CONSTRUCTION PLANS
FOR
WILLOW BEND SUBDIVISION
ALBUQUERQUE, NEW MEXICO

INDEX

FOR INFORMATION ONLY

APPROVAL OF [redacted] DRAWINGS
CHIEF CONSTRUCTION ENGINEER
DATE 9/5/97

RECORD DRAWING

I, A. E. Schumacher, Registered Professional Engineer and Land Surveyor in the State of New Mexico, do hereby certify that this "as-built" information was obtained by me or under my supervision and represents the "as-built" conditions of this project, and is true and correct to the best of my knowledge and belief. All vertical and horizontal dimensions should be field verified prior to use on future projects.

A. E. Schumacher 11/5/93
A. E. Schumacher — Date
NMPE/LS No. 2360

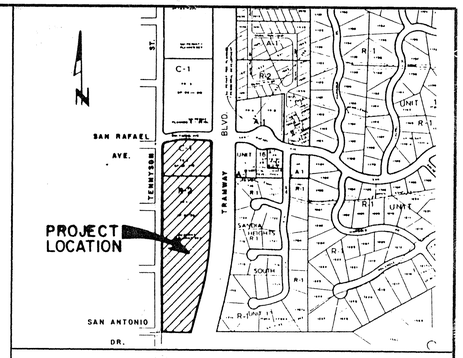
STATE OF NEW MEXICO — SCHUMACHER 2360 — REGISTERED PROFESSIONAL ENGINEER & LAND SURVEYOR

ENGINEER'S CERTIFICATION

I, MARIA HINOJAS, A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THESE PLANS COMPLY WITH ALL APPLICABLE LAWS, ORDINANCES AND REGULATIONS TO THE BEST OF MY KNOWLEDGE AND BELIEF.

Maria A. Hinojas 3-22-93
5-5-93

BHI JOB NO. 92182.01



VICINITY MAP
NOT TO SCALE
D-23

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, OR BERNALILLO COUNTY STANDARD SPECIFICATIONS, WHICHEVER IS MORE STRINGENT.
2. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM (260-1990) FOR LOCATION OF EXISTING UTILITIES.
3. 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.
4. THREE (3) WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT TO CONSTRUCTION COORDINATION DIVISION A DETAILED CONSTRUCTION SCHEDULE. TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN A BARRICADING PERMIT FROM THE CONST. COORDINATION DIVISION. CONTRACTOR SHALL NOTIFY BARRICADE ENGINEER (768-2551) PRIOR TO OCCUPYING AN INTERSECTION. REFER TO SECTION 19 OF THE GENERAL CONDITIONS OF THE STANDARD SPECIFICATIONS.
5. ALL STREET STRIPING ALTERED OR DESTROYED SHALL BE REPLACED IN KIND BY CONTRACTOR TO LOCATION AND IN KIND AS EXISTING OR AS INDICATED BY THIS PLAN SET.
6. 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 ENGINEER. 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.

THE FOLLOWING NOTES ALSO APPLY WHEN CHECKED

- [x] ALL UTILITIES AND UTILITY SERVICE LINES SHALL BE INSTALLED PRIOR TO PAVING.
- [x] PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN TO THE COUNTY PUBLIC WORKS DEPARTMENT FOR APPROVAL.
- [ ] TACK COAT REQUIREMENTS SHALL BE DETERMINED BY THE COUNTY ENGINEER.
- [ ] SIDEWALKS AND WHEELCHAIR RAMPS WITHIN THE CURB RETURNS SHALL BE CONSTRUCTED WHEREVER A NEW CURB RETURN IS CONSTRUCTED.
- [x] IF CURB IS DEPRESSED FOR A DRIVEPAD, THE DRIVEPAD SHALL BE CONSTRUCTED PRIOR TO ACCEPTANCE OF CURB AND GUTTER.
- [x] ALL STORM DRAINAGE FACILITIES SHALL BE COMPLETED PRIOR TO FINAL ACCEPTANCE.
- [x] THE REQUESTOR OR DEVELOPER SHALL BE RESPONSIBLE FOR REPAIR OR REPLACEMENT OF ALL CURB AND GUTTER OR SIDEWALK DAMAGED AFTER APPROVAL BY THE COUNTY ENGINEER OF WORK COMPLETED BY THE CONTRACTOR.

REV	SHEETS	CITY ENGINEER	DATE	USER DEPARTMENT	DATE	USER DEPARTMENT	DATE

APPROVAL OF REVISIONS

MARIA A. HINOJAS — NEW MEXICO — 11558 — REGISTERED PROFESSIONAL ENGINEER — 3-17-93

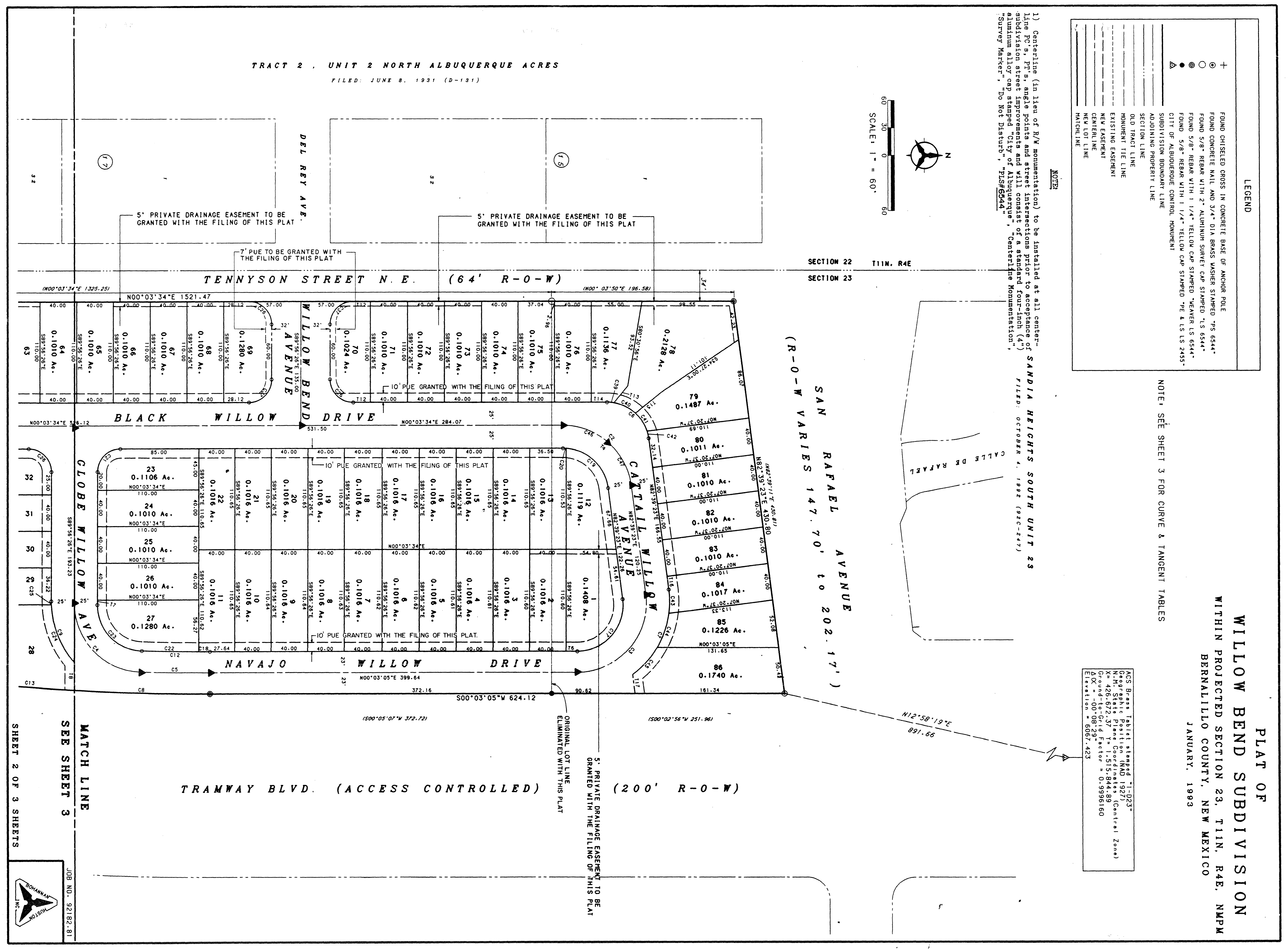
BOHANNAN HUSTON INC.
ALBUQUERQUE, NEW MEXICO
ENGINEERS PLANNERS PHOTOGRAMMETRISTS

APPROVED FOR CONSTRUCTION
C.R. Bowman 5/5/93
BCPWD C.E.

PROJECT NUMBER
5293.90

SHEET 1 OF 23

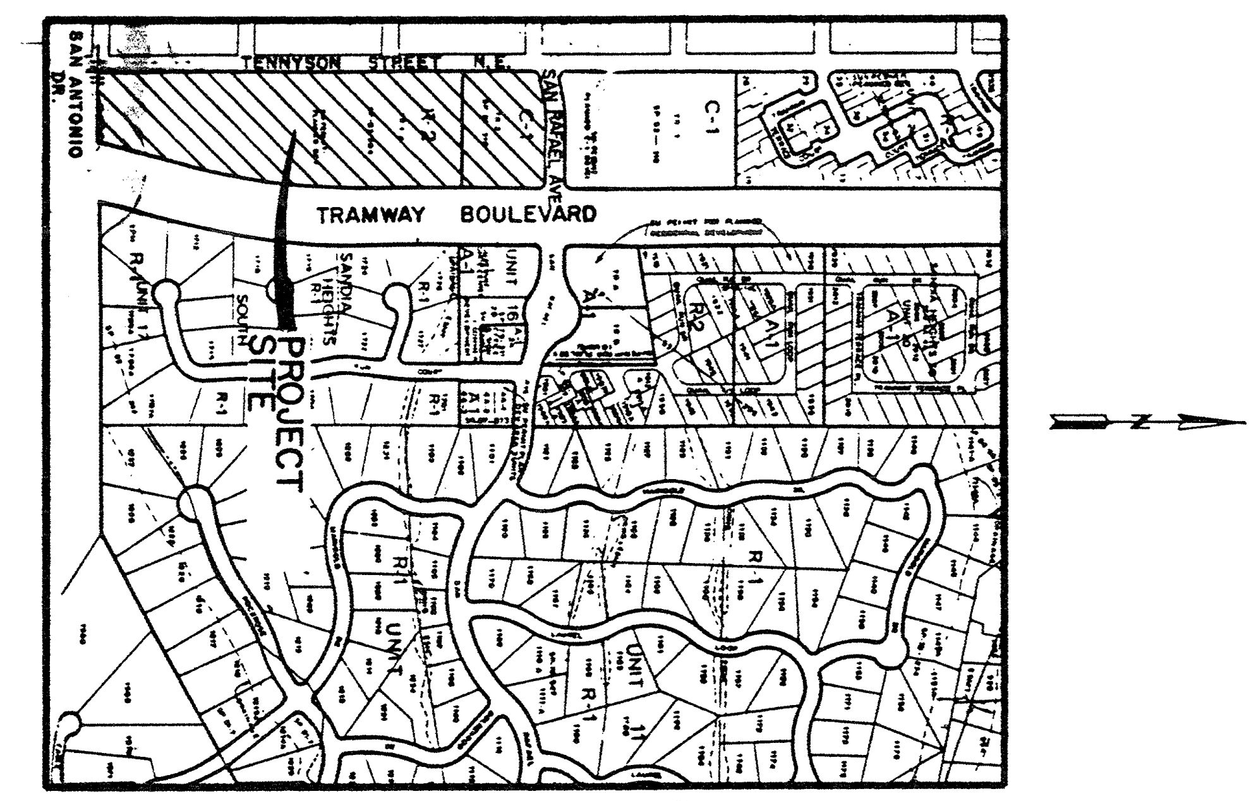
USERNAME: C:92182D1.PAD
FILENAME: TITLE.GRF



NOTE:

1) Centerline (in lieu of R/W monumentation) to be installed at all centerline PC's, PT's, angle points and street intersections prior to acceptance of subdivision street improvements and will consist of a standard four-inch (4") aluminum alloy cap stamped "City of Albuquerque", "Centerline Monumentation", "Survey Marker", "Do Not Disturb", "PLS#6544"

SP-93011813380136



LOCATION MAP

ZONE ATLAS INDEX MAP No. D-23-Z

NOT TO SCALE

SUBDIVISION DATA

1. DRB Number: 92-237.
2. Zone Atlas Index Number: D-23-Z.
3. Gross Subdivision Acreage: 13.6615 Acres.
4. Number of Lots created: 86 Lots.
5. Dedicated Right-of-Way: 3.3992 Acres.

NOTES

1. Bearings are New Mexico State Plane Grid Bearings (Central Zone).
2. Distances are ground distances.
3. Record Bearings and distances are shown in parenthesis ( ).
4. Date of Survey: October, 1992.
5. This site may be subject to Flood Insurance as required by the Flood Insurance Agency.
6. No Lot shall have direct access to either Tramway Boulevard, San Rafael Avenue, or Tennyson Street.
7. Water services will be provided by Sandia Peak Utility Company.
8. Sewer services will be provided by Sandia Peak Services, Inc.
9. All water and sewer lines will be placed within Bernalillo County dedicated rights-of-way and/or easements, granted to Sandia Peak Utility Company and Sandia Peak Services, Inc.
10. "These properties are within Sandia Peak Utilitie's, Inc. and Sandia Peak Service's, Inc. service area for water and sanitary sewer service. Fire protection, water and sanitary sewer service capabilities are based upon these utility companies' facilities, not the City of Albuquerque."

DISCLOSURE STATEMENT

The purpose of this Replat is to subdivide Tracts 1A-1 and 2A into eighty-six (86) Lots, WILLOW BEND SUBDIVISION, to dedicate street right-of-way to the County of Bernalillo, to vacate Public Service Company of New Mexico utility easements and to grant additional easements.

PUBLIC UTILITY EASEMENTS

PUBLIC UTILITY EASEMENTS shown on this plat are ten (10) feet wide and are for the common joint use of:

A. The Public Service Company of New Mexico for the installation, maintenance, and service of overhead and underground electrical lines, transformers, and other equipment, fixtures, structures and related facilities reasonably necessary to provide electrical service.

B. The Gas Company of New Mexico for installation, maintenance, and service of natural gas lines, valves and other equipment and facilities reasonably necessary to provide natural gas.

C. U S West for the installation, maintenance and service of all buried and aerial communication lines and other related equipment and facilities reasonably necessary to provide communication services, including but not limited to above ground pedestals and closures.

D. Jones Intercable for the installation, maintenance, and service of such lines, cable, and other related equipment and facilities reasonably necessary to provide Cable TV service.

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

DESCRIPTION

A certain tract of land situate within the Elena Gallegos Grant, in Projected Section 23, Township 11 North, Range 4 East, New Mexico Principal Meridian, Bernalillo County, New Mexico, being and comprising all of Tract 1A-1 of LANDS OF SANDIA PEAK TRAM COMPANY as the same is shown and designated on the Replat, filed in the office of the County Clerk of Bernalillo County, New Mexico on June 26, 1991 in Volume 91C, Folio 129, together with Tract 2A of LANDS OF SANDIA PEAK TRAM COMPANY as the same is shown and designated on the Replat, filed in the office of the County Clerk of Bernalillo County, New Mexico on June 26, 1991 in Volume 91C, Folio 127 and being more particularly described by New Mexico State Plane Grid Bearings (Central Zone) and ground distances as follows:

BEGINNING at the southwest corner of said Tract 1A-1, a point on the east right-of-way line of Tennyson Street, N.E., whence the City of Albuquerque Survey Control Monument "TUMBLE 1969", (having New Mexico State Plane Coordinates, Central Zone values of X=425,465.55 and Y=1,513,470.01) bears N83°08'28"W a distance of 582.40 feet and from said point of beginning running thence along the west boundary line of said Tract 1A-1 and said Tract 2A, and also along said right-of-way line,
N00°03'34"E, a distance of 1521.47 feet to the northwest corner of said Tract 2A, a point on the south right-of-way line of San Rafael Avenue, thence running along the north boundary line of said Tract 2A and also along said right-of-way line,
N82°39'23"E, a distance of 430.80 feet to the northeast corner of said Tract 2A, a point on the west right-of-way line of Tramway Boulevard, thence running along the east boundary line of said Tract 2A and said Tract 1A-1 and also along said right-of-way line,
S00°03'05"W, a distance of 624.12 feet to a point of curvature; thence,
679.32 feet along the arc of a curve to the right having a radius of 2511.07 feet and a chord bearing S07°48'05"W, a distance of 677.25 feet to a point of tangency; thence,
S15°33'06"W, a distance of 3.31 feet to a point; thence,
S29°10'53"W, a distance of 206.00 feet to a point; thence,
S21°01'52"W, a distance of 100.50 feet to a point; thence,
S21°45'06"W, a distance of 6.35 feet to the southeast corner of said Tract 1A-1, thence leaving said right-of-way line and running thence along the south boundary line of said Tract 1A-1,
N89°36'45"W, a distance of 196.61 feet to the point and place of beginning.

Tract contains 13.6615 acres, more or less.

FREE CONSENT AND DEDICATION

The foregoing Replat of that certain tract of land situate within projected Section 23, Township 11 North, Range 4 East, New Mexico Principal Meridian, Bernalillo County, New Mexico, being and comprising all of Tract 1A-1 of LANDS OF SANDIA PEAK TRAM COMPANY as the same is shown and designated on the Replat, filed in the office of the County Clerk of Bernalillo County, New Mexico on June 26, 1991 in Volume 91C, Folio 129, together with Tract 2A of LANDS OF SANDIA PEAK TRAM COMPANY as the same is shown and designated on the Replat, filed in the office of the County Clerk of Bernalillo County, New Mexico on June 26, 1991 in Volume 91C, Folio 127, and now hereon shown and comprising Lots 1 thru 86, WILLOW BEND SUBDIVISION, is with free consent and in accordance with the desires if the undersigned owner(s) and/or proprietor(s) thereof, and said owner(s) and/or proprietor(s) do hereby dedicate 3.3992 acres of road right-of-way and do hereby grant all easements as shown on this Plat. Public street rights-of-way, public drainage and facilities are dedicated to the County of Bernalillo, New Mexico, which will accept responsibility for maintenance upon completion and inspection. Electrical Power and Communication easements are reserved for overhead distribution lines for pole type utilities and buried distribution lines, conduits, and pipes for underground utilities and other related equipment where shown or indicated, and including the right of ingress and egress for construction and maintenance, and the right to trim interfering trees and shrubs.

CENTEX REAL ESTATE CORPORATION

Richard Mallett

Richard Mallett, Vice President
Operations

State of New Mexico)
SS
County of Bernalillo)

The foregoing instrument was acknowledged before me this 21st day of JANUARY, 1993, by Richard Mallett on behalf of Centex Real Estate Corporation.

My Commission Expires: 9-23-96 ______ Notary Public

OFFICIAL SEAL
JENNIFER N. KECK
NOTARY PUBLIC - STATE OF NEW MEXICO
Notary Bond Filed with Secretary of State
My Commission Expires 9-23-96

PNM EASEMENT RELEASE APPROVAL

Public Service Company of New Mexico does hereby release, waive, quitclaim and discharge its right title and interest in the easements (Granted by prior plat, replat or document) Shown to be vacated on this plat.

PUBLIC SERVICE COMPANY OF NEW MEXICO

By Rob Roberts

State of New Mexico)
SS
County of Bernalillo)

The foregoing instrument was acknowledged before me this 3rd day of FEB, 1993, by BOB Roberts of the Public Service Company of New Mexico, a New Mexico corporation, on behalf of said corporation.

My Commission Expires: 8-9-93 ______ Notary Public

8-9-93

PLAT OF
WILLOW BEND SUBDIVISION
WITHIN PROJECTED SECTION 23, T11N, R4E, NMPM
BERNALILLO COUNTY, NEW MEXICO
JANUARY, 1993

APPROVALS

PLAT NUMBER ______

PLANNING DIRECTOR	DATE 1/26-93
CITY ENGINEER	DATE
A.M.A.F.C.A.	DATE
TRAFFIC ENGINEER	DATE 012593
CITY SURVEYOR	DATE
PROPERTY MANAGEMENT Robert W. Kane	DATE 1-26-93
WATER RESOURCES DEPARTMENT Julie M. Stone	DATE 1/26/93
PARKS AND RECREATION DEPARTMENT	DATE 2-2-93
PUBLIC SERVICE COMPANY OF NEW MEXICO	DATE 2-3-93
U.S. WEST COMMUNICATIONS Joe Dunlap	DATE 2-3-93
GAS COMPANY OF NEW MEXICO	DATE
BERNALILLO COUNTY PUBLIC WORKS	DATE
SANDIA PEAK SERVICES, INC.	DATE
SANDIA PEAK UTILITY COMPANY	DATE
COUNTY PLANNING COMMISSION CHAIRMAN	DATE
BERNALILLO COUNTY COMMISSION CHAIRMAN	DATE

THIS IS TO CERTIFY THAT TAXES ARE CURRENT AND PAID

ON UPC# ______

PROPERTY OWNER OF RECORD: ______

BERNALILLO COUNTY TREASURER'S OFFICE DATE

SURVEYOR'S CERTIFICATION

I, A. Dwain Weaver, a registered Professional New Mexico Surveyor, certify that this plat was prepared by me or under my supervision, shows all easements of record, and conforms to the Minimum Requirements of the Standards for Land Surveys in New Mexico as adopted by the New Mexico State Board of Registration for Professional Engineers and Professional Surveyors in November 1989 and meets the minimum requirements for monumentation and surveys contained in the Albuquerque Subdivision Ordinance, and is true and accurate to the best of my knowledge and belief.

A. Dwain Weaver

Bohannan-Huston, Inc.
Courtyard I
7500 Jefferson Street, N.E.
Albuquerque, New Mexico 87109

A. Dwain Weaver
New Mexico Professional Surveyor 6544

Date: Jan. 20, 1993

A. DWAIN WEAVER 6544

8-9-93

JOB NO. 92182.81

SHEET 1 OF 3 SHEETS

SURV: [S9218281] SHEET1.GRF

PLAT OF
WILLOW BEND SUBDIVISION

WITHIN PROJECTED SECTION 23, T11N, R4E, NMPM
BERNALILLO COUNTY, NEW MEXICO
JANUARY, 1993

CURVE DATA

NUMBER	ARC	RADIUS	DELTA	CHORD	CHORD BEARING	TANGENT
C1	679.32 (679.32)	2511.07 (2511.07)	15°30'01" (15°30'01")	677.25	S07°48'05"W	341.75 (341.75)
C2	108.12	75.00	82°35'49"	99.00	N41°21'28"E	65.89
C3	127.49	75.00	97°23'42"	112.69	S48°38'46"E	85.36
C4	115.57	75.00	88°17'24"	104.47	N45°54'52"E	72.79
C5	74.61	2488.07	1°43'05"	74.61	N00°54'37"E	37.31
C6	64.87	45.00	82°35'49"	59.40	N41°21'28"E	39.53
C7	104.72	100.00	60°00'00"	100.00	S67°20'37"E	57.74
C8	147.45	2511.07	3°21'52"	147.43	S01°44'01"W	73.75
C9	72.27	100.00	41°24'35"	70.71	S69°21'16"W	37.80
C10	212.73	45.00	270°51'43"	63.16	S23°42'13"W	0.00
C11	192.13	45.00	244°37'23"	76.06	S57°44'52"W	36.93
C12	73.86	2465.07	1°43'00"	73.86	S00°54'35"W	36.93
C13	142.40	2511.07	3°14'57"	142.38	S05°02'25"W	71.22
C14	168.71	2511.07	3°50'58"	168.68	S08°35'23"W	84.39
C15	184.49	2511.07	4°12'34"	184.44	S12°37'09"W	92.28
C16	36.27	2511.07	0°49'40"	36.27	S15°08'16"W	18.14
C17	84.99	50.00	97°23'42"	75.12	S48°38'46"E	56.91
C18	12.36	2465.07	0°17'14"	12.36	N00°11'42"E	6.18
C19	68.58	50.00	78°34'59"	63.33	N43°21'54"E	40.91
C20	3.50	50.00	4°00'51"	3.50	N02°03'59"E	1.75
C21	39.27	25.00	90°00'00"	35.36	N44°56'26"W	25.00
C22	61.50	2465.07	1°25'46"	61.50	N01°03'12"E	30.75
C23	77.05	50.00	88°17'29"	69.65	N45°54'49"E	48.53
C24	68.50	100.00	39°14'45"	67.17	N68°16'22"E	35.65
C25	3.78	100.00	2°09'49"	3.78	N88°58'39"E	1.89
C26	39.27	25.00	90°00'00"	35.36	N45°03'34"E	25.00
C27	9.51	25.00	21°47'12"	9.45	N79°09'57"E	4.81
C28	15.53	45.00	19°46'12"	15.45	N78°09'27"E	7.84
C29	80.48	45.00	102°28'19"	70.18	S40°43'17"E	56.04
C30	115.51	45.00	147°04'31"	86.31	N84°03'08"E	152.28
C31	30.14	25.00	69°04'31"	28.35	S55°24'11"E	17.21
C32	1.21	45.00	1°32'41"	1.21	S21°38'16"E	0.61
C33	103.34	45.00	131°34'19"	82.08	N01°13'20"E	100.06
C34	28.20	25.00	64°37'23"	26.73	N32°15'08"W	15.81
C35	86.93	45.00	110°41'11"	74.03	S57°38'54"E	65.09
C36	1.86	45.00	2°21'53"	1.86	N01°07'23"W	0.93
C37	39.27	25.00	90°00'00"	35.36	S44°56'26"E	25.00
C38	39.27	25.00	90°00'00"	35.36	S45°03'34"W	25.00
C39	7.65	45.00	9°44'11"	7.64	N04°55'39"E	3.83
C40	25.95	45.00	33°02'34"	25.59	N26°19'01"E	13.35
C41	23.37	45.00	29°45'13"	23.11	N57°42'55"E	11.95
C42	7.90	45.00	10°03'52"	7.89	N77°37'27"E	3.96
C43	25.88	100.00	14°49'37"	25.81	S89°55'48"E	13.01
C44	39.39	100.00	22°34'05"	39.13	S71°13'57"E	19.95
C45	39.45	100.00	22°36'18"	39.20	S48°38'46"E	19.99
C46	54.06	75.00	41°17'55"	52.90	N20°42'31"E	28.26
C47	54.06	75.00	41°17'55"	52.90	N62°00'26"E	28.26

TANGENT DATA

NUMBER	BEARING	DISTANCE
T1	S15°33'06"W	3.31
	(S15°35'08"W)	(3.31)
T2	S21°45'06"W	6.35
	(S15°21'17"W)	(6.11)
T3	S00°03'34"W	20.00
T4	N48°38'32"W	1.79
T5	S29°10'53"W	2.04
T6	S00°03'05"W	12.26
T7	S89°56'26"E	5.23
T8	S89°56'26"E	30.62
T9	S89°56'26"E	15.60
T10	S79°29'08"E	9.94
T11	S89°56'26"E	16.20
T12	N00°03'34"E	18.00
T13	S51°20'08"E	23.54
T14	N00°03'34"E	17.39
T15	S39°23'00"E	35.91
T16	N82°39'23"E	14.41
T17	N82°39'23"E	20.73
T18	S89°56'26"E	20.00

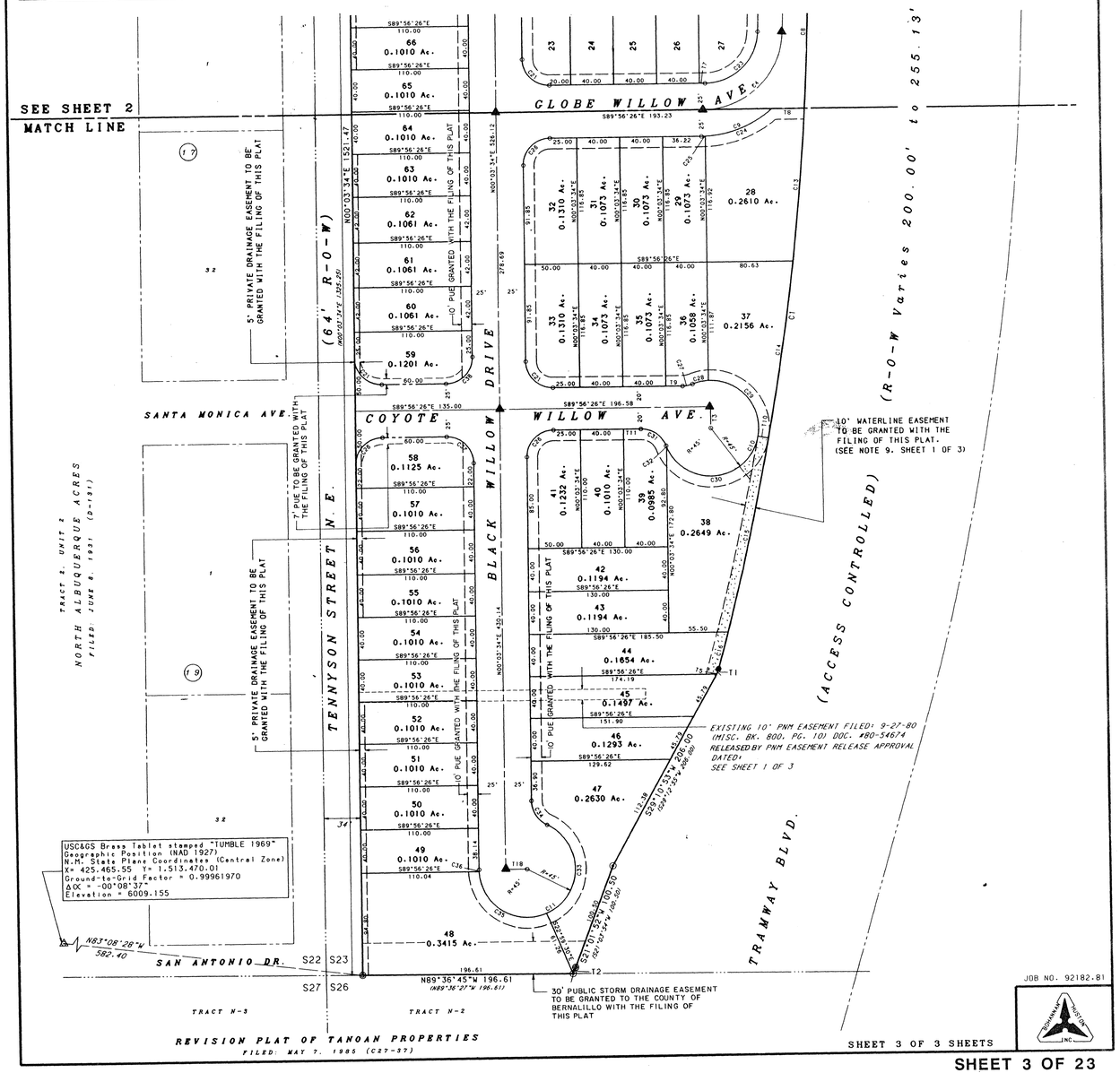
N

60 30 0 60

SCALE: 1" = 60'

