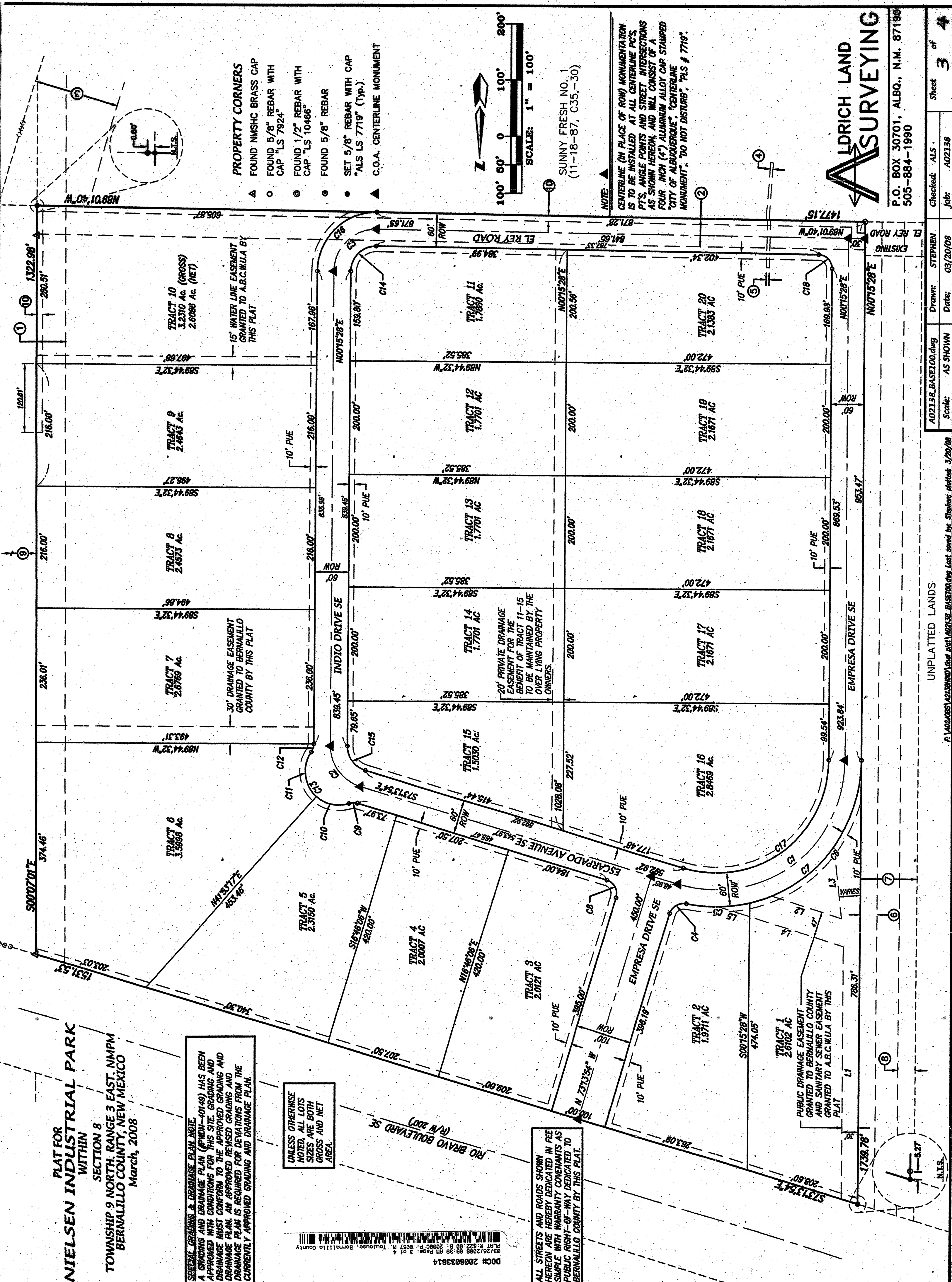


PLAT FOR
NIELSEN INDUSTRIAL PARK
WITHIN
SECTION 8
TOWNSHIP 9 NORTH, RANGE 3 EAST, NMPM
BERNALILLO COUNTY, NEW MEXICO
March, 2008

SPECIAL GRADING & DRAINAGE PLAN NOTE
A GRADING AND DRAINAGE PLAN (PWN-40148) HAS BEEN
APPROVED WITH CONDITIONS FOR THIS SITE. GRADING AND
DRAINAGE MUST CONFORM TO THE APPROVED GRADING AND
DRAINAGE PLAN. ANY DEVIATION FROM THE APPROVED
DRAINAGE PLAN IS PROHIBITED. ANY DEVIATION FROM THE
CURRENTLY APPROVED GRADING AND DRAINAGE PLAN.

UNLESS OTHERWISE
NOTED,
ALL DIMENSIONS
ARE IN FEET
AND INCHES
GROSS AND NET
AREA

ALL STREETS AND ROADS SHOWN
HEREIN ARE HEREBY DEDICATED IN FEE
SIMPLE WITH WARRANTY COVENANTS AS
STATED IN THE PLAT. THE DEDICATION IS
TO BE MAINTAINED BY THE
BERNALILLO COUNTY BY THIS PLAT.



PUBLIC UTILITY EASEMENTS shown on this plat are
granted for the common and joint use of:

- The PNM Electric Services Division for the installation,
maintenance and service of overhead and underground
electrical lines, transformers, poles and any other
equipment, fixtures, structures and related facilities
reasonably necessary to provide electrical services.
- The PNM Gas Services Division for installation,
maintenance and service of overhead and underground
gas lines, valves, regulators, and related facilities
reasonably necessary to provide natural gas.
- Quest for installation, maintenance and service of all
buried and aerial communication lines and other related
equipment and facilities reasonably necessary to provide
communication services, including but not limited to
above ground pedestals and closures.
- Comcast cable for installation, maintenance and service
of all related equipment and facilities reasonably
necessary to provide cable television services. Included is the right to build, rebuild, construct,
reconstruct, locate, relocate, change, remove, modify,

renew, operate and maintain facilities for the purposes
described above, together with free access to, from and
over said easement, including sufficient working area
space for electric transformers, with the right and privilege
to trim and remove trees, shrubs or bushes which
interfere with the purposes set forth herein. No building,
sign, pool (above ground or subsurface), hot tub,
concrete or wood pool decking, or other structure shall be
erected or constructed on said easements, nor shall any
well be drilled or operated thereon. Property owners
shall be solely responsible for correcting any violations of
National Electrical Safety Code caused by construction of
poles, equipment or any structure adjacent to within or
near easements shown on this plat.

In approving this plat, the utility companies did not
conduct a Title Search of the properties shown herein.
Consequently, the utility companies do not waive or
release any easement or easement rights which may
have been granted by prior plat, replat or other documents
and which are not shown on this plat. Easements for
electric transformers, switches, poles, and related facilities
shall extend ten feet (10') in front of transformer/switchgear
doors and five feet (5') on each side.

CURVE TABLE				
CURVE	LENGTH	RADIUS	DELTA	TAUGENT CH-BEARING-CH-DIST
C1	427.55	200.00	106.30.38"	308.07 S83.30.47"W 368.60
C2	86.20	73.00	73.00.29.22"	55.90 N39.29.13"E 68.74
C3	174.75	73.00	90.42.53"	75.94 N45.35.54"E 106.73
C4	36.99	23.00	84.45.22"	22.81 N59.05.17"E 33.70
C5	111.67	280.00	24.35.39"	56.71 S89.13.17"W 110.82
C6	347.86	280.00	76.39.27"	205.55 S39.33.15"W 322.49
C7	458.53	280.00	107.16.00"	316.50 S50.53.28"W 402.01
C8	39.27	23.00	90.00.00"	25.00 S90.13.54"E 35.36
C9	15.13	23.00	34.40.36"	7.81 N89.25.46"E 14.90
C10	62.62	60.00	59.47.47"	34.50 N78.00.37"W 59.82
C11	66.97	60.00	83.02.48"	53.13 N05.35.20"W 78.55
C12	15.13	23.00	34.40.36"	7.81 S73.25.46"W 14.90
C13	148.59	60.00	148.50.39"	178.51 N39.29.13"W 113.75
C14	71.45	45.00	60.59.20"	45.77 N45.29.07"E 64.18
C15	57.72	45.00	23.29.20"	33.60 N39.29.13"E 53.24
C16	166.24	105.00	80.42.53"	105.32 N45.35.54"E 148.92
C17	371.79	200.00	106.30.38"	207.28 S83.30.47"W 320.52
C18	35.95	23.00	84.45.22"	24.60 S44.23.06"E 35.13

LINE TABLE		BEARING	LENGTH
LINE			
L1		N0715.29"E	446.85
L2		N7220.06"W	132.57
L3		S0624.14"E	128.67
L4		S7220.06"E	178.16
L5		S7220.06"E	57.88

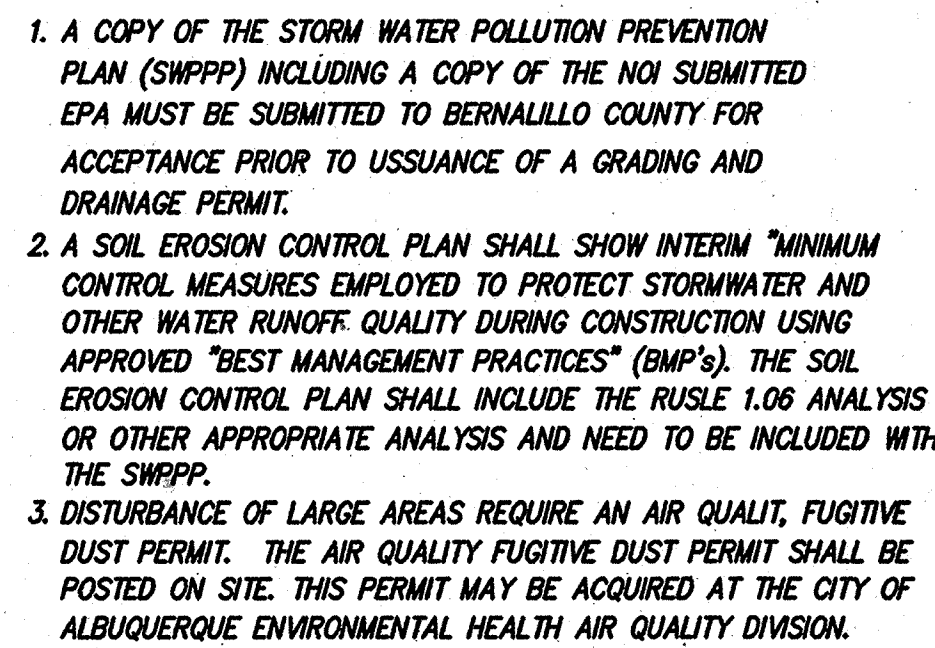
"Drainage Easement Dedication - Dedication to the County of Bernalillo, its
successors and assigns, of the lands, right-of-way, and easements designated
herein as "Drainage Easement" is with full and free consent and in accordance
with the desire of the undersigned owner(s), their successors, assigns,
transferees, heirs, and devisees. This dedication is for drainage, flood control,
conveyance of storm water, and the construction, operation and maintenance of,
and access to such facilities. Except by the written approval of the County
Engineer, no fence, wall, building or other obstruction may be placed or
maintained in said easements, and there shall be no alterations of the grades or
contours in said easements. The granting of easements, drainage channels, or facilities
County of Bernalillo to maintain natural arroyos, drainage channels, or facilities
unless otherwise agreed to in writing by the County. The granting of this
easement shall not require the protection of property lying outside of the
easements granted. Safe locations for structures built on lands adjacent to the
easements dedicated herein may be substantially outside the area described by
the easements. Subject to the rules, regulations, and ordinances of Bernalillo
County, any portion of any lands, right-of-way, or easements dedicated or
granted herein may be vacated to the extent said portion is declared
unnecessary for flood control and drainage by the County Engineer of Bernalillo
County."

ALDRICH LAND
SURVEYING
P.O. BOX 30701, ALBU., N.M. 87190
505-884-1990

DOCH 2008033614
03/20/2008 09:39 AM Page 1 of 4
F:\14022005\140230000 (and plat)\140230000.dwg (last saved by: Stephen Phillips, 3/20/08)

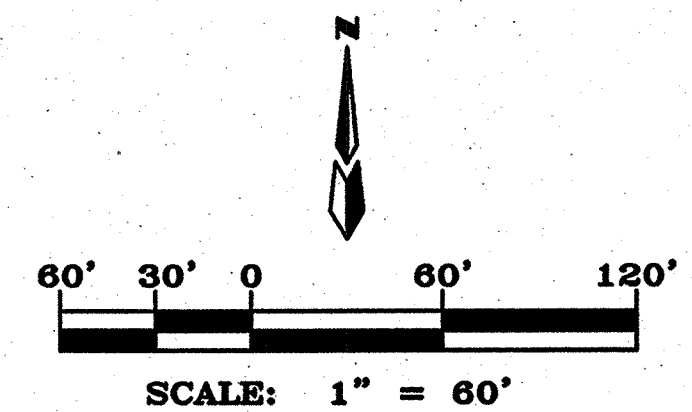
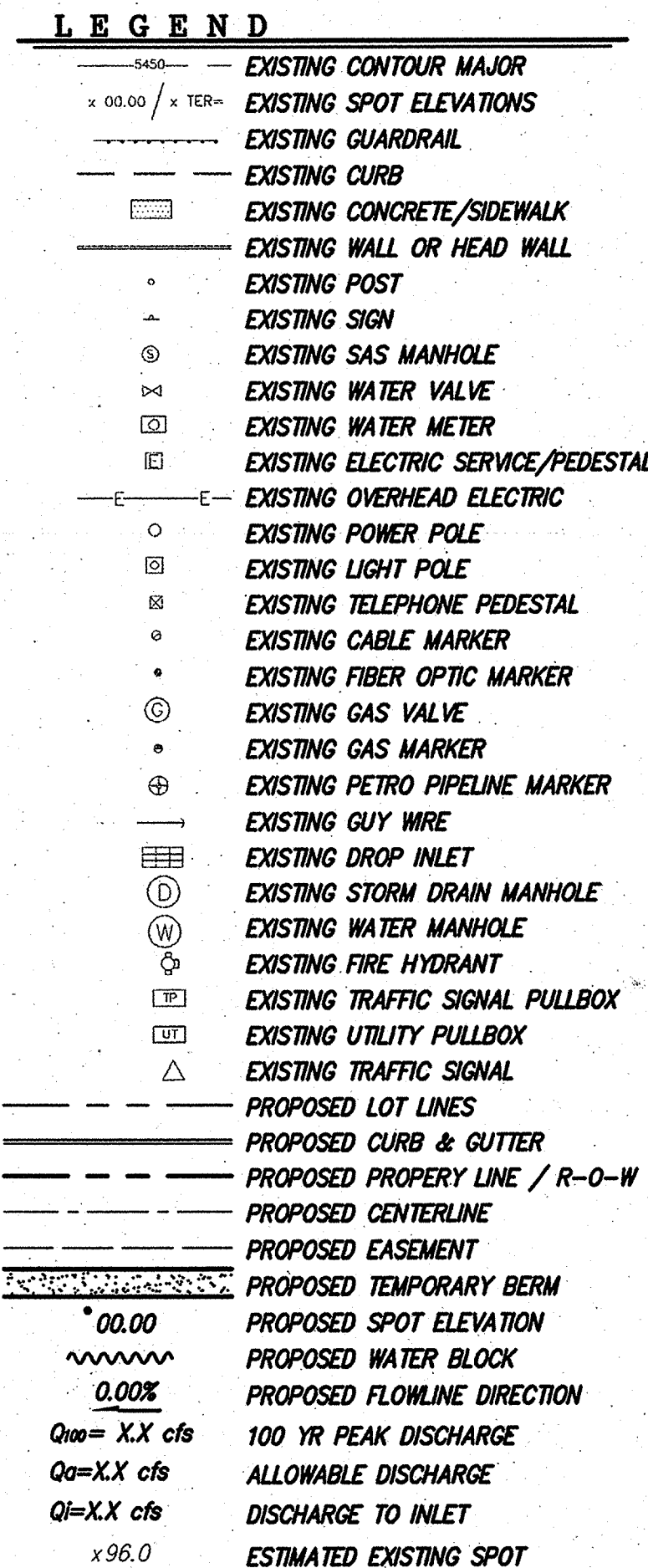
Drawn: RICHARD
Checked: ALS
Job: A02138
Date: 03/20/08
Sheet: 4 of 4

Scale: as shown



LEGAL DESCRIPTION

A Tract of land situate in Section 8, Township 9 North, Range 3 East, New Mexico Principal Meridian, Bernalillo County, New Mexico, being a portion of TRACT "AA" LANDS OF SCHWARTZMAN PACKING COMPANY.



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

COUNTY OF BERNALILLO
PUBLIC WORKS DEPARTMENT

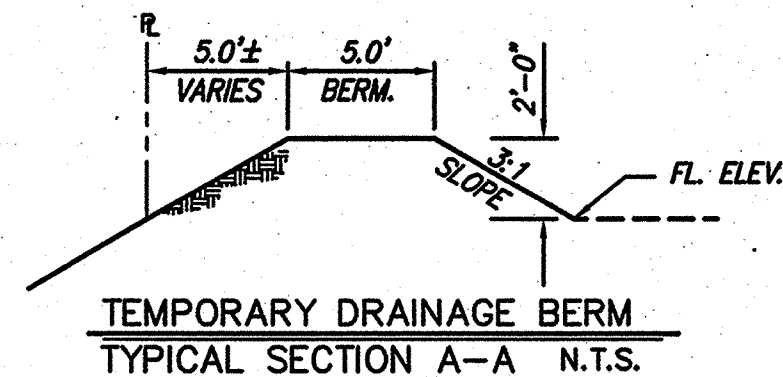
TITLE: **NIELSEN INDUSTRIAL PARK
GRADING & DRAINAGE PLAN**

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR.	MO./DAY/YR.
BERNALILLO COUNTY PERMIT NO. 40149		ZONE MAP NO. P-14-Z	SHEET 4 OF 29	

SEE SHEET 2 OF 4

A2138NIND/GRADE N DRAIN/A2138-BASE_GD4.dwg 11-06-07 ACH DER TAS SLV DLH RDQ

—S450—	EXISTING CONTOUR MAJOR	○	EXISTING CABLE MARKER	—+—	PROPOSED LOT LINES
—S450S—	EXISTING SPOT ELEVATIONS	⊙	EXISTING FIBER OPTIC MARKER	=====	PROPOSED CURB & GUTTER
=====	EXISTING GUARDRAIL	⊙	EXISTING GAS VALVE	=====	PROPOSED PROPERTY LINE / R/W
=====	EXISTING CURB	⊕	EXISTING GAS MARKER	=====	PROPOSED CENTERLINE
[HATCH]	EXISTING CONCRETE/SIDEWALK	⊕	EXISTING PETRO PIPELINE MARKER	=====	PROPOSED EASEMENT
=====	EXISTING WALL OR HEAD WALL	→	EXISTING GUY WIRE	[HATCH]	PROPOSED BERM
○	EXISTING POST	[HATCH]	EXISTING DROP INLET	0.00	PROPOSED SPOT ELEVATION
+	EXISTING SIGN	(D)	EXISTING STORM DRAIN MANHOLE	~~~~~	PROPOSED WATER BLOCK
⊙	EXISTING SAS MANHOLE	(W)	EXISTING WATER MANHOLE	0.00%	PROPOSED FLOWLINE DIRECTION
⊙	EXISTING WATER VALVE	(F)	EXISTING FIRE HYDRANT	Q ₁₀₀ =X.X cfs	100 YR PEAK DISCHARGE
[HATCH]	EXISTING WATER METER	[HATCH]	EXISTING TRAFFIC SIGNAL PULLBOX	Q _a =X.X cfs	ALLOWABLE DISCHARGE
[HATCH]	EXISTING ELECTRIC SERVICE/PEDESTAL	(UT)	EXISTING UTILITY PULLBOX	Q _i =X.X cfs	DISCHARGE TO INLET
—E—	EXISTING OVERHEAD ELECTRIC	△	EXISTING TRAFFIC SIGNAL		
○	EXISTING POWER POLE				
[HATCH]	EXISTING LIGHT POLE				
[HATCH]	EXISTING TELEPHONE PEDESTAL				

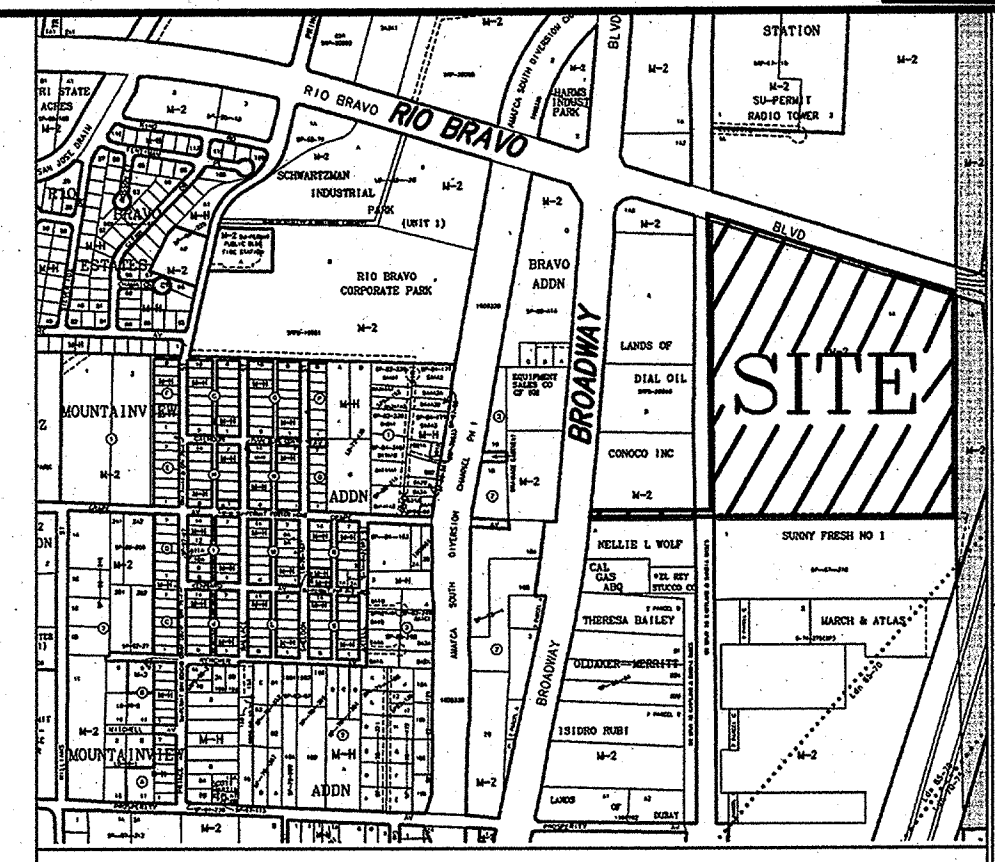


CONSTRUCTION DRAINAGE NOTES:

1. A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) INCLUDING A COPY OF THE NOI SUBMITTED EPA MUST BE SUBMITTED TO BERNALILLO COUNTY FOR ACCEPTANCE PRIOR TO ISSUANCE OF A GRADING AND DRAINAGE PERMIT.
2. A SOIL EROSION CONTROL PLAN SHALL SHOW INTERIM "MINIMUM CONTROL MEASURES EMPLOYED TO PROTECT STORMWATER AND OTHER WATER RUNOFF QUALITY DURING CONSTRUCTION USING APPROVED "BEST MANAGEMENT PRACTICES" (BMP's). THE SOIL EROSION CONTROL PLAN SHALL INCLUDE THE RUSLE 1.08 ANALYSIS OR OTHER APPROPRIATE ANALYSIS AND NEED TO BE INCLUDED WITH THE SWPPP.
3. DISTURBANCE OF LARGE AREAS REQUIRE AN AIR QUALITY, FUGITIVE DUST PERMIT. THE AIR QUALITY FUGITIVE DUST PERMIT SHALL BE POSTED ON SITE. THIS PERMIT MAY BE ACQUIRED AT THE CITY OF ALBUQUERQUE ENVIRONMENTAL HEALTH AIR QUALITY DIVISION.

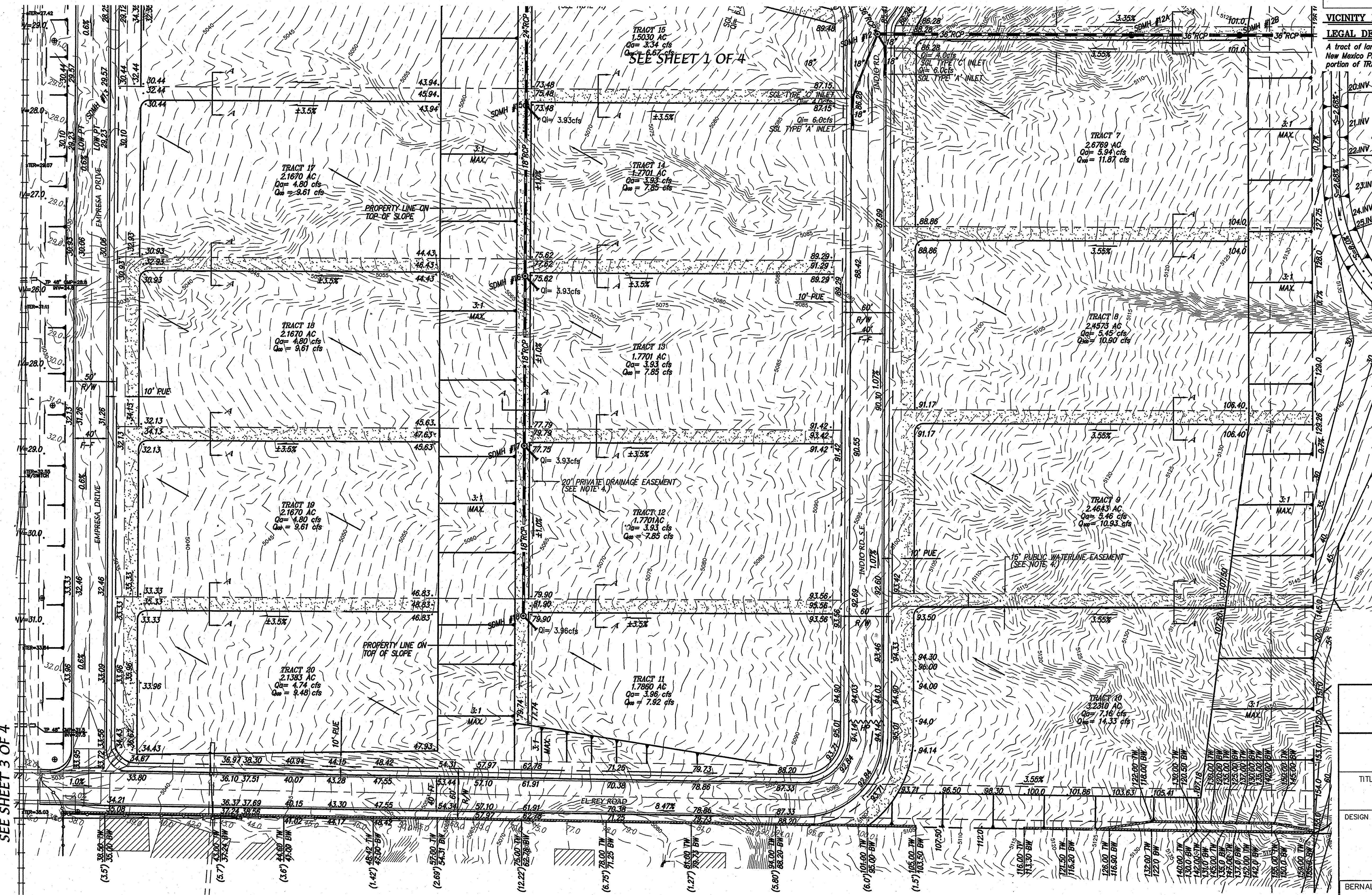
GENERAL DRAINAGE NOTES:

1. RUNOFF FROM EACH TRACT SHALL BE RESTRICTED TO AN ALLOWABLE PEAK DISCHARGE THAT IS HALF OF THE 100 YR. 6 HR STORM EVENT AS SHOWN ON THIS PLAN.
2. EACH TRACT WITHIN NIELSEN IP SHALL BE REQUIRED TO SUBMIT AND RECEIVE APPROVAL FROM THE BERNALLIHO COUNTY PUBLIC WORKS PRIOR TO ANY ONSITE GRADING.
3. AS EACH TRACT DEVELOPS, THE COUNTY MAY REQUIRE THE IMPLEMENTATION OF "BEST MANAGEMENT PRACTICES" FOR STORMWATER POLLUTION CONTROL. REFER TO THE APPROVED DRAINAGE REPORT FOR GUIDELINES ON DESIGN.
4. NO BUILDING SHALL BE ALLOWED WITHIN THE DRAINAGE EASEMENT AND ANY INFRASTRUCTURE WITHIN THE EASEMENT THAT IS DAMAGED OR REMOVED AS A RESULT OF STORM DRAIN SERVICING IS THE RESPONSIBILITY OF THE PROPERTY OWNER.
5. THIS SITE DOES NOT LIE WITHIN THE 100 YEAR FLOOD ZONE.

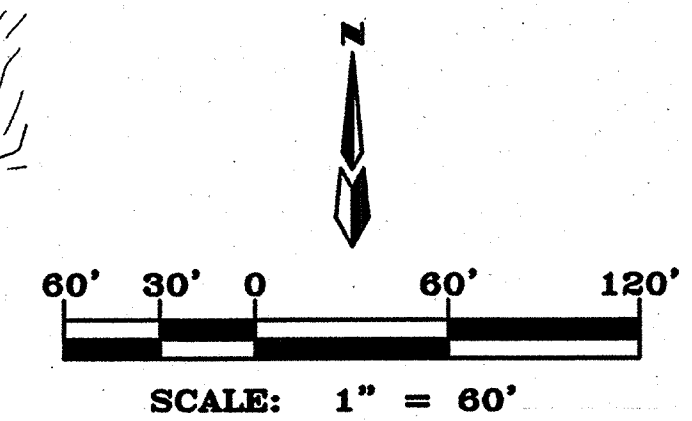


VICINITY MAP

LEGAL DESCRIPTION
A tract of land situate in Section 8, Township 9 North, Range 3 East, New Mexico Principal Meridian, Bernalillo County, New Mexico being a portion of TRACT "AA" LANDS OF SCHWARTZMAN PACKING COMPANY.



