CITY OF ALBUQUERQUE

Planning Department
Suzanne Lubar, Director

Mayor Richard J. Berry

January 28, 2016

Kirk Randal, P.E.
Anderson Wahlen & Associates
2010 North Redwood Road
Salt Lake City UT 84116

RE: **Smith's #423 Fuel Center**
5640 4th St NW
Grading and Drainage Plan
Engineers Stamp Date 1/26/16 (F14D072)

Dear Mr. Randal,

Based upon the information provided in your submittal received 1/27/16, this plan is approved for Grading Permit, Paving Permit and Building Permit. However, before construction may begin the DRC must approve the plan set.

Please inform the Architect/Owner or the contractor to attach a copy of this approved plan dated 1/26/16 to the construction sets in the permitting process prior to sign-off by Hydrology. If this plan is not with the construction plan sets the permitting process will be held up until the plan is provided.

Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist will be required.

If you have any questions, please contact me at 924-3686 or Rudy Rael at 924-3977.

Sincerely,

Abiel Carrillo, P.E.
Principal Engineer, Hydrology
Planning Department

RR/AC
C: File

PO Box 1293

Albuquerque

New Mexico 87103

www.cabq.gov

City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

Project Title: Smith's #423 Fuel Center Building Permit #: _____ City Drainage #: F14-D072

DRB#: _____ EPC#: _____ Work Order#: DRC 587880

Legal Description: Lots 2, 3 & 4 Harper Addition

City Address: 5640 4th Street NW

Engineering Firm: Anderson Wahlen & Associates Contact: Kirk Randall

Address: 2010 North Redwood Road, Salt lake City, UT 84116

Phone#: 801-410-8520 Fax#: 801-521-9551 E-mail: kirkr@awaeng.com

Owner: Smith's Food & Drug Centers, Inc. Contact: Roger Gough

Address: 1550 South Redwood Road, Salt Lake City, Ut 84104

Phone#: 801-974-1529 Fax#: 801-974-1628 E-mail: roger.gough@sfdc.com

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
- X 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:

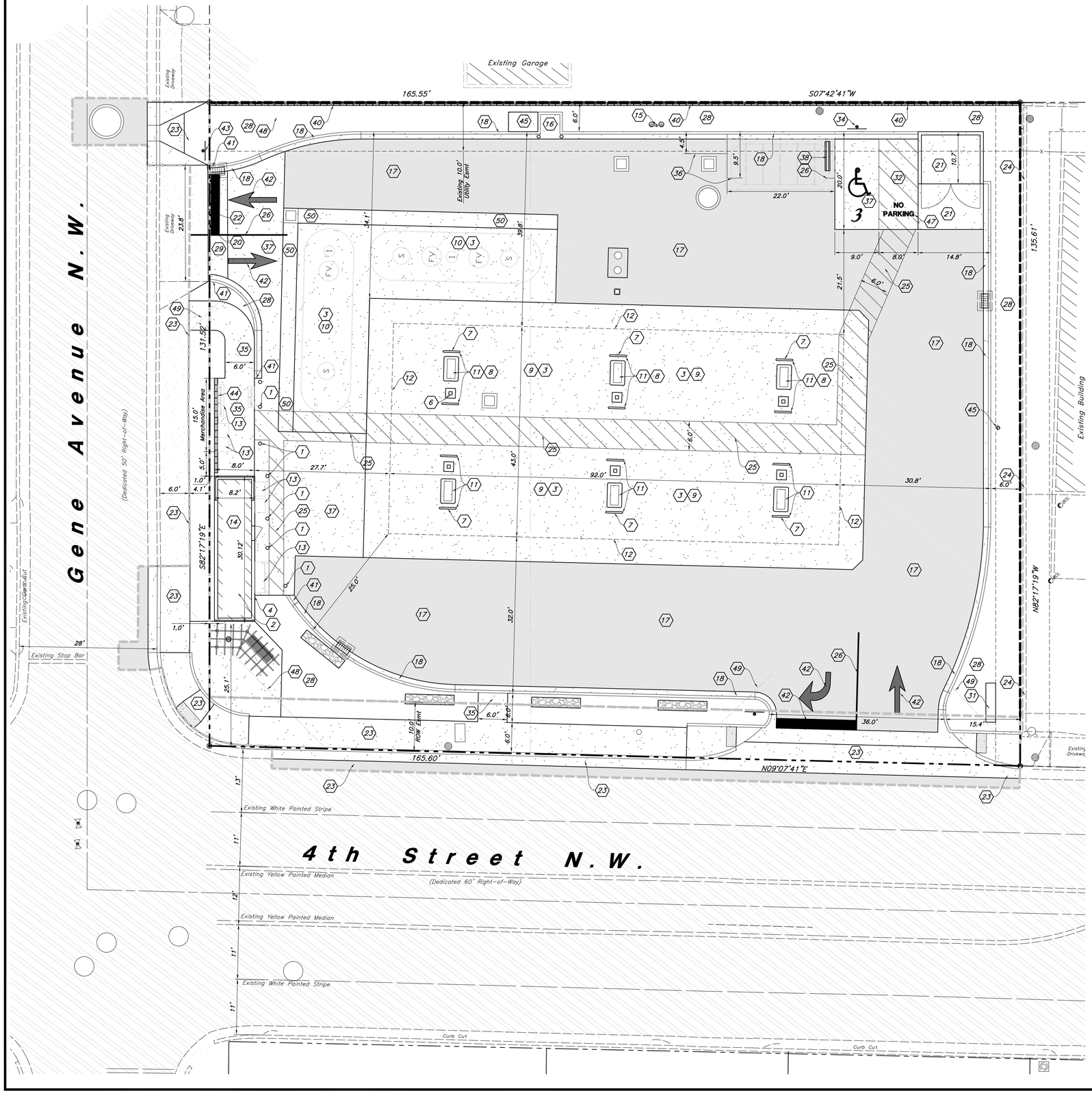
- ____ SIA/FINANCIAL GUARANTEE RELEASE
- ____ PRELIMINARY PLAT APPROVAL
- ____ S. DEV. PLAN FOR SUB'D APPROVAL
- ____ S. DEV. FOR BLDG. PERMIT APPROVAL
- ____ SECTOR PLAN APPROVAL
- ____ FINAL PLAT APPROVAL
- ____ CERTIFICATE OF OCCUPANCY (PERM)
- ____ CERTIFICATE OF OCCUPANCY (TCL TEMP)
- ____ FOUNDATION PERMIT APPROVAL
- X 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: X Yes ____ No ____ Copy Provided

DATE SUBMITTED: 1-27-2016 By: Kirk Randall

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 followin

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



Scale: 1" = 10'

10' 0 10' 20'

Site Construction Notes

1. Const. Bollard (18/C4.3)
2. Install roof penetration in kiosk and weather proof for speaker/camera wire installation.
3. All concrete slabs shall be cleaned and sealed by Owner. Contractor shall coordinate with the Owner provided Contractor (White Mountain, Mike Lette 801-547-9278 or Romac Services 801-759-7315).
4. Provide caulking and painting as necessary to touch up exterior panels of the kiosk.
5. Provide a water tight seal between the kiosk foundation and canopy slab.
6. Const. Tank Vent Risers on Column (See Arch. Plans)
7. Paint all bollards and island forms with Contractor supplied Sherwin Williams Industrial Enamel B54Z Series Paint.
8. Install a diesel tee, plug, and fittings in the MPD sumps of the islands with diesel.
9. Construct 6" Thick Concrete Canopy Drive Slab w/ Rebar Reinforcing (See Arch. Plans)
10. Construct 8" Thick Concrete Tank Pad w/ Rebar Reinforcing. (See Arch. Plans for Section)
11. Contractor Shall Construct Dispenser Islands w/ Bollard Protection and Install Fuel Dispenser (See Arch. Plans)
12. Overhead Canopy System Supplied and Installed by others. General Contractor to Install Footings, Conduits, & Conductors per Drawings by Madison Industries
13. Retail Merchandisers
14. General Contractor to Const. Floor and Foundation then Place Prefabricated Kiosk (See Arch. Plans)
15. Const. Remote Tank Vent Riser Modified for Separator Vent. (See Arch. Plans) (21/A.1)
16. Const. 4'x4'x6" Concrete Pad for Air (12/C4.2)
17. Const. Asphalt Paving (2/C4.1)
18. Const. 18" Concrete Curb and Gutter (1/C4.1)
19. General Contractor to Install Mechanical Equipment Screen (Provided by Others)
20. Connect & Match Existing Grade
21. Dumpster Enclosure (18/C4.3) (22/C4.4)
22. Provide Smooth Clean Edge, Sawcut Asphalt if Needed
23. Street Improvements; See Work Order #XXXXXX Plans
24. Exist. Curb Wall to Remain
25. Pedestrian Warning Zone Striping (See Arch. Plans)
26. Const. 4" Paint Stripe (Color: White)
27. Const. 6' CMU Screen Wall (22/C4.4)
28. Landscape (See Landscape Plan)
29. Const. 4' Waterway (9/C4.1)
31. Pylon Sign by Separate Permit
32. Const. Accessible Striping per MUTCD & ICC/ANSI A117.1 (Latest Editions)
33. Const. Accessible Ramp per ICC/ANSI A117.1 (Latest Edition) (17/C4.3)
34. Const. Accessible Sign & ICC/ANSI A117.1 (Latest Editions) (18/C4.3)
35. Const. Conc. Sidewalk (3/C4.1)
36. Const. Truncated Domes per ICC/ANSI A117.1-2003 (Latest Addition)
37. Const. 7" Thick Conc. Paving (6/C4.2)
38. Const. Conc. Wheel Stop (9/C4.2)
39. Street Improvement Plan (Offsite) Boundary
40. Const. 6' Screen Wall (1/C5.1)
41. Const. curb Transition (15/C4.3)
42. Const. Turn Arrow & Asphalt markings per MUTCD
43. Const. Stop Sign (R1-1) per MUTCD
44. Const. 4' CMU Screen Wall (22/C4.4)
45. Const. Emergency Fuel Stop (10/A3.0)
46. Const. 4'x6' Concrete Pad (See Arch. Plans) (10/A3.0)
47. Const. "NO PARKING" painting in capital letters, each of which shall be at least one foot high and at least two inches wide, placed at rear of the parking space so as to be close to where an adjacent vehicles rear tire would be placed (Color; White), per 66-1-4.1B NMSA 1978
48. Sight Distance Triangle
Landscaping and signing will not interfere with clear sight requirements. Therefore, signs, walls, trees, and shrubbery between 3 and 8 feet tall (as measured from the gutter pan) will not be acceptable in this area. (See Landscape Plan) (24/C4.4)
48. Driveway Visibility
Landscaping and signing will not interfere with clear sight requirements. Therefore, signs, walls, trees, and shrubbery between 3 and 8 feet tall (as measured from the gutter pan) will not be acceptable in this area. (See Landscape Plan) (23/C4.4)
50. Const. 3' Waterway (9/C4.1)

Vicinity Map
Zone Atlas Page F-14
5640 4th Street N.W.
Albuquerque, New Mexico 87107
Not to Scale

Legend

- Proposed Building
- Proposed Curb & Gutter
- Proposed Asphalt
- Proposed Concrete
- Existing Improvements
- Existing Asphalt
- Existing Concrete
- Existing Building
- Existing Power Pole
- Existing Power Pole w/ Guy

Legal Description

Lots numbered Two (2), Three (3), and Four (4) of the HARPER ADDITION, a Subdivision of a tract of land in School District No. 4, Albuquerque, Bernalillo County, New Mexico, as the same are shown and designated on the plat of said Subdivision, filed in the office of the County Clerk of Bernalillo County, New Mexico on December 28, 1945 in Volume D, folio 79.

Site Data

Total Site Area = 22,111 s.f. (0.51 ac.)
Landscape Area Provided = 3,350 s.f. (15%)
Impervious Area Provided = 18,521 s.f. (84%)
Building Area = 241 s.f (1%)
Canopy Area = 3,955 s.f
Parking Required = 1 stalls
Parking Provided = 1 stall + 1 Accessible Stall + 1 Motorcycle Stall = 3 Total

General Site Notes:

1. Stalls designated as Accessible will require a painted Accessible symbol and sign. (See Details)
2. Fire lane markings and signs to be installed as directed by the Fire Marshall.
3. Aisle markings, directional arrows and stop bars will be painted at each driveway as shown on the plans.
4. All dimensions are to back of curb unless otherwise noted.
5. Const. curb transition at all points where curb abuts sidewalk, see detail.

