

CITY OF ALBUQUERQUE

PLANNING DEPARTMENT – Development Review Services



August 28, 2015

Verlyn Miller, PE
Miller Engineering Consultants
3500 Comanche NE
Albuquerque, NM 87107

Richard J. Berry, Mayor

**RE: Advanced Auto Parts
Grading and Drainage Plan
Engineer's Stamp Date 8-17-2015 (File: H14D041)**

Dear Mr. Miller:

Based upon the information provided in your submittal received 8-18-15, the above referenced plan cannot be approved for Building Permit until the following comments are addressed:

1. Since a new valley gutter, sidewalk, and sidewalk culverts are proposed to be built in the R.O.W., these improvements must be done through the Work Order process (DRC) and not by an SO-19 Permit.
2. This is a "phased" project where one portion of the site is to be developed at this time, and the remaining portion is to be developed in the future. For phased projects the following is required:
 - a. Grading and Drainage plan with supporting calculation for the **Final Developed condition**. Dwg. C-102 is essentially this Final Condition Plan. However, the following needs to be corrected:
 - i. Remove the Curb and Gutter separating the two properties, and show only the intended final condition.
 - ii. Show intended elevations/contours in the future parting lot
 - iii. How will flows be directed to the pond in the final condition without the curb and gutter?
 - iv. Show the intended roof discharge points and direction of the future building
 - v. Since full Retention ponds must retain the 100yr-10day volume, with 1 ft. of freeboard, Pond #1 is undersized.
 - vi. Future Pond #2 should be a detention pond, only retaining the First Flush and then discharging at a rate of 2.75cfs/Ac. The discharge mechanism will need to be designed.
 - b. Grading and Drainage plan with supporting calculations for the **Interim condition**. Provide a plan with just the development intended to occur under this Building Permit. Show:
 - i. The Curb and Gutter that separates the phases (in i. above)
 - ii. How will the remaining site be graded in the interim? How and where will it discharge to?
 - iii. Provide drainage calculations for the remainder of the site in the Interim state.
 - iv. Pond #1 can be designed for just the "Interim Condition" (100yr-10day volume), and then enlarged later. It is up to you. But if the property is divided, the drainage easement must cover the "final condition" pond footprint.
3. For both Ponds: Show contour labels, Bottom of Pond elevation, Max WSEL, Provided Volume and Required Volume. (Show this on both the Interim and Future G&D plans, as it may be different)
4. Roof flows from the Advance Auto Parts must be directed to a first flush pond before discharging to swale along the south boundary. Perhaps the hatched area (handicap ramp?) at SW corner of the building can be used as such.
5. Provide calculations that size the SW culvert(s), the concrete swale. What is the WSEL?
6. Keyed notes should refer to the Detail on the Sheet C-501 (ie. See Detail D4 on Sht C-501)
7. Pond #2 has a 2:1 slope. More than a 3:1 slope required slope stabilization measures. Large cobbles are typically used.

PO Box 1293

Albuquerque

New Mexico 87103

www.cabq.gov

If you have any questions, you can contact me at 924-3695.

Sincerely,

A handwritten signature in blue ink, appearing to read "Rita PH", with a long horizontal flourish extending to the right.

Rita Harmon, P.E.
Senior Engineer, Planning Dept.
Development Review Services

Orig: Drainage file
c.pdf via email: Recipient



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

Project Title: ADVANCED AUTO PARTS STORE Building Permit #: _____ City Drainage #: H14D016
 DRB#: _____ EPC#: _____ Work Order#: _____
 Legal Description: TRACTS "A-1" AND "A-2" OF WHITE CITY - GLEN HAVEN ADDITION
 City Address: 2715 4TH ST. NW, ALBUQUERQUE, NM 87107
 Engineering Firm: MILLER ENGINEERING CONSULTANTS Contact: JOHN JACQUEZ
 Address: 3500 COMANCHE NE, BLDG. F, ALBUQUERQUE, NM 87107
 Phone#: 505-888-7500 Fax#: _____ E-mail: _____
 Owner: THE SKARSGARD FIRM, P.C. Contact: JOSHUA J. SKARSGARD
 Address: 8220 SAN PEDRO NE, SUITE 500, ALBUQUERQUE, NM 87113
 Phone#: 505-262-2323 Fax#: _____ E-mail: _____
 Architect: GG ARCHITECT LLC Contact: CLINT WILSEY
 Address: 2041 S. PLAZA ST. NW, ALBUQUERQUE, NM 87104
 Phone#: 505-280-0043 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

DATE SUBMITTED: 8-18-2015

By: [Signature] Copy Provided 8-5-2015

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:

- Conceptual Grading and Drainage Plan:** Required for approval of Site Development Plans greater than five (5) acres and Sector Plans
- Drainage Plans:** Required for building permits, grading permits, paving permits and site plans less than five (5) acres
- Drainage Report:** Required for subdivision containing more than ten (10) lots or constituting five (5) acres or more
- 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
PLANNING DEPARTMENT
DEVELOPMENT SERVICE / HYDROLOGY SECTION

DATE: 8/5/15
CONFERENCE RECAP

ZONE ATLAS PAGE NO: _____

DRAINAGE FILE: _____

ZONING: _____

DRB: _____

SUBJECT: Advance Automotive

H14D016

STREET ADDRESS (IF KNOWN): _____

SUBDIVISION NAME: _____

APPROVAL REQUESTED: _____

ATTENDANCE: John Jacques & Rita Harmon

FINDINGS:

- ① Cannot discharge into 5th unless there is enough street capacity and FALL to down stream inlets (also depends on amount)
- ② can + should discharge historic flows into EXISTING POND (get easement ~~to~~)
- ③ Analyze extire site to discharge into pond.
- ④ increase basin size of basins discharging into 4th (roof flows to 4th)

THE UNDERSIGNED AGREES THAT THE ABOVE FINDINGS ARE SUMMARIZED ACCURATELY AND ARE SUBJECT TO CHANGE IF FURTHER INVESTIGATION REVEALS THAT THEY ARE NOT REASONABLE OR THAT THEY ARE BASED ON INACCURATE INFORMATION.

SIGNED: Rita Harmon
NAME (PRINT): Curtis A. Chene

SIGNED: John Jacques
NAME (PRINT): _____

****NOTE**** PLEASE PROVIDE A COPY OF THIS RECAP WITH YOUR DRAINAGE SUBMITTAL.

EXISTING

BASIN A = 0.30 AC (DRAINS TO 4th ST)

ALL LAND TREATMENT D

BASIN B = 1.19 AC (DRAINS TO EX POND)
 LT C = 0.51 AC
 D = 0.68 AC

BASIN C = 0.37 AC (DRAINS TO NORTH (NEIGHBORHOOD or) PHOENIX)
 LT C = 0.35 AC
 LT D = 0.02 AC

PROPOSED

BASIN 1 = 0.36 AC (DRAINS TO 4th STREET)
 ALL LT D

FIRST FLUSH A = $((.44 - .1) / 12) * 15681 = 444 \text{ cf}$

FIRST $\frac{1}{2}$ " = $653 \text{ cf} = .5 / 12 * \text{Impervious Area}$

BASIN 2 = 1.03 AC (DRAINS TO Relocated Pond)
 LT C = 0.16 AC
 LT D = 0.87 AC
 FIRST FLUSH = 1074 cf
 FIRST $\frac{1}{2}$ " = 1580 cf
 WH #1

BASIN 3 = 0.47 AC (DRAINS TO POND - WH #2)
 LT C = 0.28
 LT D = 0.19
 FIRST FLUSH = 235 cy
 FIRST $\frac{1}{2}$ " = 345 cy



Advance Auto Parts
2801 4th St. NW
ALBUQUERQUE, NM 87107

STORE # 103011

REV		DATE	DESCRIPTION

DATE: 7-29-15 CROSS SQ. FT.: 9,933 SF.

PROJECT# AA-15-002
DRAWN BY: Clint Wilsey
CHECK BY: Clint Wilsey

VERSION 04-14 100x100

ALL REPORTS, PLANS, SPECIFICATIONS, FIELD DATA, NOTES AND OTHER DOCUMENTS, INCLUDING ALL DOCUMENTS ON ELECTRONIC MEDIA, PREPARED BY THE DESIGN PROFESSIONAL, AS INSTRUMENTS OF SERVICE SHALL REMAIN THE PROPERTY OF THE DESIGN PROFESSIONAL. DISSEMINATION MAY NOT BE MADE WITHOUT PRIOR CONSENT OF THE DESIGN PROFESSIONAL. ALL COMMON LAW RIGHTS OF COPYRIGHT AND OTHERWISE ARE HEREBY SPECIFICALLY RESERVED.

