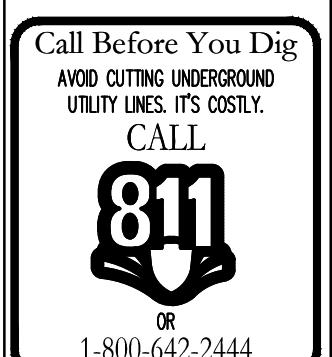


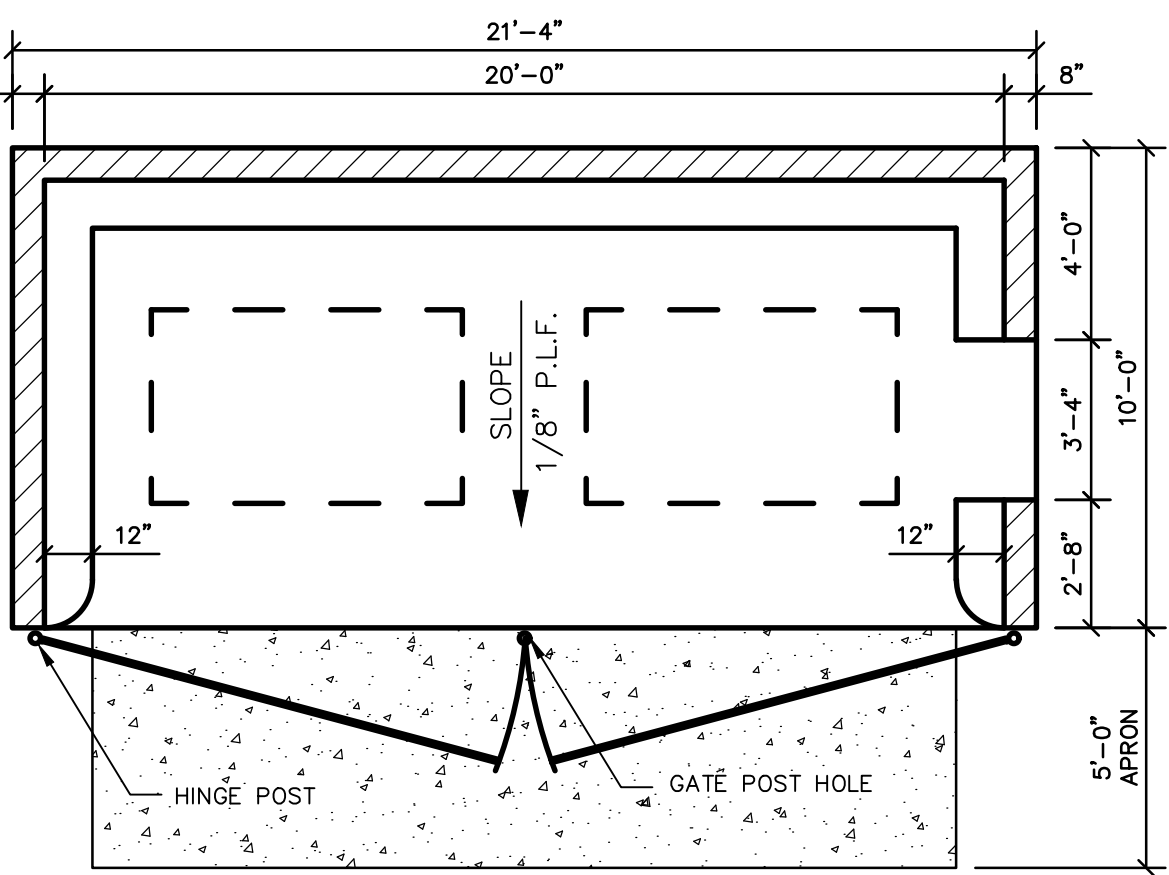
File: P:\Plans\Drawings - Car Wash\Salina-Maryland\Imp Plan\02-04 DETAIL SHEET.dwg Sheet: 02 DETAILS Date: 11-04-25 12:20pm

CAUTION TO SUBCONTRACTOR I

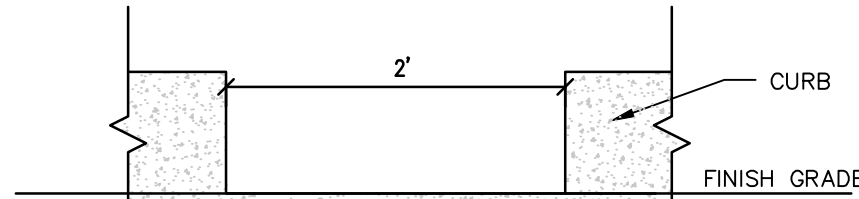
EXISTING UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE SUBCONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO COMMENCING CONSTRUCTION. NO REPRESENTATION IS MADE THAT ALL EXISTING UTILITIES ARE SHOWN HEREON. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR UTILITIES NOT SHOWN OR UTILITIES NOT SHOWN IN THEIR PROPER LOCATION.