New Mexico One Call, Inc.
NMOC
Professional Resources for Damage Prevention
1-800-321-ALERT

Smith's
FOOD & DRUG STORES
1550 South Redwood Road
Salt Lake City, Utah 84104
Telephone (801) 974-1400

 # 423
Albuquerque, NM

REV	DATE	DESCRIPTION

Designed by: KR
Drafted by: JC
Client Name:
Smith's Food & Drug Stores
SMC423-SP

ANDERSON WAHLEN & ASSOCIATES
2010 North Redwood Road, Salt Lake City, Utah 84116
801 521-8529 - AWAengineering.net

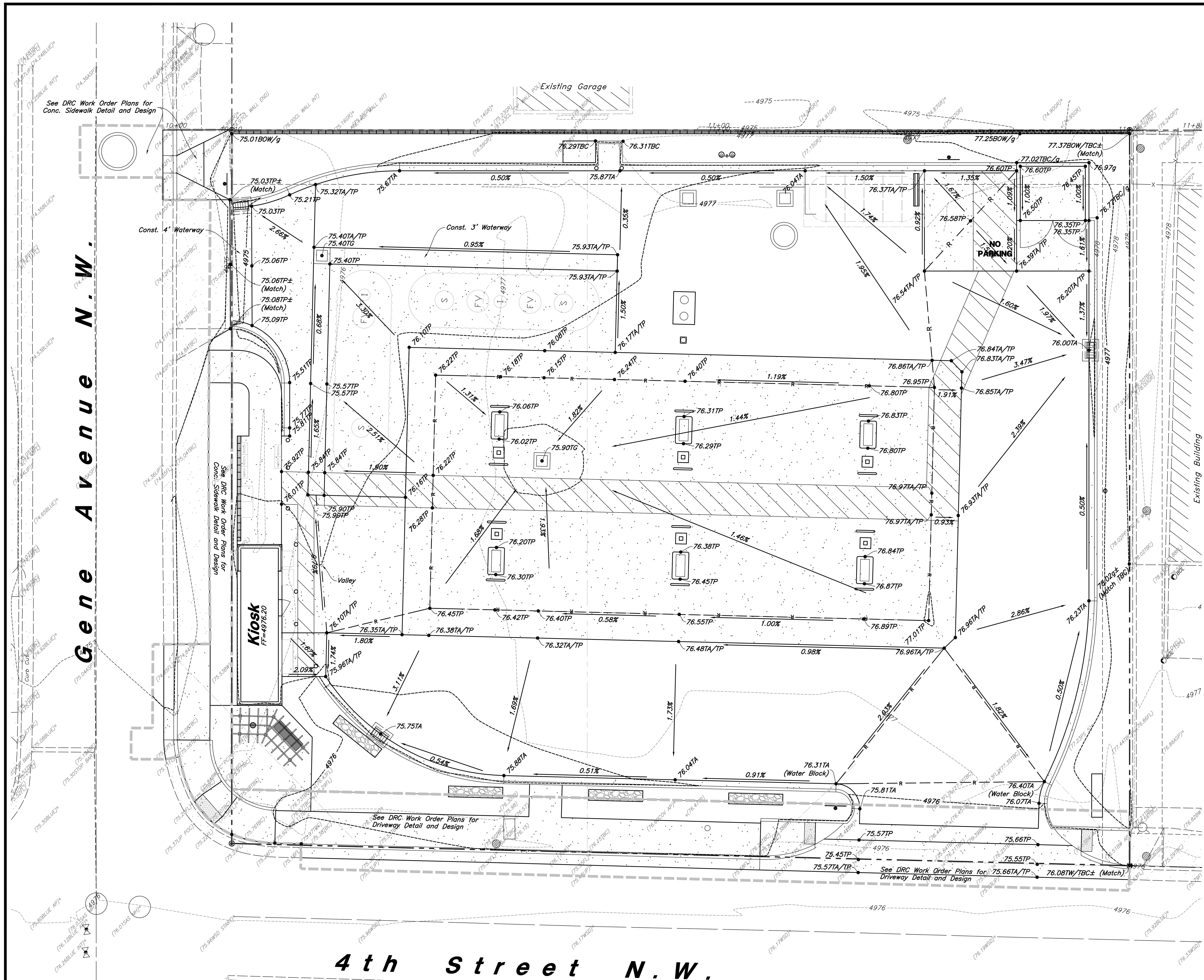
Traffic Circulation / Site Plan

Smith's #423 Fuel Center
5640 4th Street N.W.
Albuquerque, New Mexico 87107

DAVID G. ANDERSON
NEW MEXICO
20167
REGISTERED PROFESSIONAL ENGINEER
1-26-2016

26 Jan, 2016

SHEET NO.
C1.1



Scale: 1" = 10'

General Grading Notes:

1. All grading shall be in accordance with the project geotechnical report.
2. Cut slopes shall be no steeper than 3 horizontal to 1 vertical.
3. Fill slopes shall be no steeper than 3 horizontal to 1 vertical.
4. Fills shall be compacted per the recommendations of the geotechnical report prepared for the project and shall be certified by the Owner's Special Inspection.
5. Areas to receive fill shall be properly prepared and approved by the Owner's Special Inspection prior to placing fill.
6. Fills shall be benched into competent material as per specifications and geotechnical report.
7. All trench backfill shall be tested and certified by the Owner's Special Inspection.
8. The Owner's Special Inspection shall perform periodic inspections and submit a complete report and map upon completion of the rough grading.
9. The final compaction report and certification from the Owner's Special Inspection shall contain the type of field testing performed. Each test shall be identified with the method of obtaining the in-place density, whether sand cone or drive ring and shall be so noted for each test. Sufficient maximum density determinations shall be performed to verify the accuracy of the maximum density curves used by the field technician.
10. Dust shall be controlled by watering.
11. The location and protection of all utilities is the responsibility of the permitee.
12. Approved protective measures and temporary drainage provisions must be used to protect adjoining properties during the grading process.
13. All public roadways must be cleared daily of all dirt, mud and debris deposited on them as a result of the grading operation. Cleaning is to be done to the satisfaction of the City Engineer.
14. The site shall be cleared and grubbed of all vegetation and deleterious matter prior to grading.
15. The contractor shall provide shoring in accordance with OSHA requirements for trench walls.
16. Aggregate base shall be compacted per the geotechnical report prepared for the project.
17. The recommendations in the following Geotechnical Engineering Report by Kleinfelder are included in the requirements of grading and site Preparation. The Report is titled "Geological Engineering Report Proposed Smith's Food & Drug Fuel Center Retail Store #423 5640 4th Street NW Albuquerque, New Mexico"

   Project No.: 20152711.001A
   Dated: October 29, 2014
18. As part of the construction documents, owner has provided contractor with a topographic survey performed by manual or aerial means. Such survey was prepared for project design purposes and is provided to the contractor as a courtesy. It is expressly understood that such survey may not accurately reflect existing topographic conditions.
19. If Contractor observes evidence of hazardous materials or contaminated soils he shall immediately contact the project engineer to provide notification and obtain direction before proceeding with disturbance of said materials or contaminated soil.
20. Contractor will be responsible to phase the construction development so that storm water improvements and storm water facilities including detention or retention improvement facilities are constructed and functional prior to an offsite storm water release and take necessary construction precautions so that no offsite flooding will occur.
21. Importing fill material from an off-site location without prior written approval from the Owner's Project Manager is strictly prohibited. Identification of offsite borrow locations and material must be coordinated and documented with the SWPPP. The Owner's Special Inspection shall verify the suitability of all off-site material. This includes an analysis to insure that no environmental contamination is present. If any material is brought on site without prior written approval of the Owner's Project Manager, the Contractor will bear all costs associated with removing the material, testing for contamination, monitoring the clean-up operation, disposal in an approved landfill, and certifying that the Owner's site is environmentally clean. If requested, the Owner's Project Manager or the Owner's Special Inspection must be granted unfettered access to any and all borrow sites.

NOTE:
See Plans by Madison Industries for Footing Depth.

Curb and Gutter Construction Notes:

1. Open face gutter shall be constructed where drainage is directed away from curb.
2. Open face gutter locations are indicated by shading and notes on the grading plan.
3. It is the responsibility of the surveyor to adjust top of asphalt grades to top of curb grades at the time of construction staking.
4. Refer to the typical details for a standard and open face curb and gutter for dimensions.
5. Transitions from open face to standard curb and gutter are to be smooth. Hand form these areas if necessary.

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NMOC
Professional Resources for Damage Prevention
1-800-321-ALERT

Tank Installation Notes:

1. Contractor shall verify that a minimum of 1% slope is provided on all vapor recovery lines from the MPD to the tanks.

Filter Fabric Notes:

1. The bottom and all four sides of tank hole are to be lined with Amoco CEF 4545 or equivalent filter fabric.
2. All adjoining filter fabric panel seams are to be overlapped a minimum of 24"
3. All filter fabric is to be properly anchored to prevent movement while backfilling tank hole.

Tank Depth of Bury Calculations

DESCRIPTION	FURTHEST ISLAND		LOWEST ISLAND	
1. Elevation at Top of Island	4976.87		4976.36	
2. Min. Slope of Piping = (L) x 1/8" per foot / 12 Where L1 =215 ft., L2 = 60 ft.	2.2	ft	0.6	ft
3. Dispenser Island 6" Concrete Drive Slab 6" Pipe Cover 8" Pipe Diameter 3" Tank Connection 10" Total 33"	2.75	ft	2.75	ft
4. Grade Differential = (#2 + #3)	4.95	ft	3.35	ft
5. Top of Tanks = (#1 - #4)	4971.92	ft	4973.01	ft
6. Top of Tanks = Lowest Calculated Elevation	4971.92			
Check Min. / Max. Burial Depth	4.0' Min. / 7.0' Max.			
7. Lowest Elevation of Slab Above Tank	4975.50			
8. Depth of Bury = (#7 - #6)	3.58			ft
NOTE: If #8 < 4.5 ft., Set Top of Tanks at (#7 - 4.5 ft.) = 4971.00 If #8 > 7 ft., Contact Owner for Certification of Burial Depth with Tank			**4971.00**	

Accessible Note:

Contractor must maintain a running slope on Accessible routes no steeper than 5.0% (1:20). The cross slope for Accessible routes must be no steeper than 2.0% (1:50). All Accessible routes must have a minimum clear width of 36". If Grades on plans do not meet this requirement notify Consultant immediately.

The Client, Contractor and Subcontractor should immediately notify the Consultant of any conditions of the project that they believe do not comply with the current state of the (ICC/ANSI A117.1-Latest Edition) and/or FHAA.

Smith's
FOOD & DRUG STORES
#423
Albuquerque, NM

REV	DATE	DESCRIPTION
X	XXX	XXXX

Designed by: KR/AT
Drafted by: AM/NM
Client Name:
Smith's Food & Drug Stores

SMC423-GR

ANDERSON WAHLEN & ASSOCIATES
2010 North Redwood Road, Salt Lake City, Utah 84116
801 521-8529 – AWAengineering.net

Grading Plan

Smith's #423 Fuel Center
5640 4th Street N.W.
Albuquerque, New Mexico 87107

DAVID G. ANDERSON
NEW MEXICO
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1-26-2016
REGISTERED PROFESSIONAL ENGINEER

26 Jan, 2016

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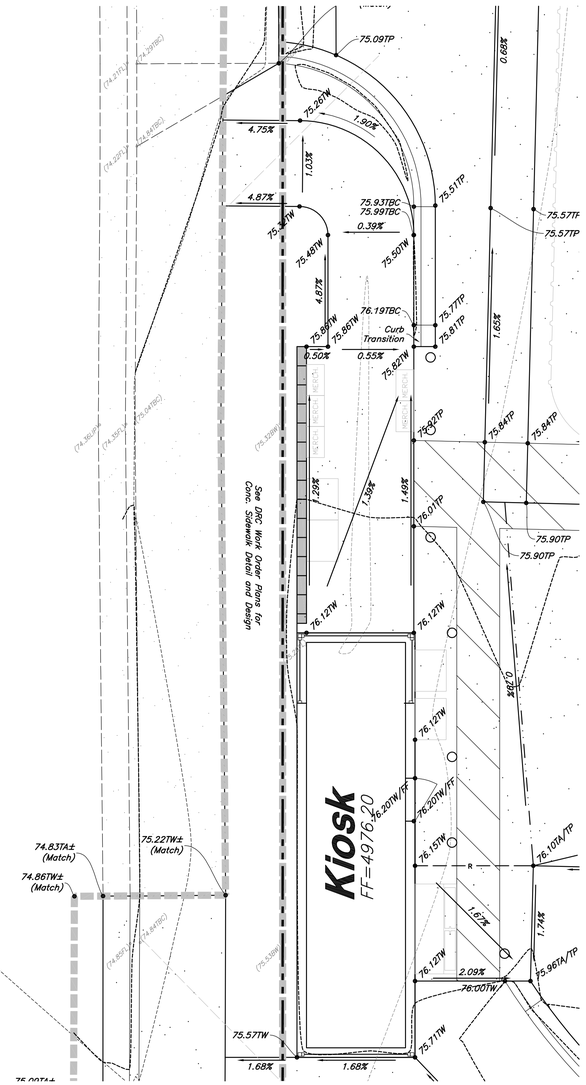

Pedestrian Access Route & Kiosk Merchandise Area

1

Scale: 1" = 5'

NOTE:
See Plans by Madison Industries for Footing Depth.