7-29-15

66ARCHITECT, LLC
Clint Wilsey, Architect
clint.wilsey@gmail.com
505 280-0043

GRADING AND
DRAINAGE
REPORT

C-001

GENERAL NOTES:

- EXISTING TOPOGRAPHIC DATA SHOWN ON THESE PLANS WAS PROVIDED BY WAYJOHN SURVEYING, INC. MILLER ENGINEERING CONSULTANTS HAS UNDERTAKEN NO FIELD VERIFICATION OF THIS INFORMATION.
- ACS STA A-438 BENCH MARK THE TOP OF A STAINLESS STEEL ROD SET BENEATH A 5-1/2" NGS ACCESS COVER STAMPED "A-438 1984" SET FLUSH WITH THE GROUND, LOCATED IN THE NORTHWEST QUADRANT OF MENDALL BOULEVARD AND THE A.T. & S.F. RAILROAD TRACKS INTERSECTION. ELEV. 4975.35 (NAVD 1988)
- TBM FOUND 1/2" REBAR WITH CAP "LS 11463" ELEV. 4965.21
- THE CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY SEDIMENT AND EROSION CONTROL DEVICES DURING THE CONSTRUCTION PHASE.
- CONTRACTOR SHALL OBTAIN A GRADING PERMIT FROM THE CITY OF ALBUQUERQUE, PRIOR TO ANY GRADING OR CONSTRUCTION.
- TWO WORKING DAYS PRIOR TO ANY EXCAVATION CONTRACTOR MUST CONTACT LINE LOCATING SERVICE 260-1990 FOR LOCATION OF EXISTING UTILITIES.
- ALL EMBANKMENTS SHALL BE PLACED AND COMPACTED IN LIFTS OF MAXIMUM OF 8". THE EMBANKMENTS SHALL BE WETTED AND COMPACTED TO 95% OPTIMUM DENSITY PER ASTM D1557 AND 95% UNDER ALL STRUCTURES INCLUDING DRIVEWAYS AND PARKING LOTS.
- MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER(S) OF THE PROPERTY SERVED.
- THE CONTRACTOR SHALL FIELD VERIFY LOCATION AND SIZE OF ALL UTILITIES PRIOR TO CONSTRUCTION.
- APPROX. HALF OF SUBJECT PROPERTY IS LOCATED WITHIN ZONE X (SOUTH EASTERN ¾ OF 4TH STREET FRONTAGE). THE REMAINING WESTERN AND NORTHERN PORTION OF THE PROPERTY IS LOCATED IN ZONE X (500 YEAR) DESIGNATING AREAS DETERMINED TO BE OUTSIDE THE 100-YEAR FLOOD PLANE ACCORDING TO THE FLOOD INSURANCE RATE MAP, ALBUQUERQUE, NEW MEXICO AND UNINCORPORATED AREAS PER MAP NO 35001C 0332G.
- ALL WORK PERFORMED SHALL COMPLY WITH THE REQUIREMENTS OF THE CITY OF ALBUQUERQUE STORM DRAINAGE REGULATIONS. ALL WORK PERFORMED SHALL COMPLY WITH THE REQUIREMENTS OF THE CITY OF ALBUQUERQUE "GRADING AND DRAINAGE DESIGN REQUIREMENTS AND POLICIES FOR LAND DEVELOPMENT."
- THE OWNER, CONTRACTOR AND/OR BUILDER SHALL COMPLY WITH ALL APPROPRIATE LOCAL, STATE AND FEDERAL REGULATIONS AND REQUIREMENTS.
- THE CONTRACTOR SHALL TAKE ALL APPROPRIATE AND REASONABLE MEASURES TO PREVENT SEDIMENT OR POLLUTANT LADEN STORM WATER FROM EXITING THE SITE DURING CONSTRUCTION. STORMWATER MAY BE DISCHARGED IN A MANNER, WHICH COMPLIES WITH THE APPROVED GRADING AND DRAINAGE PLAN.
- THE CONTRACTOR SHALL TAKE ALL APPROPRIATE MEASURES TO PREVENT THE MOVEMENT OF CONSTRUCTION RELATED SEDIMENT, DUST, MUD, POLLUTANTS, DEBRIS, WASTE, ETC FROM THE SITE BY WIND, STORM FLOW OR ANY OTHER METHOD EXCLUDING THE INTENTIONAL, LEGAL TRANSPORTATION OF SAME IN A MANNER ACCEPTABLE BY THE CITY.
- THE CONTRACTOR SHALL NOT DISTURB AREAS OUTSIDE THE AREAS SHOWN AS "SLOPE LIMITS" ON THE GRADING AND DRAINAGE PLAN.
- THE CONTRACTOR SHALL SUBMIT A SEED MIX DESIGN TO THE OWNER FOR REVIEW AND APPROVAL PRIOR TO STARTING THE SEEDING ON THE PROJECT. THE SEED MIX DESIGN SHALL BE A SEED MIX RECOMMENDED BY THE NRCS FIELD OFFICE REPRESENTATIVE THAT IS APPROPRIATE FOR THE PROJECT LOCATION. ALL DISTURBED AREAS WITH SLOPES LESS THAN 3:1 SHALL RECEIVE CLASS "A" SEEDING. ALL DISTURBED AREAS WITH SLOPES EQUAL TO OR GREATER THAN 3:1 SHALL RECEIVE STEEP SLOPE SEEDING. THE STEEP SLOPE SEEDING SHALL CONSIST OF SEEDING IN CONJUNCTION WITH A 100% COCONUT FIBER BLEND EROSION BLANKET (NORTH AMERICAN GREEN C125) OR APPROVED EQUAL. ALL MATERIALS, EQUIPMENT AND LABOR ASSOCIATED WITH THE PROPER CONSTRUCTION OF THE STEEP SLOPE SEEDING WILL BE CONSIDERED INCIDENTAL AND NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE FOR THIS MATERIAL OR WORK. THE COCONUT FIBER EROSION BLANKET AND ASSOCIATED SEEDING SHALL BE CONSTRUCTED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND APPROVED BY THE PROJECT ENGINEER PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER FOR CLARIFICATION IF THERE ARE ANY SPOT ELEVATIONS ON THE GRADING AND DRAINAGE PLAN WHICH APPEAR TO BE AMBIGUOUS OR DO NOT MEET THE INTENT OF THE GRADING AND DRAINAGE PLAN.
- THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER FOR CLARIFICATION IF THERE ARE SIDEWALKS OR CONCRETE FLATWORK WHICH DOES NOT MEET ADA ACCESSIBILITY REQUIREMENTS. ALL SIDEWALKS SHALL HAVE A MAXIMUM CROSS SLOPE OF 2.0%, ALL SIDEWALKS SHALL HAVE A MAXIMUM LONGITUDINAL SLOPE OF 5.0%, AND ALL RAMPS SHALL HAVE A MAXIMUM LONGITUDINAL SLOPE OF 15:1.
- ALL SIDEWALKS AND CONCRETE FLATWORK SHALL HAVE A MINIMUM OF 0.5% SLOPE. CONTRACTOR SHALL CONTACT PROJECT ENGINEER IF THERE ARE SIDEWALKS OR CONCRETE FLATWORK WHICH DO NOT MEET THIS REQUIREMENT.
- THE CONTRACTOR SHALL SUBMIT MATERIAL SUBMITTALS, CUT SHEETS AND SHOP DRAWINGS FOR ALL CIVIL RELATED ITEMS FOR REVIEW PRIOR TO CONSTRUCTION.
- THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS (UPDATE 8, AMENDMENT 1)
- ALL EXISTING MANHOLES, VALVES AND METERS SHALL BE ADJUSTED TO NEW FINISH GRADE.

SPECIAL ORDER 19

DRAINAGE FACILITIES WITHIN THE CITY
RIGHT-OF-WAY NOTICE TO CONTRACTOR

- AN EXCAVATION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY.
- ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HERON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION AS REVISED THROUGH UPDATE #7 AMENDMENT 1.
- TWO WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL 260-1990, FOR LOCATION OF EXISTING UTILITIES.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL CONSTRUCTIONS, SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
- BACK FILL COMPACTION SHALL BE ACCORDING TO TRAFFIC/STREET USE.
- MAINTENANCE OF THE FACILITY SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY BEING SERVED.
- WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24 - HOUR BASIS.

