

**EES****Entitlement and Engineering
Solutions, Inc**

August 7, 2015

Rudy Rael, P.E.
Senior Engineer
Planning Department
Development & Review Services Division
600 2nd St. NW, Suite 201
Albuquerque, NM 87102

Dear Mr. Rael:

This letter has been written to accompany the Grading and Drainage Area Plan for the proposed Advance Auto Parts (AAP) at the northwest corner of San Mateo Boulevard and Claremont Avenue in Albuquerque. This letter has been revised to reflect changes to the drainage plan made since our previous submittal on June 23, 2015. The proposed AAP site consists of lots 8, 9, 10 of Block 2 of the Bel-air Subdivision. The site is currently vacant. A replat will be completed by others to consolidate the lots into a single lot. This process will also provide the new address for the AAP.

No existing drainage studies are known for the proposed site and regional detention does not exist. Existing gradients on-site fall to the west away from San Mateo Boulevard and North away from Claremont Avenue with a low point at the northwest corner of Lot 8. No drainage infrastructure exists on the site. The Geotechnical Report indicates the soils are sand with varying amounts of clay, silt, and gravel and clay with varying amounts of silt, sand, and gravel. There are two existing shallow inlets on the northwest corner of San Mateo and Claremont; one located on each street (see enclosed plan). These inlets are part of a public storm sewer in Claremont Avenue that drains to the west.

The proposed site will tie into the gutter in Claremont Avenue near the proposed curb cut for the southern access to the AAP. The connection to the gutter will be made via sidewalk culvert per COA standard drawing 2236. The stormwater will then drain west to the existing inlets at the intersection of Claremont Avenue NE and Truman Street NE via the existing curb and gutter. The outfall location was changed to provide more attenuation on-site (greater than first flush volume) and disconnect the proposed system from the inlet located in the FEMA Zone AO floodplain.

Stormwater from Basin A (parking lot north and west of the AAP store) will drain via a curb, gutter and concrete pan to a proposed Type C (COA 2205) inlet located along the western boundary of the site. Stormwater from Basin B (AAP roof) will discharge to the parking lot and will drain via surface flow to the curb, gutter, and inlet mentioned in Basin A above. The exception is that the southernmost roof drain/downspout will be piped directly to the retention pond as grades for the parking lot in this area are such that discharge onto the parking lot in this area would sheet flow directly into Claremont Avenue and bypass the proposed retention pond. The Type C inlet then drains to the proposed retention pond via a 12" reinforced concrete pipe.

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The proposed retention pond has been sized to retain the 'First Flush' volume of 542 cubic feet per the City Guidelines (0.34 inches of rain on impervious areas). Supporting calculations are enclosed. The pond as graded currently provides 850 cubic feet of storage. The design has been changed since the previous submittal to retain the entirety of the First Flush from the impervious areas (including roof drainage) and has also allowed for an extra storage volume (300 cubic feet) to maximize on-site retention and to minimize discharge via the outfall to Claremont Avenue.

Water from the retention pond drains via a 12" concrete channel (6" deep) and 12" sidewalk culvert to the curb and gutter on the northern side of Claremont Avenue. The First Flush storage capacity is provided below the elevation of the outfall through the proposed retaining wall. Additional storage has been provided to minimize discharge through the outfall to Claremont Avenue and to maximize retention. After the water discharges through the sidewalk culvert it will flow to the west (away from San Mateo and the FEMA Zone AO floodplain) to existing inlets at the intersection of Claremont Avenue and Truman Street.

Drainage from the offsite basins (OS1, OS2, OS3, and OS4) will drain off site consistent with existing drainage patterns. Runoff from these basins is minimal. Basins OS2 and OS4 are made up entirely of landscaped areas and OS2 will be depressed to retain rainwater in this area.

The curbs, gutters, pans and swales have been sized to accommodate both the 10-year and 100-year peak flows without any overtopping. The finished floor elevation (FFE) of the new building has been set at 5215.50.

The Flood Insurance Rate Map (FIRM) Panel 35001C0352H panel 352 of 825 has indicated that San Matteo Boulevard and Claremont Avenue are within the Zone AO floodplain. The FIRM has indicated that the depth of flow is 1 foot deep. FEMA was unable to provide a flood elevation for the Zone AO floodplain given it is sheet flow and described by depth. The highest surveyed adjacent elevation for the proposed building is 5213.50. Based on the 1 foot flow depth, the floodplain would be 5214.50 adjacent to the site. The FFE has been set at 5215.5, which is 1 foot higher than the floodplain as required by the City of Albuquerque City (Ordinance 14-5-1-1).

Please contact me at 303-572-7997 if there are additional concerns regarding the drainage conveyance for the new site.

Sincerely,

Jeff Colson, PE

PROJECT BENCHMARK & VERTICAL DATUM

ALL CORNERS FOUND IN PLACE AND HELD WERE TAGGED WITH A BRASS DISK STAMPED "LS 8686" OR WERE ILLEGIBLE UNLESS OTHERWISE INDICATED HEREON. ALL CORNERS THAT WERE SET ARE EITHER A 1/2" REBAR WITH CAP STAMPED "PS 14269" OR SET CHISELED "4" IN CONCRETE.

VERTICAL DATUM IS BASED UPON THE ALBUQUERQUE CONTROL SURVEY BENCHMARK "21-H18", ELEVATION = 5215.209 (NAVD 1988)

PROJECT BASIS OF BEARING

NEW MEXICO STATE PLANE GRID SYSTEM, AND OUR PROJECT BEARING IS "S 0°00' 03" 32" E" ALONG THE WESTERLY RIGHT OF WAY LINE OF SAN MATEO BOULEVARD, NE.

PRIVATE DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY NOTICE TO CONTRACTOR (SPECIAL ORDER 19 ~ "SO-19")

1. AN EXCAVATION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY.
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.

DRAINAGE NOTES:

TABLE 1: BASIN SUMMARY RUNOFF TABLE

BASIN	DESIGN POINT	CONTRIBUTING AREA (AC)	IMPERVIOUS AREA (AC)**	BASIN IMPERVIOUSNESS	10-YEAR PEAK FLOW (CFS)	100-YEAR PEAK FLOW (CFS)
A		0.31	0.28	91.3%	0.91	1.38
B	1	0.16	0.16	100.0%	0.50	0.75
OS1*		0.03	0.02	74.9%	0.07	0.31
OS2*		0.01	0.00	0.0%	0.01	0.27
OS3		0.03	0.03	89.9%	0.10	0.25
OS4*		0.04	0.00	0.0%	0.04	0.10

