

# CITY OF ALBUQUERQUE

*Planning Department*  
Brennon Williams, Director



*Mayor Timothy M. Keller*

September 13, 2019

Ron Bohannon, P.E.  
Tierra West, LLC  
5571 Midway Park Place, NE  
Albuquerque, NM 87109

**RE: U-Haul at West Bluff  
1801 Atrisco Dr NW  
Request for Certificate of Occupancy – Permanent  
Engineer's Certification Date: 8/22/19 – Accepted  
Grading Plan Stamp Date: 1/30/17  
Hydrology File: H11D059**

Dear Mr. Bohannon,

PO Box 1293

Based on the submittal received on 8/22/19 and supplemental information provided on 9/12/19, the Engineer's Certification is approved in support of Certificate of Occupancy (Permanent) by Hydrology.

Albuquerque

If you have any questions, please contact me at 924-3695 or [dpeterson@cabq.gov](mailto:dpeterson@cabq.gov).

NM 87103

Sincerely,

[www.cabq.gov](http://www.cabq.gov)

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

C: Email      Fox, Debi; Tena, Victoria; Sandoval, Darlene; Costilla, Michelle

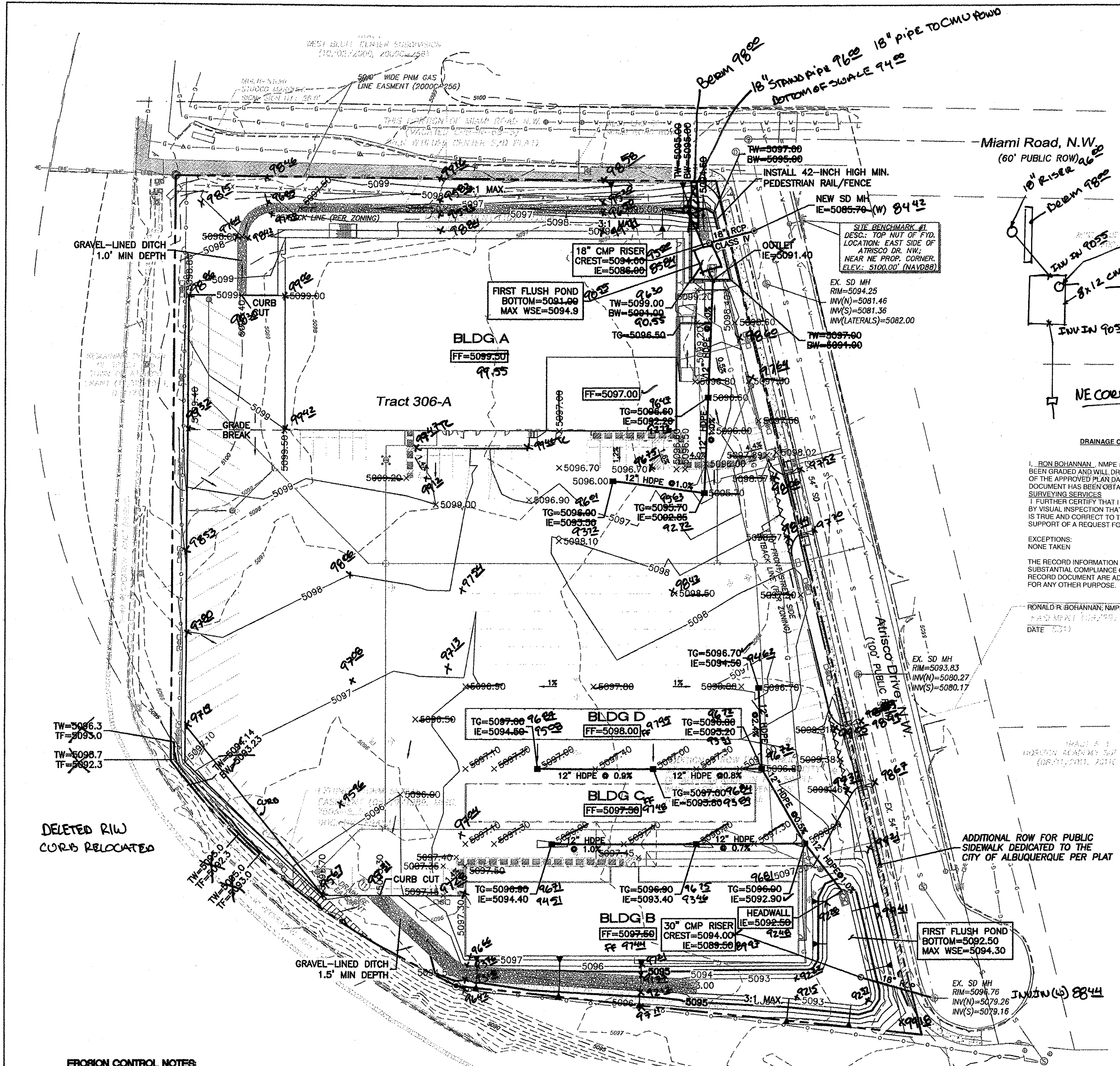












- LEGEND**
- CURB & GUTTER
  - BOUNDARY LINE
  - EASEMENT
  - CENTERLINE
  - RIGHT-OF-WAY
  - BUILDING
  - SIDEWALK
  - RETAINING WALL
  - CONTOUR MAJOR
  - CONTOUR MINOR
  - SPOT ELEVATION
  - FLOW ARROW
  - EXISTING CURB & GUTTER
  - EXISTING BOUNDARY LINE
  - EXISTING CONTOUR MAJOR
  - EXISTING CONTOUR MINOR
  - EXISTING SPOT ELEVATION
  - ACCESSIBLE ROUTE
  - WATERBLOCK

