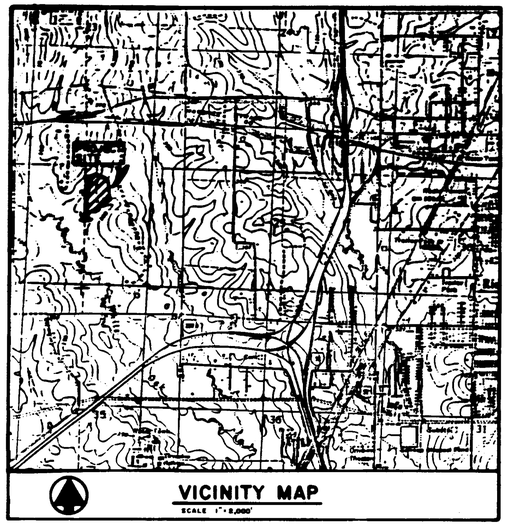
CONSTRUCTION PLANS

WESTFIELD OF DINSMOR

SITUATED IN THE NE1/4 OF SECTION 26,
T7N-R1E, MADISON COUNTY, MISSISSIPPI



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1.	COVER SHEET
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9.	STANDARD WATER DETAILS

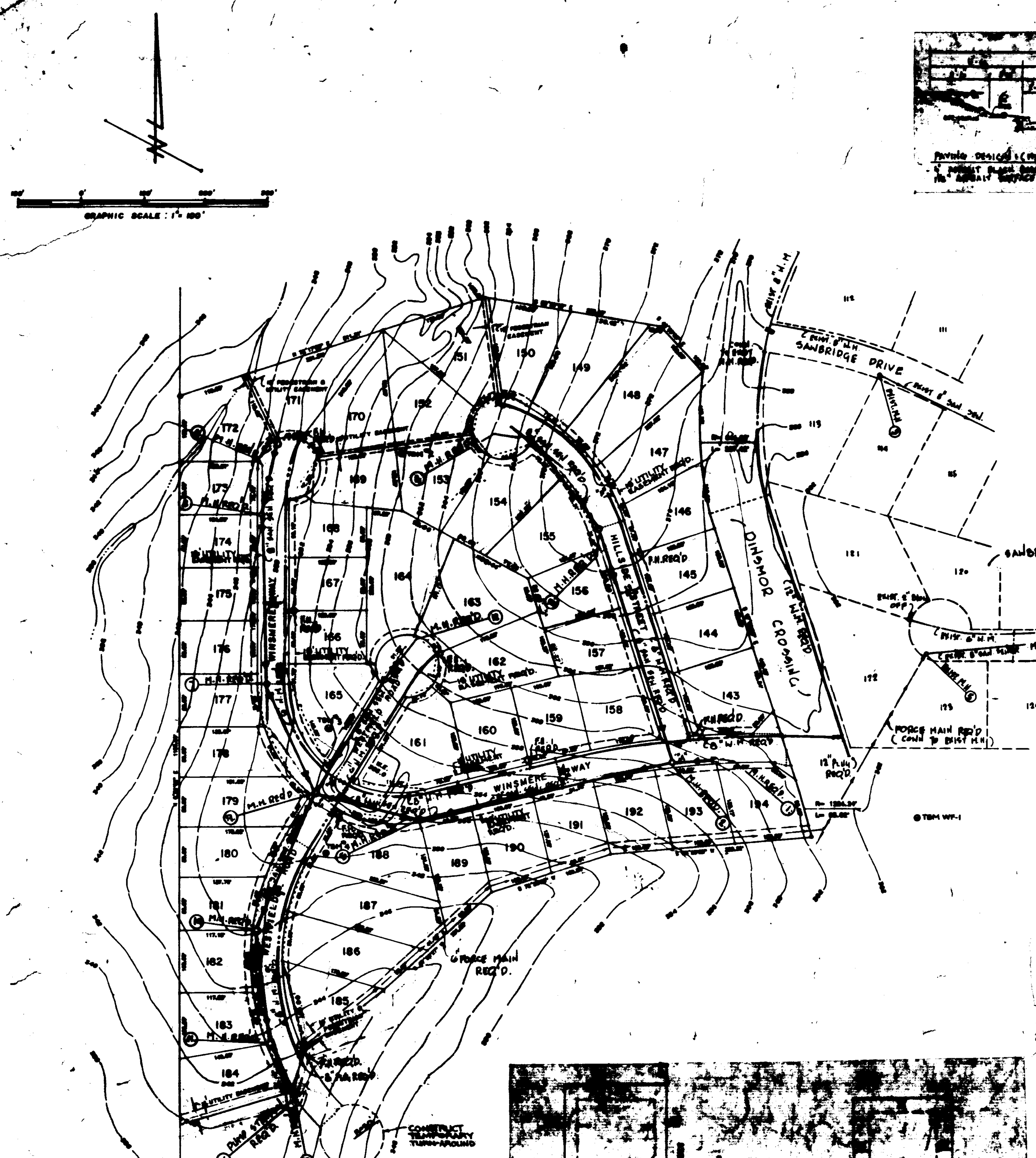
DEVELOPED BY: S.M.C.D.C. INC. GENERAL PARTNER
5 LAKELAND CIRCLE
JACKSON, MISSISSIPPI