SEE SHEET 4 OF 4



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

COUNTY OF BERNALILLO
PUBLIC WORKS DEPARTMENT

TITLE: ***NIELSEN INDUSTRIAL
GRADING & DRAINAGE PLAN***

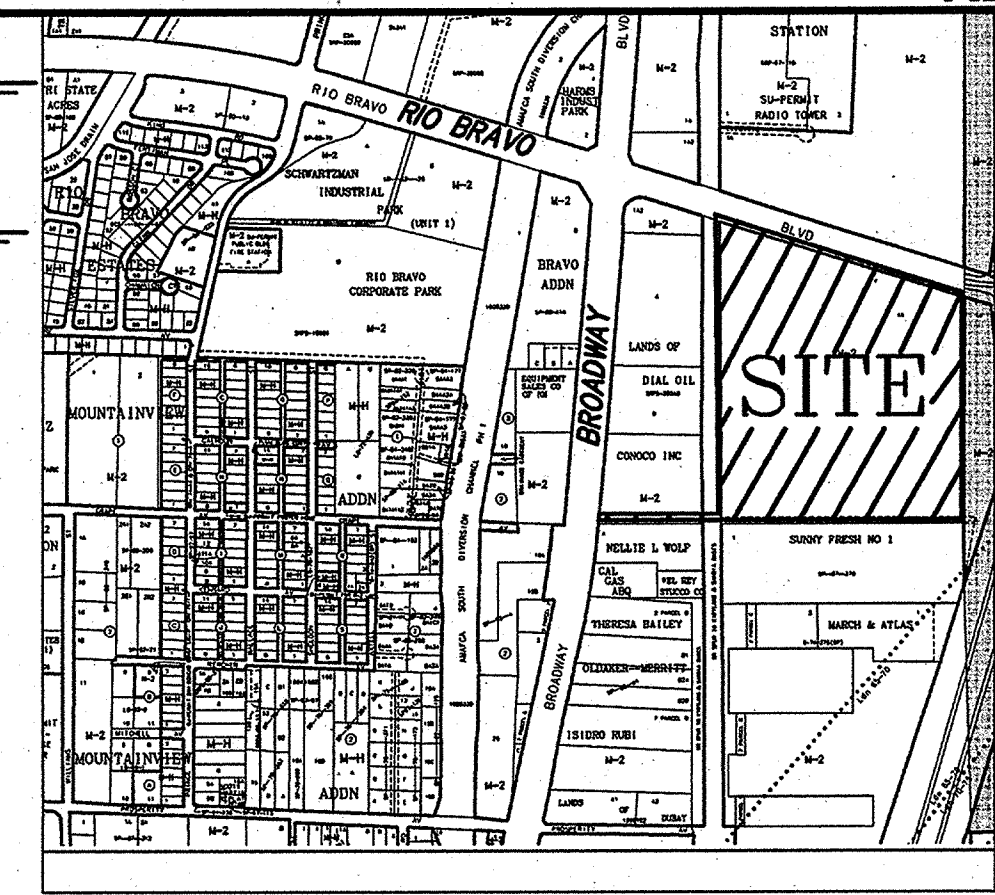
DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR.	MO./DAY/YR.
BERNALILLO COUNTY PERMIT NO. 40149		ZONE MAP NO. P-14-Z	SHEET 5	OF 29

- GENERAL DRAINAGE NOTES:**

REFER TO SHEET 1 OF 4

CONSTRUCTION DRAINAGE NOTES:

REFER TO SHEET 1 OF 4

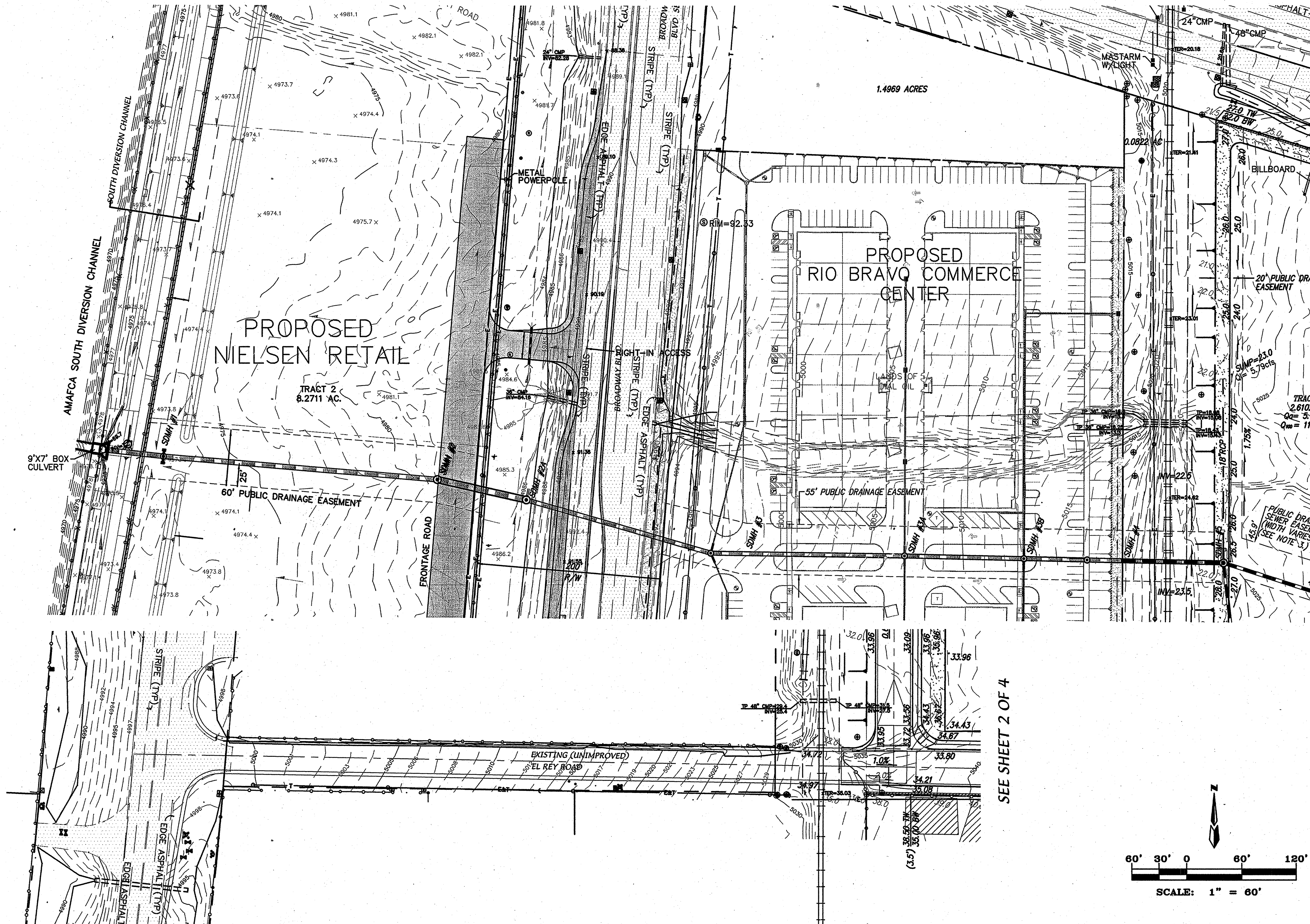


VICINITY MAP

ZONE: P-13-Z

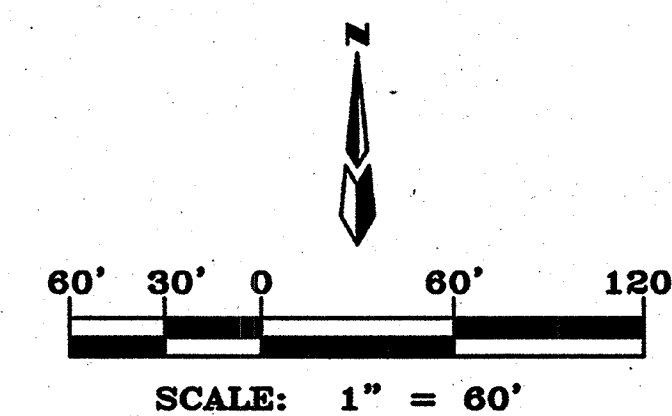
LEGAL DESCRIPTION

A tract of land situate in Section 8, Township 9 North,
Range 3 East, New Mexico Principal Meridian, Bernalillo
County, New Mexico being a portion of TRACT "AA"
LANDS OF SCHWARTZMAN PACKING COMPANY



SEE SHEET 1 OF 4

SEE SHEET 2 OF 4



A2138NIND/GRADE N DRAIN/A2138-BASE_GD5.dwg 8-17-07 ACH DER TAS SLV DLH

ENGINEER'S SEAL		SURVEY INFORMATION		BENCH MARKS		AS BUILT INFORMATION	
NO.	DATE	REMARKS	FIELD NOTES		STATION	CONTRACTOR	DATE
			BY	DATE			
					STATION "2-N14" IS LOCATED 3.9 MILES SOUTH OF DOWNTOWN ALBUQUERQUE. TO REACH STATION FROM INTERSECTION OF BROADWAY BLVD. AND CENTRAL AVE., GO SOUTH ON BROADWAY BLVD. 3.7 MILES TO THE STATION ON THE LEFT. STATION MARK IS A STANDARD ACS 3 1/4" ALUMINUM CAP STAMPED "2-N14". X=381,735.28, Y=1,467,202.41 (NAD 1927) ELEV=4973.259 (MSL029).		
DESIGN							
DESIGNED BY	DLH	DATE	11/04				
DRAWN BY	ACH	DATE	11/04				
CHECKED BY	DMG	DATE	11/04				

dm

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

COUNTY OF BERNALILLO
PUBLIC WORKS DEPARTMENT

TITLE: **NIelsen INDUSTRIAL
GRADING & DRAINAGE PLAN**

DESIGN REVIEW COMMITTEE

CITY ENGINEER APPROVAL

TE

MO./D

DAY/YR

R.	
----	--

MO.

 / DAY

/YR.

10

BERNALILLO COUNTY PERMIT NO.

ZONE MAP NO.	
--------------	--

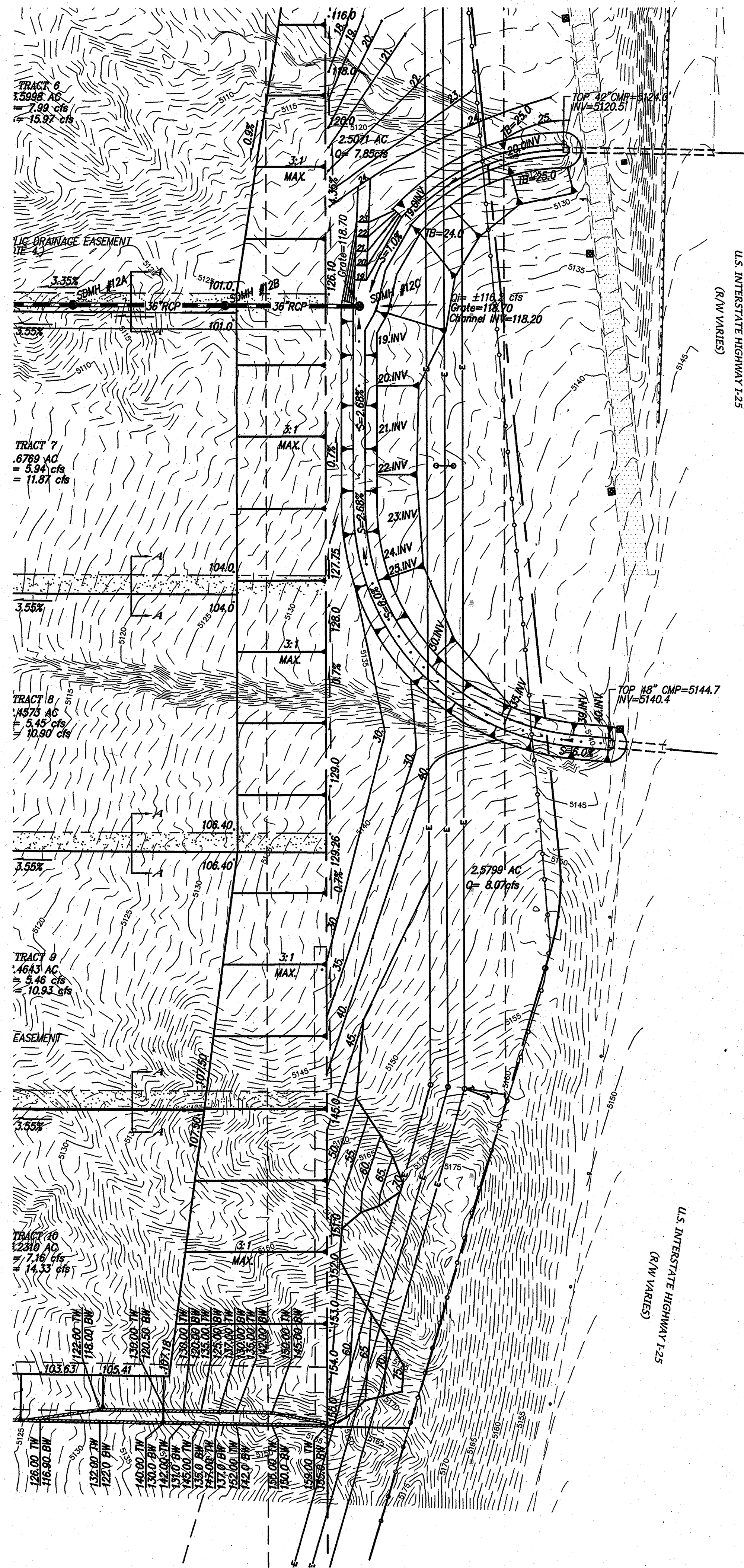
SHEET		OF	
-------	--	----	--

7	
---	--

- | | | | |
|--|------------------------------------|--|---------------------------------|
| | EXISTING CONTOUR MAJOR | | EXISTING GAS MARKER |
| | EXISTING SPOT ELEVATIONS | | EXISTING PETRO PIPELINE MARKER |
| | EXISTING GUARDRAIL | | EXISTING GUY WIRE |
| | EXISTING CURB | | EXISTING DROP INLET |
| | EXISTING CONCRETE/SIDEWALK | | EXISTING STORM DRAIN MANHOLE |
| | EXISTING WALL OR HEAD WALL | | EXISTING WATER MANHOLE |
| | EXISTING POST | | EXISTING FIRE HYDRANT |
| | EXISTING SIGN | | EXISTING TRAFFIC SIGNAL PULLBOX |
| | EXISTING GAS MANHOLE | | EXISTING UTILITY PULLBOX |
| | EXISTING WATER VALVE | | EXISTING TRAFFIC SIGNAL |
| | EXISTING WATER METER | | PROPOSED LOT LINES |
| | EXISTING ELECTRIC SERVICE/PEDESTAL | | PROPOSED CURB & GUTTER |
| | EXISTING OVERHEAD ELECTRIC | | PROPOSED PROPERTY LINE / R-O-W |
| | EXISTING POWER POLE | | PROPOSED CENTERLINE |
| | EXISTING LIGHT POLE | | PROPOSED EASEMENT |
| | EXISTING TELEPHONE PEDESTAL | | PROPOSED BERM |
| | EXISTING CABLE MARKER | | PROPOSED SPOT ELEVATION |
| | EXISTING FIBER OPTIC MARKER | | PROPOSED WATER BLOCK |
| | EXISTING GAS VALVE | | PROPOSED FLOWLINE DIRECTION |

SEE SHEET 2 OF 4

SEE SHEET 1 OF 4

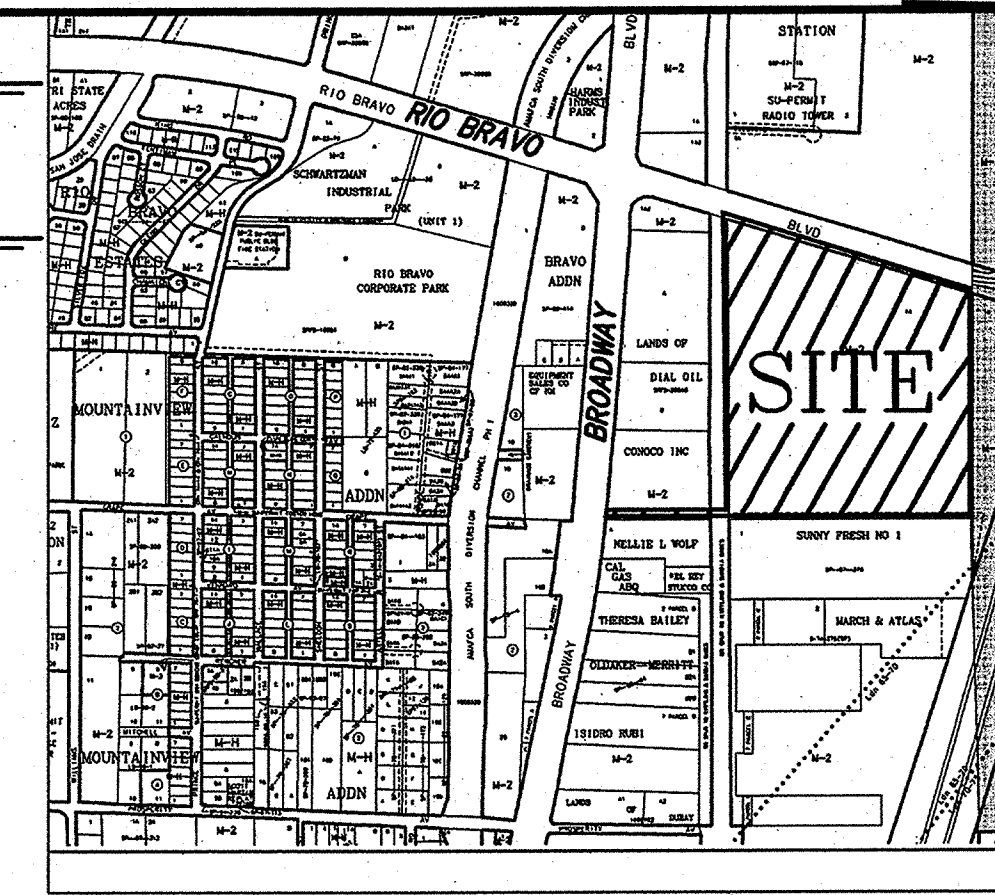


GENERAL DRAINAGE NOTES:

REFER TO SHEET 1 OF 4.

CONSTRUCTION DRAINAGE NOTES:

REFER TO SHEET 1 OF 4.

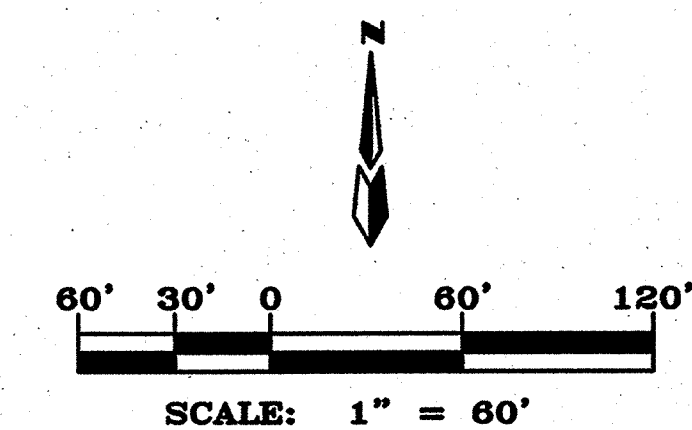


VICINITY MAP

ZONE: P-13-Z

LEGAL DESCRIPTION

*A tract of land situate in Section 8, Township 9 North,
Range 3 East, New Mexico Principal Meridian, Bernalillo
County, New Mexico being a portion of TRACT "AA"
LANDS OF SCHWARTZMAN PACKING COMPANY*

[illegible]

dmc

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

COUNTY OF BERNALILLO
PUBLIC WORKS DEPARTMENT

TITLE:															
NIELSEN INDUSTRIAL GRADING & DRAINAGE PLAN															
DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;">MO./DAY/YR.</td> <td style="width: 50%; text-align: center;">MO./DAY/YR.</td> </tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> </table>	MO./DAY/YR.	MO./DAY/YR.										
MO./DAY/YR.	MO./DAY/YR.														
BERNALILLO COUNTY PERMIT NO.	ZONE MAP NO.	SHEET OF													
40149	P-14-Z	7 29													



NOTES:

1. VALLEY GUTTER AND WHEELCHAIR RAMP NOT PART OF THIS PROJECT (BUILT WITH N.M.D.O.T. RIO BRAVO PLANS). THE PAVEMENT, CROSSWALK AND MEDIAN CURB & GUTTER ARE PART OF THIS PROJECT.
2. THIS SIGN IS PART OF THE APPROVED N.M.D.O.T. PLANS FOR RIO BRAVO BLVD. IMPROVEMENTS. ONLY INSTALL NEW SIGN IF ONE IS NOT CURRENTLY EXISTING.

<i>AS BUILT INFORMATION</i>	
CONTRACTOR	
WORK STARTED BY	Cartesian Surveys Inc.
BY	
ACCEPTANCE BY	
FIELD	
VERIFICATION BY	Cartesian Surveys Inc.
DRAWINGS	
CORRECTED BY	
<i>MICRO-FILM INFORMATION</i>	
RECORDED BY	
NO.	

STATION "2"-N14 IS LOCATED 3.9 MILES SOUTH OF DOWNTOWN ALBUQUERQUE. TO REACH STATION FROM INTERSECTION SECTION OF BROADWAY BLVD. AND CENTRAL AVE., GO SOUTH ON BROADWAY BLVD. 3.7 MILES TO THE STATION ON THE LEFT. STATION MARK IS A STANDARD ACS 3 1/4" ALUMINUM CAP STAMPED "2"-N14. X=361,755.28, Y=1,467,202.41 (NAD 1927) ELEV=4,973.269 (NAD1929)

[illegible][illegible]

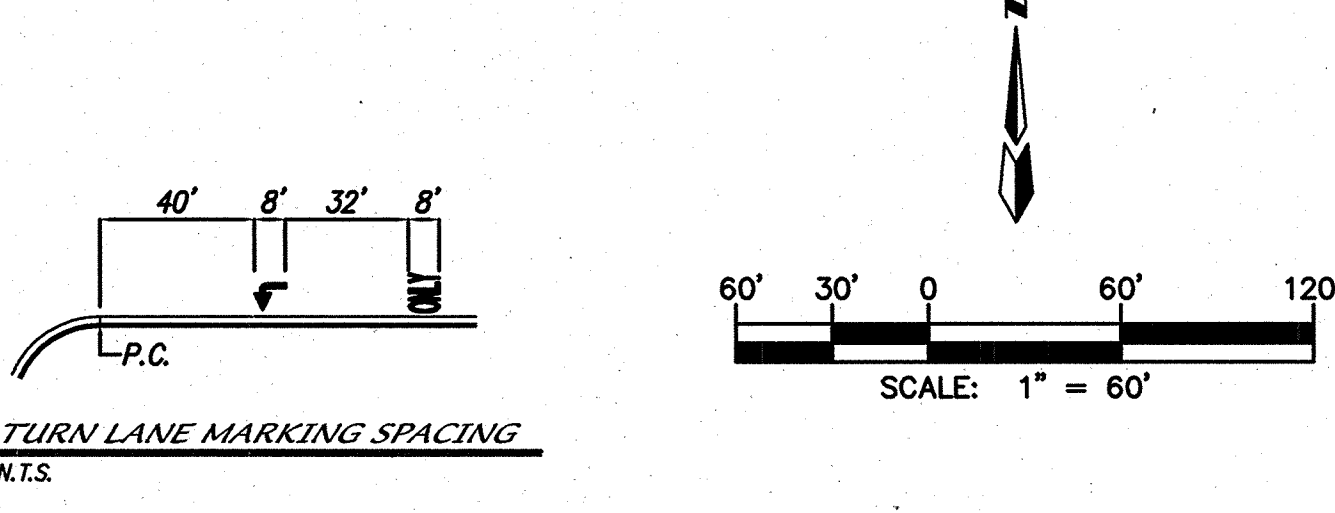
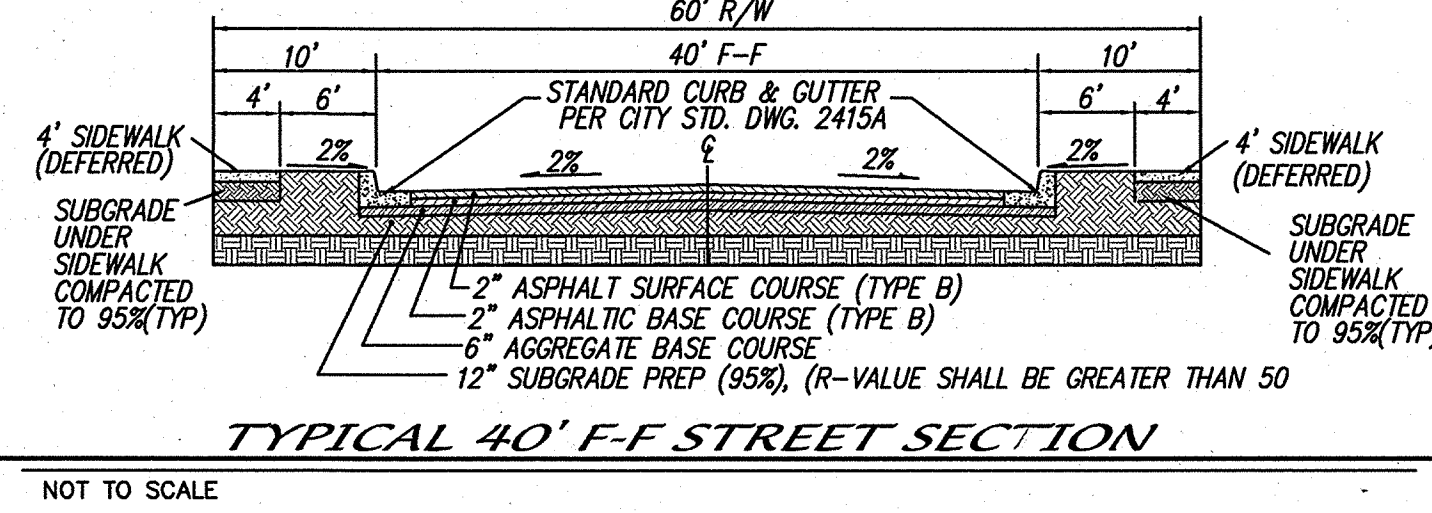
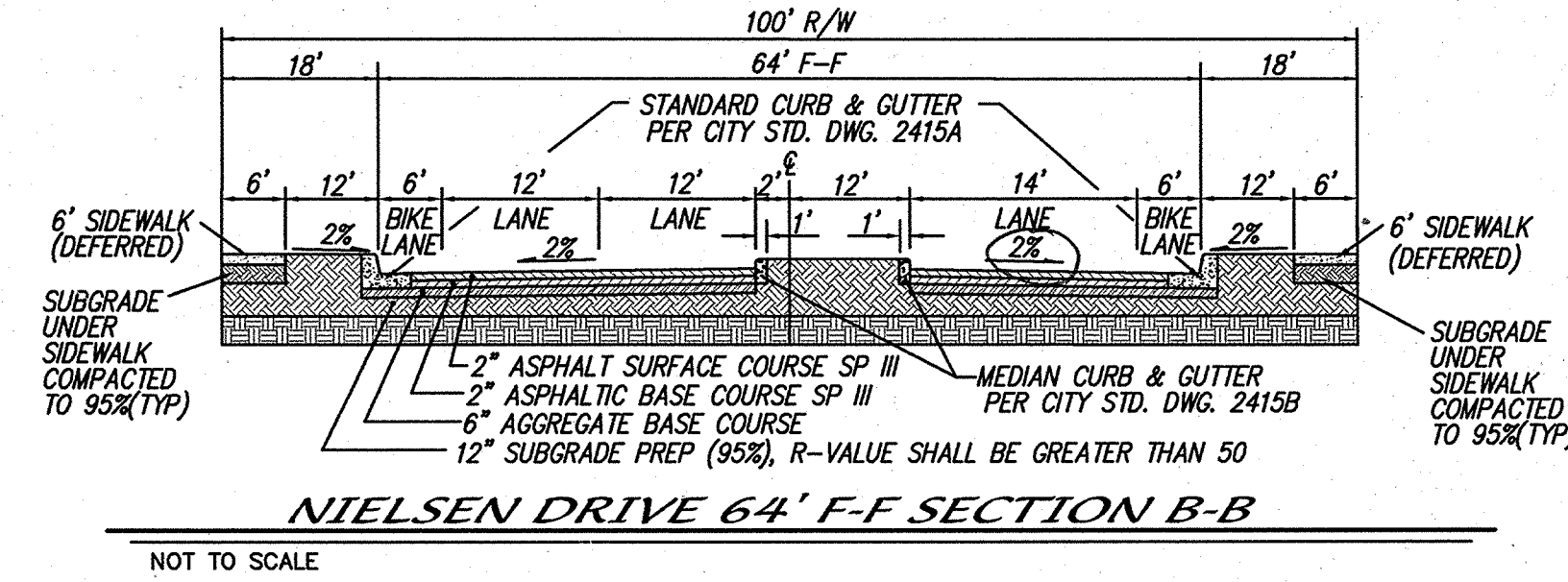
dmg MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539

BERNALILLO COUNTY
PUBLIC WORKS DEPARTMENT

TITLE: ***NIELSEN INDUSTRIAL PARK
MASTER PAVING PLAN***

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

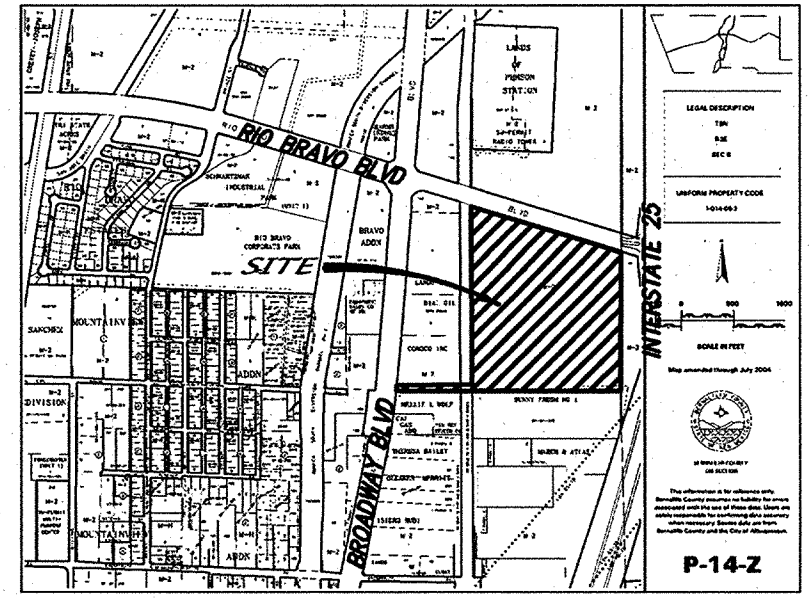
BERNALILLO COUNTY PROJECT NO.	ZONE MAP NO.	SHEET	OF
50051	P-14-Z	8	29



LEGEND

- NEW STANDARD CURB AND GUTTER
- NEW MEDIAN CURB AND GUTTER
- EXISTING CONCRETE CURB AND GUTTER
- NEW SIDEWALK (THIS PROJECT)
- DEFERRED SIDEWALK
- STORM DRAIN INLET THIS PROJECT
- NEW STREET LIGHTS (6-TOTAL)
- LOT LINE
- RIGHT-OF-WAY LINE
- CENTERLINE
- CROWN TRANSITION SEE NOTE 5
- WHEEL CHAIR RAMP (THIS PROJECT)

SEE SHEET 8 OF 28



VICINITY MAP ZONE MAP: P-14-Z

NOTES

- ALL SIDEWALKS PER CITY OF ALBUQUERQUE STANDARD DRAWING 2430.
- ALL 6" VALLEY GUTTERS PER CITY OF ALBUQUERQUE STANDARD DRAWING 2420.
- ALL HANDICAP RAMPS ARE PER COA DETAIL 2441, CASE II
- TRANSITION SECTION FROM FULL CROWN TO NO CROWN TO BE A MINIMUM OF 50 FEET PER C.O.A. STD DETAIL #2401.
- ALL 10" VALLEY GUTTERS PER CITY OF ALBUQUERQUE STANDARD DRAWING 2422.
- SOIL NOT HAVING THE MINIMUM R-VALUE OF 50 FOR STREETS SHALL BE REMOVED TO A DEPTH OF 2 FEET AND REPLACED, BY THE CONTRACTOR, WITH SUITABLE MATERIAL OR A PAVEMENT SECTION SHALL BE DESIGNED BY THE CONSULTANT ACCORDING TO THE EXISTING R-VALUE PER C.O.A. STANDARD SPECIFICATIONS.
- ALL BULLNOSES TO BE PAINTED REFLECTORIZED YELLOW
- ALL 4" VALLEY GUTTERS PER COA STD. DWG 2421
- THIS STOP SIGN IS PART OF THE APPROVED N.M.D.O.T. PLANS FOR BROADWAY BLVD. IMPROVEMENTS. ONLY INSTALL NEW STOP SIGN IF ONE IS NOT CURRENTLY EXISTING.

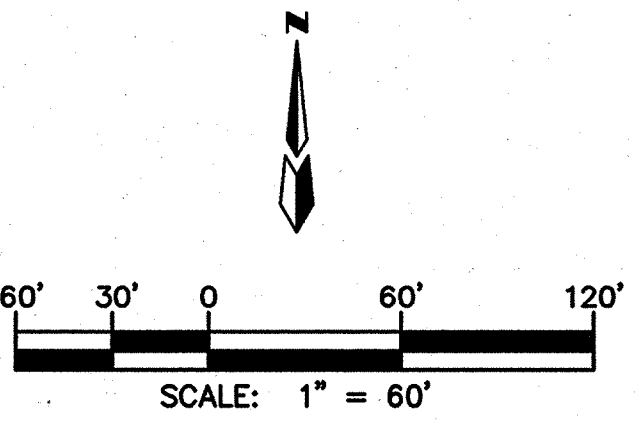
AS BUILT INFORMATION	
CONTRACTOR	WORK
STATIONED BY	STATIONED BY
ACCEPTANCE BY	ACCEPTANCE BY
FIELD	FIELD
REVISIONS	REVISIONS
DATE	DATE
BY	BY
NO.	NO.

BENCH MARKS	
STATION	2-NH4 IS LOCATED 3.9 MILES SOUTH OF DOWNTOWN ALBUQUERQUE. TO REACH STATION FROM INTERSECTION SECTION OF BROADWAY BLVD. AND CENTRAL AVE. GO SOUTH ON BROADWAY BLVD. 3.7 MILES TO THE STATION ON THE LEFT. STATION MARK IS A STANDARD ACS 3 1/4" ALUMINUM CAP STAMPED "2-NH4", X=391,235.28, Y=1,467,202.41 (NAD 1927) ELEV=4,973.259 (NGVD29).

