# CONSTRUCTION PLANS FOR COORS VILLAGE TRACTS 3-A & 3-B PUBLIC INFRASTRUCTURE

ALBUQUERQUE, NEW MEXICO March, 2019



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Construction Engineer

Matthew Garduno TLC Plumbing Muhanned Adeeb

7/21/2020

CONSTRUCTION DETAILS

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10. TRAFFIC CONTROL PLAN (NMDOT)

VICINITY MAP ZONE MAP F-11-Z

IN ACCORDANCE WITH CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION THROUGH UPDATE #9, AND WILL BE REFERRED TO HEREIN AS "STANDARD SPECIFICATIONS"

2. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL

CONTRACTOR SHALL ASSUME THE SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS DURING THI AND HOLD HARMLESS THE OWNER AND ENGINEER FROM ANY AND ALL LIABILITY REAL OR ALLEGED, IN CONNECTION WITH TH

AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY

CONTRACTOR SHALL NOTIFY THE CONSTRUCTION ENGINEER (OR PROJECT MANAGER) NOT LESS THAN SEVEN (7) DAYS MONUMENT IS LOCATED, CONTRACTOR SHALL, AT HIS OWN EXPENSE, ADJUST THE MONUMENT COVER TO THE NEW GRAD

ACCESSORIES AS REQUIRED BY THE CITY OF ALBUQUERQUE FOR THE PREPARATION OF "AS BUILT" DRAWINGS. CONTRACTOR

CONTRACTOR SHALL ASSUME FINANCIAL RESPONSIBILITY FOR ANY DAMAGE TO EXISTING PAVEMENT, PAVEMENT MARKINGS, SIGNAGE, CURB AND GUTTER, HANDICAP RAMPS, AND SIDEWALK DURING CONSTRUCTION APART FROM THOSE

9. CONTRACTOR SHALL MAINTAIN A GRAFFITI-FREE WORK SITE. CONTRACTOR SHALL PROMPTLY REMOVE ANY AND ALI GRAFFITI FROM EQUIPMENT, WHETHER PERMANENT OR TEMPORARY.

CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE AND MAINTAIN ALL CONSTRUCTION SIGNING UNTIL THE PROJECT HAS BEEN ACCEPTED BY THE CITY AND OTHER JURISDICTIONAL AUTHORITIES WHERE APPLICABLE.

11. CONSTRUCTION ACTIVITY SHALL BE LIMITED TO THE PROPERTY AND/OR PROJECT LIMITS SHOWN. ANY DAMAGE TO ADJACENT PROPERTIES RESULTING FROM THE CONSTRUCTION PROCESS IS THE RESPONSIBILITY OF THE CONTRACTOR,

12. REMOVALS SHALL BE DISPOSED OF OFF-SITE AND SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

### TRANSPORTATION

1. ANY STREET STRIPING ALTERED OR DESTROYED SHALL BE REPLACED WITH THERMO-PLASTIC REFLECTORIZED PAVEMENT MARKING BY CONTRACTOR TO THE SAME LOCATION AS EXISTING OR AS INDICATED BY THIS PLAN SET.

2. REMOVAL OF EXISTING CURB & GUTTER AND SIDEWALKS SHALL BE TO THE NEAREST JOINT.

3. OVERNIGHT PARKING OF CONSTRUCTION EQUIPMENT SHALL NOT OBSTRUCT DRIVEWAYS OR DESIGNATED TRAFFIC

LANES. THE CONTRACTOR SHALL NOT STORE ANY EQUIPMENT OR MATERIAL WITHIN THE PUBLIC RIGHT-OF-WAY.

4. CURB AND GUTTER, SIDEWALKS, AND DRIVE PADS SHALL MATCH THE LINE AND GRADE OF ABUTTING EXISTING AREAS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE PROJECT ENGINEER. 5. THE SUBGRADE PREP SHALL EXTEND ONE FOOT BEYOND THE FREE EDGE OF NEW CURB AND GUTTER AND SIDEWALK.

6. CONTRACTOR TO TEST SUBGRADE R-VALUE PRIOR TO CONSTRUCTION. IN THE EVENT THE R-VALUE IS LESS THAN 50. REMOVE 2 FEET OF SUBGRADE MATERIAL AND IMPORT MATERIAL WITH R-VALUE GREATER THAN 50 OR CONTACT THE ENGINEER IMMEDIATELY SO THE PAVEMENT SECTION CAN BE MODIFIED.

AT ALL PAVEMENT REMOVAL AND REPLACEMENTS, SAW-CUT EDGES SHALL BE STRAIGHT AND CLEAN, AND LONGITUDINAL JOINTS SHALL NOT BE PLACED WITHIN WHEEL PATHS. PATCHES SHALL BE REGULAR AND SQUARE OR RECTANGULAR, WITH FOUR STRAIGHT SIDES. FINISHED PAVEMENT SURFACE SHALL BE FLUSH WITH EXISTING PAVEMENT SURFACE, WITH NO SPILLOVER OF ASPHALT OR TACK COAT. CARE MUST BE TAKEN TO AVOID DAMAGING THE INTEGRITY OR APPEARANCE OF SURROUNDING PAVEMENTS; IF DAMAGED, THE ENTIRE SURFACE PATCH MUST BE EXPANDED TO COVER DAMAGES.

8. CONTRACTOR WILL ENSURE THE ASPHALT HAS A SMOOTH, UNIFORM EDGE WHEN REMOVING AND REPLACING CURB AND GUTTER. IF THE ASPHALT EDGE IS NOT SMOOTH AND UNIFORM, CONTRACTOR WILL SAW CUT AND REPLACE A ONE-FOOT STRIP OF ASPHALT ALONG THE FULL SECTION BEING REPLACED; REFER TO C.O.A. STANDARD DRAWING # 2465 WITH THE APPROPRIATE PAVING SECTION BASED ON ROADWAY CLASSIFICATION.

TIERRA WEST, LLC

5571 MIDWAY PARK PLACE NE

ALBUQUERQUE, NEW MEXICO 87109

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DRB NO. PR-2018-001584

(505) 858-3100 SHEETS ENGINEERS STAMP OF 30 RONALD R. BOHANNAN P.E. #7868

RECORD DRAWINGS

# CERTIFICATE OF SUBSTANTIAL COMPLIANCE ON PLANS

I, Ronald R. Bohannan, of the firm of Tierra West LLC, 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 Planning Department and that the original design intent of the approved plans has been met, except as noted by me on the as-built construction drawings.



### OTHER COMMON NOTES

GUYS, ETC. ARE AN OBSTRUCTION TO CONSTRUCTION OPERATIONS. IF ANY OBSTRUCTION TO CONSTRUCTION OPERATIONS IS EVIDENT, CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE APPROPRIATE UTILITY OWNER TO REMOVE OR SUPPORT THE UTILITY OBSTRUCTION. ANY COST ASSOCIATED WITH THIS EFFORT SHALL BE THE RESPONSIBILITY OF CONTRACTOR.

PNM WILL PROVIDE AT NO COST TO THE CITY OR THE CONTRACTOR THE REQUIRED PERSONNEL FOR INSPECTION OR OBSERVATION DEEMED NECESSARY BY PNM WHILE THE CONTRACTOR IS EXPOSING PNM'S CABLES. HOWEVER, THE CONTRACTOR SHALL BE CHARGED THE TOTAL COST ASSOCIATED WITH REPAIRS TO ANY DAMAGED CABLES OR FOR ANY COST ASSOCIATED WITH SUPPORTING OR RELOCATING THE POLES AND CABLES DURING CONSTRUCTION.

5. CONTRACTOR SHALL SUPPORT AND PROTECT ALL EXISTING, UNDERGROUND UTILITY LINES WHICH BECOME EXPOSED DURING CONSTRUCTION. PAYMENT FOR SUPPORTING WORK SHALL BE INCIDENTAL TO WATERLINE AND/OR SEWER LINE COSTS.

6. CONTRACTOR IS TO SUPPORT, PROTECT, AND MAINTAIN THE INTEGRITY OF ALL UNDERGROUND TELEPHONE, ELECTRIC CABLES AND CABLE TELEVISION UTILITIES AT NO ADDITIONAL COST TO THE OWNER. CABLE IS TO BE SUPPORTED AT A MAXIMUM SPACING OF FIFTEEN (15) FEET. CONTRACTOR SHALL COORDINATE WITH AND MAKE NECESSARY PAYMENT (IF ANY) TO UTILITY OWNER FOR DE-ENERGIZATION OF CABLES OR SUPPORT OF CABLES BY THE UTILITY OWNER.

7. CONTRACTOR SHALL PROMPTLY CLEAN UP ANY MATERIAL EXCAVATED WITHIN THE PUBLIC RIGHT-OF-WAY OR PRIVATE ROADWAY EASEMENTS TO PREVENT ANY EXCAVATED MATERIAL BEING WASHED DOWN THE STREET OR INTO ANY PUBLIC DRAINAGE FACILITY. 11. TRACER WIRE SHALL BE INCLUDED FOR ALL PUBLIC WATER AND SEWER MAINS AND FOR WATER SERVICES IN ACCORDANCE WITH

CONTRACTOR SHALL CONDUCT ALL WORK IN A MANNER WHICH WILL MINIMIZE INTERFERENCE WITH LOCAL TRAFFIC.

9. ALL EXISTING SIGNS, MARKERS, DELINEATORS, ETC., WITHIN THE CONSTRUCTION LIMITS SHALL BE REMOVED, STORED AND

IN COMPLIANCE WITH ALL APPLICABLE ENVIRONMENTAL REGULATIONS. NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE FOR COSTS ASSOCIATED WITH OBTAINING A DISPOSAL SITE AND HAUL THERETO.

11. IF CULTURAL RESOURCES, SUCH AS HISTORIC OR PREHISTORIC ARTIFACTS, OR HUMAN REMAINS ARE DISCOVERED DURING MEDICAL EXAMINER AT (505) 272-3053. IF THE MEDICAL EXAMINER DETERMINES THAT HUMAN REMAINS ARE NOT PRESENT, THE CONSTRUCTION ENGINEER SHALL NOTIFY THE STATE HISTORIC PRESERVATION OFFICER (SHPO) AT 827-6320.

**HYDROLOGY** 

1. ALL STORM DRAINS SHALL BE RCP CLASS III UNLESS OTHERWISE NOTED ON THE PLANS.

2. RCP SHALL BE INSTALLED SO THAT THE JOINT GAP AT THE HOME POSITION SHALL CONFORM TO THE APPROVED MANUFACTURER'S RECOMMENDATION. MANUFACTURER'S RECOMMENDED JOINT GAP TOLERANCES FOR EACH PIPE SIZE AND TYPE SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO PLACEMENT OF PIPE. RCP JOINTS SHALL NOT BE GROUTED UNLESS DIRECTED BY THE ENGINEER AND WITH CITY APPROVAL.

ALL UTILITIES AND UTILITY SERVICE LINES SHALL BE INSTALLED PRIOR TO PAVING. EXISTING VALVES AND MANHOLES SHALL NOT BE BURIED OR PAVED OVER BUT RIMS SHALL BE ADJUSTED TO MATCH NEW GRADE PER COA STANDARD DRAWINGS 2460 AND 2461.

4. MANHOLE RIMS, FIRE HYDRANT ELEVATIONS, AND FLANGE ELEVATIONS SHOWN ARE APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY AND ADJUST TO FINAL PAVEMENT OR SURFACE GRADES.

ALL EXCAVATION, TRENCHING, AND SHORING ACTIVITIES MUST BE ACCOMPLISHED IN ACCORDANCE WITH OSHA 29CFR 1926.650 5. THE CONTRACTOR SHALL COORDINATE WITH THE WATER AUTHORITY SEVEN (7) DAYS IN ADVANCE OF PERFORMING WORK THAT WILL AFFECT THE PUBLIC WATER OR SANITARY SEWER INFRASTRUCTURE. WORK REQUIRING SHUTOFF OF FACILITIES DESIGNATED AS MASTER PLAN FACILITIES MUST BE COORDINATED WITH THE WATER AUTHORITY 14 DAYS IN ADVANCE OF PERFORMING SUCH WORK. WHEN DISTURBING MORE THAN 1/4 ACRES, CONTRACTOR SHALL SECURE A "TOPSOIL DISTURBANCE PERMIT" PRIOR TO BEGINNING ONLY WATER AUTHORITY CREWS ARE AUTHORIZED TO OPERATE PUBLIC VALVES. SHUTOFF REQUESTS MUST BE MADE ONLINE AT HTTP://ABCWUA.ORG/WATER\_SHUT\_OFF\_AND\_TURN\_ON\_PROCEDURES.ASPX

3. IN ADVANCE OF CONSTRUCTION, CONTRACTOR SHALL DETERMINE IF OVERHEAD UTILITY LINES, SUPPORT STRUCTURES, POLES. 6. PROPOSED WATERLINE MATERIALS SHALL BE PVC PIPE MEETING AWWA C-900; DR18 REQUIREMENTS (6" - 12") OR DUCTILE IRON PIPE MEETING AWWA C-150 REQUIREMENTS (6" - 48"),

> ALL WATERLINE FITTINGS, VALVES, BENDS, TEES, CROSSES AND APPURTENANCES SHALL HAVE RESTRAINED JOINTS UNLESS OTHERWISE NOTED ON THE PLANS. THE JOINT RESTRAINT REQUIREMENTS SHOULD BE DELINEATED WITHIN A JOINT RESTRAINT TABLE.

8. ALL SANITARY SEWER LINE STATIONING REFERS TO SANITARY SEWER CENTERLINE STATIONING. EXCEPT WHEN PROFILED WITHIN A PROPOSED OR EXISTING STREET, WHERE STREET STATIONING SHALL GOVERN.

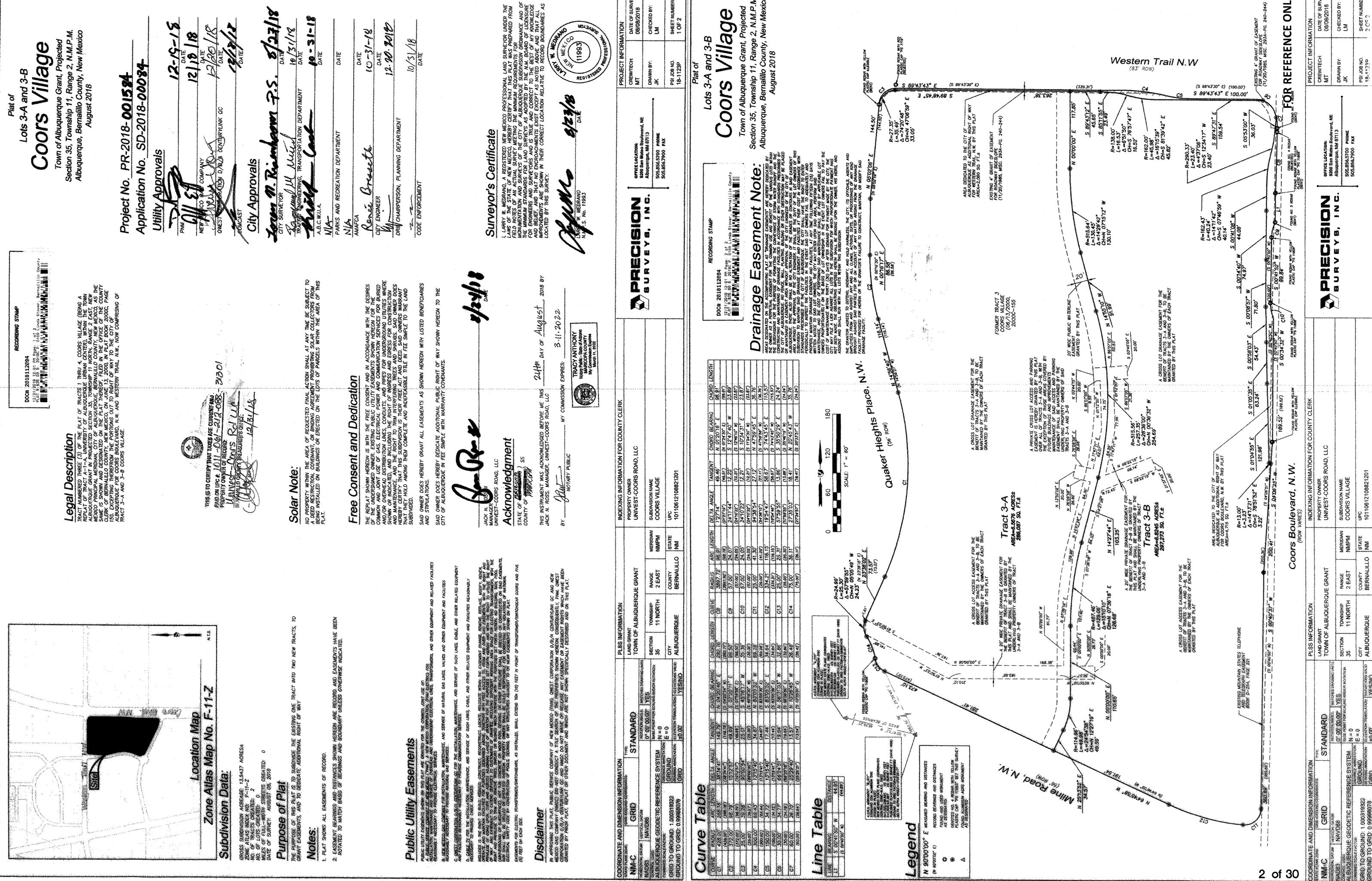
ALL FINAL BACKFILL FOR TRENCHES SHALL BE COMPACTED TO A MINIMUM OF 95% MAXIMUM DENSITY PER ASTM D-1557 AND AS DIRECTED BY STANDARD SPECIFICATIONS SECTION 701.14.2 AND STANDARD DRAWING NUMBER 2465.

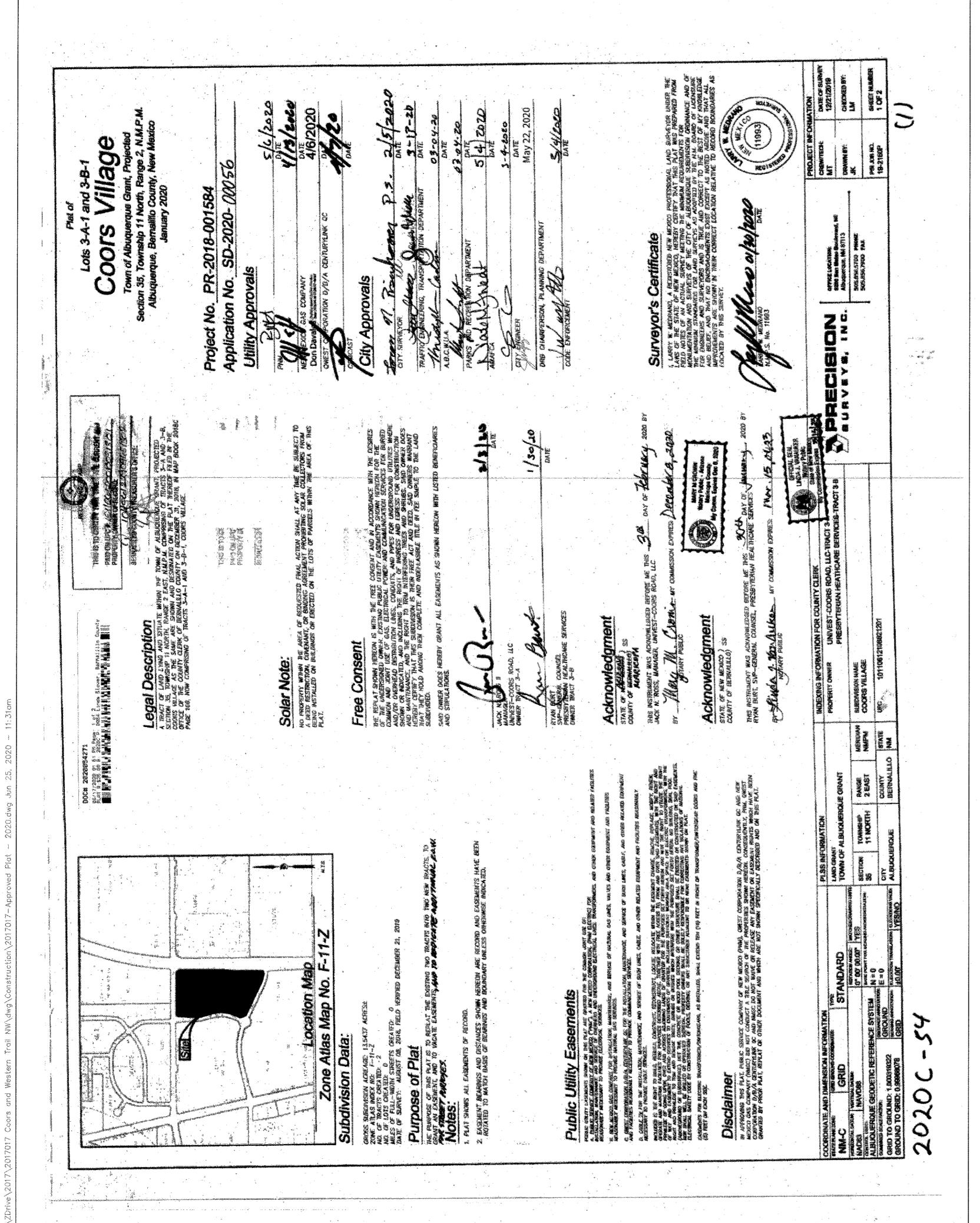
10. ELECTRONIC MARKER SPHERES (EMS) WILL BE PLACED ACCORDING TO THE CITY OF ALBUQUERQUE SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION AS REVISED THROUGH UPDATE #9. THE CONTRACTOR SHALL INSTALL A 4" X 4" X5' POST AND EMS AT THE END OF EACH SANITARY SEWER SERVICE.

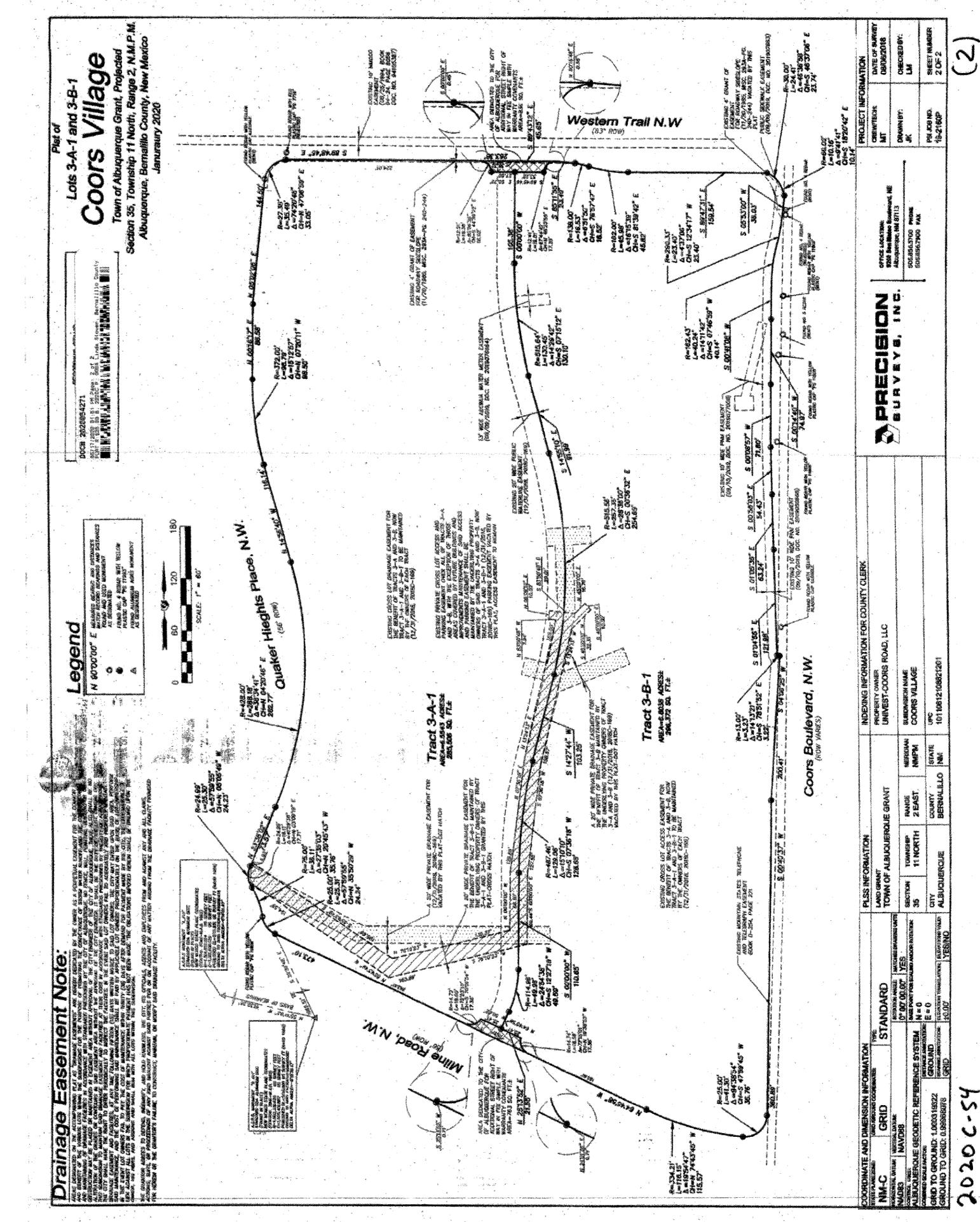
12. CONTRACTOR SHALL PROVIDE THE PROPOSED HYDRO TESTING PLANS TO THE WUA INSPECTORS FOR APPROVAL PRIOR TO

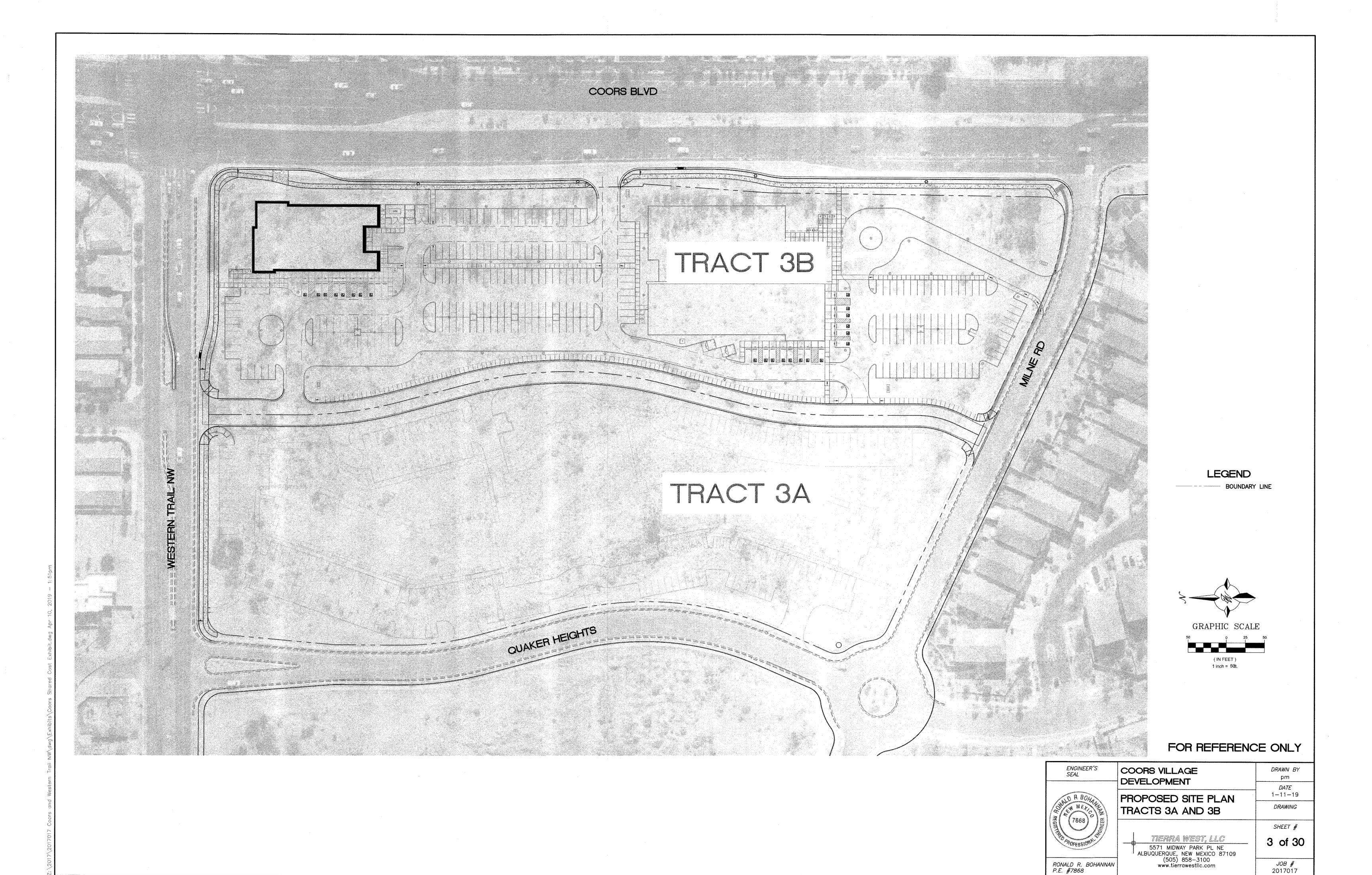
10. DISPOSAL SITE FOR ALL EXCESS EXCAVATION MATERIAL AND UNSUITABLE MATERIAL SHALL BE ARRANGED BY THE CONTRACTOR 13. AT UTILITY CROSSINGS, WHERE LESS THAN 18" OF VERTICAL SEPARATION FROM STORM DRAIN PIPING OR STRUCTURES IS PROPOSED, LEAN FILL CONSTRUCTION (PER SECTION 207 OF THE STANDARD SPECIFICATIONS) SHALL BE USED TO PROTECT THE WATER OR SEWER LINE. LEAN FILL SHALL EXTEND A PERPENDICULAR DISTANCE OF 5 FEET ON EACH SIDE OF THE STORM PIPE OR