**DRAINAGE CERTIFICATION WITH SURVEY WORK DONE BY PROFESSIONAL SURVEYOR**

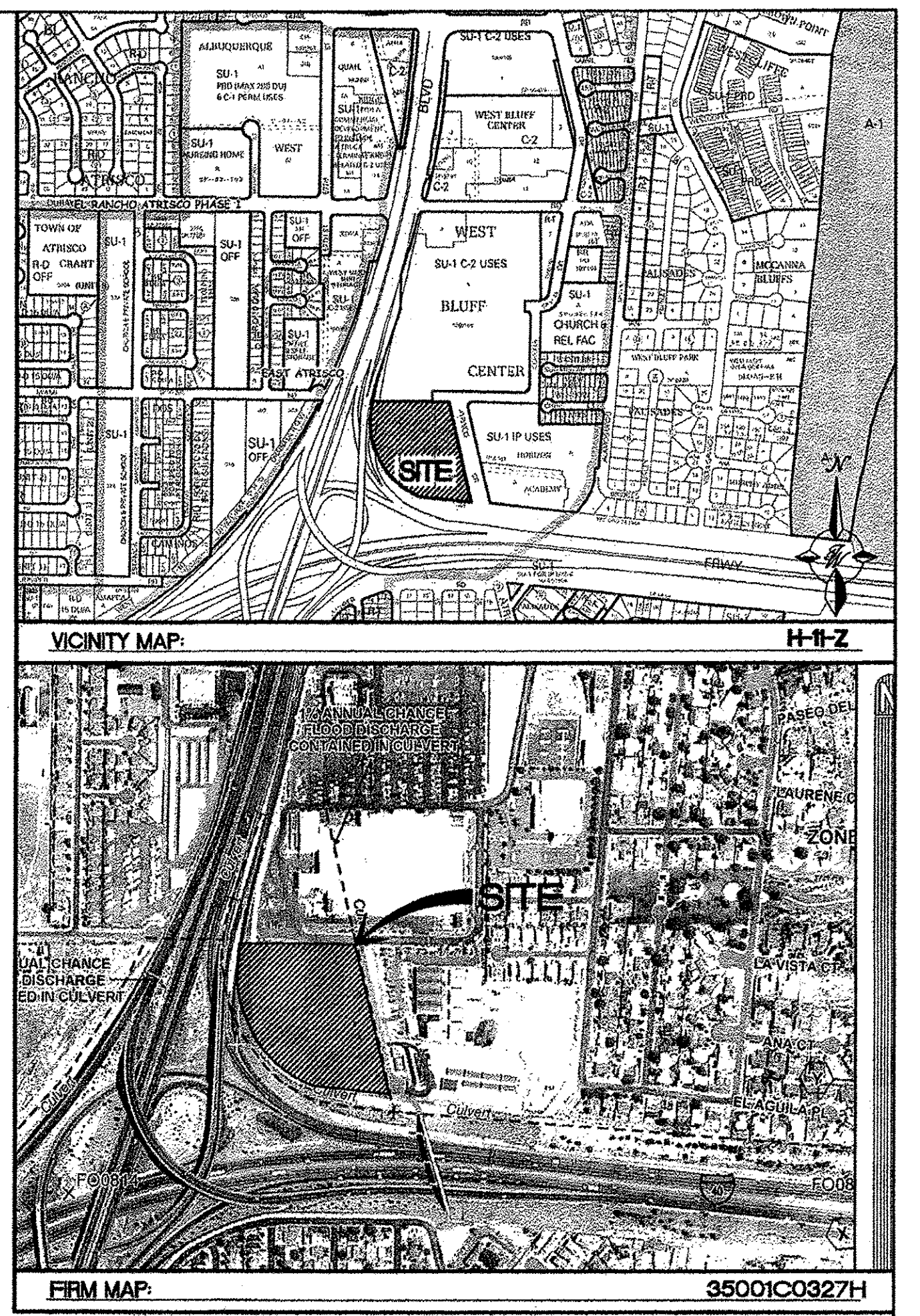
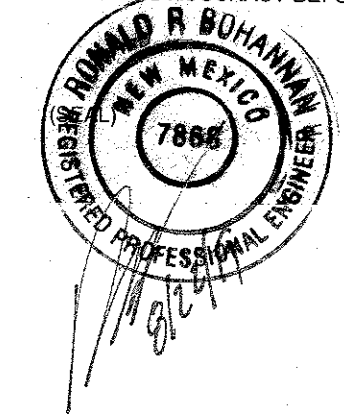
I, RONALD R. BOHANNAN, N.M.P.E. # 7868, OF THE FIRM, TERRA WEST, LLC, HEREBY CERTIFY THAT THIS PROJECT HAS BEEN GRADED AND WILL DRAIN IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED 12/20/17 THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY JOHN STEVEN SANDOVAL, N.M.P.S. # 12351, OF THE FIRM, CONSTRUCTION SURVEYING SERVICES.

I FURTHER CERTIFY THAT I HAVE PERSONALLY VISITED THE PROJECT SITE ON 8/24/19 AND HAVE DETERMINED BY VISUAL INSPECTION THAT THE SURVEY DATA PROVIDED IS REPRESENTATIVE OF ACTUAL SITE CONDITIONS AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR PERMANENT CERTIFICATE OF OCCUPANCY.

**EXCEPTIONS:**  
NONE TAKEN

THE RECORD INFORMATION PRESENTED HEREON IS NOT NECESSARILY COMPLETE AND INTENDED ONLY TO VERY SUBSTANTIAL COMPLIANCE OF THE GRADING AND DRAINAGE ASPECTS OF THIS PROJECT. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE.

RONALD R. BOHANNAN, N.M.P.E. # 7868  
DATE: 8/24/19



- NOTICE TO CONTRACTORS**
- AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY.
  - ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF ALBUQUERQUE INTERIM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1985.
  - TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, 765-1234, FOR LOCATION OF EXISTING UTILITIES.
  - PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL CONSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
  - BACKFILL COMPACTION SHALL BE ACCORDING TO TRAFFIC/STREET USE.
  - MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.
  - WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24-HOUR BASIS.

APPROVAL	NAME	DATE
INSPECTOR		

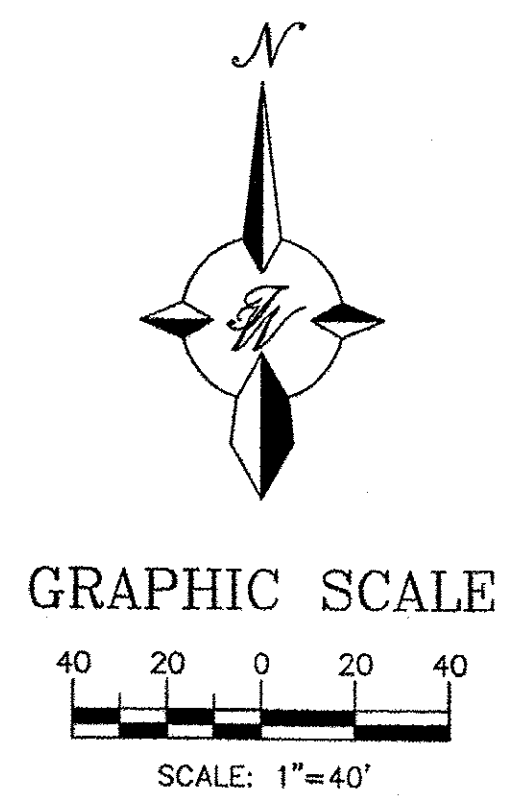
- EROSION CONTROL NOTES**
- CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.
  - CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RUN-OFF ON SITE DURING CONSTRUCTION.
  - CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY.
  - REPAIR OF DAMAGED FACILITIES AND CLEANUP OF SEDIMENT ACCUMULATIONS ON ADJACENT PROPERTIES AND IN PUBLIC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.
  - ALL EXPOSED EARTH SURFACES MUST BE PROTECTED FROM WIND AND WATER EROSION PRIOR TO FINAL (CITY) ACCEPTANCE OF ANY PROJECT.