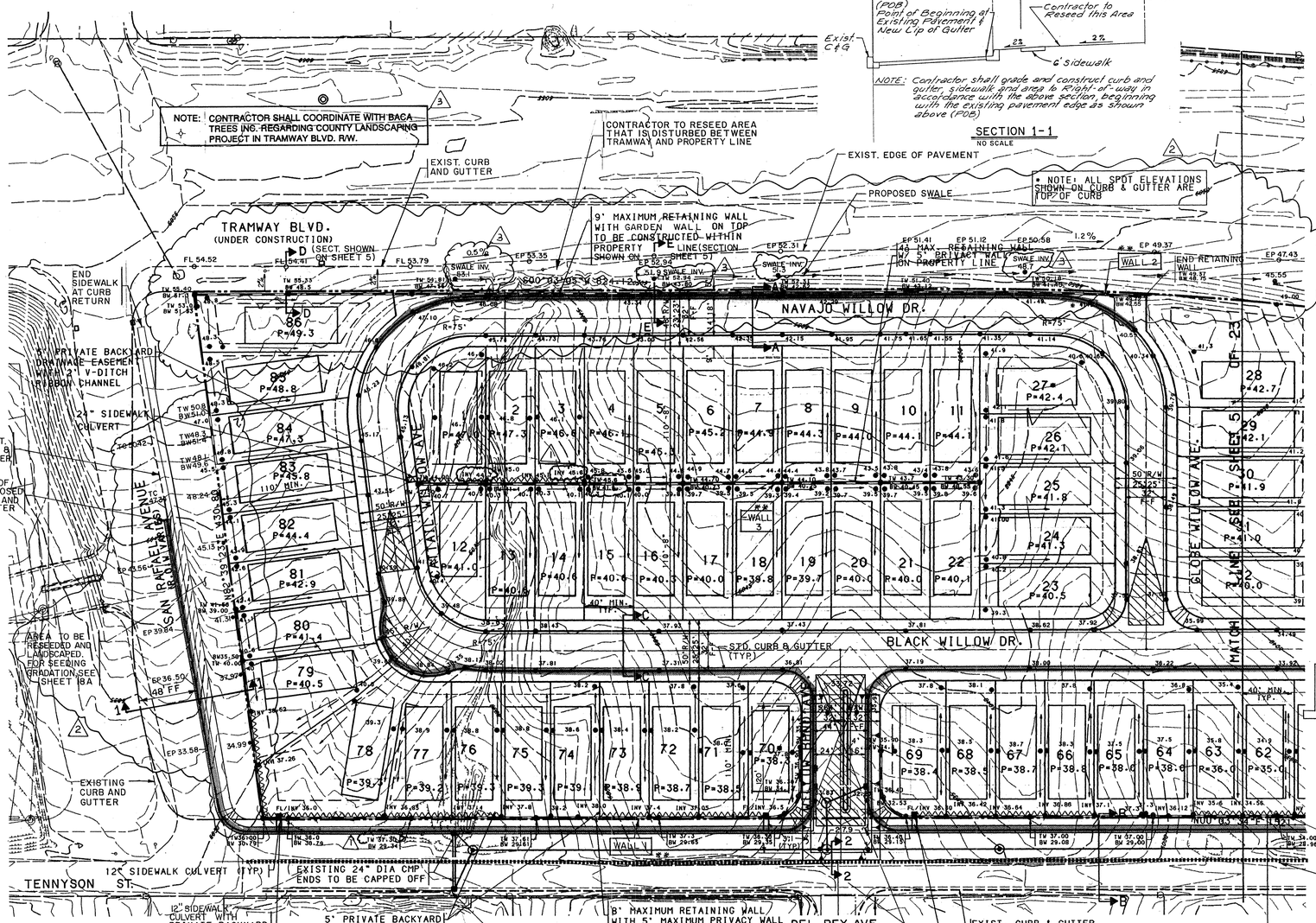
LEGEND

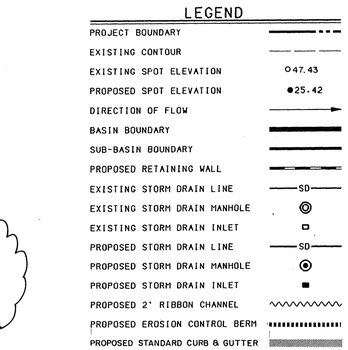
- FOUND CHISELED CROSS IN CONCRETE BASE OF ANCHOR POLE
- FOUND CONCRETE NAIL AND 3/4" DIA BRASS WASHER STAMPED "PS 6544"
- FOUND 5/8" REBAR WITH 2" ALUMINUM SURVEY CAP STAMPED "LS 6544"
- FOUND 5/8" REBAR WITH 1 1/4" YELLOW CAP STAMPED "WEAVER LS 6544"
- FOUND 5/8" REBAR WITH 1 1/4" YELLOW CAP STAMPED "PE & LS LS 2455"
- CITY OF ALBUQUERQUE CONTROL MONUMENT
- SUBDIVISION BOUNDARY LINE
- ADJOINING PROPERTY LINE
- SECTION LINE
- OLD TRACT LINE
- MONUMENT TIE LINE
- EXISTING EASEMENT
- NEW EASEMENT
- CENTERLINE
- NEW LOT LINE
- MATCHLINE



JOB NO. 92182.81

SHEET 3 OF 3 SHEETS

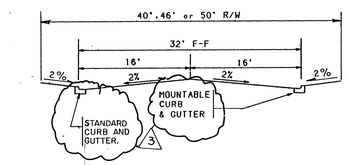




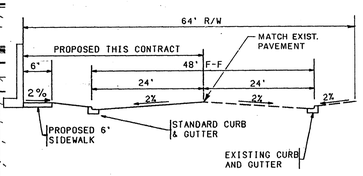
SECTION 1-1
NO SCALE

LEGEND

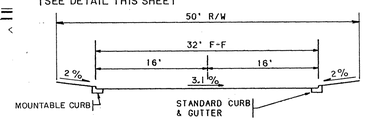
PROJECT BOUNDARY	
EXISTING CONTOUR	
EXISTING SPOT ELEVATION	○47.43
PROPOSED SPOT ELEVATION	●25.42
DIRECTION OF FLOW	
BASIN BOUNDARY	
SUB-BASIN BOUNDARY	
PROPOSED RETAINING WALL	
EXISTING STORM DRAIN LINE	SD
EXISTING STORM DRAIN MANHOLE	
EXISTING STORM DRAIN INLET	
PROPOSED STORM DRAIN LINE	SD
PROPOSED STORM DRAIN MANHOLE	
PROPOSED STORM DRAIN INLET	
PROPOSED 2' RIBBON CHANNEL	
PROPOSED EROSION CONTROL BERM	
PROPOSED STANDARD CURB & GUTTER	



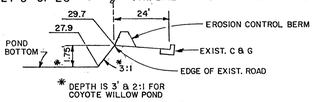
TYPICAL STREET SECTION A-A
NO SCALE



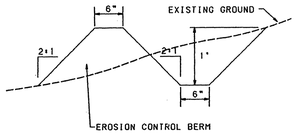
TYPICAL STREET SECTION B-B
NO SCALE



TYPICAL STREET SECTION C-C
NO SCALE

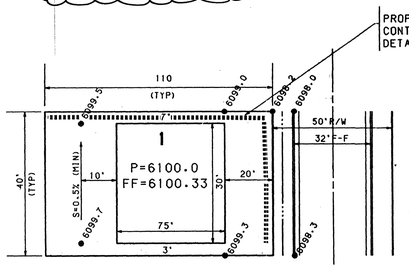


SECTION 2-2
NO SCALE

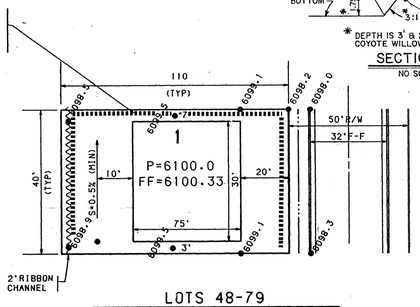


EROSION CONTROL PLAN
NO SCALE

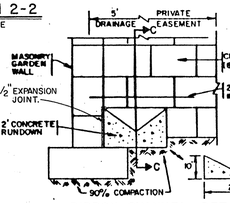
A BERM WITH THE DIMENSIONS SHOWN SHALL BE MAINTAINED DURING CONSTRUCTION UNTIL COMPLETION OF INDIVIDUAL HOMES WITHIN THE PROJECT.



LOTS 1-47, 80-86
TYPICAL LOT GRADING PLAN
SCALE: 1"=30'



LOTS 48-79
TYPICAL LOT GRADING PLAN
SCALE: 1"=30'



RIBBON CHANNEL DETAIL
NO SCALE

NOTE: BUILD WALL FIRST AND CHANNEL SECOND W/ 1/2" EXPANSION JOINT BETWEEN THEM.

SECTION C-C
NO SCALE

SCALE: 1" = 50'
BHI JOB NO. 92182.01

GRADING CONSTRUCTION NOTES:

1. ALL GRADING AND CONSTRUCTION UNDER THIS PLAN SHALL BE IN ACCORDANCE WITH THE "NEW MEXICO STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION".
2. CONSTRUCTION ACTIVITY SHALL BE LIMITED TO THE PROPERTY AND/OR PROJECT LIMITS. THE CONTRACTOR SHALL NOT DISTURB THE AREAS IN WHICH NO GRADING IS INDICATED. ANY DAMAGE TO ADJACENT PROPERTIES RESULTING FROM THE CONSTRUCTION PROCESS IS THE RESPONSIBILITY OF THE CONTRACTOR. ANY COSTS INCURRED FOR REPAIRS SHALL BE THE COST OF THE CONTRACTOR.
3. EXCEPT AS PROVIDED HEREIN, GRADING SHALL BE PERFORMED TO THE ELEVATIONS AND IN ACCORDANCE WITH THE TYPICAL SECTIONS SHOWN ON THIS PLAN.
4. THIS PLAN IS FOR THE EXCAVATION, PLACEMENT, AND COMPACTION OF NATURAL EARTH MATERIALS AND THE CONSTRUCTION OF PRIVATE RETAINING WALLS ONLY.
5. ALL ELEVATIONS SHOWN FOR HOUSE/BUILDING FOOTPRINTS ARE PAD ELEVATIONS. ADD SLAB THICKNESS FOR FINISH FLOOR ELEVATIONS.
6. TOP OF CURB AND STREET ELEVATIONS SHOWN ON THIS PLAN ARE SUFFICIENT FOR ROUGH GRADING ONLY.
7. PADS SHALL NOT VARY FROM A TRUE HORIZONTAL PLANE BY MORE THAN +/- 0.1 FT. AT ANY POINT. THIS TRUE PLANE SHALL NOT VARY FROM THE SHOWN PAD ELEVATION BY +/- 0.2 FT., UNLESS PERMITTED BY THE OWNER.
8. THE CONTRACTOR SHALL ABIDE BY ALL LOCAL, STATE, AND FEDERAL REGULATIONS WHICH APPLY TO THE CONSTRUCTION OF THESE IMPROVEMENTS AND GRADING OPERATIONS.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL CONSTRUCTION PERMITS AND INSPECTION APPROVALS NECESSARY FOR THE CONSTRUCTION OF THESE FACILITIES AND ALL GRADING OPERATIONS.
10. THE COST FOR REQUIRED CONSTRUCTION DUST AND EROSION CONTROL MEASURES SHALL BE INCIDENTAL TO THE PROJECT COST.
11. MAXIMUM SLOPES OUTSIDE THE BUILDING PAD ENVELOPES SHALL BE 4:1.
12. UNLESS OTHERWISE SHOWN, DRAINAGE SWALES SHALL HAVE A MINIMUM 1% SLOPE IN THE DIRECTION OF FLOW.
13. BOULDERS, GREATER THAN 3 FT IN DIAMETER, EXCAVATED DURING GRADING ACTIVITIES SHALL BE STOCKPILED AND DISPOSED OF AT THE DISCRETION OF THE OWNER.
14. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING CONSTRUCTION OF PUBLIC AND PRIVATE IMPROVEMENTS.
15. THE CONSTRUCTION OF WALLS OR FENCE ACROSS DRAINAGE PATHS INDICATED ON THIS PLAN SHALL NOT INTERFERE WITH THE DRAINAGE FLOWS. THE PROVISION OF 0.5 FT VERTICAL CLEARANCE ABOVE THE DRAINAGE PATH IS REQUIRED WHEN CONSTRUCTING WALL OR FENCES.

AS BUILT INFORMATION

CONTRACTOR	
WORK STAKED BY	
INSPECTOR'S ACCEPTANCE BY	DATE
FIELD VERIFICATION BY	DATE
DRAWINGS CORRECTED BY	DATE
MICRO-FILM INFORMATION	
RECORDED BY	DATE
NO.	

BENCH MARKS

THE BENCH MARK IS A STANDARD ASC BRASS TABLET STAMPED "1-023" SET IN TOP OF A CONCRETE POST LOCATED APPROXIMATELY N13° 19' 23"E. 867.95 FROM THE NE CORNER OF BOUNDARY.

ELEV.=6087.423'

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL

ALVAN A. HINGOLS JR. NEW MEXICO REGISTERED PROFESSIONAL ENGINEER 12-24-92

NO.	DATE	REMARKS	BY
4	4-93	REVISED PER COUNTY COMMENTS	JT
3	3-93	TRAMWAY RETAINING WALL	JT
2	3-93	TW ELEV., SECTION CHANGES	MH
1	1-6-93	POND, SECTIONS & EXIST. ELEVATIONS	MH

REVISIONS

DESIGN

		DATE
DESIGNED BY	MH	12/92
DRAWN BY	MH/DR	12/92
CHECKED BY	MH	12/92

APPROVED FOR ROUGH GRADING (± 1')

A.M.A.F.C.A. — DATE 12/21/92

APPROVED FOR ROUGH GRADING (± 1')

HYDROLOGY ENGINEER — DATE 12/28/92

COUNTY OF BERNALILLO

PUBLIC WORKS DEPARTMENT

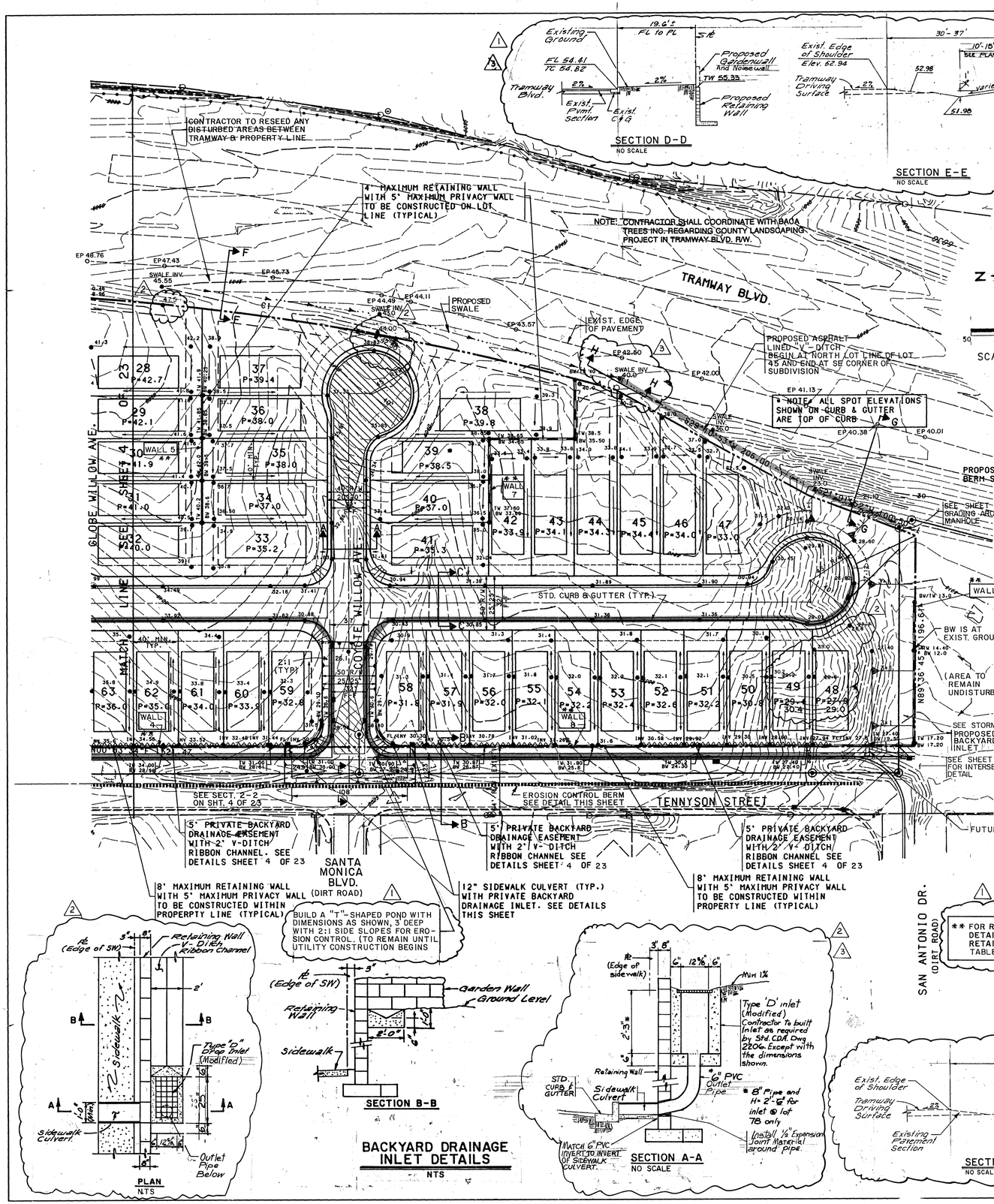
WILLOW BEND SUBDIVISION

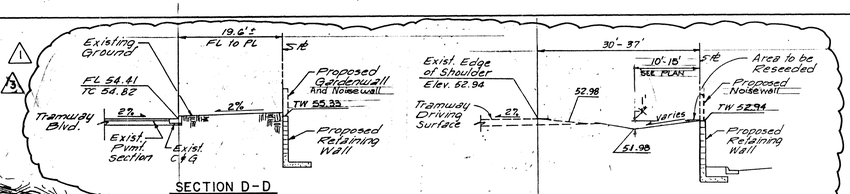
GRADING PLAN AND DETAILS

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
COUNTY ENGINEER	OKBowman	5/5/93			

DRAWING NO. — MAP NO. D-23 — SHEET 4 OF 23

USERNAME: [C9218201.PAD]
FILENAME: GRADE1.GRF





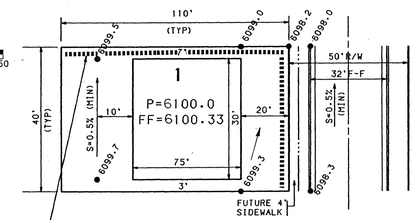
SECTION D-D
NO SCALE

SECTION E-E
NO SCALE

LEGEND

PROJECT BOUNDARY	
EXISTING CONTOUR	
EXISTING SPOT ELEVATION	47.43
PROPOSED SPOT ELEVATION	25.42
DIRECTION OF FLOW	
BASIN BOUNDARY	
SUB-BASIN BOUNDARY	
PROPOSED RETAINING WALL	
EXISTING STORM DRAIN LINE	SD
EXISTING STORM DRAIN MANHOLE	
EXISTING STORM DRAIN INLET	
PROPOSED STORM DRAIN LINE	SD
PROPOSED STORM DRAIN MANHOLE	
PROPOSED STORM DRAIN INLET	
2' V-DITCH RIBBON CHANNEL	
PROPOSED EROSION CONTROL BERM	
PROPOSED STANDARD CURB & GUTTER	

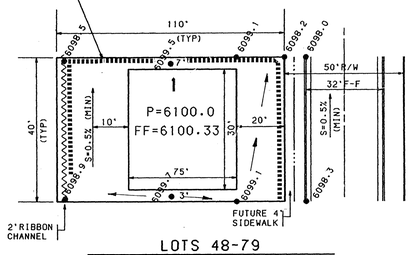
SCALE: 1" = 50'



LOTS 1-47, 80-86

TYPICAL LOT GRADING PLAN

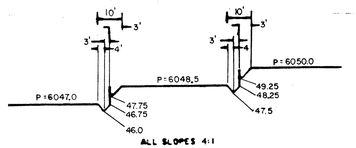
SCALE: 1"=30'



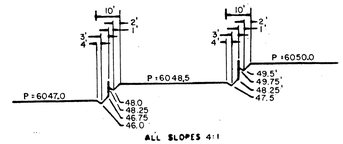
LOTS 48-79

TYPICAL LOT GRADING PLAN

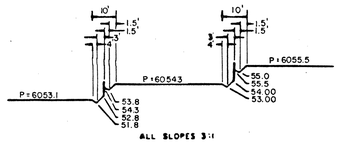
SCALE: 1"=30'



FRONT SIDE
TYPICAL SIDELOT GRADING PLAN
NO SCALE



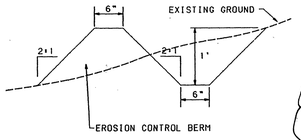
BACK SIDE
TYPICAL SIDELOT GRADING PLAN
NO SCALE
LOTS 1-47, 80-86



BACK SIDE / FRONT SIDE
TYPICAL SIDELOT GRADING PLAN
NO SCALE
LOTS 48-79

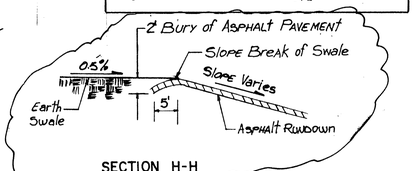
TABLE FOR CONSTRUCTION OF RETAINING WALLS

WALL	SECTION(S)
1	I,J,K,L,M,N,O
2	A,B,C,D,E,F,G,H
3	I,J,K
4	I,J,K,L,M,N,O
5	I,J
6	A
7	I,J,K
8	I,J,K,L,M,O
9	P,Q



EROSION CONTROL PLAN
NO SCALE

A BERM WITH THE DIMENSIONS SHOWN SHALL BE MAINTAINED DURING CONSTRUCTION UNTIL COMPLETION OF INDIVIDUAL HOMES WITHIN THE PROJECT.



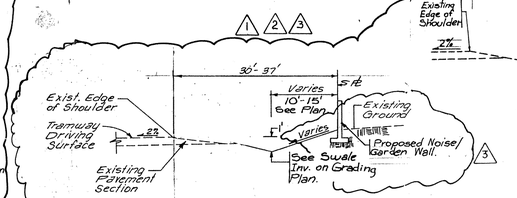
SECTION H-H
NO SCALE

PLAN
NTS

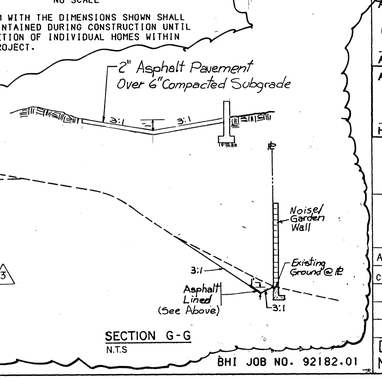
SECTION B-B

BACKYARD DRAINAGE INLET DETAILS
NTS

SECTION A-A
NO SCALE



SECTION F-F
NO SCALE



SECTION G-G
N.T.S

BHI JOB NO. 92182.01

AS BUILT INFORMATION

CONTRACTOR
WORK STAKED BY
ACCEPTANCE BY — DATE
FIELD VERIFICATION BY — DATE
DRAWINGS CORRECTED BY — DATE
MICRO-FILM INFORMATION
RECORDED BY — DATE
NO.

BENCH MARKS

THE BENCH MARK IS A STANDARD ASC BRASS TABLET STAMPED "1-023" SET IN TOP OF A CONCRETE POST LOCATED APPROXIMATELY N 13° 19' 23"E. 867.95' FROM THE NE CORNER OF BOUNDARY.

ELEVATION = 6067.423

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL

A. MICHAEL SOTOMAYOR — NEW MEXICO REGISTERED PROFESSIONAL ENGINEER — 7-24-93

REVISIONS

NO.	DATE	REMARKS	BY
4	4-93	REVISED PER COUNTY COMMENTS	JT
3	3-93	TRAMWAY R/W RETAINING WALL	JT
2	3-93	TW ELEV, SECTIONS & CHANGES	MH
1	1-6-93	POND, SECTIONS & EXIST. ELEVATIONS	MH

DESIGN

DESIGNED BY	MH	DATE 12/92
DRAWN BY	MH/OR	DATE 12/92
CHECKED BY	MH	DATE 12/92

APPROVED FOR ROUGH GRADING (± 1')
A.M.A.F.C.A. — DATE 12/21/92

APPROVED FOR ROUGH GRADING (± 1')
HYDROLOGY ENGINEER — DATE 12/29/92

COUNTY OF BERNALILLO
PUBLIC WORKS DEPARTMENT

WILLOW BEND SUBDIVISION
GRADING PLAN AND DRAINAGE DETAILS

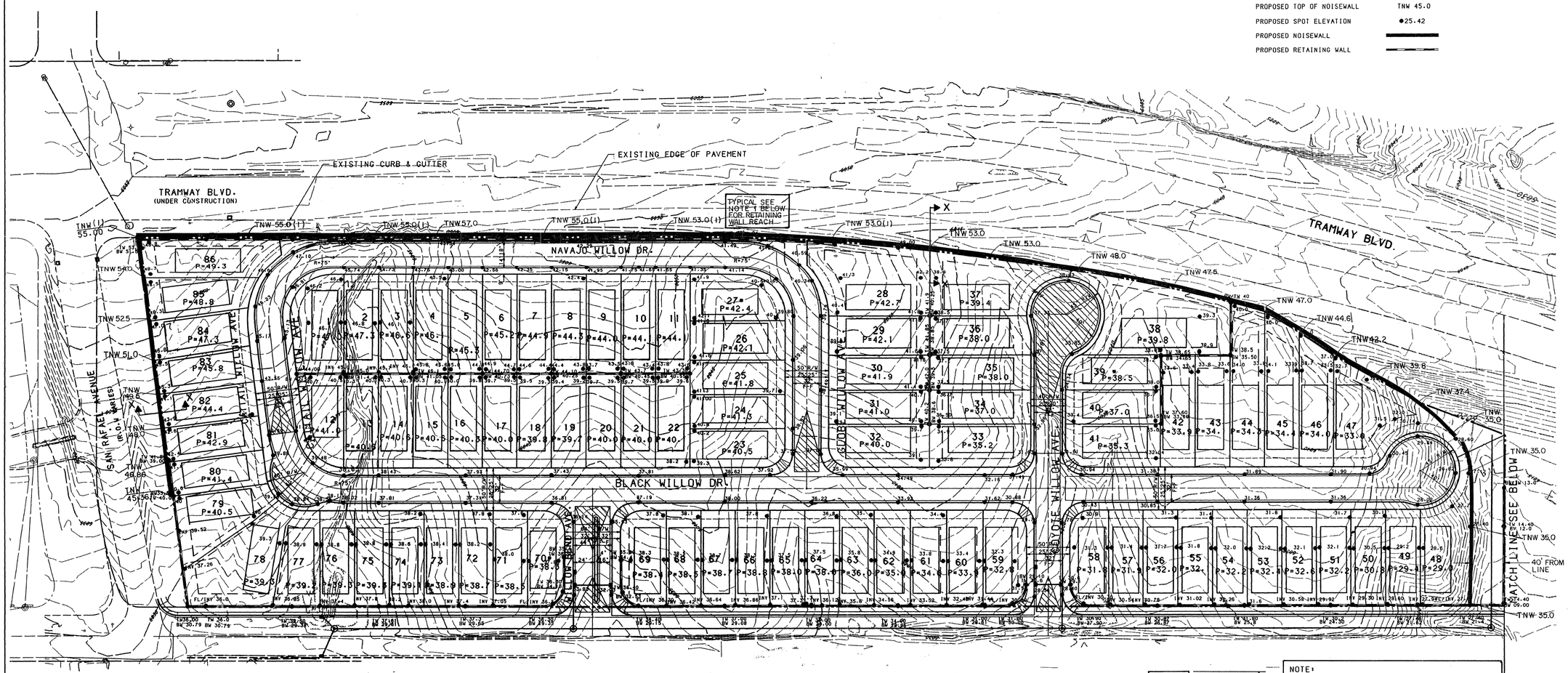
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
COUNTY ENGINEER		5/5/93			

DRAWING NO. — MAP NO. D-23 — SHEET 5 OF 23

USERNAME: [C9218201.PAD]
FILENAME: GRADE2.GRF

LEGEND

PROJECT BOUNDARY	
EXISTING CONTOUR	
PROPOSED TOP OF NOISEWALL	TNW 45.0
PROPOSED SPOT ELEVATION	●25.42
PROPOSED NOISEWALL	
PROPOSED RETAINING WALL	

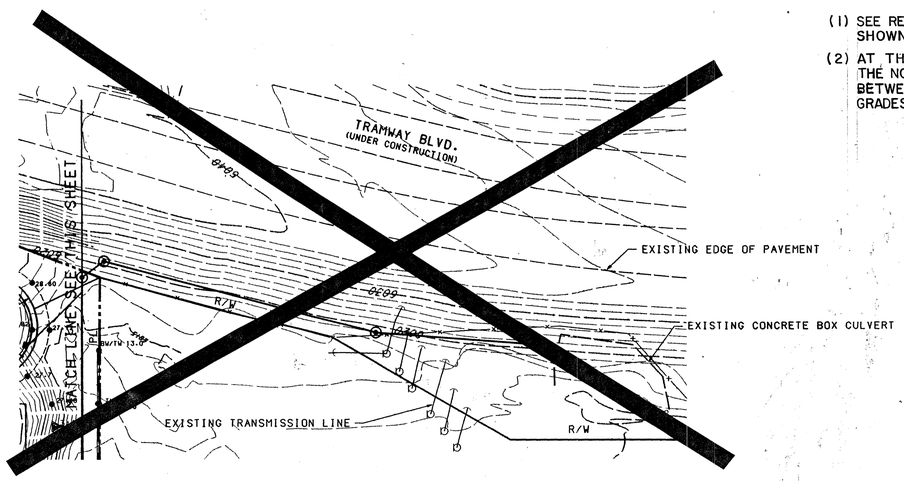


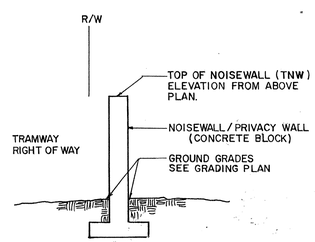
NOTE:
THIS SHEET IS NOT TO BE USED FOR GRADING. SEE SHEET 4 & 5 OF 23 FOR GRADING AND DETAILS.

