CITY OF ALBUQUERQUE

May 8, 2018

Mark Goodwin, P.E.
Mark Goodwin & Associates
PO Box 90606
Albuquerque, NM 87199

RE: Family Dollar
1400 Gibson Blvd SE
Grading Plan
Engineers Stamp Date: 4/25/18 (L15D049)

Dear Mr. Goodwin:

Based on the information provided in your submittal received on 5/4/18, the grading plan cannot be approved for building permit until the following are addressed:

1. The backflow preventer will need to be designed; just providing the manual is insufficient. How will it be maintained? Is it in a manhole or inlet? Provide a detail. How are you attaching a flange fitting to RCP? This will have to be a privately owned and maintained facility and cannot be pushed to DRC or be placed in the public ROW. A Private Drainage Covenant (no Public Easement) will need to accompany it and must be submitted to with the original notarized form, exhibit A (legible on 8.5x11 paper), and recording fee ($25, payable to City of Albuquerque).

2. Clarification and additional detail is needed on the emergency spillway:
   a. Increase the density of spot elevations and include top of curb/flowline elevations in the vicinity of the Family Dollar, correct the grade line from 0.05% to 0.5%, and provide the spillway elevation.
   b. Where is the spillway detail in plan? Is this detail in the ROW or at the edge of the parking lot? Details for both cases should be provided. The elevations are off by 2' from one side to the other.
   c. Use sidewalk culverts per Std dwg 2236 in the public ROW or provide the complete design for the steel plate cover. Angled SW culverts/steel plates are not acceptable.
   d. Provide a profile for the spillway channel (water surface, slopes, top/bottom of channel).
   e. Provide a section for the channel showing the adjacent grades for the sidewalk, ROW, and Family Dollar. It seems there may be a drop-off from the back of sidewalk to the channel bottom and a pedestrian safety rail may be required.

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

Orig: Drainage File

f. Build notes are needed for the channel as well (concrete type, thickness, reinforcement, etc.).
g. Include sidewalk culverts with capacity to pass 6.76cfs; these will be built by WO, but should at least be sized and shown on the grading plan.

3. A Private Facility Drainage Covenant is required for the stormwater quality ponds. The original notarized form, exhibit A (legible on 8.5x11 paper), and recording fee ($25, payable to City of Albuquerque) must be turned into DRC (4th, Plaza del Sol) for routing. Please contact Charlotte LaBadie (clabadie@cabq.gov, 924-3996) or Madeline Carruthers (mtafoya@cabq.gov, 924-3997) regarding the routing and recording process for covenants.

4. Payment of the Fee in Lieu (Amount = 883CF x $8/CF, per grading plan, stamped 3/28/18) for the required first flush volume must be made.

Prior to Certificate of Occupancy:

5. The Private Facility Drainage Covenant must be recorded with Bernalillo County and a copy included with the drainage certification.

6. Payment of Fee-in-Lieu will be required for any ponding areas not constructed and certified.

7. City acceptance and close-out of the public Work Order will be required, unless a financial guarantee has been posted.

If you have any questions, please contact me at 924-3695 or dpeterson@cabq.gov.

Sincerely,

Dana Peterson, P.E.
Senior Engineer, Planning Dept.
Development Review Services

PO Box 1293
Albuquerque
NM 87103
www.cabq.gov

Orig: Drainage File

Series 37

- Installs between pipe flanges, eliminating valve body.
- Offers minimal face-to-face dimension—only the thickness of the flange.
- Features unique, maintenance-free, one-piece elastomer check sleeve design.
- Eliminates chatter—silent, non-slamming.
- Closes on entrapped solids.

Materials of Construction

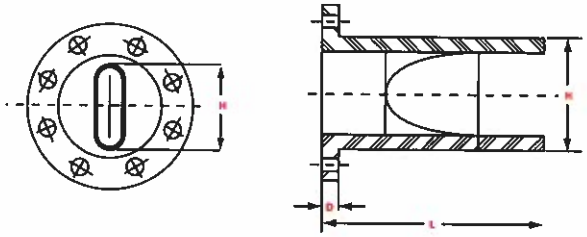
- Valves are available in pure gum rubber, neoprene, Hypalon®, buna-N, Viton® and EPDM.
- ANSI Class 125 Flanges, DIN PN6, PN10, PN16.
- Special coating available.