Interstate 40  
(N.M.P. NO. TPU-040-3(89)155 PUBLIC ROW  
WIDTH VARIES)

**CAUTION**

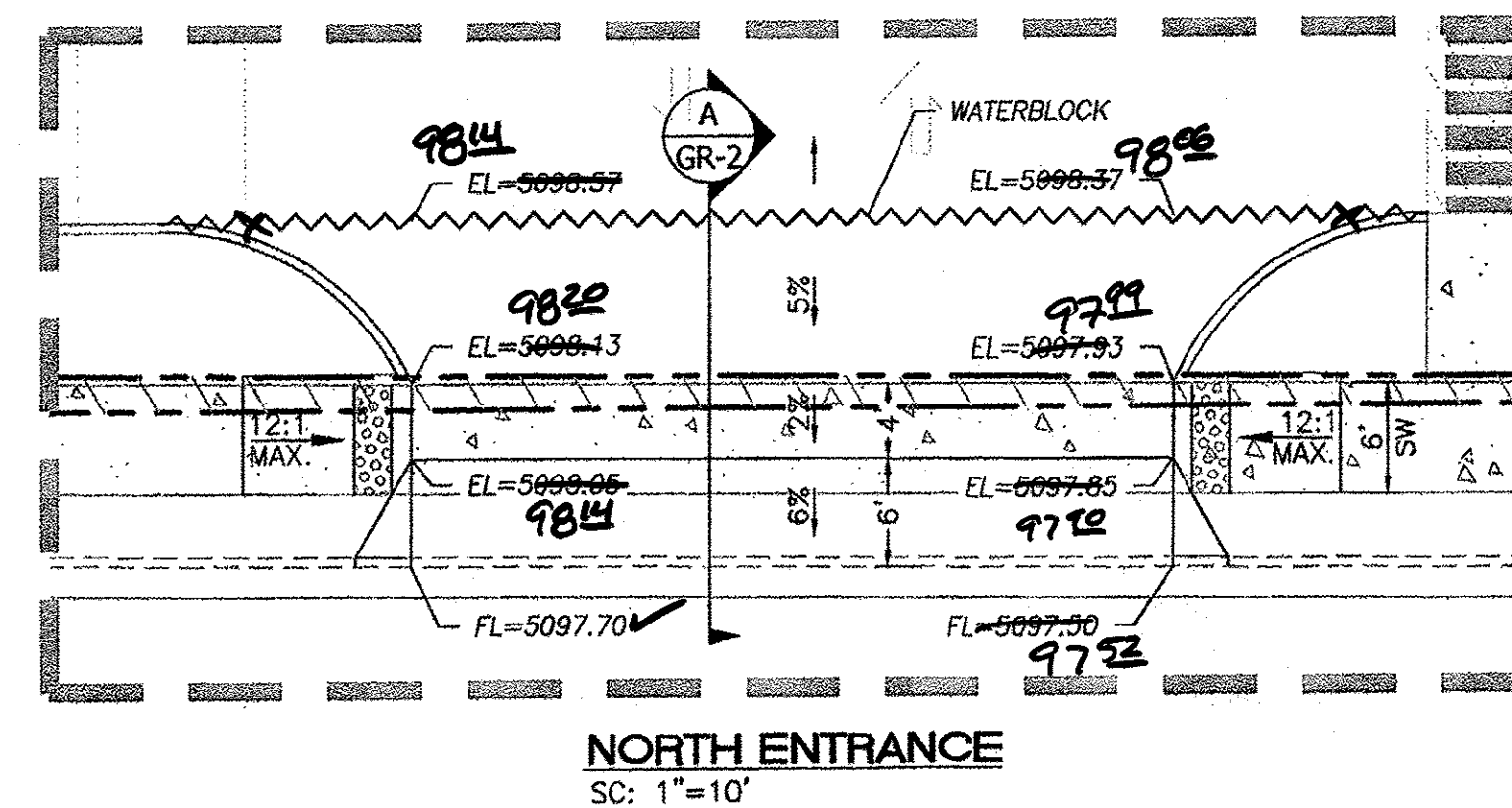
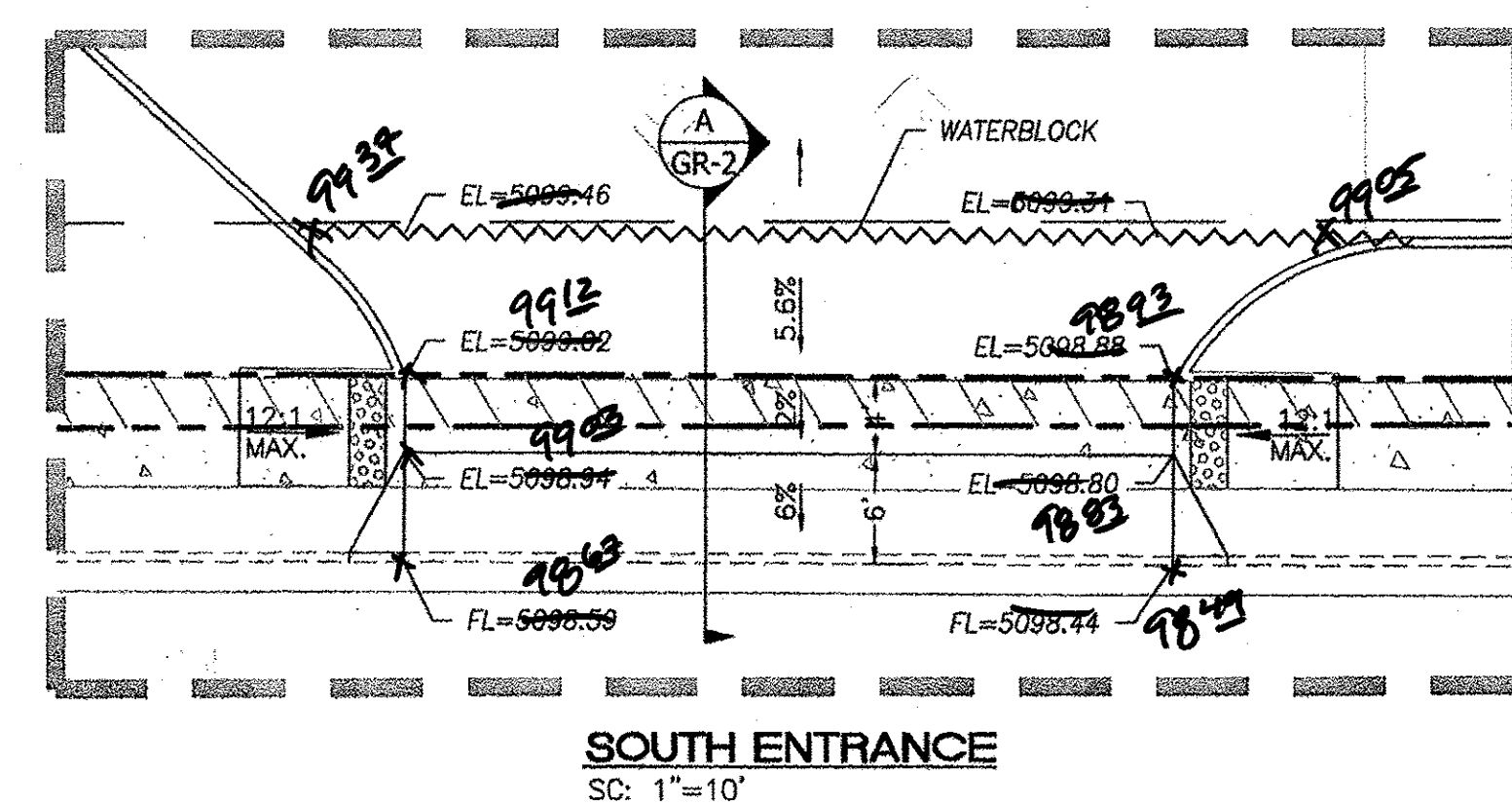
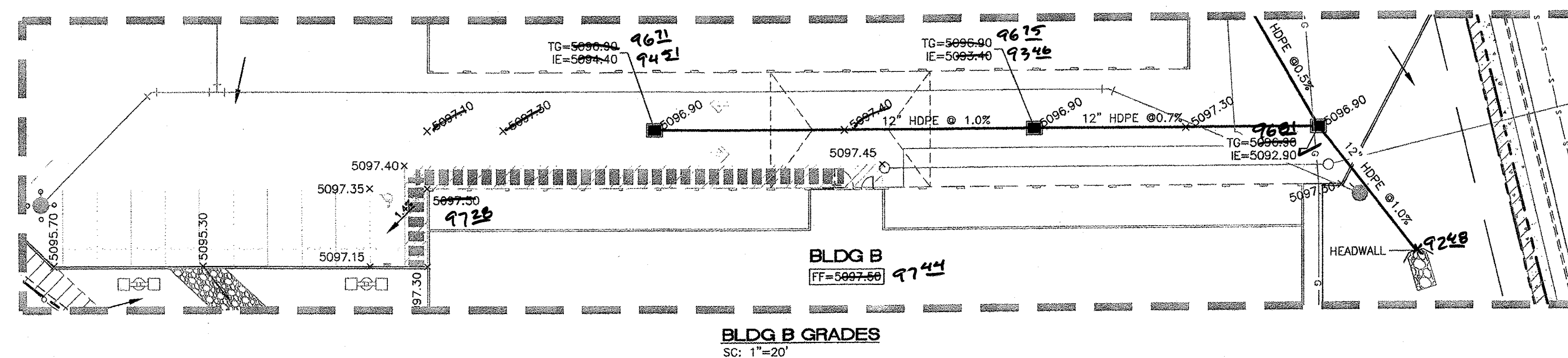
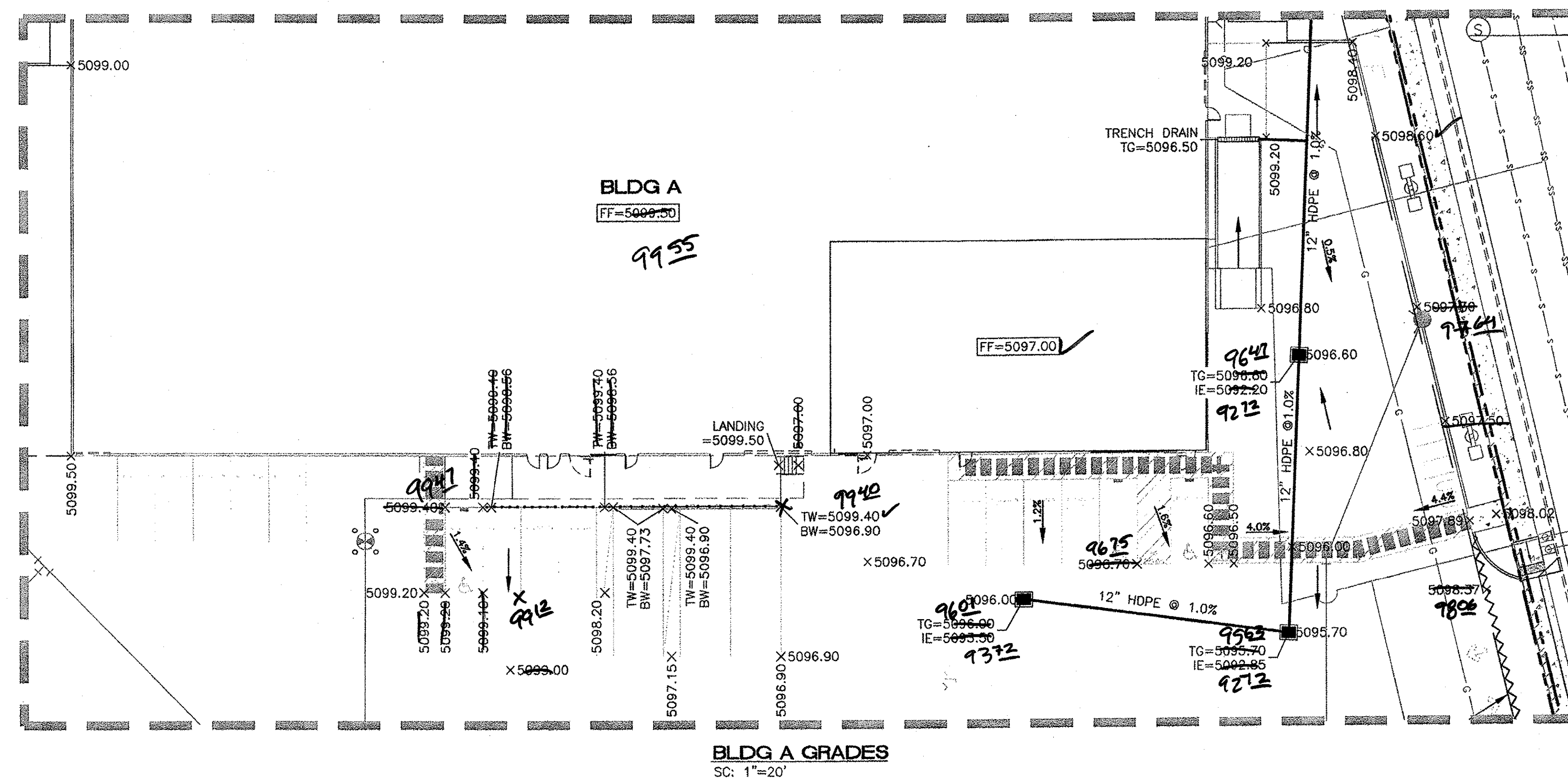
ALL EXISTING UTILITIES SHOWN WERE OBTAINED FROM RESEARCH, AS-BUILTS, SURVEYS OR INFORMATION PROVIDED BY OTHERS. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONDUCT ALL NECESSARY FIELD INVESTIGATIONS PRIOR TO AND INCLUDING ANY EXCAVATION, TO DETERMINE THE ACTUAL LOCATION OF UTILITIES AND OTHER IMPROVEMENTS, PRIOR TO STARTING THE WORK. ANY CHANGES FROM THIS PLAN SHALL BE COORDINATED WITH AND APPROVED BY THE ENGINEER.