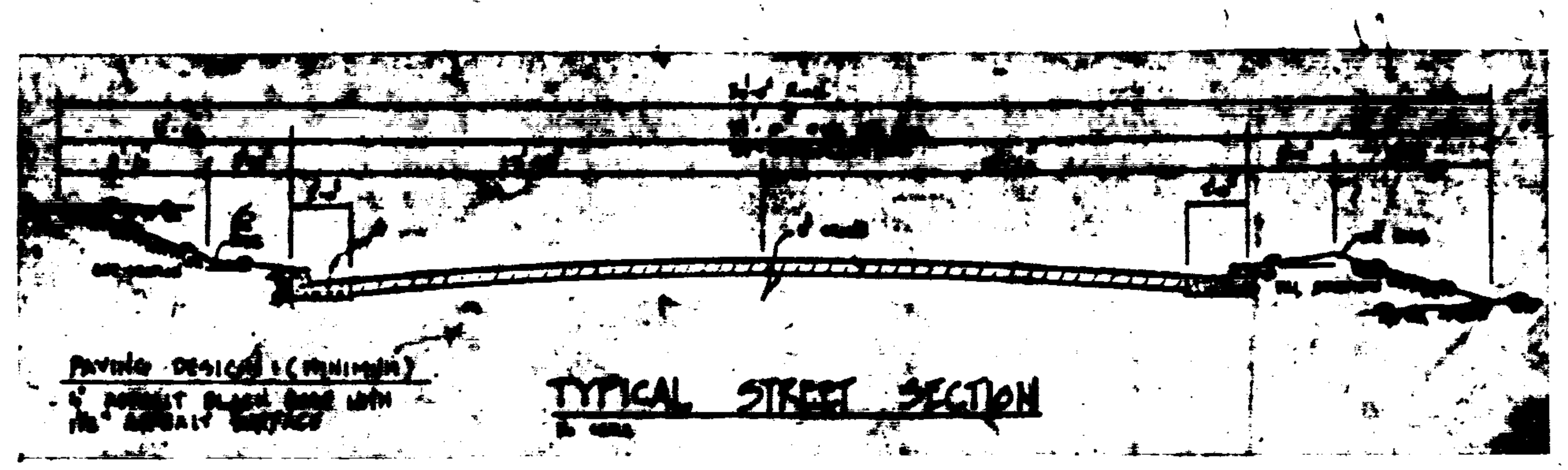
DESIGNED BY: CENTRAL MISSISSIPPI ENGINEERING, INC.
5 LAKELAND CIRCLE
JACKSON, MISSISSIPPI 39216