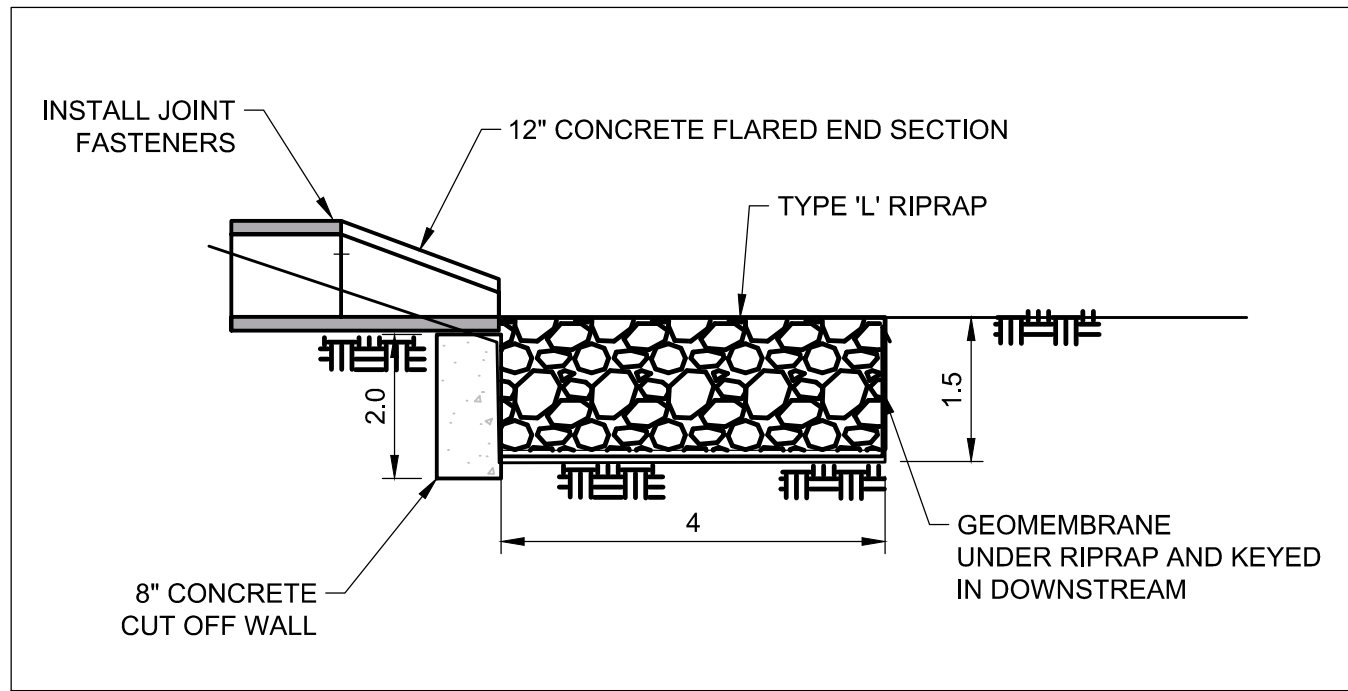
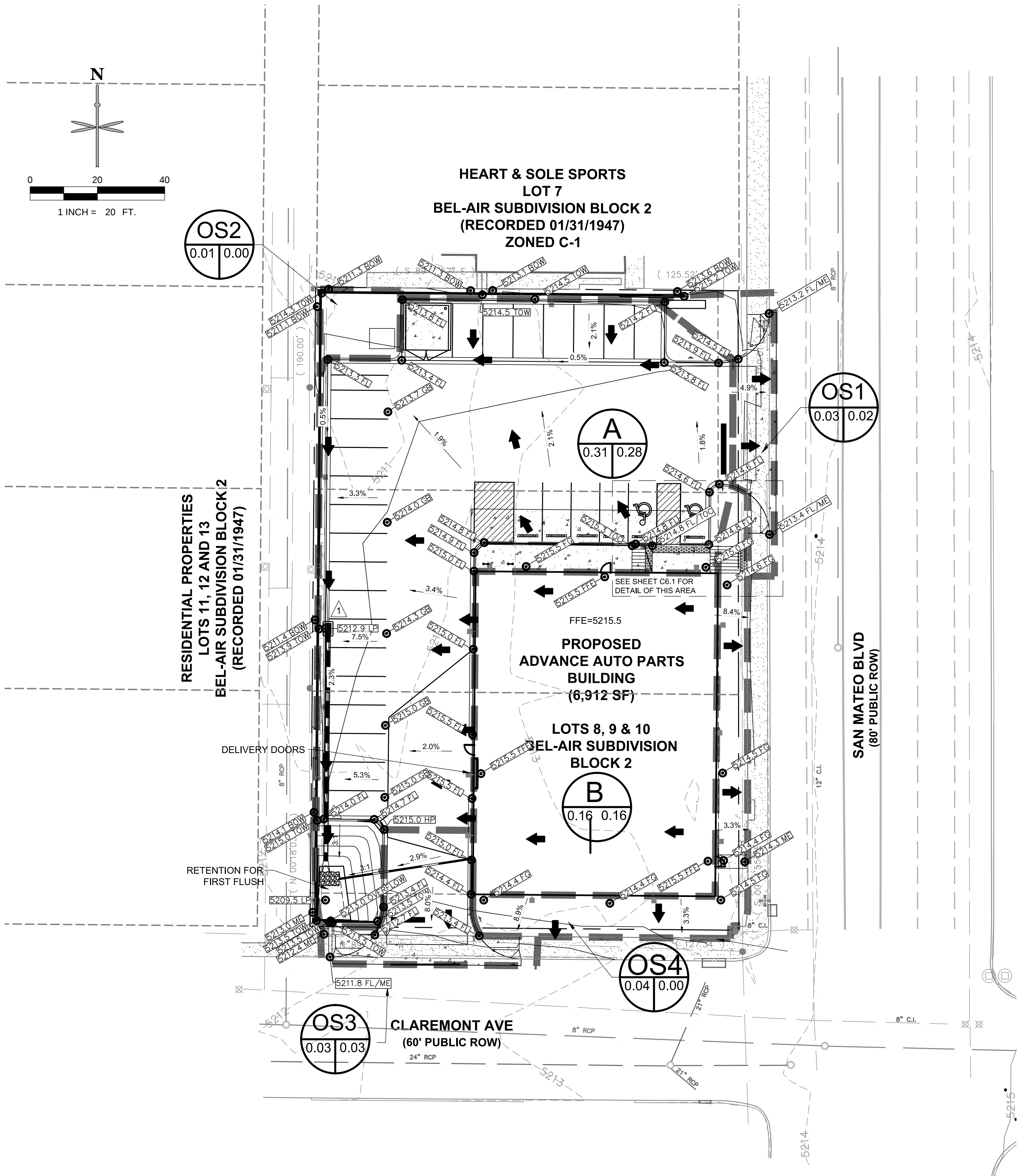
* BASIN CONSIST OF ENTIRELY LANDSCAPED AREA (OS2 & OS4) OR PARTIALLY LANDSCAPED AREA (OS1).
** AREA OF LAND TREATMENT D

DRAINAGE LEGEND

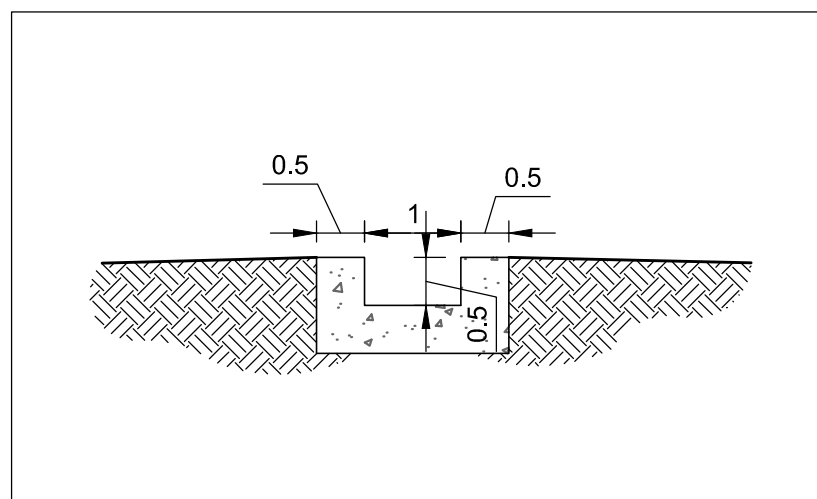
- PROPERTY LINE
- 715 EXISTING MAJOR CONTOUR
- 717 EXISTING MINOR CONTOUR
- 715 PROPOSED MAJOR CONTOUR
- 717 PROPOSED MINOR CONTOUR
- PROPOSED STORM SEWER
- MAJOR BASIN BOUNDARY LINE
- PROPOSED 6" CURB
- FLOW ARROW
- PROPOSED STORM MANHOLE
- EXISTING STORM MANHOLE
- BASIN DESIGNATION
- IMPERVIOUS AREA (A_{imp}/A_{total})
- BASIN AREA IN ACRES
- DESIGN POINT
- SLOPE ARROW
- XXXX.X FL - FLOWLINE
- XXXX.X FFE - FINISHED FLOOR ELEVATION
- XXXX.X LP - LOW POINT
- XXXX.X TOW - TOP OF WALL
- XXXX.X BOW - BOTTOM OF WALL
- XXXX.X GB - GRADE BREAK
- XXXX.X FG - FINISHED GRADE SPOT ELEVATION
- XXXX.X BOC - BACK OF CURB
- XXXX.X ME - MATCH EXISTING