- NOTES:**
- ALL EXISTING STORM DRAIN RIM & INVERT INFORMATION ALONG ATRISCO DR NW FROM CITY PROJECT NO. 3558.
  - SEE SHEET GR-2 FOR DETAILED ACCESSIBLE ROUTE.



	<b>WEST BLUFF BUSINESS CENTER</b>	DRAWN BY DY
	<b>GRADING AND DRAINAGE PLAN</b>	DATE 1/30/17
	<b>TERRA WEST, LLC</b> 5571 MIDWAY PARK PLACE NE ALBUQUERQUE, NM 87109 (505) 858-3100 www.tierrawestllc.com	2016061-GRB
		SHEET # <b>GR-1</b>
RONALD R. BOHANNAN P.E. #7868		JOB # 2016061





0.87' WATER BLOCK

5% 2% 6% ATRISCO

SW PER ADA 4' 6'

**SECTION A-A**













SC: 1"=10'

- ### **EROSION CONTROL NOTES:**
1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.
  2. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RUN-OFF ON SITE DURING CONSTRUCTION.
  3. CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY.
  4. REPAIR OF DAMAGED FACILITIES AND CLEANUP OF SEDIMENT ACCUMULATIONS ON ADJACENT PROPERTIES AND IN PUBLIC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.
  5. ALL EXPOSED EARTH SURFACES MUST BE PROTECTED FROM WIND AND WATER EROSION PRIOR TO FINAL (CITY) ACCEPTANCE OF ANY PROJECT.

**CAUTION**

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### LEGEND

- |   |                        |
|---|------------------------|
|  | CURB & GUTTER          |
|  | BOUNDARY LINE          |
|  | EASEMENT               |
|  | CENTERLINE             |
|  | BUILDING               |
|  | SIDEWALK               |
|  | SPOT ELEVATION         |
|  | FLOW ARROW             |
|  | EXISTING CURB & GUTTER |
|  | EXISTING BOUNDARY LINE |
|  | ACCESSIBLE ROUTE       |
|  | WATERBLOCK             |

**DRAINAGE CERTIFICATION WITH SURVEY WORK DONE BY PROFESSIONAL SURVEYOR**

I, RON BOHANNAN, NMP# 8788, OF THE FIRM, TIERRA WEST LLC, HEREBY CERTIFY THAT THIS PROJECT HAS BEEN DRAINAGE AND WILL DRAIN IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED 1/30/17 THE RECORD INFORMATION EDITED onto the ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY JOHN STEVEN SANDOVAL, NMP# 87301, OF THE FIRM, CONSTRUCTION SURVEYING SERVICES INC.

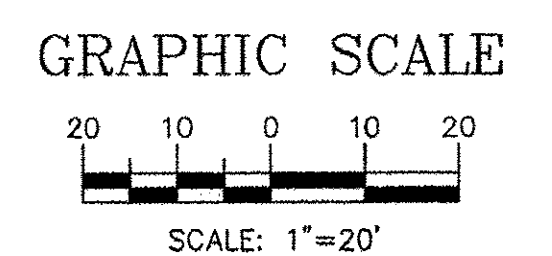
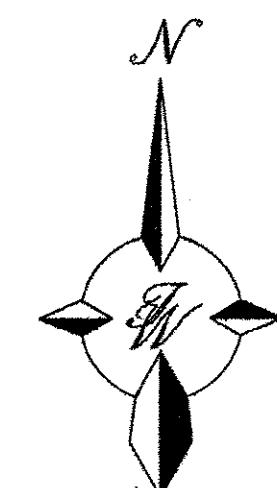
I FURTHER CERTIFY THAT I HAVE PERSONALLY VISITED THE PROJECT SITE ON 4/11/18 AND HAVE DETERMINED BY VISUAL INSPECTION THAT THE SURVEY DATA PROVIDED IS REPRESENTATIVE OF ACTUAL SITE CONDITIONS AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR PERMANENT CERTIFICATE OF OCCUPANCY.



EXCEPTIONS:  
NONE TAKEN

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RONALD R. BOHANNAN, NMPE # 7868

DATE \_\_\_\_\_



<p>ENGINEER'S SEAL</p>	<p><b>WEST BLUFF BUSINESS CENTER</b></p>	<p>DRAWN BY DY</p>
	<p><b>GRADING AND DRAINAGE PLAN</b></p>	<p>DATE 1/25/17</p>
<p>RONALD R. BOHANNAN P.E. #7868</p>	<p> <b><i>TERRA WEST, LLC</i></b> 5571 MIDWAY PARK PLACE NE ALBUQUERQUE, NM 87109 (505) 856-3100 www.tierrowestllc.com</p>	<p>SHEET # <b>GR-2</b></p>
		<p>JOB # 2016061</p>



Bill of Materials

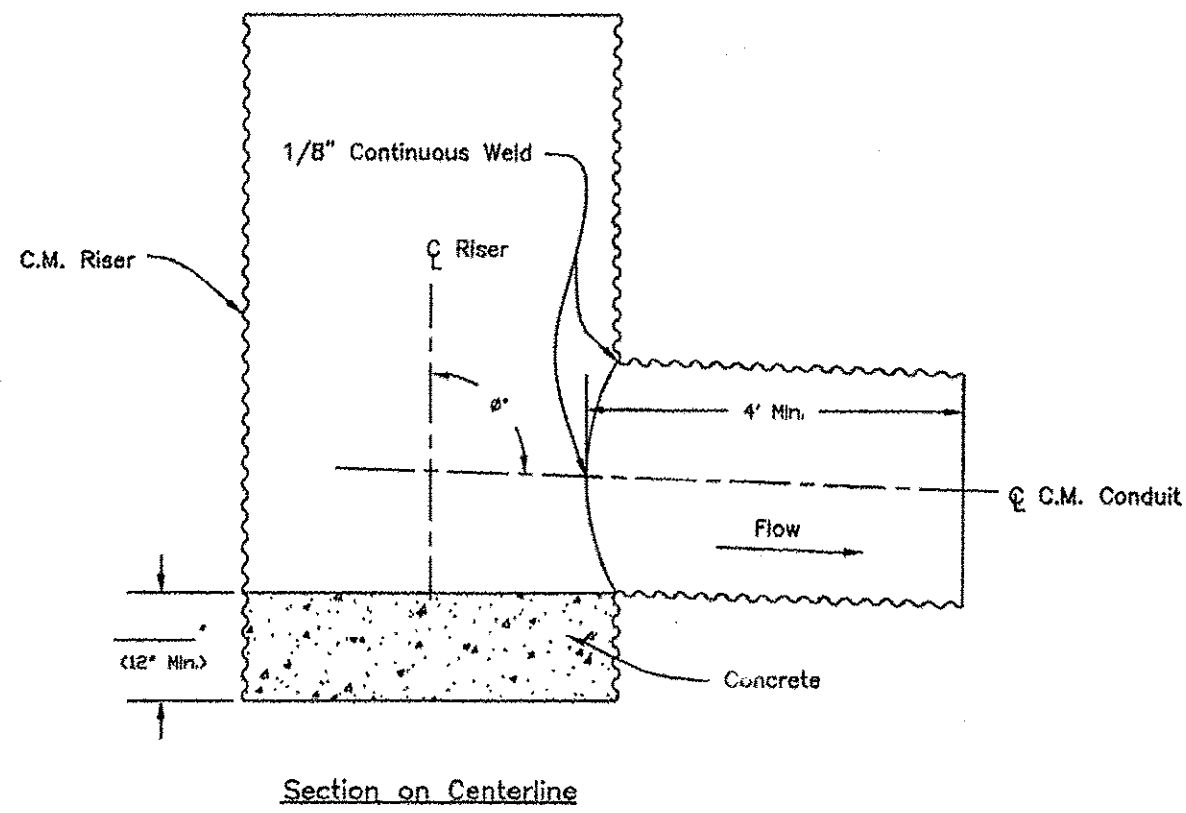
C.M. Riser \_\_\_\_\_ Diam., \_\_\_\_\_ Lin. Ft., Metal thickness = \_\_\_\_\_" ( \_\_\_\_\_ Gage)

C.M. Conduit \_\_\_\_\_ Diam., \_\_\_\_\_ Lin. Ft., Metal thickness = \_\_\_\_\_" ( \_\_\_\_\_ Gage)

Angle = \_\_\_\_\_ Degrees

Volume of Concrete = \_\_\_\_\_ Cu. Yds.