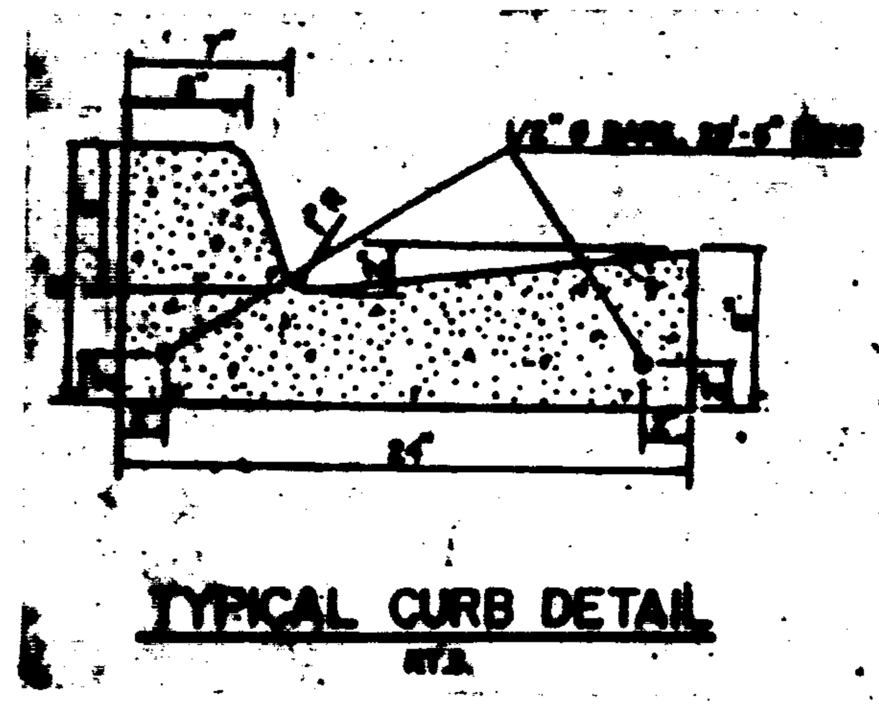
THIS DRAWING CORRECTED
AS BUILT
DATE
SIGNED

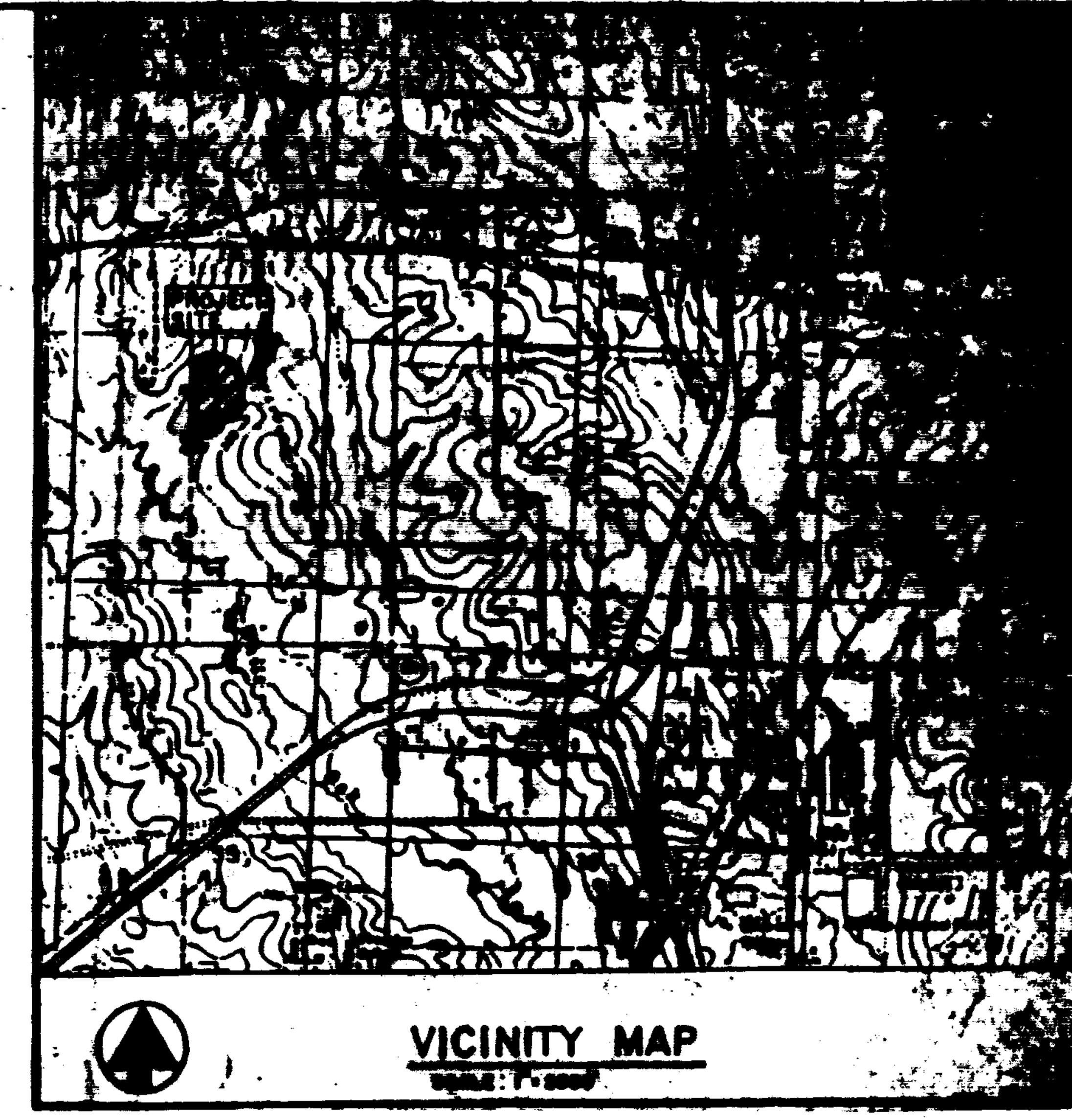
JANUARY, 1990

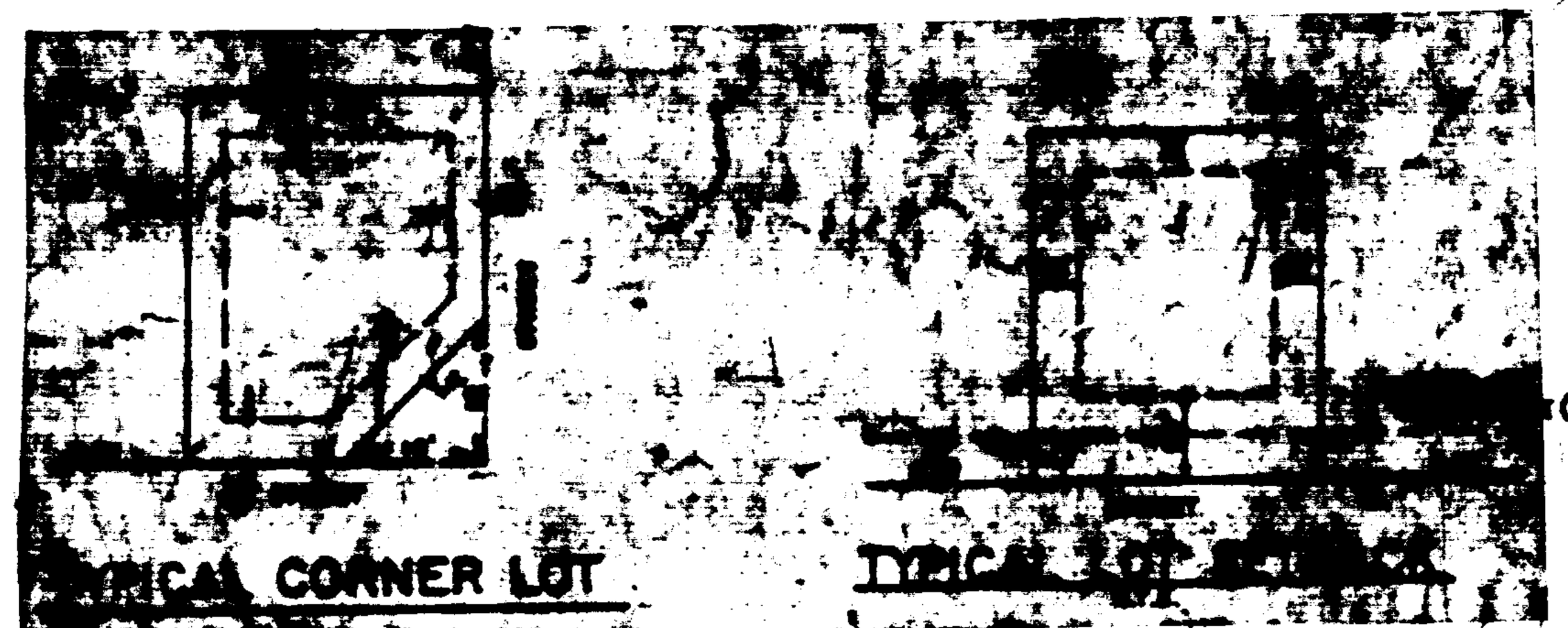
PWP00410











WESTFIELD OF DINSMOR
CURVE DATA

	CURVE "A"	℄	CURVE "B"
Δ =	14° 25' 19"	14° 25' 19"	14° 25' 19"
R =	1310.64'	1335.64'	1360.64'
T =	165.83'	168.99'	172.15'
L =	329.90'	336.19'	342.49'
CH =	329.03'	335.31'	341.58'
D =	4° 22' 18"	[illegible]° 17' [illegible]"	4° 12' 39"

	CURVE "C"	℄	CURVE "D"
Δ =	103° 30'	103° 30'	103° 30'
R =	225.00'	[illegible].00'	175.00'
T =	285.41'	253.70'	221.99'
L =	[illegible].44'	[illegible]1.30'	316.12'
CH =	[illegible].39'	314.13'	274.66'
D =	25° 27' 53"	[illegible]° 38' 52"	32° 44' 26"

	CURVE "E"	℄	CURVE "F"
Δ =	39° 00'	39° 00'	39° 00'
R =	287.39'	282.39'	307.39'
T =	[illegible]	100.00'	[illegible]
L =	[illegible]	192.22'	[illegible].22'
CH =	[illegible]	[illegible].53'	[illegible].22'
D =	2[illegible]° [illegible]' 37"	[illegible]° 17' 22"	[illegible]

[illegible]

GENERAL NOTES:

1. [illegible]
2. [illegible]
3. [illegible]
4. SURVEY IS A CLASS "B" SURVEY. CONTOURS TAKEN FROM AERIAL TOPOGRAPHIC SURVEY BY OTHERS. DATUM IS N.G.V.D.

