

CONSTRUCTION PLANS

FOR

MIDTOWN BUSINESS PARK

CUTLER AVENUE N.E.

PAVING, UTILITY AND SIGNAL IMPROVEMENTS

CITY OF ALBUQUERQUE
NEW MEXICO
AUGUST 1998

JW

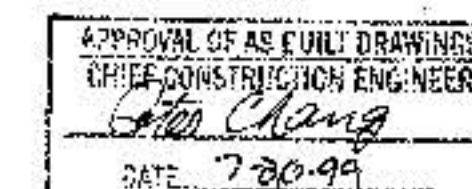
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TRAFFIC CONTROL NOTES

- ALL EXISTING TRAFFIC LANES MUST BE MAINTAINED ON SATURDAYS AND SUNDAYS FROM 7:00 A.M. TO 7:00 P.M. CONTRACTOR SHALL OPEN ALL LANES TO TRAFFIC UPON COMPLETION OF WORK SHIFT.
- CONTRACTOR IS ENCOURAGED TO WORK AT NIGHT AS MUCH AS POSSIBLE. BORING & JACKING IS ALSO ENCOURAGED TO BE DONE AT NIGHT.
- TRENCH PLATES MAY BE USED TO COVER OPEN EXCAVATIONS. IF NOT, ALL EXCAVATIONS SHALL BE BACKFILLED AND SURFACED PRIOR TO PLACING TRAFFIC OVER TRENCH.
- A MINIMUM OF ONE LANE IN EACH DIRECTION SHALL BE MAINTAINED ON WASHINGTON ST. AT ALL TIMES. NO TRAFFIC SPLITS WILL BE ALLOWED EXCEPT BETWEEN 7:00 P.M. TO 7:00 A.M. SUNDAY THROUGH THURSDAY NIGHTS.
- A TOTAL OF 14 CALENDAR DAYS IS ALLOWED FOR ALL WORK AFFECTING TRAFFIC LANES.

RECORD DRAWING	
DATE: 6/19/98	DRAFTED BY: R. W. WEST
THROUGH RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED AND FURNISHED BY OTHERS. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THE DOCUMENT AS A RESULT.	



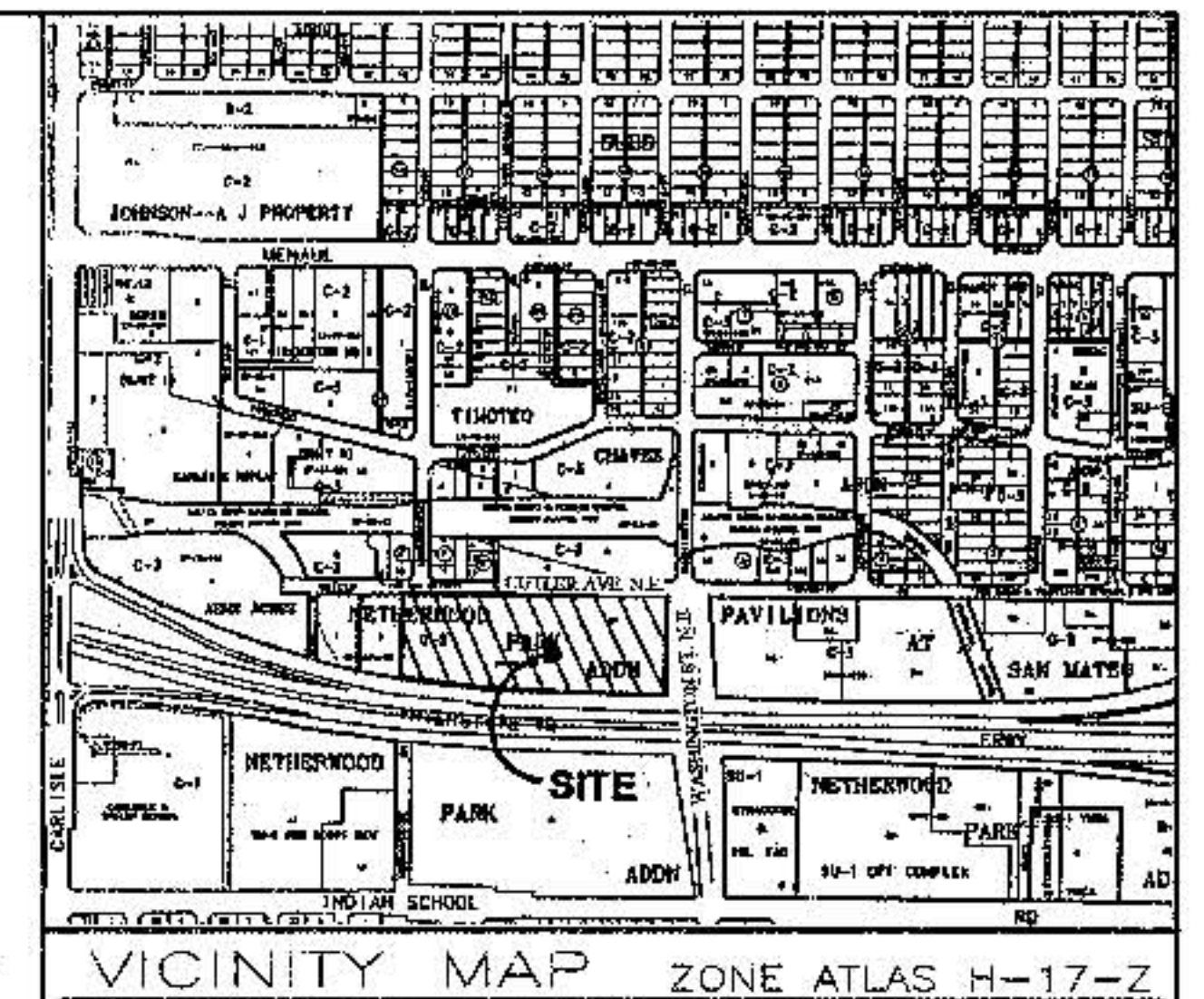
TERRA WEST, L.L.C.
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TERRA WEST, L.L.C.
4421 McLEOD ROAD, N.E., SUITE D
ALBUQUERQUE, NEW MEXICO 87109
(505)893-7582

REV.	SHEETS	CITY ENGINEER	DATE	USER DEPT.	DATE	USER DEPT.	DATE
ENGINEERS STAMP & SIGNATURE		APPROVALS	ENGINEER	DATE	APPROVED FOR CONSTRUCTION		
		DRG Chairman	<i>[Signature]</i>	7/14/98	<i>[Signature]</i> City Engineer Date 7/14/98		
		Transportation	<i>[Signature]</i>	7-14-98			
		Water/Wastewater	<i>[Signature]</i>	7-14-98			
		Hydrology	<i>[Signature]</i>	7-14-98			
		C.I.P.	<i>[Signature]</i>	7-14-98			
		Const. Mgmt.	<i>[Signature]</i>	7-14-98			
		Const. Coord.	<i>[Signature]</i>	7-14-98			
CITY PROJECT NO.		581981		SHEET		1 OF 24	

DRB CASE NO. 96-538

1970987/9787 TL 345/JUN/98 04 29



VICINITY MAP ZONE ATLAS H-17-Z

NOTICE TO CONTRACTORS

1. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION (UPDATE #0).

2. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM (280-1990) FOR LOCATION OF EXISTING UTILITIES.

3. ANY WORK AFFECTING AN ARTERIAL ROADWAY REQUIRES 24-HOUR CONSTRUCTION.

4. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OR SURVEYOR IMMEDIATELY SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.

5. FIVE (5) WORKING DAYS PRIOR TO BEGINNING OF CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT TO CONSTRUCTION COORDINATIONS DIVISION A DETAILED CONSTRUCTION SCHEDULE. TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN A BARRICADE PERMIT FROM THE CONST. COORDINATION DIVISION. CONTRACTOR SHALL NOTIFY BARRICADE ENGINEER (768-2551) PRIOR TO OCCUPYING AN INTERSECTION. REFER TO STANDARD SPECIFICATIONS.

6. ALL STREET STRIPING ALTERED OR DESTROYED SHALL BE REPLACED WITH PLASTIC REFLECTORIZED PAVEMENT MARKINGS BY THE CONTRACTOR TO LOCATION AS EXISTING OR AS INDICATED BY THIS PLAN SET.

7. CONTRACTOR SHALL NOTIFY THE ENGINEER NOT LESS THAN SEVEN (7) DAYS PRIOR TO STARTING WORK IN ORDER THAT THE ENGINEER MAY TAKE NECESSARY MEASURES TO INSURE THE PRESERVATION OF SURVEY MONUMENTS. CONTRACTOR SHALL NOT DISTURB PERMANENT SURVEY MONUMENTS WITHOUT THE CONSENT OF THE ENGINEER AND SHALL NOTIFY THE ENGINEER AND BEAR THE EXPENSE OF REPLACING ANY THAT MAY BE DISTURBED WITHOUT PERMISSION. REPLACEMENT SHALL BE DONE ONLY BY THE CITY SURVEYOR. WHEN A CHANGE IS MADE IN THE FINISHED ELEVATIONS OF THE PAVEMENT OF ANY ROADWAY IN WHICH A PERMANENT SURVEY MONUMENT IS LOCATED, CONTRACTOR SHALL, AT HIS OWN EXPENSE, ADJUST THE MONUMENT COVER TO THE NEW GRADE UNLESS OTHERWISE SPECIFIED. REFER TO SECTION 4.4 OF THE GENERAL CONDITIONS OF THE STANDARD SPECIFICATIONS. ANY PERMANENT SURVEY MONUMENT LOCATED WITHIN 50' OF THIS PROJECT THAT IS NOT SHOWN ON THE PLAN AND IS DESTROYED DURING CONSTRUCTION WILL BE REPLACED AT THE DESIGNER'S EXPENSE.

THE FOLLOWING NOTES ALSO APPLY WHEN CHECKED

☒ ALL UTILITIES AND UTILITY SERVICE LINES SHALL BE INSTALLED PRIOR TO PAVING.

☒ BACKFILL COMPACTION SHALL BE ACCORDING TO SPECIFIED STREET USE.

☒ TACK COAT REQUIREMENTS SHALL BE DETERMINED BY THE CITY ENGINEER.

☒ SIDEWALKS AND WHEELCHAMP RAMP WITHIN THE CURB RETURNS SHALL BE CONSTRUCTED WHEREVER A NEW CURB RETURN IS CONSTRUCTED.

☐ IF CURB IS DEEPRESSED FOR A DRIVEPAD, THE DRIVEPAD SHALL BE CONSTRUCTED PRIOR TO ACCEPTANCE OF CURB AND CUTTER.

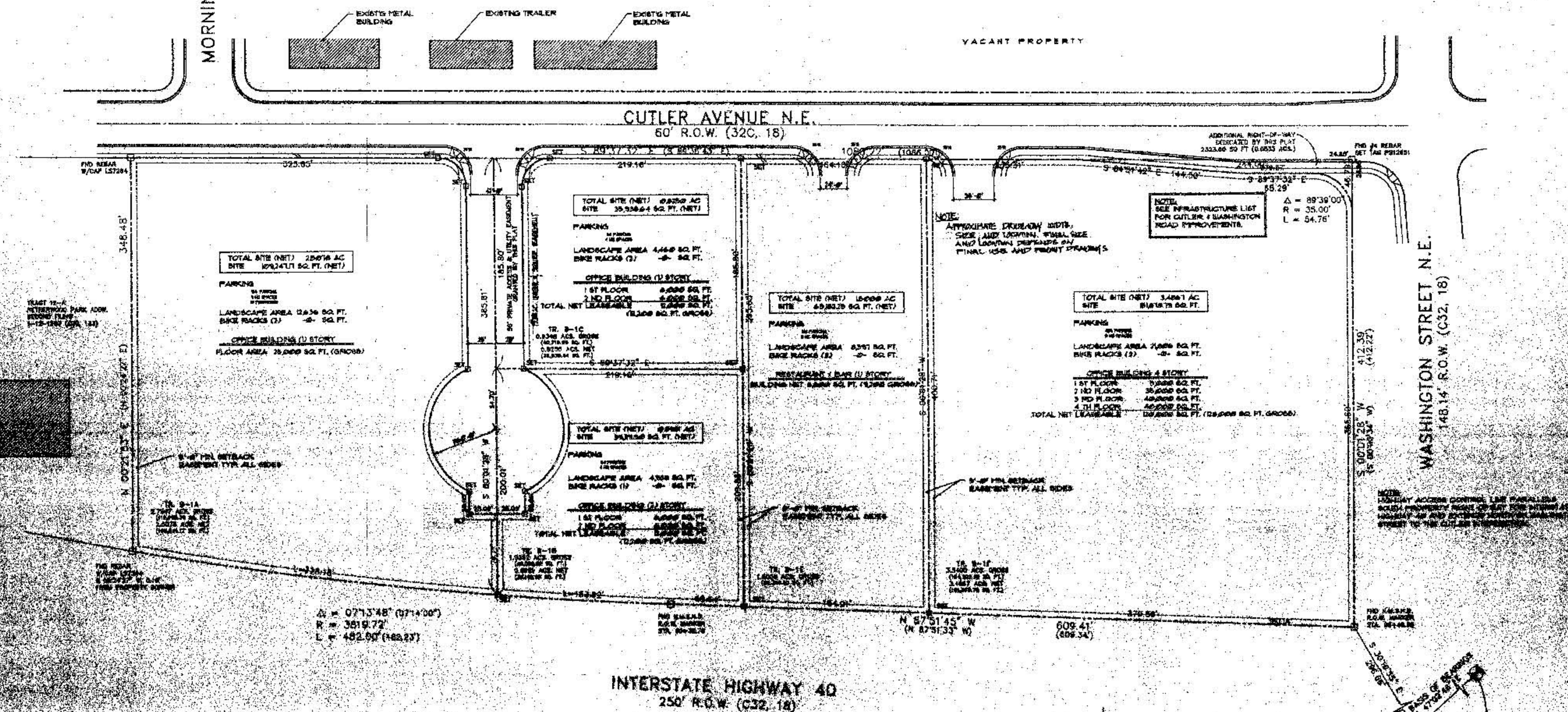
☐ ALL STORM DRAINAGE FACILITIES SHALL BE COMPLETED PRIOR TO FINAL ACCEPTANCE.



Anderson
Connell
Frederick
Architects

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Alhambra, CA 91801
(626) 286-1000
FAX (626) 286-1001

MORNINGSIDE



INTERSTATE HIGHWAY 40
250' R.O.W. (C32, 18)

SITE DEVELOPMENT PLAN FOR SUBDIVISION SITE ZONED C-3

NOTE: NO DIRECT VEHICULAR ACCESS FROM SUBJECT
PROPERTY TO WASHINGTON STREET NE

STANDARDS AND REQUIREMENTS:

VEHICULAR AND PEDESTRIAN ACCESS
ALONG WITH CIRCULATION SHALL BE
MAINTAINED THROUGH THE
DEVELOPMENT. PEDESTRIAN WALKS
SHALL COMBINE THE BUILDINGS AND TIE
TO THE ADJACENT STREETS. MAJOR
CROSSWALKS WITHIN THE DEVELOPMENT
WILL PROVIDE TOLERANCE AS WELL AS
COLOR FOR INDICATION AS
PEDESTRIAN WALKWAYS.

PARKING AREAS SHALL BE PROVIDED
ON EACH TRACT AS REQUIRED FOR THE
BUILDING USE. STANDARDS FOR
NUMBER, SIZE AND PAVEMENT OF PARKING
SPACES AND CIRCULATION AREAS WILL
BE SET. PARKING AREAS WILL BE
LIGHTED AND WILL INCLUDE SHADE
TREES IN GENEROUS TREE SHELLS.

AREA LIGHTING AND BUILDING LIGHTING
SHALL BE DESIGNED TO SHED LIGHT
AREAS OUTSIDE THE DEVELOPMENT
AND 1-40.

SIGNAGE SHALL BE RESTRICTED TO
BUILDING FACADES. SIGNAGE PER THE
C-2 ZONE AND 1 (ONE) MINIMUM SIGN
PER BUILDING COLOR TO MATCH
BUILDING.

LANDSCAPE BUFFER OF 10' (SEE PERM)
SHALL BE PROVIDED ALONG SCOTTY
PROPERTY LINE ALONG INTERSTATE 40.

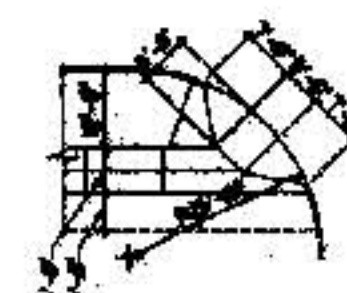
ALL IMPERVIOUS AREAS SHALL BE
SCREENED WITH SOLID WALLS - COLOR
TO MATCH BUILDING.

ALL HVAC EQUIPMENT SHALL BE
SCREENED FROM PUBLIC VIEW WITH A
SLOPED METAL WALL AND AROUND
EQUIPMENT ON ROOFS.

ARCHITECTURAL ELEMENTS SHALL BE
COORDINATED ON SITE PLAN FOR BUILDING
PERMITS AND THIS WILL BE GUARANTEED.

NO CELL TOWERS SHALL BE ALLOWED
UNLESS INTEGRATED INTO BUILDING OR
LIGHT STANDARDS.

A MINIMUM 10 FT. PLANTING AREA BETWEEN
AND AROUND ALL BUILDINGS.
SEPARATING ROADWAYS AND PARKING
SHALL BE ADOPTED TO THEM AT
REGULAR INTERVALS SHALL SHADE ALL
WALKWAYS AND MAY BE CLUSTERED.



(WHEEL CHAIR) CURB ACCESS RAMP
SCALE: 1/2" = 1'-0"

SCALE: 1" = 40'
PROJECT NO. 610-11
PLOT BY P.G.
ZONE ATLAS H-17-Z

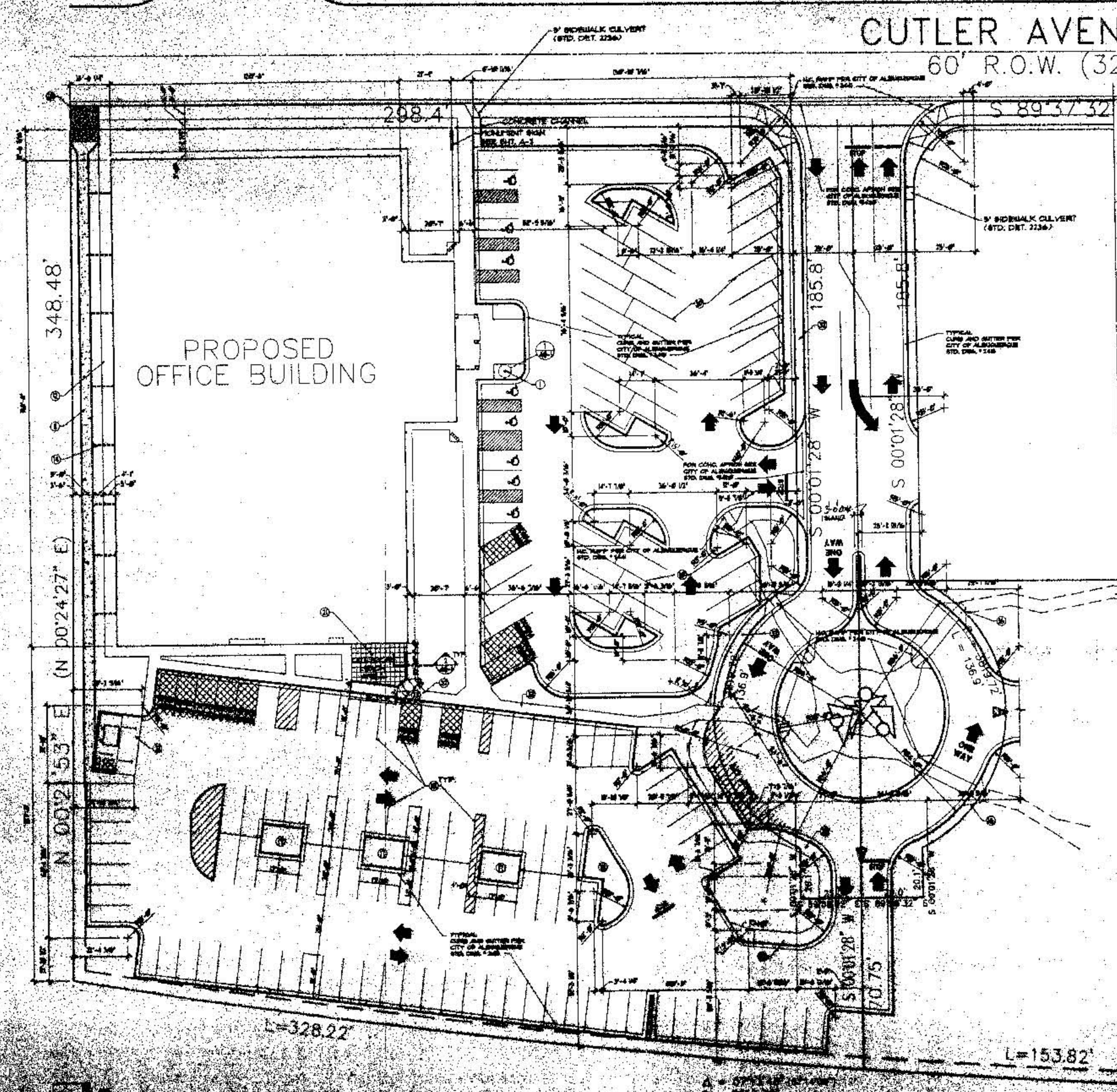
N.M.S.H.C. STATION 1-40-10
X = 398,552.75
Y = 1,493,138.25
GROUND TO GRID = 0.99966363
DELTA ALPHA = -0011'54"
NEW MEXICO STATE PLANE
COORDINATE SYSTEM
CENTRAL ZONE
NAD 1927

N.G.S. STATION KOAT-TVIT
X = 440,206.79
Y = 1,533,471.33
GROUND TO GRID = NONE PUBLISHED
DELTA ALPHA = -0006'56"
NEW MEXICO STATE PLANE
COORDINATE SYSTEM
CENTRAL ZONE
NAD 1927

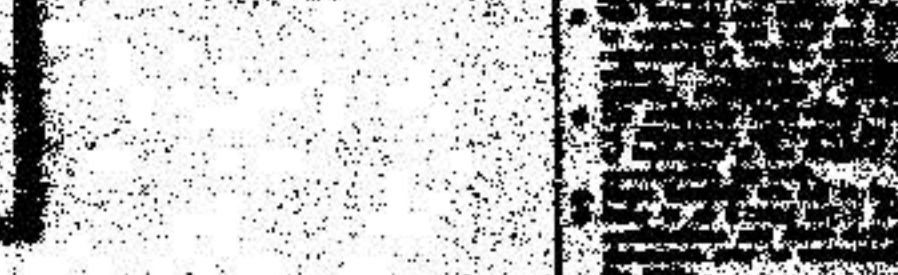
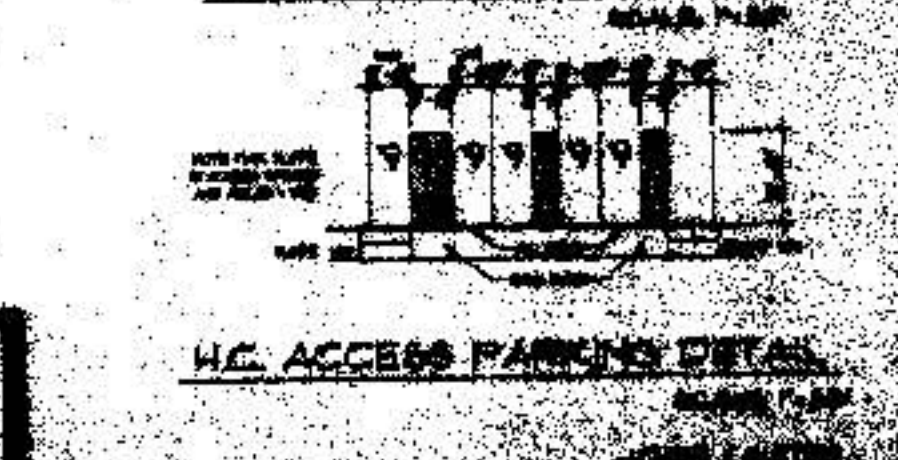
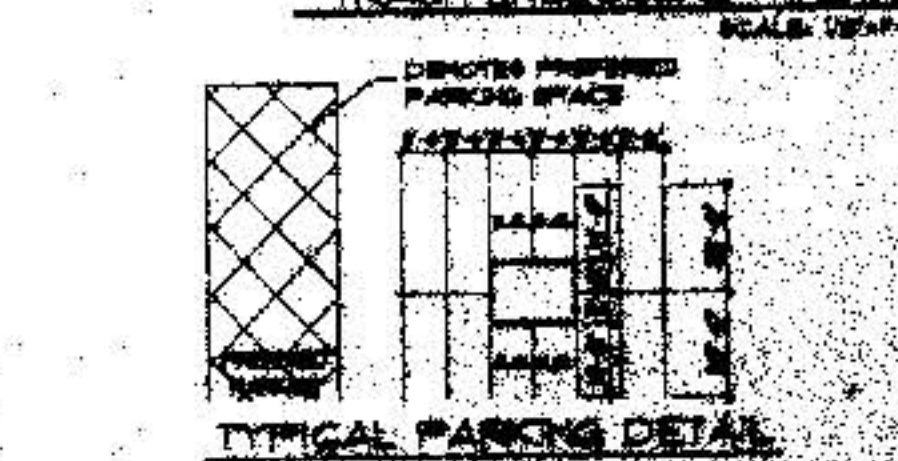
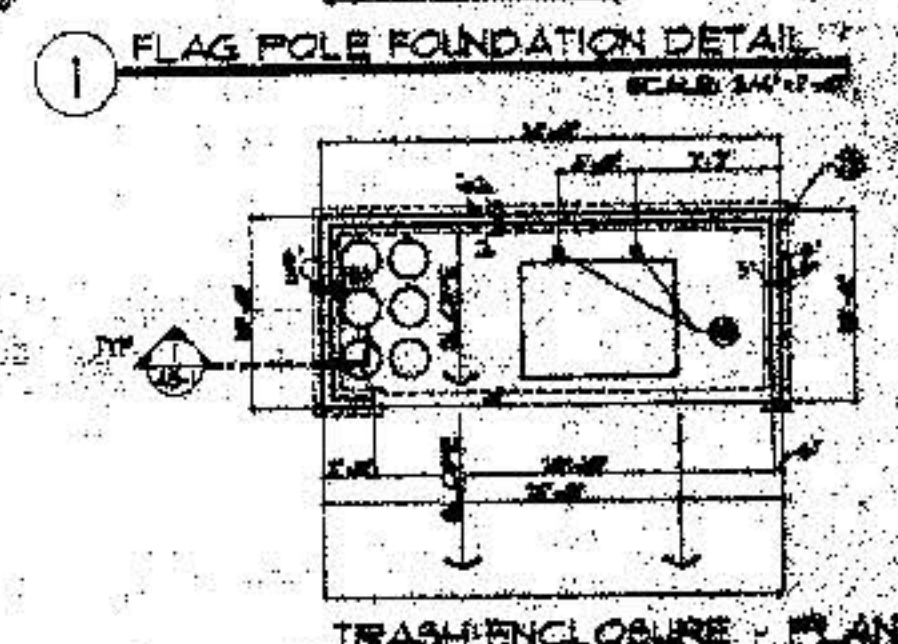
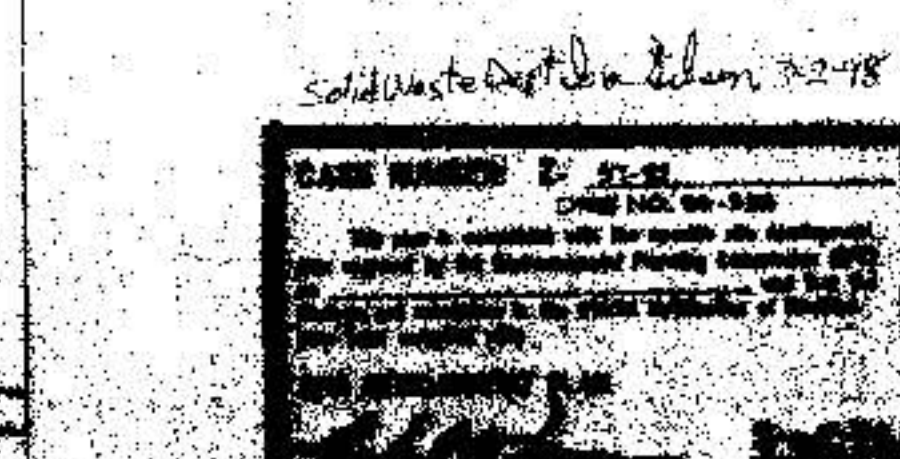
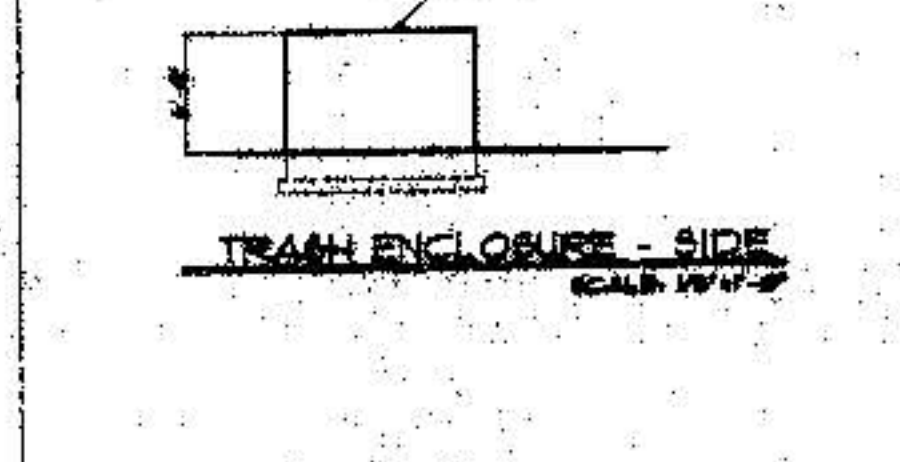
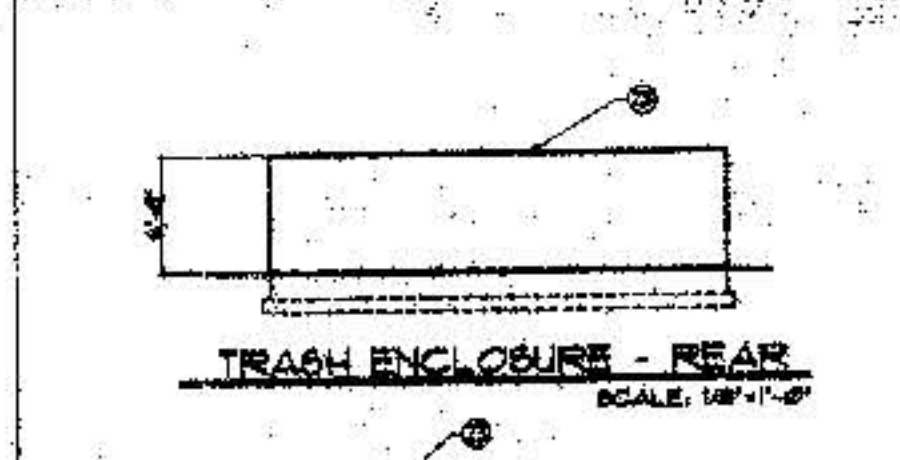
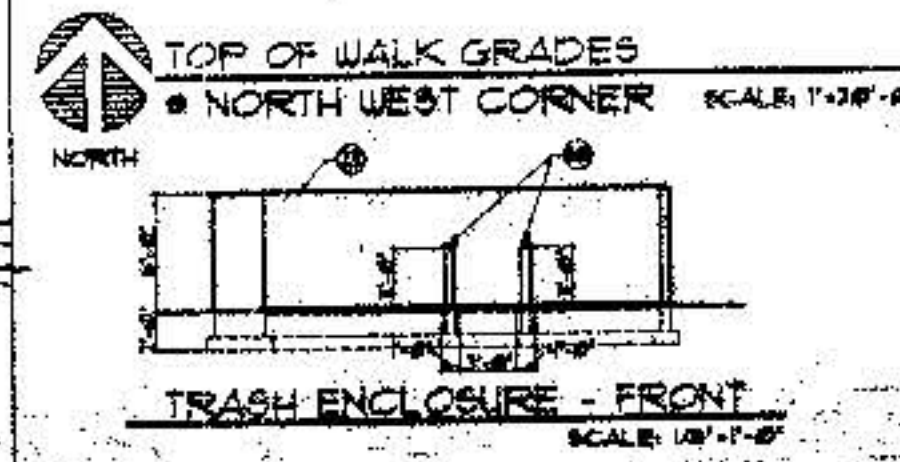
CASE NUMBER: 2-11-11
DATE: 11-11-11
BY: [Signature]
CHECKED: [Signature]
DATE: 11-11-11
APPROVED: [Signature]
DATE: 11-11-11
THIS PLAN IS THE PROPERTY OF THE ARCHITECT AND IS NOT TO BE REPRODUCED OR USED FOR ANY OTHER PROJECT WITHOUT THE WRITTEN PERMISSION OF THE ARCHITECT.

Standard Notes:
1. All dimensions are in feet and inches.
2. All dimensions are to the center of the line unless otherwise noted.
3. All dimensions are to the finished surface unless otherwise noted.
4. All dimensions are to the center of the line unless otherwise noted.
5. All dimensions are to the finished surface unless otherwise noted.