Tideflex® Technologies' Series 37 Flanged InLine Check Valve is a simple, reliable, cost-effective solution to backflow problems. Designed to be installed between twomating flanges, the Series 37 eliminates the need for a valve body.

With only one moving part, the maintenance-free rubber check sleeve, the Series 37 InLine Check Valve is simple in design. Sliding, rotating, swinging and spring parts are eliminated. There are no seats to corrode or packing to maintain. In addition, the Series 37 is a passive design, requiring no external source of air or electricity to operate. The result is reduced operating costs.

The Series 37 InLine Check Valve can be ordered in a variety of elastomers. Flanges conform to ANSI B16.1 Class 125 specifications. Special custom designs or metric flanged models are also available. When ordering, specify line pressure, backpressure and whether an SST is required.

The pressure drop of the Series 37 is increased because of the smaller I.D. required to fit the check valve in the line.



Dimensions Series 37 Flanged InLine Check Valve

Nominal Size* (Pipe I.D.)	Length L	Height of Bill H	Flange Thickness D	Max. Backpressure (psi)	
				Standard Tideflex®	With Saddle Support
2	5	1 7/8	3/8	150	N/A
3	5 1/2	2 7/8	3/8	100	N/A
4	7	3 7/8	3/8	75	150
6	11	5 7/8	3/8	75	150
8	12 1/2	7 7/8	1/2	60	125
10	15 1/2	9 7/8	1/2	45	75
12	18 1/2	11 7/8	1/2	35	75
14	22	13 3/4	5/8	25	70
16	23	15 3/4	3/4	20	60
18	24	17 3/4	1	15	45
20	32	19 3/4	1	10	40
24	37	23 3/4	1	10	40
30	41	29 3/4	11/2	8	40
36	47	35 3/4	11/2	8	35
42	49	41 1/2	1 3/4	5	25
48	52	47 1/2	1 3/4	5	25
54	57	53 1/2	2	5	
60	64	59 1/2	2	5	CONTACT FACTORY
72	73	71 1/2	2	5	

Numbers indicate maximum dimensions in inches.
** Larger sizes available upon request.*

Tideflex® Technologies
Division of Red Valve, Inc.

SERIES 37 INLINE CHECK VALVE

Installation, Operation, and Maintenance Manual

The revolutionary design of the Series 37 In–Line Check Valve provides absolute backflow protection. This unique "duck bill" design eliminates costly backflow from oceans, rivers or storm water and is the ideal valve for effluent diffuser systems.

The Series 37 Check Valve is available in a wide variety of elastomers and is designed to meet your exact flow specifications.

Series 37 valves are constructed with 125# ANSI flanges, which have the same drilling pattern as ANSI 150# for ease of installation.

- **Simple design**
- **Cost effective**
- **No cavities or dead spots to bind valve operation**
- **Low maintenance**

IMPORTANT

Please take a moment to **review this manual.** Before performing any maintenance on the valve be sure the pipeline has been depressurized. The improper installation or use of this product may result in personal injury, product failure, or reduced product life. Tideflex® Technologies can accept NO liability resulting from the improper use or installation of this product. If you have any questions or problems, please call the customer service department at (412) 279-0044. We appreciate your comments. Thank you for choosing Tideflex® Technologies.

INSTALLATION

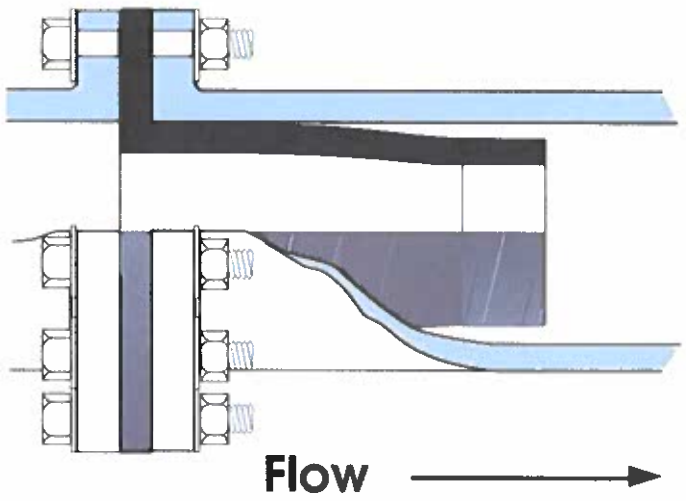
1. INSPECTION OF VALVE:
Check flange faces of pipe for rough/damaged areas. Pipeline flanges must be flat, properly spaced, and parallel to achieve proper seal. Tideflex® Technologies recommends that pipeline flanges are serrated approximately 1/16" deep at 90°, in order to prevent the "creep" of the rubber flange of the valve sleeve. **Flanges with an oversized I.D. can cut the sleeve flange, and are not recommended with the Series 37 Valve.** Grind or file any sharp edges of pipeline flange to prevent damage to the sleeve. PVC flanges may not seal properly, and are not recommended by Tideflex® Technologies. If PVC flanges are used, metal back up rings should be placed behind the PVC flanges in order to prevent yielding. Typically, PVC flanges will yield before the valve will seal.