Concrete Table	
Riser Diameter (Inches)	Volume of Concrete (Cu. Yds./Inch)
18	.0055
21	.0074
24	.0097
30	.0152
36	.0218



- Notes:
- The maximum diameter of the C.M. riser shall be 36".
  - The maximum height of the C.M. riser measured from the top of the riser to the invert of the C.M. conduit shall be 13 feet.

USDA  
United States  
Department of  
Agriculture  
Natural Resources  
Conservation Service

C.M. RISER DETAILS  
(ROUND CONCRETE BASE)

CLIENT: ###  
COUNTY: ###

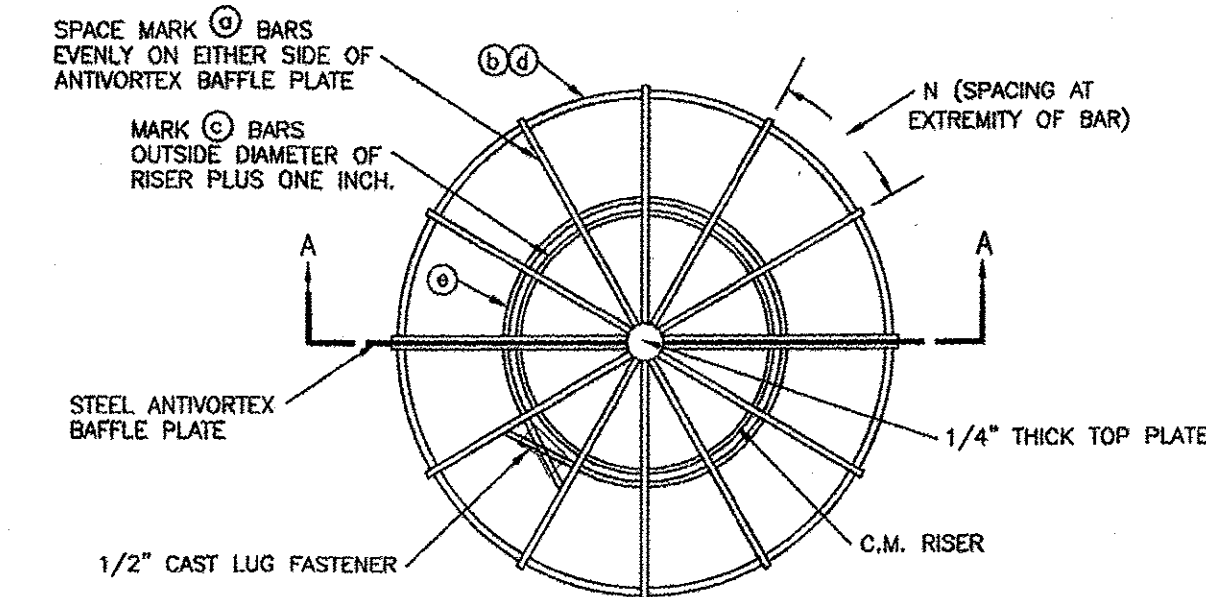
Designed: ### Date: ###  
File Name: W-261  
Drawn: ### Date: 07/14  
Checked: ###  
Approved: ###  
Sheet XX of ###

USDA  
United States  
Department of  
Agriculture  
Natural Resources  
Conservation Service

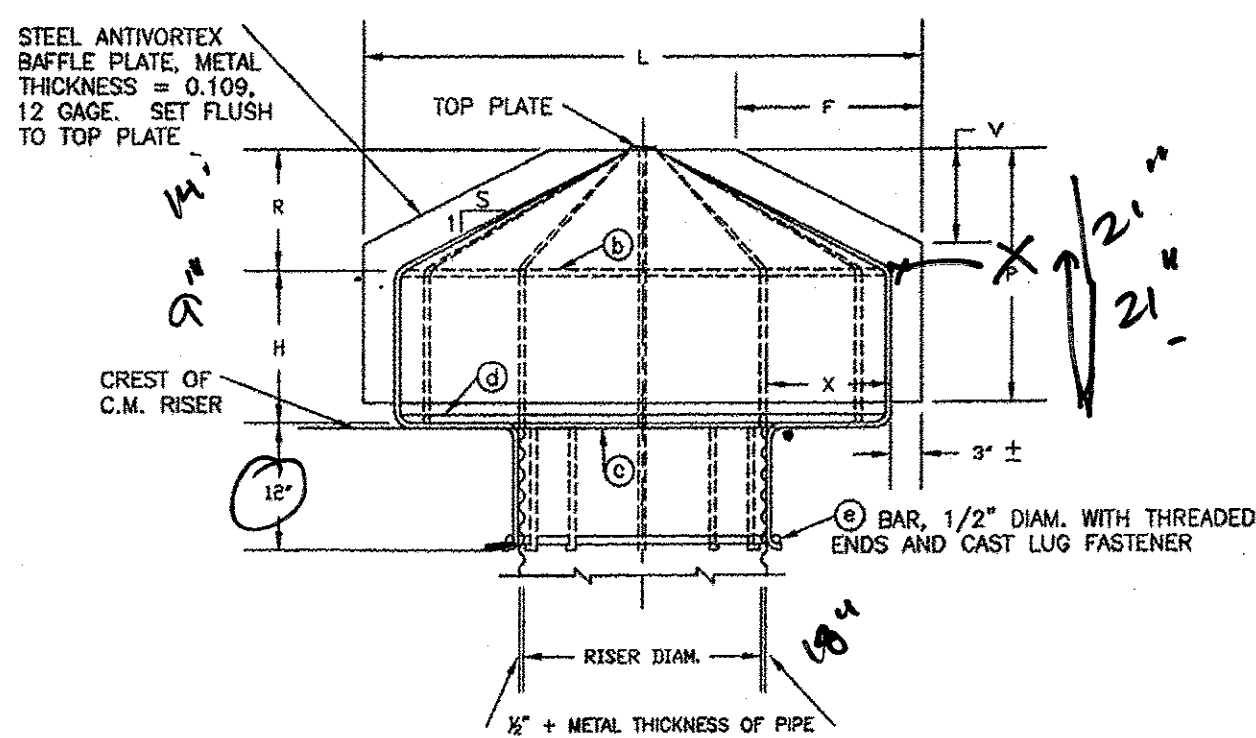
CONICAL TRASH RACK AND  
BAFFLE PLATE FOR 18" TO 36"  
DIAM. C.M. RISERS

CLIENT: ###  
COUNTY: ###

Designed: ### Date: ###  
File Name: W-275  
Drawn: ### Date: 07/14  
Checked: ###  
Approved: ###  
Sheet XX of ###