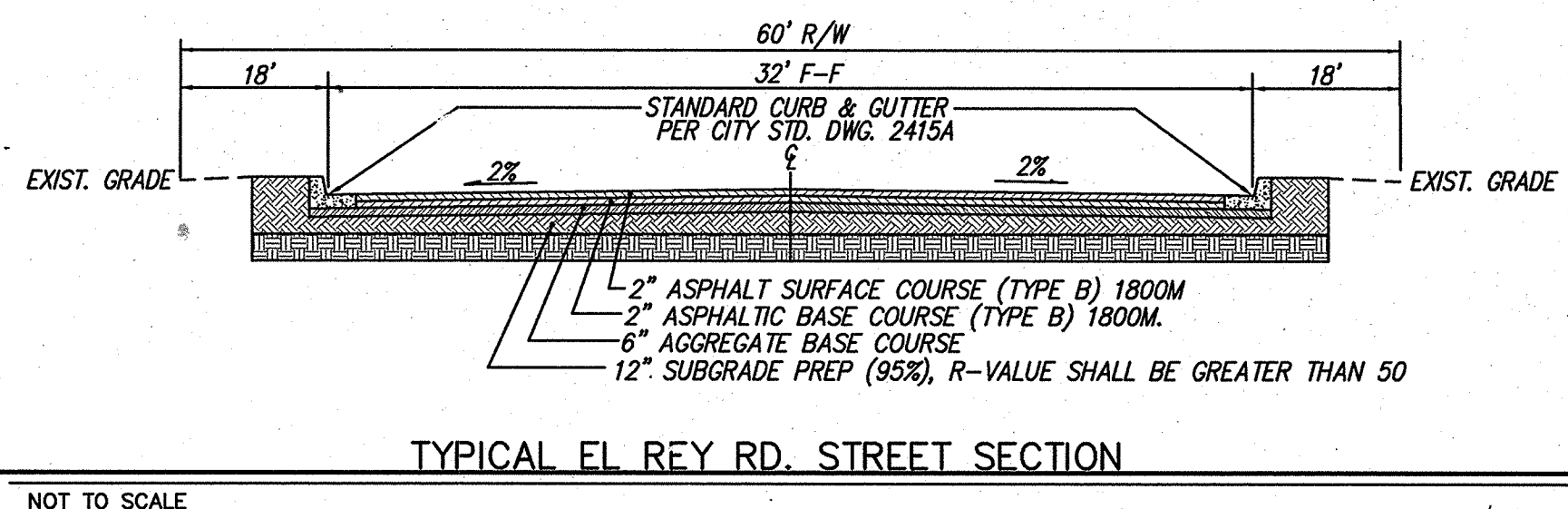
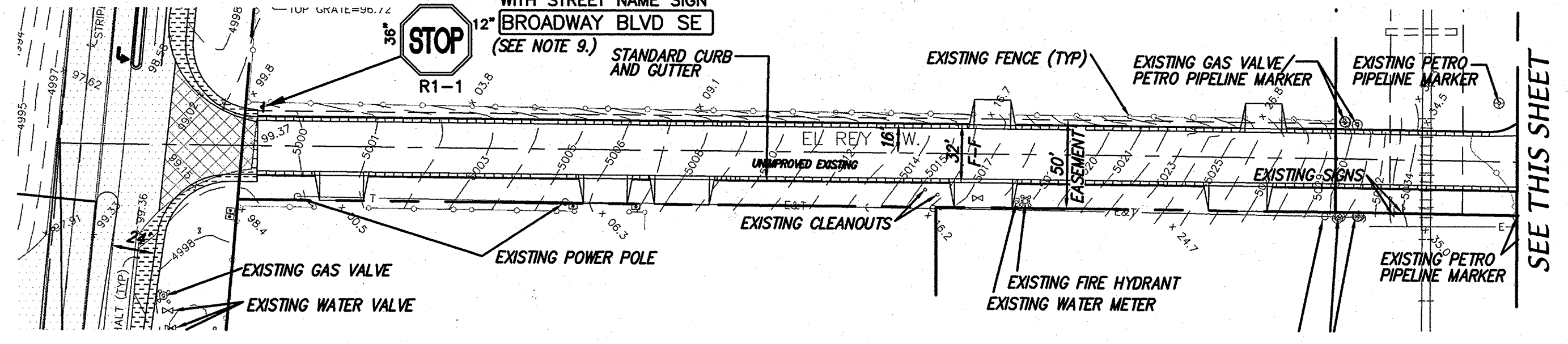
SURVEY INFORMATION	
FIELD NOTES	DATE
NO.	BY

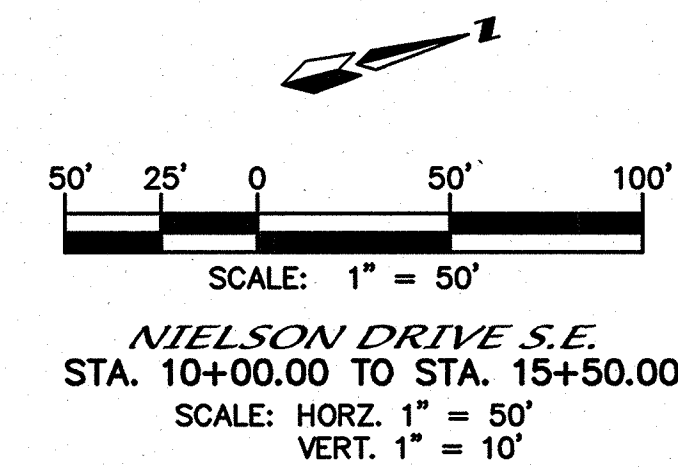
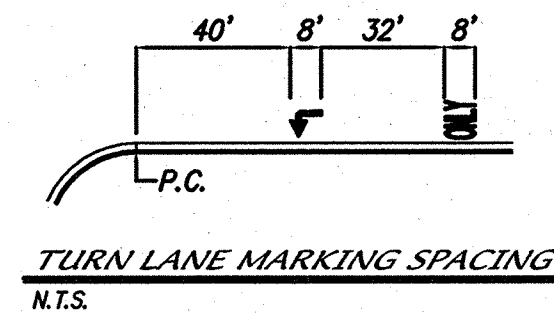
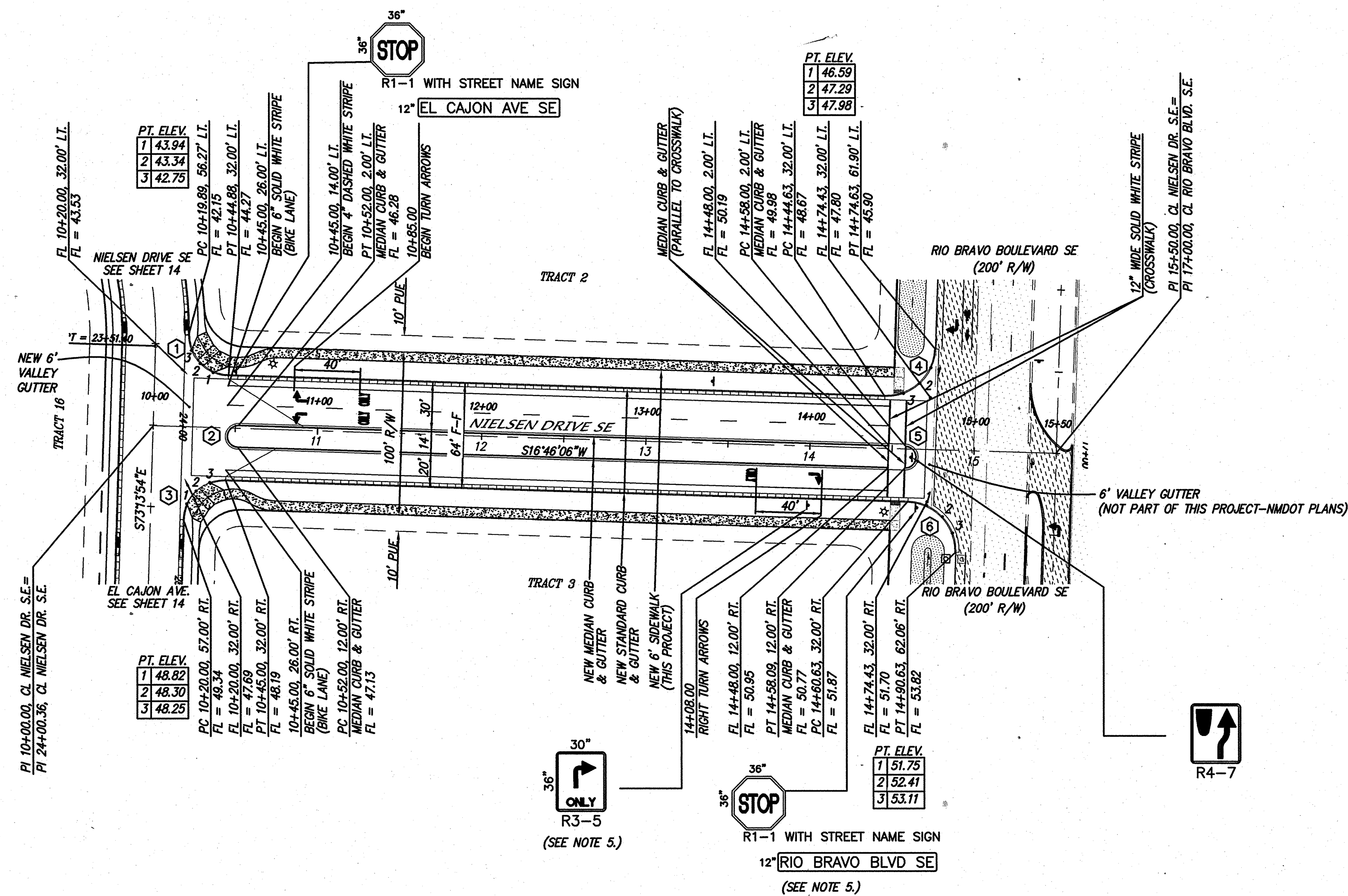
ENGINEER'S SEAL	
DATE	1-2-08

REVISIONS	
NO.	DATE
BY	REMARKS
DESIGNED BY	DLH
DRAWN BY	KJS
CHECKED BY	DWG
DATE	05/05
DATE	05/05
DATE	05/05



dmg MARK GOODWIN & ASSOCIATES, P.A. CONSULTING ENGINEERS P.O. BOX 30606 ALBUQUERQUE, NEW MEXICO 87199 (505) 828-2200, FAX (505) 797-9539	
BERNALILLO COUNTY PUBLIC WORKS DEPARTMENT	
TITLE: NIELSEN INDUSTRIAL PARK MASTER PAVING PLAN	
DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL
LAST DESIGN UPDATE	MO./DAY/YR.
BERNALILLO COUNTY PROJECT NO.	ZONE MAP NO.
50051	P-14-Z
SHEET	OF
9	29





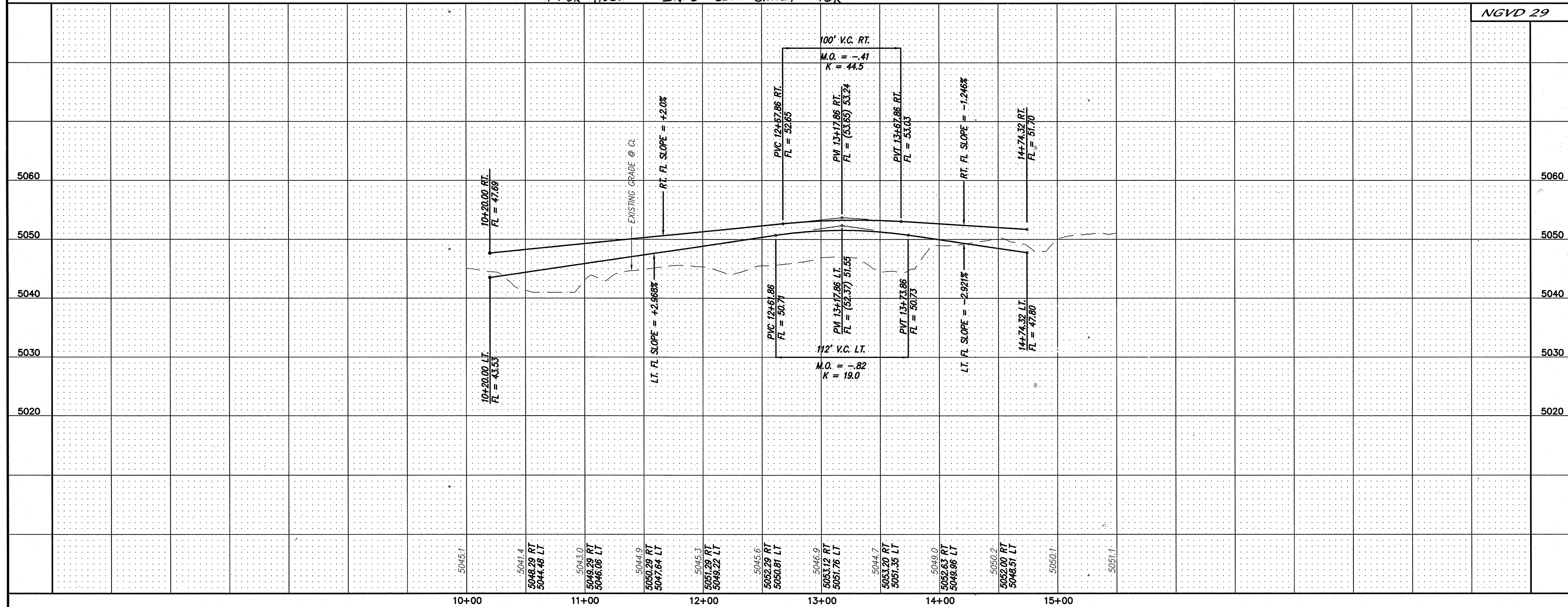
NOTES

1. ALL STATIONING IS CENTERLINE STATIONING.
2. PAINT THE MEDIAN CURB AT BOTH ENDS YELLOW, (22 LF AT EACH END).
3. ALL STRIPING AND MARKINGS SHALL BE HOT THERMOPLASTIC.
4. LANE LINES SHALL BE REFLECTIVE PAINT.
5. THIS SIGN IS PART OF THE APPROVED N.M.D.O.T. PLANS FOR RIO BRAVO BLVD. IMPROVEMENTS. ONLY INSTALL NEW SIGNS IF ONE IS NOT CURRENTLY EXISTING.

CURVE DATA - DESCRIBES FACE OF NEW CURB

① $\Delta=88^{\circ}19'23''$ $L=38.54$ $R=25.00$ $Tan=34.83$	② $\Delta=180^{\circ}00'00''$ $L=21.99$ $R=7.00$ $Tan=14.00$	③ $\Delta=90^{\circ}00'00''$ $L=39.27$ $R=25.00$ $Tan=35.36$
④ $\Delta=88^{\circ}48'35''$ $L=47.02$ $R=30.00$ $Tan=42.36$	⑤ $\Delta=180^{\circ}00'00''$ $L=21.99$ $R=7.00$ $Tan=14.00$	⑥ $\Delta=90^{\circ}07'21''$ $L=47.19$ $R=30.00$ $Tan=42.47$

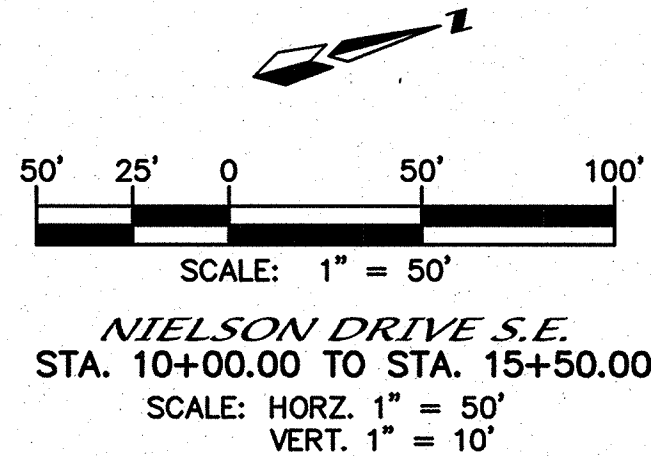
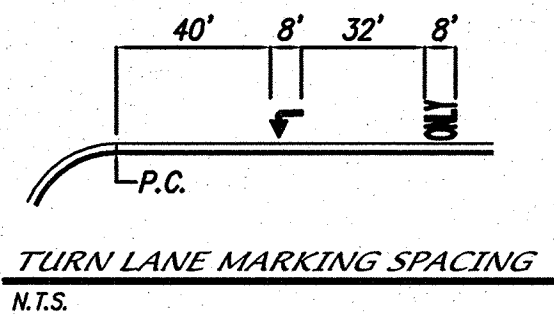
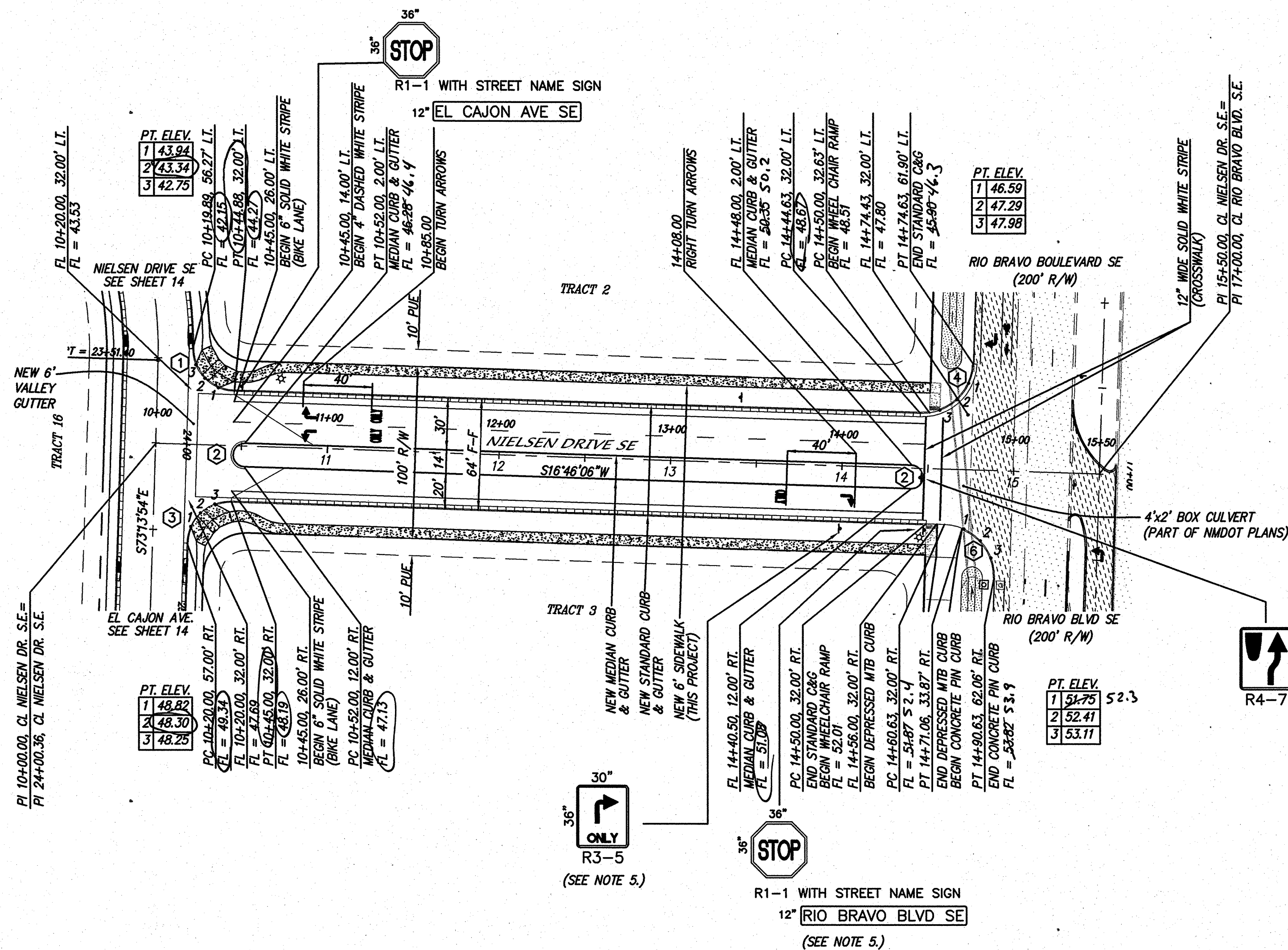
*FOR ASBUILT INFO SEE SHEET 10R



Certification
THE CHANGES SHOWN HEREON ARE BASED UPON A FIELD SURVEY CONDUCTED BY ME OR UNDER MY SUPERVISION AND REFLECT THE LOCATIONS (VERTICALLY AND HORIZONTALLY) TO THE BEST OF MY KNOWLEDGE AND BELIEF.

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

BERNALILLO COUNTY PUBLIC WORKS DEPARTMENT	
TITLE: NIENSON INDUSTRIAL PARK NIENSON DR. S.E. PAVING IMPROVEMENTS	
DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL
LAST DESIGN UPDATE	MO./DAY/YR.
BERNALILLO COUNTY PROJECT NO. 50051 ZONE MAP NO. P-14 SHEET 10 OF 29	

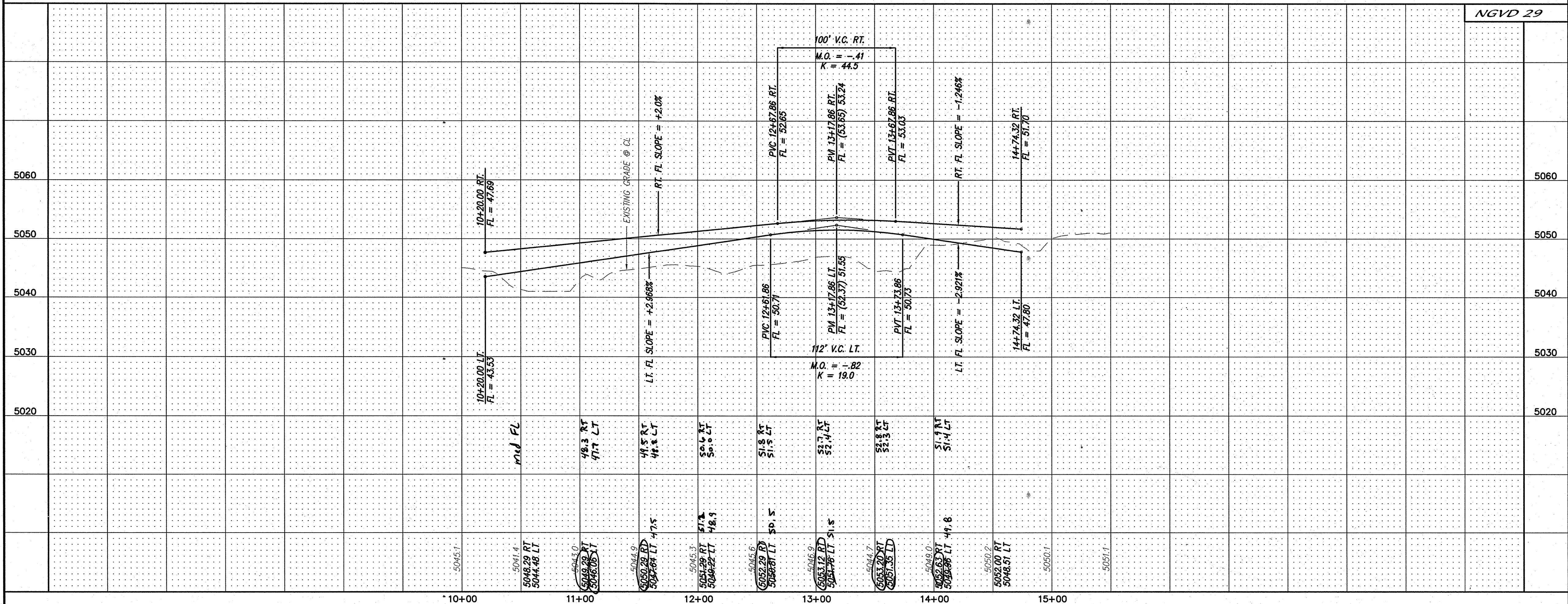


NOTES

1. ALL STATIONING IS CENTERLINE STATIONING.
2. PAINT THE MEDIAN CURB AT BOTH ENDS YELLOW, (22 LF AT EACH END).
3. ALL STRIPING AND MARKINGS SHALL BE HOT THERMOPLASTIC.
4. LANE LINES SHALL BE REFLECTIVE PAINT.
5. THIS SIGN IS PART OF THE APPROVED N.M.D.O.T. PLANS FOR RIO BRAVO BLVD. IMPROVEMENTS. ONLY INSTALL NEW SIGNS IF ONE IS NOT CURRENTLY EXISTING.

CURVE DATA - DESCRIBES FACE OF NEW CURB

① $\Delta=88^{\circ}19'23''$ $L=38.54$ $R=25.00$ $Tan=34.83$	② $\Delta=180^{\circ}00'00''$ $L=21.99$ $R=7.00$ $Tan=14.00$	③ $\Delta=90^{\circ}00'00''$ $L=39.27$ $R=25.00$ $Tan=33.36$
④ $\Delta=89^{\circ}48'35''$ $L=47.02$ $R=30.00$ $Tan=42.36$	⑤ $\Delta=180^{\circ}00'00''$ $L=21.99$ $R=7.00$ $Tan=14.00$	⑥ $\Delta=90^{\circ}07'21''$ $L=47.19$ $R=30.00$ $Tan=42.47$



Certification
THE CHANGES SHOWN HEREON ARE BASED UPON A FIELD SURVEY CONDUCTED BY ME OR UNDER MY SUPERVISION AND REFLECT THE LOCATIONS (VERTICALLY AND HORIZONTALLY) TO THE BEST OF MY KNOWLEDGE AND BELIEF.

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

BERNALILLO COUNTY PUBLIC WORKS DEPARTMENT	
TITLE: NIELSEN INDUSTRIAL PARK NIELSEN DR. S.E. PAVING IMPROVEMENTS	
DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL
MO./DAY/YR.	MO./DAY/YR.
DESIGNED BY DLH	DATE 05/05
DRAWN BY K/S	DATE 05/05
CHECKED BY DMG	DATE 05/05
BERNALILLO COUNTY PROJECT NO. 50051	
ZONE MAP NO. P-14	
SHEET 10R 29 OF 29	

1. ALL STATIONING IS CENTERLINE STATIONING.
2. THE NEW DRIVEWAY INTO EXISTING DRIVEWAY. CONTACT ENGINEER IF THERE ARE ANY PROBLEMS WITH FIELD CONNECTION.
3. THIS STOP SIGN IS PART OF THE APPROVED N.M.D.O.T. PLANS FOR BROADWAY BLVD. IMPROVEMENTS. ONLY INSTALL NEW STOP SIGN IF ONE IS NOT CURRENTLY EXISTING.
4. PROPOSED DRIVEWAY PADS PER COA STD. DWG. 2425 (FIELD VERIFY LOCATIONS BEFORE CONSTRUCTION)

- ① $\Delta = 94^{\circ}40'10''$
 $L = 66.09$
 $R = 40.00$
 $Tan = 58.83$
- ② $\Delta = 82^{\circ}12'23''$
 $L = 57.39$
 $R = 40.00$
 $Tan = 52.59$
- ③ $\Delta = 90^{\circ}45'00''$
 $L = 39.60$
 $R = 25.00$
 $Tan = 35.59$
- ④ $\Delta = 89^{\circ}17'07''$
 $L = 38.96$
 $R = 25.00$
 $Tan = 35.13$
- ⑤ $\Delta = 9^{\circ}19'39''$
 $L = 24.42$
 $R = 150.00$
 $Tan = 24.39$
- ⑥ $\Delta = 9^{\circ}21'46''$
 $L = 24.51$
 $R = 150.00$
 $Tan = 24.48$

 REMOVE & REPLACE PAVEMENT

 EXISTING PAVEMENT

50' 25' 0 50' 100'

SCALE: 1" = 50'

EL REY ROAD S.E.

STA. 9+99.69 TO STA. 19+00.00

SCALE: HORIZ. 1" = 50'
VERT. 1" = 10'

Certification
THE CHANGES SHOWN HEREON ARE BASED UPON A
FIELD SURVEY CONDUCTED BY ME OR UNDER MY
SUPERVISION AND REFLECT THE LOCATIONS
(VERTICALLY AND HORIZONTALLY) TO THE BEST OF
MY KNOWLEDGE AND BELIEF.

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

BERNALILLO COUNTY
PUBLIC WORKS DEPARTMENT

TITLE: ***NIELSEN INDUSTRIAL PARK
EL REY ROAD S.E. (WEST)
PAVING IMPROVEMENTS***

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL
-------------------------	------------------------

BERNALILLO COUNTY PROJECT NO.	
-------------------------------	--

50051

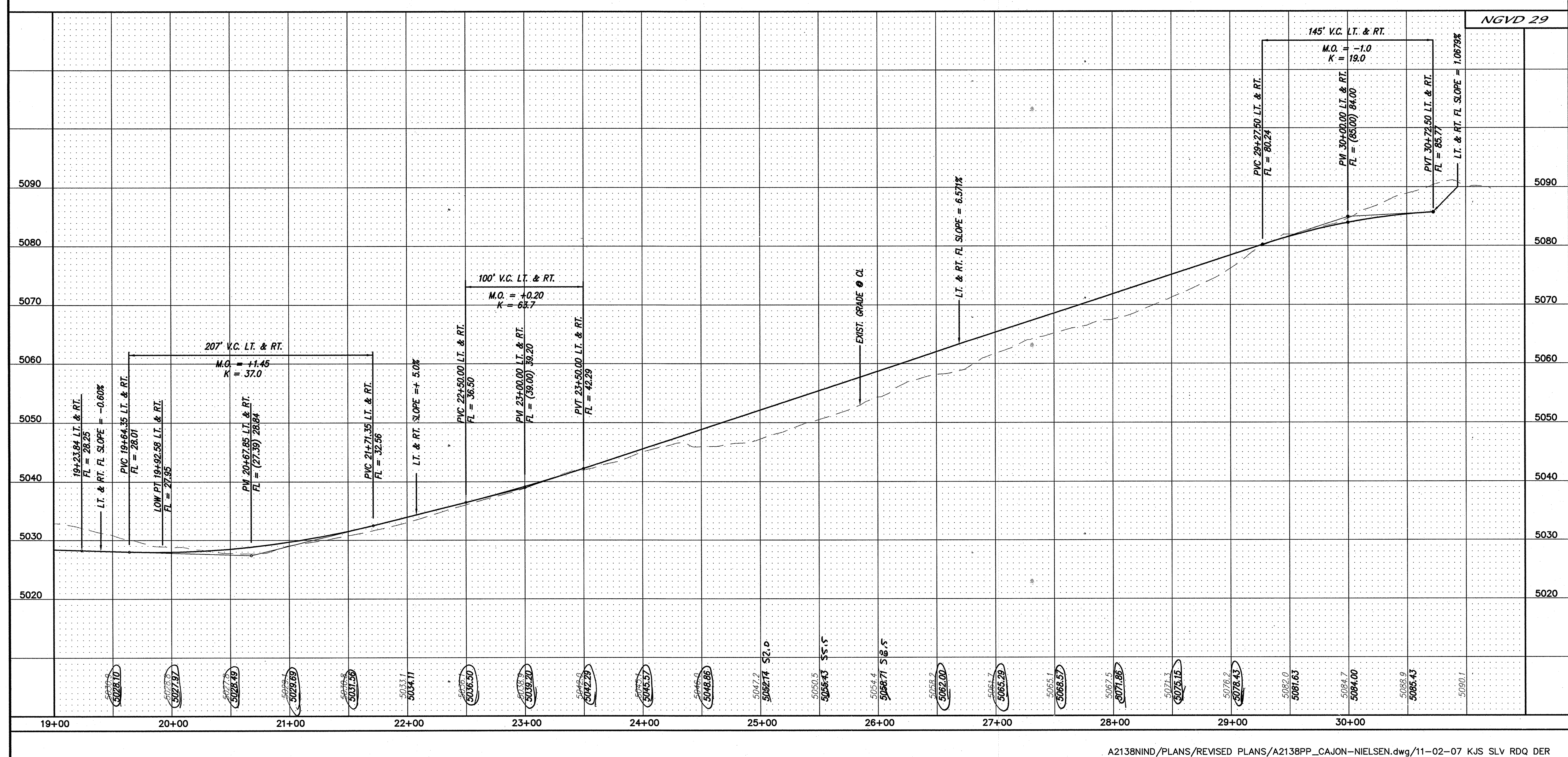
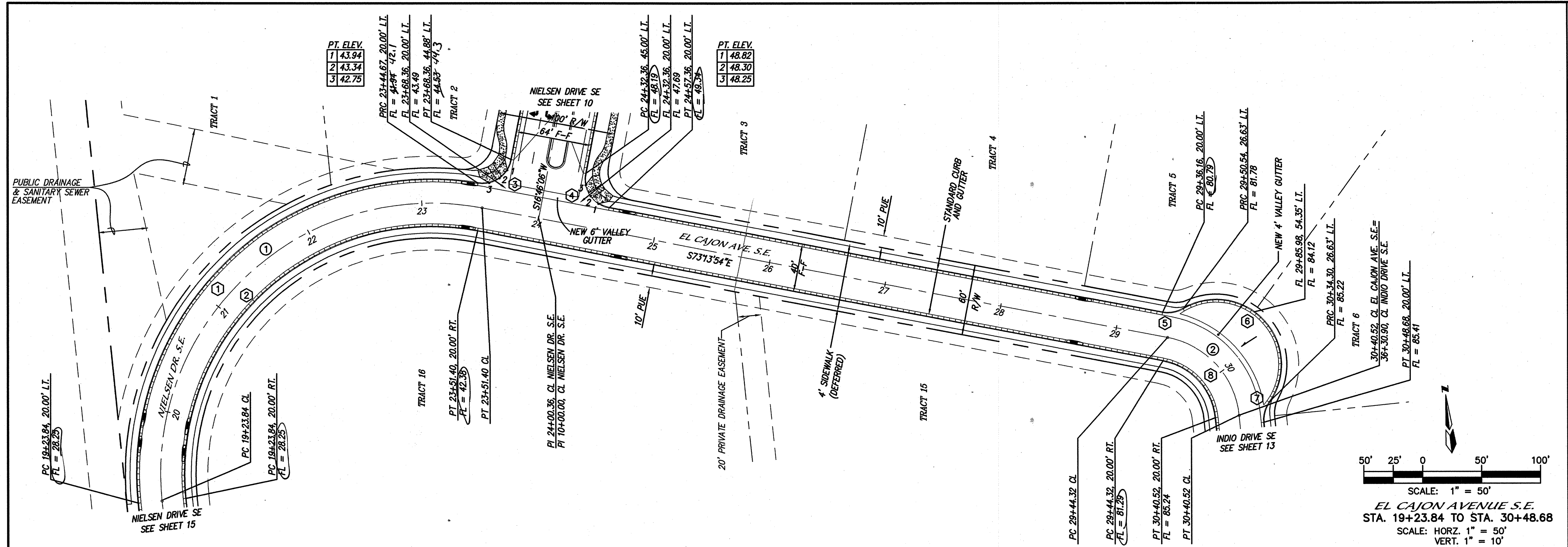
ZONE MAP NO.	
--------------	--

MAF NO.
P-14

SHEET OF
11R129



BERNALILLO COUNTY PROJECT NO. 50051	ZONE MAP NO. P-14	SHEET OF 13 29
---	-----------------------------	--------------------------



NOTES

1. ALL STATIONING IS CENTERLINE STATIONING.

CURVE DATA - DESCRIBES CENTERLINE

① $\Delta=106^{\circ}30'38''$ $L=427.56$ $R=230.00$ $Tan=368.60$	② $\Delta=73^{\circ}29'22''$ $L=96.20$ $R=75.00$ $Tan=89.74$
---	---

CURVE DATA - DESCRIBES FACE OF NEW CURB

① $\Delta=104^{\circ}50'01''$ $L=457.42$ $R=250.00$ $Tan=398.23$	② $\Delta=106^{\circ}30'38''$ $L=390.38$ $R=210.00$ $Tan=336.55$	③ $\Delta=88^{\circ}19'23''$ $L=38.54$ $R=28.00$ $Tan=34.63$
④ $\Delta=90^{\circ}00'00''$ $L=39.27$ $R=25.00$ $Tan=35.36$	⑤ $\Delta=41^{\circ}30'57''$ $L=18.11$ $R=25.00$ $Tan=17.72$	⑥ $\Delta=156^{\circ}31'16''$ $L=150.25$ $R=55.00$ $Tan=107.70$
⑦ $\Delta=41^{\circ}30'57''$ $L=18.11$ $R=25.00$ $Tan=17.72$	⑧ $\Delta=73^{\circ}29'22''$ $L=70.54$ $R=55.00$ $Tan=65.81$	

STATION 2-NIT IS LOCATED 3.9 MILES SOUTH OF DOWNTOWN ALBUQUERQUE. TO REACH STATION FROM INTERSECTION SECTION OF BROADWAY BLVD. AND CENTRAL AVE. GO SOUTH ON BROADWAY BLVD. 3.7 MILES TO THE STATION ON THE LEFT. STATION MARK IS A STANDARD AIS 3 1/4" ALUMINUM CAP STAMPED "2-NIT" X=381,735.28, Y=1,467,202.41 (NAD 1927). ELEV=4,973.259 (NGVD29).

SCALE: 1" = 50'
EL CAJON AVENUE S.E.
STA. 19+23.84 TO STA. 30+48.68
SCALE: HORZ. 1" = 50'
VERT. 1" = 10'

ENGINEER'S SEAL		SURVEY INFORMATION		AS BUILT INFORMATION	
		FIELD NOTES		CONTRACTOR	
		DATE		DATE	
NO.		BY		NO.	
REVISIONS		REVISIONS		REVISIONS	
DESIGNED BY		DATE		DATE	
DRAWN BY		DATE		DATE	
CHECKED BY		DATE		DATE	

Certification
THE CHANGES SHOWN HEREON ARE BASED UPON A FIELD SURVEY CONDUCTED BY ME OR UNDER MY SUPERVISION AND REFLECT THE LOCATIONS (VERTICALLY AND HORIZONTALLY) TO THE BEST OF MY KNOWLEDGE AND BELIEF.

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

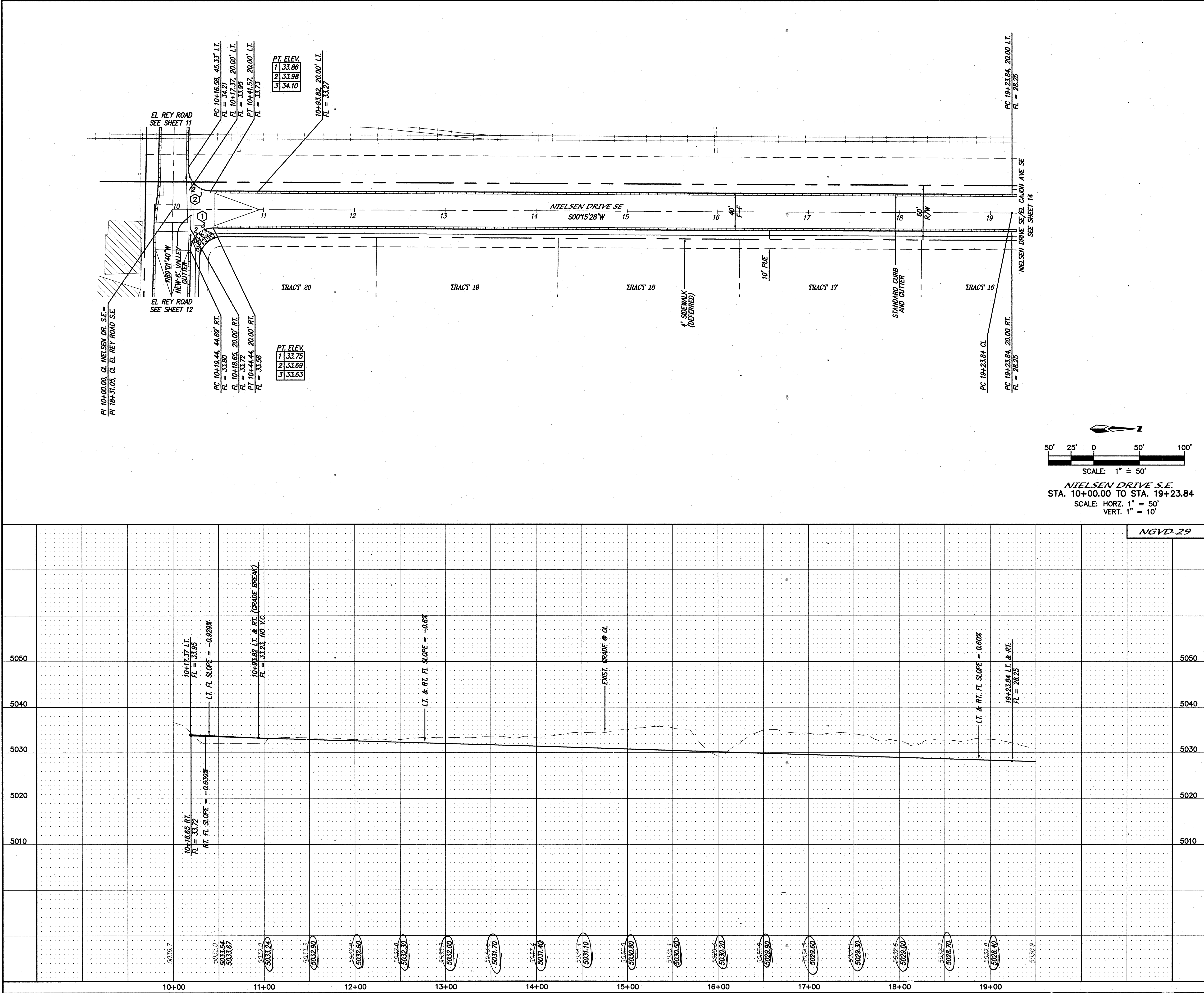
BERNALILLO COUNTY PUBLIC WORKS DEPARTMENT

TITLE: **NIELSEN INDUSTRIAL PARK EL CAJON AVENUE S.E. PAVING IMPROVEMENTS**

DESIGN REVIEW COMMITTEE: CITY ENGINEER APPROVAL

LAST DESIGN UPDATE: MO./DAY/YR. MO./DAY/YR.