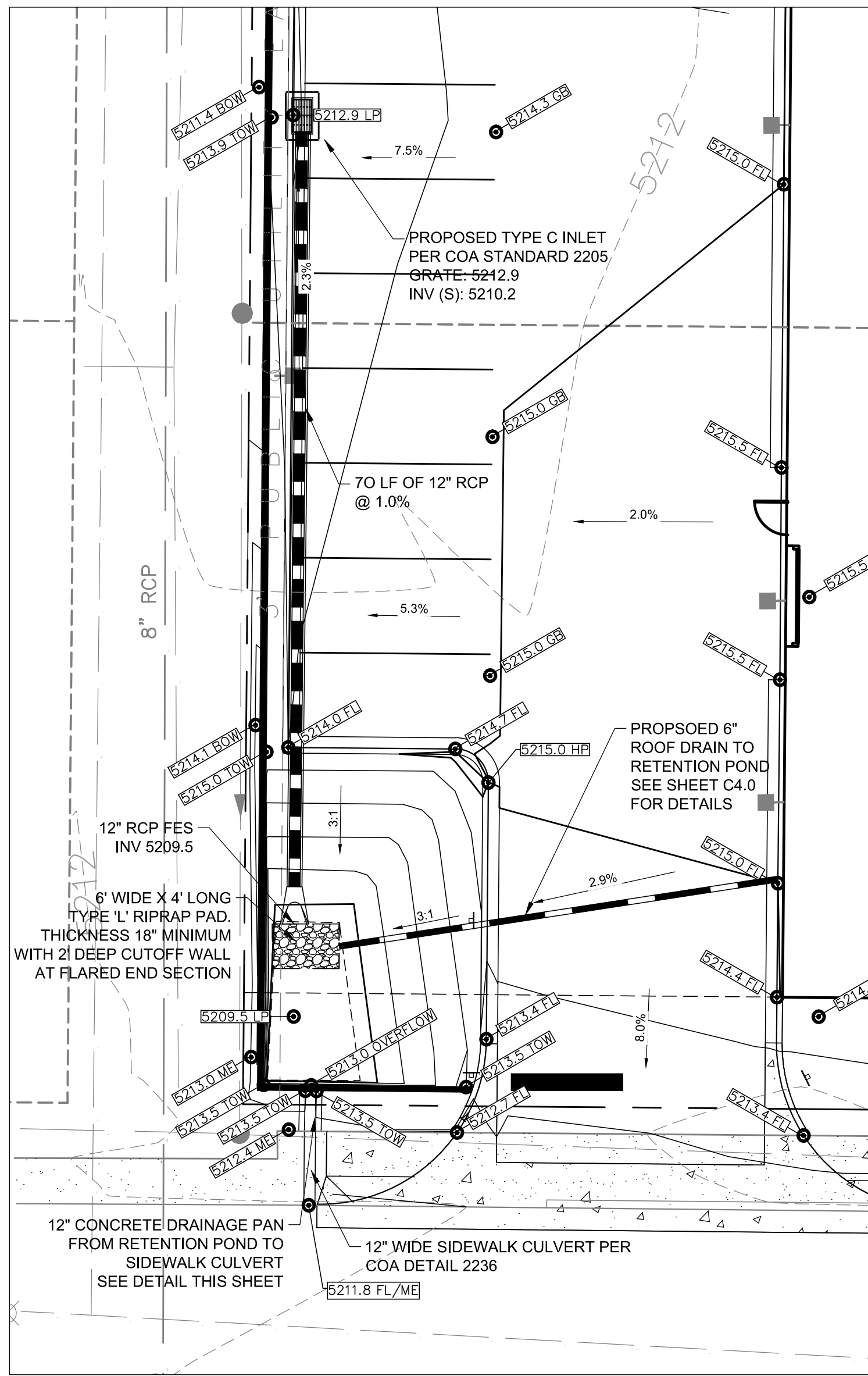
ZONE H-17 VICINITY MAP



OUTFALL PROTECTION DETAIL
NOT TO SCALE

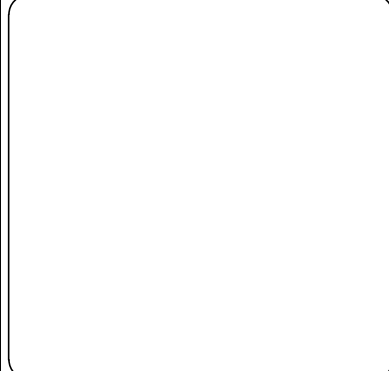


CONCRETE DRAINAGE PAN DETAIL
NOT TO SCALE



RETENTION POND & OUTFALL DETAIL
SCALE 1" = 10'

No.	REVISION	BY	DATE



EES ENGINEERING SOLUTIONS, Inc.
10000 East Alameda Avenue
Suite 1575
Denver, CO 80231
303.572.7997



CONSTRUCTION DRAWINGS
ADVANCE AUTO PARTS
SAN MATEO BOULEVARD AND CLAREMONT AVENUE
DRAINAGE AND GRADING PLAN

PROJECT NO: CAD008.01
DESIGNED BY: JDC
DRAWN BY: JDC
DATE: 08/07/15
C5.0
SHEET 7 OF 13

Basin Qpeak Analysis per DPM Section 22.2

Design Package: Advance Auto Parts
Location: Albuquerque, NM 2813 San Mateo NE

Computed: JDC Date: 6/18/2015
Checked: _____ Date: _____

Total Area Tract B-1 = 25291 sf 0.58 ac

10-year																																					
Sub-Basin Data						Impervious Area		Zone 2 Land Treatment A				Zone 2 Land Treatment B				Zone 2 Land Treatment C				Zone 2 Land Treatment D				Composite													
Basin ID	Description	Total Area (sf)	Total Area (ac)	Area (ac)	Basin IMP	Qp A _(10-Yr) Table A-9	Area (sf)	Area (ac)	(Qp * Area (ac)) = Qp A (cfs)	Qp B _(10-Yr) Table A-9	Area (sf)	Area (ac)	(Qp * Area (ac)) = Qp B (cfs)	Qp C _(10-Yr) Table A-9	Area (sf)	Area (ac)	(Qp * Area (ac)) = Qp C (cfs)	Qp D _(10-Yr) Table A-9	Area (sf)	Area (ac)	(Qp * Area (ac)) = Qp D (cfs)	Basin 10-Yr Total (cfs)	Qpeak														
Proposed Conditions																																					
A	Parking Lot North and West of Building	13394	0.307	0.28	91.3%	0.38	0	0	0.00	0.95	1163	0.027	0.03	1.71	0	0.000	0.00	3.14	12231	0.281	0.88	0.91															
B	Roof	6912	0.159	0.16	100.0%	0.38	0	0	0.00	0.95	0	0.000	0.00	1.71	0	0.000	0.00	3.14	6912	0.159	0.50	0.50															
OS4	Landscape Buffer South and East of Building	1883	0.043	0.00	0.0%	0.38	0	0	0.00	0.95	1883	0.043	0.04	1.71	0	0.000	0.00	3.14	0	0.000	0.00	0.04															
OS1	Driveway Cut to San Mateo	1163	0.027	0.02	74.9%	0.38	0	0	0.00	0.95	313	0.007	0.01	1.71	0	0.000	0.00	3.14	850	0.020	0.06	0.07															
OS2	NW Corner of Site	486	0.011	0.00	0.0%	0.38	0	0	0.00	0.95	486	0.011	0.01	1.71	0	0.000	0.00	3.14	0	0.000	0.00	0.01															
OS3	Driveway Cut To Claremont	1453	0.033	0.03	89.9%	0.38	0	0	0.00	0.95	50	0.001	0.00	1.71	0	0.000	0.00	3.14	1403	0.032	0.10	0.10															
Tract B-1 Total Impervious Area=						84.6%		Tract B-1 Land Treatment (A) Total =				0.00%				Tract B-1 Land Treatment (B) Total =				15.40%				Tract B-1 Land Treatment (C) Total =				0.00%				Tract B-1 Land Treatment (D) Total =				84.60%	