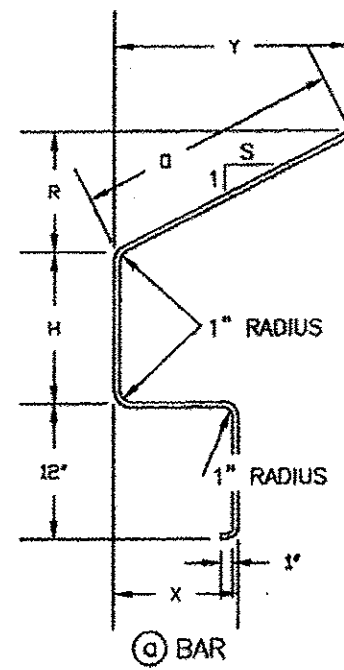
PLAN VIEW



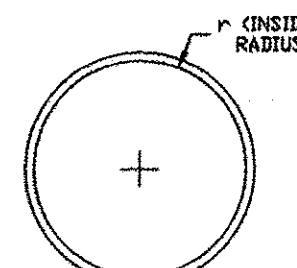
SECTION A-A

ALL BARS FORMING CONICAL TRASH  
RACK ARE MARK (C) BARS, UNLESS  
OTHERWISE NOTED.

- NOTES:
- WELD 4 MARK (C) BARS TO BAFFLE PLATE AND TO TOP PLATE. WELD MARK (C) AND MARK (D) BARS TO 4 MARK (C) BARS. WELD MARK (D) BAR TO MARK (C) BARS. WELD REMAINING MARK (C) BARS TO MARK (D), MARK (C), AND MARK (D) BARS AND TOP PLATE.
  - THE TRASH RACK AND ANTIVORTEX BAFFLE PLATE, MAY BE FABRICATED AS A UNIT, OR TRASH RACK MAY BE FABRICATED IN IDENTICAL HALVES AND ATTACHED TO BAFFLE PLATE WITH 1/2" DIAM. U BOLTS SPACED APPROXIMATELY 12 INCHES CENTER TO CENTER ALONG THE VERTICAL AND INCLINED SECTIONS OF THE MARK (C) BARS NEXT TO THE PLATE.
  - ALL BARS ARE SMOOTH ROUND BARS.
  - COAT WITH A RUST INHIBITIVE PAINT.

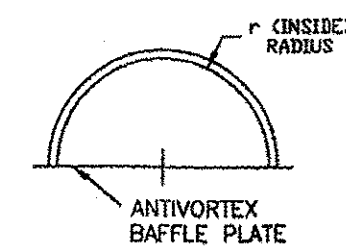


(C) BAR

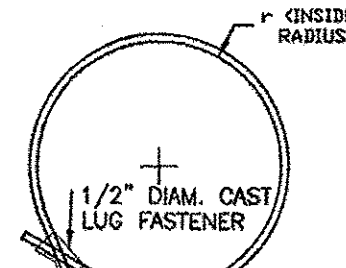


(C) AND (D) BARS

BENDING DIAGRAMS



(D) BAR



(D) BAR

TABLE OF DIMENSIONS AND QUANTITIES												
(D) BARS 5/8" DIAMETER											ANTIVORTEX BAFFLE PLATE	
H	R	X	Y	S	O	TOTAL	NO.	N	L	P	F	V
INCHES	INCHES	INCHES	INCHES	INCHES	INCHES	LENGTH	REQ'D	INCHES	INCHES	INCHES	INCHES	INCHES
18" DIAMETER CORRUGATED METAL RISER												
9	14-1/8	6	14-1/8	20	4"	10	11-7/16	3'	21	8	8	
21" DIAMETER CORRUGATED METAL RISER												
12	9-1/4	9	16-1/2	2	20-5/8	4' 6-5/8"	12	12-3/8	4'	18	12	6
24" DIAMETER CORRUGATED METAL RISER												
15	11-3/8	12	22-3/4	2	25-3/8	5' 5-3/8"	12	14-13/16	4'-6"	24	18	9
30" DIAMETER CORRUGATED METAL RISER												
18	9-1/2	15	28-1/2	3	30	6' 4"	14	15-13/16	6'	24	21	7
36" DIAMETER CORRUGATED METAL RISER												
21	12-1/2	21	37-5/8	3	39-1/2	7'-10-1/2"	16	17-5/16	7'-6"	30	30	10

TABLE OF DIMENSIONS AND QUANTITIES												
(C) BARS 5/8" DIAMETER												
NO.	r	LENGTH	NO.	r	LENGTH	NO.	r	LENGTH	NO.	r	LENGTH	DIAM.
REQ'D	INCHES	INCHES	REQ'D	INCHES	INCHES	REQ'D	INCHES	INCHES	REQ'D	INCHES	INCHES	INCHES
18" DIAMETER CORRUGATED METAL RISER												
2	14-5/16	48	1	10	62-10	1	14-5/16	92	1	10-1/4	73	3
21" DIAMETER CORRUGATED METAL RISER												
2	18-13/16	60	1	11-1/2	72-1/4	1	18-13/16	120	1	11-3/4	82-1/2	3-1/2
24" DIAMETER CORRUGATED METAL RISER												
2	23-5/16	74	1	13	81-8	1	23-5/16	148	1	13-1/4	91-1/2	3-1/2
30" DIAMETER CORRUGATED METAL RISER												
2	29-5/16	93	1	16	100-1/2	1	29-5/16	186	1	16-1/4	111	4
36" DIAMETER CORRUGATED METAL RISER												
2	38-3/8	121-1/2	1	19	119-5	1	38-3/8	243	1	19-1/4	129	4