Sheet No.
3 OF 24



- KEYED NOTES**
1. FLAG POLE (SEE SPEC.)
 2. FLAG POLE FOUNDATION (SEE DET. 2236)
 3. WATERPROOF CONCRETE 1" DEEP
 4. 4" HARDWOOD TREATED JOISTS
 5. 6" GA. GALVANIZED CORR. STEEL
 6. 4" GELCO, STEEL, JOISTS
 7. CONCRETE
 8. 4" VIT. BUILT-UP STEEL
 9. 4" VIT. STEEL, LIGHTNING PROTECT
 10. 6" WIDE PAINTED, STEEL
 11. CONCRETE DRAINAGE CHANNEL
 12. 4" VIT. CONC. WALK
 13. 2" WIDE RACK
 14. 6" PVC DRAIN UNDER WALK
 15. DAYLIGHT THRU CURB & DRAINAGE
 16. 6" HIGH CONC. CURB & 4" GUTTER
 17. FUTURE H.C. RAMP FREE CITY OF ALBUQUERQUE
 18. STD. DNG. 244
 19. 1" WIDE AREA
 20. HANDICAPPED SIGN
 21. GRATE, SEE GRADING PLAN (STD. DETAIL # 2236)
 22. 2" WIDE CONC. TEST WALL
 23. CONC. WALL 1" SLOPED TOP (PAINTED)
 24. 2" WIDE CONC. TEST WALL
 25. 1" WIDE CONC. TEST WALL
 26. 1" WIDE CONC. TEST WALL
 27. 1" WIDE CONC. TEST WALL
 28. 1" WIDE CONC. TEST WALL
 29. 1" WIDE CONC. TEST WALL
 30. 1" WIDE CONC. TEST WALL
 31. 1" WIDE CONC. TEST WALL
 32. 1" WIDE CONC. TEST WALL

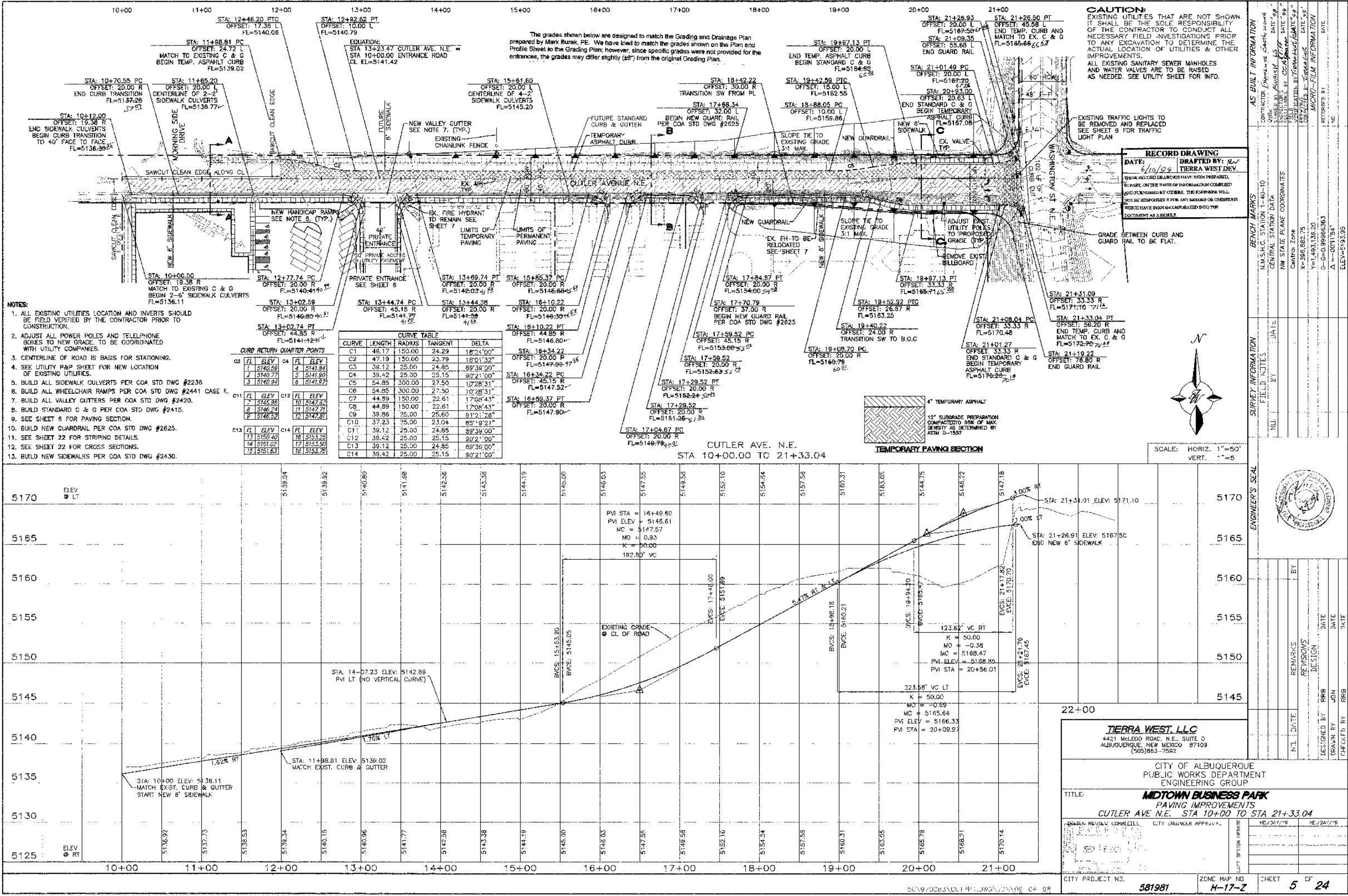


DATE: 10/1/78
BY: [Signature]
CHECKED: [Signature]
PROJECT: [Text]
DESCRIPTION: [Text]
SCALE: 1"=20'-0"

Anderson Cornel Frederick Architects
1000 10th Avenue N.E.
Albuquerque, N.M. 87102
TELEPHONE: (505) 243-1111

**OFFICE BUILDING
SOCIAL SECURITY ADMINISTRATION
SITE WORK AND SHELL BUILDING**

4 OF 24

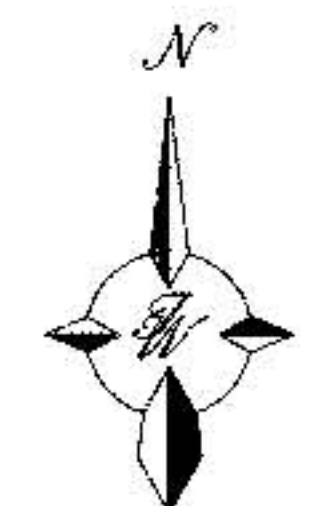


- NOTES:**
1. ALL EXISTING UTILITIES LOCATION AND INVERTS SHOULD BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
 2. ADJUST ALL POWER POLES AND TELEPHONE BOXES TO NEW GRADE. TO BE COORDINATED WITH UTILITY COMPANIES.
 3. CENTERLINE OF ROAD IS BASIS FOR STATIONING.
 4. SEE UTILITY P&P SHEET FOR NEW LOCATION OF EXISTING UTILITIES.
 5. BUILD ALL SIDEWALK CULVERTS PER COA STD DWG #2236.
 6. BUILD ALL WHEELCHAIR RAMPS PER COA STD DWG #2441 CASE II.
 7. BUILD ALL VALLEY GUTTERS PER COA STD DWG #2420.
 8. BUILD STANDARD C & G PER COA STD DWG #2415.
 9. SEE SHEET 6 FOR PAVING SECTION.
 10. BUILD NEW GUARDRAIL PER COA STD DWG #2625.
 11. SEE SHEET 22 FOR STRIPING DETAILS.
 12. SEE SHEET 22 FOR CROSS SECTIONS.
 13. BUILD NEW SIDEWALKS PER COA STD DWG #2430.

CURVE TABLE				
CURVE	LENGTH	RADIUS	TANGENT	DELTA
C1	48.17	150.00	24.29	18°24'00"
C2	47.19	150.00	23.79	18°01'32"
C3	39.12	25.00	24.85	89°38'00"
C4	39.42	25.00	25.15	90°21'00"
C5	54.85	300.00	27.50	10°28'31"
C6	54.85	300.00	27.50	10°28'31"
C7	44.89	150.00	22.61	17°08'43"
C8	44.89	150.00	22.61	17°08'43"
C9	39.86	25.00	25.60	91°21'28"
C10	37.23	25.00	23.04	85°19'21"
C11	39.12	25.00	24.85	89°38'00"
C12	39.42	25.00	25.15	90°21'00"
C13	39.12	25.00	24.85	89°38'00"
C14	39.42	25.00	25.15	90°21'00"

CAUTION:
EXISTING UTILITIES THAT ARE NOT SHOWN. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONDUCT ALL NECESSARY FIELD INVESTIGATIONS PRIOR TO ANY EXCAVATION TO DETERMINE THE ACTUAL LOCATION OF UTILITIES & OTHER IMPROVEMENTS.
ALL EXISTING SANITARY SEWER MANHOLES AND WATER VALVES ARE TO BE RAISED AS NEEDED. SEE UTILITY SHEET FOR INFO.

RECORD DRAWING
DATE: 6/10/09
DRAFTED BY: RW
TERRA WEST DEV.



SCALE: HORIZ. 1"=50'
VERT. 1"=5'

TERRA WEST, LLC
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CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

MIDTOWN BUSINESS PARK
PAVING IMPROVEMENTS
CUTLER AVE N.E. STA 10+00 TO STA 21+33.04

DESIGN REVIEW COMMITTEE
CITY ENGINEER APPROVAL
DATE: _____
BY: _____

CITY PROJECT NO. 581981
ZONE MAP NO. H-17-2
SHEET 5 OF 24

AS BUILT INFORMATION
CONTRACTOR: _____
DATE: _____
BY: _____

BENCH MARKS
NASSHC STATION 1+00-10
CENTRAL STATION DATA
NASSHC STATION 1+00-10
NASSHC STATION 1+00-10
NASSHC STATION 1+00-10

SURVEY INFORMATION
FIELD NOTES
DATE: _____
BY: _____

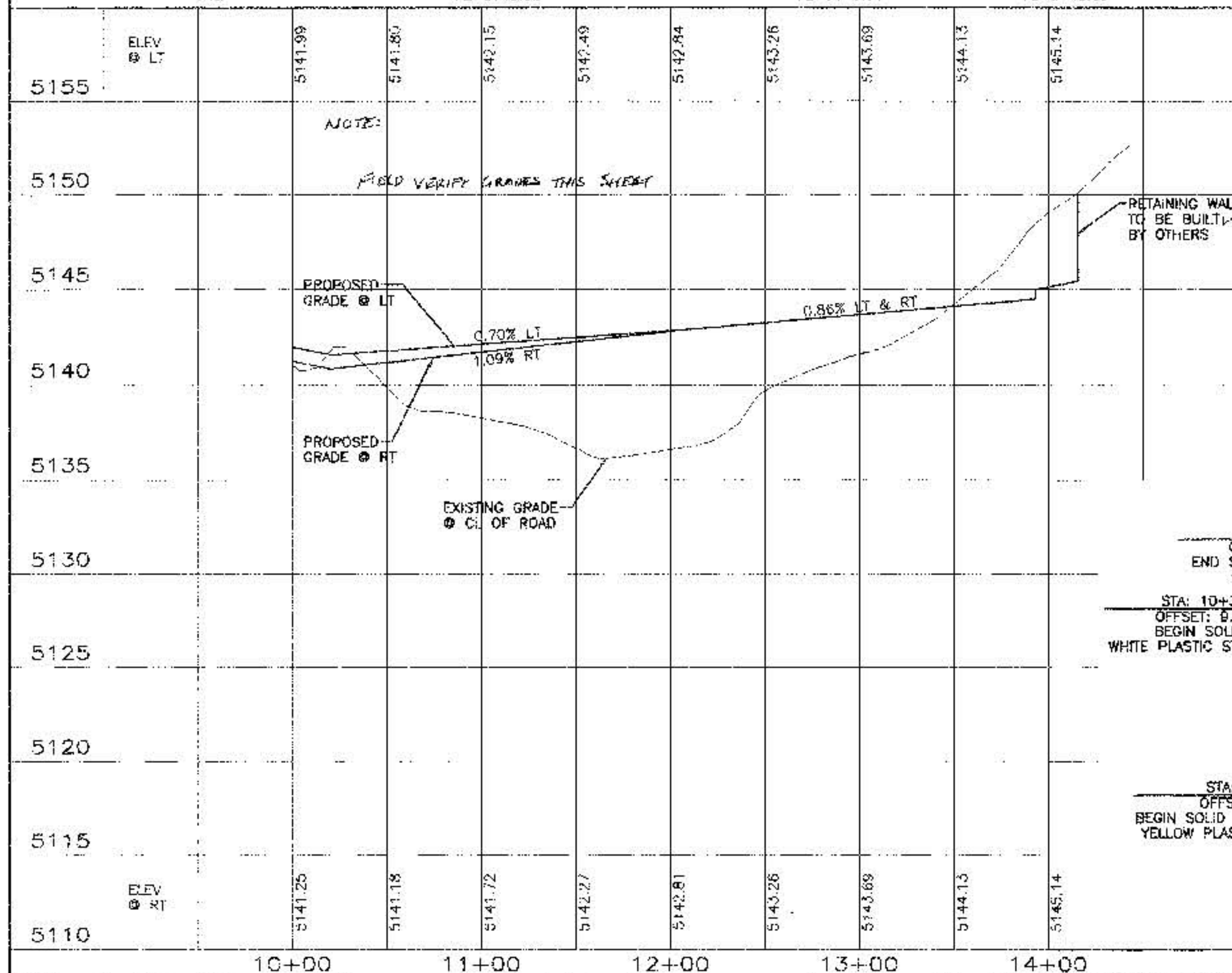
ENGINEER'S SEAL
DATE: _____
BY: _____

REVISIONS
DATE: _____
BY: _____

DESIGNED BY
DATE: _____
BY: _____

CHECKED BY
DATE: _____
BY: _____

EQUATION:
STA 10+00.00 ENTRANCE ROAD
STA 13+23.47 CUTLER AVE. N. E.
FL=5141.42

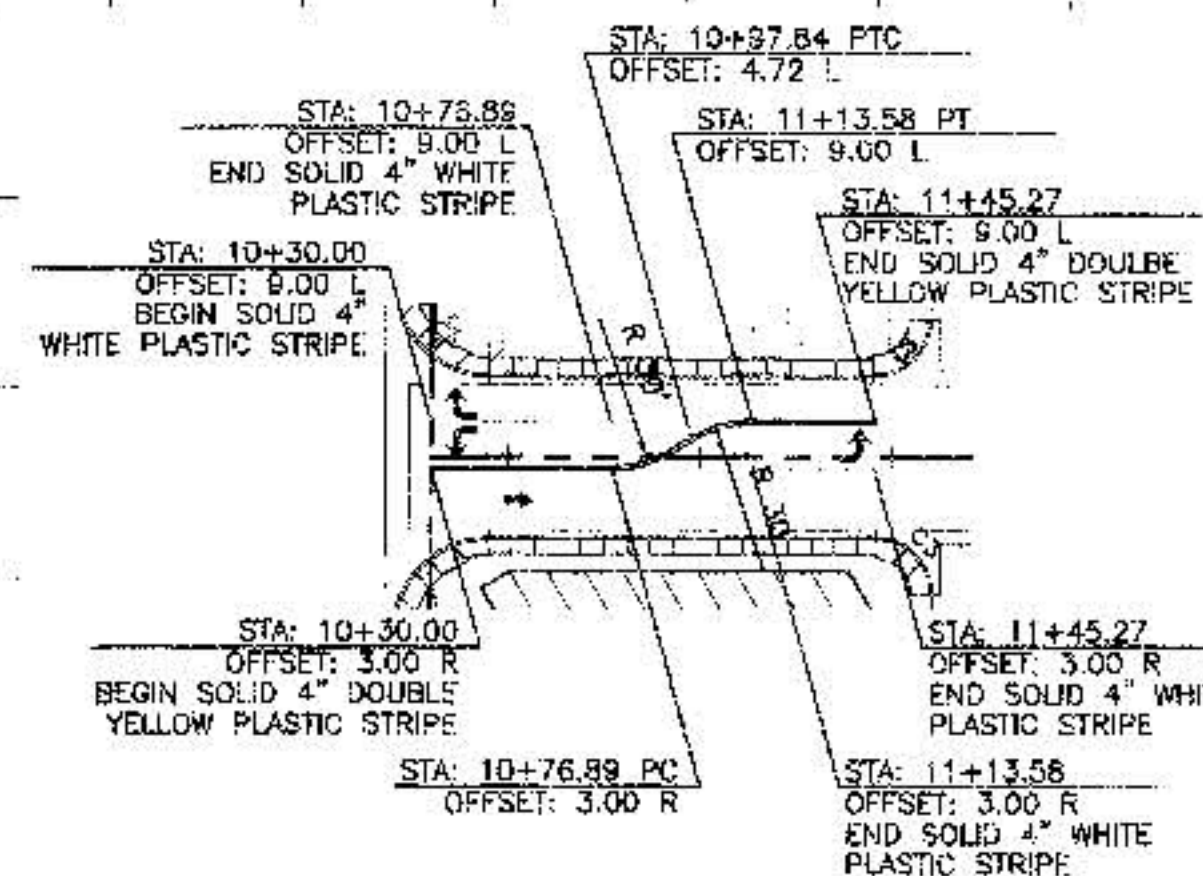
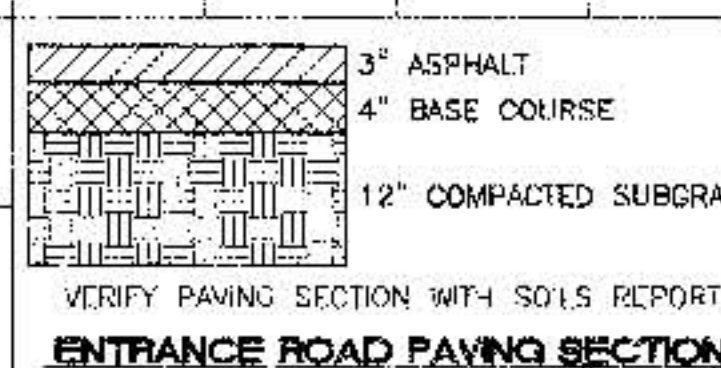


CARD RETURN QUARTER POINTS

C1	FL	ELFV	C2	FL	ELFV	C3	FL	ELFV
1	5141.59		4	5142.59		7	5142.54	
2	5142.59		5	5142.59		8	5142.59	
3	5141.94		6	5140.94		9	5142.39	
C4	FL	ELFV	C5	FL	ELFV	C6	FL	ELFV
10	5142.84		13	5142.39		16	5142.85	
11	5142.87		14	5142.44		17	5142.84	
12	5142.79		15	5142.55		18	5142.82	
C15	FL	ELFV	C25	FL	ELFV			
19	5143.35		22	5144.19				
20	5143.42		23	5144.25				
21	5143.49		24	5144.30				

- NOTES:
1. ALL EXISTING UTILITIES LOCATION AND INVERTS SHOULD BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
 2. CENTERLINE OF ROAD IS BASIS FOR STATIONING.
 3. SEE UTILITY P&P SHEET FOR NEW LOCATION OF EXISTING UTILITIES.
 4. BUILD ALL SIDEWALK CULVERTS PER COA STD DWG #2236.
 5. BUILD ALL SIDEWALK RAMPS PER COA STD DWG #2441.
 6. BUILD ALL VALLEY GUTTERS PER COA STD DWG #2420.
 7. BUILD STANDARD C & G PER COA STD DWG #2415.

MIDTOWN BUSINESS PARK ENTRANCE
STA 10+00.00 TO 13+93.20



10+00 11+00 12+00 13+00 14+00

2" ASPHALT CONCRETE TYPICAL FINISH COURSE PLACED AFTER ALL NAILHOLES, VALVES, COVERS/RINGS ARE SET TO GRADE. 1800 LBS STABILITY TYPE B GRADATION.

TACK COAT AS REQUIRED BY THE ENGINEER BETWEEN ALL ASPHALT/AGGREGATE MATERIAL LIFTS.

2" ASPHALT CONCRETE, 1600 LBS. STABILITY, TYPE B GRADATION.

6" AGGREGATE BASE COURSE R-VALUE=50. 95% MIN. COMPACTION ASTM D1557

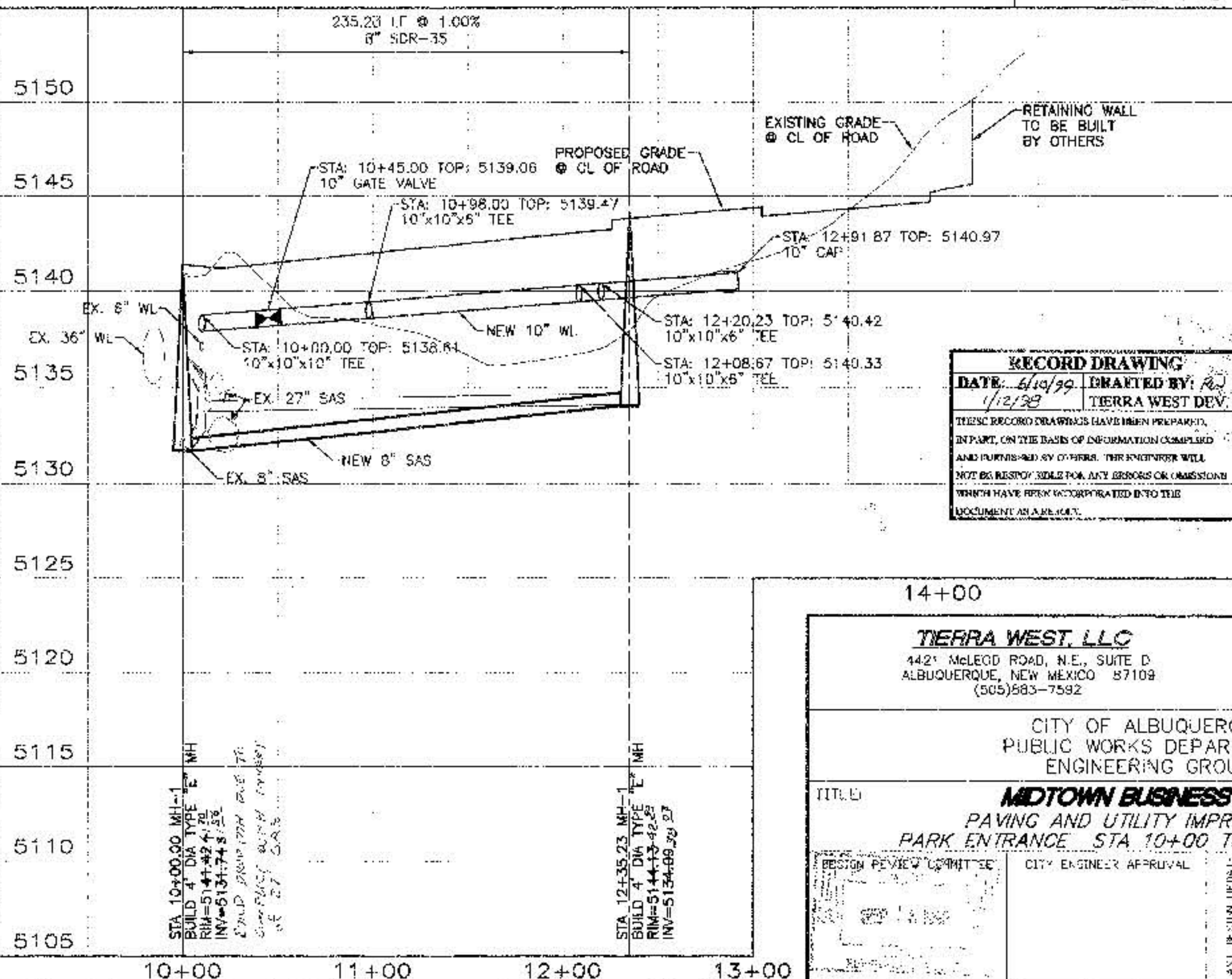
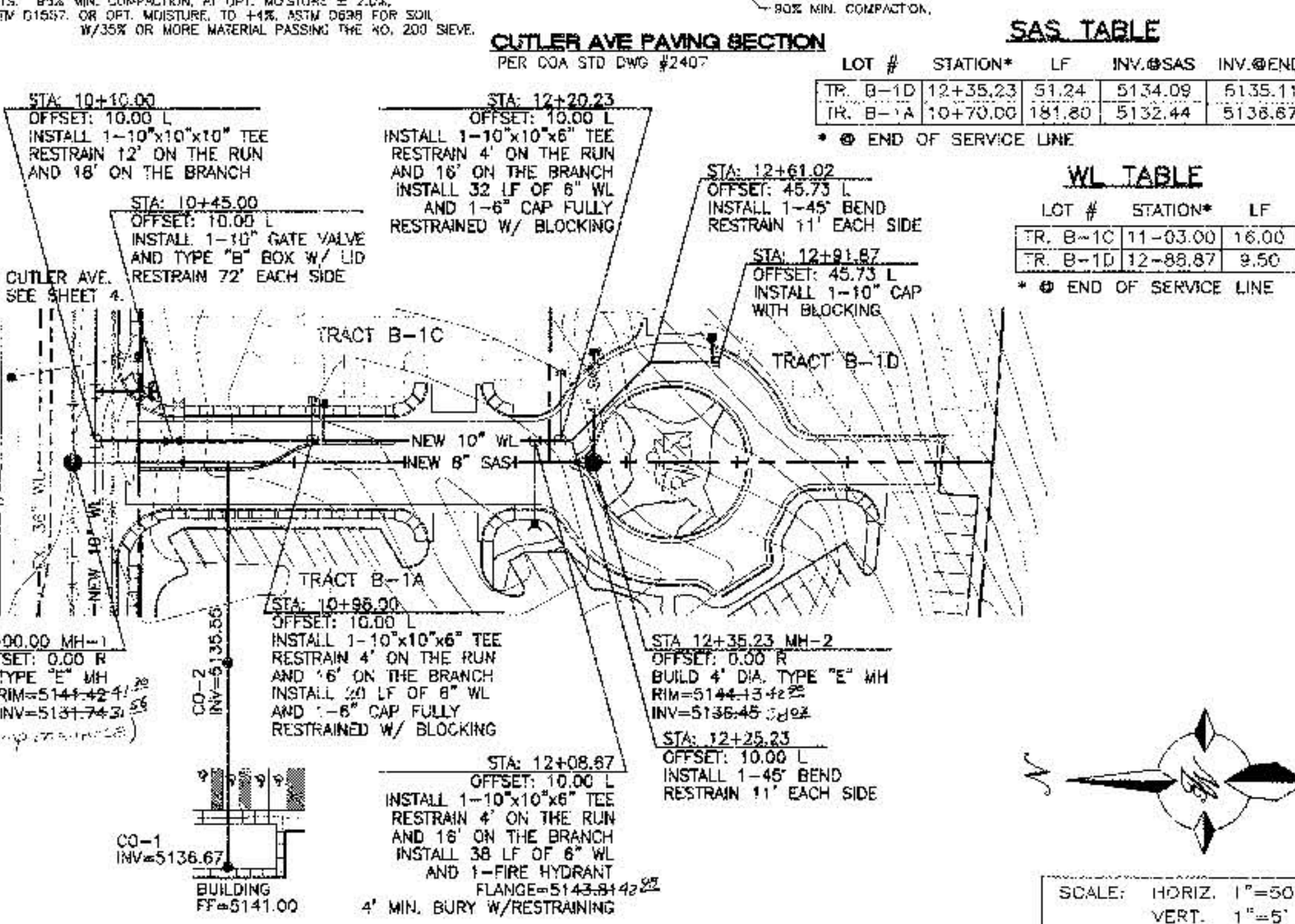
FINISH SURFACE OF SUBGRADE SHALL BE MOISTURE CONTROLLED TO COMPACTION MOISTURE RANGE OR PRIME COAT APPLIED AS REQUIRED BY THE ENGINEER UNTIL NEXT/FINAL SURFACING IS COMPLETED. SUBGRADE PREPARATION SHALL BE PERFORMED AFTER ALL SUBSURFACE R/W UTILITIES CONSTRUCTION COMPLETED.

SUBGRADE SOIL, R-VALUE=50. PLACED IN 2'-6" COMPACTED

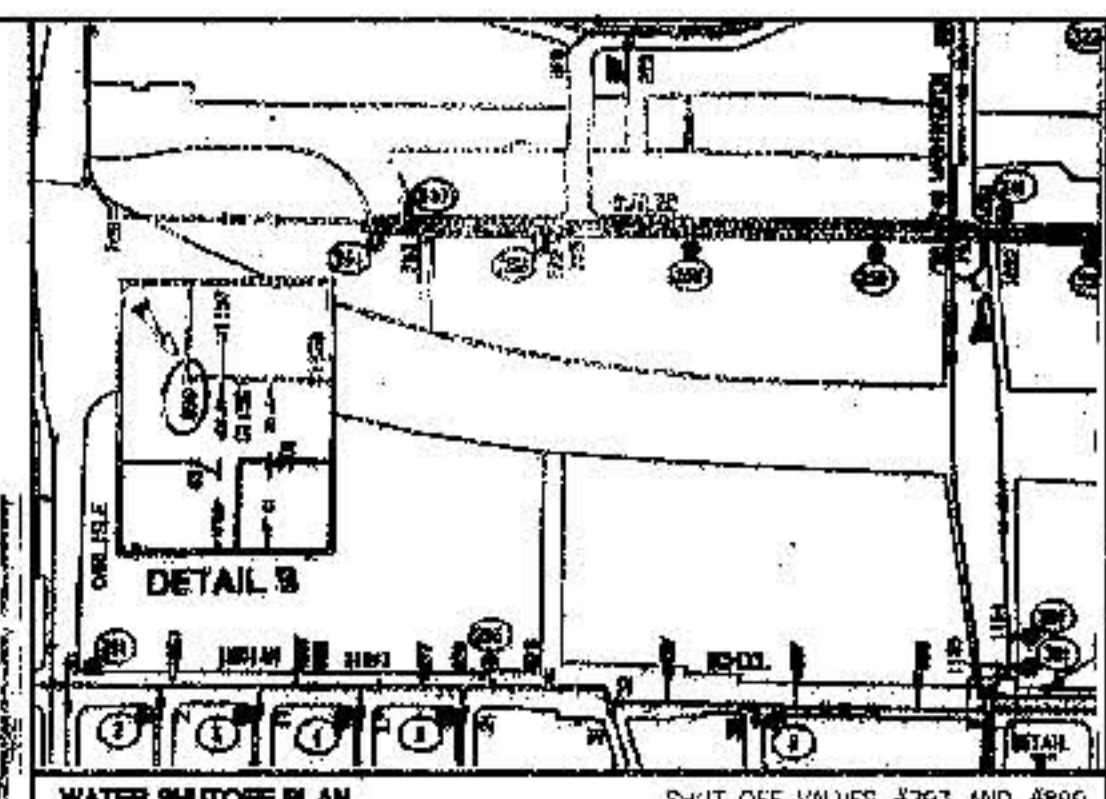
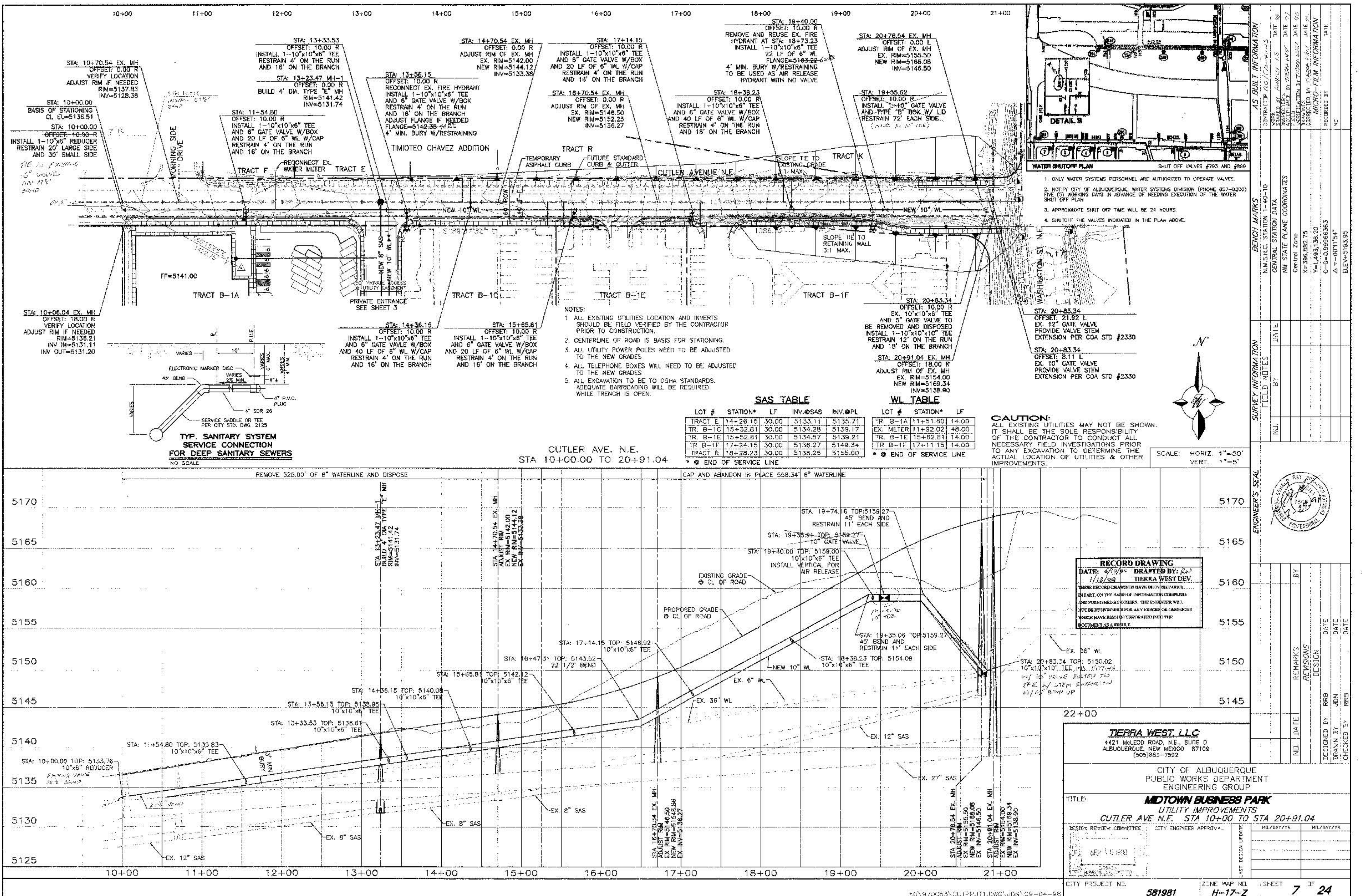
12"

STANDARD C&G PER C.O.A. STD DWG #2415

COMPACTED SUBGRADE TO 90% ASTM D1557



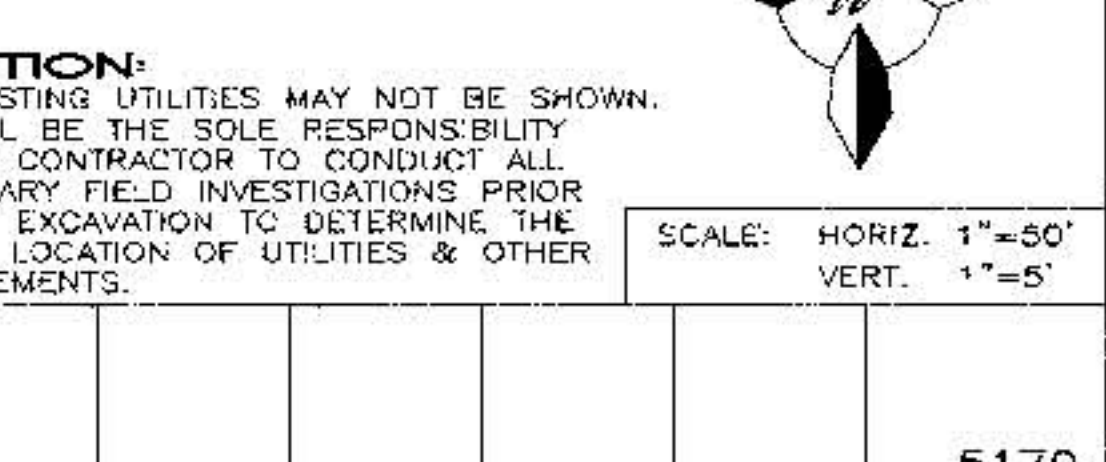
ENGINEER'S SEAL		SURVEY INFORMATION		BENCH MARKS		AS BUILT INFORMATION	
		FIELD NOTES		N.M.S.I.C. STATION 1+40-10		CONTRACT FILES: C-09863-2	
		NO.	BY	DATE	INSPECTED BY: [Signature]	DATE: 4/4	STARTED BY: [Signature]
REMARKS		BY		NM STATE PLANE COORDINATES		CHECKED BY: [Signature]	
NE, DATE				Central Zone		DRAWN BY: [Signature]	
REVISIONS				X=396,882.75		MICRO-FILM INFORMATION	
DESIGN				Y=5,493,36.20		RECORDED BY:	
DESIGNED BY: RRB		DATE		C-G=0.99966363		DATE	
DRAWN BY: RRB		DATE		Δ = -0.01154°		NF	
CHECKED BY: RRB		DATE		Elev=5183.85			



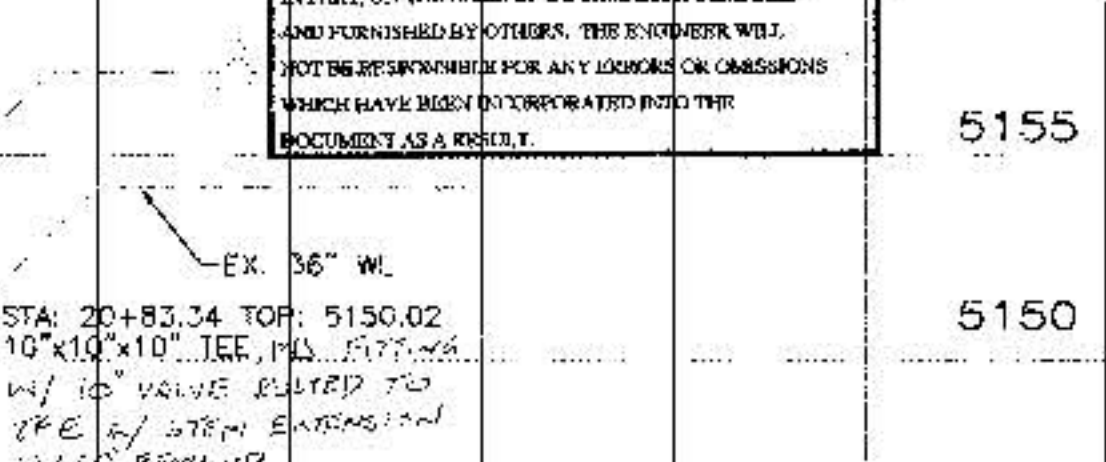
1. ONLY WATER SYSTEMS PERSONNEL ARE AUTHORIZED TO OPERATE VALVES.
2. NOTIFY CITY OF ALBUQUERQUE, WATER SYSTEMS DIVISION (PHONE 857-8200) FIVE (5) WORKING DAYS IN ADVANCE OF NEEDING EXECUTION OF THE WATER SHUTOFF PLAN.
3. APPROXIMATE SHUT OFF TIME WILL BE 24 HOURS.
4. SHUTOFF THE VALVES INDICATED IN THE PLAN ABOVE.



