FLOOR ELEVATION |
| | TC | TOP OF CURB ELEVATION |
| | FL | FLOWLINE ELEVATION |
| | SD1 | EXISTING STORM DRAIN |
| | | DIRECTION OF FLOW |

Project Benchmark

THE PROJECT BENCHMARK IS A FOUND NMDOT MONUMENT "MS-448-N12"

X = 1521354.471
 Y = 1528973.229
 NAD83
 Z = 5026.132 (NAVD88)
 G-G FACTOR: 0.999679709

LOCAL BENCHMARK IS THE NORTHEAST CORNER OF TRACT C.
 ELEV 5031.036

Drainage Calculations

ALAMEDA WEST - TRACT C
 Hydrology Calculations
 Date: November 11, 2003
 DPM - Section 22.2
 Volume 2, January 1993

| | |
|----------------------------------|-------------|
| Precipitation Zone | 1 |
| 100 Year Storm Depth, P (360) | 2.2 |
| 100 year Storm Depth, P (10 day) | 3.67 |

| Treatment Area | A | B | C | D |
|------------------------------|------|------|------|------|
| Excess Precipitation Factors | 0.44 | 0.67 | 0.99 | 1.97 |
| Peak Discharge Factors | 1.29 | 2.03 | 2.87 | 4.37 |

| Land Treatment Area | Acres | Existing | Proposed |
|----------------------------|-------|----------|----------|
| Type "D" (Roof) | | 0.00 | 0.38 |
| Type "C" (Unpaved Roadway) | | 0.00 | 0.00 |
| Type "B" (Irrigated Lawns) | | 0.00 | 0.48 |
| Type "A" (Undeveloped) | | 0.86 | 0.00 |

| | | |
|--------------------------|---------|---------|
| Total (Acres) | 0.86 | 0.86 |
| Excess Precipitation(in) | 0.44 | 1.25 |
| Volume (100), cf | 1379.98 | 3899.13 |
| Volume (10), cf | 924.59 | 2612.42 |
| Volume (100, 10 day), cf | 1379.98 | 5937.52 |
| Q (100), cfs | 1.11 | 2.64 |
| Q (10), cfs | 0.75 | 1.77 |

Drainage Narrative

THE PURPOSE OF THIS GRADING AND DRAINAGE PLAN IS TO RECLAIM THE PROPERTY HEREIN FOR DEVELOPMENT, ORIGINALLY DESIGNATED AS A DRAINAGE POND OF THE ALAMEDA WEST SHOPPING CENTER. SEE DRAINAGE REPORT.

Pond Volume

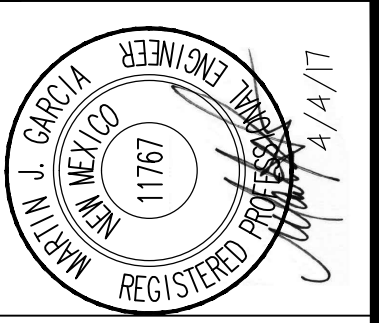
FLUSH POND
 IMPERVIOUS AREA — 0.38 x 43560 = 16552.8 SF

PONDING REQUIRED — $16552.8 \times \frac{34}{12} = 468.99$ CF

PONDING PROVIDED:
 A26.2 = 936.97 SF
 A26.7 = 1079.25 SF

VOL 26.5 & 27: $936.97 + 1079.25 = \frac{2016.22}{2} \times 0.5 = 504.05$ CF

WATER SURFACE ELEV = 5027.00 + 4.19 = 5031.19 (SEE AHYMO)



Anchor Engineering, LLC
 1035 S. Boque Up. Boque Farms, NM 87068
 505.862.1530
 admin@anchoreng.net