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    Project No.: 20152711.001A
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Smith's
FOOD & DRUG STORES
#423
Albuquerque, NM

REV	DATE	DESCRIPTION
X	XXX	XXXX

Designed by: KR/AT
Drafted by: AM/NM
Client Name:
Smith's Food & Drug Stores
SMC423-GR

ANDERSON WAHLEN & ASSOCIATES
2010 North Redwood Road, Salt Lake City, Utah 84116
801 521-8529 - AWAengineering.net

Enlarged Grading Plan

Smith's #423 Fuel Center
5640 4th Street N.W.
Albuquerque, New Mexico 87107

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1-26-2016

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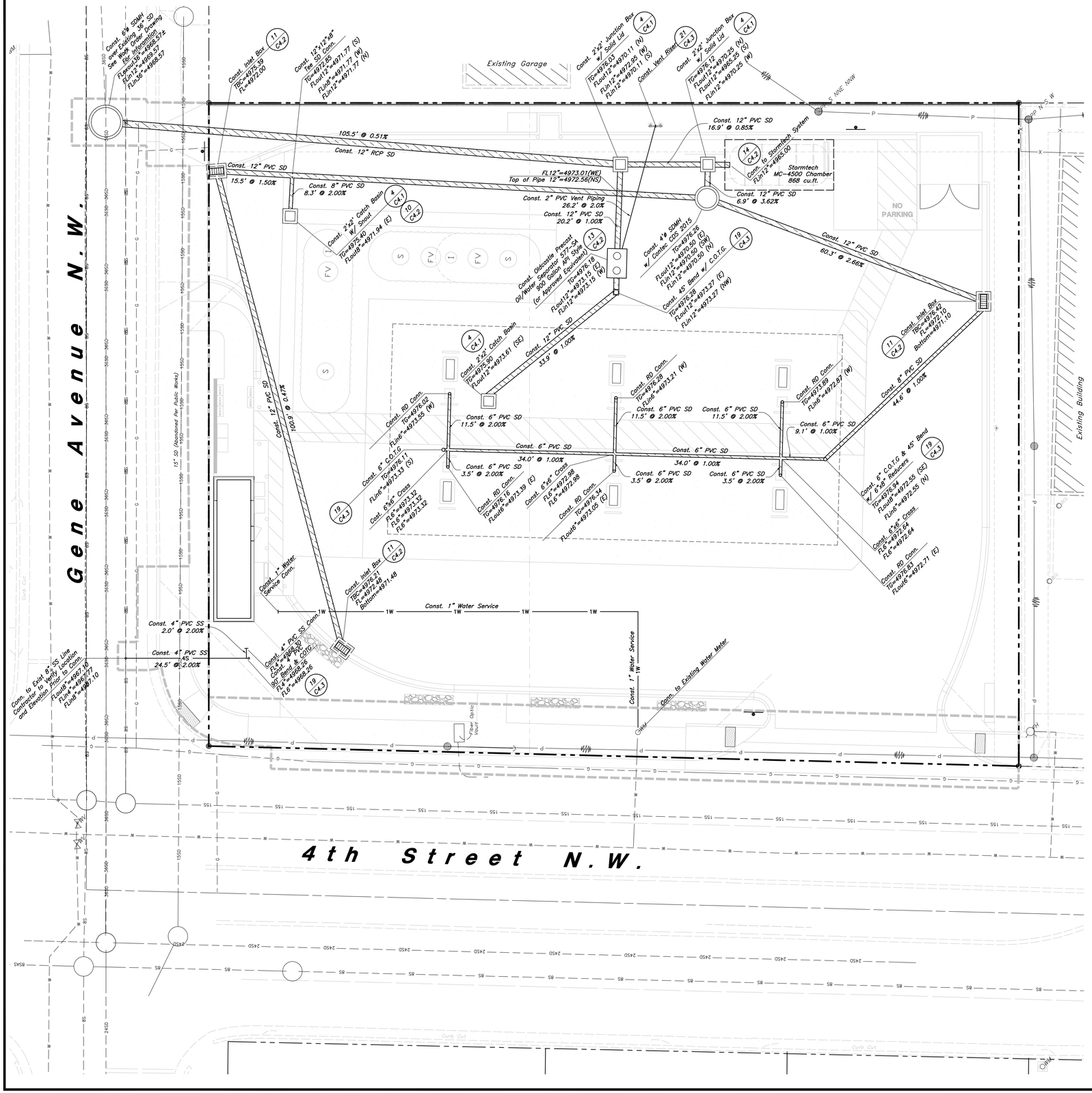

Scale: 1" = 10'

10' 0 10' 20'

General Utility Notes:

1. All sewer and water facilities shall be constructed per local jurisdiction standards and specifications. Contractor is responsible to obtain standards and specifications.
2. Coordinate all utility connections to building with plumbing plans and building contractor.
3. Verify depth and location of all existing utilities prior to constructing any new utility lines. Notify Civil Engineer of any discrepancies or conflicts prior to any connections being made.
4. All catch basin and inlet box grates are to be bicycle proof.
5. Refer to the site electrical plan for details and locations of electrical lines, transformers and light poles.
6. Gas lines, telephone lines, and cable TV lines are not a part of these plans.
7. Water meters are to be installed per city standards and specifications. It will be the contractor's responsibility to install all items required.
8. Water lines, valves, fire hydrants, fittings etc. are to be constructed as shown. Contractor is responsible, at no cost to the owner, to construct any vertical adjustments necessary to clear sewer, storm drain, or other utilities as necessary including valve boxes and hydrant spools to proper grade.
9. Contractor shall install a 12" concrete collar around all manholes, valves, catch basins, cleanouts & any other structures located within the asphalt.

Utility Piping Materials:

All piping to be installed per manufacturers recommendations. Refer to project specifications for more detailed information regarding materials, installation, etc.

Culinary Service Laterals

1. Pipe material as shown on utility plan view and/or to meet city standards.

Water Main Lines and Fire Lines

1. Pipe material as shown on utility plan view and/or to meet city standards.

Sanitary Sewer Lines

1. All sewer piping to be Polyvinyl Chloride (PVC) sewer pipe, ASTM D3034, Type PSM, SDR 35

Storm Drain Lines

1. 12" pipes or smaller – Polyvinyl Chloride (PVC) sewer pipe, ASTM D3034, Type PSM, SDR 35
2. 15" pipes or larger – ADS High Density Polyethylene (HDPE) AASHTO M 294, Types with Smooth Interior or Equal as Approved.

Storm Drain Note:

All Storm Drainage Pipe Lengths and Slopes are from Center of Box to Center of Box.

CAUTION :

The locations and/or elevations of existing utilities as shown on these plans are based on records of the various utility companies and, where possible, measurements taken in the field. The information is not to be relied on as being exact or complete.

New Mexico One Call, Inc.
NMOC
Professional Resources for Damage Prevention
1-800-321-ALERT

Smith's
FOOD & DRUG STORES
#423
Albuquerque, NM

REV	DATE	DESCRIPTION
X	XXX	XXXX

Designed by: KR/AT
Drafted by: AM/NM
Client Name:
Smith's Food & Drug Stores
SMC423-UT

ANDERSON WAHLEN & ASSOCIATES
2010 North Redwood Road, Salt Lake City, Utah 84116
801 521-8529 – AWAengineering.net

Utility Plan

Smith's #423 Fuel Center
5640 4th Street N.W.
Albuquerque, New Mexico 87107

DAVID E. ANDERSON NEW MEXICO 20167 REGISTERED PROFESSIONAL ENGINEER 1-26-2016

26 Jan, 2016

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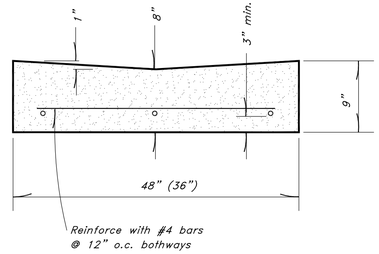


8 Typical Waterway Detail

Not to Scale

1. REINFORCEMENT: ASTM A 615, grade 60, galvanized or epoxy coated deformed steel rebar or smooth steel dowels with diameter and length as indicated.

   A. Space rebar and dowels at 12 to 15 inches on center.
   B. Grease dowels to provide movement in expansion joints.
   C. Keep tie bars in the vertical center of the concrete slab and perpendicular to the joint during concrete placement.

2. SAWING: Keep at least 3 working power saws on-site when concrete is being placed. Saw crack control joints (contraction joints) before shrinkage cracking takes place. Do not tear or ravel concrete during sawing. In cool weather, the joint sawing may be delayed only for the time required to prevent tearing and raveling the concrete. Cut joints to dimensions recommend by sealant manufacturer and approved by ENGINEER.

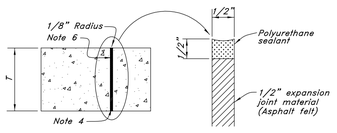
3. JOINTS: Lay out joints to aid construction and control random cracking.

   A. Joint Spacing shall be 12 feet maximum on center in both directions.
   B. Extend transverse contraction joints continuously across the full width of the concrete. Make the joints coincide with curb and gutter joints.
   C. Make adjustments in joint locations to meet inlet or manhole locations.
   D. Expansion Joints shall be placed where concrete abuts a building wall, sidewalk, curb, gutter or any immovable structure.

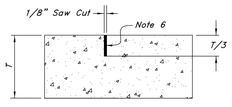
4. JOINT FILLER: Bituminous (Asphalt or tar) mastic, ASTM D994. Formed and encased between 2 layers of bituminous saturated felt or 2 layers of glass-fiber felt extending to the bottom of the concrete slab.

5. BACKER ROD: Round Rods. It must be oversized approximately 25 percent to fit tightly into each joint and compatible with hot poured sealant.

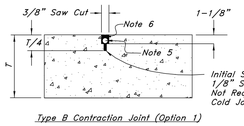
6. JOINT SEALANT: Hot applied, Asphalt base type, ASTM D 3405. Remove dirt, oil, and curing compounds from joint reservoir. Seal joints immediately after cleaning.



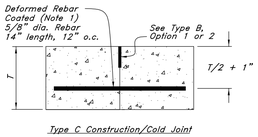
Type A Expansion Joint



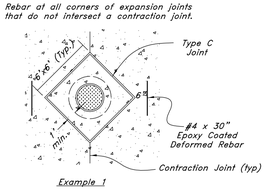
Type B Contraction Joint (Option 2)



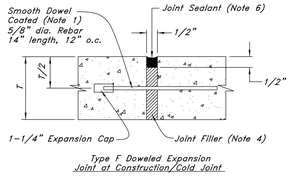
Type B Contraction Joint (Option 1)



Type C Construction/Cold Joint



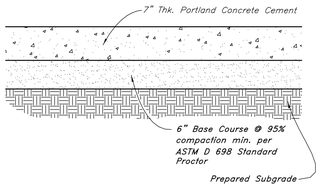
Example 1



Type F Doweled Expansion Joint at Construction/Cold Joint

7 Concrete Joint Detail

Not to Scale



1. See Geotechnical Report for Project for Further Details
2. See Concrete Joint Detail

6 Concrete Paving Section

Not to Scale

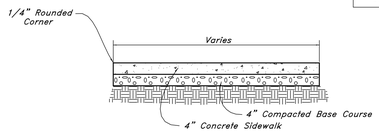
Contraction Joints

A. Spacing = 10' o.c.

Expansion Joints

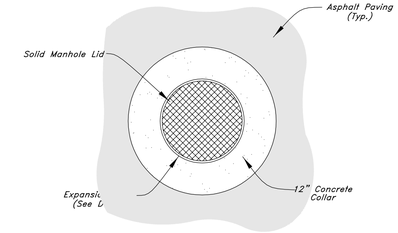
A. Make expansion joints full depth, see joint detail
B. Place expansion joint at all cold joints
C. Expansion joints are required at the start or end of curb radius

1. See Concrete Joint Detail

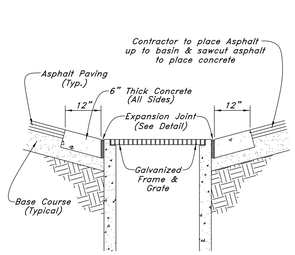


3 Typical Sidewalk Detail

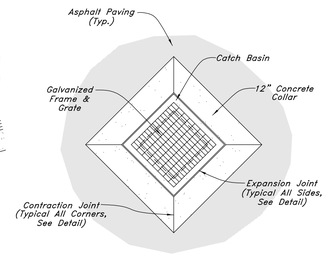
Not to Scale



Plan View



Profile View



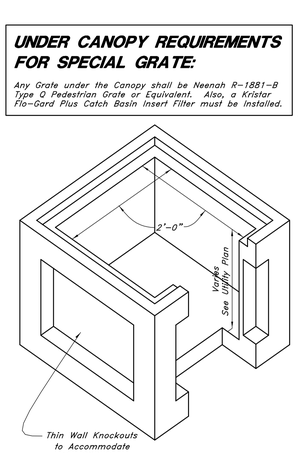
Plan View

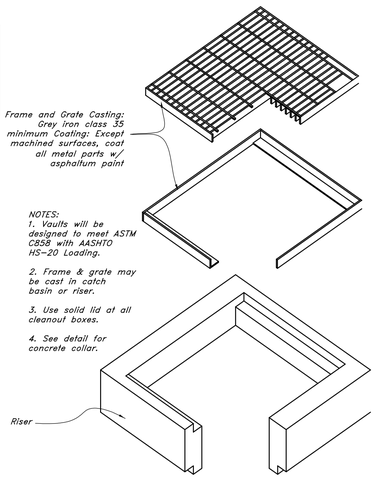
5 12" Concrete Collar

Not to Scale

UNDER CANOPY REQUIREMENTS FOR SPECIAL GRATE:

Any Grate under the Canopy shall be Neenah R-1881-B Type C Pedestrian Grate or Equivalent. Also, a Kristar Flo-Gard Plus Catch Basin Insert Filter must be Installed.