WATER HARVEST VOLUMES

WATER HARVEST AREA 1 proposed					
Pond Rating Table					
Side Slope 2:1					
Depth (ft)	Area (sq ft)	(ac)	Volume (ac-ft)	Cum Volume (ac-ft)	
62.5	714	0.016	0.000	0.000	
63	904	0.021	0.009	0.009	
64	1350	0.031	0.036	0.045	
65	1850	0.042	0.074	0.118	
65.5	2102	0.048	0.097	0.215	
66	2367	0.054	0.113	0.328	

WATER HARVEST AREA 2 proposed					
Pond Rating Table					
Side Slope 3:1					
Depth (ft)	Area (sq ft)	(ac)	Volume (ac-ft)	Cum Volume (ac-ft)	
66.5	5767	0.132	0.000	0.000	
67	6230	0.143	0.069	0.069	
67.5	6710	0.154	0.143	0.212	

EXISTING WATER HARVEST AREA					
Pond Rating Table					
Side Slope 3:1					
Depth (ft)	Area (sq ft)	(ac)	Volume (ac-ft)	Cum Volume (ac-ft)	
63.44	1200	0.028	0.000	0.000	
64	1528	0.035	0.018	0.018	
65	2351	0.054	0.064	0.081	
65.8	3303	0.076	0.122	0.203	

top of pond

DRAINAGE DATA

Precipitation Zone 2 - 100-year Storm										P(360) =	2.33 in	P(1440) =	2.67 in
Basin	Basin Area (Ac)	Land Treatment Factors				Ew (in)	V(100-6) (af)	V(100-24) (af)	Q(100) (cfs)				
		A	B	C	D								
Existing Conditions													
A	0.300	0.000	0.000	0.000	0.300	2.120	0.053	0.063	1.410				
B	1.190	0.000	0.000	0.510	0.680	1.696	0.168	0.191	4.797				
C	0.370	0.000	0.000	0.350	0.020	1.184	0.036	0.037	1.193				
Total	1.860							0.291	7.400				
Proposed Conditions													
1	0.360	0.000	0.000	0.000	0.360	2.12	0.064	0.076	1.692				
2	1.030	0.000	0.000	0.160	0.870	1.97	0.169	0.198	4.591				
3	0.470	0.000	0.000	0.280	0.190	1.53	0.060	0.066	1.772				
Total	1.860							0.340	8.056				

Precipitation Zone 2 - 10-year Storm										P(360) =	1.52 in	P(1440) =	1.8 in
Basin	Basin Area (Ac)	Land Treatment Factors				Ew (in)	V(10-6) (af)	V(10-24) (af)	Q(10) (cfs)				
		A	B	C	D								
Existing Conditions													
A	0.300	0.000	0.000	0.000	0.300	2.120	0.053	0.063	1.410				
B	1.190	0.000	0.000	0.510	0.680	1.696	0.168	0.191	4.797				
C	0.370	0.000	0.000	0.350	0.020	0.564	0.017	0.018	0.661				
Total	1.860							0.272	6.869				
Proposed Conditions													
1	0.360	0.000	0.000	0.000	0.360	1.340	0.040	0.048	1.130				
2	1.030	0.000	0.000	0.160	0.870	1.213	0.104	0.124	3.005				
3	0.470	0.000	0.000	0.280	0.190	0.851	0.033	0.038	1.075				
Total	1.860							0.209	5.211				

SITE LOCATION

ADVANCE AUTO PARTS IS LOCATED AT 2715 4TH STREET N.W. IN ALBUQUERQUE, NM. THE BOUNDARY IS RECTANGULAR IN SHAPE AND BOUNDED BY EXISTING RESIDENCES TO THE WEST, EXISTING BUSINESS AND RESIDENCES TO THE SOUTH, AN EXISTING RESIDENCES AND PHEONIX AVENUE TO THE NORTH, AND 4TH STREET N.W. TO THE EAST.

EXISTING ON SITE CONDITIONS

THE SITE IS DEVELOPED WITH AN EXISTING ASPHALT PAVED PARKING AREA, EXISTING CAR WASH AND EXISTING VACUUMS. THE SITE IS ACCESSED FROM 4TH STREET N.W. ON THE EAST SIDE OF THE SITE. THE PROPERTY HAS THREE DRAINAGE BASINS, WHICH ARE IDENTIFIED AS BASIN A, B, AND C. THIS REPORT FOCUSES ON THE PRE AND POST HYDROLOGY. BASIN A DRAINS TO EAST INTO 4TH STREET N.W. VIA SURFACE FLOWS; BASIN B DRAINS TO THE WEST TO AN EXISTING POND VIA SURFACE FLOW THROUGH A DRAINAGE SWALE AND BASIN C DISCHARGES TO THE NORTH TO ADJOINING PROPERTY OR PHEONIX AVENUE. THE DRAINAGE DATA ON THIS PAGE SUMMARIZES THE EXISTING PEAK DISCHARGE AND RUNOFF VOLUME FOR BASIN A, B AND C.

PROPOSED CONDITIONS

THE PROPOSED DEVELOPMENT OF THE SITE WILL CONSIST OF 10000 SQUARE FOOT BUILDING, ASSOCIATED CONCRETE FLATWORK, SIDEWALKS, ASPHALT PARKING LOT, AND LANDSCAPING. THE PROPOSED IMPROVEMENTS ARE ALL LOCATED IN A PORTION OF PROPOSED DRAINAGE BASINS 1 AND 2. THE PARKING AREA FOR A FUTURE DEVELOPMENT IS LOCATED WITHIN PROPOSED BASIN 2 ALONG WITH THE NEW WATER HARVEST AREA NO. 1. THE BUILDING FOR THE FUTURE DEVELOPMENT IS LOCATED WITHIN PROPOSED BASIN 3, ALONG WITH FUTURE WATER HARVEST AREA NO. 2. BASIN 1 WILL FREE DISCHARGE INTO 4TH STREET VIA SURFACE FLOW. BASIN 2 WILL DISCHARGE INTO THE RELOCATED WATER HARVEST AREA NO. 1 (RETENTION) ALONG THE WEST PORTION OF THE PROPERTY. BASIN 3 (FUTURE DEVELOPMENT) WILL DISCHARGE INTO THE NEW WATER HARVEST AREA NO. 2 (FUTURE RETENTION). THE DEVELOPMENT SHOWN NORTH OF THE PROPOSED ADVANCED AUTO PARTS IS A CONCEPTUAL PLAN OF A FUTURE DEVELOPMENT. THIS DEVELOPMENT IS BEING SHOWN TO SET THE PARAMETERS AND REQUIREMENTS FOR DRAINAGE IN THE FUTURE. THE DRAINAGE DATA ON THIS PAGE SUMMARIZES THE PROPOSED PEAK DISCHARGE AND RUNOFF VOLUME FOR BASIN 1, 2 AND 3.

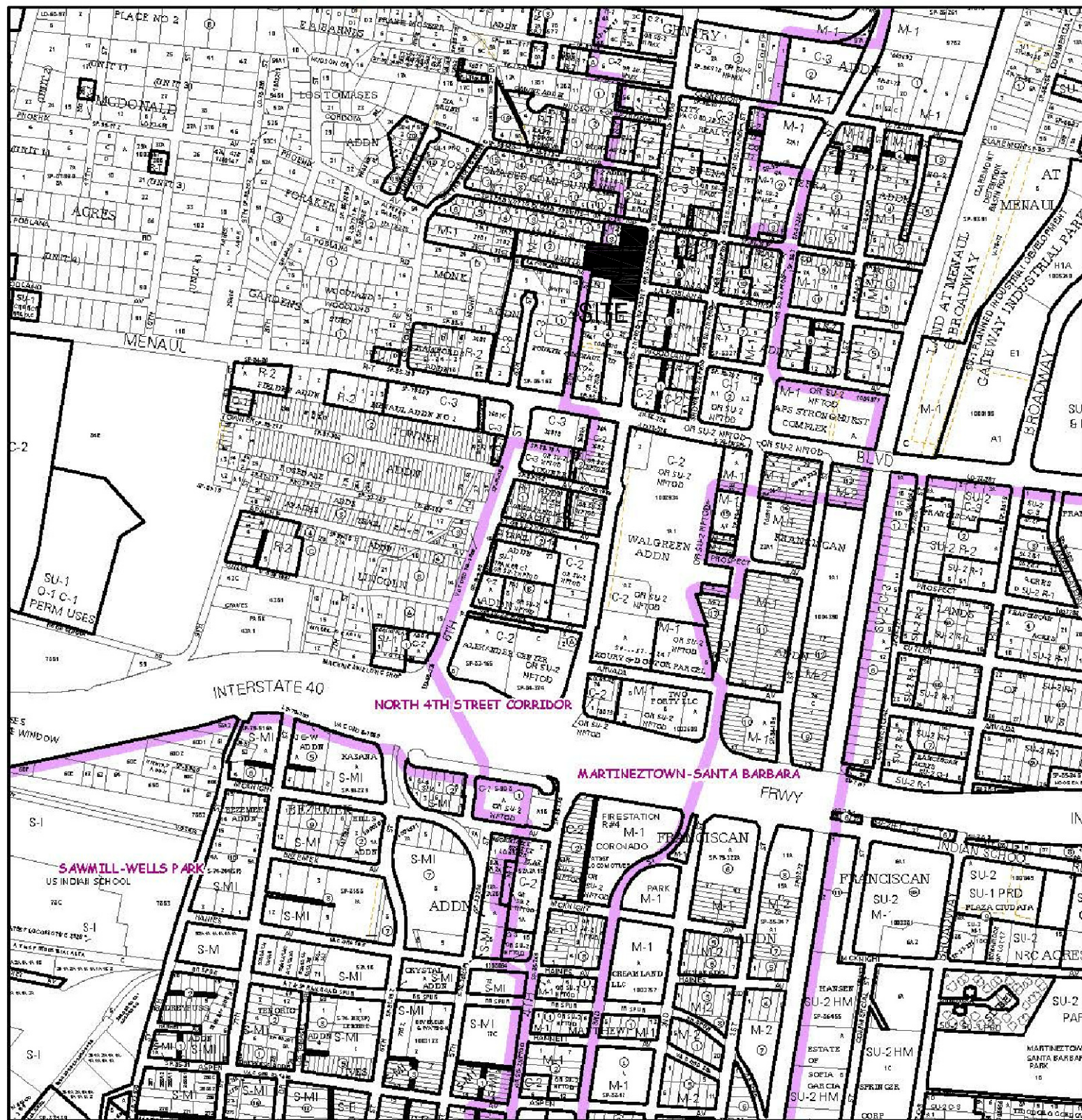
OFFSITE FLOWS

THERE ARE NO OFFSITE FLOWS THAT DRAIN ONTO THE SITE.