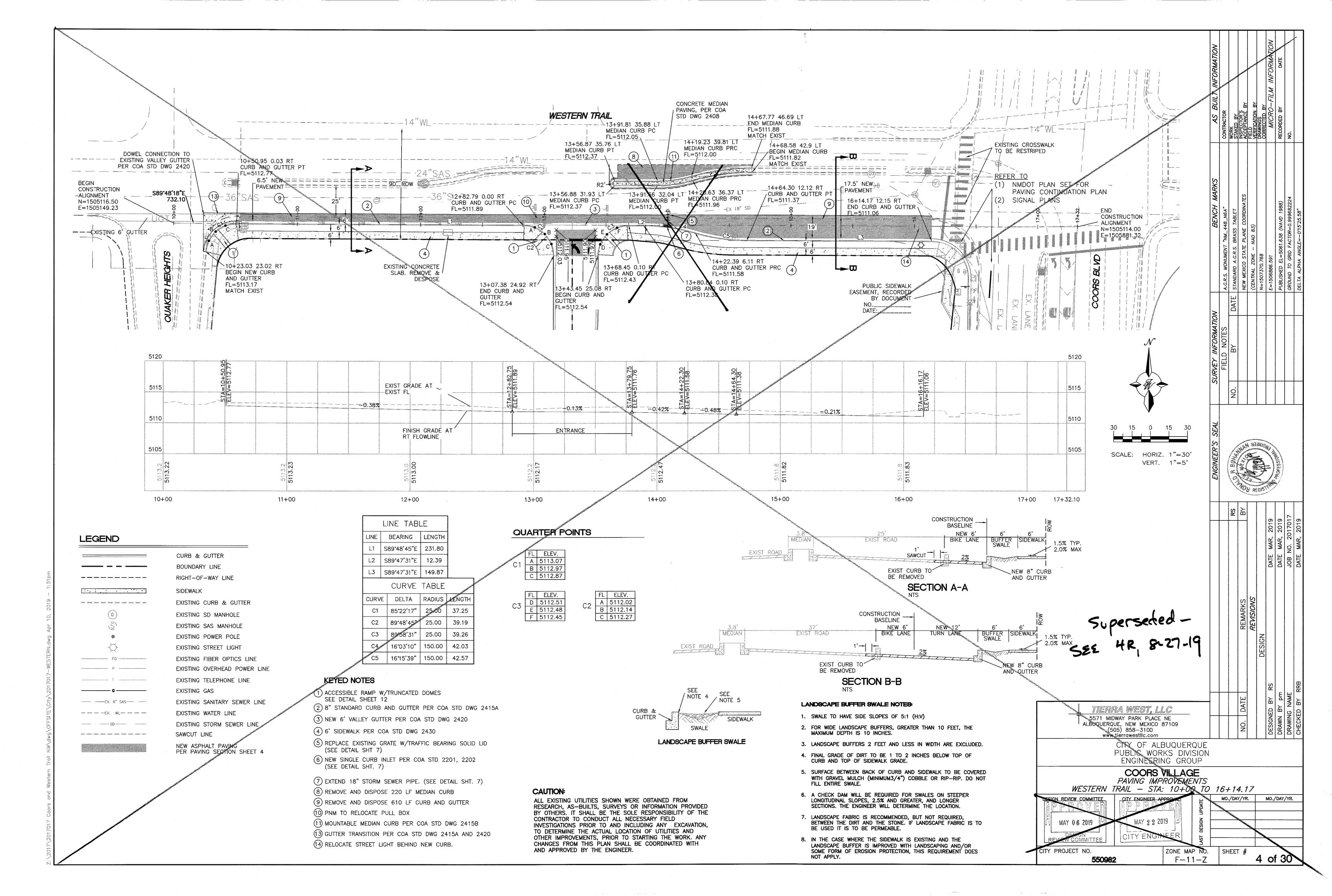
14. ALL DESIGNS AND CONSTRUCTION OF ANY UNDERGROUND UTILITIES SHALL COMPLY WITH ADMINISTRATIVE INSTRUCTION NO. 9 EXCAVATION OR CONSTRUCTION, WORK SHALL CEASE AND THE CONSTRUCTION ENGINEER SHALL NOTIFY THE COUNTY OFFICE OF THE FOR WORK NEARBY OR AFFECTING SAN JUAN CHAMA TRANSMISSION LINES AND APPURTENANCES. INFORMATION SHALL BE PROVIDED TO THE WATER AUTHORITY ONE (1) MONTH IN ADVANCE OF THE CONSTRUCTION START DATE. INFORMATION CAN BE FOUND AT HTTP://WWW.ABCWUA.ORG/WATER\_SHUT\_OFF\_AND\_TURN\_ON\_PROCEDURES.ASPX

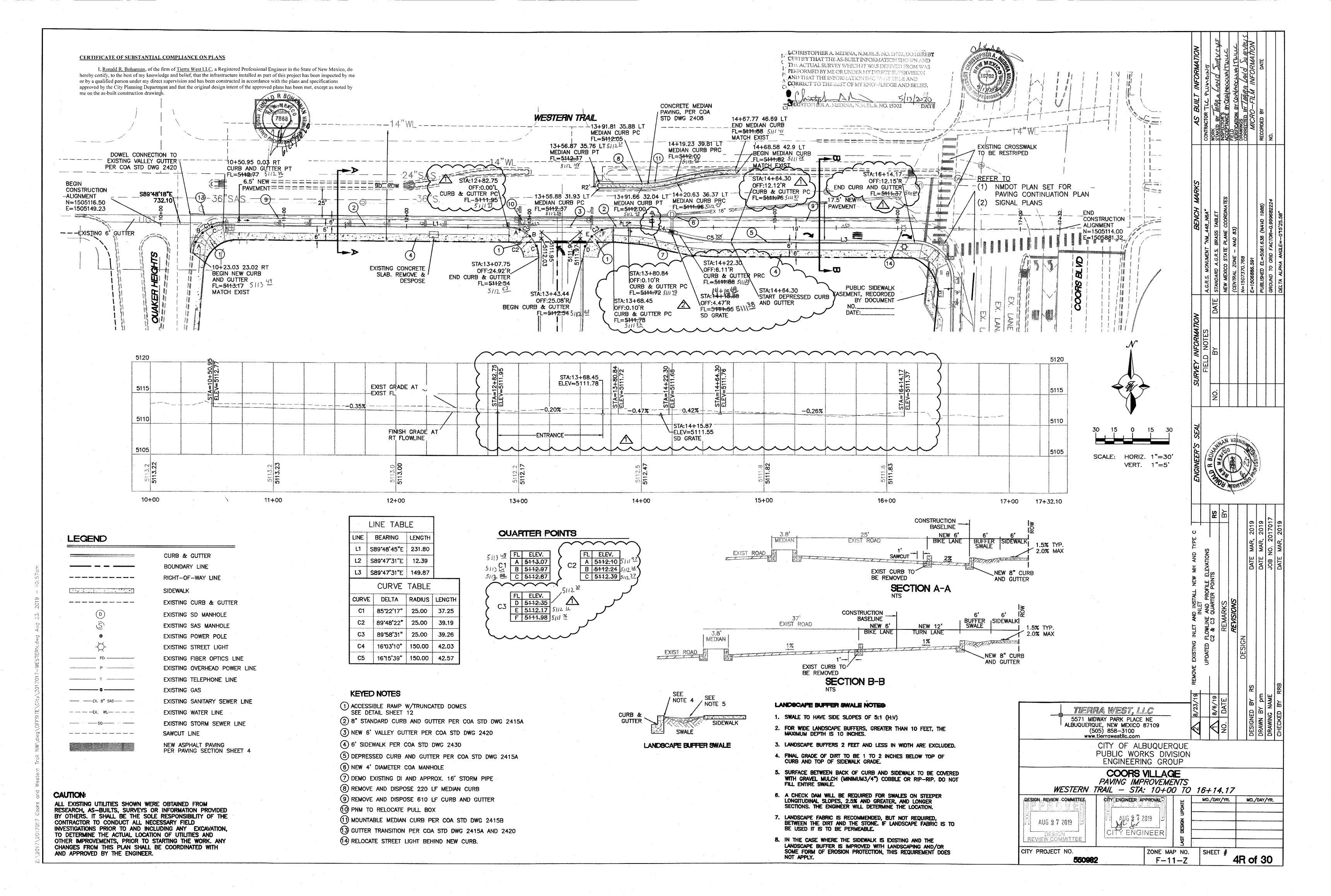


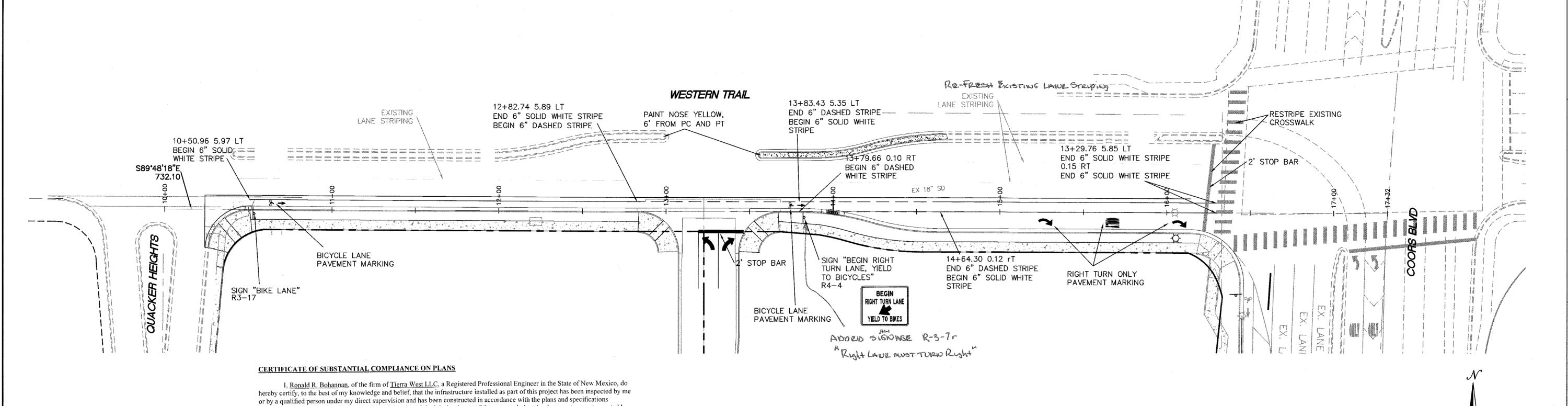












PERMANENT SIGNING AND STRIPING NOTES:

me on the as-built construction drawings.

1. ALL REGULATORY, WARNIN	NG, SPECIAL,	AND GUIDE SIGNS SHALL CO	MPLY WITH THE FOLI	LOWING REQUIREMEN
SIGN	SIGN CODE	COLOR	LETTER SHEETING	BACKGROUND SHEETING
STOP	R1-1	(W/RED)	TYPE VIII OR IX	TYPE XI
YIELD	R1-2	(W/RED)	TYPE VIII OR IX	TYPE XI
DO NOT ENTER	R5-1	(W/RED)	TYPE VIII OR IX	TYPE XI
WRONG WAY SCHOOL BUS STOP	R5-1A S3-1	(W/RED) (BLK/FLOURESCENT	TYPE VIII OR IX	TYPE XI
		YELLOW GREEN)	TYPE VIII OR IX	TYPE XI
SCHOOL BUS X-ING	S1-1	(BLK/FLOURESCENT YELLOW GREEN)	TYPE VIII OR IX	TYPE XI
PEDESTRIAN X-ING	W11-2	(BLK/FLOURESCENT YELLOW GREEN)	TYPE VIII OR IX	TYPE XI
BIKE X-ING	W11-1	(BLK/FLOURESCENT YELLOW GREEN)	TYPE VIII OR IX	TYPE XI
ALL SCHOOL/PED/BIKE SUPPLEMENTAL PLAQUES		(BLK/FLOURESCENT YELLOW GREEN)WHEREVER BLK/YELLOW IS SPECIFIED COLOR IN MUTCD	TYPE VIII OR IX	TYPE XI
ALL OTHER WARNING SIGNS AND SUPPLEMENTAL PLAQUES		(BLK/FLOURESCENT YELLOW GREEN)WHEREVER BLK/YELLOW IS SPECIFIED COLOR IN MUTCD	TYPE VIII OR IX	TYPE XI
GUIDE & DESTINATION SIGNS INCLUDES EXTRUDED & NON EXTRUDED (OVERHEAD & GROUND MOUNTED)		(W/GREEN) EXCEPT WHERE SPECIFIED OTHERWISE IN THE MUTCD	TYPE VIII OR IX	TYPE XI
E-CODE SIGNS	E11-1, 1A 1B, 1C	(BLK/YELLOW)	TYPE VIII OR IX	TYPE XI
RECREATIONAL & CULTURAL INTEREST	ALL	(W/BROWN)	TYPE VIII OR IX	TYPE XI
GENERAL SERVICES	ALL	(W/BLUE)	TYPE VIII OR IX	TYPE XI
SPECIFIC SERVICES	ALL	(W/BLUE)	TYPE VIII OR IX	TYPE XI
ALL OTHER PERMANENT SIGN	NS	(BLK/WHITE) EXCEPT WHER SPECIFIED OTHERWISE IN THE MUTCD	E TYPE IV	TYPE XI

- 1. ALL REGULATORY, WARNING, SPECIAL, AND GUIDE SIGNS SHALL COMPLY WITH THE FOLLOWING REQUIREMENTS: 2. ONLY 0.125 INCHES THICK ALUMINUM PANEL SIGNS ARE PERMITTED FOR WARNING AND REGULATORY SIGNS.

  LETTER BACKGROUND 3. ANTI-GRAFFITI COATING SHALL BE APPLIED ON ALL REGULATORY, WARNING, GUIDE, AND OTHER SPECIAL
  - 4. QUANTITIES MAY VARY AS FIELD CONDITIONS DICTATE. THE CONTRACTOR WILL BE PAID FOR ACTUAL QUANTITIES USED.

approved by the City Planning Department and that the original design intent of the approved plans has been met, except as noted by

- 5. ALL TRAFFIC CONTROL DEVICES SHALL COMPLY WITH NM STANDARDS SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION (LATEST EDITION) AND ANY APPLICABLE SPECIAL PROVISION AND/ OR SUPPLEMENTAL SPECIATION. ALSO THE DEVICES SHALL COMPLY WITH THE CURRENT EDITION, WITH
- 6. EACH SIGN FACE SHOWN ON PLANS SHALL MEET THE SPECIFICATIONS IN THE STANDARD HIGHWAY SIGNS MANUAL (CURRENT EDITION) FOR PROPER ARRANGEMENT, SPACING OF LETTERS, LETTER HEIGHT, SYMBOLS AND BORDERS FOR THE SPECIFIED SIZE AND MESSAGE AS SHOWN ON PLANS.
- 7. POST LENGTHS ARE BASED ON A MINIMUM OF 5 FT FOR RURAL ROADWAY SECTIONS TO A MINIMUM OF 7 FT FOR URBAN AND INTERSTATE ROADWAY SECTIONS. THE LENGTHS ARE MEASURED FROM THE BOTTOM OF THE SIGN TO NEAR EDGE OF THE DRIVING LANE.
- 8. THE LATERAL CLEARANCE OF SIGNS SHALL BE NO CLOSER THAN THE 6 FT FROM THE EDGE OF SHOULDER OR 12 FT FROM THE EDGE OF TRAVELED WAY FOR RURAL AREAS AND NO CLOSER THAN 2 FT FROM FACE OF CURB FOR URBAN AREAS.

9. ALL SIGNING HARDWARE, INCLUDING BRACKETS, (FOR MOUNTING ALL STREET NAME SIGNS, W1-8-18 BACK

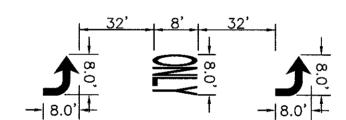
- TO BACK MOUNTING, ETC.) ARE CONSIDERED INCIDENTAL TO SIGN INSTALLATION. THEREFORE, NO PAYMENT WILL BE MADE.
- 10. THREE 4 LB/FT SIGN POST INSTALLATION APPROVED ONLY IF THE SPAN BETWEEN THE OUTER POSTS EXCEEDS 84" (SIGN WIDTH OF 96" OR GREATER).
- 11. 3'-6" BASE POST ARE REQUIRED FOR ALL SMALL SIGN POST. SEE STANDARD SERIAL DRAWING 701-02-1/3
- 12. SIGN POST SHALL BE SQUARE TUBING AS APPROVED BY THE PROJECT MANAGER OR THE DISTRICT TRAFFIC ENGINEER.
- 13. CONTRACTOR SHALL FIELD VERIFY ALL SIGNING INFORMATION, TEXT, AND LOCATIONS PRIOR TO FABRICATION AND INSTALLATION. NEW SIGN LOCATIONS SHALL BE APPROVED BY THE PROJECT MANAGER OR THE DISTRICT TRAFFIC ENGINEER.
- 14. HOT THERMOPLASTIC PAVEMENT MARKINGS SHALL TO BE USED ON ALL STRIPING (LONG LINES, CROSSWALKS, LEGENDS, SYMBOLS, ETC.) THE THERMOPLASTIC PAINT SHALL BE APPLIED AT A THICKNESS OF 120 MII
- 15. WATER BLASTING IS THE ONLY APPROVED METHOD OF EXISTING STRIPE REMOVAL WITHIN DISTRICT THREE. THE USE OF BLACK PAINT AS A METHOD OR REMOVING OR COVERING EXISTING STRIPING IS STRICTLY PROHIBITED.

### GENERAL NOTES:

- OBLITERATE ALL EXISTING STRIPING AND PAVEMENT MARKING UNLESS OTHERWISE SPECIFIED
- 2. EXISTING MARKINGS IDENTIFIED TO BE REMOVED SHALL BE COMPLETELY OBLITERATED TO A MAXIMUM DEPTH OF 0.25" AND FOR A WIDTH EQUAL TO TWO TIMES THE WIDTH OF THE STRIPE OR MARKING TO BE REMOVED, PER COA STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, SECTION 443.3.2
- ALL SIGNS SHALL BE MADE IN ACCORDANCE WITH THE M.U.T.C.D. (CURRENT EDITION) SPECIFICATIONS.
- 4. ALL STRIPING AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE M.U.T.C.D. (CURRENT EDITION) SPECIFICATIONS.

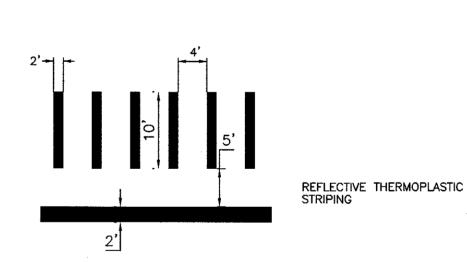
# LEGEND

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	PROPOSED CURB & GUTTER
	BOUNDARY LINE
	EXISTING BOUNDARY LINE
	CENTERLINE
	RIGHT-OF-WAY
	4" DASHED WHITE LINE
	4" SOLID WHITE STRIPE



90 mil THERMOPLASTIC RETRO REFLECTORIZED

ARROW DETAILS



ALL PAVEMENT MARKINGS SHALL CONFORM TO M.U.T.C.D. SPECS (LATEST EDITION)

CROSSWALK DETAIL (CONTINENTAL)

TIERRA WEST, LLC

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(505) 858-3100
www.tierrawestilc.com

CITY OF ALBUQUERQUE
PUBLIC WORKS DIVISION
ENGINEERING GROUP

COORS VII LAGE

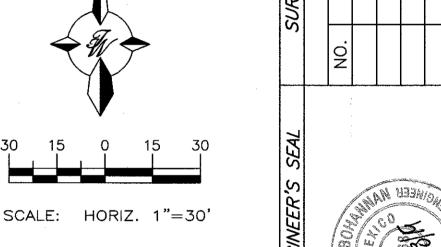
# CAUTION:

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.

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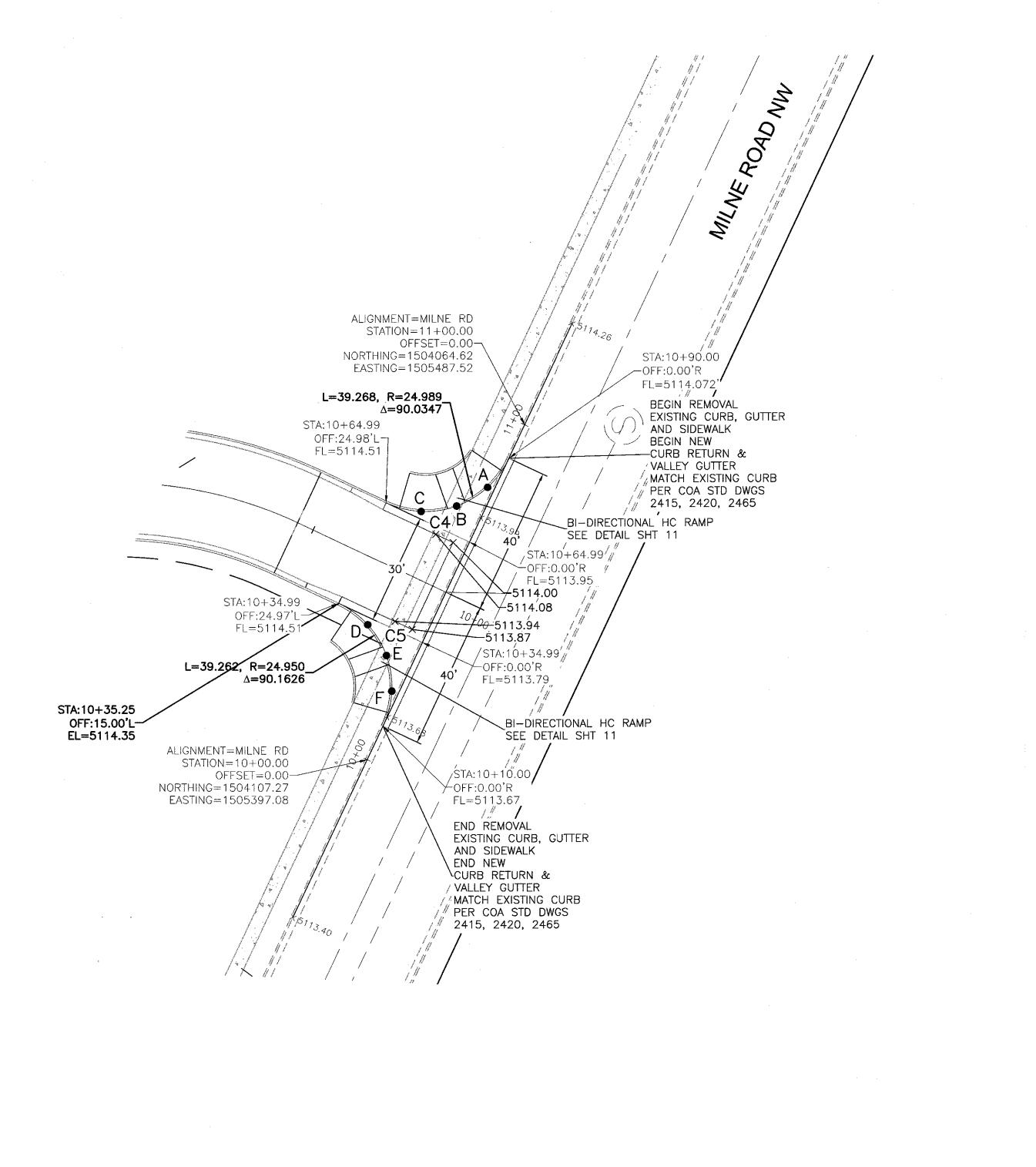
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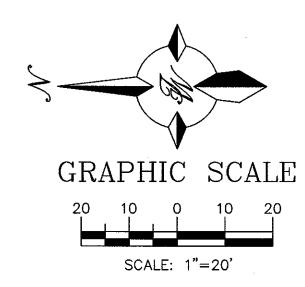
DESIGN

ME

5 of 30

2017 Coors and Western Trall NW\dwa\OFFSITE\City\2017017-





# **QUARTER POINTS**

	FL	ELEV.
	Α	5114.18
4	В	5114.29
	С	5114.40

FL ELEV. C5 D 5114.30 E 5114.09 F 5113.88

### CERTIFICATE OF SUBSTANTIAL COMPLIANCE ON PLANS

I, Ronald R. Bohannan, of the firm of Tierra West LLC, 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 Planning Department and that the original design intent of the approved plans has been met, except as noted by me on the as-built construction drawings.



747	-,	SURVEY INFORMATION	/	BENCH WARKS	AS BUILT
		FIELD NOTES		A.G.R.S. MONUMENT "NM_448_N6A"	CONTRACTOR TLC
	NO.	ВУ	DATE	STANDARD A.G.R.S. BRASS TABLET	WORK STAKED BY TRUENED
				NEW MEXICO STATE PLANE COORDINATES	INSPECTOR'S   ACCEPTANCE BY
				(CENTRAL ZONE - NAD 83)	FIELD   VERIFICATION BY
				N=1507370.768	DRAWINGS BY TU
				E=1506886.591	MICRO-FIL
				PUBLISHED EL=5061.638 (NAVD 1988)	RECORDED BY
				GROUND TO GRID FACTOR=0.999682224	NO.
				DELTA ALPHA ANGLE=-015'25.58"	

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		REMARKS	REVISIONS	DESIGN				
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MO./DAY/YR. MO./DAY/YR.

TIERRA WEST, LLC

5571 MIDWAY PARK PLACE NE
ALBUQUERQUE, NEW MEXICO 87109
(505) 858-3100
www.tierrawestlic.com CITY OF ALBUQUERQUE PUBLIC WORKS DIVISION ENGINEERING GROUP **COORS VILLAGE** 

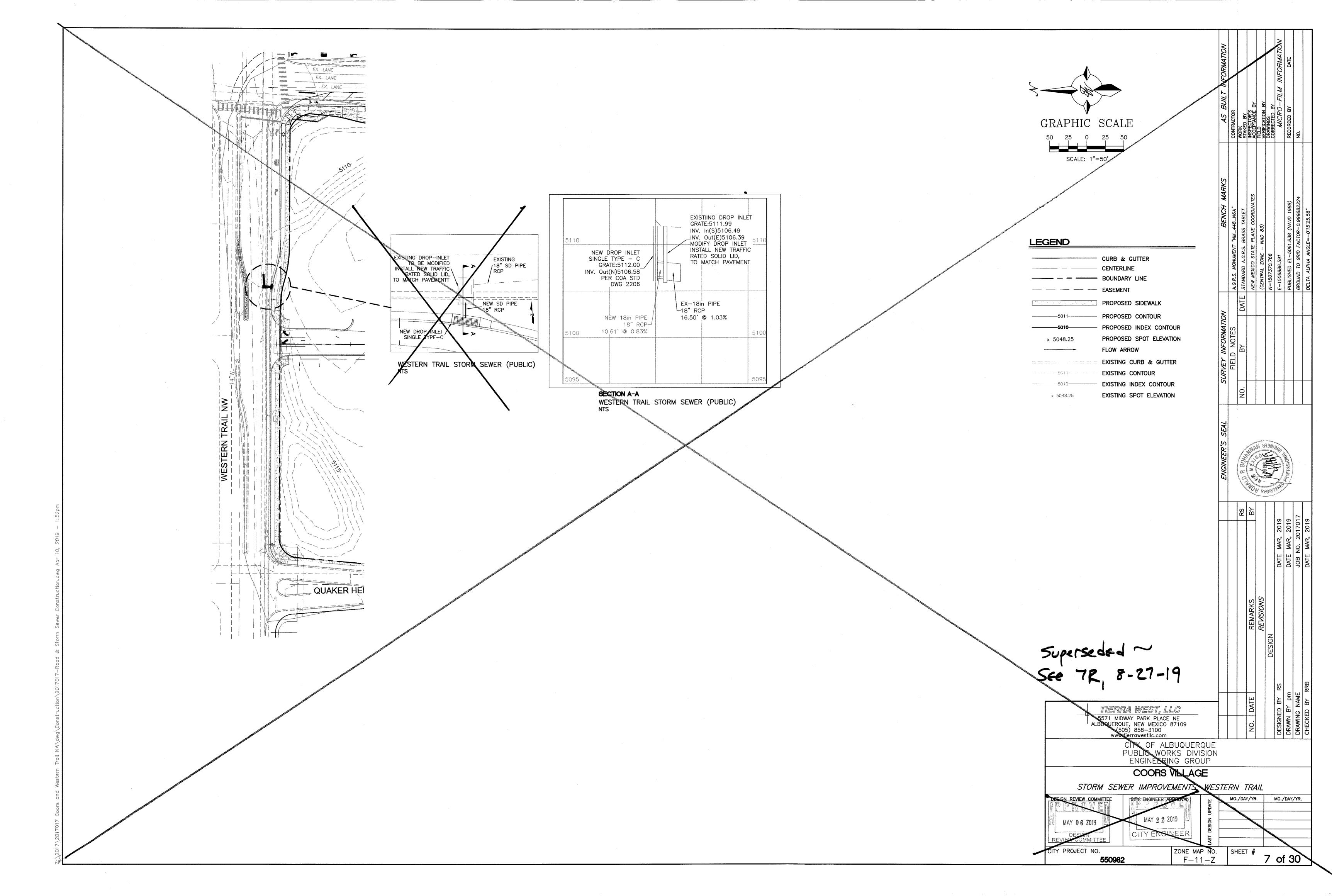
MILNE RD. ENTRANCE IMPROVEMENTS (TO PRIVATE ROAD)

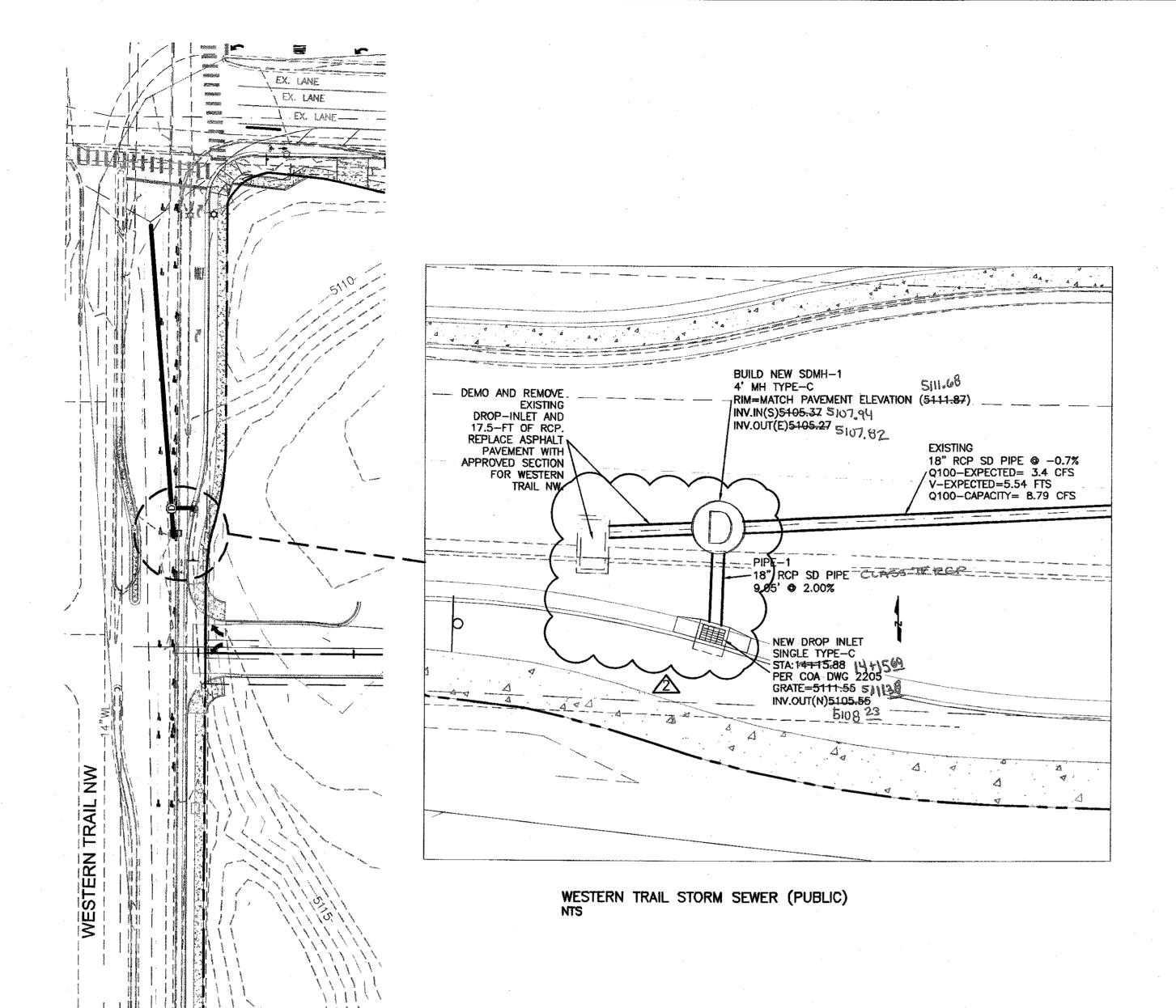
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CITY PROJECT NO. 550982	2

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6 of 30





CERTIFY THAT THE AS-BUILT INFORMATION SHOWN AND
THE ACTUAL SURVEY WHICH IT WAS DERIVED FROM WAS
PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION
AND THAT THE INFORMATION SHOWN IS TRUE AND
CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

STRISTOPHER A. MEDINA, N.M.P.L.S. NO. 15702



### CERTIFICATE OF SUBSTANTIAL COMPLIANCE ON PLANS

I, Ronald R. Bohannan, of the firm of <u>Tierra West LLC</u>, 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 Planning Department and that the original design intent of the approved plans has been met, except as noted by me on the as-built construction drawings.