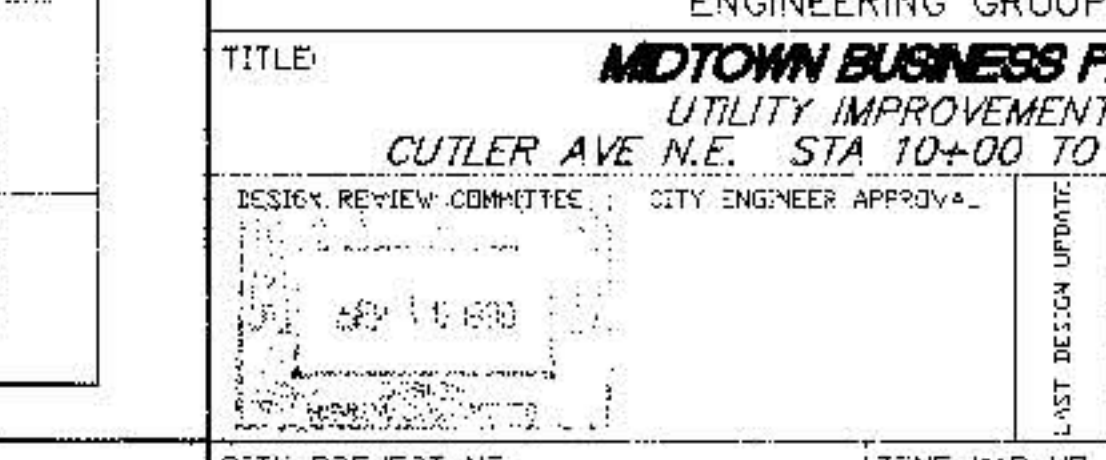
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AS BUILT INFORMATION			
CONTRACT NO.	DATE	BY	DATE
100-100-100	1/12/92	RA	1/12/92

BENCH MARKS			
MARK	STATION	DATE	BY
NM SING.	STATION 1-40-10		
CENTRAL	STATION DATA		
NM STATE	PLANE COORDINATES		
Control	Zone		
X=396,882.75			
Y=1,493,352.20			
C=0-00000000			
ELEV=5193.95			

SURVEY INFORMATION			
NO.	DATE	BY	DATE
1			
2			
3			
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10			

ENGINEER'S SEAL			
NO.	DATE	BY	DATE
1			
2			
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REVISIONS			
NO.	DATE	BY	DATE
1			
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DESIGNER'S SEAL			
NO.	DATE	BY	DATE
1			
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10			

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP			
TITLE	DESIGNER	REVIEW COMMITTEE	CITY ENGINEER APPROVAL
MIDTOWN BUSINESS PARK UTILITY IMPROVEMENTS CUTLER AVE N.E. STA 10+00 TO STA 20+91.04	RA		

TERRA WEST, LLC			
4421 MCLEOD ROAD, N.E., SUITE D	ALBUQUERQUE, NEW MEXICO 87109	(505) 883-7592	
DATE	1/12/92	DRAWN BY	RA
DATE	1/12/92	CHECKED BY	RA
DATE	1/12/92	DESIGNED BY	RA
DATE	1/12/92	REVISIONS	
DATE	1/12/92	BY	
DATE	1/12/92	NO.	

CITY PROJECT NO. 581981			
ZONE MAP NO. H-17-Z	SHEET 7	OF 24	
DATE	1/12/92	BY	RA
DATE	1/12/92	CHECKED BY	RA
DATE	1/12/92	DESIGNED BY	RA
DATE	1/12/92	REVISIONS	
DATE	1/12/92	BY	
DATE	1/12/92	NO.	

SIGNAL NOTES

- ALL WORK ON THESE PLANS TO BE PERFORMED UNDER THIS CONTRACT SHALL CONFORM TO THE CURRENT NATIONAL ELECTRIC CODE, THE STANDARDS OF THE NATIONAL BOARD OF FIRE UNDERWRITERS FOR ELECTRICAL WIRING AND APPARATUS, AND THE CITY'S TRAFFIC ENGINEERING OPERATIONS THIRD DRAFT SPECIFICATIONS (JUNE 1994).
- LOCATIONS OF CONDUITS, FOUNDATIONS, CONTROL CABINETS, POLES, PULL BOXES, MANHOLES, AND SPICE 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.
- 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 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.
- SPlicing OF COMMUNICATIONS CABLE WILL NOT BE PERMITTED IN PULL BOXES. SPlicing OF COMMUNICATIONS CABLE (CONNECTIONS) WILL BE PERMITTED ONLY AT SPICE CABINETS OR CONTROLLER CABINETS WITH SPICE BARS. SPlicing OF TRAFFIC SIGNALS 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.
- 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.
- 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.
- THE CONTRACTOR SHALL NOTIFY THE CITY OF ALBUQUERQUE TRAFFIC ENGINEERING OPERATIONS (857-8000) 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.
- 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.
- THE CONTRACTOR SHALL REMOVE ALL CONFLICTING SIGNING AND DELIVER TO THE CITY TRAFFIC ENGINEERING YARDS WHEN TRAFFIC SIGNALS ARE PUT INTO OPERATION.
- 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.
- 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.
- FOR CONDUITS CONTAINING ONLY LOW VOLTAGE COMMUNICATIONS CABLES, THE REQUIREMENTS FOR A SINGLE CONDUCTOR BARE COPPER #8 AWG MAY BE WAIVED WHERE PERMITTED BY THE NATIONAL ELECTRIC CODE.
- THE CITY OF ALBUQUERQUE TRAFFIC ENGINEERING OPERATIONS PERSONNEL WILL PROVIDE TRAFFIC SIGNAL TIMING PLANS AND WILL PROGRAM TRAFFIC SIGNAL CONTROLLERS.
- EXISTING CONDUITS TO BE REMOVED OR ABANDONED SHALL HAVE ALL WIRING REMOVED.
- EXISTING CONDUITS SHALL BE REPAIRED, ADJUSTED, OR REPLACED AS DIRECTED BY THE PROJECT MANAGER WHERE ELECTRICAL PULLBOXES OR TRAFFIC MANHOLES ARE INSTALLED OR REPLACED.
- CONTRACTOR SHALL COIL EXCESS INTERCONNECT CABLE AT ALL NEW OR EXISTING TRAFFIC MANHOLES BETWEEN SPICE CABINET OR CONTROL CABINETS WITH SPICE BARS. IF MORE THAN ONE MANHOLE EXISTS BETWEEN SPICE CABINETS OR CONTROL CABINETS WITH SPICE BARS, THEN COILING IS ONLY REQUIRED AT ONE OF THE MANHOLES. THE FOLLOWING QUANTITIES OF COMMUNICATION CABLE SHALL BE COILED:
12 PAIR - 50 FT.
25 PAIR - 50 FT.
50 PAIR - 25 FT.
75 PAIR - 25 FT.
- THE CONTRACTOR SHALL PROVIDE OFF-DUTY POLICE OFFICERS TO DIRECT TRAFFIC WHEN SIGNALS ARE TURNED OFF.
- 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.
- 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 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.
- CABINET AND CONTROLLER NEED TO BE I.D.C. 820A.

INCIDENTAL ITEMS *

- REMOVAL OF EXISTING PULL BOXES, CONDUITS, OR OTHER SIGNAL EQUIPMENT FOR INSTALLATION OF NEW SIGNAL EQUIPMENT.
- CABLE TESTING AND DIAGRAMS.
- BORING, DRILLING, PUSHING, AND TRENCHING, INCLUDING REMOVAL AND REPLACEMENT OF PAVEMENT, SIDEWALKS, DRIVEWAYS, 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.
- LOCATION OF UTILITY LINES INCLUDING EXPLORATORY TRENCHING AND EXPOSING OF GAS LINES WHEN BORING.
- DESIGN, MATERIALS, INSTALLATION AND REMOVAL OF SAFETY BARRIER FOR SHIELDING EQUIPMENT OR MATERIAL.
- APPRIISING PUBLIC THROUGH THE LOCAL NEWS MEDIA.
- HAULING OF MATERIAL TO BE DISPOSED TO CITY LANDFILL.
- REMOVAL, SALVAGE, AND TRANSPORTATION OF EXISTING SIGNAL EQUIPMENT TO THE CITY TRAFFIC ENGINEERING OPERATIONS YARD.
- LEAN FILL FOR CONDUIT TRENCHES.
- PULL BOX ADJUSTMENT TO GRADE.
- OFF-DUTY POLICE OFFICER FOR TRAFFIC CONTROL.
- REMOVAL AND REPLACEMENT IN KIND OF BETTER OF LANDSCAPING INCLUDING SPRINKLERS, FOR INSTALLATION OF PULL BOXES, CONDUITS AND SIGNAL FOUNDATIONS.
- 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.

LIGHTING NOTES

- LOCATIONS OF CONDUITS, FOUNDATIONS, PULL BOXES, AND CONTROL 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.
- ALL WIRE ON THIS PROJECT TO BE COPPER ONLY.
- ALL ROADWAY AND OVERHEAD SIGN LIGHTING CIRCUITS ON THIS PROJECT SHALL BE 240 VOLTS.
- ALL PULL BOXES INSTALLED FOR ROADWAY, OVERHEAD SIGN STRUCTURES, OR PEDESTRIAN LIGHTING SHALL BE STANDARD SIZE.
- CONTRACTOR SHALL REMOVE EXISTING CONDUITS AND PULL BOXES THROUGH OUT THE PROJECT AS DIRECTED BY PROJECT MANAGER.
- REWIRING OF EXISTING LUMINAIRES TO REMAIN, TO BE REMOVED AND RESET, AND CONNECTIONS TO NEW CIRCUITS SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION.
- EACH CIRCUIT FOR ROADWAY LIGHTING, PEDESTRIAN LIGHTING, OVERHEAD SIGN LIGHTING AND UNDERPASS LIGHTING SHALL BE INSTALLED IN SEPARATE CONDUITS UNLESS APPROVED OTHERWISE.
- EACH TIME A ROADWAY LUMINAIRE, OVERHEAD SIGN LUMINAIRE, UNDERPASS LUMINAIRE OR ORNAMENTAL (PEDESTRIAN) LUMINAIRE IS TURNED ON OR OFF THE CONTRACTOR SHALL COORDINATE WITH THE FOLLOWING REPRESENTATIVES:
LOCAL POWER COMPANY
CITY OF ALBUQUERQUE
POWER SHALL NEITHER BE TURNED ON OR OFF UNTIL RESPONSIBLE PARTIES FOR EACH LIGHTING SYSTEM HAVE BEEN NOTIFIED.
- RESPONSIBILITY AND MAINTENANCE OF LIGHTING SYSTEMS INSTALLED AS PART OF THIS PROJECT SHALL BE AS FOLLOWS:
A. ROADWAY LIGHTING SYSTEM SHALL BE ACCEPTED AND MAINTAINED BY CITY OF ALBUQUERQUE. THE CONTRACTOR SHALL PROVIDE THE CITY OF ALBUQUERQUE AND PNM FIVE(5) WORKING DAYS NOTICE IN ADVANCE OF TURNING ON THE SYSTEM SO AS TO ALLOW THE CITY OF ALBUQUERQUE AND PNM TO INSPECT AND APPROVE THE SYSTEM BEFORE IT IS TURNED ON.
THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE AND COST OF ENERGIZING ALL LIGHTING SYSTEM UNTIL SUCH TIME THAT THE APPROPRIATE OWNER AND MAINTAINING AGENCY ACCEPT THE RESPONSIBILITY FOR THEIR RESPECTIVE SYSTEMS.
- THE CONTRACTOR SHALL PAY FOR COSTS FOR PNM TO PROVIDE POWER SERVICE. THESE COSTS WILL BE (MEASURED AND PAID UNDER CONTRACT ITEM 706340 - POWER SERVICE INSTALLATION SEE SPECIAL PROVISIONS/INCIDENTAL).
- CONTRACTOR SHALL COORDINATE WITH POLE MANUFACTURER TO MATCH BOLT PATTERN OF NEW TYPE V STANDARDS WITH THAT OF EXISTING FOUNDATIONS TO REMAIN.
- ALL LIGHTING CONTROL CABINETS SHALL INCLUDE PHOTO ELECTRIC CELLS.
- THE DESIGN IS BASED UPON GE OR APPROVED EQUAL TYPE (H), (400) WATT, (HIGH PRESSURE SODIUM), (FULL-OUT-OFF), (FLAT GLASS) LUMINAIRES (WITH INDIVIDUAL PHOTO CELLS). THE CONTRACTOR SHALL FURNISH AND INSTALL THIS TYPE OF FIXTURE.
- LIGHTING IS TO BE SERVED BY METER PEDESTAL IN COMBINATION WITH TRAFFIC SIGNALS (SEE SIGNAL PLANS).
- THE CONTRACTOR SHALL REMOVE EXISTING SERVICE RISERS, SERVICE POLES, CONTROL CABINETS, AND EXISTING WIRING AS REQUIRED BY PNM AND AS DIRECTED BY THE PROJECT MANAGER.
- ALL LIGHTING CONTROL CABINETS SHALL BE TESCO (OR APPROVED EQUAL). THE CONTRACTOR SHALL SUBMIT A COPY OF THE LIGHTING PLANS TO THE MANUFACTURER. THE MANUFACTURER SHALL REVIEW PLANS AND MODIFY THE EQUIPMENT IN EACH CABINET AS NECESSARY TO ACCOMMODATE LIGHTING REQUIREMENTS AS SHOWN ON PLANS. THE MANUFACTURER SHALL SUBMIT SHOP DRAWINGS OF EACH CABINET TO THE PROJECT MANAGER AND PNM FOR REVIEW AND APPROVAL PRIOR TO MANUFACTURING OF CABINETS. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CABINET AND NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE THEREFORE.
- LIGHTING WILL BE COMPLETED WITH CONSTRUCTION PHASING, REFER TO SECTION 6. NEW LIGHTING SHALL BE OPERATIONAL PRIOR TO OPENING ROADWAY TO TRAFFIC.

LIGHTING INCIDENTAL ITEMS

- ANCHOR BOLTS FOR FOUNDATIONS.
- GROUND RODS FOR FOUNDATIONS.
- UNIVERSAL SUPPORT BRACKETS FOR SERVICE RISERS.
- CONCRETE FOUNDATION FOR LIGHTING CONTROL CABINETS INCLUDING EXCAVATION, BACKFILL, CONCRETE, GROUND RODS, AND ANCHOR BOLTS.
- REWIRING OF ANY EXISTING LUMINAIRES TO REMAIN OR BE RESET.
- SINGLE CONDUCTOR #10 AWG COPPER WIRE CONNECTIONS FROM MAIN CIRCUIT TO LUMINAIRES.
- REMOVAL OF EXISTING STANDARDS AND LUMINAIRES AND DELIVERY TO THE CITY OF ALBUQUERQUE.
- SHOP DRAWING PREPARATION AND COORDINATION FOR LIGHTING CONTROL CABINETS.
- ENERGY COST OF THE LIGHTING SYSTEM UNTIL ACCEPTANCE BY THE MAINTAINING AGENCY.

TRAFFIC SIGNAL EQUIPMENT REQUIREMENTS

- SPICE CABINETS SHALL BE AS DETAILED ON THE PLANS. LOW VOLTAGE SPICE BLOCKS SHALL BE 50 UNITS TO THE FOOT, WITH EACH SPICE BLOCK CAPABLE OF HANDLING 25 PAIR CABLE (NUMBER OF SPICE BLOCKS IN EACH CABINET CAPABLE OF HANDLING NUMBER OF CONDUCTORS SHOWN ON PLANS). SPICE BLOCKS SHALL BE BELL SYSTEMS PART #6683-50 OR APPROVED EQUAL. ALL COMMUNICATION CABLE PAIRS SHALL BE TERMINATED AT THE SPICE BLOCK INCLUDING INACTIVE PAIRS.
- INTERCONNECT CABLES SHALL COMPLY WITH REA SPECIFICATIONS PE-22. INTERCONNECT CABLE SHALL CONTAIN THE NUMBER OF WIRE PAIRS SHOWN ON THE PLANS AND THE INDIVIDUAL CONDUCTORS SHALL BE 19 AWG SOLID.
- EMERGENCY VEHICLE PRE-EMPT EQUIPMENT SHALL BE 3M "OPTICOM" MODEL 782 PHASE SELECTORS MOUNTED ON 3M "OPTICOM" MODEL 820 RACKS, OR APPROVED EQUAL. ALL RACKS SHALL BE CAPABLE OF PROVIDING FOUR CHANNELS OF DETECTION. PHASE SELECTOR MODULES SHALL BE CAPABLE OF TWO CHANNELS OF DETECTION EACH. OPTICAL DETECTORS SHALL BE 3M "OPTICOM" MODEL 511, 1 CHANNEL, 1 DIRECTION OR APPROVED EQUAL. OPTICAL DETECTOR CABLE SHALL BE 3M "OPTICOM" MODEL 138 OR EQUAL. OPTICAL EMITTERS SHALL BE 3M "OPTICOM" MODEL 592 WITH POWER SUPPLY, CABLE, AND SWITCHES, OR APPROVED EQUAL. A MANUFACTURER'S REPRESENTATIVE SHALL ASSIST THE CONTRACTOR IN THE FIELD AS WORK PROGRESSES TO COMPLETE THE INSTALLATION OF ALL PRE-EMPT EQUIPMENT AND ASSIST IN SETTING UP, TURNING ON, PROGRAMMING AND FIELD TESTING PRE-EMPT EQUIPMENT, INCLUDING EMITTERS TO INSURE THAT THE EQUIPMENT IS OPERATIONAL.

TRAFFIC SIGNAL LEGEND

NEW	EXISTING	ITEM
		PULL BOX
		SERVICE POLE
		METER PEDESTAL
		CONTROLLER CABINET
		CONDUIT RUN (SIGNALS)
		CONDUIT RUN (INTERCONNECT)
		LOOP DETECTOR
		TRAFFIC SIGNAL PEDESTAL POLE
		CONDUIT RUN NUMBER (SIGNAL)
		CONDUIT RUN NUMBER (POWER SERVICE)
		CONDUIT RUN NUMBER (INTERCONNECT)
		CONDUIT RUN NUMBER (WARNING BEACON)
		TYPE II STANDARD WITH MASTARM, TRAFFIC SIGNAL, BACK PLATE, AND OPTICAL DETECTOR
		TRAFFIC SIGNAL, BACK PLATE, OPTICAL DETECTOR, LUMINAIRE, AND VIDEO CAMERA
		TRAFFIC SIGNAL, BACK PLATE, OPTICAL DETECTOR, LUMINAIRE, AND VIDEO CAMERA
		PEDESTRIAN PUSH BUTTON (MOUNTED TO SIDE OF POLE WHERE INDICATED)
		PEDESTRIAN SIGNALS (MOUNTED TO SIDE OF POLE WHERE INDICATED)
		SPICE CABINET
		TRAFFIC MANHOLE
		VIDEO CAMERA

DEFINITIONS

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

RECORD DRAWING
DATE: _____ DRAFTED BY: _____
TERRA WEST DEV.
THIS RECORD DRAWING HAS BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION OBTAINED AND FURNISHED BY OTHERS. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THE DRAWING AS A RESULT.

TERRA WEST, LLC
4421 MCLEOD ROAD, N.E., SUITE D
ALBUQUERQUE, NEW MEXICO 87109
(505)863-7592

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE:

**TRAFFIC SIGNAL
NOTES AND LEGEND**

DESIGN REVIEW COMMITTEE

CITY ENGINEER APPROVAL

NO. / DAY / YR. NO. / DAY / YR.

CITY PROJECT NO.

581981

ZONE MAP NO.

F-16-Z

SHEET 8 OF 24

EXISTING CONDUIT AND CONDUCTOR RUNS

CONDUIT LENGTH, SIZE, AND TYPE				CONDUIT FILL BY CONTRACTOR LENGTH AND TYPE						
RUN ID	SIZE/LENGTH	TYPE	REMARKS	MCC 5 (# @ FT)	MCC 20 (# @ FT)	SCC #4 (# @ FT)	SCC #8 (# @ FT)	DLIC (# @ FT)	CC #12 (# @ FT)	OPTICOM (# @ FT)
1	15'	REC	POWER TO METER				3 @ 40'			
2	20'	REC	CC3 TO PB1	1 @ 52'	2 @ 32'	1 @ 32'				
3	20'	REC	CC3 TO PB1	1 @ 52'	2 @ 32'	1 @ 32'				
4	20'	REC	PB1 TO PB2	1 @ 10'	2 @ 19'	1 @ 55'				
5	20'	REC	PB2 TO PB3	1 @ 32'	2 @ 32'	1 @ 32'				
6	20'	REC	PB3 TO PB4	1 @ 55'	2 @ 60'	1 @ 60'				
7	40'	REC	PB4 TO PDE	1 @ 51'	2 @ 32'	1 @ 32'				
8	15'	REC	PB5 TO PB6	1 @ 51'	1 @ 32'	1 @ 32'				
9	20'	REC	PB6 TO PB7	1 @ 21'	2 @ 32'	1 @ 32'				
10	20'	REC	PB7 TO PB8	1 @ 32'	2 @ 32'	1 @ 32'				
11	33'	REC	PB8 TO PB9	1 @ 32'	2 @ 10'					
12	3'	REC	PB9 TO PB10	1 @ 42'	2 @ 10'					
13	25'	REC	PB10 TO PB11	1 @ 31'	2 @ 32'					
14	10'	REC	PB11 TO PB12	1 @ 10'	2 @ 10'					
15	185'	REC	PB12 TO PB13	1 @ 10'	2 @ 10'					
16	145'	REC	PB13 TO PB14							
17	50'	REC	BASE TO 2C							
18	38'	REC	BASE TO 2C							
19	38'	REC	BASE TO 2C							
20	38'	REC	BASE TO 2C							
21	38'	REC	BASE TO 2C							
22	38'	REC	BASE TO 2C							
23	38'	REC	BASE TO 2C							
24	38'	REC	BASE TO 2C							
25	38'	REC	BASE TO 2C							
26	38'	REC	BASE TO 2C							
27	38'	REC	BASE TO 2C							
28	38'	REC	BASE TO 2C							
29	38'	REC	BASE TO 2C							
30	38'	REC	BASE TO 2C							
31	38'	REC	BASE TO 2C							
32	38'	REC	BASE TO 2C							
33	38'	REC	BASE TO 2C							
34	38'	REC	BASE TO 2C							
35	38'	REC	BASE TO 2C							
36	38'	REC	BASE TO 2C							
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44	38'	REC	BASE TO 2C							
45	38'	REC	BASE TO 2C							
46	38'	REC	BASE TO 2C							
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53	38'	REC	BASE TO 2C							
54	38'	REC	BASE TO 2C							
55	38'	REC	BASE TO 2C							
56	38'	REC	BASE TO 2C							
57	38'	REC	BASE TO 2C							
58	38'	REC	BASE TO 2C							
59	38'	REC	BASE TO 2C							
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83	38'	REC	BASE TO 2C							
84	38'	REC	BASE TO 2C							
85	38'	REC	BASE TO 2C							
86	38'	REC	BASE TO 2C							
87	38'	REC	BASE TO 2C							
88	38'	REC	BASE TO 2C							
89	38'	REC	BASE TO 2C							
90	38'	REC	BASE TO 2C							
91	38'	REC	BASE TO 2C							
92	38'	REC	BASE TO 2C							
93	38'	REC	BASE TO 2C							
94	38'	REC	BASE TO 2C							
95	38'	REC	BASE TO 2C							
96	38'	REC	BASE TO 2C							
97	38'	REC	BASE TO 2C							
98	38'	REC	BASE TO 2C							
99	38'	REC	BASE TO 2C							
100	38'	REC	BASE TO 2C							

NEW CONDUIT AND CONDUCTOR REQUIREMENTS

CONDUIT LENGTH, SIZE, AND TYPE				CONDUIT FILL BY CONTRACTOR LENGTH AND TYPE						
RUN ID	SIZE/LENGTH	TYPE	REMARKS	MCC 5 (# @ FT)	MCC 7 (# @ FT)	MCC 20 (# @ FT)	SCC #8 (# @ FT)	DLIC (# @ FT)	OPTICOM (# @ FT)	
4	10'	REC	TRANSFORMER TO METER				3 @ 40'			
2	EXISTING	REC	CC3 TO PB1					3 @ 32'	1 @ 32'	
3	EXTEND 3"-19'	REC	PB1 TO PB2	1 @ 78'		2 @ 78'	1 @ 78'	5 @ 78'	1 @ 78'	
5	EXTEND 3"-15'	REC	PB2 TO PB3	1 @ 83'		2 @ 83'	1 @ 83'	3 @ 83'		
6	81'	REC	PB3 TO PB4	1 @ 86'		2 @ 86'				
6A	81'	REC	PB3 TO PB4				1 @ 86'		1 @ 86'	
8	EXTEND 3"-11'	REC	PB4 TO PB7					2 @ 69'	2 @ 69'	
7	85'	REC	PB5 TO PB6				2 @ 90'			
9	EXISTING	REC	PB7 TO PB1						3 @ 32'	
14	EXISTING	REC	PB7 TO MA1	1 @ 16'						
10	18'	REC	PB2 TO MA2	1 @ 23'		2 @ 23'			1 @ 23'	
11	15'	REC	PB3 TO MA3	1 @ 21'		2 @ 21'			1 @ 21'	
12	18'	REC	PB4 TO MA4	1 @ 23'		2 @ 23'			1 @ 23'	
13	12'	REC	PB5 TO MA3 (STREET LIGHT)				2 @ 17'			
17	20'	REC	PB6 TO MA4 (STREET LIGHT)				2 @ 25'			
15	EXTEND 2"-9'	REC	PB8 TO PB2					2 @ 180'		
16	EXTEND 2"-12'	REC	PB9 TO PB4					2 @ 170'		
18	38'	REC	PB10 TO PB3					3 @ 48'		
MA1			BASE TO 2C	1 @ 15'						
MA2			BASE TO 2A	1 @ 15'						
MA2			BASE TO 3C		1 @ 15'					
MA2			BASE TO 2M	1 @ 30'						
MA2			BASE TO 2MA		1 @ 40'					
MA2			BASE TO P1 & P2	2 @ 15'						
MA2			BASE TO PPB1 & PPB2	2 @ 5'						
MA2			BASE TO OPTICOM						1 @ 30'	
MA3			BASE TO 3A	1 @ 15'						
MA3			BASE TO 4C		1 @ 15'					
MA3			BASE TO 3M	1 @ 35'						
MA3			BASE TO 3MA		1 @ 45'					
MA3			BASE TO P5 & P6	2 @ 15'						
MA3			BASE TO PPB5 & PPB6	2 @ 5'						
MA3			BASE TO OPTICOM						1 @ 40'	
MA4			BASE TO 4A	1 @ 15'						
MA4			BASE TO 1C		1 @ 15'					
MA4			BASE TO 4M	1 @ 30'						
MA4			BASE TO 4MA		1 @ 40'					
MA4			BASE TO P7 & P8	2 @ 15'						
MA4			BASE TO PPB7 & PPB8	2 @ 5'						
MA4			BASE TO OPTICOM						1 @ 30'	
TOTALS	318' 126'			605'	170'	628'	631'	1717'	486'	

ABBREVIATIONS

CC 6	COMMUNICATION CABLE-6 PAIR
CC 12	COMMUNICATION CABLE-12 PAIR
DLIC	DETECTOR LOOP LEAD IN CABLE
MA	MASTARM
MCC	MULTI CONDUCTOR CABLE
PB	PULL BOX
PP	PEDESTAL POLE
PPB	PEDESTRIAN PUSH BUTTON
REC	RIGID ELECTRIC CONDUIT
SCC	SINGLE CONDUCTOR CABLE
CAM	VIDEO CAMERA

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ALBUQUERQUE, NEW MEXICO 87109
(505)883-7592

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: **INTERSECTION OF WASHINGTON ST. N.E.
AND CUTLER AVE. N.E.
CABLES AND CONDUITS**

DESIGN REVIEW COMMITTEE
DATE: 7-98
DRAWN BY: JON
CHECKED BY: RRB

CITY ENGINEER APPROVAL
DATE: 7-98
SHEET 10 OF 24

CITY PROJECT NO.

581981

ZONE MAP NO.