2. GASKETS:
The Series 37 In-line Check Valve is self gasketing, and does not need a separate gasket.

CAUTION: Do not use any sharp tools such as a crowbar or screwdriver on the rubber during installation. Sharp instruments can damage flange faces and cause possible leakage.

3. INSTALLING FLANGE BOLTS:
Tighten all bolts uniformly to distribute pressure evenly around the sleeve flange.(For complete information on bolting dimensions refer to the back cover of this IOM).

4. VALVE ORIENTATION:
The valve end with the rubber flange face should be installed on the pressure side of the system.The bill area should be installed facing downstream, with the "slit" vertically oriented.
The inlet flange makes use of the rubber check valve flange as the gasket (additional rubber gaskets are not required on the inlet flange). The installation bolt torque on the end flange bolts are listed in the table on the back page of this IOM.



NEVER...	NEVER...	NEVER...
Use sharp tools on rubber sleeve.	**Exceed design working pressure.**	**Install the valve backwards.**

OPERATION

The Series 37 Check Valve is a self-contained check valve for use on low back pressure systems. All check valves are built for each specific application. Back pressures in excess of the maximum rated back pressure may invert the sleeve and cause valve failure.

Tideflex® Technologies check valves are custom made products intended for a specific application and have been designed to respond to criteria unique to that purpose, such as line pressure, minimum and maximum backflow pressure, and chemical compatibility. Should the conditions for which the valve has been designed be altered or change in any way, it could affect the normal operation of the valve, and/or prevent the valve from draining completely. Valves made to withstand high back pressure may not self–drain completely.

MAINTENANCE

1. INSPECTION:
Valves should occasionally be inspected for damage and wear. The inspection period should be determined by the severity of the service and environment. If valves are periodically inspected and preventive maintenance done, the valve will last longer and operate better.

CAUTION: Do not remove the bolting or valve parts or bolting with pressure in the line. It is easy to inspect the valve for obvious problems.

ELASTOMER SLEEVE REPLACEMENT:

1. A spare replacement check sleeve should be placed on order when this valve is placed in service.

2. Remove the existing valve and install the replacement as specified under **INSTALLATION**.

STORAGE:

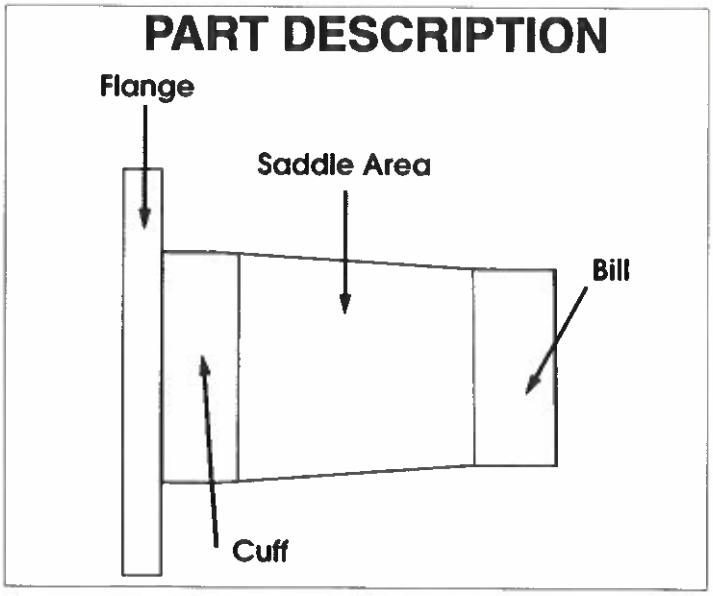
If your Series 37 Valve is to be stored for a period of time prior to installation, the following storage guidelines will help preserve your valve and assure a trouble free installation.