ENGINEER'S SEAL

ENGINEER'S SEAL

1993 A BOHA

1994 A BOHA

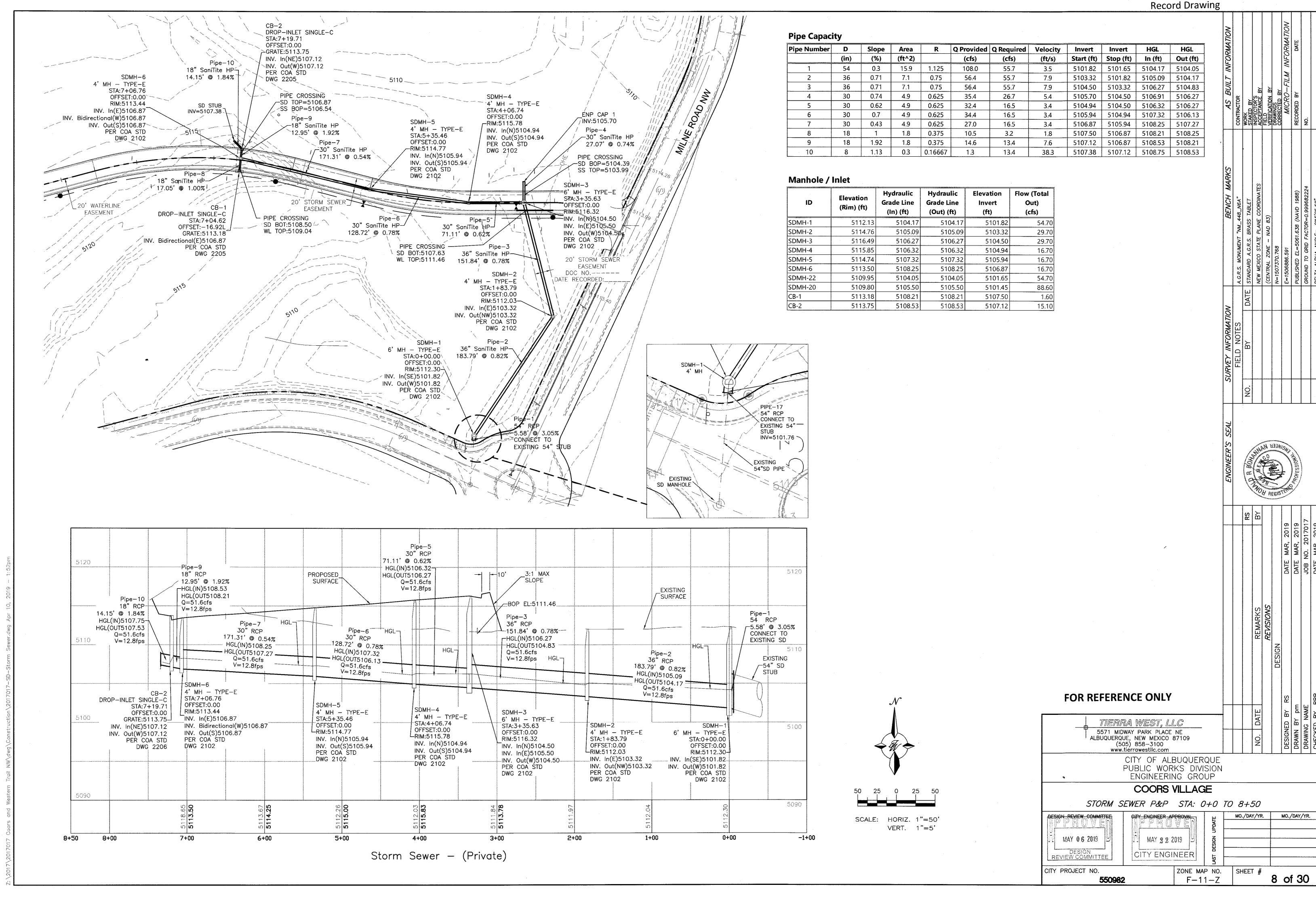
1995 A BOH

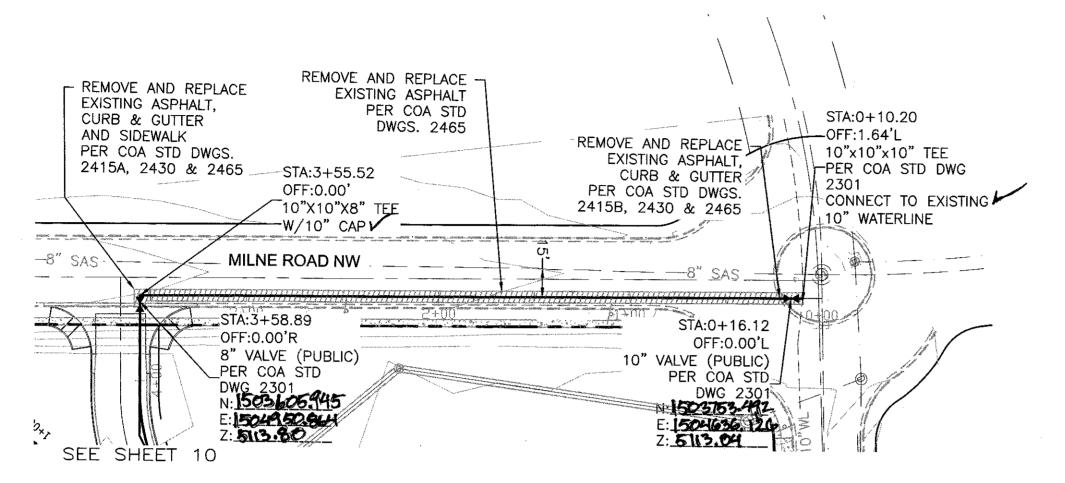
LEGEND	
	CURB & GUTTER
	CENTERLINE
	BOUNDARY LINE
	EASEMENT
	PROPOSED SIDEWALK
5011	PROPOSED CONTOUR
5010	PROPOSED INDEX CONTOUR
× 5048.25	PROPOSED SPOT ELEVATION
444	FLOW ARROW
Mary and the second of the sec	EXISTING CURB & GUTTER
-5011	EXISTING CONTOUR
5010	EXISTING INDEX CONTOUR
x 5048.25	EXISTING SPOT ELEVATION

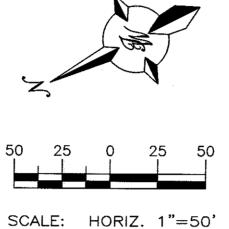
GRAPHIC SCALE

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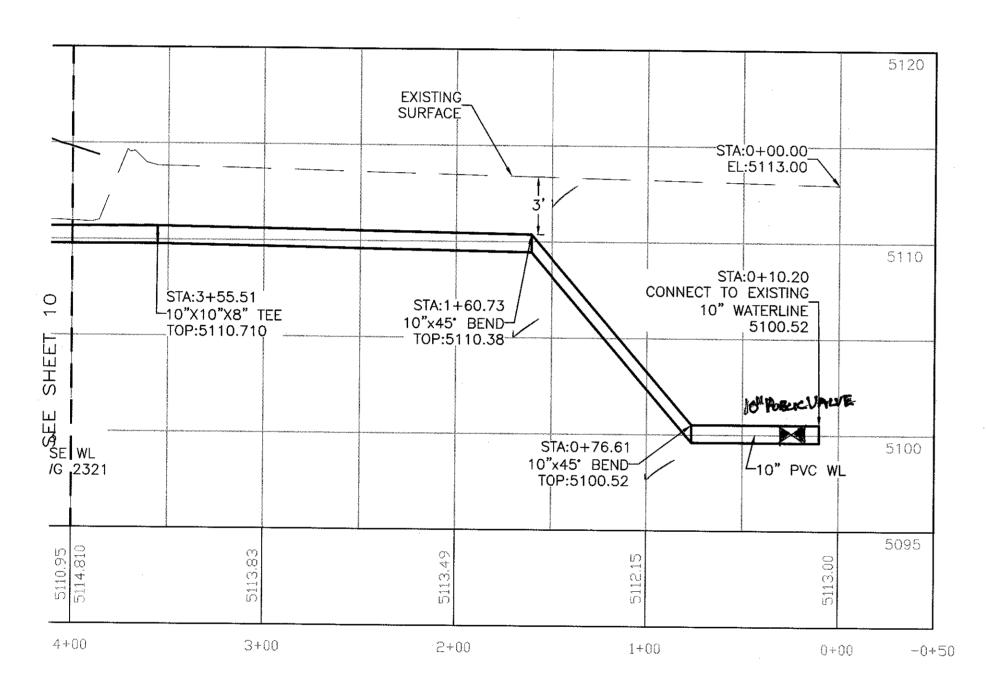
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		(505) www.tie	) 858-3100 errawestlic.com			2	,	N N		DES	DRA	DR.	붕
	•	P	CITY OF ALI UBLIC WOR ENGINEERIN	KS DIVI	SION	<b>9</b> -							
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VERT. 1"=5'



WATERLINE, MINIMUN 3 FT BURY

# CURB & GUTTER BOUNDARY LINE SIDEWALK EXISTING CURB & GUTTER -8" WL----- WATERLINE SINGLE CLEAN OUT DOUBLE CLEAN OUT EXISTING SD MANHOLE EXISTING INLET

EXISTING SAS MANHOLE --- EX. 8" SAS- -- EXISTING SANITARY SEWER LINE ---- EXISTING WATER LINE - EXISTING STORM SEWER LINE

### GENERAL NOTES

ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, ORDINANCES, RULES, AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.

**LEGEND** 

- 1. CONTRACTOR SHALL ASSUME THE SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD HARMLESS THE OWNER AND ENGINEER FROM ANY AND ALL LIABILITY REAL OR ALLEGED IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPT LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR ENGINEER.
- 2.CONTRACTOR SHALL ASSIST THE ENGINEER/INSPECTOR IN THE RECORDING OF DATA ON ALL UTILITY LINES AND ACCESSORIES AS REQUIRED BY THE CITY OF ALBUQUERQUE FOR THE PREPARATION OF "AS BUILT" DRAWINGS. CONTRACTOR SHALL NOT COVER UTILITY LINES AND ACCESSORIES UNTIL ALL DATA HAS BEEN RECORDED.
- 3. CONTRACTOR SHALL ASSUME FINANCIAL RESPONSIBILITY FOR ANY DAMAGE TO EXISTING PAVEMENT, PAVEMENT MARKINGS, SIGNAGE, CURB AND GUTTER, HANDICAP RAMPS, AND SIDEWALK DURING CONSTRUCTION APART FROM THOSE SECTIONS INDICATED ON THE PLANS, AND SHALL REPAIR OR REPLACE, PER THE STANDARD SPECIFICATIONS, ANY SUCH DAMAGE.
- 4. CONSTRUCTION ACTIVITY SHALL BE LIMITED TO THE PROPERTY AND/OR PROJECT LIMITS SHOWN. ANY DAMAGE TO ADJACENT PROPERTIES RESULTING FROM THE CONSTRUCTION PROCESS IS THE RESPONSIBILITY OF THE CONTRACTOR, INCLUDING AND SUCH COSTS INCURRED.
- 5.REMOVALS SHALL BE DISPOSED OF OFF-SITE AND SHALL BE THE RESPONSIBLY OF THE

### WATER & SEWER

- 1. ALL UTILITIES AND UTILITY SERVICE LINES SHALL BE INSTALLED PRIOR TO PAVING. EXISTING VALVES AND MANHOLES SHALL NOT BE BURIED OR PAVED OVER BUT RIMS SHALL BE ADJUSTED TO MATCH NEW GRADE PER COA STANDARD DRAWINGS 2460 AND 2461.
- 2.MANHOLE RIMS, FIRE HYDRANT ELEVATIONS, AND FLANGE ELEVATIONS SHOWN ARE APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY AND ADJUST TO FINAL PAVEMENT OR SURFACE GRADES.

THE CONTRACTOR SHALL COORDINATE WITH THE WATER AUTHORITY SEVEN (7) DAYS IN ADVANCE OF PERFORMING WORK THAT WILL AFFECT THE PUBLIC WATER OR SANITARY SEWER INFRASTRUCTURE. WORK REQUIRING SHUTOFF OF FACILITIES DESIGNATED AS MASTER PLAN FACILITIES MUST BE COORDINATED WITH THE WATER AUTHORITY 14 DAYS IN ADVANCE OF PERFORMING SUCH WORK. ONLY WATER AUTHORITY CREWS ARE

### NOTES

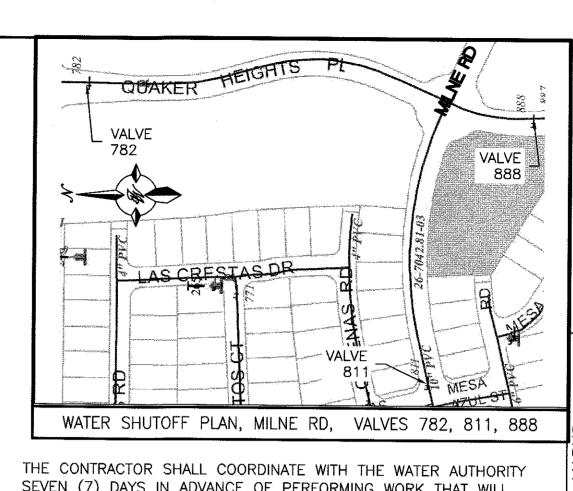
- 1. TRACT 3A WATER AVAILABILITY STATEMENT NO 190111
- 2. TRACT 3B WATER AVAILABILITY STATEMENT NO 180413
- 3. SEE PAGE 13-15 FOR STANDARD DETAILS

### **CERTIFICATE OF SUBSTANTIAL COMPLIANCE ON PLANS**

I, Ronald R. Bohannan, of the firm of Tierra West LLC, 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 Planning Department and that the original design intent of the approved plans has been met, except as noted by me on the as-built construction drawings.



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.



SEVEN (7) DAYS IN ADVANCE OF PERFORMING WORK THAT WILL AFFECT THE PUBLIC WATER OR SANITARY SEWER INFRASTRUCTURE WORK REQUIRING SHUTOFF OF FACILITIES DESIGNATED AS MASTER PLAN FACILITIES MUST BE COORDINATED WITH THE WATER AUTHORITY 14 DAYS IN ADVANCE OF PERFORMING SUCH WORK, ONLY WATER AUTHORITY CREWS ARE AUTHORIZED TO OPERATE PUBLIC VALVES. SHUTOFF REQUESTS MUST BE MADE ONLINE AT HTTP://ABCWUA.ORG/CONTENT/VIEW/463/729/

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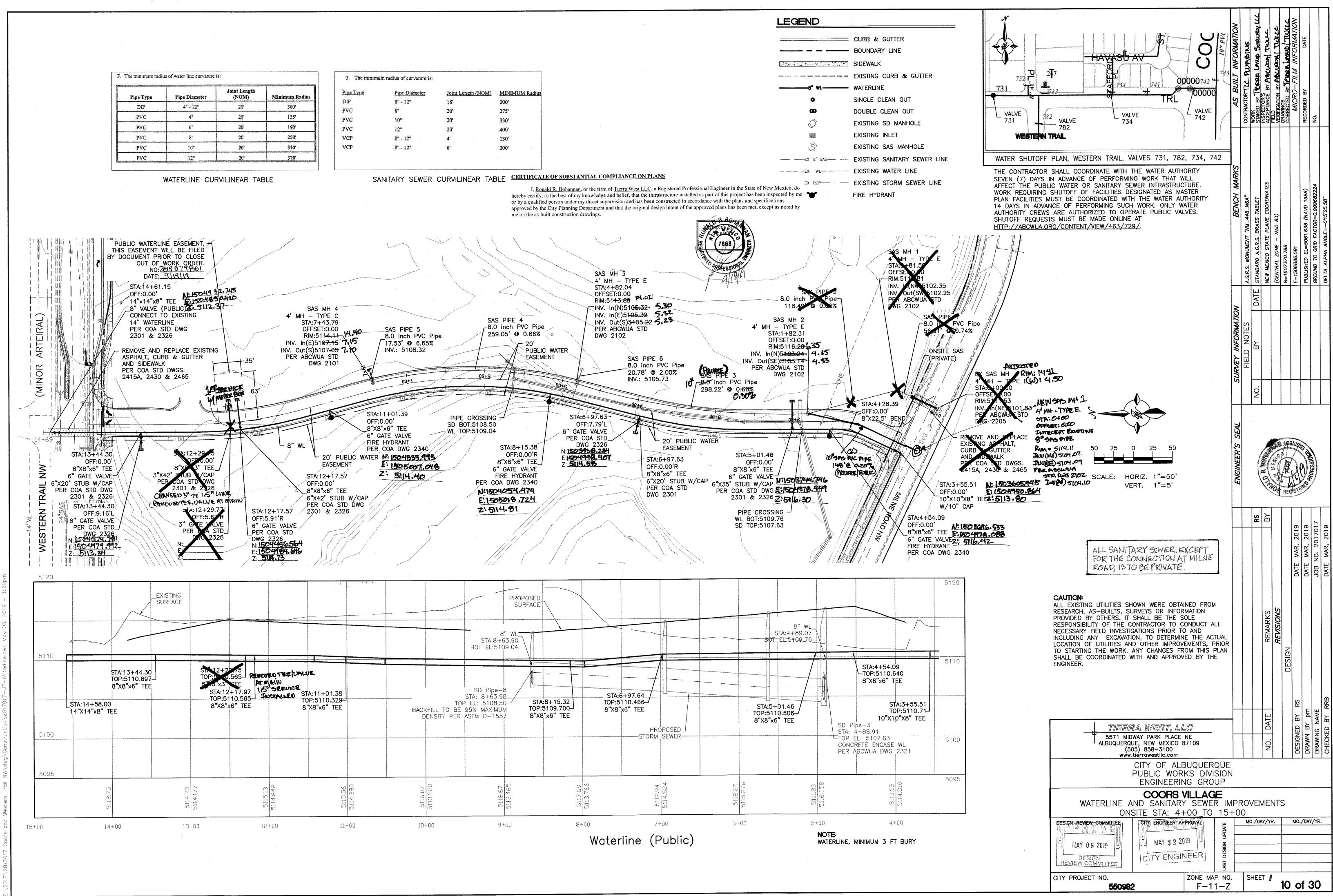
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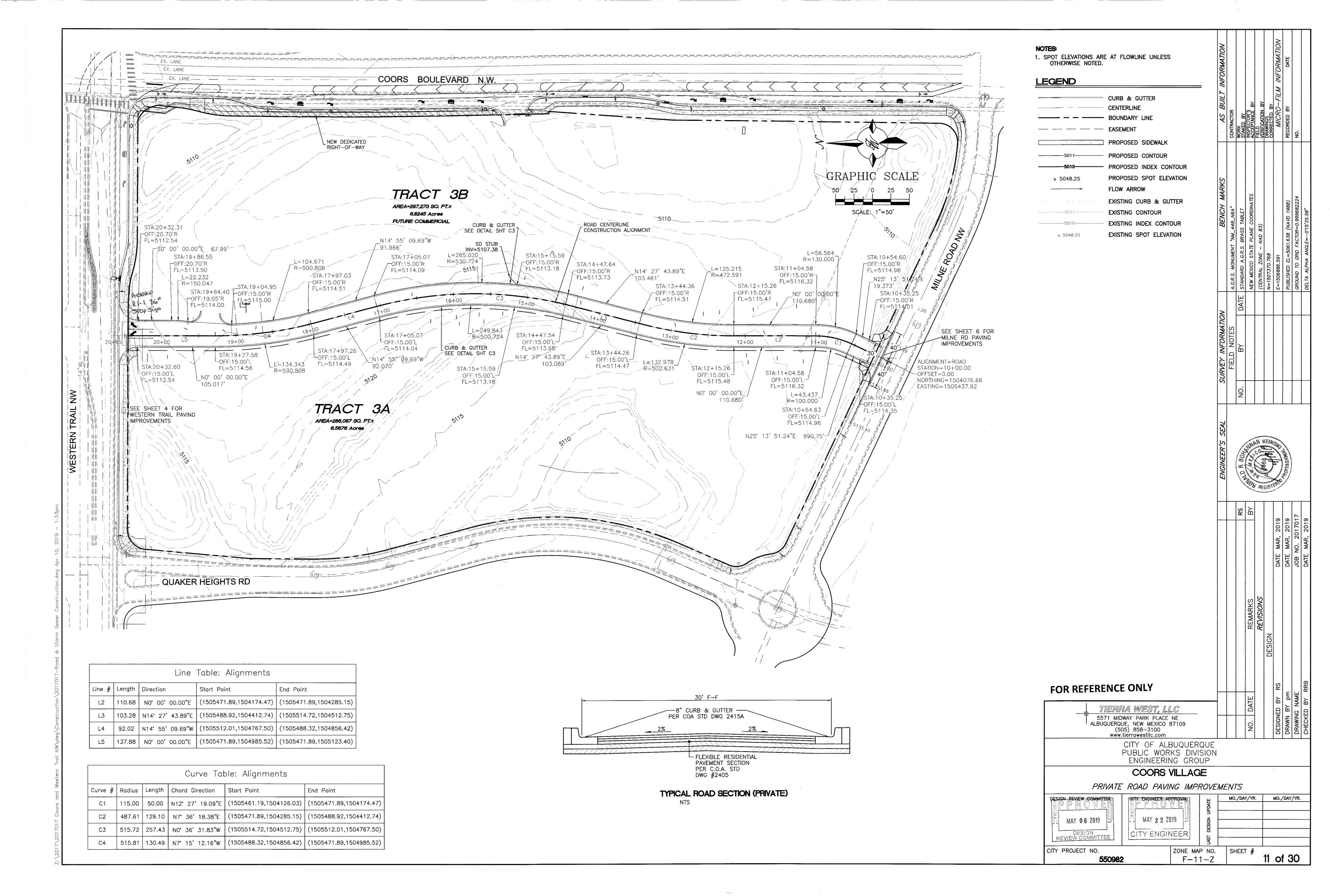
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**RECORD DRAWINGS** 

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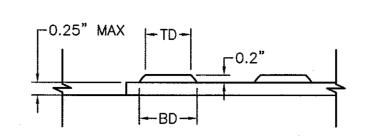


MEET A 12:1 SLOPE; 7' MIN REQ.

-WING TRANSITION OF HC RAMP

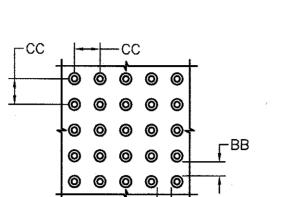
MUST BE ORTHOGONAL TO SIDEWALK

WHEELCHAIR RAMP DETAIL (TYP.)



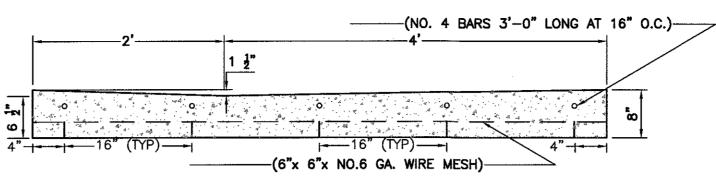
DOME SECTION BD - BASE DIAMETER 0.9" MIN TD - TOP DIAMETER 50% OF BD MIN TO

65% OF BD MAX

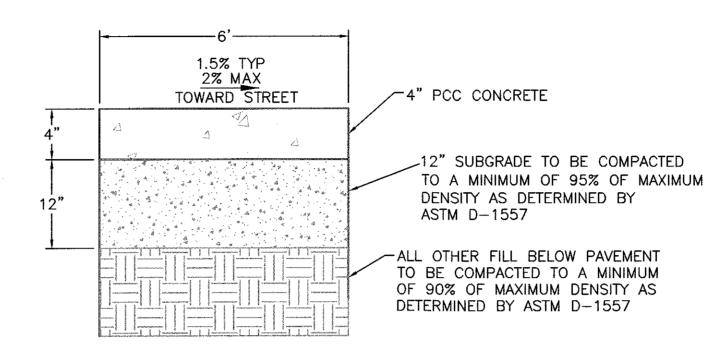


DOME SPACING

CC - CENTER TO CENTER SPACING 2.35" BB - BASE TO BASE SPACING 1.48" MIN

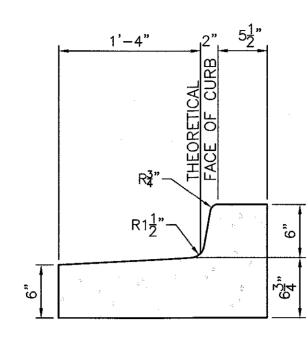


CONCRETE VALLEY GUTTER DETAIL



# CONCRETE SIDEWALK SECTION

PER COA STD DWG 2430



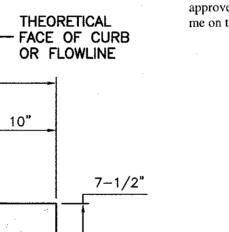
CURB GENERAL NOTES: 1. ALL CURBS TO BE CONSTRUCTED OF PORTLAND CEMENT CONCRETE, PER WAL-MART SPECIFICATIONS. 2. PROVIDE CONTRACTION JTS. 12' MAX., SPACING, 1/2" EXP. JTS. AT CURB RETURNS AND AT A MAX. SPACING OF 120' BETWEEN CURB RETURNS AND EACH SIDE OF SEPARATELY CONSTRUCTED DRIVEWAYS. CONTRACTION JTS., SHALL BE EITHER SAWED OR TOOLED A MINIMUM OF 1" DEEP AT FINISHED FACES. 3. ALL EDGES SHALL BE EDGED WITH A 3/8" RADUIS

EDGING TOOL. 4. 1/4" ISOLATION JOINT SHALL BE PLACED BETWEEN SIDEWALK AND CURB WHEN CAST ADJACENT TO EACH OTHER.

STANDARD CURB / GUTTER

### CERTIFICATE OF SUBSTANTIAL COMPLIANCE ON PLANS

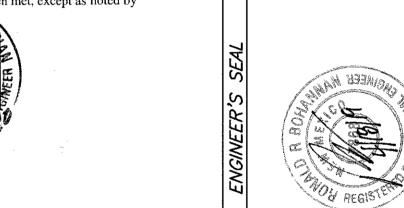
I, Ronald R. Bohannan, of the firm of Tierra West LLC, a Registered Professional Engineer in the State of New Mexico, do hereby certify, to the best of my knowledge and belief, that the infrastructure installed as part of this project has been inspected by me or by a qualified person under my direct supervision and has been constructed in accordance with the plans and specifications approved by the City Planning Department and that the original design intent of the approved plans has been met, except as noted by me on the as-built construction drawings.



CURB GENERAL NOTES: 1. ALL CURBS TO BE CONSTRUCTED OF PORTLAND CEMENT CONCRETE, PER WAL-MART SPECIFICATIONS. 2. PROVIDE CONTRACTION JTS. 12' MAX., SPACING, 1/2" EXP. JTS. AT CURB RETURNS AND AT A MAX. SPACING OF 120' BETWEEN CURB RETURNS AND EACH SIDE OF SEPARATELY CONSTRUCTED DRIVEWAYS. CONTRACTION JTS., SHALL BE EITHER SAWED OR TOOLED A MINIMUM OF 1" DEEP AT FINISHED FACES. 3. ALL EDGES SHALL BE EDGED WITH A 3/8" RADUIS EDGING TOOL. 4. 1/4" ISOLATION JOINT SHALL BE PLACED BETWEEN SIDEWALK AND CURB WHEN CAST ADJACENT TO EACH

## STANDARD MEDIAN CURB / GUTTER

OTHER.