H-17-2

SHEET 10 OF 24

1/8/2008/Albuquerque/2008/23-98

DETECTOR LOOPS											
LOOP ID	VEHICLE DETECTOR			LOOP TYPE	LOOP DIMENSIONS				LOOP WIRE	PAVEMENT SAWCUT	
	MODE	CALL	UNIT NO		CHANNEL	L	W	S			T
DL1	PRESENCE		ONE	CH 1	QP	40'	6'	13'	2'	379	145
DL2 (1)	PRESENCE	EXTEND	FOUR	CH 1	EC	6'	6'	6'	2'	93	30
DL2 (2)	PRESENCE	EXTEND	FOUR	CH 1	EC	6'	6'	17'	2'	115	41
DL3	PRESENCE		FIVE	CH 1	QP	40'	6'	13'	2'	379	145
DL4 (1)	PRESENCE		SIX	CH 1	DL	40'	6'	5'	2'	363	137
DL4 (2)	PRESENCE		SIX	CH 1	DL	40'	6'	12'	2'	377	144
DL4 (3)	PRESENCE		SIX	CH 1	DL	40'	6'	25'	2'	452	157
DL5	PRESENCE		ONE	CH 2	QP	40'	6'	13'	2'	379	145
DL6 (1)	PRESENCE	EXTEND	THREE	CH 2	EC	6'	6'	6'	2'	93	30
DL6 (2)	PRESENCE	EXTEND	THREE	CH 2	EC	6'	6'	17'	2'	115	41
DL7	PRESENCE		FIVE	CH 2	QP	40'	6'	13'	2'	379	145
DL8 (1)	PRESENCE		SEVEN	CH 1	DL	40'	6'	5'	2'	363	137
DL8 (2)	PRESENCE		SEVEN	CH 1	DL	40'	6'	12'	2'	377	144

DETECTOR RACK ASSIGNMENTS

UNIT NUMBER	POWER SUPPLY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
CHANNEL 1	→	Ø1	Ø2	Ø6	Ø2 FC	Ø3	Ø4	Ø8	Ø4 EC	DUAL LEFT Ø1	DUAL LEFT Ø3	SD 1	SD 3	SD 5	P E D I S O L A T I O N	OPTICOM 1	OPTICOM 3
CHANNEL 2	→	Ø5	Ø2	Ø6	Ø6 EC	Ø7	Ø4	Ø8	Ø8 EC	DUAL LEFT Ø5	DUAL LEFT Ø7	SD 2	SD 4	SD 6		OPTICOM 2	OPTICOM 4
DETECTOR MODULE REQUIRED	→	*	✓			✓											

* INCIDENTAL TO CONSTRUCTION

FUNCTION CHART - 115 VOLT CIRCUIT

CONDUCTOR			RING 1 - MULTI CONDUCTOR CABLE 20		RING 2 - MULTI CONDUCTOR CABLE 20	
CONDUCTOR NUMBER	BASE COLOR	TRACER	FUNCTION	FIELD CONNECTION	FUNCTION	FIELD CONNECTION
1	BLACK	-	SPARE	SPARE	SPARE	SPARE
2	WHITE	-	SPARE	SPARE	SPARE	SPARE
3	RED	-	PHASE 1 RED	SPARE	PHASE 5 RED	SPARE
4	GREEN	-	PHASE 1 GREEN	GREEN LEFT TURN ARROW 4B, 4C	PHASE 5 GREEN	GREEN LEFT TURN ARROW 2B, 2C
5	ORANGE	-	PHASE 1 YELLOW	YELLOW LEFT TURN ARROW 4B, 4C	PHASE 5 YELLOW	YELLOW LEFT TURN ARROW 2B, 2C
6	BLUE	-	SPARE	SPARE	SPARE	SPARE
7	WHITE	BLACK	SPARE	SPARE	SPARE	SPARE
8	RED	BLACK	PHASE 2 RED	RED BALL 2A, 2M	PHASE 6 RED	RED BALL 4A, 4M
9	GREEN	BLACK	PHASE 2 GREEN	GREEN BALL 2A, 2M	PHASE 6 GREEN	GREEN BALL 4A, 4M
10	ORANGE	BLACK	PHASE 2 YELLOW	YELLOW BALL 2A, 2M	PHASE 6 YELLOW	YELLOW BALL 4A, 4M
11	BLUE	BLACK	PHASE 2 WALK	PEDESTRIAN WALK P4, P5	PHASE 6 WALK	PEDESTRIAN WALK P1, P8
12	BLACK	WHITE	PHASE 2 DON'T WALK	PEDESTRIAN DON'T WALK P4, P5	PHASE 6 DON'T WALK	PEDESTRIAN DON'T WALK P1, P8
13	RED	WHITE	PHASE 3 RED	SPARE	PHASE 7 RED	SPARE
14	GREEN	WHITE	PHASE 3 GREEN	GREEN LEFT TURN ARROW 3B, 3C	PHASE 7 GREEN	GREEN LEFT TURN ARROW 1B, 1C
15	BLUE	WHITE	PHASE 3 YELLOW	YELLOW LEFT TURN ARROW 3B, 3C	PHASE 7 YELLOW	YELLOW LEFT TURN ARROW 1B, 1C
16	BLACK	RED	PHASE 4 RED	RED BALL 1A, 1B, 1C, 1M	PHASE 8 RED	RED BALL 3A, 3B, 3C, 3M
17	WHITE	RED	PHASE 4 GREEN	GREEN BALL 1A, 1B, 1C, 1M	PHASE 8 GREEN	GREEN BALL 3A, 3B, 3C, 3M
18	ORANGE	RED	PHASE 4 YELLOW	YELLOW BALL 1A, 1B, 1C, 1D	PHASE 8 YELLOW	YELLOW BALL 3A, 3B, 3C, 3D
19	BLUE	RED	PHASE 4 WALK	PEDESTRIAN WALK P2, P3	PHASE 8 WALK	PEDESTRIAN WALK P6, P7
20	RED	GREEN	PHASE 4 DON'T WALK	PEDESTRIAN DON'T WALK P2, P3	PHASE 8 DON'T WALK	PEDESTRIAN DON'T WALK P6, P7

ABBREVIATIONS

DL - DETECTOR LOOP
 EC - EXTENDED CALL LOOP
 L - DETECTOR LOOP LENGTH
 W - DETECTOR LOOP WIDTH
 S - SAW CUT LOOP TO CURB
 T - TERMINAL LENGTH
 QP - 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

QUANTITY ESTIMATING ASSUMPTIONS:

LOOP WIRE	
6' X 30' QP LOOP	= (8*L) + (4*W) + (2*S) + (2*T) + 5 = 269 + 2(S+T)
6' X 40' QP LOOP	= (8*L) + (4*W) + (2*S) + (2*T) + 5 = 349 + 2(S+T)
6' X 50' QP LOOP	= (8*L) + (4*W) + (2*S) + (2*T) + 5 = 429 + 2(S+T)
6' X 6' EC LOOP	= (8*L) + (8*W) + (2*S) + (2*T) + 5 = 77 + 2(S+T)
6' X 6' SYS LOOP	= (8*L) + (8*W) + (2*S) + (2*T) + 5 = 96 + 2(S+T)

PAVEMENT SAW CUT

6' X 30' QP LOOP	= (3*L) + (2*W) + S = 102 + S
6' X 40' QP LOOP	= (3*L) + (2*W) + S = 132 + S
6' X 50' QP LOOP	= (3*L) + (2*W) + S = 162 + S
6' X 6' EC LOOP	= (2*L) + (2*W) + S = 24 + S
6' X 6' SYS LOOP	= (2*L) + (2*W) + S = 24 + S

WHERE:

L = DETECTOR LOOP LENGTH (FROM PLAN)
 W = DETECTOR LOOP WIDTH (FROM PLAN)
 S = SAWCUT LENGTH FROM DETECTOR LOOP TO FACE OF CURB (FROM PLAN)
 T = LOOP WIRE TERMINAL LENGTH FROM FACE OF CURB TO PULL BOX (FROM PLAN)

FUNCTION CHART - 24 VOLT CIRCUIT

MULTI CONDUCTOR CABLE 5			
CONDUCTOR NUMBER	BASE COLOR	FUNCTION	FIELD CONNECTION
1	BLACK	PHASE 2 PPB	PPB1 & PPB3
2	WHITE	COMMON	PPB1 THRU PPB8
3	RED	PHASE 4 PPB	PPB5 & PPB2
4	GREEN	PHASE 6 PPB	PPB7 & PPB6
5	ORANGE	PHASE 8 PPB	PPB4 & PPB8

NOTES:

- 1/ IDENTIFY CONDUCTORS LISTED AS "115 VOLTS"
- 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.

TERRA WEST, L.L.C.

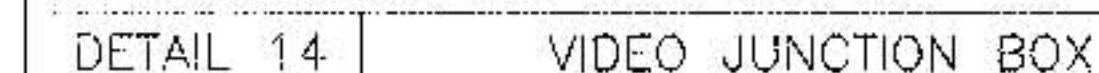
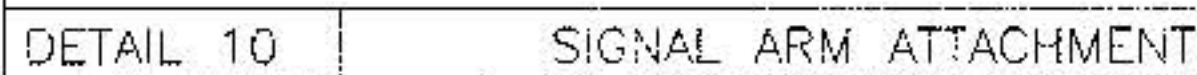
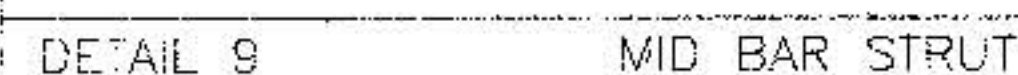
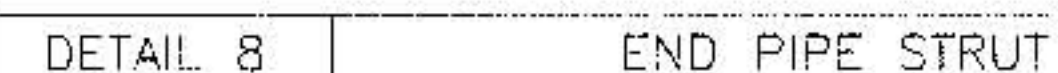
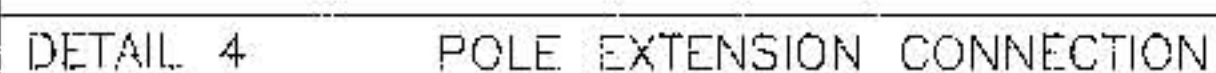
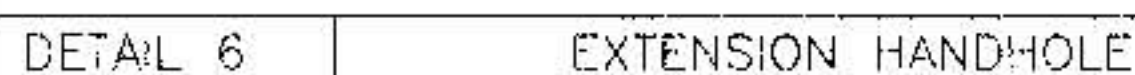
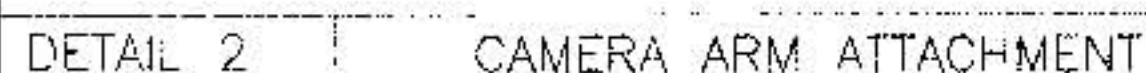
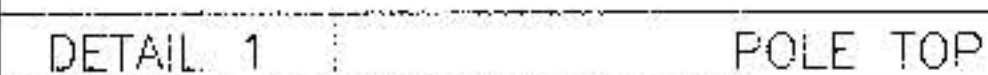
4421 McLEOD ROAD, N.E., SUITE D
 ALBUQUERQUE, NEW MEXICO 87109
 (505)883-7582

CITY OF ALBUQUERQUE
 PUBLIC WORKS DEPARTMENT
 ENGINEERING GROUP

TITLE: **INTERSECTION OF WASHINGTON ST. N.E. AND CUTLER AVE. N.E. FUNCTIONS AND DETECTORS**

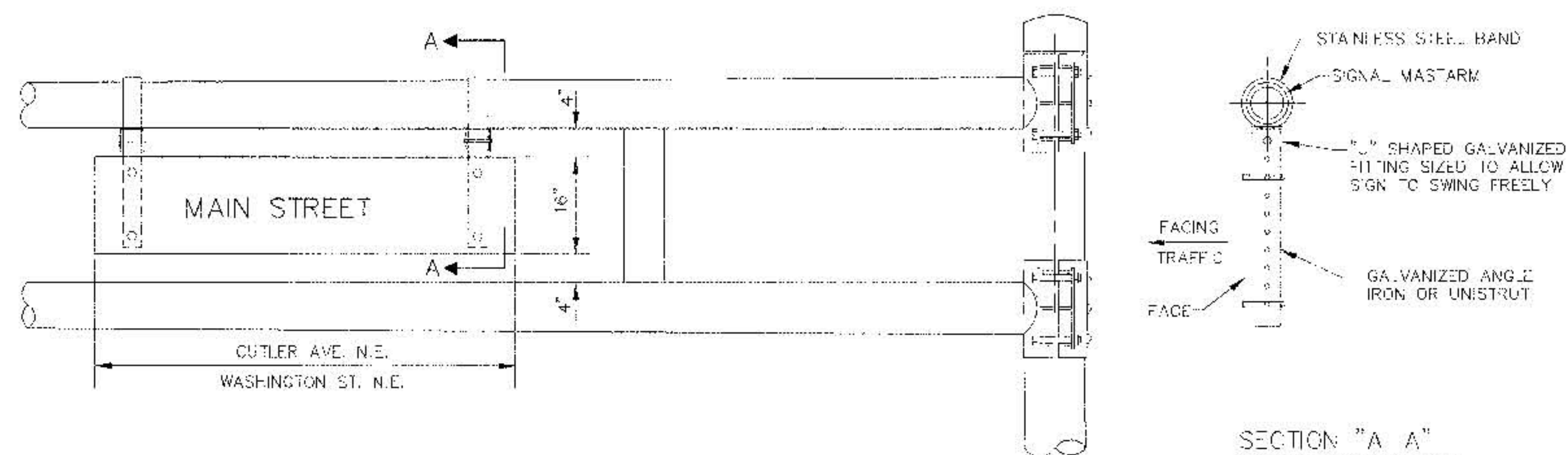
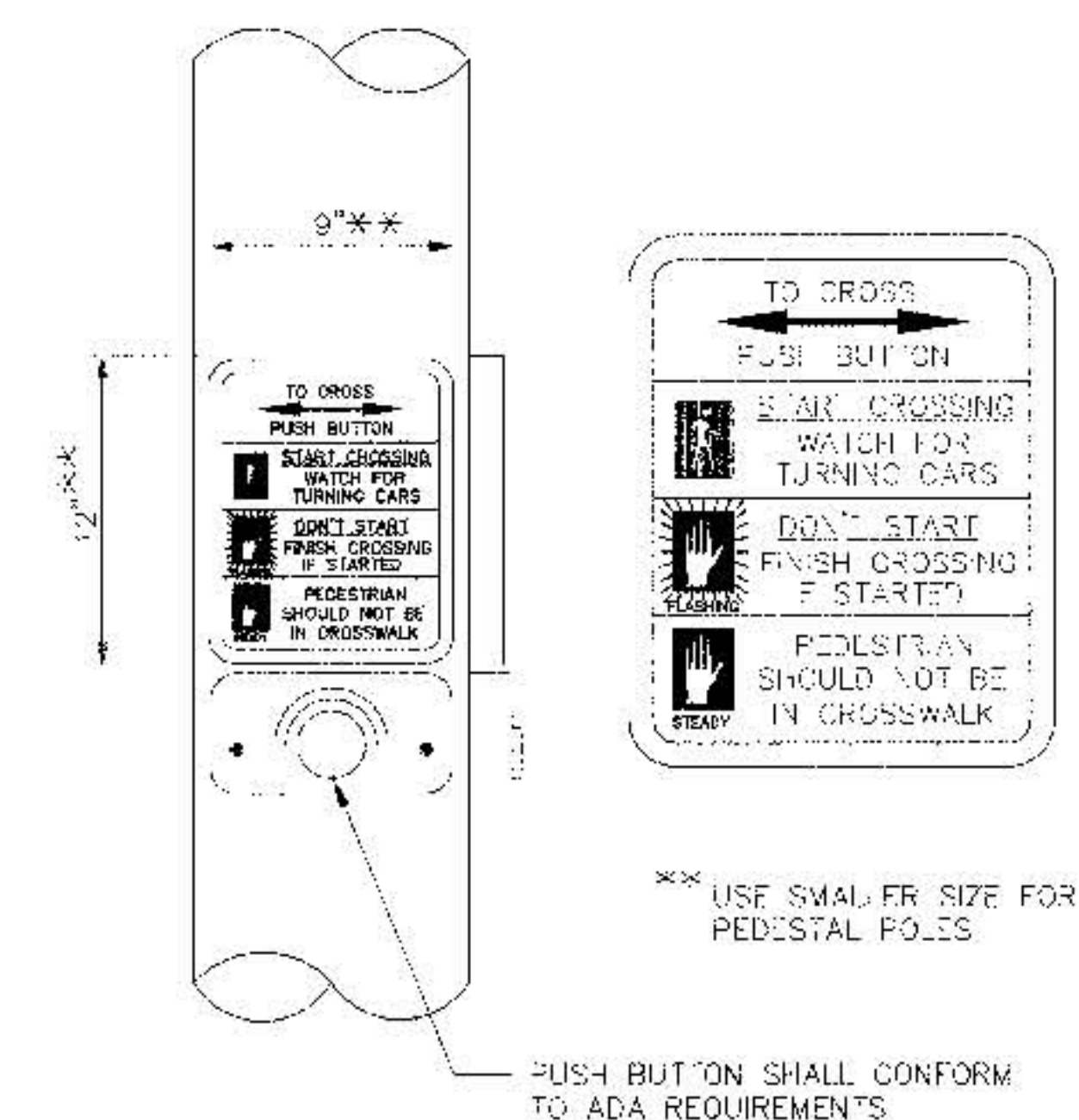
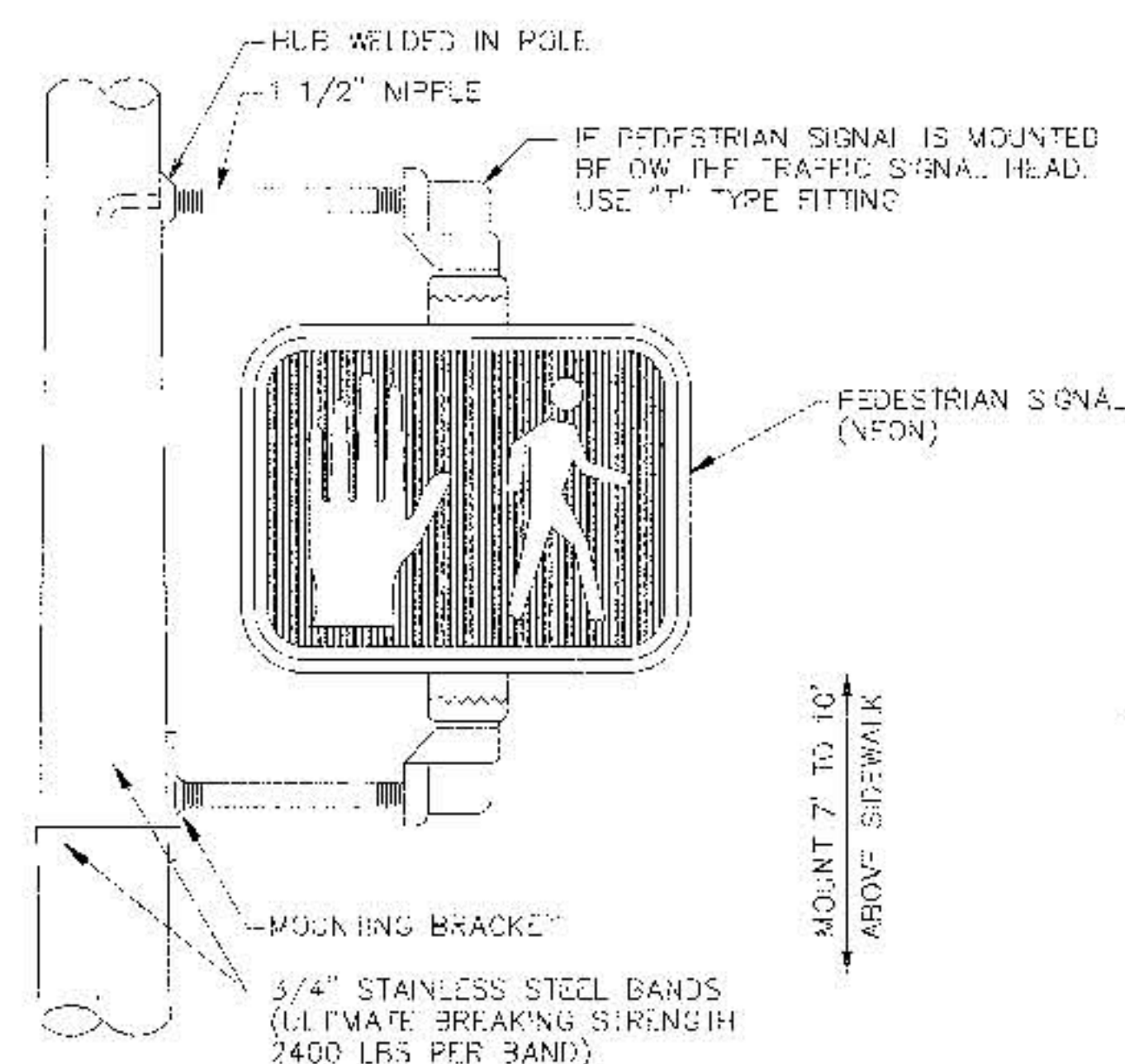
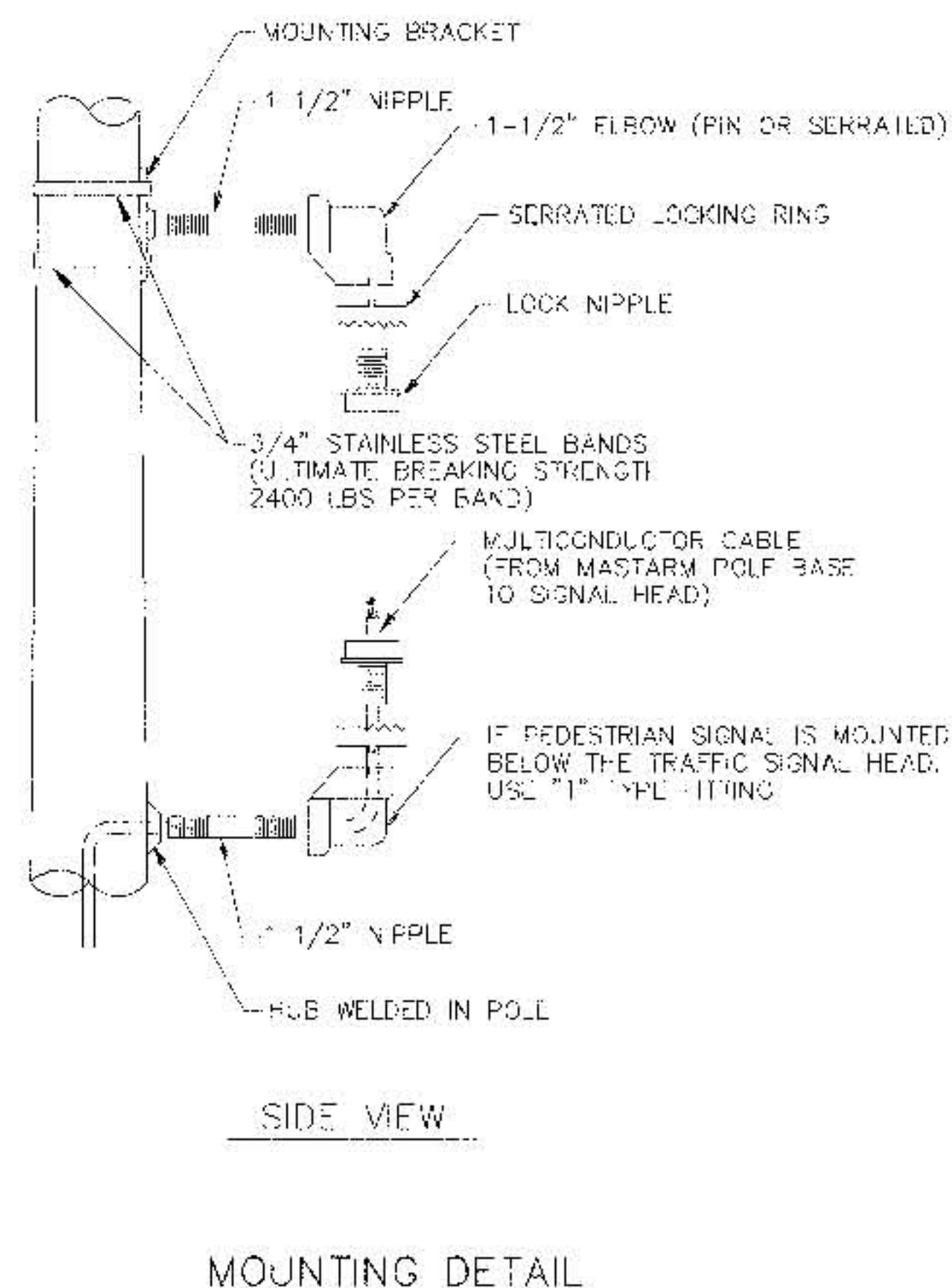
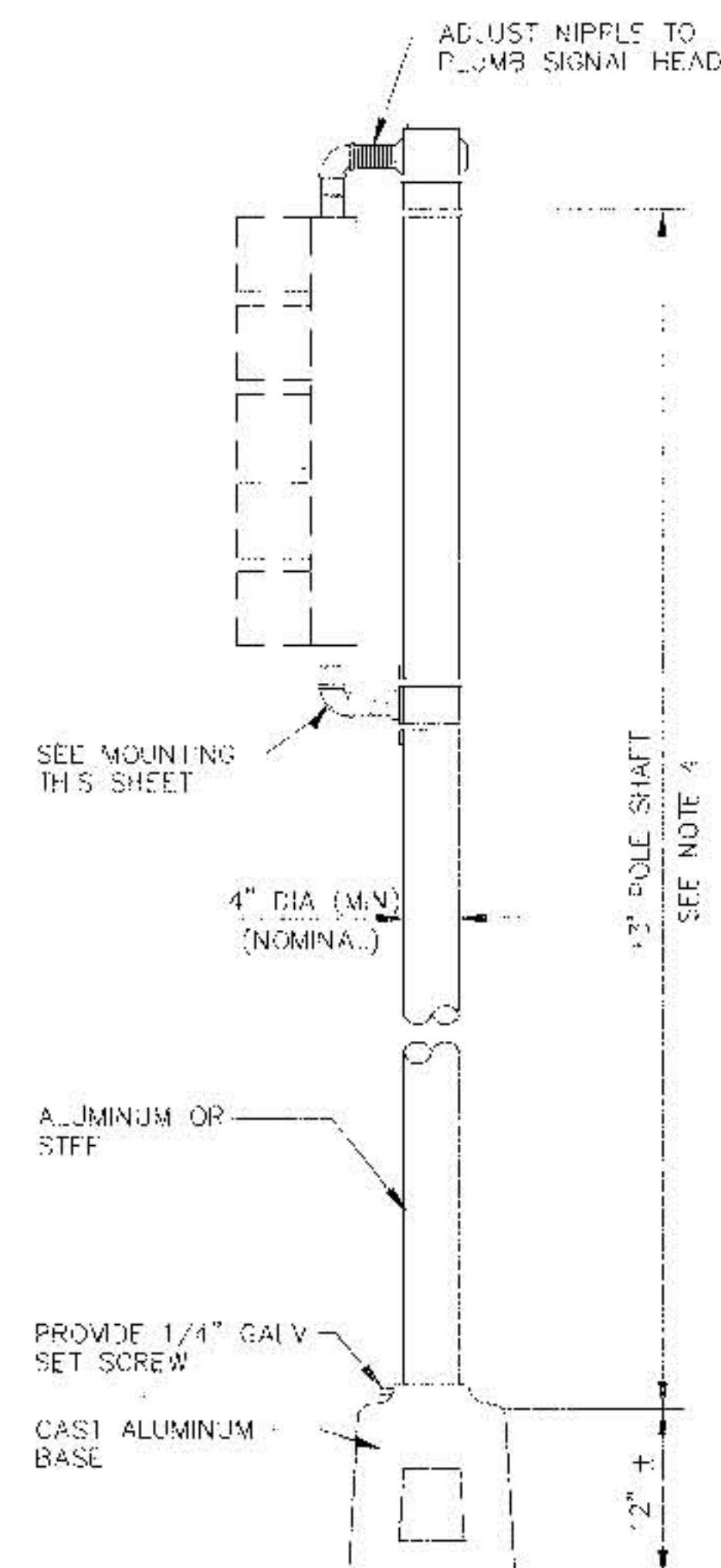
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DESIGNED BY: RRB DATE: 7-98				
DRAWN BY: JON DATE: 7-98				
CHECKED BY: RRB DATE: 7-98				

CITY PROJECT NO. 581981 ZONE MAP NO. H-17-2 SHEET 11 OF 24



CITY PROJECT NO.	581981	ZONE MAP NO.	H-17-Z	SHEET	14	OF	24
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ENGINEER'S SEAL		SURVEY INFORMATION		BENCH MARKS		AS BUILT INFORMATION	
		FIELD NOTES		N.M.S.H.C. STATION 1-40-10 CENTRAL STATION DATA NN STATE PLANE COORDINATES Central Zone X=396,882.75 Y=1,481,135.20 G-G=0.99866383 O-G=0.0011144 FIELD ELEVATION		CONTRACTOR	
		NO.	BY			DATE	WORK STARTED BY
						INSPECTOR'S ACCEPTANCE BY	
						DATE	
						DRAWING CONTROLLED BY	
						DATE	
						MICRO-FILM INFORMATION	
						RECORDED BY	
						NO.	



NOTES:

1. STREET NAME SIGNS REQUIRED AS SHOWN ON PLANS
2. STREET NAME SIGN SHALL BE 6" WIDE WITH 8" SERIES "C" LETTERS. SIGN SHALL BE NO MORE THAN 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 SABLE, FIRM, AND SLIP-RESISTANT AREA - 30"x48" (915 mm x 1220 mm) - SHALL BE PROVIDED TO ALLOW FOR A FORWARD OR 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.

FINISH:

☐ GALVANIZED☐ POWDER COATED

COLOR

TIERRA WEST, LLC
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ALBUQUERQUE, NEW MEXICO 87105
(505)883-7592

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

FILE:

TRAFFIC SIGNAL MISCELLANEOUS DETAILS

DESIGN REVIEW COMMITTEE: CITY ENGINEER APPROVAL:

CITY ENGINEER APPROVAL

CITY PROJECT NO.

581981

ZONE MAP NO.

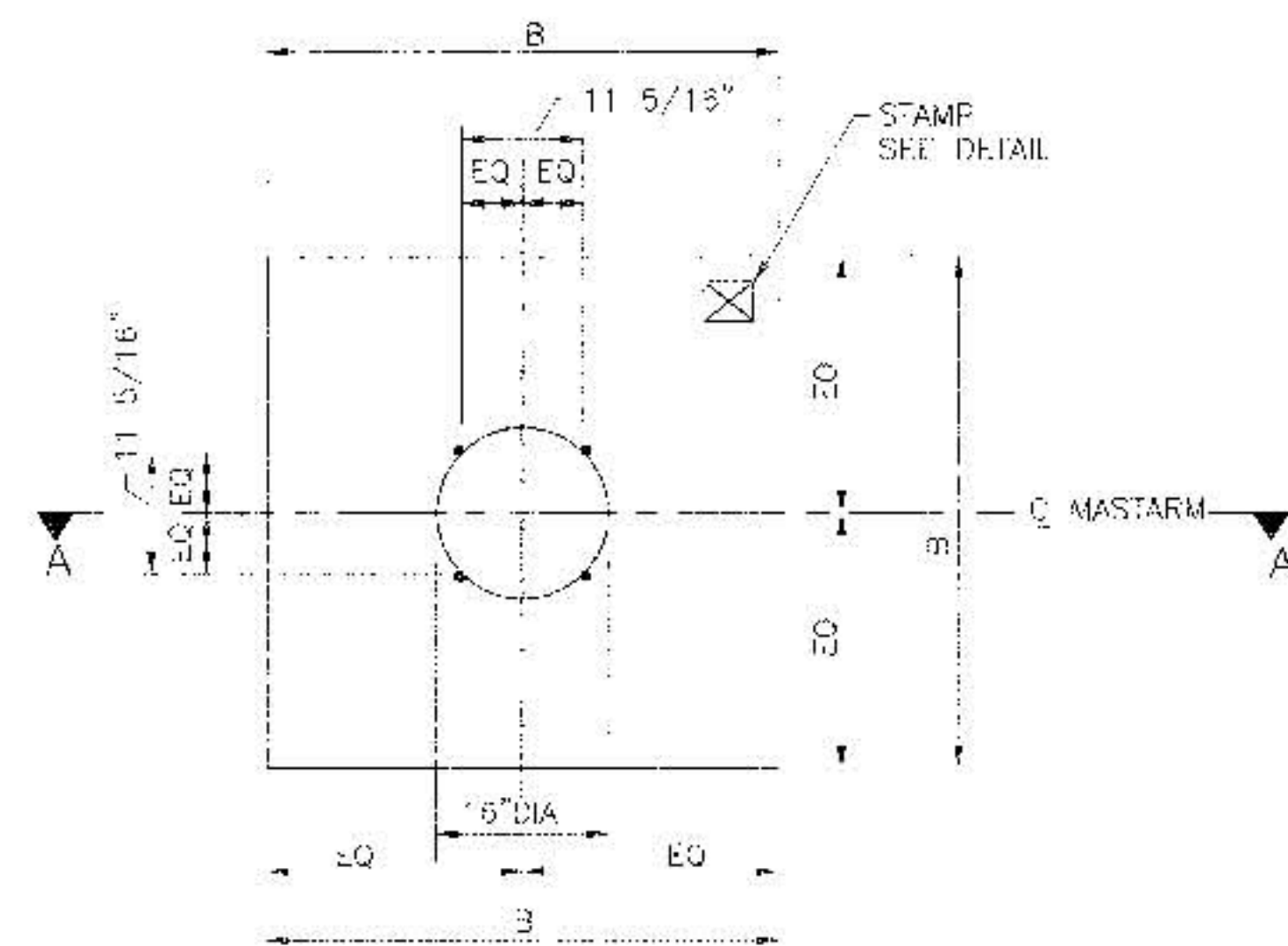
ZONE MAP NO.
H-17-2

SHEET 15 OF 24

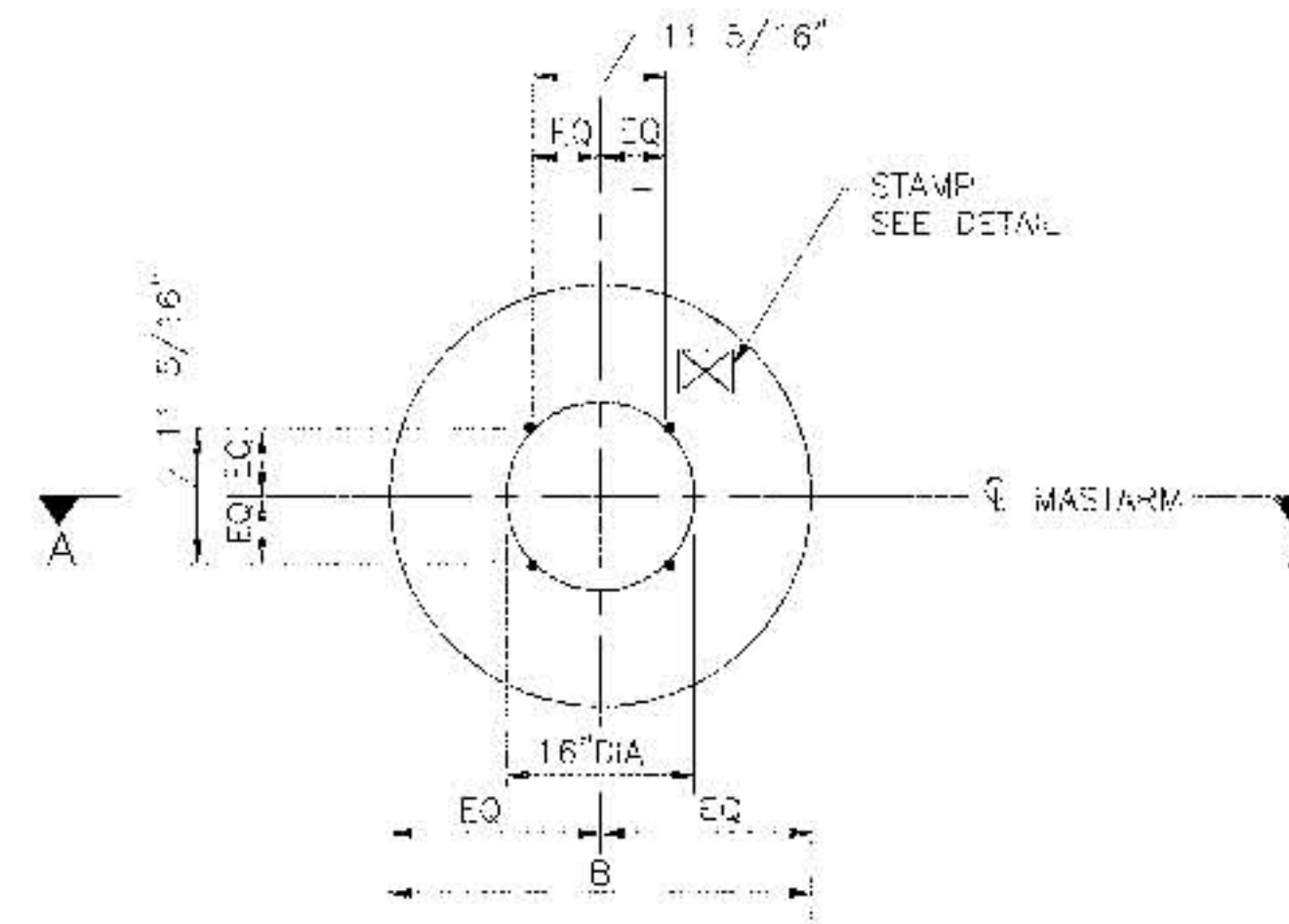
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NO.	FIELD NOTES		DATE	N.W.S.I.C. STATION I-40-10 CENTRAL STATION DATA	CONTRACTOR	WORK ORDER BY INSPECTOR'S ACCEPTANCE BY DATE	
	BY	DATE					
				NW STATE PLANE COORDINATES		DATE	
				Central Zone		VERIFICATION BY DATE	
				X=396,862.75		REMARKS DATE	
				Y=1,493,136.20	MICRO-FILM INFORMATION		
				G-0=0.99968363	RECORDED BY	DATE	
				$\Delta = -0^{\circ}11'54"$	NO.		
				$\Delta = -0^{\circ}11'54"$			