| NO. | DATE | COMMENTS |
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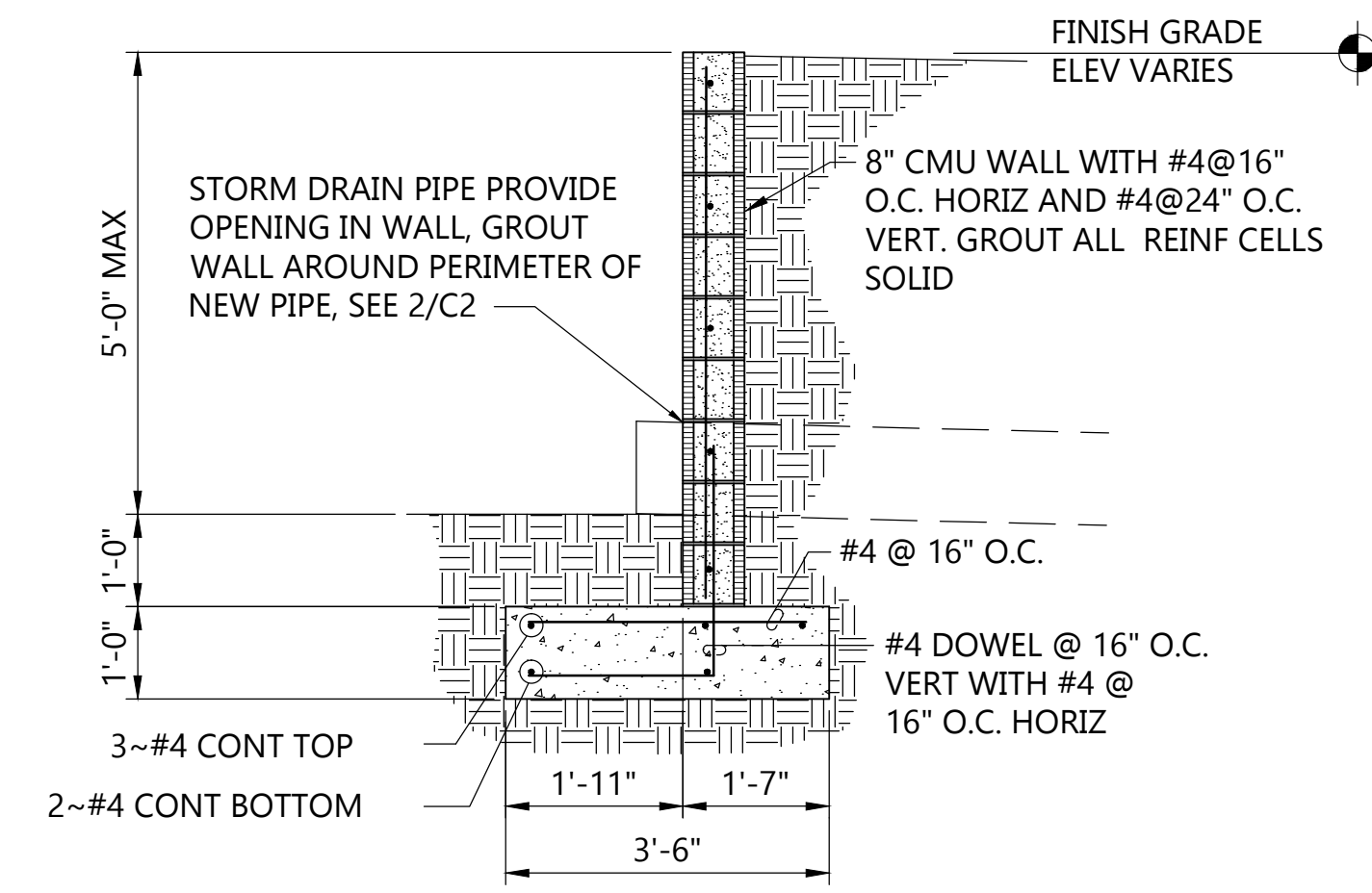
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|-------------|------------|
| PROJECT NO. | 16-035 |
| DATE: | 4.4.2017 |
| DRAWN BY: | F PHILLIPS |
| CHECKED BY: | M GARCIA |
| SCALE: | 1" = 20' |