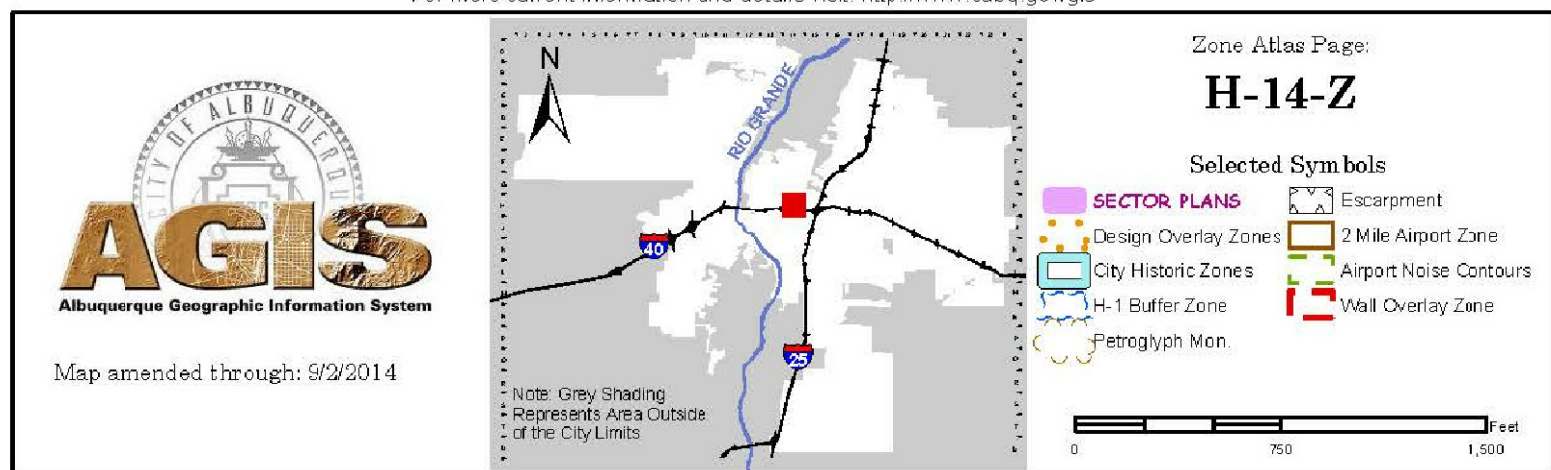
CONCLUSION

RUNOFF VOLUME AND FLOW RATE INCREASED AS A RESULT OF CHANGES IN LAND TREATMENTS FOR BASIN 1 A BY 0.013 ACRE FEET AND THE PEAK FLOW RATE HAS INCREASED BY 0.28 CFS. IN PROPOSED BASIN 2, WATER HARVEST AREA NO. 1 WILL RETAIN ALL OF THE 100-YEAR, 24-HOUR STORM EVENT. IN PROPOSED BASIN 3, WATER HARVEST AREA NO. 2 (FUTURE) WILL RETAIN ALL OF THE 100-YEAR, 24-HOUR STORM EVENT. BASED CITY OF ALBUQUERQUE HYDROLOGY DEPARTMENT RULES FOR THE VALLEY ITS BEEN DETERMINED TO RETAIN THE FIRST HALF INCH OF RAIN ONSITE. THAT CALCULATION WAS DETERMINED TO BE 2577 CUBIC FEET OF RETENTION. THE PROPOSED WATER HARVEST AREAS RETAINS 12371 CUBIC FEET WHICH EXCEEDS THE 2577 CUBIC FEET CALCULATED FOR THE FIRST HALF INCH OF RAIN.

THE PROPOSED GRADING IMPROVEMENTS WILL INCLUDE SIDEWALK CULVERTS, VALLEY GUTTERS, CURB AND GUTTERS AND CURB CUTS ALLOWING STORMWATER INTO AND OUT OF PROPOSED WATER HARVESTING AREAS. THESE WATER HARVESTING AREAS WILL BE USED TO MANAGE THE FIRST FLUSH AS REQUIRED BY THE RECENT CITY OF ALBUQUERQUE DRAINAGE ORDINANCE CHANGES. THE VOLUME OF THE FIRST FLUSH (0.44-0.1 INCHES * IMPERVIOUS AREA)= 1752 cf. THE WATER HARVEST AREA VOLUME = 12371 cf > 1752 cf. THEREFORE MANAGES THE FIRST FLUSH. (SEE CALCULATIONS BELOW)