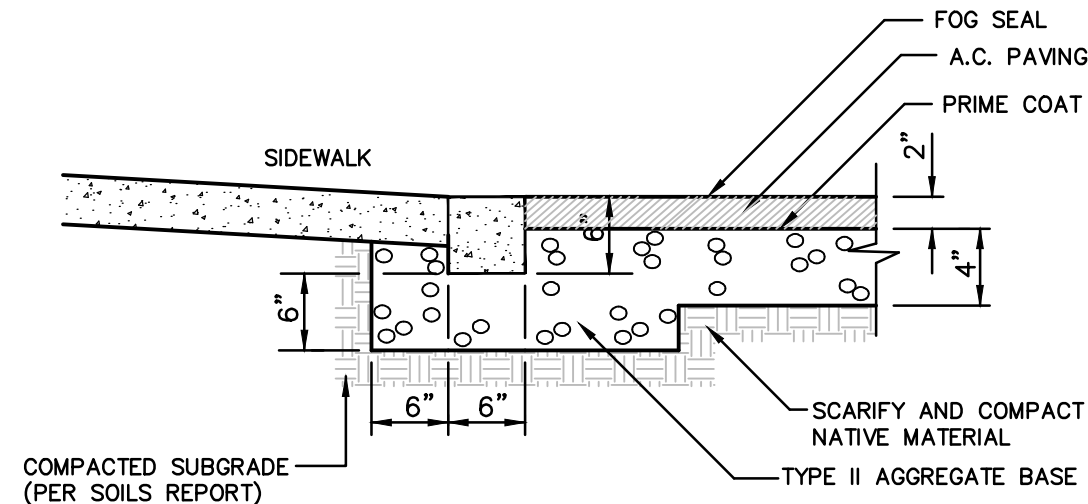
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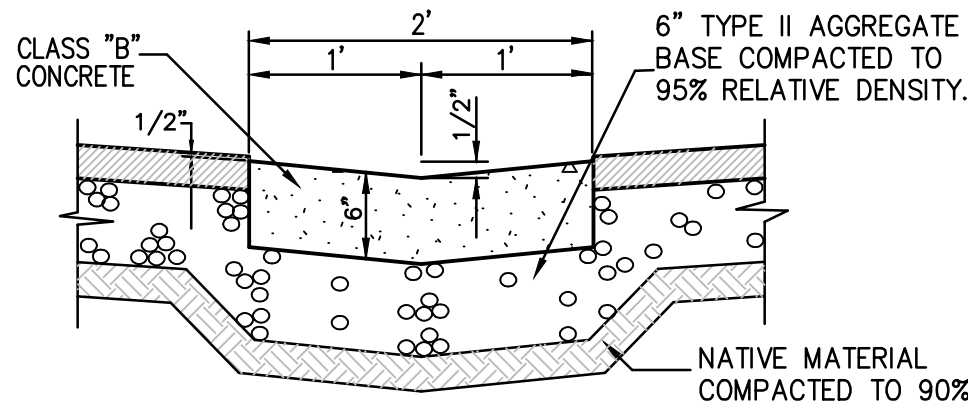
SIDE ACCESS MAY OCCUR ON EITHER SIDE WITH NO GATE
TWO CONTAINER
NOT TO SCALE



