

DS #:

5100

APN:

163-05-101-002

PROJECT:

Chick-fil-A @ Charleston & Fort Apache

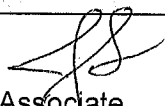
SUBMITTAL:

3rd

SCANNED BY/DATE:

CHECKED BY/DATE:



CITY OF LAS VEGAS		DATE: July 31, 2019
INTER-OFFICE MEMORANDUM		
TO: Land Development Services Department of Building & Safety		FROM: Jennifer Shinn, P.E.  Flood Control Engr. Associate Department of Public Works
SUBJECT: Drainage Study for: Chick-fil-A @ Charleston & Fort Apache		COPIES TO: Kimley-Horn
Cross Streets:	Charleston Blvd & Fort Apache Road	Crossroads Commons/Chick-fil-A
File Number:	F:\Depot\DSMemos\DS5100C.doc	Bart Anderson, P.E., DevCo
Parcel Number:	163-05-101-002	CCRFCD
Zoning Action:	SDR-75332	
FEMA Flood Zone	YES NO X	
Proposed Storm Drain	YES NO X	

HISTORY	DATE RECEIVED	DATE REVIEWED	COMMENTS	REVIEW FEES	FEES PAID Payment Trn #
1 st Submittal	2/14/2019 & 3/7/2019	3/4/2019 & 3/28/2019	See Comments Below	\$400.00	503237:\$400
2 nd Submittal	4/25/2019	5/1/2019	CCRFCD Concurrence	NC	--
3 rd Submittal	7/16/2019	7/31/2019	Approved	\$100.00	3490113: \$100
TOTAL FEES (LDDRS):				\$500.00	----

REMARKS:

The Drainage Study for the subject project has been reviewed and:

X	is approved subject to conformance to all City standards and the following conditions:
	must be resubmitted or supplemented including the following:
	is conditionally approved subject to Clark County Regional Flood Control District concurrence.
	is conditionally approved subject to Clark County Public Works Department concurrence.

Remarks:

3rd Submittal – Update #1: Revise site plan for building size increase and trash enclosure

NOTE: Any future changes to the proposed design (or design assumptions) as outlined in the approved drainage study and attached preliminary grading plan which affect drainage must be addressed in a Drainage Study Update and accepted by the *City of Las Vegas Flood Control Section*. Additionally, conditional acceptance of a drainage study is valid for a period of one (1) year. If the proposed construction has not been completed in that time period, the *City of Las Vegas* reserves the right to require additional conditions and/or submission and acceptance of a complete drainage study update prior to further construction of a project.

NOTE: Please be advised that all land surface area disturbances over 1 acre or any area adjacent to a water way must submit to the *Nevada Division of Environmental Protection* a "Notice of Intent" to discharge that certifies a stormwater pollution prevention plan has been developed and is maintained on site; for inclusion in the Stormwater General Permit No. NVR100000. A phased construction unit in a contiguous subdivision is considered under construction until all stripped or disturbed surface areas have been covered by paving, building construction or planting. For more information, including forms and applications see <http://ndep.nv.gov/bwpc/storm01.htm> or call (775) 687-9429.

END OF REMARKS

T/R/S: T21S/R60E/S05
AREA Q05



July 31, 2019
KH Project Number 092908012

Ms. Jennifer Shinn, P.E.
City of Las Vegas Flood Control
333 N. Rancho
Las Vegas, NV 89106

**RE: Technical Drainage Study CD for Chick-fil-A at Charleston & Ft.
Apache
DS 5100**

Dear Jennifer,

This letter is to acknowledge that the electronic copy of the technical drainage study update is an identical replicate of the original hard copy submitted to the City of Las Vegas.

Please feel free to contact me if you have any questions or need any additional information. Thank you.

Sincerely,



Treasea Wolf, PE



**Update #1 to the
Technical Drainage Study
for**

*Chick-fil-A @
Charleston & Fort Apache*

Date Prepared:
July 12, 2019

Prepared for:
Chick-fil-A
1535 Alston Parkway, Suite 350
Irvine, California 92618
404.305.4834

Prepared by:
Kimley-Horn and Associates, Inc.
6671 Las Vegas Boulevard South, Suite 320
Las Vegas, NV 89119
702.862.3600

Kimley»Horn

HYDROLOGIC CRITERIA AND DRAINAGE MANUAL
DRAINAGE STUDY INFORMATION FORM

Name of Development: Chick-fil-A @ Charleston & Fort Apache Date: Jul 12, 2019

Location of Development: a) Descriptive (Cross Streets) North/South: Fort Apache Road
East/West: Charleston Boulevard

b) Section: 5 Township: 21S Range: 60E

c) APN : 163-05-101-002

Name of Owner: Crossroads Commons LTD LLC/Chick-fil-A

Telephone No.: 404.305.4834 Fax No.: N/A E-Mail Address: N/A

Address: 851 S Rampart Las Vegas, Nevada 89128

Contact Person-Name: Michael Schwab, P.E. Telephone No.: 702.790.0206

* E-Mail Address: michael.schwab@kimley-horn.com Fax No.: _____

Firm: KIMLEY-HORN

Address: 6671 Las Vegas Boulevard South, Suite 320 Las Vegas, NV 89119

Type of Land Development/Land Disturbance Process:

☐ Rezoning	☐ Subdivision Map	☐ Clearing and Grading Only
☐ Parcel Map	☐ Planned Unit Development	☒ Other (Please specify below)
☐ Large Parcel Map	☒ Building Permit	GRADING PERMIT

1. Total Owned Land Area: At Site: +/- 16.63 acres Being Developed/Disturbed: +/- 2.0 acres

2. Is a portion or all of the subject property located in a designated FEMA Flood Hazard Area? ☐ Yes** ☒ No

3. Is the property bordered or crossed by an existing or proposed Clark County Regional Flood Control District Master Planned Facility? ☒ Yes** ☐ No

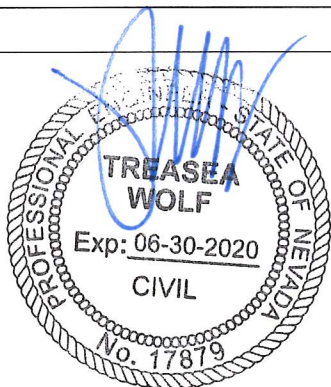
4. Proposed type of development (Residential, Commercial, Etc.): Commercial

5. Approximate upstream land area which drains to the subject site: N/A

6. Has the site drainage been evaluated in the past? ☒ YES ☐ NO If yes, please identify documentation: Technical Drainage Study for Odette Center; Pentacore, February 2001

7. If known, please briefly identify the proposed discharge point(s) of runoff from the site: Fort Apache Road storm drain to the west, Charleston Blvd to the north and the existing private drive aisle to the south

8. Briefly describe your proposed schedule for the subject project: ASAP



Engineer's Seal

Submit this form as part of the required drainage study to the local entity which has jurisdiction over the subject property. This form may provide sufficient information to serve as the Conceptual Drainage Study.

*New Required Field

**Review and concurrence of the Clark County Regional Flood Control District is required.

Revision	Date
Supplement	Mar 7, 2019
Update #1	Jul 12, 2019

DS 5100

Local Entity File No.

REFERENCE:

STANDARD FORM 1



July 12, 2019

Ms. Jennifer Shinn, P.E.
City of Las Vegas Flood Control
333 Rancho Drive
Las Vegas, NV 89106

RE: *Update #1 to the Technical Drainage Study for Chick-fil-A @ Charleston & Ft. Apache*

Dear Ms. Shinn,

We are submitting this update letter and revised plans for the Chick-fil-A @ Charleston & Ft. Apache. The revision is to revise the site plan for the retail building and trash enclosure. The retail building has increased in size from a total of 9,011 SF to 10,168 SF. Due to the increase in size, the patio area to the east of the retail building has been removed. The proposed trash enclosure has also increased in size and roof drains have been added to the plans on the east and west side of the proposed retail building. However, the finished floor elevation of the proposed building is unchanged and drainage pattern is consistent with the previously approved study.

We are submitting this revision/update letter of explanation for your files and to approve plans that are also being submitted for review/approval.