1. Store valve in a clean, cool, dry location. Avoid exposure to light, electric motors, dirt or chemicals.

2. Store valve to prevent other items from contacting check sleeve or flanges to prevent possible damage.

3. Store this manual with the valve, so that it is readily available at time of installation.

PART DESCRIPTION



TROUBLESHOOTING GUIDE

SYMPTOM:
LEAKAGE AT FLANGE
- Retighten all flange bolts uniformly, as explained on the back cover of this IOM.

SYMPTOM:
SLEEVE RUPTURE (At juncture of flanges)
- **Excessive back pressure due to water hammer or pressure surge.**
- **High velocity of abrasive media with the valve cracked open.**

SYMPTOM:
CUTS ON FLANGE SURFACE
- Sharp I.D. of mating flange.
- Oversized I.D. of mating flange.

SYMPTOM:
SLEEVE INVERTED
- Excessive back pressure.

Tideflex® Technologies Warranty

WARRANTIES - REMEDIES - DISCLAIMERS - LIMITATION OF LIABILITY
Unless otherwise agreed to in writing signed by Tideflex® Technologies, all Products supplied by Tideflex® Technologies will be described in the specifications set forth on the face hereof.

THE WARRANTIES SET FORTH IN THIS PROVISION ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES WHETHER STATUTORY, EXPRESS OR IMPLIED (INCLUDING ALL WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND ALL WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OR TRADE).

Tideflex® Technologies Products are guaranteed for a period of one year from date of shipment, against defective workmanship and material only, when properly installed, operated and serviced in accordance with Tideflex® Technologies' recommendations. Replacement for items of Tideflex® Technologies' manufacture will be made free of charge if proved to be defective within such year; but not claim for transportation, labor or consequential damages shall be allowed. We shall have the option of requiring the return of the defective product to our factory, with transportation charges prepaid, to establish the claim and our liability shall be limited to the repair or replacement of the defective product, F.O.B. our factory. Tideflex® Technologies will not assume costs incurred to remove or install defective products nor shall we incur backcharges or liquidated damages as a result of warranty work. Tideflex® Technologies does not guarantee resistance to corrosion erosion, abrasion or other sources of failure, nor does Tideflex® Technologies guarantee a minimum length of service, or that the product shall be fit for any particular service. Failure of purchaser to give prompt written notice of any alleged defect under this guarantee forthwith upon its discovery, or use, and possession thereof after an attempt has been made and completed to remedy defects therein, or failure to return product or part for replacement as herein provided, or failure to install and operate said products and parts according to instructions furnished by Tideflex® Technologies, or failure to pay entire contract price when due, shall be a waiver by purchaser of all rights under these representations. All orders accepted shall be deemed accepted subject to this warranty which shall be exclusive of any other or previous warranty, and shall be the only effective guarantee or warranty binding on Tideflex® Technologies, anything on the contrary contained in purchaser's order, or represented by any agent or employee of Tideflex® Technologies in writing or otherwise, not withstanding implied warranties. TIDEFLEX® TECHNOLOGIES MAKES NO WARRANTY THAT THE PRODUCTS, AUXILIARIES AND PARTS ARE MERCHANTABLE OR FIT FOR ANY PARTICULAR PURPOSE.

Recommended Bolt Torque

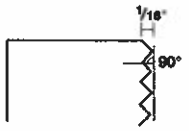
Valve Size	Bolt Size	Torque (ft*lb.)
2"	5/8" - 11NC	30
2-1/2"	5/8" - 11NC	40
3"	5/8" - 11NC	40
4"	5/8" - 11NC	30
5"	3/4" - 10NC	40
6"	3/4" - 10NC	30
8"	3/4" - 10NC	40
10"	7/8" - 9NC	40
12"	7/8" - 9NC	50
14"	1" - 8NC	50
16"	1" - 8NC	50
18"	1-1/8" - 7NC	30
20"	1-1/8" - 7NC	30
24"	1-1/4" - 7NC	40
30"	1-1/4" – 7NC	30
36"	1-1/2" – 6NC	40
42"	1-1/2" – 6NC	30
48"	1-1/2" – 6NC	30
54"	1-3/4" – 5NC	50
60"	1-3/4" – 5NC	50
72"	1-3/4" – 5NC	50

- Torque values are suggested minimum values.
- Torque all flange bolts in a star pattern. First to 50% of tabulated values, then re-torque to 100% of tabulated values. If greater torque is required, continue re-torquing in increments of 50% of tabulated values.
- Variables such as surface finish on bolt threads, type of anti-sieze compound used, and surface finish of the mating flanges all have an effect on the minimum torque required to obtain a leak tight flange seal.
- Use of a high quality anti-sieze compound on all bolt threads is recommended.