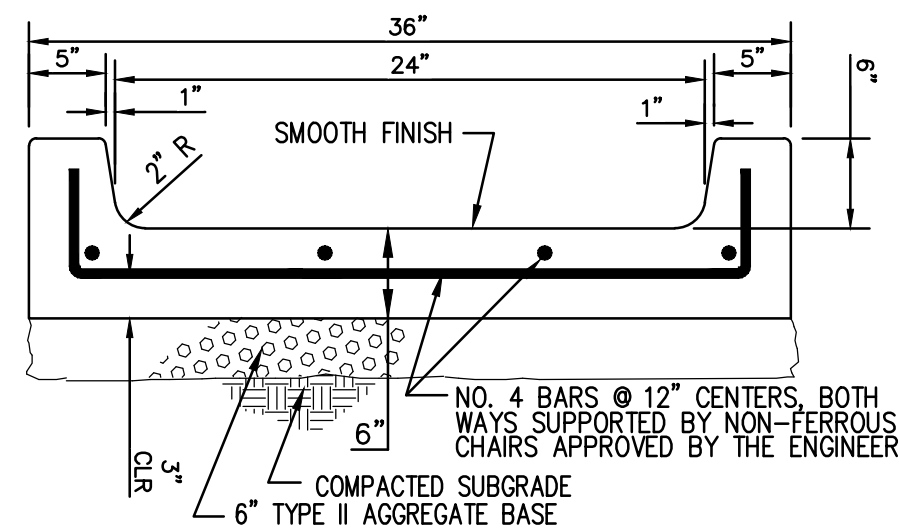
CURB CUT
NOT TO SCALE



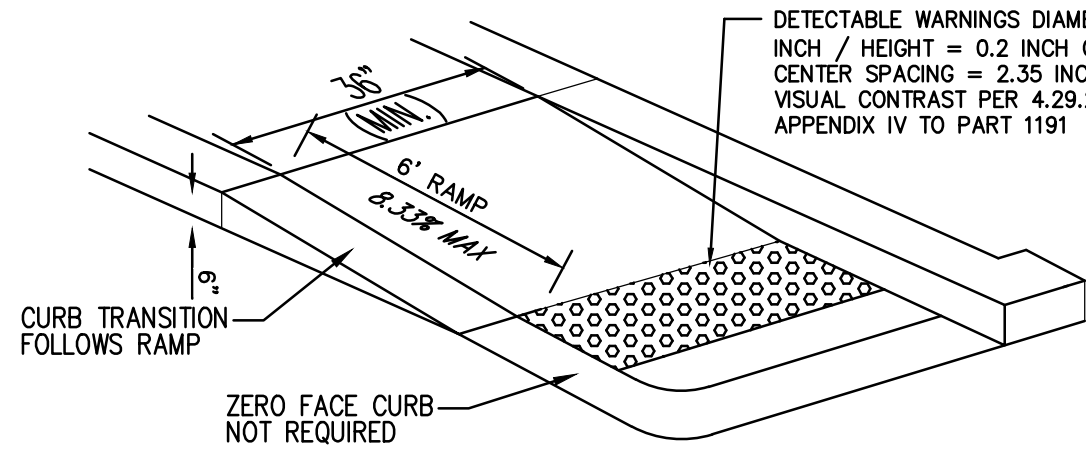
"A" CURB W/ ZERO LIP DETAIL
NOT TO SCALE