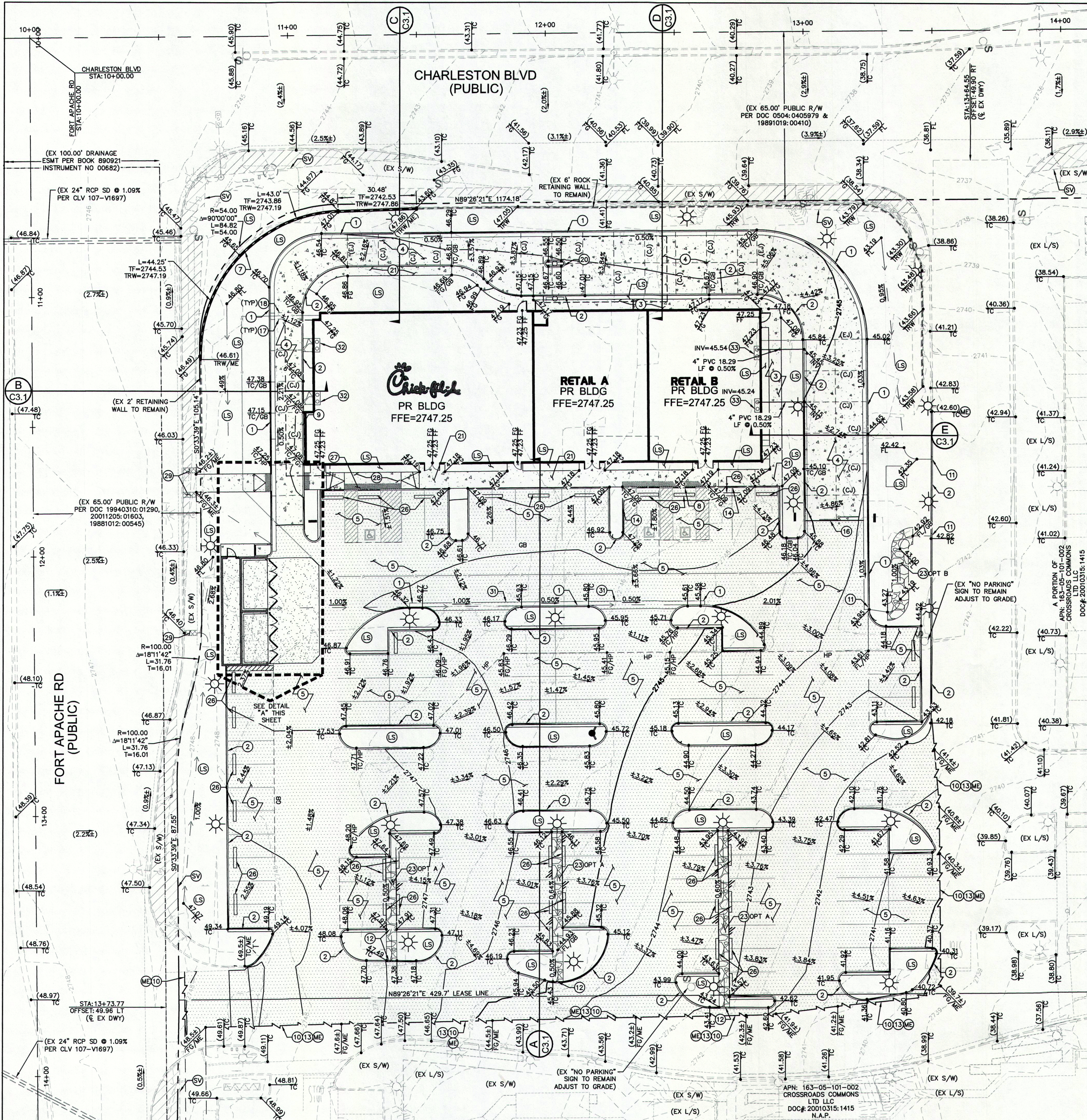
We have attached revised wet-stamped copies of sheets C3.0, C3.1, C4.1, C4.2, C4.3, and C4.5.

Please do not hesitate to contact me if you should have any questions or need additional information

Sincerely,

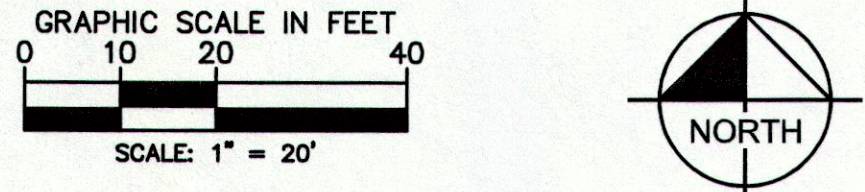


Treasea Wolf, P.E., LEED AP



LEGEND

- RIGHT-OF-WAY
- PROPERTY LINE
- LEASE LINE
- GRADE BREAK
- PR SAWTOOTH LINE
- PR RETAINING WALL
- PR SWALE/FLOW LINE
- PR TYPE 'L' CURB & GUTTER
- PR TYPE 'A' CURB
- EX STREETLIGHT
- EX SIGHT VISIBILITY ZONE (SVZ)
- PR PAVEMENT
- PR CONCRETE



ENGINEER'S NOTES:

- ALL WORK SHALL CONFORM TO THE SOILS REPORT PREPARED BY TERRACON, DATED MARCH 28, 2019, NO. 8418522.
- ALL OFF-SITE IMPROVEMENT CONSTRUCTION SHALL CONFORM TO THE "UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA" LATEST EDITION.
- FINAL ASPHALTIC CONCRETE (AC) PAVEMENT SURFACES SHALL BE FLUSH WITH THE TOP OF GUTTER (INCLUDING OPEN GRADE).
- CONTRACTOR IS RESPONSIBLE FOR DUST AND EROSION CONTROL DURING CONSTRUCTION.
- THIS PLAN SHALL NOT, IN PART OR IN WHOLE, BE USED FOR CONSTRUCTION UNTIL APPROVED AND SIGNED BY ALL APPLICABLE GOVERNMENT AGENCIES.
- ENGINEER TO BE NOTIFIED OF ANY DISCREPANCIES IMMEDIATELY.
- MATCH ELEVATIONS SHOWN TO BE VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION.
- THIS PROJECT IS PART OF A PROPOSED COMMERCIAL SUBDIVISION.
- ALL ON-SITE STORM DRAINS AND THE ASSOCIATED STORM WATER FACILITIES ARE PRIVATELY OWNED AND PRIVATELY MAINTAINED.

STORMWATER MANAGEMENT NOTES

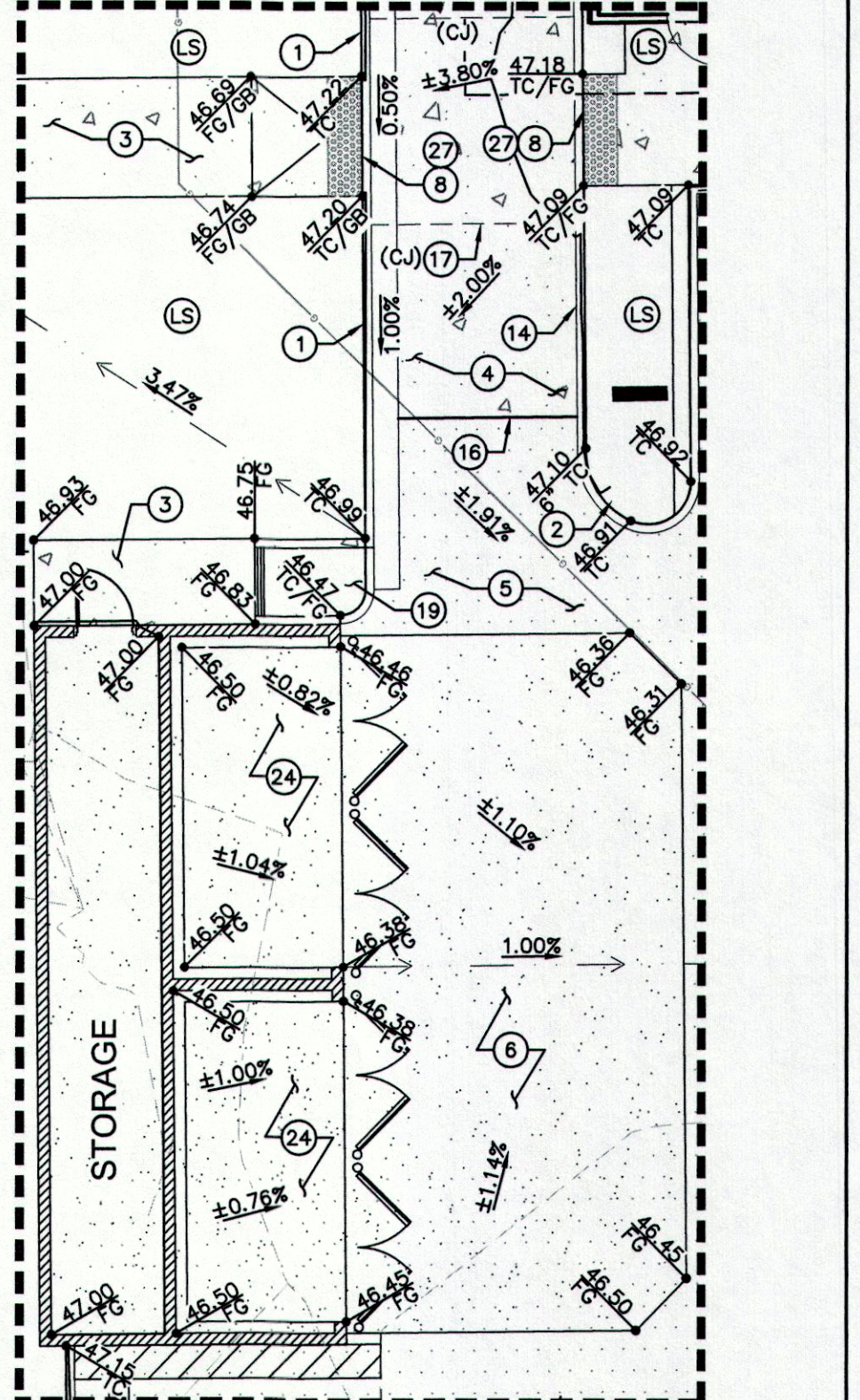
- THE OWNER, SITE DEVELOPER, CONTRACTOR, AND/OR THEIR AUTHORIZED AGENTS SHALL EACH DAY REMOVE ALL SEDIMENT, MUD, CONSTRUCTION DEBRIS, OR OTHER POTENTIAL POLLUTANTS THAT MAY HAVE BEEN DISCHARGED TO, OR ACCUMULATED IN, THE PUBLIC RIGHTS OF WAY OF THE CITY OF LAS VEGAS AS A RESULT OF CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS SITE DEVELOPMENT OR CONSTRUCTION PROJECT. SUCH MATERIALS SHALL BE PREVENTED FROM ENTERING THE STORM SEWER SYSTEM.
- ADDITIONAL CONSTRUCTION SITE DISCHARGE BEST MANAGEMENT PRACTICES MAY BE REQUIRED OF THE OWNER AND HIS OR HER AGENTS DUE TO UNFORESEEN EROSION PROBLEMS OR IF THE SUBMITTED PLAN DOES NOT MEET THE PERFORMANCE STANDARDS SPECIFIED IN THE CITY OF LAS VEGAS BUILDING ADMINISTRATIVE CODE 24.40 AND THE LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDANCE MANUAL.
- TEMPORARY OR PERMANENT STABILIZATION PRACTICES WILL BE INSTALLED ON DISTURBED AREAS AS SOON AS PRACTICABLE AND NO LATER THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. SOME EXCEPTIONS MAY APPLY; REFER TO THE NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVR100000, SECTION III.A.5.
- AT A MINIMUM, THE CONTRACTOR OR HIS AGENT SHALL INSPECT ALL DISTURBED AREAS, AREAS USED FOR STORAGE OF MATERIALS AND EQUIPMENT THAT ARE EXPOSED TO PRECIPITATION, VEHICLE ENTRANCE AND EXIT LOCATIONS, AND ALL BMPs WEEKLY AND WITHIN 24 HOURS AFTER ANY RAIN EVENT OF 0.5 INCHES OR MORE. THE CONTRACTOR OR HIS AGENT SHALL UPDATE OR MODIFY THE STORMWATER POLLUTION PREVENTION PLAN AS NECESSARY. SOME EXCEPTIONS TO WEEKLY INSPECTIONS MAY APPLY, SUCH AS SUSPENSION OF LAND DISTURBANCE ACTIVITIES. REFER TO THE NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVR100000, SECTION III.A.12.
- ACCUMULATED SEDIMENT IN BMPs SHALL BE REMOVED WITHIN SEVEN DAYS AFTER A STORMWATER RUNOFF EVENT OR PRIOR TO THE NEXT ANTICIPATED STORM EVENT, WHICHEVER IS EARLIER. SEDIMENT MUST BE REMOVED WHEN BMP DESIGN CAPACITY HAS BEEN REDUCED BY 50 PERCENT OR MORE.

