CITY OF ALBUQUERQUE

January 3, 2017

Richard J. Berry, Mayor

J. Graeme Means, P.E.
High Mesa Consulting Group
6010-B Midway Park Blvd SE
Albuquerque, NM 87102

RE: Good 2 Go: Broadway
Grading Plan
Engineer's Stamp Date 12-~~6~~5-2016 (File: L14D022) 1-31-17

Dear Mr. Means:

Based upon the information provided in your submittal received 12-6-2016, the above referenced Grading Plan is approved for Building Permit.

Please attach a copy of this approved plan in the construction sets when submitting for the building permit. Prior to Certificate of Occupancy (CO) release, Engineer Certification per the DPM checklist will be required.

If you have any questions, you can contact me at 924-3986.

Sincerely,

Abiel Carrillo, P.E.
Principal Engineer, Planning Department
Development Review Services

MA/AC

PO Box 1293

Albuquerque

New Mexico 87103

www.cabq.gov

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City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 10/2015)

Project Title: Good 2 Go: Broadway Building Permit #: _____ Hydrology File #: L-14/D22

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

Legal Description: PARCELS A COMPRISING LOTS 2 THRU 6

City Address: 1401 Broadway Blvd SE, Albuquerque, NM 87102

Applicant: High Mesa Consulting Group Contact: J. Graeme Means

Address: 6010-B Midway Park Blvd. NE, Albuquerque, NM 87109

Phone#: 505-345-4250 Fax#: 505-345-4254 E-mail: Gmeans@highmesacg.com

Other Contact: _____ Contact: _____

Address: _____

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

Check all that Apply:

DEPARTMENT:

✔ HYDROLOGY/ DRAINAGE
___ TRAFFIC/ TRANSPORTATION
___ MS4/ EROSION & SEDIMENT CONTROL

TYPE OF SUBMITTAL:

___ ENGINEER/ARCHITECT CERTIFICATION

___ CONCEPTUAL G & D PLAN
✔ GRADING PLAN
___ DRAINAGE MASTER PLAN
___ DRAINAGE REPORT
___ CLOMR/LOMR

___ TRAFFIC CIRCULATION LAYOUT (TCL)
___ TRAFFIC IMPACT STUDY (TIS)
___ EROSION & SEDIMENT CONTROL PLAN (ESC)

___ OTHER (SPECIFY) _____

TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

✔ BUILDING PERMIT APPROVAL
___ CERTIFICATE OF OCCUPANCY

___ PRELIMINARY PLAT APPROVAL
___ SITE PLAN FOR SUB'D APPROVAL
___ SITE PLAN FOR BLDG. PERMIT APPROVAL
___ FINAL PLAT APPROVAL

___ SIA/ RELEASE OF FINANCIAL GUARANTEE
___ FOUNDATION PERMIT APPROVAL
✔ GRADING PERMIT APPROVAL
___ SO-19 APPROVAL
✔ PAVING PERMIT APPROVAL
___ GRADING/ PAD CERTIFICATION
___ WORK ORDER APPROVAL
___ CLOMR/LOMR

___ **PRE-DESIGN MEETING?**

___ OTHER (SPECIFY) _____

IS THIS A RESUBMITTAL?: ___ Yes ✔ No

DATE SUBMITTED: 12-6-16 By: Ryan Curley

COA STAFF: ELECTRONIC SUBMITTAL RECEIVED: ___

CONSTRUCTION NOTES:

1. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE NEW MEXICO STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION – 1987, PUBLISHED BY THE NEW MEXICO CHAPTER AMERICAN PUBLIC WORKS ASSOCIATION. (REVISED 12/06)
2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL POTENTIAL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL INTERPRETATIONS IT MAKES WITHOUT FIRST CONTACTING THE ENGINEER AS REQUIRED ABOVE.
3. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
4. ALL CONSTRUCTION WITHIN PUBLIC RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE STANDARDS AND PROCEDURES.
5. UTILITY INFORMATION SHOWN HEREON IS BASED UPON ONSITE SURFACE EVIDENCE AND UTILITY LINE-SPOTS PROVIDED BY HIGH MESA CONSULTING GROUP. IN ADDITION, UTILITY LINE-SPOTS WERE REQUESTED VIA THE NEW MEXICO ONE CALL SERVICE (TICKET NO. 16A020710). UTILITY LINES SHOWN ON THIS DRAWING ARE SHOWN IN AN APPROXIMATE MANNER ONLY AND SUCH LINES MAY EXIST WHERE NONE ARE SHOWN. IF ANY SUCH EXISTING LINES ARE SHOWN, THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE OWNER OF SAID UTILITY, AND THE INFORMATION MAY BE INCOMPLETE, OR MAY BE OBSOLETE BY THE TIME CONSTRUCTION COMMENCES. THE SURVEYOR HAS CONDUCTED ONLY PRELIMINARY INVESTIGATION OF THE LOCATION, DEPTH, SIZE, OR TYPE OF EXISTING UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES. THIS INVESTIGATION IS NOT CONCLUSIVE, AND MAY NOT BE COMPLETE, THEREFORE, MAKES NO REPRESENTATION PERTAINING THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFOR. THE PROPERTY OWNER, DEVELOPER, OR CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ANY UTILITY LINE, PIPELINE, OR UNDERGROUND UTILITY LINE IN OR NEAR THE AREA OF THE WORK IN ADVANCE OF AND DURING EXCAVATION WORK. THE PROPERTY OWNER, DEVELOPER, OR CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, PIPELINES, AND UNDERGROUND UTILITY LINES. IN PLANNING AND CONDUCTING EXCAVATION, THE CONTRACTOR SHALL COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES.
6. THE DESIGN OF PLANTERS AND LANDSCAPED AREAS IS NOT PART OF THIS PLAN. ALL PLANTERS AND LANDSCAPED AREAS ADJACENT TO THE BUILDING(S) SHALL BE PROVIDED WITH POSITIVE DRAINAGE TO AVOID ANY PONDING ADJACENT TO THE STRUCTURE. FOR CONSTRUCTION DETAILS, REFER TO LANDSCAPING PLAN.

EROSION & SEDIMENT CONTROL MEASURES:

1. THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES INTO PUBLIC RIGHT-OF-WAY OR ONTO PRIVATE PROPERTY.
2. THE CONTRACTOR SHALL PROMPTLY CLEAN UP ANY MATERIAL EXCAVATED WITHIN THE PUBLIC RIGHT-OF-WAY SO THAT THE EXCAVATED MATERIAL IS NOT SUSCEPTIBLE TO BEING WASHED DOWN THE STREET.
3. SPOILS FROM THE PROJECT SHALL NOT BE DEPOSITED OR STORED IN THE STREET OR ROADWAY.
4. SPOILS SHALL BE STAGED ON THE UPSTREAM SIDE OF TRENCHES WHEN TRENCHING IS REQUIRED.
5. THE CONTRACTOR SHALL CLEAN AND REMOVE ALL FUGITIVE DUST, SOIL AND DEBRIS RESULTING FROM THIS PROJECT FROM THE STREET AT THE END OF EACH DAY
6. CONTRACTOR SHALL LEAVE THE AREA IMMEDIATELY BEHIND THE CURB DEPRESSED TO CONTAIN NUISANCE FLOWS AND SEDIMENT.
7. CONCRETE TRUCKS SHALL BE SENT BACK TO THE PLANT FOR WASHING; THE WASHING OF CONCRETE TRUCKS SHALL NOT BE PERMITTED WITHIN THE PUBLIC RIGHT-OF-WAY.
8. WHEN APPLICABLE, CONTRACTOR SHALL SECURE "TOPSOIL DISTURBANCE PERMIT" FROM THE CITY AND/OR FILE A NOTICE OF INTENT (N.O.I.) WITH THE EPA PRIOR TO BEGINNING CONSTRUCTION.
9. UNLESS FINAL STABILIZATION IS OTHERWISE PROVIDED FOR, ANY AREAS OF EXCESS DISTURBANCE (TRAFFIC ACCESS, STORAGE YARD, EXCAVATED MATERIAL, ETC.) SHALL BE RE-SEEDED ACCORDING TO CITY OF ALBUQUERQUE SPECIFICATION 1012 "MISCELLANEOUS SEEDING". THIS WILL BE CONSIDERED INCIDENTAL TO CONSTRUCTION, THEREFORE, NO SEPARATE PAYMENT WILL BE MADE.
10. PROTECT EXISTING STORM DRAIN FACILITIES FROM SEDIMENT AS REQUIRED.