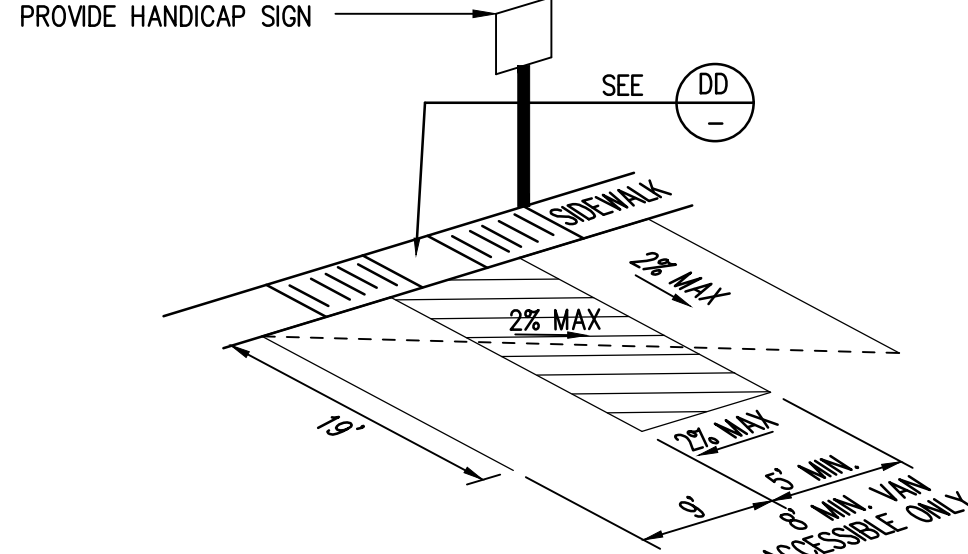
2' CONCRETE VALLEY GUTTER
NOT TO SCALE



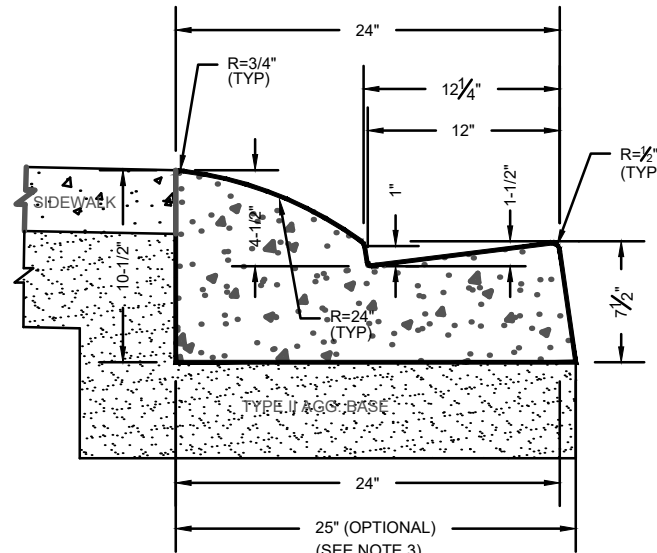
"U" CHANNEL DETAIL
NOT TO SCALE



HANDICAP RAMP
NOT TO SCALE

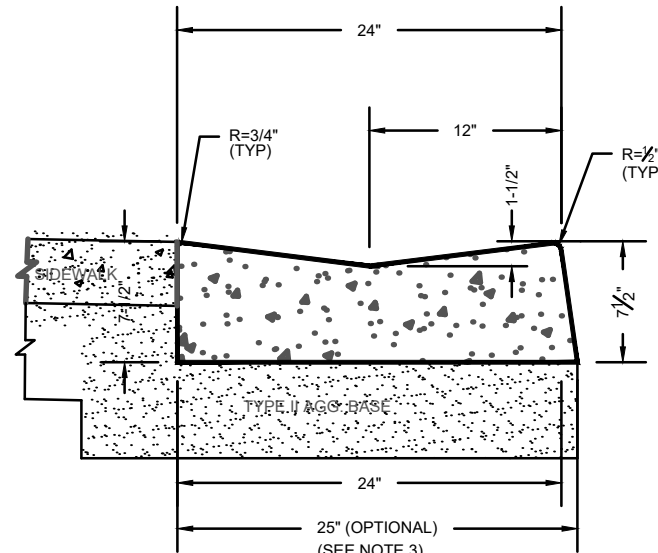


HANDICAP LOADING ZONE
NOT TO SCALE



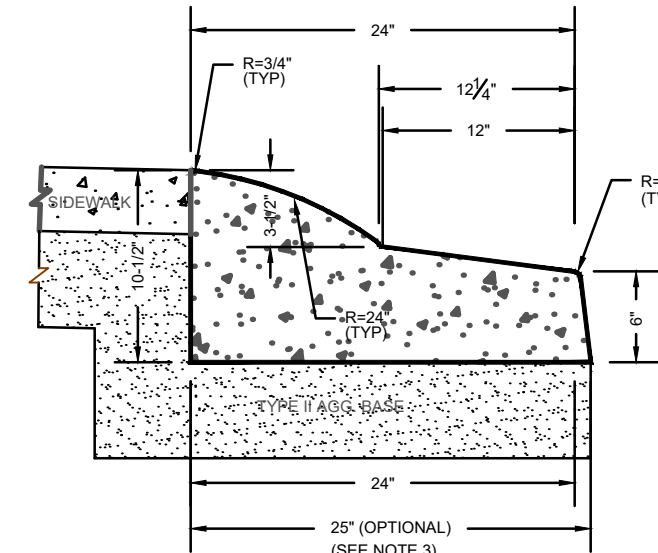
R-TYPE CURB AND GUTTER
NOT TO SCALE

- NOTES:
- WHERE LONGITUDINAL SLOPE IS LESS THAN 0.4% THE FLOW LINE SHALL BE WATER TESTED.
 - CONSTRUCT 1/2" EXPANSION JOINT AT ALL COLD JOINTS, AT BEGINNING AND END OF CURB RETURNS, AND AT 300 FT. MAX. INTERVALS FOR EXTRUDED CURB AND 30 FT. MAX. INTERVALS FOR FORMED CURB. WEAKENED PLANE JOINTS SHALL BE FORMED AT THE REMAINING 15 FT. INTERVALS. SEE STD. DWG. NO. 234 FOR JOINT DETAILS.
 - ONE INCH BATTER AT GUTTER FACE IS OPTIONAL.
 - NO UTILITY BOXES AND COVERS ADJACENT TO R-TYPE CURB SHALL BE ALLOWED AT DRIVEWAY LOCATIONS.
 - IF R-TYPE CURB IS APPROVED FOR OTHER LOCATIONS THAT ARE SUBJECTED TO REGULAR TRAFFIC, THEN UTILITY BOXES AND COVERS ADJACENT TO R-TYPE CURB SHALL MEET H20-44 FOR STEEL BOXES AND ANSISCTE 77-2007 (TIER-22) FOR FIBERGLASS POLYMER CONCRETE BOXES RATED "TRAFFIC BEARING" TYPE.
 - FOR NEW CONSTRUCTION ON RESIDENTIAL SUBDIVISION STREETS ONLY.