SIGHT VISIBILITY ZONES NOTE

NO WALLS, FENCES, SHRUBS, UTILITY APPURTENANCES OR ANY OTHER OBJECT, OTHER THAN TRAFFIC CONTROL DEVICES, FIRE HYDRANTS, TREES, AND STREET LIGHT POLES MAY BE CONSTRUCTED OR INSTALLED WITHIN THE SIGHT VISIBILITY ZONE UNLESS SAID OBJECT IS MAINTAINED LESS THAN 24 INCHES IN HEIGHT MEASURED FROM TOP OF CURB, OR WHERE NO CURB EXISTS, A HEIGHT OF 27 INCHES MEASURED FROM THE TOP OF ADJACENT ASPHALT, GRAVEL OR PAVEMENT STREET SURFACE. THIS RESTRICTION EXTENDS ALONG THE SIGHT VISIBILITY LINE THROUGH LANDSCAPED MEDIANS.

CONSTRUCTION NOTES

- CONSTRUCT "L" TYPE CURB & GUTTER PER DETAIL 17, SHEET C4.2
- CONSTRUCT "A" TYPE CURB PER DETAIL 8, SHEET C4.1
- CONSTRUCT SIDEWALK PER DETAIL 11, SHEET C4.1
- CONSTRUCT CONCRETE PAVING DRIVE-THRU LANE PER SOILS REPORT BY TERRACON CONSULTANTS. SEE DETAIL 24, SHEET C4.3
- CONSTRUCT STANDARD AC PAVEMENT PER SOILS REPORT BY TERRACON CONSULTANTS. SEE DETAIL 21, SHEET C4.2
- CONSTRUCT CONCRETE APRON @ TRASH ENCLOSURE PER SOILS REPORT BY TERRACON CONSULTANTS. SEE DETAIL 18, SHEET C4.2
- CONSTRUCT 5.33' MAX RETAINING WALL PER SEPARATE ARCHITECTURAL PLANS AND DETAILS BY OTHERS
- CONSTRUCT 0" CURB PER DETAIL 17, SHEET C4.2
- DRIVE-THRU ISOMETRIC PLAN VIEW PER DETAILS 13 & 14, SHEET C4.2
- SAWTOOTH NEAT & MATCH EXISTING
- CONSTRUCT 2.0' WIDE CURB OPENING PER DETAIL 16A, SHEET C4.2
- CONSTRUCT 4.0' WIDE CURB OPENING PER DETAIL 16B, SHEET C4.2
- CONSTRUCT TRANSVERSE AND LONGITUDINAL DOWELED CONSTRUCTION JOINT PER DETAIL 23, AND BUTT JOINT PER DETAIL 23A, SHEET C4.3
- CONSTRUCT 0" TO 6" TRANSITION PER DETAIL 15, SHEET C4.2
- CONSTRUCT CONCRETE/AC EDGE PER DETAIL 21A, SHEET C4.2
- CONSTRUCT CONTRACTION JOINT (CJ) PER DETAIL 22, SHEET C4.3
- CONSTRUCT EXPANSION JOINT (EJ) PER DETAIL 26, SHEET C4.3
- CONSTRUCT RETURNED CURB ACCESSIBLE RAMP PER DETAIL 31, SHEET C4.3
- DRIVE-THRU ISLAND CURB PER DETAIL 29, SHEET C4.3
- CONSTRUCT SIDEWALK WITH 6" CURB SECTION PER DETAIL 12, SHEET C4.1
- INSTALL RIP-RAP (D50=3", T=6") LINED SWALE PER DETAIL 30, SHEET C4.3
- CONSTRUCT TRASH ENCLOSURE FOUNDATION PER DETAIL 19, SHEET C4.2
- CONSTRUCT PRECAST CONCRETE WHEEL STOP PER CCAUSD DWG NO. 238-SEE DETAIL 27, SHEET C4.3
- CONSTRUCT ACCESSIBLE CURB RAMP PER DETAIL 9, SHEET C4.1
- INSTALL SIDEWALK UNDERDRAIN PER CCAUSD DWG NO. 236
- CONSTRUCT 3' VALLEY GUTTER PER DETAIL 45, SHEET C4.1
- ROOF DRAIN SPILL TO GRADE WITH 3'X6" RIP-RAP PAD; D50=6" THICKNESS=12"
- ROOF DRAIN TO SPILL THROUGH CURB WITH CURB-O-LET PER DETAIL 45, SHEET C4.5
- PROPOSED LANDSCAPING PER SEPARATE LANDSCAPE PLANS
- MATCH EXISTING
- EXISTING SIGHT VISIBILITY ZONE



DETAIL "A"

SCALE: 1"=10'

BENCHMARK

7LV00 32SSW5: A RIVET AND PLATE IN THE TOP OF CURB AT THE NORTHWEST CORNER OF RAMPART BOULEVARD AND CHARLESTON BOULEVARD = 837.425m = 2,747.45ft (NAVD88).

BASIS OF BEARING

NORTH 89°26'21" EAST, BEING THE SOUTH LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF SECTION 32, TOWNSHIP 20 SOUTH, RANGE 80 EAST, W.D.M., CITY OF LAS VEGAS, STATE OF NEVADA, AS SHOWN BY THE MAP RECORDED IN FILE 36 OF SURVEYS, PAGE 89 IN THE OFFICE OF THE COUNTY RECORDER, CLARK COUNTY, NEVADA.

FLOOD ZONE NOTE

THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) PANEL NUMBER 32003C2145F, EFFECTIVE NOVEMBER 16, 2011, INDICATE THAT THE PROJECT SITE IS LOCATED IN ZONE "X"; ZONE "X" IS DEFINED BY FEMA AS "AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN."

DRAINAGE CERTIFICATION

I CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED DRAINAGE STUDY ON FILE WITH CITY OF LAS VEGAS FOR THIS PROJECT, DS-5100

TREASEA WOLF, PE No. 17879 DATE: 7-12-19

CLV #: H #:

EARTHWORK QUANTITIES

CUT	FILL	NET
3,842 CY	186 CY	3,656 CY (CUT)*

*RAW NUMBERS; HAVE NOT BEEN ADJUSTED FOR SOIL TYPE

LEGEND & ABBREVIATIONS

SEE SHEET C0.3 FOR MASTER LEGEND AND ABBREVIATIONS.

LEGAL DESCRIPTION

SEE COVER SHEET FOR FULL LEGAL DESCRIPTION

NOTES:

ALL DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.

OWNER RESPONSIBLE TO PROVIDE SURVEY MONUMENTATION AS SHOWN AND TO REPLACE ALL SURVEY MONUMENTATION DAMAGED, DISTURBED, DESTROYED, OR OBSOBELED DURING CONSTRUCTION.