BERNALILLO COUNTY PROJECT NO. **50051** ZONE MAP NO. **P-14** SHEET **14** OF **29**



NOTES

1. ALL STATIONING IS CENTERLINE STATIONING.

CURVE DATA - DESCRIBES FACE OF NEW CURB

① Δ=90°45'00"
L=39.60
R=25.00
Tan=35.59

② Δ=89°17'07"
L=38.96
R=25.00
Tan=35.13

CERTIFICATION

THE CHANGES SHOWN HEREON ARE BASED UPON A FIELD SURVEY CONDUCTED BY ME OR UNDER MY SUPERVISION AND REFLECT THE LOCATIONS (VERTICALLY AND HORIZONTALLY) TO THE BEST OF MY KNOWLEDGE AND BELIEF.

WJW

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

BERNALILLO COUNTY
PUBLIC WORKS DEPARTMENT

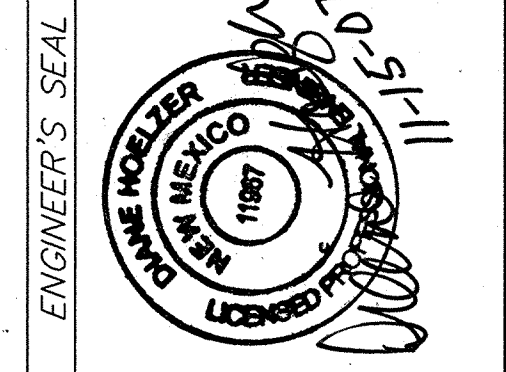
TITLE: NIELSEN INDUSTRIAL PARK
NIELSEN DRIVE S.E.
PAVING IMPROVEMENTS

DESIGN REVIEW COMMITTEE CITY ENGINEER APPROVAL

BERNALILLO COUNTY PROJECT NO.
50051

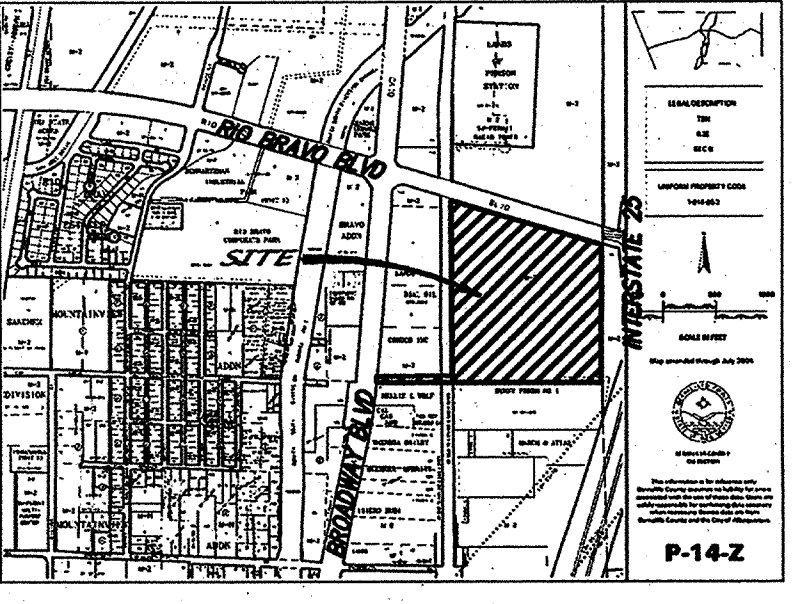
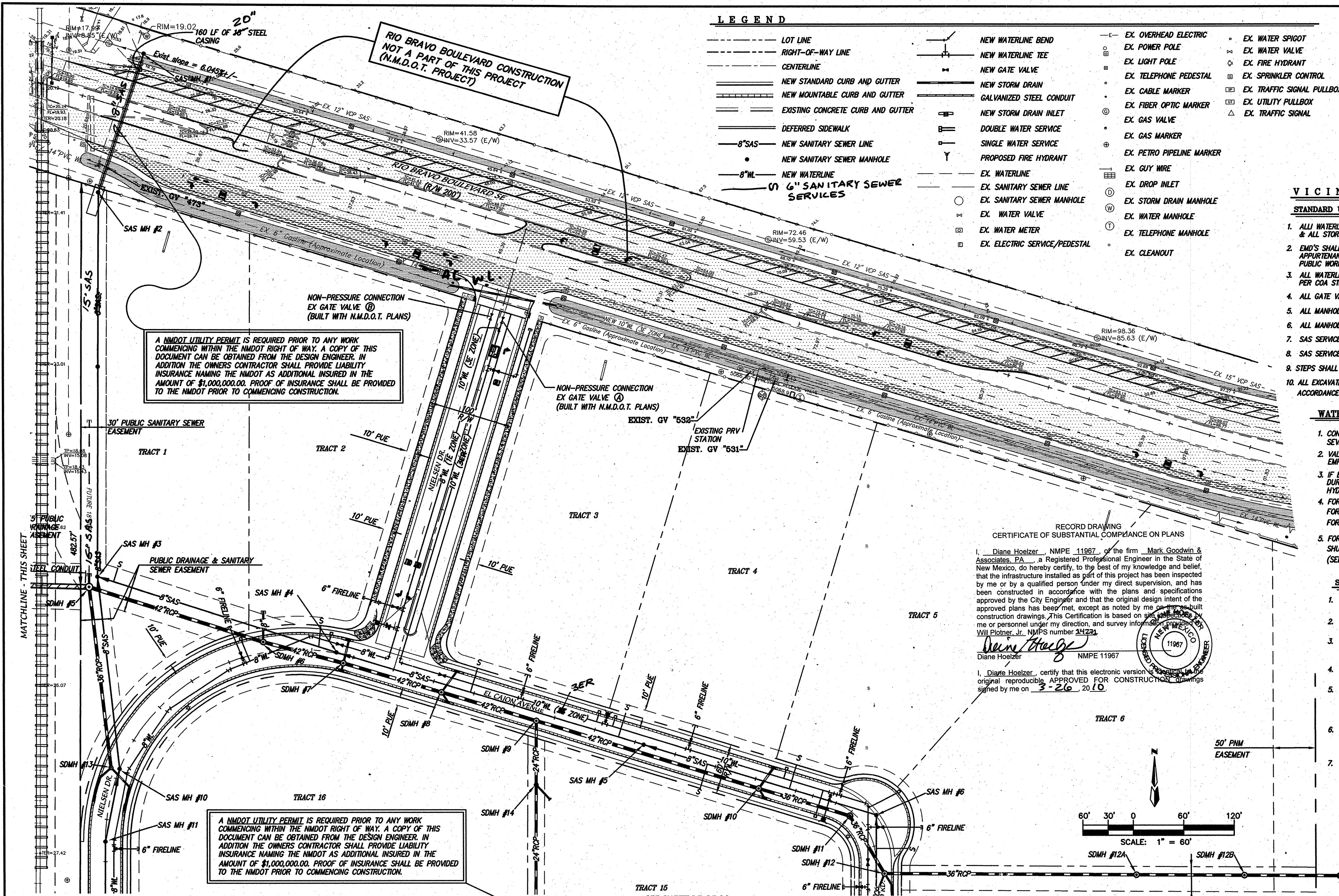
ZONE MAP NO.
P-14

SHEET OF
15 29



ENGINEER'S SEAL		REVISIONS		DESIGN	
NO.	DATE	REMARKS	BY	DATE	DATE
				11/07	11/07
				11/07	11/07

SURVEY INFORMATION		BENCH MARKS		AS BUILT INFORMATION	
NO.	BY	DATE	STATION	CONTRACTOR	WORK
			STATION 12+14 IS LOCATED 3.9 MILES SOUTH OF DOWNTOWN ALBUQUERQUE. TO REACH STATION FROM INTERSECTION OF BROADWAY BLVD. AND CENTRAL AVE., GO SOUTH ON BROADWAY BLVD. 3.7 MILES TO THE STATION ON THE LEFT. STATION MARK IS A STANDARD ACS 3 1/4" ALUMINUM CAP STAMPED "2-N14". X=861,735.28, Y=1,467,202.41 (NAD 1927) ELEV=4,973.259 (NGVD29).		



VICINITY MAP ZONE MAP: P-14-Z

STANDARD UTILITY NOTES:

- ALL WATERLINE IS C-900 PVC PIPE AND ALL SANITARY SEWER IS SDR35 PVC PIPE & ALL STORM DRAIN IS RCP CLASS III UNLESS NOTED OTHERWISE ON THE PLANS.
- END'S SHALL BE INSTALLED ON ALL WATERLINES AND SANITARY SEWER APPURTENANCES AS PER SECTION 170 OF STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION LATEST EDITION.
- ALL WATERLINE SERVICES SHALL BE 2" UNLESS NOTED OTHERWISE ON PLANS. PER COA STD DWG. 2363 AND 2367.
- ALL GATE VALVES PER STANDARD DRAWING 2326 AND 2328.
- ALL MANHOLES TYPE "C" PER STANDARD DRAWING 2101.
- ALL MANHOLES TYPE "E" PER STANDARD DRAWING 2102.
- SAS SERVICES INTO MAIN LINE PER STANDARD DRAWING 2125.
- SAS SERVICES INTO MANHOLES PER STANDARD DRAWING 2118.
- STEPS SHALL NOT BE INSTALLED IN SANITARY SEWER MANHOLES.
- ALL EXCAVATION, TRENCHING AND SHORING ACTIVITIES MUST BE CARRIED OUT IN ACCORDANCE WITH OSHA 29 CFR 1926.650 SUBPART "P".

WATER SHUT-OFF NOTES

- CONTRACTOR WILL CONTACT WATER SYSTEMS AT 857-8200, SEVEN (7) DAYS PRIOR TO NECESSARY SHUT-OFF.
- VALVES SHALL ONLY BE OPERATED BY WATER AUTHORITY EMPLOYEES (ABCWUB).
- IF EXISTING FIRE HYDRANTS ARE TO BE SHUT DOWN DURING CONSTRUCTION, CONTRACTOR SHALL BAG FIRE HYDRANTS DURING TERM OF SHUT DOWN.
- FOR CONNECTION IN NIELSEN DRIVE:
FOR 8" WL, SHUT OFF EXISTING GATE VALVE (B)
FOR 10" WL, SHUT OFF EXISTING GATE VALVE (A)
- FOR NON-PRESSURE CONNECTION AT BROADWAY/EL REY ROAD: SHUT OFF EXISTING GATE VALVE "961" AND (C) AND (D) (SEE SHEET 17)

SPECIAL NOTES FOR WORK IN AMAFCA RIGHT OF WAY:

- AMAFCA FIELD ENGINEER SHALL BE NOTIFIED 48 HOURS PRIOR TO ANY WORK WITHIN AMAFCA R/W. CALL 884-2215.
- NO WORK WILL BE PERFORMED IN THE AMAFCA R/W BETWEEN MAY 15 AND OCTOBER 15 WITHOUT WRITTEN PERMISSION FROM AMAFCA.
- ALL SUBGRADE, BACKFILL AND EMBANKMENT SHALL BE COMPACTED TO 98% (MODIFIED PROCTOR) WITHIN THE AMAFCA R/W. TESTING REPORTS SHALL BE PROVIDED TO THE AMAFCA FIELD ENGINEER.
- AMAFCA FIELD ENGINEER WILL BE NOTIFIED 48 HOURS PRIOR TO FINAL INSPECTION OF ANY FACILITIES WITHIN THE AMAFCA R/W.
- ALL DISTURBED GROUND AREAS SHALL BE REVEGETATED IN ACCORDANCE WITH CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, SECTION 1012 NATIVE GRASS SEEDING, AS CURRENTLY UPDATED.
- ANY EXISTING SURVEY CONTROL MONUMENTS THAT ARE MOVED OR DESTROYED AS A RESULT OF THE CONSTRUCTION SHALL BE REPLACED BY A REGISTERED SURVEYOR AT THE OWNER'S EXPENSE.
- OWNER'S CONTRACTOR SHALL PROVIDE LIABILITY INSURANCE NAMING AMAFCA AS ADDITIONAL INSURED IN THE AMOUNT OF \$2,000,000. PROOF OF INSURANCE SHALL BE PROVIDED TO AMAFCA PRIOR TO CONSTRUCTION.

APPROVED FOR CONSTRUCTION WITHIN AMAFCA RIGHT-OF-WAY:

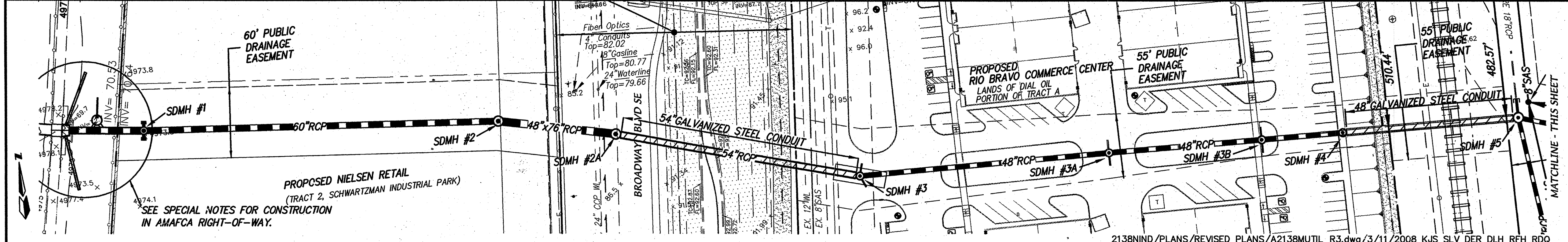
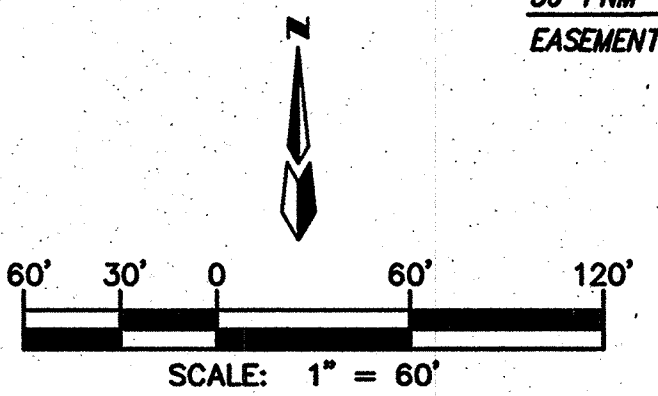
FOR AMAFCA DATE

RECORD DRAWING
CERTIFICATE OF SUBSTANTIAL COMPLIANCE ON PLANS

I, Diane Hoelzer, NMPE 11967, of the firm Mark Goodwin & Associates, P.A., a Registered Professional Engineer in the State of New Mexico, do hereby certify, to the best of my knowledge and belief, that the infrastructure installed as part of this project has been inspected by me or by a qualified person under my direct supervision, and has been constructed in accordance with the plans and specifications approved by the City Engineer and that the original design intent of the approved plans has been met, except as noted by me on the as-built construction drawings. This Certification is based on site inspection by me or personnel under my direction, and survey information provided by Will Plotner, Jr., NMPS number 14224.

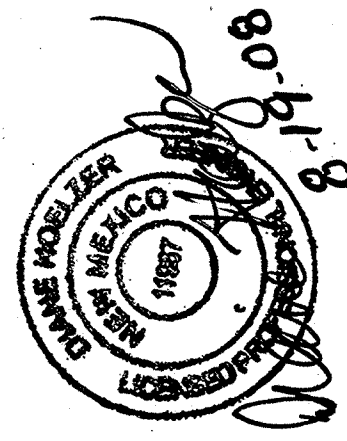
Diane Hoelzer
Diane Hoelzer NMPE 11967

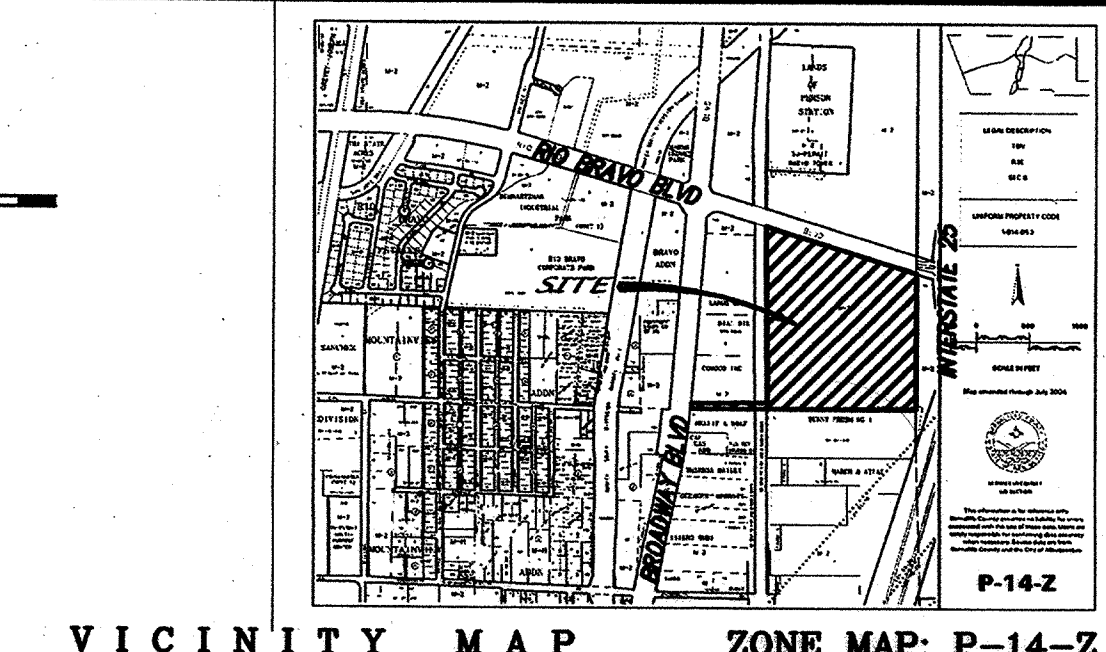
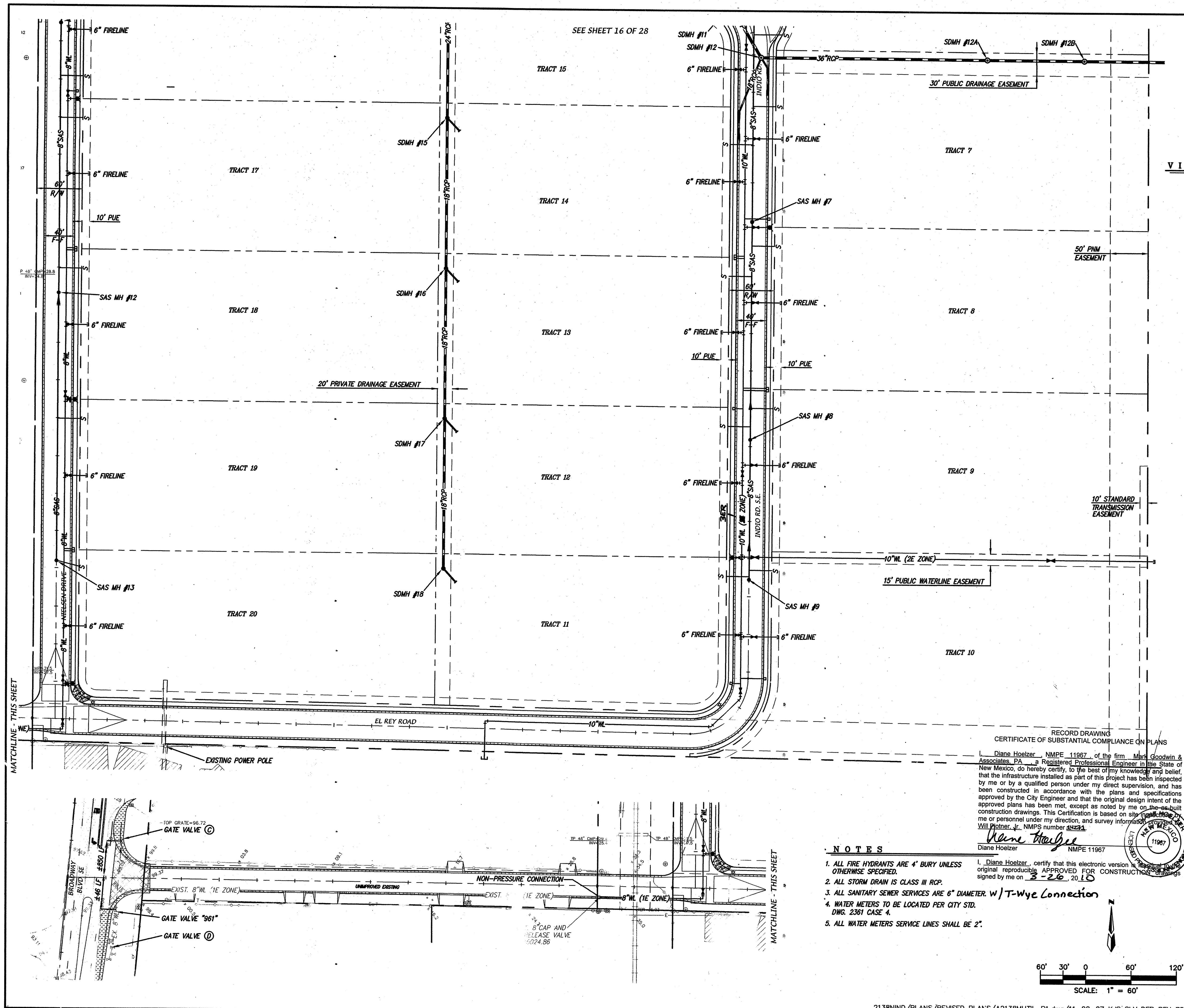
I, Diane Hoelzer, certify that this electronic version is a true and correct original reproducible. APPROVED FOR CONSTRUCTION Drawings signed by me on 3-26-2010.



MARK GOODWIN & ASSOCIATES, P.A. CONSULTING ENGINEERS P.O. BOX 90606 ALBUQUERQUE, NEW MEXICO 87199 (505) 828-2200, FAX (505) 797-9539	
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT	
TITLE: NIELSEN INDUSTRIAL PARK MASTER UTILITY PLAN	
DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL
LAST DESIGN UPDATE	MO./DAY/YR.
CITY PROJECT NO. 777081	ZONE MAP NO. P-14-Z
SHEET 16	OF 29

AS BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		FIELD NOTES		ENGINEER'S SEAL		REMARKS		DESIGN		DATE		DATE	
CONTRACTOR	DATE	STATION	DATE	NO.	BY	NO.	BY	NO.	BY	NO.	BY	NO.	BY	NO.	BY	NO.	BY
CONTRACTOR: Carlsberg Survey Inc.	DATE: 11/07/07	STATION: 2+14.1 IS LOCATED 3.9 MILES SOUTH OF DOWNTOWN ALBUQUERQUE. TO REACH STATION FROM INTERSECTION OF BROADWAY BLVD. AND CENTRAL AVE. GO SOUTH ON BROADWAY BLVD. 3.7 MILES TO THE STATION ON THE LEFT.	DATE: 11/07/07	NO.	BY	NO.	BY	NO.	BY	NO.	BY	NO.	BY	NO.	BY	NO.	BY
INSPECTOR'S APPROVAL: Carlsberg Survey Inc.	DATE: 11/07/07	SECTION: BROADWAY BLVD. AND CENTRAL AVE. GO SOUTH ON BROADWAY BLVD. 3.7 MILES TO THE STATION ON THE LEFT.	DATE: 11/07/07	NO.	BY	NO.	BY	NO.	BY	NO.	BY	NO.	BY	NO.	BY	NO.	BY
VERIFICATION: Carlsberg Survey Inc.	DATE: 11/07/07	STATION MARK IS A STANDARD AGS 3 1/4" ALUMINUM CAP STAMPED "2-MH", X=561,735.28, Y=1,467,012.41 (NAD 1983) ELEV=4,974.289 (NGVD29).	DATE: 11/07/07	NO.	BY	NO.	BY	NO.	BY	NO.	BY	NO.	BY	NO.	BY	NO.	BY
RECORDED BY: Carlsberg Survey Inc.	DATE: 11/07/07		DATE: 11/07/07	NO.	BY	NO.	BY	NO.	BY	NO.	BY	NO.	BY	NO.	BY	NO.	BY





- LEGEND**
- LOT LINE
 - RIGHT-OF-WAY LINE
 - CENTERLINE
 - NEW STANDARD CURB AND GUTTER
 - NEW MOUNTABLE CURB AND GUTTER
 - EXISTING CONCRETE CURB AND GUTTER
 - DEFERRED SIDEWALK
 - 6" SANITARY SEWER SERVICES
 - NEW SANITARY SEWER LINE
 - NEW SANITARY SEWER MANHOLE
 - NEW WATERLINE
 - NEW WATERLINE BEND
 - NEW WATERLINE TEE
 - NEW GATE VALVE
 - NEW STORM DRAIN
 - NEW STORM DRAIN INLET
 - DOUBLE WATER SERVICE
 - SINGLE WATER SERVICE
 - PROPOSED FIRE HYDRANT
 - EX. WATERLINE
 - EX. SANITARY SEWER LINE
 - EX. SANITARY SEWER MANHOLE
 - EX. WATER VALVE
 - EX. WATER METER
 - EX. ELECTRIC SERVICE/PEDESTAL
 - EX. OVERHEAD ELECTRIC
 - EX. POWER POLE
 - EX. LIGHT POLE
 - EX. TELEPHONE PEDESTAL
 - EX. CABLE MARKER
 - EX. FIBER OPTIC MARKER
 - EX. GAS VALVE
 - EX. GAS MARKER
 - EX. PETRO PIPELINE MARKER
 - EX. GUY WIRE
 - EX. DROP INLET
 - EX. STORM DRAIN MANHOLE
 - EX. WATER MANHOLE
 - EX. TELEPHONE MANHOLE
 - EX. CLEANOUT
 - EX. WATER SPIGOT
 - EX. WATER VALVE
 - EX. FIRE HYDRANT
 - EX. SPRINKLER CONTROL
 - EX. TRAFFIC SIGNAL PULLBOX
 - EX. UTILITY PULLBOX
 - EX. TRAFFIC SIGNAL

NOTES

- ALL FIRE HYDRANTS ARE 4' BURY UNLESS OTHERWISE SPECIFIED.
- ALL STORM DRAIN IS CLASS III RCP.
- ALL SANITARY SEWER SERVICES ARE 6" DIAMETER W/ T-Wye Connection
- WATER METERS TO BE LOCATED PER CITY STD. DWG. 2361 CASE 4.
- ALL WATER METERS SERVICE LINES SHALL BE 2".

1. Diane Hoelzer, NMPE 11967, of the firm Mark Goodwin & Associates, P.A., a Registered Professional Engineer in the State of New Mexico, do hereby certify, to the best of my knowledge and belief, that the infrastructure installed as part of this project has been inspected by me or by a qualified person under my direct supervision, and has been constructed in accordance with the plans and specifications approved by the City Engineer and that the original design intent of the approved plans has been met, except as noted by me on the as-built construction drawings. This Certification is based on site inspection by me or personnel under my direction, and survey information provided by Will Plotner, Jr., NMPS number 44231.

Diane Hoelzer
Diane Hoelzer NMPE 11967

SCALE: 1" = 60'

AS BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL	
CONTRACTOR	DATE	NO.	BY	NO.	BY	REMARKS	DATE
STATION 2+114 IS LOCATED 3.9 MILES SOUTH OF DOWNTOWN ALBUQUERQUE. TO REACH STATION FROM INTERSECTION OF BROADWAY BLVD. AND CENTRAL AVE., GO SOUTH ON BROADWAY BLVD. 3.7 MILES TO THE STATION ON THE LEFT. STATION MARK IS A STANDARD ACS 3 1/4" ALUMINUM CAP STAMPED "2+114" X=381.738.28, Y=1467.2012.41 (NAD 1983) ELEV=4873.298 (NGVD29).							
DESIGNED BY	DATE	DRAWN BY	DATE	CHECKED BY	DATE	REVISIONS	DATE
777081	11/07	K/S	11/07	DWG	11/07		

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

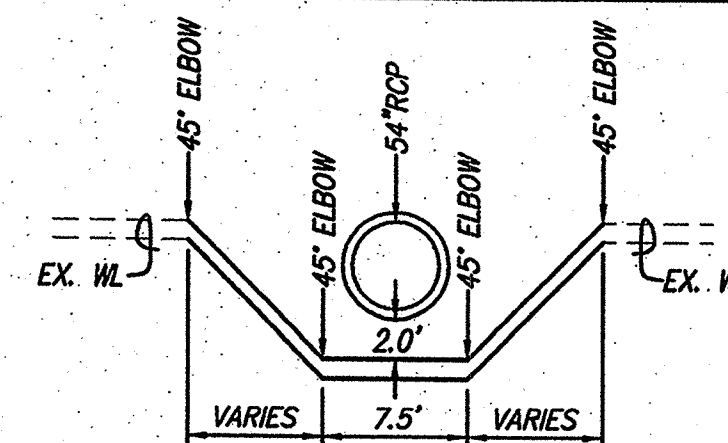
TITLE: **NIELSEN INDUSTRIAL PARK MASTER UTILITY PLAN**

DESIGN REVIEW COMMITTEE CITY ENGINEER APPROVAL

LAST DESIGN UPDATE

CITY PROJECT NO. **777081** SHEET **17** OF **29**

STORM DRAIN SUMMARY TABLE							
LOCATION		Q100	VELOCITY	UPSTREAM		DOWNSTREAM	
UPSTRM	DNSTRM	(cfs)	(fps)	GRD	HGL	GRD	HGL
MH#1	OUTFALL	317	16-19	81.0	76.0	77.00	72.5
MH#2	MH#1	280	14	88.42	81.6	81.00	77.9
MH#2A	MH#2	280	18	86.50	83.3	88.42	81.6
MH#3	MH#2A	280	18	98.90	89.4	86.50	84.8
MH#3A	MH#3	266	21-28	102.29	95.5	98.90	89.4
MH#3B	MH#3A	258	29-32	102.35	94.4	102.29	86.5
MH#4	MH#3B	244	34-36	105.74	98.7	102.35	94.4
MH#5	MH#4	244	19-36	126.50	116.8	105.74	98.7



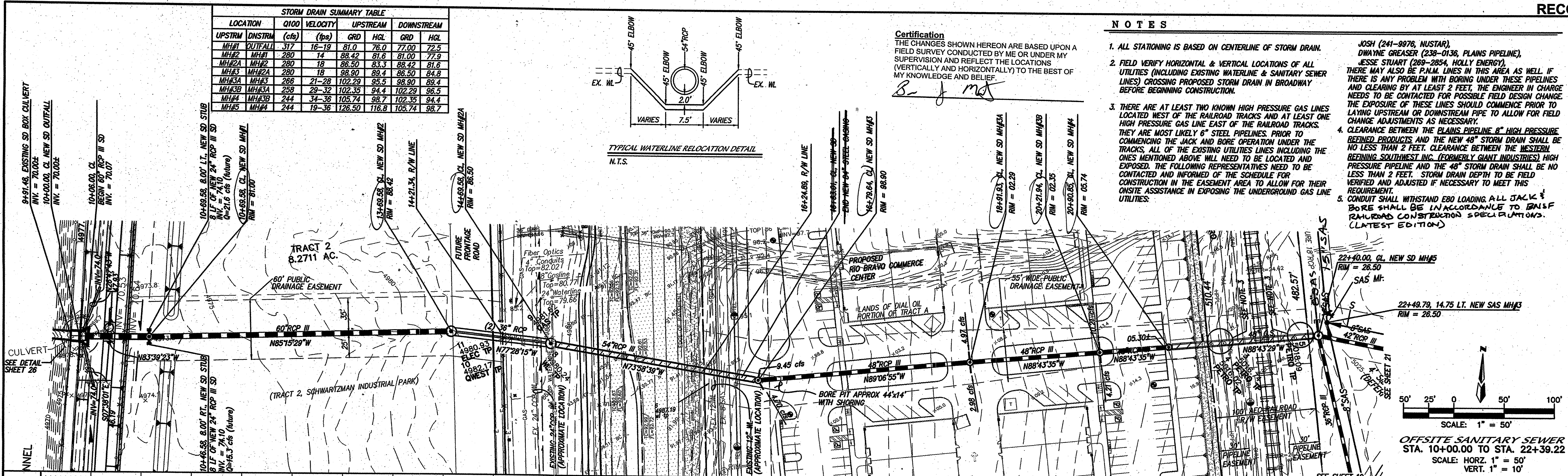
Certification
THE CHANGES SHOWN HEREON ARE BASED UPON A FIELD SURVEY CONDUCTED BY ME OR UNDER MY SUPERVISION AND REFLECT THE LOCATIONS (VERTICALLY AND HORIZONTALLY) TO THE BEST OF MY KNOWLEDGE AND BELIEF.