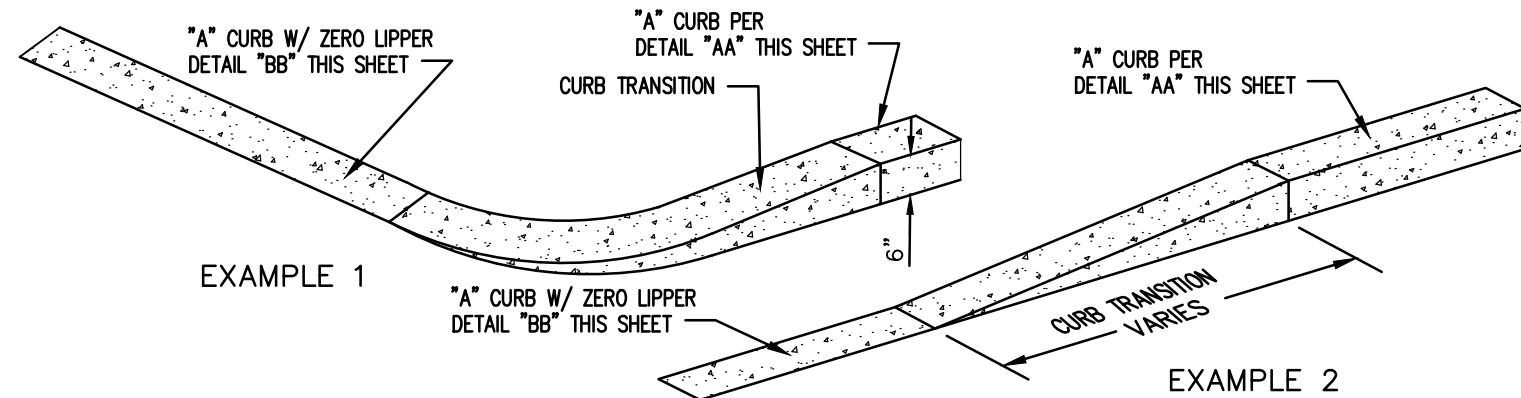
ZERO LIP R-TYPE CURB AND GUTTER
NOT TO SCALE

- NOTES:
- WHERE LONGITUDINAL SLOPE IS LESS THAN 0.4% THE FLOW LINE SHALL BE WATER TESTED.
 - CONSTRUCT 1/2" EXPANSION JOINT AT ALL COLD JOINTS, AT BEGINNING AND END OF CURB RETURNS, AND AT 300 FT. MAX. INTERVALS FOR EXTRUDED CURB AND 30 FT. MAX. INTERVALS FOR FORMED CURB. WEAKENED PLANE JOINTS SHALL BE FORMED AT THE REMAINING 15 FT. INTERVALS. SEE STD. DWG. NO. 234 FOR JOINT DETAILS.
 - ONE INCH BATTER AT GUTTER FACE IS OPTIONAL.
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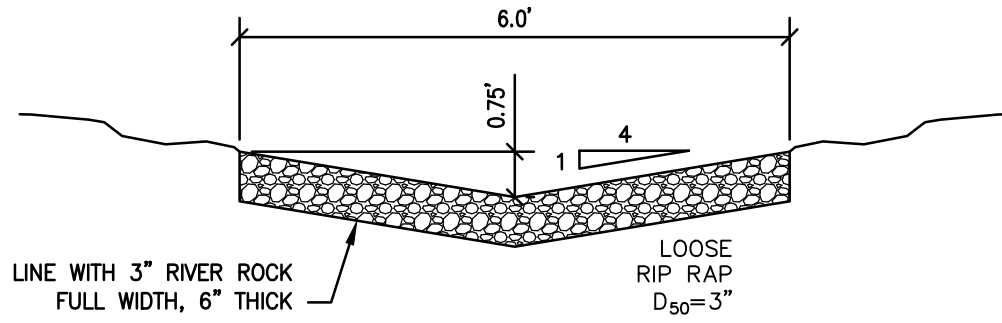


R-TYPE CURB AND GUTTER
NOT TO SCALE

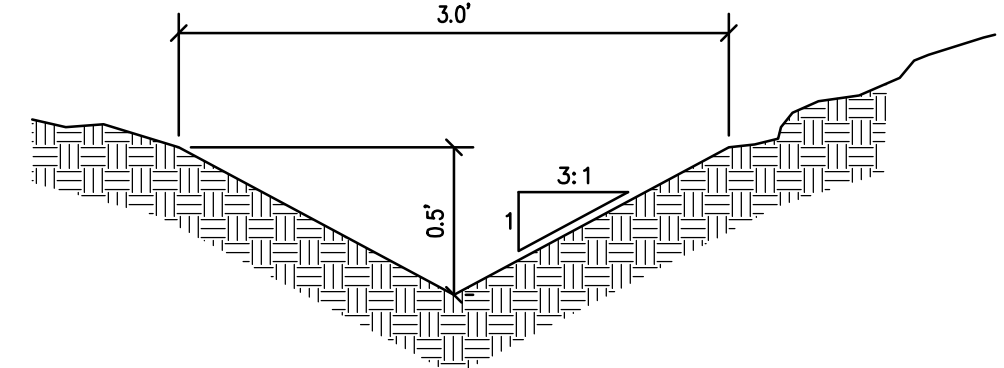
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 - FOR NEW CONSTRUCTION ON RESIDENTIAL SUBDIVISION STREETS ONLY.



CURB TRANSITION
NOT TO SCALE



BMP SWALE
NOT TO SCALE

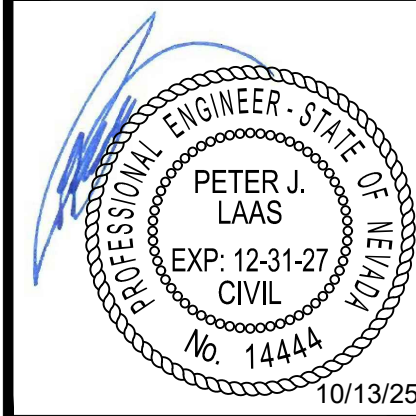


3' WIDE EARTH SWALE
NOT TO SCALE



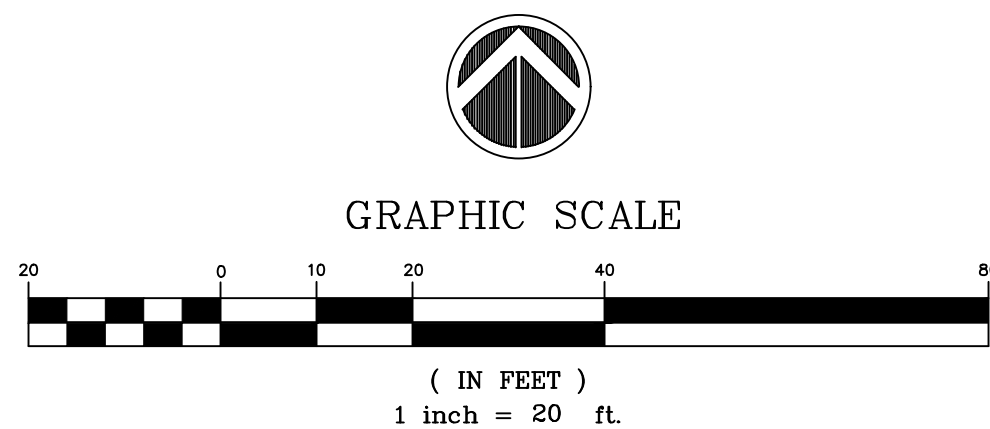
DETAIL SHEET

TOMMY'S CAR WASH @ SAHARA & MARYLAND
CITY OF LAS VEGAS, NEVADA



IMPULSE
CIVIL ENGINEERS - PLANNERS
400 W. WILLOW AVE. SUITE 200
LAS VEGAS, NEVADA 89103
PHONE: (702) 815-0770
FAX: (702) 478-6535

Impulse
Civil Engineering & Planning
SHEET 3 of 8 SHEETS
W.D. # : MC-2303
BY :
DATE : 11/18/23
SCALE : N.T.S.