TBM-WF-1 - ELEV.= 362.05 MSL
R.R. SPIKE IN P.P. APPROX. 170' EAST OF SE COR. OF LOT 154

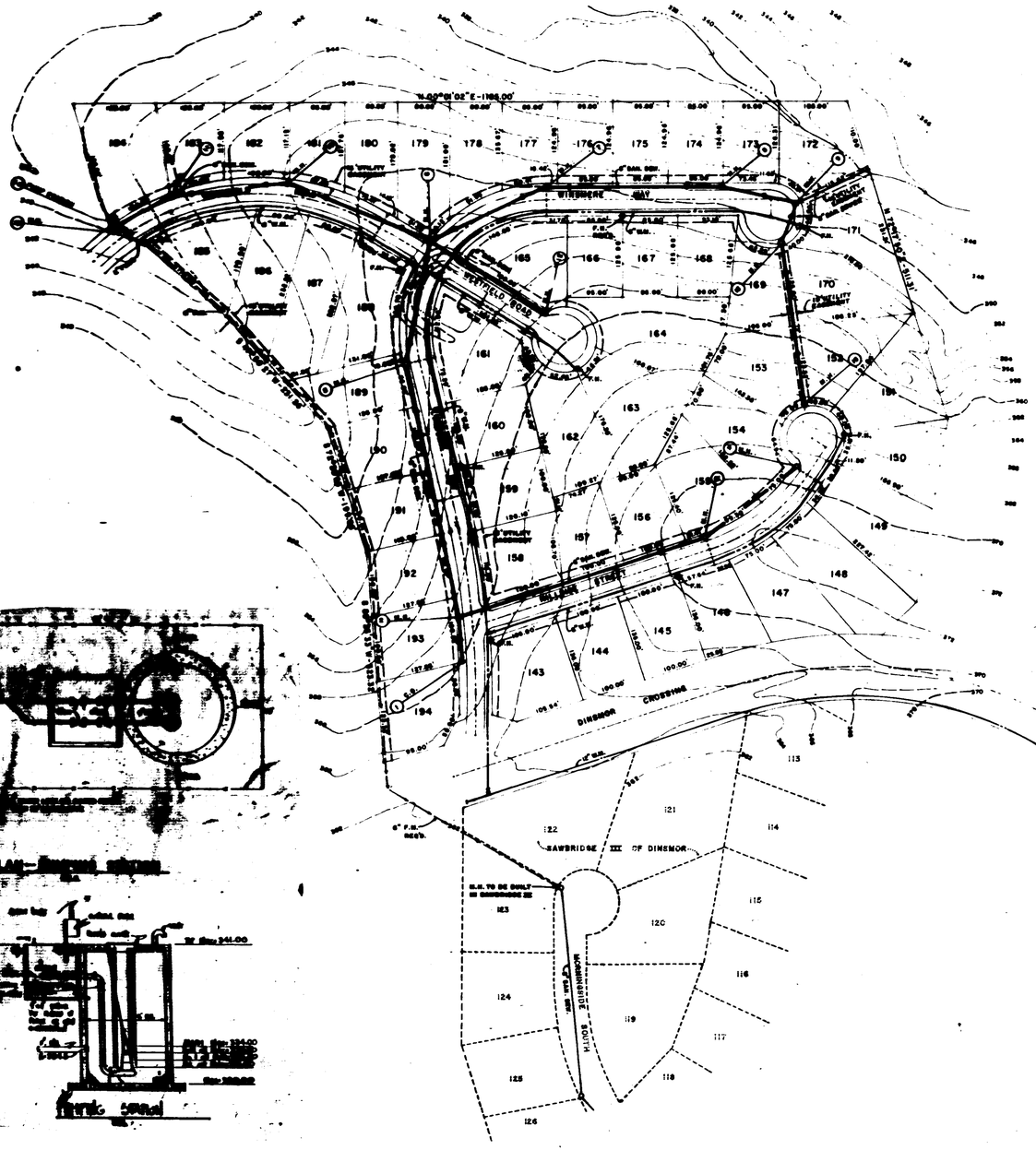
TBM #2 - ELEV.= 361.41 MSL
R.R. SPIKE IN 20" OAK NEAR NW COR. OF LOT 153

TBM #3 - ELEV.= 358.23 MSL
R.R. SPIKE IN 12" ELM NEAR SW COR. OF LOT 165

TBM #4 - ELEV.= 351.26 MSL
R.R. SPIKE IN 30" OAK NEAR SW COR. OF LOT 188

THIS DRAWING CORRECTED
AS BUILT
DATE ______
SIGNED ______

PRELIMINARY PLAT
WESTFIELD OF DINSMOR



SEWER SPECIFICATIONS

1-All sewer main and services shall be Extra Strength Vitrified Clay Pipe (ASTM C-700), ABS sewer pipe (ASTM D-2680), or PVC sewer pipe (ASTM D 3034) SDR 35.

2-Manholes to be precast concrete conforming to ASTM C-478. All manholes shall be waterproofed and shall have watertight flexible connections at inlets and outlets.

3-Manhole castings to be Harper No. 1, MSPR Standard, or approved equal.

4-Sewer mains to be tested by air per ASTM C 828, results to be furnished to the ENGINEER and the UTILITY. PVC sewer pipe to have a maximum of 5.0% deflection as determined by the pulling of a 5% mandrel after the pipe has been backfilled for at least 30 days.