PROJECT TITLE: RESTAURANT SITE
 ALAMEDA WEST SHOPPING CENTER
 ALBUQUERQUE, NEW MEXICO

SHEET TITLE: GRADING AND DRAINAGE PLAN

SHEET

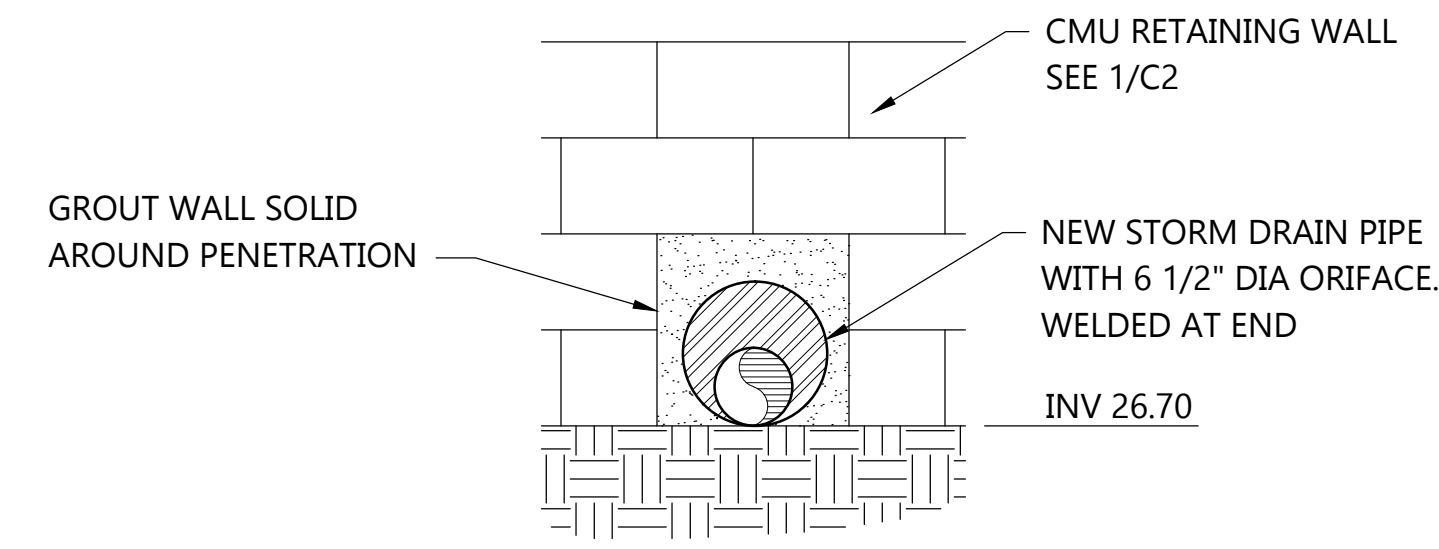
C1



POND RETAINING WALL

SCALE: 1/2" = 1'-0"