B. J. M.

NOTES

- ALL STATIONING IS BASED ON CENTERLINE OF STORM DRAIN.
- FIELD VERIFY HORIZONTAL & VERTICAL LOCATIONS OF ALL UTILITIES (INCLUDING EXISTING WATERLINE & SANITARY SEWER LINES) CROSSING PROPOSED STORM DRAIN IN BROADWAY BEFORE BEGINNING CONSTRUCTION.
- THERE ARE AT LEAST TWO KNOWN HIGH PRESSURE GAS LINES LOCATED WEST OF THE RAILROAD TRACKS AND AT LEAST ONE HIGH PRESSURE GAS LINE EAST OF THE RAILROAD TRACKS. THEY ARE MOST LIKELY 6" STEEL PIPELINES. PRIOR TO COMMENCING THE JACK AND BORE OPERATION UNDER THE TRACKS, ALL OF THE EXISTING UTILITIES LINES INCLUDING THE ONES MENTIONED ABOVE WILL NEED TO BE LOCATED AND EXPOSED. THE FOLLOWING REPRESENTATIVES NEED TO BE CONTACTED AND INFORMED OF THE SCHEDULE FOR CONSTRUCTION IN THE EASEMENT AREA TO ALLOW FOR THEIR ONSITE ASSISTANCE IN EXPOSING THE UNDERGROUND GAS LINE UTILITIES.
- CLEARANCE BETWEEN THE PLAINS PIPELINE 8" HIGH PRESSURE REINFORCED CONCRETE AND THE NEW 48" STORM DRAIN SHALL BE NO LESS THAN 2 FEET. CLEARANCE BETWEEN THE WESTERN REINFORCED CONCRETE AND THE NEW 48" STORM DRAIN SHALL BE NO LESS THAN 2 FEET. STORM DRAIN DEPTH TO BE FIELD VERIFIED AND ADJUSTED IF NECESSARY TO MEET THIS REQUIREMENT.
- CONDUIT SHALL WITHSTAND EBO LOADING ALL JACK & BORE SHALL BE IN ACCORDANCE TO BNSF RAILROAD CONSTRUCTION SPECIFICATIONS (LATEST EDITION).

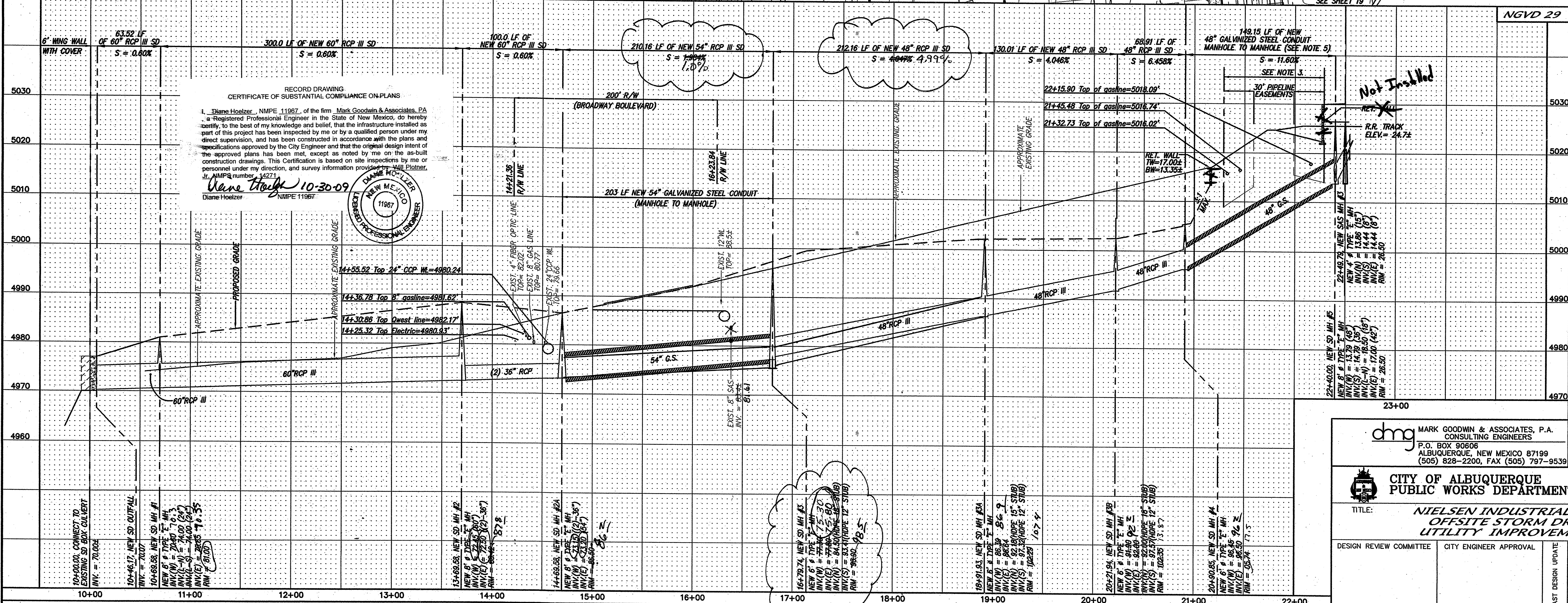
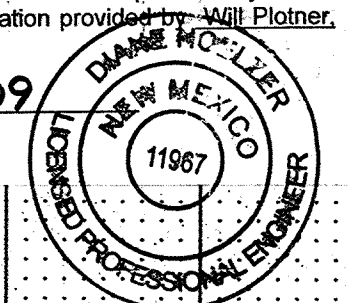
JOSH (241-8976, MUSTAR),
DESIGNER (238-0136, PLAINS PIPELINE),
ESSE STUART (289-2854, HOLLY ENERGY),
THERE MAY ALSO BE P.N.M. LINES IN THIS AREA AS WELL. IF THERE IS ANY PROBLEM WITH BORING UNDER THESE PIPELINES AND CLEARING BY AT LEAST 2 FEET, THE ENGINEER IN CHARGE NEEDS TO BE CONTACTED FOR POSSIBLE FIELD DESIGN CHANGE. THE EXPOSURE OF THESE LINES SHOULD COMMENCE PRIOR TO LAYING UPSTREAM OR DOWNSTREAM PIPE TO ALLOW FOR FIELD CHANGE ADJUSTMENTS AS NECESSARY.



RECORD DRAWING
CERTIFICATE OF SUBSTANTIAL COMPLIANCE ON PLANS

I, Diane Hoelzer, NMPE 11967, of the firm Mark Goodwin & Associates, P.A., a Registered Professional Engineer in the State of New Mexico, do hereby certify, to the best of my knowledge and belief, that the infrastructure installed as part of this project has been inspected by me or by a qualified person under my direct supervision, and has been constructed in accordance with the plans and specifications approved by the City Engineer and that the original design intent of the approved plans has been met, except as noted by me on the as-built construction drawings. This Certification is based on site inspections by me or personnel under my direction, and survey information provided by Will Plotner, Jr., NMPS number 14271.

Diane Hoelzer 10-30-09
Diane Hoelzer NMPE 11967



MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 80606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 787-9539

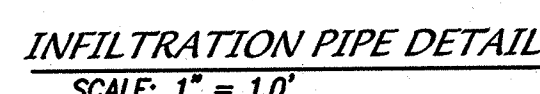
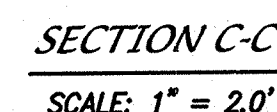
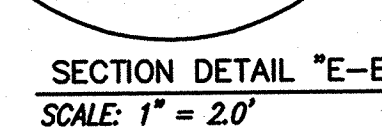
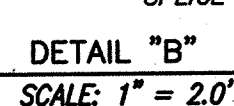
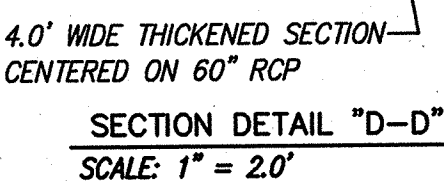
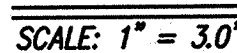
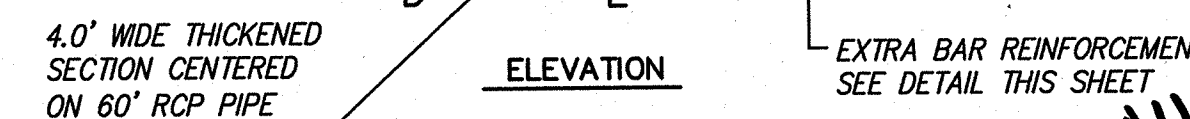
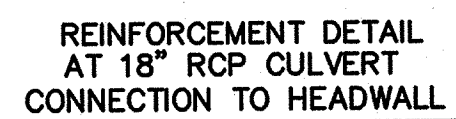
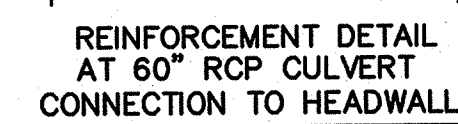
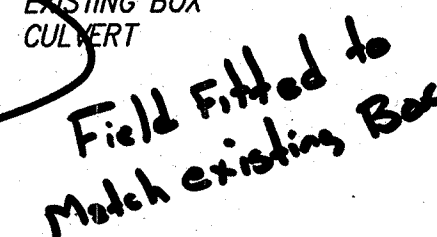
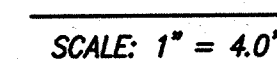
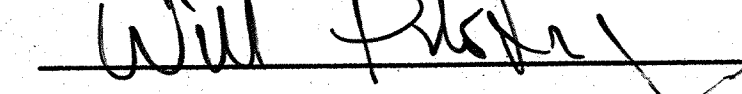
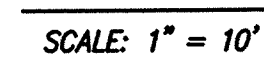


CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

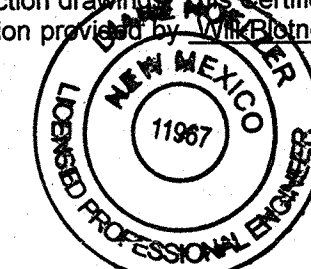
DESIGN REVIEW COMMITTEE		CITY ENGINEER APPROVAL		MO./DAY/YR.		MO./DAY/YR.	
DATE	REMARKS	DATE	REMARKS	DATE	REMARKS	DATE	REMARKS

CITY PROJECT NO. 777081
B.C.P.W. NO. 50051
ZONE MAP NO. P-14-2
SHEET 18R 29

REVISED MH #3 (SAS CONFLICT)



Diane Hoelzer
Diane Hoelzer NMPE 11967

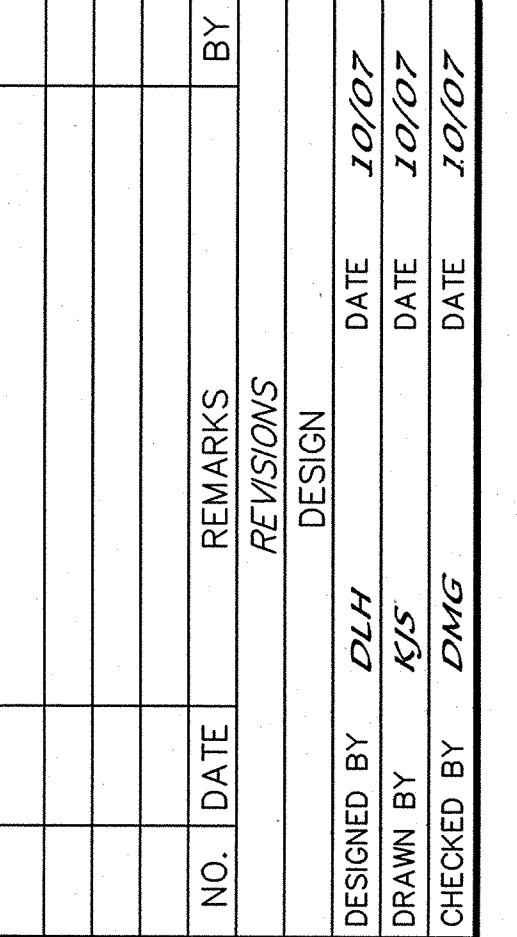


Lynn M. Mazur 1-18-08
FOR AMAFCA DATE

TITLE: ***NIELSEN INDUSTRIAL PARK
WATER QUALITY MANHOLE &
SD OUTFALL STRUCTURE***

CITY PROJECT NO.	777081	ZONE MAP NO.	SHEET OF
B.C.P.W. NO.	50051	P-14-Z	18.1 29

- AS BUILT INFORMATION**

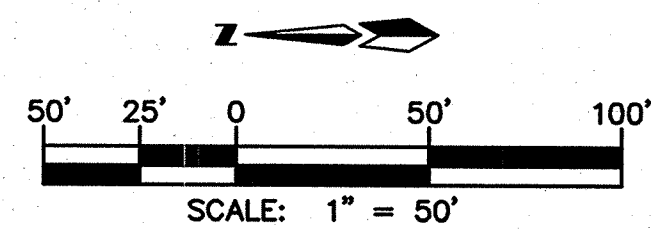
ENGINEER'S SEAL

PWCO: 50051 (STORM DRAIN)

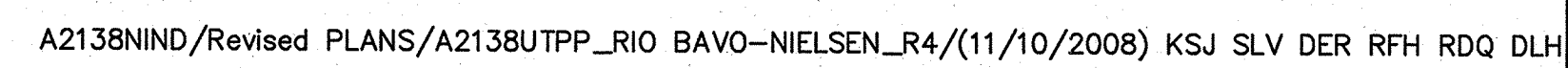


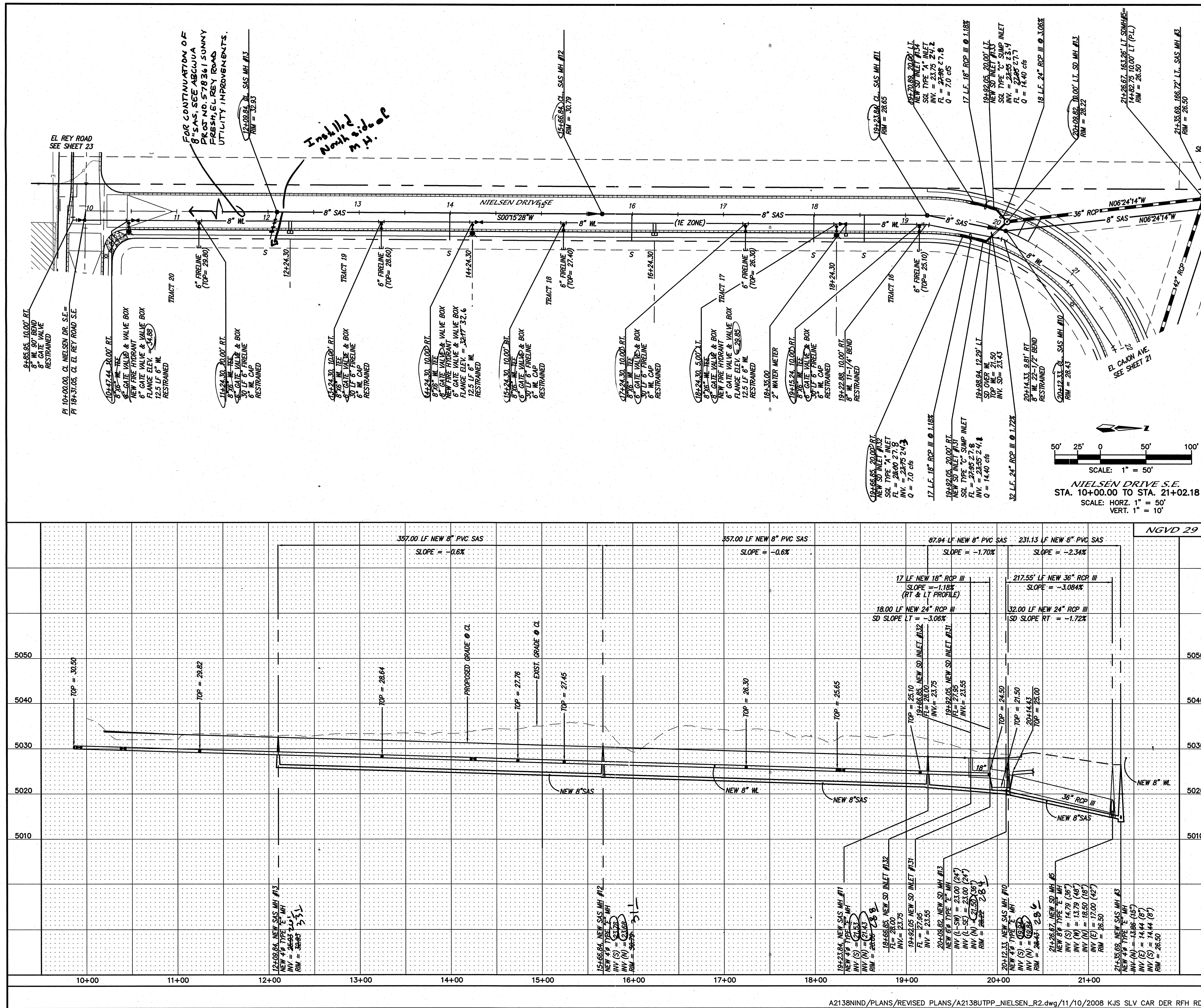
TITLE: ***NIELSEN INDUSTRIAL PARK
TRACT 1 EASEMENT STORM/SAS
UTILITY IMPROVEMENTS***

CITY PROJECT NO.	777081	ZONE MAP NO.	SHEET OF
B.C.P.W. NO.	50051	P-14-Z	19R 29



A NMDOT UTILITY PERMIT IS REQUIRED PRIOR TO ANY WORK COMMENCING WITHIN THE NMDOT RIGHT OF WAY. A COPY OF THIS DOCUMENT CAN BE OBTAINED FROM THE DESIGN ENGINEER. IN ADDITION THE OWNERS CONTRACTOR SHALL PROVIDE LIABILITY INSURANCE NAMING THE NMDOT AS ADDITIONAL INSURED IN THE AMOUNT OF \$1,000,000.00. PROOF OF INSURANCE SHALL BE PROVIDED TO THE NMDOT PRIOR TO COMMENCING CONSTRUCTION.





NOTES

1. ALL STATIONING IS BASED ON NIELSEN CENTERLINE.
2. STORM DRAIN CONSTRUCTION IS UNDER BERNALILLO COUNTY PUBLIC WORKS DEPT. JURISDICTION AND WATERLINE AND SANITARY SEWER IS UNDER ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY (A.B.C.W.U.A.) JURISDICTION.

BLOCK	TRACT	STATION AT P.L.	INV. ELEV. AT P.L.	LENGTH AT P.L.
1	16	18+55.00	24.35	25.00'
1	17	18+00.00	24.15	25.00'
1	18	16+00.00	25.35	25.00'
1	19	14+00.00	26.55	25.00'
1	20	12+00.00	27.75	26.20'

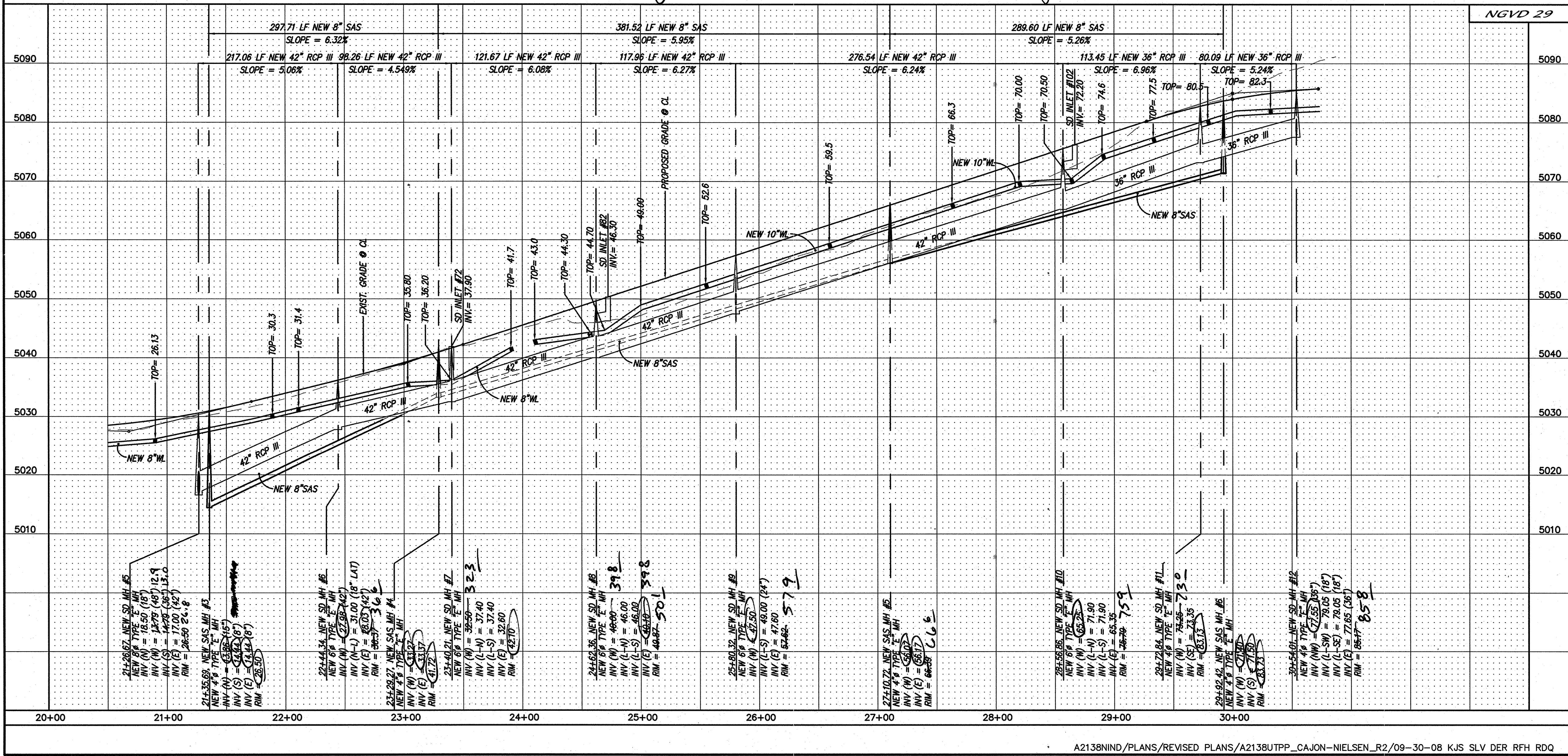
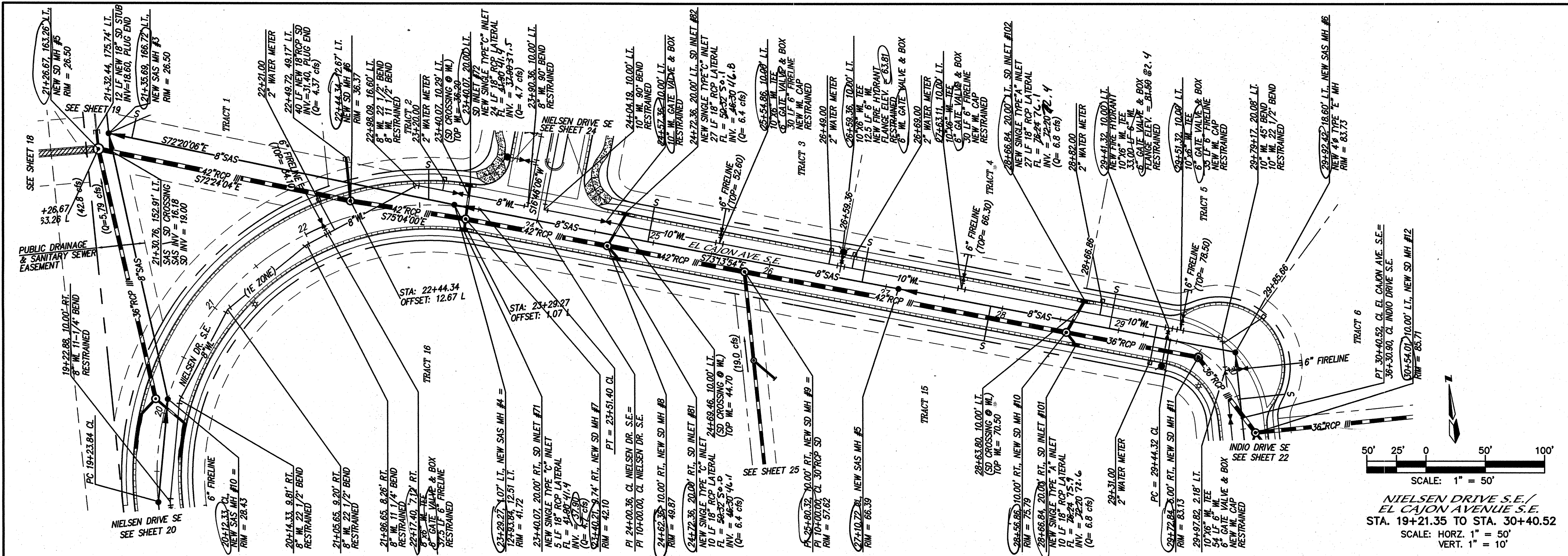
STORM DRAIN SUMMARY TABLE							
LOCATION		Q100	VELOCITY	UPSTREAM		DOWNSTREAM	
UPSTRM	DNSTRM	(cfs)	(fps)	GRD	HGL	GRD	HGL
MH#13	MH#5	42.8	10-13	128.43	124.2	126.50	121.20

Certification
THE CHANGES SHOWN HEREON ARE BASED UPON A
FIELD SURVEY CONDUCTED BY ME OR UNDER MY
SUPERVISION AND REFLECT THE LOCATIONS
(VERTICALLY AND HORIZONTALLY) TO THE BEST OF
MY KNOWLEDGE AND BELIEF.

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

	CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT
TITLE:	<i>NIelsen INDUSTRIAL PARK NIelsen DRIVE SOUTH UTILITY IMPROVEMENTS</i>

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR.	MO./DAY/YR.
CITY PROJECT NO. B.C.P.W. NO.	777081 50051	ZONE MAP NO. P-14-Z	SHEET OF 20R 29	



NOTES

1. ALL STATIONING IS BASED ON EL CAJON AVE. CENTERLINE.

2. STORM DRAIN CONSTRUCTION IS UNDER BERNALILLO COUNTY PUBLIC WORKS DEPT. JURISDICTION AND WATERLINE AND SANITARY SEWER IS UNDER ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY (A.B.C.W.U.A.) JURISDICTION.

AS BUILT INFORMATION

CONTRACTOR	DATE
STATION	DATE
INSPECTOR	DATE
FIELD	DATE
REVISION	DATE
CORRECTION	DATE
RECORDED BY	DATE
NO.	

BENCH MARKS

STATION 2+14 IS LOCATED 3.9 MILES SOUTH OF DOWNTOWN ALBUQUERQUE. TO REACH STATION FROM INTERSECTION SECTION OF BROADWAY BLVD. AND CENTRAL AVE. GO SOUTH ON BROADWAY BLVD. 3.7 MILES TO THE STATION ON THE LEFT. STATION MARK IS A STANDARD ACS 3 1/4" ALUMINUM CAP STAMPED "2-N4". X=381.35/28, Y=1.467/202.41 (NAD 1927) ELEV=4973.259 (NGVD29).

SURVEY INFORMATION

FIELD BY	DATE
NO.	

ENGINEER'S SEAL

NEW MEXICO
1987
DANIEL HOELTER
LICENSED PROFESSIONAL ENGINEER

SANITARY SEWER SERVICES

BLOCK	TRACT	STATION AT PL	INV. ELEV. AT PL	LENGTH AT PL
1	1 **	21+39.00	21.00	17.00'
1	2	23+07.74	34.50	26.00'
1	3	24+95.00	45.33	30.00'
1	4	26+79.00	56.50	30.00'
1	5	28+92.00	67.81	30.00'
1	6	30+24.48	76.10	39.10'
1	15*	27+90.00	67.00	30.00'

* SAS SERVICE LINE OVER STORM DRAIN PIPE.
** END SAS SERVICE LINE AT EASEMENT LINE

STORM DRAIN SUMMARY TABLE

LOCATION	Q100	VELOCITY	UPSTREAM	DOWNSTREAM
UPSTRM	DNSTRM	(cfs)	(fps)	GRD HGL GRD HGL
MH#5	MH#6	195	20-24	136.37 130.7 126.50 119.50
MH#7	MH#8	191	25	142.10 135.1 136.37 130.70
MH#9	MH#7	181	25-26	149.87 142.5 142.10 135.10
MH#9	MH#8	168	24-26	157.62 149.9 149.87 142.50
MH#10	MH#9	150	23-27	175.79 167.5 157.62 149.90
MH#11	MH#10	136	23-26	183.13 175.7 175.79 167.50
MH#12	MH#11	136	19-22	185.17 180.52 183.13 175.70

Certification

THE CHANGES SHOWN HEREON ARE BASED UPON A FIELD SURVEY CONDUCTED BY ME OR UNDER MY SUPERVISION AND REFLECT THE LOCATIONS (VERTICALLY AND HORIZONTALLY) TO THE BEST OF MY KNOWLEDGE AND BELIEF.

[Signature]

PWCO: 50051

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

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

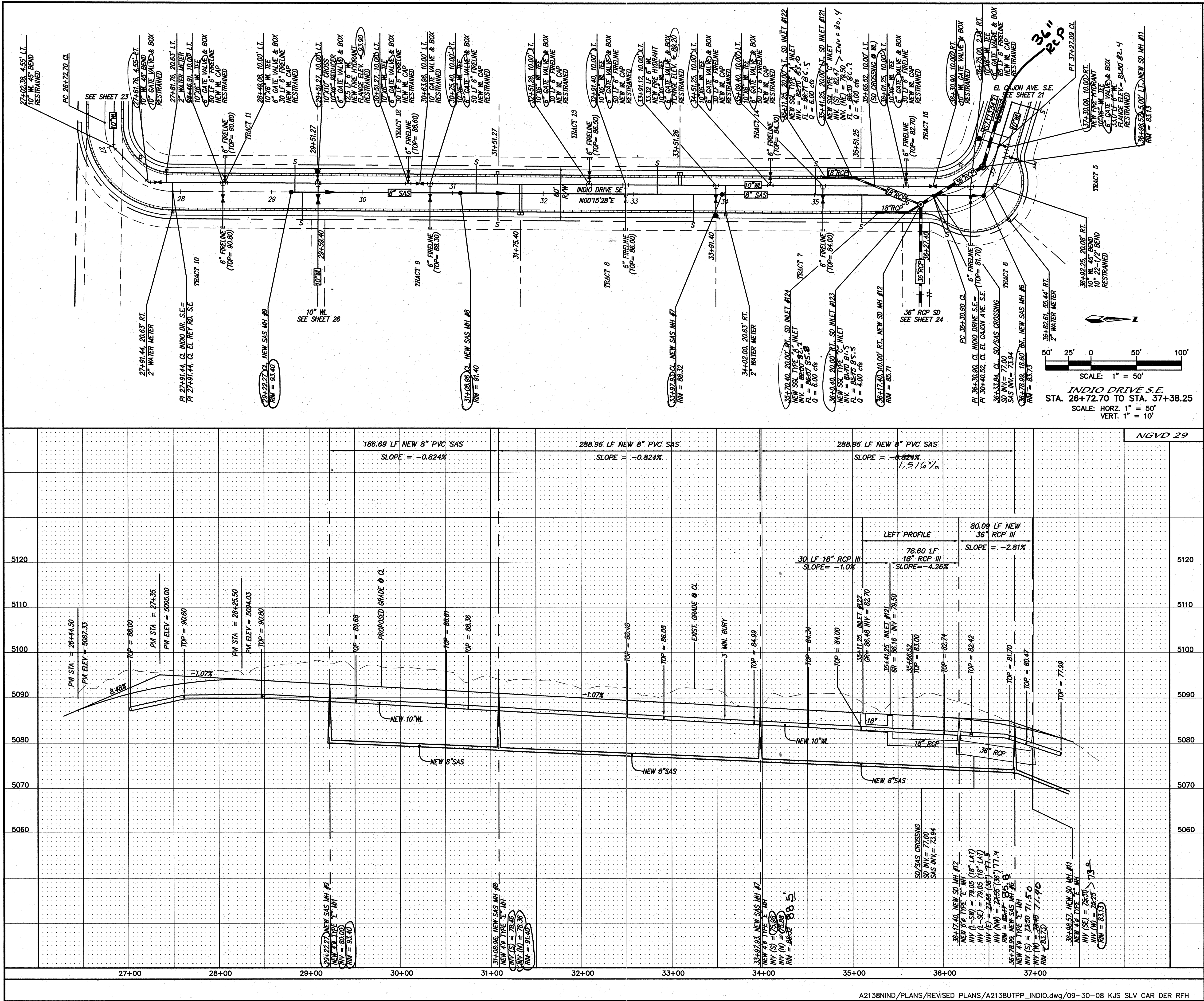
TITLE: **NIELSEN INDUSTRIAL PARK
EL CAJON AVENUE S.E.
UTILITY IMPROVEMENTS**

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

CITY PROJECT NO. **777081**
B.C.P.W. **50051**

ZONE MAP NO. **P-14-Z**

SHEET **21R 29** OF



NOTES

1. ALL STATIONING IS BASED ON INDIO DRIVE CENTERLINE.
2. STORM DRAIN CONSTRUCTION IS UNDER BERNALILLO COUNTY PUBLIC WORKS DEPT. JURISDICTION AND WATERLINE AND SANITARY SEWER IS UNDER ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY (A.B.C.W.U.A.) JURISDICTION.

SANITARY SEWER SERVICES				
BLOCK	TRACT	STATION AT P.L.	INV. ELEV. AT P.L.	LENGTH AT P.L.
1	6	36+47.00	76.10	37.94'
1	7	35+52.40	81.00	30.00'
1	8	33+66.40	83.00	30.00'
1	9	31+50.40	85.30	30.00'
1	10	29+34.40	87.50	30.00'
1	* 11	29+26.27	82.50	30.00'
1	* 12	31+26.27	80.70	30.00'
1	* 13	33+26.26	79.05	30.00'
1	* 14	35+01.25	78.50	30.00'

* TRACTS 11, 12, 13, 14, & 15 WILL BE REQUIRED TO PUMP SEWAGE TO SANITARY SEWER SERVICE INVERT @ P.L. DUE TO LOW ONSITE GRADES.

Certification
THE CHANGES SHOWN HEREON ARE BASED UPON A FIELD SURVEY CONDUCTED BY ME OR UNDER MY SUPERVISION AND REFLECT THE LOCATIONS (VERTICALLY AND HORIZONTALLY) TO THE BEST OF MY KNOWLEDGE AND BELIEF.

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

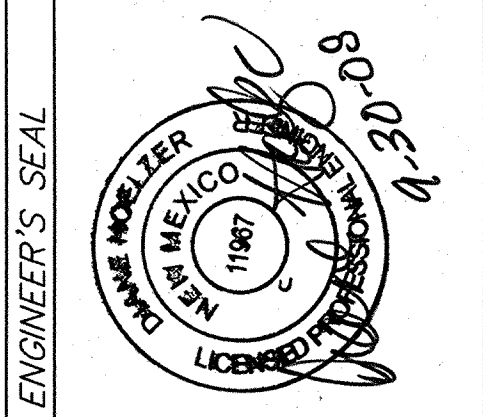
**CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT**

TITLE: **NIELSEN INDUSTRIAL PARK
INDIO DRIVE S.E.
UTILITY IMPROVEMENTS**

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

CITY PROJECT NO. **777081**
B.C.P.W. NO. **50051**

ZONE MAP NO. **P-14-Z**
SHEET **22** OF **29**



REVISIONS		DATE	BY
NO.	DATE	REMARKS	BY
		DESIGN	
		REVISED	
		DATE	DATE
		DATE	DATE
		DATE	DATE

SURVEY INFORMATION		FIELD NOTES		BENCH MARKS		AS BUILT INFORMATION	
NO.	BY	DATE	STATION "2-N14 IS LOCATED 3.9 MILES SOUTH OF DOWNTOWN ALBUQUERQUE. TO REACH STATION FROM INTERSECTION SECTION OF BROADWAY BLVD. AND CENTRAL AVE. GO SOUTH ON BROADWAY BLVD. 3.7 MILES TO THE STATION ON THE LEFT. STATION MARK IS A STANDARD ACS 3 1/4" ALUMINUM CAP. STAMPED "2-N14". X=381.735.28, Y=1.467.2012.41 (NAD 1927) ELEV=4973.259 (NGVD29).			CONTRACTOR	
				WORK INSPECTED BY	Cartesian Surveys Inc.	DATE	
				INSPECTOR'S ACCEPTANCE BY		DATE	
				FIELD VERIFICATION BY	Cartesian Surveys Inc.	DATE	
				DRAWINGS CORRECTED BY		DATE	
				MICRO-FILM INFORMATION			
				RECORDED BY		DATE	
				NO.			