5-All sewer services to be marked at the property line with a 2" diameter creosote post or other acceptable marker.

6 Bedding for sewer pipe shall be Class "C" in accordance with ASTM C-12 for rigid pipe and Class III in accordance with ASTM D 2321 for flexible pipe.

7-Manholes shall be waterproofed with an application of KOPPERS 300 M Coal Tar Epoxy or approved equal, inside and outside.

8-All sewer 24 inches or less will be laid with straight aligment between manholes and will be checked by either laser or lamping methods.

9-All backfill will be of suitable material, hand tamped to (1) foot of the top of the pipe, and otherwise placed in such a manner as not to distrub the alignment of the pipe.

10-Sewer and water mains will have a minimum separation of ten (10) feet horizontally and 18 inches vertically with relation to each other.

11- Leakage tests shall include appropriate water or low pressure air testing. The leakage outward or inward (exfiltration or infiltration) shall not exceed 200 gallons per inch of pipe diameter per mile per day (0.19 m/cm of pipe dia./km/day) for any section of the system. An exfiltration or infiltration test shall be performed with a minimum positive head of 2 feet (0.61 m). The air test, if used, shall, as a minimum conform to the test procedure decribed in ASTM C-828-76T, entitled "Tentative Recommended Practise for Low-Pressure Air Teast of Vitrified Clay Pipe Lines". The testing methods selected should take into consideration the range in ground water elevations projected and the situation during the test.

12-FORCE MAIN to be constructed of class 160 pvc, ruber ring push on joints, NSF approved with minimum 36" cover.

13-FORCE MAIN to be pressure tested in accordance with AWWA Standard C-600-77, Section 4, results to be furnished to the Engineer.

WESTFIELD OF DINSMOR
MECHANICAL SPECIFICATIONS

PUMPING STATION:

The pumping station will be capable of pumping 100 gpm at a 44 TDH. The pump will be duplex with slide rail assembly. Pumps shall be capable of passing 3 inch solids and shall be pedestal type with automatic level controls for rotating and simultaneous operation. Motors to be 5 HP single phase 230 V. Tungsten carbide seals are required.

PUMP STATION: 100 GPM @ 44 TDH; 5 HP SINGLE PHASE; 230 volt;
1750 RPM 7.56" IMP. DIA.
Hydromatic S4MH or approved equal

CONTROL PANEL:

The control panel shall have Dead Front NEMA 4 or NEMA 3-R with interior door, having all controls customarily used by operator; and shall contain the following:

a. Two Run-Time Meters; (one for each pump)
b. Green run and amber failure lights.
c. H-O-A switch for each pump.
d. 150 watt Condensation Heater.
e. Seal Failure Sensor and light in panel (red)
f. Low/High voltage protection
g. Phase failure and lightring protector.

Notes:

1. There shall be no Junction box inside of wet well.
2. Three rums of 2 inch, minimum diameter conduit from the control panel for float switches, and one for each pump's wiring.
3. Valves shall be flanged, standard AWWA with non-rising stems, irons bodies, bronze mounted and tested to [illegible] psi, Mueller or American.
4. Control wires to be sealed air-tight at panel and wet well.