GRADING NOTE:

PER THE SOILS REPORT, POSITIVE DRAINAGE OF 5% MINIMUM IN LANDSCAPE AREAS AND 2% MINIMUM ELSEWHERE SHALL BE MAINTAINED FOR AREAS ADJACENT TO STRUCTURES. THE 2% SHOULD BE MAINTAINED A DISTANCE OF 10' IN AREAS WHERE ADA IS ADJACENT TO THE BUILDING, SLOPES LESS THAN 2% ARE ACCEPTABLE.

ELEVATION NOTE:

ADD 2700 FEET TO ALL SPOT ELEVATIONS, EXCEPT FINISHED FLOOR ELEVATIONS AND CONTOURS.

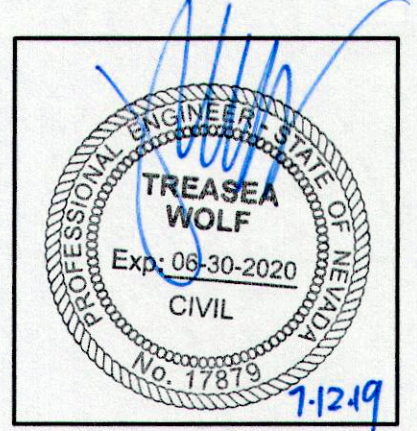


Chick-fil-A

5200 Buffington Road
Atlanta, Georgia
30349-2998

Kimley»Horn

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6671 LAS VEGAS BLVD., SUITE 200
LAS VEGAS, NV 89119
WWW.KIMLEY-HORN.COM