NOTES:

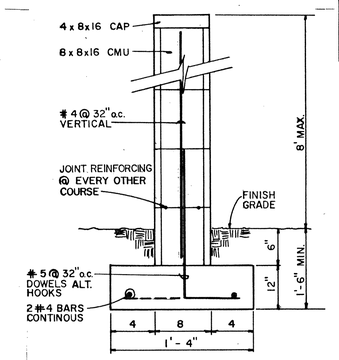
(1) SEE RETAINING WALL PROFILES (WALL 2) FOR NOISE WALL PROFILE. SHOWN ELEVATION ON THIS SHEET IS A MINIMUM ELEVATION.

(2) AT THE LOCATIONS SHOWN ABOVE THE CONTRACTOR SHALL PROVIDE THE NOISE WALL ELEVATION SHOWN. NOISE WALL CONSTRUCTION BETWEEN SHOWN ELEVATIONS/LOCATIONS SHALL BE STRAIGHT-GRADES BETWEEN THE TWO ADJACENT SHOWN ELEVATIONS.





SECTION X-X
N.T.S



GARDEN WALL DETAIL FOR 8' max. HEIGHT.
N.T.S

N

60 30 0 60

SCALE: 1" = 60'

BHI JOB NO. 92182.01

SURVEY INFORMATION		
FIELD NOTES		
NO.	BY	DATE

BENCH MARKS	
THE BENCH MARK IS A STANDARD ASC BRASS TABLET STAMPED "1-D23" SET IN TOP OF A CONCRETE POST LOCATED APPROXIMATELY N13° 19' 23"E 867.95' FROM THE NE CORNER OF BOUNDARY	ELEV.=6067.423'

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

ENGINEER'S SEAL

4-7-93

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	

DESIGNED BY	MH	DATE 12/92
DRAWN BY	OR	DATE 12/92
CHECKED BY	MH	DATE 12/92

COUNTY OF BERNALILLO

PUBLIC WORKS DEPARTMENT

WILLOW BEND SUBDIVISION
NOISEWALL PLAN AND DETAILS

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
COUNTY ENGINEER	A.L. Bowman	5/5/93			

DRAWING NO.	MAP NO.	SHEET	OF
	D-23	6	23

USERNAME: [C92182O1.PAD]
FILENAME: NOISEWALL.GRF

PROJECT BOUNDARY
PROPOSED CURB & GUTTER
EXISTING CURB & GUTTER
FUTURE SIDEWALK
PROPOSED SANITARY SEWER MANHOLE
EXISTING SANITARY SEWER MANHOLE
PROPOSED FIRE HYDRANT
EXISTING FIRE HYDRANT
PROPOSED GATE VALVE
EXISTING GATE VALVE
PROPOSED STORM DRAIN LINE
PROPOSED STORM DRAIN MANHOLE
PROPOSED STORM DRAIN INLET
EXISTING STORM DRAIN LINE
EXISTING STORM DRAIN MANHOLE
EXISTING STORM DRAIN INLET
CROWN FLATTENING
PROPOSED CONDUIT PIPE
EXISTING CONDUIT PIPE
PROPOSED STREET LIGHT
EXISTING STREET LIGHT

NOTES

1. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LOCATIONS AND NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.

2. ALL CURB RETURN RADII SHALL BE 25' TO FACE OF CURB UNLESS OTHERWISE SPECIFIED.

3. ALL CURVE DATA AND DIMENSIONS REFER TO FACE OF CURB UNLESS OTHERWISE SPECIFIED.

4. GRADE ELEVATIONS, WHERE NOTED, ARE FLOWLINE UNLESS OTHERWISE SPECIFIED.

5. CONTRACTOR IS TO INSTALL A 4"x4"x5' POST AND EMD AT THE END OF EACH SANITARY SEWER SERVICE.

6. CONTRACTOR IS RESPONSIBLE FOR REPAIR AND/OR REPLACEMENT OF ALL UTILITY CONDUITS AND EXISTING LINES.

7. ANY ADDITIONAL GRADING REQUIRED TO MATCH PROPOSED STREET GRADES SHALL BE INCIDENTAL TO PAVING ITEMS.

8. CONTRACTOR SHALL PROVIDE THE INSPECTORS, (CITY AND PRIVATE) WITH THE PROPOSED HYDROSTATIC TESTING PLAN. THE PLAN MUST BE APPROVED BEFORE TESTING OPERATIONS BEGIN.

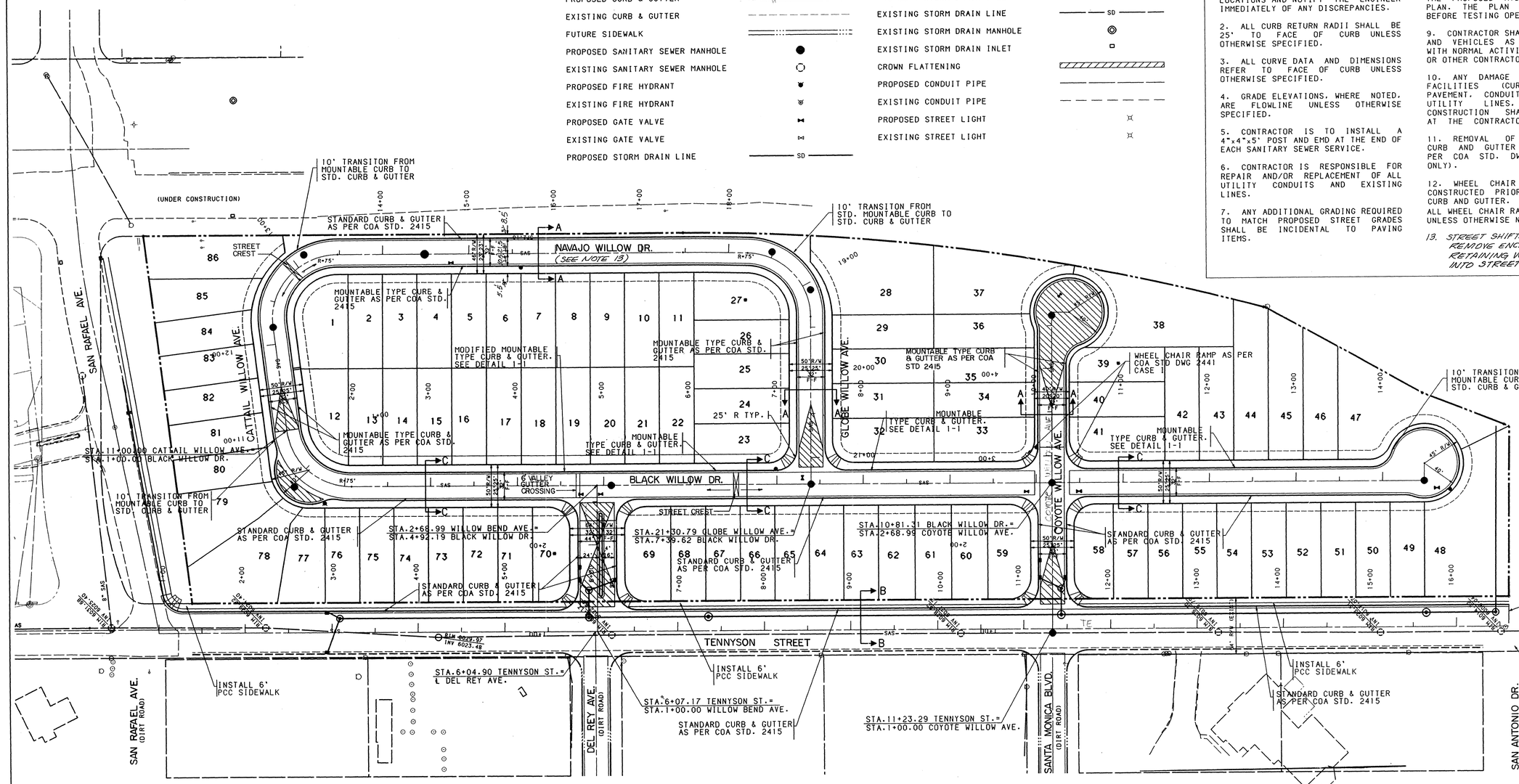
9. CONTRACTOR SHALL PARK EQUIPMENT AND VEHICLES AS NOT TO INTERFERE WITH NORMAL ACTIVITIES OF RESIDENTS OR OTHER CONTRACTORS ON SITE.

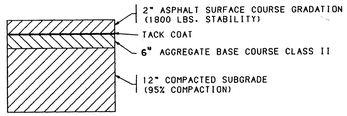
10. ANY DAMAGE TO THE EXISTING FACILITIES (CURB AND GUTTER, PAVEMENT, CONDUITS, LANDSCAPING, UTILITY LINES, ETC.) DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTORS EXPENSE.

11. REMOVAL OF THE EXISTING CURB AND GUTTER SHALL BE AS PER COA STD. DWG. 2415 (SAWCUT ONLY).

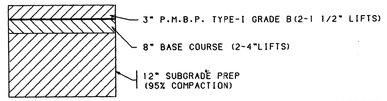
12. WHEEL CHAIR RAMPS SHALL BE CONSTRUCTED PRIOR TO ACCEPTANCE OF CURB AND GUTTER.
ALL WHEEL CHAIR RAMPS ARE CASE II UNLESS OTHERWISE NOTED.

13. STREET SHIFTED WESTERLY TO REMOVE ENCROACHMENT OF RETAINING WALL FOOTING INTO STREET SECTION.



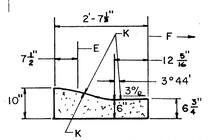


TYPICAL PAVEMENT SECTION
NO SCALE



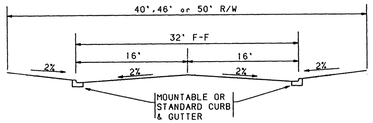
* TYPICAL PAVEMENT SECTION
TENNYSON STREET
NO SCALE

* TENNYSON STREET PAVEMENT SECTION SHOULD BE PER NMSHTD SPECIFICATIONS, 1984 EDITION

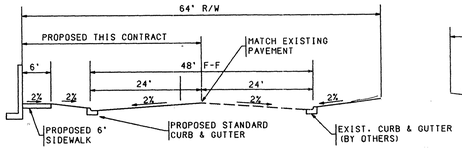


MOUNTABLE CURB ROLL TYPE

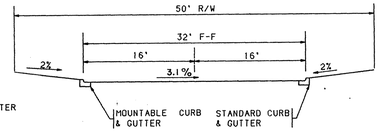
DETAIL 1-1
N.T.S



SECTION A-A
NO SCALE



TENNYSON STREET SECTION B-B
NO SCALE



SECTION C-C
NO SCALE

RECORD DRAWING

I, A. E. Schumacher, Registered Professional Engineer and Land Surveyor in the State of New Mexico, do hereby certify that this "as-built" information was obtained by me or under my supervision and represents the "as-built" conditions of this project, and is true and correct to the best of my knowledge and belief. All vertical and horizontal dimensions should be field verified prior to use on future projects.

A. E. Schumacher 11/5/93
A. E. Schumacher — Date
NMPE/LS No. 2360

STATE OF NEW MEXICO — ALBERT E. SCHUMACHER 2360 — REGISTERED PROFESSIONAL ENGINEER & LAND SURVEYOR

SCALE: 1" = 60'

BHI JOB NO. 92182.01

AS BUILT INFORMATION

CONTRACTOR
WORK STAKED BY
INSPECTOR'S ACCEPTANCE BY — DATE
FIELD VERIFICATION BY — DATE
DRAWINGS CORRECTED BY — DATE
MICRO-FILM INFORMATION
RECORDED BY — DATE
NO.

BENCH MARKS
THE BENCH MARK IS A STANDARD ASC BRASS TABLET STAMPED "1-D23" SET IN TOP OF A CONCRETE POST LOCATED APPROXIMATELY N13° 19' 23"E 867.95' FROM THE NE CORNER OF BOUNDARY.
ELEV.=6067.423'

SURVEY INFORMATION
FIELD NOTES

NO.	DATE	BY	REMARKS
			REVISIONS

DESIGN
DESIGNED BY MH DATE 12/92
DRAWN BY OR DATE 12/92
CHECKED BY MH DATE 12/92

ENGINEER'S SEAL
ALBERT A. HINOJOSA JR. — NEW MEXICO — 13538 — REGISTERED PROFESSIONAL ENGINEER — 12-17-92

COUNTY OF BERNALILLO
PUBLIC WORKS DEPARTMENT

WILLOW BEND SUBDIVISION
PAVING PLAN

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
COUNTY ENGINEER	OBBowman	5/5/93			

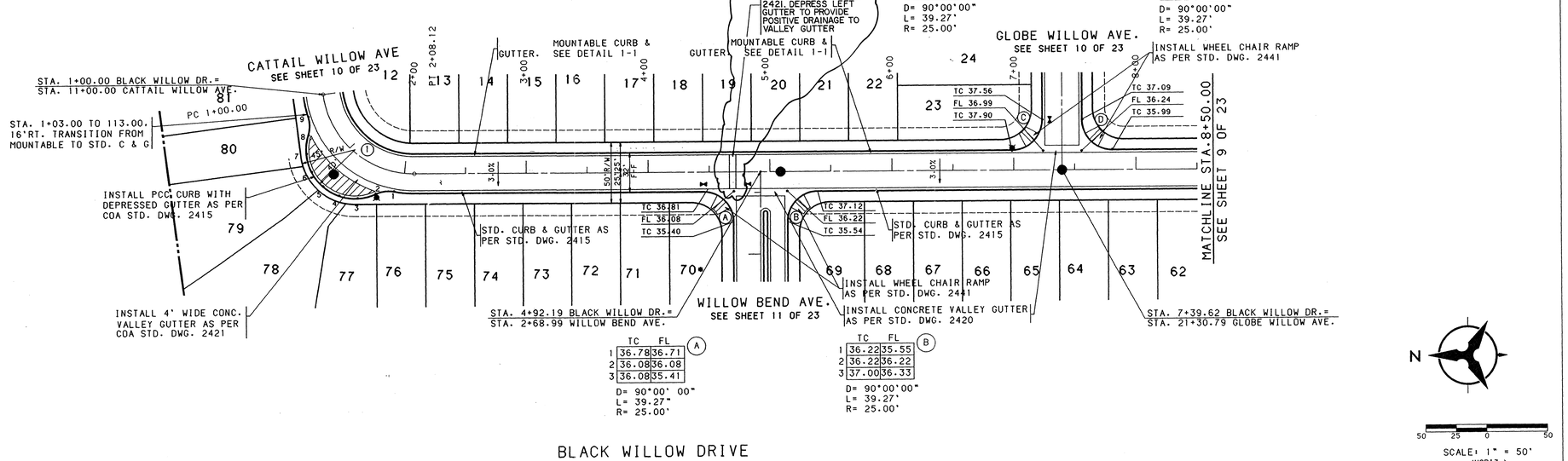
DRAWING NO. | MAP NO. D-23 | SHEET 7 OF 23

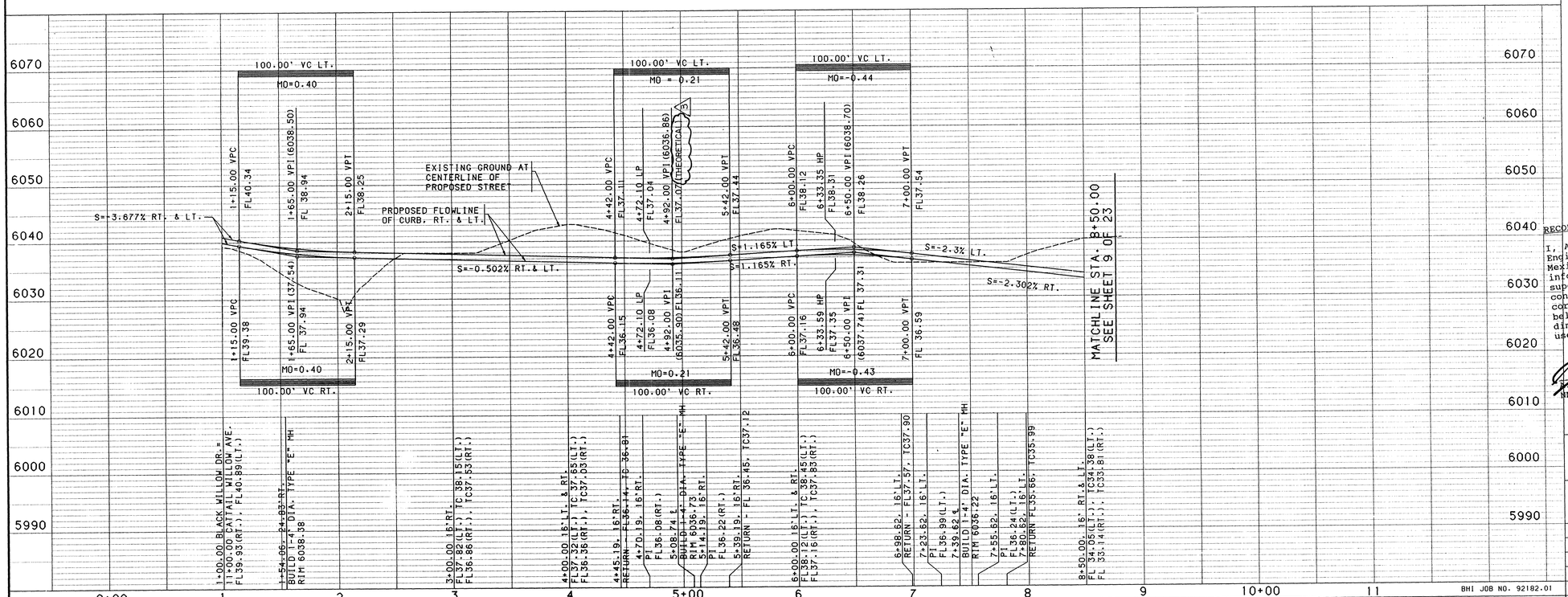
USERNAME: [C9218201.PAD]
FILENAME: PAVING.GRF

KNUCKLE CURB DATA			
PT	TC	STATION & OFFSET	DELTA
1	38.13	1+94.36, 16.00'RT.	35°12'15"
2	38.24	1+83.13, 21.65'RT.	21°59'51"
3	38.58	1+74.01, 30.70'RT.	21°59'51"
4	38.82	1+64.18, 36.31'RT.	21°59'51"
5	39.08	1+54.06, 38.21'RT.	21°59'51"
6	39.48	1+43.93, 36.31'RT.	21°59'51"
7	39.55	1+34.11, 30.70'RT.	21°59'51"
8	39.76	1+24.98, 21.65'RT.	35°12'15"
9	40.10	1+13.75, 16.00'RT.	
R=40.00', L=92.14' (BETWEEN PTS 2 & 8)			

(1) CENTERLINE CURVE DATA

P.I.	STA. 1+65.89
Delta	82° 35' 49.4"
D	76° 23' 40"
T	65.89'
L	108.12'
R	75.00'





USERNAME: CDP[CC9218201.PNP]
FILENAME: BLACK1.GRF

NOTES

1. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LOCATIONS AND NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.

2. ALL CURB RETURN RADII SHALL BE 25' TO FACE OF CURB UNLESS OTHERWISE SPECIFIED.

3. ALL CURVE DATA AND DIMENSIONS REFER TO FACE OF CURB UNLESS OTHERWISE SPECIFIED.

4. GRADE ELEVATIONS, WHERE NOTED, ARE FOR FLOW LINE UNLESS OTHERWISE SPECIFIED.

5. CONTRACTOR IS TO INSTALL A 4"x4"x5' POST AND EMD AT THE END OF EACH SANITARY SEWER SERVICE.

6. CONTRACTOR IS RESPONSIBLE FOR REPAIR AND/OR REPLACEMENT OF ALL UTILITY CONDUITS AND EXISTING LINES.

7. ANY ADDITIONAL GRADING REQUIRED TO MATCH PROPOSED STREET GRADES SHALL BE INCIDENTAL TO PAVING ITEMS.

8. CONTRACTOR SHALL PROVIDE THE INSPECTORS, (CITY AND PRIVATE) WITH THE PROPOSED HYDROSTATIC TESTING PLAN. THE PLAN MUST BE APPROVED BEFORE TESTING OPERATIONS BEGIN.

9. CONTRACTOR SHALL PARK EQUIPMENT AND VEHICLES AS NOT TO INTERFERE WITH NORMAL ACTIVITIES OF RESIDENTS OR OTHER CONTRACTORS ON SITE.

10. ANY DAMAGE TO THE EXISTING FACILITIES (CURB AND GUTTER, PAVEMENT, CONDUITS, LANDSCAPING, UTILITY LINES, ETC.) DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTORS EXPENSE.

11. REMOVAL OF THE EXISTING CURB AND GUTTER SHALL BE AS PER COA STD. DWG. 2415 (SAWCUT ONLY).

12. WHEEL CHAIR RAMPS SHALL BE CONSTRUCTED PRIOR TO ACCEPTANCE OF CURB AND GUTTER. ALL WHEEL CHAIR RAMPS ARE CASE II UNLESS OTHERWISE NOTED.

AS-BUILT INFORMATION
CONTRACTOR
WORK STAKED BY
INSPECTOR'S ACCEPTANCE BY — DATE
FIELD VERIFICATION BY — DATE
DRAWINGS CORRECTED BY — DATE
MICRO-FILM INFORMATION
RECORDED BY — DATE
NO.

BENCH MARKS
THE BENCH MARK IS A STANDARD ASC BRASS TABLET STAMPED "1-D23" SET IN TOP OF A CONCRETE POST LOCATED APPROXIMATELY N13° 19' 23"E 867.95 FROM THE NE CORNER OF BOUNDARY.
ELEVATION = 6067.423'

SURVEY INFORMATION
FIELD NOTES
NO. BY DATE

ENGINEER'S SEAL
ALBERT A. HINOJOS III
NEW MEXICO
15538
11/5/93
REGISTERED PROFESSIONAL ENGINEER

NO.	DATE	REMARKS	BY
4-93		REVISED PER COUNTY COMMENTS	JT

REVISIONS

DESIGNED BY MH — DATE 12/92
DRAWN BY MH/QR — DATE 12/92
CHECKED BY MH — DATE 12/92

RECORD DRAWING

I, A. E. Schumacher, Registered Professional Engineer and Land Surveyor in the State of New Mexico, do hereby certify that this "as-built" information was obtained by me or under my supervision and represents the "as-built" conditions of this project, and is true and correct to the best of my knowledge and belief. All vertical and horizontal dimensions should be field verified prior to use on future projects.

A. E. Schumacher 11/5/93
A. E. Schumacher — Date
NMPE/LS No. 2360

STATE OF NEW MEXICO
SCHUMACHER
2360
REGISTERED
PROFESSIONAL ENGINEER & LAND SURVEYOR

COUNTY OF BERNALILLO

PUBLIC WORKS DEPARTMENT

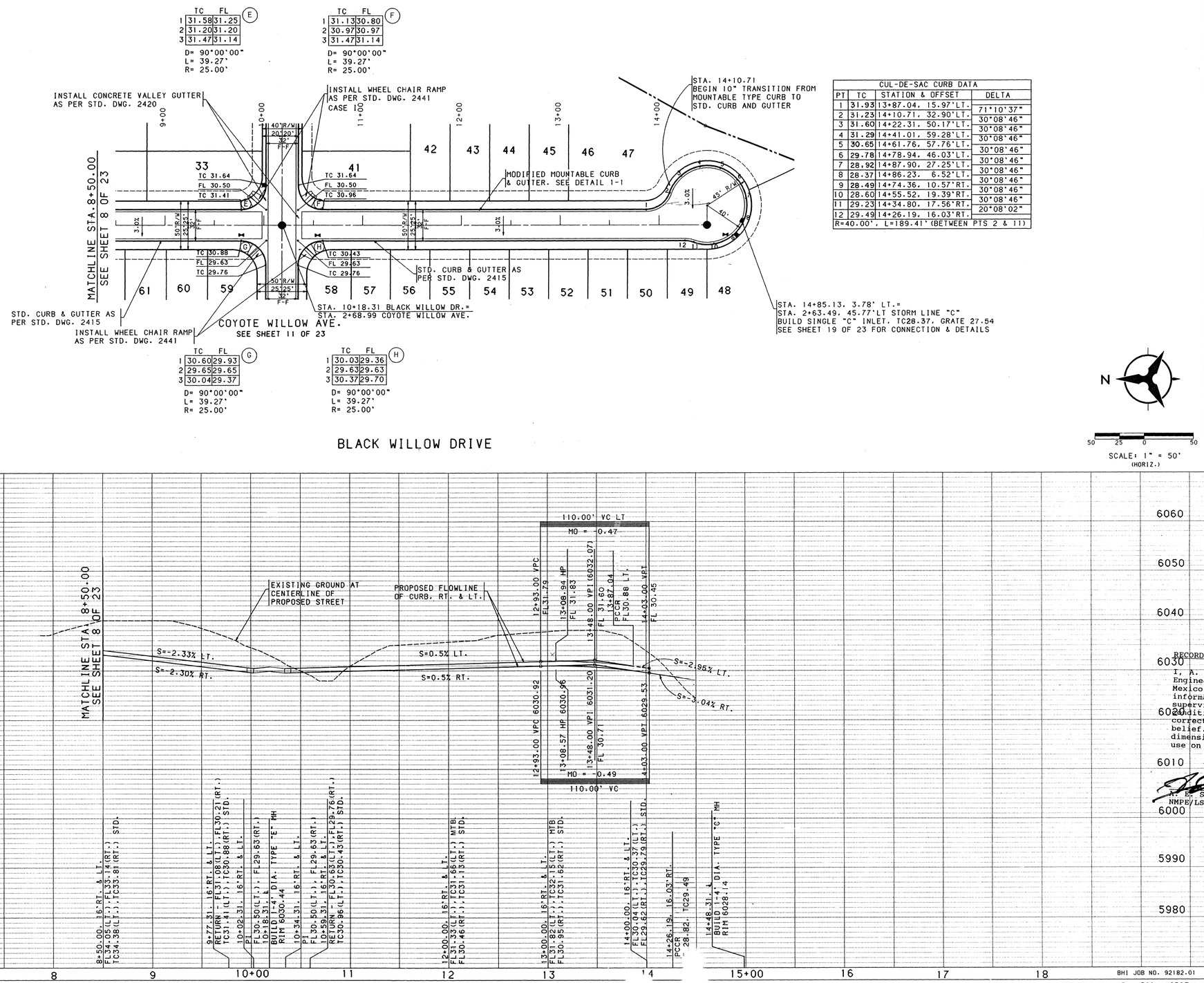
WILLOW BEND SUBDIVISION

PAVING PLAN & PROFILE

BLACK WILLOW DR. - STA. 1+00.00 TO STA. 8+50.00

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
COUNTY ENGINEER	A.E. Bowman	5/5/93			

DRAWING NO. | MAP NO. D-23 | SHEET 8 OF 23



CUL-DE-SAC CURB DATA			
PT	TC	STATION & OFFSET	DELTA
1	31.93	13+87.04, 15.97'LT.	71°10'37"
2	31.23	14+10.71, 32.90'LT.	30°08'46"
3	31.60	14+22.31, 50.17'LT.	30°08'46"
4	31.29	14+41.01, 59.28'LT.	30°08'46"
5	30.65	14+61.76, 57.76'LT.	30°08'46"
6	29.78	14+78.94, 46.03'LT.	30°08'46"
7	28.92	14+87.90, 27.25'LT.	30°08'46"
8	28.37	14+86.23, 6.52'LT.	30°08'46"
9	28.49	14+74.36, 10.57'RT.	30°08'46"
10	28.60	14+55.52, 19.39'RT.	30°08'46"
11	29.23	14+34.80, 17.56'RT.	20°08'02"
12	29.49	14+26.19, 16.03'RT.	
R=40.00', L=189.41' (BETWEEN PTS 2 & 11)			

NOTES

1. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LOCATIONS AND NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.

2. ALL CURB RETURN RADII SHALL BE 25' TO FACE OF CURB UNLESS OTHERWISE SPECIFIED.

3. ALL CURVE DATA AND DIMENSIONS REFER TO FACE OF CURB UNLESS OTHERWISE SPECIFIED.

4. GRADE ELEVATIONS, WHERE NOTED, ARE FOR FLOW LINE UNLESS OTHERWISE SPECIFIED.

5. CONTRACTOR IS TO INSTALL A 4"x4"x5' POST AND EMD AT THE END OF EACH SANITARY SEWER SERVICE.

6. CONTRACTOR IS RESPONSIBLE FOR REPAIR AND/OR REPLACEMENT OF ALL UTILITY CONDUITS AND EXISTING LINES.

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9. CONTRACTOR SHALL PARK EQUIPMENT AND VEHICLES AS NOT TO INTERFERE WITH NORMAL ACTIVITIES OF RESIDENTS OR OTHER CONTRACTORS ON SITE.

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11. REMOVAL OF THE EXISTING CURB AND GUTTER SHALL BE AS PER COA STD. DWG. 2415 (SAWCUT ONLY).

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RECORD DRAWING

I, A. E. Schumacher, Registered Professional Engineer and Land Surveyor in the State of New Mexico, do hereby certify that this "as-built" information was obtained by me or under my supervision and represents the "as-built" conditions of this project, and is true and correct to the best of my knowledge and belief. All vertical and horizontal dimensions should be field verified prior to use on future projects.