Basin A	Total 10-Yr Qpeak =	0.91	cfs
Basin B	Total 10-Yr Qpeak =	0.50	cfs
Basin B+C	Total 10-Yr Qpeak at Design Point 1 =	1.41	cfs

100-year																													
Sub-Basin Data						Impervious Area		Zone 2 Land Treatment A				Zone 2 Land Treatment B				Zone 2 Land Treatment C				Zone 2 Land Treatment D				Composite					
Basin ID	Description	Total Area (sf)	Total Area (ac)	Area (ac)	Basin IMP	Qp A (100-Yr) Table A-9	Area (sf)	Area (ac)	(Qp * Area (ac)) = Qp A (cfs)	Qp B (100-Yr) Table A-9	Area (sf)	Area (ac)	(Qp * Area (ac)) = Qp B (cfs)	Qp C (100-Yr) Table A-9	Area (sf)	Area (ac)	(Qp * Area (ac)) = Qp C (cfs)	Qp D (100-Yr) Table A-9	Area (sf)	Area (ac)	(Qp * Area (ac)) = Qp D (cfs)	Basin 100-Yr Total (cfs)	Qpeak Total (cfs)						
Proposed Conditions																													
A	Parking Lot North and West of Building	13394	0.307	0.28	91.3%	1.56	0	0	0.00	2.28	1163	0.027	0.06	3.14	0	0.000	0.00	4.70	12231	0.281	1.32	1.38							
B	Roof	6912	0.159	0.16	100.0%	1.56	0	0	0.00	2.28	0	0.000	0.00	3.14	0	0.000	0.00	4.70	6912	0.159	0.75	0.75							
OS4	Landscape Buffer South and East of Building	1883	0.043	0.00	0.0%	1.56	0	0	0.00	2.28	1883	0.043	0.10	3.14	0	0.000	0.00	4.70	0	0.000	0.00	0.10							
OS1	Driveway Cut to San Mateo	1163	0.027	0.02	74.9%	1.56	0	0	0.00	2.28	313	0.007	0.02	3.14	0	0.000	0.00	4.70	850	0.020	0.09	0.11							
OS2	NW Corner of Site	486	0.011	0.00	0.0%	1.56	0	0	0.00	2.28	486	0.011	0.03	3.14	0	0.000	0.00	4.70	0	0.000	0.00	0.03							
OS3	Driveway Cut To Claremont	1453	0.033	0.03	89.9%	1.56	0	0	0.00	2.28	50	0.001	0.00	3.14	0	0.000	0.00	4.70	1403	0.032	0.15	0.15							
Tract B-1 Total Impervious Area=						84.6%		Tract B-1 Land Treatment (A) Total =				0.00%		Tract B-1 Land Treatment (B) Total =				15.40%		Tract B-1 Land Treatment (C) Total =				0.00%		Tract B-1 Land Treatment (D) Total =		84.60%	

90th Percentile Storm Event Treatment for Water Quality			
90th Percentile Runoff Depth =	0.44	Inches	
Initial Impervious Abstraction (Table A-6) =	0.10	Inches	
Required Treatment Depth (D) =	0.34	Inches	
Impervious Area - Basin A	0.28		
Impervious Area - Basin B	0.16	acres	
Basin A Required Retainment for Treatment (D x Imp Area)/12 in/ft=	0.01	acre-ft	347 cf
Basin B Required Retainment for Treatment (D x Imp Area)/12 in/ft=	0.00		196 cf
Total Required Retainment for Treatment=	0.01		542 cf

Basin A	Total 10-Yr Qpeak =	1.38	cfs
Basin B	Total 10-Yr Qpeak =	0.75	cfs
Basin B+C	Total 10-Yr Qpeak at Design Point 1 =	2.13	cfs

Required North Pond Detention Volume Expansion Calculations

Project:	Advance Auto Parts			
Address:	Albuquerque, NM 2813 San Mateo NE			
Tract B-1:	25291	ft^2	0.58	acres

Based on Drainage Design Criteria for City of Albuquerque Section 22.2, D.P.M., Vol 2

Excess Precipitation E (Inches) 100 Yr, 6 hr Storm DPM Sect. 22.2 Table A-8				
Zone	A	B	C	D
1	0.44	0.67	0.99	1.97
2	0.53	0.78	1.13	2.12
3	0.66	0.92	1.29	2.36
4	0.80	1.08	1.46	2.64

TABLE A-9. PEAK DISCHARGE (CFS/ACRE)				
Zone	100-YR.			
	Treatment [2-YR., 10-YR.]			
	A	B	C	D
1	1.29 [0.00, 0.24]	2.03 [0.03, 0.76]	2.87 [0.47, 1.49]	4.37 [1.69, 2.89]
2	1.56 [0.00, 0.28]	2.28 [0.08, 0.95]	3.14 [0.60, 1.71]	4.7 [1.86, 2.14]
3	1.87 [0.00, 0.58]	2.6 [0.21, 1.19]	3.45 [0.78, 2.00]	5.02 [2.04, 2.20]
4	2.2 [0.05, 0.87]	2.92 [0.38, 1.45]	3.73 [1.00, 2.26]	5.25 [2.17, 3.57]

DPM Section 22.2 Notes Land Treatment Descriptions

Land Treatments Table A-4	
A	Soil uncompacted by human activity with 0 to 10 percent slopes. Native grasses, weeds and shrubs in typical densities with minimal disturbance to grading, ground cover and infiltration capacity.
B	Irrigated lawns, parks and golf courses with 0 to 10 percent slopes. Native grasses, weeds and shrubs, and soil uncompacted by human activity with slopes greater than 10 percent and less than 20 percent.
C	Soil compacted by human activity. Minimal vegetation. Unpaved parking, roads, trails. Most vacant lots. Gravel or rock on plastic (desert landscaping). Irrigated lawns and parks with slopes greater than 10 percent. Native grasses, weeds and shrubs, and soil uncompacted by human activity with slopes at 20 percent or greater. Native grass, weed and shrub areas with clay or clay loam soils and other soils of very low permeability as classified by SCS Hydrologic Soil Group D.
D	Impervious areas, pavement and roofs.
Most watersheds contain a mix of land treatments. To determine proportional treatments, measure respective subareas. In lieu of specific measurement for treatment D, the area percentages in TABLE A-5 may be employed.	