INSTALLATION NOTES FOR SERIES 37 CHECK VALVES

A.

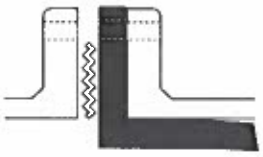
B.



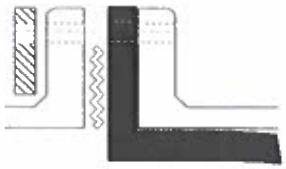
A. Standard check valves are built to schedule 40 pipe I.D. and to ANSI Class 125/150# flange and bolt circle specifications. It is recommended that the mating flanges are flat, full faced, and serrated.

B. It is recommended that the mating flange be serrated to "grip" the rubber flange. The serrations should be cut 1/16" deep, with a 90° angle tool point. The pitch should be 8 (eight) cuts per inch.

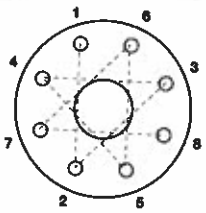
C.



D.



E.



C. When installing a check valve to a rubber, PVC, or any "slick" mating flange, we recommend that you install a metal serrated gasket between the two flanges to assist in the seal.

D. When bolting a check valve to a PVC or Synthetic mating flange, use a split back-up retaining ring, since the mating flange will yield prior to generating enough force on the flange faces for a proper seal.

E. Always use a "star" pattern when bolting a check valve.

Tideflex Technologies
700 North Bell Avenue
Carnegie, PA 15106
(412) 279-0044
FAX (412) 279-7878
www.tideflex.com

Note: If long, unsupported lengths of steel, plastic, or synthetic pipe are being used, the pipe may yield or sag due to the valve weight. This may cause an inadequate seal between the valve and flanges. Be certain sufficient pipe hangers are used and properly located to support the total weight of the valve and the process fluid.

April 25, 2018

Mr. Dana Peterson
City of Albuquerque
PO Box 1293
Albuquerque, NM 87103

Re: Family Dollar 1400 Gibson Blvd SE- Grading Plan (L15D049)

Dear Mr. Peterson;

Below is a response to the comments dated 3/28/18 for the Building permit comments to the approved Grading Plan dated 3/30/2018 at 1400 Gibson Blvd.

1. Attached with this submittal is the build information and space sheet for the back flow preventer that is labeled on the revised grading plan.

2. Clarification of the emergency spillway has been shown with increased spots, and spillway slope, the maximum water surface elevation of the flood which will enact the emergency spillway. A cross section detail of the channel has been added to the drawing to show construction.
3. The private inlet note was relocated on the drawing and was removed by accident..
4. Private drainage covenant will be submitted for the stormwater quality ponds.
5. Roof Drain arrows have been shown and added to the plan.
6. First flush payment will be made for the required storm pond volume previously agreed upon..
7. All Sanitary sewer grease trap drains and infrastructure for the future buildings will be installed with this construction

Please call me if you have any questions.

Sincerely,
MARK GOODWIN & ASSOCIATES, P.A.

Hiram L. Crook
Staff Engineer

HYDROLOGY NOTES

THE TOTAL SITE IS BOUNDED BY GIBSON BLVD LANE SW TO THE NORTH, AND EXISTING RESIDENTIAL DEVELOPMENT TO THE SOUTH. THE PROJECT SITE IS A COMMERCIAL PROPERTY WITH 3 PROPOSED BUILDINGS.

THE PROJECT SITE CONSISTS OF 1.6354 ACRES. NO OFFSITE FLOWS ENTER THIS SITE. THE SITE IS NOT IN A 100YR FLOOD ZONE.

THE DEVELOPED 100-YR 24-HR FLOW GENERATED FOR THIS SITE IS 6.76 CFS. THE HYDROLOGY WAS CALCULATED PER COA DPM USING AHYMO. P₂₄=2.61" FROM NOAA 14. THE RESULTS ARE SUMMARIZED IN THE HYDROLOGY TABLE ON THIS SHEET.