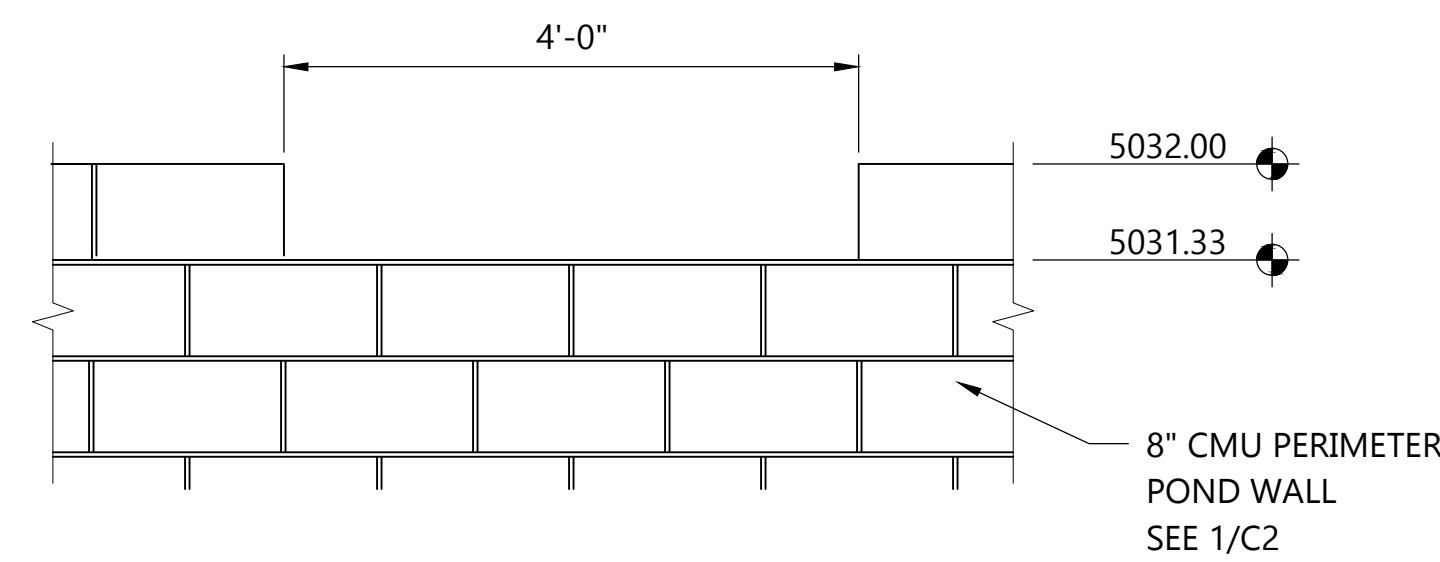
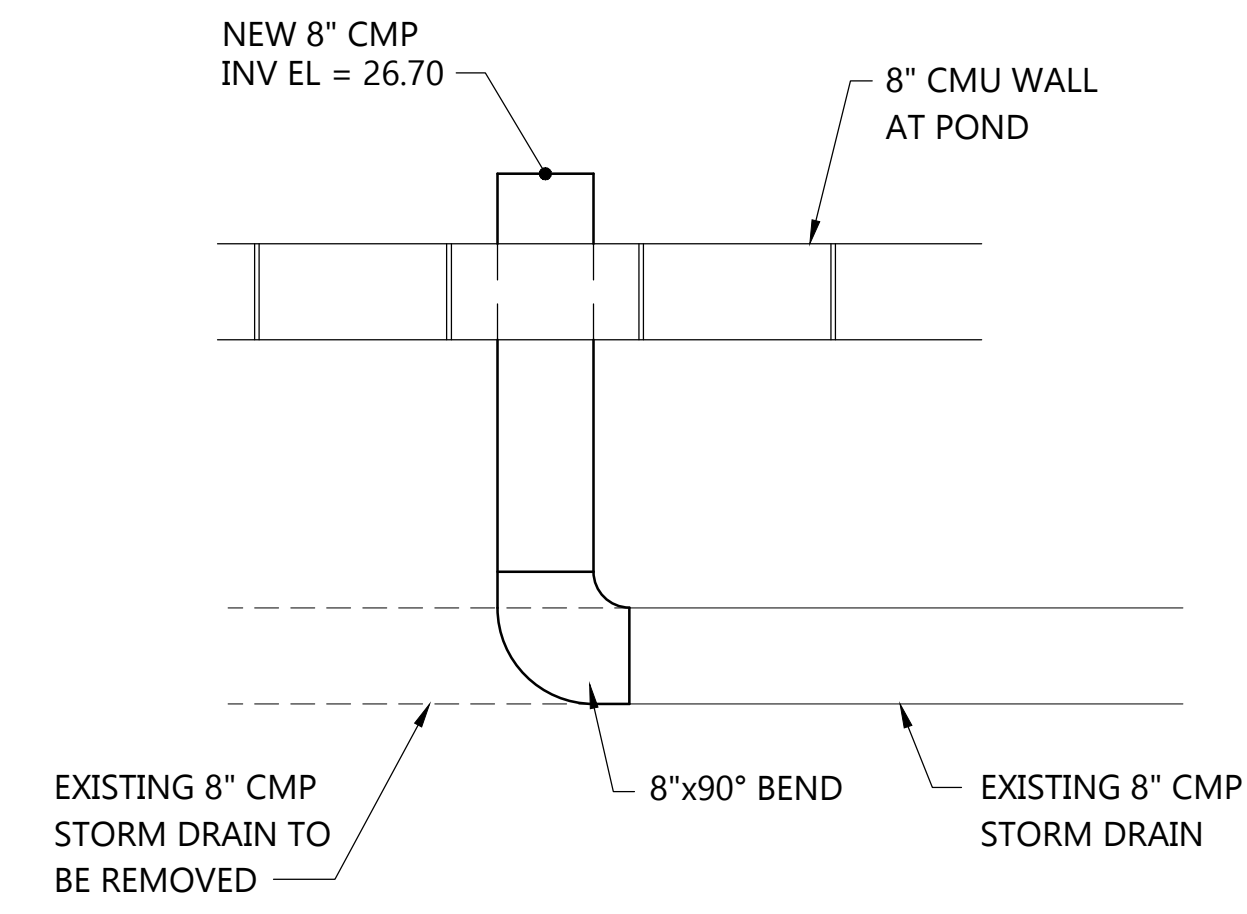
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C2



STORM DRAIN PIPE DETAIL

SCALE: 3/4" = 1'-0"

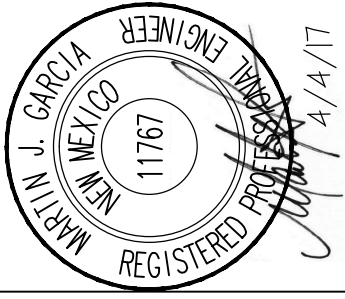
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C2



EMERGENCY POND OVERFLOW

SCALE: 1/2" = 1'-0"

3
C2



| NO. | DATE | COMMENTS |
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|---------------|--|
| PROJECT TITLE | RESTAURANT SITE ALAMEDA WEST SHOPPING CENTER ALBUQUERQUE, NEW MEXICO |
| SHEET TITLE | SITE DETAILS |

SHEET
C2