GRADING KEYED NOTES

1. CONSTRUCT CURB CUT PER TYPICAL DETAIL, SHEET C3.1
2. DEPRESSED LANDSCAPING FOR WATER QUALITY RETENTION
3. NEW PAVEMENT PER PAVING PLAN, SHEET C1.2

CALCULATIONS

I. SITE CHARACTERISTICS

A. PRECIPITATION ZONE = **2**

B. $P_{100,\ 6\ HR}$ = P_{360} = **2.4 IN**

C. TOTAL PROJECT AREA (A_T) =

37,855	SF	
0.87	**AC**	

D. LAND TREATMENTS

1. EXISTING LAND TREATMENT

TREATMENT	AREA (SF/AC)		%
A			
B			
C	2,074	SF	5
	0.05	**AC**	
D	35,781	SF	95
	0.82	**AC**	

2. DEVELOPED LAND TREATMENT

TREATMENT	AREA (SF/AC)		%
A			
B			
C	4,534	SF	12
	0.10	**AC**	
D	33,321	SF	88
	0.76	**AC**

II. HYDROLOGY

A. EXISTING CONDITION 100 YEAR

1. **100-YR STORM**

a. VOLUME 100-YR, 6- HR

$E_W = (E_A A_A + E_B A_B + E_C A_C + E_D A_D)/A_T$

E_W = (0.53*0.00) + (0.78*0.00) + (1.13*0.05) + (2.12*0.82)/0.87 = **2.07 IN**

$V_{100,6\ HR} = (E_W/12)A_T$ = (2.07/12)0.87 = 0.1499 AC-FT = **6,530 CF**

b. PEAK DISCHARGE

$Q_P = Q_{PA}A_A + Q_{PB}A_B + Q_{PC}A_C + Q_{PD}A_D$

Q_P = (1.56 * 0.00) + (2.28 * 0.00) + (3.14 * 0.05) + (4.70 * 0.82) = **4.0 CFS**

B. DEVELOPED CONDITION

1. **100-YR STORM**

a. VOLUME

$E_W = (E_A A_A + E_B A_B + E_C A_C + E_D A_D)/A_T$

E_W = (0.53*0.00) + (0.78*0.00) + (1.13*0.10) + (2.12*0.76)/0.87 = **2.00 IN**

$V_{100,6\ HR} = (E_W/12)A_T$ = (2.00/12)0.87 = 0.1448 AC-FT = **6,310 CF**

b. PEAK DISCHARGE

$Q_P = Q_{PA}A_A + Q_{PB}A_B + Q_{PC}A_C + Q_{PD}A_D$

Q_P = (1.56 * 0.00) + (2.28 * 0.00) + (3.14 * 0.10) + (4.70 * 0.76) = **3.9 CFS**

C. COMPARISON 100 YEAR

1. **100-YR STORM**

a. VOLUME 100-YR, 6-HR

$\Delta V_{100,\ 6\ HR}$ = 6310 - 6530 = **-220 CF** **(DECREASE)** *

b. PEAK DISCHARGE

ΔQ_{100} = 3.9 - 4.0 = **-0.1 CFS** **(DECREASE)** *

DOES NOT INCLUDE PONDING WHICH IS A GREATER REDUCTION.

D. FIRST FLUSH CALCULATIONS

1. **RETENTION REQUIREMENT**

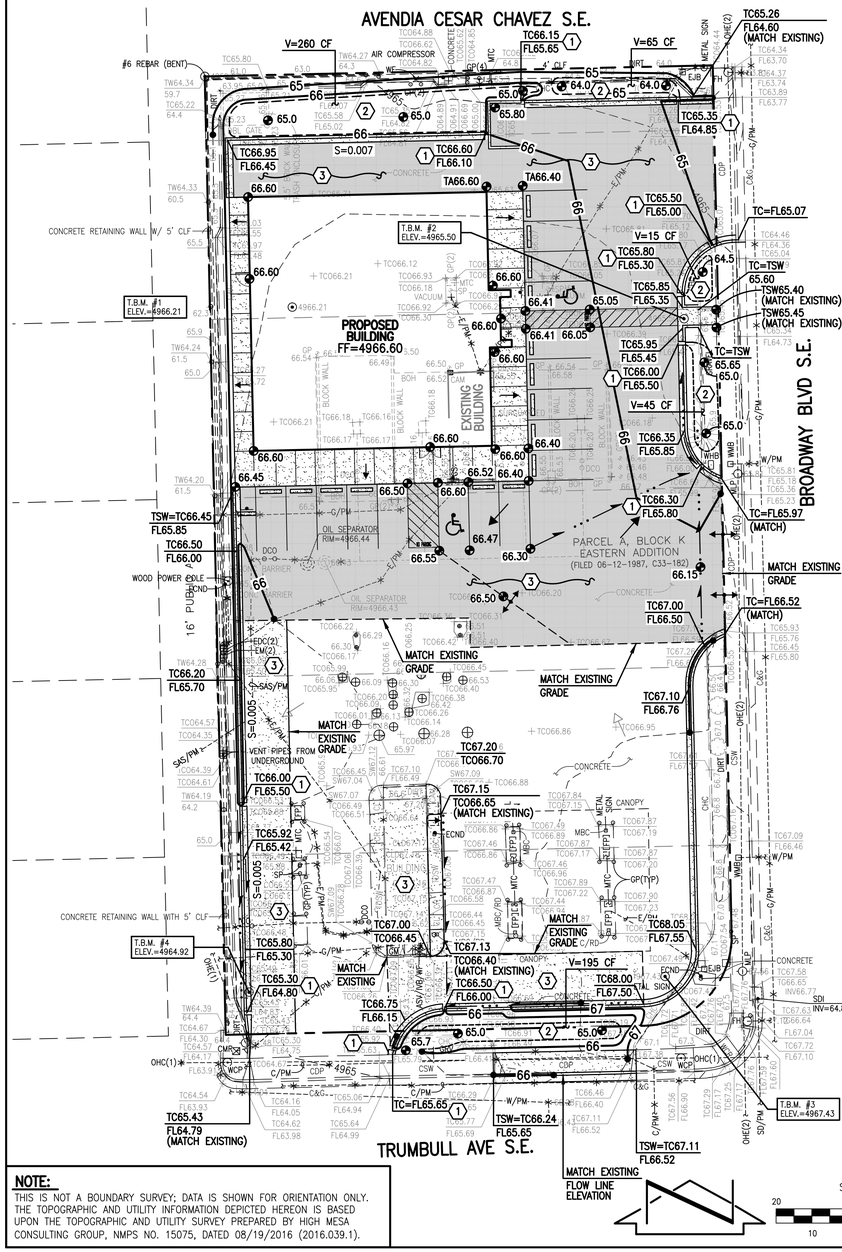
a. VOLUME

$V_{RQ} = ((P_{FF}-IA_D)/12)A_D$

V_{RQ} = ((0.44-0.10)/12)(33320.70) = **940 CF**

2. **WATER QUALITY PONDING PROVIDED ONSITE** (BASED ON AVERAGE END AREA METHOD)