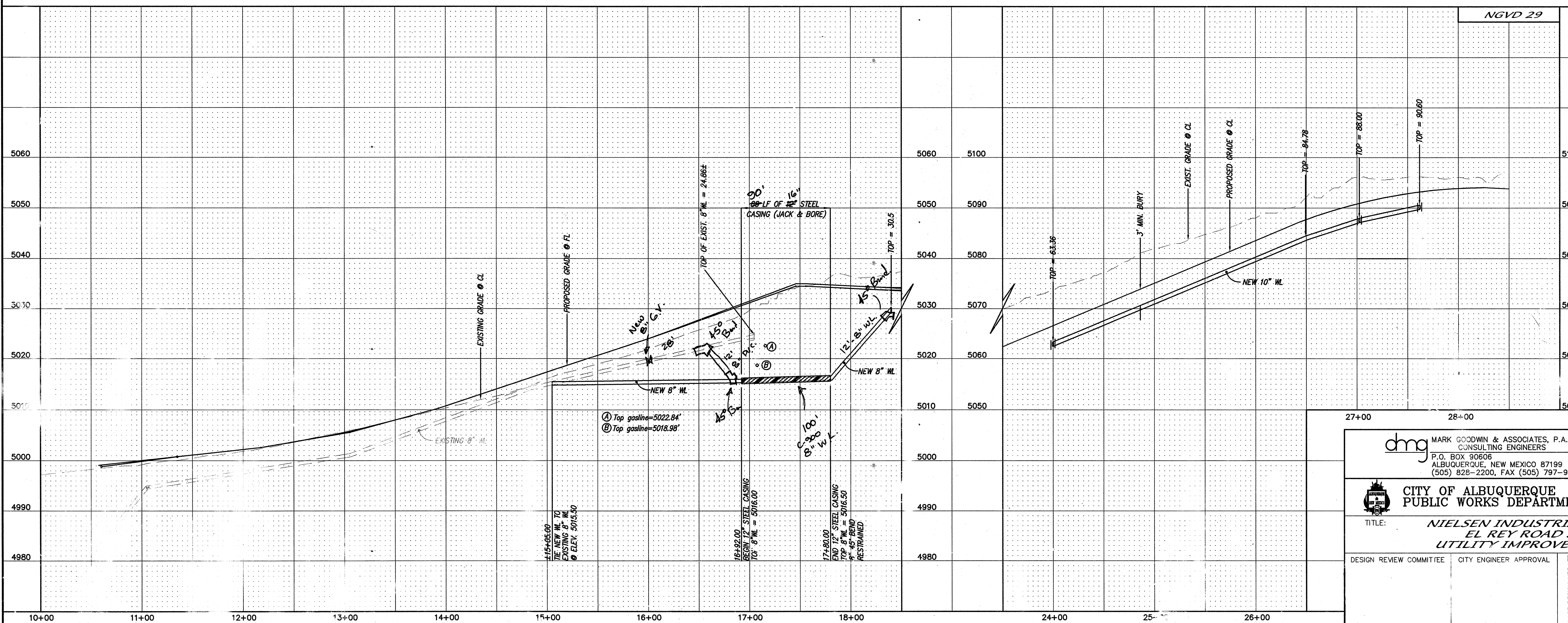
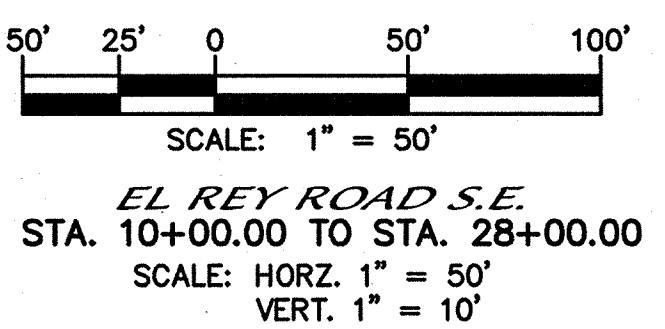
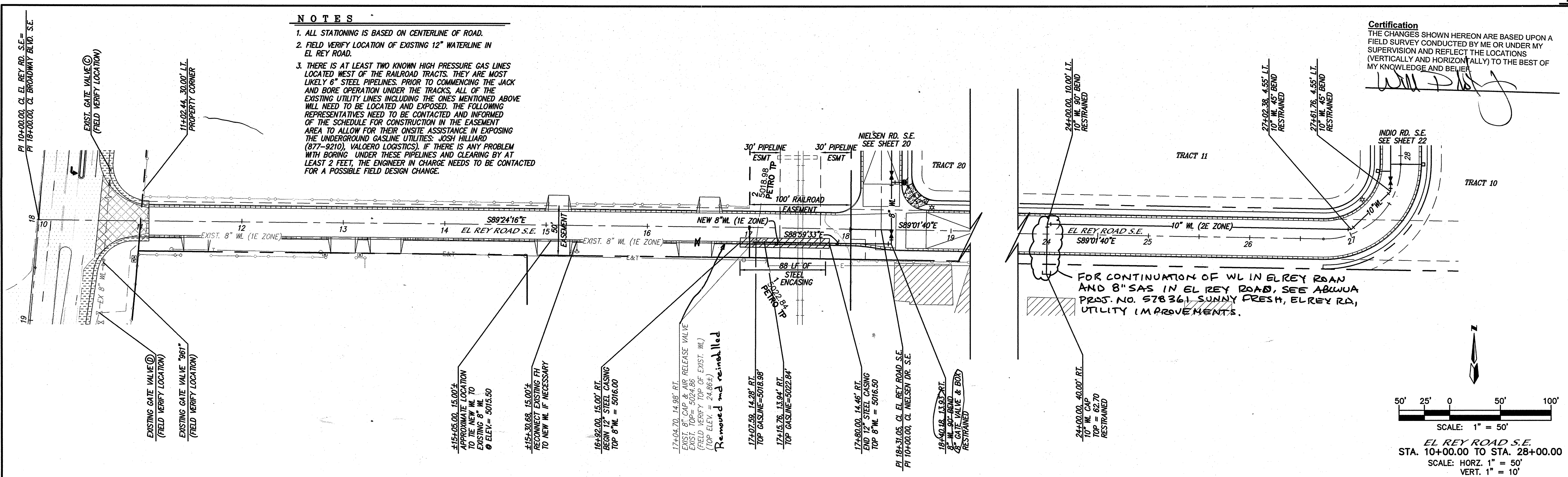
LAST DESIGN UPDATE	MO./DAY/YR.	MO./DAY/YR.

NOTES

1. ALL STATIONING IS BASED ON CENTERLINE OF ROAD.
2. FIELD VERIFY LOCATION OF EXISTING 12" WATERLINE IN EL REY ROAD.
3. THERE IS AT LEAST TWO KNOWN HIGH PRESSURE GAS LINES LOCATED WEST OF THE RAILROAD TRACTS. THEY ARE MOST LIKELY 6" STEEL PIPELINES. PRIOR TO COMMENCING THE JACK AND BORE OPERATION UNDER THE TRACKS, ALL OF THE EXISTING UTILITY LINES INCLUDING THE ONES MENTIONED ABOVE WILL NEED TO BE LOCATED AND EXPOSED. THE FOLLOWING REPRESENTATIVES NEED TO BE CONTACTED AND INFORMED OF THE SCHEDULE FOR CONSTRUCTION IN THE EASEMENT AREA TO ALLOW FOR THEIR ONSITE ASSISTANCE IN EXPOSING THE UNDERGROUND GASLINE UTILITIES: JOSH HILLARD (877-9210), VALERO LOGISTICS. IF THERE IS ANY PROBLEM WITH BORING UNDER THESE PIPELINES AND CLEARING BY AT LEAST 2 FEET, THE ENGINEER IN CHARGE NEEDS TO BE CONTACTED FOR A POSSIBLE FIELD DESIGN CHANGE.

CERTIFICATION
THE CHANGES SHOWN HEREON ARE BASED UPON A FIELD SURVEY CONDUCTED BY ME OR UNDER MY SUPERVISION AND REFLECT THE LOCATIONS (VERTICALLY AND HORIZONTALLY) TO THE BEST OF MY KNOWLEDGE AND BELIEF.

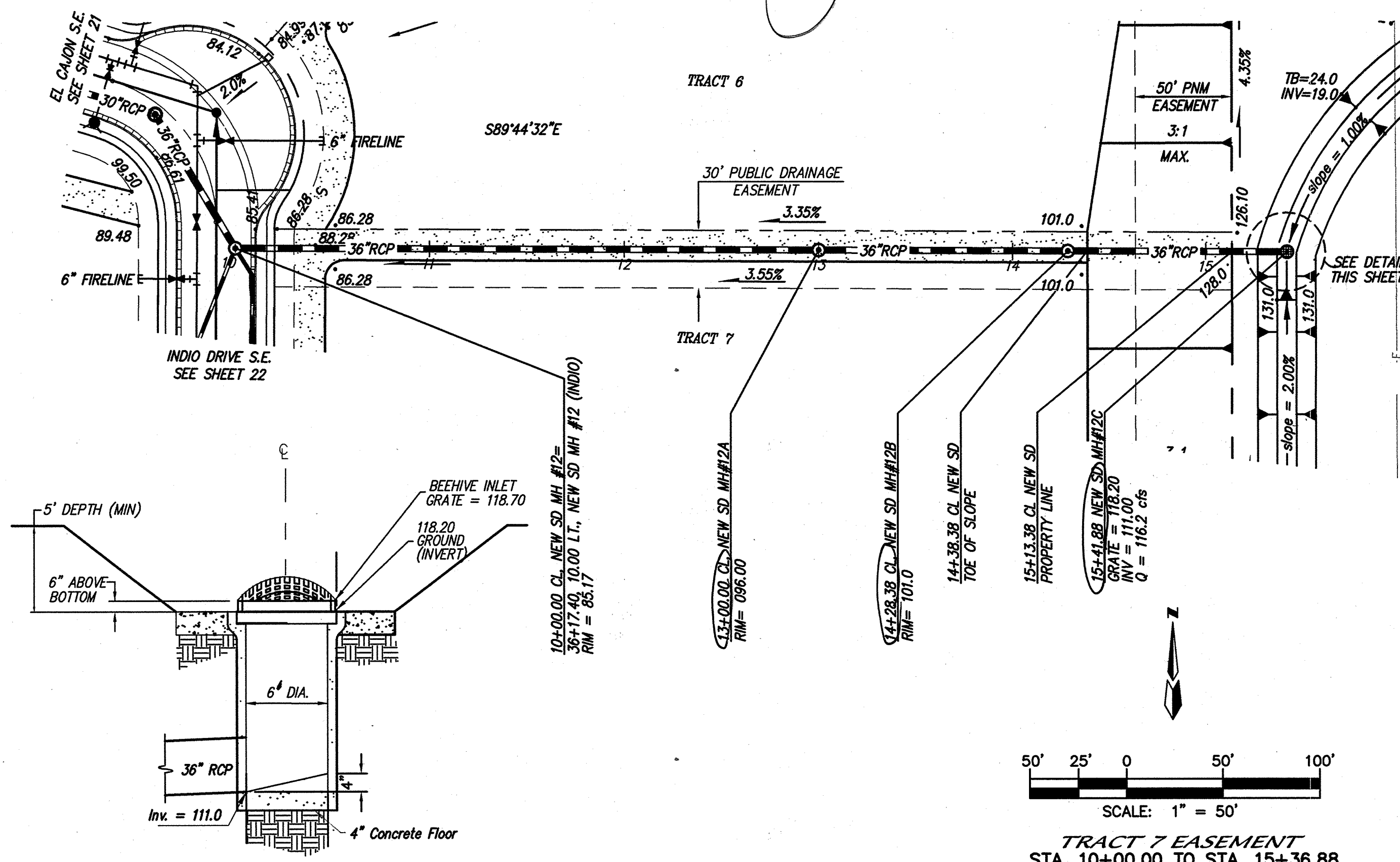
WILL D. BERRY
11/11/07



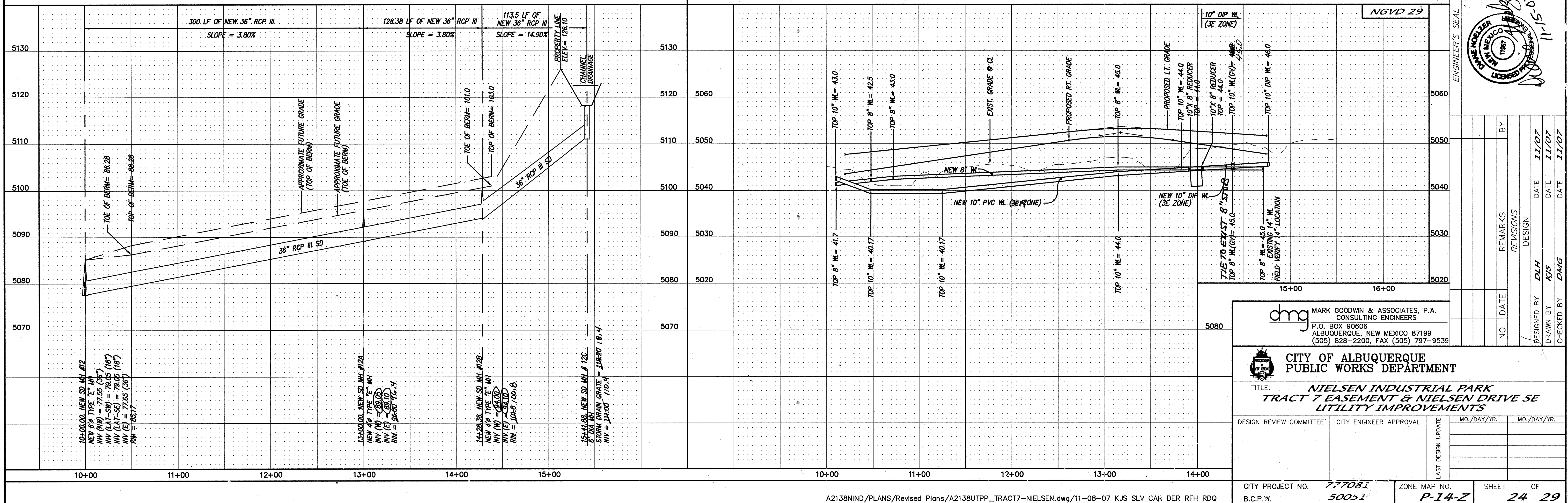
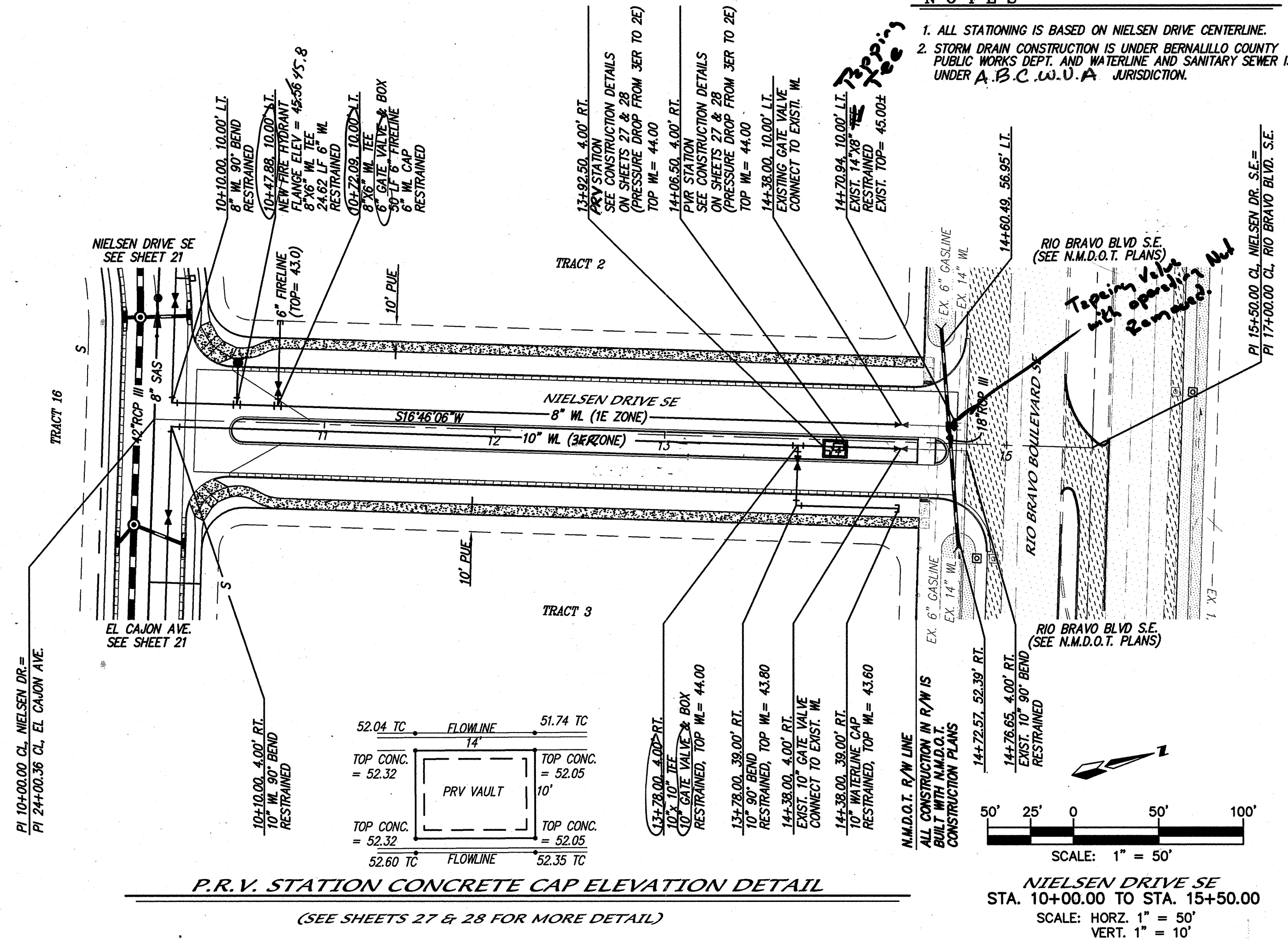
MARK GOODWIN & ASSOCIATES, P.A. CONSULTING ENGINEERS P.O. BOX 90608 ALBUQUERQUE, NEW MEXICO 87199 (505) 828-2200, FAX (505) 797-9539	
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT	
TITLE: NIELSEN INDUSTRIAL PARK EL REY ROAD S.E. UTILITY IMPROVEMENTS	
DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL
NO. / DAY / YR.	MC / DAY / YR.
LAST DESIGN UPDATE	
PROJECT NO. 777081	MAP NO. P-14-Z
DATE 11/07	DATE 11/07
CHECKED BY DMG	DATE 11/07

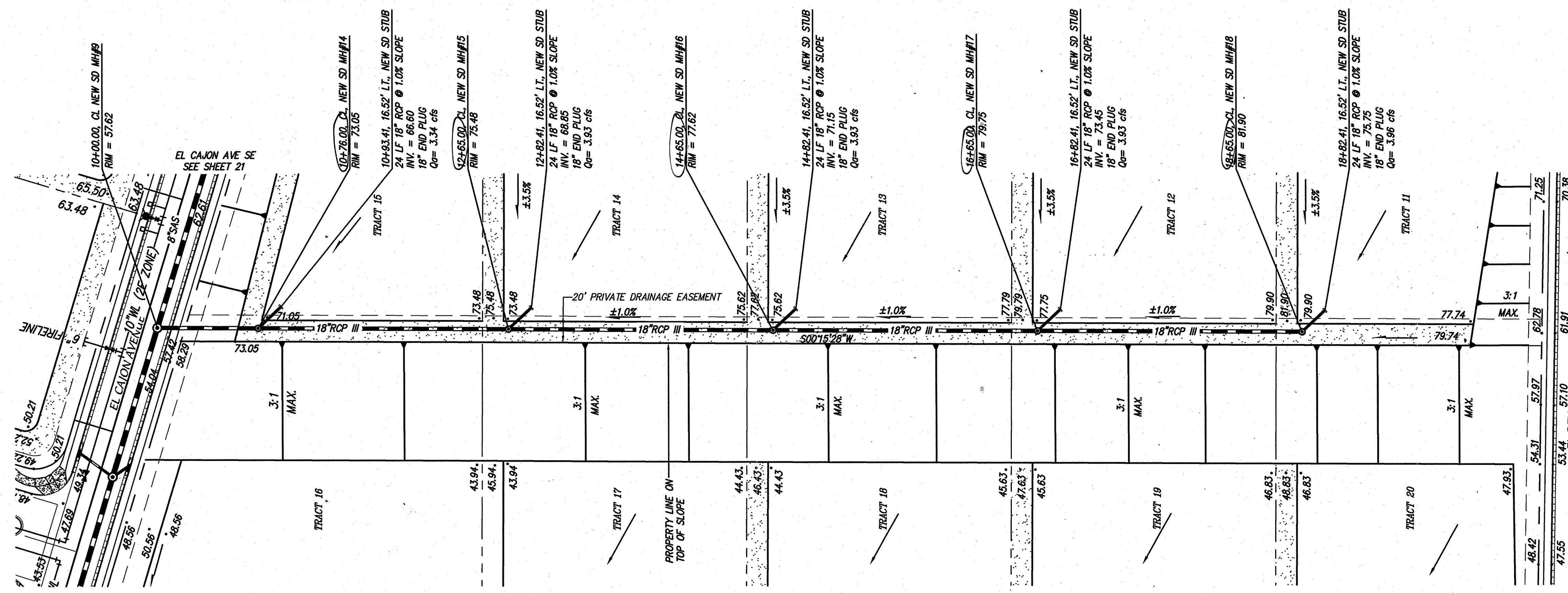
THE CHANGES SHOWN HEREON ARE BASED UPON A
FIELD SURVEY CONDUCTED BY ME OR UNDER MY
SUPERVISION AND REFLECT THE LOCATIONS
(VERTICALLY AND HORIZONTALLY) TO THE BEST OF
MY KNOWLEDGE AND BELIEF

1. ALL STATIONING IS ALONG SD PIPE.
2. STORM DRAIN CONSTRUCTION IS UNDER BERNALILLO COUNTY PUBLIC WORKS DEPT. AND WATERLINE AND SANITARY SEWER IS UNDER A.B.C.W.U.A. JURISDICTION.



1. ALL STATIONING IS BASED ON NIELSEN DRIVE CENTERLINE.
2. STORM DRAIN CONSTRUCTION IS UNDER BERNALILLO COUNTY PUBLIC WORKS DEPT. AND WATERLINE AND SANITARY SEWER IS UNDER A.B.C.W.V.A JURISDICTION.

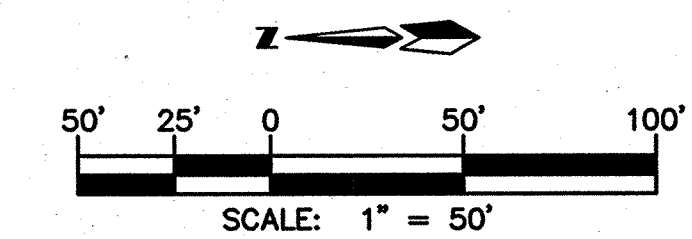




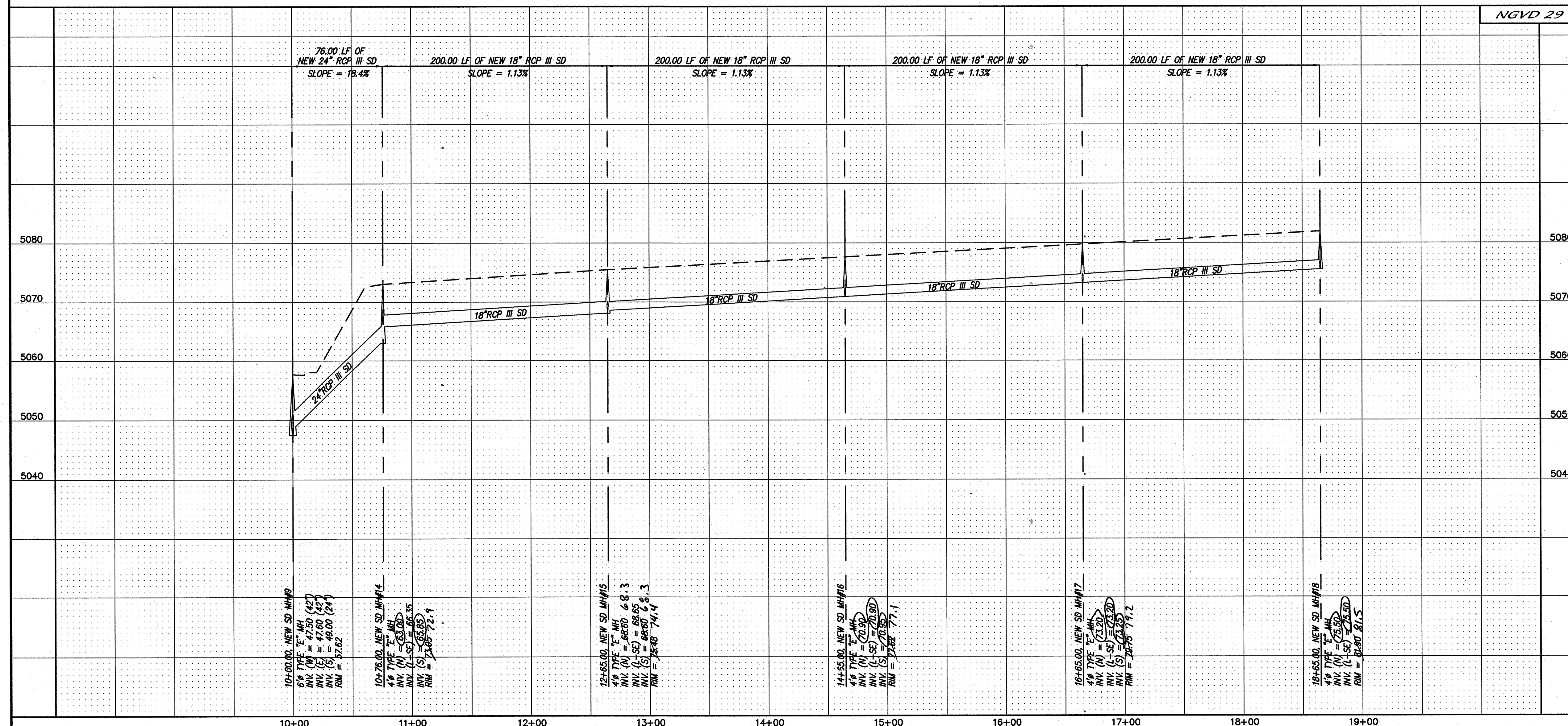
NOTES

- ALL STATIONING IS BASED ON CENTERLINE OF NEW 24" RCP.
- STORM DRAIN CONSTRUCTION IS UNDER BERNALILLO COUNTY PUBLIC WORKS DEPT. AND WATERLINE AND SANITARY SEWER IS UNDER CITY OF ALBUQUERQUE JURISDICTION.

DENOTES BERM LOCATION (TYPICAL) SEE GRADING & DRAINAGE PLAN FOR MORE DETAIL.



TRAJECTS 11-15
STA. 10+00.00 TO STA. 18+65.00
SCALE: HORZ. 1" = 50'
VERT. 1" = 10'



STORM DRAIN SUMMARY TABLE					
LOCATION		Q100	VELOCITY	UPSTREAM	DOWNSTREAM
UPSTRM	DNSTRM	(cfs)	(fps)	GRD	HGL
MH#14	MH#9	19.0	20.0	173.05	163.7
MH#15	MH#14	15.8	8.9	175.48	171.8
MH#16	MH#15	11.8	6.7	177.62	175.3
MH#17	MH#16	7.9	4.5	179.75	177.2
MH#18	MH#17	3.9	2.2	181.90	177.8

Certification
THE CHANGES SHOWN HEREON ARE BASED UPON A FIELD SURVEY CONDUCTED BY ME OR UNDER MY SUPERVISION AND REFLECT THE LOCATIONS (VERTICALLY AND HORIZONTALLY) TO THE BEST OF MY KNOWLEDGE AND BELIEF.

MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90608
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539

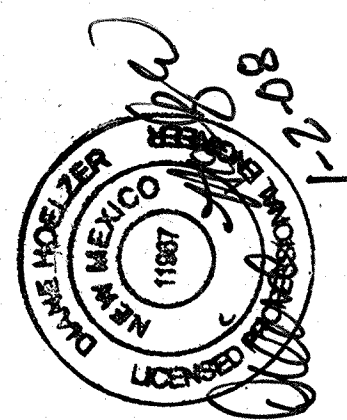
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

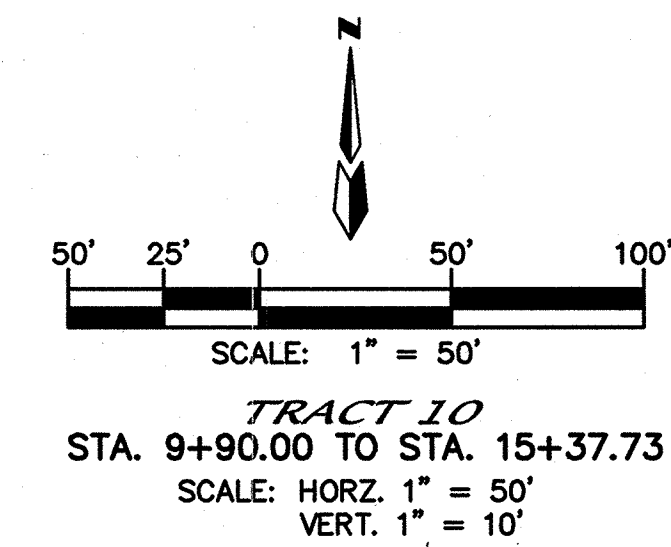
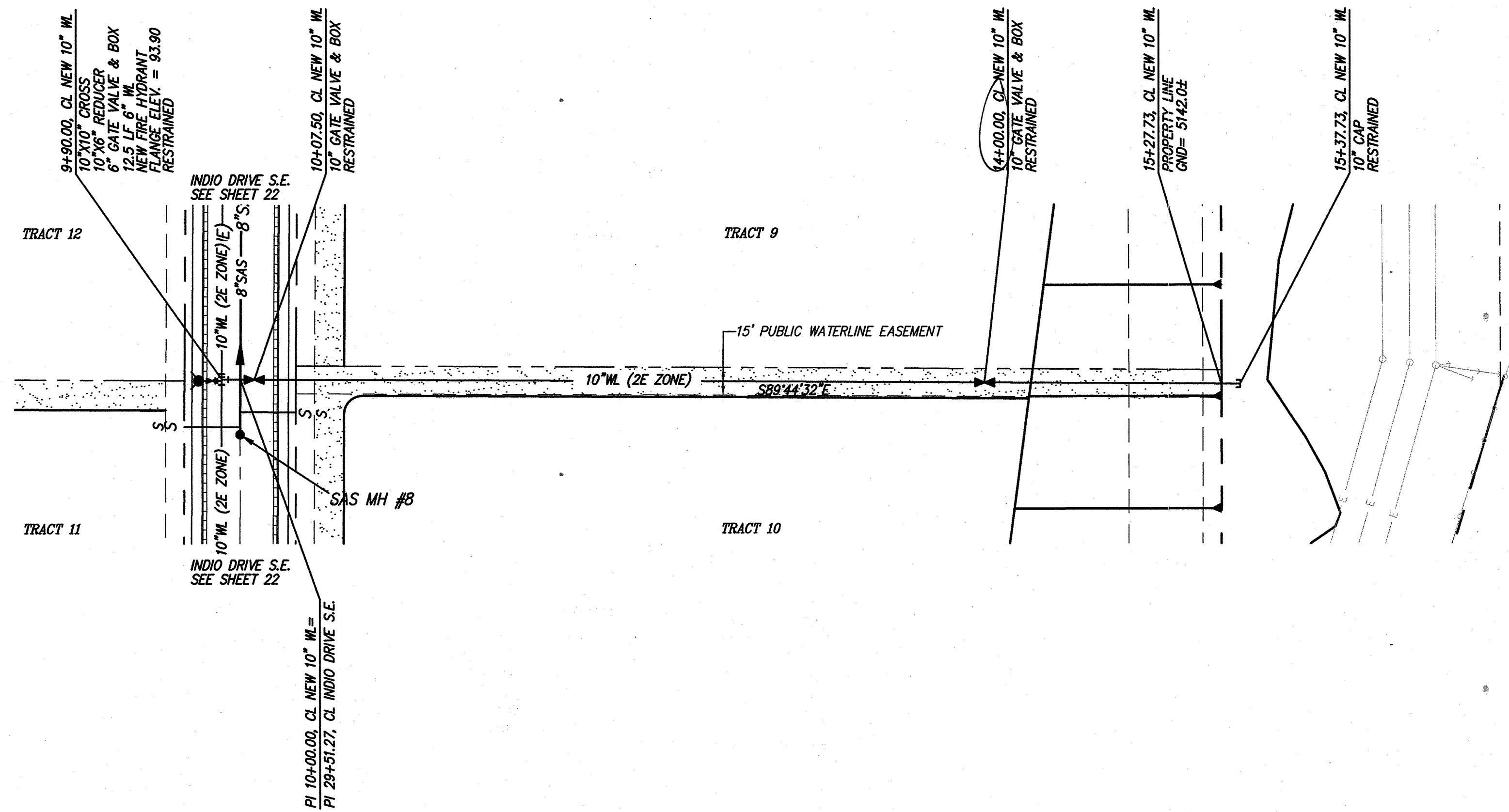
TITLE: NIELSEN INDUSTRIAL PARK
TRACTS 11-15 EASEMENT
STORM DRAIN IMPROVEMENTS

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

CITY PROJECT NO. 777081
B.C.P.W. NO. 50051
ZONE MAP NO. P-14-Z
SHEET 25 OF 29

AS BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL	
CONTRACTOR	WORK ORDER BY	STATION "2" MH IS LOCATED 3.9 MILES SOUTH OF DOWNTOWN ALBUQUERQUE. TO REACH STATION FROM INTERSECTION OF BROADWAY BLVD. AND CENTRAL AVE. GO SOUTH ON BROADWAY BLVD. 3.7 MILES TO THE STATION ON THE LEFT. STATION MARK IS A STANDARD ACS 3 1/4" ALUMINUM CAP STAMPED "2-N14" X-381,235.28 Y=1,467,202.41 (NAD 1927) ELEV=4,973.289 (NGVD29).	DATE	NO.	BY	DATE	NO.
INSPECTOR	ACCEPTANCE BY						
DRAWINGS	VERIFICATION BY						
CORRECTIONS	CORRECTED BY						
RECORD BY	RECORDED BY						
NO.	NO.						