RETENTION POND VOLUME CALCULATIONS

Contour	Surface Area	Average Surface Area	Volume Provided
422	5213		
309	5212	365.5	365.5
206	5211	257.5	257.5
135	5210	170.5	170.5
99	5209.5	117	58.5

Volume Provided	852	FT ³
Volume Required (FIRST FLUSH)	542	FT ³
Additional Volume Provided	310	FT ³

100 YEAR - CURB AND GUTTER @0.5%

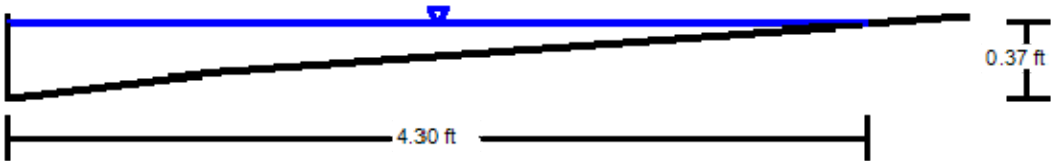
Project Description

Solve For Spread

Input Data

Channel Slope	0.00500	ft/ft
Discharge	2.13	ft³/s
Gutter Width	1.00	ft
Gutter Cross Slope	0.13	ft/ft
Road Cross Slope	0.08	ft/ft
Spread	4.30	ft
Roughness Coefficient	0.013	

Cross Section Image



V: 1
H: 1

Project Description

Input Data

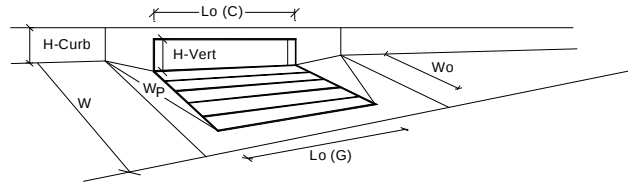
Cross Section Image



INLET IN A SUMP OR SAG LOCATION

Project = Enter Your Project Name Here

Inlet ID = Enter Your Inlet ID Here



Design Information (Input)

Type of Inlet

Local Depression (additional to continuous gutter depression 'a' from 'Q-Allow')

Number of Unit Inlets (Grate or Curb Opening)

Water Depth at Flowline (outside of local depression)

Grate Information

Length of a Unit Grate

Width of a Unit Grate

Area Opening Ratio for a Grate (typical values 0.15-0.90)

Clogging Factor for a Single Grate (typical value 0.50 - 0.70)

Grate Weir Coefficient (typical value 2.15 - 3.60)

Grate Orifice Coefficient (typical value 0.60 - 0.80)

Curb Opening Information

Length of a Unit Curb Opening

Height of Vertical Curb Opening in Inches

Height of Curb Orifice Throat in Inches

Angle of Throat (see USDCM Figure ST-5)

Side Width for Depression Pan (typically the gutter width of 2 feet)

Clogging Factor for a Single Curb Opening (typical value 0.10)

Curb Opening Weir Coefficient (typical value 2.3-3.7)

Curb Opening Orifice Coefficient (typical value 0.60 - 0.70)

Total Inlet Interception Capacity (assumes clogged condition)

Inlet Capacity IS GOOD for Minor and Major Storms (>Q PEAK)

	MINOR	MAJOR	
Inlet Type =	CDOT/Denver 13 Combination		
a_{local} =	2.00	2.00	inches
N_o =	1	1	
Ponding Depth =	6.0	6.0	inches
	MINOR	MAJOR	☐ Override Depths
$L_o (G)$ =	3.00	3.00	feet
W_o =	1.73	1.73	feet
A_{ratio} =	0.43	0.43	
$C_r (G)$ =	0.50	0.50	
$C_w (G)$ =	3.30	3.30	
$C_o (G)$ =	0.60	0.60	
	MINOR	MAJOR	
$L_o (C)$ =	3.00	3.00	feet
H_{vert} =	6.50	6.50	inches
H_{throat} =	5.25	5.25	inches
Theta =	0.00	0.00	degrees
W_p =	2.20	2.20	feet
$C_r (C)$ =	0.10	0.10	
$C_w (C)$ =	3.70	3.70	
$C_o (C)$ =	0.66	0.66	
	MINOR	MAJOR	
Q_a =	2.8	2.8	cfs
$Q_{PEAK REQUIRED}$ =	0.5	0.8	cfs

12" RCP @ 1.0% - Q100YR 2.13 CFS

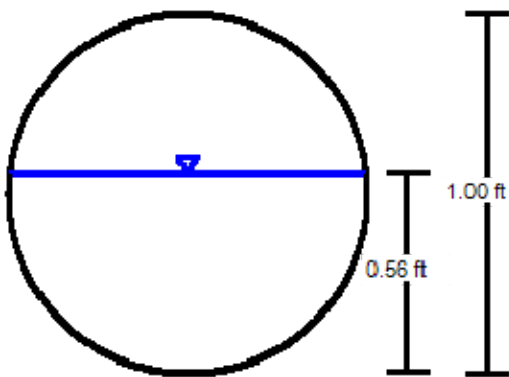
Project Description

Friction Method Manning Formula
Solve For Normal Depth

Input Data

Roughness Coefficient	0.013	
Channel Slope	0.01000	ft/ft
Normal Depth	0.56	ft
Diameter	1.00	ft
Discharge	2.13	ft³/s

Cross Section Image



V: 1
H: 1

CONC. DRAIN PAN - 100 YEAR FLOW

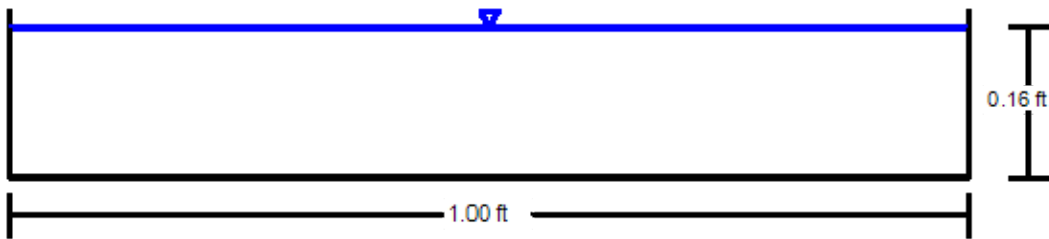
Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Roughness Coefficient	0.013	
Channel Slope	0.24000	ft/ft
Normal Depth	0.16	ft
Bottom Width	1.00	ft
Discharge	2.13	ft ³ /s

Cross Section Image



V: 1
H: 1

SIDEWALK CULVERT - 100 YEAR FLOW

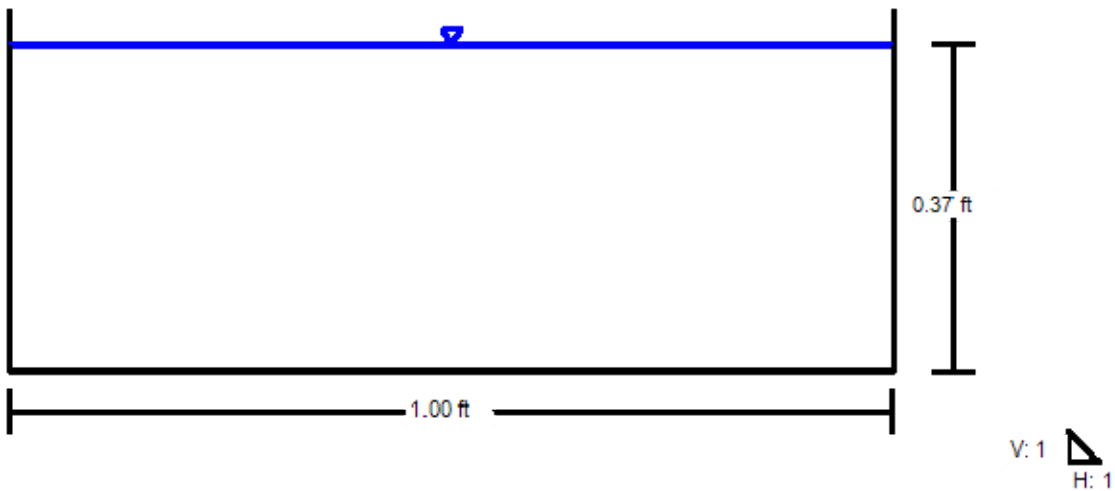
Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Roughness Coefficient	0.013	
Channel Slope	0.02000	ft/ft
Normal Depth	0.37	ft
Bottom Width	1.00	ft
Discharge	2.13	ft ³ /s

Cross Section Image



PROJECT BENCHMARK & VERTICAL DATUM

ALL CORNERS FOUND IN PLACE AND HELD WERE TAGGED WITH A BRASS DISK STAMPED "LS 8686" OR WERE ILLEGIBLE UNLESS OTHERWISE INDICATED HEREON. ALL CORNERS THAT WERE SET ARE EITHER A 1/2" REBAR WITH CAP STAMPED "PS 14269" OR SET CHISELED "4" IN CONCRETE.