V_{CAP} = 260 + 15+ 45+195+65 = **580 CF**



DRAINAGE PLAN

I. INTRODUCTION AND EXECUTIVE SUMMARY

THIS PROJECT, LOCATED IN THE SOUTH BROADWAY AREA OF ALBUQUERQUE, REPRESENTS A MODIFICATION TO AN EXISTING SITE WITHIN AN INFILL AREA. ON A DEVELOPED SITE THAT CONTAINS AN EXISTING BUILDING, PAVEMENT, A GAS STALL CANOPY, CARWASH, AND LANDSCAPED AREAS. THE PROPOSED REDEVELOPMENT IS COMPRISED OF NEW BUILDING CONSTRUCTION, PAVING IMPROVEMENTS, LANDSCAPING, AND UTILITY IMPROVEMENTS. THE DRAINAGE PLAN FOR THIS PROJECT WILL CONTINUE TO FOLLOW EXISTING DRAINAGE PATTERNS INTO BROADWAY BLVD AND TRUMBULL AVE AND WILL REDUCE THE PEAK DISCHARGE RATE. THERE ARE NO OFF-SITE FLOWS THAT DRAIN INTO THE SITE.

II. PROJECT DESCRIPTION

AS SHOW BY THE VICINITY MAP ON SHEET C1.1, THE SITE LOCATED AT THE NORTHWEST CORNER OF THE INTERSECTION OF BROADWAY BLVD. SE AND TRUMBULL AVE. SE. THE CURRENT LEGAL DESCRIPTION IS PARCEL A COMPRISING LOTS TWO(2) THRU SIX(6), INCLUSIVE AND THE SOUTHERLY 18 OF LOT ONE(1), BLOCK "K" EASTERN ADDITION. AS SHOWN BY PANEL 334 OF 825 OF THE NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAPS PUBLISHED BY FEMA FOR BERNALILLO COUNTY, NEW MEXICO SEPTEMBER 26, 2008, THIS SITE DOES NOT LIE WITHIN A DESIGNATED FLOOD HAZARD ZONE.

III. BACKGROUND DOCUMENTS

THE FOLLOWING IS A LIST OF DOCUMENTS RELATED TO THE SITE AND SURROUNDING AREA. THE LIST MAY NOT BE ALL INCLUSIVE, HOWEVER REPRESENTS A SUMMARY OF THE RELEVANT PLANS AND DOCUMENTS WHICH ARE KNOWN TO THE ENGINEER AT THE TIME OF THE PLAN PREPARATION.

A. TOPOGRAPHIC AND UTILITY SURVEY PREPARED BY HIGH MESA CONSULTING GROUP (HMCG), DATED 08/19/2016(NMPS 15075). THE SURVEY DOCUMENTS THE EXISTING CONDITIONS FOR THE SITE.

B. GRADING AND DRAINAGE PLAN FOR DIAMOND SHAMROCK GAS STATION, PREPARED BY LEE ENGINEERING, R.G. LEE NMPE, DATED 6/26/1987. THIS ESTABLISHED FREE DISCHARGE FROM THE DEVELOPED SITE TO BROADWAY BLVD SE AND TRUMBULL AVE. SE AND A DISCHARGE RATE OF 3.69 CFS. THE PRECIPITATION DEPTH, RATIONAL METHOD COEFFICIENT, AND PEAK INTENSITY USED TO CALCULATE THIS PEAK DISCHARGE RATE ARE LOWER THAN THE STANDARD VALUES USED IN THE CURRENT DPM WHICH ACCOUNTS FOR THE DIFFERENCE IN DISCHARGE RATES BETWEEN OUR CALCULATED EXISTING RATE AND APPROVED DEVELOPED RATE SHOWN ON THIS PLAN.

I. EXISTING CONDITIONS

THE EXISTING SITE CONSISTS OF A GAS STATION BUILDING, CANOPY, CAR LOCATED WITHIN AN INFILL AREA. THE SITE ALSO CONTAINS EXISTING CONCRETE PAVING, CURB AND GUTTER, LANDSCAPING, AND AN EXISTING RETAINING WALL ALONG THE WEST EDGE OF THE SITE. THE SITE IS DIVIDED BY A HIGH POINT THAT RUNS NORTHWEST TO SOUTHEAST THROUGH THE SITE. THE AREA SOUTH OF THE HIGH POINT DRAINS FROM NORTHEAST TO SOUTHWEST AND FREELY DISCHARGES INTO TRUMBULL AVE THROUGH THE EXISTING DRIVEPAD ENTRANCES LOCATED ON THIS SOUTH SIDE OF THE SITE. THE AREA NORTH OF THE HIGH POINT FROM SOUTHWEST TO NORTHEAST AND FREELY DISCHARGES INTO BROADWAY BLVD. THROUGH THE EXISTING DRIVEPAD ENTRANCES LOCATED ON THIS THE EAST SIDE OF THE SITE. THE EXISTING TOTAL DISCHARGE THAT LEAVES THE SITE IS 4.0 CFS. THERE ARE NO OFFSITE FLOWS INTO THE SITE.

II. DEVELOPED CONDITIONS

AS PART OF THE NEW DEVELOPMENT THE EXISTING GAS STATION BUILDING AND CARWASH WILL BE DEMOLISHED AND ONE OF THE EXISTING DRIVE PAD ENTRANCES ALONG TRUMBULL AVE. WILL BE REMOVED AND REPLACED WITH SIDEWALK AND CURB AND GUTTER. THE EXISTING CANOPY AND GAS STALLS WILL REMAIN. THE EXISTING RETAINING WALL AND CURB ALONG THE WEST EDGE OF THE SITE WILL ALSO REMAIN UNDISTURBED. THE NEW SITE WILL CONTAIN A NEW BUILDING, PAVEMENT, SIDEWALKS, AND DEPRESSED LANDSCAPED AREAS FOR WATER QUALITY RETENTION. THE DEVELOPED SITE WILL STILL FOLLOW THE EXISTING DRAINAGE PATTERN OF SPLITTING THE SITE RUNOFF AND FREELY DISCHARGING INTO TRUMBULL AVE AND BROADWAY BLVD BUT UNLIKE IN THE EXISTING CONDITION, A PORTION OF THE RUNOFF WILL BE DIRECTED TOWARDS DEPRESSED LANDSCAPED AREAS PRIOR TO LEAVING THE SITE. THE PROPOSED TOTAL DISCHARGE THAT LEAVES THE SITE WILL BE 3.9 CFS WHICH IS A 0.1 CFS REDUCTION TO THE EXISTING DISCHARGE. THIS RATE IS SLIGHTLY HIGHER THAN THE APPROVED DEVELOPED DISCHARGE OF 3.69 CFS BUT THIS DIFFERENCE IS ATTRIBUTABLE TO FACTORS DESCRIBED ABOVE IN THE BACKGROUND DOCUMENT SECTION. AS IN THE EXISTING CONDITION, THERE WILL CONTINUE TO BE NO OFFSITE FLOWS IMPACTING THE PROJECT SITE.