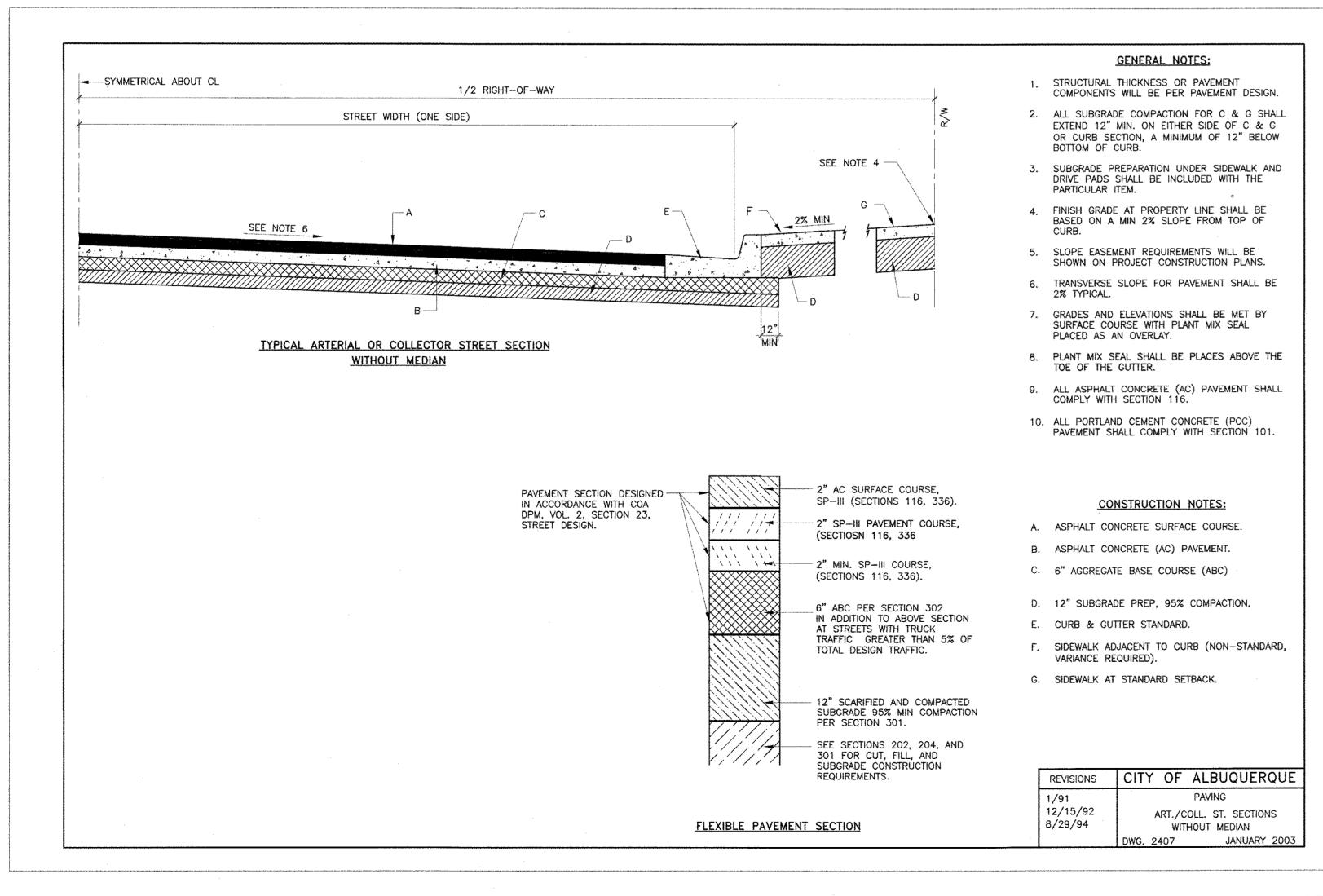
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5571 MIDWAY PARK PLACE NE ALBUQUERQUE, NEW MEXICO 87109 (505) 858-3100 www.tierrawestllc.com		NO. DATE		DESIGNED BY	DRAWN BY pm	DRAWING NAME	
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PUBLIC WORKS DIVISION ENGINEERING GROUP

# COORS VILLAGE

CONSTRUCTION DETAILS

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### WATER LINE

### SANITARY SEWER

### **GENERAL NOTES**

- BEDDING SHALL BE CLASS I—A WORKED BY HAND. IF GROUNDWATER IS ANTICIPATED, THEN BEDDING SHALL BE CLASS I-B COMPACTED TO 85% STANDARD PROCTOR. (SEE SPECIFICATIONS FOR GRADATION)
- 2. HAUNCHING SHALL BE WORKED AROUND THE PIPE BY HAND TO ELIMINATE VOIDS AND SHALL BE CLASS I-A OR CLASS I-B OR CLASS II COMPACTED TO 85% PROCTOR.
- 3. INITIAL BACKFILL SHALL BE CLASS I-A WORKED BY HAND, OR CLASS I-B OR CLASS II COMPACTED TO 85% STANDARD PROCTOR.
- 4. INITIAL BACKFILL NOT UNDER PAVED AREAS CAN BE COMPACTED TO 95% STANDARD PROCTOR.
- 5. FINAL BACKFILL SHALL BE CLASS I, OR II COMPACTED AS NOTED IN NOTES 3. AND 4.

- FINAL BACKFILL NOT UNDER PAVED AREAS CAN BE TYPE II COMPACTED TO 95% STANDARD PROCTOR.
- 7. ALL MATERIALS ARE CLASSIFIED IN ACCORDANCE WITH ASTM D 2321-89.
- 8. ALL MATERIALS SHALL BE INSTALLED IN MAXIMUM 8" LOOSE LIFTS IN ACCORDANCE WITH ASTM D 698.
- 9. FILL SALVAGED FROM EXCAVATION SHALL BE FREE OF DEBRIS, ORGANICS AND ROCKS LARGER THAN 3".
- 10. ALL TRENCH EXCAVATIONS SHALL BE SLOPED, SHORED, SHEETED, BRACED, OR OTHERWISE SUPPORTED IN COMPLIANCE WITH OSHA REGULATIONS AND LOCAL ORDINANCES. (SEE SPECIFICATIONS)

UTILITY TRENCH AND BEDDING DETAIL

# THE FOLLOWING TABLES WERE CREATED USING EBAA IRON INC. SOFTWARE FOR RESTRAINING JOINTS WITH THESE CRITERIA:

DEPTH OF BURY: 3.0' MINIMUM SAFETY FACTOR: 1.5 TO 1

PIPE MATERIAL: PVC GM/SM-SILTY GRAVEL/SILTY SAND, GRAVEL-SAND MIXTURES TEST PRESSURE: 150 PSI

TRENCH TYPE 3: PIPE BEDDED IN 4" MINIMUM LOOSE SOIL BACKFILL LIGHTLY CONSOLIDATED TO TOP OF PIPE

THESE LENGTHS WILL BE AFFECTED IF THE TYPE OF MATERIAL, GREATER DEPTH OF BURY, ETC. CHANGES. THESE MUST BE RECALCULATED BY THE DESIGN ENGINEER PRIOR TO CONSTRUCTION.

00110111001											
RES	TRAINE	O JOIN	LENG	THS FO	R TEES	S*					
CIZE	LENGTH ALONG RUN**										
SIZE	10'	8'	6'	4'	2'	0,					
12x12x12	61	68	76	83	90	98					
12x12x10	39	48	56	65	74	83					
12x12x8	15	26	37	48	59	70					
12x12x6	1	1	9	24	38	53					
12x12x4	1	1	1	1	16	37					
10x10x10	46	54	61	68	76	83					
10x10x8	25	34	43	52	61	70					
10x10x6	1	5	17	29	41	53					
10x10x4	1	1	1	2	20	37					
8x8x8	34	42	49	56	63	70					
8x8x6	6	15	25	34	43	53					
8x8x4	1	1	1	10	24	37					
6x6x6	7	24	31	39	46	53					
6x6x4	1	1	6	17	27	37					
*RESTRAIN	*RESTRAINTS ONLY PLACED ON THE BRANCH										

\*RESTRAINTS ONLY PLACED ON THE BRANCH
\*\*LENGTH ALONG RUN REFERS TO THE LENGTH OF PIPE ON EITHER SIDE OF THE TEE BEFORE THE NEXT JOINT.

RESTRAINED JOINT LENGTHS FOR HORIZONTAL BENDS, VALVES, AND DEAD ENDS (EACH SIDE)  HORIZONTAL BENDS VALVES										
SIZE	VALVES									
SIZE	90,	45°	22-1/2*	11-1/4	DEAD END					
12	45	19	9	4	102					
10	38	16	8	4	86					
8	32	13	6	3	72					
6	25	10	5	2	55					
4	18	7	4	1	39					

TAG WITH SPECIFIC UTILITY, SIZE, AND

DEPTH TO INVERT

REBAR IS TO BE CUT OFF 6" BELOW SUBGRADE AFTER UTILITY CONNECTION IS COMPLETED AND PRIOR

TO PAVING

THE FOLLOWING TABLES WERE CREATED USING EBAA IRON INC. SOFTWARE FOR RESTRAINING JOINTS WITH THESE CRITERIA:

DEPTH OF BURY: 3.0' MINIMUM TO 6.0'

SAFETY FACTOR: 1.5 TO 1 PIPE MATERIAL: PVC

SOIL TYPE: GM/SM-SILTY GRAVEL/SILTY SAND, GRAVEL-SAND MIXTURES TEST PRESSURE: 150 PSI TRENCH TYPE 3: PIPE BEDDED IN 4" MINIMUM LOOSE SOIL

BACKFILL LIGHTLY CONSOLIDATED TO TOP OF PIPE

THESE LENGTHS WILL BE AFFECTED IF THE TYPE OF MATERIAL, GREATER DEPTH OF BURY, ETC. CHANGES. THESE MUST BE RECALCULATED BY THE DESIGN ENGINEER PRIOR TO CONSTRUCTION.

	RESTRAINED JOINT LENGTHS FOR VERTICAL OFFSETS/BENDS (EACH SIDE)											
0.75	_		HORIZON	TAL BENDS								
SIZE	-	90°	45°	22-1/2*	11-1/4							
12	UPPER LOWER	DON'T USE	42 10	20 5	10 2							
10	UPPER LOWER	DON'T USE	36 8	17 4	8 2							
8	UPPER LOWER	DON'T USE	30 7	14 3	7 2							
6	UPPER LOWER	DON'T USE	23 5	11 3	5 1							
4	UPPER	DON'T	16	8 0	4							

RESTRAINED JOINT LENGTHS FOR REDUCERS***									
SIZE	L. SIDE	SIZE	L. SIDE						
12x10	50	10x6	53						
12x8	54	10x4	70						
12x6	74	8x6	30						
12x4	88	8×4	52						
10.48	20	644	28						

10x8 | 29 | 6x4 | 28 \*\*\*RESTRAINTS ONLY PLACED ON LARGE SIDE

# JOINT RESTRAINT TABLES

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USE AT CAPPED END OF ALL UTILITY SERVICE CONNECTIONS TO/FROM SAM'S CLUB, WAL\*MART STORES & SUPERCENTERS

PAINT COLOR TO DENTIFY UTILITY

#4 REBAR

(SEE BELOW)

WELD TO PLATE

3/16" x10"x10" ~ STEEL PLATE

UTILITY COLOR SEWER GREEN BLUE WATER STORM DRAIN WHITE ELECTRICAL RED YELLOW TELCO/CATV ORANGE FUTURE SITE LIGHTING FIBER OPTIC (GAS STATION) PURPLE

TYPICAL UTILITY MARKER

TIERRA WEST, LLC 5571 MIDWAY PARK PLACE NE ALBUQUERQUE, NEW MEXICO 87109 (505) 858-3100 www.tierrawestllc.com CITY OF ALBUQUERQUE PUBLIC WORKS DIVISION ENGINEERING GROUP

COORS VILLAGE

CONSTRUCTION DETAILS

DESIGN REVIEW COMMITTEE

MAY 06 2019

550982

CITY PROJECT NO.

CITY ENGINEER APPROVAL MAY 22 2019 CITY ENGINEER ZONE MAP NO.

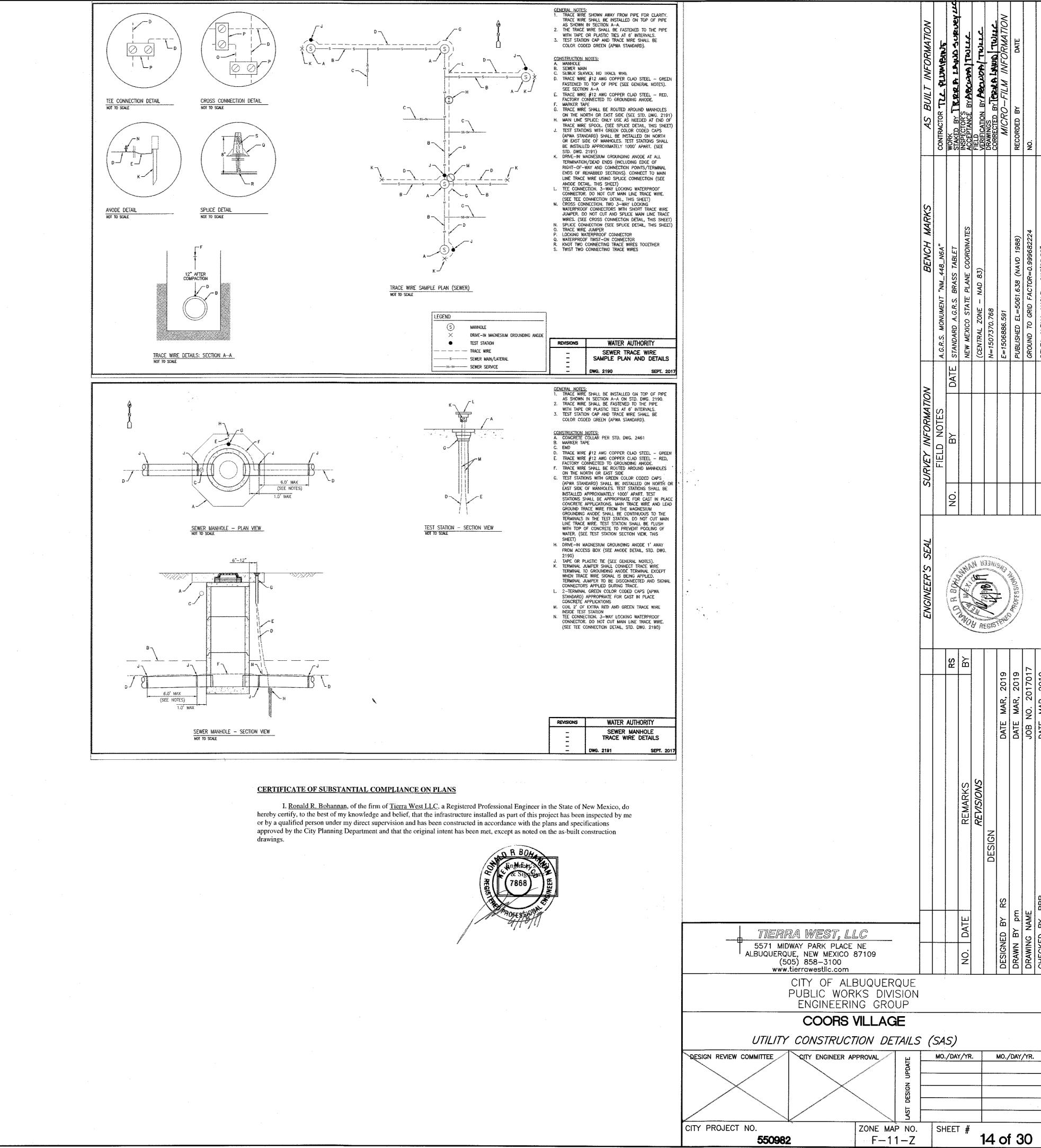
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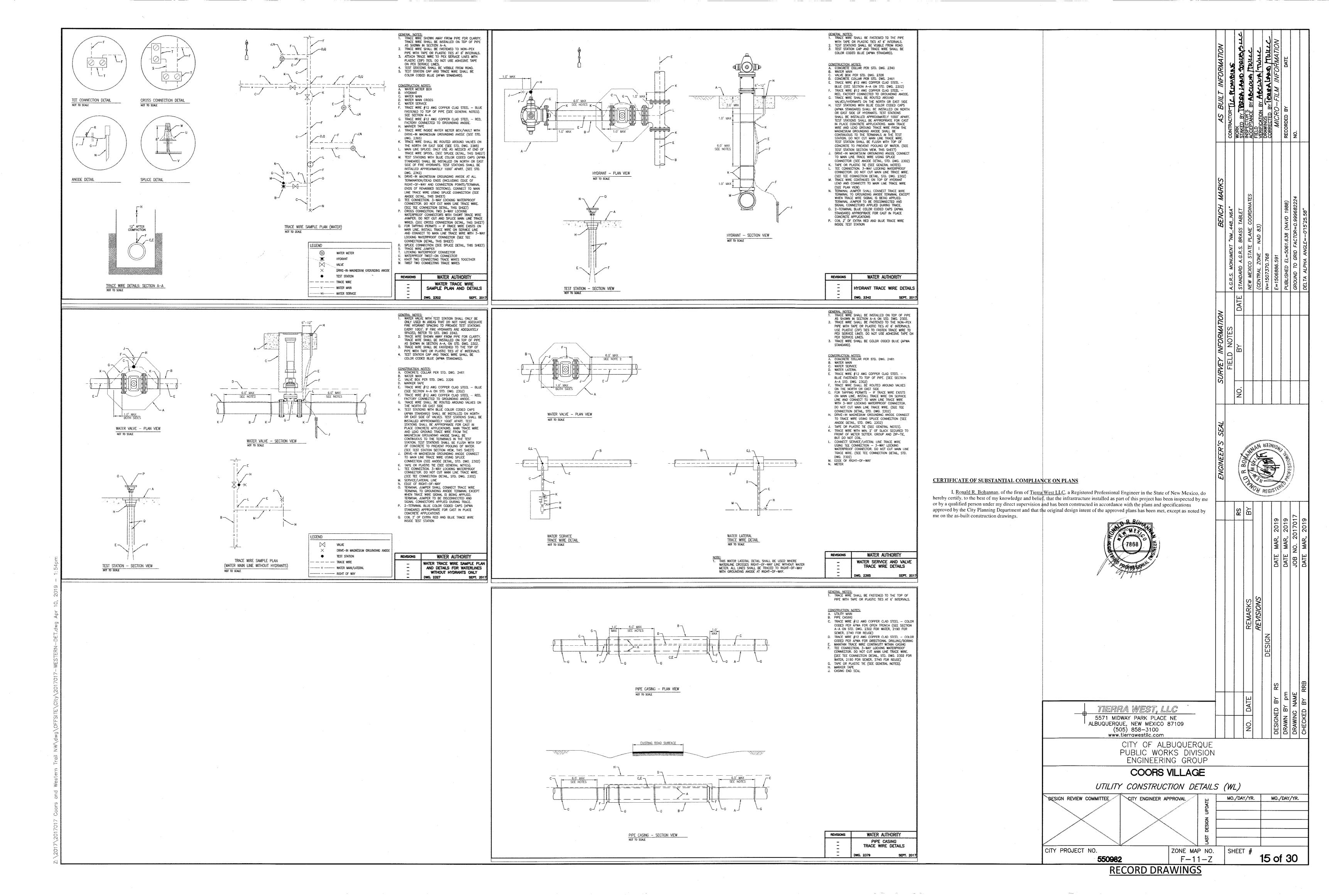
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**RECORD DRAWINGS** 



RECORD DRAWINGS



2. LOCATIONS OF CONDUITS, FOUNDATIONS, CONTROL CABINETS, POLES, PULL BOXES, MANHOLES, AND SPLICE CABINETS SHOWN ON THE PLANS ARE SCHEMATIC AND SHALL BE ADJUSTED IN THE FIELD TO MAXIMIZE CLEAR SPACE AVAILABLE FOR PEDESTRIANS AND WHEELCHAIRS TO COMPLY WITH THE AMERICANS WITH DISABILITIES ACT. THE CONTRACTOR SHALL MEET WITH THE CITY'S TRAFFIC ENGINEERING OPERATIONS PERSONNEL IN THE FIELD AT ALL LOCATIONS TO SPOT EQUIPMENT BEFORE BEGINNING THE WORK. ALL SUCH EQUIPMENT SHALL BE INSTALLED WITHIN THE RIGHT-OF-WAY.

3. THE CONTRACTOR IS WARNED THAT EXISTING CONDUITS MAY CONTAIN AC POWER AND CAUTION SHALL BE EXERCISED IN INTERCEPTING OR INSTALLING CABLE IN EXISTING CONDUIT.

4. THE CONTRACTOR SHALL BORE, DRILL, OR PUSH WHEN CROSSING EXISTING PAVEMENTS AND ANY DRIVEWAYS FOR SIDE STREET CROSSINGS. BEFORE CONDUIT CAN BE BORED, DRILLED, OR PUSHED THE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES. THE CONTRACTOR SHALL LOCATE AND EXPOSE GAS LINES WHICH CROSS ANY PROPOSED BORES THESE EXCAVATIONS SHALL REMAIN OPEN UNTIL AFTER THE BORE IS COMPLETE. CONTRACTOR SHALL REMOVE AND REPLACE IN KIND ANY SIDEWALK OR PAVEMENT REQUIRED TO EXPOSE SUCH LINES. THE CONTRACTOR MAY CUT, TRENCH, AND REPLACE EXISTING PAVEMENT ONLY WHEN APPROVED BY THE PROJECT MANAGER.

5. SPLICING OF COMMUNICATIONS CABLE WILL NOT BE PERMITTED IN PULL BOXES. SPLICING OF COMMUNICATIONS CABLE (CONNECTIONS) WILL BE PERMITTED ONLY AT SPLICE CABINETS OR CONTROLLER CABINETS WITH SPLICE BARS. SPLICING OF TRAFFIC SIGNALS MCC WILL BE PERMITTED IN LARGE PULL BOXES INCLUDING LARGE MEDIAN PULL BOXES. SPLICING OF VIDEO DETECTION COAXIAL CABLE WILL NOT BE PERMITTED FROM THE MASTARM BASE TO THE CONTROLLER CABINET. SPLICING OF OPTICAL DETECTOR CABLE WILL NOT BE PERMITTED FROM THE DETECTOR TO THE CONTROLLER CABINET

6. ALL LOOP LEAD-IN CABLES SHALL BE TAGGED AT THE CONTROL CABINET TO IDENTIFY EACH CABLE BY PHASE AND LOOP NUMBER. ALL VIDEO DETECTION COAXIAL AND POWER CABLES SHALL BE TAGGED AT THE CONTROL CABINET TO IDENTIFY EACH CABLE BY CAMERA NUMBER AND LOCATION. ALL OPTICAL DETECTOR CABLE SHALL BE TAGGED AT THE CONTROL CABINET TO IDENTIFY EACH BY DIRECTION AND LOCATION.

7. ALL PULL BOXES SHALL BE REINFORCED POLYMER MORTAR HEAVY DUTY TYPE WITH REINFORCED POLYMER MORTAR HEAVY DUTY COVERS. CONCRETE COVERS, STEEL COVERS, AND CONCRETE PULL BOXES WILL NOT BE ACCEPTABLE.

8. THE CONTRACTOR SHALL NOTIFY THE CITY OF ALBUQUERQUE TRAFFIC ENGINEERING OPERATIONS(857-8044) THREE WORKING DAYS IN ADVANCE OF ANY ANTICIPATED WORK ON SIGNALS, LIGHTING, AND POWER SERVICES. TRAFFIC ENGINEERING OPERATIONS PERSONNEL WILL ASSIST THE CONTRACTOR IN FIELD LOCATION OF EQUIPMENT, COLOR CODING OF WIRING, AND MUST BE PRESENT WHEN SIGNALS AND LIGHTING ARE SHUT-OFF OR TURNED ON. THE CONTRACTOR SHALL ALSO NOTIFY THE CITY OF ALBUQUERQUE TRAFFIC ENGINEERING OPERATIONS EACH TIME A TRAFFIC SIGNAL CONTROL DOOR IS OPENED.

9. THE CONTRACTOR SHALL NOTIFY PUBLIC SERVICE COMPANY 30 DAYS IN ADVANCE OF ANTICIPATED POWER SERVICE CONNECTIONS. THE CONTRACTOR SHALL COORDINATE WITH PUBLIC SERVICE COMPANY TO ESTABLISH ELECTRICAL SERVICE IN THE CITY'S NAME. THE CONTRACTOR SHALL PAY THE LOCAL POWER COMPANY ALL COSTS TO PROVIDE ELECTRICAL SERVICE. THIS WORK WILL BE CONSIDERED INCIDENTAL TO CONSTRUCTION.

10. THE CONTRACTOR SHALL REMOVE ALL CONFLICTING SIGNING AND DELIVER TO THE CITY TRAFFIC ENGINEERING YARDS WHEN TRAFFIC SIGNALS ARE PUT INTO OPERATION.

11. LIVE UNUSED CONDUCTORS WILL NOT BE ALLOWED AT MASTARM POLES AND PEDESTAL POLES. ALL SUCH UNUSED CONDUCTORS SHALL BE DISCONNECTED AT THE LARGE PULL BOX ADJACENT TO THE POLE.

12 IF TRENCH WIDTHS LESS THAN 12" ARE PROPOSED BY THE CONTRACTOR, APPROVED COMPACTION METHODS SHALL BE USED DURING BACKFILL TO PREVENT LATENT TRENCH FAILURES. THE CONTRACTOR SHALL USE GROUT OR LEAN FILL AS APPROVED BY THE PROJECT MANAGER IN LIEU OF EARTH BACKFILL.

13. THE CITY OF ALBUQUERQUE TRAFFIC ENGINEERING OPERATIONS PERSONNEL WILL PROVIDE TRAFFIC SIGNAL TIMING PLANS AND WILL PROGRAM TRAFFIC SIGNAL CONTROLLERS.

14. EXISTING CONDUITS TO BE REMOVED OR ABANDONED SHALL HAVE ALL WIRING REMOVED.

15. EXISTING CONDUITS SHALL BE REPAIRED, ADJUSTED, OR REPLACED AS DIRECTED BY THE PROJECT MANAGER WHERE ELECTRICAL PULLBOXES OR TRAFFIC MANHOLES ARE INSTALLED OR REPLACED.

16. THE CONTRACTOR SHALL PROVIDE OFF-DUTY POLICE OFFICERS TO DIRECT TRAFFIC WHEN SIGNALS ARE TURNED

17. ALL DATA SHOWN HEREIN CONCERNING EXISTING UTILITIES HAS BEEN OBTAINED FROM "AS-BUILT" DRAWINGS AND FROM FIELD OBSERVATIONS WHICH MAY OR MAY NOT BE ACCURATE. THE CONTRACTOR WILL BE RESPONSIBLE FOR EXPLORATORY TRENCHING. IF NECESSARY, TO MORE SPECIFICALLY LOCATE UTILITY LINES. COST OF LOCATING UTILITY LINES INCLUDING EXPLORATORY TRENCHING WILL BE CONSIDERED INCIDENTAL TO CONSTRUCTION.

18. THE CONTRACTOR SHALL VIDEO TAPE THE EXISTING TRAFFIC SIGNAL EQUIPMENT IN VHS FORMAT AND REVIEW THE TAPE WITH CITY OF ALBUQUERQUE TRAFFIC ENGINEERING OPERATIONS PERSONNEL PRIOR TO BEGINNING ANY REMOVALS OF SIGNAL EQUIPMENT. THE TAPE SHALL BECOME THE PROPERTY OF THE CITY AND MAY BE USED TO RESOLVE ANY QUESTIONS RELATED TO THE ORIGINAL CONDITION AND QUALITY OF EXISTING EQUIPMENT. THE EXISTING TRAFFIC SIGNAL EQUIPMENT INCLUDING POLES, CONTROLLER CABINETS, CONFLICT MONITORS, AND DETECTORS SHALL BE DELIVERED TO THE CITY OF ALBUQUERQUE TRAFFIC ENGINEERING YARD ON PINO ROAD NE.

19. CABINET AND CONTROLLER NEED TO BE I.D.C. 820A.

# INCIDENTAL ITEMS \*

1. REMOVAL OF EXISTING PULL BOXES, CONDUITS, OR OTHER SIGNAL EQUIPMENT FOR INSTALLATION OF NEW SIGNAL EQUIPMENT.

CABLE TESTING AND DIAGRAMS.

3. BORING, DRILLING, PUSHING, AND TRENCHING, INCLUDING REMOVAL AND REPLACEMENT OF PAVEMENT, SIDEWALKS, DRIVEPADS, VALLEY GUTTERS. WHEELCHAIR RAMPS, CURB & GUTTER, AND LANDSCAPING (INCLUDING SPRINKLERS), FOR INSTALLATION OF PULL BOXES, CONDUITS, AND SIGNAL FOUNDATIONS, EXCEPT AS NOTED ON THE PLANS.

4. LOCATION OF UTILITY LINES INCLUDING EXPLORATORY TRENCHING AND EXPOSING OF GAS LINES WHEN BORING.

5. DESIGN, MATERIALS, INSTALLATION AND REMOVAL OF SAFETY BARRIER FOR SHIELDING EQUIPMENT OR MATERIAL.

6. APPRISING PUBLIC THROUGH THE LOCAL NEWS MEDIA.

7. HAULING OF NON SALVAGEBLE MATERIAL TO BE DISPOSED TO CITY LANDFILL.

8. REMOVAL, SALVAGE, AND TRANSPORTATION OF EXISTING SIGNAL EQUIPMENT TO THE CITY TRAFFIC ENGINEERING OPERATIONS YARD.

9. LEAN FILL FOR CONDUIT TRENCHES.

10. PULL BOX ADJUSTMENT TO GRADE.

11. OFF-DUTY POLICE OFFICER FOR TRAFFIC CONTROL

12. REMOVAL AND REPLACEMENT IN KIND OR BETTER OF LANDSCAPING INCLUDING SPRINKLERS, FOR INSTALLATION OF PULL BOXES, CONDUITS AND SIGNAL FOUNDATIONS.