CHICK-FIL-A

CHARLESTON & FT. APACHE

8975 W CHARLESTON BLVD
LAS VEGAS, NV 89117

FSR# 4293

REVISION SCHEDULE

NO. DATE DESCRIPTION

AGENCY # T80

PROJECT # 092308012

PRINTED FOR 2ND SUB

DATE 07/09/19

DESIGN BY JZ

DRAWN BY CT

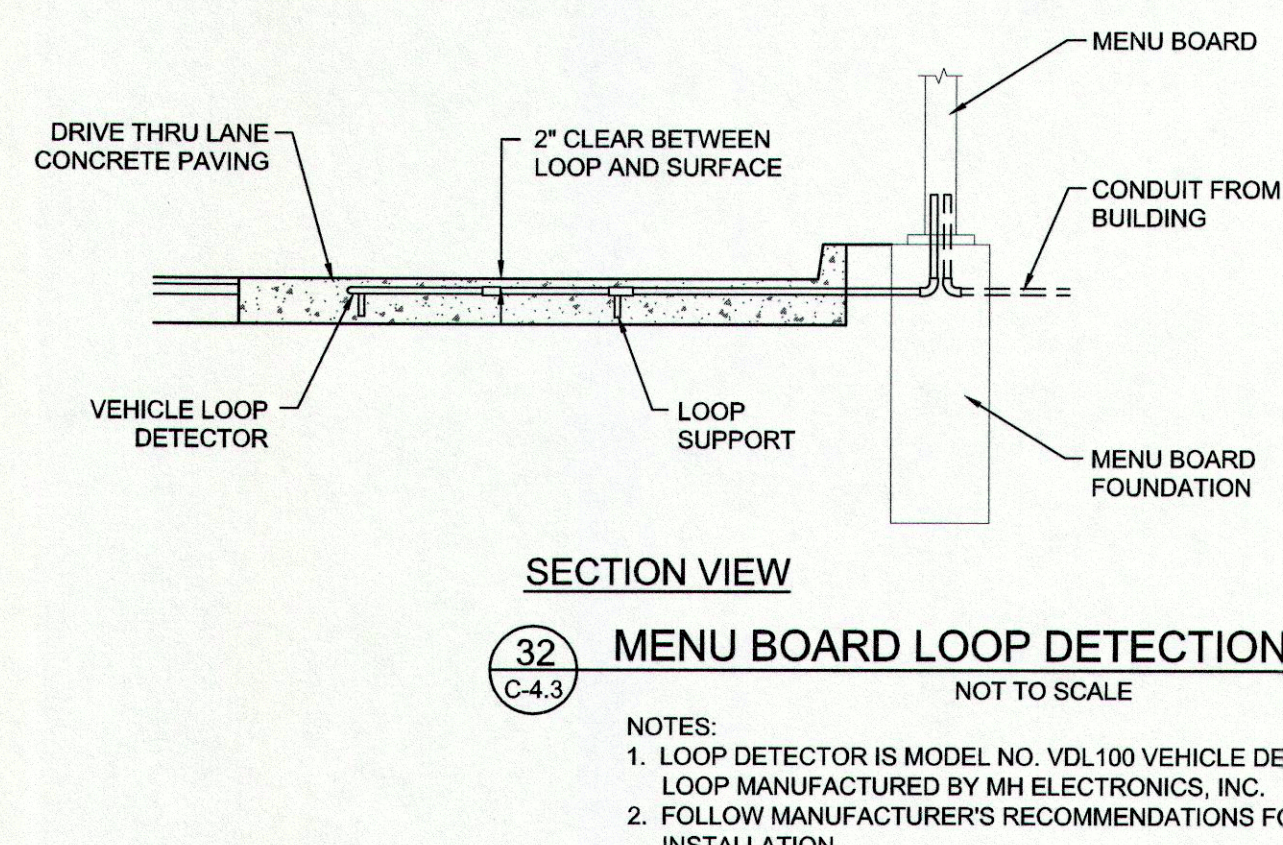
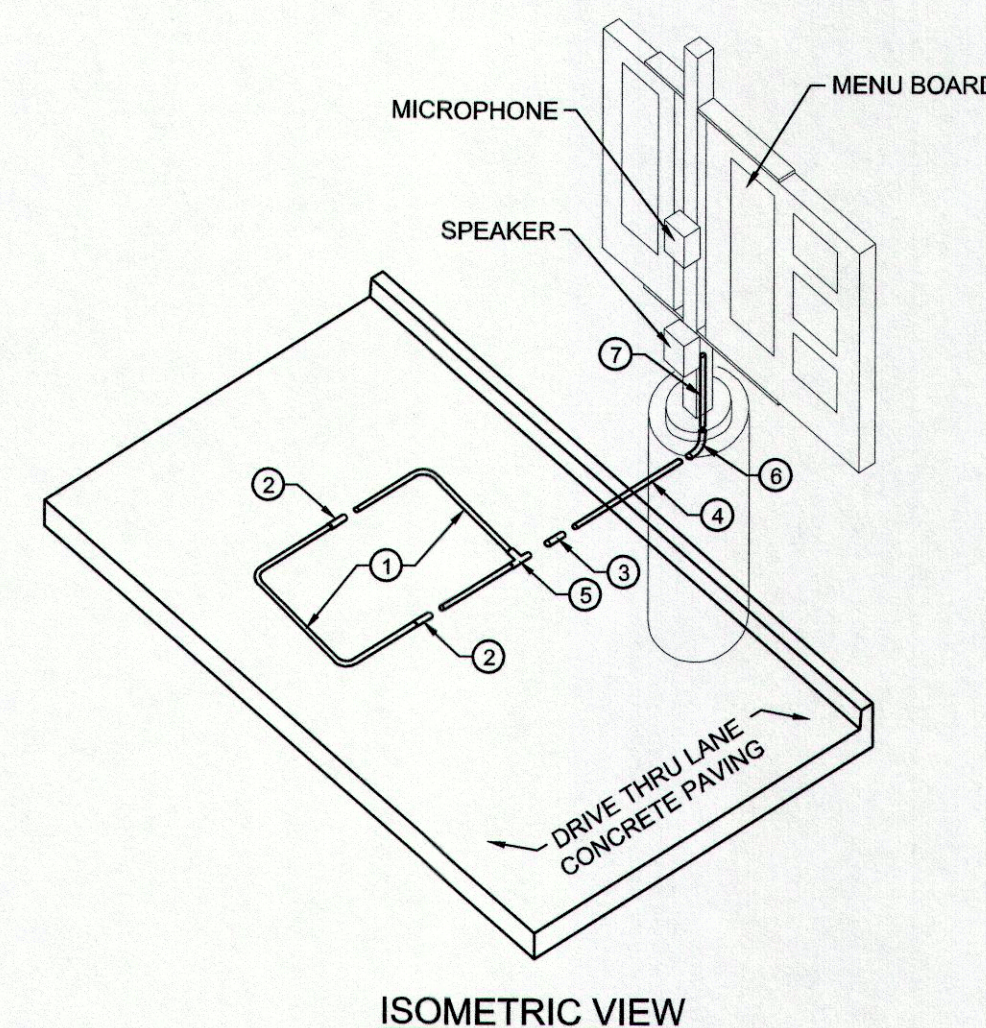