THE DRAINAGE BASIN FROM THE DEVELOPED AREA WILL NOT BE CHANGED. ALL RUNOFF WILL BE SURFACE DRAINED TO A TYPE "D" INLET IN A SUMP CONDITION, THE FLOW WILL THEN BE CONVEYED BY A 18" RCP TO AN EXISTING MANHOLE IN GIBSON BLVD.

A STORMWATER BACKFLOW PREVENTER WILL BE INSTALLED WITHIN THE 18" RCP TO PREVENT THE BACKWARD FLOW OF THE FULL 100-YR DISCHARGE OF THE 54" GIBSON STORM SYSTEM. AS A BACKUP SYSTEM, A 4' CONCRETE OVERFLOW SPILLWAY HAS BEEN DESIGNED TO CARRY THE FULL 100 YEAR DISCHARGE OFF THE SIGHT TO STREET GRADES IN GIBSON BLVD. THERE ARE A SERIES OF (3) EXISTING CURB INLETS AT THE INTERSECTION OF GIBSON BLVD AND MULBERRY ST THAT CAN ACCEPT THESE FLOWS.

BASIN DATA

BASIN ID	%% D	%% C	AREA	Q(100)	VOLUME
100	75	25	1.6354 AC.	6.76 cfs	.2813 AC-FT

FIRST FLUSH

THE REQUIRED PORTION OF THE "FIRST FLUSH" IS TO BE RETAINED ON 3" -12" DEPRESSED LANDSCAPED AREAS ONSITE. THESE PONDS WILL HOLD THE FIRST FLUSH VOLUME FOR THE BUILDING ROOFS AND ASSOCIATED MARKED PAVING AREAS SHOWN BELOW.

REQUIRED VOLUME = 0.34" X IMPERVIOUS AREA
= 0.34"/12 X (53418 SF)
= 1513.53 CF

VOLUME PROVIDED = 686 CF

ONSITE FIRST FLUSH POND				
POND	PROVIDED FIRST FLUSH VOLUME (Cu Ft)	DEPTH (Ft)	ID Area	REQUIRED FIRST FLUSH VOLUME (Cu Ft)
P1	163	3"	A3	*135
P2	103	3"	B3	*91
P3	57	6"	B2	*53
P4	41	3"	A2	*97
P5	68	3"		
P6	*156	12"	A1	235
P7	*98	12"	B1	136
Total First Flush Credit = 630 Cu Ft				
883 Cu Ft to be Paid				

NOTES

1. CONTRACTOR MUST OBTAIN A TOPSOIL DISTURBANCE PERMIT FROM THE ENVIRONMENTAL HEALTH DIVISION PRIOR TO CONSTRUCTION.
2. CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION SHALL GOVERN ALL WORK.
3. THE CONTRACTOR SHALL CONFORM TO ALL CITY, COUNTY, STATE AND FEDERAL DUST CONTROL MEASURES AND REQUIREMENTS AND WILL BE RESPONSIBLE FOR PREPARING AND OBTAINING ALL NECESSARY APPLICATIONS AND APPROVALS.
4. THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE LOTS INTO PUBLIC RIGHT-OF-WAY. THIS CAN BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMS AND WETTING THE SOIL TO KEEP IT FROM BLOWING
5. THE EARTHWORK CONTRACTOR SHALL STOCKPILE ENOUGH MATERIAL ADJACENT TO RETAINING WALL LOCATIONS TO BE UTILIZED FOR WALL BACKFILL.
6. NO WORK ALLOWED IN THE PUBLIC RIGHT OF WAY WITHOUT AN APPROVED WORK ORDER.

Curve Table						
Curve #	Radius	Length	Delta	tangent	chord	chord dist
C1	2.04'	6.47'	181°29'08"	157.64'	N83°03'55"W	4.09''
C2	218.87'	30.13'	7°53'14"	15.09'	S78°21'21"E	30.11''
C3	294.68'	35.65'	6°55'55"	17.85'	S86°22'15"E	35.63''

Line Table		
Line #	Direction	Length
L1	S79°15'25"E	19.6119.61'
L2	S79°17'36"E	23.2123.21'
L3	S86°36'10"E	48.7548.75'