13. COST FOR PUBLIC SERVICE COMPANY TO PROVIDE ELECTRICAL SERVICE.

\* ITEMS LISTED ARE ONLY A GENERAL DESCRIPTION OF THE REQUIRED WORK AND MATERIALS, AND MAY NOT BE COMPLETE. THIS LIST DOES NOT INCLUDE ANY INCIDENTAL WORK OR MATERIALS REQUIRED BY THE SPECIAL PROVISIONS SERIALS (STANDARD DETAILS), SUPPLEMENTAL SPECIFICATIONS, OR THE STANDARD SPECIFICATIONS.

# TRAFFIC SIGNAL LEGEND

NEW	EXISTING	PULL BOX
		SERVICE POLE
M	M	METER PEDESTAL
C	<u> </u>	CONTROLLER CABINET
		CONDUIT RUN (SIGNALS)
	Name and a second secon	CONDUIT RUN (INTERCONNECT)
		LOOP DETECTOR
←●	4-0	TRAFFIC SIGNAL PEDESTAL POLE
1	1E	CONDUIT RUN NUMBER (SIGNAL)
<u>s</u> 1	<u>Si</u>	CONDUIT RUN NUMBER (POWER SERVICE)
<u>∕c1</u>	<u>C</u>	CONDUIT RUN NUMBER (INTERCONNECT)
F1	Æ1	CONDUIT RUN NUMBER (WARNING BEACON)
		TYPE II STANDARD WITH MASTARM TRAFFIC SIGNAL, BACK PLATE, AND OPTICAL DETECTOR
X		TRAFFIC SIGNAL, BACK PLATE, OPTICAL DETECTOR, LUMINAIRE, AND VIDEO CAMERA
× **	\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	TRAFFIC SIGNAL, BACK PLATE, OPTICAL DETECTOR, LUMINAIRE,
•		PEDESTRIAN PUSH BUTTON (MOUNTED TO SIDE OF POLE WHERE INDICATED)
ιφ		PEDESTRIAN SIGNALS (MOUNTED TO SIDE OF POLE WHERE INDICATED)
SC	SC	SPLICE CABINET
•	$\oslash$	TRAFFIC MANHOLE
-	1	VIDEO CAMERA

CERTIFICATE OF SUBSTANTIAL COMPLIANCE OF

I, Ronald R. Bohannan, of the firm of Tierra West hereby certify, to the best of my knowledge and belief, that or by a qualified person under my direct supervision and ha approved by the City Planning Department and that the original design intent of the approved has been met, except as noted by me on the as-built construction drawings.

# **DEFINITIONS**

"ENGINEER" - FOR THE PURPOSES OF THIS PROJECT, THE TERM "ENGINEER" IS SYNONYMOUS WITH THE TERM "PROJECT MANAGER".

TIERRA WEST, LLC  5571 MIDWAY PARK PLACE NE ALBUQUERQUE, NEW MEXICO 87109 (505) 858-3100 www.tierrawestllc.com		NO. DATE	DESIGNED BY RS	DRAWN BY pm	DRAWING NAME	ממי אמ מדאסדיים
CITY OF ALBUQUERQUE PUBLIC WORKS DIVISION ENGINEERING GROUP						
COORS VILLAGE						

	SIGNA	IL NOTE	S		
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CITY PROJECT NO.

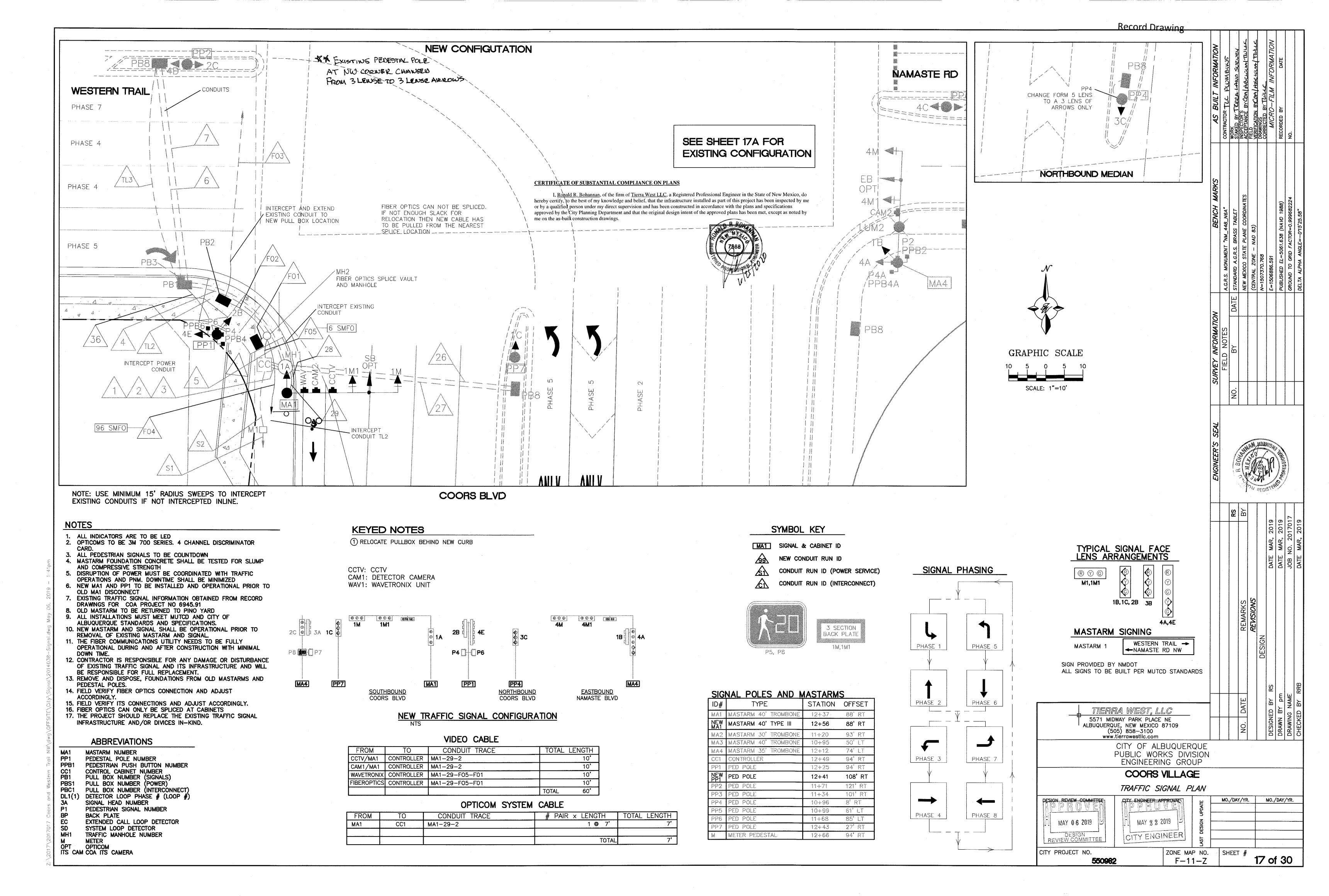
DESIGN REVIEW COMMIT

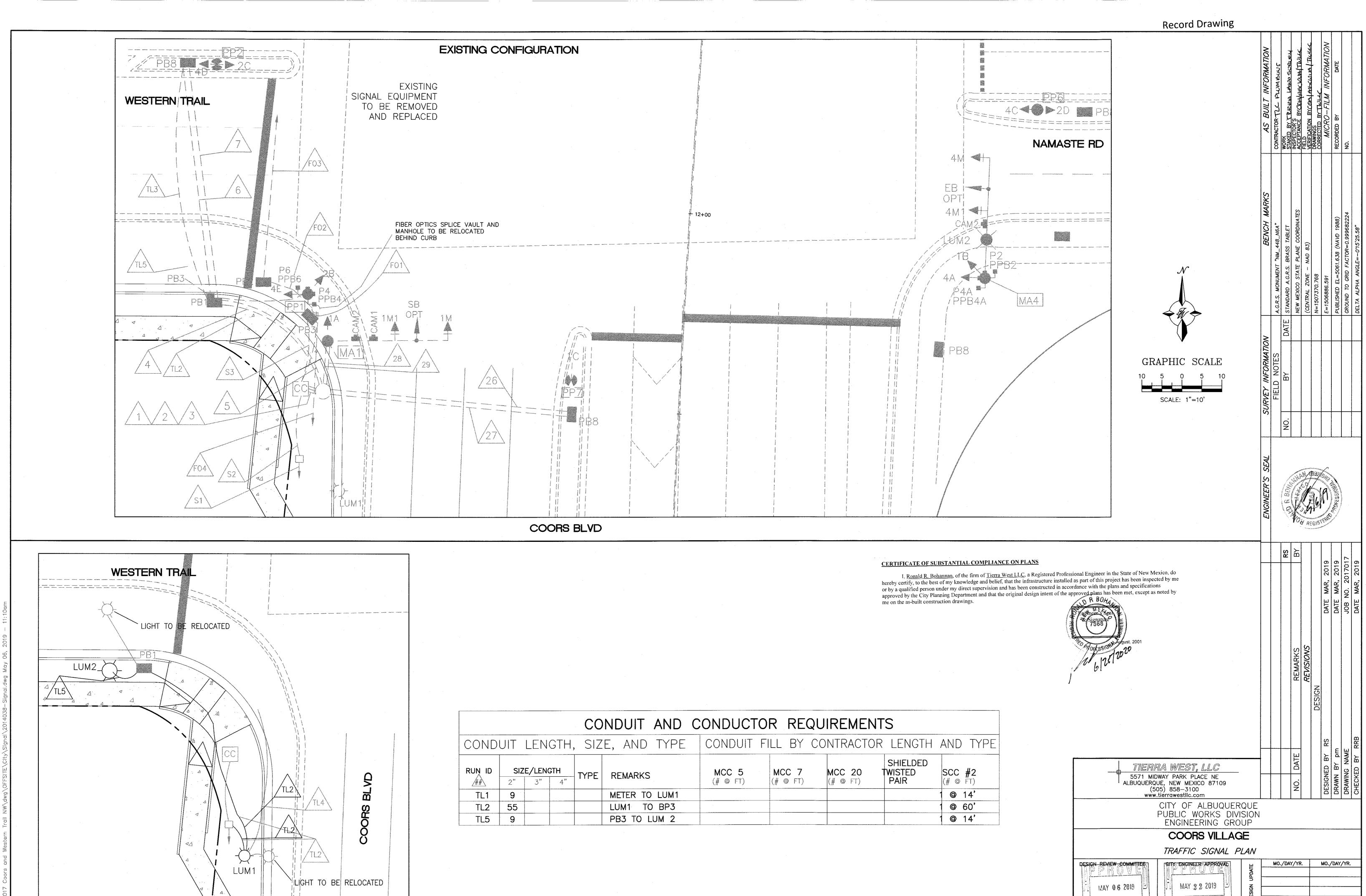
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ZONE MAP NO. | SHEET # F-11-Z

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CITY ENGINEER

CITY PROJECT NO.

ZONE MAP NO. F-11-Z

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7. V 0017 V 0017 V 0017 Coors and Western Trail NWA dwa V 0FFS (TFV City Stand) 201403

STREET LIGHT RELOCATION

**LEGEND** 

EXISTING SIGNAL

PROPOSED SIGNAL

NOTES

1. NEW MASTARM AND SIGNAL SHALL BE OPERATIONAL PRIOR TO REMOVAL OF EXISTING MASTARM AND SIGNAL.

2. THE CONTRACTOR SHALL NOTIFY THE CITY OF ALBUQUERQUE TRAFFIC ENGINEERING OPERATIONS(857-8044) THREE WORKING DAYS IN ADVANCE OF ANY ANTICIPATED WORK ON SIGNALS, LIGHTING, AND POWER SERVICES. TRAFFIC ENGINEERING OPERATIONS PERSONNEL WILL ASSIST THE CONTRACTOR IN FIELD LOCATION OF EQUIPMENT, COLOR CODING OF WIRING, AND MUST BE PRESENT WHEN SIGNALS AND LIGHTING ARE SHUT-OFF OR TURNED ON. THE CONTRACTOR SHALL ALSO NOTIFY THE CITY OF ALBUQUERQUE TRAFFIC ENGINEERING OPERATIONS EACH TIME A TRAFFIC SIGNAL CONTROL DOOR IS OPENED.

3. THE CONTRACTOR SHALL PROVIDE OFF-DUTY POLICE OFFICERS TO DIRECT TRAFFIC WHEN SIGNALS ARE TURNED OFF.

4. CITY OF ALBUQUERQUE SIGNAL REP IS MATTHEW YANNONI

(505-857-8004) TO BE CONTACTED BY CONTRACTOR PRIOR TO THE TRANSITION TO THE NEW SIGNAL

ANTICIPATED SCHEDULE OF WORK:

PHASE 1. WESTERN TRAIL RIGHT TURN AND BICYCLE LANE ADDITION AND ASSOCIATED IMPROVEMENTS, INCLUSIVE OF THE SIGNAL MODIFICATIONS AND REPLACEMENT OF THE SIGNAL MAST ARM, PEDESTRIAN POLE AND AFFILIATED CONDUITS REQUIRED FOR THE NEW SIGNAL CONFIGUREAITON.

PHASE 2. COORS BOULVEARD 4TH LANE ADDITION, RIGHT TURN LANE AND BICYCLE LANE ADDITION AND ASSOCIATED IMPROVEMENTS AND DRIVEWAY

PHASE 3. COORS BOULVEARD NORTH BOUND LEFT TURN LANE STRIPING TRANSITION TO A TWO-WAY LEFT-TURN LANE.

PHASE 4. WESTERN TRAIL MEDIAN MODIFICATION FOR LEFT TURN LANE POCKET INTO THE PRIVATE ROADWAY ENTRANCE.

SCHEDULE SUBJECT TO CHANGE PENDING CONTRACTOR SCHEDULE

	l	1		1		7	7	7	2
						DATE MAR, 2	DATE MAR, 2	JOB NO. 201	MAR,
						DATE	DATE	JOB 1	DATE
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RA WEST, LLC			PA			딦	₩	9	
IDWAY PARK PLACE NE QUE, NEW MEXICO 87109 505) 858-3100 w.tierrawestllc.com			NO.			DESIGNED BY	DRAWN BY pm	DRAWING NAME	CHECKED
CITY OF ALBUQUERQUE PUBLIC WORKS DIVISION ENGINEERING GROUP									

CERTIFICATE OF SUBSTANTIAL COMPLIANCE ON PLANS

me on the as-built construction drawings.

ENGINEERING GROUI COORS VILLAGE SIGNAL PHASING PLAN

TIERRA WEST, LLC

5571 MIDWAY PARK PLACE NE ALBUQUERQUE, NEW MEXICO 87109 (505) 858-3100 www.tierrawestllc.com

MO./DAY/YR. CITY ENGINEER APPROVAL MAY 2 2 2019 CITY ENGINEER

CITY PROJECT NO. 550982

DESIGN REVIEW COMMITTEE

MAY 06 2019

DESIGN REVIEW COMMITTEE

ZONE MAP NO. F-11-Z

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MO./DAY/YR.

CON	DUN LENGIF	H, SIZE, AND TYPE		CON	IDUIT FIL	L BY COI	NTRACTOR	R LENGTH	AND TY	PE		·		
RUN ID	SIZE/LENGTH T	TYPE REMARKS	MCC 5 (# @ FT)	MCC 7 (# @ FT)	MCC 20 (# @ FT)	SHIELDED TWISTED PAIR	SCC #2 (# @ FT)	SCC #6 (# @ FT)	VIDEO (# @ FT)	VIDEO POWER (# @ FT)	OPTICOM (# @ FT)	CCTV (# @ FT)	WAVETRONIX (# @ FT)	FIBER OPTIC (# @ F
MA1		BASE TO 1A	1 @ 15'								\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	,	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
MA1		BASE TO 1M	1 @ 60'											
MA1		BASE TO 1M1	1 @ 50'											
MA1		BASE TO OPTICOM									1 @ 55'			
MA1		BASE TO CAM1							1 @ 60'	1 @ 60'				
MA1		BASE TO CCTV	,							1 @ 60'		1 @ 60'		
MA1		BASE TO WAVETRONIX											1 @ 60'	
MA4		BASE TO 4A		1 @ 15'										
MA4		BASE TO 1B	1 @ 15'											
PP1		BASE TO 2B	1 @ 15'											
PP1		BASE TO 4E	1 9 10	1 @ 15'										
PP1		BASE TO P4, P6	2 @ 15'	1 9 10										
PP1		BASE TO PPB4, PPB6	2 0 10			2 @ 5'								
PP4		BASE TO 3C	1 @ 15'											
PP7		BASE TO 1C	1 @ 15'											
2		MIII TO COI												
28	8	MH1 TO CC1							1 @ 10'	1 @ 10'	1 @ 10'	1 @ 10'	1 @ 10'	1 @ 10
29	8	MA1 TO MH1	1 0 17		0 0 47				1 @ 13'	1 @ 13'	1 @ 13'	1 @ 13'	1 @ 13'	
36	18	MA1 TO MH1 PB1 TO PP1	1 @ 13'		2 @ 13'	0 0 07'	2 @ 13'							
30	10	PBI IO PPI	2 @ 23'			2 @ 23'								
F01	5	VAULT TO MH2					·							1 @ 10
F02	20	MH2 TO PB2												1 @ 2
F03	?	PB2 TO NEXT VAULT					·							TBD
F04	?	MH2 TO NEXT VAULT												TBD
F05	18	MH2 TO CC												1 @ 2
·														CE
														1

<u> IFICATE OF SUBSTANTIAL COMPLIANCE ON PLANS</u>

I, Ronald R. Bohannan, of the firm of <u>Tierra West LLC</u>, 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 Planning Department and that the original design intent of the approved plans has been met, except as noted by

me on the as-built construction drawings.



# **ABBREVIATIONS**

COMMUNICATION CABLE-6 PAIR CC 12 COMMUNICATION CABLE-12 PAIR DETECTOR LOOP LEAD IN CABLE MASTARM MULTI CONDUCTOR CABLE PΒ PULL BOX PEDESTAL POLE PP PEDESTRIAN PUSH BUTTON RIGID ELECTRIC CONDUIT

SCC SINGLE CONDUCTOR CABLE VIDEO CAMERA

TIERRA WEST, LLC 5571 MIDWAY PARK PLACE NE

ALBUQUERQUE, NEW MEXICO 87109 (505) 858-3100 www.tiérrawestllc.com CITY OF ALBUQUERQUE

PUBLIC WORKS DIVISION ENGINEERING GROUP

# COORS VILLAGE

CARLES AND CONDUITS SIGNAL NOTES

UADL	ES AND CONDUITS,	3/G/V/	IL NOTES	
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MAY 06 2019

DESIGN REVIEW COMMIT

ZONE MAP NO. | SHEET 19 of 30

# SIGNAL NOTES

LOCATIONS OF CONDUITS, FOUNDATIONS, CONTROL CABINETS, POLES, PULL BOXES, MANHOLES, AND SPLICE CABINETS SHOWN ON THE PLANS ARE SCHEMATIC AND SHALL BE ADJUSTED IN THE FIELD TO MAXIMIZE CLEAR SPACE AVAILABLE FOR PEDESTRIANS AND WHEELCHAIRS TO COMPLY WITH THE AMERICANS WITH DISABILITIES ACT. THE CONTRACTOR SHALL MEET WITH THE PROJECT MANAGER IN THE FIELD AT ALL LOCATIONS TO SPOT EQUIPMENT BEFORE BEGINNING THE WORK. ALL SUCH EQUIPMENT SHALL BE INSTALLED WITHIN THE RIGHT-OF-WAY.

274'

- THE CONTRACTOR IS WARNED THAT EXISTING CONDUITS MAY CONTAIN AC POWER AND CAUTION SHALL BE EXERCISED IN INTERCEPTING OR INSTALLING CABLE IN EXISTING CONDUIT.
- THE CONTRACTOR SHALL BORE, DRILL, OR PUSH WHEN CROSSING EXISTING PAVEMENTS AND DRIVEWAYS. BEFORE CONDUIT CAN BE BORED. DRILLED, OR PUSHED THE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES. THE CONTRACTOR SHALL LOCATE AND EXPOSE GAS LINES WHICH CROSS ANY PROPOSED BORES. THESE EXCAVATIONS SHALL REMAIN OPEN UNTIL AFTER THE BORE IS COMPLETE. CONTRACTOR SHALL REMOVE AND REPLACE IN KIND ANY SIDEWALK OR PAVEMENT REQUIRED TO EXPOSE SUCH LINES. THE CONTRACTOR MAY CUT, TRENCH, AND REPLACE EXISTING PAVEMENT ONLY WHEN APPROVED BY THE PROJECT MANAGER.
- 4. MASTARMS SHALL BE PLACED 90° TO THE CENTERLINE UNLESS OTHERWISE NOTED.
- 5. NOT USED

TOTALS

- 6. SHOWN DISTANCES TO TRAFFIC SIGNAL POLES TO BE MEASURED FROM FACE OF CURB, UNLESS OTHERWISE NOTED.
- ALL WIRE ON THIS PROJECT SHALL BE COPPER
- 8. NOT USED
- SPLICING OF COMMUNICATIONS CABLE (CONNECTIONS) WILL BE PERMITTED ONLY AT SPLICE CABINET OR CONTROL CABINETS WITH SPLICE BLOCKS. SPLICING OF VIDEO DETECTION COAXIAL CABLE WILL NOT BE PERMITTED BETWEEN THE MASTARM BASE AND THE CONTROLLER CABINET. SPLICING OF OPTICAL DETECTOR CABLE WILL NOT BE PERMITTED FROM THE OPTICAL DETECTOR TO THE CONTROLLER CABINET.
- 10. SIGNAL HEADS SHALL BE COVERED WHEN NECESSARY WITH PACIFIC ENTERPRISES SIGNAL COVERS OR APPROVED EQUAL.
- 11. NOT USED
- 12. THE CONTRACTOR IS HEREBY ADVISED THAT THE INTERSECTION SIGNALS SHALL NOT BE TURNED ON UNTIL THE SIGNAL IS COMPLETELY INSTALLED. INCLUDING FULLY ACTUATED OPERATION (ALL LOOPS AND PUSHBUTTON WIRING SHALL BE OPERATIONAL).
- 13. FLASHING OPERATION IS NOT CONSIDERED THE BEGINNING OF THE FIELD TESTING PERIOD.
- 14. ACCEPTABLE TYPE II AND TYPE III STANDARDS ARE VALMONT, UNION METAL, JEM, OR APPROVED EQUAL.

15. ALL LOOP LEAD-IN CABLES SHALL BE TAGGED AT THE CONTROL CABINET TO IDENTIFY EACH CABLE BY PHASE AND LOOP NUMBER. ALL VIDEO DETECTION COAXIAL AND POWER CABLES SHALL BE TAGGED AT THE CONTROL CABINET TO IDENTIFY EACH CABLE BY CAMERA NUMBER AND LOCATION. ALL OPTICAL DETECTOR CABLES SHALL BE TAGGED AT THE CONTROL CABINET TO IDENTIFY EACH BY DIRECTION AND

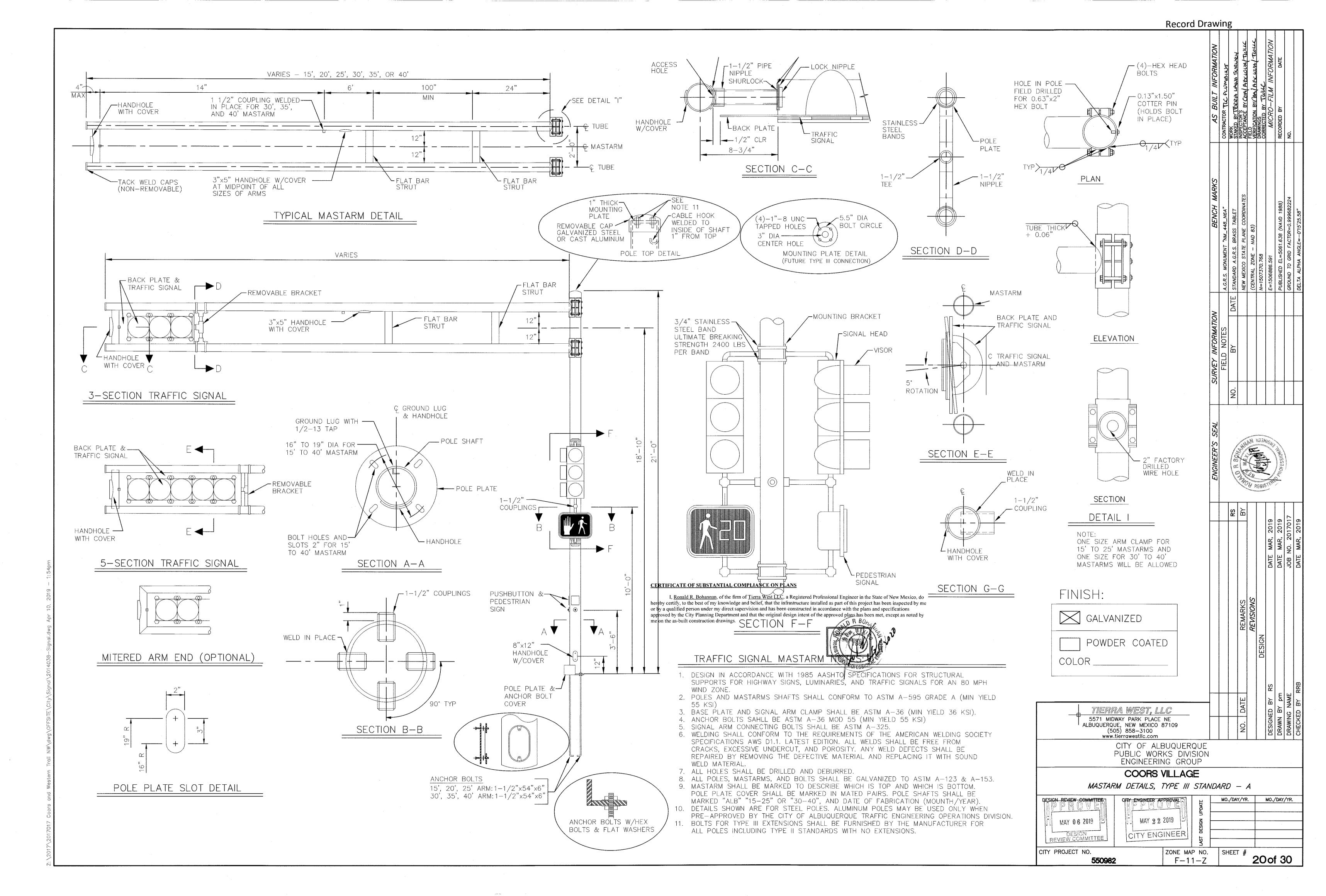
78'

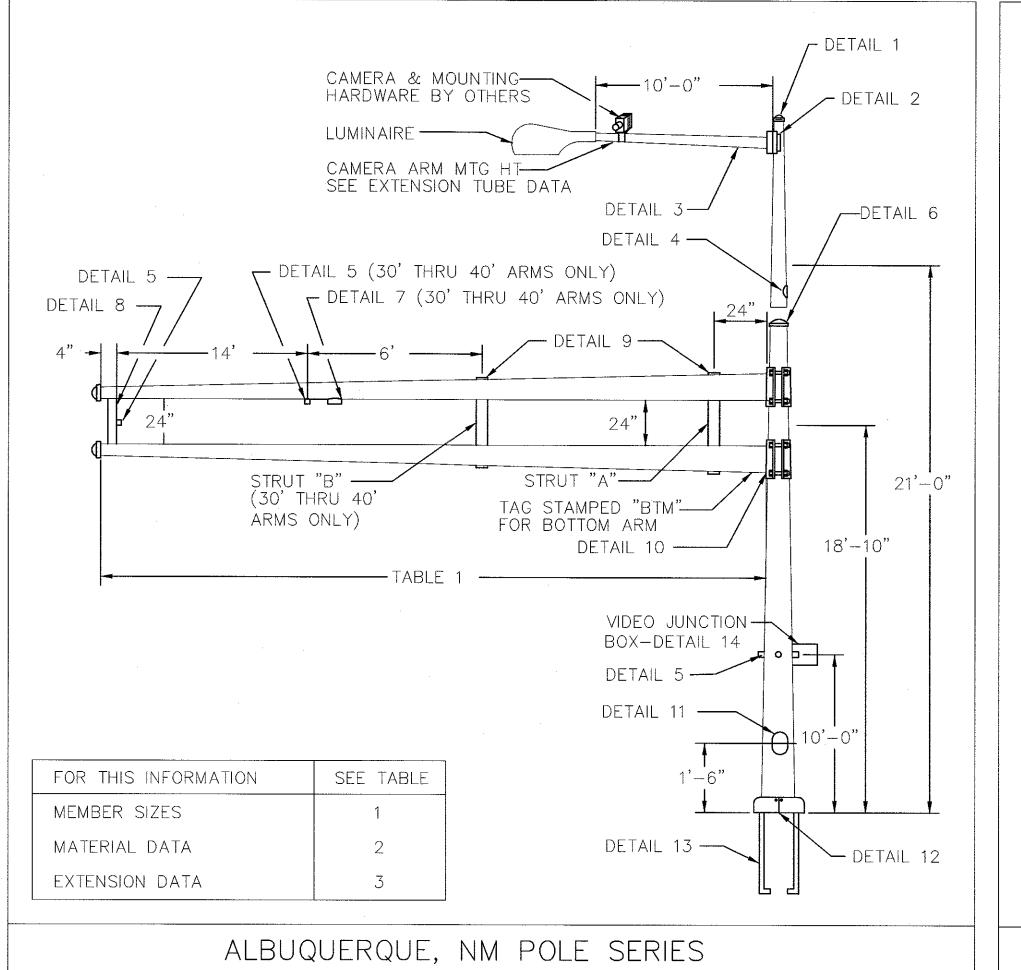
143'