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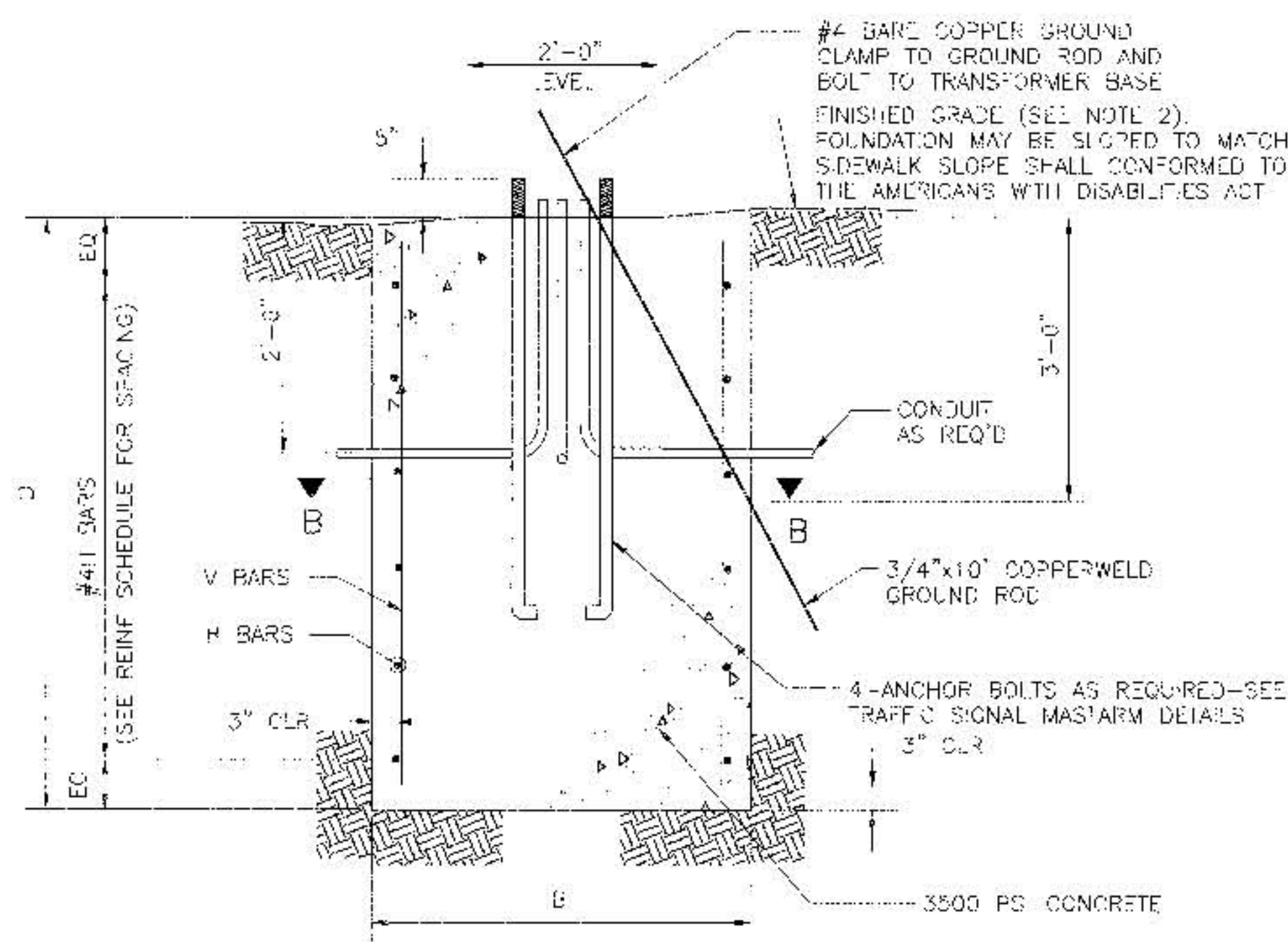
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SHEET	15 OF	24



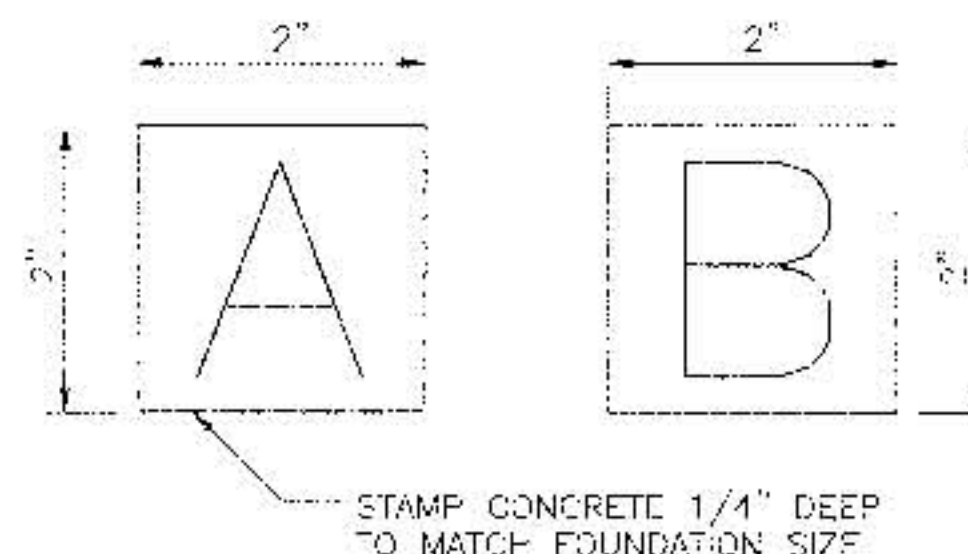
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NO SCALE



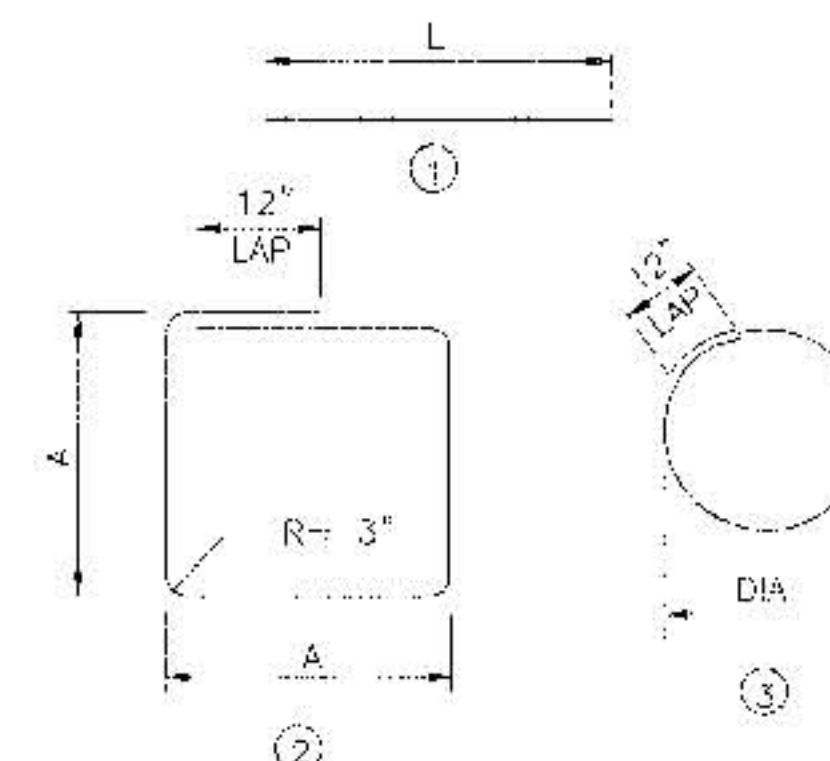
PLAN VIEW (ROUND)
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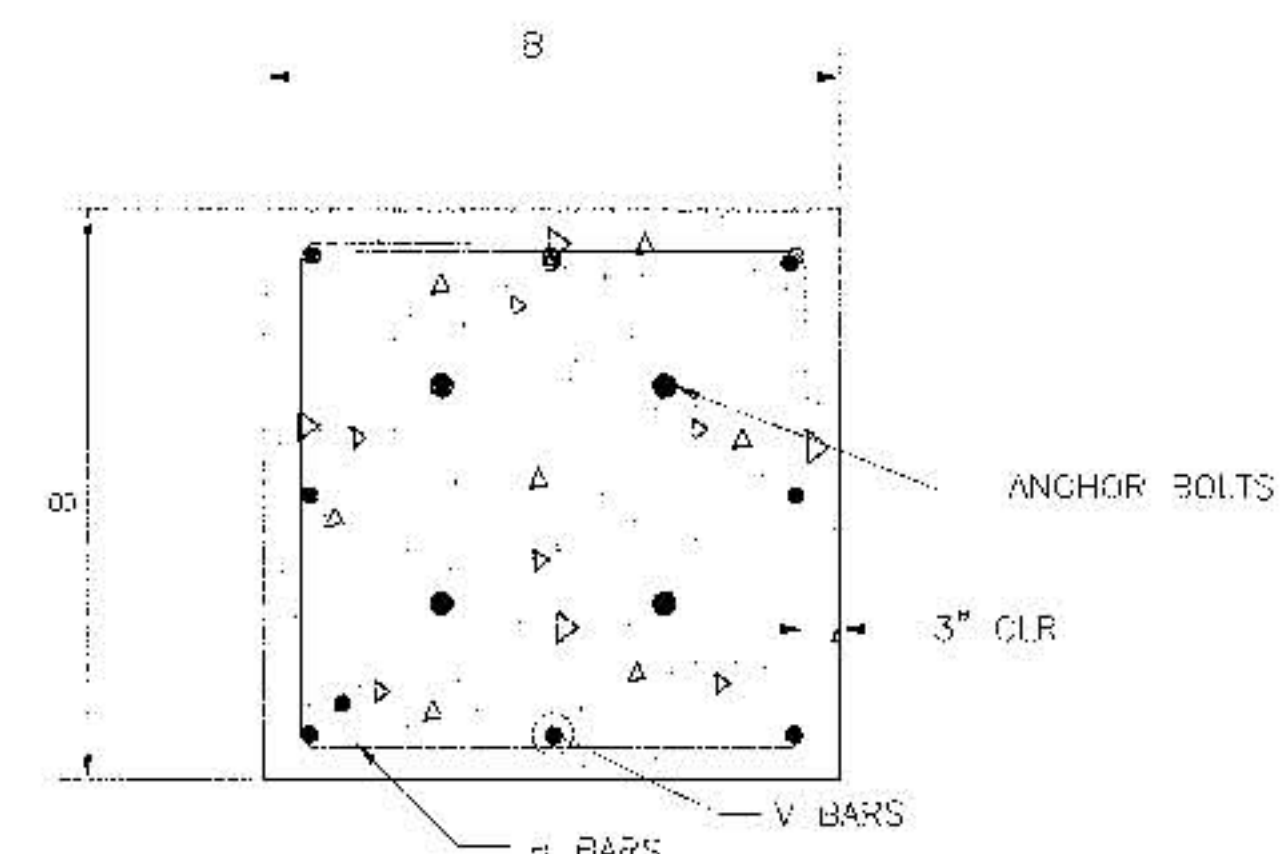
SECTION A-A (ROUND OR SQUARE)
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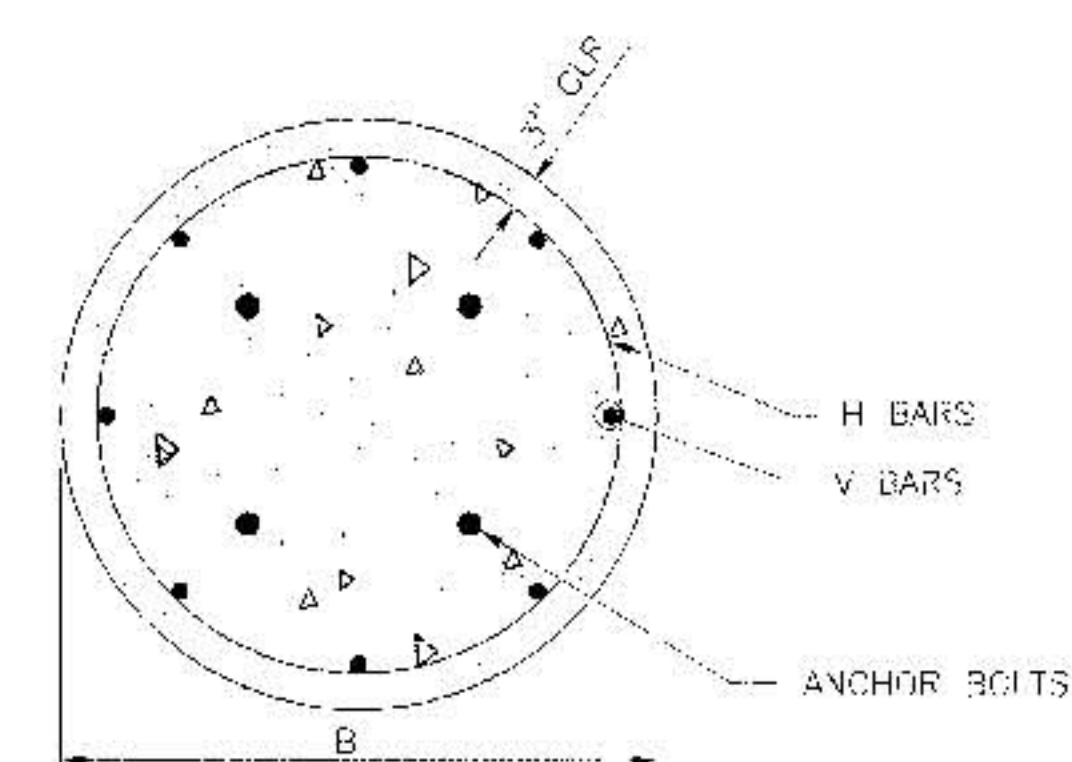
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BAR BENDING DIAGRAM



SECTION B-B (SQUARE)
NO SCALE



SECTION B-B (ROUND)
NO SCALE

FOUNDATION DIMENSIONS AND QUANTITIES							
FOUNDATION TYPE	SIGNAL ARM SPAN(FT)	DIMENSION B (WIDTH)	D (DEPTH)	REINFORCING V BARS MARK	H BARS MARK	REBAR POUNDS	3500 PSI CONCRETE CUBIC YARDS
TYPE A (SQUARE)	15	3'-6"	8'-0"	#4V2	#3H2	49.1	2.27
	20	"	"	"	"	"	"
	25	"	"	"	"	"	"
TYPE B (SQUARE)	30	4'-0"	8'-3"	#5V1	#3H1	82.5	3.70
	35	"	"	"	"	"	"
	40	"	"	"	"	"	"
TYPE A (ROUND)	15	2'-6"	8'-8"	#5V4	#3H4	88.1	1.55
	20	"	"	"	"	"	"
	25	"	"	"	"	"	"
TYPE B (ROUND)	30	3'-0"	11'-9"	#7V3	#3H3	179.7	3.08
	35	"	"	"	"	"	"
	40	"	"	"	"	"	"

ROUND SHAPE TO BE USED ONLY WHERE SPECIFICALLY NOTED ON PLANS OR WHEN APPROVED BY THE PROJECT MANAGER.

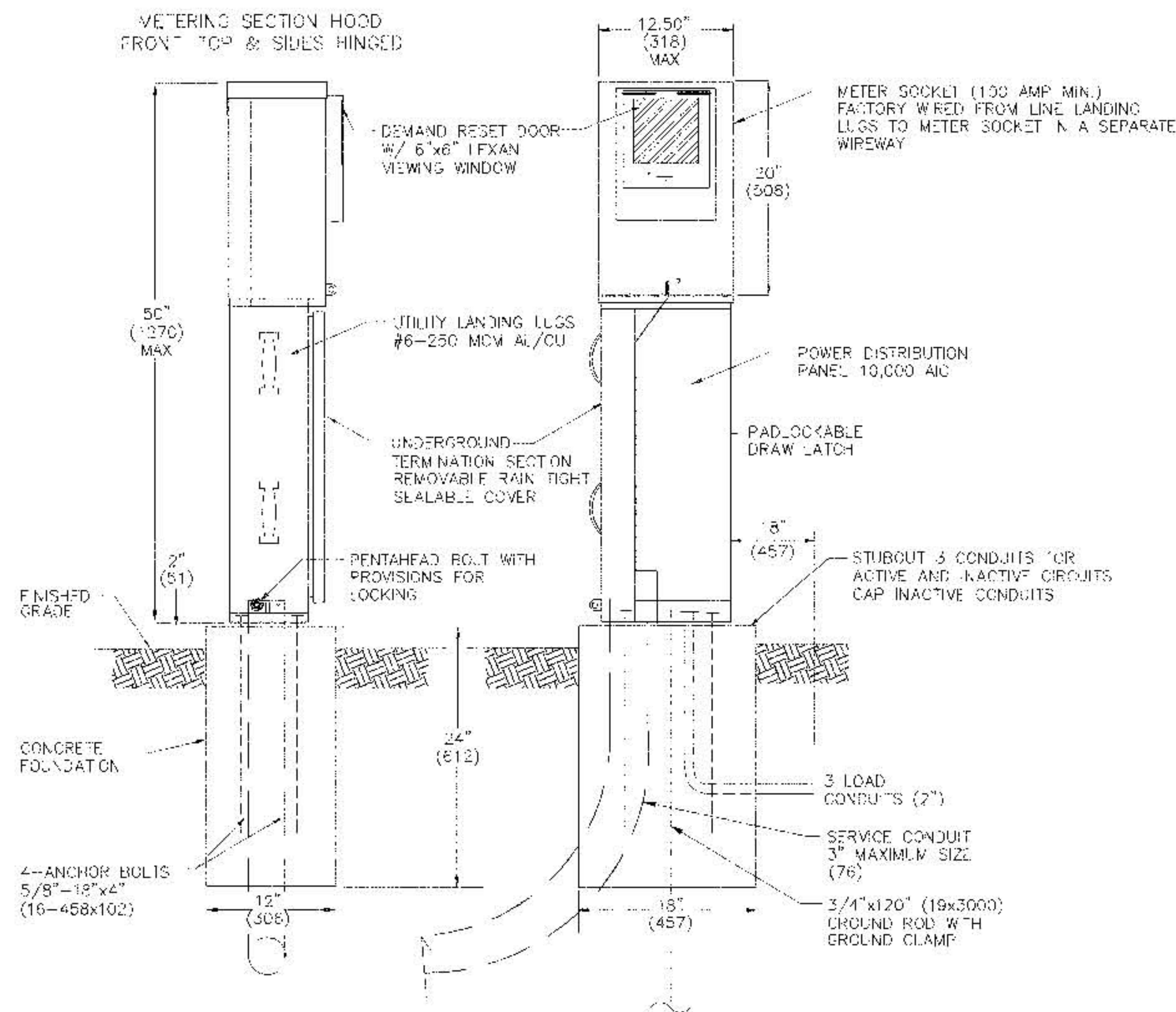
REINFORCING SCHEDULE (GRADE 60 BARS)					
MARK	QUANT	TYPE	SZF	LENGTH	COMMENTS
#5V1	8	1	5	5'-9"	
#4V2	2	1	4	4'-6"	
#7V3	6	1	7	11'-3"	
#5V4	6	1	6	8'-0"	
#3H1	6	2	3	15'-4"	A = 42" TIES AT 14" OC
#3H2	5	2	3	13'-4"	A = 36" TIES AT 12" OC
#3H3	12	3	3	9'-3"	DIA = 30" TIES AT 12" OC
#3H4	9	3	3	7'-8"	DIA = 24" TIES AT 12" OC

TRAFFIC SIGNAL MASTARM FOUNDATION NOTES

- REFER TO THE PLANS FOR LOCATIONS OF TRAFFIC SIGNAL MASTARM FOUNDATIONS.
- FINISHED GRADE FOR THE FOUNDATIONS SHALL BE ESTABLISHED IN THE FIELD BY THE PROJECT MANAGER.
- THE FOUNDATIONS SHOWN HERE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, CURRENT EDITION.
- CONCRETE SHALL BE 3500 PSI FOR EXTERIOR STRUCTURES. REFER TO TABLE 101.0 OF THE SPECIFICATIONS.
- REINFORCING STEEL SHALL CONFORM TO ASTM A-615 GRADE 60.
- 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.
- THE CONCRETE SHALL GAIN 80% OF THE DESIGN STRENGTH PRIOR TO INSTALLING THE TRAFFIC SIGNAL MASTARM.
- ALL FOUNDATIONS SHALL INCLUDE COPPERWELD GROUND RODS. ALL GROUND RODS SHALL BE 3/4" DIA X 10'-0" AND WILL BE CONSIDERED INCIDENTAL TO THE FOUNDATIONS BID ITEMS.
- ALL FOUNDATIONS SHALL BE STAMPED EITHER "A" OR "B" TO SHOW TYPE CONSTRUCTED (SEE STAMP DETAIL).

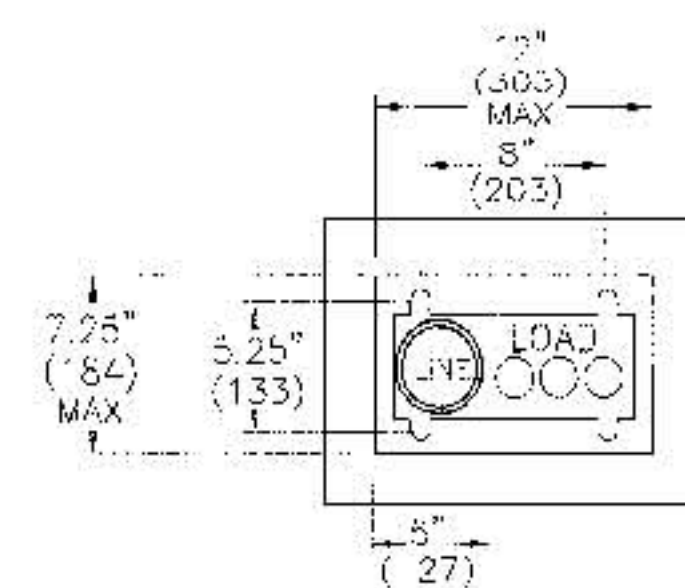
TIERRA WEST, LLC 4421 MCLEOD ROAD, N.E., SUITE D ALBUQUERQUE, NEW MEXICO 87109 (505)683-7592			
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP			
TITLE: TRAFFIC SIGNAL FOUNDATION DETAILS TYPE II AND TYPE III STANDARD			
DESIGN/REVIEW/REVISION	CITY ENGINEER APPROVAL	MO./DAY/YR.	MO./DAY/YR.
DESIGNED BY: RRB	CHECKED BY: RRB	DATE: 3-98	DATE: 3-98
DRAWN BY: JDN	CHECKED BY: RRB	DATE: 3-98	DATE: 3-98
CITY PROJECT NO. 581981		ZONE MAP NO. H-17-2	SHEET 16 OF 24

AS BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION	
CONTRACTOR	DATE	N.M.S.C. STATION 1-40-10	DATE	FIELD NOTES	NO.
INSPECTOR	DATE	CENTRAL STATION DATA	DATE	BY	
REVIEWER	DATE	N.M. STATE PLANE COORDINATES	DATE		
APPROVED BY	DATE	Central Zone	DATE		
APPROVED BY	DATE	X=396,882.75	DATE		
APPROVED BY	DATE	Y=1,483,136.70	DATE		
APPROVED BY	DATE	G=0.00966363	DATE		
APPROVED BY	DATE	A=0.01154"	DATE		
APPROVED BY	DATE	ELD=5182.95	DATE		

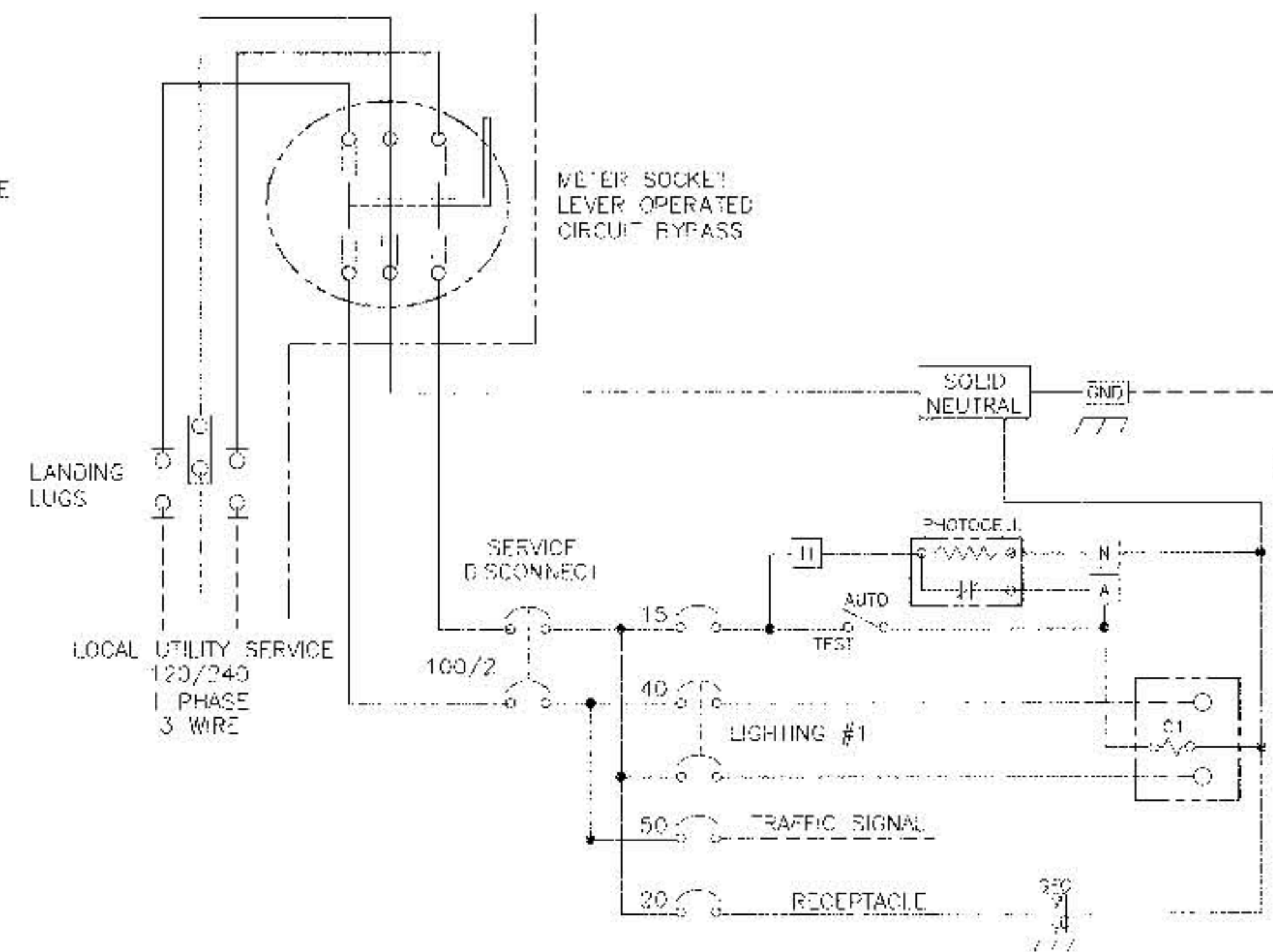


LEFT SIDE

FRONT VIEW



BASE PLAN



SERVICE EQUIPMENT WIRING DIAGRAM "B"

CONSTRUCTION MATERIALS AND FINISH

☐ 12 GA HD GALVANIZED SHEET STEEL	☐ POWDER COATED
☐ 14 GA #304D STAINLESS STEEL SHEET	☐ POWDER COATED COLOR
	☐ NATURAL
☐ 0.125" ALUMINUM SHEET	☐ POWDER COATED COLOR
	☐ ANODIZED

POWDER COAT COLORS

☐ WHITE	☐ RANCH GREEN
☐ MINT GREEN	☐ OTHER
☐ CAMEL	

PHOTO ELECTRIC CELL

☐ ON LIGHT POLE
☐ IN SERVICE CABINET

METER PEDESTAL CONSTRUCTION NOTES

- METER PEDESTAL SHALL BE UL LISTED "INDUSTRIAL CONTROL PANEL" PER UL 508.
- METER PEDESTAL SHALL MEET THE ELECTRIC UTILITY SERVICE EQUIPMENT REQUIREMENTS COMMITTEE (EUSERC) GUIDELINES.
- CONSTRUCTION SHALL BE NEMA 3R AND #2, RAIN TIGHT AND DUST TIGHT, ELECTRICALLY WELDED AND REINFORCED WHERE REQUIRED.
- ALL NUTS, BOLTS, SCREWS AND FINISHES SHALL BE STAINLESS STEEL.
- NUTS, BOLTS, AND SCREWS SHALL NOT BE VISIBLE FROM OUTSIDE OF METER PEDESTAL.
- PHENOLIC NAME PLATES SHALL BE PROVIDED AS REQUIRED.
- CIRCUIT BREAKERS SHALL BE CABLE IN-CABLE OUT WITH LINE ON TOP & LOAD ON THE BOTTOM. HANDLE POSITION UP="ON", MIDDLE="TRIPPED", DOWN="OFF".
- A PLASTIC COVERED WIRING DIAGRAM SHALL BE ATTACHED TO THE INSIDE OF THE FRONT DOOR.
- METER PEDESTAL SHALL BE FACTORY WIRE AND CONFORM TO REQUIRED NEMA STANDARDS.
- ALL POWDER COATED METER PEDESTAL SHALL HAVE A CORROSION RESISTANT COATING WHICH INCLUDES A FIVE STEP DIP TANK METAL PREPARATION PROCESS:
 - ALKALINE CLEANER 160°F.
 - CLEAR WATER RINSE.
 - IRON PHOSPHATE APPLICATION 150°F.
 - CLEAR WATER RINSE.
 - INHIBITIVE RINSE TO SEAL PHOSPHATED SURFACES 120°F.
 FINISHED WITH AN ELECTROSTATICALLY APPLIED DRY POLYESTER POWDER COATING THEN BAKED @ 380°F TO CURE.
- CONCRETE FOUNDATIONS INCLUDING EXCAVATION AND BACKFILL, CONCRETE, AND ANCHOR BOLTS, COMPLETE IN PLACE, WILL BE CONSIDERED INCIDENTAL TO THE METER PEDESTAL.