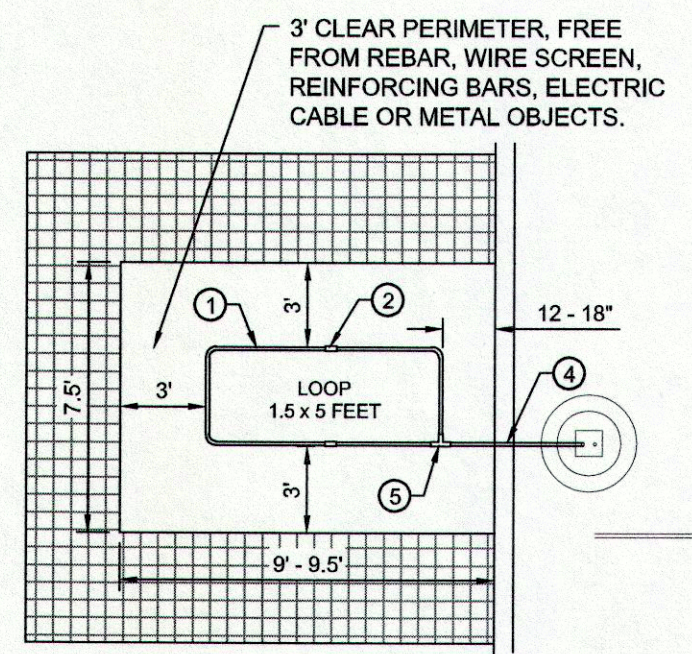
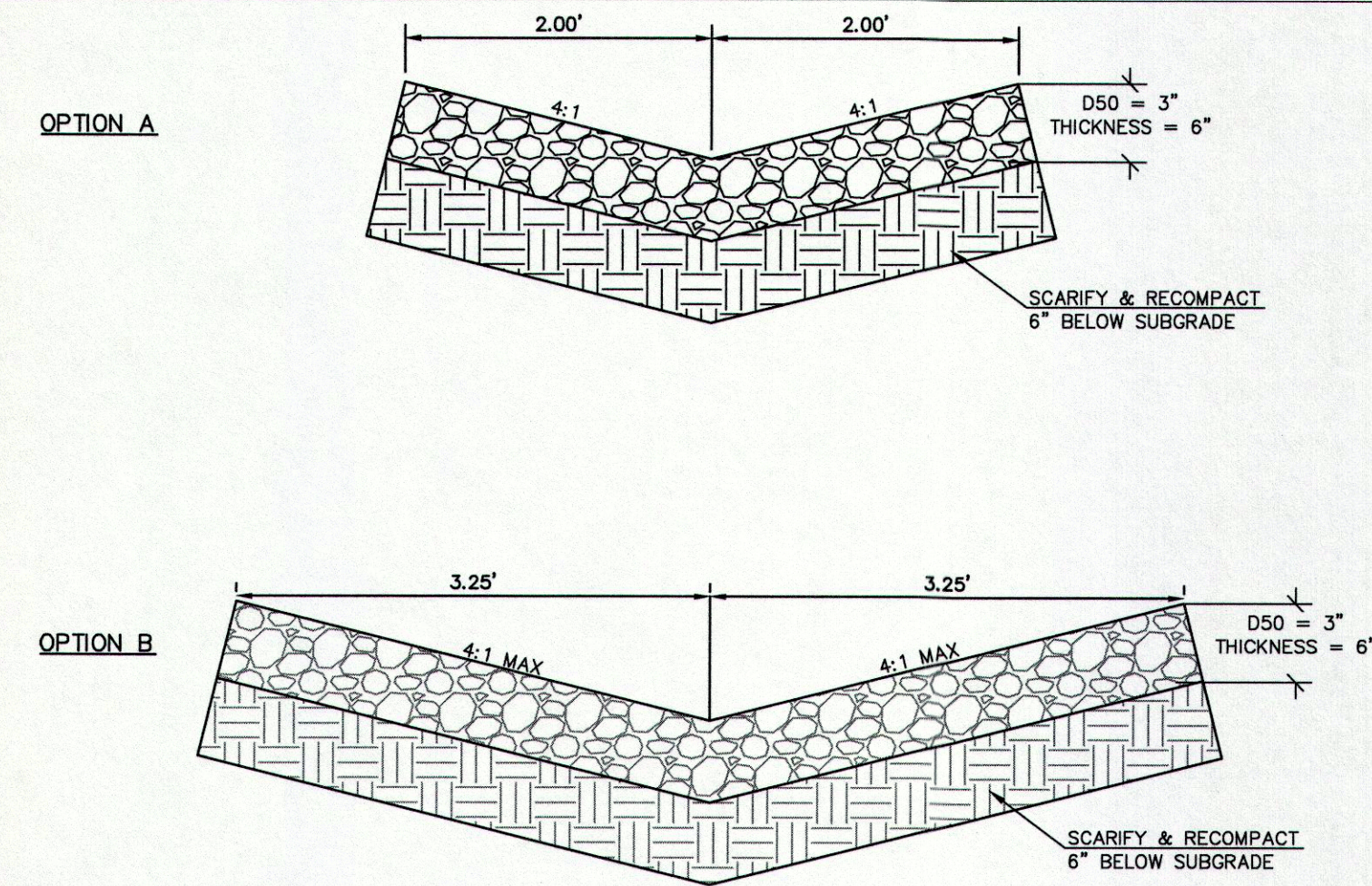
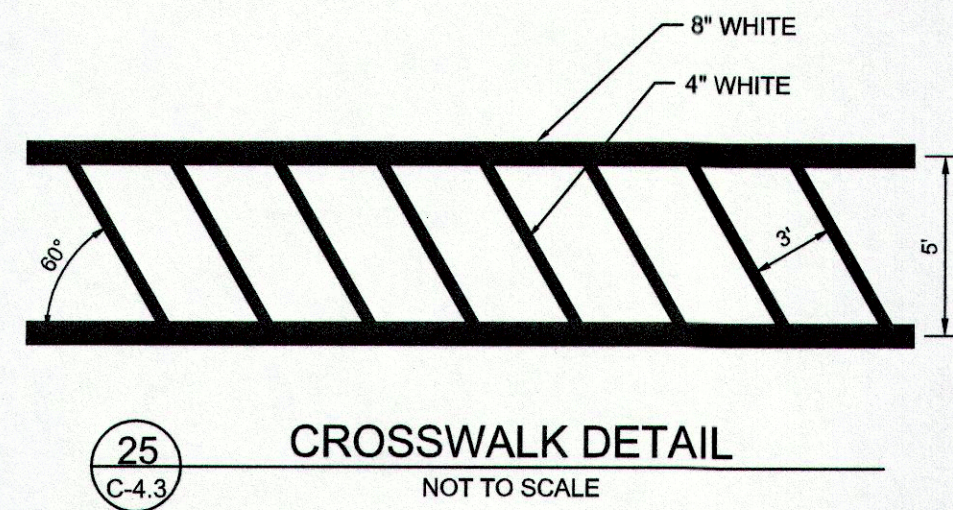
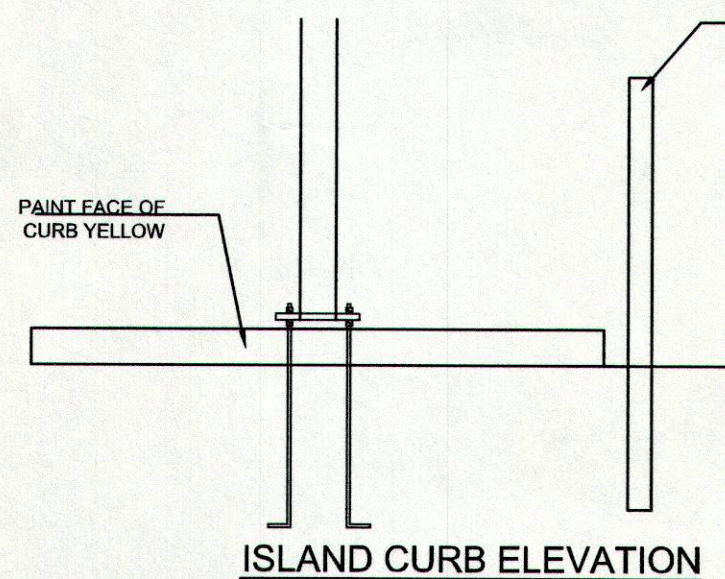
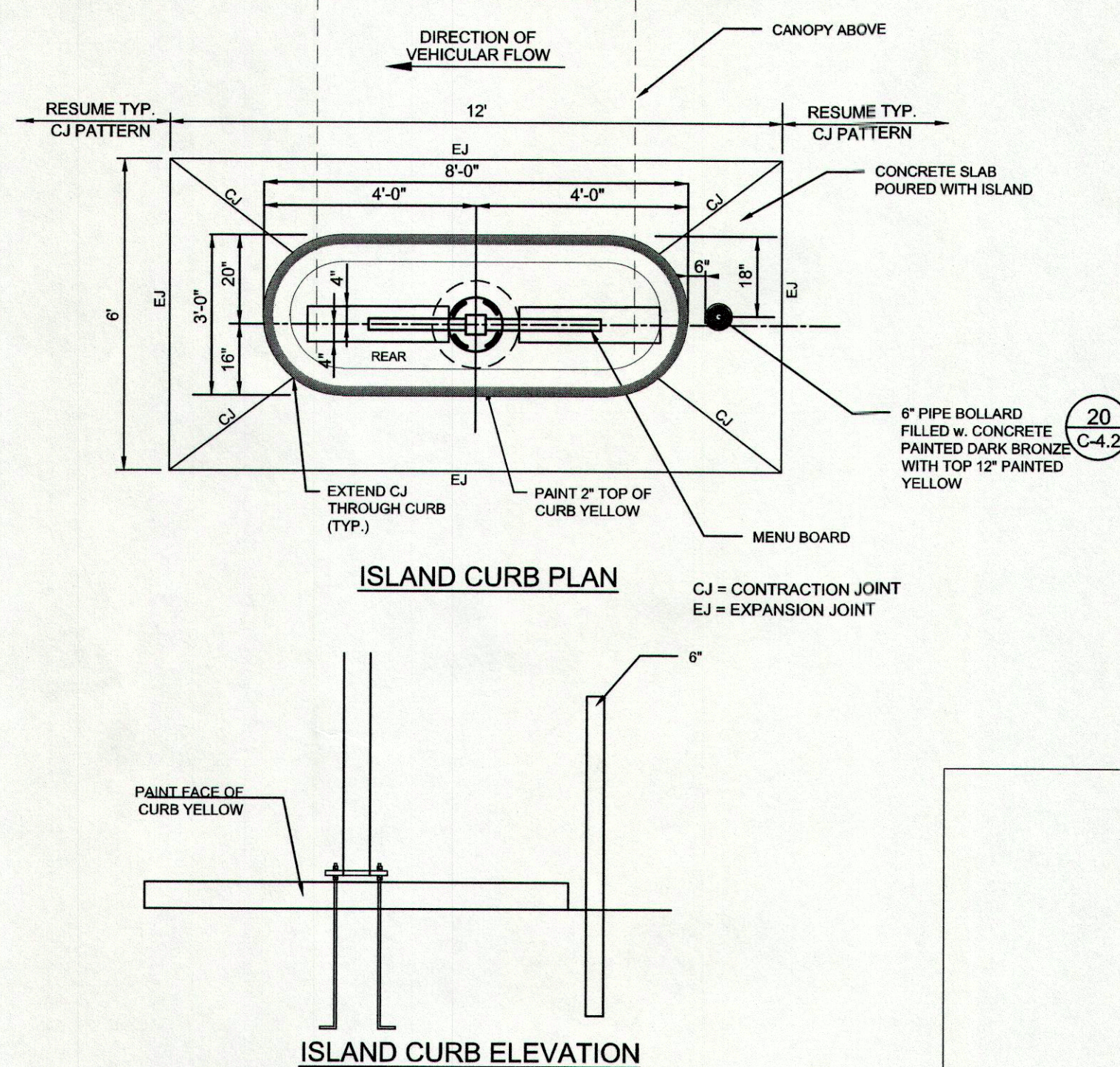
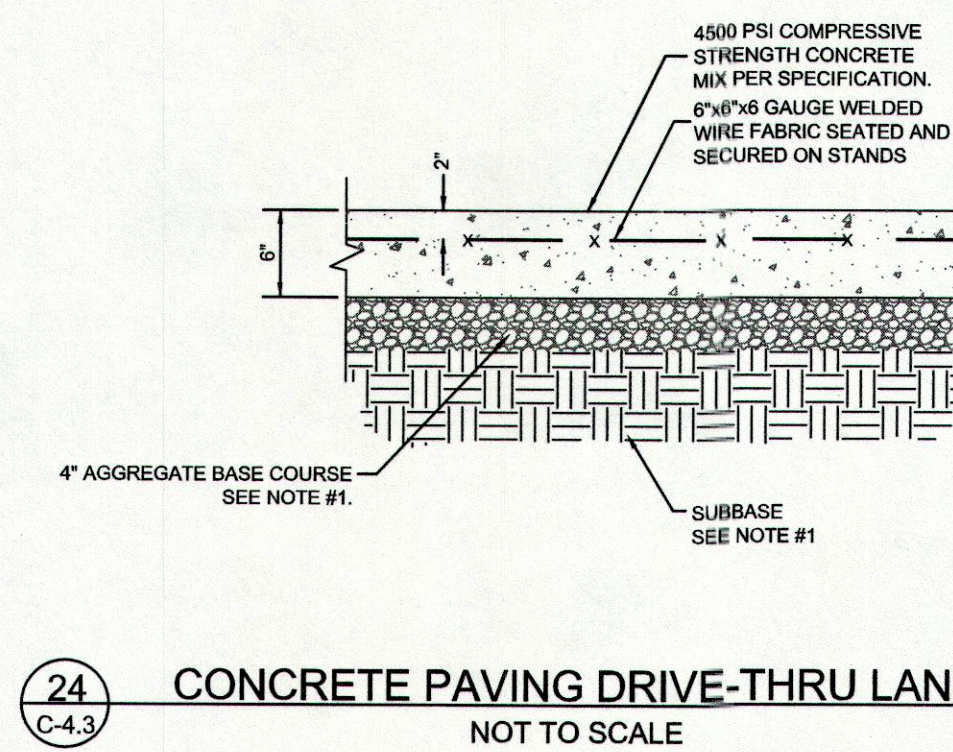
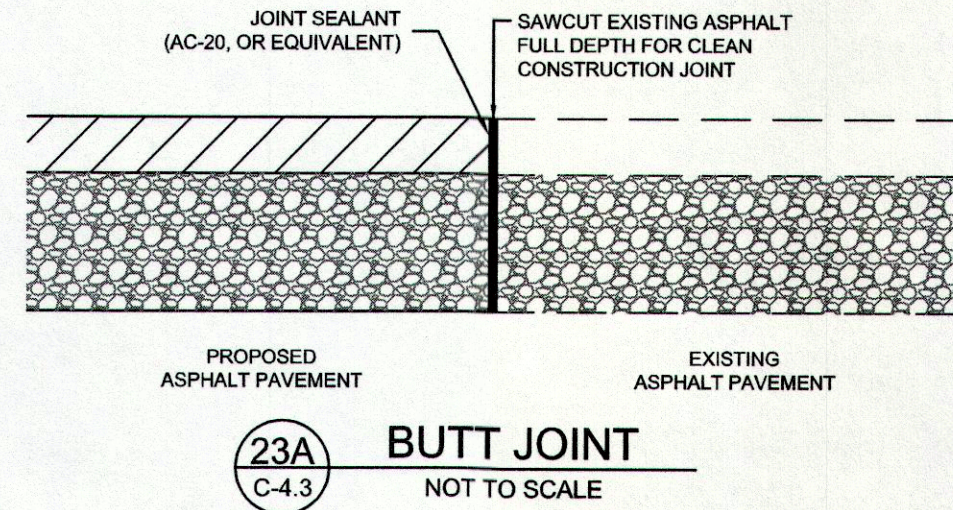