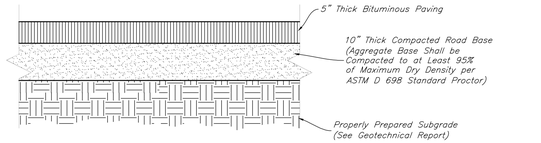


NOTES:
1. Vaults will be designed to meet ASTM C858 with AASHTO HS-20 Loading.
2. Frame & grate may be cast in catch basin or riser.
3. Use solid lid at all cleanout boxes.
4. See detail for concrete collar.

4 Precast 24" x 24" Catch Basin / Junction Box

Not to Scale

See Geotechnical Report for Project



2 Standard Asphalt Section

Not to Scale

1. Contraction Joints
   A. Spacing = 10' o.c., see joint detail
   B. 1/8" wide by 2" deep from top of curb at 15'-0" intervals

2. Expansion Joints
   A. Make expansion joints full depth, see joint detail
   B. Place expansion joint at all cold joints
   C. Expansion joints are required at ends of all radii.
   D. Required 5'-0" on each side of drainage structures
   E. Required at 90'-0" maximum intervals in straight curb and gutter
   F. Provide #6 x 18" long smooth steel dowel bars with 1" dia. grease cap through expansion joints (¾" thick bituminous filler material)

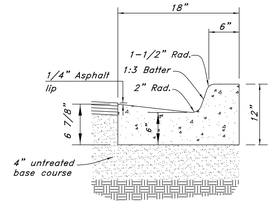
3. 2'-6" Long tie bar on 2'-6" centers shall be provided when curb is adjacent to P.C.C. pavement

4. Provide (2) #6 x 2'-6" long tie bars to connect existing and new curb and gutter

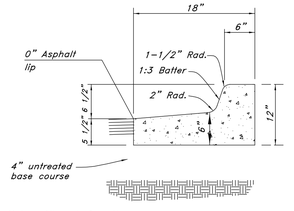
5. Remove forms as early as possible. Brush top and face of curbs to remove all imperfections. Typical of all form work.

6. All radii shall be true arcs

7. Medium to light broom finish on all exterior concrete



Standard



Note: All curb & gutter to be standard unless otherwise noted.

Open Face

1 (On-Site) 18" Curb And Gutter

Not to Scale

New Mexico One Call, Inc.
NMOC
Professional Resources for Damage Prevention
1-800-321-ALERT

Smith's
FOOD & DRUG STORES
1550 South Redwood Road
Salt Lake City, Utah 84104
Telephone (801) 974-1400

 # 423
Albuquerque, New Mexico

REV	DATE	DESCRIPTION
X	XXX	XXXX

Designed by: KR/AT
Drafted by: AM/NM
Client Name:
Smith's Food & Drug Stores
SMC423-DT

ANDERSON WAHLEN & ASSOCIATES
2010 North Redwood Road, Salt Lake City, Utah 84116
801 521-8529 - AWAengineering.net

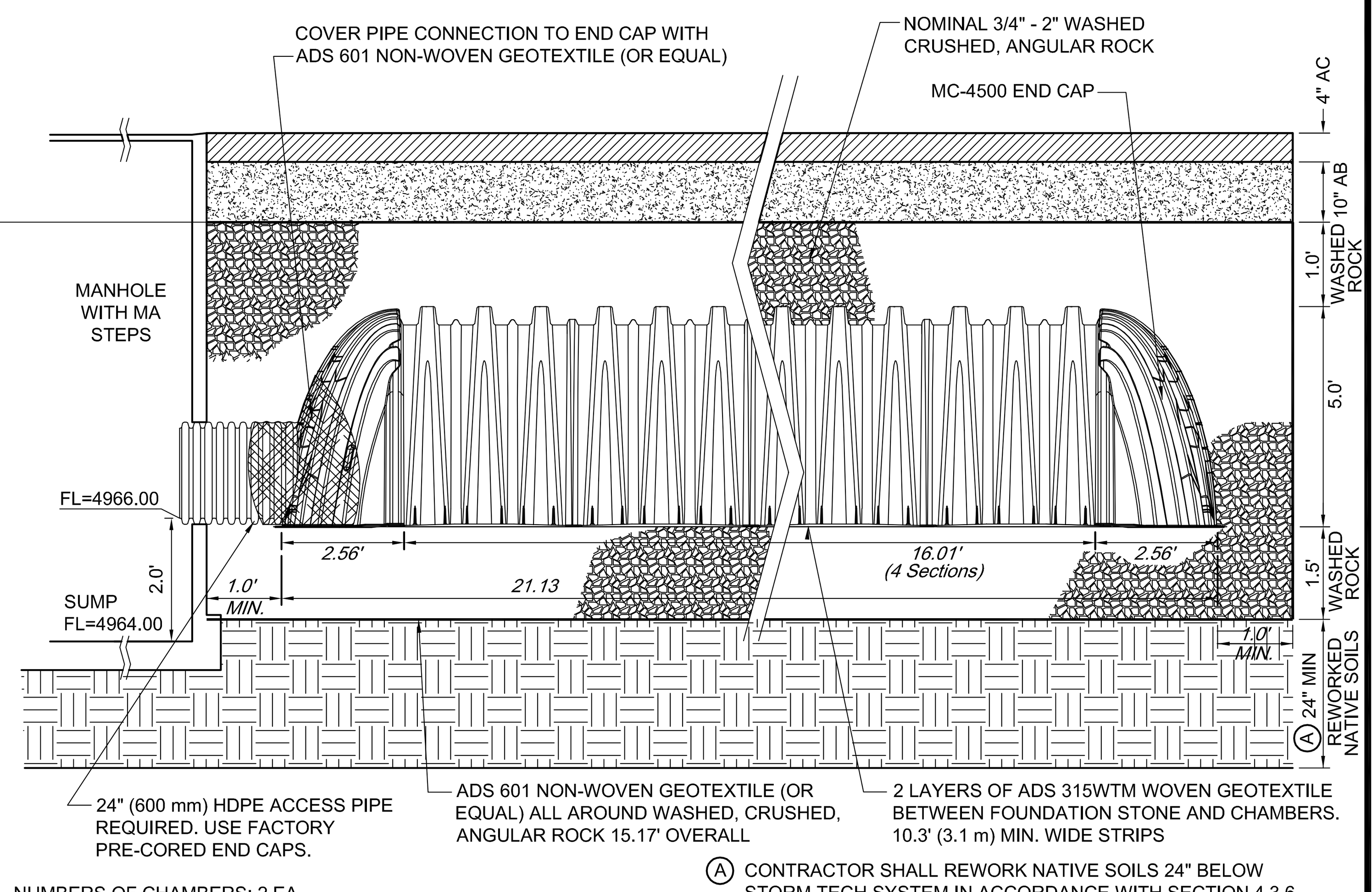
Details

Smith's #423 Fuel Center
5640 4th Street N.W.
Albuquerque, New Mexico 87107

DAVID E. ANDERSON
NEW MEXICO
20167
REGISTERED PROFESSIONAL ENGINEER
1-26-2016

26 Jan, 2016

SHEET NO.
C4.1



NUMBERS OF CHAMBERS: 2 EA
NUMBER OF END CAPS: 2 EA
BED SIZE: 157 SQ. FT.

(A) CONTRACTOR SHALL REWORK NATIVE SOILS 24" BELOW STORM TECH SYSTEM IN ACCORDANCE WITH SECTION 4.3.6, "SUBSURFACE PREPARATION" & COMPACTED IN ACCORDANCE WITH SECTION 4.2.7 "STRUCTURAL FILL AND COMPACTION" OF THE PROJECT GEOTECHNICAL REPORT.

ADS ADVANCED DRAINAGE SYSTEMS, INC.

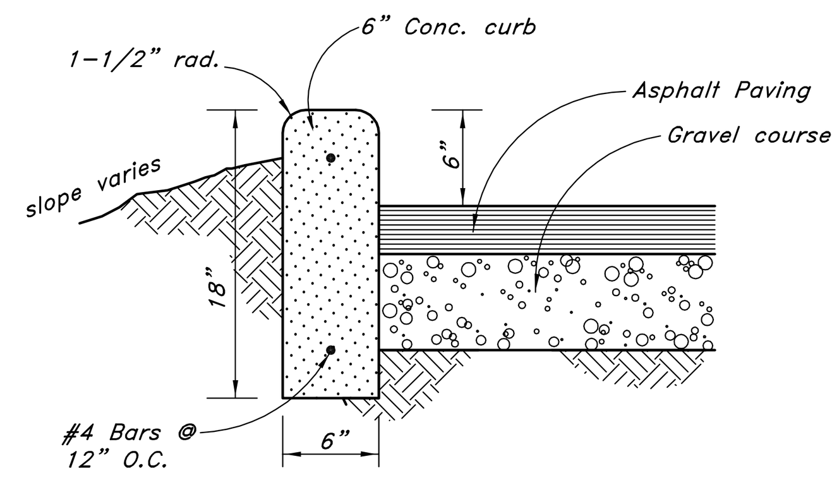
INSTALL PER MANUFACTURER'S RECOMMENDATIONS

StormTech Detention•Retention•Recharge
Subsurface Stormwater Management
70 INWOOD ROAD, SUITE 3 | ROCKY HILL, CT 06067
PHONE: 888-892-2694 | FAX: 866-328-8401
WWW.STORMTECH.COM

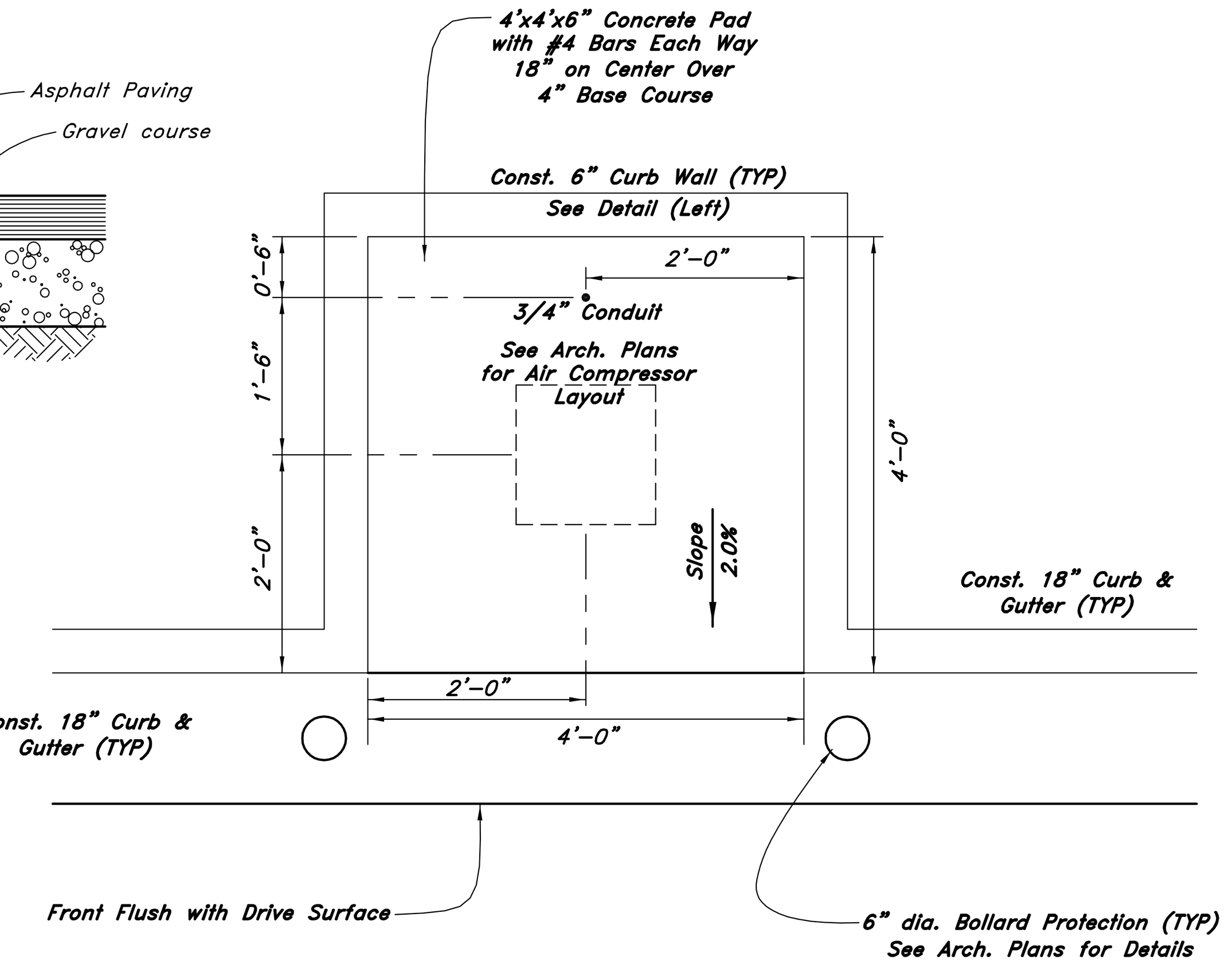
MC-4500 ISOLATOR ROW PROFILE	
SCALE:	NTS
DATE:	12-29-10
DRAWN BY:	JM
CHECKED:	KAM