THE PROPOSED LANDSCAPED WATER HARVESTING AREAS WITHIN AND AT THE PERIMETER OF THE DEVELOPED SITE WILL CAPTURE AND TREAT THE FIRST FLUSH RUNOFF GENERATED BY THE PROPOSED IMPROVEMENTS TO THE MAXIMUM EXTENT PRACTICABLE. FIRST FLUSH CALCULATIONS FOR THE DEVELOPED SITE SHOW THAT 940 CF OF WATER HARVESTING IS REQUIRED; AVERAGE END AREA METHOD CALCULATIONS FOR THE DEVELOPED SITE DEMONSTRATE THAT THE COMBINED ONSITE WATER HARVESTING AREA CAPACITY IS 580 CF. DUE TO SITE TOPOGRAPHY LIMITATIONS AND THIS BEING A PARTIAL MODIFICATION TO AN EXISTING SITE, NO ADDITIONAL WATER QUALITY AREAS ARE AVAILABLE.

II. GRADING PLAN

THE GRADING PLAN ON SHEET C1.1 SHOWS 1) THE EXISTING GRADES INDICATED BY THE CONTOURS AT 1 FOOT INTERVALS AND SPOT ELEVATIONS FROM THE TOPOGRAPHIC SURVEY REFERENCED ABOVE BY THIS OFFICE; 2) THE LIMIT AND CHARACTER OF EXISTING IMPROVEMENTS AS SHOWN BY THE AFOREMENTIONED SURVEY; 3) THE LIMIT AND CHARACTER OF THE PROPOSED IMPROVEMENTS; 4) PROPOSED GRADES INDICATED BY CONTOURS AT 1 FOOT INTERVALS AND SPOT ELEVATIONS; AND 5) CONTINUITY BETWEEN EXISTING AND PROPOSED GRADES.

III. CALCULATIONS

THE CALCULATIONS CONTAINED HEREON ANALYZE THE EXISTING AND DEVELOPED CONDITIONS FOR THE 100 YEAR, 6-HOUR RAINFALL EVENT, THE PROCEDURE FOR 40 ACRE AND SMALLER BASINS, AS SET FORTH IN THE REVISIONS OF SECTION 22.2, HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL, VOLUME 2, DESIGN CRITERIA, DATED JANUARY 1993 AND REVISED 1997, HAS BEEN USED TO QUANTIFY THE PEAK RATE OF DISCHARGE AND VOLUME OF RUNOFF GENERATED. AS SHOWN BY THE CALCULATIONS, THERE WILL BE A DECREASE IN THE 100-YEAR PEAK DISCHARGE AND VOLUME RUNOFF ATTRIBUTABLE TO THIS PROJECT DUE TO. THE ADDITION OF LANDSCAPED AREAS. THE DISCHARGE WILL BE FURTHER REDUCED DUE TO THE CONSTRUCTION OF WATER QUALITY PONDS.

IV. CONCLUSIONS

THE FOLLOWING CONCLUSIONS HAVE BEEN ESTABLISHED FROM THE EVALUATIONS CONTAINED HEREIN:

1. THE PROPOSED IMPROVEMENTS REPRESENT MODIFICATIONS TO AN EXISTING DEVELOPED SITE.
2. THE PROPOSED IMPROVEMENTS WILL NOT SIGNIFICANTLY ALTER THE EXISTING DRAINAGE PATTERNS ON SITE.
3. THE PROPOSED IMPROVEMENTS WILL RESULT IN A DECREASE IN THE DEVELOPED RUNOFF GENERATED BY THE SITE.
4. THE PROPOSED IMPROVEMENTS WILL RESULT IN A DECREASE IN THE DEVELOPED DISCHARGE RATE
5. THE PROPOSED IMPROVEMENTS WILL NOT ADVERSELY IMPACT DOWNSTREAM PROPERTIES OR DOWNSTREAM DRAINAGE CONDITIONS.

NOTE:

THIS IS NOT A BOUNDARY SURVEY; DATA IS SHOWN FOR ORIENTATION ONLY. THE TOPOGRAPHIC AND UTILITY INFORMATION DEPICTED HEREON IS BASED UPON THE TOPOGRAPHIC AND UTILITY SURVEY PREPARED BY HIGH MESA CONSULTING GROUP, NMPS NO. 15075, DATED 08/19/2016 (2016.039.1).

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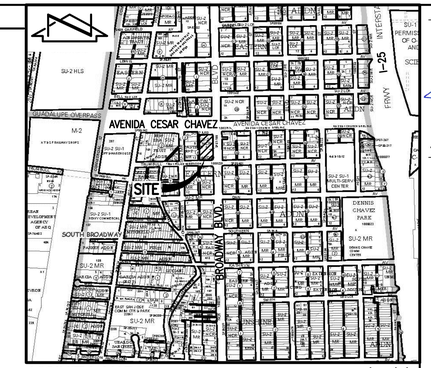
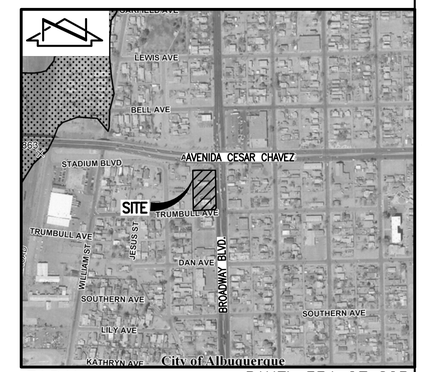


VICINITY MAP

SCALE: 1" = 750'

L-14



F.I.R.M.

SCALE: 1" = 500'

PANEL 334 OF 825

DATED 9/26/2008

PROJECT BENCHMARK

AGRS 3 1/4" ALUMINUM DISC STAMPED "12-L14 1987", SET FLUSH WITH TOP OF THE WEST CURB, APPROXIMATELY 70 FEET NORTH OF THE INTERSECTION OF THIRD STREET SW. AND SECOND STREET SW.
NORTHING: 1,480971.075 (GRID)
EASTING: 1,520049.232 (GRID)
ELEVATION = 4947.708 FEET (NAVD 1988)
1/CF = 1.000316270

TEMPORARY BENCHMARK #1 (T.B.M.)

A CHISELED "+" SCRIBED IN CONCRETE NEAR THE NORTHWEST CORNER OF THE CARWASH , AS SHOWN ON THIS SHEET.
ELEVATION = 4966.21 FEET (NAVD 1988)

TEMPORARY BENCHMARK #2 (T.B.M.)

A CHISELED "+" SCRIBED IN CONCRETE NEAR THE NORTHEAST CORNER OF THE CARWASH , AS SHOWN ON THIS SHEET.
ELEVATION = 4965.50 FEET (NAVD 1988)

TEMPORARY BENCHMARK #3 (T.B.M.)

A MAG NAIL SET IN CONCRETE JOINT AT THE SOUTHEAST CORNER OF THE SITE, AS SHOWN ON THIS SHEET.
ELEVATION = 4967.43 FEET (NAVD 1988)

TEMPORARY BENCHMARK #4 (T.B.M.)