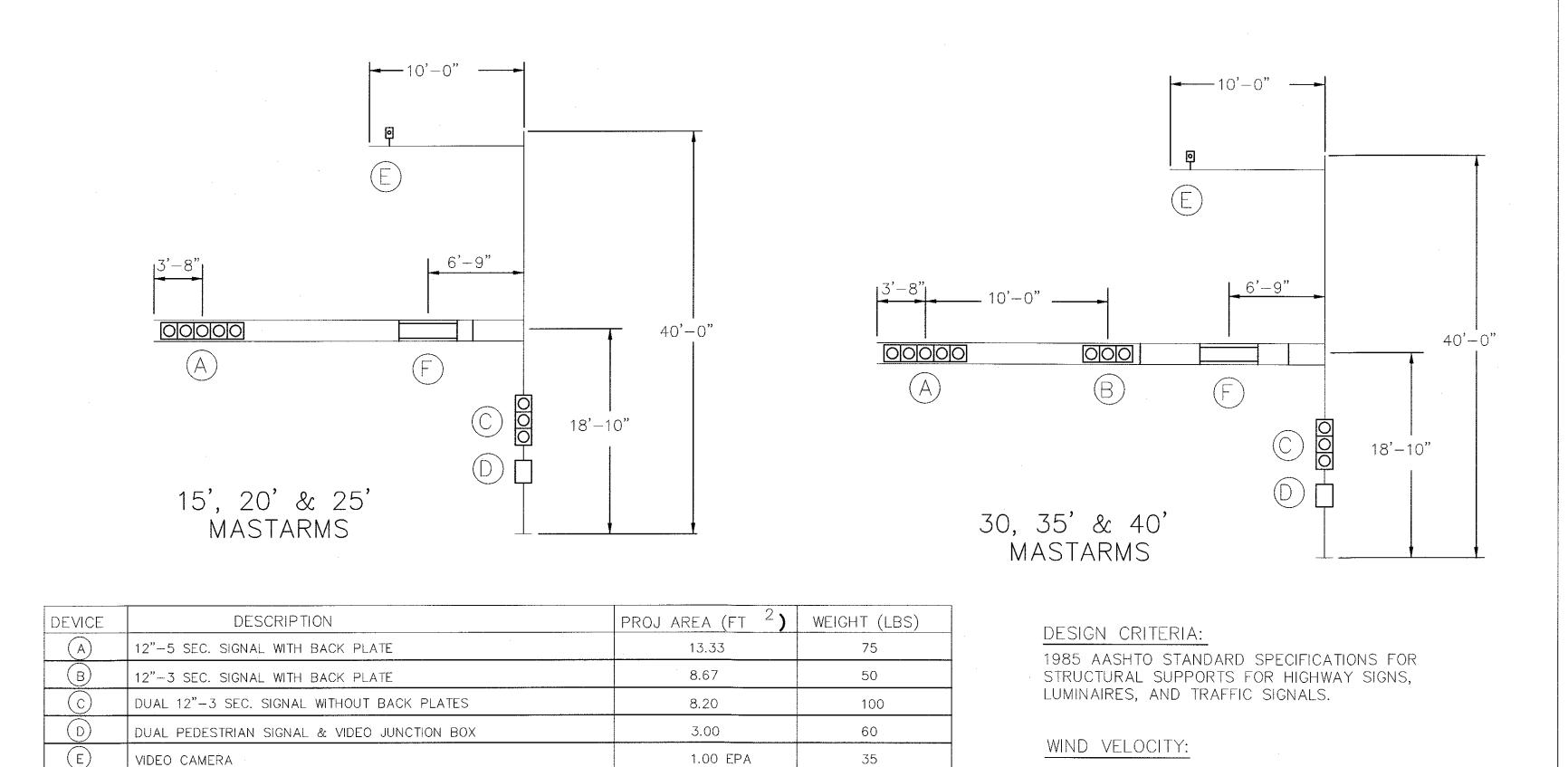
- 16. THE CONTRACTOR SHALL NOTIFY THE CITY OF ALBUQUERQUE SIGNAL SHOP TWO WORKING DAYS IN ADVANCE OF ANY ANTICIPATED WORK ON SIGNALS, LIGHTING, AND POWER SERVICES. TRAFFIC ENGINEERING PERSONNEL MUST BE PRESENT WHEN SIGNALS ARE SHUT-OFF OR TURNED ON. THE CONTRACTOR SHALL ALSO NOTIFY THE CITY OF ALBUQUERQUE SIGNAL SHOP EACH TIME A TRAFFIC SIGNAL CONTROL DOOR IS
- 17. THE CONTRACTOR SHALL NOTIFY THE LOCAL POWER COMPANY 30 DAYS IN ADVANCE OF ANTICIPATED POWER SERVICE CONNECTIONS. THE CONTRACTOR SHALL COORDINATE WITH THE LOCAL POWER COMPANY TO ESTABLISH ELECTRICAL SERVICE IN THE MAINTAINING AGENCY'S NAME. THE CONTRACTOR SHALL PAY THE LOCAL POWER COMPANY ALL COSTS TO PROVIDE ELECTRICAL SERVICE. THIS WORK WILL BE CONSIDERED INCIDENTAL TO CONSTRUCTION.
- 18. THE CONTRACTOR IS RESPONSIBLE FOR THE COST OF THE POWER AND MAINTENANCE UNTIL SUCH TIME AS THE SIGNAL IS ACCEPTED FOR MAINTENANCE BY THE CITY OF ALBUQUERQUE.
- 19. THE CONTRACTOR SHALL REMOVE AND SALVAGE TO COA YARD ALL CONFLICTING SIGNING WHEN TRAFFIC SIGNALS ARE PUT INTO OPERATION.
- 20. FOR CONDUITS CONTAINING ONLY LOW VOLTAGE COMMUNICATIONS CABLES. THE REQUIREMENTS FOR SINGLE CONDUCTOR BARE COPPER #8 AWG MAY BE WAIVED WHERE PERMITTED BY THE NATIONAL ELECTRICAL CODE.
- 21. EXISTING CONDUITS TO BE REMOVED OR ABANDONED SHALL HAVE ALL WIRING REMOVED.
- 22. EXISTING CONDUITS SHALL BE REPAIRED, ADJUSTED, OR REPLACED AS DIRECTED BY THE PROJECT MANAGER WHERE ELECTRICAL PULL BOXES OR TRAFFIC MANHOLES ARE INSTALLED OR REPLACED.
- 23. THE CONTRACTOR SHALL ARRANGE TO HAVE OFF-DUTY POLICE OFFICERS TO DIRECT TRAFFIC WHEN SIGNALS ARE TURNED OFF.
- 24. ALL DATA SHOWN HEREIN CONCERNING EXISTING UTILITIES HAS BEEN OBTAINED FROM "AS-BUILT" DRAWINGS AND FROM FIELD OBSERVATIONS WHICH MAY OR MAY NOT BE ACCURATE. THE CONTRACTOR WILL BE RESPONSIBLE FOR EXPLORATORY TRENCHING, IF NECESSARY, TO MORE SPECIFICALLY LOCATE UTILITY LINES. COST OF LOCATING UTILITY LINES INCLUDING EXPLORATORY TRENCHING WILL BE CONSIDERED INCIDENTAL TO CONSTRUCTION.
- 25. NOT USED

26'

26. THE CONTRACTOR SHALL VIDEO TAPE THE EXISTING TRAFFIC SIGNAL EQUIPMENT IN VHS FORMAT AND REVIEW THE TAPE WITH THE CITY OF ALBUQUERQUE SIGNAL SHOP PERSONNEL PRIOR TO BEGINNING ANY REMOVALS OF SIGNAL EQUIPMENT. THE TAPE SHALL BECOME THE PROPERTY OF THE CITY OF ALBUQUERQUE SIGNAL LABS AND MAY BE USED TO RESOLVE ANY QUESTIONS RELATED TO THE ORIGINAL CONDITION AND QUALITY OF EXISTING EQUIPMENT. THE EXISTING TRAFFIC SIGNAL EQUIPMENT INCLUDING POLES, CONTROLLER, CABINETS, SIGNAL HEADS, PEDESTRIAN HEADS, PEDESTRIAN PUSH BUTTONS, FITTINGS, BACK PLATES, LOAD SWITCHES, CONFLICT MONITORS, AND DETECTORS SHALL BE DELIVERED TO THE CITY OF ALBUQUERQUE SIGNAL YARD







3.00 EPA

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LOADING INFORMATION

										TABL	E 1: P(	DLE ANI	D MASTA	RM SC	HEDU	ILE								
DE	SIGNATIO	ON (SEE EXA	MPLE ABOVE)		POLE	DATA		В	ASE PL	ATE DAT	A	1A.	VCHOR BOL	T DATA		N	/ASTARI	M DA	TA		,	ARM ATT	ACHMEN	TDATA
POLE SERIES	POLE TYPE	SIGNAL ARM SPAN (FT)	CAMERA MOUNTING HEIGHT O=NO CAMERA	BASE DIA	TOP DIA	LENGTH	GA	CIRCLE "C"	THK "G"	BC1	RANGE BC2	BOLT CIRCLE	DIAMETER "K"	LENGTH	HOOK "H"	FIXED END DIA	FREE END DIA	GA	LENGTH (FT)	"A"	"B"	"C"	"D"	"E"
ALB	2	15	0, 30, 35, 40	10.00"	7.06"	21'-0"	7	23.00"	1.50"	16.00"	19.00"	16.00"	1.50"	54"	6"	5.80"	3.70"	11	15	7.25"	9.44"	10.81"	10.38"	1.00"-8UNC X 8.00"
ALB	2	20	0, 30, 35, 40	10.00"	7.06"	21'-0"	7	23.00"	1.50"	16.00"	19.00"	16.00"	1.50"	54"	6"	6.50"	3.70"	11	20	7.25"	9.44"	10.81"	10.38"	1.00"-8UNC X 8.00"
ALB	2	25	0, 30, 35, 40	10.00"	7.06"	21'-0"	7	23.00"	1.50"	16.00"	19.00"	16.00"	1.50"	54"	6"	7.00"	3.50"	11	25	7.25"	9.44"	10.81"	10.38"	1.00"-8UNC X 8.00"
ALB	2	30	0, 30, 35, 40	12.00"	9.06"	21'-0"	5	23.00"	1.50"	16.00"	19.00"	16.00"	1.50"	54"	6"	7.72"	3.52"	7	30	9.25"	11.44"	13.81"	12.38"	1.00"-8UNC X 9.00"
ALB	2	35	0, 30, 35, 40	12.00"	9.06"	21'-0"	5	23.00"	1.50"	16.00"	19.00"	16.00"	1.50"	54"	6"	8.30"	3.40"	7	35	9.25"	11.44"	13.81"	12.38"	1.00"-8UNC X 9.00"
ALB	2	40	0, 30, 35, 40	12.00"	9.06"	21'-0"	5	23.00"	1.50"	16.00"	19.00"	16.00"	1.50"	54"	6"	9.00"	3.40"	7	40	9.25"	11.44"	13.81"	12.38"	1.00"-8UNC X 9.00"

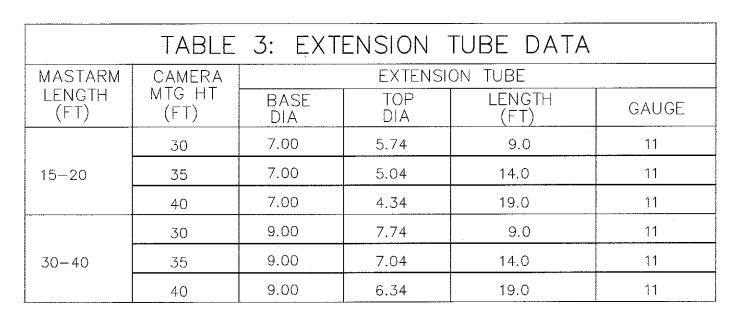
FREE SWINGING STREET NAME -96" X 16"

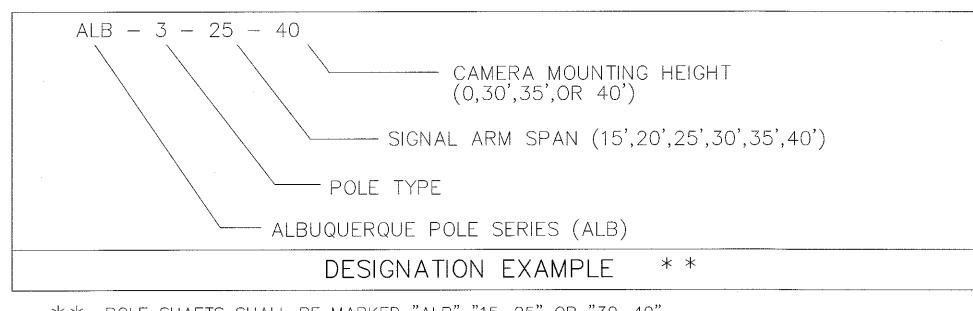
	TABLE 2:	MATE	RIAL DATA		
COMPONENT	ASTM DESIGNATION	MIN. YIELD (KSI)	COMPONENT	ASTM DESIGNATION	MIN YIELD (KSI)
POLE TUBE	A595 GR A	55	SIGNAL ARM CLAMP	A36	36
BASE PLATE	A36	36	SIGNAL ARM CONN BOLTS	A325*	
MAST ARM TUBE	A595 GR A	55	CAMERA ARM PLATES	A36	36
CAMERA ARM TUBE	A595 GR A	55	GALVANIZING	A123 & A153	
POLE EXTENSION	A595 GR A	55			
ANCHOR BOLTS AASHTO M314	- GR. 55	•			

# CERTIFICATE OF SUBSTANTIAL COMPLIANCE ON PLANS

\* LUBRICATE IN FIELD IF NECESSARY IN LIEU OF THE REQUIREMENT IN A325

I, Ronald R. Bohannan, of the firm of Tierra West LLC, 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 Planning Department and that the original design intent of the approved plans has been met, except as noted by me on the as-built construction drawings.





\*\* POLE SHAFTS SHALL BE MARKED "ALB" "15-25" OR "30-40", AND DATE OF FABRICATION (MONTH/YEAR).

FINISH:

GALVANIZED POWDER COATED COLOR

80 MPH ISOTACH

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

CITY OF ALBUQUERQUE PUBLIC WORKS DIVISION ENGINEERING GROUP

COORS VILLAGE

MASTARM DETAILS — TYPE III STANDARD — B CITY ENGINEER APPROVAL DESIGN REVIEW COMMITTEE

MO./DAY/YR. MO./DAY/YR. MAY 22 2019 MAY 06 2019 CITY ENGINEER CITY PROJECT NO. ZONE MAP NO. 21 of 30

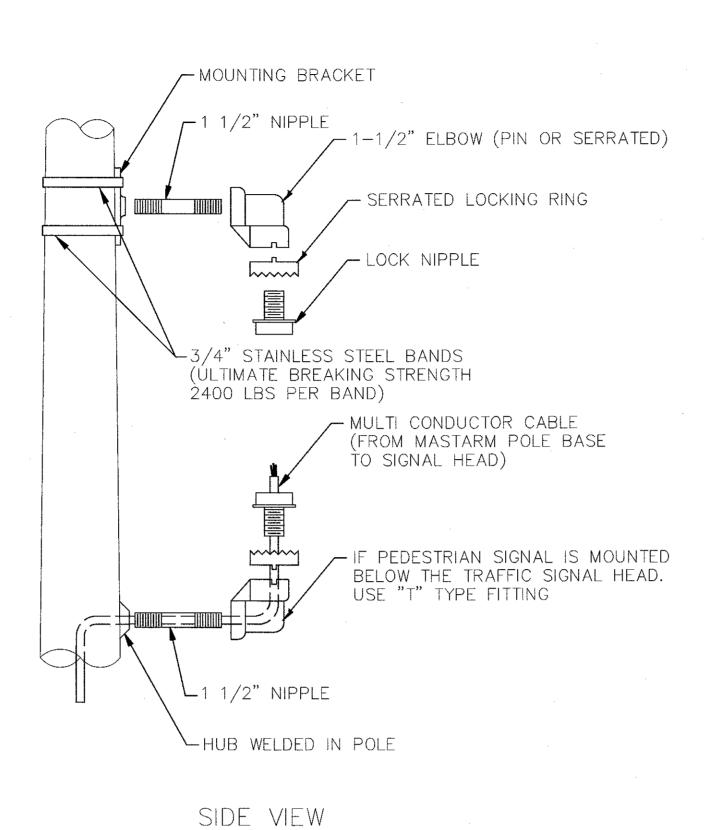
550982

F-11-Z



# NOTES:

- 1. STREET NAME SIGNS REQUIRED AS SHOWN ON PLANS.
- 2. STREET NAME SIGN SHALL BE 16" WIDE WITH 8" SERIES "C" LETTERS. SIGN SHALL BE NO MORE THAN TO 12 SQUARE FEET TOTAL AREA AND SHALL HAVE HIGH INTENSITY REFLECTIVE LEGEND, 1" BORDER AND BACKGROUND COLORS: WHITE ON GREEN, SIGN PANELS SHALL BE SINGLE SHEET 6061-T6 ALUMINUM .120 MINIMUM THICKNESS.
- 3. PEDESTRIAN ACTUATED CROSSING SHALL BE A MAXIMUM OF 42" (1065 mm) ABOVE THE FINISHED PUBLIC SIDEWALK. A STABLE, FIRM, AND SLIP-RESISTANT AREA - 30"x48" (915 mm x 1220 mm) - SHALL BE PROVIDED TO ALLOW FOR A FORWARD OR Á PARALLEL APPROACH TO THE CONTROLS. WHERE A PARALLEL IS PROVIDED, CONTROLS SHALL BE WITHIN 10" (255 mm) HORIZONTALLY OF AND CENTERED ON THE CLEAR GROUND SPACE.
- 4. FOR INSTALLATIONS WITH ONLY PEDESTRIAN SIGNALS, CUT SHAFT TO 9'. USE 15' SHAFT FOR PEDESTAL POLES REQUIRING BOTH 5-SECTION SIGNAL ASSEMBLIES AND PEDESTRIAN SIGNALS.



MOUNTING DETAIL

OF CROSSING 9"<del>\* \*</del> TO CROSS -PEDESTRIAN SIGNAL PUSH BUTTON USE COUNTDOWN MODEL TO CROSS
PUSH BUTTON START CROSSING WATCH FOR START CROSSING
WATCH FOR
TURNING CARS TURNING CARS DON'T START DON'T START FINISH CROSSING IF STARTED FINISH CROSSING PEDESTRIAN SHOULD NOT BE IN CROSSWALK IF STARTED PEDESTRIAN STEADY SHOULD NOT BE IN CROSSWALK -MOUNTING BRACKET \*\* USE SMALLER SIZE FOR -3/4" STAINLESS STEEL BANDS PEDESTAL POLES (ULTIMATE BREAKING STRENGTH 2400 LBS PER BAND) - PUSH BUTTON SHALL CONFORM TO ADA REQUIREMENTS

- GALVANIZED ANGLE

IRON OR UNISTRUT

IF PEDESTRIAN SIGNAL IS MOUNTED

BELOW THE TRAFFIC SIGNAL HEAD. USE "T" TYPE FITTING

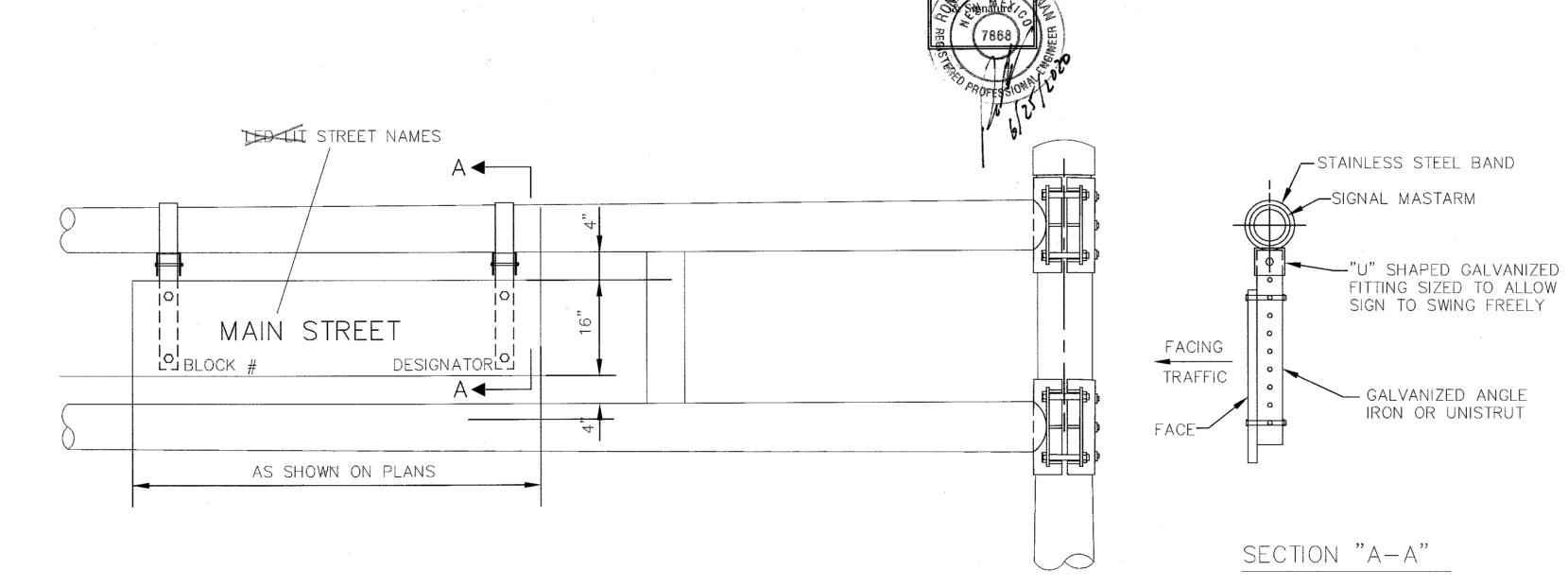
PEDESTRIAN SIGNAL DETAILS

-HUB WELDED IN POLE

-1 1/2" NIPPLE

### CERTIFICATE OF SUBSTANTIAL COMPLIANCE ON PLANS

I, Ronald R. Bohannan, of the firm of Tierra West LLC, 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 Planning Department and that the original design intent of the approved plans has been met, except as noted by me on the as-built construction drawings.



STREET NAME SIGN DETAILS

SUBJECT TO COA TRAFFIC ENGINEER APPROVAL PRIOR TO FABRICATION.

PUSH BUTTON DETAIL

ARROW IN DIRECTION

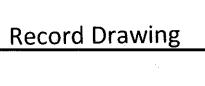
FINISH: **GALVANIZED** POWDER COATED COLOR TIERRA WEST, LLC 5571 MIDWAY PARK PLACE NE
ALBUQUERQUE, NEW MEXICO 87109
(505) 858-3100
www.tierrawestllc.com

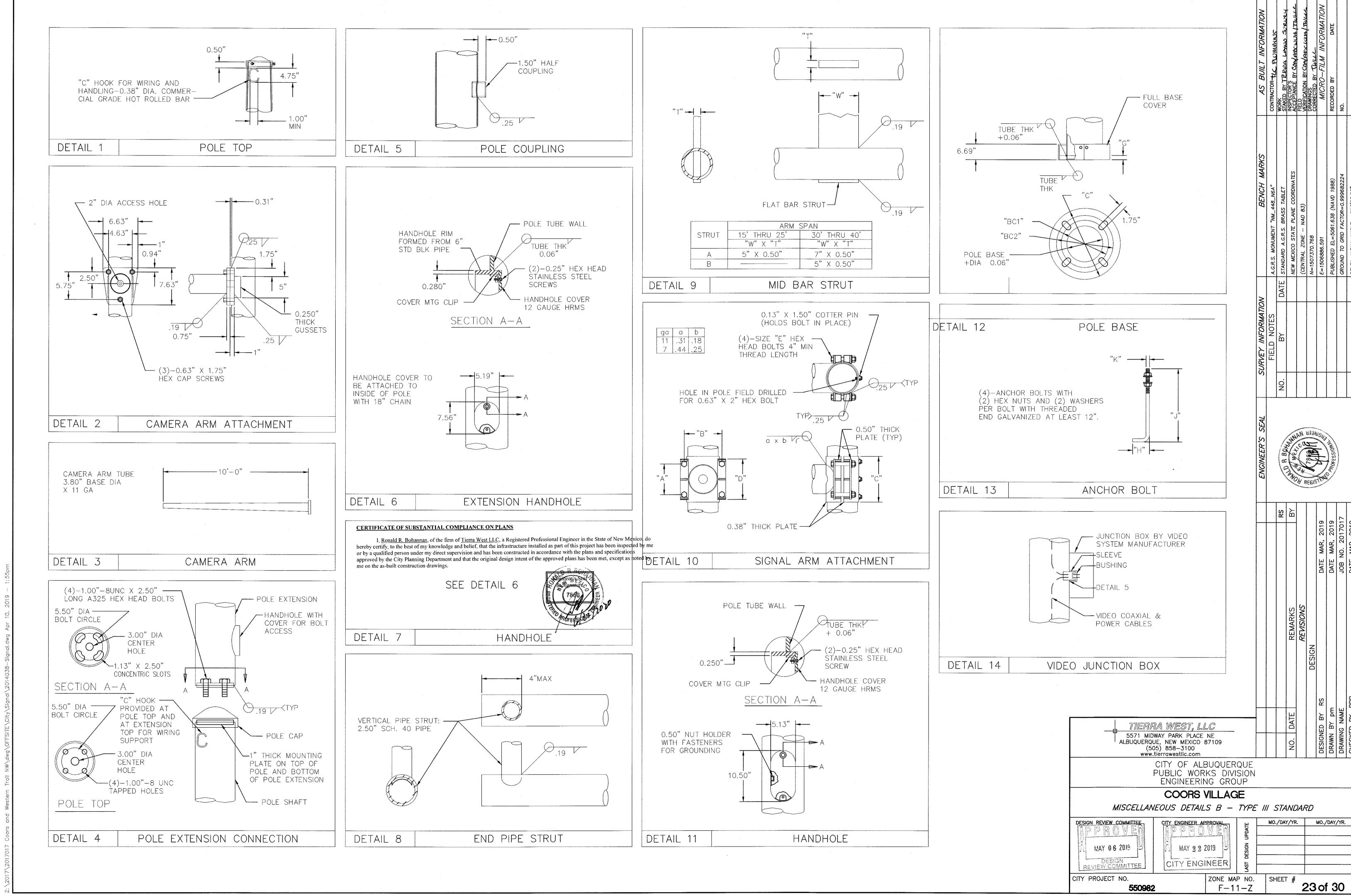
CITY OF ALBUQUERQUE PUBLIC WORKS DIVISION ENGINEERING GROUP

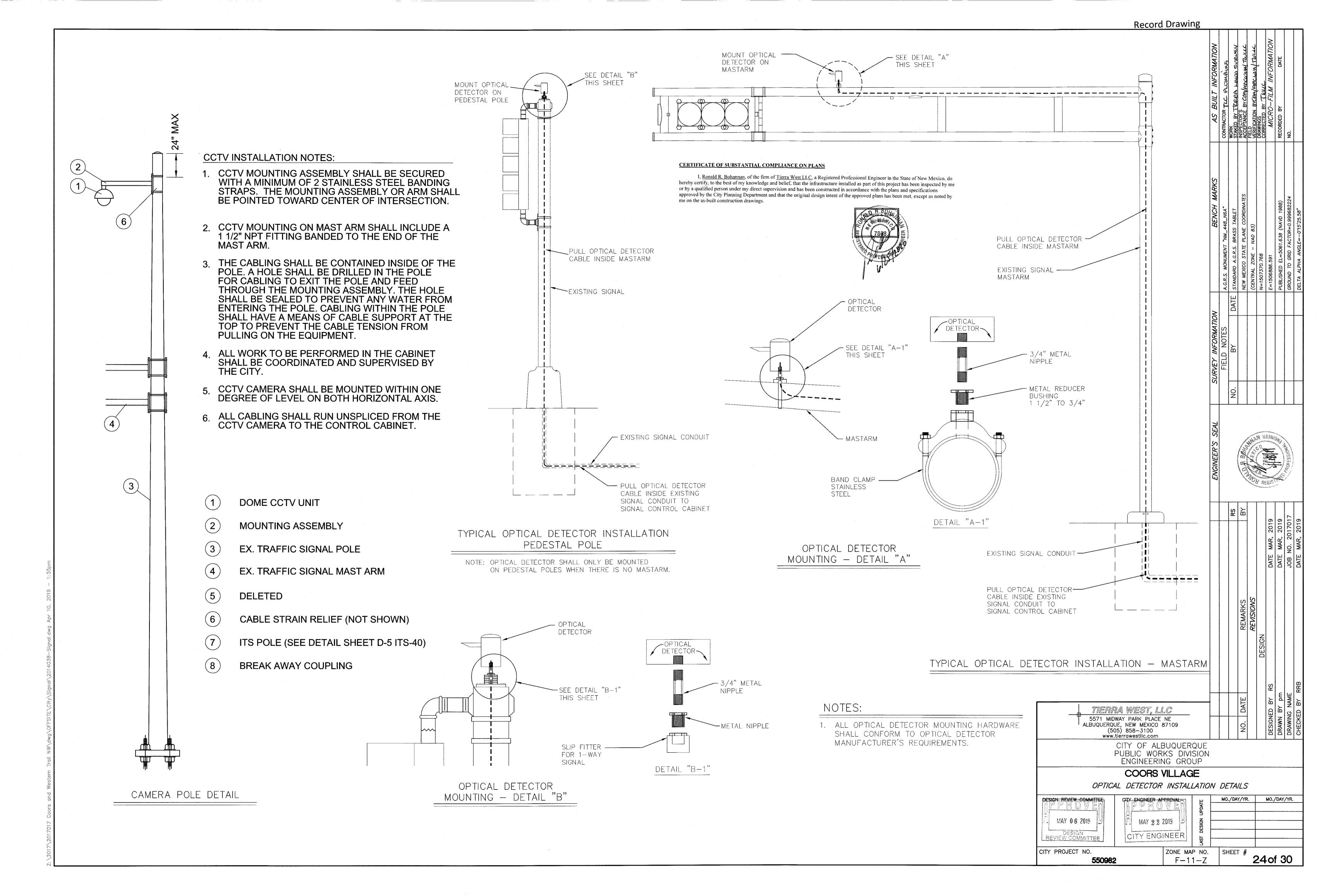
# COORS VILLAGE

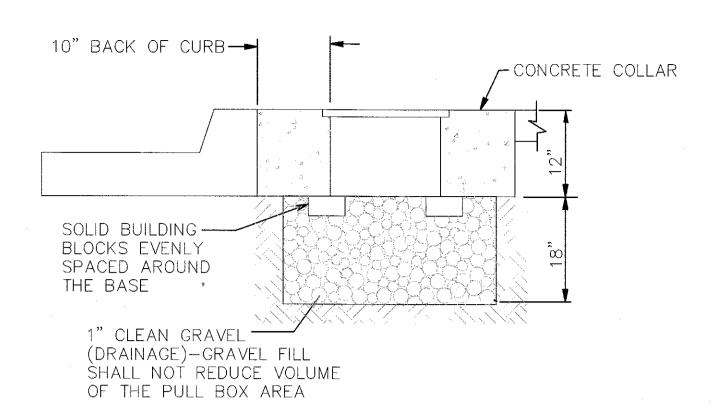
MISCELLANEOUS DETAILS A - TYPE III STANDARD

550982	2	F-1			"	22 of 30	
Y PROJECT NO.		ZONE MAI	P NO.	9	SHEET #		
MAY 06 ZO19  DESIGN REVIEW COMMITTEE	MAY 2 2 20 CITY ENGI		LAST DESIGN UPDATE	M	IO./DAY/YR.	MO./DAY/YR.	