NOTES

1. ALL STATIONING IS BASED ON CENTERLINE OF NEW 10" WATERLINE.

 DENOTES BERM LOCATION (TYPICAL)
SEE GRADING & DRAINAGE PLAN
FOR MORE DETAIL

[illegible]

Certification
THE CHANGES SHOWN HEREON ARE BASED UPON A
FIELD SURVEY CONDUCTED BY ME OR UNDER MY
SUPERVISION AND REFLECT THE LOCATIONS
(VERTICALLY AND HORIZONTALLY) TO THE BEST OF
MY KNOWLEDGE AND BELIEF.

Wine that

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

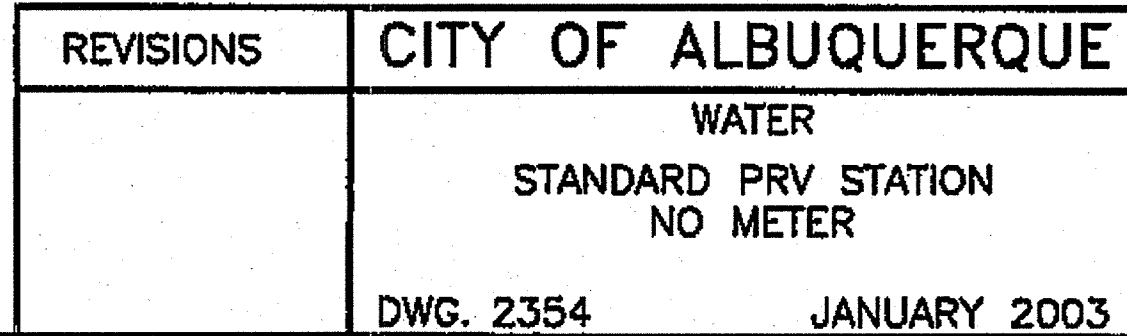


**CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT**

TITLE: ***NIELSEN INDUSTRIAL PARK
TRACT 10 WATERLINE EASEMENT
UTILITY IMPROVEMENTS***

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

CITY PROJECT NO.	777081	ZONE MAP NO.	SHEET OF
B.C.P.W.	50051	P-14-Z	26 29



- A PRESSURE REDUCING VALVE, AS SPECIFIED (8" PRV - THIS PROJECT) (3" PRV - BYPASS - THIS PROJECT)
- B FLEXIBLE COUPLING WITH THRUST TIES, SEE THRUST TIE DETAIL ON DWG. 2358 (8")
- C FLANGED TEE, REQUIRED ONLY IF BYPASS SPECIFIED (8"x3" TEE - THIS PROJECT)
- D BURIED BUTTERFLY VALVE (GATE VALVE FOR SIZE < 14") (8" GATE VALVE - THIS PROJECT)
- E BUTTERFLY VALVE WITH HAND WHEEL OPERATOR (GATE VALVE FOR SIZE < 8"), REQUIRED ONLY WHEN BYPASS IS SPECIFIED. (8" BUTTERFLY VALVE - THIS PROJECT)
- F FLANGED SPOOL, LENGTH = 1'-0"
- G ADJUSTABLE PIPE SADDLE SUPPORT, GRINNELL FIG. 264, ELCEN FIG. 50 OR EQUAL, TYPICAL
- H GATE VALVE WITH HAND WHEEL OPERATOR, REQUIRED ONLY IF BYPASS SPECIFIED (3" BYPASS - THIS PROJECT)
- J 1'-6" WIDE ALUMINUM LADDER W/LADDER UP SAFETY POST PER OSHA STANDARDS.
- K ALUMINUM FLOOR DOOR WITH RECESSED HASP COVERED BY A HINGED LID FLUSH WITH TOP SURFACE. DOOR SIZE SHALL BE 4'x4' DOUBLE LEAF (WITHOUT BYPASS) AND 4'x6' DOUBLE LEAF (WITH BYPASS). HARDWARE AND HINGES SHALL BE 304 STAINLESS STEEL. BILCO TYPE JD, OR EQUAL.
- L GRAVEL PER ASTM C33, NO. 57 GRAVEL.
- M 6" STEEL PIPE W/GOOSENECK AND INSECT SCREEN
- N 3'-0" SQ ALUMINUM FLOOR DOOR WITH RECESSED HASP COVERED BY A HINGED LID FLUSH WITH TOP SURFACE. HARDWARE AND HINGES SHALL BE 304 STAINLESS STEEL. BILCO TYPE J, OR EQUAL.
- P WALL PIPE WITH THRUST COLLAR, CENTER IN WALL
- Q 1/2" PIPE TAP WITH 1/2" BALL VALVE AND CAP
- R D.I. SPOOL FLG. x P.E.
- S MEGA FLANGE - FLANGE ADAPTER, AS MANUFACTURED BY EBAA IRON SALES, OR APPROVED EQUAL.
- T INSULATING FLANGE KIT.
- U 10"x 8" REDUCER
- V 8" PRV AND 3" PRV SHALL BE MANUFACTURED BY CLA-VAL COMPANY.

SURVEY INFORMATION		BENCH MARKS
FIELD NOTES		
NO.	BY	DATE
		STATION "2-N14" IS LOCATED 3.9 MILES SOUTH OF DOWNTOWN ALBUQUERQUE. TO REACH STATION FROM INTERSECTION SECTION OF BROADWAY BLVD. AND CENTRAL AVE., GO SOUTH ON BROADWAY BLVD. 3.7 MILES TO THE STATION ON THE LEFT. STATION MARK IS A STANDARD AIS 3 1/4" ALUMINUM CAP STAMPED "2-N14", X=391, Y=258, Y=1,467,2012.41 (NAD 1927) ELEV=4,973.259 (NGVD29).

[illegible]

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

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

TITLE: **NIELSEN INDUSTRIAL PARK
(3E TO3ERZONE)
PRV STATION DETAILS**

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

CITY PROJECT NO. <i>777081</i>	ZONE MAP NO. <i>P-14-Z</i>	SHEET OF <i>27 29</i>
-----------------------------------	-------------------------------	--------------------------

PRV VAULT DIMENSION AND REINFORCING SCHEDULE																				
"L"=VAULT LENGTH "W"=VAULT WIDTH		STANDARD PRV VAULT DIMENSIONS										WALL REINFORCING								
PIPE SIZE (IN)	STANDARD NO METER, NO BYPASS	PRV "W"	STANDARD NO METER, W/BYPASS	PRV "W"	WITH PROPELLER METER AND NO BYPASS	WITH PROPELLER METER AND BYPASS	WITH MAGNETIC FLOW METER AND BYPASS	WALL THICKNESS	TOP THICKNESS		WITHOUT BYPASS		WITH BYPASS							
									TRAFFIC	NONTRAFFIC	"L"	"W"	b	"L"	"W"	b				
	"L"	"W"	"L"	"W"	"L"	"W"	"L"	"W"	L(t)	W(t)	T(t)	T(t)	a	a		a	a	b		
6	10'-6"	5'-6"	11'-8"	8'-0"	10'-6"	5'-6"	14'-6"	8'-0"	15'-8"	8'-6"	1'-0"	1'-0"	1'-0"	0'-8"	#6 @ 12"	TYPICAL	TYPICAL	#5 @ 6"	TYPICAL	#6 @ 12"
8	10'-6"	5'-8"	12'-0"	8'-2"	10'-6"	5'-8"	15'-4"	8'-2"	16'-2"	8'-8"	1'-0"	1'-0"	1'-0"	0'-8"	#6 @ 12"	TYPICAL	TYPICAL	#5 @ 6"	TYPICAL	#6 @ 12"
10	10'-6"	5'-10"	13'-0"	8'-4"	11'-4"	5'-10"	17'-4"	8'-4"	17'-4"	8'-10"	1'-0"	1'-0"	1'-0"	0'-8"	#6 @ 12"	#6 @ 12"	TYPICAL	#5 @ 6"	#6 @ 12"	#6 @ 12"
12	10'-6"	6'-0"	13'-8"	8'-6"	12'-8"	6'-0"	19'-0"	8'-6"	18'-4"	9'-0"	1'-0"	1'-0"	1'-0"	0'-8"	#6 @ 12"	#6 @ 12"	TYPICAL	#5 @ 6"	#6 @ 12"	#6 @ 12"
14	10'-6"	6'-2"	14'-9"	8'-8"	14'-3"	6'-2"	21'-6"	8'-8"	20'-2"	9'-2"	1'-0"	1'-2"	1'-0"	0'-8"	#5 @ 6"	#5 @ 6"	#6 @ 12"	#5 @ 6"	#5 @ 6"	#6 @ 12"
16	10'-6"	6'-4"	15'-4"	8'-10"	16'-6"	6'-4"	24'-2"	8'-10"	21'-0"	9'-4"	1'-0"	1'-2"	1'-0"	0'-8"	#5 @ 6"	#5 @ 6"	#6 @ 12"	#5 @ 6"	#5 @ 6"	#6 @ 12"

DIMENSIONAL NOTES:

"L"=VAULT LENGTH
 "W"=VAULT WIDTH
 L(t)=WALL THICKNESS(LENGTH)
 W(t)=WALL THICKNESS(WIDTH)
 T(t)=TOP SLAB THICKNESS

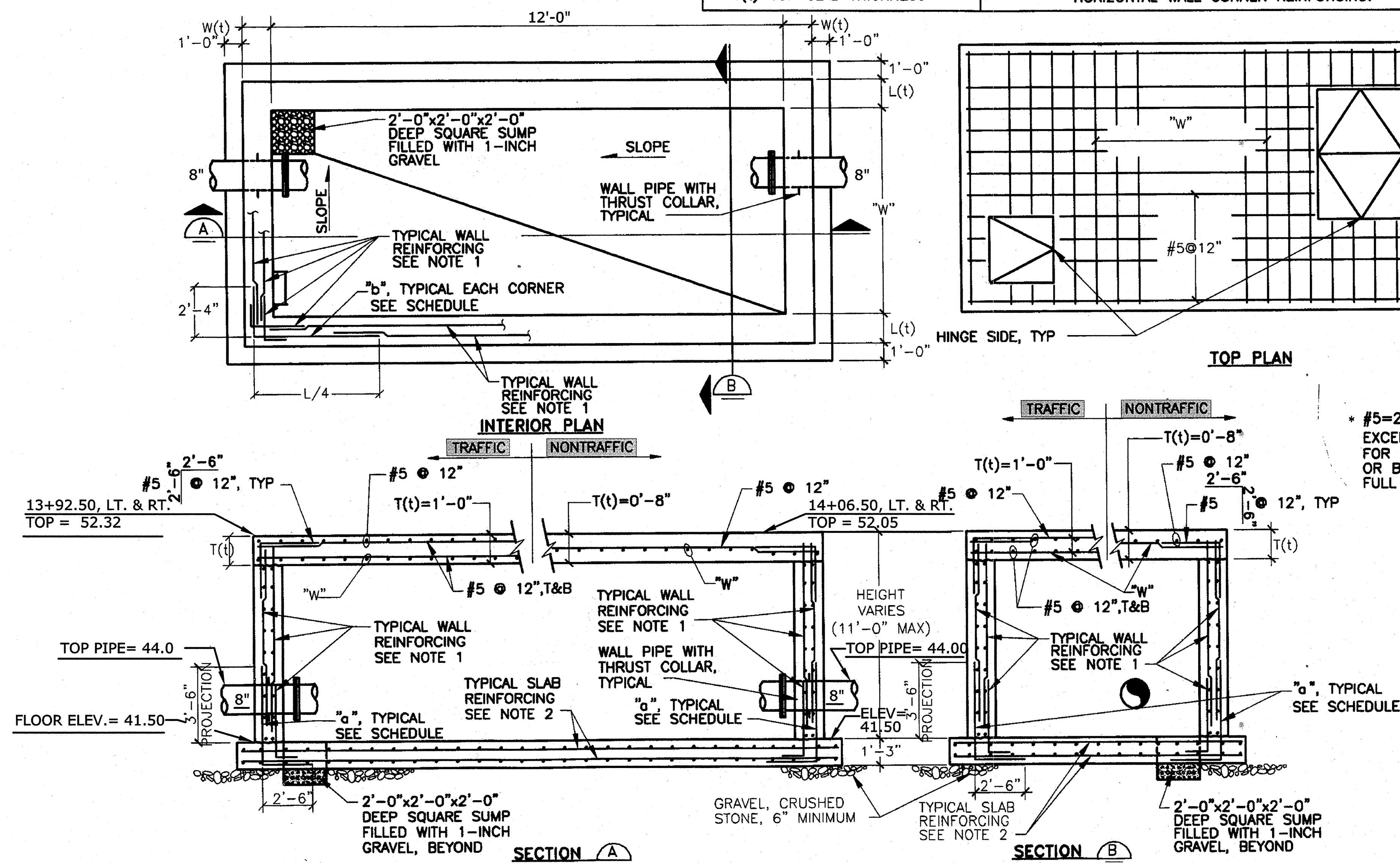
WALL REINFORCING NOTES:

1. "a" BAR DESIGNATION REPRESENTS WALL DOWELS PROTRUDING VERTICALLY FROM BASE SLAB ALONG LENGTHWISE DIMENSION "L" OR WIDTH DIMENSION "W".
2. "b" BAR DESIGNATION REPRESENTS ADDITIONAL HORIZONTAL WALL CORNER REINFORCING.

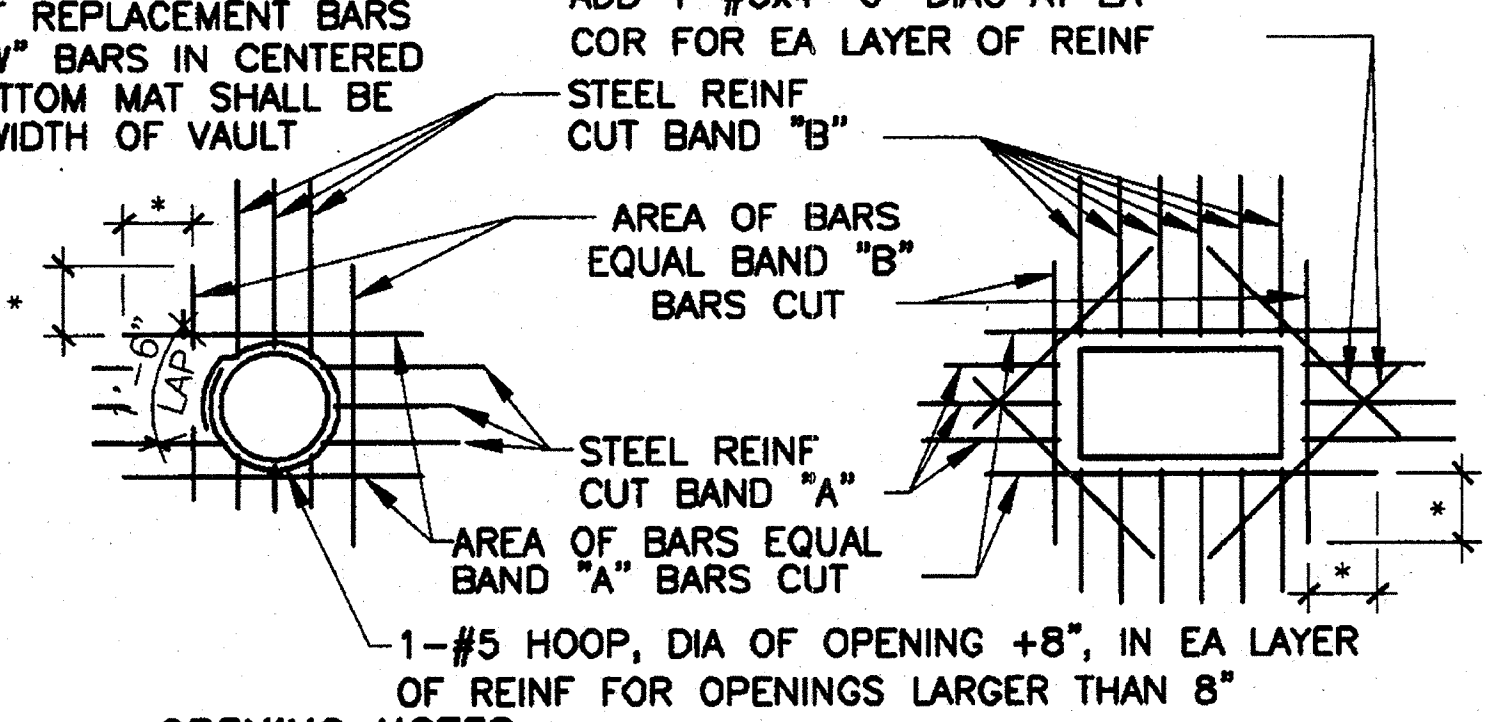
GENERAL NOTES:

1. TYPICAL WALL REINFORCING SHALL BE #5 @ 12" O.C., EACH WAY, EACH FACE UNLESS SHOWN OTHERWISE ON THE SCHEDULE. PROVIDE BARS AS INDICATED ON THE SCHEDULE AND LAP WITH #5 @ 12" FOR REMAINDER OF WALL HEIGHT OR LENGTH.
2. TYPICAL BASE SLAB REINFORCING SHALL BE #5 @ 12" EACH WAY, TOP AND BOTTOM OF SLAB.
3. CONCRETE SHALL BE IN ACCORDANCE WITH STD SPECIFICATION SECTION 510 WITH $F'_c = 4000$ PSI. ALL REINFORCING STEEL SHALL BE GRADE 60.
4. IF THE DEPTH OF VAULT EXCEEDS THE 11'-0" MAXIMUM DEPTH SHOWN, THE ENGINEER/CONTRACTOR SHALL DESIGN THE REINFORCEMENT, WALL AND FLOOR THICKNESSES TO SUIT THE SPECIFIC CONDITIONS. ALL STRUCTURAL MODIFICATIONS SHALL BE PERFORMED AND STAMPED BY A LICENSED NEW MEXICO PROFESSIONAL ENGINEER.

VAULT TOP REINFORCING		
VAULT DIMENSION	REINFORCING	
	T(t)=0'-8" T(t)=1'-0"	
	CENTERED MAT	BOTTOM MAT
"W"	"W"	"W"
≤6'-0"	#5 @ 12"	#5 @ 12"
>6'-0" ≤7'-0"	#5 @ 12"	#6 @ 12"
>7'-0" ≤9'-0"	#6 @ 12"	#7 @ 12"
>9'-0" ≤10'-0"	#7 @ 12"	#7 @ 12"



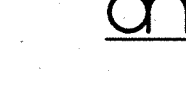
* #5=2'-6", #6=3'-0", #7=3'-6"
EXCEPT REPLACEMENT BARS
FOR "W" BARS IN CENTERED
OR BOTTOM MAT SHALL BE
FULL WIDTH OF VAULT

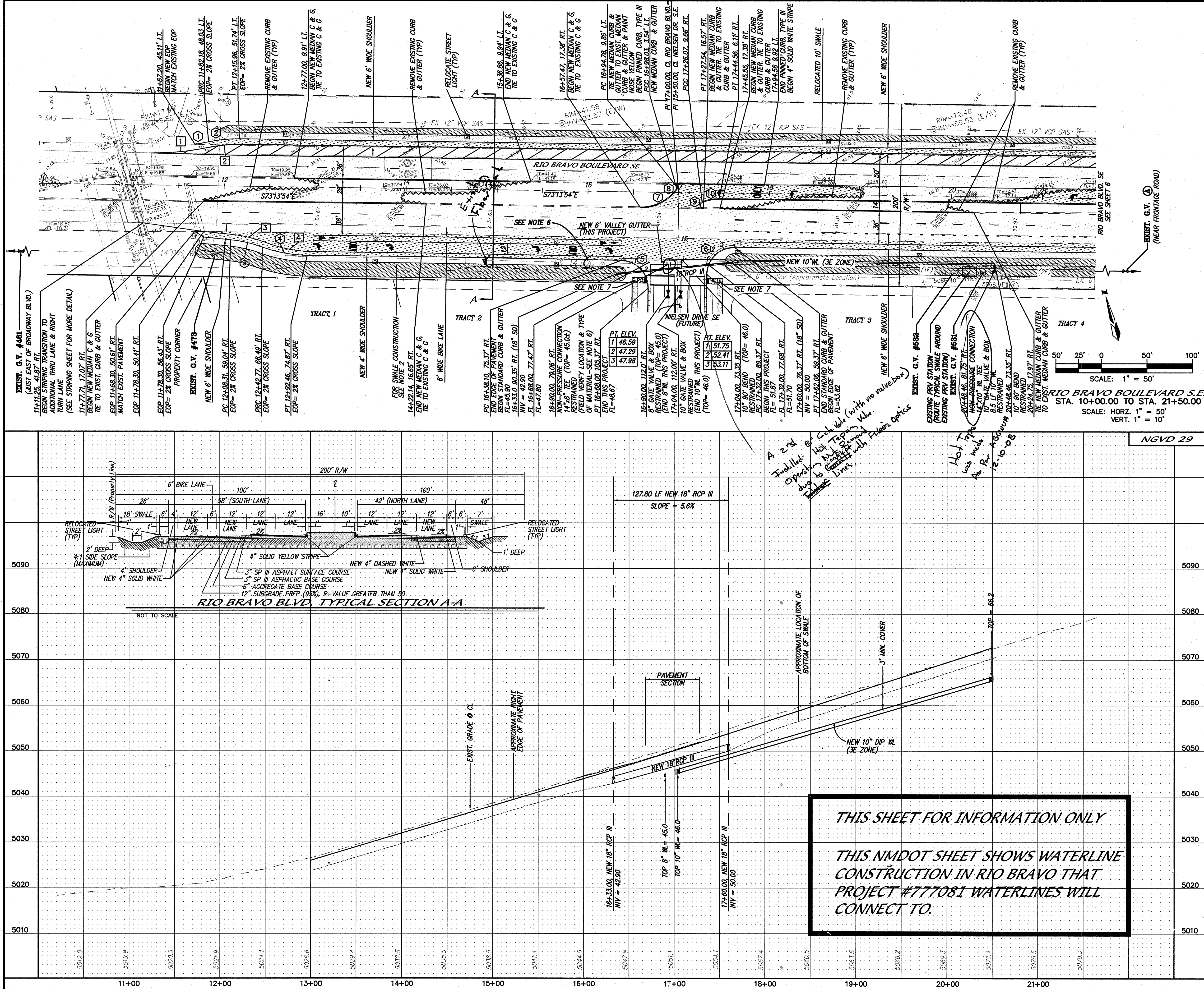


OPENING NOTES

1. TYPICAL FOR ALL OPENINGS IN CONCRETE WALLS AND SLABS.
2. DO NOT WELD REINFORCEMENT TO PIPE SLEEVES AND INSERTS.

REVISIONS	CITY OF ALBUQUERQUE
	WATER
	STANDARD PRV STATION
	STRUCTURAL DETAILS
	DWG. 2357
	JANUARY 2002

	MARK GOODWIN & ASSOCIATES, P.A. CONSULTING ENGINEERS				DAT#
P.O. BOX 90606 ALBUQUERQUE, NEW MEXICO 87199 (505) 828-2200, FAX (505) 797-9539				NO.	DESIGNED BY DRAWN BY CHECKED BY
 CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT					
TITLE:	NIELSEN INDUSTRIAL PARK (3E TO 3ER ZONE) PRV STATION DETAILS				
DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR.		MO./DAY/YR.
CITY PROJECT NO. 777081		ZONE MAP NO. P-14-Z	SHEET	OF	
			28	29	



NOTES

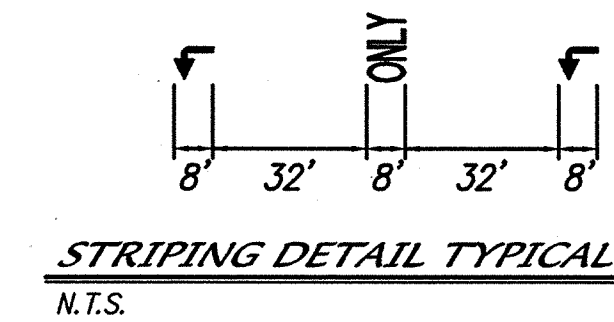
1. ALL STATIONING IS CENTERLINE STATIONING.
2. SEE SHEET 6 FOR RIO BRAVO STREET AND PAVEMENT SECTIONS.
3. SEE SHEET 7 FOR STRIPING & SIGNAGE PLAN.
4. SEE SHEETS 9, 10 & 11 FOR TRAFFIC CONTROL PLANS.
5. FIELD VERIFY WATERLINE MATERIAL BEFORE MAKING CONNECTION.
6. THE WHEEL CHAIR RAMP AND VALLEY GUTTER ARE PART OF THIS PROJECT. THE PAVEMENT WILL BE BUILT WITH NIELSEN INDUSTRIAL PARK ON-SITE CONSTRUCTION PLANS.

CURVE DATA - DESCRIBES NEW STRIPING (SEE SHEET 7 STRIPING DETAIL)

1	L=64.85 R=300.00 Δ=12°23'05" Tan=32.55	2	L=32.74 R=150.00 Δ=12°30'26" Tan=16.44	3	L=38.82 R=150.00 Δ=15°12'41" Tan=20.03
4	L=53.08 R=150.00 Δ=20°16'24" Tan=26.82				

CURVE DATA - DESCRIBES FACE OF NEW CURB/EOP

1	L=15.26 R=294.00 Δ=2°58'29" Tan=7.63	2	L=34.05 R=156.00 Δ=12°30'26" Tan=17.09	3	L=35.36 R=144.06 Δ=14°03'42" Tan=17.77
4	L=50.62 R=150.00 Δ=19°20'12" Tan=25.55	5	L=47.02 R=30.00 Δ=89°48'35" Tan=29.90	6	L=47.19 R=30.00 Δ=90°07'21" Tan=30.06
7	L=47.39 R=50.00 Δ=54°18'19" Tan=25.64	8	L=8.77 R=4.00 Δ=125°36'35" Tan=7.78	9	L=11.04 R=4.00 Δ=158°06'38" Tan=20.68
10	L=18.95 R=50.00 Δ=21°42'50" Tan=9.59				



- NEW RELOCATED ROADSIDE SWALE
- EXISTING PAVEMENT
- NEW PAVEMENT
- EXISTING CURB & GUTTER TO BE REMOVED
- EXISTING STREET LIGHT
- RELOCATE EXISTING STREET LIGHT

CERTIFICATION

THE CHANGES SHOWN HEREON ARE BASED UPON A FIELD SURVEY CONDUCTED BY ME OR UNDER MY SUPERVISION AND REFLECT THE LOCATIONS (VERTICALLY AND HORIZONTALLY) TO THE BEST OF MY KNOWLEDGE AND BELIEF.

dmg

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

NEW MEXICO DEPARTMENT OF TRANSPORTATION
TITLE: NIELSEN INDUSTRIAL PARK
RIO BRAVO BOULEVARD S.E. (WEST)
PAVING & WATERLINE IMPROVEMENTS

NO.	DATE	REVISIONS	DESIGN	DATE	DATE	DATE
1	05/05					
2	05/05					
3	05/05					

CONSTRUCTION TRAFFIC CONTROL GENERAL NOTES

1. PROJECT IS SUBJECT TO THE REQUIREMENTS OF COUNTY ORDINANCE NO. 95-12 AND COUNTY ORDINANCE NO. 96-3. THE CONTRACTOR IS RESPONSIBLE FOR ACQUIRING ALL PERMITS NECESSARY. CONTRACTOR SHALL CALL 848-1504 FOR MORE INFORMATION.
2. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN TO THE COUNTY TRAFFIC CONTROL ADMINISTRATOR AT LEAST 72 HOURS PRIOR TO COMMENCEMENT OF WORK. TRAFFIC CONTROL PLANS SHALL BE PREPARED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION AND BY CERTIFIED PERSONNEL AND MUST BE APPROVED PRIOR TO COMMENCEMENT OF WORK ON THE PROJECT. CALL 848-1504 FOR FURTHER INFORMATION.
3. A DAILY TRAFFIC CONTROL LOG SHALL BE MAINTAINED BY THE CONTRACTOR REFLECTING THE TYPES AND LOCATIONS OF ALL TRAFFIC CONTROL DEVICES, SIGNS, BARRICADES, ETC. BEING USED ON THE PROJECT IN COMPLIANCE WITH THE APPROVED TRAFFIC CONTROL PLAN. THIS LOG SHALL BE SUBMITTED TO THE BERNALILLO COUNTY TRAFFIC CONTROL ADMINISTRATOR UPON COMPLETION OF THE PROJECT CONSTRUCTION OR WHEN SO REQUESTED BY THE PROJECT MANAGER OR THE BERNALILLO COUNTY TRAFFIC CONTROL ADMINISTRATOR.
4. CONTRACTOR SHALL PROVIDE A WEEKLY CONSTRUCTION ACTIVITY SCHEDULE TO BERNALILLO COUNTY PUBLIC WORKS DIVISION ATTN: PROJECT MANAGER
5. THE CONTRACTOR SHALL FILE A WEEKLY WRITTEN REPORT TO THE TRAFFIC CONTROL ADMINISTRATOR DESCRIBING THE TRAFFIC CONTROL PLAN THAT WILL BE IN EFFECT FOR THE FOLLOWING WEEK.
6. SUBJECT TO THE APPROVED TRAFFIC CONTROL PLAN, AT LEAST ONE LANE SHALL BE OPEN TO TRAFFIC AT ALL TIMES. CONTRACTOR SHALL PROVIDE PROPER SIGNAGE AND FLAGMAN AND SHALL MAINTAIN THE TRAFFIC LANE IN SUCH A MANNER AS TO ASSURE PROPER SAFETY TO THE TRAVELING PUBLIC AT ALL TIMES, EXCEPT WHEN GRADING, EXCAVATION AND BACKFILL OPERATIONS ARE BEING CONDUCTED IMMEDIATELY IN FRONT OF THE PROPERTY, IN WHICH CASE ACCESS WILL NOT BE DENIED FOR MORE THAN 4 HOURS WITHOUT APPROVAL BY THE COUNTY.
7. TRAFFIC LANES PROVIDED DURING CONSTRUCTION SHALL BE MAINTAINED, IN SUCH A CONDITION UNDER ALL WEATHER CONDITIONS, SO AS TO PERMIT THE REASONABLE PASSAGE OF PASSENGER VEHICLES, AND SHALL BE KEPT GRADED AND SMOOTH, AND WATERED SEVERAL TIMES DAILY TO CONTROL DUST.
8. TYPICAL TRAFFIC CONTROL PLANS DO NOT REFLECT THE EXISTING TOPOGRAPHY SUCH AS DRIVEWAYS, LANE WIDTHS, AND BUSINESS/RESIDENTIAL ACCESSES. EVERY LOCATION THAT REQUIRES CONSTRUCTION TRAFFIC CONTROL SHALL HAVE A DETAILED TRAFFIC CONTROL PLAN SHOWING ALL EXISTING TOPOGRAPHY.
9. CONSTRUCTION SHALL NOT BEGIN UNLESS A TRAFFIC CONTROL PLAN HAS BEEN APPROVED AND VERIFIED BY BERNALILLO COUNTY TRAFFIC ENGINEERING.
10. ALL CONSTRUCTION TRAFFIC CONTROL DEVICES SHALL COMPLY WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL, SERVICE AND MAINTAIN ALL TRAFFIC CONTROL DEVICES. TRAFFIC CONTROL DEVICES SHALL NOT BE REMOVED OR ALTERED IN ANY WAY WITHOUT THE APPROVAL OF THE COUNTY TRAFFIC CONTROL ADMINISTRATOR, PER SECTION 6A-4 OF THE MUTCD, LATEST EDITION.
11. THE CONSTRUCTION TRAFFIC CONTROL INITIAL SET-UP FOR EACH PHASE SHALL BE BY AN AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA) CERTIFIED WORKSITE TRAFFIC SUPERVISOR. THE MAINTENANCE AND SERVICING SHALL ALSO BE DONE BY AN ATSSA CERTIFIED WORKSITE TRAFFIC SUPERVISOR OR EQUIVALENT.
12. CONTRACTOR IS RESPONSIBLE TO MAINTAIN AND SERVICE ALL TRAFFIC CONTROL DEVICES 24 HOURS A DAY, 7 DAYS A WEEK THROUGHOUT LENGTH OF PROJECT. CONTRACTOR IS RESPONSIBLE THAT ALL TRAFFIC CONTROL DEVICES COMPLY WITH THE MUTCD, LATEST EDITION.
13. ALL ADVANCE WARNING SIGNS SHALL BE DOUBLE INDICATED WHENEVER THERE ARE MULTI-LANE TRAFFIC IN ANY ONE GIVEN DIRECTION AND THERE IS SUFFICIENT MEDIAN SPACE.