A CHISELED "+" SCRIBED IN CONCRETE AT THE SOUTHWEST CORNER OF THE SITE , AS SHOWN ON THIS SHEET.
ELEVATION = 4964.92 FEET (NAVD 1988)

LEGEND

C&G	CURB AND GUTTER	RD	ROOF DRAIN	INV	INVERT
C/PM	COMMUNICATION BY PAINT MARK	RR	RIVER ROCK	TA	TOP OF ASPHALT PAVEMENT
CAM	CAMERA	SAS	SANITARY SEWER	TC	TOP OF CURB
CHC	CONCRETE HEADER CURB	SI	STORM DRAIN INLET	TG	TOP OF GRATE
CLD	CENTERLINE OF DOOR	SW	SIDEWALK	+ 67.25	EXISTING SPOT ELEVATION
CLF	CHAINLINK FENCE	TC	TOP OF CURB	67.10	PROPOSED SPOT ELEVATION
CO	SEWER CLEANOUT	TCO	TOP OF CONCRETE		EXISTING FLOWLINE
CONC	CONCRETE	TDSW	TURNDOWN SIDEWALK		PROPOSED FLOWLINE
CMR	COMMUNICATIONS RISER	TYP	TYPICAL	4967	EXISTING CONTOUR
CSW	CONCRETE SIDEWALK	WCP	WOOD COMMUNICATIONS POLE	67	PROPOSED CONTOUR
DCO	DOUBLE SEWER CLEANOUT	WCR	WHEELCHAIR RAMP		EXISTING DIRECTION OF FLOW
E/PM	ELECTRIC BY PAINT MARK	WHB	WATERLINE HOTBOX		PROPOSED DIRECTION OF FLOW
ECND	ELECTRIC CONDUIT	WMB	WATER METER BOX		RIGHT OF WAY LINE
EDC	ELECTRIC DISCONNECT SWITCH	W/PM	WATERLINE BY PAINT MARK		PUBLIC EASEMENT LINE
EJB	ELECTRIC JUNCTION BOX	WVB	WATER VALVE BOX		HIGH POINT / DIVIDE
EM	ELECTRIC METER	*	PAINTED UTILITY MARKER		PROPOSED CONCRETE
FH	FIRE HYDRANT	1.2'ø	DIAMETER OF TREE		PROPOSED ASPHALT PAVING
FL	FLOWLINE		UNDERGROUND FUEL TANK LID		
FP	FUEL PUMP		DECIDUOUS TREE		
G/PM	GAS BY PAINT MARK				
GM	GAS METER		SMALL DECIDUOUS TREE		
GP	STEEL GUARD POST		SHRUB		
GRV	GRAVEL		GROUP OF SHRUBS		
GS	GAS SERVICE				
IVB	IRRIGATION VALVE BOX				
MBC	10"X10" METAL BUILDING COLUMN				
MC	METAL COLUMN				
MLP	METAL LIGHT POLE				
MTC	METAL TRASH CAN				
OHC(1)	OVERHEAD COMMUNICATION (# OF LINES)				
OHE(2)	OVERHEAD ELECTRIC (# OF LINES)				

2016.042.1

HIGH MESA Consulting Group
6010-B MIDWAY PARK BLVD. NE • ALBUQUERQUE, NEW MEXICO 87109
PHONE: 505.345.4250 • FAX: 505.345.4254 • www.highmesacg.com

J. GRAEME MEANS NEW MEXICO 13676 REGISTERED PROFESSIONAL ENGINEER

12-5-2016

nbwarchitects p.a.
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PROJECT: NEW BUILDING FOR: GOOD 2 GO CONVENIENCE STORE
ALBUQUERQUE NO. 309
ALBUQUERQUE, NEW MEXICO

SHEET TITLE: PROPOSED GRADING PLAN

REVISIONS

PROJECT NO. 16031
DATE: DECEMBER 2016
DRAWN BY: J.Y.R.
CHECKED BY: R.J.C.

DRAWING NO.: C1.1

COA PARKING CALCULATIONS

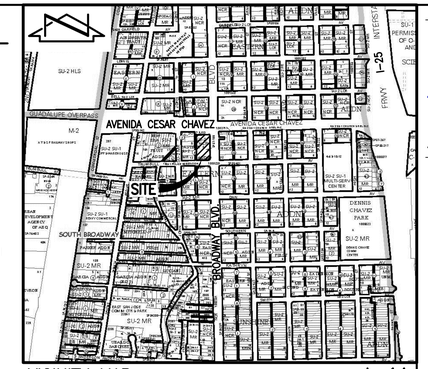
CITY OF ALBUQUERQUE ZONING CODE: REQUIRED OFF STREET PARKING
VEHICLE PARKING:
TOTAL BUILDING SF = 4,898; 4,898/200 = 24.49 ≅ 25 SPACES REQUIRED. THIS SITE QUALIFIES FOR 10% TRANSIT REDUCTION OF 2 SPACES AFTER THE REDUCTION THE AMOUNT OF SPACES REQUIRED EQUALS 23.
PARKING SPACES PROVIDED: 26 SPACES
BICYCLE PARKING:
ONE BICYCLE SPACE IS REQUIRED FOR EVERY 20 SPACES.
PARKING SPACE PROVIDED: 2 SPACES
MOTORCYCLE PARKING:
20 REQUIRED VEHICLE SPACES REQUIRES A MIN. OF 1 MOTORCYCLE PARKING SPACE.
PARKING SPACES PROVIDED: 1 SPACE
ACCESSIBLE PARKING:
23 REQUIRED VEHICLE SPACES REQUIRE A MIN. OF 1 ACCESSIBLE PARKING SPACE.
PARKING SPACES PROVIDED: 2 SPACES

PAVING KEYED NOTES

1. CONSTRUCT STANDARD CURB AND GUTTER PER TYPICAL SECTION, SHEET C3.1
2. CONSTRUCT DEPRESSED CURB AND GUTTER PER TYPICAL SECTION, SHEET C3.1
3. CONSTRUCT NEW ASPHALT PAVEMENT PER TYPICAL SECTION, SHEET C3.1
4. CONSTRUCT CONCRETE SIDEWALK PER TYPICAL SECTION, SHEET C3.1
5. CONSTRUCT 12" CURB OPENING FOR WATER HARVESTING AND FIRST FLUSH CAPTURE AND OVERFLOW RELEASE
6. PAINT 4" WIDE CROSS HATCH (2' CC) PAVEMENT MARKINGS @ 45 DEG WITH "NO PARKING" STENCILED AS SHOWN WITH BLUE TRAFFIC PAINT, MIN 2 COATS TYPICAL
7. INSTALL 1–ADA COMPLIANT ACCESSIBLE PARKING SPACE PAVEMENT MARKING WITH BLUE TRAFFIC PAINT, MIN 2 COATS, TYPICAL
8. INSTALL 1– ADA COMPLIANT ACCESSIBLE PARKING SIGN WITH LANGUAGE "VIOLATORS ARE SUBJECT TO A FINE AND/OR TOWING".
9. EXISTING CURB TO REMAIN
10. EXISTING SIDEWALK AND DRIVEPAD TO REMAIN
11. PAINT 4" PAVEMENT MARKING WITH WHITE TRAFFIC PAINT, MINIMUM 2 COATS, TYPICAL
12. CONSTRUCT ADA RAMP PER TYPICAL SECTION, SHEET C3.1
13. CONSTRUCT STANDARD CURB AND GUTTER PER COA STD DWG 2415
14. CONSTRUCT CONCRETE SIDEWALK PER COA STD DWG 2430
15. CONSTRUCT CONCRETE PAVEMENT PER TYPICAL SECTION, SHEET C3.1
16. INSTALL CONCRETE WHEEL STOP PER TYPICAL SECTION, SHEET C3.1
17. CONSTRUCT DOUBLE TURNDOWN SIDEWALK, PER TYPICAL SECTION, SHEET C3.1
18. EXISTING CONCRETE TO REMAIN
19. INSTALL 1 – "MOTORCYCLE PARKING ONLY" SIGN