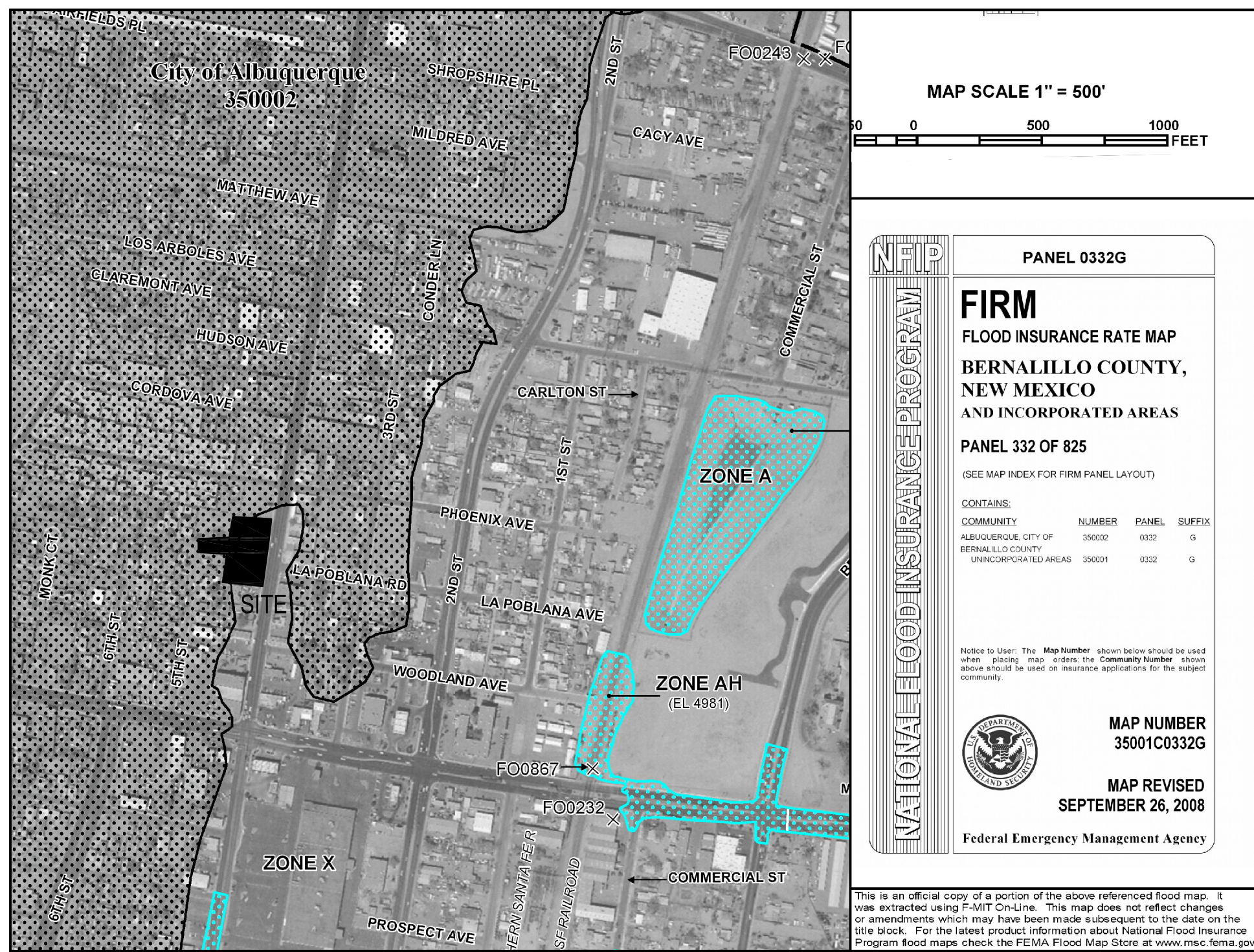


For more current information and details visit: <http://www.cabq.gov/dgis>



C1 VICINITY MAP

ZONE ATLAS MAP H-17-C

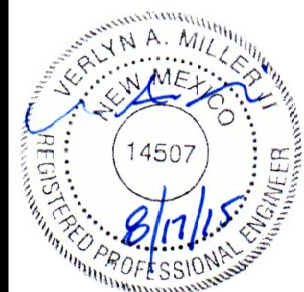


A1 FLOOD ZONE MAP

FLOOD ZONE MAP: 35001C0353H



MILLER ENGINEERING CONSULTANTS
Engineers • Planners
3500 COMANCHE, NE
ALBUQUERQUE, NM 87107
(505) 280-7500
(505) 280-3600 (FAX)
WWW.MECNM.COM



STORE # 103011

<u>DATE</u>	<u>GROSS SQ. FT.</u>
7-29-15	9,933 SF.

VERSION Q4-14 100x100

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DRAINAGE BASIN MAPS

C-101



SCALE: 1" = 30'

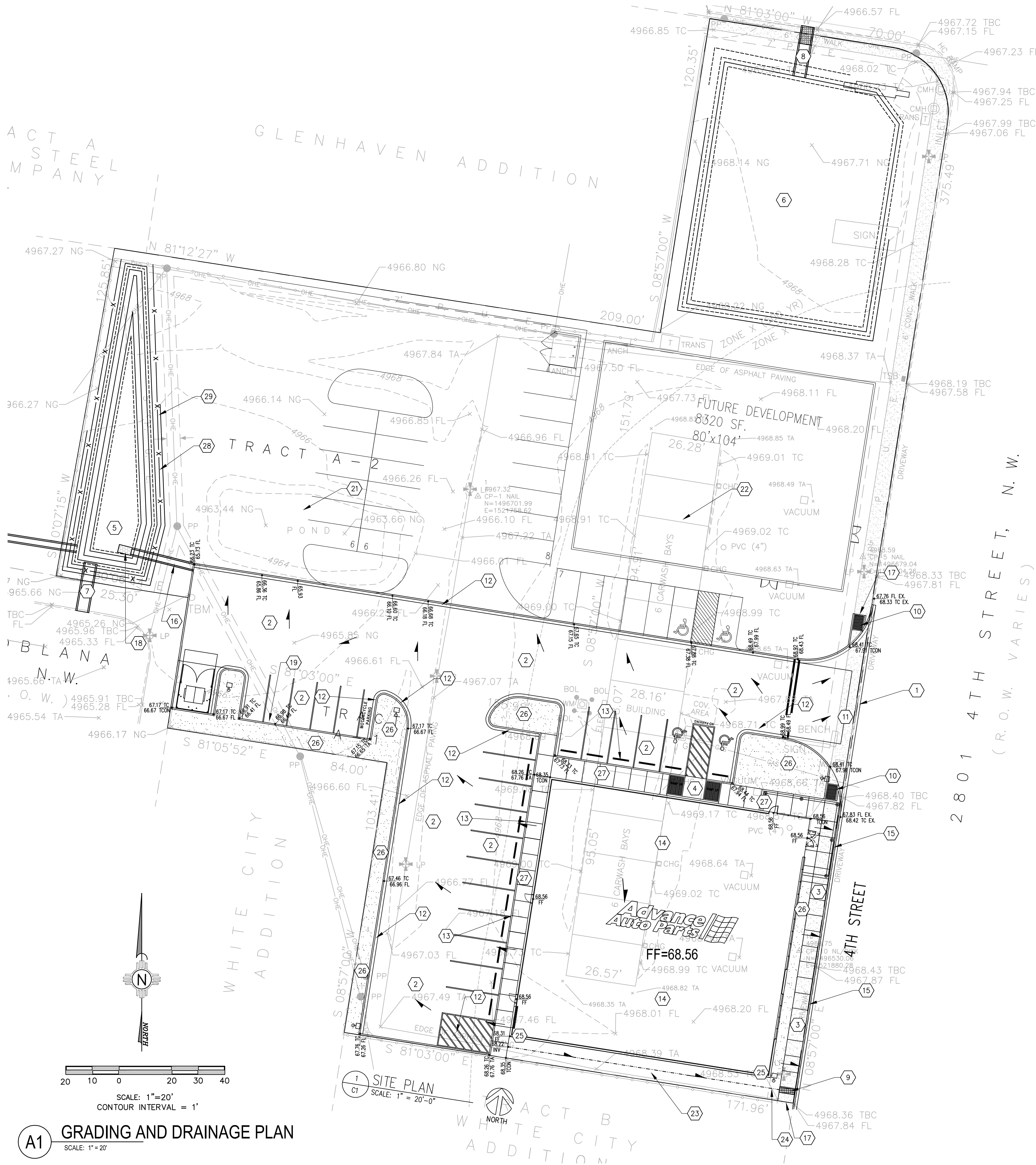


SCALE: 1" = 30'



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T:\Clients\Clint Wilsey Architect\Advanced Auto parts\sheet\grading and drainage plan.dwg, CD PLAN C-102, 8/17/2015 4:44:56 PM, jlocheur, 1:1



LEGEND:

38.00 FG	PROPOSED SPOT ELEVATIONS (FINISHED GRADE)	==	GRADE BREAK-HIGH POINT
MATCH (95.19)	MATCH EXISTING ELEVATIONS	---	SWALE
TC ON	TOP OF CONCRETE	SD	STORM DRAIN LINE
FL	FLOW LINE, CURB		
INV	INVERT		
FG	FINISH GRADE	5895	PROPOSED MAJOR CONTOUR
TBC	TOP OF BASE COURSE	5895	PROPOSED MINOR CONTOUR
TC	TOP OF CURB	5895	EXISTING MAJOR CONTOUR
TG	TOP OF GRATE		EXISTING MINOR CONTOUR
	FLOW ARROW		

KEYED NOTES:

- MATCH NEW TOP OF CONCRETE VALLEY GUTTER WITH EXISTING ASPHALT PAVEMENT AT THE LIP OF EXISTING CURB. CONTRACTOR SHALL FIELD VERIFY ELEVATIONS AND LOCATION PRIOR TO CONSTRUCTION.
- NEW PAVEMENT SECTION. SEE SECTION DETAILS ON ARCHITECTURAL PLANS AND IN THE GEOTECHNICAL REPORT.
- NEW CONCRETE SIDEWALK. AS PER COA STANDARD DWG 2430. CONTRACTOR SHALL SUBMIT A JOINT PATTERN TO THE PROJECT ARCHITECT FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.
- NEW TYPE A HANDICAP RAMP, SEE SHEET C-501 FOR DETAILS.
- NEW WATER HARVEST AREA 1. TOP=66.0, INV=62.5. SIDE SLOPE 2:1 WITH FILTER FABRIC AND 3" OF 3/4" GRAVEL MULCH. SEE DETAIL THIS SHEET C-501.
- FUTURE WATER HARVEST AREA 2. TOP=67.5, INV=66.5. SIDE SLOPE 3:1. SEE DETAIL THIS SHEET C-501.
- NEW EMERGENCY SPILLWAY, 4' WIDE CONCRETE CHANNEL, TOP=66.0, CREST OF SPILLWAY=65.5. NEW CONCRETE CHANNEL. SEE DETAIL THIS SHEET C-501.
- FUTURE EMERGENCY SPILLWAY TOP=67.5, CREST OF SPILLWAY=67.0. NEW CONCRETE CHANNEL. SEE DETAIL THIS SHEET C-501.
- NEW 24" WIDE SIDEWALK CULVERT WITH STEEL PLATE TOP. INV=67.84, TOP=68.36 (FIELD VERIFY ELEVATIONS PRIOR TO CONSTRUCTION) INV. SLOPE AT 2% MIN. AS PER COA STANDARD DETAIL 2236.
- NEW TYPE B HANDICAP RAMP, SEE SHEET C-501 FOR DETAILS.
- NEW CONCRETE VALLEY GUTTER AS PER COA STANDARD DETAIL 2420.
- NEW CURB AND GUTTER. SEE ARCHITECTURAL PLANS FOR DETAIL.
- NEW THICKENED EDGE ON CONCRETE SIDEWALK. SEE ARCHITECTURAL PLANS FOR DETAIL.
- NEW BUILDING. SEE ARCHITECTURAL PLANS FOR DETAILS.
- MATCH EXISTING TOP BACK OF CURB WITH TOP OF CONCRETE ELEVATION. AND SLOPE @ 2% UP MAXIMUM.
- NEW 3' WIDE CONCRETE CHANNEL. S=1% MIN. SEE SHEET C-501 FOR DETAILS.
- SAWCUT EXISTING SIDEWALK TO NEAREST CONSTRUCTION JOINT AND MATCH WITH NEW CONCRETE SIDEWALK.
- NEW 5'x5'x18" THICK LOOSE RIP RAP PAD. SEE SHEET C-501 FOR DETAILS.
- NEW CONCRETE HEADER CURB. SEE SHEET C-501 FOR DETAILS.
- NOT USED.
- FILL IN EXISTING RETENTION POND AFTER PROPOSED WATER HARVEST AREA NO. 1 IS CONSTRUCTED.
- EXISTING BUILDINGS AND ASPHALT TO BE DEMOLISHED.
- NEW CONCRETE SWALE. SEE SHEET C-501 FOR DETAILS.
- 5' TRANSITION FROM CONCRETE SWALE TO CONCRETE SIDEWALK CULVERT.
- ROOF DRAIN LOCATION.
- LANDSCAPE AREA. SEE ARCHITECTURAL PLANS FOR DETAILS.
- NEW CONCRETE SIDEWALK/FLATWORK. SEE ARCHITECTURAL PLANS FOR DETAILS.
- NEW 6' CHAIN LINK FENCE. SEE ARCHITECTURAL PLANS FOR DETAILS.
- NEW 12' SWING CHAIN LINK GATE.