A. E. Schumacher, NMPE/LS No. 2360 — Date 11/5/93

OFFICE OF THE STATE ENGINEER — SCHUMACHER 2360 — REGISTERED PROFESSIONAL ENGINEER & LAND SURVEYOR

AS-BUILT INFORMATION

CONTRACTOR	
WORK STAKED BY	
STAKES CHECKED BY ASBUILT INSPECTOR	DATE
FIELD VERIFICATION BY	DATE
DRAWINGS CORRECTED BY	DATE

MICRO-FILM INFORMATION

RECORDED BY	DATE
NO.	

BENCH MARKS

THE BENCH MARK IS A STANDARD ASC BRASS TABLET STAMPED "1-D23" SET IN TOP OF A CONCRETE POST LOCATED APPROXIMATELY N13° 19' 23"E 867.95 FROM THE NE CORNER OF BOUNDARY.	ELEVATION = 6067.423'

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL — MARK A. HUNSAKER — NEW MEXICO — 15383 — 2-17-93 — REGISTERED PROFESSIONAL ENGINEER

NO.	DATE	REMARKS	BY
		REVISIONS	

DESIGN

DESIGNED BY	MH	DATE 12/92
DRAWN BY	MH/DR	DATE 12/92
CHECKED BY	MH	DATE 12/92

HUNSAKER & ASSOCIATES, INC.

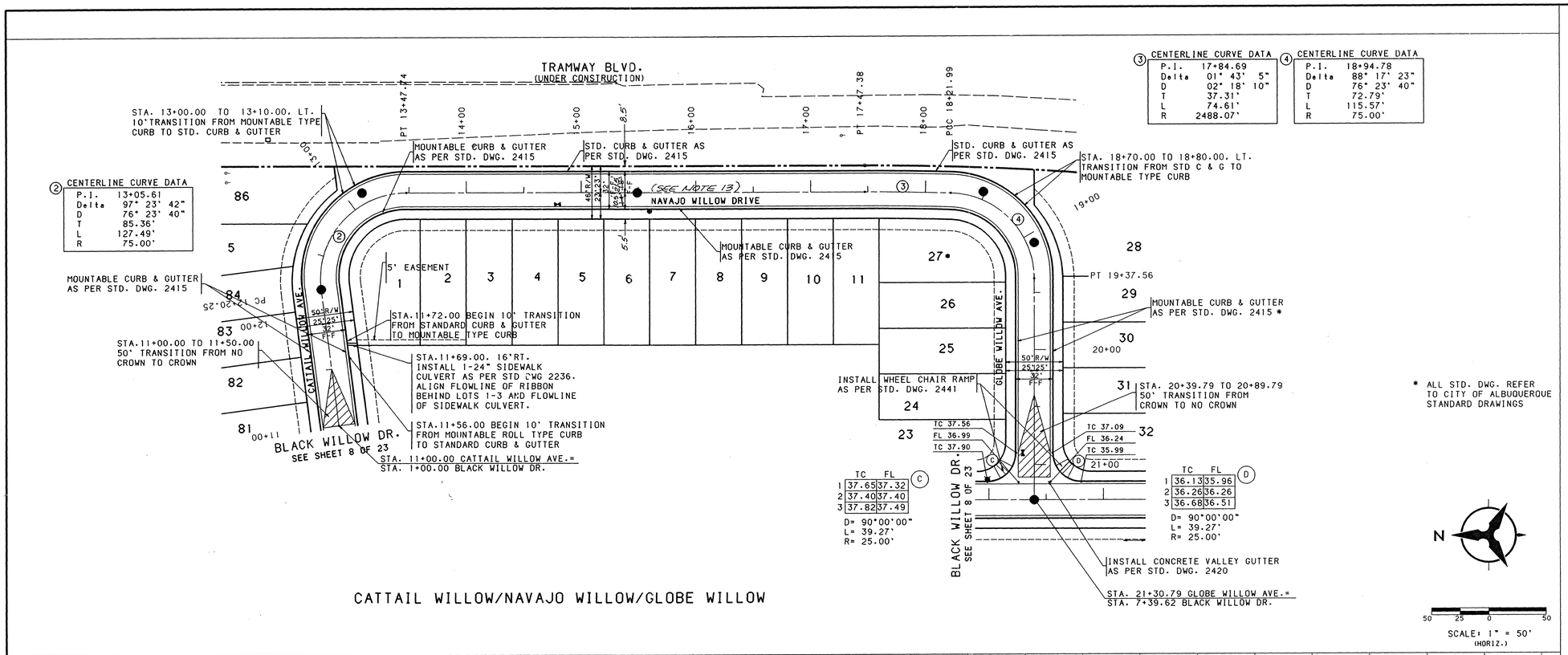
COUNTY OF BERNALILLO
PUBLIC WORKS DEPARTMENT

WILLOW BEND SUBDIVISION
PAVING PLAN & PROFILE
BLACK WILLOW DR.- STA. 8+50.00 TO STA. 14+48.45

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
COUNTY ENGINEER	CR Bowman	5/5/93			

DRAWING NO.	MAP NO.	SHEET	OF
	D-23	9	23

USERNAME: CDP:[C9218201.PNP]
FILENAME: BLACK2.ORF



② CENTERLINE CURVE DATA	
P.I.	13+05.61
Delta	97° 23' 42"
D	76° 23' 40"
T	85.36'
L	127.49'
R	75.00'

③ CENTERLINE CURVE DATA	
P.I.	17+84.69
Delta	01° 43' 5"
D	02° 18' 10"
T	37.31'
L	74.61'
R	2488.07'

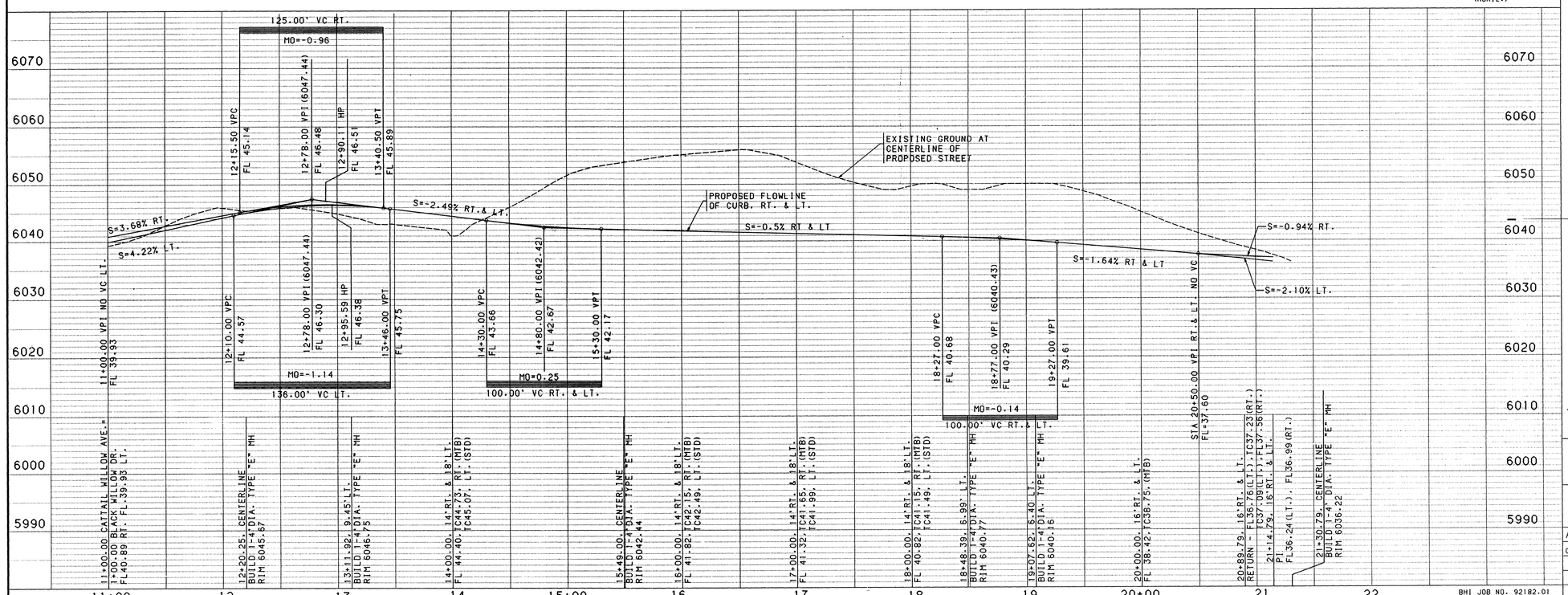
④ CENTERLINE CURVE DATA	
P.I.	18+94.78
Delta	88° 17' 23"
D	76° 23' 40"
T	72.79'
L	115.57'
R	75.00'

Ⓒ	TC	FL
1	37.65	37.32
2	37.40	37.40
3	37.82	37.49

Ⓓ	TC	FL
1	36.13	35.96
2	36.26	36.26
3	36.68	36.51

* ALL STD. DWG. REFER TO CITY OF ALBUQUERQUE STANDARD DRAWINGS

CATTAIL WILLOW/NAVAJO WILLOW/GLOBE WILLOW



USERNAME: CDP:[C92182O1.PNP]
FILENAME: CNG.GRF

NOTES

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12. WHEEL CHAIR RAMPS SHALL BE CONSTRUCTED PRIOR TO ACCEPTANCE OF CURB AND GUTTER. ALL WHEEL CHAIR RAMPS ARE CASE II UNLESS OTHERWISE NOTED.

13. STREET SHIFTED WESTERLY TO REMOVE ENCROACHMENT OF RETAINING WALL FOOTING INTO STREET SECTION.

AS-BUILT INFORMATION

CONTRACTOR	
STAKED BY	
INSPECTOR'S ACCEPTANCE BY	DATE
FIELD VERIFICATION BY	DATE
DRAWINGS CORRECTED BY	DATE

MICRO-FILM INFORMATION

RECORDED BY	DATE
NO.	

BENCH MARKS

THE BENCH MARK IS A STANDARD ASC BRASS TABLET STAMPED "1-D23" SET IN TOP OF A CONCRETE POST LOCATED APPROXIMATELY N13° 19' 23"E 867.95 FROM THE NE CORNER OF BOUNDARY.

ELEVATION = 6067.423'

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL

ALBERT A. HIMOUD
NEW MEXICO
7558
REGISTERED PROFESSIONAL ENGINEER
3-7-93

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	

DESIGNED BY MH DATE 12/92
DRAWN BY MH/OR DATE 12/92
CHECKED BY MH DATE 12/92

RECORD DRAWING

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A. E. Schumacher 11/5/93
A. E. Schumacher Date
NMPE/LS No. 2360

STATE OF NEW MEXICO
ALBERT E. SCHUMACHER
REGISTERED
PROFESSIONAL ENGINEER AND LAND SURVEYOR

COUNTY OF BERNALILLO
PUBLIC WORKS DEPARTMENT

WILLOW BEND SUBDIVISION
PAVING PLAN & PROFILE
CATTAIL/NAVAJO/GLOBE - STA. 11+00.00 TO STA. 21+30.79

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
COUNTY ENGINEER	CRBowman	5/5/93			

DRAWING NO.	MAP NO.	SHEET	OF
	D-23	10	23

	TC	FL
1	30.77	30.10
2	29.74	29.74
3	30.09	29.42

(I)

D= 90°00'00"
L= 39.27'
R= 25.00'

	TC	FL
1	36.78	36.71
2	36.08	36.08
3	36.08	35.41

(A)

D= 90°00'00"
L= 39.27'
R= 25.00'

MEDIAN CURB & GUTTER

	STA. & OFFSET	TC
a	1+42.00, 2.00' RT.	30.98
b	1+42.00, 6.00' RT.	31.01
c	2+35.00, 2.00' RT.	36.13
d	2+35.00, 6.00' RT.	36.12

STORM DRAIN INLETS

1 STA. 1+59.00, 22.00' LT.
BUILD 1-SINGLE TYPE "C" INLET
TC 31.66, GRATE 30.83
INV 26.66

2 STA. 1+74.00, 22.00' LT.
BUILD 1- TYPE "A" INLET
TC 32.48, GRATE 31.65
INV 28.98

3 STA. 1+59.00, 22.00' RT.
BUILD 1- TYPE "A" INLET
TC 31.80, GRATE 30.97
INV 27.80

	TC	FL
1	30.31	29.64
2	29.92	29.92
3	30.92	30.25

(J)

D= 90°00'00"
L= 39.27'
R= 25.00'

	TC	FL
1	36.22	35.55
2	36.22	36.22
3	37.00	36.33

(B)

D= 90°00'00"
L= 39.27'
R= 25.00'

	TC	FL
1	28.53	28.86
2	27.83	27.83
3	28.48	27.81

(K)

D= 90°00'00"
L= 39.27'
R= 25.00'

	TC	FL
1	30.60	29.93
2	29.65	29.65
3	30.04	29.37

(G)

D= 90°00'00"
L= 39.27'
R= 25.00'

	TC	FL
1	31.58	31.25
2	31.20	31.20
3	31.47	31.14

(E)

D= 90°00'00"
L= 39.27'
R= 25.00'

	TC	FL
1	27.92	27.25
2	27.41	27.41
3	28.23	27.56

(L)

D= 90°00'00"
L= 39.27'
R= 25.00'

	TC	FL
1	30.03	29.36
2	29.63	29.63
3	30.37	29.70

(H)

D= 90°00'00"
L= 39.27'
R= 25.00'

	TC	FL
1	31.13	30.80
2	30.97	30.97
3	31.47	31.14

(F)

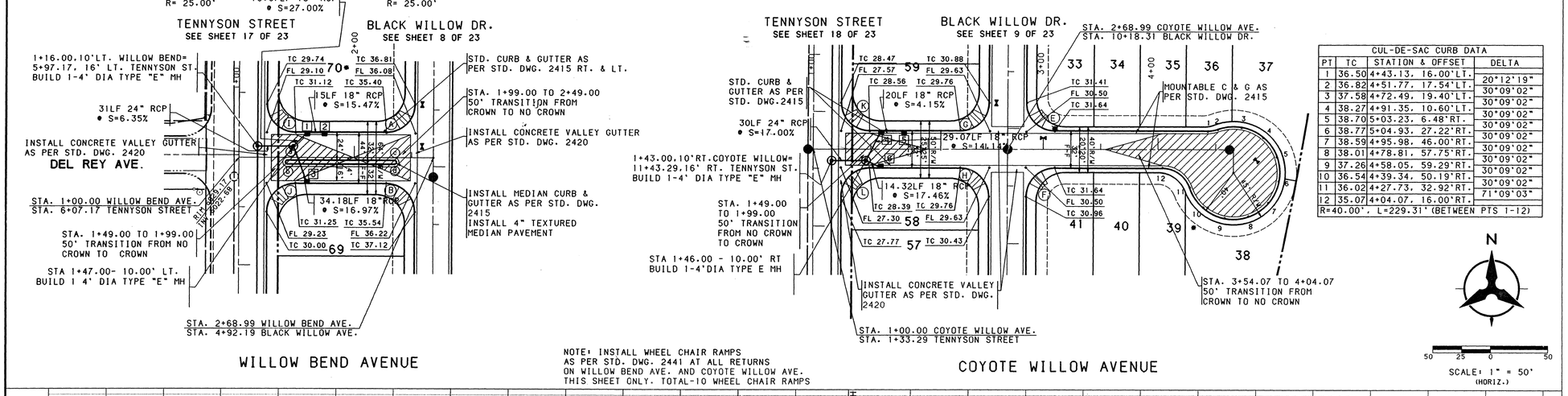
D= 90°00'00"
L= 39.27'
R= 25.00'

STORM DRAIN INLETS

4 STA. 1+59.00, 16.00' LT.
BUILD 1- TYPE "B" INLET
TC 28.69, GRATE 27.86
INV 24.61

5 STA. 1+79.00, 16.00' LT.
BUILD 1- TYPE "A" INLET
TC 28.94, GRATE 28.11
INV 25.44

6 STA. 1+59.00, 16.00' RT.
BUILD 1- TYPE "A" INLET
TC 26.56, GRATE 25.73
INV 23.00



NOTE: INSTALL WHEEL CHAIR RAMPS
AS PER STD. DWG. 2441 AT ALL RETURNS
ON WILLOW BEND AVE. AND COYOTE WILLOW AVE.
THIS SHEET ONLY. TOTAL-10 WHEEL CHAIR RAMPS

CUL-DE-SAC CURB DATA			
PT	TC	STATION & OFFSET	DELTA
1	36.50	4+43.13, 16.00'LT.	
2	36.82	4+51.77, 17.54'LT.	20°12'19"
3	37.58	4+72.49, 19.40'LT.	30°09'02"
4	38.27	4+91.35, 10.60'LT.	30°09'02"
5	38.70	5+03.23, 6.48'RT.	30°09'02"
6	38.77	5+04.93, 27.22'RT.	30°09'02"
7	38.59	4+95.98, 46.00'RT.	30°09'02"
8	38.01	4+78.81, 57.75'RT.	30°09'02"
9	37.26	4+58.05, 59.29'RT.	30°09'02"
10	36.54	4+39.34, 50.19'RT.	30°09'02"
11	36.02	4+27.73, 32.92'RT.	30°09'02"
12	35.07	4+04.07, 16.00'RT.	71°09'03"
R=40.00', L=229.31' (BETWEEN PTS 1-12)			

NOTES

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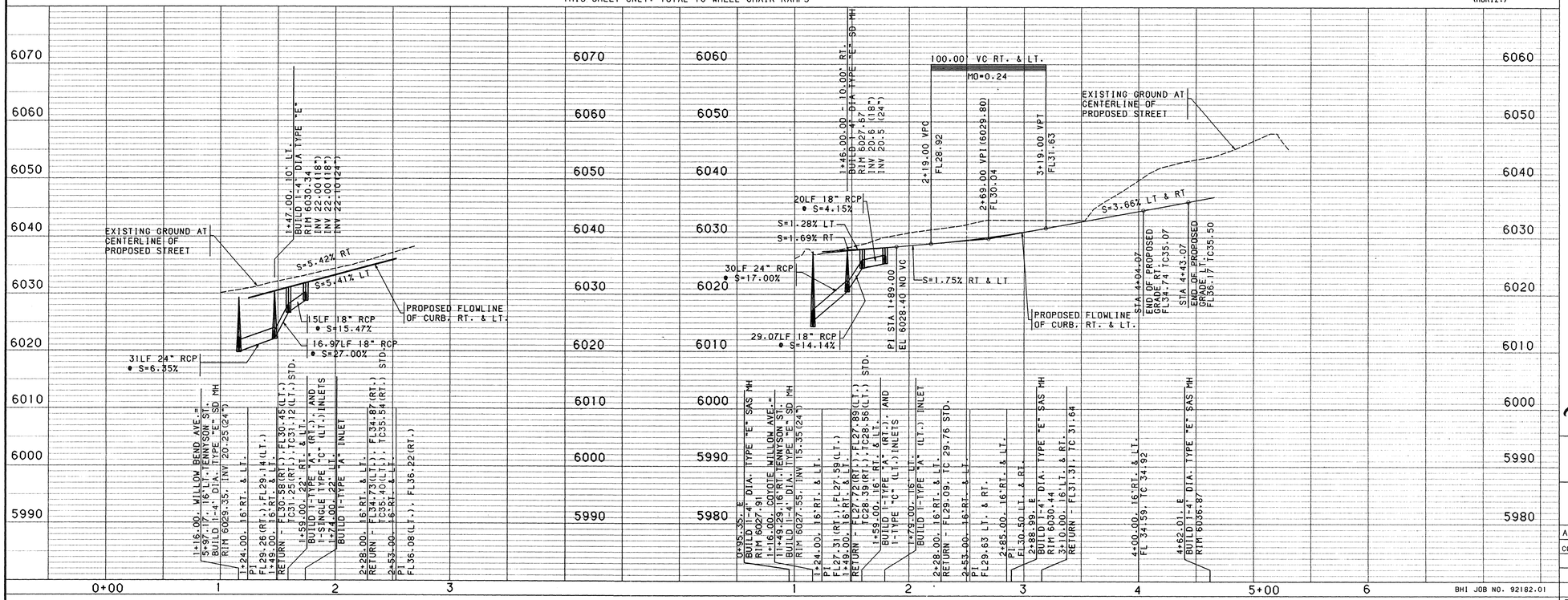
ALL WHEEL CHAIR RAMPS ARE CASE II UNLESS OTHERWISE NOTED.



USERNAME: CDP:[C92182D1.PNP]
FILENAME: COT.GRF

RECORD DRAWING

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4/5/93
Date

A. E. Schumacher
NMPE/LS No. 2360

STATE OF NEW MEXICO
ALBERT E. SCHUMACHER
2360
REGISTERED
PROFESSIONAL ENGINEER & LAND SURVEYOR

COUNTY OF BERNALILLO
PUBLIC WORKS DEPARTMENT

WILLOW BEND SUBDIVISION
PAVING PLAN & PROFILE
WILLOW BEND AVE. & COYOTE WILLOW AVE.

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
COUNTY ENGINEER	CKBowman	5/5/93			

DRAWING NO. | MAP NO. D-23 | SHEET 11 OF 23

AS-BUILT INFORMATION

CONTRACTOR		
WORK STAKED BY		
INSPECTOR'S ACCEPTANCE BY		DATE
FIELD VERIFICATION BY		DATE
DRAWINGS CORRECTED BY		DATE

MICRO-FILM INFORMATION

RECORDED BY | DATE
NO.

BENCH MARKS

THE BENCH MARK IS A STANDARD ASC BRASS TABLET STAMPED "1-D23" SET IN TOP OF A CONCRETE POST LOCATED APPROXIMATELY N13° 19' 23"E 867.95 FROM THE NE CORNER OF BOUNDARY.

ELEVATION = 6067.423'

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL

ALBERT E. SCHUMACHER
NEW MEXICO
2360
REGISTERED
PROFESSIONAL ENGINEER & LAND SURVEYOR
2-17-93

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	

DESIGNED BY MH — DATE 12/92
DRAWN BY MM/DR — DATE 12/92
CHECKED BY MH — DATE 12/92

LEGEND

PROJECT BOUNDARY	
PROPOSED CURB & GUTTER	
EXISTING CURB & GUTTER	
FUTURE SIDEWALK	
PROPOSED SANITARY SEWER MANHOLE	
EXISTING SANITARY SEWER MANHOLE	
PROPOSED FIRE HYDRANT	
EXISTING FIRE HYDRANT	
PROPOSED GATE VALVE	
EXISTING GATE VALVE	
EXISTING STORM DRAIN MANHOLE	
PROPOSED SANITARY SEWER LINE	SAS
EXISTING SANITARY SEWER LINE	SAS
PROPOSED SANITARY SEWER SERVICE	
PROPOSED WATER LINE	W
EXISTING WATER LINE	W
PROPOSED WATER METER SERVICE	
EXISTING STORM DRAIN LINE	SD
PROPOSED STORM DRAIN LINE	SD

NOTES

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2. ALL CURB RETURN RADII SHALL BE 25' TO FACE OF CURB UNLESS OTHERWISE SPECIFIED.

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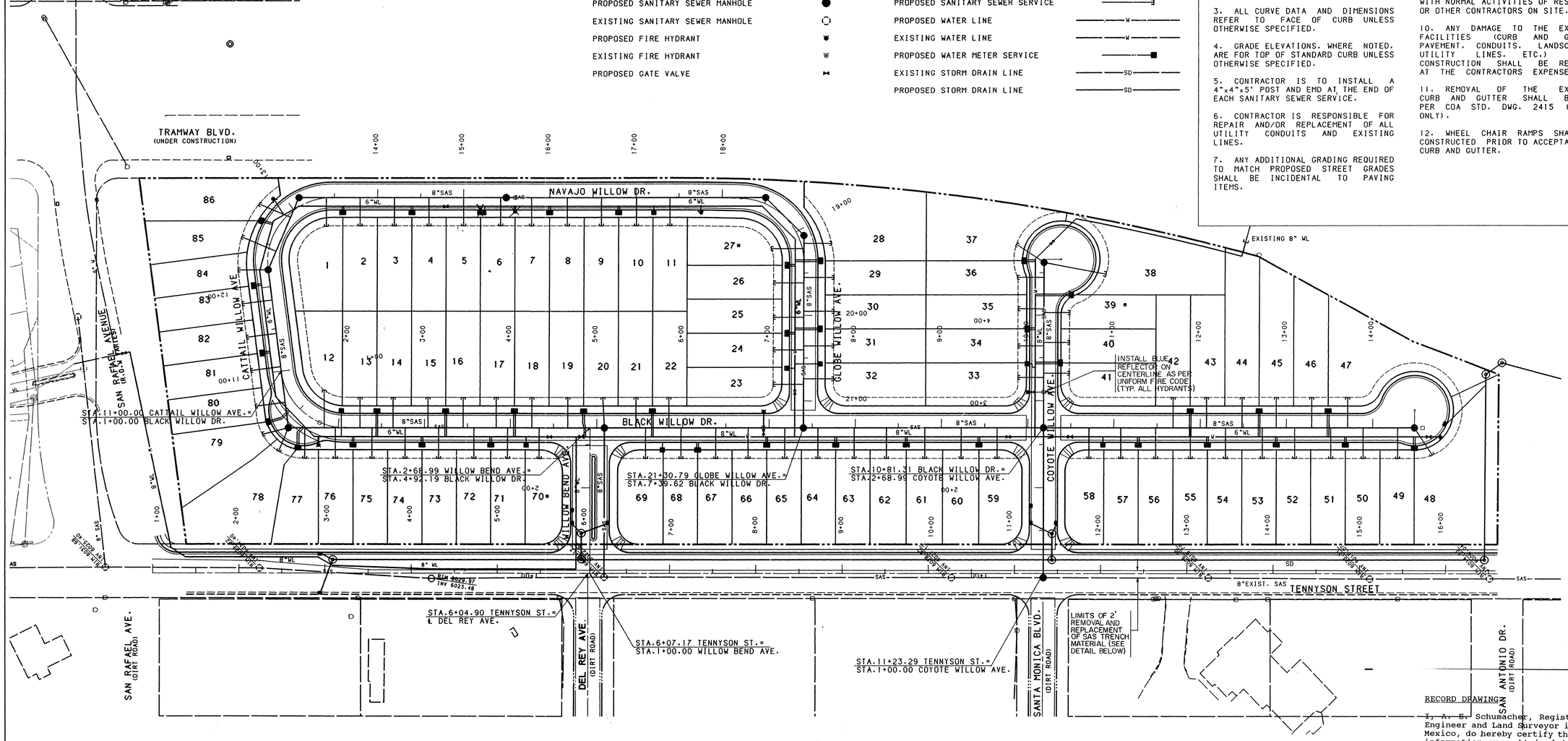
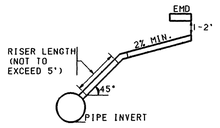
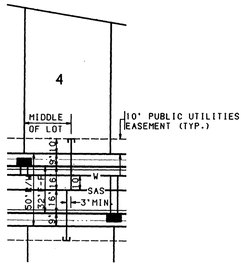
12. WHEEL CHAIR RAMPS SHALL BE CONSTRUCTED PRIOR TO ACCEPTANCE OF CURB AND GUTTER.





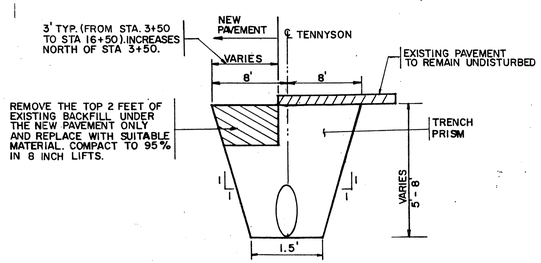
SERVICE RISER DETAIL

(SERVICE CONNECTION & INSTALLATION TO CONFORM TO COA STD. DWG. 2134. USE CI SOIL PIPE ONLY)



TYPICAL UTILITY SERVICE LOCATION

NO SCALE



EXISTING SAS TRENCH

N.T.S

NOTE:

THERE IS CONCERN THAT EXISTING SANITARY SEWER TRENCH PRISM MAY BE UNSUITABLE FOR LONG-TERM STREET COMPACTION IN THE TRENCH AREA. IT IS THE INTENT OF THIS DETAIL TO PROVIDE FOR THE REMOVAL OF EXISTING MATERIAL (2') AND REPLACEMENT OF NEW MATERIAL WITHIN THE EXISTING SAS TRENCH PRISM WHEREVER TRENCH PRISM IS NOT LOCATED UNDER EXISTING PAVEMENT. HOWEVER, CONTRACTOR SHALL NOT PROCEED WITH THIS WORK UNTIL SO DIRECTED BY THE OWNER. THE CONTRACTOR SHALL ASSIST THE SOILS TESTING FIRM IN INVESTIGATING THE SUITABILITY OF THE EXISTING MATERIAL BY PROVIDING SPOT TRENCHES IN THE SAS TRENCH ZONE AS DIRECTED BY THE SOILS TESTING FIRM.

RECORD DRAWINGS

I, A. E. Schumacher, Registered Professional Engineer and Land Surveyor in the State of New Mexico, do hereby certify that this "as-built" information was obtained by me or under my supervision and represents the "as-built" conditions of this project, and is true and correct to the best of my knowledge and belief. All vertical and horizontal dimensions should be field verified prior to use on future projects.

11/5/93

A. E. Schumacher
NMPE/LS No. 13602360

Date

N

60 30 0 60

SCALE: 1" = 60'

BHI JOB NO. 92182.01

COUNTY OF BERNALILLO
PUBLIC WORKS DEPARTMENT

WILLOW BEND SUBDIVISION
UTILITY PLAN

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
COUNTY ENGINEER	R.K. Bowman	5/5/93			

DRAWING NO.	MAP NO.	SHEET
	D-23	12 OF 23

AS BUILT INFORMATION

CONTRACTOR STAKED BY
INSPECTOR'S FIELD ACCEPTANCE BY — DATE
FIELD VERIFICATION BY — DATE
DRAWINGS CORRECTED BY — DATE
MICRO-FILM INFORMATION
RECORDED BY — DATE
NO.

BENCH MARKS

THE BENCH MARK IS A STANDARD ACS BRASS TABLET STAMPED "1-D23" SET IN TOP OF A CONCRETE POST LOCATED APPROXIMATELY N 13° 19' 23" E. 867.95' FROM THE NE CORNER OF BOUNDARY.