EXISTING UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE SUBCONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO COMMENCING CONSTRUCTION. NO REPRESENTATION IS MADE THAT ALL EXISTING UTILITIES ARE SHOWN HEREON. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR UTILITIES NOT SHOWN OR UTILITIES NOT SHOWN IN THEIR PROPER LOCATION.



Call Before You Dig
AVOID CUTTING UNDERGROUND
UTILITY LINES. IT'S COSTLY.
CALL
811
OR
1.800.642.2444

1. 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 CONSTRUCTION PROJECT. SUCH MATERIALS SHALL BE PREVENTED FROM ENTERING THE STORM SEWER SYSTEM.
2. 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 LVMC 14.18.130 AND CLAY COUNTY REGIONAL FLOOD CONTROL DISTRICT PERMITS, HYDROLOGIC CRITERIA AND DRAINAGE DESIGN MANUAL SECTION 1500 AND THE LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDANCE MANUAL.
3. 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 NVRI000000, SECTION II.A.5.
4. AT A MINIMUM, THE CONTRACTOR OR HIS AGENT SHALL EXIST ALL DISTURBED AREAS, AREAS USED FOR STORAGE OF MATERIALS AND EQUIPMENT THAT ARE EXPOSED TO PRECIPITATION, VEHICLE ENTRANCE AND EXIT LOCATIONS, AND ALL AREAS WEEKLY, AND WITHIN 24 HOURS AFTER ANY RAINFALL EVENT OF 0.5 INCHES OR MORE. THE CONTRACTOR OR HIS AGENT SHALL UPDATE AND ADJUST 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 NVRI000000, SECTION II.A.12.
5. 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.
6. AT A MINIMUM, THE CONTRACTOR OR HIS AGENT SHALL RESPOND TO STORMWATER INSPECTION CORRECTIVE ACTIONS IN THE MANNER PRESCRIBED BY CITY LAS VEGAS, INCLUDING BUT NOT LIMITED TO PROVIDING PHOTOS AND DESCRIPTIONS OF THE CORRECTIONS COMPLETED BY THE CONTRACTOR OR HIS AGENT.

IMPULSE CIVIL ENGINEERING
7485 WEST AZURE DRIVE, SUITE 226
LAS VEGAS, NV 89130
702-815-0720 (PHONE)
CONTACT PERSON: PETE LAAS

$$I = \int F \cdot dt$$

POST-CONSTRUCTION BEST MANAGEMENT PRACTICES (PCBMPs) / CONTROL MEASURES NOTED ON THE GRADING PLANS ARE MANDATORY PERMANENT REGULATORY STORMWATER POLLUTION CONTROLS. THESE PCBMPs MUST BE INSTALLED PER THE APPROVED PLANS AND MUST BE PERMANENTLY MAINTAINED.

- 1 CONSTRUCT ISLAND "L" CURB PER CAAUSD #219
- 2 CONSTRUCT ISLAND "A" CURB PER CAAUSD #219
- 3 CONSTRUCT R-TYPE (ONSITE) CURB
4 PER CAAUSD #217.3.1.1 SEE DETAIL "G" SHEET 3
- 5 CONSTRUCT TIP OUT R-TYPE (ONSITE) CURB
6 PER CAAUSD #217.1.5.2 SEE DETAIL "F" SHEET 3
- 7 CONSTRUCT 2' CONCRETE VULNER GUTTER
8 PER DETAIL "B" SHEET 3
- 9 CONSTRUCT CONC. SIDEWALK PER CAAUSD #234
- 10 CONSTRUCT ZERO LIP R-TYPE (ONSITE)
11 CURB & GUTTER PER DETAIL "H" SHEET 3
- 12 CONSTRUCT CURB CUT PER DETAIL "F" SHEET 3
- 13 CONSTRUCT ADA RAMP PER DETAIL "D" SHEET 3
- 14 CONSTRUCT ADA LOADING ZONE PER DETAIL "E" SHEET 3
- 15 CONSTRUCT BMP SWALE PER DETAIL "L" SHEET 3
- 16 CONSTRUCT EARTHEN SWALE PER DETAIL "M" SHEET 3
- 17 CONSTRUCT ZERO LIP "A" CURB PER DETAIL "G" SHEET 3
- 18 CONSTRUCT CURB TRANSITION FROM "O" FACE TO "F" FACE
19 PER DETAIL "K" SHEET 3
- 20 CONSTRUCT CURB TRANSITION FROM R-TYPE TO TIP OUT R-TYPE
- 21 SAWCUT EXISTING AC PAVEMENT, REMOVE AND MATCH EXISTING
- 22 CONSTRUCT TRASH ENCLOSURE PER DETAIL "A" SHEET 3
- 23 CONSTRUCT 2.5' WIDE "U" CHANNEL PER DETAIL "C" SHEET 3
- 24 ROOF DRAIN OUTLET PER ARCHITECTURAL SPEC.
- 25 INSTALL SPLASH BLOCK PER ARCHITECTURAL SPEC.
- 26 SAWCUT AND MATCH EXISTING CURB
- 27 EXISTING CURB PROTECT IN PLACE
- 28 INSTALL TRENCH DRAIN