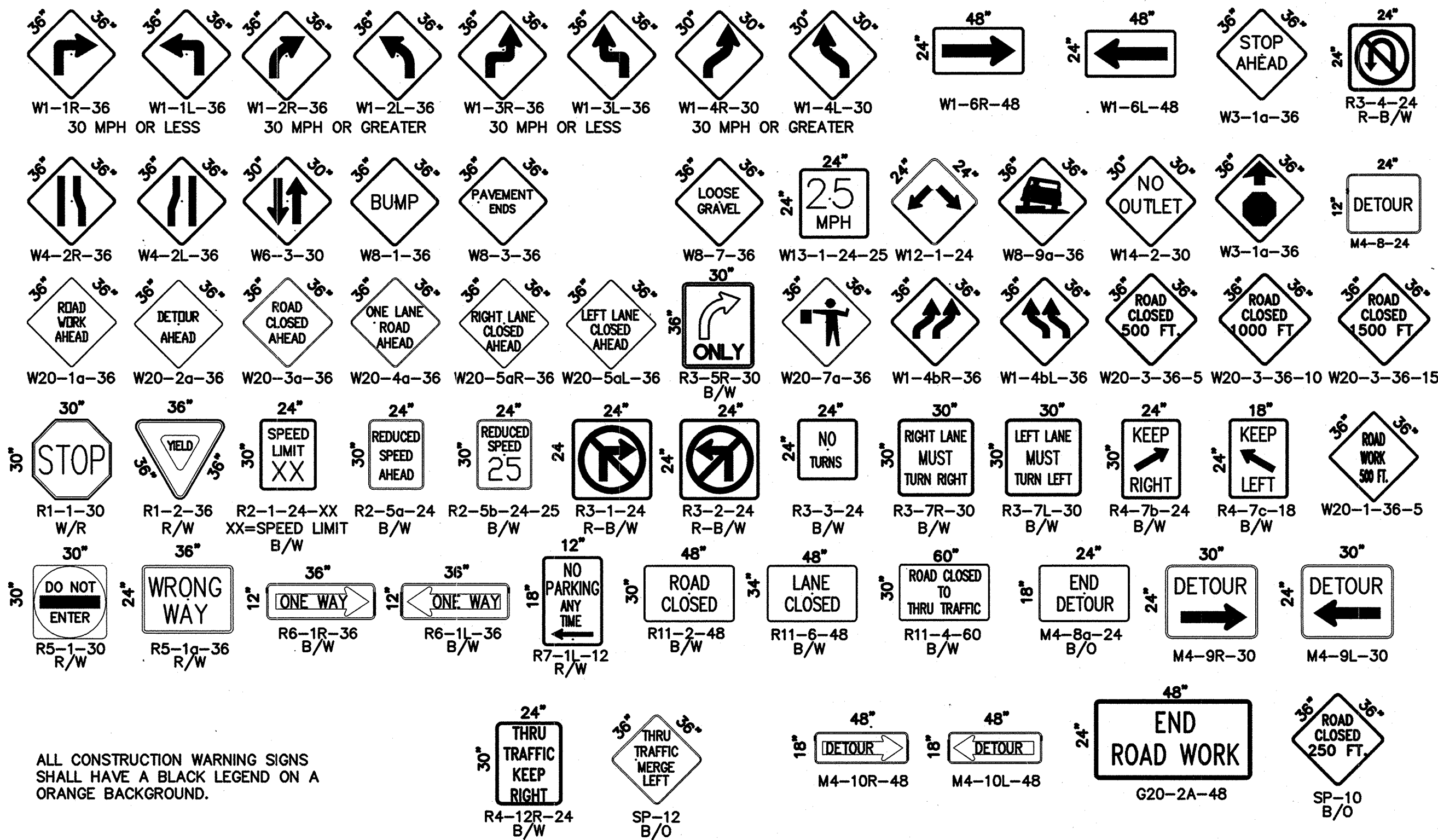
14. ALL BARRICADES IN ALL TAPERS AND TANGENTS SHALL BE PLACED APART, A DISTANCE MEASURED IN FEET, EQUAL TO THAT OF THE POSTED SPEED LIMIT. NO EXCEPTIONS UNLESS APPROVED BY BERNALILLO COUNTY TRAFFIC ENGINEERING PER MUTCD SECTION 6A-4.
15. ALL WORK IN ARTERIAL ROADWAYS SHALL BE ON A CONTINUOUS 24 HOUR PER DAY BASIS UNTIL COMPLETED.
16. EQUIPMENT OR MATERIALS SHALL NOT BE STORED WITHIN 15 FEET OF A TRAVELED TRAFFIC LANE DURING NON-WORKING HOURS WITHOUT THE APPROVAL OF BERNALILLO COUNTY TRAFFIC ENGINEERING.
17. CONTRACTOR SHALL PROVIDE AND MAINTAIN A SAFE AND ADEQUATE MEANS OF CHANNELIZING PEDESTRIAN TRAFFIC AROUND AND THROUGH THE CONSTRUCTION AREA.
18. CONTRACTOR IS RESPONSIBLE FOR OBLITERATION OF ANY CONFLICTING STRIPING AND RESPONSIBLE FOR ALL TEMPORARY STRIPING.
19. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL FACILITIES, BUSINESSES AND/OR RESIDENTS AT ALL TIMES.
20. CONTRACTOR SHALL PROVIDE ACCESS SIGNS FOR BUSINESSES LOCATED WITHIN THE CONSTRUCTION AREA UNDER THE SUPERVISION OF BERNALILLO COUNTY TRAFFIC ENGINEERING. EACH ACCESS SIGN SHALL HAVE 5 INCH, WHITE LETTERING ON BLUE BACKGROUND. SHOPPING CENTERS AND MALLS SHALL BE LISTED AS SUCH.
21. 48 HOURS PRIOR TO OCCUPYING OR CLOSING OF A RIGHT-OF-WAY, CONTRACTOR SHALL NOTIFY: POLICE, FIRE DEPARTMENT, SCHOOLS, HOSPITALS, TRANSIT AUTHORITY, BUSINESSES AND/OR RESIDENTS THAT WILL BE AFFECTED BY THE CONSTRUCTION.
22. ANY FIELD ADJUSTMENTS SHALL BE APPROVED BY BERNALILLO COUNTY TRAFFIC ENGINEERING.
23. EXCAVATIONS SHALL BE PLATED, TEMPORARILY PATCHED OR RESURFACED PRIOR TO OPENING OF TRAFFIC. A MINIMUM OF 11 FEET, SHALL BE PROVIDED FOR TRAFFIC IN ANY GIVEN DIRECTION. CONTRACTOR IS RESPONSIBLE FOR ANY WORK INVOLVED IN SATISFYING THESE REQUIREMENTS.

BROADWAY BLVD. / RIO BRAVO BLVD. SPECIAL TRAFFIC NOTES

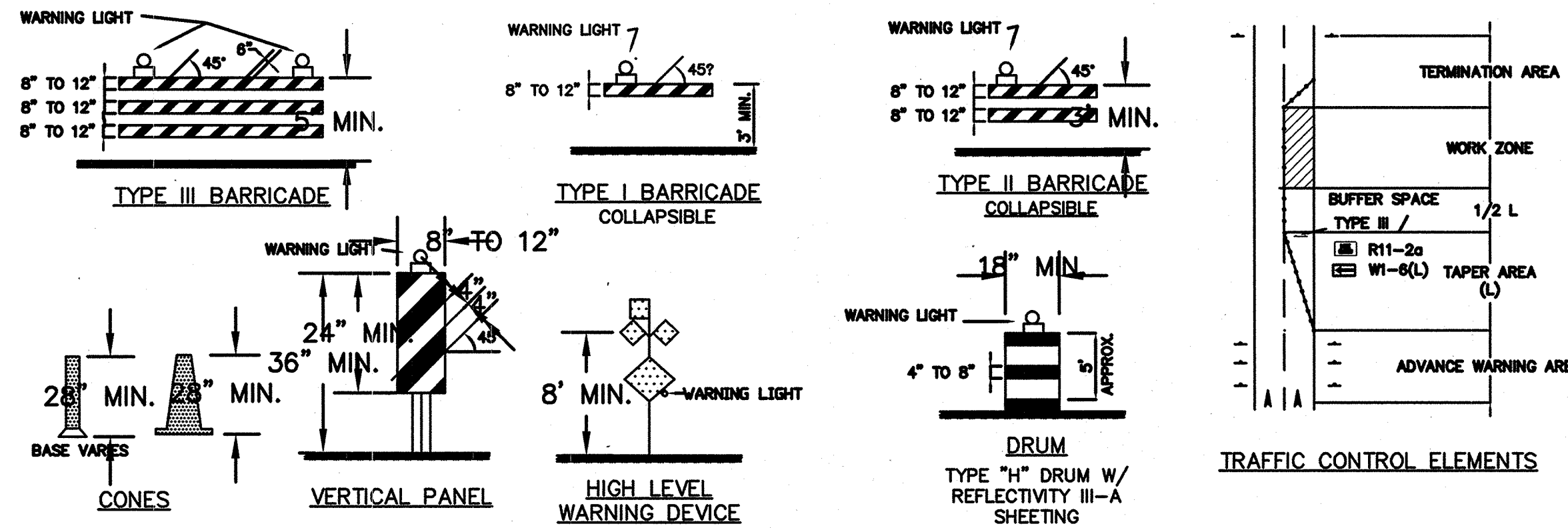
BERNALILLO COUNTY TRAFFIC CONTROL GENERAL NOTES:

1. PROJECT IS SUBJECT TO THE REQUIREMENTS OF COUNTY ORDINANCE NO. 95-12 AND COUNTY ORDINANCE NO. 96-3. THE CONTRACTOR IS RESPONSIBLE FOR ACQUIRING ALL PERMITS NECESSARY. CONTRACTOR SHALL CALL 848-1504 FOR MORE INFORMATION.
2. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN TO THE COUNTY TRAFFIC CONTROL MANAGER AT LEAST 72 HOURS PRIOR TO COMMENCEMENT OF TRAFFIC CONTROL PLANS SHALL BE PREPARED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION AND BY CERTIFIED PERSONNEL AND MUST BE APPROVED PRIOR TO COMMENCEMENT OF WORK ON THE PROJECT. CALL 848-1504 FOR FURTHER INFORMATION.
3. A DAILY TRAFFIC CONTROL LOG SHALL BE MAINTAINED BY THE CONTRACTOR REFLECTING THE TYPES AND LOCATIONS OF ALL TRAFFIC CONTROL DEVICES, SIGNS, BARRICADES, ETC. BEING USED ON THE PROJECT IN COMPLIANCE WITH THE APPROVED TRAFFIC CONTROL PLAN. THIS LOG SHALL BE SUBMITTED TO THE BERNALILLO COUNTY TRAFFIC CONTROL MANAGER UPON COMPLETION OF THE PROJECT CONSTRUCTION OR WHEN SO REQUESTED BY THE PROJECT OR THE BERNALILLO COUNTY TRAFFIC CONTROL MANAGE,
4. CONTRACTOR SHALL PROVIDE A WEEKLY CONSTRUCTION ACTIVITY SCHEDULE TO BERN COUNTY PUBLIC WORKS DIVISION ATTN: HOSS FOSTER.
5. THE CONTRACTOR SHALL FILE WEEKLY WRITTEN REPORTS TO THE TRAFFIC CONTROL MANAGER DESCRIBING THE TRAFFIC CONTROL PLAN THAT WILL BE IN EFFECT FOR THE FOLLOWING WEEK.
6. SUBJECT TO THE APPROVED TRAFFIC CONTROL PLAN, AT LEAST ONE LANE SHALL BE OPEN TO TRAFFIC AT ALL TIMES. CONTRACTOR SHALL PROVIDE PROPER SIGNAGE AND FLAGMAN AND SHALL MAINTAIN THE TRAFFIC LANE IN SUCH A MANNER AS TO ASSURE PROPER SAFETY TO THE TRAVELING PUBLIC AT ALL TIMES, EXCEPT WHEN GRADING, EXCAVATION AND BACKFILL OPERATIONS ARE BEING CONDUCTED IMMEDIATELY IN FRONT OF THE PROPERTY, IN WHICH CASE ACCESS WILL NOT BE DENIED FOR MORE THAN 4 HOURS WITHOUT APPROVAL BY THE COUNTY.
7. TRAFFIC LANES PROVIDED DURING CONSTRUCTION SHALL BE MAINTAINED, IN SUCH A CONDITION UNDER ALL WEATHER CONDITIONS, SO AS TO PERMIT THE REASONABLE PASSAGE OF PASSENGER VEHICLES, AND SHALL BE KEPT GRADED AND SMOOTH, AND WATERED SEVERAL TIMES DAILY TO CONTROL DUST.

SIGN FACE DETAILS



ALL CONSTRUCTION WARNING SIGNS SHALL HAVE A BLACK LEGEND ON A ORANGE BACKGROUND.



LEGEND

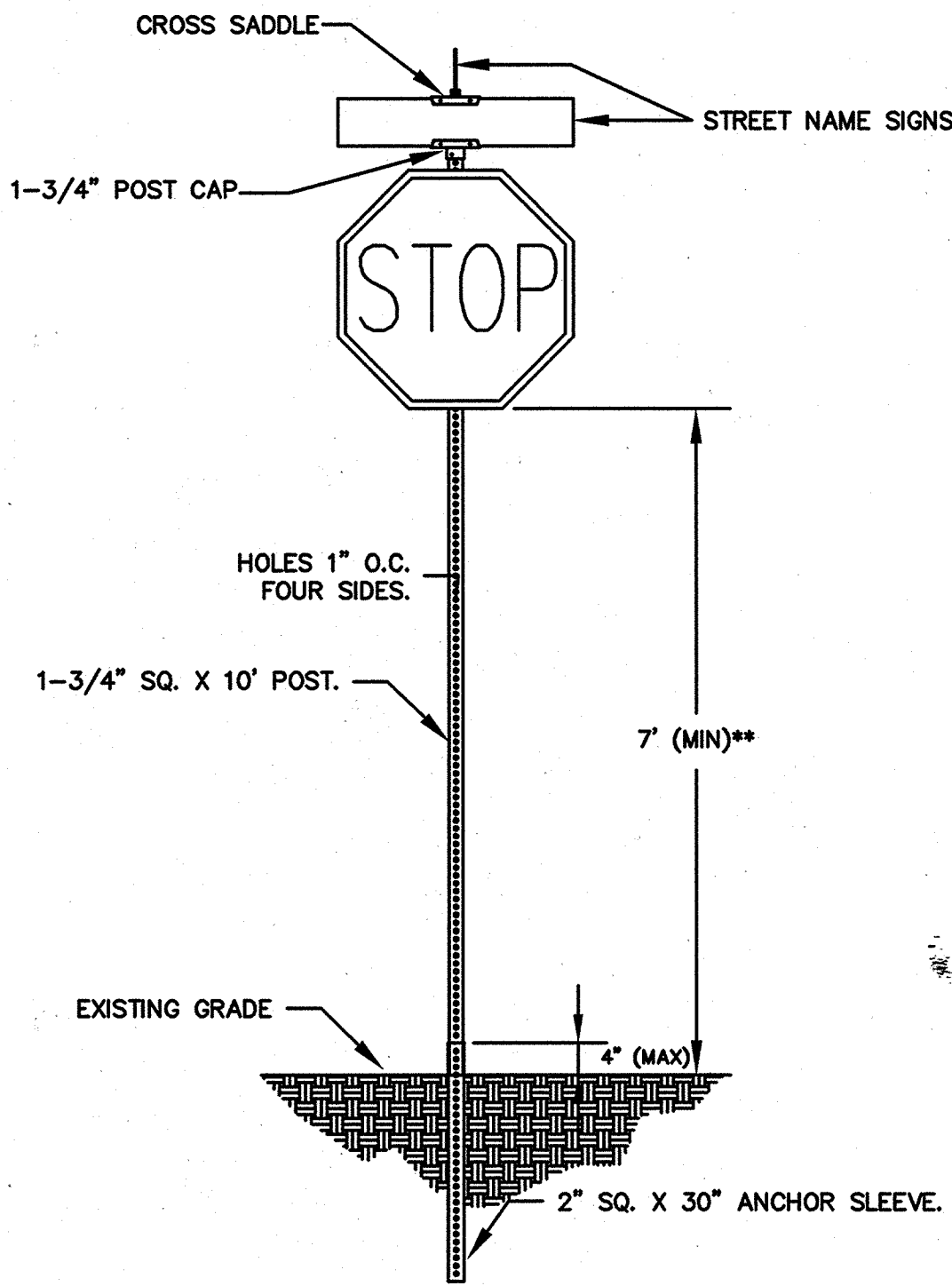
- WORK AREA
- BARRICADE - TYPE I, TYPE II, OR TYPE "H" DRUM W/ REFLECTIVITY III-A SHEETING
 - BARRICADE - TYPE III
 - VERTICAL PANEL
 - WARNING SIGN
 - DISTANCE BETWEEN SIGNS - A DISTANCE MEASURED IN FEET EQUAL TO A VALUE OF TEN TIMES THE SPEED LIMIT OF THE STREET
 - FLAGMAN POSITION
 - SPACING BETWEEN BARRICADES- A DISTANCE MEASURED IN FEET EQUAL TO THE SPEED LIMIT OF THE STREET
 - TAPER LENGTH - SEE CHART BELOW
- THE TANGENT LENGTH IS EQUAL TO THE TAPER LENGTH FOR A GIVEN STREET.

NO.	DESCRIPTION	DATE	BY
REVISIONS			
COUNTY OF BERNALILLO			
NIELSEN INDUSTRIAL PARK			
SIGNING & CONSTRUCTION			
TRAFFIC CONTROL STANDARDS			
COUNTY STANDARDS			
COUNTY PROJECT NO. 50051	SHEET 29.1 OF 29		

CONSTRUCTION TRAFFIC CONTROL GENERAL NOTES

1. PROJECT IS SUBJECT TO THE REQUIREMENTS OF COUNTY ORDINANCE NO. 95-12 AND COUNTY ORDINANCE NO. 96-3. THE CONTRACTOR IS RESPONSIBLE FOR ACQUIRING ALL PERMITS NECESSARY. CONTRACTOR SHALL CALL 848-1504 FOR MORE INFORMATION.
2. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN TO THE COUNTY TRAFFIC CONTROL ADMINISTRATOR AT LEAST 72 HOURS PRIOR TO COMMENCEMENT OF WORK. TRAFFIC CONTROL PLANS SHALL BE PREPARED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION AND BY CERTIFIED PERSONNEL AND MUST BE APPROVED PRIOR TO COMMENCEMENT OF WORK ON THE PROJECT. CALL 848-1504 FOR FURTHER INFORMATION.
3. A DAILY TRAFFIC CONTROL LOG SHALL BE MAINTAINED BY THE CONTRACTOR REFLECTING THE TYPES AND LOCATIONS OF ALL TRAFFIC CONTROL DEVICES, SIGNS, BARRICADES, ETC. BEING USED ON THE PROJECT IN COMPLIANCE WITH THE APPROVED TRAFFIC CONTROL PLAN. THIS LOG SHALL BE SUBMITTED TO THE BERNALILLO COUNTY TRAFFIC CONTROL ADMINISTRATOR UPON COMPLETION OF THE PROJECT CONSTRUCTION OR WHEN SO REQUESTED BY THE PROJECT MANAGER OR THE BERNALILLO COUNTY TRAFFIC CONTROL ADMINISTRATOR.
4. CONTRACTOR SHALL PROVIDE A WEEKLY CONSTRUCTION ACTIVITY SCHEDULE TO BERNALILLO COUNTY PUBLIC WORKS DIVISION ATTN: PROJECT MANAGER
5. THE CONTRACTOR SHALL FILE A WEEKLY WRITTEN REPORT TO THE TRAFFIC CONTROL ADMINISTRATOR DESCRIBING THE TRAFFIC CONTROL PLAN THAT WILL BE IN EFFECT FOR THE FOLLOWING WEEK.
6. SUBJECT TO THE APPROVED TRAFFIC CONTROL PLAN, AT LEAST ONE LANE SHALL BE OPEN TO TRAFFIC AT ALL TIMES. CONTRACTOR SHALL PROVIDE PROPER SIGNAGE AND FLAGMAN AND SHALL MAINTAIN THE TRAFFIC LANE IN SUCH A MANNER AS TO ASSURE PROPER SAFETY TO THE TRAVELING PUBLIC AT ALL TIMES, EXCEPT WHEN GRADING, EXCAVATION AND BACKFILL OPERATIONS ARE BEING CONDUCTED IMMEDIATELY IN FRONT OF THE PROPERTY, IN WHICH CASE ACCESS WILL NOT BE DENIED FOR MORE THAN 4 HOURS WITHOUT APPROVAL BY THE COUNTY.
7. TRAFFIC LANES PROVIDED DURING CONSTRUCTION SHALL BE MAINTAINED, IN SUCH A CONDITION UNDER ALL WEATHER CONDITIONS, SO AS TO PERMIT THE REASONABLE PASSAGE OF PASSENGER VEHICLES, AND SHALL BE KEPT GRADED AND SMOOTH, AND WATERED SEVERAL TIMES DAILY TO CONTROL DUST.
8. TYPICAL TRAFFIC CONTROL PLANS DO NOT REFLECT THE EXISTING TOPOGRAPHY SUCH AS DRIVEWAYS, LANE WIDTHS, AND BUSINESS/RESIDENTIAL ACCESSES. EVERY LOCATION THAT REQUIRES CONSTRUCTION TRAFFIC CONTROL SHALL HAVE A DETAILED TRAFFIC CONTROL PLAN SHOWING ALL EXISTING TOPOGRAPHY.
9. CONSTRUCTION SHALL NOT BEGIN UNLESS A TRAFFIC CONTROL PLAN HAS BEEN APPROVED AND VERIFIED BY BERNALILLO COUNTY TRAFFIC ENGINEERING.
10. ALL CONSTRUCTION TRAFFIC CONTROL DEVICES SHALL COMPLY WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL, SERVICE AND MAINTAIN ALL TRAFFIC CONTROL DEVICES. TRAFFIC CONTROL DEVICES SHALL NOT BE REMOVED OR ALTERED IN ANY WAY WITHOUT THE APPROVAL OF THE COUNTY TRAFFIC CONTROL ADMINISTRATOR, PER SECTION 6A-4 OF THE MUTCD, LATEST EDITION.
11. THE CONSTRUCTION TRAFFIC CONTROL INITIAL SET-UP FOR EACH PHASE SHALL BE BY AN AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA) CERTIFIED WORKSITE TRAFFIC SUPERVISOR. THE MAINTENANCE AND SERVICING SHALL ALSO BE DONE BY AN ATSSA CERTIFIED WORKSITE TRAFFIC SUPERVISOR OR EQUIVALENT.
12. CONTRACTOR IS RESPONSIBLE TO MAINTAIN AND SERVICE ALL TRAFFIC CONTROL DEVICES 24 HOURS A DAY, 7 DAYS A WEEK THROUGHOUT LENGTH OF PROJECT. CONTRACTOR IS RESPONSIBLE THAT ALL TRAFFIC CONTROL DEVICES COMPLY WITH THE MUTCD, LATEST EDITION.
13. ALL ADVANCE WARNING SIGNS SHALL BE DOUBLE INDICATED WHENEVER THERE ARE MULTI-LANE TRAFFIC IN ANY ONE GIVEN DIRECTION AND THERE IS SUFFICIENT MEDIAN SPACE.
14. ALL BARRICADES IN ALL TAPERS AND TANGENTS SHALL BE PLACED APART, A DISTANCE MEASURED IN FEET, EQUAL TO THAT OF THE POSTED SPEED LIMIT. NO EXCEPTIONS UNLESS APPROVED BY BERNALILLO COUNTY TRAFFIC ENGINEERING PER MUTCD SECTION 6A-4.
15. ALL WORK IN ARTERIAL ROADWAYS SHALL BE ON A CONTINUOUS 24 HOUR PER DAY BASIS UNTIL COMPLETED.
16. EQUIPMENT OR MATERIALS SHALL NOT BE STORED WITHIN 15 FEET OF A TRAVELED TRAFFIC LANE DURING NON-WORKING HOURS WITHOUT THE APPROVAL OF BERNALILLO COUNTY TRAFFIC ENGINEERING.
17. CONTRACTOR SHALL PROVIDE AND MAINTAIN A SAFE AND ADEQUATE MEANS OF CHANNELIZING PEDESTRIAN TRAFFIC AROUND AND THROUGH THE CONSTRUCTION AREA.
18. CONTRACTOR IS RESPONSIBLE FOR OBLITERATION OF ANY CONFLICTING STRIPING AND RESPONSIBLE FOR ALL TEMPORARY STRIPING.
19. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL FACILITIES, BUSINESSES AND/OR RESIDENTS AT ALL TIMES.

20. CONTRACTOR SHALL PROVIDE ACCESS SIGNS FOR BUSINESSES LOCATED WITHIN THE CONSTRUCTION AREA UNDER THE SUPERVISION OF BERNALILLO COUNTY TRAFFIC ENGINEERING. EACH ACCESS SIGN SHALL HAVE 5 INCH, WHITE LETTERING ON BLUE BACKGROUND. SHOPPING CENTERS AND MALLS SHALL BE LISTED AS SUCH.
21. 48 HOURS PRIOR TO OCCUPANCY OR CLOSING OF A RIGHT-OF-WAY, CONTRACTOR SHALL NOTIFY: POLICE, FIRE DEPARTMENT, SCHOOLS, HOSPITALS, TRANSIT AUTHORITY, BUSINESSES AND/OR RESIDENTS THAT WILL BE AFFECTED BY THE CONSTRUCTION.
22. ANY FIELD ADJUSTMENTS SHALL BE APPROVED BY BERNALILLO COUNTY TRAFFIC ENGINEERING.
23. EXCAVATIONS SHALL BE PLATED, TEMPORARILY PATCHED OR RESURFACED PRIOR TO OPENING OF TRAFFIC. A MINIMUM OF 11 FEET, SHALL BE PROVIDED FOR TRAFFIC IN ANY GIVEN DIRECTION. CONTRACTOR IS RESPONSIBLE FOR ANY WORK INVOLVED IN SATISFYING THESE REQUIREMENTS.
24. THE CONTRACTOR SHALL CONTACT BERNALILLO COUNTY TRAFFIC ENGINEER (848-1575) BEFORE REMOVING AND/OR INSTALLING ANY TRAFFIC SIGNS OR PERMANENT STRIPING AND MARKINGS. ALL STRIPING, PAVEMENT MARKINGS INCLUDING CROSSWALKS, LEGENDS AND SYMBOLS ARE TO BE CONSTRUCTED OF INTERSECTION GRADE COLD PLASTIC AND LINE MARKINGS ARE TO BE CONSTRUCTED OF DURABLE PAINT IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) LATEST EDITION. ANY PAVEMENT MARKINGS AND SIGNS REMOVED OR DAMAGED DURING CONSTRUCTION SHALL BE REPLACED AT EXISTING LOCATIONS. SUCH WORK SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION OF THE PROJECT.



SIGN POST DETAIL
SCALE: N.T.S

*ALL STREET NAME SIGNS SHALL BE WHITE LETTERS ON GREEN BACKGROUND WITH HI INTENSITY REFLECTIVE SHEETING. ALL LETTERS SHALL BE 4" FOR POSTED SPEEDS OF 25 MPH AND BELOW AND 6" FOR POSTED SPEEDS GREATER THAN 25 MPH.
**SEE MUTCD FOR MINIMUM MOUNTING HEIGHT IN RURAL AREAS

# OF POSTS	MAXIMUM SIGN SQUARE FOOTAGE
1	6
2	12
3	18

TAPER REQUIREMENT

SPEED LIMIT (MPH)	TAPER LENGTH(L) (FEET)			MINIMUM NUMBER OF DEVICES FOR TAPER	MAXIMUM DEVICE SPACING IN FEET	
	10' LANE	11' LANE	12' LANE		ALONG TAPER	AFTER TAPER
20	70	75	80	5	20	20
25	105	115	125	6	25	25
30	150	165	180	7	30	30
35	205	225	245	8	35	35
40	270	295	320	9	40	40
45	450	495	540	13	45	45
50	500	550	600	13	50	50
55	550	605	660	13	55	55

RECOMMENDED SIGN SPACING(D) FOR

ADVANCE WARNING SIGN SERIES

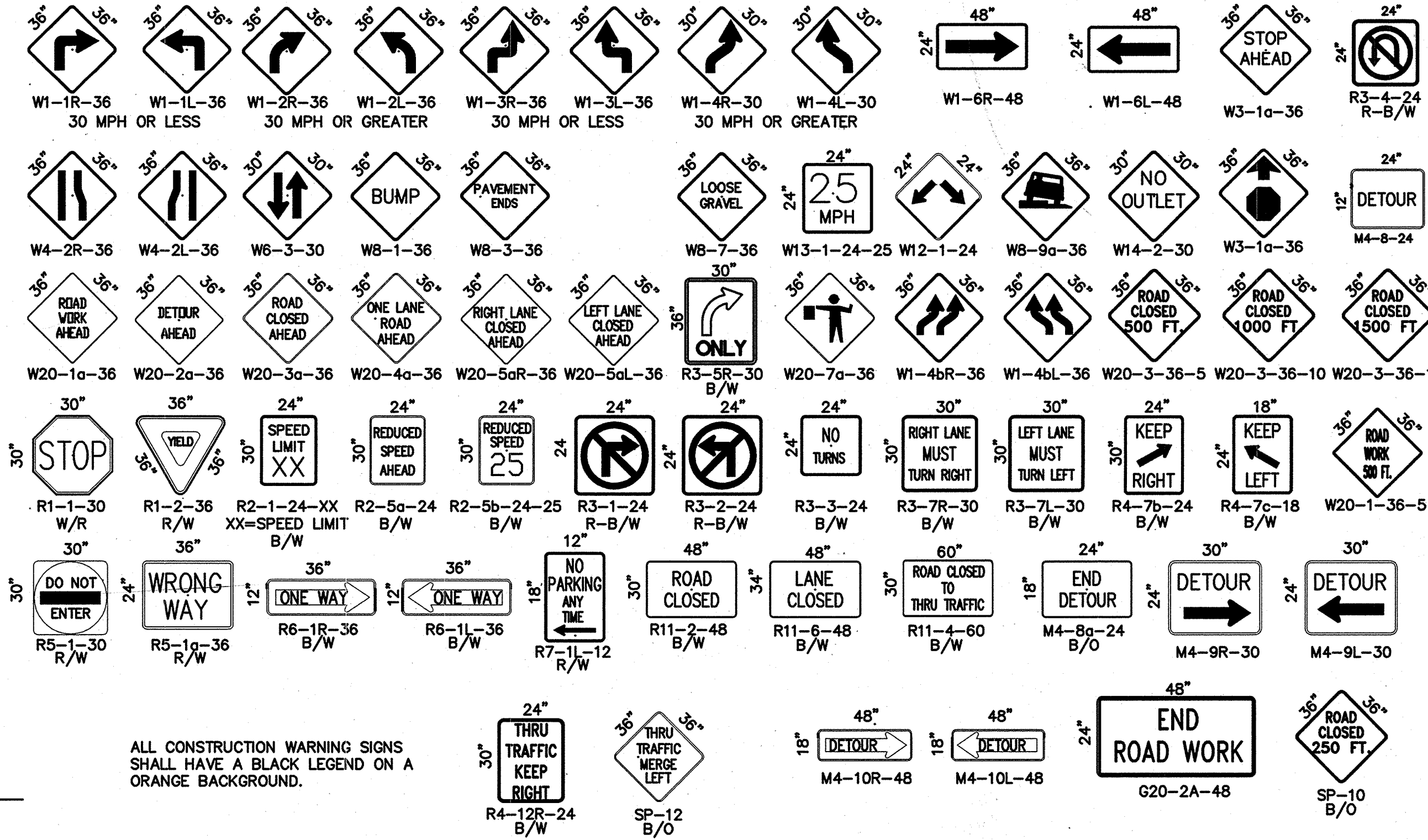
SPEED MILES PER HOUR	MINIMUM DISTANCE IN FEET	
	BETWEEN SIGNS	FROM LAST SIGN TO TAPER
0-20	10 X SPEED LIMIT	10 X SPEED LIMIT
25-30	10 X SPEED LIMIT	10 X SPEED LIMIT
30-35	10 X SPEED LIMIT	10 X SPEED LIMIT
40-45	10 X SPEED LIMIT	10 X SPEED LIMIT
50-60	10 X SPEED LIMIT	10 X SPEED LIMIT

LEGEND

- WORK AREA
- BARRICADE - TYPE I, TYPE II, OR TYPE "H" DRUM W/ REFLECTIVITY III-A SHEETING
 - BARRICADE - TYPE III
 - VERTICAL PANEL
 - WARNING SIGN
 - DISTANCE BETWEEN SIGNS - A DISTANCE MEASURED IN FEET EQUAL TO A VALUE OF TEN TIMES THE SPEED LIMIT OF THE STREET
 - FLAGMAN POSITION
 - SPACING BETWEEN BARRICADES- A DISTANCE MEASURED IN FEET. EQUAL TO THE SPEED LIMIT OF THE STREET
 - TAPER LENGTH - SEE CHART BELOW

THE TANGENT LENGTH IS EQUAL TO THE TAPER LENGTH FOR A GIVEN STREET.

SIGN FACE DETAILS



ALL CONSTRUCTION WARNING SIGNS SHALL HAVE A BLACK LEGEND ON A ORANGE BACKGROUND.

TAPER CRITERIA

TYPE OF TAPER

TAPER LENGTH

UPSTREAM TAPER:
MERGING TAPER
SHIFTING TAPER
SHOULDER TAPER
TWO-WAY TRAFFIC TAPER
DOWNSTREAM TAPERS

L MINIMUM
1/2 L MINIMUM
1/2 L MINIMUM
100 FEET MAXIMUM
100 FEET PER LANE

TAPER LENGTH COMPUTATION

SPEED LIMIT

40 MPH OR LESS

$$L = \frac{WS^2}{60}$$

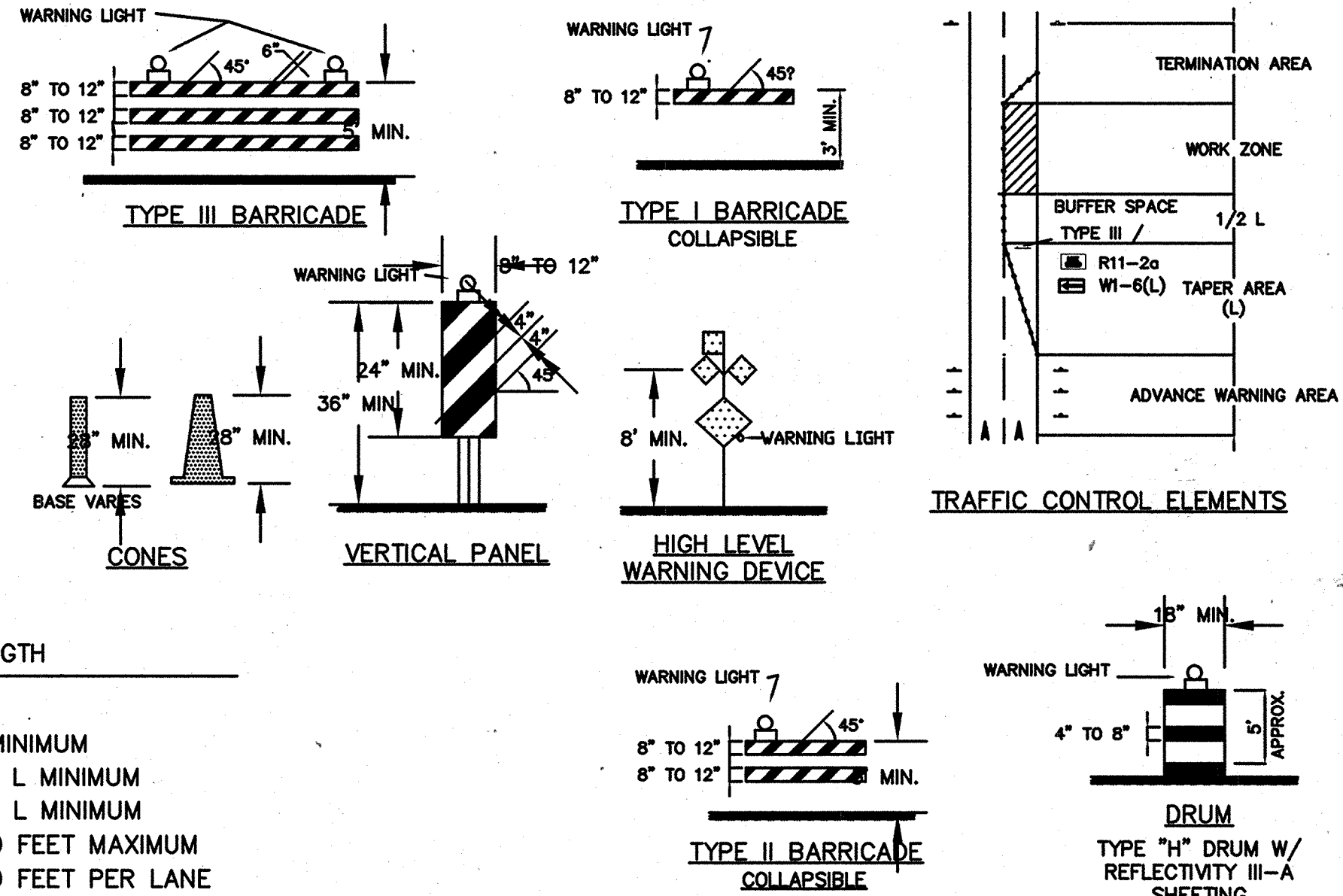
40 MPH OR GREATER

$$L = W \times S$$

L = TAPER LENGTH

W = WIDTH OF OFFSET IN FEET

S = POSTED SPEED OR OFF-PEAK 85-PERCENTILE SPEED IN MPH



NO.	DESCRIPTION	DATE	BY
REVISIONS			
COUNTY OF BERNALILLO			
NIELSEN INDUSTRIAL PARK			
SIGNING & CONSTRUCTION			
TRAFFIC CONTROL STANDARDS			
COUNTY STANDARDS			
COUNTY PROJECT NO. 50051		SHEET 29.2 OF 29	