ELEV.=6067.423'

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	

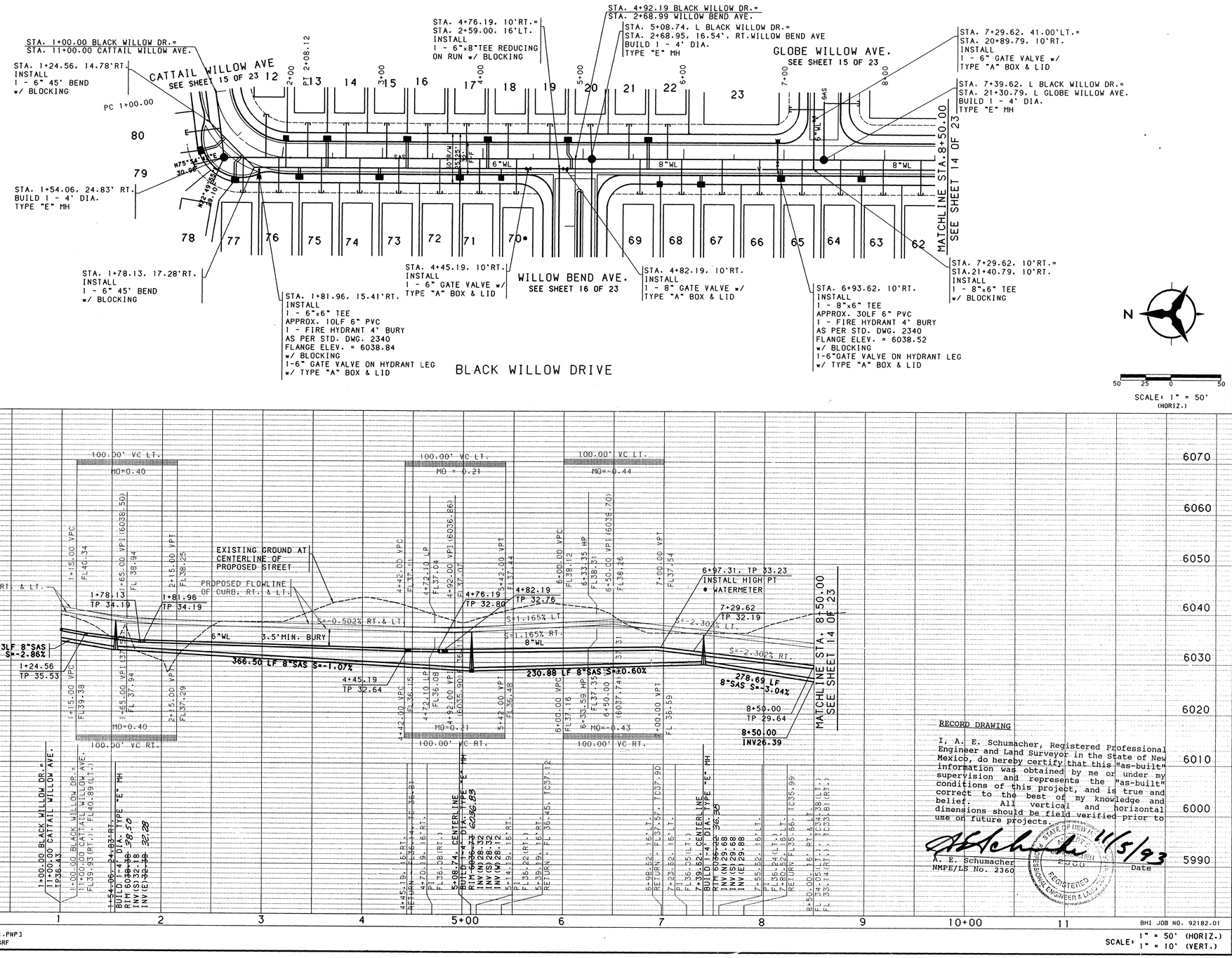
DESIGNED BY	MH	DATE 12/92
DRAWN BY	MH/OR	DATE 12/92
CHECKED BY	MH	DATE 12/92

USERNAME: [C9218201.PAD]
FILENAME: UTILITY.GRF

WATER & SANITARY SEWER SERVICES					
LOT NUMBER	WL STATION & OFFSET	WL TYPE	SAS STATION & OFFSET	SAS LENGTH	TOP OF PIPE AT PLUG
12	2+02.86, 10'RT.	SINGLE	1+84.55, 3.86'RT.	43.29'	36.50
13	2+44.62, 10'RT.	DOUBLE	2+25.22, CENTERLINE	35.00'	35.24
14			2+63.46, CENTERLINE	35.00'	35.43
15	3+24.62, 10'RT.	DOUBLE	3+04.09, CENTERLINE	35.00'	35.60
16			3+45.00, CENTERLINE	35.00'	35.00
17	4+04.62, 10'RT.	DOUBLE	3+83.44, CENTERLINE	35.00'	35.00
18			4+24.85, CENTERLINE	35.00'	35.00
19	4+88.19, 10'RT.	DOUBLE	4+66.45, CENTERLINE	35.00'	35.00
20			5+08.74, MH	35.05'	33.50
21	5+64.62, 10'RT.	DOUBLE	5+45.52, CENTERLINE	35.00'	35.30
22			5+83.81, CENTERLINE	35.00'	36.10

WATER & SANITARY SEWER SERVICES					
LOT NUMBER	WL STATION & OFFSET	WL TYPE	SAS STATION & OFFSET	SAS LENGTH	TOP OF PIPE AT PLUG
61	8+59.31, 10'RT.	DOUBLE	8+80.60, CENTERLINE	35.00'	30.00
62			8+36.19, CENTERLINE	35.00'	31.00
63	7+77.31, 10'RT.	DOUBLE	7+98.79, CENTERLINE	35.00'	31.50
64			7+56.55, CENTERLINE	35.00'	32.26
65	6+97.31, 10'RT.	DOUBLE	7+18.10, CENTERLINE	35.00'	32.96
66			6+75.76, CENTERLINE	35.00'	34.00
67	6+17.30, 10'RT.	DOUBLE	6+38.20, CENTERLINE	35.00'	34.50
68			5+97.98, CENTERLINE	35.00'	34.00
69	5+77.31, 10'RT.	SINGLE	5+56.76, CENTERLINE	35.00'	34.00
70	4+17.19, 10'RT.	SINGLE	4+33.32, CENTERLINE	35.00'	33.50

WATER & SANITARY SEWER SERVICES					
LOT NUMBER	WL STATION & OFFSET	WL TYPE	SAS STATION & OFFSET	SAS LENGTH	TOP OF PIPE AT.PLUG
71	3+77.19, 10'RT.	DOUBLE	3+96.68, CENTERLINE	35.00'	34.00
72			3+57.53, CENTERLINE	35.00'	34.00
73	2+97.19, 10'RT.	DOUBLE	3+16.44, CENTERLINE	35.00'	34.40
74			2+77.38, CENTERLINE	35.00'	34.60
75	2+17.19, 10'RT.	DOUBLE	2+39.07, CENTERLINE	35.00'	34.60
76			1+96.78, 0.87' RT.	35.00'	34.60
77	1+64.91, 12.27'RT.	DOUBLE	1+66.26, 13.42' RT.	35.00'	34.70
78			1+54.06, MH	29.10'	35.00
79	1+43.28, 10.42'RT.	DOUBLE	1+54.06, MH	30.96'	36.00
80			1+34.09, 8.48' RT.	35.00'	36.49



USERNAME: CDP:[C92182O1.PNP]
FILENAME: BLACK1-UTIL.CRF

BHI JOB NO. 92182.01

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

NOTES

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UTILITY NOTES IN addition TO THE ABOVE:

13. ALL WATER AND SEWER INSTALLATION TO BE BY CITY OF ALBUQUERQUE STANDARDS, WITH THE FOLLOWING EXCEPTIONS.

14. ALL HYDRANTS LINES ARE TO HAVE GATE VALVES INSTALLED 4 FEET FROM THE CURB IN THE STREET. All HYDRANTS ARE TO BE KENNEDY K-81, 4 FOOT BURY, WITH M.J. PIPE CONNECTIONS.

15. ALL GATE VALVES ARE TO BE KENNEDY OR WATROUS RESILIENT SEAT WITH 5 1/4 INCH CAST IRON SCREW TYPE VALVE BOXES.

16. ALL BRASS IS TO BE FORD BRAND. NO CORP STOP IN THE STREET. ALL SERVICES ARE TO BE SDR-7 POLY. 1 INCH FOR DOUBLES AND 3/4 INCH FOR SINGLES. METER CANS ARE TO BE 18 INCH DIAMETER. POLYLOCK MATERIAL. COPPER SETTERS TO BE FORD. 9 INCH TO 15 INCH IN HEIGHT. TWO PER CAN WHERE POSSIBLE.

17. MINIMUM OF WATTS #7 DUAL CHECK-VALVE TO BE INSTALLED ON THE CUSTOMER SIDE OF THE SERVICE CONNECTION DURING CONSTRUCTION (OUTLET SIDE OF THE COPPER SETTER). THE BACK-FLOW PREVENTER IS TO BE OWNED AND MAINTAINED BY THE RESIDENT.

18. INSPECTION AND ACCEPTANCE WILL BE BY SANDIA PEAK UTILITY COMPANY AND SANDIA PEAK SERVICES, INC. COORDINATE WITH BILL BAKER, 269-9694 OR 294-7187.

RECORD DRAWING

I, A. E. Schumacher, Registered Professional Engineer and Land Surveyor in the State of New Mexico, do hereby certify that this "as-built" information was obtained by me or under my supervision and represents the "as-built" conditions of this project, and is true and correct to the best of my knowledge and belief. All vertical and horizontal dimensions should be field verified prior to use on future projects.

A. E. Schumacher 11/5/93
A. E. Schumacher — Date
NMPE/LS No. 2360

STATE OF NEW MEXICO — REGISTERED PROFESSIONAL ENGINEER & LAND SURVEYOR

AS-BUILT INFORMATION

CONTRACTOR	
WORK STAKED BY	
INSPECTOR'S ACCEPTANCE BY	DATE
FIELD VERIFICATION BY	DATE
DRAWINGS CORRECTED BY	DATE

MICRO-FILM INFORMATION

RECORDED BY	DATE
NO.	

BENCH MARKS

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ELEVATION = 6067.423'

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL

ALBERT A. HINOJOS JR. — NEW MEXICO — 15550 — 2-17-93 — REGISTERED PROFESSIONAL ENGINEER

REVISIONS

NO.	DATE	REMARKS	BY

DESIGN

DESIGNED BY MH	DATE	12/92
DRAWN BY MH/GR	DATE	12/92
CHECKED BY MH	DATE	12/92

COUNTY OF BERNALILLO

PUBLIC WORKS DEPARTMENT

WILLOW BEND SUBDIVISION

UTILITY PLAN & PROFILE

BLACK WILLOW DR. - STA. 1+00.00 TO STA. 8+50.00

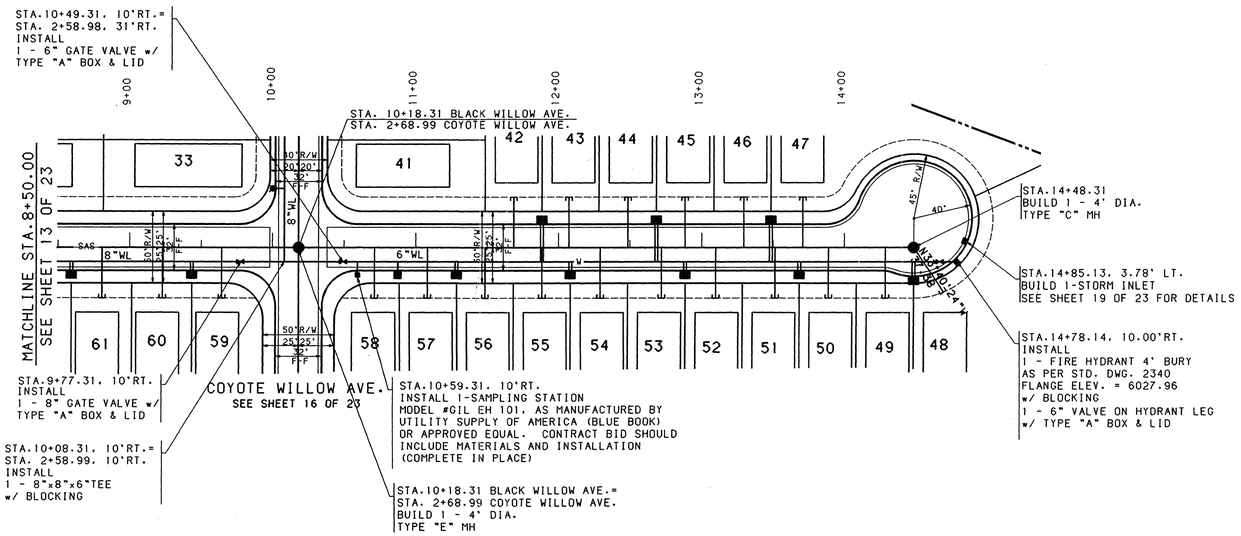
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
COUNTY ENGINEER		5/5/93			

DRAWING NO. | MAP NO. D-23 | SHEET 13 OF 23

WATER & SANITARY SEWER SERVICES					
LOT NUMBER	WL STATION & OFFSET	WL TYPE	SAS STATION & OFFSET	SAS LENGTH	TOP OF PIPE AT PLUG
42	11+88.31, 10'RT.	DOUBLE	11+68.50,CENTERLINE	35.00'	29.00
43			12+07.27,CENTERLINE	35.00'	29.00
44	12+68.31, 10'RT.	DOUBLE	12+48.50,CENTERLINE	35.00'	29.00
45			12+88.21,CENTERLINE	35.00'	29.00
46	13+48.31, 10'RT.	DOUBLE	13+29.31,CENTERLINE	35.00'	29.00
47			13+70.80,CENTERLINE	35.00'	28.50
48	14+50.31, 10'RT.	DOUBLE	14+48.31, MH	37.38'	24.30
49			14+28.71,CENTERLINE	35.00'	25.50

WATER & SANITARY SEWER SERVICES					
LOT NUMBER	WL STATION & OFFSET	WL TYPE	SAS STATION & OFFSET	SAS LENGTH	TOP OF PIPE AT PLUG
50	13+70.31, 10'RT.	DOUBLE	13+88.84,CENTERLINE	35.00'	26.30
51			13+51.31,CENTERLINE	35.00'	27.70
52	12+90.31, 10'RT.	DOUBLE	13+09.61,CENTERLINE	35.00'	28.05
53			12+71.94,CENTERLINE	35.00'	27.00
54	12+10.31, 10'RT.	DOUBLE	12+29.25,CENTERLINE	35.00'	27.00
55			11+88.43,CENTERLINE	35.00'	27.00
56	11+30.31, 10'RT.	DOUBLE	11+48.46,CENTERLINE	35.00'	27.00
57			11+08.00,CENTERLINE	35.00'	27.00

WATER & SANITARY SEWER SERVICES					
LOT NUMBER	WL STATION & OFFSET	WL TYPE	SAS STATION & OFFSET	SAS LENGTH	TOP OF PIPE AT PLUG
58	10+90.31, 10'RT.	SINGLE	10+71.11,CENTERLINE	35.00'	27.00
59	9+43.31, 10'RT.	DOUBLE	9+64.28, CENTERLINE	35.00'	28.00
60			9+22.70, CENTERLINE	35.00'	29.40
61	8+59.31, 10'RT.	DOUBLE	8+80.60, CENTERLINE	35.00'	30.00
62			8+36.19, CENTERLINE	35.00'	31.00



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A. E. Schumacher 4/5/93 Date
NMPE/LS No. 2300

STATE OF NEW MEXICO ALBERT E. SCHUMACHER 2300 REGISTERED PROFESSIONAL ENGINEER & LAND SURVEYOR

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AS-BUILT INFORMATION
CONTRACTOR
WORK STAKED BY
WORK INSPECTED BY
ACCEPTANCE BY — DATE
FIELD VERIFICATION BY — DATE
DRAWINGS CORRECTED BY — DATE
MICRO-FILM INFORMATION
RECORDED BY — DATE
NO.

BENCH MARKS
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ELEVATION = 6067.423'

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL
ALBERT A. HINOJOS-WARREN NEW MEXICO 15258 REGISTERED PROFESSIONAL ENGINEER 3-17-93

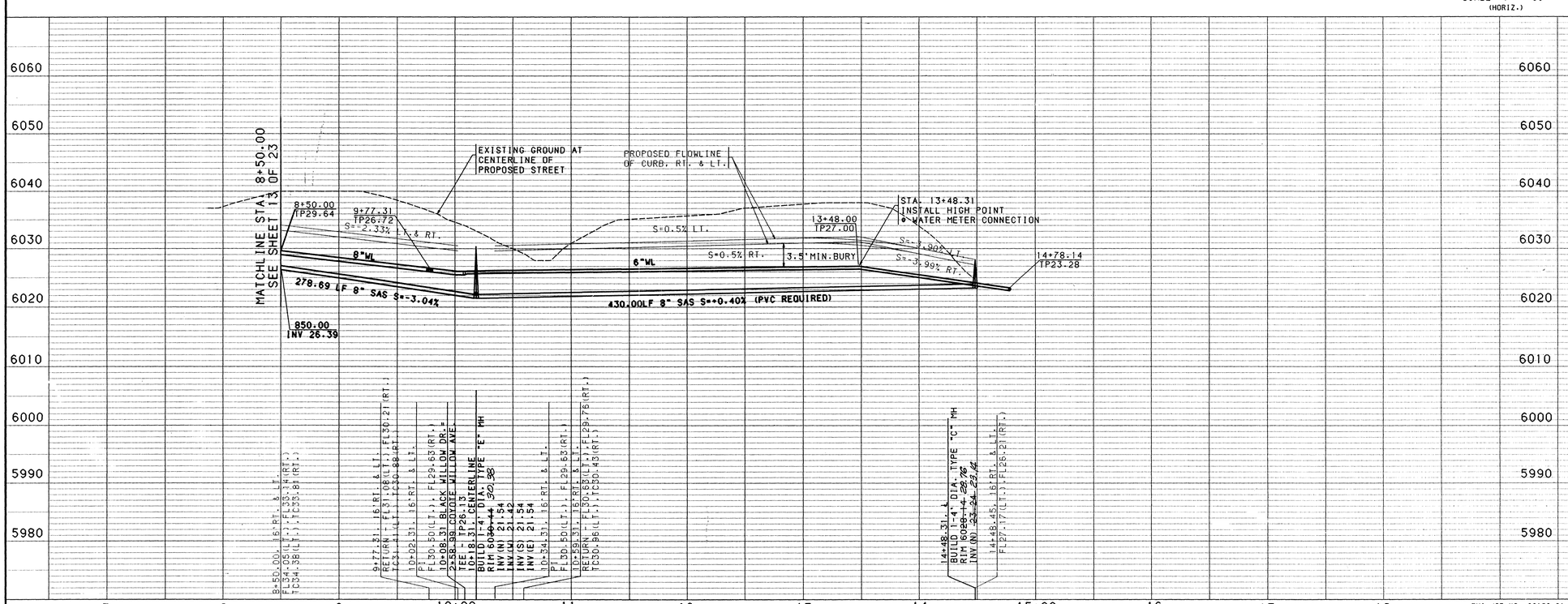
NO.	DATE	REMARKS	BY
		REVISIONS	

DESIGNED BY MH — DATE 12/92
DRAWN BY MH/OR — DATE 12/92
CHECKED BY MH — DATE 12/92

COUNTY OF BERNALILLO
PUBLIC WORKS DEPARTMENT

WILLOW BEND SUBDIVISION
UTILITY PLAN & PROFILE
BLACK WILLOW DR.- STA. 8+50.00 TO STA. 14+48.45

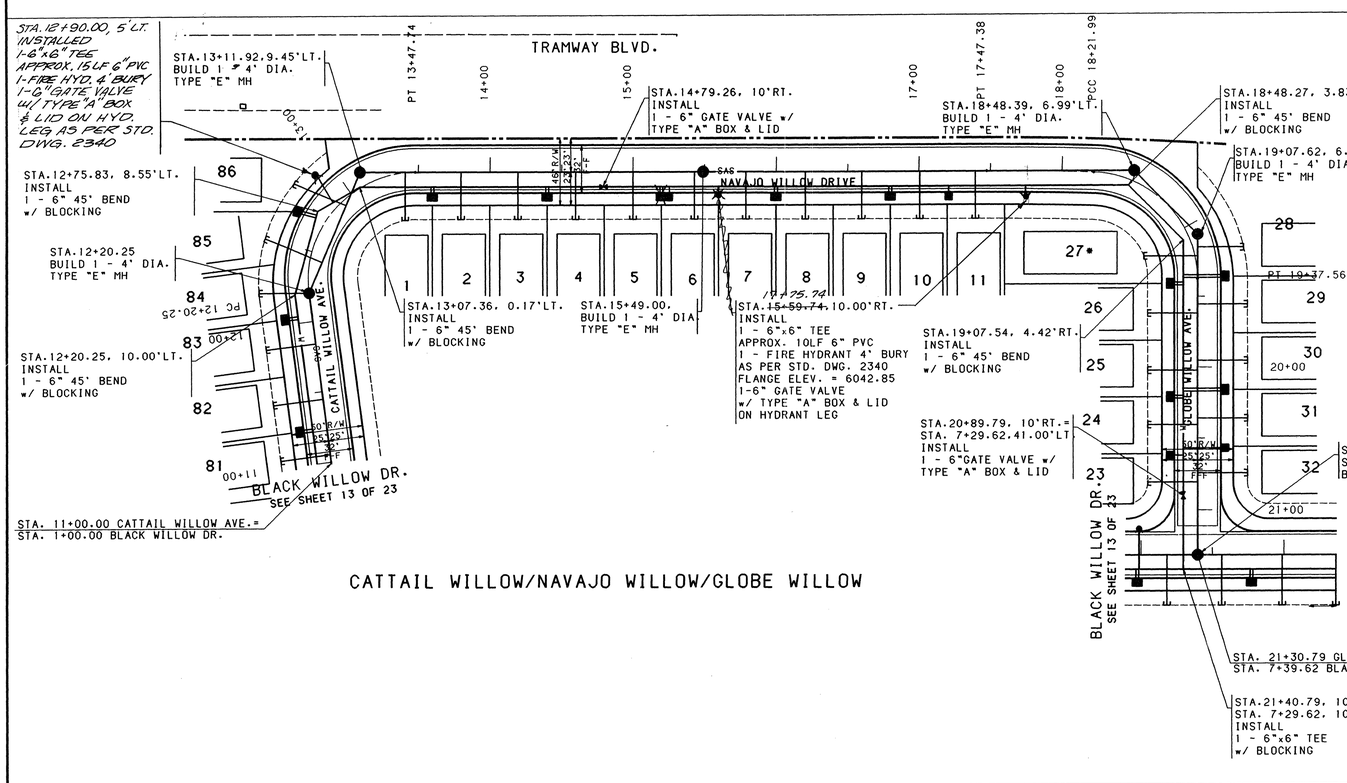
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
COUNTY ENGINEER	CR Bowman	5/5/93			



BHI JOB NO. 92182.01

USERNAME: CDP:[C9218201.PNP]
FILENAME: BLACK2-UTIL.GRF

DRAWING NO.	MAP NO.	SHEET	OF
	D-23	14	23



WATER & SANITARY SEWER SERVICES					
LOT NUMBER	WL STATION & OFFSET	WL TYPE	SAS STATION & OFFSET	SAS LENGTH	TOP OF PIPE AT PLUG
1	13+59.74, 10'RT.	DOUBLE	13+40.73, 0.33' RT.	33.58'	43.00
2			13+79.71.CENTERLINE	35.00'	41.40
3	14+39.74, 10'RT.	DOUBLE	14+19.38.CENTERLINE	35.00'	40.65
4			14+59.66.CENTERLINE	35.00'	39.96
5	~~15+19.74, 10'RT.~~	~~DOUBLE~~	15+00.00.CENTERLINE	35.00'	39.31
6	15+20.74, 10'RT.	SINGLE	15+42.95.CENTERLINE	35.00'	38.55
7	15+99.74, 10'RT.	DOUBLE	15+78.82.CENTERLINE	35.00'	38.68
8			16+20.28.CENTERLINE	35.00'	39.00
9	16+79.74, 10'RT.	DOUBLE	16+59.70.CENTERLINE	35.00'	39.00
10			17+00.50.CENTERLINE	35.00'	39.00
11	17+19.74, 10'RT.	SINGLE	17+39.41.CENTERLINE	35.00'	39.00
23	20+60.79, 10'RT.	SINGLE	20+80.47.CENTERLINE	35.00'	34.19
24	20+20.79, 10'RT.	DOUBLE	20+40.42.CENTERLINE	35.00'	36.00
25			20+02.03.CENTERLINE	35.00'	36.00
26	19+40.79, 10'RT.	DOUBLE	19+61.65.CENTERLINE	35.00'	36.50
27			19+21.47, 1.76' LT.	37.66'	37.00
28	19+36.23, 10'RT.	DOUBLE	19+15.71.CENTERLINE	35.00'	37.50
29			19+55.31.CENTERLINE	32.24'	37.10
30	20+15.79, 10'RT.	DOUBLE	19+95.21.CENTERLINE	35.00'	36.44
31			20+35.84.CENTERLINE	35.00'	36.00
32	20+55.79, 10'RT.	SINGLE	20+74.25.CENTERLINE	35.00'	34.10
81	11+23.82, 10'LT.	DOUBLE	11+05.28.CENTERLINE	35.00'	36.35
82			11+44.52.CENTERLINE	35.00'	39.19
83	12+03.82, 10'LT.	DOUBLE	11+84.04.CENTERLINE	35.00'	41.00
84			12+20.24, MH	35.00'	42.30
85	12+72.67, 7.36'LT.	DOUBLE	12+43.79, 8.67'RT.	43.47'	43.00
86			12+91.58, 3.86'RT.	39.69'	42.65

NOTES

1. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LOCATIONS AND NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.

2. ALL CURB RETURN RADII SHALL BE 25' TO FACE OF CURB UNLESS OTHERWISE SPECIFIED.

3. ALL CURVE DATA AND DIMENSIONS REFER TO FACE OF CURB UNLESS OTHERWISE SPECIFIED.

4. GRADE ELEVATIONS, WHERE NOTED, ARE FOR FLOW LINE UNLESS OTHERWISE SPECIFIED.

5. CONTRACTOR IS TO INSTALL A 4"x4"x5' POST AND EMD AT THE END OF EACH SANITARY SEWER SERVICE.

6. CONTRACTOR IS RESPONSIBLE FOR REPAIR AND/OR REPLACEMENT OF ALL UTILITY CONDUITS AND EXISTING LINES.

7. ANY ADDITIONAL GRADING REQUIRED TO MATCH PROPOSED STREET GRADES SHALL BE INCIDENTAL TO PAVING ITEMS.

8. CONTRACTOR SHALL PROVIDE THE INSPECTORS, (CITY AND PRIVATE) WITH THE PROPOSED HYDROSTATIC TESTING PLAN. THE PLAN MUST BE APPROVED BEFORE TESTING OPERATIONS BEGIN.

9. CONTRACTOR SHALL PARK EQUIPMENT AND VEHICLES AS NOT TO INTERFERE WITH NORMAL ACTIVITIES OF RESIDENTS OR OTHER CONTRACTORS ON SITE.

10. ANY DAMAGE TO THE EXISTING FACILITIES (CURB AND GUTTER, PAVEMENT, CONDUITS, LANDSCAPING, UTILITY LINES, ETC.) DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTORS EXPENSE.

11. REMOVAL OF THE EXISTING CURB AND GUTTER SHALL BE AS PER COA STD. DWG. 2415 (SAWCUT ONLY).

12. WHEEL CHAIR RAMPS SHALL BE CONSTRUCTED PRIOR TO ACCEPTANCE OF CURB AND GUTTER.

UTILITY NOTES IN ADDITION TO THE ABOVE:

13. ALL WATER AND SEWER INSTALLATION TO BE BY CITY OF ALBUQUERQUE STANDARDS, WITH THE FOLLOWING EXCEPTIONS.

14. ALL HYDRANTS LINES ARE TO HAVE GATE VALVES INSTALLED 4 FEET FROM FROM THE CURB IN THE STREET. All HYDRANTS ARE TO BE KENNEDY K-81, 4 FOOT BURY, WITH M.J. PIPE CONNECTIONS.

15. ALL GATE VALVES ARE TO BE KENNEDY OR WATROUS RESILIENT SEAT WITH 5 1/4 INCH CAST IRON SCREW TYPE VALVE BOXES.

16. ALL BRASS IS TO BE FORD BRAND, NO CORP STOP IN THE STREET. ALL SERVICES ARE TO BE SDR-7 POLY, 1 INCH FOR DOUBLES AND 3/4 INCH FOR SINGLES. METER CANS ARE TO BE 18 INCH DIAMETER, POLYLOCK MATERIAL. COPPER SETTERS TO BE FORD, 9 INCH TO 15 INCH IN HEIGHT, TWO PER CAN WHERE POSSIBLE.

17. MINIMUM OF WATTS #7 DUAL CHECK-VALVE TO BE INSTALLED ON THE CUSTOMER SIDE OF THE SERVICE CONNECTION DURING CONSTRUCTION (OUTLET SIDE OF THE COPPER SETTER). THE BACK-FLOW PREVENTER IS TO BE OWNED AND MAINTAINED BY THE RESIDENT.