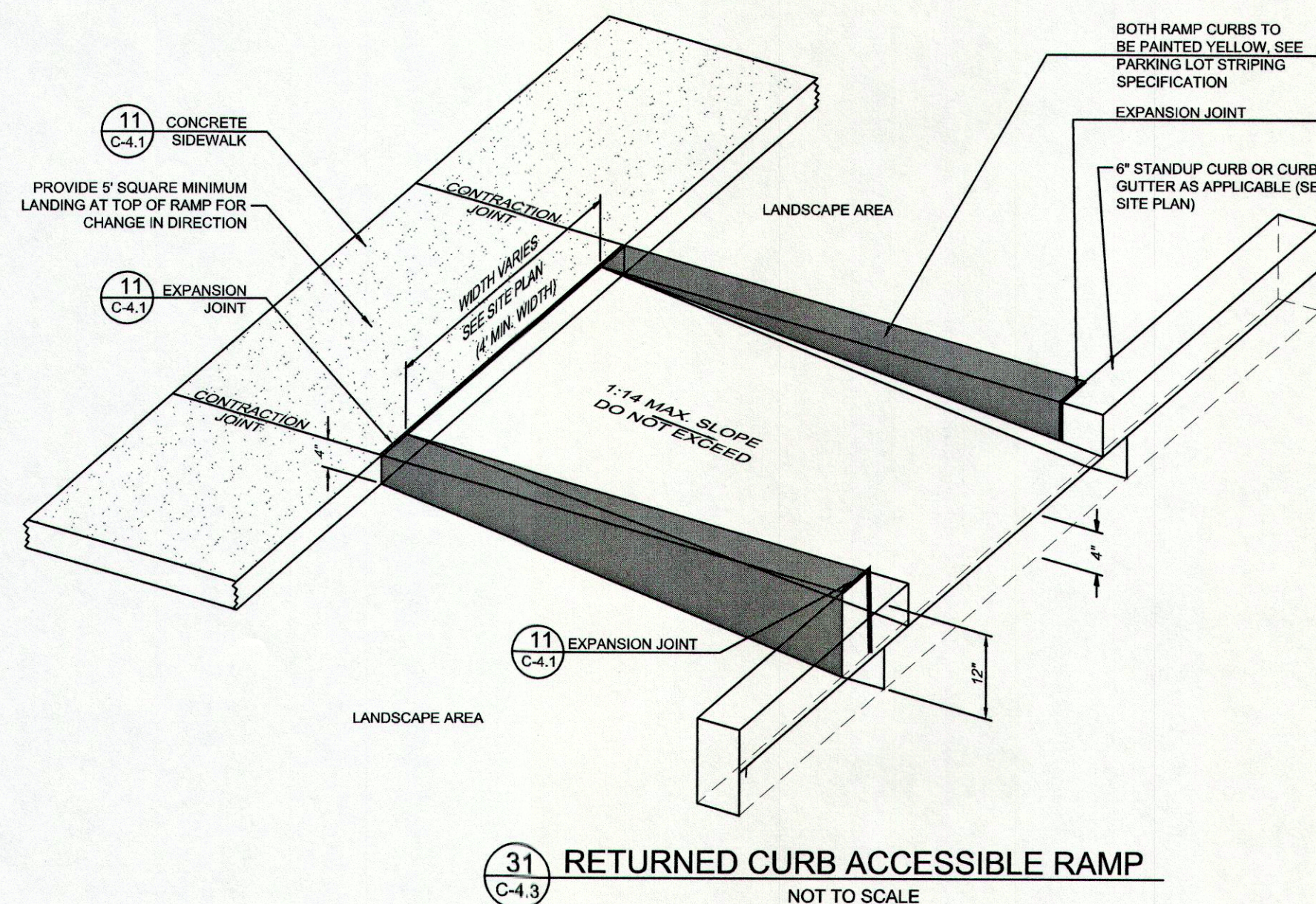
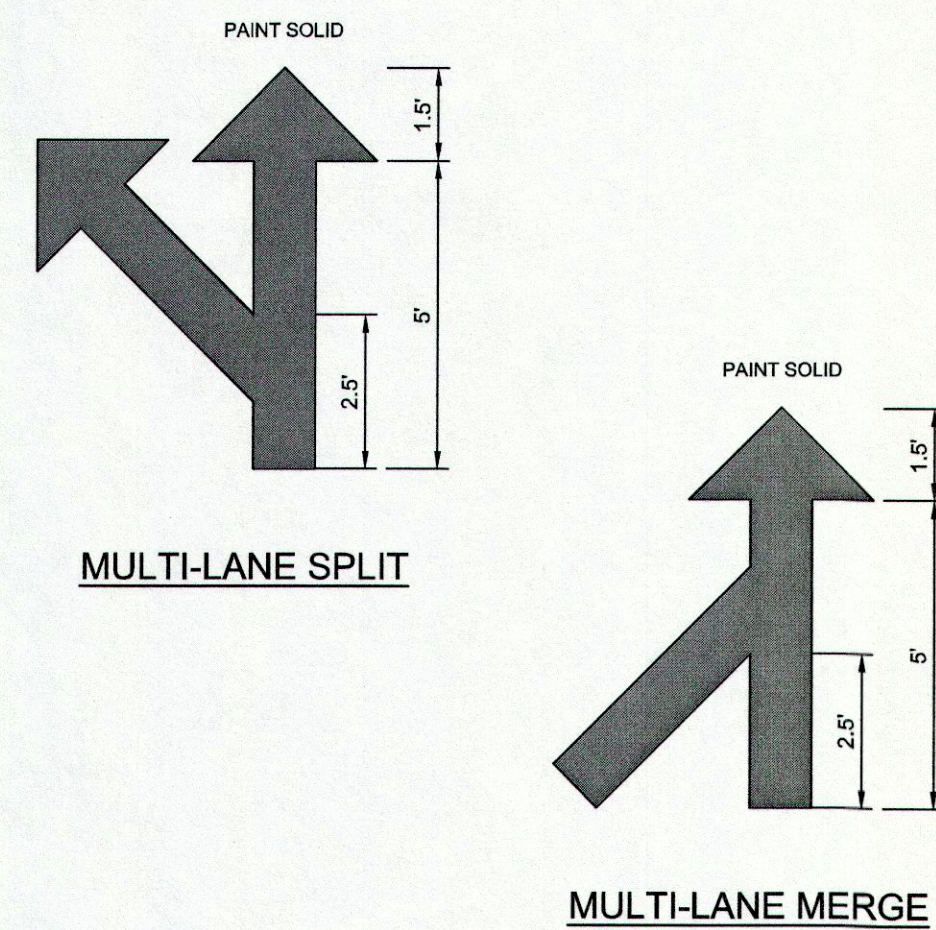
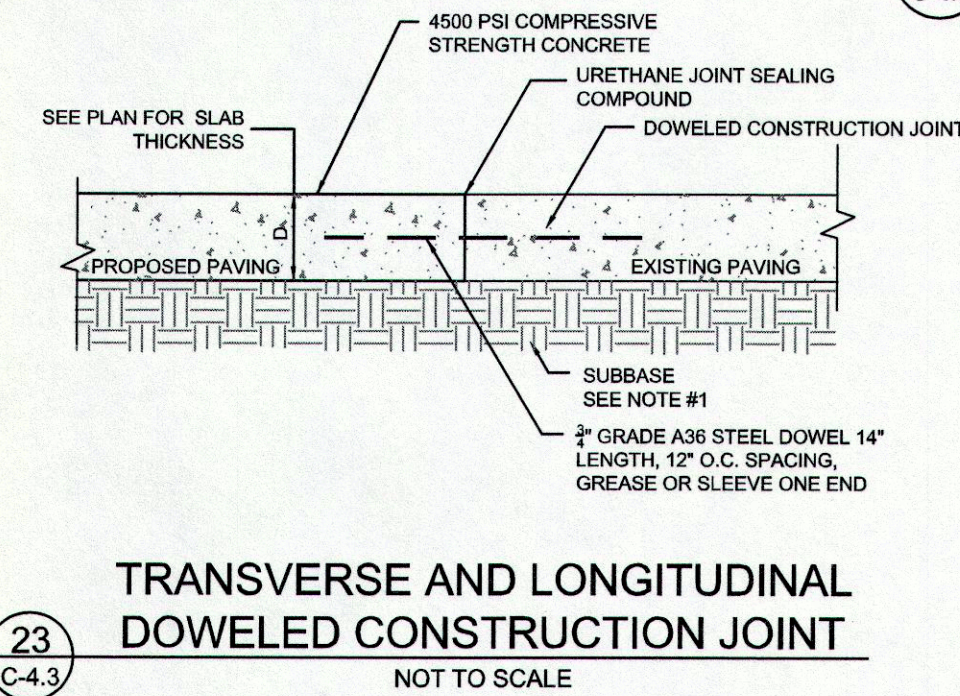
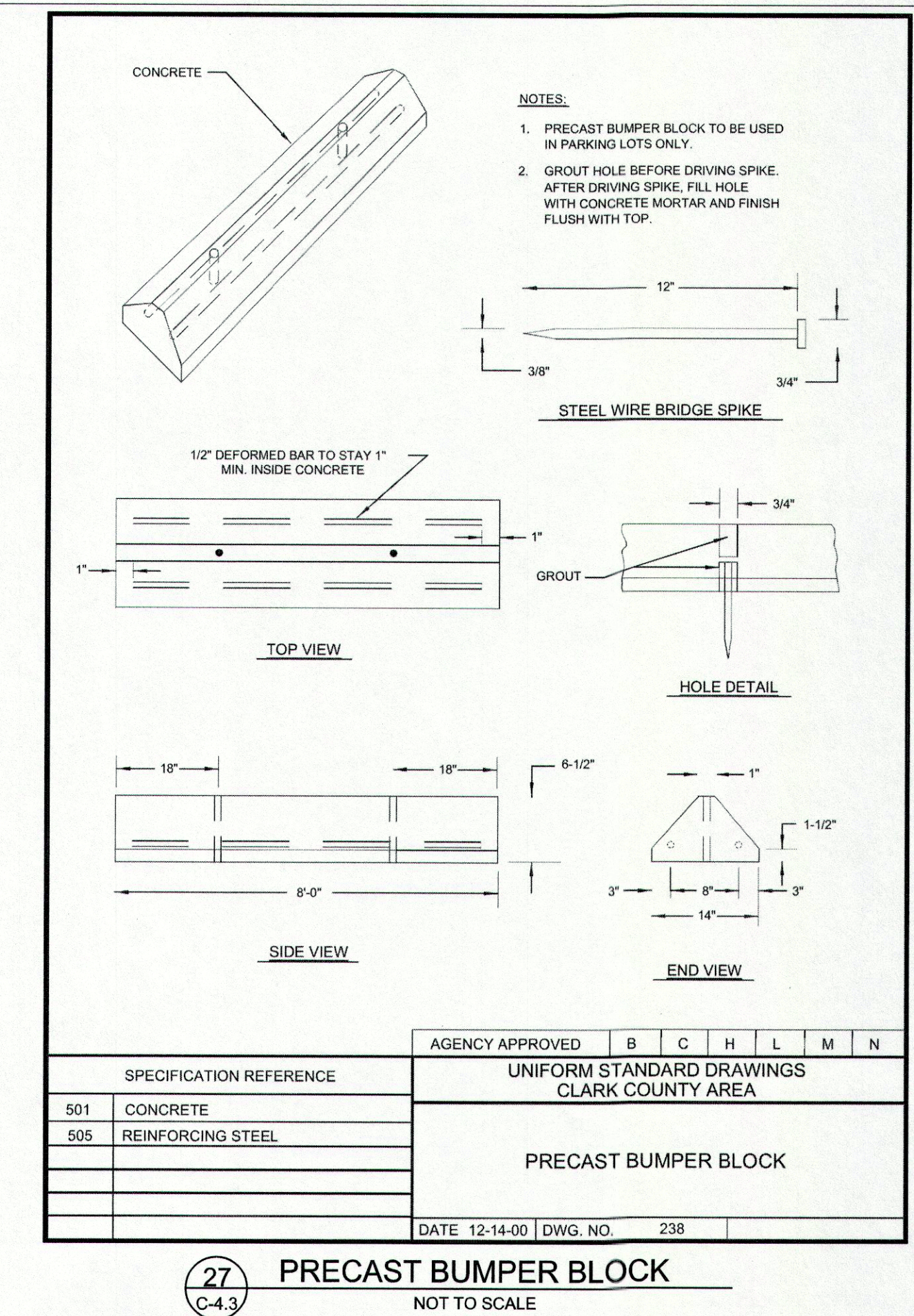
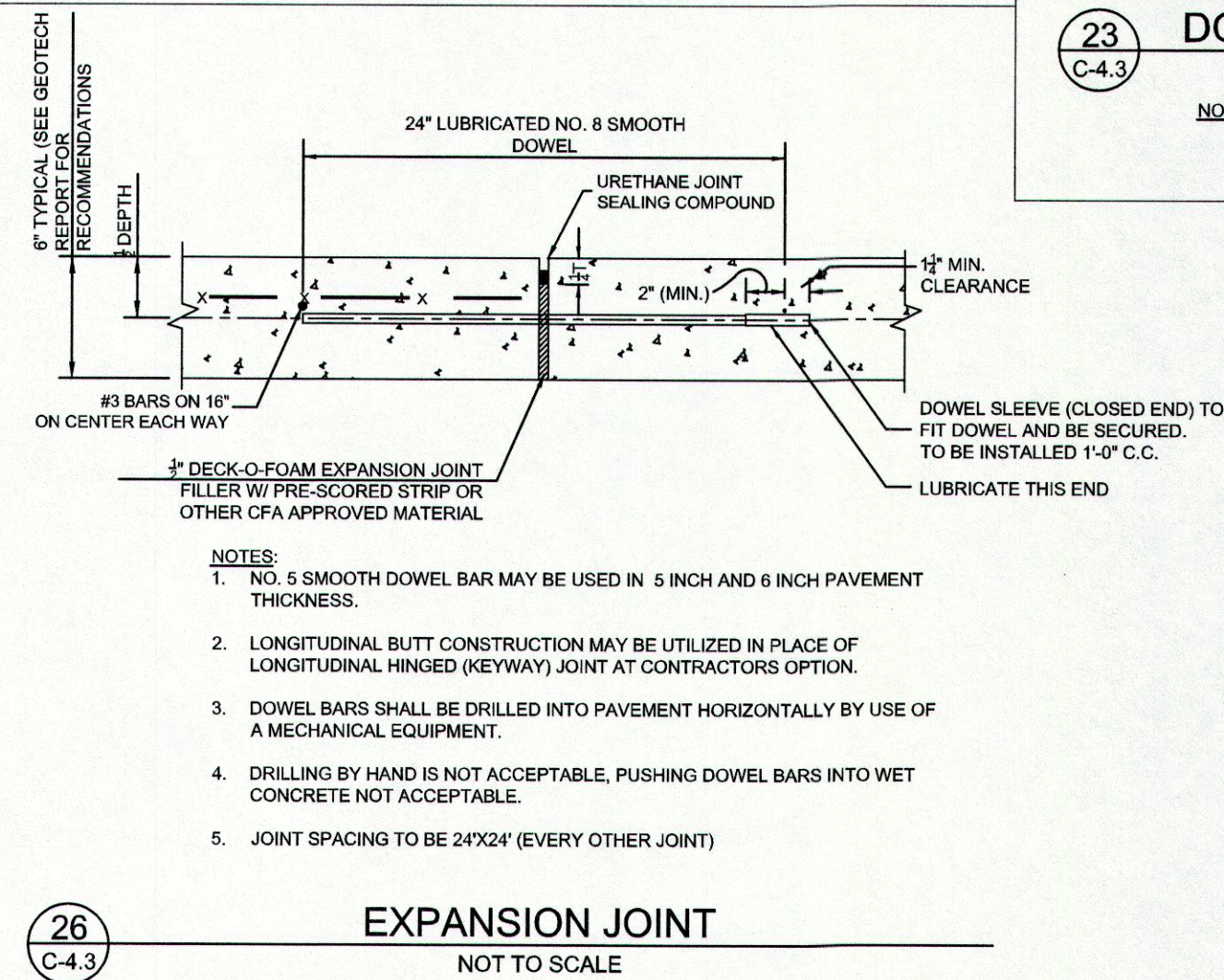
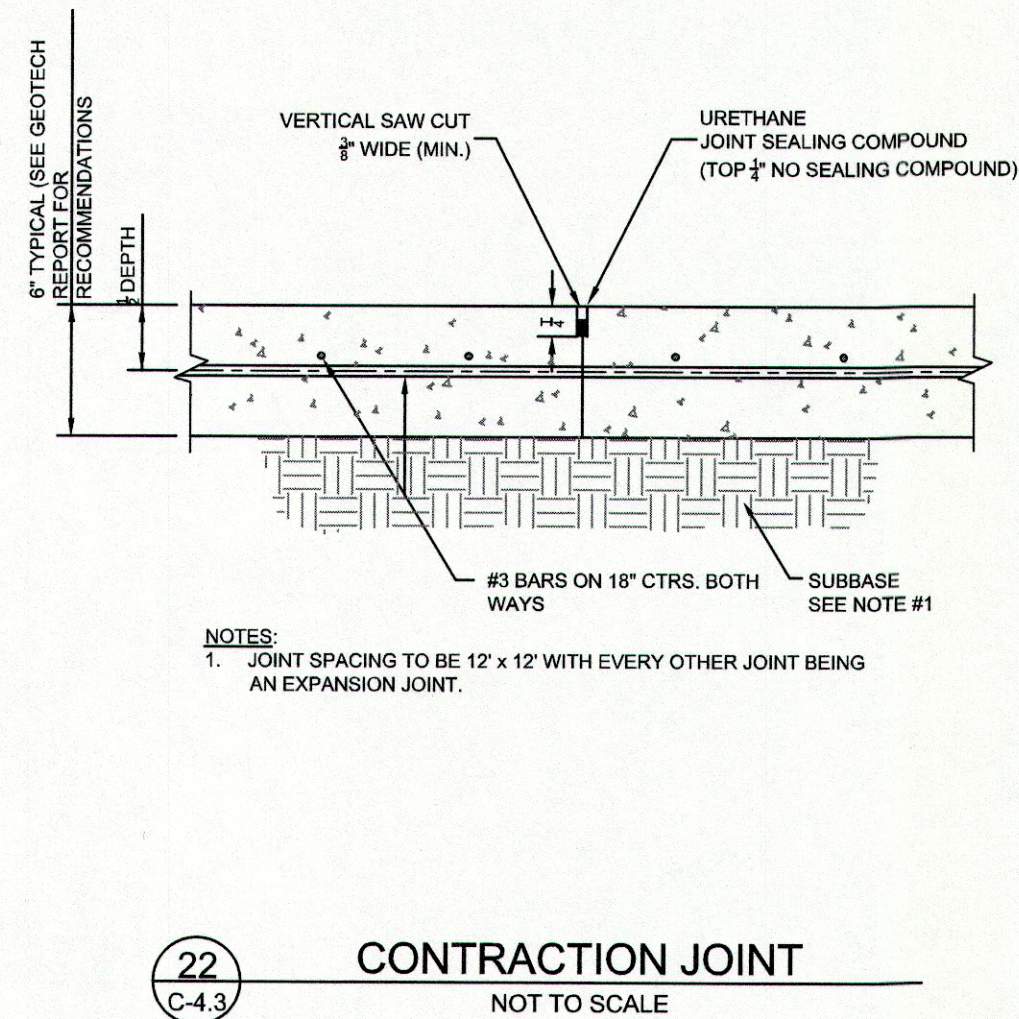
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SHEET GRADING PLAN