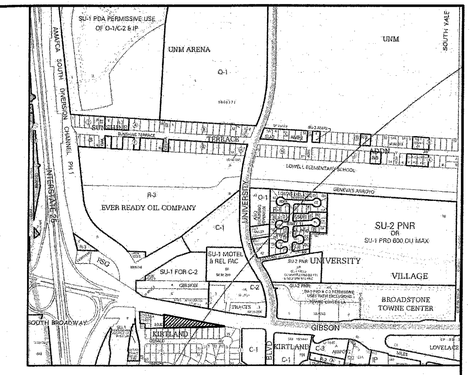
LEGEND

LEGEND

- –5065– CONTOUR (MAJOR)
- CONTOUR (MINOR)
- CURB AND GUTTER
- CONCRETE
- WALL
- FENCE – CHAIN LINK
- TOP CURB / FLOW LINE (TC= / FL=)
- X 65.00 SPOT ELEVATION
- SANITARY SEWER MANHOLE
- STORM DRAIN MANHOLE
- CATCH BASIN/DROP INLET
- CMP/PVC DRAIN PIPE
- OVERHEAD ELECTRIC/UTILITY LINE
- POLE
- ANCHOR
- WATER VALVE
- FIRE HYDRANT
- WATER METER
- WATER MANHOLE
- IRRIGATION CONTROL
- TRAFFIC PULL BOX
- PULLBOX
- LIGHT POLE
- SIGN
- BOLLARD
- DEPRESSED LANDSCAPE

LANDSCAPE BUFFER NOTES:

1. Swale to be 6" deep when the distance between back of curb and the sidewalk is 5 feet.
2. Swale to be 1" deeper than the distance in feet between the back of curb and the sidewalk for landscape buffers different than 5 feet wide.
3. For wide landscape buffers, greater than 10 feet, the maximum depth is 10 inches.
4. Final grade of dirt to be 1 to 2 inches below top of curb and top of sidewalk grade.
5. Surface between back of curb and sidewalk to be covered with gravel mulch (minimum ½"), cobbles or rip-rap. Do not fill entire swale.
6. A check dam will be required for swales on steeper longitudinal slopes and longer sections. The engineer will determine the location.
7. Landscape fabric is recommended, but not required, between the dirt and the stone. If landscape fabric is to be used it is to be permeable.
8. Detail is to be built for all new construction. In the case where the sidewalk is existing and the landscape buffer is improved with landscaping and/or some form of erosion protection, this requirement does not apply.



VICINITY MAP ZONE MAP: L-15-Z

LEGAL DESCRIPTION

PORTION OF TRACT B, GIBSON AND MILES AREA, WITHIN THE TOWN OF ALBUQUERQUE GRANT, PROJECTED SECTION 28, TOWNSHIP 10 NORTH, RANGE 3 EAST, N.M.P.M., CITY OF ALBUQUERQUE, NEW MEXICO