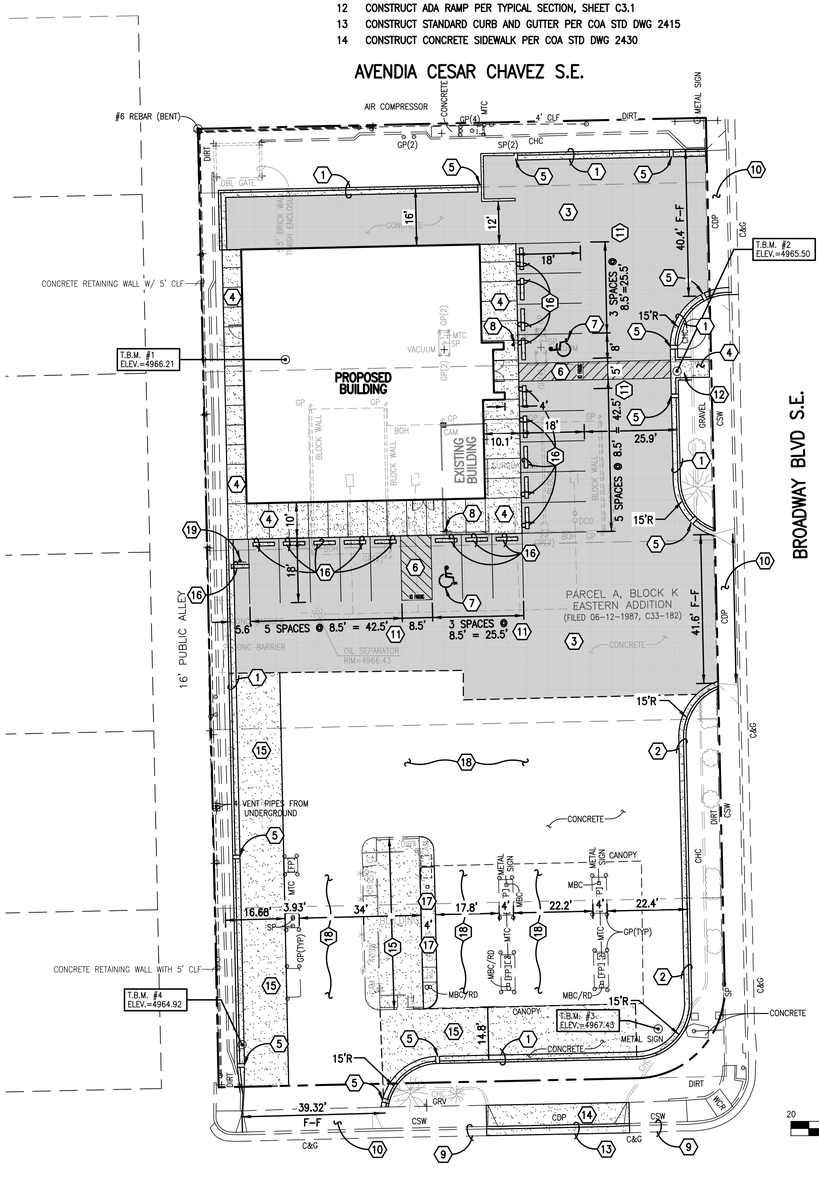
DEMOLITION KEYED NOTES

1. NEATLY SAW CUT, REMOVE, AND DISPOSE OF EXISTING CONCRETE PAVING
2. NEATLY SAW CUT, REMOVE, AND DISPOSE OF EXISTING CURB AND GUTTER
3. NEATLY SAW CUT EXISTING ASPHALT PAVEMENT
4. REMOVE AND DISPOSE OF EXISTING CURB AND GUTTER
5. REMOVE AND DISPOSE OF EXISTING CURB
6. REMOVE AND DISPOSE OF EXISTING ASPHALT PAVING
7. REMOVE AND DISPOSE OF EXISTING CONCRETE PAVING
8. REMOVE AND DISPOSE OF EXISTING BUILDING
9. REMOVE AND DISPOSE OF EXISTING BLOCK WALL
10. REMOVE AND DISPOSE OF EXISTING SEWER LINE
11. REMOVE AND DISPOSE OF EXISTING STORM DRAIN LINE AND INLET
12. REMOVE AND DISPOSE OF EXISTING SIDE WALK
13. REMOVE AND DISPOSE OF EXISTING GUARD POSTS
14. REMOVE AND DISPOSE OF EXISTING CONCRETE BARRIERS
15. REMOVE AND DISPOSE OF EXISTING OIL SEPERATOR
16. EXISTING METAL LIGHT POLE TO REMAIN
17. EXISTING POWER POLE TO REMAIN
18. EXISTING FENCE TO REMAIN
19. EXISTING RETAINING WALL TO REMAIN
20. EXISTING CURB AND GUTTER TO REMAIN
21. EXISTING TREE TO REMAIN
22. EXISTING CONCRETE PAVEMENT TO REMAIN
23. EXISTING GAS TANKS TO REMAIN
24. EXISTING CANOPY AND COLUMNS TO REMAIN
25. EXISTING GUARD POSTS TO REMAIN
26. EXISTING HOT BOX TO REMAIN
27. EXISTING SIDEWALK AND DRIVE PAD TO REMAIN
28. REMOVE AND SALVAGE EXISTING DUMPSTER FOR RELOCATION
29. REMOVE AND DISPOSE OF EXISTING SIDEWALK AND DRIVEPAD
30. EXISTING FUEL PUMP ISLAND TO REMAIN
31. EXISTING SANITARY SEWER LINE REMAIN