14 StormTech MC-4500 Isolator Row Detail

Not to Scale



Typical Curb Wall Detail

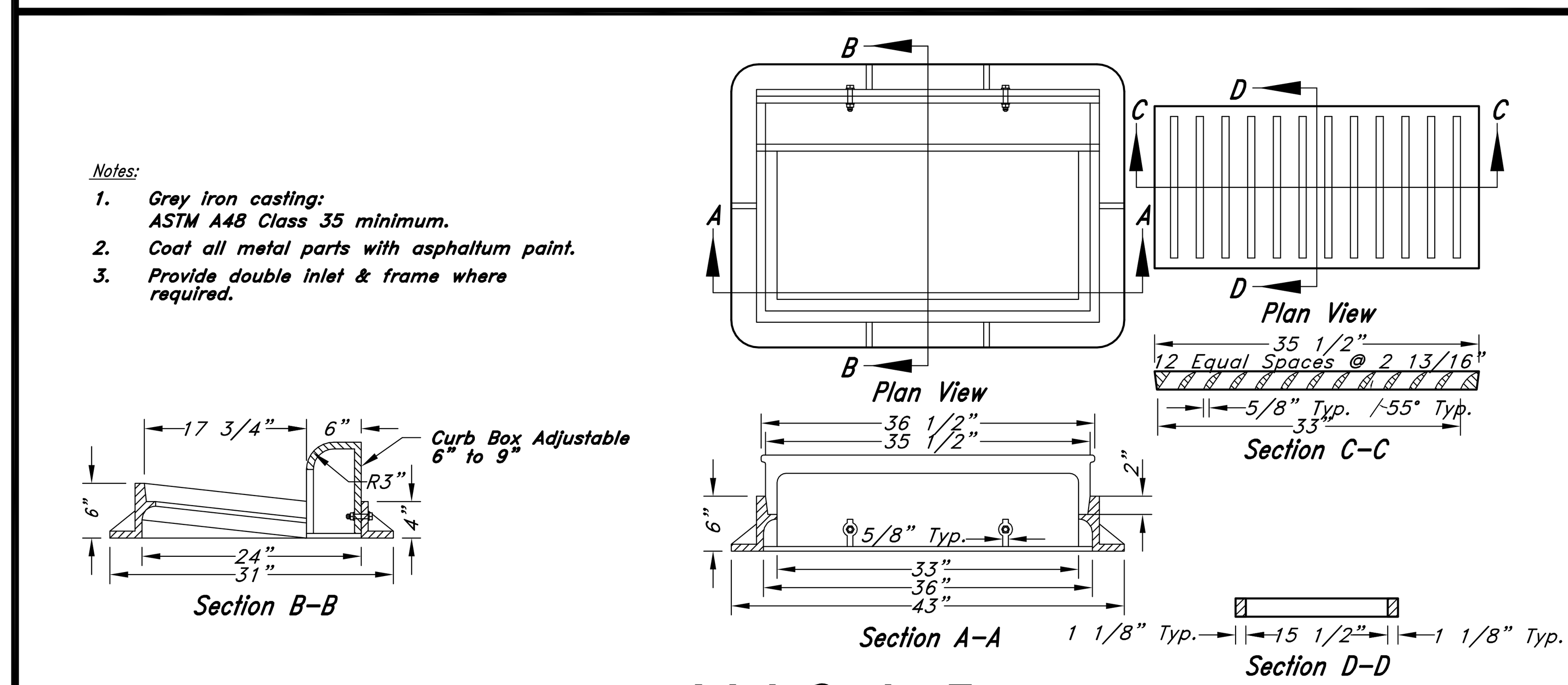


12 Air Pad Detail

Not to Scale

Notes:

1. Grey iron casting: ASTM A48 Class 35 minimum.
2. Coat all metal parts with asphaltum paint.
3. Provide double inlet & frame where required.

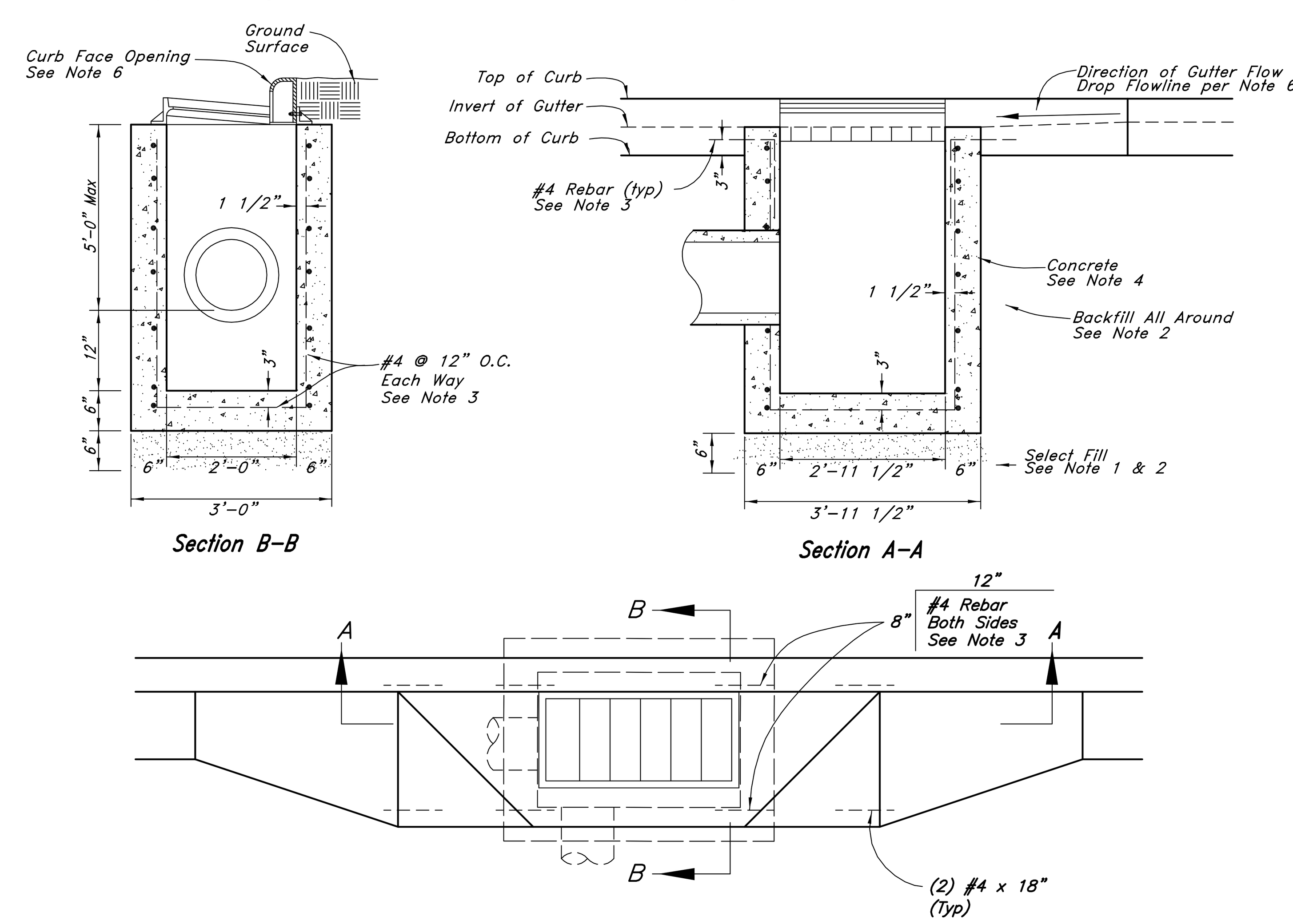


Inlet Grate Frame

Not to Scale

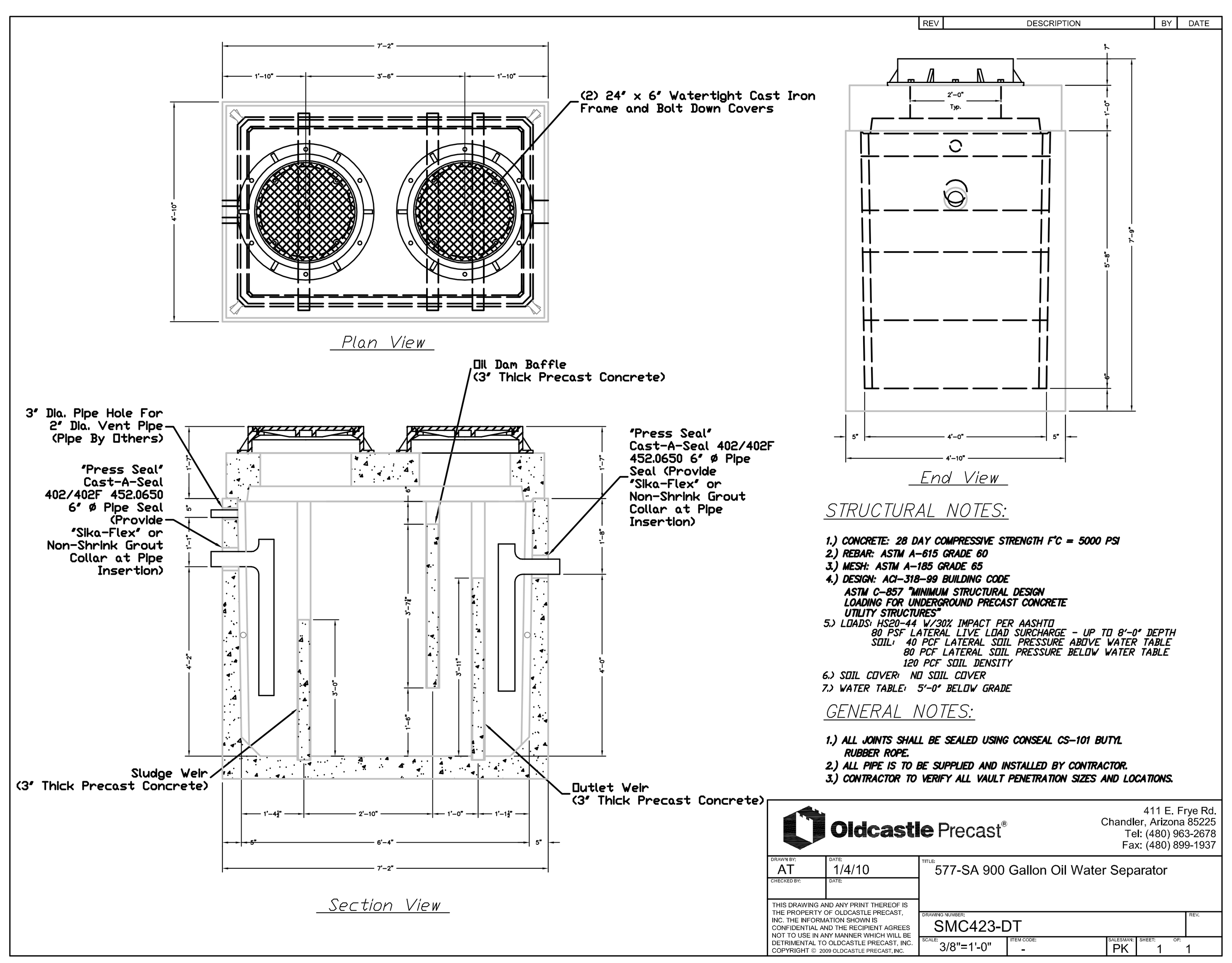
Catch Basin Notes:

1. Select Fill: Use untreated base course grade 1 or grade 3/4 per APWA Section 02060. Use of sewer rock or recycled aggregate requires Engineers written approval.
2. Backfill: Install and compact all backfill material or APWA Section 02321.
3. Reinforcement: Use ASTM A 615, grade 60 deformed steel rebar. See APWA Section 03200.
4. Concrete: Class 4,000 per APWA Section 03304. Place per APWA Section 03310. Apply a sealing / curing compound per APWA Section 03390 or use an acceptable alternate curing method.
5. Pipe Laterals: The drawing shows alternate connections to the curb outlet. Refer to construction drawings for connection locations.
6. Curb Face Opening: Make opening 4 inches high. Provide at least a 2 inch drop from the gutter flowline to the invert of the curb face opening.