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PERMIT DRAWINGS



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REVISIONS		DESCRIPTION
REV	DATE	

DATE	GROSS SQ. FT.
7-29-15	9,933 SF.

PROJECT# AA-15-002
DRAWN BY: Clint Wilsey
CHECK BY: Clint Wilsey

VERSION 04-14 100x100
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66ARCHITECT, LLC
Clint Wilsey, Architect
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GRADING AND
DRAINAGE PLAN

C-102



REVISIONS		DESCRIPTION
REV	DATE	

DATE	GROSS SQ. FT.
7-29-15	9,933 SF.

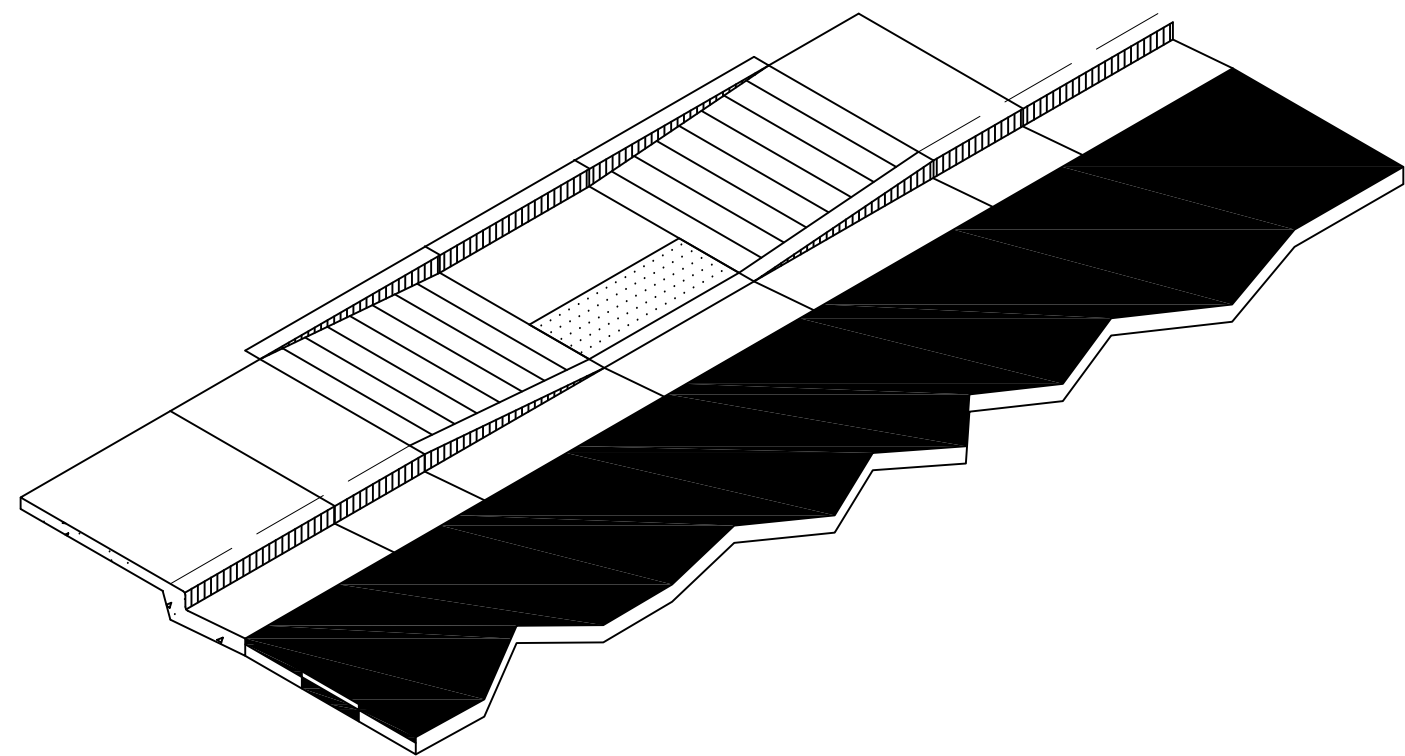
PROJECT # AA-15-002
DRAWN BY: Clint Wilsey
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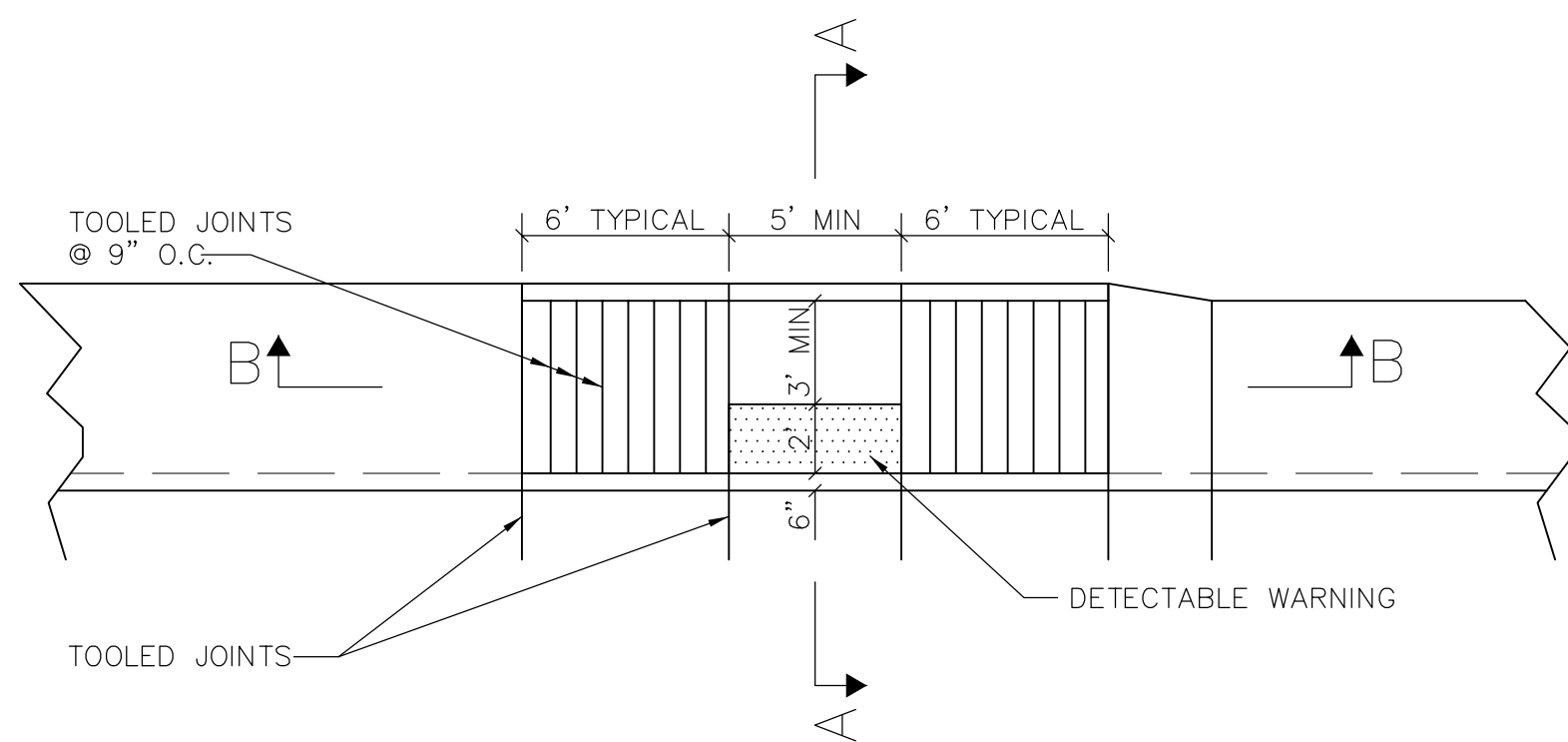
7-29-15
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MISCELLANEOUS
DETAILS