SCALE: NONE
DIMENSIONS ARE IN INCHES, (###) MILLIMETER

1/ABCHSLOWG

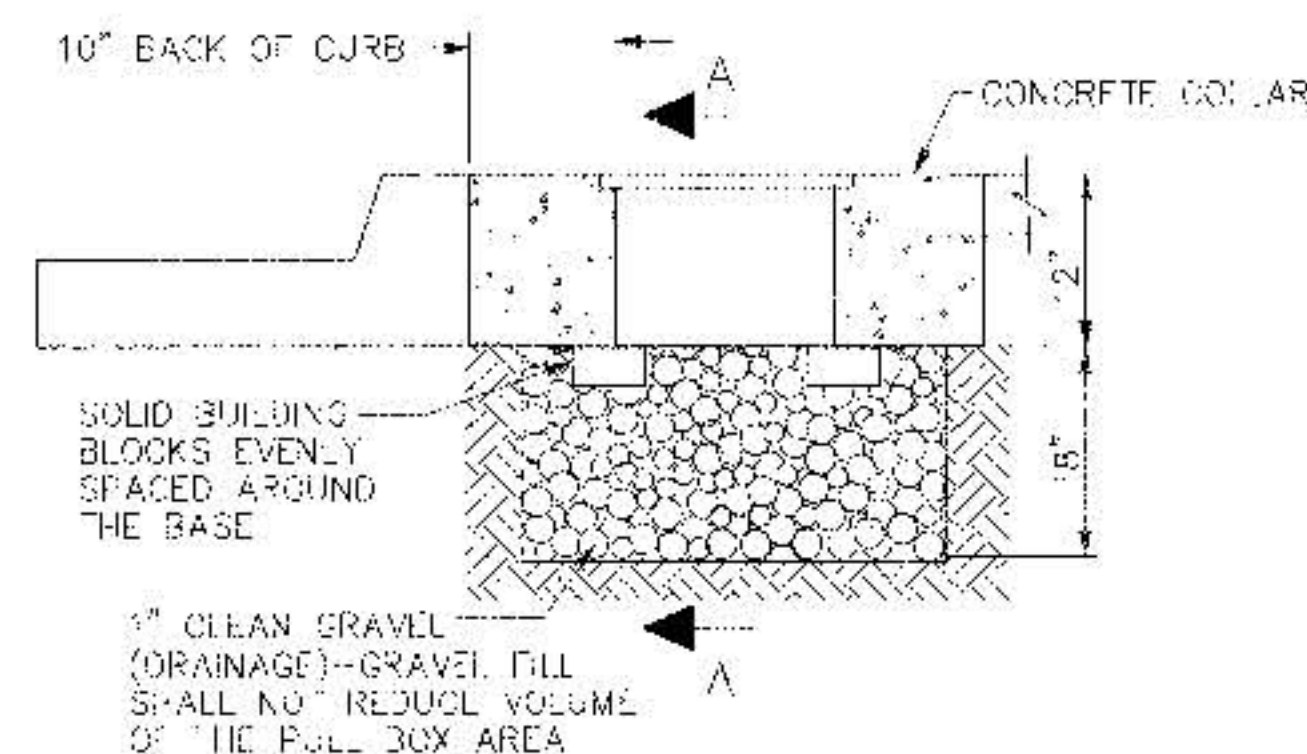
TERRA WEST, LLC 4421 McLEOD ROAD, N.E., SUITE D ALBUQUERQUE, NEW MEXICO 87109 (505) 883-7592	
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP	
TITLE: TRAFFIC SIGNAL METER PEDESTAL DETAILS COMBINATION SIGNALS AND LIGHTING	
DESIGN REVIEW COMMITTEE REVIEWED BY: [Signature] DATE: 10/18/2011	CITY ENGINEER APPROVAL [Signature] DATE: 10/18/2011
CITY PROJECT NO. 581981	ZONE MAP NO. H-17-2
SHEET 17 OF 24	DESIGNED BY: RRG DRAWN BY: JCN CHECKED BY: RRG

AS BUILT INFORMATION	
CONTRACTOR	DATE
WORK STARTED BY	DATE
INSPECTOR	DATE
FIELD CHECK BY	DATE
REVISION BY	DATE
CORRECTED BY	DATE
RECORDED BY	DATE
NO.	

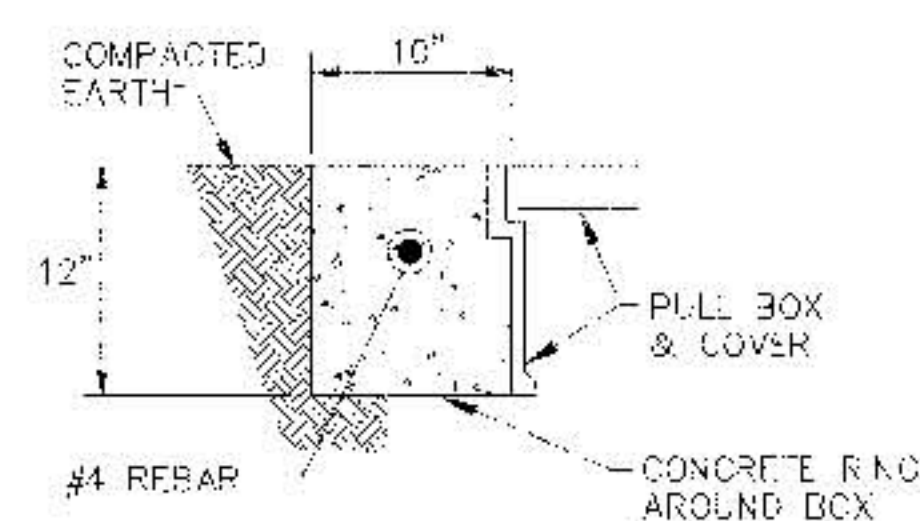
SURVEY INFORMATION	
FIELD NOTES	DATE
BY	
NO.	



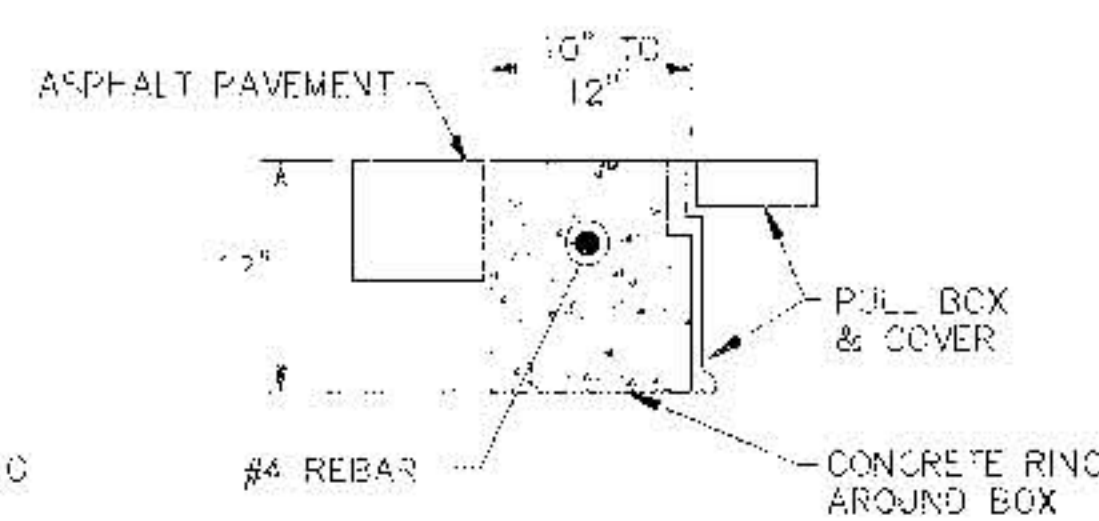
ENGINEER'S SEAL	
REMARKS	BY
REVISIONS	
DESIGN	
DATE: 3-98	DATE: 3-98
DATE: 3-98	DATE: 3-98



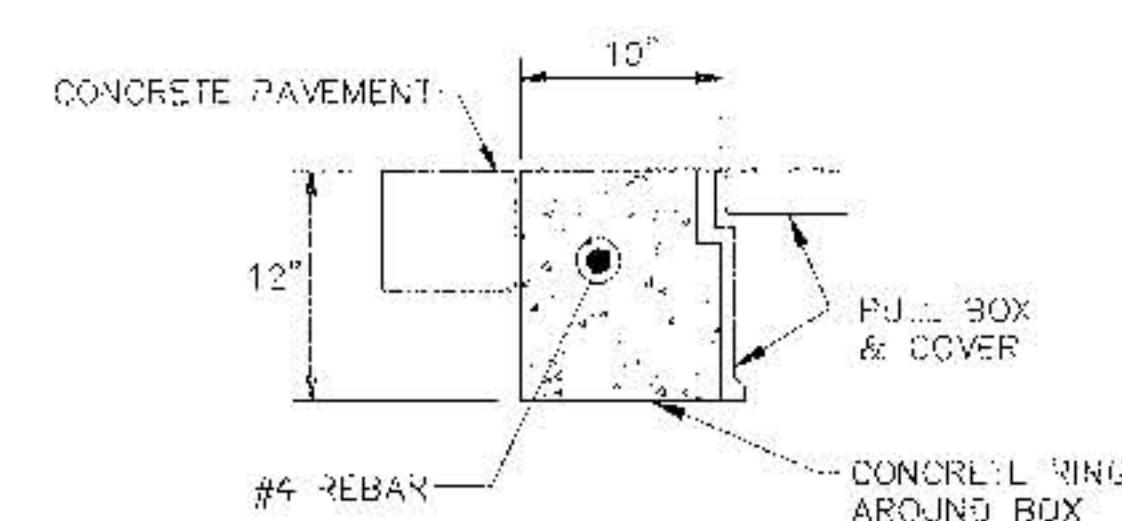
TYPICAL PULL BOX INSTALLATION
NOTE: SEE "CONCRETE COLLAR DETAIL"



IN COMPACTED EARTH



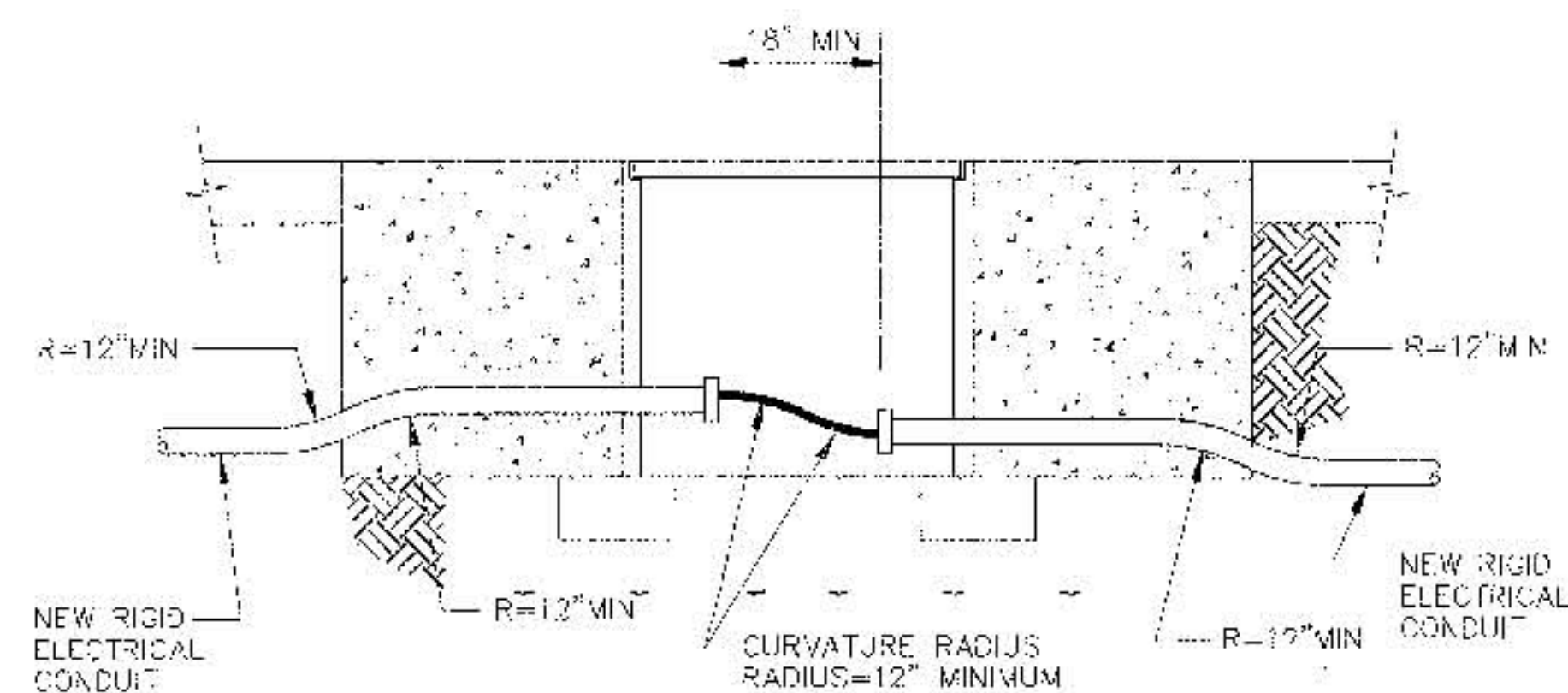
IN ASPHALT PAVEMENTS



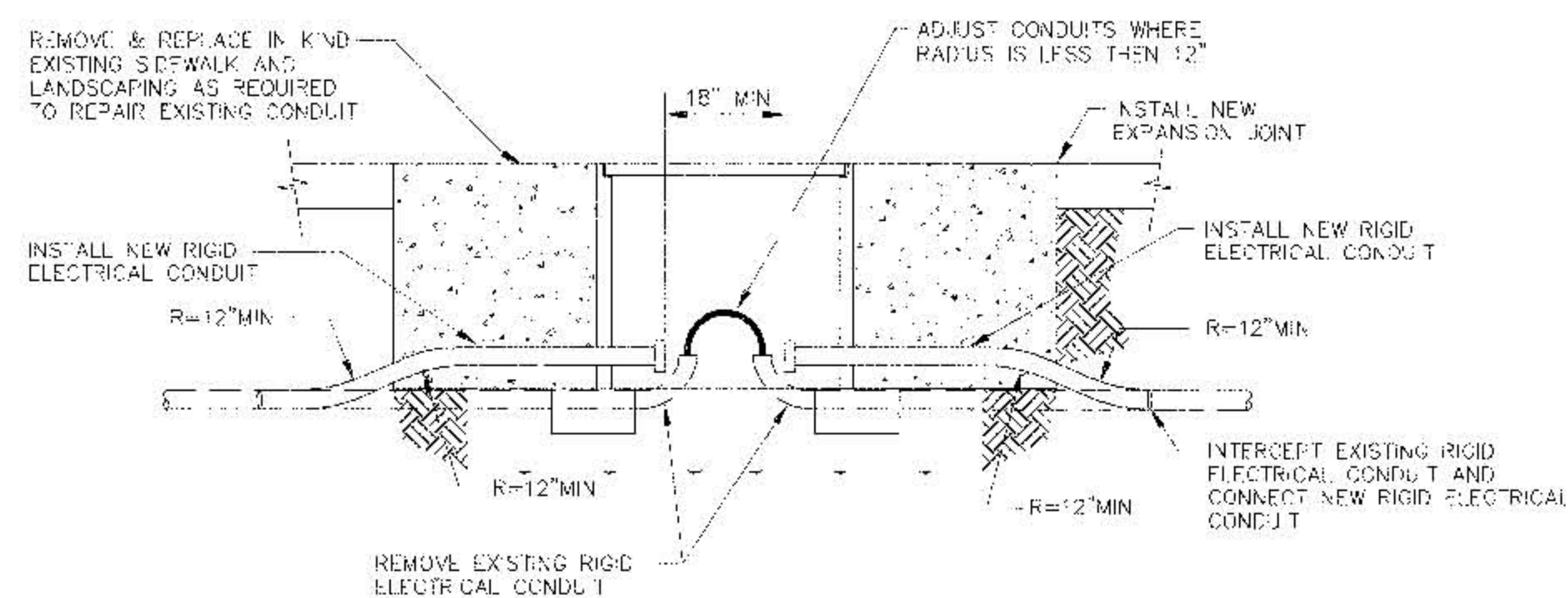
IN CONCRETE PAVEMENTS

CONCRETE COLLAR DETAILS

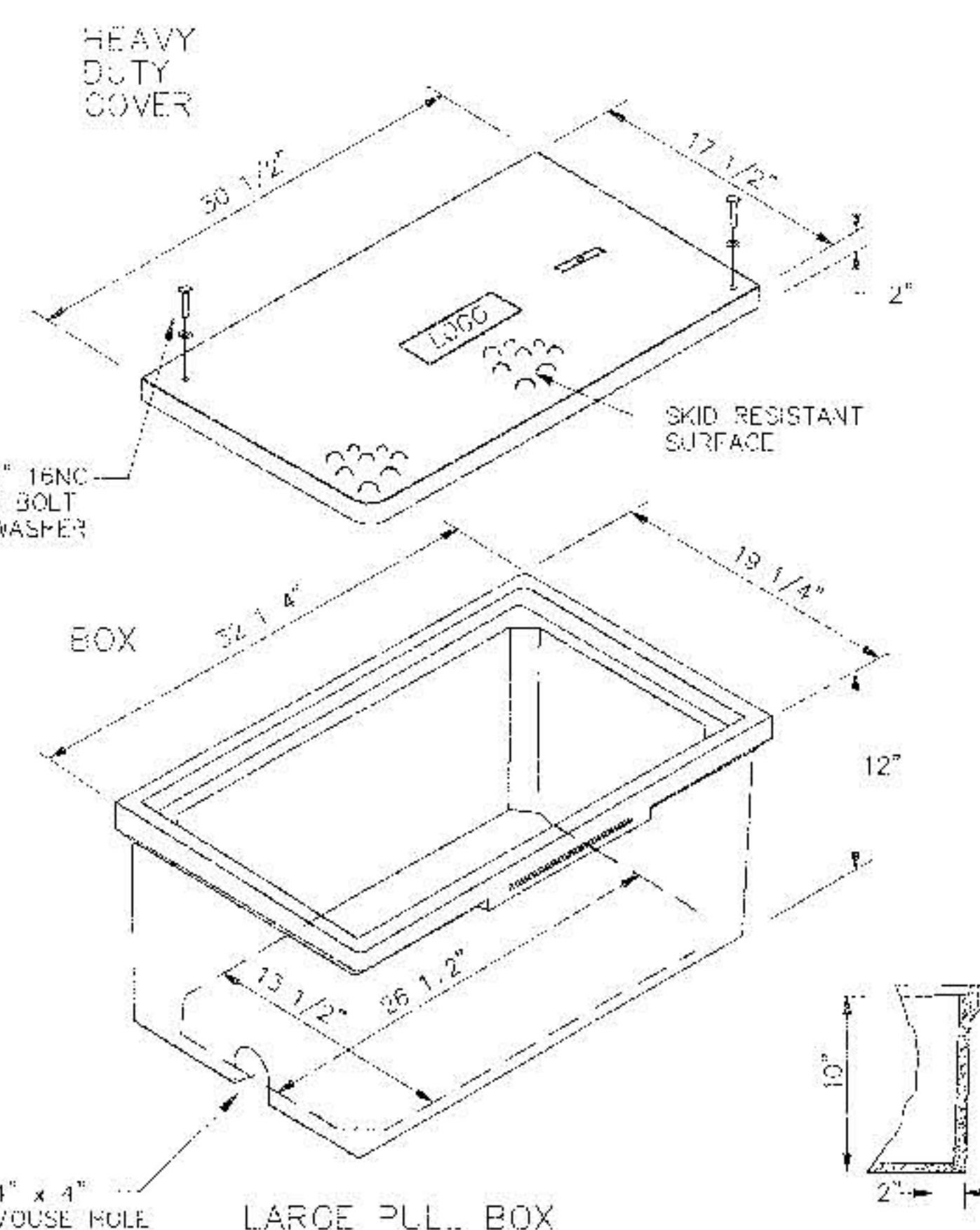
NOTE: THE CONCRETE COLLAR FOR THE PULL BOXES WILL BE CONSIDERED INCIDENTAL TO THE PULL BOX BID ITEMS



TRAFFIC SIGNAL PULL BOX (TYPICAL)
NEW CONDUIT INSTALLATION

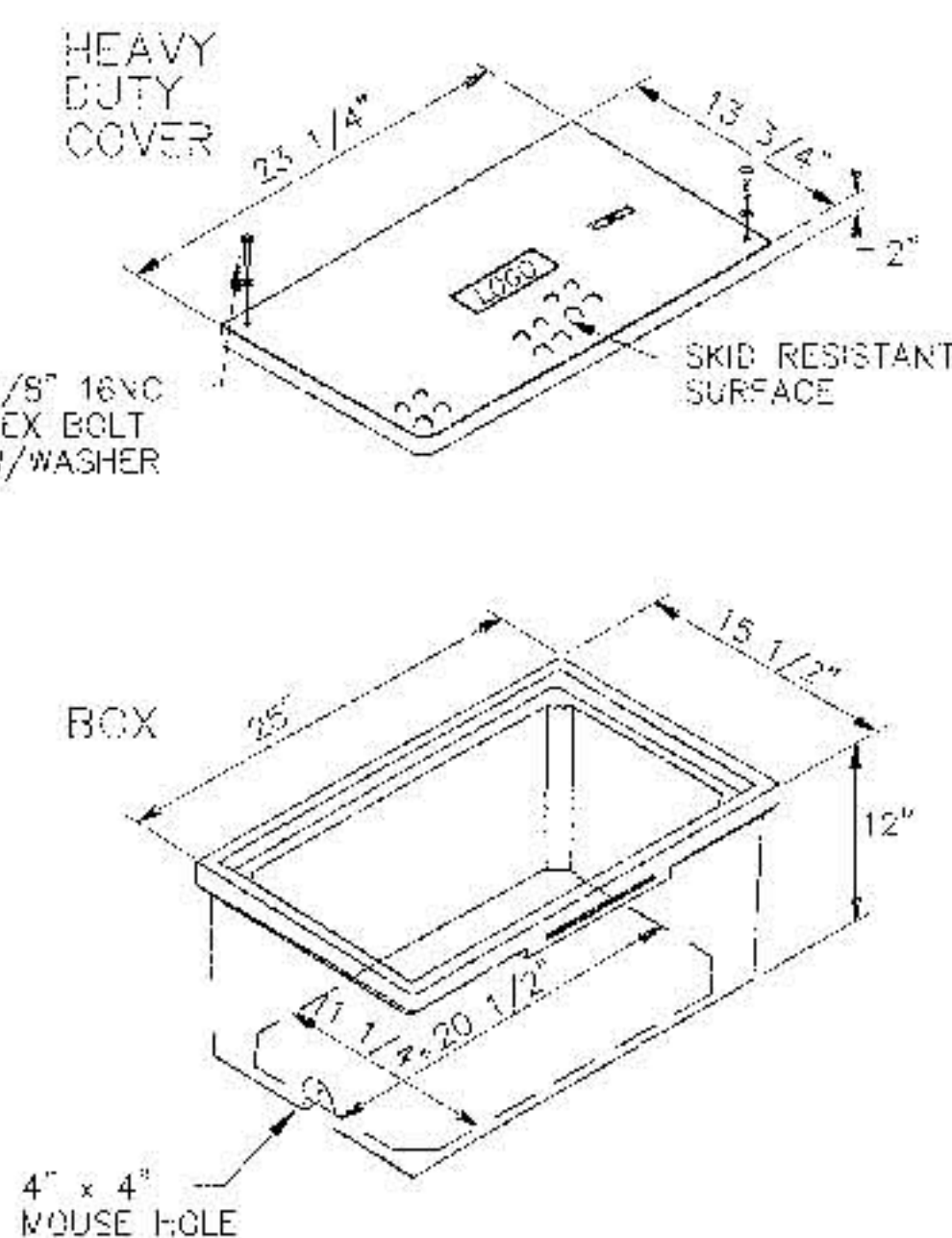


TRAFFIC SIGNAL PULL BOX (TYPICAL)
RETROFIT INSTALLATION



LARGE PULL BOX

PULL BOX DETAILS



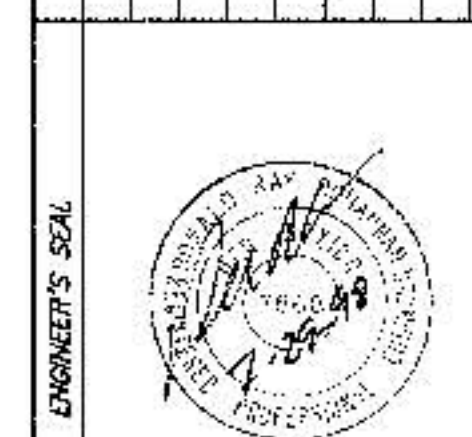
STANDARD PULL BOX

NOTES FOR HEAVY DUTY REINFORCED POLYMER MORTAR PULL BOX AND COVERS

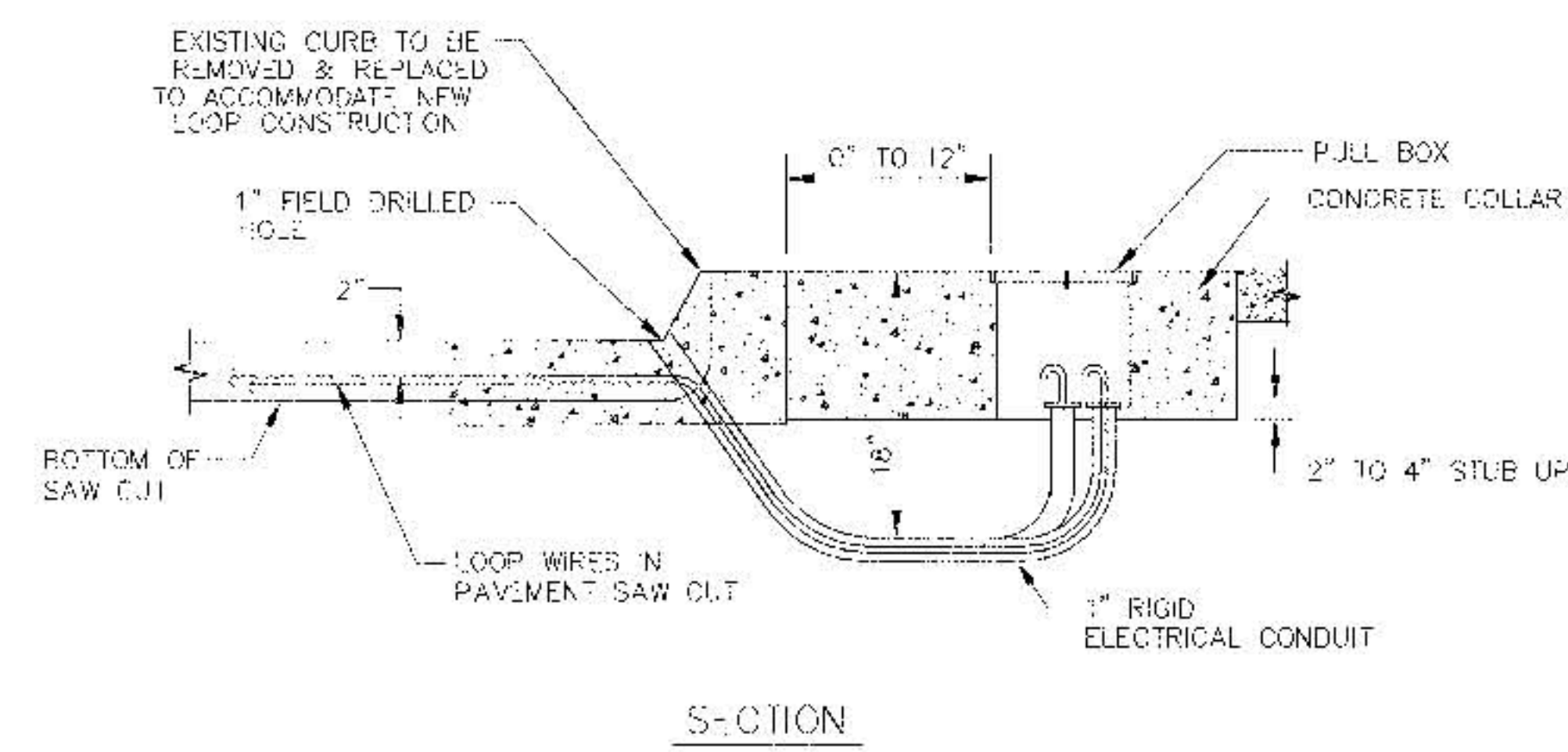
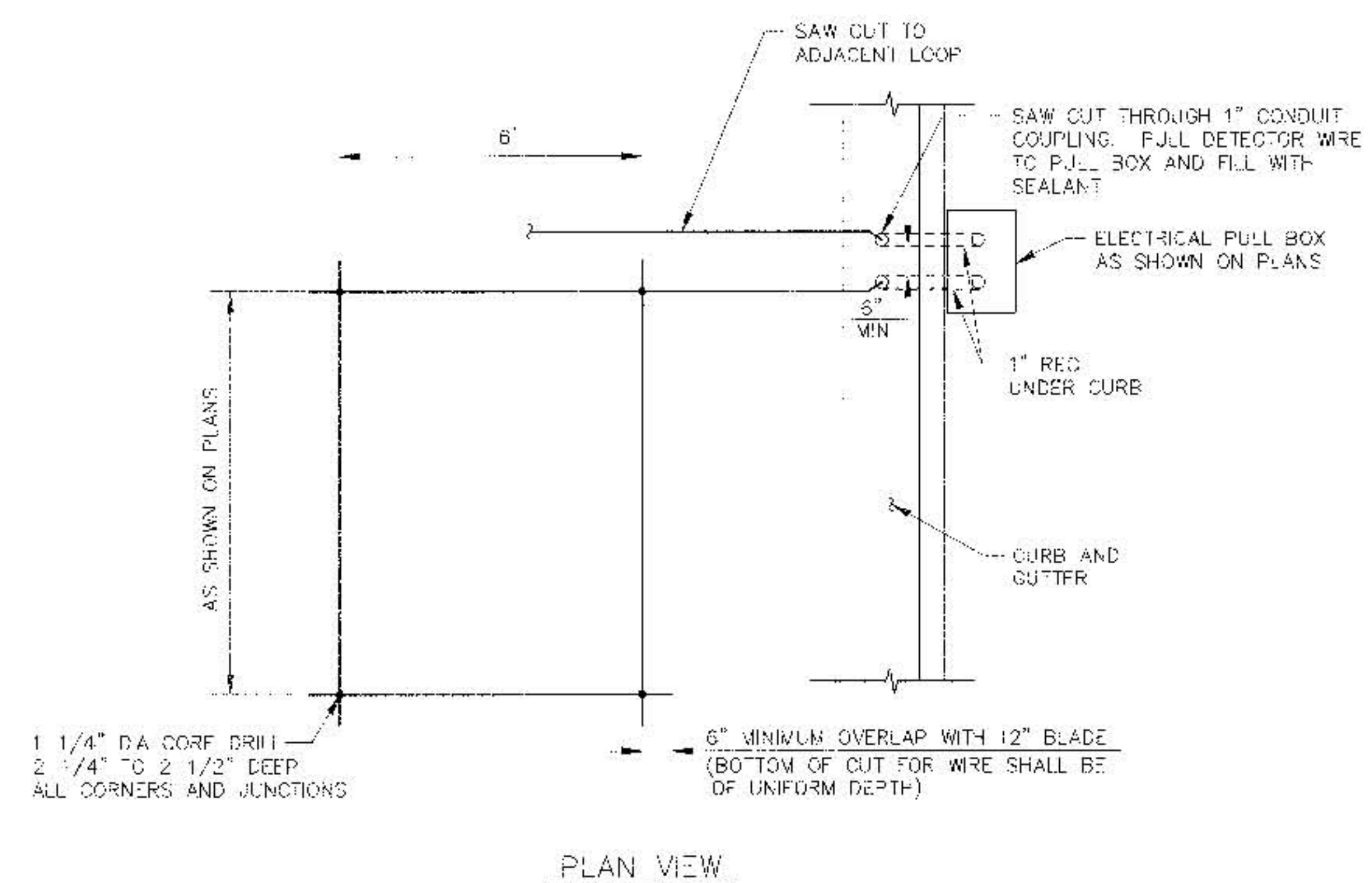
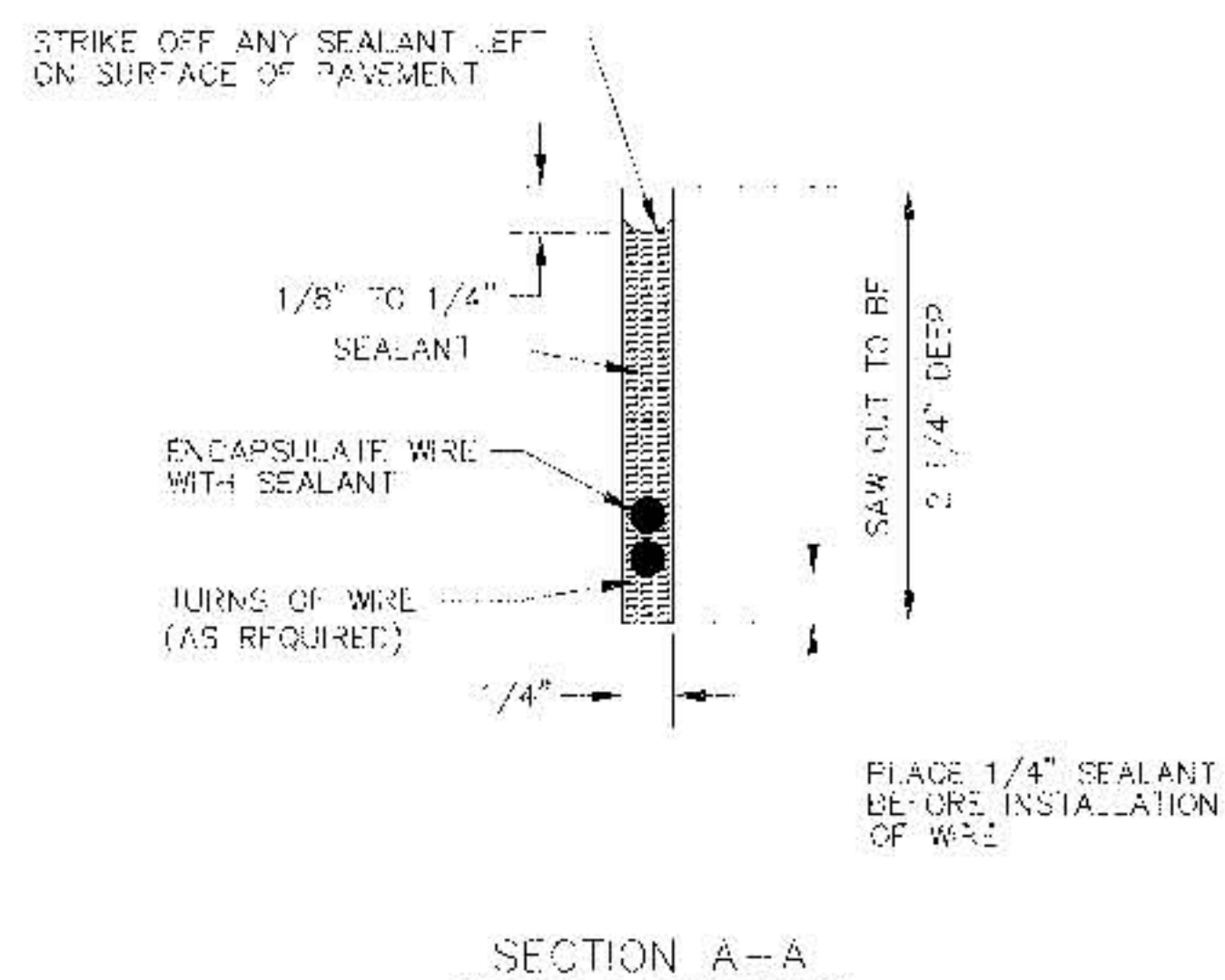
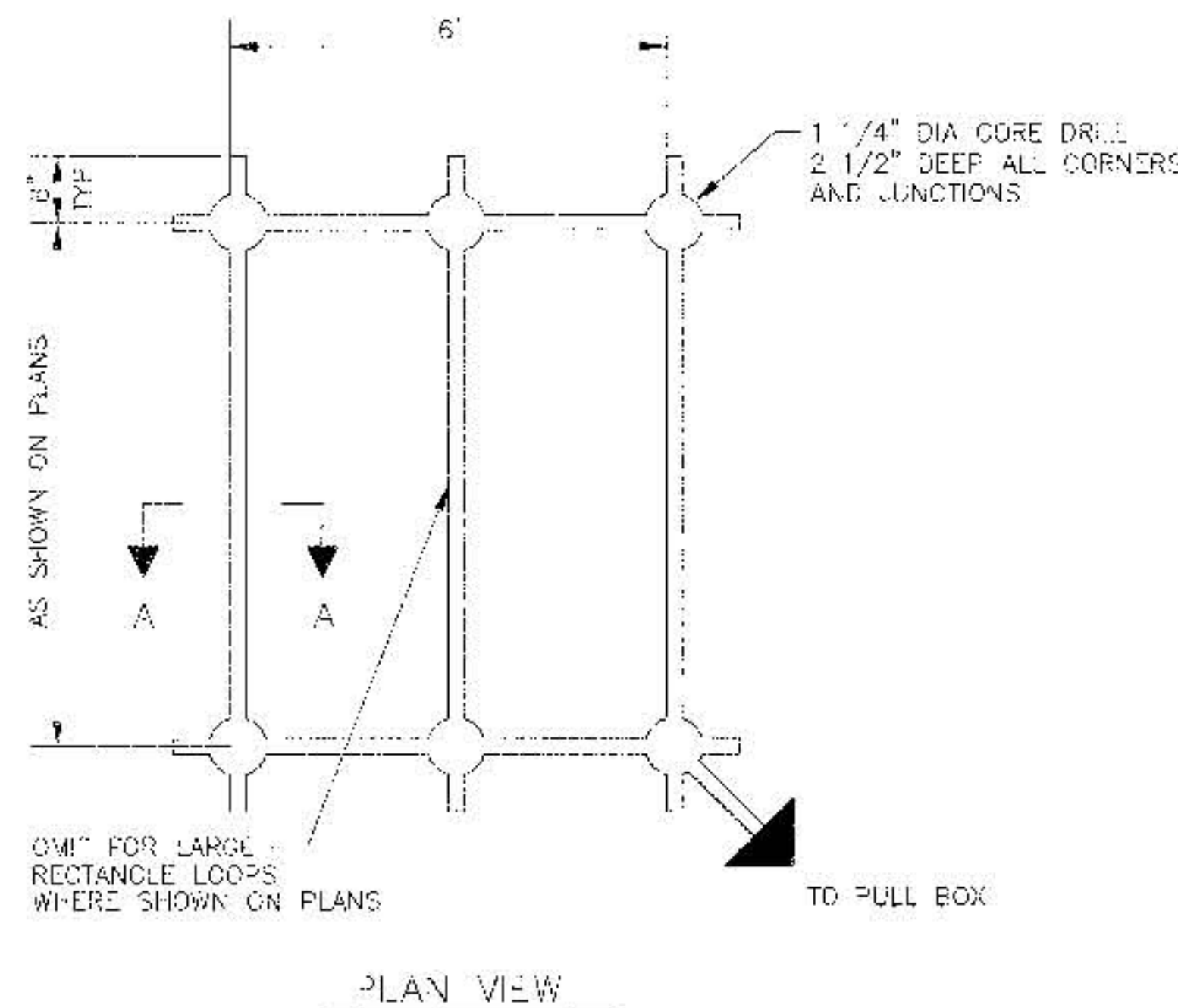
1. MATERIAL TO BE AN AGGREGATE CONSISTING OF SAND AND GRAVEL BOUND TOGETHER WITH A POLYMER AND REINFORCED WITH CONTINUOUS WOVEN GLASS STRANDS. THE MATERIAL MUST HAVE THE FOLLOWING MECHANICAL PROPERTIES: COMPRESSIVE STRENGTH - 11,000 PSI, TENSILE STRENGTH - 1,700 PSI, FLEXURAL STRENGTH - 7,500 PSI.
2. ALL PULL BOX COVERS SHALL BE HEAVY DUTY REINFORCED POLYMER MORTAR, HAVING A SERVICE LOAD OF 22,568 LBS OVER 10" SQUARE (225 PSI).
3. PULL BOX TYPE AND LOGO SHALL BE APPROVED BY THE PROJECT MANAGER.
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.
5. ELECTRICAL PULL BOX (STANDARD) SHALL BE A HEAVY DUTY REINFORCED POLYMER MORTAR PULL BOX AND COVER MEASURING 13 3/4" x 23 1/4" x 2"