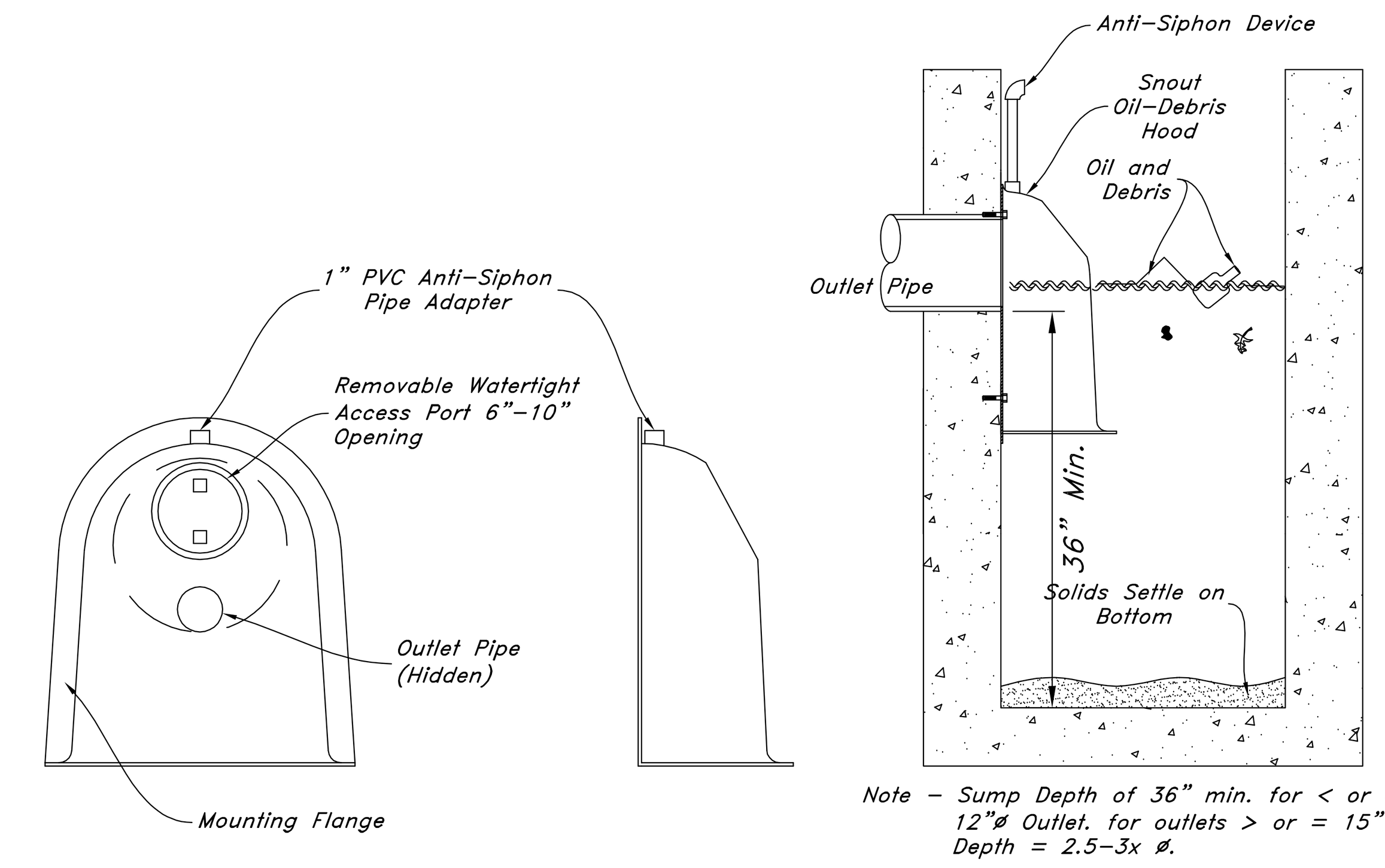
11 18" Curb & Gutter Curb Inlet with Single Grate

Not to Scale



13 Oldcastle Precast Oil / Water Separator 577-SA 900 Gallon - API Style

Not to Scale



Front View

Side View

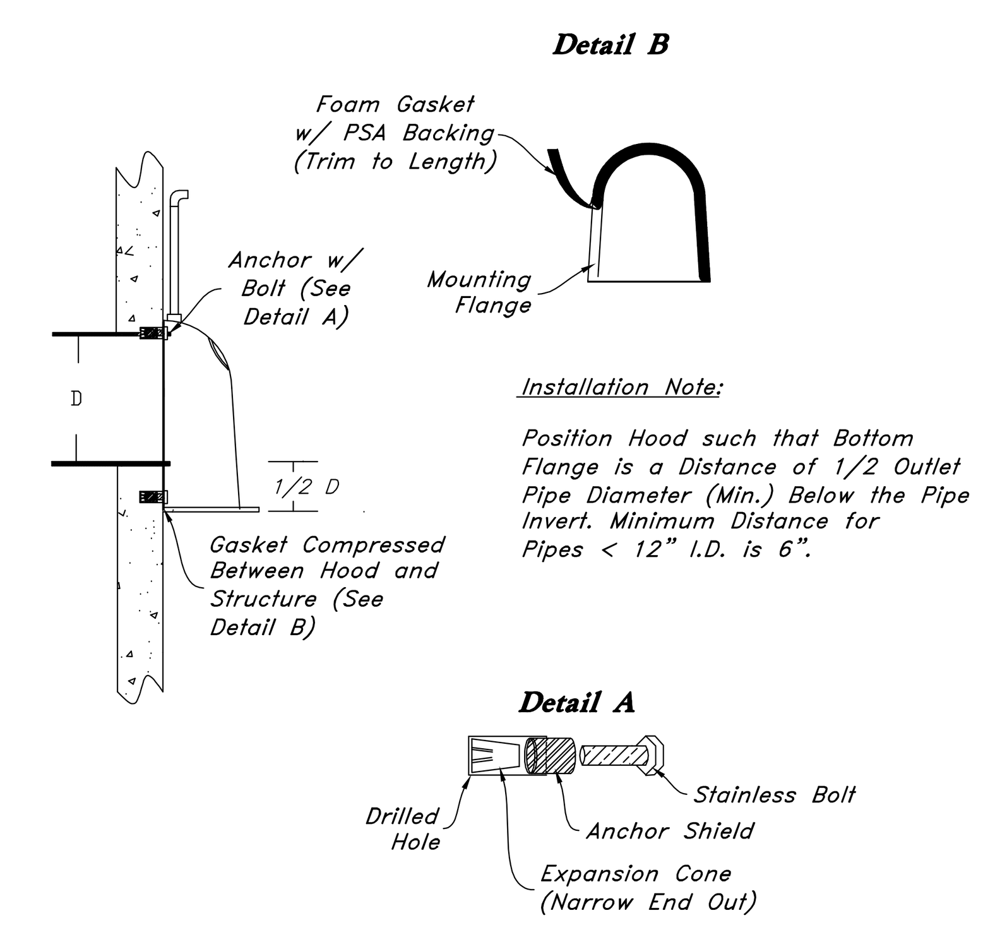
Snout Oil-Water Debris Separator

Notes:

1. All hoods and traps for catch basins and water quality structures shall be as manufactured by:

   Best Management Products, inc.
   53 MT. Archer RD.
   lyme, CT 06371
   (860) 434-0277, (860) 434-3195 fax
   toll free: (800) 504-8008 or (888) 354-7585
   web site: www.bestmp.com
   or pre-approved equal

2. All hoods shall be constructed of a glass reinforced resin composite with iso gel coat exterior finish with a minimum 0.125" laminate thickness.
3. All hoods shall be equipped with a watertight access port, a mounting flange, and an anti-siphon vent as drawn. (see configuration detail)
4. The size and position of the hood shall be determined by outlet pipe size as per manufacturer's recommendation.
5. The bottom of the hood shall extend downward a distance equal to 1/2 the outlet pipe diameter with a minimum distance of 6" for pipes <12" i.d.
6. The anti-siphon vent shall extend above hood by minimum of 3" and a maximum of 24" according to structure configuration.
7. The surface of the structure where the hood is mounted shall be finished smooth and free of loose material.
8. The hood shall be securely attached to structure wall with 3/8' stainless steel bolts and oil-resistant gasket as supplied by manufacturer. (see installation detail)
9. Installation instructions shall be furnished with manufacturer supplied installation kit.
   installation kit shall include:
   a. installation instructions
   b. pvc anti-siphon vent pipe and adapter
   c. oil-resistant crushed cell foam gasket with psa backing
   d. 3/8" stainless steel bolts
   e. anchor shields

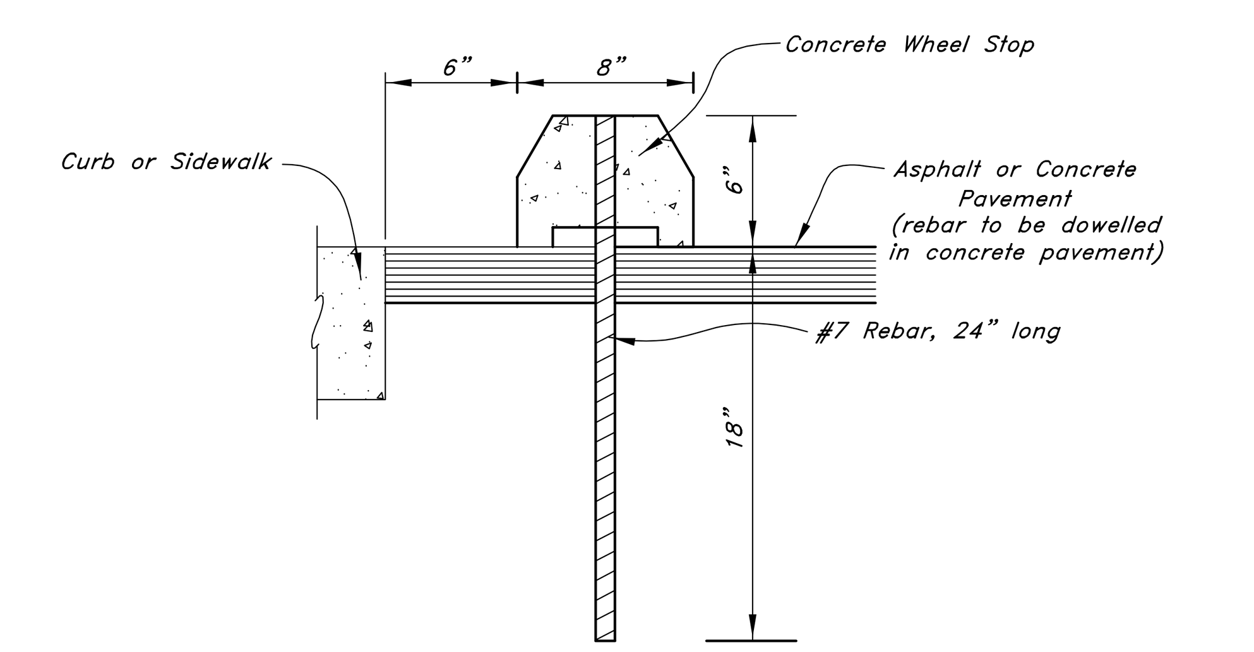


Installation Note:

Position Hood such that Bottom Flange is a Distance of 1/2 Outlet Pipe Diameter (Min.) Below the Pipe Invert. Minimum Distance for Pipes < 12" I.D. is 6".