18. INSPECTION AND ACCEPTANCE WILL BE BY SANDIA PEAK UTILITY COMPANY AND SANDIA PEAK SERVICES, INC. COORDINATE WITH BILL BAKER, 269-9694 OR 294-7187

RECORD DRAWING

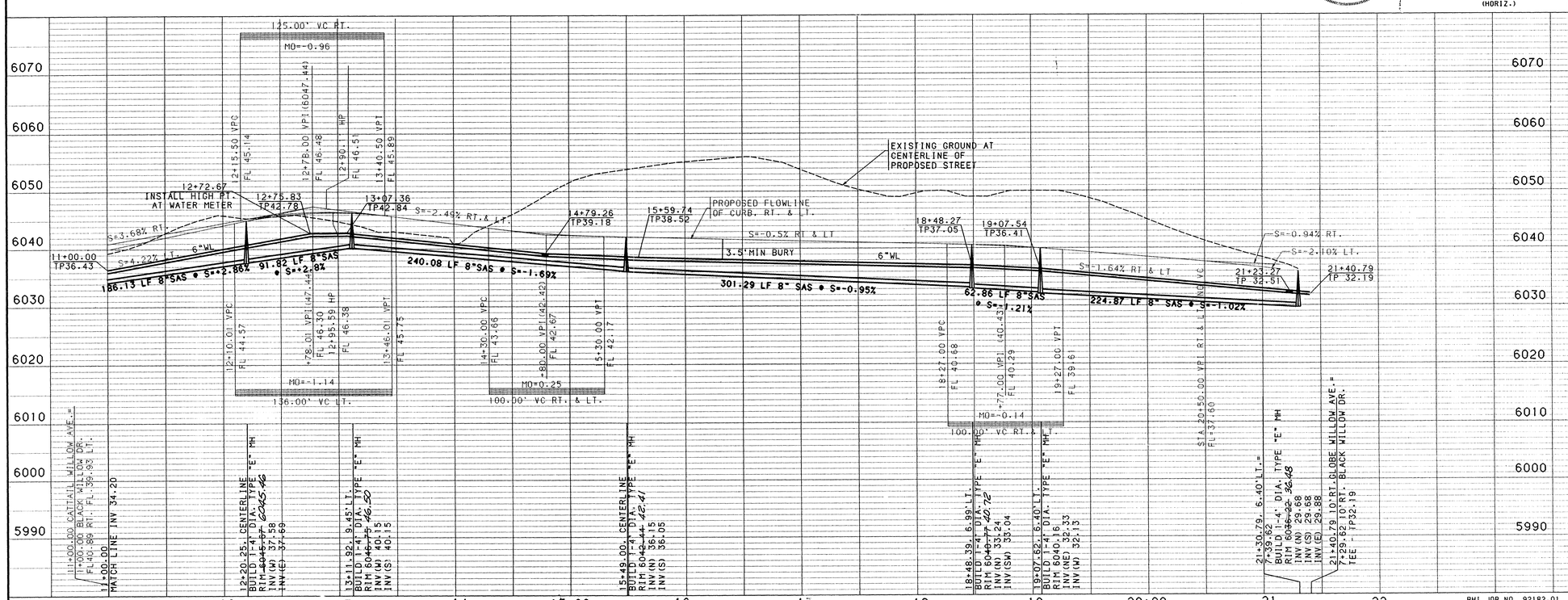
I, A. E. Schumacher, Registered Professional Engineer and Land Surveyor in the State of New Mexico, do hereby certify that this "as-built" information was obtained by me or under my supervision and represents the "as-built" conditions of this project, and is true and correct to the best of my knowledge and belief. All vertical and horizontal dimensions should be field verified prior to use on future projects.

11/5/93
A. E. Schumacher Date
NMPE/LS No. 2360

STATE OF NEW MEXICO ALBERT E. SCHUMACHER 2360 REGISTERED PROFESSIONAL ENGINEER & LAND SURVEYOR

N

SCALE: 1" = 50'
(HORIZ.)



USERNAME: CDP:[C92182O1.PNP]
FILENAME: CNG-UTIL.GRF

AS-BUILT INFORMATION

CONTRACTOR WORK STAKED BY		
STAKES & REFERENCE TIES CHECKED BY		DATE
FIELD VERIFICATION BY		DATE
DRAWINGS CORRECTED BY		DATE
MICRO-FILM INFORMATION		
RECORDED BY		DATE
NO.		

BENCH MARKS

THE BENCH MARK IS A STANDARD ASC BRASS TABLET STAMPED "1-D23" SET IN TOP OF A CONCRETE POST LOCATED APPROXIMATELY N13° 19' 23"E 867.95 FROM THE NE CORNER OF BOUNDARY.

ELEVATION = 6067.423'

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL

A. E. SCHUMACHER NEW MEXICO 11538 REGISTERED PROFESSIONAL ENGINEER 2-17-93

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	

DESIGNED BY MH DATE 12/92
DRAWN BY MH/GR DATE 12/92
CHECKED BY MH DATE 12/92

COUNTY OF BERNALILLO

PUBLIC WORKS DEPARTMENT

WILLOW BEND SUBDIVISION

UTILITY PLAN & PROFILE

CATTAIL/NAVAJO/WILLOW - STA. 11+00.00 TO STA. 21+30.79

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
COUNTY ENGINEER	CRBowman	5/5/93			

DRAWING NO. | MAP NO. D-23 | SHEET 15 OF 23

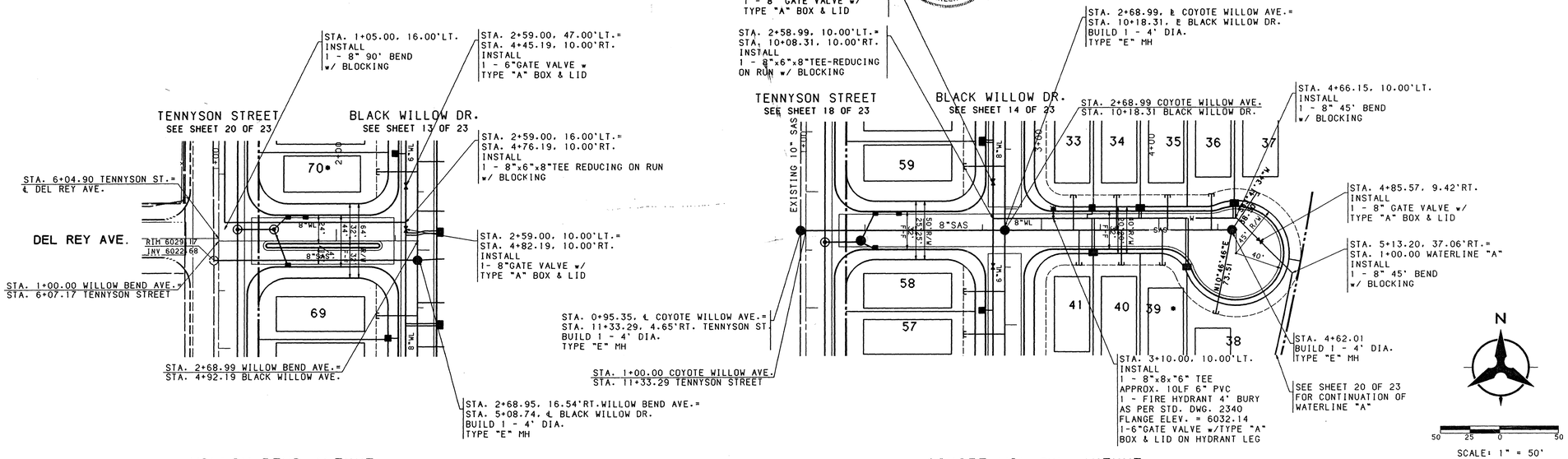
RECORD DRAWING

I. A. E. Schumacher, Registered Professional Engineer and Land Surveyor in the State of New Mexico, do hereby certify that this "as-built" information was obtained by me or under my supervision and represents the "as-built" conditions of this project, and is true and correct to the best of my knowledge and belief. All vertical and horizontal dimensions should be field verified prior to use on future projects.

11/5/93
Date

I. E. Schumacher
NMPE/LS No. 2360

WATER & SANITARY SEWER SERVICES					
LOT NUMBER	WL STATION & OFFSET	WL TYPE	SAS STATION & OFFSET	SAS LENGTH	TOP OF PIPE AT PLUG
33	3+44.00, 10'LT.	SINGLE	3+26.98, CENTERLINE	30.00'	30.00
34	3+84.00, 10'LT.	DOUBLE	3.63.88, CENTERLINE	30.00'	30.50
35			4+07.34, CENTERLINE	30.00'	32.00
36	4+64.01, 10.00'LT.	DOUBLE	4+44.54, CENTERLINE	30.84'	32.92
37			4+62.01, MH	38.50'	32.50
38	4+23.86, 10.00'LT.	DOUBLE	4+62.01, MH	73.51'	32.42
39			4+02.95, CENTERLINE	30.25'	31.74
40	3+43.95, 10'RT.	DOUBLE	3+68.00, CENTERLINE	30.00'	30.50
41			3+31.89, CENTERLINE	30.00'	30.00



USERNAME: CDP*[C9218201.PNP]
FILENAME: COY-UTIL.ORF

NOTES

1. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LOCATIONS AND NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.

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AS-BUILT INFORMATION
CONTRACTOR
CONSTRUCTION STAKED BY
ACCEPTANCE BY — DATE
FIELD VERIFICATION BY — DATE
DRAWINGS CORRECTED BY — DATE
MICRO-FILM INFORMATION
RECORDED BY — DATE
NO.

BENCH MARKS
THE BENCH MARK IS A STANDARD ASC BRASS TABLET STAMPED "1-D23" SET IN TOP OF A CONCRETE POST
LOCATED APPROXIMATELY N13° 19' 23"E 867.95 FROM THE NE CORNER OF BOUNDARY.
ELEVATION = 6067.423'

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL

NO.	DATE	REMARKS	BY
		REVISIONS	

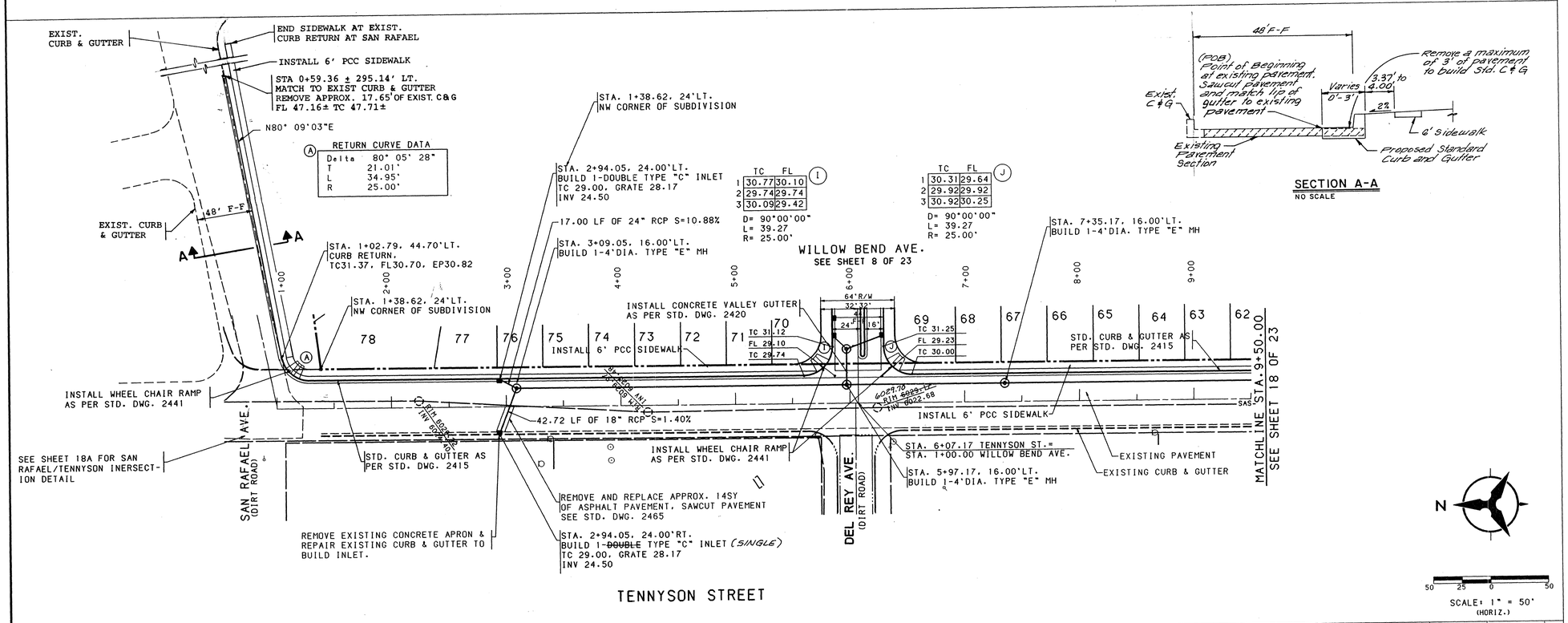
DESIGNED BY MH — DATE 12/92
DRAWN BY MH/DR — DATE 12/92
CHECKED BY MH — DATE 12/92

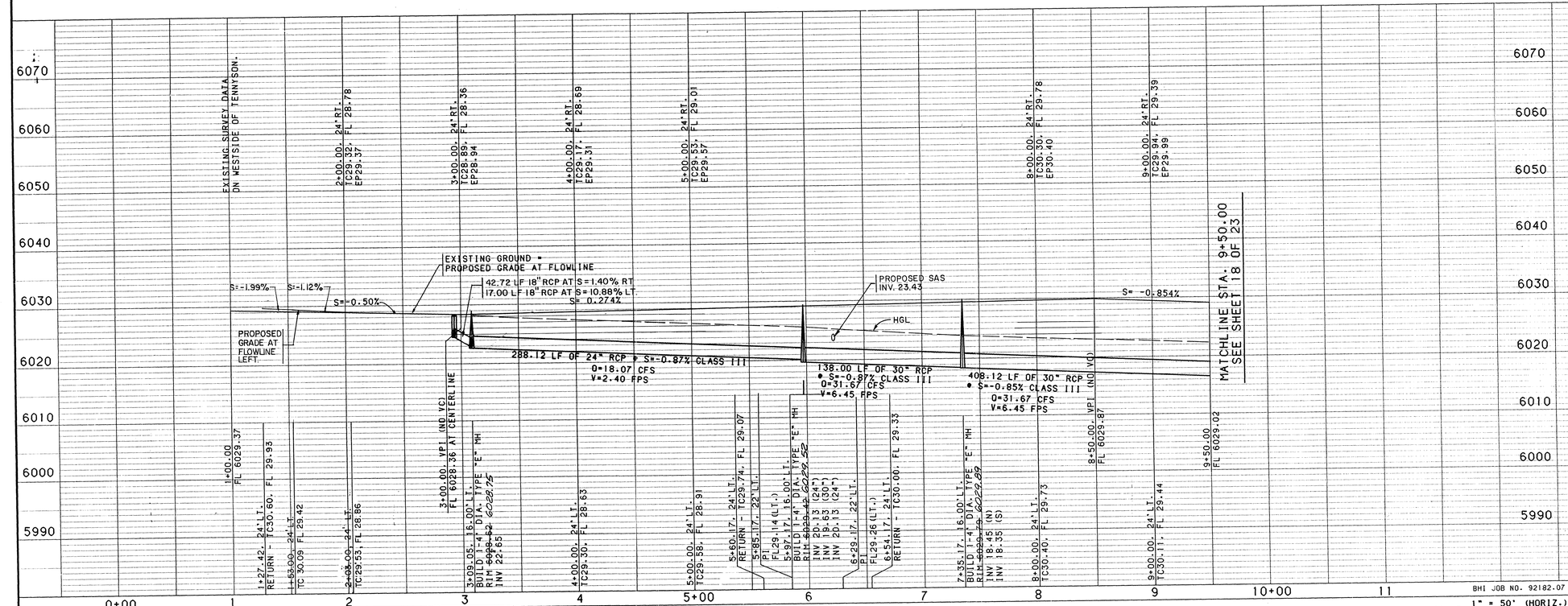
COUNTY OF BERNALILLO
PUBLIC WORKS DEPARTMENT

WILLOW BEND SUBDIVISION
UTILITY PLAN & PROFILE
WILLOW BEND AVE. & COYOTE WILLOW AVE.

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
COUNTY ENGINEER	CRBowman	5/5/93			

DRAWING NO. | MAP NO. D-23 | SHEET 16 OF 23





USERNAME: CDP:[C92182O1.PNP]
FILENAME: SDI-TENNY.GRF

NOTES

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AS-BUILT INFORMATION

CONTRACTOR
WORK STAKED BY
STAKED BY R.S.
ACCEPTANCE BY — DATE
FIELD VERIFICATION BY — DATE
DRAWINGS CORRECTED BY — DATE

MICRO-FILM INFORMATION
RECORDED BY — DATE
NO.

BENCH MARKS

THE BENCH MARK IS A STANDARD ASC BRASS TABLET STAMPED "1-D23" SET IN TOP OF A CONCRETE POST LOCATED APPROXIMATELY N13° 19' 23"E 867.95 FROM THE NE CORNER OF BOUNDARY.

ELEVATION = 6067.423'

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL

ANDREW A. HINOJOS — NEW MEXICO — 11598 — REGISTERED PROFESSIONAL ENGINEER — 11-17-93

REVISIONS

NO.	DATE	REMARKS	BY

DESIGN

DESIGNED BY — DATE 11/92
DRAWN BY — DATE 11/92
CHECKED BY — DATE 11/92

RECORD DRAWING

I, A. E. Schumacher, Registered Professional Engineer and Land Surveyor in the State of New Mexico, do hereby certify that this "as-built" information was obtained by me or under my supervision and represents the "as-built" conditions of this project, and is true and correct to the best of my knowledge and belief. All vertical and horizontal dimensions should be field verified prior to use on future projects.

11/5/93

A. E. Schumacher — Date
NMPE/LS No. 2360

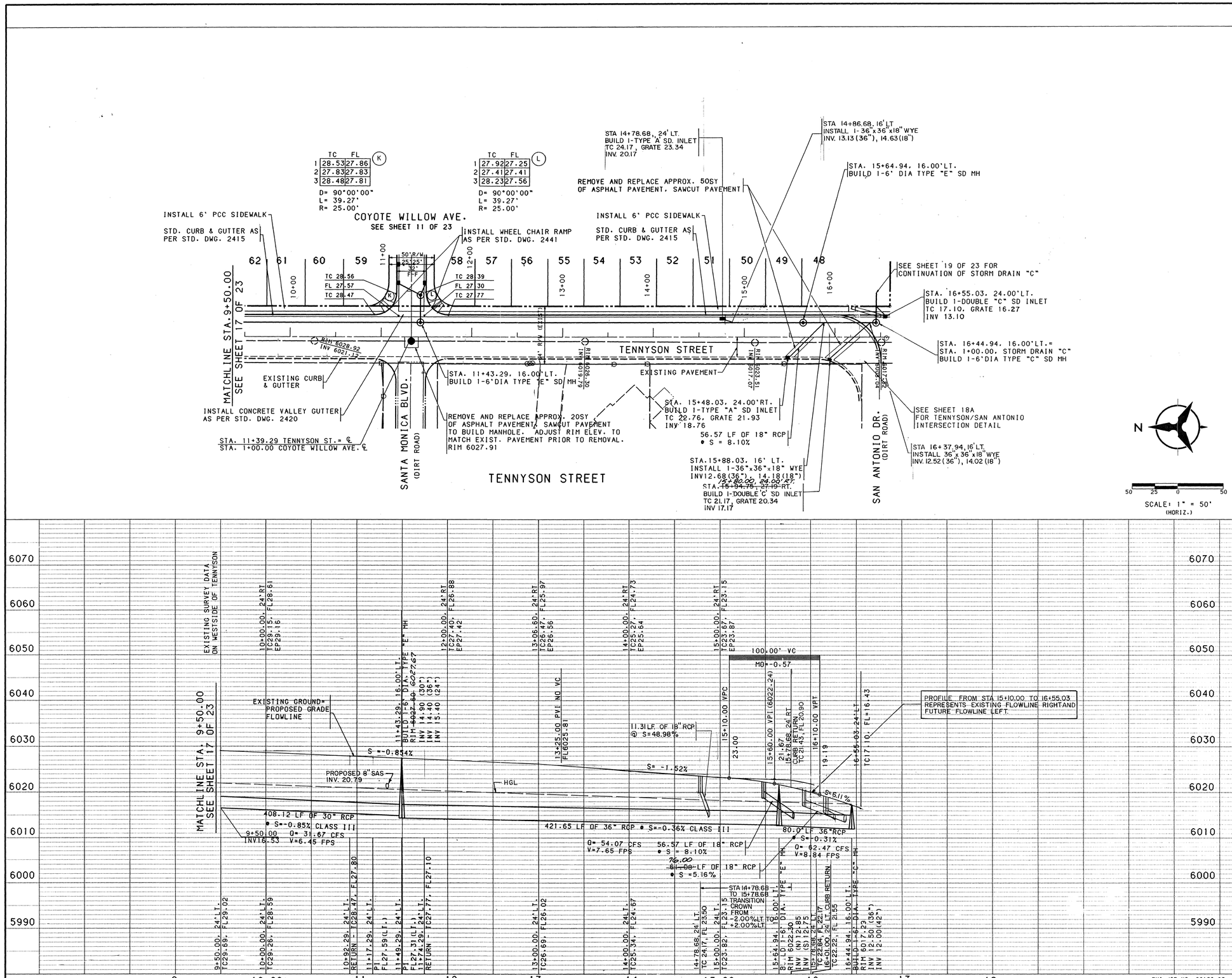
STATE OF NEW MEXICO — SCHUMACHER — 2360 — REGISTERED PROFESSIONAL ENGINEER

COUNTY OF BERNALILLO
PUBLIC WORKS DEPARTMENT

WILLOW BEND SUBDIVISION
PAVING PLAN & PROFILE/STORM DRAIN
TENNYSON ST.- STA. 1+00.00 TO STA. 9+50.00

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
COUNTY ENGINEER	CP Bowman	5/5/93			

DRAWING NO. — MAP NO. D-23 — SHEET 17 OF 23



USER: CDP
FILENAME: SD2-TENNY.GRF

NOTES

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AS-BUILT INFORMATION

CONTRACTOR
WORK STAKED BY
STAKED BY
ACCEPTANCE BY — DATE
FIELD VERIFICATION BY — DATE
DRAWINGS CORRECTED BY — DATE

MICRO-FILM INFORMATION

RECORDED BY — DATE
NO.

BENCH MARKS

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ELEVATION = 6067.423'

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL

ALBERT A. HINOJOS JR. NEW MEXICO 11558 REGISTERED PROFESSIONAL ENGINEER 12-7-92

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	

DESIGNED BY MH — DATE 12/92
DRAWN BY DR — DATE 12/92
CHECKED BY MH — DATE 12/92

RECORD DRAWING

I, A. E. Schumacher, Registered Professional Engineer and Land Surveyor in the State of New Mexico, do hereby certify that this "as-built" information was obtained by me or under my supervision and represents the "as-built" conditions of this project, and is true and correct to the best of my knowledge and belief. All vertical and horizontal dimensions should be field verified prior to use on future projects.

11/5/93
A. E. Schumacher — Date
NMPE/LS No. 2360

STATE OF NEW MEXICO — ALBERT E. SCHUMACHER 2360 — REGISTERED PROFESSIONAL ENGINEER & LAND SURVEYOR

COUNTY OF BERNALILLO

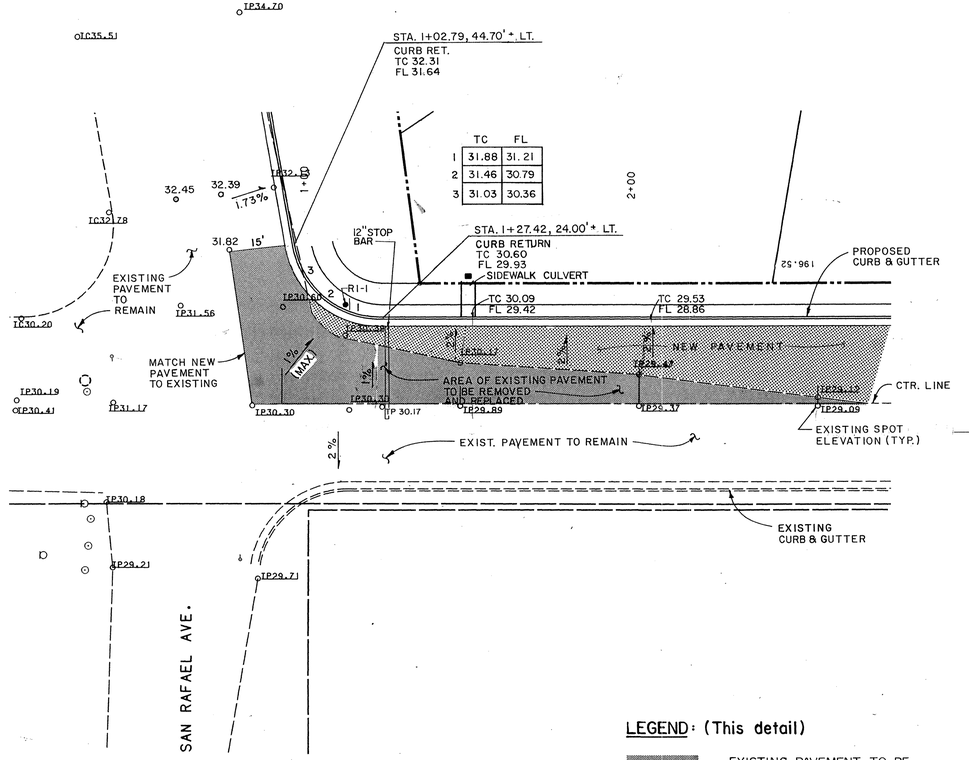
PUBLIC WORKS DEPARTMENT

WILLOW BEND SUBDIVISION

PAVING PLAN & PROFILE/STORM DRAIN
TENNYSON STREET STA. 9+50.00 TO STA. 17+00.00

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
COUNTY ENGINEER		5/5/93			

DRAWING NO. — MAP NO. D-23 — SHEET 18 OF 23

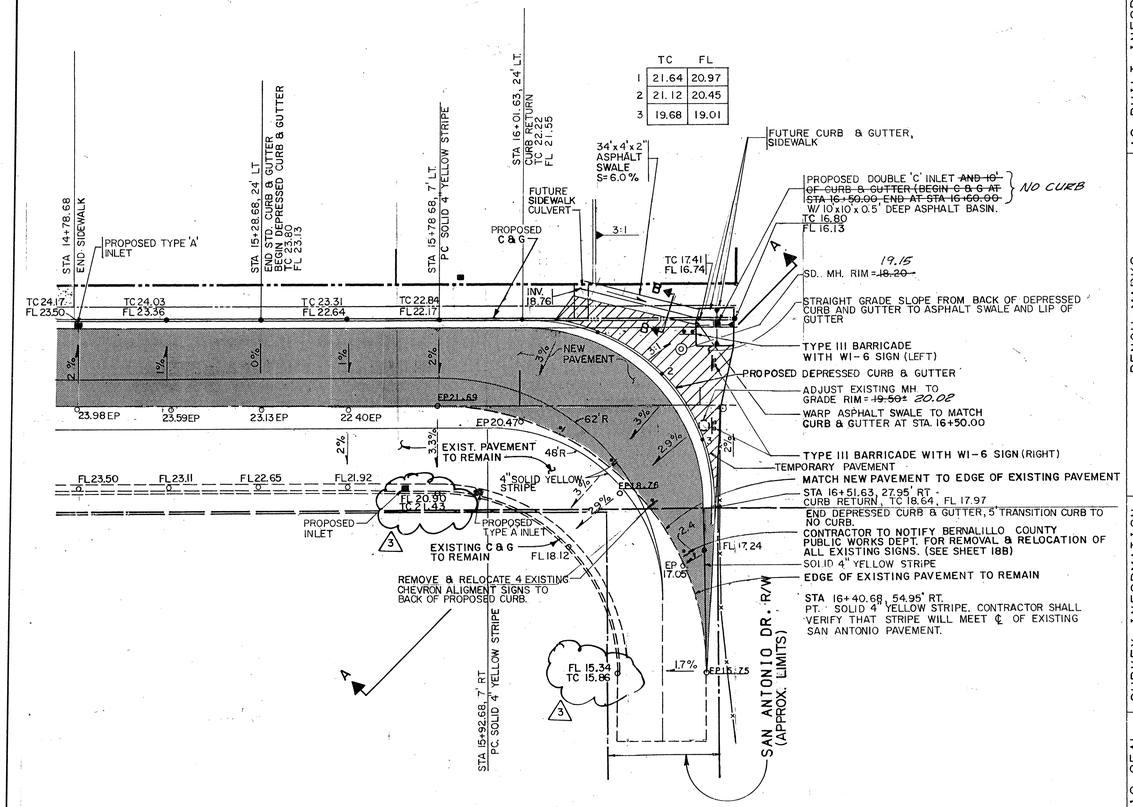


	TC	FL
1	31.88	31.21
2	31.46	30.79
3	31.03	30.36

SAN RAFAEL/TENNYSON

LEGEND: (This detail)

- EXISTING PAVEMENT TO BE REMOVED AND REPLACED.
- NEW PAVEMENT (This Project.)
- R1-1 STOP SIGN

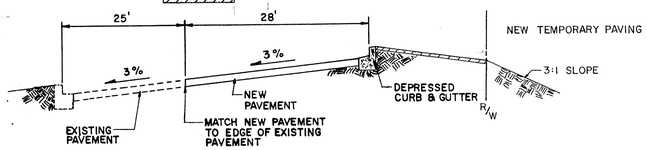


	TC	FL
1	21.64	20.97
2	21.12	20.45
3	19.68	19.01

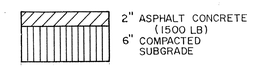
TENNYSON/SAN ANTONIO

LEGEND: (This detail)

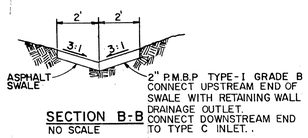
- NEW PAVEMENT (TENNYSON STREET SECTION)
- NEW TEMPORARY PAVING (SEE SECTION THIS SHEET)



SECTION A-A
NO SCALE



TEMPORARY PAVING SECTION
NO SCALE



SECTION B-B
NO SCALE

N

20 10 0 20

SCALE: 1" = 20'

BHI JOB NO. 92182.01

RECLAMATION SEEDING SPECIFICATION

ALL SURFACES DISTURBED BY CONSTRUCTION OR SITEWORK, AND NOT COVERED BY PAVEMENT OR NEW LANDSCAPING, SHALL BE RESEEDED AS SPECIFIED HEREIN. THE SEEDING OPERATION SHALL CONSIST OF PROTECTION OF SITE, PREPARATION OF SEEDBED, MULCHING, FERTILIZATION AND THE PROVISION OF MATERIALS, LABOR AND EQUIPMENT NECESSARY TO PERFORM THE OPERATION. THE SEED MIX SHALL BE AS DENOTED IN THE LIST BELOW.