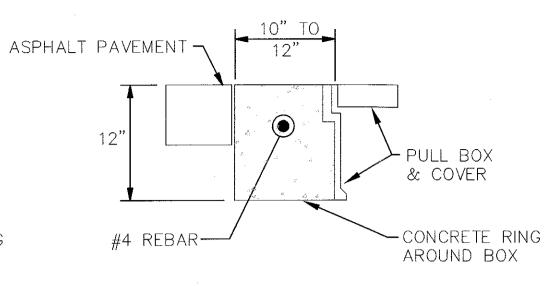


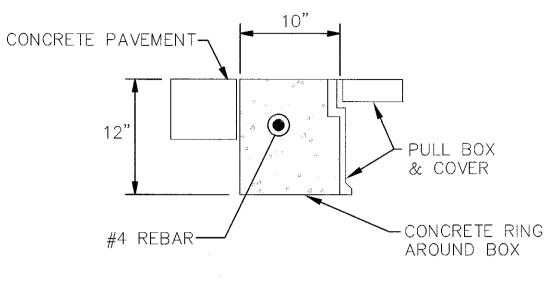
TYPICAL PULL BOX INSTALLATION

NOTE: SEE "CONCRETE COLLAR DETAIL"

# COMPACTED & COVER #4 REBAR— AROUND BOX

IN COMPACTED EARTH





IN CONCRETE PAVEMENTS

### CERTIFICATE OF SUBSTANTIAL COMPLIANCE ON PLANS

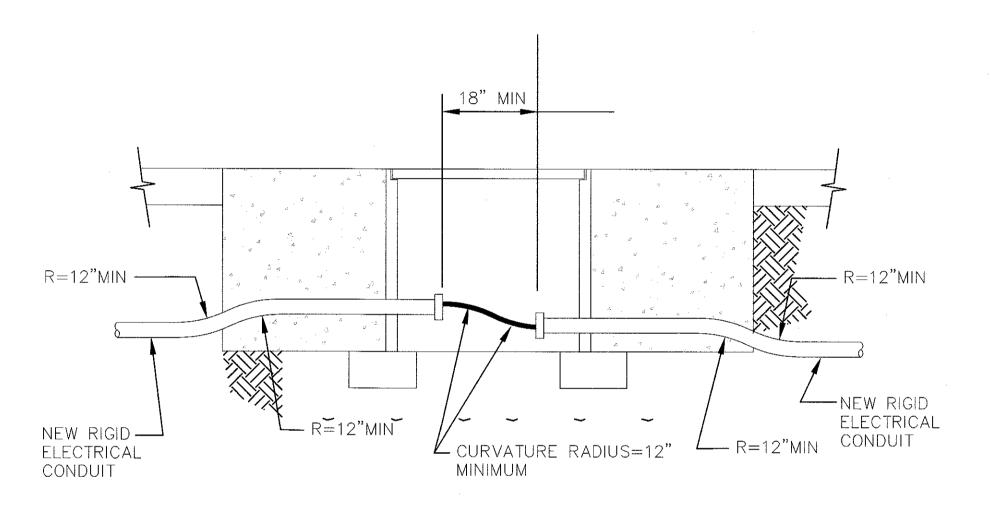
HEAVY DUTY COVER

I, Ronald R. Bohannan, of the firm of <u>Tierra West LLC</u>, 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 Planning Department and that the original design intent of the approved plans has been met, except as noted by me on the as-built construction drawings.

# CONCRETE COLLAR DETAILS

IN ASPHALT PAVEMENTS

NOTE: THE CONCRETE COLLAR SHALL BE PER SEC 101, EXTERIOR CONCRETE f'c=3500 PSI AT 28 DAYS

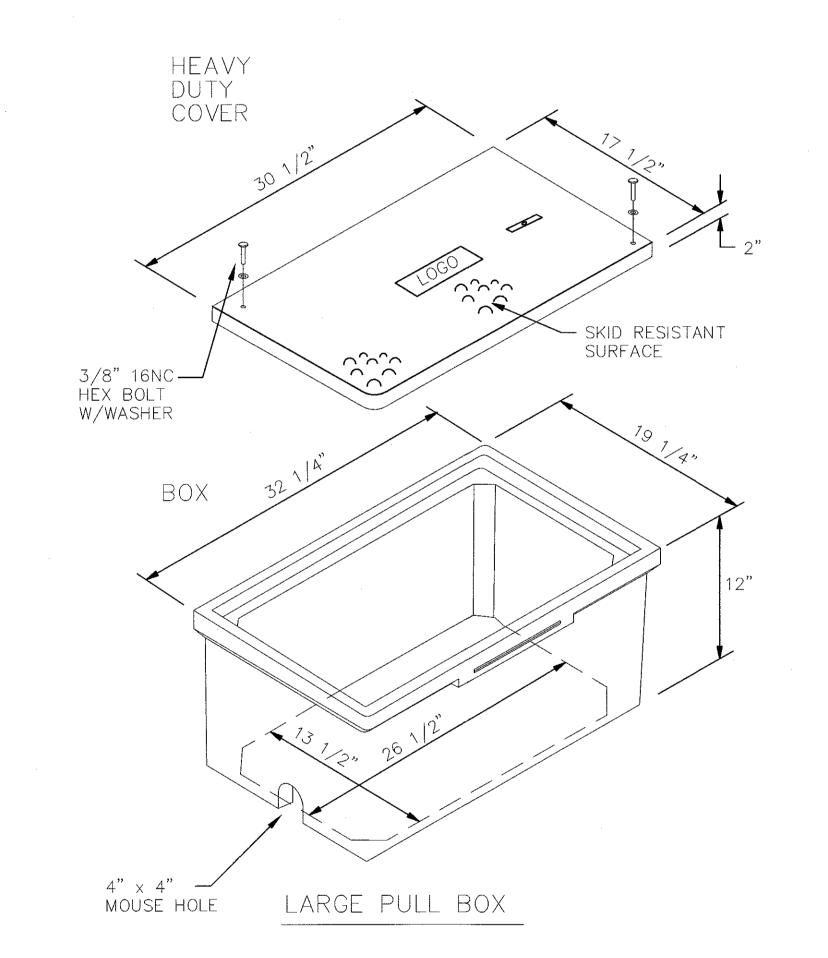


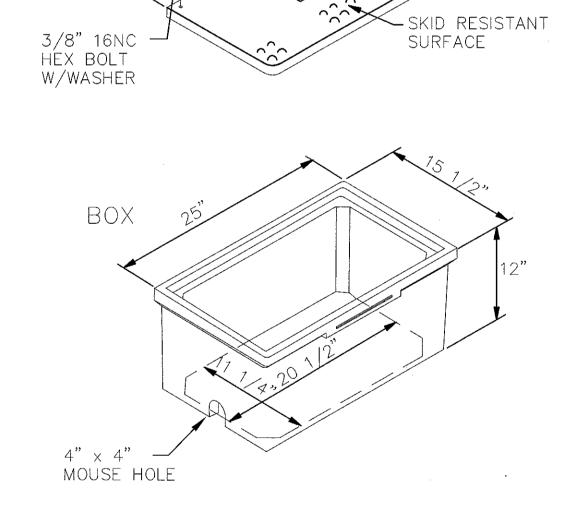
# TRAFFIC SIGNAL PULL BOX (TYPICAL)

NEW CONDUIT INSTALLATION

# - ADJUST CONDUITS WHERE RADIUS IS LESS THEN 12" REMOVE & REPLACE IN KIND ----EXISTING SIDEWALK AND LANDSCAPING AS REQUIRED 18" MIN TO REPAIR EXISTING CONDUIT ─ INSTALL NEW EXPANSION JOINT - INSTALL NEW RIGID INSTALL NEW RIGID ----ELECTRICAL CONDUIT ELECTRICAL CONDUIT R=12"MIN ----— R=12"MIN INTERCEPT EXISTING RIGID ELECTRICAL CONDUIT AND CONNECT NEW RIGID ELECTRICAL REMOVE EXISTING RIGID

THE CONCRETE COLLAR SHALL BE CONSIDERED INCIDENTAL TO THE PULL BOX BID ITEMS





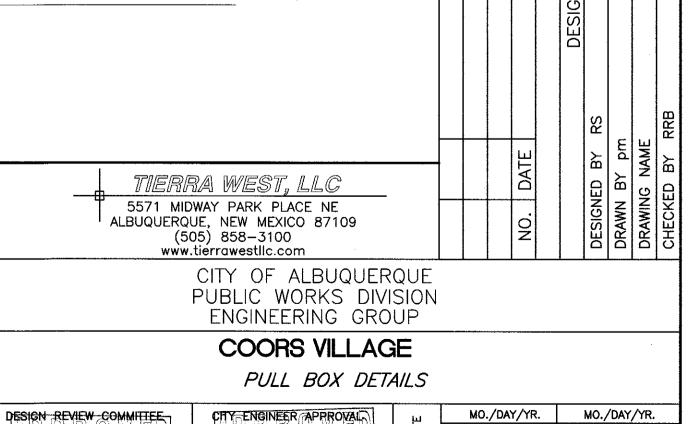
STANDARD PULL BOX

MAY 06 2019

550982

NOTES FOR HEAVY DUTY REINFORCED POLYMER MORTAR PULL BOX AND COVERS

1. MATERIAL TO BE AN AGGREGATE CONSISTING OF SAND AND GRAVEL BOUND TOGETHER WITH A POLYMER AND REINFORCED WITH CONTINUOUS WOVEN GLASS STRANDS. THE MATERIAL MUST HAVE THE FOLLOWING MECHANICAL PROPERTIES: COMPRESSIVE STRENGTH - 11,000 PSI, TENSILE STRENGTH - 1,700 PSI, FLEXURAL STRENGTH - 7,500 PSI.



MAY 22 2019

CITY ENGINEER

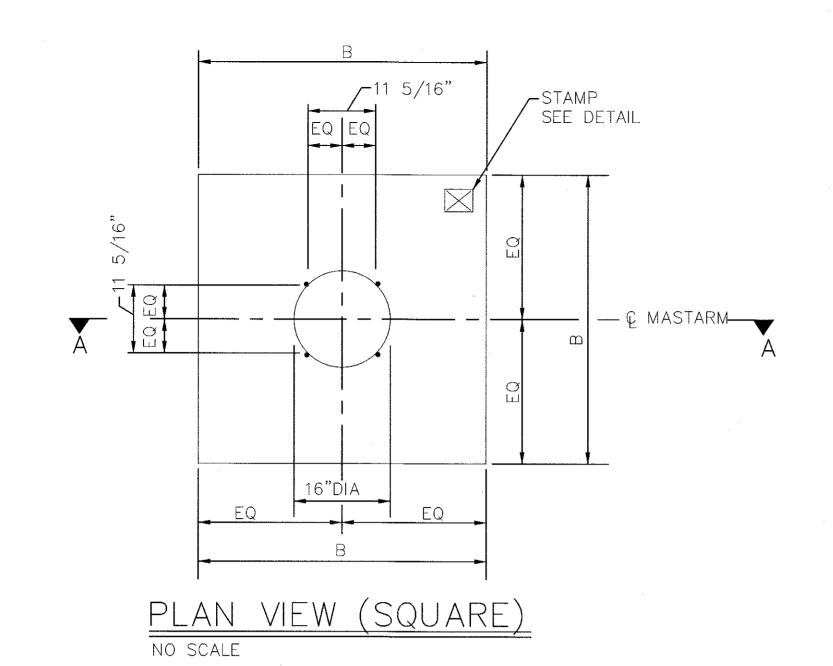
ZONE MAP NO.

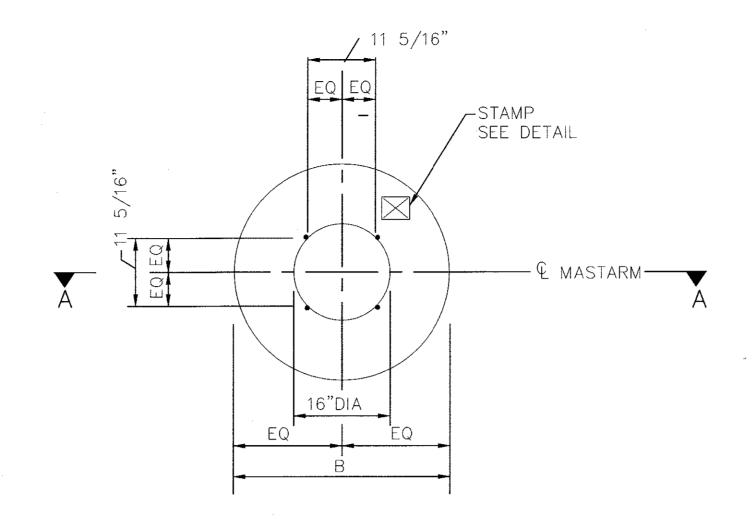
F-11-Z

SHEET #

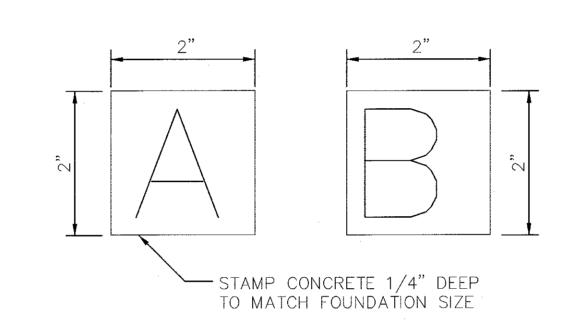
25 of 30

2. ALL PULL BOX COVERS SHALL BE HEAVY DUTY REINFORCED POLYMER MORTAR, HAVING A SERVICE LOAD OF ELECTRICAL CONDUIT 22,568 LBS OVER 10" SQUARE (225 PSI). 3. PULL BOX TYPE AND LOGO SHALL BE APPROVED BY THE PROJECT MANAGER. TRAFFIC SIGNAL PULL BOX (TYPICAL) 4. THE DIMENSIONS OF THE PULL BOXES SHOWN ARE NOMINAL DIMENSIONS AND MAY VARY AS TO THE MANUFACTURER'S RECOMMENDATIONS. ALL DIMENSIONS SHALL BE VERIFIED BY THE PROJECT MANAGER. RETROFIT INSTALLATION 5. ELECTRICAL PULL BOX (STANDARD) SHALL BE A HEAVY DUTY REINFORCED POLYMER MORTAR PULL BOX AND COVER MEASURING 13 3/4"  $\times$  23 1/4"  $\times$  2". DESIGN REVIEW COMMITTEE CITY PROJECT NO.

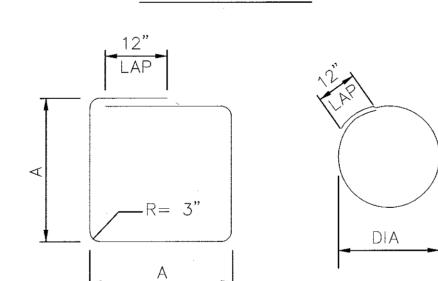




# PLAN VIEW (ROUND) NO SCALE



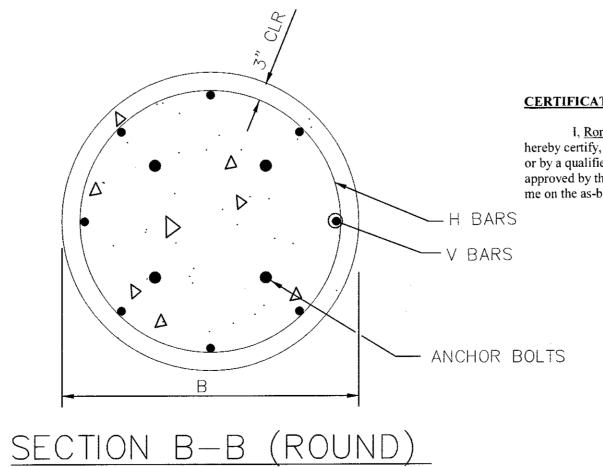
# STAMP DETAIL NO SCALE



12"	
TLAP	12 AP
<	
R= 3"	DIA
A	1

# BAR BENDING DIAGRAM

NO SCALE



		FOUN	DATIO	ON D	IMEN	SIONS	SANI	D QUAN	ITITIES
	FOUNDATION TYPE	SIGNAL ARM SPAN(FT)	DIMEN B (WIDTH)	SION D (DEPTH)	REINFO V BARS MARK	r <del>.</del>	REBAR POUNDS	3500 PSI CONCRETE CUBIC YARDS	NOTES
ten mentel des mit tet des in det ten mellen te ten militar akteur des de temperature un	TYPE A (SQUARE)	15 20 25	3'-6"	5'-0"	#4V2 "	#3H2 "	49.1 •	2.27	
	TYPE B (SQUARE)	30 35 40	4'-0"	6'-3"	#5V1 "	#3H1 "	82.6	3.70	
	TYPE A (ROUND)	15 20 25	2'-6"	8'-6"	#6V4 "	#3H4 "	98.1	1.55	ROUND SHAPE TO BE USED ONLY WHERE SPECIFICALLY
	TYPE B (ROUND)	30 35 40	3'-0"	11'-9"	#7V3 "	#3H3 "	179.7	3.08 "	NOTED ON PLANS OR WHEN APPROVED BY THE PROJECT MANAGER.

	RE			G SCI 60 B	HEDULE ARS)
MARK	QUANT	TYPE	SIZE	LENGTH	COMMENTS
#5V1	8	~	5	5'-9"	
#4V2	8	1	4	4'-6"	
#7V3	6	1	7	11'-3"	
#6V4	6	1	6	8'-0"	
#3H1	6	2	3	15'-4"	A = 42", TIES AT 14" OC
#3H2	5	2	3	13'-4"	A = 36", TIES AT 12" OC
#3H3	12	3	3	9'-3"	DIA = 30", TIES AT 12" OC
#3H4	9	3	3	7'-8"	DIA = 24", TIES AT 12" OC

# TRAFFIC SIGNAL MASTARM FOUNDATION NOTES

- 1. REFER TO THE PLANS FOR LOCATIONS OF TRAFFIC SIGNAL MASTARM FOUNDATIONS.
- 2. FINISHED GRADE FOR THE FOUNDATIONS SHALL BE ESTABLISHED IN THE FIELD BY THE PROJECT MANAGER.
- 3. THE FOUNDATIONS SHOWN HERE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, CURRENT REVISION.
- 4. CONCRETE SHALL BE 3500 PSI FOR EXTERIOR STRUCTURES. REFER TO TABLE 101.C OF THE SPECIFICATIONS.
- 5. REINFORCING STEEL SHALL CONFORM TO ASTM A-615 GRADE 60.
- 6. THE TOP 6 INCHES OF THE FOUNDATION PEDESTAL SHALL BE FORMED TO THE DIMENSIONS SHOWN ON THIS SHEET TO FORM NEAT LINES. CONCRETE BELOW 6 LINES MAY BE CAST AGAINST THE EARTH.
- 7. THE CONCRETE SHALL GAIN 80% OF THE DESIGN STRENGTH PRIOR TO INSTALLING THE TRAFFIC SIGNAL MASTARM.
- 8. ALL FOUNDATIONS SHALL INCLUDE COPPER WELD GROUND RODS. ALL GROUND RODS SHALL BE 3/4" DIA X 10'-0" AND WILL BE CONSIDERED INCIDENTAL TO THE FOUNDATIONS BID ITEMS.

9. ALL FOUNDATIONS SHALL BE STAMPED EITHER "A" OR "B" TO SHOW CERTIFICATE OF SUBSTANTIAL COMPLIANCE ON PLANS TYPE CONSTRUCTED (SEE STAMP DETAIL).

I, Ronald R. Bohannan, of the firm of <u>Tierra West LLC</u>, 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 Planning Department and that the original design intent of the approved plans has been met, except as noted by me on the as-built construction drawings.



				RS			RRB
TIERRA WEST, LLC  5571 MIDWAY PARK PLACE NE ALBUQUERQUE, NEW MEXICO 87109 (505) 858-3100 www.tierrawestlic.com		NO. DATE		DESIGNED BY	DRAWN BY pm	DRAWING NAME	CHECKED BY
CITY OF ALBUQUERQUE PUBLIC WORKS DIVISION							

ENGINEERING GROUP

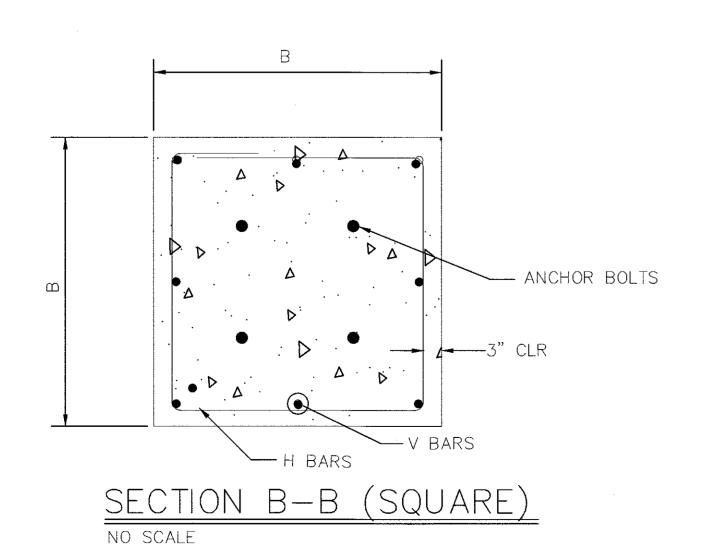
# COORS VILLAGE

FOUNDATION DETAILS, TYPE II AND TYPE III STANDARD

DESIGN REVIEW COMMITTEE  MAY 0 6 2019  DESIGN REVIEW COMMITTEE	MAY 3 2 20 CITY ENGIN	19	LAST DESIGN UPDATE	MO./DAY/YR.	MO./DAY/YR.
CITY PROJECT NO. 550982	2	ZONE MAI		SHEET #	26of 30

	2'-0 LEVEL		#4 BARE COPPER GROUND CLAMP TO GROUND ROD AND BOLT TO TRANSFORMER BASE FINISHED GRADE (SEE NOTE 2). FOUNDATION MAY BE SLOPED TO MATCH SIDEWALK SLOPE SHALL CONFORMED TO THE AMERICANS WITH DISABILITIES ACT	
# S	B BARS BARS		CONDUIT AS REQ'D  3/4"x10' COPPER WELD GROUND ROD	
EQ	S" CLR		TRAFFIC SIGNAL MASTARM DETAILS  3" CLR  3" CLR  3500 PSI CONCRETE	-
SE	CTION A—A (RC	OUND OR		

SECTION ATA (NOUND ON SQUARE) NO SCALE



			FUNCTION CH	HART - 115 VOLT	CIRCUIT	1/
co	NDUCTOR		RING 1 - MULTI C	CONDUCTOR CABLE 20	RING 2 - MULTI C	ONDUCTOR CABLE 20 <sup>2</sup>
CONDUCTOR NUMBER	BASE COLOR	TRACER	FUNCTION	FIELD CONNECTION	FUNCTION	FIELD CONNECTION
1	BLACK	***	SPARE	SPARE	SPARE	SPARE
2	WHITE	verson	SPARE	SPARE	SPARE	SPARE
3	RED	omenous reconstructural area area tradition and distribution of the second area are second as a second area are second as a second area area area.	PHASE 1 RED	RED LEFT TURN ARROW 1B, 1C	PHASE 5 RED	RED LEFT TURN ARROW 3B, 3C
4	GREEN		PHASE 1 GREEN	GREEN LEFT TURN ARROW 1B, 1C	PHASE 5 GREEN	GREEN LEFT TURN ARROW 3B, 3C
5	ORANGE	gh <del>anda a na basan a na na</del>	PHASE 1 YELLOW	YELLOW LEFT TURN ARROW 1B, 1C	PHASE 5 YELLOW	YELLOW LEFT TURN ARROW 3B, 3C
6	BLUE		SPARE	SPARE	PHASE 5 YELLOW	YELLOW RIGHT TURN ARROY 4A, 4E
7	WHITE	BLACK	SPARE	SPARE	PHASE 5 RED	GREEN RIGHT TURN ARROW 4A, 4E
8	RED	BLACK	PHASE 2 RED	RED BALL 3A, 3M1, 3M2	PHASE 6 RED	RED BALL 1A, 1M1, 1M2
9	GREEN	BLACK	PHASE 2 GREEN	GREEN BALL 3A, 3M1, 3M2	PHASE 6 GREEN	GREEN BALL 1A, 1M1, 1M2
10	ORANGE	BLACK	PHASE 2 YELLOW	YELLOW BALL 3A, 3M1, 3M2	PHASE 6 YELLOW	YELLOW BALL 1A, 1M1, 1M2
11	BLUE	BLACK	PHASE 2 WALK	PEDESTRIAN WALK P2A, P2B	PHASE 6 WALK	PEDESTRIAN WALK P6A, P6B
12	BLACK	WHITE	PHASE 2 DON'T WALK	PEDESTRIAN DON'T WALK P2A, P2B	PHASE 6 DON'T WALK	PEDESTRIAN DON'T WALK P6A, P6B
1.3	RED	WHITE	PHASE 3 RED	RED LEFT TURN ARROW 2B, 2C, 2D, 2E	PHASE 7 RED	RED LEFT TURN ARROW 4B, 4C, 4D
14	GREEN	WHITE	PHASE 3 GREEN	GREEN LEFT TURN ARROW 2B, 2C, 2D, 2E	PHASE 7 GREEN	GREEN LEFT TURN ARROW 4B, 4C, 4D
15	BLUE	WHITE	PHASE 3 YELLOW	YELLOW LEFT TURN ARROW 2B, 2C, 2D, 2E	PHASE 7 YELLOW	YELLOW LEFT TURN ARROW 4B, 4C, 4D
16	BLACK	RED	PHASE 4 RED	RED BALL 4A, 4M1, 4M2	PHASE 8 RED	RED BALL 2A, 2M1, 2M2
17	WHITE	RED	PHASE 4 GREEN	GREEN BALL 4A, 4M1, 4M2	PHASE 8 GREEN	GREEN BALL 2A, 2M1, 2M2
18	ORANGE	RED	PHASE 4 YELLOW	YELLOW BALL 4A, 4M1, 4M2	PHASE 8 YELLOW	YELLOW BALL 2A, 2M1, 2M2
19	BLUE	RED	PHASE 4 WALK	PEDESTRIAN WALK P4A, P4B	PHASE 8 WALK	PEDESTRIAN WALK P8A, P8B
20	RED	GREEN	PHASE 4 DON'T WALK	PEDESTRIAN DON'T WALK P4A, P4B	PHASE 8 DON'T WALK	PEDESTRIAN DON'T WALK P8A, P8B

		FUNCTIO	N CHART – 24 VOL	T CIRCUIT	3
		RING 1 - MU	LTI CONDUCTOR CABLE 5	RING 2 - MI	ULTI CONDUCTOR CABLE 5
CONDUCTOR NUMBER	BASE COLOR	FUNCTION	FIELD CONNECTION	FUNCTION	FIELD CONNECTION
1	BLACK	PHASE 2 PPB	PPB2A,PPB2B	SPARE	
2	WHITE	COMMON	PP2A,2B,4A,4B,6A,6B,8A,8B	COMMON	PPB, 6A,6B,8A,8B
3	RED	PHASE 4 PPB	PPB4A,PPB4B	SPARE	
4	GREEN	PHASE 6 PPB	PPB6A,PPB6B	PHASE 6 PPB	PPB6A, PPB6B
5	ORANGE	PHASE 8 PPB	PPB8A,PPB8B	PHASE 8 PPB	PPB8A, PPB8B

SPLICE CLOSURE - 64 DMS +3 # CODRS SOUTH DE MONTANO

# NOTES:

1/ IDENTIFY CONDUCTORS LISTED AS "115 VOLTS"

THE SIGNAL MODIFICATION WORKS SHALL REPLACE THE

CONTRACTOR WILL BE RESPONSIBLE FOR FULL SPLICE

REPLACEMENT

FIBER FROM EXISTING FULL SPLICE TO EXISTING FULL SPLICE. NO INTERMEDIATE SPLICES ARE ALLOWED. IF THE FIBER IS DAMAGED OR DISTURBED DURING THE PROJECT WORK, THE

- 2/ WRAP RING 2 CABLE AT EACH SPLICE POINT WITH COLORED ELECTRICAL TAPE. THE IDENTIFICATION MARKING SHALL BE PROVIDED ON EACH RING 2 CABLE AT EACH SPLICE BOX AND LOCATED 6" BACK FROM THE END.
- 3/ IDENTIFY CONDUCTORS LISTED AS "PPB LOW VOLTAGE" AT EACH SPLICE POINT. FIVE (5) CONDUCTOR CABLE SHALL BE 24 VOLTS AND USED FOR PUSH BUTTONS ONLY.

# **ABBREVIATIONS**

- DETECTOR LOOP - EXTENDED CALL LOOP - DETECTOR LOOP LENGTH - DETECTOR LOOP WIDTH

- SAW CUT LOOP TO CURB - TERMINAL LENGTH – QUADRAPOLE LOOP

SDWBA - SYSTEM DETECTOR WEST BOUND APPROACH SDWBD - SYSTEM DETECTOR WEST BOUND DEPARTURE SDEBA - SYSTEM DETECTOR EAST BOUND APPROACH SDEBD - SYSTEM DETECTOR EAST BOUND DEPARTURE SDNBA — SYSTEM DETECTOR NORTH BOUND APPROACH SDNBD — SYSTEM DETECTOR NORTH BOUND DEPARTURE SDSBA - SYSTEM DETECTOR SOUTH BOUND APPROACH SDSBD - SYSTEM DETECTOR SOUTH BOUND DEPARTURE

STORE COURT ST VESTERY THAIL & COOPS

MO./DAY/YR.