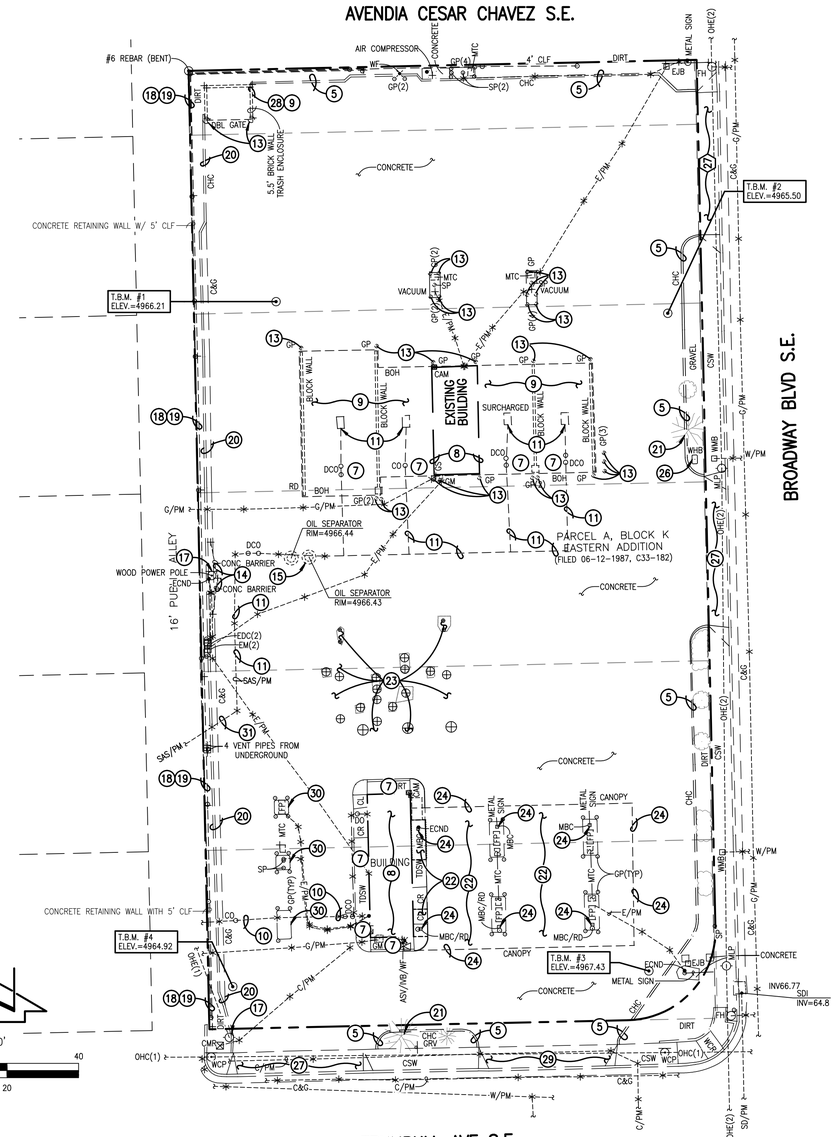


VICINITY MAP
SCALE: 1" = 750'

L-14



PAVING PLAN



DEMOLITION PLAN

LEGEND

C&G	CURB AND GUTTER
CAM	CAMERA
CHC	CONCRETE HEADER CURB
CLD	CENTERLINE OF DOOR
CLF	CHAINLINK FENCE
CONC	CONCRETE
CSW	CONCRETE SIDEWALK
GP	STEEL GUARD POST
GRV	GRAVEL
MBC	10"X10" METAL BUILDING COLUMN
MC	METAL COLUMN
MLP	METAL LIGHT POLE
MTC	METAL TRASH CAN
RD	ROOF DRAIN
RR	RIVER ROCK
SW	SIDEWALK
TDSW	TURNDOWN SIDEWALK
TYP	TYPICAL
WCP	WOOD COMMUNICATIONS POLE
WCR	WHEELCHAIR RAMP
*	PAINTED UTILITY MARKER
1.2'ø	DIAMETER OF TREE
	DECIDUOUS TREE
	SMALL DECIDUOUS TREE
	SHRUB
	GROUP OF SHRUBS

DESIGN LEGEND:

- RIGHT OF WAY LINE
- PUBLIC EASEMENT LINE
- HIGH POINT / DIVIDE
- PROPOSED CONCRETE
- PROPOSED ASPHALT PAVING

PROJECT BENCHMARK

AGRS 3 1/4" ALUMINUM DISC STAMPED "12–L14 1987", SET FLUSH WITH TOP OF THE WEST CURB, APPROXIMATELY 70 FEET NORTH OF THE INTERSECTION OF THIRD STREET SW. AND SECOND STREET SW.
NORTHING: 1,480971.075 (GRID)
EASTING: 1,520049.232 (GRID)
ELEVATION = 4947.708 FEET (NAVD 1988)
1/CF = 1.000316270

TEMPORARY BENCHMARK #1 (T.B.M.)

A CHISELED "+" SCRIBED IN CONCRETE NEAR THE NORTHWEST CORNER OF THE CARWASH , AS SHOWN ON THIS SHEET.
ELEVATION = 4966.21 FEET (NAVD 1988)

TEMPORARY BENCHMARK #2 (T.B.M.)

A CHISELED "+" SCRIBED IN CONCRETE NEAR THE NORTHEAST CORNER OF THE CARWASH , AS SHOWN ON THIS SHEET.
ELEVATION = 4965.50 FEET (NAVD 1988)

TEMPORARY BENCHMARK #3 (T.B.M.)

A MAG NAIL SET IN CONCRETE JOINT AT THE SOUTHEAST CORNER OF THE SITE, AS SHOWN ON THIS SHEET.
ELEVATION = 4967.43 FEET (NAVD 1988)

TEMPORARY BENCHMARK #4 (T.B.M.)

A CHISELED "+" SCRIBED IN CONCRETE AT THE SOUTHWEST CORNER OF THE SITE , AS SHOWN ON THIS SHEET.
ELEVATION = 4964.92 FEET (NAVD 1988)

NOTE:
THIS IS NOT A BOUNDARY SURVEY; DATA IS SHOWN FOR ORIENTATION ONLY. THE TOPOGRAPHIC AND UTILITY INFORMATION DEPICTED HEREON IS BASED UPON THE TOPOGRAPHIC AND UTILITY SURVEY PREPARED BY HIGH MESA CONSULTING GROUP, NMPS NO. 15075, DATED 08/19/2016 (2016.039.1).

2016.042.1

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12-5-2016

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PROJECT NO. 16031
DATE: DECEMBER 2016
DRAWN BY: J.Y.R.
CHECKED BY: R.J.C.

DRAWING NO.: C1.2

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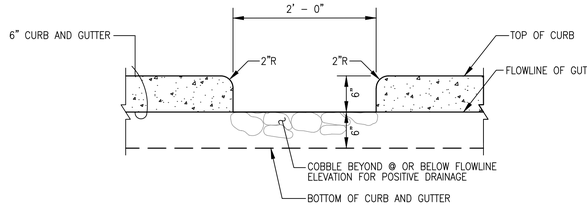
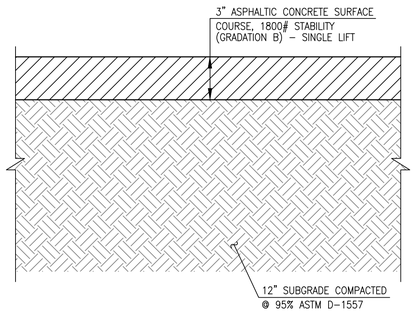
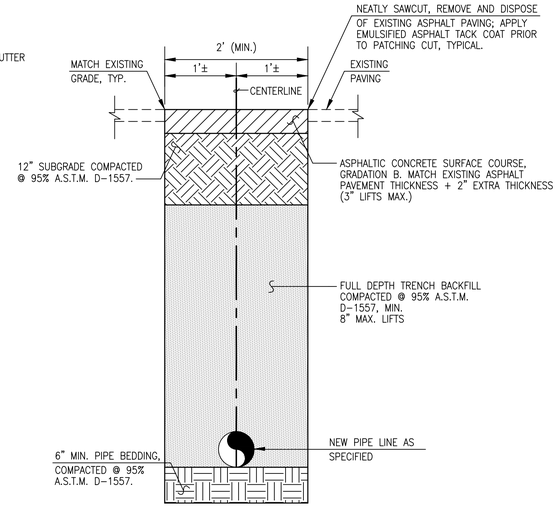


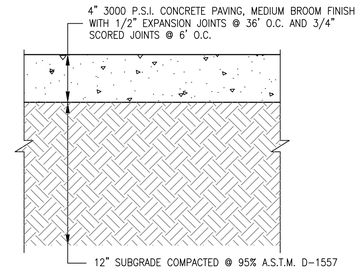
CURB CUT SECTION
SCALE: 1" = 1'-0"