SEED MIX

SEED MIX	PROPORTION	LBS. PLS PER ACRE
GRASSES		
INDIAN RICE GRASS	10%	1.5 LBS
GALLETA GRASS "VIVA"	30%	3.5 LBS
SIDE OATS GRAMA	20%	2 LBS
SAND DROPSEED	10%	1 LB
BLUE GRAMA "HACHITA"	30%	2 LBS
WILD FLOWERS		
TAHOKA DAISY		1 LB
YELLOW CONEFLOWER		1 LB
GALLARDIA		1 LB

RECORD DRAWING

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11/5/93
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NMPE/LS No. 2360

STATE OF NEW MEXICO REGISTERED SCHUMACHER 2360 PROFESSIONAL ENGINEER & LAND SURVEYOR

COUNTY OF BERNALILLO
PUBLIC WORKS DEPARTMENT

WILLOW BEND SUBDIVISION
SAN RAFAEL & SAN ANTONIO INTERSECTION

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
COUNTY ENGINEER	J.P. Bowman	5/5/93			

DRAWING NO.	MAP NO.	SHEET OF
	D-23	18A 23

AS BUILT INFORMATION
CONTRACTOR
WORK STAKED BY
INSPECTOR'S ACCEPTANCE BY — DATE
FIELD VERIFICATION BY — DATE
DRAWINGS CORRECTED BY — DATE
MICRO-FILM INFORMATION
RECORDED BY — DATE
NO.

BENCH MARKS
THE BENCH MARK IS A STANDARD ASC BRASS TABLET STAMPED "1-D23" SET IN TOP OF A CONCRETE POST LOCATED APPROXIMATELY N131° 19' 23"E. 897.95 FROM THE NE CORNER OF BOUNDARY.
ELEV.=6067.423'

SURVEY INFORMATION
FIELD NOTES
NO. | BY | DATE

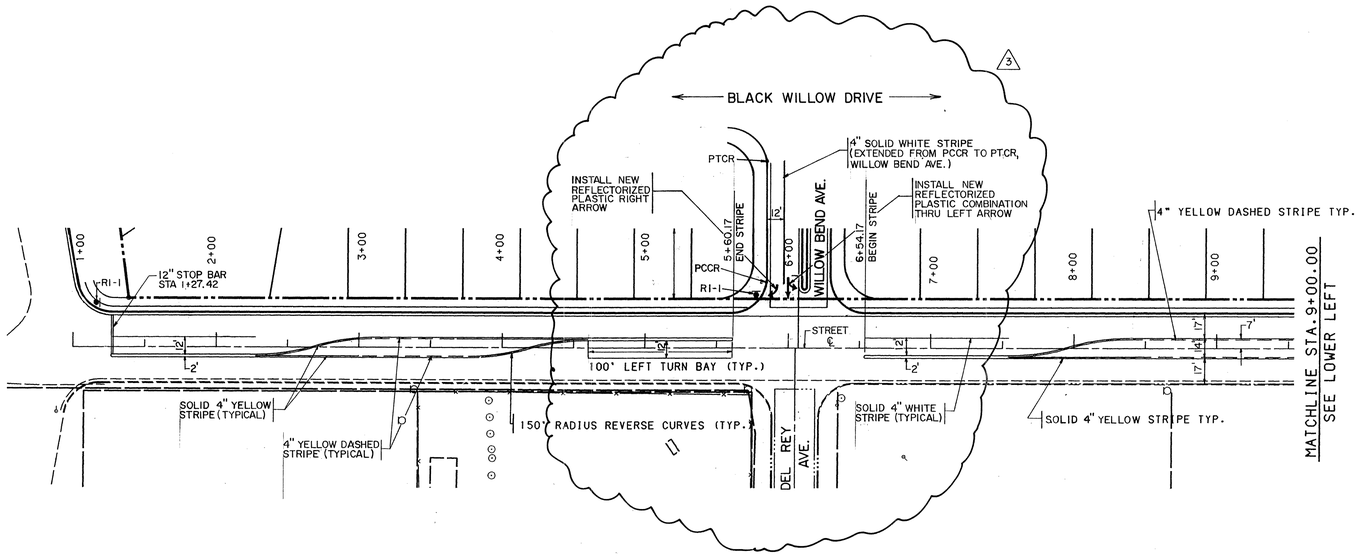
ENGINEER'S SEAL
NEWBY A. HINO, JR. NEW MEXICO 11558 REGISTERED PROFESSIONAL ENGINEER

NO.	DATE	REMARKS	BY
3	4-93	REVISED PER COUNTY COMMENTS	JT

REVISIONS

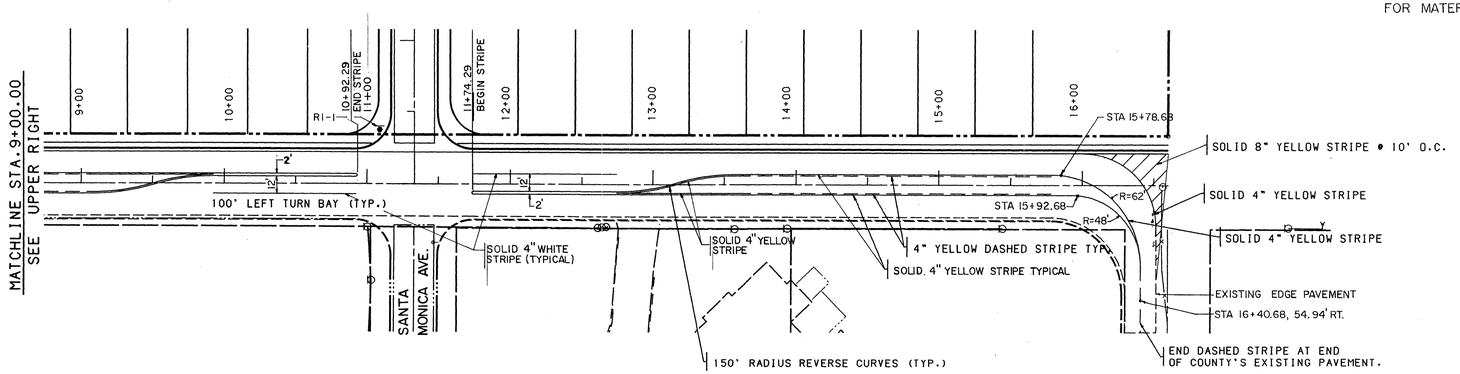
DESIGN
DESIGNED BY MH — DATE 3/93
DATE
DATE

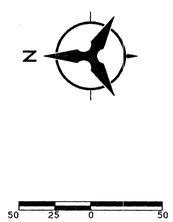
USERNAME: EC9218201.PADJ
FILENAME: INTER.GRF



NOTE:

1. PERMANENT SIGNING WILL BE APPROVED BY BERNALILLO COUNTY PUBLIC WORKS.
2. ALL STRIPING IS REFLECTORIZED PAINTED STRIPE.
3. 4" BROKEN YELLOW REFLECTORIZED PLASTIC STRIPE (10' STRIPE 30' GAP).
4. DIMENSIONS ARE TO CENTERLINE OF SOLID STRIPES.
5. SIGNS INSTALLED WITH THIS PROJECT SHALL BE PER MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
6. RI-1 IS "STOP SIGN."
7. PRIOR TO INSTALLING SIGNAGE, THE CONTRACTOR SHALL CONTRACT THE PUBLIC WORKS DEPARTMENT FOR MATERIALS AND FINAL SIGN PLACEMENT.





RECORD DRAWING

I, A. E. Schumacher, Registered Professional Engineer and Land Surveyor in the State of New Mexico, do hereby certify that this "as-built" information was obtained by me or under my supervision and represents the "as-built" conditions of this project, and is true and correct to the best of my knowledge and belief. All vertical and horizontal dimensions should be field verified prior to use on future projects.

11/5/93
Date

A. E. Schumacher
NMPE/LS No. 2360

STATE OF NEW MEXICO
ALBERT E. SCHUMACHER
2360
REGISTERED PROFESSIONAL ENGINEER AND LAND SURVEYOR

COUNTY OF BERNALILLO
PUBLIC WORKS DEPARTMENT

BOHANNAN HUSTON INC.

WILLOW BEND SUBDIVISION
TENNYSON STREET STRIPING AND SIGNING PLAN

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
COUNTY ENGINEER	C.K. Bowman	5/5/93			

DRAWING NO.	MAP NO. D-23	SHEET 18B OF 23

BHI JOB NO. 92182.05

AS BUILT INFORMATION

CONTRACTOR STAKED BY
INSPECTOR'S ACCEPTANCE BY — DATE
FIELD VERIFICATION BY — DATE
DRAWINGS CORRECTED BY — DATE

MICRO-FILM INFORMATION

RECORDED BY — DATE
NO.

BENCH MARKS

THE BENCH MARK IS A STANDARD ASC BRASS TABLET STAMPED "1-D23" SET IN TOP OF A CONCRETE POST LOCATED APPROXIMATELY N13° 19' 23"E. 867.95 FROM THE NE CORNER OF BOUNDARY.

ELEV.=6067.423'

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL

A. HUSTON
NEW MEXICO
1558
REGISTERED PROFESSIONAL ENGINEER

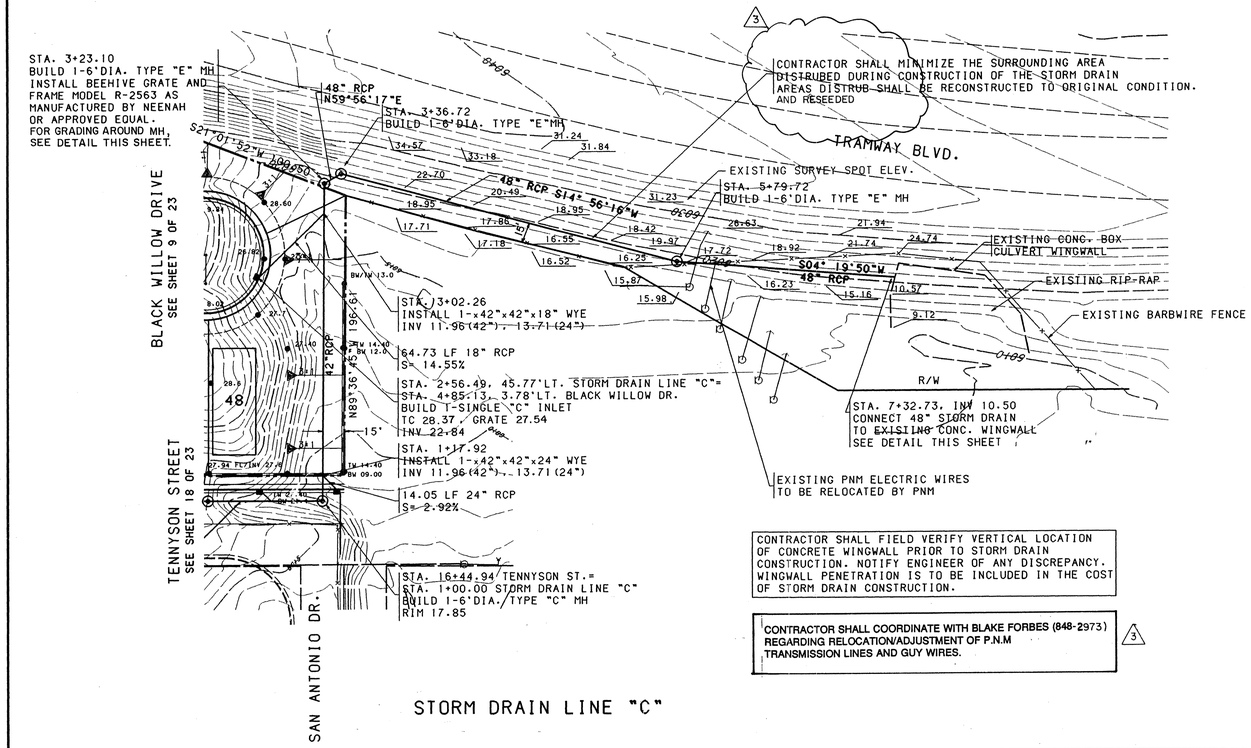
NO.	DATE	REMARKS	BY
1	4-93	REVISED PER COUNTY COMMENTS	JT

REVISIONS

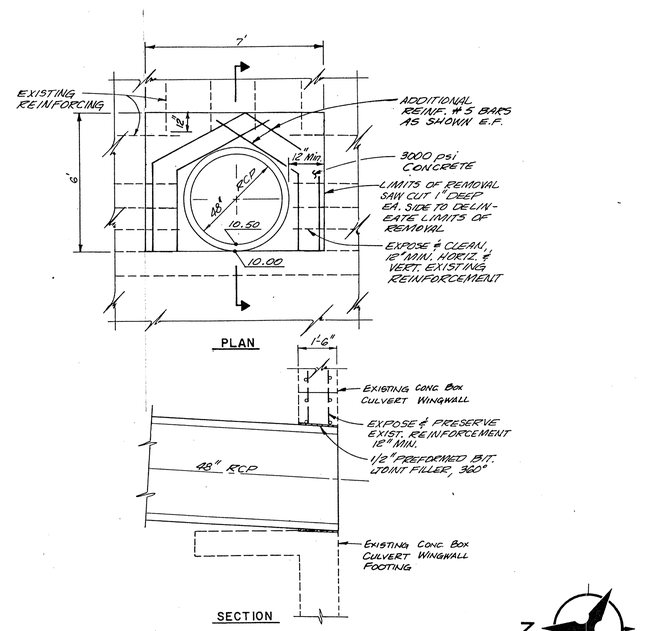
DESIGN

DESIGNED BY MH — DATE 3/93
DRAWN BY — DATE
CHECKED BY — DATE

USERNAME: [C9218201.PAD]
FILENAME: STRIPE.GRF



STORM DRAIN LINE "C"



STORM DRAIN CONNECTION TO WINGWALL

NO SCALE

SCALE: 1" = 50' (HORIZ.)

NOTES

1. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LOCATIONS AND NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.

2. ALL CURB RETURN RADII SHALL BE 25' TO FACE OF CURB UNLESS OTHERWISE SPECIFIED.

3. ALL CURVE DATA AND DIMENSIONS REFER TO FACE OF CURB UNLESS OTHERWISE SPECIFIED.

4. GRADE ELEVATIONS, WHERE NOTED, ARE FOR FLOW LINE UNLESS OTHERWISE SPECIFIED.

5. CONTRACTOR IS TO INSTALL A 4"x4"x5' POST AND EMD AT THE END OF EACH SANITARY SEWER SERVICE.

6. CONTRACTOR IS RESPONSIBLE FOR REPAIR AND/OR REPLACEMENT OF ALL UTILITY CONDUITS AND EXISTING LINES.

7. ANY ADDITIONAL GRADING REQUIRED TO MATCH PROPOSED STREET GRADES SHALL BE INCIDENTAL TO PAVING ITEMS.

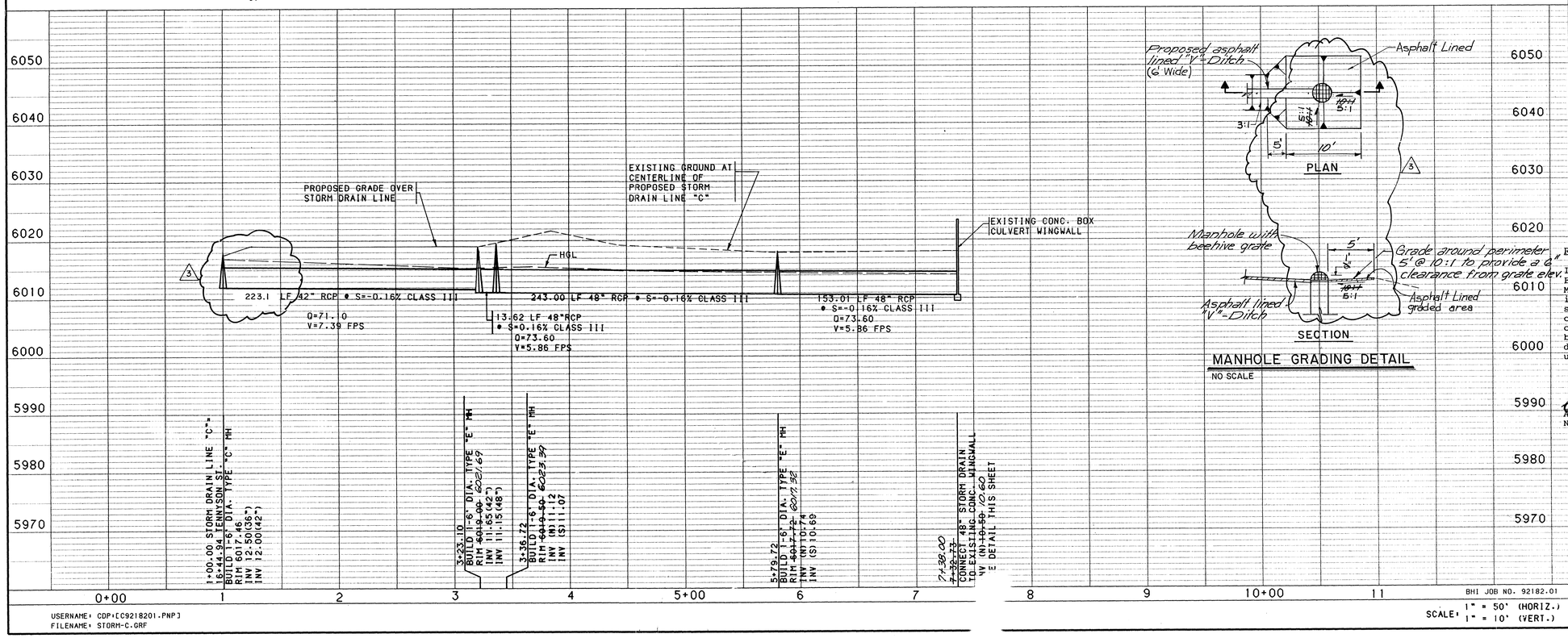
8. CONTRACTOR SHALL PROVIDE THE INSPECTORS. (CITY AND PRIVATE) WITH THE PROPOSED HYDROSTATIC TESTING PLAN. THE PLAN MUST BE APPROVED BEFORE TESTING OPERATIONS BEGIN.

9. CONTRACTOR SHALL PARK EQUIPMENT AND VEHICLES AS NOT TO INTERFERE WITH NORMAL ACTIVITIES OF RESIDENTS OR OTHER CONTRACTORS ON SITE.

10. ANY DAMAGE TO THE EXISTING FACILITIES (CURB AND GUTTER. PAVEMENT. CONDUITS. LANDSCAPING. UTILITY LINES. ETC.) DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTORS EXPENSE.

11. REMOVAL OF THE EXISTING CURB AND GUTTER SHALL BE AS PER COA STD. DWG. 2415 (SAWCUT ONLY).

12. WHEEL CHAIR RAMPS SHALL BE CONSTRUCTED PRIOR TO ACCEPTANCE OF CURB AND GUTTER.



USERNAME: CDP(EC9218201.PNP)
FILENAME: STORM-C.GRF

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

BHI JOB NO. 92182.01

MANHOLE GRADING DETAIL

NO SCALE

RECORD DRAWING

I, A. E. Schumacher, Registered Professional Engineer and Land Surveyor in the State of New Mexico, do hereby certify that this "as-built" information was obtained by me or under my supervision and represents the "as-built" conditions of this project, and is true and correct to the best of my knowledge and belief. All vertical and horizontal dimensions should be field verified prior to use on future projects.

11/5/93

A. E. Schumacher Date
NMPE/LS No. 2360

STATE OF NEW MEXICO SCHUMACHER 2360 REGISTERED PROFESSIONAL ENGINEER & LAND SURVEYOR

COUNTY OF BERNALILLO
PUBLIC WORKS DEPARTMENT

WILLOW BEND SUBDIVISION
STORM DRAIN LINE "C"
STA. 1+00.00 TO STA. 7+32.73

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
COUNTY ENGINEER		5/5/93			

DRAWING NO. | MAP NO. D-23 | SHEET 19 OF 23

AS-BUILT INFORMATION
CONTRACTOR
WORK STAKED BY
INSPECTOR'S ACCEPTANCE BY — DATE
FIELD VERIFICATION BY — DATE
DRAWINGS CORRECTED BY — DATE
MICRO-FILM INFORMATION
RECORDED BY — DATE
NO.

BENCH MARKS
THE BENCH MARK IS A STANDARD ASC BRASS TABLET STAMPED "1-D23" SET IN TOP OF A CONCRETE POST LOCATED APPROXIMATELY N13° 19' 23"E 867.95 FROM THE NE CORNER OF BOUNDARY.
ELEVATION = 6067.423'

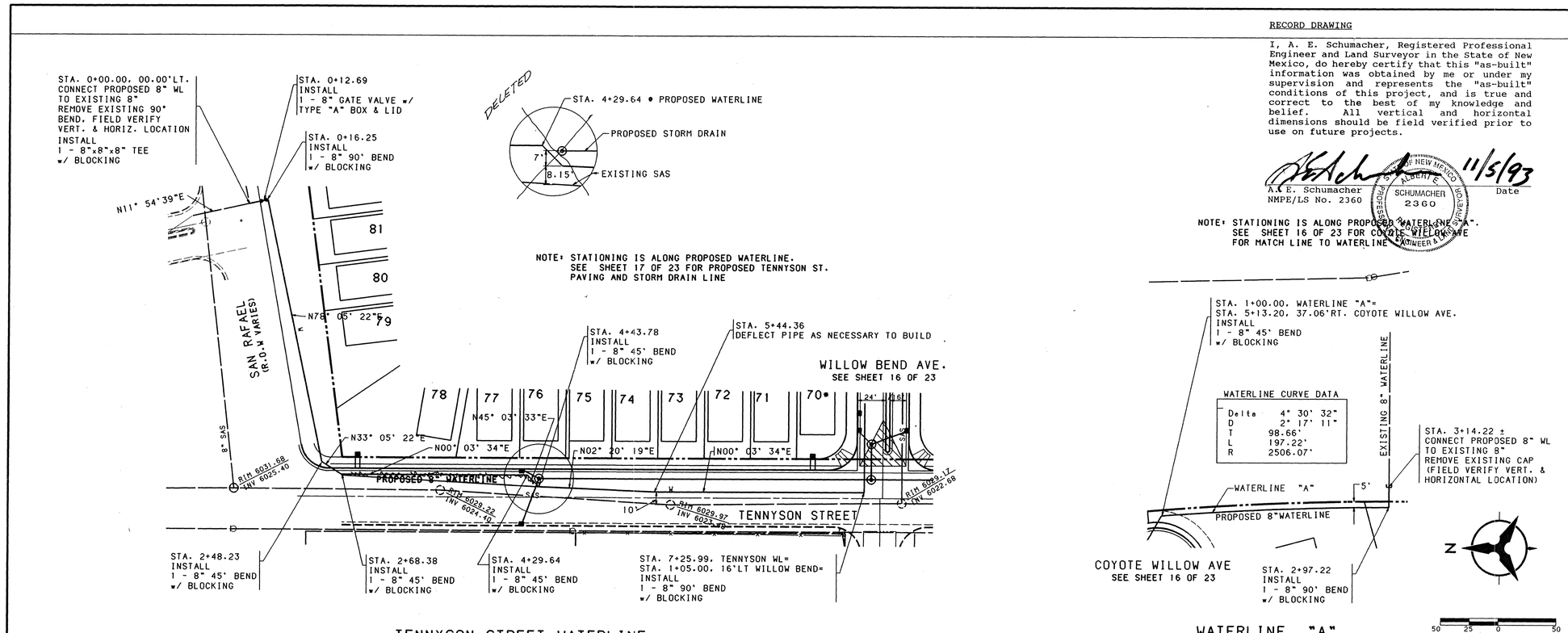
SURVEY INFORMATION
FIELD NOTES
NO. | BY | DATE

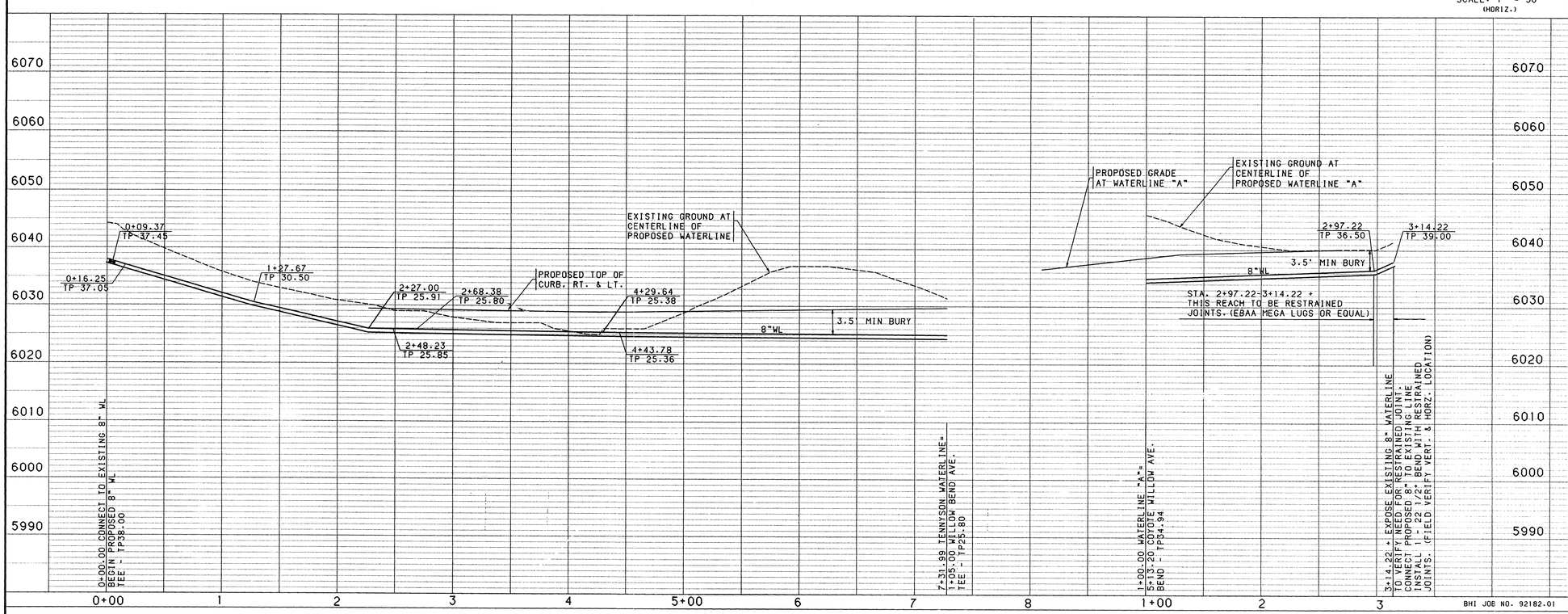
ENGINEER'S SEAL
A. HINOJOS SCHUMACHER, NEW MEXICO REGISTERED PROFESSIONAL ENGINEER & LAND SURVEYOR 2360 4-19-93

NO.	DATE	REMARKS	BY
A	4-93	REVISED PER COUNTY COMMENTS	JT

REVISIONS

DESIGN
DESIGNED BY MH — DATE 11/92
DRAWN BY DR — DATE 11/92
CHECKED BY MH — DATE 11/92





USERNAME: CDP:[C9218201.PNP]
FILENAME: TENNWL.GRF

NOTES

1. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LOCATIONS AND NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.

2. ALL CURB RETURN RADII SHALL BE 25' TO FACE OF CURB UNLESS OTHERWISE SPECIFIED.

3. ALL CURVE DATA AND DIMENSIONS REFER TO FACE OF CURB UNLESS OTHERWISE SPECIFIED.

4. GRADE ELEVATIONS, WHERE NOTED, ARE FOR FLOW LINE UNLESS OTHERWISE SPECIFIED.

5. CONTRACTOR IS TO INSTALL A 4"x4"x5' POST AND EMD AT THE END OF EACH SANITARY SEWER SERVICE.

6. CONTRACTOR IS RESPONSIBLE FOR REPAIR AND/OR REPLACEMENT OF ALL UTILITY CONDUITS AND EXISTING LINES.

7. ANY ADDITIONAL GRADING REQUIRED TO MATCH PROPOSED STREET GRADES SHALL BE INCIDENTAL TO PAVING ITEMS.

8. CONTRACTOR SHALL PROVIDE THE INSPECTORS. (CITY AND PRIVATE) WITH THE PROPOSED HYDROSTATIC TESTING PLAN. THE PLAN MUST BE APPROVED BEFORE TESTING OPERATIONS BEGIN.

9. CONTRACTOR SHALL PARK EQUIPMENT AND VEHICLES AS NOT TO INTERFERE WITH NORMAL ACTIVITIES OF RESIDENTS OR OTHER CONTRACTORS ON SITE.

10. ANY DAMAGE TO THE EXISTING FACILITIES (CURB AND GUTTER, PAVEMENT, CONDUITS, LANDSCAPING, UTILITY LINES, ETC.) DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTORS EXPENSE.

11. REMOVAL OF THE EXISTING CURB AND GUTTER SHALL BE AS PER COA STD. DWG. 2415 (SAWCUT ONLY).

12. WHEEL CHAIR RAMPS SHALL BE CONSTRUCTED PRIOR TO ACCEPTANCE OF CURB AND GUTTER.

UTILITY NOTES IN ADDITION TO THE ABOVE:

13. ALL WATER AND SEWER INSTALLATION TO BE BY CITY OF ALBUQUERQUE STANDARDS. WITH THE FOLLOWING EXCEPTIONS.

14. ALL HYDRANTS LINES ARE TO HAVE GATE VALVES INSTALLED 4 FEET FROM FROM THE CURB IN THE STREET. All HYDRANTS ARE TO BE KENNEDY K-81. 4 FOOT BURY. WITH M.J. PIPE CONNECTIONS.

15. ALL GATE VALVES ARE TO BE KENNEDY OR WATROUS RESILIENT SEAT WITH 5 1/4 INCH CAST IRON SCREW TYPE VALVE BOXES.

16. ALL BRASS IS TO BE FORD BRAND, NO CORP STOP IN THE STREET. ALL SERVICES ARE TO BE SDR-7 POLY, 1 INCH FOR DOUBLES AND 3/4 INCH FOR SINGLES. METER CANS ARE TO BE 18 INCH DIAMETER, POLYLOCK MATERIAL. COPPER SETTERS TO BE FORD, 9 INCH TO 15 INCH IN HEIGHT, TWO PER CAN WHERE POSSIBLE.

17. MINIMUM OF WATTS #7 DUAL CHECK-VALVE TO BE INSTALLED ON THE CUSTOMER SIDE OF THE SERVICE CONNECTION DURING CONSTRUCTION (OUTLET OF THE COPPER SIDE). THE BACKFLOW PREVENTER IS TO BE OWNED AND MAINTAINED BY THE RESIDENT.