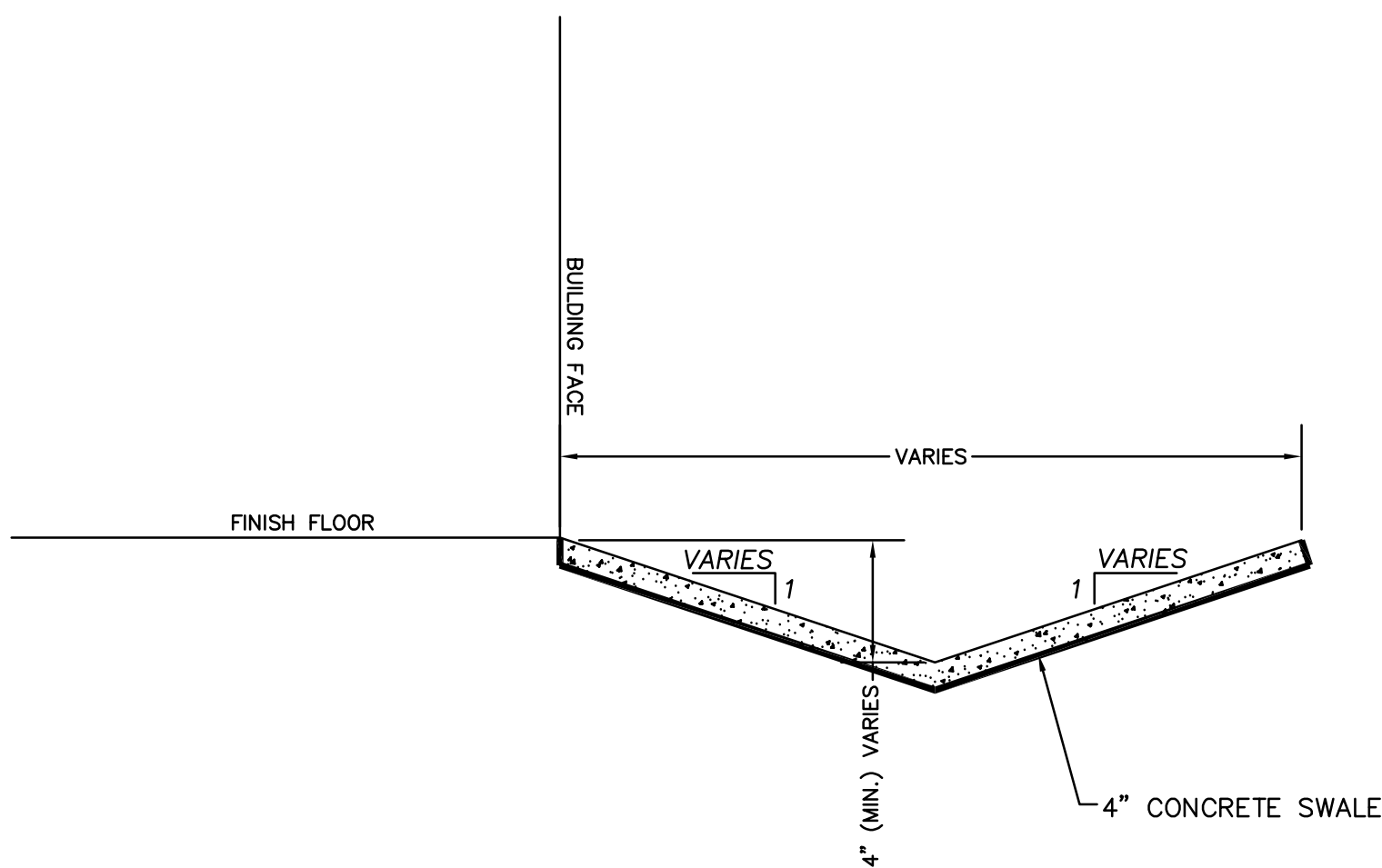
C-501



ISOMETRIC VIEW



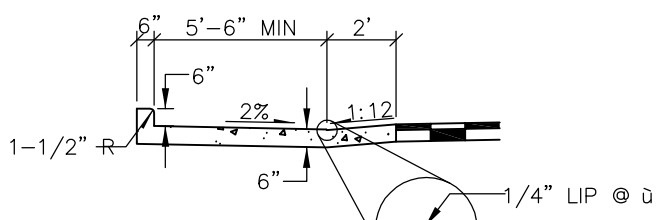
C4 TYPE A HANDICAP RAMP DETAIL
SCALE: NOT TO SCALE



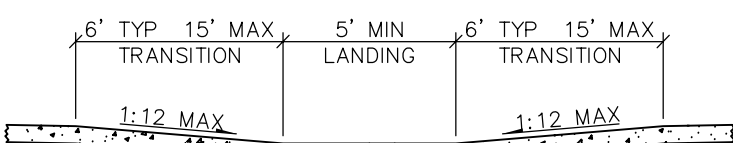
B1 CONCRETE SWALE DETAIL
SCALE: NOT TO SCALE

GENERAL NOTES

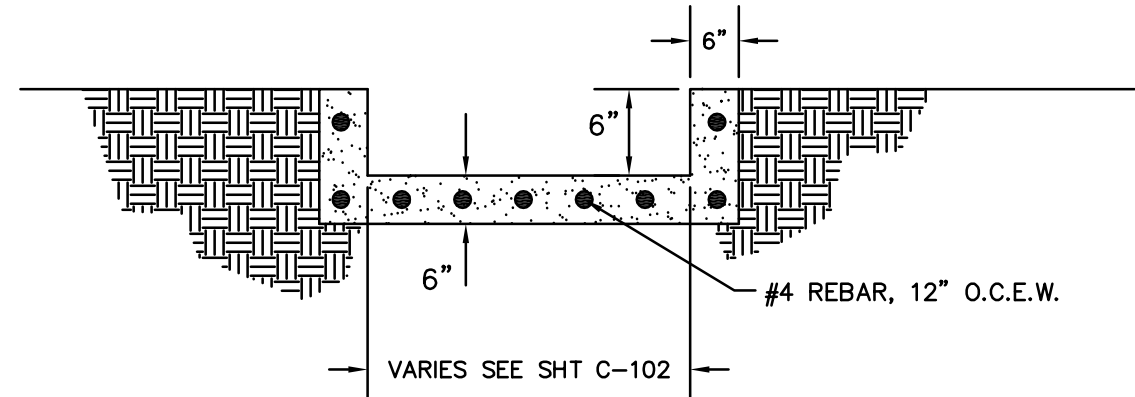
1. AVOID PLACING DRAINAGE STRUCTURES, TRAFFIC SIGNAL EQUIPMENT, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.
2. RAMP SLOPES SHALL NOT BE STEEPER THAN 2%. THE TRANSITIONS SHALL HAVE A MAXIMUM SLOPE OF 1:12.
3. DETECTABLE WARNINGS SHALL BE ARMOR-TILE TACTILE SYSTEMS, CAST-IN-PLACE SYSTEMS, BRICK RED OR APPROVED EQUAL. INSTALLATION SHALL BE DONE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.