VERTICAL DATUM IS BASED UPON THE ALBUQUERQUE CONTROL SURVEY BENCHMARK "21-H18", ELEVATION = 5215.209 (NAVD 1988)

PROJECT BASIS OF BEARING

NEW MEXICO STATE PLANE GRID SYSTEM, AND OUR PROJECT BEARING IS "S 00D 03' 32" E" ALONG THE WESTERLY RIGHT OF WAY LINE OF SAN MATEO BOULEVARD, NE.

PRIVATE DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY
NOTICE TO CONTRACTOR
(SPECIAL ORDER 19 ~ "SO-19")

1. AN EXCAVATION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY.
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.

DRAINAGE NOTES:

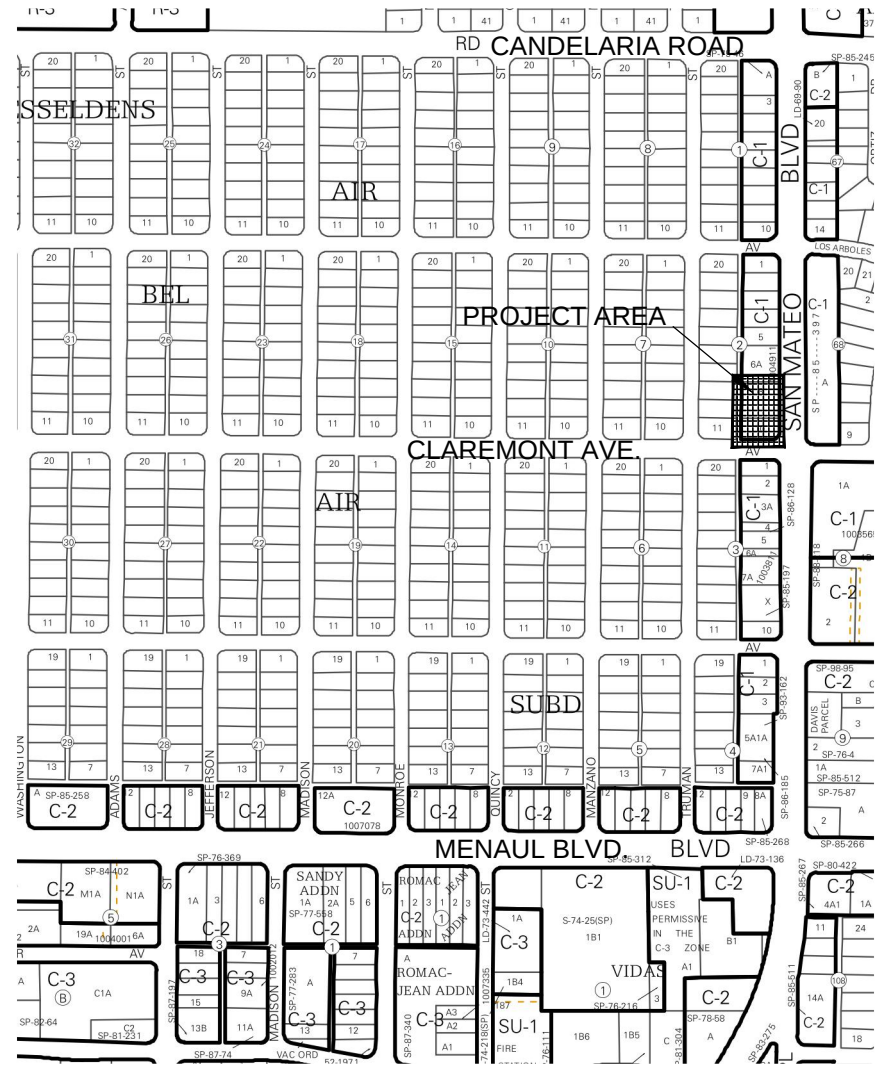
TABLE 1: BASIN SUMMARY RUNOFF TABLE

BASIN	DESIGN POINT	CONTRIBUTING AREA (AC)	IMPERVIOUS AREA (AC)**	BASIN IMPERVIOUSNESS	10-YEAR PEAK FLOW (CFS)	100-YEAR PEAK FLOW (CFS)
A		0.31	0.28	91.3%	0.91	1.38
B	1	0.16	0.16	100.0%	0.50	0.75
OS1*		0.03	0.02	74.9%	0.07	0.31
OS2*		0.01	0.00	0.0%	0.01	0.27
OS3		0.03	0.03	89.9%	0.10	0.25
OS4*		0.04	0.00	0.0%	0.04	0.10