SHEET NUMBER

C3.0

K:\JAN_Civil\2019\0810\12-Chick-Fil-A Charleston - Fort Apache\242502\CD\Partials\02080012-DT.dwg Sheet No. C-4.3 Drawn by: cassy.bauer - Friday, July 12, 2019 7:28 AM Printed by: Zha, Jia-yin - July 12, 2019 8:59 AM

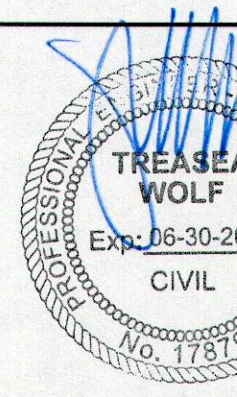


- PARTS LIST**
- 1 PREFAB (FOLDED) LOOP (1.5' x 5')
 - 2 1/2" PVC COUPLING
 - 3 1/2" PVC SLEEVE COUPLING
 - 4 1/2" PVC TUBING (3' LENGTH)
 - 5 1/2" PVC CORNER FITTING
 - 6 1/2" PVC 90° ELBOW
 - 7 1/2" PVC TUBING (2' LENGTH)



Chick-fil-A
5200 Buffington
Atlanta, GA
30349-2925

Kimley-Horn
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6871 LAS VEGAS BLVD. S., SUITE 302, LAS VEGAS, NV 89119



CHICK-FIL-A
CHARLESTON & FT. APACHE

FSR# 4
REVISION SCHEDULE
NO. DATE DESCRIPTION

AGENCY #
PROJECT #
PRINTED FOR
DATE
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DRAWN BY
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SHEET
TYPICAL DETAILS 30
SHEET NUMBER

CLV #: H #:

C4.3