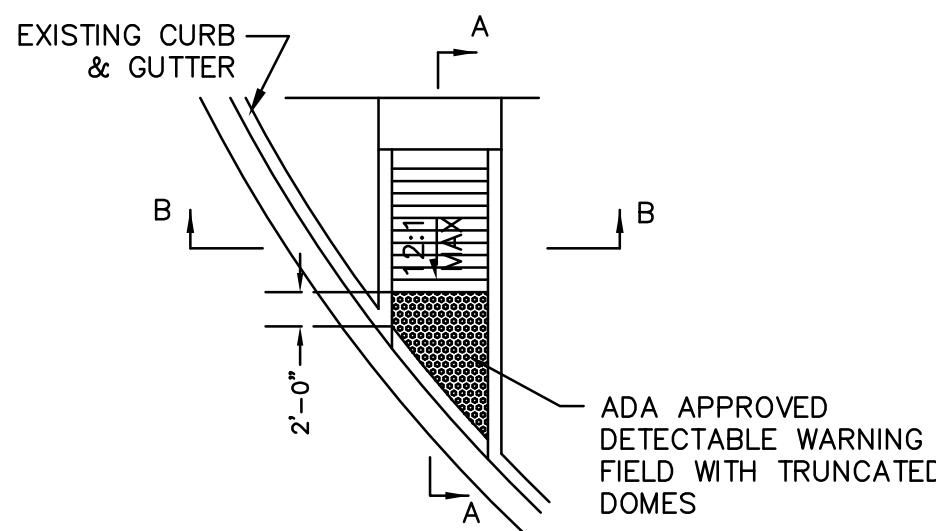
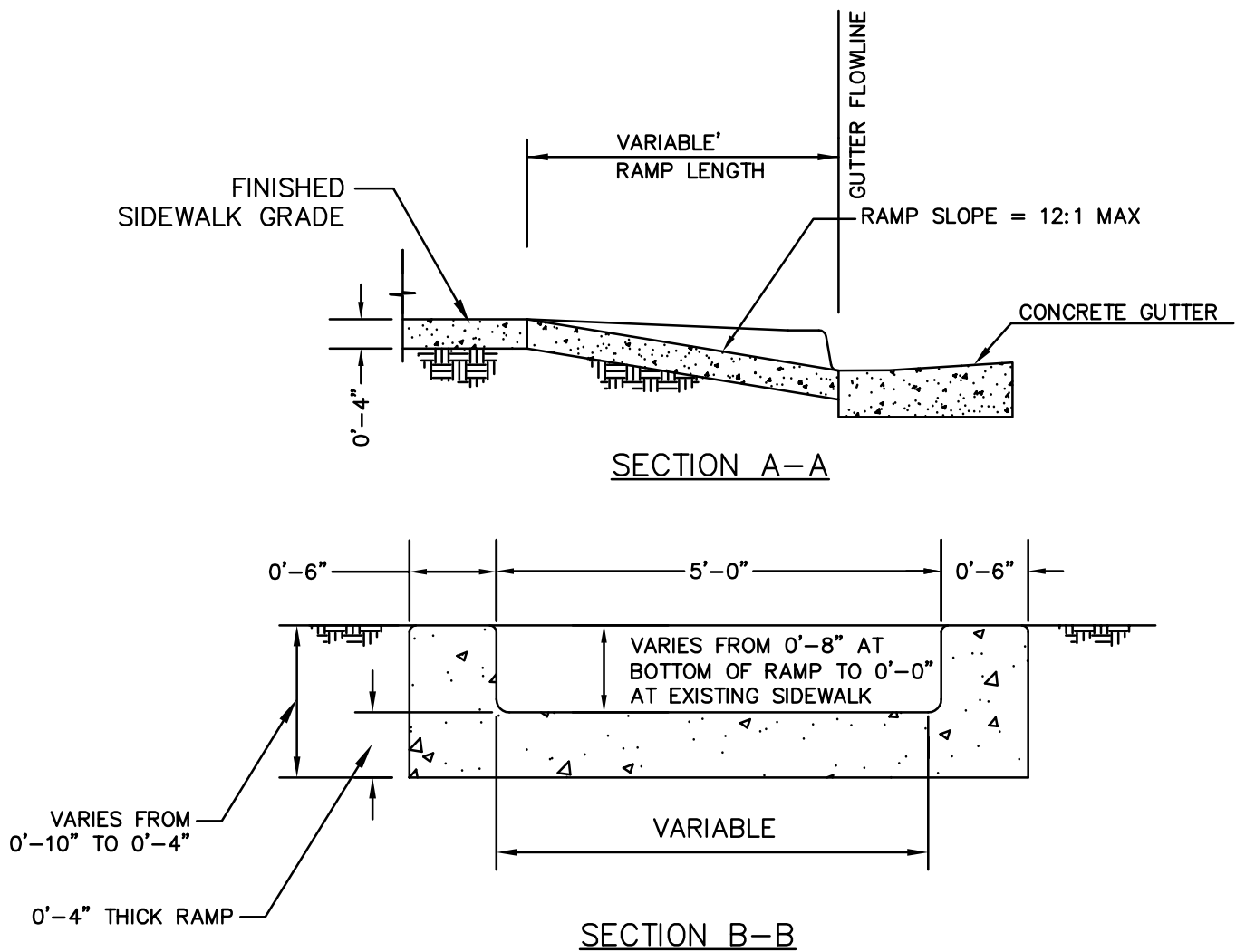
SECTION A-A



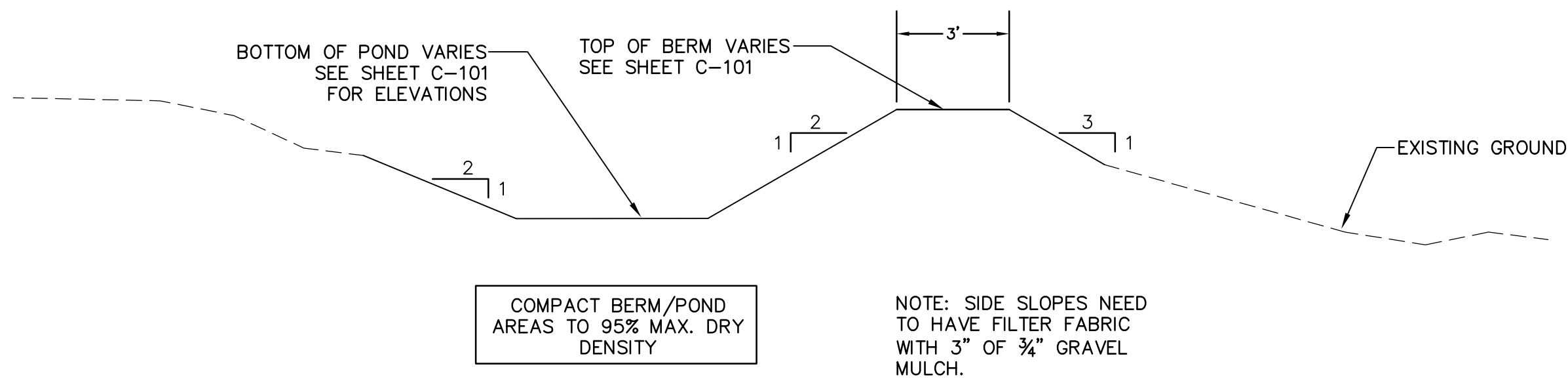
SECTION B-B



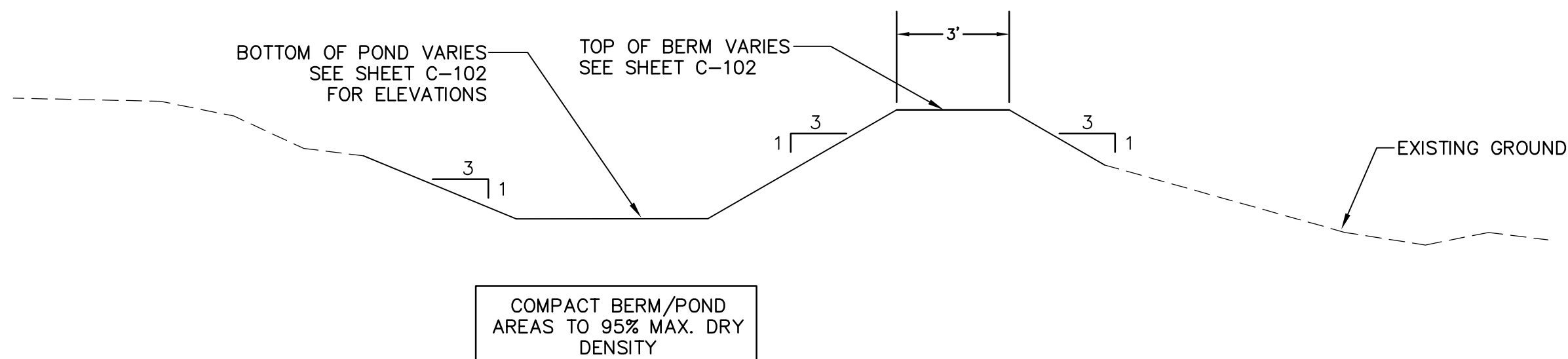
D4 CONCRETE CHANNEL DETAIL
SCALE: NOT TO SCALE



C4 TYPE B HANDICAP RAMP DETAIL
SCALE: NOT TO SCALE



D5 TYPICAL WATER HARVEST AREA NO. 1 SECTION DETAIL
SCALE: NOT TO SCALE



D5 TYPICAL WATER HARVEST AREA NO. 2 (FUTURE) SECTION DETAIL
SCALE: NOT TO SCALE

A1 MISCELLANEOUS DETAILS
SCALE: NOT TO SCALE

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