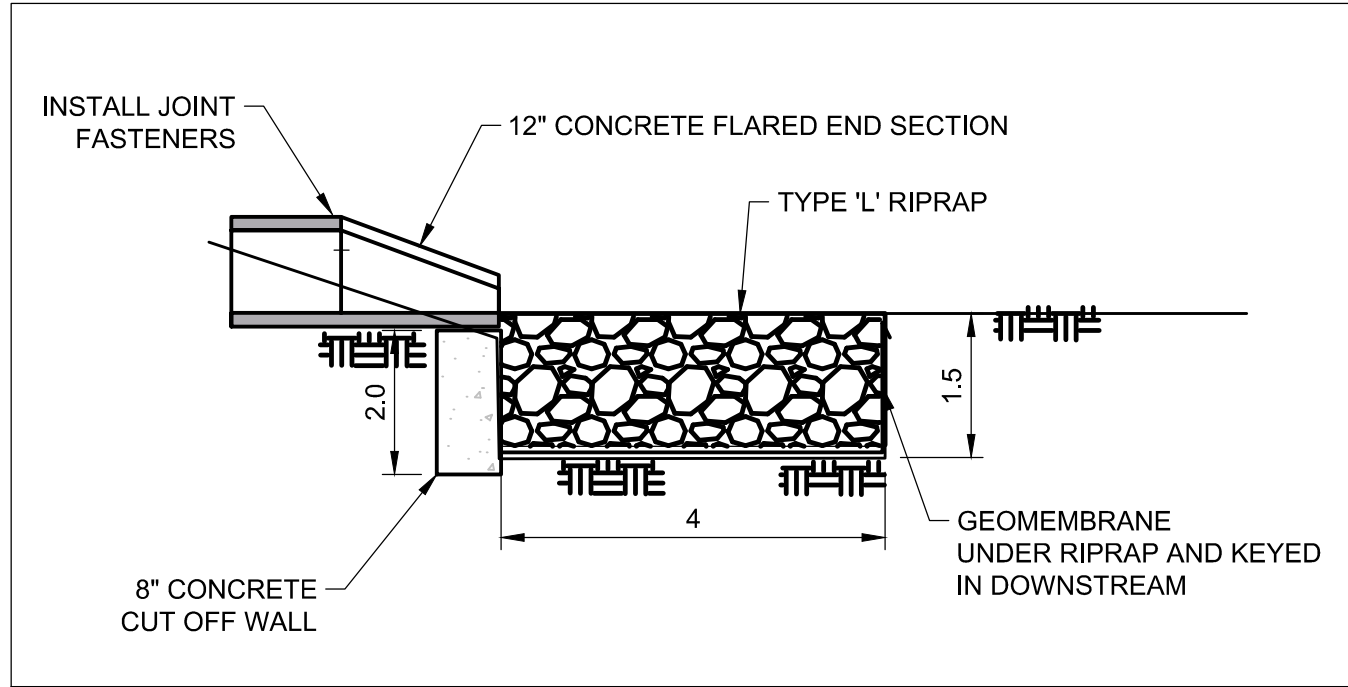
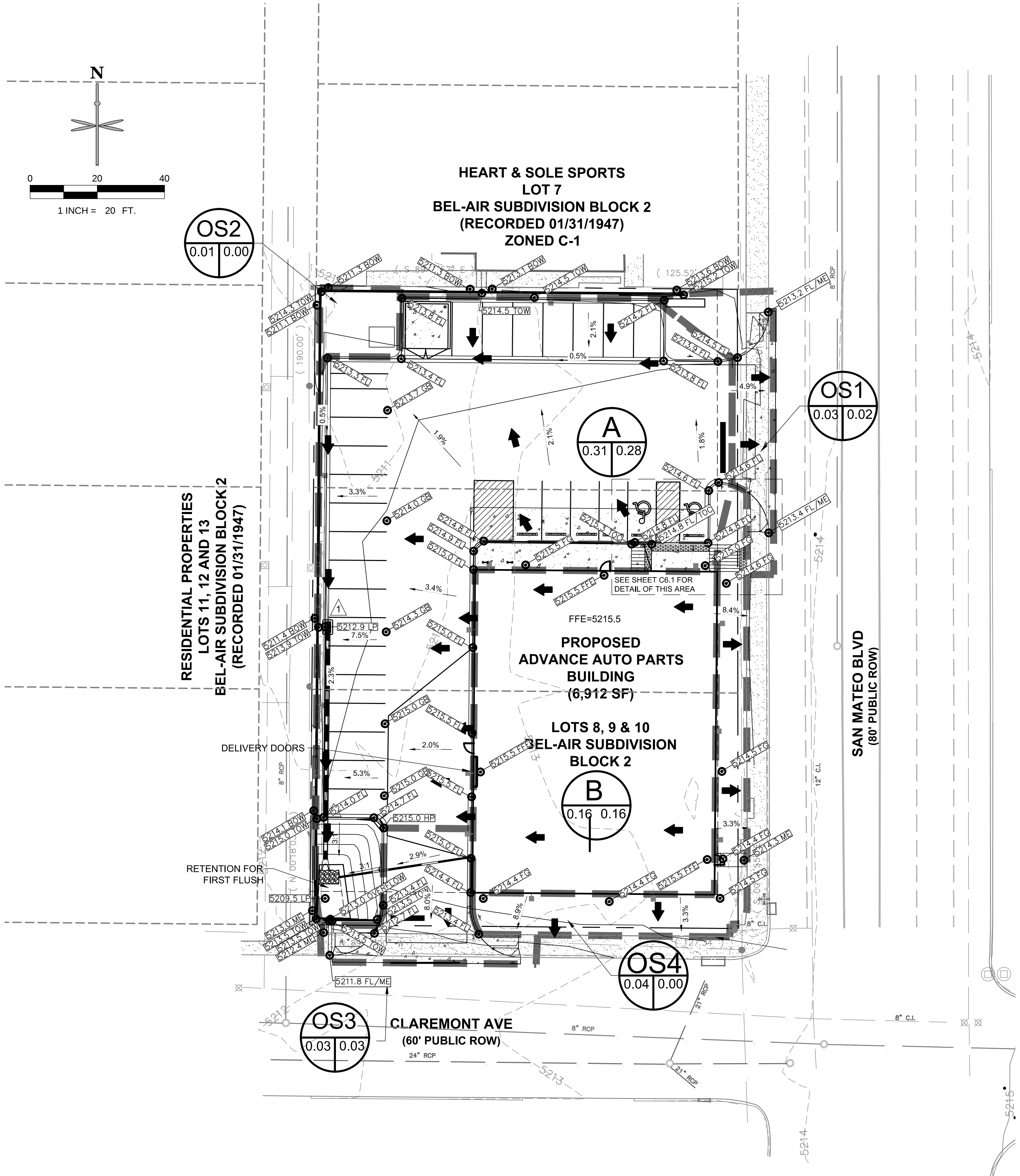
* BASIN CONSIST OF ENTIRELY LANDSCAPED AREA (OS2 & OS4) OR PARTIALLY LANDSCAPED AREA (OS1).
** AREA OF LAND TREATMENT D

DRAINAGE LEGEND

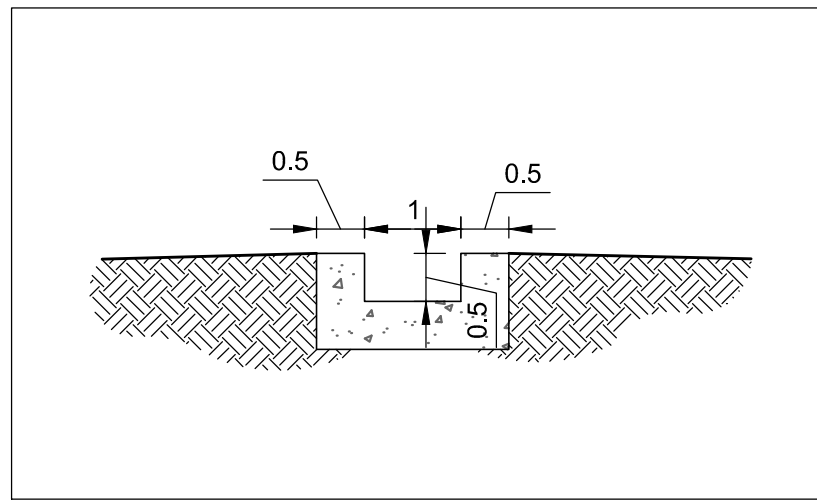
- PROPERTY LINE
- 715 EXISTING MAJOR CONTOUR
- 717 EXISTING MINOR CONTOUR
- 715 PROPOSED MAJOR CONTOUR
- 717 PROPOSED MINOR CONTOUR
- PROPOSED STORM SEWER
- MAJOR BASIN BOUNDARY LINE
- PROPOSED 6" CURB
- FLOW ARROW
- PROPOSED STORM MANHOLE
- EXISTING STORM MANHOLE
- BASIN DESIGNATION
- IMPERVIOUS AREA (A_{imp}/A_{total})
- BASIN AREA IN ACRES
- DESIGN POINT
- SLOPE ARROW
- XXXX.X FL - FLOWLINE
- XXXX.X FFE - FINISHED FLOOR ELEVATION
- XXXX.X LP - LOW POINT
- XXXX.X TOW - TOP OF WALL
- XXXX.X BOW - BOTTOM OF WALL
- XXXX.X GB - GRADE BREAK
- XXXX.X FG - FINISHED GRADE SPOT ELEVATION
- XXXX.X BOC - BACK OF CURB
- XXXX.X ME - MATCH EXISTING