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### CERTIFICATE OF SUBSTANTIAL COMPLIANCE ON PLANS

SPETIE CLOSEPE E DELL'HAE & COORS

l, <u>Ronald R. Bohannan</u>, of the firm of <u>Tierra West LLC</u>, 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 Planning Department and that the original design intent of the approved plans has been met, except as noted by me on the as-built construction drawings.

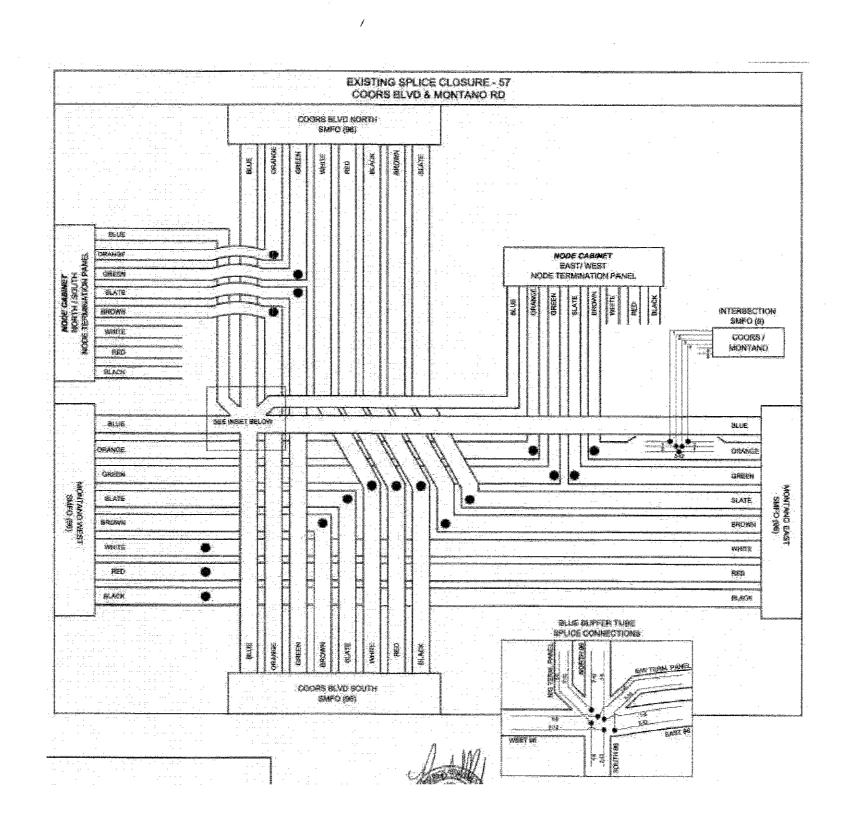


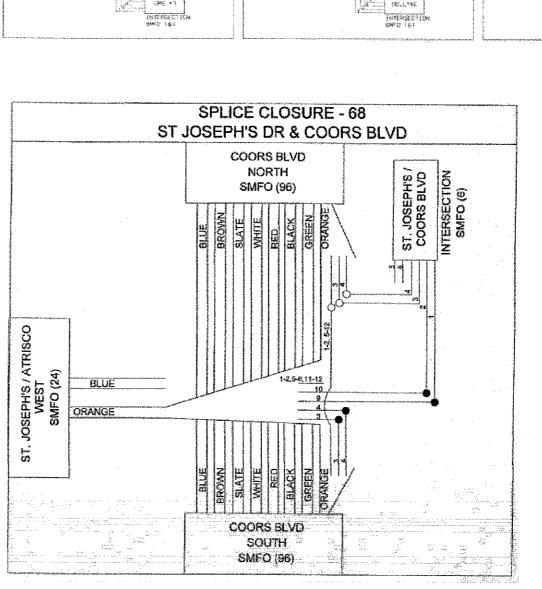
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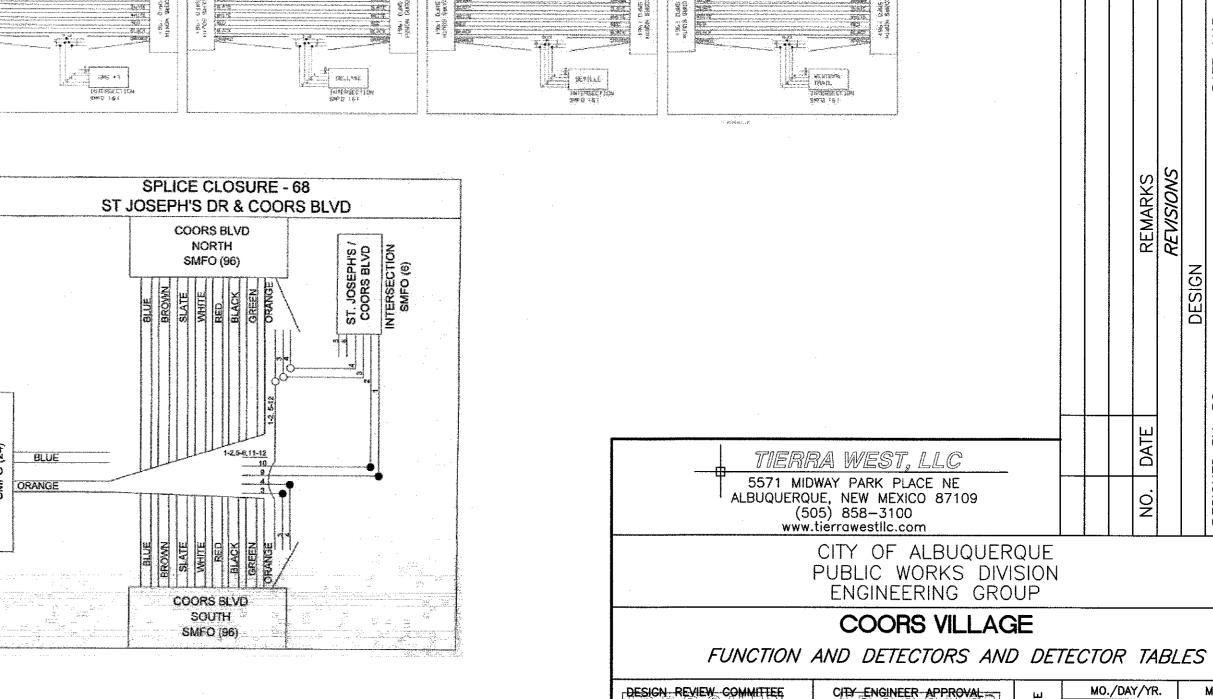
# TIMING PLAN

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Intersection Name:	WESTERN	TRAIL & C	COORS					
Revision Date	12/31/2013							
Timing Data						rok. Par monton		
Phase I.D.:	1	2	3	4	5	6	7	8
Phase Dir.:	S-E	NB	W-S	EB	N-W	SB	E-N	WB
Min Gm		16	3	8	3	16	3	8
Walk	l õ l	7	0	7	0	7	0	7
Ped Cir.		25	0	42	0	23	1 0	42
Veh Ext:	2.0	4.0	2.0	4.0	2.0	4.0	2.0	4.0
Veh Ext2:			1,000				4,5,4	****
Max 1:	16	40	16	28	16	40	16.	28
Max 2:								
Max 3:								
Yellow:	3.0	4.5	3.0	4.0	3.0	4.5	3.0	4.0
Red Clr	11	1.0	0.5	2.0	0.5	1.0	0.5	2.0
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Time:	8 SEC.							
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7. Timing uploaded from field and confirmed. No changes since 12/31/13.







DESIGN REVIEW COMMITTEE

MAY **06 201**9

550982

CITY PROJECT NO.

CITY\_ENGINEER\_APPROVAL\_\_\_

MAY 22 2019

CITY ENGINEER

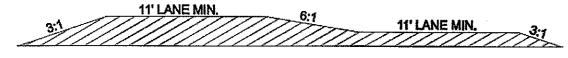
ZONE MAP NO.

F-11-Z

SHEET #

### GENERAL TRAFFIC CONTROL NOTES:

- 1. The Contractor/TCP firm MUST adhere to the dates and times listed on the TCP permit. Failure to do so will result in the permit being revoked.
- 2. The NMDOT reserves the right to make any changes and/or modifications to the approved Traffic Control Permit.
- 3. The Contractor/TCP firm shall adhere to all the requirements listed in the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD).
- 4. In the areas of pavement operations or other activities within the traveled way and adjacent to the existing traveled lane, the contractor shall assure that no pavement drop-offs are left exposed\_during non-working hours. The contractor shall initiate corrective means as per "the New Mexico\_Department Of Transportation Payement Drop-off Guideline" to achieve a minimum 6:1 slope between traveled lanes and a minimum 3:1 slope adjacent to the existing traveled lane with two 11 foot driving lanes as shown in the detail below.



- 5. The Contractor/TCP firm will be required to cover up all conflicting signs within or in advanced of the work zone.
- 6. In covering up any conflicting signs, the contractor is to use an approved method of covering existing signing so as not to damage/distort sign sheeting or markings. The Contractor/TCP firm shall not place a patch on the sign and tape the patch directly to the face of the sign. Failure to adhere to this requirement will result in the Contractor/TCP firm being required to replace the sign.
- 7. The Contractor/TCP firm shall not place a lane drop taper along a horizontal curve. The lane drop taper shall be placed in advance of the horizontal curve so that it is visible to all oncoming traffic.
- 8. On crest vertical curves, the Contractor/TCP firm shall place lane drops in advance or at the beginning of the curve to enhance visibility of the lane drop to oncoming traffic.
- 9. The Contractor/TCP firm SHALL contact Mr. Phil Gallegos, D3 Public Information Officer (PIO), at least 48 hours before any work listed in the TCP is performed, to confirm the actual start dates of the construction. Mr. Gallegos can then publish the upcoming work in the District Three Traffic Report. Mr. Gallegos can be reached at 841-2700.
- 10. All traffic devices shall be kept clean throughout the duration of the project. Any sign that is tagged by Graffiti shall be cleaned within 24 hours or removed and replaced.
- 11. "BUMP", "LOOSE GRAVEL", "LANE DROP-OFF SIGN" sign placement the contractor shall place W8-1-48 signs ("BUMP" - B/FO), W8-7-48 signs ("LOOSE GRAVE" - B/FO) and/or W8-9a-48 signs ("SHOULDER DROP-OFFS" -B/FO) in advance of bridge approaches or other locations\_during cold milling and overlay operations as needed or as directed by the project manager. See standard drawing 702-01-1/3 for sign details
- 12. The following reflectivity material shall be used on all signing placed on NMDOT roadways

SIGN SIGN CODE APPROACH SIGNS W20-1,2,3,4,5,7		COLOR	LETTER SHEETING	BACKGROUND SHEETING		
		(BLK/FLOURESCENT Orange)		Type VII, VIII or IX		
CHEVRONS	WI-8	(BLK/FLOURESCENT Orange)		Type VII, VIII or IX		
CURVES	W1-2	(BLK/FLOURESCENT Orange)		Type VII, VIII or IX		
REVERSE CURVE	W1-4	(BLK/FLOURESCENT Orange)		Type VII, VIII or IX		
MERGE	W4-1	(BLK/FLOURESCENT Orange)		Type VII, VIII or IX		
NO PASSING ZONE	W14-3	(BLK/FLOURESCENT Orange)		Type VII, VIII or IX		
FLAGGER PADDLE		(BLK/FLOURESCENT Orange side one with Red on side 2)		Type VII, VIII or IX		
ALL DRUMS		(BLK/FLOURESCENT Orange)		Type VII, VIII or IX		
All Other Const. Signs		Black on Orange		Type III		

13. If any of the signs and/or traffic control devices, on the attached TCP, are being used overnight the following minimum reflectivity standards shall be required:

- The state of the		SHEETING TYPE	(ASTM D4956-04)		
SIGN COLOR		Beaded Sheeting	Prismatic Sheeting	ADDITIONAL	
	ſ	11	III	III, IV, VI, VII, VIII, IX, X	CRITERIA
White on Green	W*; G ≥ 7	W";G≥15	W*; G ≥ 25	W ≥ 250; G ≥ 25	Overhead
White on Green	W*; G≥7		W ≥ 120; G ≥ 15		Ground-mounted
Black on Yellow or	Y'; O'		Y≥50; O≥50		
Black on Orange	Y*;O*		Y≥75;O≥75		Ø
White on Red		W ≥ 35	; R ≥ 7		<b>a</b>
Black on White	e de la companya de	Wa	-50		
W1-1, -2 – Turn and Cur	ve	is color for this applicatio BOLD SYMi • W3-1 Stop Ahead		• W11-3 – Deer Crossing	<u> </u>
· W1-1, -2 – Turn and Cur	ve	BOLD SYM  • W3-1 ~ Stop Ahead		• W11-3 – Deer Crossing	·
• W1-1, -2 – Turn and Cur • W1-3, -4 – Reverse Turn	ve	BOLD SYM		• W11-4 - Cattle Crossin	· ig
W1-1, -2 – Turn and Cur W1-3, -4 – Reverse Turn W1-5 – Winding Road W1-6, -7 – Large Arrow	ve	• W3-1 - Stop Ahead • W3-2 - Yield Ahead • W3-3 - Signal Ahead • W4-1 - Merge		•	g ent
W1-1, -2 – Turn and Cur W1-3, -4 – Reverse Turn W1-5 – Winding Road W1-6, -7 – Large Arrow W1-8 – Chevron	ve and Curve	*W3-1 - Stop Ahead *W3-2 - Yield Ahead *W3-3 - Signal Ahead *W4-1 - Merge *W4-2 - Lane Ends		• W11-4 – Cattle Crossin • W11-5 – Farm Equipm • W11-6 – Snowmobile ( • W11-7 – Equestrian Cr	g ent Crossing
• W1-1, -2 – Turn and Cur • W1-3, -4 – Reverse Turn • W1-5 – Winding Road • W1-6, -7 – Large Arrow • W1-8 – Chevron • W1-10 – Intersection in G	ve and Curve  Curve	*W3-1 Stop Ahead *W3-2 Yield Ahead *W3-3 Signal Ahead *W4-1 Merge *W4-2 Lane Ends *W4-3 Added Lane	BOLSIGNS	• W11-4 - Cattle Crossin • W11-5 - Farm Equipm • W11-6 - Snowmobile ( • W11-7 - Equestrian Cr • W11-8 - Fire Station	g ent Crossing ossing
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w1-1,-2 - Turn and Cur w1-3,-4 - Reverse Turn w1-5,-7 - Winding Road w1-6,-7 - Large Arrow w1-8 - Chevron w1-10 - Intersection in G w1-15 - 270 Degree Loo w2-1 - Cross Road w2-2,-3 - Side Road w2-4,-5 - T and Y Inters w2-6 - Circular Intersection w3-1 - Stop Ahead: Red w3-3 - Signal Ahead: Red w3-3 - Signal Ahead: Red w3-5 - Speed Reduction	ve and Curve  Curve  p  section tion  FINE SYMBC  retroreflectivity ≥ 7; vectoreflectivity ≥ 7; vectoreflectivity ≥ 7; we diretroreflectivity ≥ 7; we diretroreflectivity ≥ 7; white retroreflectivity ≥ 7; white retroref	BOLD SYMI  • W3-1 Stop Ahead  • W3-2 Yield Ahead  • W3-3 Signal Ahead  • W4-1 Merge  • W4-2 Lane Ends  • W4-3 Added Lane  • W4-6 Entering Roads  • W6-1, -2 Divided Hig  • W6-3 Two-Way Traff  • W10-1, -2, -3, -4, -11, -  Highway-Railroad Adv.  • W11-2 Pedestrian Cro  DL SIGNS Symbol Sig  SPECIAI  White retroreflectivity ≥ 35  Green retroreflectivity ≥ 7  y ≥ 50	way Added Lane ghway Begins and Ends ic 12 – ance Warning ossing ns Not Listed As Bold L CASES	• W11-4 - Cattle Crossin • W11-5 - Farm Equipm • W11-6 - Snowmobile ( • W11-7 - Equestrian Cr • W11-8 - Fire Station • W11-10 - Truck Crossi • W12-1 - Double Arrow • W16-5p, -6p, -7p - Poil • W20-7a - Hagger • W21-1a - Worker  Symbol Signs	g ent Crossing ossing ng
w1-1,-2 - Turn and Cur w1-3,-4 - Reverse Turn w1-5 - Winding Road w1-6,-7 - Large Arrow w1-8 - Chevron w1-10 - Intersection in G w1-15 - 270 Degree Loo w2-1 - Cross Road w2-2,-3 - Side Road w2-4,-5 - T and Y Inters w2-6 - Circular Intersect	ve and Curve  Curve  p  section tion  FINE SYMBC  retroreflectivity ≥ 7; vectoreflectivity ≥ 7; vectoreflectivity ≥ 7; we diretroreflectivity ≥ 7; we diretroreflectivity ≥ 7; white retroreflectivity ≥ 7; white retroref	BOLD SYMI  • W3-1 Stop Ahead  • W3-2 Yield Ahead  • W3-3 Signal Ahead  • W4-1 Merge  • W4-2 Lane Ends  • W4-3 Added Lane  • W4-6 Entering Roads  • W6-1, -2 Divided Hig  • W6-3 Two-Way Traff  • W10-1, -2, -3, -4, -11, -  Highway-Railroad Adv.  • W11-2 Pedestrian Cro  DL SIGNS Symbol Sig  SPECIAI  White retroreflectivity ≥ 35  Green retroreflectivity ≥ 7  y ≥ 50	way Added Lane ghway Begins and Ends ic 12 – ance Warning ossing ns Not Listed As Bold L CASES	• W11-4 - Cattle Crossin • W11-5 - Farm Equipm • W11-6 - Snowmobile ( • W11-7 - Equestrian Cr • W11-8 - Fire Station • W11-10 - Truck Crossi • W12-1 - Double Arrow • W16-5p, -6p, -7p - Poil • W20-7a - Hagger • W21-1a - Worker  Symbol Signs	g ent Crossing ossing ng

- 14. Placement of the sequential arrow shall be at or near the beginning of the lane closure taper. In areas of insufficient pavement width, the sequential arrow may be placed within the taper, but not to exceed 1/2 the taper length. In all cases, the sequential arrow shall be placed behind the channelization devices.
- 15. All signing on the interstate and on high speed 4 lane divided facilities shall be double indicated.
- 16. All signs that are part of work zone that is in place for more than 3 days shall be placed on posts.
- 17. Covering existing white and yellow stripes with black paint as a method of stripe removal is strictly prohibited.
- 18. All warning and regulatory signs shall meet the following size requirements:
  - a. Interstate: Warning sign 48"x48" Regulatory 48"x60" **b.** Non-Interstate: Warning sign 36"x36" Regulatory 36"x42"
- 19. All CWB ends, within the clear zone, have to be protected with an approved crash cushion attenuator (approved based on the design speed of the road).
- 20. When flaring the leading end of a Temporary Concrete Wall Barrier (TCWB) within a construction work zone, the flare rate shall be done in accordance with the rates shown in the table below:

Roadway Speed Limit	Minimum Taper/Flare Rate	Desirable Taper/Flare Rate
Less than 45 MPH	8:1	18:1
Between 45 MPH and 55 MPH	10:1	24:1
Greater than 55 MPH	15:1	30:1

- 21. When CWB is placed in a construction work zone, a 5' buffer area is strongly recommended between the Temporary Concrete Wall Barrier and the work zone to accommodate barrier deflection. When a 5' buffer area is not attainable, consideration shall be given to anchoring the TCWB to the pavement surface. (See attachment "B" - note 8 in standard drawing 606-20-1/4 dated 1/11/2005).
- 22. The crash cushion attenuators shall be designed as per the District Traffic Engineer's recommendations. The District May elect to either utilize the posted speed or the 85% speed in the layout of the crash cushion attenuators within the work
- 23. All construction signing shall have a Type III or higher reflective background.
- 24. All devices that are placed within the NMDOT R/W shall adhere to section 702 Traffic Control Devices For Construction – in the latest edition of the NMDOT Specification book
- 25. All stationary objects within clear zone shall be properly shielded and outlined with drums mounted with Type "A" warning lights. Use of vertically mounted retro-reflective material in lieu of a Type A warning light is strictly prohibited.
- 26. Use of Type I or II barricades for approach tapers on rural Interstate or secondary roadways are prohibited.
- 27. Any equipment, materials, or vehicles stored within ROW shall be outside of clear zone (based on existing posted speed).
- 28. Any equipment, material or vehicle stored within clear zone shall be properly shielded. 29. Materials, work activities, equipment, and vehicles shall not be stored within the established buffer space.
- 30. All construction equipment, vehicles and materials shall remain behind traffic control devices.
- 31. All traffic control device types, quantities and spacing shall not deviate from the approved Traffic Control Plan. Any changes to the traffic control plan must be approved by the District Traffic Engineer or his/her designee
- 32. The following Taper lengths, buffer zone, and spacing of devices requirements shall be adhered to:

Posted	Posted		Merging (L) & Shifting Taper (1/2L) Length (FT.) 1						Shoulder Taper (Ft.) 2			Transition Area/	Buffer Space	Maximum Spacing		
Speed Formula		11'	lane	12' L	ne	131	Lane		1/3	L		Calming Zone 3	or Distance 4	of De	of Devices (Ft.) 5	
(MPH)		11 laise 12 Laise		15 Laite		4'	6,	8,	10'	(2L) (Ft.)	to Flagger Station	On a Taper	On a Tangent			
alian rangan	antickentantel en esem	<b>ASICIALIS</b> Profesiolation	ot :: (polentor los taxantestas	denominary was a supplied on	i producerno procursi, com a	Z-0309***********************************	esitä kerietteniä vita	minelaeve bese	(amorates/milyayo	production trans.	25 de autres de seu	January and the second second second			Androvski,	
20	2000	75	40	8Q	40	85	A CONTRACTOR OF THE PARTY OF TH	9.	. 13	18	22	160	115	20	40	
25	L=WS2/60	115	60	125	65	135	70	14	21	28	35	250	155	25	50	
30		165	85	180	- 90	195	100	20	30	40	<b>5</b> 0.	360	200	30	60	
35	Paisson and the second and the secon	225	115	245	125	265	135	27	41	54	68	490	250	35	70	
40		295	150	320	160	345	175	36	53.	71 :	89	640	305	40	80	
45	Parent service	495	250	540	270	585	295	60	90	120	150	1080	360	45	90	
50		550	2/5	600	300	650	325	67	100	133	167	1200	425	50	100	
55		605	305	660	330	715	360	73	110	147	183	1320	495	55	110	
60	L=WS	680	330	720	360	<b>₹780</b>	490	80 🦔	120	160	200	1440	570	60	120	
65		715	360	780	390	845	425	87	130	173	217	1560	645	65	130	
70		770	385	840	420	910	465	93	140	187	233	1680	730	70	140	
75	12 12 13 13 14 15	825	415	900	450	975	490	100	150	200	250	1800	820	75	150	

See Section 6C.08 on page 6C-5 and Figure 6C-2 on page 6C-6 of the 2003 MUTCD
 See Figure 6H-37 on page 6H-79 of the 2003 MUTCD

CONSTRUCTION

AHEAD

48"x48"

-A-

W20-7

ROAD

CLOSED

48"x48"

LEFT LANE

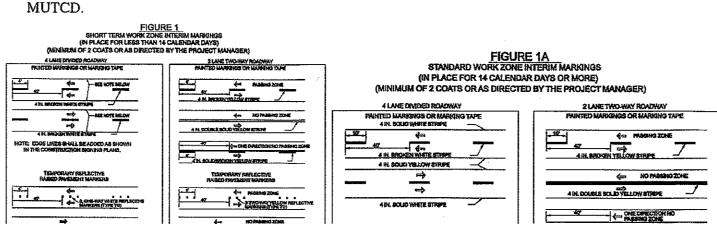
MUST

TURN LEFT

R3-7L

30"x30"

- See Section 6C.06 on page 6C-04 and 6C-05 of the 2003 MUTCD
- 33. The contractor or the traffic Control Subcontractor Shall provide a Traffic Control Supervisor on site during working hours for immediate response to traffic control issues/concerns.
- 34. Work Zone Interim Markings:
- a. The contractor shall place reflectorized painted markings on each markings on each intermediate lift of surfacing or milled surface at the end of day's surfacing or milling operation, these markings shall be placed in accordance with the details shown in figure 1 or figure 1a on this sheet. in the event the painted markings cannot be placed as described above, the contractor shall, with the approval of the project manager, place marking tape or temporary reflective raised pavement markers in accordance with the details shown in figure 1 or figure 1a on this sheet or as directed by the project manager. Payment for marking tape will be paid for under the unit price of reflectorized painted markings, unless otherwise specified.
- b. The contractor shall place removable marking tape or temporary reflective raised pavement markers after placement of the final lift of surfacing if permanent markings are not placed during the same working day. These markings shall be placed in accordance with the details shown in figure 1 or 1a on this sheet or as directed by the project manager.
- c. On roadways with severe curvature, broken-line interim markings with half-cycle lengths and a minimum of 2 foot stripes or a group of two temporary reflective pavement markings spaced 2 feet apart may be used where passing is allowed. Interim edge lines or channelization lines for delineation may be used as needed or as directed by the project manager. Passing/no passing zone signing to supplement interim markings for delineation may be used as needed or as directed by the project manager. All interim markings shall be in accordance with the current edition of the



36"x36'

30"x30"

R3-2L 24"x24"

RIGHT LANE

MUST

TURN RIGHT

R3-7R

60"x24"

-A-A-

LANE CLOSED

48"x48'

48"x48"

KEEP

RIGHT

R4-7a

24"x30'

-Q-

BE

PREPARED

STOP/

48"x48"

LANE CLOSED

AHEAD

48"x48'

30"x30"

DETOUR

30"x24"

NO

LEFT

TURN

24"x30"

-B-B-

36"x36

-E-

CENTER

LANE CLOSED

48"x48"

DETOUR

30"x24"

NOTE: ARROW DIRECTION

TO BE ADJUSTED AS

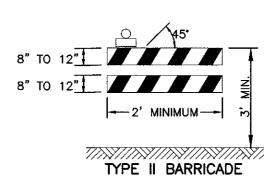
# TAPER REQUIREMENTS

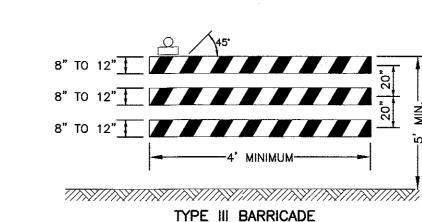
SPEED LIMIT	TA	PER LENGT (FEET)	MAXIMUM DISTANCE BETWEEN	MINIMUM NUMBER OF	
(MPH)	10' LANE	11' LANE	12' LANE	DEVICES (FEET)	DEVICES REQUIRED
25	104	115	125	25	6
30	150	165	185	30	7
35	204	225	245	35	8
40	267	293	320	40	9
45	450	495	540	45	13
50	500	550	600	50	13
55	550	605	660	55	13

# RECOMMENDED SIGN SPACING (D) FOR ADVANCE WARNING SIGN SERIES

SPEED MILES PER HOUR	MINIMUM DISTA BETWEEN SIGNS	NCE IN FEET 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
35-40	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

# TYPE I BARRICADE





NOTE: FLASHING OR STEADY BURN WARNING LIGHTS SHOULD BE USED ON BARRICADES, PANELS, AND DRUMS AS NEEDED.

## LEGEND

# WORK AREA

TRAFFIC SIGN & QUANTITY (SEE THIS SHEET FOR DESIGNATION)

- BARRICADE TYPE I, TYPE II, OR BARREL 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 - ON CHART

LANE ROAD

48"x48'

ROAD

CLOSED

48"x48"

ROAD CLOSED

TO

THRU TRAFFIC

R11-4

60"x60"

-V-

RIGHT

TWO LANES

CLOSED

48"x48"

-F-

24"x24"

ROAD

**CLOSED** 

48"x30"

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

ACCESS

TO

ACCESS INFORMATION

60"x60"

-Y-

LEFT

TWO LANES

CLOSED

AHEAD

W20-5 48"x48"

ROAD WORK

G20-2

60"x24"

-W-

# TAPER CRITERIA

TYPE OF TAPER TAPER LENGTH **UPSTREAM TAPER:** SEE CHART MERGING TAPER: L MINIMUM SHIFTING TAPER: 1/2 L MINIMUM SHOULDER TAPER: 1/2 L MINIMUM TWO-WAY TRAFFIC TAPER: 100 FEET MAXIMUM DOWNSTREAM TAPER: 100 FEET PER LANE

# TAPER LENGTH COMPUTATION

SPEED LIMIT

45 MPH OR LESS:

45 MPH OR GRATER:  $L = W \times S$ 

L = TAPER LENGTH

W = WIDTH OF OFFSET IN FEET S = POSTED SPEED OR OFF-PEAK 85-PERCENTILE SPEED IN MPH

### CERTIFICATE OF SUBSTANTIAL COMPLIANCE ON PLANS

I, Ronald R. Bohannan, of the firm of Tierra West LLC, 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 Planning Department and that the original design intent of the approved plans has been met, except as noted by me on the as-built construction drawings.



ALL ADVANCE WARNING SIGNS ARE TO BE DOUBLE INDICATED WHENEVER MEDIANS ARE 2. TRANSFORMATION FROM EXISTING SIGNALS TO SPAN WIRE IS TO OCCUR AT OFF PEAK

3. THIS IS A STANDARD TRAFFIC CONTROL PLAN AND SOME TRAFFIC CONTROL SITUATIONS MAY BE SHOWN THAT ARE NOT REQUIRED ON THIS PARTICULAR PROJECT.

5571 MIDWAY PARK PLACE NE ALBUQUERQUE, NEW MEXICO 87109 (505) 858-3100 www.tierrawestllc.com CITY OF ALBUQUERQUE PUBLIC WORKS DIVISION

COORS VILLAGE

WESTERN TRAIL - TRAFFIC CONTROL STANDARDS

CITY PROJECT NO.	ZONE MAP NO.	SHEET #	28 of 30
	DESIGN		
DESIGN REVIEW COMMITTEE CITY EN	SINEER APPROVAL	MO./DAY/YR.	MO./DAY/YR.

TIERRA WEST, LLC

ENGINEERING GROUP