1. SEE SHEETS 3 & 4 FOR STREET SECTIONS AND DETAILS.
2. THE QUANTITIES SHOWN HEREON ARE ESTIMATES ONLY AND ARE NOT TO BE USED FOR ANY OTHER PURPOSES.
3. CONTRACTORS SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AND SHALL REPORT ALL DISCREPANCIES TO THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORK.
4. THE SITE SHALL BE GRADED IN ACCORDANCE WITH THE APPROVED SITE PLAN SUBMITTED BY GEO TECH, INC. DATED: 9/15/2025. PROJECT NO. 19865-1.
5. ADD 2000 TO ALL GRADES SHOWN HERE ON OTHER FINISHED FLOOR LEVELS.
6. THIS GRADING PERMIT DOES NOT INCLUDE THE CONSTRUCTION OF RETAINING WALLS AND OTHER STRUCTURES. SEPARATE PERMITS AND APPLICATIONS ARE REQUIRED FOR THESE. (APPENDIX SECTION J103.5 AS AMENDED).
7. ALL WORK PERFORMED UNDER THIS GRADING PERMIT REQUIRES SPECIAL INSPECTION PER SECTION 1704 (APPENDIX SECTION J105.2).
8. ALL CUT/FILL SLOPES SHALL BE TREATED WITH LANDSCAPE ROCK. ALL CUT/FILL SLOPES SHALL BE MAINTAINED TO CONTROL EROSION, THESE MEASURES SHALL BE INSTALLED AS SOON AS POSSIBLE AND PRIOR TO CALLING FOR FINAL INSPECTION. (APPENDIX SECTION J110.1).
9. ALL GRADING SHALL DRAIN AWAY FROM ALL BUILDING FOUNDATIONS. SEE SECTIONS ON SHEET 4.
10. SEE FLOOD HAZARD ZONE NOTE THIS SHEET.

SAWCUT CLEANAND REMOVE EXISTING CURB, GUTTER, AND SIDEWALK. IN THE EVENT THE A.C. PAVEMENT IS DAMAGED, DEGRADED, OR COMPROMISED IN ANY WAY DURING REMOVAL, THE PAVEMENT SHALL BE REMOVED AND REPLACED BY MECHANICAL MEANS AS REQUIRED BY A CNLV CONSTRUCTION SERVICES INSPECTOR.

THE STRUCTURAL DETAIL(S) SHOWN HEREON ARE FOR REFERENCE ONLY AS BLOCK WALLS REQUIRE A SEPARATE STRUCTURAL REVIEW AND PERMIT ISSUED BY THE ONLY BUILDING DEPARTMENT. APPROVAL OF THESE PLANS SHALL NOT BE CONSTRUED TO BE APPROVAL OF ANY STRUCTURAL DETAILS OR BLOCK WALL DESIGN.

RETAINING WALLS		
SYMBOL	COURSES	HEIGHT
Δ_1	1	0.67'
Δ_2	2	1.33'
Δ_3	3	2.00'
Δ_4	4	2.67'
Δ_5	5	3.33'
Δ_6	6	4.00'

COURSES SHOWN ON THIS PLAN ARE COMPUTED BASED ON TOP OF RETAINING WALL (TRW) MINUS TOP OF FOOTING (TF). TOP OF FOOTING IS FINISHED GRADE AT THE FACE OF WALL MINUS 4 INCHES.

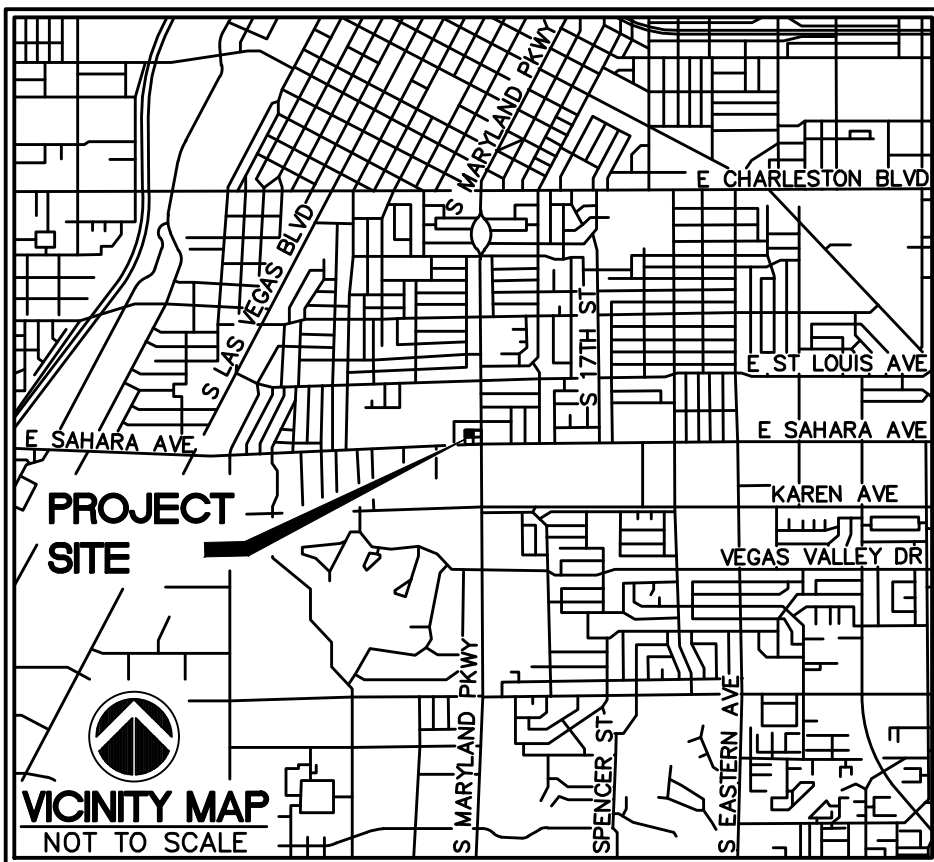
TOTAL PROJECT
CUT = 775 CY
FILL = 456 CY