DRAINAGE CERTIFICATION WITH SURVEY WORK DONE BY PROFESSIONAL SURVEYOR

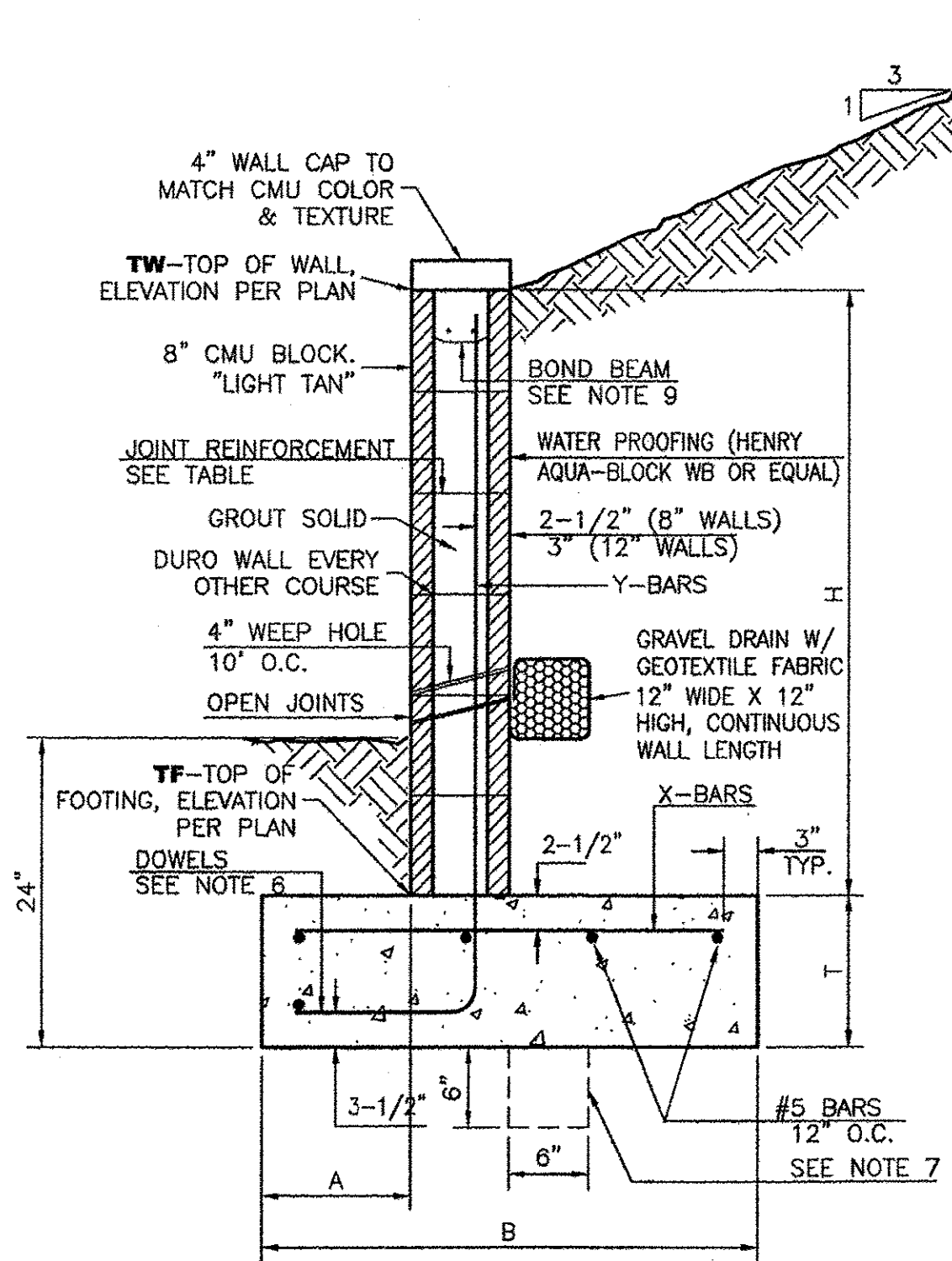
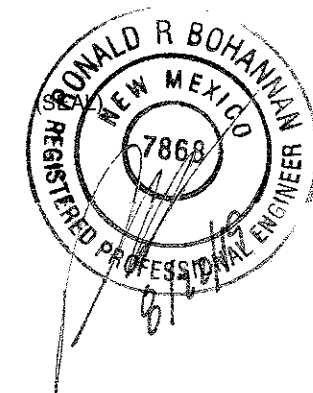
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EXCEPTIONS:  
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RONALD R. BOHANNAN, NMPE # 7868

DATE



RETAINING WALL DETAIL  
NTS

8 INCH REINFORCED CONCRETE MASONRY WALL

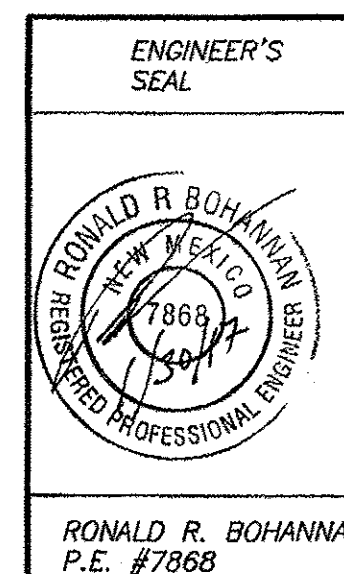
H	A	B	T	Y-BARS	X-BARS
ft.-in.	in.	ft.-in.	in.		
2'-0"	8"	2'-0"	9"	#4 @32" O.C.	#4 @24" O.C.
2'-8"	8"	2'-0"	9"	#4 @32" O.C.	#4 @24" O.C.
3'-4"	8"	2'-4"	9"	#4 @32" O.C.	#4 @24" O.C.
4'-0"	10"	2'-8"	9"	#4 @32" O.C.	#4 @24" O.C.
4'-8"	12"	3'-4"	10"	#5 @32" O.C.	#4 @18" O.C.
5'-4"	14"	3'-10"	10"	#6 @16" O.C.	#4 @18" O.C.
6'-0"	16"	4'-8"	12"	#6 @8" O.C.	#4 @12" O.C.

12 INCH REINFORCED CONCRETE MASONRY WALL

H	A	B	T	Y-BARS	X-BARS
ft.-in.	in.	ft.-in.	in.		
5'-4"	14"	3'-8"	10"	#6 @18" O.C.	#4 @24" O.C.
6'-0"	15"	4'-2"	12"	#4 @16" O.C.	#4 @18" O.C.
6'-8"	16"	4'-6"	12"	#6 @24" O.C.	#5 @18" O.C.
7'-4"	18"	4'-10"	12"	#6 @16" O.C.	#5 @18" O.C.
8'-0"	20"	5'-4"	12"	#7 @18" O.C.	#6 @12" O.C.
8'-8"	20"	5'-8"	12"	#7 @16" O.C.	#6 @12" O.C.

GENERAL NOTES:

- ALL CONCRETE IS TO BE 4000 PSI @ 28 DAYS.
- MINIMUM COMPACTION UNDER FOOTINGS IS TO BE 95% PER ASTM. D 1557 FOR A DEPTH OF 12" MOISTURE CONTENT IS TO BE  $\pm$  2.0%.
- BACK FILL AGAINST WALLS IS TO BE HAND-PLACED AND COMPACTED.
- ALL BARS ARE TO BE GRADE 60, ASTM 615.
- TRUSS TYPE DUR-O-WALL EVERY OTHER COURSE.
- DOWELS SHALL BE AT LEAST EQUAL IN SIZE AND SPACING TO V-BARS, SHALL PROJECT A MINIMUM OF 30 BAR DIA. INTO THE FILLED BLOCK CORES, AND SHALL EXTEND TO THE TOE OF THE FOOTING.
- PROVIDE KEY FOR 8" AND 12" WALLS WHERE H EXCEEDS 6'-0"
- USE EITHER EXPANSION JOINTS ON 20' CENTERS OR PILASTERS EVERY 16'.
- BOND BEAM, 1-#4 BARS FOR WALLS UNDER 3'-4", 2-#4 BARS FOR WALLS UNDER 5'-4", 2-#5 BARS FOR WALLS OVER 5'-4".



WEST BLUFF  
BUSINESS CENTER  
GRADING AND  
DRAINAGE DETAILS

TIERRA WEST, LLC  
5571 MIDWAY PARK PLACE NE  
ALBUQUERQUE, NM 87109  
(505) 858-3100  
www.tierrawestllc.com

DRAWN BY  
DY  
DATE  
1/30/17  
2016061-GRB  
SHEET #  
GR-3  
JOB #  
2016061