18. INSPECTION AND ACCEPTANCE WILL BE BY SANDIA PEAK UTILITY COMPANY AND SANDIA PEAK SERVICES, INC. COORDINATE WITH BILL BAKER, 269-9694 OR 294-7187.

AS-BUILT INFORMATION
CONTRACTOR
STAKED BY
INSPECTOR'S
FIELD ACCEPTANCE BY — DATE
VERIFICATION BY — DATE
CORRECTIVE
CORRECTED BY — DATE
MICRO-FILM INFORMATION
RECORDED BY — DATE
NO.

BENCH MARKS
THE BENCH MARK IS A STANDARD ASC BRASS TABLET STAMPED "1-D23" SET IN TOP OF A CONCRETE POST
LOCATED APPROXIMATELY N13° 19' 23"E 867.95 FROM THE NE CORNER OF BOUNDARY.
ELEVATION = 6067.423'

SURVEY INFORMATION
FIELD NOTES
NO. | BY | DATE

ENGINEER'S SEAL
ALBERT E. HINOJOS
NEW MEXICO
11558
3-11-93
REGISTERED PROFESSIONAL ENGINEER

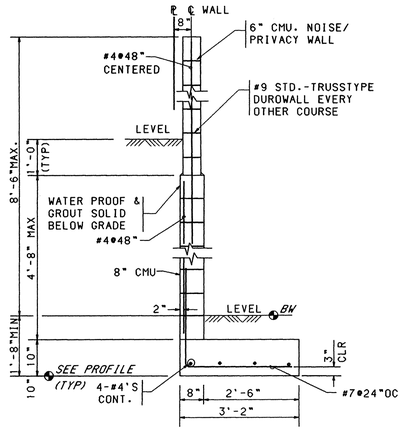
NO. | DATE | REMARKS | BY
REVISIONS
DESIGN
DESIGNED BY MH — DATE 12/92
DRAWN BY OR — DATE 12/92
CHECKED BY MH — DATE 12/92

COUNTY OF BERNALILLO
PUBLIC WORKS DEPARTMENT

WILLOW BEND SUBDIVISION
TENNYSON WATERLINE & WATERLINE "A"
PLAN AN PROFILE

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
COUNTY ENGINEER	CRBowman	5/5/93			

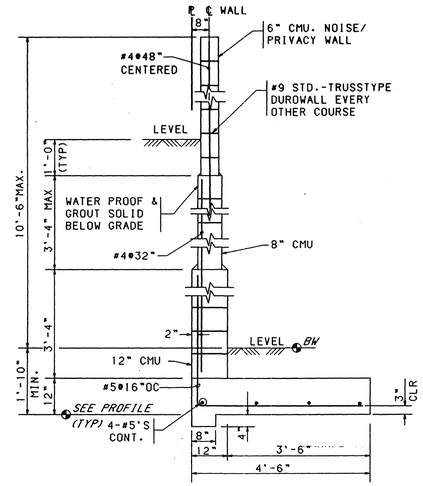
DRAWING NO. | MAP NO. D-23 | SHEET 20 OF 23



SECTION FOR WALL 2 & 6 RETAINING WALL FOR 4'-0" MAX. RETAINAGE

A/21

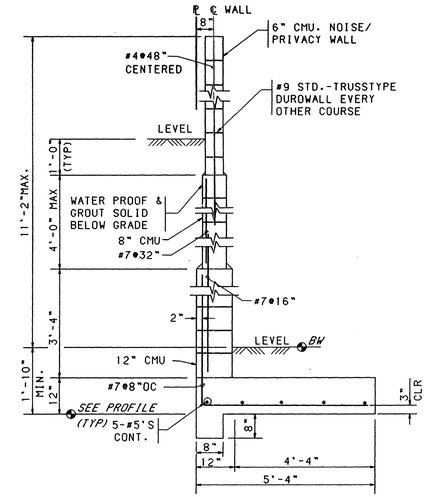
NO SCALE



SECTION FOR WALL 2 RETAINING WALL FOR 6'-0" MAX. RETAINAGE

B/21

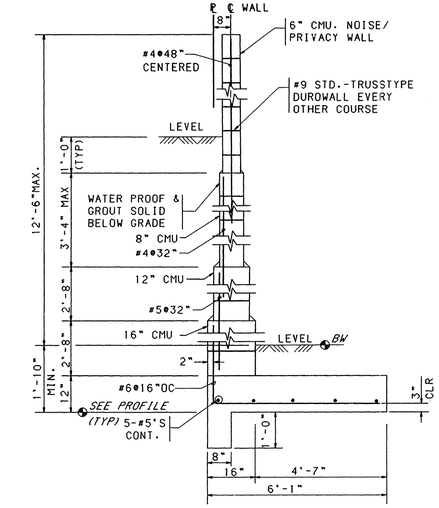
NO SCALE



SECTION FOR WALL 2 RETAINING WALL FOR 7'-0" MAX. RETAINAGE

C/21

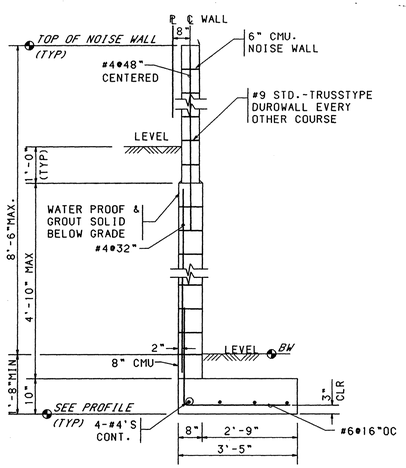
NO SCALE



SECTION FOR WALL 2 RETAINING WALL FOR 8'-0" MAX. RETAINAGE

D/21

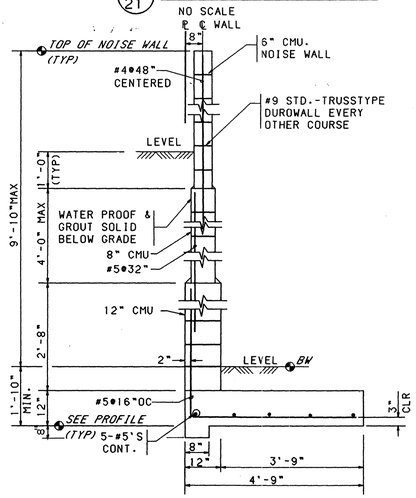
NO SCALE



SECTION FOR WALL 2 RETAINING WALL FOR 5'-0" MAX. RETAINAGE

E/21

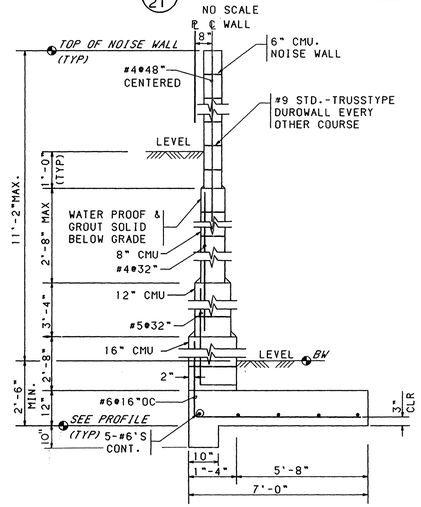
NO SCALE



SECTION FOR WALL 2 RETAINING WALL FOR 6'-10" MAX. RETAINAGE

F/21

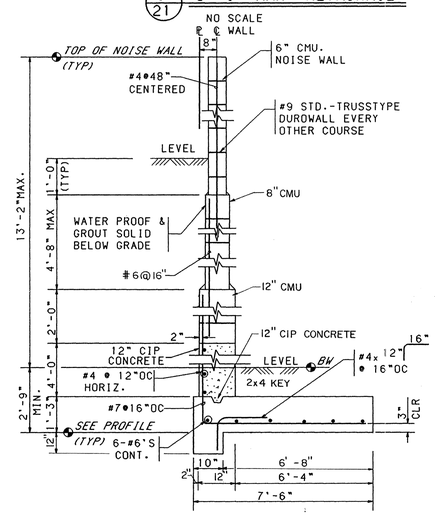
NO SCALE



SECTION FOR WALL 2 RETAINING WALL FOR 8'-2" MAX. RETAINAGE

G/21

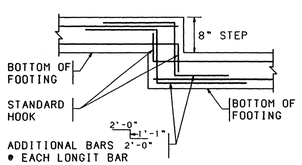
NO SCALE



SECTION FOR WALL 2 RETAINING WALL FOR 10'-2" MAX. RETAINAGE

H/21

NO SCALE

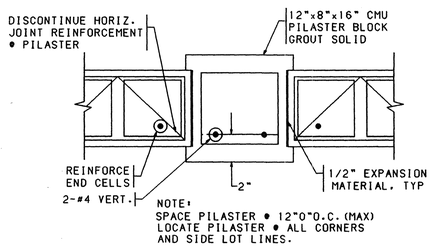


TYPICAL STEPPED FOOTING DETAIL

2/21

SEE WALL SECTIONS FOR DIMENSIONS & REINFORCEMENT

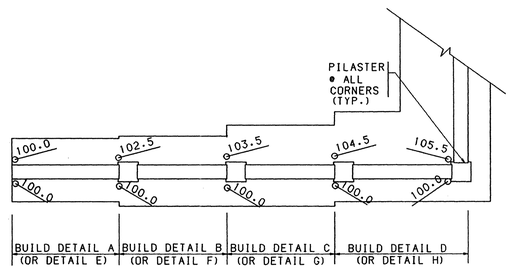
NO SCALE



PILASTER DETAIL

3/21

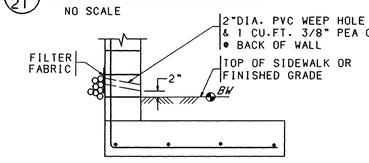
NO SCALE



TYPICAL RETAINING WALL PLAN

4/21

NO SCALE



TYPICAL WEEP HOLE DETAIL

5/21

NO SCALE

GENERAL NOTES (CONTINUED)

14. 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.

15. RETAINAGE HEIGHT IS TAKEN TO BE THE DIFFERANCE IN FINISHED GRADES ON LEFT AND RIGHT SIDE OF WALL.

BHI JOB NO. 92182.90

GENERAL NOTES FOR RETAINING WALL CONST.

1. THE SUPPORTING SOILS SHALL BE PREPARED AND PROCESSED IN ACCORDANCE WITH THE "SPECIFICATIONS FOR EARTHWORK" FOUND IN THE GEOTECHNICAL INVESTIGATION REPORT FOR WILLOW BEND SUBDIVISION, DATED OCTOBER 1, 1992 PREPARED BY SHB AGRA JOB NO. E92-1183.

2. RETAINING WALL SHALL NOT BE BACK-FILLED UNTIL AT LEAST 7 DAYS AFTER PLACING OF FINAL GROUT LEVEL. WHERE HEAVY EQUIPMENT IS USED IN BACKFILLING, SUCH EQUIPMENT SHOULD NOT APPROACH CLOSER TO THE TOP OF THE WALL THAN A DISTANCE EQUAL TO THE HEIGHT OF THE WALL. CARE SHOULD BE TAKEN TO AVOID EXERTING FORCES ON THE WALL AS COULD BE CAUSED BY EARTH MOVING EQUIPMENT.

   SLOPES UP AWAY FROM WALLS SHALL BE AS SHOWN IN DETAILS.

3. REINFORCED, EXPANSION CONTROL PILASTERS SHALL BE SPACED AT 12'-0", AT WALL TRANSITIONS & SIDE LOT LINE. SEE PILASTER DETAIL THIS SHEET.

4. DISCONTINUE HORIZONTAL WALL REINFORCEMENT AT JOINTS AND PILASTERS.

5. REINFORCEMENT OF A SIZE AND SPACING OTHER THAN THAT GIVEN IN THE DETAILS MAY BE USED PROVIDING SUCH OTHER REINFORCEMENT FURNISHES AN AREA OF STEEL AT LEAST EQUAL TO THAT GIVEN IN THE DETAILS. LAP SPLICES IN REINFORCING BARS SHALL BE BASED ON THE SMALLER BAR SPLICED:
   #4 BAR = 1'-10"
   #5 BAR = 2'-4"
   #6 BAR = 2'-9"
   #7 BAR = 3'-2"
   #8 BAR = 3'-9"

6. HORIZONTAL REINFORCING IN FOOTINGS SHALL BE CONTINUOUS AROUND CORNERS AND THROUGH TRANSITIONS (EXCEPT AS NOTED BELOW). FIELD BEND BARS AT TRANSITIONS AS REQUIRED.

7. CONSTRUCTION OF RETAINING WALLS SHALL CONFORM TO REQUIREMENTS OF THE UNIFORM BUILDING CODE SECTION 24, LOWLIFT GROUTING METHOD.

8. INSTALL WEEP HOLES @ 4'-0" O.C. IN ALL RETAINING WALLS. SEE DETAIL THIS SHEET.

9. DESIGN DATA
   BLOCK WEIGHT 16" = 185 PSF
   BLOCK WEIGHT 12" = 130 PSF
   BLOCK WEIGHT 8" = 85 PSF
   SOIL WEIGHT = 120 PCF
   EQUIV. FLUID PRESSURE :
   LEVEL FILL = 36 PSF
   3:1 FILL = 48 PSF
   SOIL BEARING PRESSURE = 2500 PCF
   (1/3 INCREASE FOR WIND/SEISMIC)
   COEFFICIENT OF FRICTION = 0.4
   PASSIVE SOIL PRESSURE = 350 PCF
   CONCRETE F'C (28 DAYS) = 3000 PSI
   GROUT STRENGTH = 2000 PSI
   CMU GRADE N = 1500 PSI (GROUTED)
   REINFORCEMENT = 60 ASTM A-615
   MORTAR = TYPE M

10. CONTRACTOR SHALL NOTIFY ENGINEER PRIOR TO CONCRETE FOOTING POUR FOR INSPECTION OF COMPACTION UNDER FOOTING, FOOTING DEPTH AND WIDTH AND WALL STEEL AND SPACING. FINAL INSPECTION OF FOOTING AND WALL WILL BE REQUIRED.

11. CONTRACTOR SHALL BE RESPONSIBLE FOR CODE ADMINISTRATION APPROVAL AND FEES ASSOCIATED WITH IT.

12. RETAINING WALLS SHALL RECIEVE A BITUMINUOUS WATERPROOFING MATERIAL ACCEPTABLE TO THE ENGINEER. WATER-PROOFING SHALL BE APPLIED TO THE BACK OF THE CMU BELOW GRADE.

13. SEE GRADING AND DRAINAGE PLAN SHEET 4 FOR TABLE PERTAINING TO RETAINING WALLS LOCATION.

AS BUILT INFORMATION

CONTRACTOR
WORK STAKED BY
INSPECTOR'S ACCEPTANCE BY — DATE
VERIFICATION BY — DATE
DRAWINGS CORRECTED BY — DATE

BENCH MARKS

STATION MARK IS A STANDARD USC&GS BRASS TABLET, STAMPED "1-D23", SET IN TOP OF A CONCRETE POST.	
LOCATED APPROXIMATELY N13~ 19' 23"E. 867.95' FROM THE N.E. CORNER OF BOUNDARY.	
ELEVATION = 6067.423'	

MICRO-FILM INFORMATION

RECORDED BY — DATE
NO.

SURVEY INFORMATION

NO.	DATE	FIELD NOTES BY

ENGINEER'S SEAL

DAVID M. BEARD — NEW MEXICO — 10016 — REGISTERED PROFESSIONAL ENGINEER

REVISIONS

NO.	DATE	REMARKS

DESIGN

		DATE
DESIGNED BY	DMB	1/93
DRAWN BY	MJT	1/93
CHECKED BY	JCA	1/93

COUNTY OF BERNALILLO
PUBLIC WORKS DEPARTMENT

BOHANNAN-HUSTON INC.

WILLOW BEND SUBDIVISION
CMU RETAINING WALL DETAILS

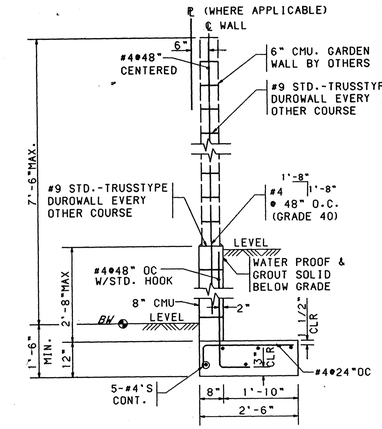
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
COUNTY ENGINEER	C.A. Bowman	5/5/93			

DRAWING NO. -

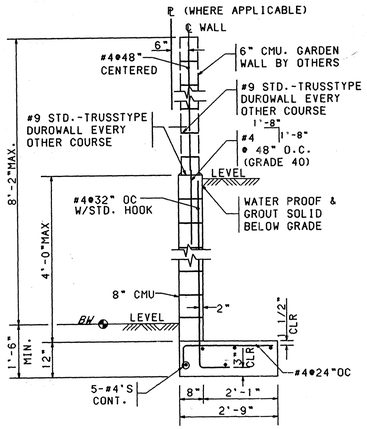
MAP NO. D-23

SHEET 21 OF 23

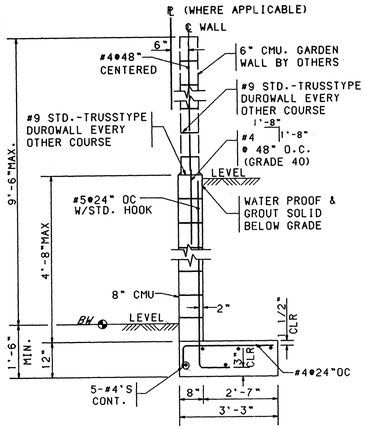
USERNAME: STRUCTOH.CMU
FILENAME: WILLOW1-CMU.GRF



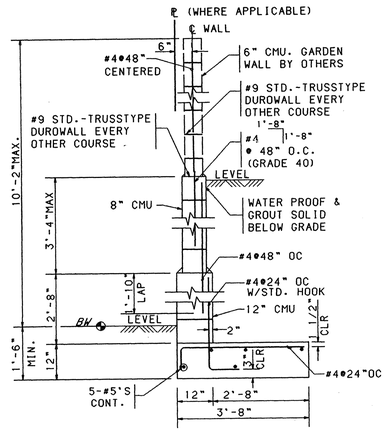
I/22 RETAINING WALL FOR 2'-0" MAX. RETAINAGE
NO SCALE



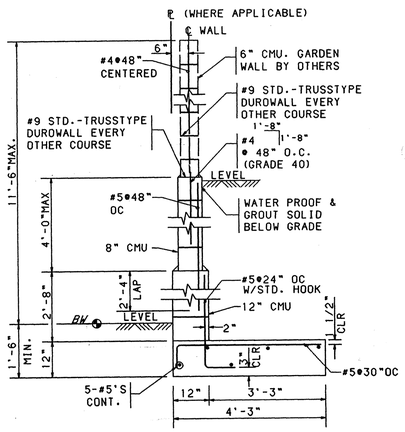
J/22 RETAINING WALL FOR 3'-0" MAX. RETAINAGE
NO SCALE



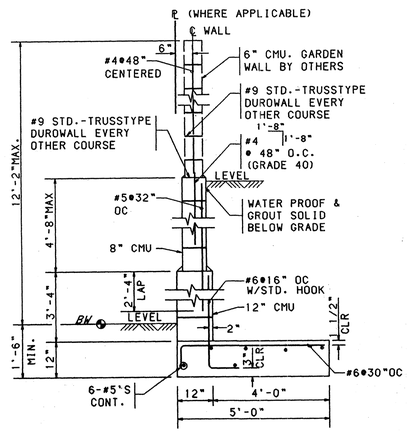
K/22 RETAINING WALL FOR 4'-0" MAX. RETAINAGE
NO SCALE



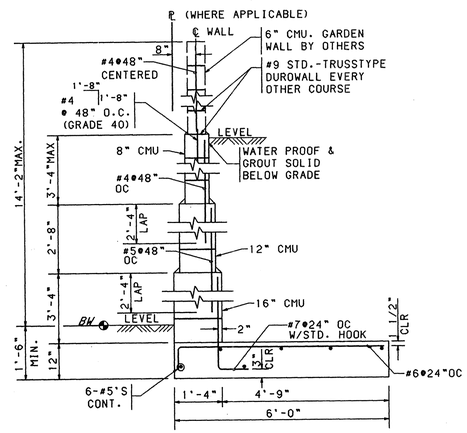
L/22 RETAINING WALL FOR 5'-0" MAX. RETAINAGE
NO SCALE



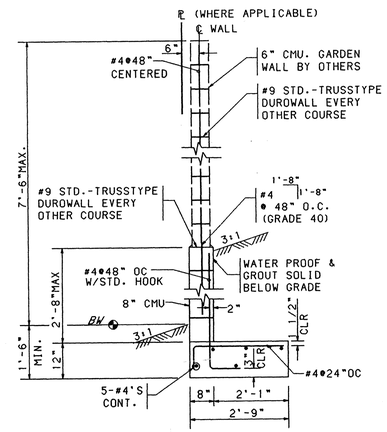
M/22 RETAINING WALL FOR 6'-0" MAX. RETAINAGE
NO SCALE



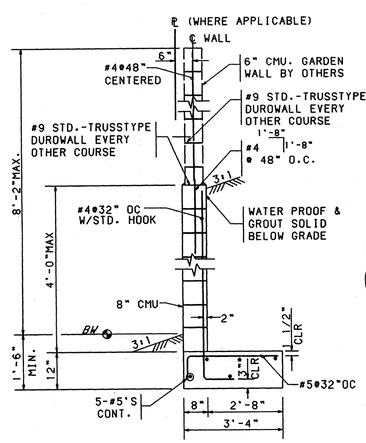
N/22 RETAINING WALL FOR 7'-0" MAX. RETAINAGE
NO SCALE



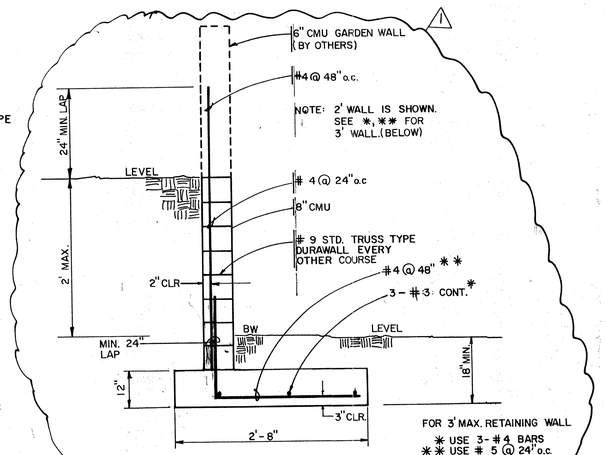
O/22 RETAINING WALL FOR 8'-0" MAX. RETAINAGE
NO SCALE



P/22 RETAINING WALL FOR 2'-0" MAX. RETAINAGE WITH 3:1 FILL SLOPE
NO SCALE



O/22 RETAINING WALL FOR 3'-0" MAX. RETAINAGE WITH 3:1 FILL SLOPE
NO SCALE



RETAINING WALL FOR 2'-0" TO 3'-0" MAX. RETAINAGE
NO SCALE

NOTES:

1. SEE GRADING AND DRAINAGE PLAN SHEET 4. FOR TABLE PERTAINING TO RETAINING WALLS LOCATION.
2. SEE SHEET 21/23 FOR GENERAL NOTES FOR RETAINING WALL CONSTRUCTION.

AS BUILT INFORMATION

CONTRACTOR
STAKED BY
INSPECTOR'S ACCEPTANCE BY — DATE
FIELD VERIFICATION BY — DATE
DRAWINGS CORRECTED BY — DATE

MICRO-FILM INFORMATION
RECORDED BY — DATE
NO.

BENCH MARKS

STATION MARK IS A STANDARD USC&GS BRASS TABLET, STAMPED "1-D23", SET IN TOP OF A CONCRETE POST.
LOCATED APPROXIMATELY N13~ 19' 23"E, 867.95' FROM THE N.E. CORNER OF BOUNDARY.
ELEVATION = 6067.423'

SURVEY INFORMATION

NO.	BY	DATE

FIELD NOTES

ENGINEER'S SEAL

DAVID M. REDE, REGISTERED PROFESSIONAL ENGINEER 10016

NO.	DATE	REMARKS
1	5-24-93	2'-3' RETAINING WALL ADDED

REVISIONS

	BY	DATE
DESIGN	JRT	1/93
DESIGNED BY	DMB	1/93
DRAWN BY	MJT	1/93
CHECKED BY	JCA	1/93

COUNTY OF BERNALILLO
PUBLIC WORKS DEPARTMENT

BOHANNAN-HUSTON INC.

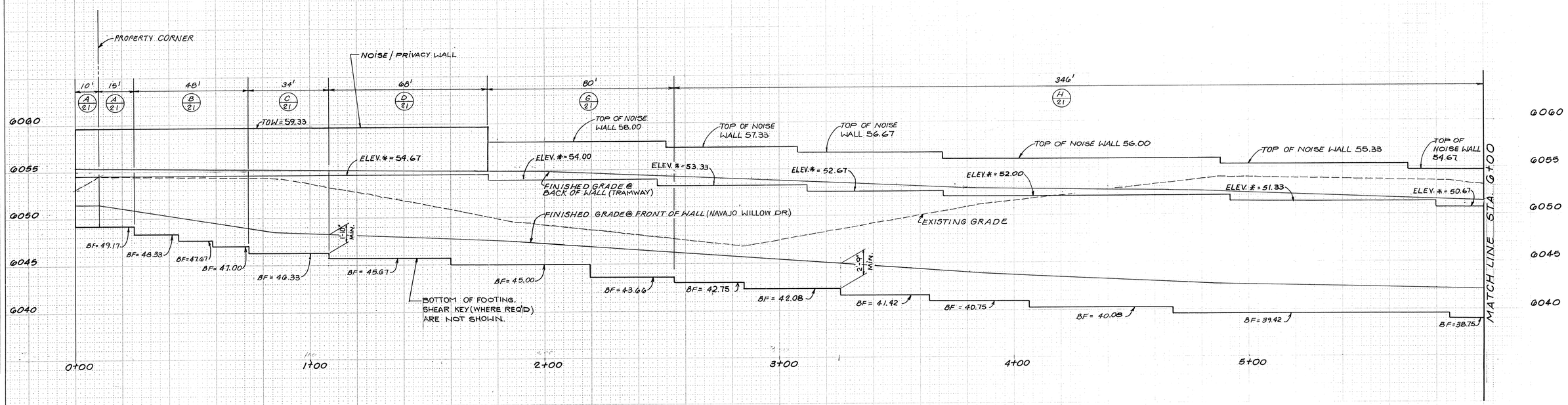
WILLOW BEND SUBDIVISION
CMU RETAINING WALL DETAILS

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
COUNTY ENGINEER	O.R. Bowman	5/5/93			

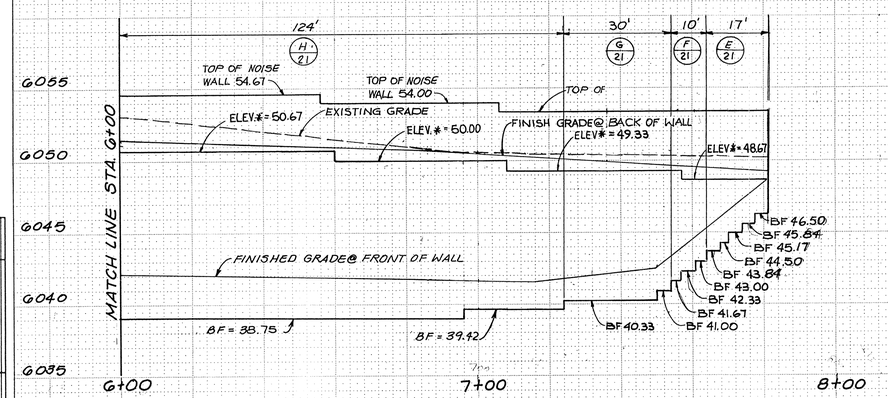
DRAWING NO. -
MAP NO. D-23
SHEET 22 OF 23

BHI JOB NO. 92182.90

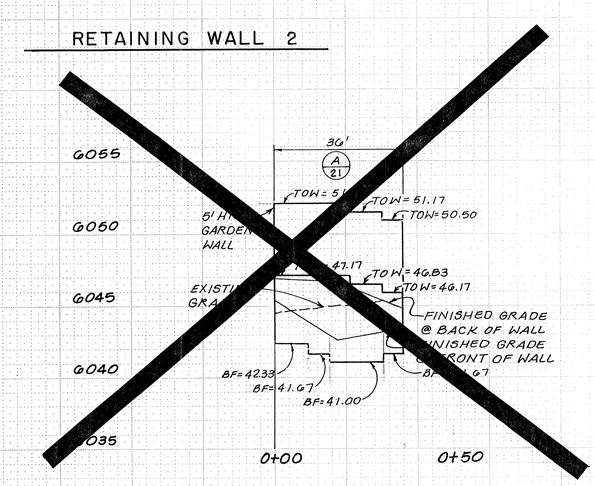
USERNAME: STRUCTOH.CMU
FILENAME: WILLOW2-CMU.GRF



RETAINING WALL 2



RETAINING WALL 2



NOTE: ELEV* INDICATES ELEVATION OF TOP OF 8' CMU COURSE. SEE WALL SECTIONS SHEET 21 OF 23.

FINAL SURVEY	SURVEYED	PLOTTED	DRAWN	AREAS	AREAS CHECKED	NOTE BOOK	NO.	BY	DATE

ORIGINAL SURVEY	SURVEYED	PLOTTED	DRAWN	AREAS	AREAS CHECKED	NOTE BOOK	NO.	BY	DATE

BHI #92182.90

REVISED 3-93 JRT

SCALE: 1" = 20' (HOR.)
1" = 5' (VER.)

COUNTY OF BERNALILLO
PUBLIC WORKS DEPARTMENT

WILLOW BEND SUBDIVISION
RETAINING WALL 2 & 6 PROFILES

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
COUNTY ENGINEER	W.P. Bowman	5/5/93			1-29-93

DRAWING NO.	MAP NO.	SHEET	OF
	D-23	23	23

JAMES M. TOPMILLER NEW MEXICO 9356 REGISTERED PROFESSIONAL ENGINEER 3-30-93