TIERRA WEST, LLC 4421 MILEDO ROAD, N.E., SUITE D ALBUQUERQUE, NEW MEXICO 87109 (505)885-7592	
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP	
TRAFFIC SIGNAL PULL BOX DETAILS	
DESIGN REVIEW COMMITTEE CITY ENGINEER APPROVAL LAST DESIGN UPDATE	NO./DAY/YR. MO./DAY/YR.
CITY PROJECT NO. 581981	ZONE MAP NO. H-17-Z
SHEET 19 OF 24	DESIGNED BY RRB DATE 3-96 DRAWN BY JDN DATE 3-98 CHECKED BY RRB DATE 3-98

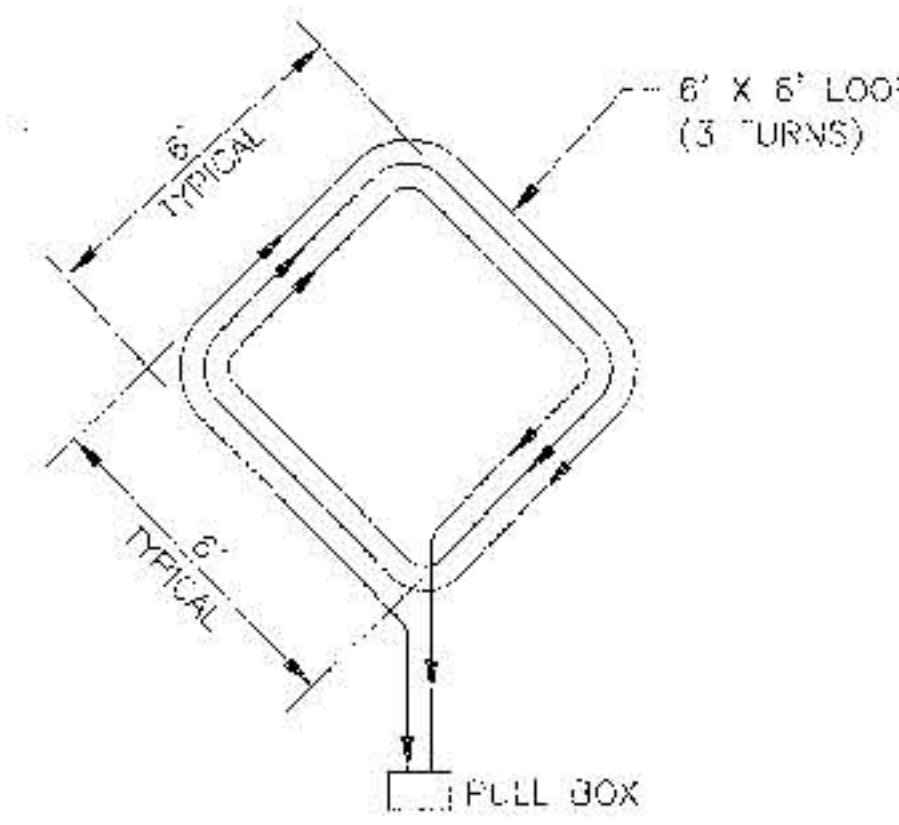
AS BUILT INFORMATION	
CONTRACTOR	NO.
DATE	DATE
INSPECTOR'S	DATE
BY	DATE
FIELD	DATE
VERIFICATION BY	DATE
DATE	DATE
MICRO-FILM INFORMATION	
RECORDED BY	DATE
NO.	NO.



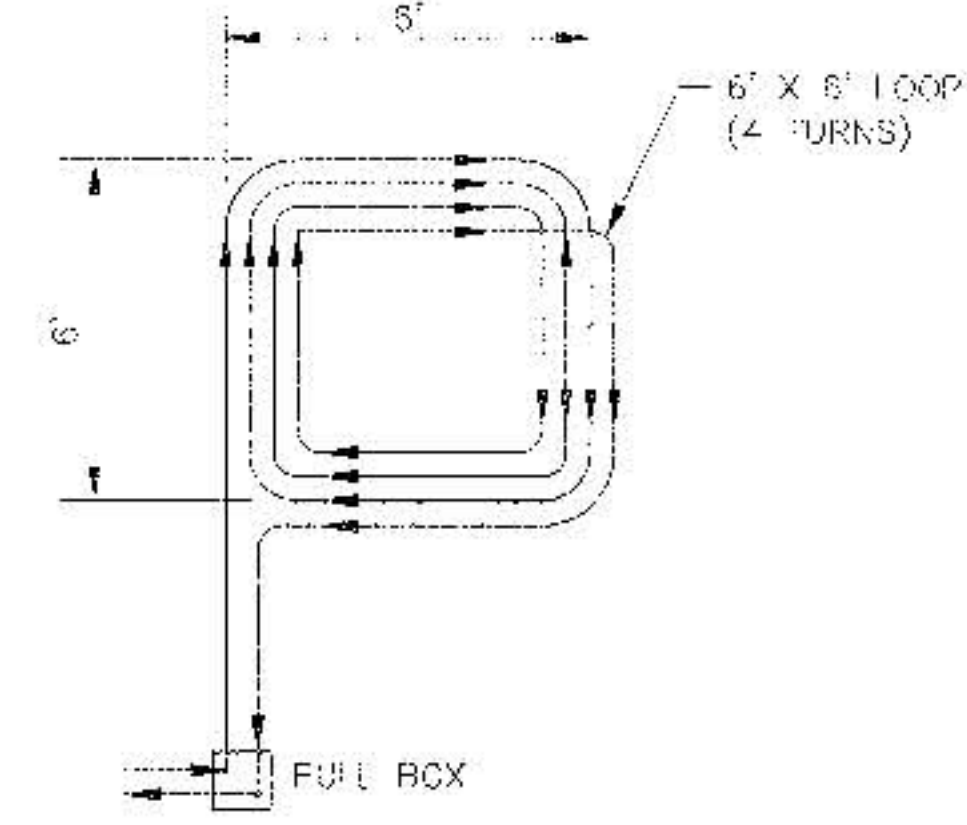
SURVEY INFORMATION	
FIELD NOTES	DATE
BY	DATE
NO.	DATE
ENGINEER'S SEAL	
REMARKS	BY
NO.	DATE
DESIGN	DATE
DESIGNED BY	DATE
DRAWN BY	DATE
CHECKED BY	DATE



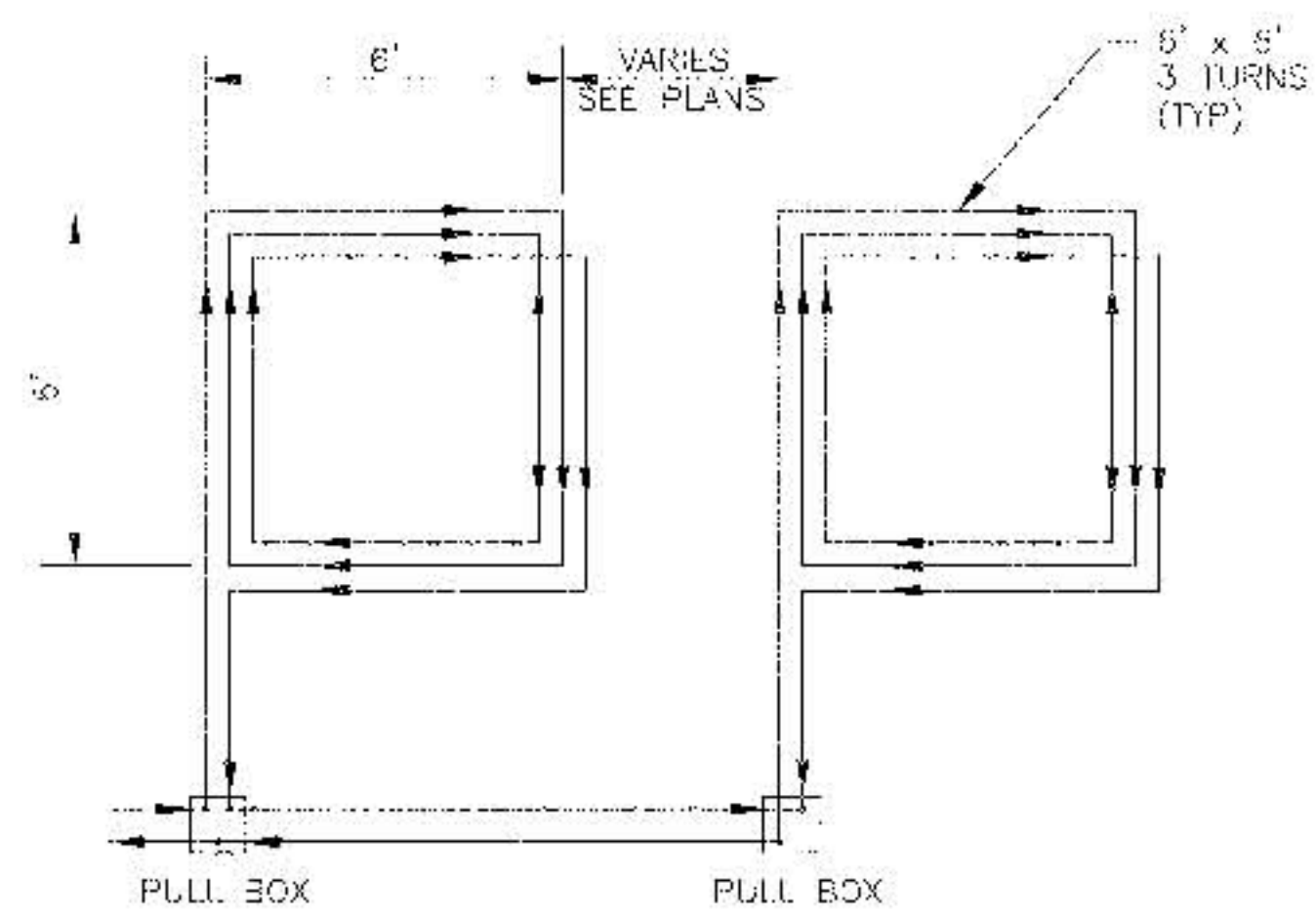
LOOP WIRE TERMINATION DETAILS



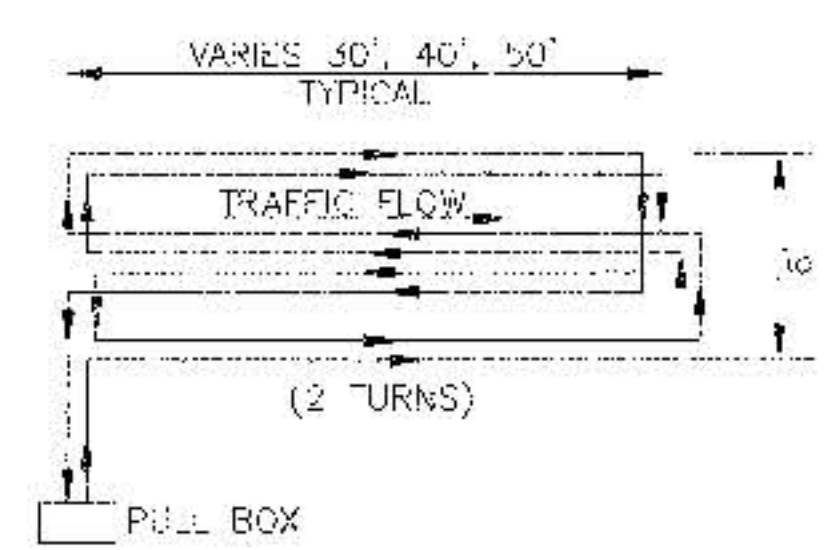
EXTEND CALL LOOP WIRING DETAIL



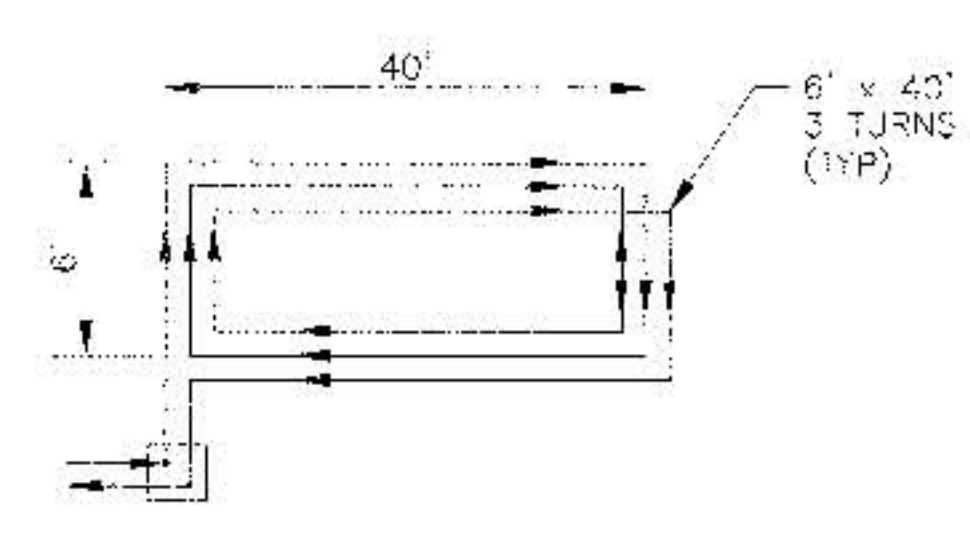
SYSTEM LOOP WIRING DETAIL



SERIES LOOP WIRING DETAIL



QUADRUPOLE LOOP WIRING DETAIL



LARGE RECTANGULAR LOOP WIRING DETAIL

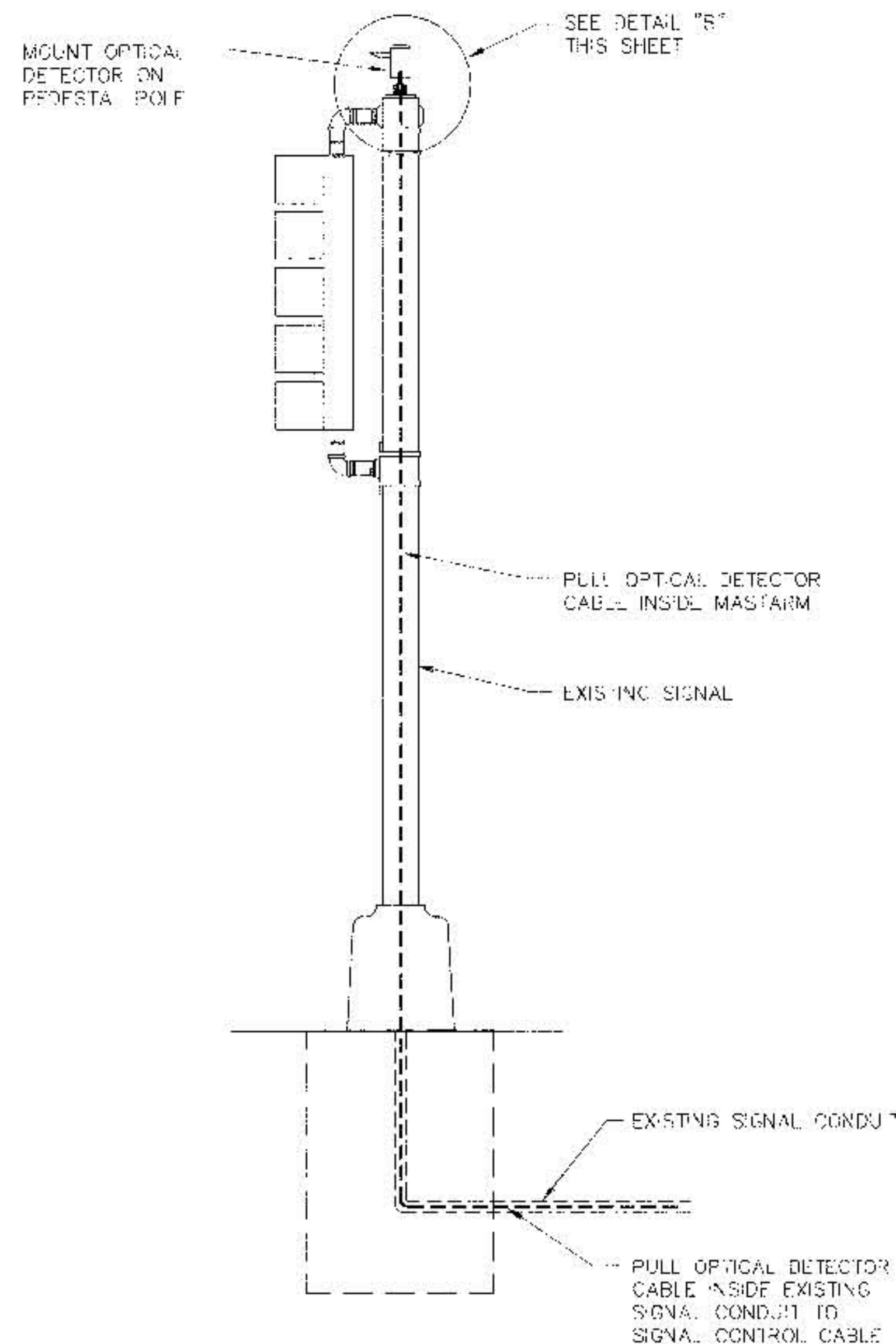
TYPICAL LOOP WIRE PLACEMENT DETAILS

- NOTES
1. WIRES MUST BE WOUND IN THE DIRECTION SHOWN.
 2. QUADRUPOLE LOOPS SHALL HAVE 2 TURNS.
 3. EXTEND CALL LOOPS SHALL HAVE 3 TURNS.
 4. SYSTEM DETECTOR LOOPS SHALL HAVE 4 TURNS.
 5. LARGE RECTANGLE LOOPS SHALL HAVE 3 TURNS.

LOOP DETECTOR NOTES

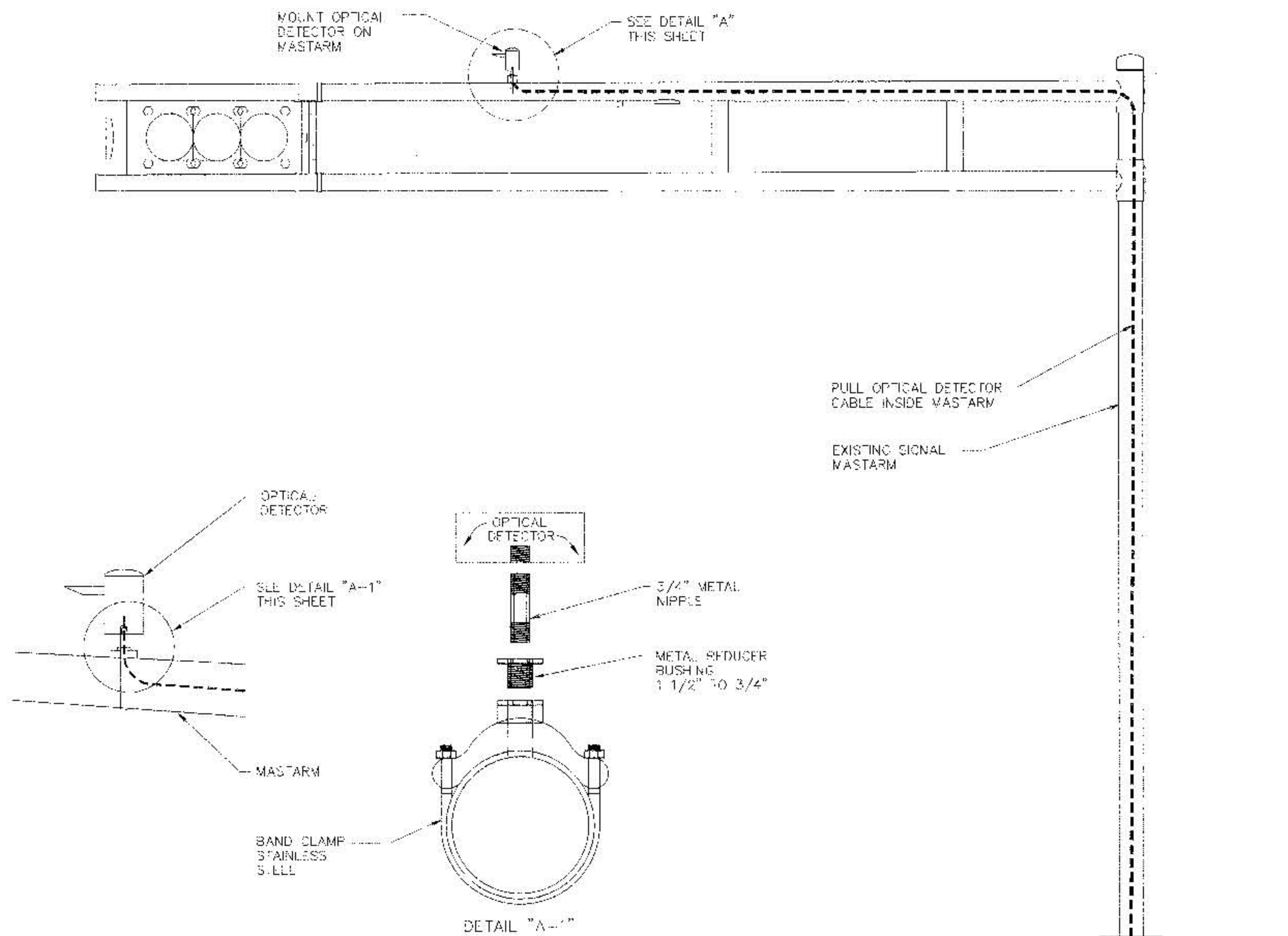
1. ALL LOOP DETECTOR WIRE SHALL BE #14 AWG STRANDED COPPER WIRE WITH CROSS-LINKED POLYETHYLENE INSULATION (INDUSTRY TYPE XHHW) CONFORMING TO THE REQUIREMENTS OF IMSA SPECIFICATIONS #51-3 1984. BACKER ROD SHALL NOT BE USED IN THE INSTALLATION OF LOOP (EXCEPT PIECES LESS THAN 12\"/>

TERRA WEST, LLC 4421 MCLEOD ROAD, N.E., SUITE D ALBUQUERQUE, NEW MEXICO 87109 (505)883-7592	
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP	
TITLE: TRAFFIC SIGNAL LOOP DETECTOR DETAILS	
DESIGN REVIEW COMMITTEE SEP 15 2008	CITY ENGINEER APPROVAL LAST DESIGN UPDATE
CITY PROJECT NO. 581981	ZONE MAP NO. H-17-Z
DESIGNED BY RRB	DATE 3-98
DRAWN BY RRB	DATE 3-98
CHECKED BY RRB	DATE 3-98
NO. / DAY / YR. 20 / 08 / 08	NO. / DAY / YR. 24 / 08 / 08



TYPICAL OPTICAL DETECTOR INSTALLATION - PEDESTAL POLE

NOTE: OPTICAL DETECTOR SHALL ONLY BE MOUNTED ON PEDESTAL POLES WHEN THERE IS NO MASTARM.

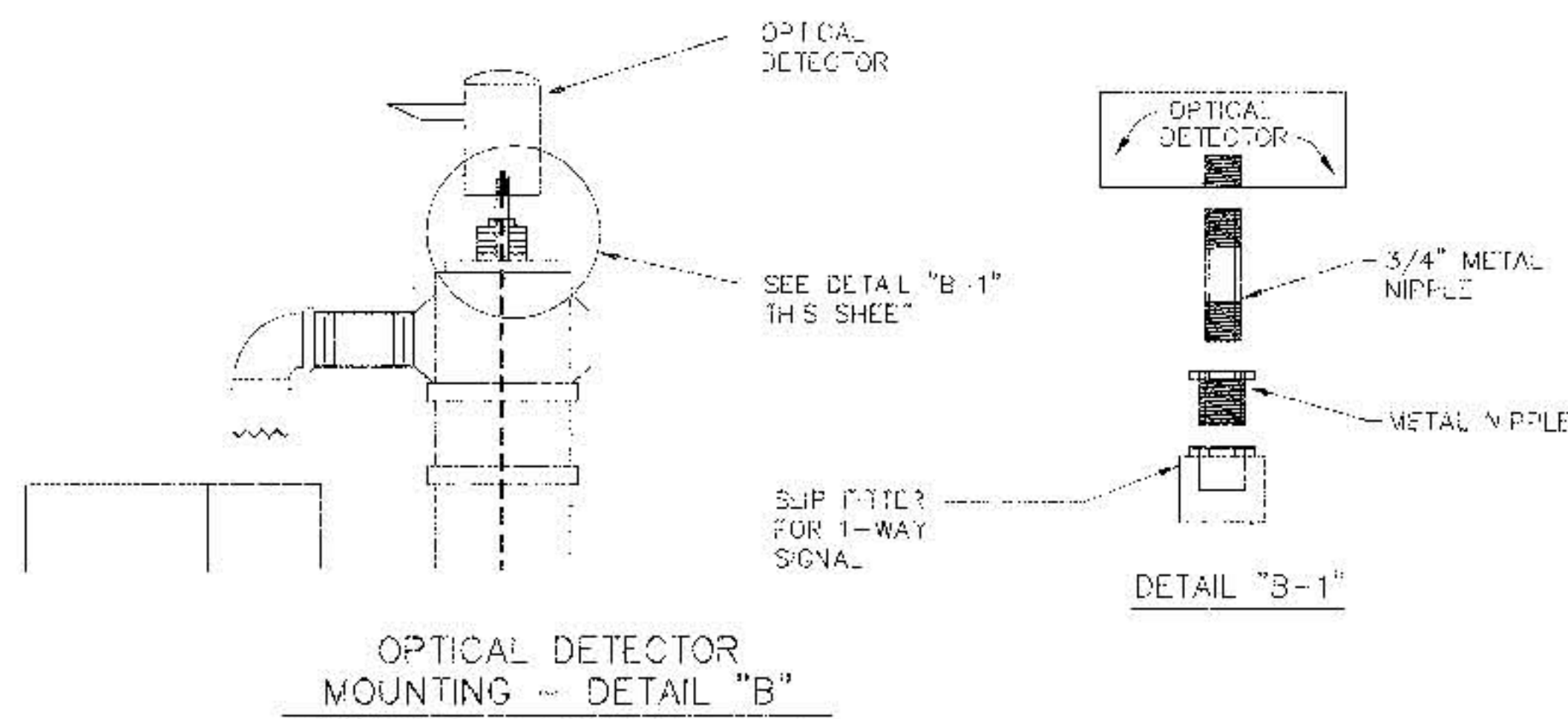


OPTICAL DETECTOR MOUNTING - DETAIL "A"

NOTES:

1. ALL OPTICAL DETECTOR MOUNTING HARDWARE SHALL CONFORM TO OPTICAL DETECTOR MANUFACTURER'S REQUIREMENTS.

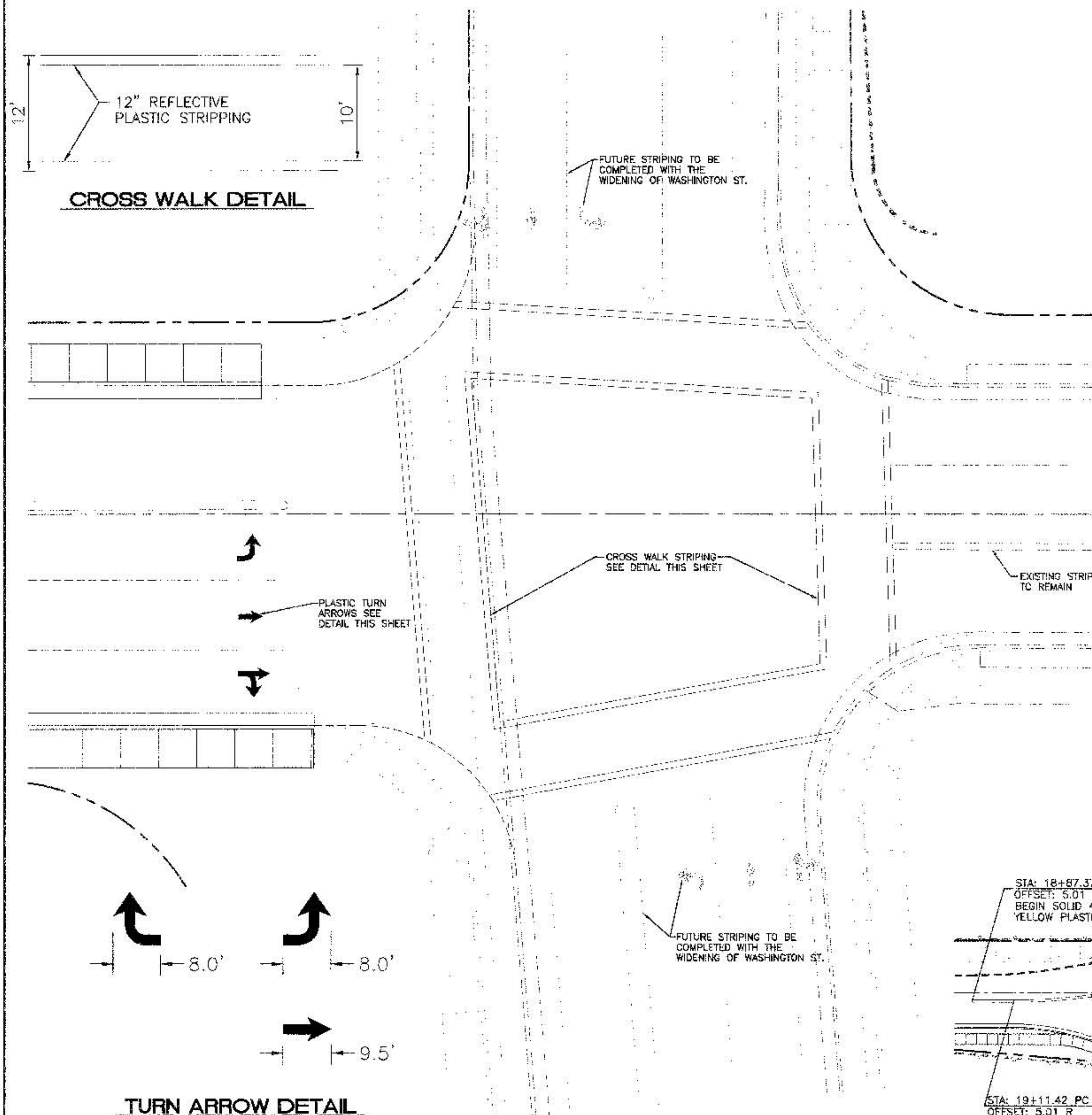
TYPICAL OPTICAL DETECTOR INSTALLATION - MASTARM



OPTICAL DETECTOR MOUNTING - DETAIL "B"

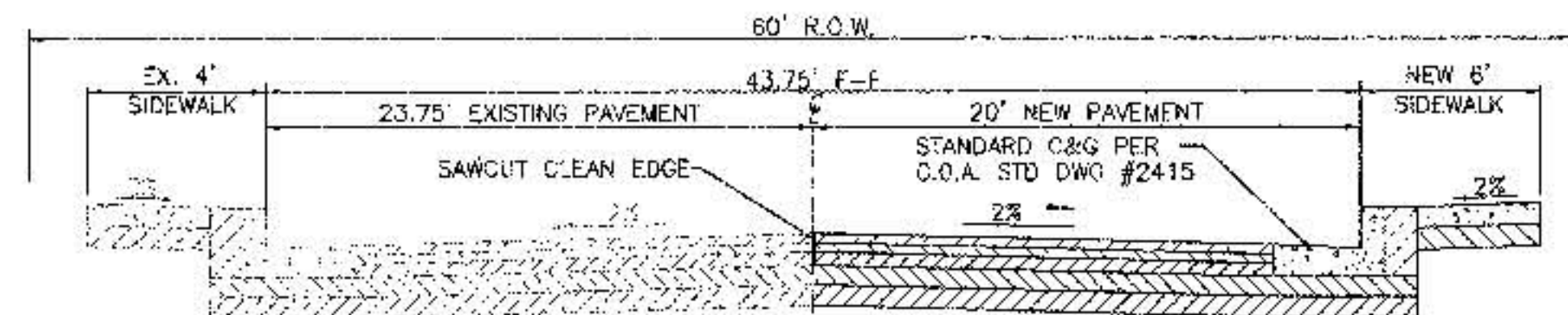
CONTRACTOR				AS BUILT INFORMATION			
CONTRACTOR	DATE	CONTRACTOR	DATE	CONTRACTOR	DATE	CONTRACTOR	DATE
WORK ORDER	DATE	WORK ORDER	DATE	WORK ORDER	DATE	WORK ORDER	DATE
INSPECTED BY	DATE	INSPECTED BY	DATE	INSPECTED BY	DATE	INSPECTED BY	DATE
FIELD	DATE	FIELD	DATE	FIELD	DATE	FIELD	DATE
APPROVED BY	DATE	APPROVED BY	DATE	APPROVED BY	DATE	APPROVED BY	DATE
RECORDED BY	DATE	RECORDED BY	DATE	RECORDED BY	DATE	RECORDED BY	DATE
NO.		NO.		NO.		NO.	