THESE QUANTITIES ARE RAW QUANTITIES
BASED ON THE DIFFERENCE BETWEEN
DESIGN SUBGRADE AND EXISTING GROUND
ONLY. THEY DO NOT ACCOUNT FOR
SHRINKAGE OR SUBSIDANCE.
CONTRACTORS ARE RESPONSIBLE FOR
THEIR OWN QUANTITIES.

ON SITE = 0.98 AC
OFF SITE = 0.00 AC

I CERTIFY THAT THIS GRADING PLAN CONFORMS
TO THE APPROVED DRAINAGE STUDY FOR THIS SITE
ON FILE WITH CITY OF LAS VEGAS, DS-5722

PETE LAAS, P.E. #14444



SYMBOLS		DESCRIPTION
EXISTING	PROPOSED	
		RIGHT-OF-WAY
		CENTERLINE
		BOUNDARY
		PROPERTY LINE
		EASEMENT
		CURB & GUTTER
		SET BACK
		RETAINING WALL
		SCREEN WALL
		SWALE
		CONTOUR
		3:1 SCARP
		EDGE OF PAVEMENT
		SIDEWALK RAMP
		SAWCUT & MATCH
		FIRE HYDRANT
		STREET LIGHT
		CABLE TV BOX
		TELEPHONE BOX
(FF=2700.00)	2700.00	FINISH FLOOR ELEV.
		PAD ELEVATION
	TRW	TOP OF RETAINING WALL
	TF	TOP OF FOOTING

NORTH 87°12'46" EAST, BEING THE SOUTH LINE OF THE SOUTHEAST QUARTER (SE 1/4) OF SECTION 3, TOWNSHIP 21 SOUTH, RANGE 61 EAST, M.D.M. CITY OF LAS VEGAS, CLARK COUNTY, NEVADA AS SHOWN BY MAP THEREOF ON FILE IN FILE 97, PAGE 79 OF PARCEL MAPS, IN THE CLARK COUNTY RECORDER'S OFFICE, CLARK COUNTY, NEVADA.

CITY OF LAS VEGAS BENCHMARK 12LV113SES

RIVET AND PLATE IN TOP OF CURB AT NW CORNER OF
MARYLAND PARKWAY AND SAHARA AVE.

ELEVATION = 2002.28 (U.S. SURVEY FEET)
ELEVATION = 610.295 (METERS)

THE SUBJECT PROPERTY IS IN SFHA ZONE "X" AS FOUND ON FEMA
FIRM: 32003C2170F
EFFECTIVE: NOVEMBER 16, 2011

A SFHA ZONE "X" IS DEFINED AS: AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE (500 YEAR) FLOODPLAIN.

CABRAL CAR WASH INC
540 PUENTA DEL REY
LAS VEGAS, NV 89138
805-310-1300 (PHONE)
CONTACT PERSON: MICHAEL CABRAL

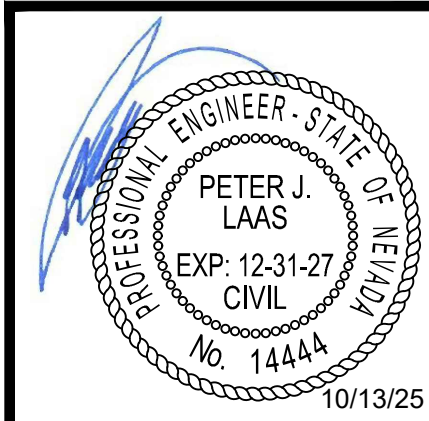
CABRAL CAR WASH INC
TOMMY CAR WASH
540 PUENTA DEL REY
LAS VEGAS, NV 89138
805-310-1300 (PHONE)
CONTACT PERSON: MICHAEL CABRAL



TITLE

GRADING PLAN

**TOMMY'S CAR WASH @ SAHARA & MARYLAND
CITY OF LAS VEGAS, NEVADA**



Impulse

Civil Engineering & Planning

SHEET 5 OF 8 SHEETS
 BY : REH
 DATE : 11/18/23
 SCALE : 1"=20'

REV	REVISION DESCRIPTION
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SHEETS	APP BY	APP DATE
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SHEETS	APP BY	APP DATE
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