10 Snout & Orifice Plate Detail

Not to Scale



9 Typical Concrete Wheel Stop

Not to Scale

REV	DATE	DESCRIPTION
X	XXX	XXXX

Designed by: KR/AT
Drafted by: AM/NM
Client Name:
Smith's Food & Drug Stores

SMC423-DT

ANDERSON WAHLEN & ASSOCIATES
2010 North Redwood Road, Salt Lake City, Utah 84116
801 521-8529 - AWAengineering.net

Details

Smith's #423 Fuel Center

5640 4th Street N.W.
Albuquerque, New Mexico 87107

New Mexico One Call, Inc.
NMOC
Professional Resources for Damage Prevention
1-800-321-ALERT

Smith's
FOOD & DRUG STORES
1550 South Redwood Road
Salt Lake City, Utah 84104
Telephone (801) 974-1400

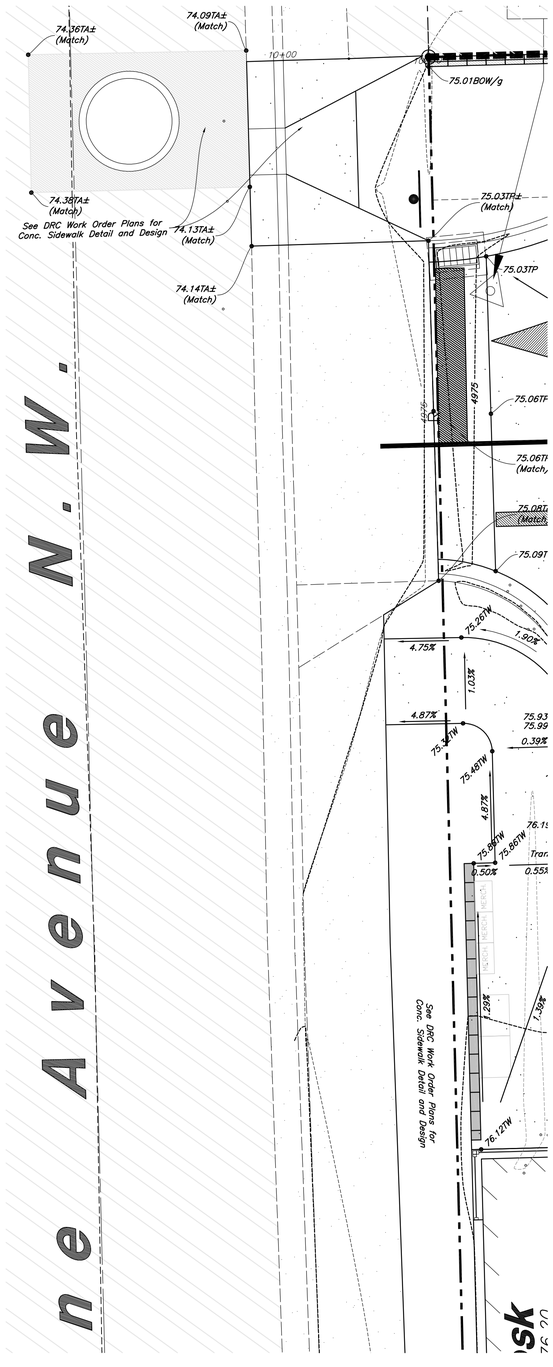
#423

Albuquerque, New Mexico

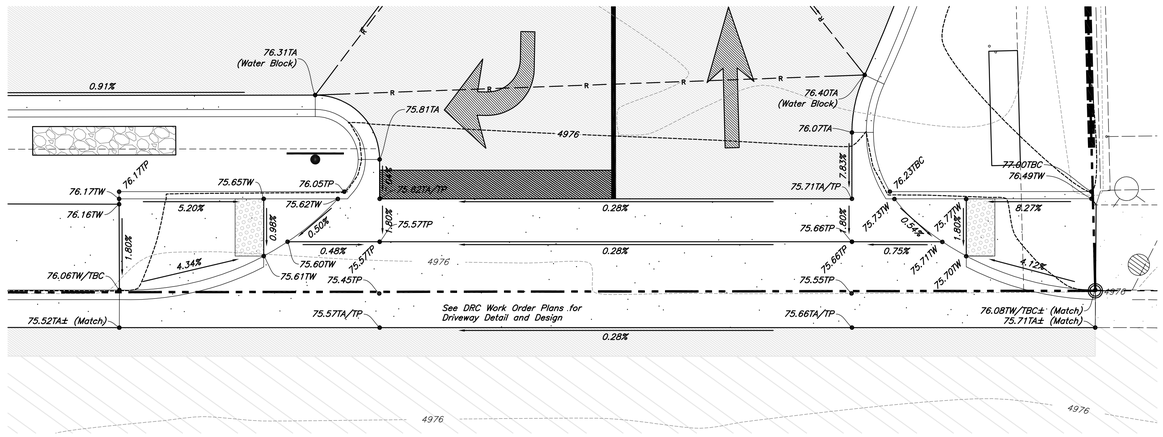
[illegible]
DAVID G. ANDERSON
NEW MEXICO
20167
REGISTERED PROFESSIONAL ENGINEER
1-26-2016

26 Jan, 2016

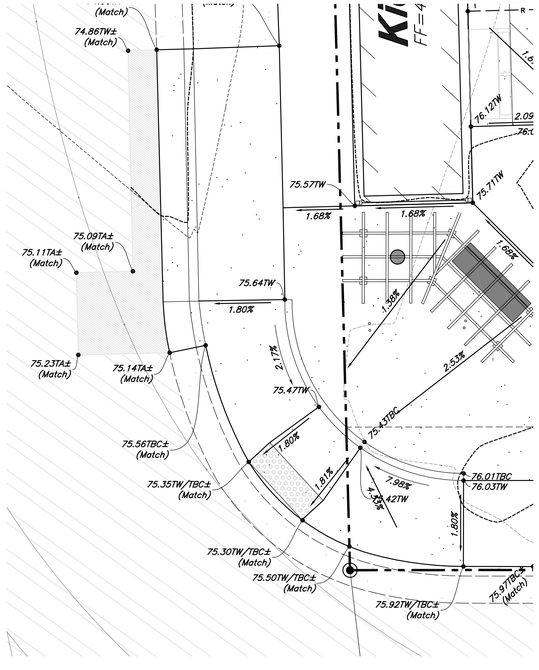
SHEET NO.
C4.2



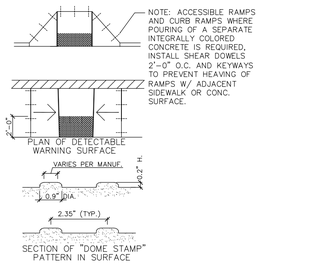
5 **Truncated Dome Detail**
Scale: 1" = 5'



4 **4th Street NW Driveway Detail**
Scale: 1" = 5'



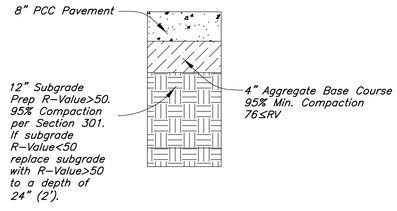
3 **4th & Gene Accessible Ramp Detail**
Scale: 1" = 5'



PLAN OF "DOME STAMP" PATTERN IN SURFACE

CURB RAMPS MUST HAVE A DETECTABLE WARNING FEATURE. THE DETECTABLE SURFACE MUST CONSIST OF RAISED TRUNCATED DOMES WITH A DIAMETER OF NOMINAL 0.9 INCHES, A HEIGHT OF NOMINAL 0.2 INCHES AND A CENTER-TO CENTER SPACING OF NOMINAL 2.35 INCHES. THE TEXTURE OF THE DETECTABLE WARNING FEATURE MUST CONTRAST WITH THE SURROUNDING SURFACES (EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT). SEE ABOVE.

2 **Truncated Dome Detail**
Not to Scale



1 **PCC Concrete Section Per COA Dwg. 2407 (Modified)**
Not to Scale

Accessible Note:

Contractor must maintain a running slope on Accessible routes no steeper than 5.0% (1:20). The cross slope for Accessible routes must be no steeper than 2.0% (1:50). All Accessible routes must have a minimum clear width of 36". If Grades on plans do not meet this requirement notify Consultant immediately.

The Client, Contractor and Subcontractor should immediately notify the Consultant of any conditions of the project that they believe do not comply with the current state of the (ICC/ANSI A117.1-Latest Edition) and/or FHAA.

AS BUILT INFORMATION

CONTRACTOR STAKED BY - - DATE -
INSPECTION'S ACCEPTANCE BY - - DATE -
FIELD VERIFICATION BY - - DATE -
CORRECTED BY - - DATE -

MICRO-FILM INFORMATION

RECORDED BY
NO. DATE

BENCH MARKS

Albuquerque Control Survey Monument "12-E14", Central Zone NAVD 88 Elevation Benchmark Only

Elevation = 4978.632 feet (NAVD 88).

SURVEY INFORMATION

FIELD NOTES

NO. BY DATE

ENGINEER'S SEAL

DAVID G. ANDERSON NEW MEXICO 20167 REGISTERED PROFESSIONAL ENGINEER

NO. DATE REMARKS

x x REVISIONS

DESIGNED BY: KR DESIGN DATE:

DRAWN BY: DC DATE: 26 Jan, 2016

CHECKED BY: DATE:

ANDERSON WAHLEN & ASSOCIATES
2010 North Redwood Road, Salt Lake City, Utah 84116
801 521-8529 – AWengineering.net

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: **Details**
Smith's #423 Fuel Center
5640 4th Street N.W.

DESIGN REVIEW COMMITTEE | CITY ENGINEER APPROVAL | LAST DESIGN UPDATE | MO./DAY/YR. | MO./DAY/YR.

CITY PROJECT NO. 587880 | ZONE MAP NO. F-14

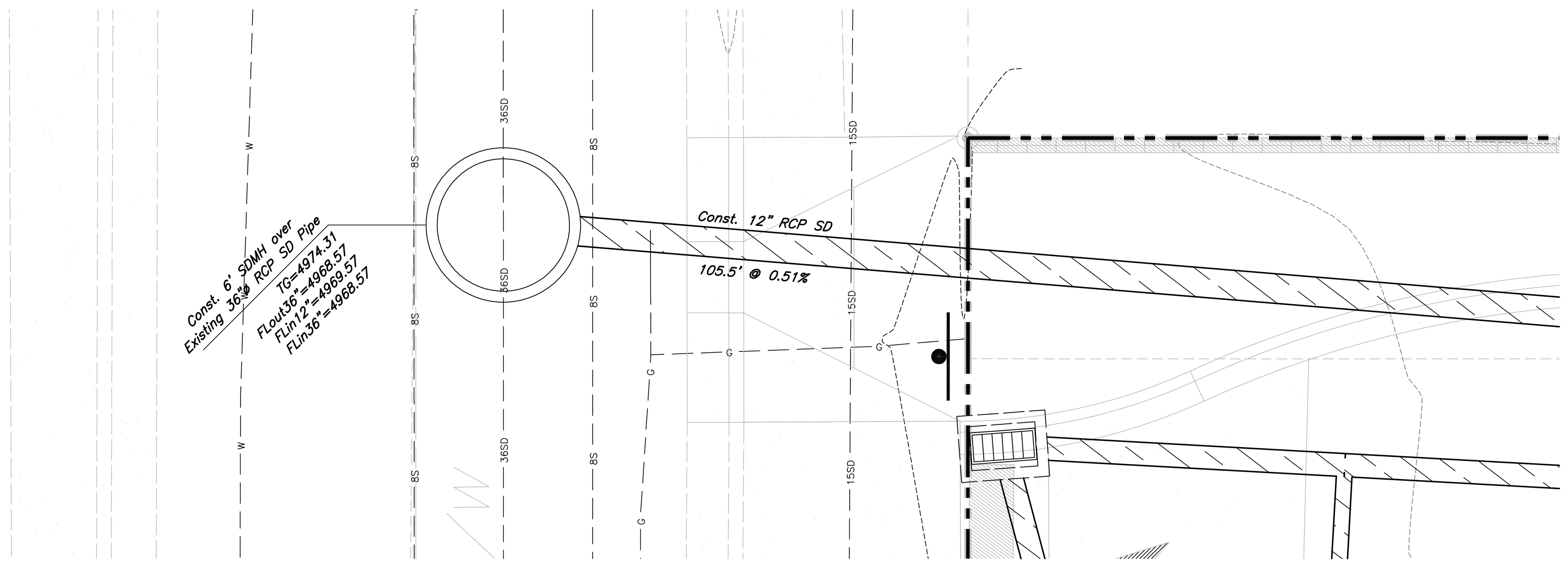
SHEET NO. 5 of 6

423DRC-DT.dwg

New Mexico One Call, Inc.
NMOC
Professional Resources for Damage Prevention
1-800-321-ALERT