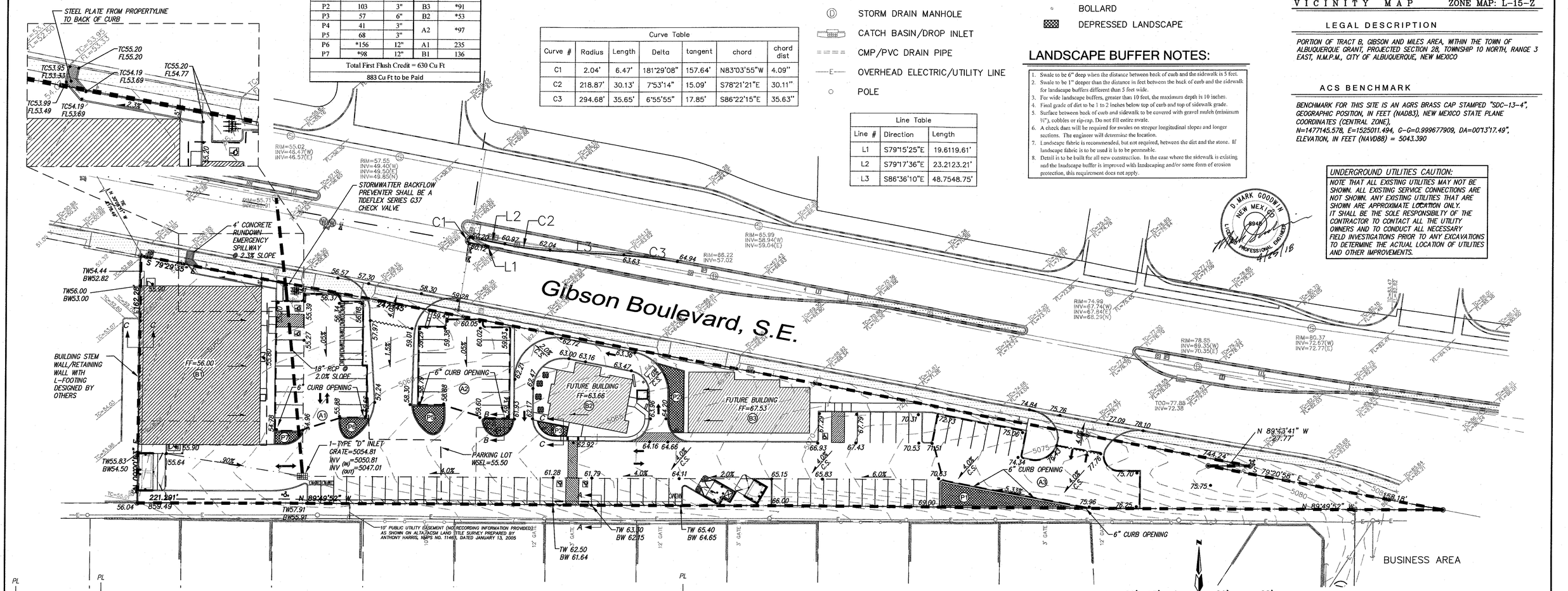
ACS BENCHMARK

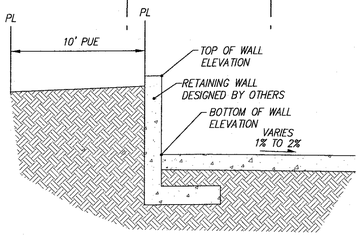
BENCHMARK FOR THIS SITE IS AN AGRS BRASS CAP STAMPED "SDC-13-4", GEOGRAPHIC POSITION, IN FEET (NAD83), NEW MEXICO STATE PLANE COORDINATES (CENTRAL ZONE), N=1477145.578, E=1525011.494, G-G=0.999677909, DA=00°13'17.49", ELEVATION, IN FEET (NAVD88) = 5043.390

UNDERGROUND UTILITIES CAUTION:

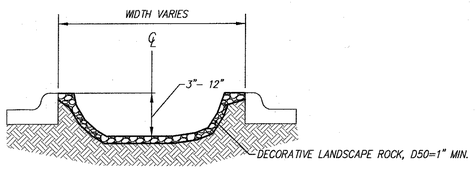
NOTE THAT ALL EXISTING UTILITIES MAY NOT BE SHOWN. ALL EXISTING SERVICE CONNECTIONS ARE NOT SHOWN. ANY EXISTING UTILITIES THAT ARE SHOWN ARE APPROXIMATE LOCATION ONLY. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT ALL THE UTILITY OWNERS AND TO CONDUCT ALL NECESSARY FIELD INVESTIGATIONS PRIOR TO ANY EXCAVATIONS TO DETERMINE THE ACTUAL LOCATION OF UTILITIES AND OTHER IMPROVEMENTS.

D. MARK GOODWIN NEW MEXICO 8948 PROFESSIONAL ENGINEER 11/15/17

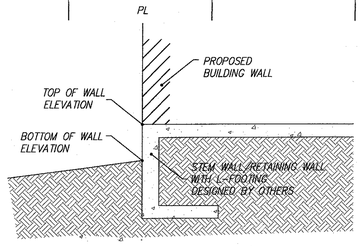




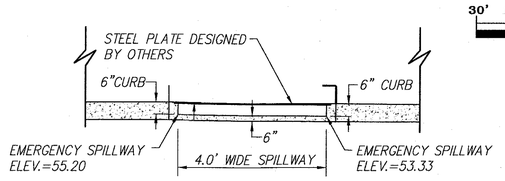
SECTION A-A
N.T.S. RETAINING WALL DETAIL (TYP.)



SECTION B-B
N.T.S. DEPRESSED LANDSCAPED DETAIL (TYP.)



SECTION C-C
N.T.S. DEPRESSED LANDSCAPED DETAIL (TYP.)



EMERGENCY SPILLWAY OPENING
N.T.S.

FAMILY DOLLAR STORE
GRADING & DRAINAGE PLAN

MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505)828-2200, FAX (505)797-9539

Designed: DMG	Drawn: DER	Checked: DMG	Sheet 1 of 1
Scale: 1" = 30'	Date: 11/10/17	Job: A16075	

F:\A16JOBS\A16075 Family Dollar - Gibson\GRADE & DRAIN\A16075_GD.dwg, Last saved by: Hiram, 11/15/17