TIERRA WEST, LLC 4421 MCLEOD ROAD, N.E., SUITE D ALBUQUERQUE, NEW MEXICO 87109 (505) 863-7592	
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP	
TITLE: TRAFFIC SIGNAL OPTICAL DETECTOR INSTALLATION DETAILS	
DESIGN REVIEW COMMITTEE CITY ENGINEER APPROVAL LAST DESIGN UPDATE	NO. / DAY / YR. MO. / DAY / YR.
CITY PROJECT NO. 581981 ZONE MAP NO. H-17-7	SHEET 21 OF 24

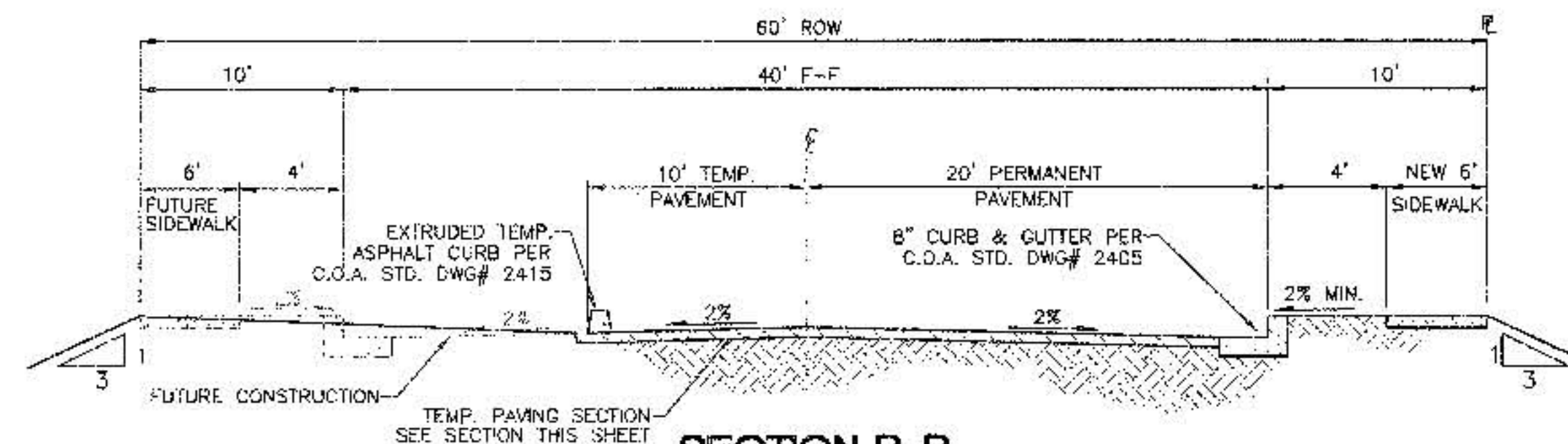


CROSS WALK DETAIL

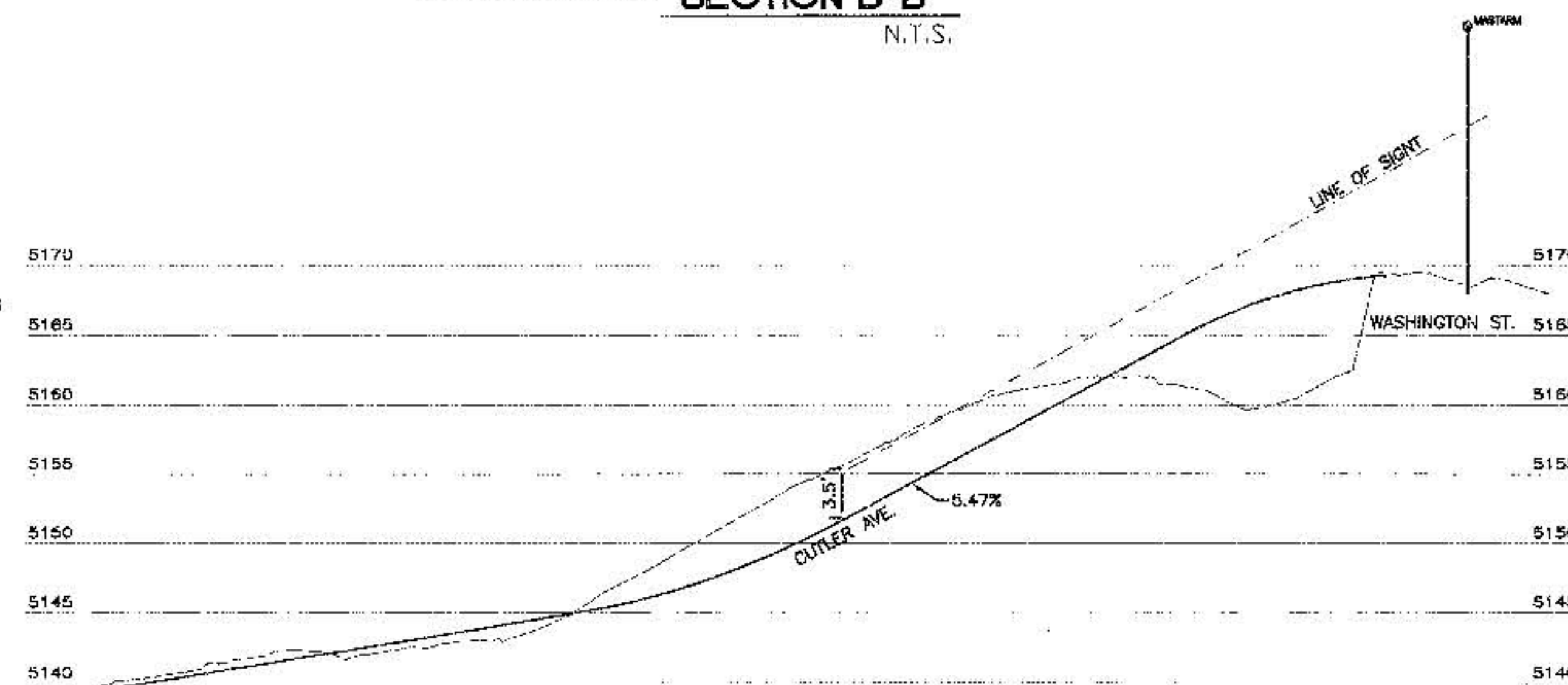
TURN ARROW DETAIL



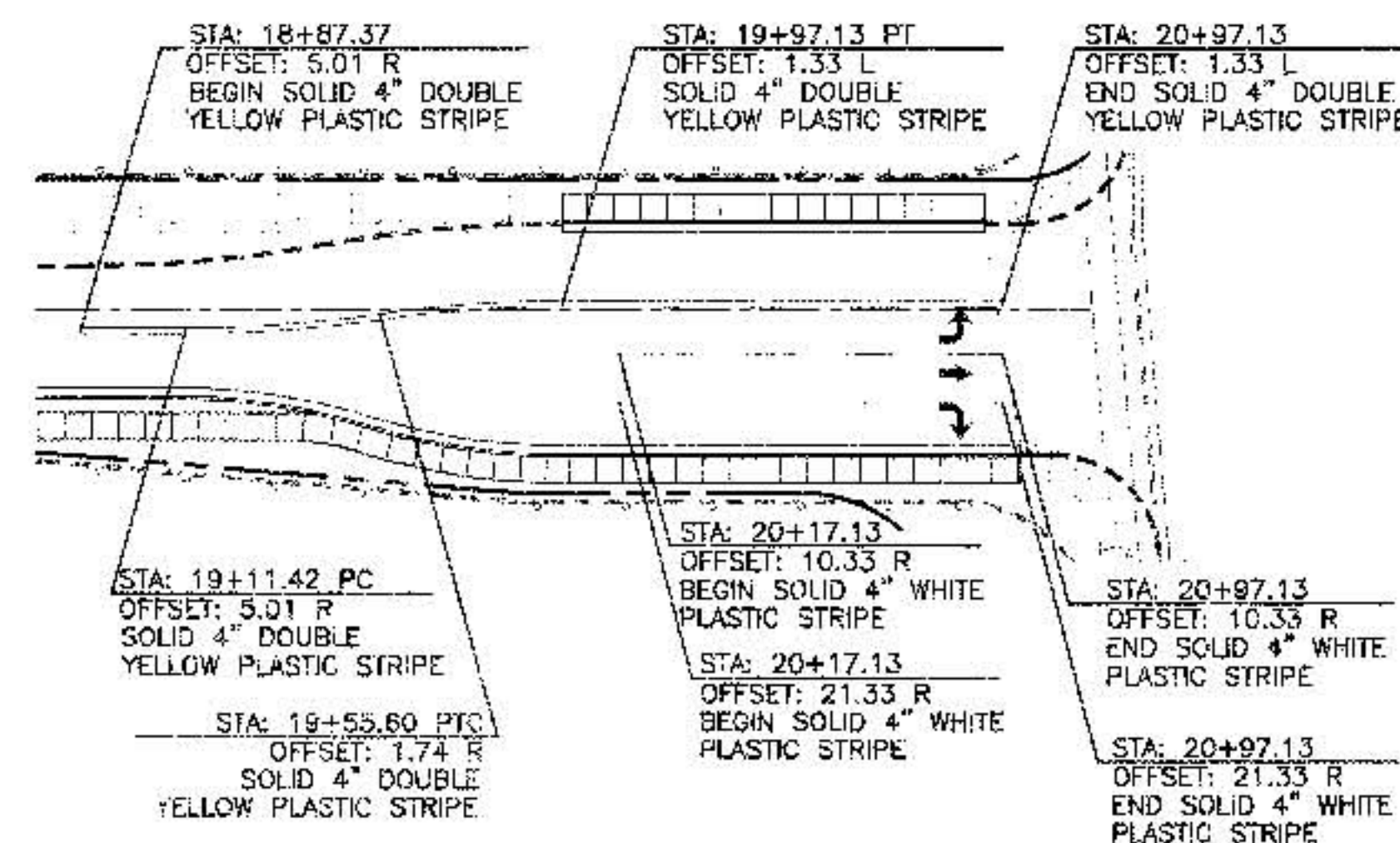
SECTION A-A
N.T.S.



SECTION B-B
N.T.S.

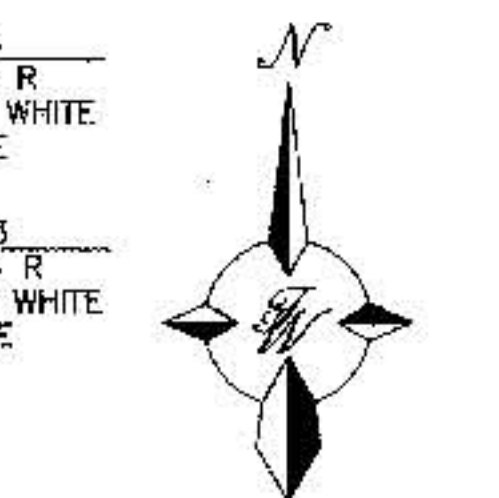


LINE OF SIGHT DETAIL



STATIONING IS BASED ON CUTLER AVE. PAVING P & P SHEET

STRIPING STATIONING



GRAPHIC SCALE
10 5 0 5 10
SCALE: 1"=10'

- NOTES:
1. DEVELOPER TO PROVIDE ALL STREET SIGNS REQUIRED FOR IMPROVEMENTS.
 3. SEE SHEET 24 FOR SIGN FACE DETAILS.
 4. ALL STRIPING TO BE 4" WIDE REFLECTIVE PLASTIC.

TERRA WEST, LLC
4421 McLEOD ROAD, N.E., SUITE D
ALBUQUERQUE, NEW MEXICO 87109
(505)883-7592

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: **INTERSECTION OF WASHINGTON ST. NE
AND CUTLER AVE. NE
STRIPING AND DETAIL SHEET**

DESIGN REVIEW COMMITTEE
SEP 16 2008
DESIGNER
PROJECT MANAGER

CITY ENGINEER APPROVAL
LAST DESIGN UPDATE

CITY PROJECT NO.

ZONE MAP NO.
H-17-Z

SHEET **22** OF **24**

AS BUILT INFORMATION			
CONTRACTOR	WORK	DATE	DATE
STANDARD BY	INSPECTOR'S	DATE	DATE
FIELD	FIELD	DATE	DATE
VERIFICATION BY	VERIFICATION BY	DATE	DATE
CORRECTED BY	CORRECTED BY	DATE	DATE
MICRO-FILM INFORMATION			
RECORDED BY	NO.	DATE	DATE

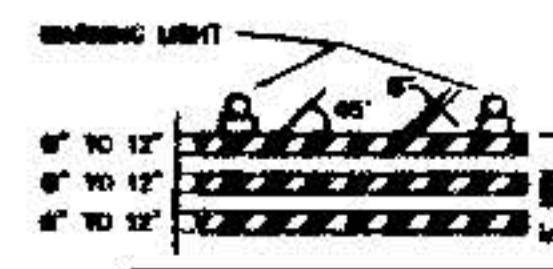


REVISIONS		DATE
NO.	DATE	DATE
DESIGNED BY	RRB	7-06
DRAWN BY	JDN	7-09
CHECKED BY	RRB	7-09

CONSTRUCTION TRAFFIC CONTROL GENERAL NOTES

- CONTRACTOR MUST OBTAIN FROM CONSTRUCTION COORDINATION AN EXCAVATION/BARRICADING PERMIT BEFORE ENGAGING IN ANY CONSTRUCTION, MAINTENANCE OR REPAIR WORK IN ANY OF THE CITY OF ALBUQUERQUE'S RIGHTS-OF-WAY. EMERGENCY WORK THAT WOULD PRESERVE LIFE OR PROPERTY IS EXCLUDED WITH THE UNDERSTANDING, THAT A PERMIT SHALL BE OBTAINED WITHIN 24 TO 48 HOURS.
- CONTRACTOR SHALL AT THE TIME OF PERMIT REQUEST, SUBMIT FOR APPROVAL BY CONSTRUCTION COORDINATION, A TRAFFIC CONTROL PLAN DETAILING ALL EXISTING TOPOGRAPHY SUCH AS LANE WIDTHS, DRIVEWAYS, AND BUSINESS/RESIDENTIAL ACCESSES. THE TRAFFIC CONTROL PLAN SHALL INCLUDE ALL PHASES OF WORK AND SCHEDULES INVOLVED IN THE CONSTRUCTION PROJECT. ANY SEPARATE PHASES OF A CONSTRUCTION PROJECT SHALL BE GIVEN AN INDIVIDUAL PERMIT EACH. BLANKET PERMITS WILL NOT BE ISSUED.
- THESE TYPICAL TRAFFIC CONTROL PLANS DO NOT REFLECT THE EXISTING TOPOGRAPHY SUCH AS DRIVEWAYS, LANE WIDTHS, AND BUSINESS/RESIDENTIAL ACCESSES. EVERY LOCATION THAT REQUIRES CONSTRUCTION TRAFFIC CONTROL SHALL HAVE A DETAILED TRAFFIC CONTROL PLAN SHOWING ALL EXISTING TOPOGRAPHY.
- CONSTRUCTION SHALL NOT BEGIN UNLESS A TRAFFIC CONTROL PLAN HAS BEEN APPROVED AND VERIFIED BY CONSTRUCTION COORDINATION.
- CONSTRUCTION COORDINATION SHALL BE NOTIFIED 48 HOURS PRIOR TO ANY TRAFFIC CONTROL CHANGES NEEDED BY CONTRACTOR, THAT WERE NOT PREVIOUSLY APPROVED. THESE TRAFFIC CONTROL CHANGES SHALL BE REQUESTED IN WRITING ACCOMPANIED WITH A TRAFFIC CONTROL PLAN REFLECTING SUCH CHANGES.
- ALL CONSTRUCTION TRAFFIC CONTROL DEVICES SHALL COMPLY TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL, SERVICE AND MAINTAIN ALL TRAFFIC CONTROL DEVICES. TRAFFIC CONTROL DEVICES SHALL NOT BE REMOVED OR ALTERED IN ANY WAY WITHOUT THE APPROVAL OF CONSTRUCTION COORDINATION, PER SECTION 6A-4 OF THE MUTCD, LATEST EDITION.
- THE CONSTRUCTION TRAFFIC CONTROL INITIAL SET-UP SHALL BE BY AN AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA) CERTIFIED WORKSITE TRAFFIC SUPERVISOR. THE MAINTENANCE AND SERVICING SHALL ALSO BE DONE BY AN ATSSA CERTIFIED WORKSITE TRAFFIC SUPERVISOR OR EQUIVALENT.
- CONTRACTOR IS RESPONSIBLE TO MAINTAIN AND SERVICE ALL TRAFFIC CONTROL DEVICES 24 HOURS A DAY, 7 DAYS A WEEK THROUGHOUT LENGTH OF PROJECT. CONTRACTOR IS RESPONSIBLE THAT ALL TRAFFIC CONTROL DEVICES COMPLY WITH THE MUTCD, LATEST EDITION.
- ALL ADVANCE WARNING SIGNS SHALL BE DOUBLE INDICATED WHENEVER THERE ARE MULTI-LANE TRAFFIC IN ANY ONE GIVEN DIRECTION AND THERE IS SUFFICIENT MEDIAN SPACE.
- ALL BARRICADES IN ALL TAPERS AND TANGENTS SHALL BE PLACED APART, A DISTANCE MEASURED IN FEET, EQUAL TO THAT OF THE POSTED SPEED LIMIT. NO EXCEPTIONS UNLESS APPROVED BY CONSTRUCTION COORDINATION PER MUTCD SECTION 6A-4.
- ALL WORK IN ARTERIAL ROADWAYS SHALL BE ON A 24-HOUR PER DAY BASIS.
- CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION COORDINATION, A WEEKLY LOG, MAINTENANCE SCHEDULES ON P.
- EQUIPMENT OR MATERIALS SHALL BE KEPT WITHIN 15 FEET OF A TRAVELLED TRAFFIC LANE DURING WORKING HOURS WITHOUT THE APPROVAL OF CONSTRUCTION COORDINATION.
- CONTRACTOR SHALL PROVIDE AND MAINTAIN A SAFE AND ADEQUATE MEANS OF CHANNELLING PEDESTRIAN TRAFFIC AROUND AND THROUGH THE CONSTRUCTION AREA.
- CONTRACTOR IS RESPONSIBLE FOR OBLITERATION OF ANY CONFLICTING STRIPING AND RESPONSIBLE FOR ALL TEMPORARY STRIPING.
- CONTRACTOR SHALL MAINTAIN ACCESS TO ALL FACILITIES, BUSINESSES AND/OR RESIDENTS AT ALL TIMES.
- CONTRACTOR SHALL PROVIDE ACCESS SIGNS FOR BUSINESSES LOCATED WITHIN THE CONSTRUCTION AREA UNDER THE SUPERVISION OF CONSTRUCTION COORDINATION. EACH ACCESS SIGN SHALL HAVE 5 INCH, WHITE OPAQUE LETTERING ON BLUE REFLECTORIZED BACKGROUND. ACCESS SIGNS SHALL BE CONSIDERED INCIDENTAL TO THE BID AND NOT PART OF THE CONTRACT UNLESS OTHERWISE STATED. NO MORE THAN 3 BUSINESSES SHALL BE LISTED ON A ACCESS SIGN. SHOPPING CENTERS AND MALLS SHALL BE LISTED AS SUCH.
- ALL ADVANCE WARNING SIGNS SHALL MEET THE MINIMUM REFLECTIVE INTENSITY REQUIREMENTS SET FORTH BY THE CITY OF ALBUQUERQUE. CONSTRUCTION COORDINATION SHALL DETERMINE ALL REQUIREMENTS AND APPROVE OR DISAPPROVE ANY ADVANCE WARNING SIGN PER SECTION 6A-4 OF THE MUTCD, LATEST EDITION.
- 48 HOURS PRIOR TO OCCUPYING OR CLOSING OF A RIGHT-OF-WAY, CONTRACTOR SHALL NOTIFY: POLICE, FIRE DEPARTMENT, SCHOOLS, HOSPITALS, TRANSIT AUTHORITY, BUSINESSES AND/OR RESIDENTS THAT WILL BE AFFECTED BY THE CONSTRUCTION.
- ANY FIELD ADJUSTMENTS SHALL BE APPROVED BY CONSTRUCTION COORDINATION.

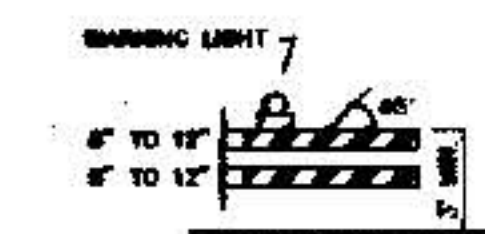
- EXCAVATIONS SHALL BE PLATED, TEMPORARILY PATCHED OR RESURFACED PRIOR TO OPENING OF TRAFFIC. A MINIMUM OF 11 FEET SHALL BE PROVIDED FOR TRAFFIC IN ANY GIVEN DIRECTION. CONTRACTOR IS RESPONSIBLE FOR ANY WORK INVOLVED IN SATISFYING THESE REQUIREMENTS.
- CONTRACTOR SHALL AT ALL TIMES COMPLY WITH THE FOLLOWING:
 - STANDARDS AND REQUIREMENTS SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
 - THE CITY OF ALBUQUERQUE TRAFFIC CODE, LATEST EDITION.
 - SECTION 19 OF THE CITY OF ALBUQUERQUE'S STANDARD SPECIFICATIONS FOR PUBLIC WORK CONSTRUCTION, AS WELL AS OTHER SECTIONS.
- FAILURE TO COMPLY WITH ANY OF THE ABOVE MENTIONED, WILL BE ADEQUATE CAUSE TO CEASE ALL WORK ON ANY CONSTRUCTION PROJECT. WORK WILL NOT RESUME UNTIL ALL REQUIREMENTS ARE ADDRESSED AND APPROVED BY CONSTRUCTION COORDINATION.
- ALL TRAFFIC CONTROL DEVICES SHALL BE KEPT IN NEW-CLEAN CONDITION. WASHING OF EQUIPMENT IS INCIDENTAL TO ITS PLACEMENT AND MAINTENANCE.
- TRAFFIC CONTROL STANDARDS APPLY ONLY WHERE THE CONSTRUCTION TRAFFIC CONTROL PLANS ARE NOT SPECIFIC.
- ADVANCE WARNING SIGNS SHALL BE 36"x36" MIN. WITH SUPER ENGINEERING GRADE SHEETING OR BETTER. MOUNTING HEIGHT AT TOP OF SIGN SHALL BE THE SAME AS FOR A 48" SIGN AS INDICATED IN THE M.U.T.C.D.
- CONTRACTOR SHALL MAINTAIN A GRAFFITI-FREE WORKSITE. ALL GRAFFITI SHALL BE PROMPTLY REMOVED FROM ALL EQUIPMENT, BOTH PERMANENT AND TEMPORARY.



TYPE I BARRICADE



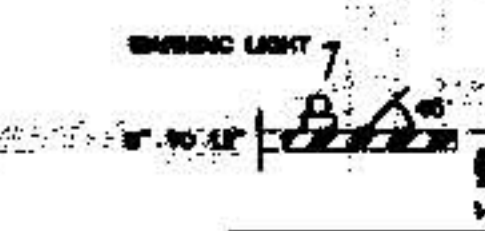
TYPE II BARRICADE



TYPE III BARRICADE



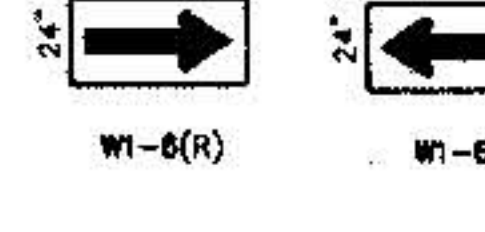
TYPE IV BARRICADE



TYPE V BARRICADE



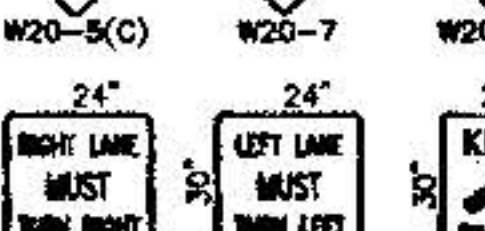
TYPE VI BARRICADE



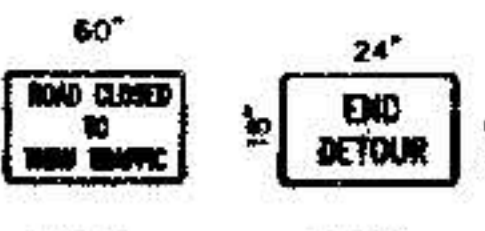
TYPE VII BARRICADE



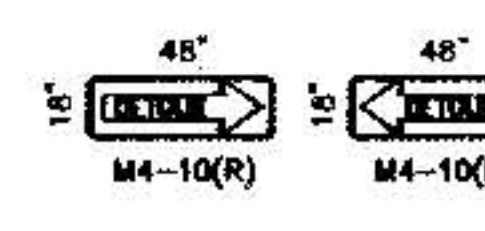
TYPE VIII BARRICADE



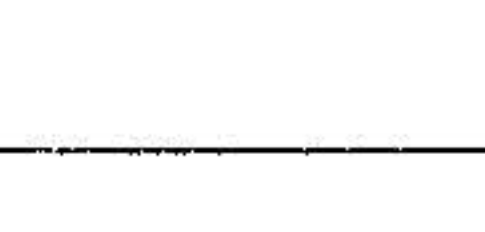
TYPE IX BARRICADE



TYPE X BARRICADE



TYPE XI BARRICADE



TYPE XII BARRICADE

LEGEND

- WORK AREA
- 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 - SEE CHART BELOW
- THE TANGENT LENGTH IS EQUAL TO THE TAPER LENGTH FOR A GIVEN STREET.

TAPER REQUIREMENTS

SPEED LIMIT (MPH)	TAPER LENGTH (L) (FEET)			MINIMUM NUMBER OF DEVICES FOR TAPER	MAXIMUM DEVICE SPACING IN FEET	
	10' LANE	11' LANE	12' LANE		ALONG TAPER	AFTER TAPER
20	70	75	80	5	20	20
25	105	115	125	6	25	25
30	150	165	180	7	30	30
35	205	225	245	8	35	35
40	270	295	320	9	40	40
45	350	385	420	10	45	45
50	450	500	550	11	50	50
55	550	605	660	12	55	55

RECOMMENDED SIGN SPACING(S) FOR ADVANCE WARNING SIGN SERIES

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

TAPER CRITERIA

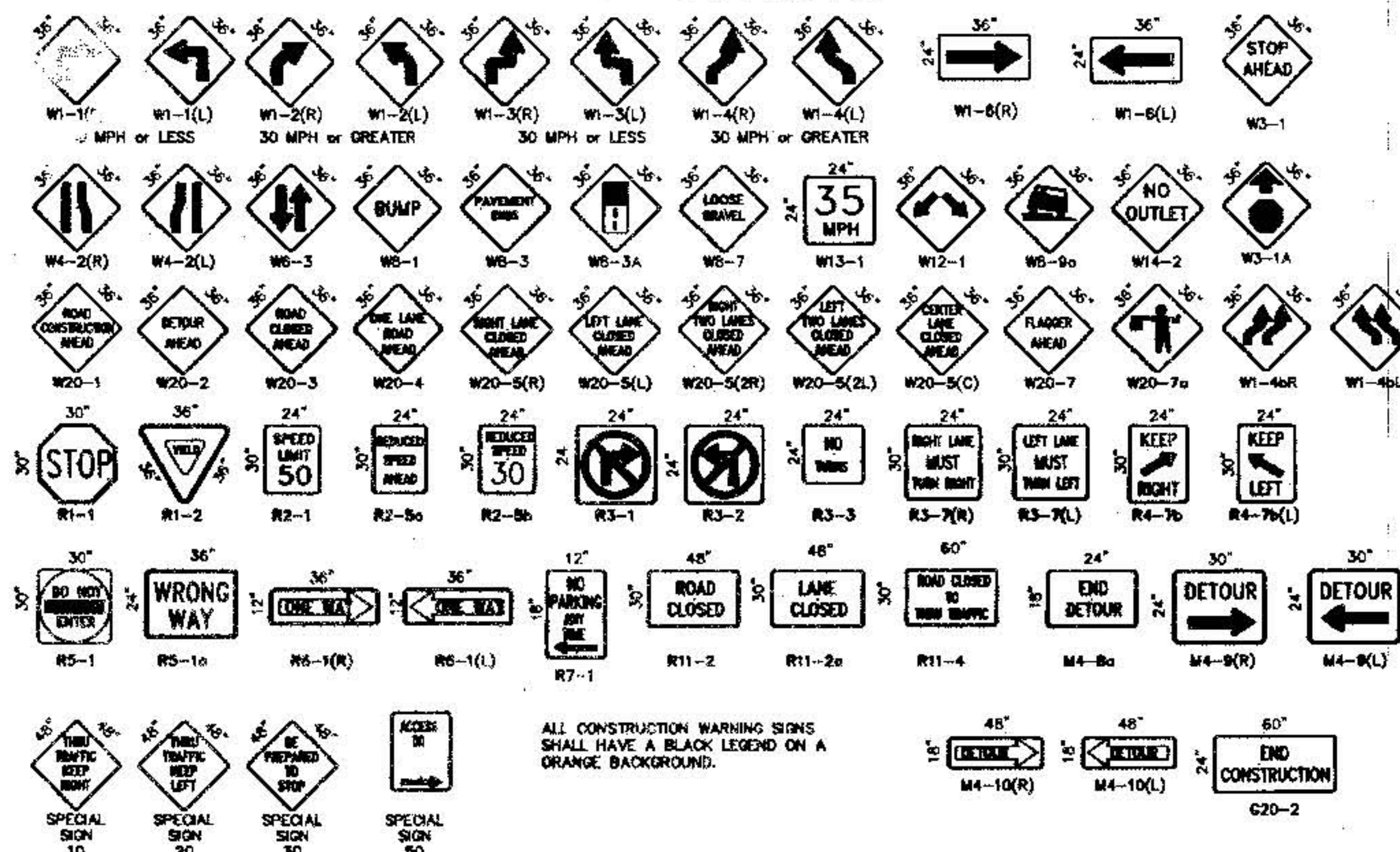
TYPE OF TAPER	TAPER LENGTH
UPSTREAM TAPER:	
MERGING TAPER	L MINIMUM
SHIFTER TAPER	1/2 L MINIMUM
SHOULDER TAPER	1/2 L MINIMUM
TWO-WAY TRAFFIC TAPER	100 FEET MAXIMUM
DOWNSTREAM TAPERS	100 FEET PER LANE

TAPER LENGTH COMPUTATION

SPEED LIMIT	L = WS ² / 60
40 MPH OR LESS	
45 MPH OR GREATER	L = W x S

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

SIGN FACE DETAILS



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

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

TITLE: **SIGNING AND CONSTRUCTION TRAFFIC CONTROL STANDARDS**

DESIGN REVIEW COMMITTEE: CITY ENGINEER APPROVAL

PROJECT NO. MAP NO. SHEET 24 OF 24