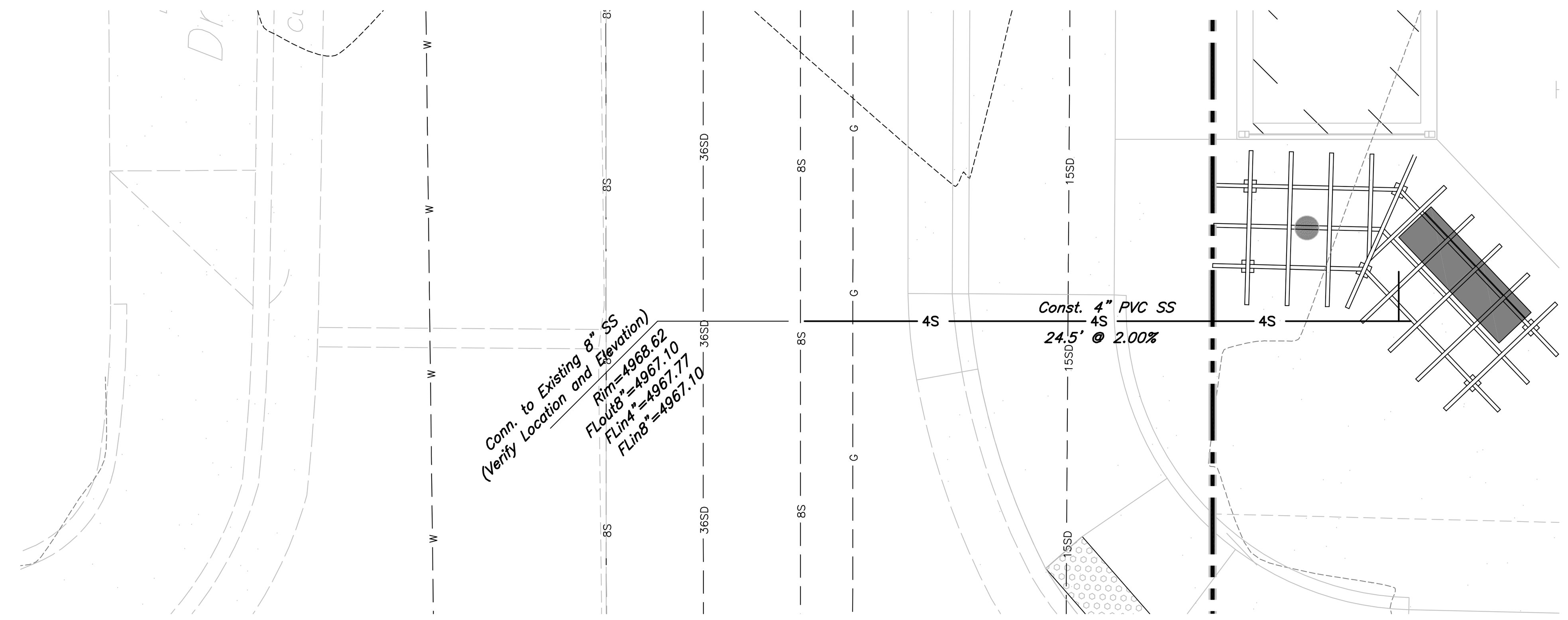
Smith's
FOOD & DRUG STORES
1550 South Redwood Road
Salt Lake City, Utah 84104
Telephone (801) 974-1400

 # 423
Albuquerque, New Mexico



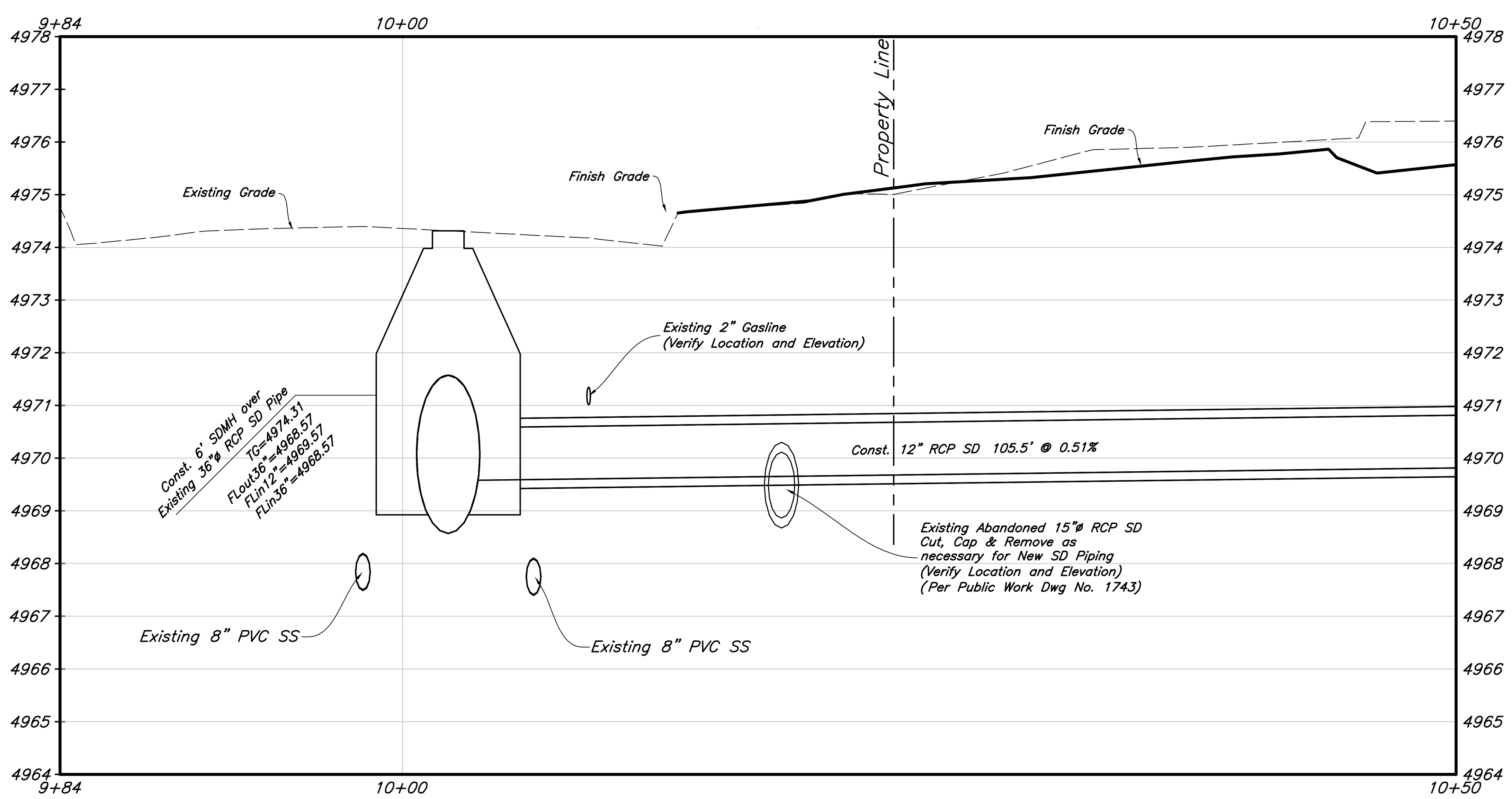
Storm Drain Connection - Gene Street

Scale: 1"=5'



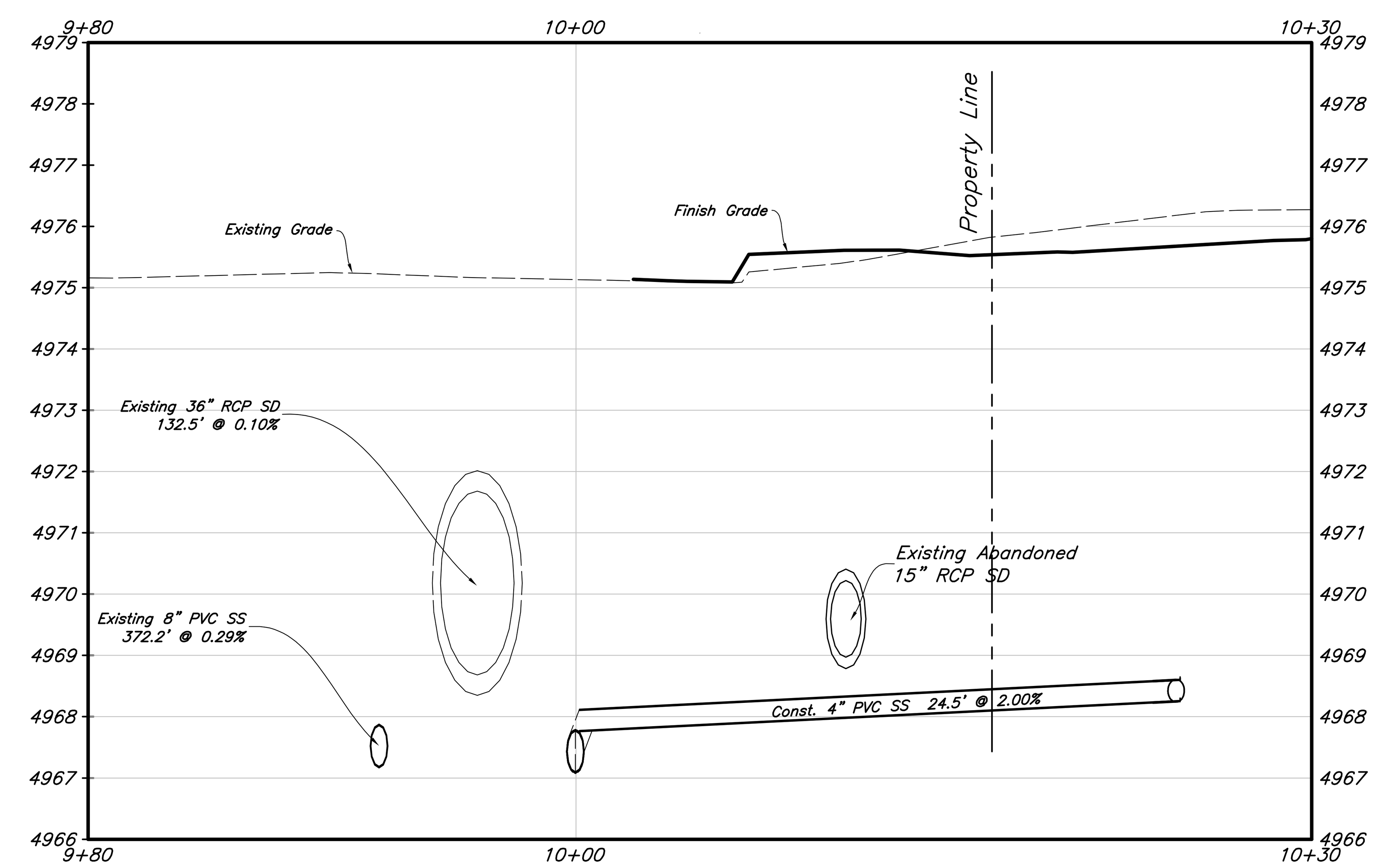
Sewer Connection - Gene Street

Scale: 1"=5'



Storm Drain Connection - Profile

Scale: 1"=5'
Scale Vertial: 1" = 2'



Sewer Connection - Profile

Scale: 1" = 5'
Scale Vertial: 1" = 2'

AS BUILT INFORMATION
CONTRACTOR
WORK STAKED BY / DATE
INSPECTOR'S ACCEPTANCE BY / DATE
FIELD VERIFICATION BY / DATE
DRAWINGS CORRECTED BY / DATE

MICRO-FILM INFORMATION
RECORDED BY / DATE
NO.

BENCH MARKS
Albuquerque Control Survey Monument "12-E14".
Central Zone NAVD 88 Elevation
Benchmark Only
Elevation = 4978.632 feet (NAVD 88).

SURVEY INFORMATION
FIELD NOTES
NO. | BY | DATE

ENGINEER'S SEAL
DAVID G. ANDERSON, NEW MEXICO, (20167), REGISTERED PROFESSIONAL ENGINEER

NO.	DATE	REMARKS
	x	REVISIONS
	x	DESIGN

DESIGNED BY: KR DATE:
DRAWN BY: DC DATE:
CHECKED BY: DATE: 26 Jan, 2016

New Mexico One Call, Inc.
NMOC
Professional Resources for Damage Prevention
1-800-321-ALERT

Smith's
FOOD & DRUG STORES
1550 South Redwood Road
Salt Lake City, Utah 84104
Telephone (801) 974-1400

#423
Albuquerque, New Mexico

ANDERSON WAHLEN & ASSOCIATES
2010 North Redwood Road, Salt Lake City, Utah 84116
801 521-8529 - AWAengineering.net

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE:
Utility Plan & Profile
Smith's #423 Fuel Center
5640 4th Street N.W.

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	MO./DAY/YR.	MO./DAY/YR.
		LAST DESIGN UPDATE	

CITY PROJECT NO. 587880
ZONE MAP NO. F-14
SHEET NO. 6 of 6
423DRC-PP.dwg