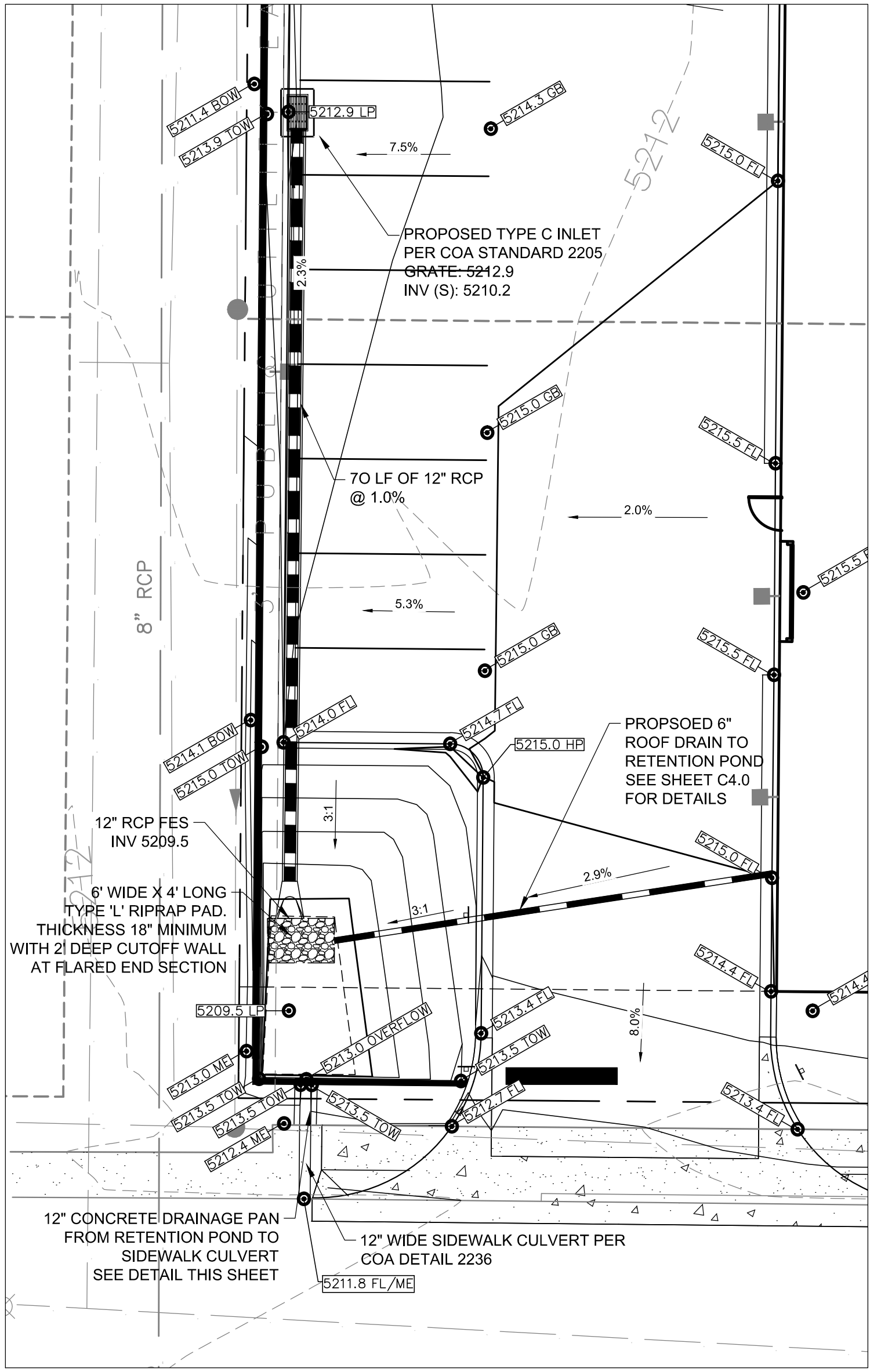
ZONE H-17 VICINITY MAP



OUTFALL PROTECTION DETAIL
NOT TO SCALE

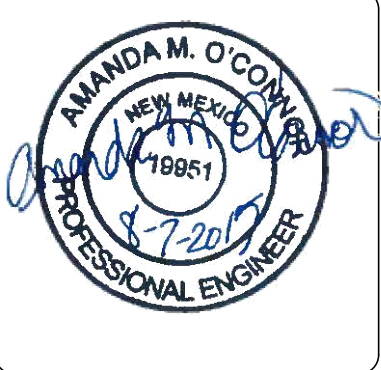


CONCRETE DRAINAGE PAN DETAIL
NOT TO SCALE



RETENTION POND & OUTFALL DETAIL
SCALE 1" = 10'

DATE	
BY	
REVISION	
No.	



CONSTRUCTION DRAWINGS
ADVANCE AUTO PARTS
SAN MATEO BOULEVARD AND CLAREMONT AVENUE
DRAINAGE AND GRADING PLAN

PROJECT NO: CAD008.01
DESIGNED BY: JDC
DRAWN BY: JDC
DATE: 08/07/15
C5.0
SHEET 7 OF 13



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

Project Title: _____ Building Permit #: _____ City Drainage #: _____

DRB#: _____ EPC#: _____ Work Order#: _____

Legal Description: _____

City Address: _____

Engineering Firm: _____ Contact: _____

Address: _____

Phone#: _____ Fax#: _____ E-mail: _____

Owner: _____ Contact: _____

Address: _____

Phone#: _____ Fax#: _____ E-mail: _____

Architect: _____ Contact: _____

Address: _____

Phone#: _____ Fax#: _____ E-mail: _____

Surveyor: _____ Contact: _____

Address: _____

Phone#: _____ Fax#: _____ E-mail: _____

Contractor: _____ Contact: _____

Address: _____

Phone#: _____ Fax#: _____ E-mail: _____

TYPE OF SUBMITTAL:

- ☐ DRAINAGE REPORT
- ☐ DRAINAGE PLAN 1st SUBMITTAL
- ☐ DRAINAGE PLAN RESUBMITTAL
- ☐ CONCEPTUAL G & D PLAN
- ☐ GRADING PLAN
- ☐ EROSION & SEDIMENT CONTROL PLAN (ESC)
- ☐ ENGINEER'S CERT (HYDROLOGY)
- ☐ CLOMR/LOMR
- ☐ TRAFFIC CIRCULATION LAYOUT (TCL)
- ☐ ENGINEER'S CERT (TCL)
- ☐ ENGINEER'S CERT (DRB SITE PLAN)
- ☐ ENGINEER'S CERT (ESC)
- ☐ SO-19
- ☐ OTHER (SPECIFY) _____

CHECK TYPE OF APPROVAL/ACCEPTANCE 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
- ☐ CERTIFICATE OF OCCUPANCY (PERM)
- ☐ CERTIFICATE OF OCCUPANCY (TCL TEMP)
- ☐ FOUNDATION PERMIT APPROVAL
- ☐ BUILDING PERMIT APPROVAL
- ☐ GRADING PERMIT APPROVAL
- ☐ PAVING PERMIT APPROVAL
- ☐ WORK ORDER APPROVAL
- ☐ GRADING CERTIFICATION
- ☐ SO-19 APPROVAL
- ☐ ESC PERMIT APPROVAL
- ☐ ESC CERT. ACCEPTANCE
- ☐ OTHER (SPECIFY) _____

WAS A PRE-DESIGN CONFERENCE ATTENDED: _____ Yes _____ No _____ Copy Provided

DATE SUBMITTED: _____ By: _____

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
4. **Erosion and Sediment Control Plan:** Required for any new development and redevelopment site with 1-acre or more of land disturbing area, including project less than 1-acre than are part of a larger common plan of development

CITY OF ALBUQUERQUE



August 18, 2015

Jeff Colson, P.E.
Entitlement and Engineering Solutions, Inc.
518 17th St. Suite 1575
Denver, CO 80203

**RE: Advanced Auto Parts
San Mateo/Claremont
Grading and Drainage Plan
Engineers Stamp Date 8/7/15 (H17D111)**

Dear Mr. Colson,

Based upon the information provided in your submittal received 8/8/15, this plan is approved for Building Permit and Paving Permit.

Please attach a copy of this approved plan dated 8/7/15 to the construction sets in the permitting process prior to sign-off by Hydrology.

Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist will be required and acceptance of a LOMR-F from FEMA.

If you have any questions, please contact me at 924-3999 or Rudy Rael at 924-3977.

Sincerely,

Shahab Biazar, P.E.
City Engineer, Albuquerque
Planning Department

RR/SB
C: File

PO Box 1293

Albuquerque

New Mexico 87103

www.cabq.gov