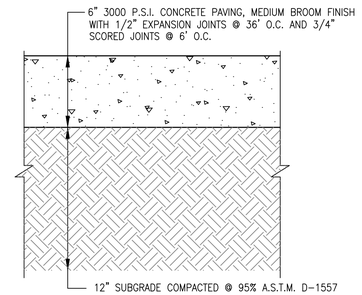
TYPICAL 3" ASPHALT PAVING SECTION
SCALE: 1" = 5" **(VEHICULAR TRAFFIC AREAS)**



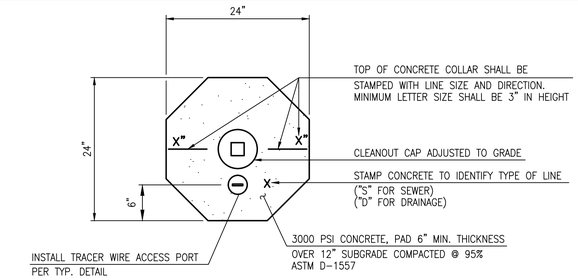
TYPICAL PRIVATE PAVING UTILITY CUT AND PAVEMENT REPLACEMENT SECTION
SCALE: 1"=1'



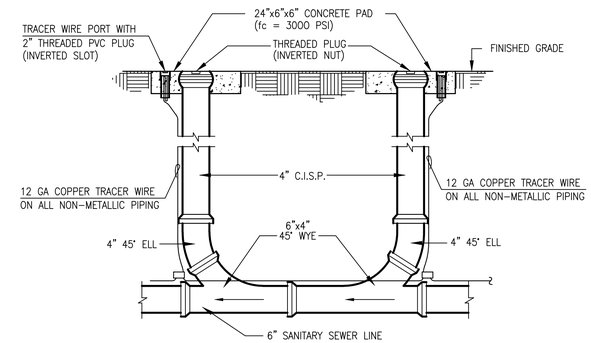
TYPICAL CONCRETE SIDEWALK SECTION
SCALE: 1" = 6"



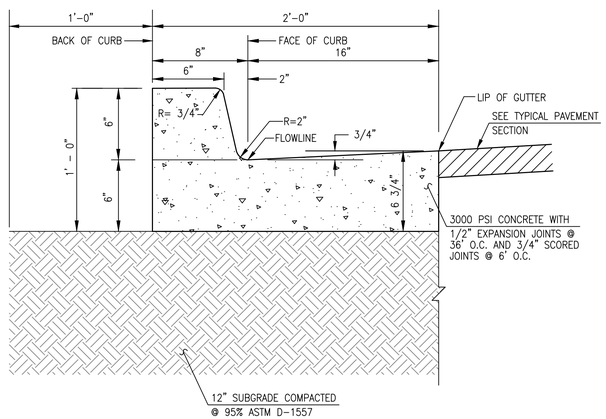
TYPICAL CONCRETE PAVEMENT SECTION
SCALE: 1" = 6"



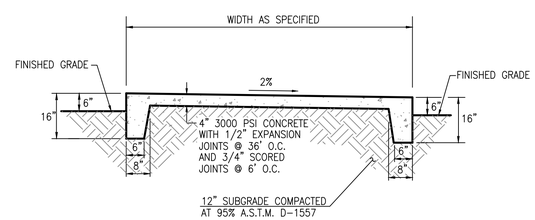
TYPICAL CLEANOUT COLLAR DETAIL
SCALE: 1" = 1"



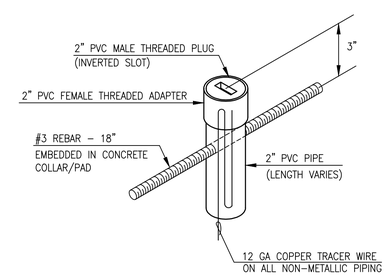
TYPICAL DOUBLE CLEANOUT SECTION
NOT TO SCALE



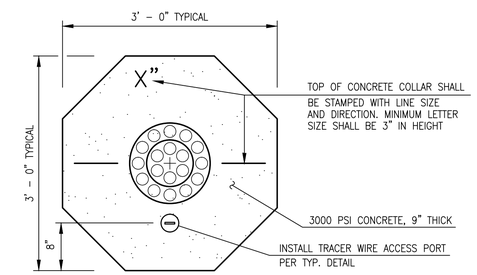
TYPICAL SIX-INCH CURB & GUTTER
SCALE: 1" = 0'-6"



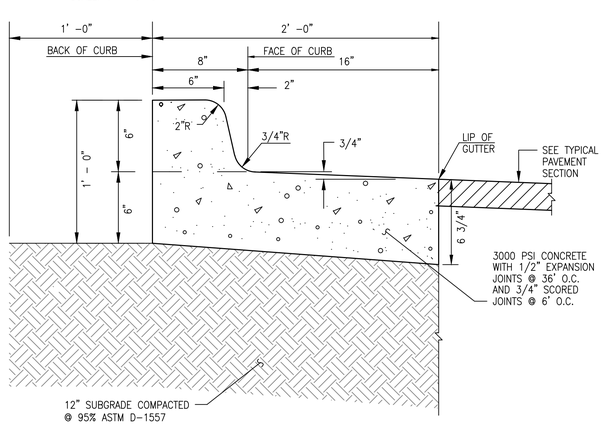
TYPICAL DOUBLE TURNDOWN SIDEWALK SECTION
SCALE: 1" = 2'-0"



TYPICAL TRACER WIRE ACCESS PORT
NOT TO SCALE

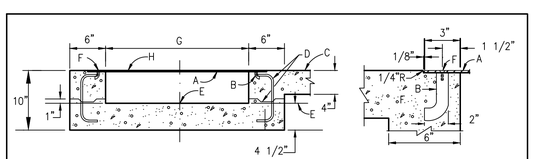


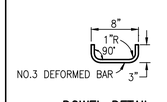
TYPICAL WATER VALVE BOX COLLAR DETAIL
SCALE: 1" = 1'



TYPICAL SIX-INCH DEPRESSED CURB AND GUTTER
SCALE: 1" = 0'-6"

NOTE: USE THIS SECTION FOR CASES WHERE PAVING SLOPES AWAY FROM FACE OF CURB



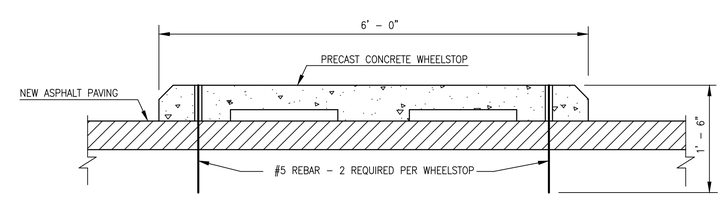


DOWEL DETAIL
SCALE: 1" = 1'

CONSTRUCTION NOTES:

A. 3/8" CHECKERED STEEL PLATE.
B. ROD ANCHOR 1" x 5"
C. SIDEWALK GRADE
D. DOWEL AND JOINT, (OPTIONAL).
E. GUTTER FLOWLINE ELEV.
F. 3/8" x 1" F.H. C'SUNK STAINLESS STEEL MACHINE SCREW.
G. DRAIN WIDTH, 24" MAX. 12" MIN.
H. AFTER CLEANING SURFACE OF SCALE, RUST, OILS, ETC., PAINT GRATE WITH ONE SHOP COAT RED OXIDE, TWO FINISH COATS OF ALUMINUM PAINT (AASHTO M 69).

SIDEWALK CULVERT SECTION
SCALE: 1" = 2"



WHEELSTOP SECTION
SCALE: 1" = 1'-0"

2016.042.1

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SECTION AND DRAINAGE PLAN

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File Name:160421_C3.1.DWG | Plot Time: 10:36 am