THIS DRAWING CORRECTED
AS BUILT
BY: ____________
DATED ____________

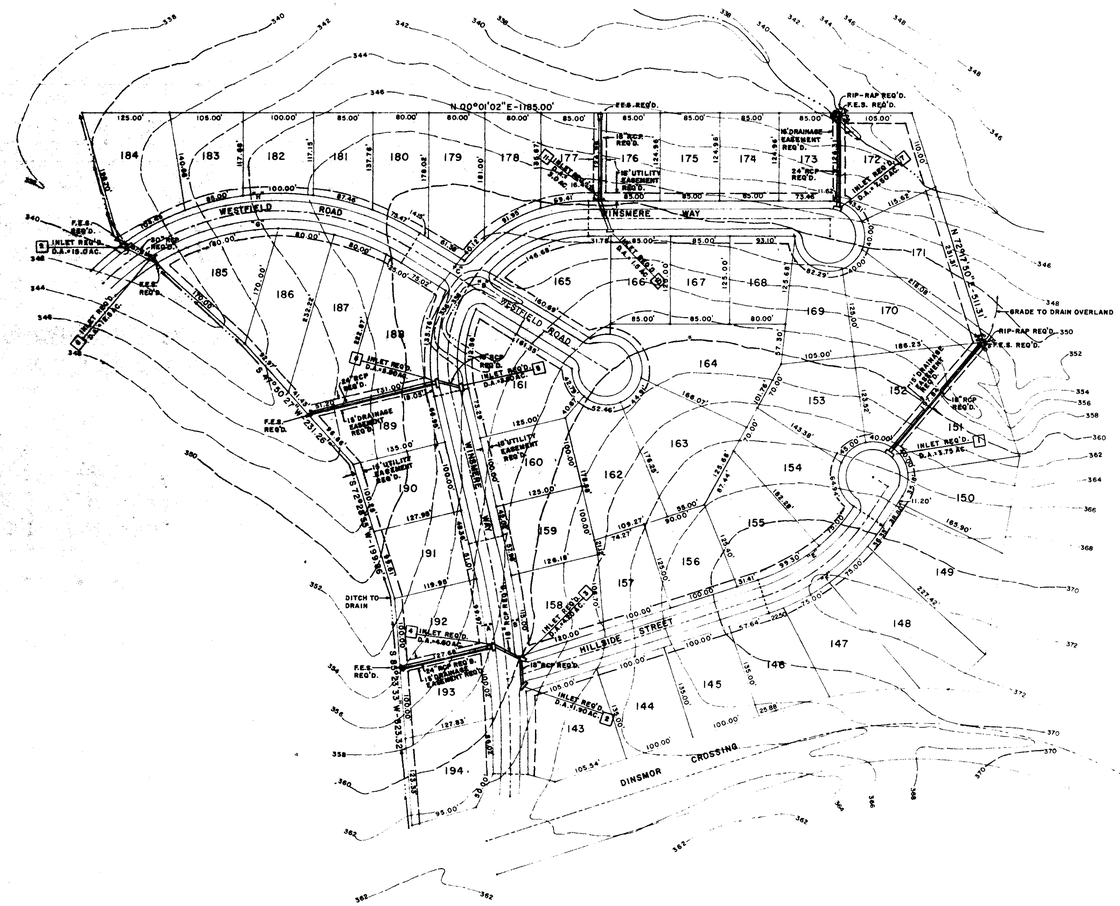
UTILITY PLAN
WESTFIELD OF DINSMOR

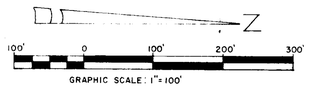
SITUATED IN THE NE 1/4 OF SECTION 26, T7N-R1E,
MADISON COUNTY, MISSISSIPPI

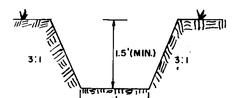
DEVELOPED BY SMCDC INC. GENERAL PARTNER
5 LAKELAND CIRCLE JACKSON, MS

REV.-APRIL 9, 1990
JANUARY 12, 1990

CENTRAL MISSISSIPPI ENGINEERING
P.O. BOX 4506 JACKSON, MS 39296-4506 601-366-6439







TYPICAL DITCH DETAIL
N.T.S.

WESTFIELD OF DINSMOR

STORM DRAINAGE COMPUTATIONS

RUNOFF: Q = CIA
C = 0.75
I = 0 INCHES/HOUR
A = DRAINAGE AREA

CAPACITY: Q = CnS 1/2 R 2/3
n = (1.49/n)* A R 2/3
A = SQFT
R = .25

NOTE: C is taken from Table 2 in the "Concrete Pipe Design Manual" published by the American Concrete Pipe Association.

INLET 1: D.A. = 2.75 AC — 18" @ 6.75%
Q = (.75)(C)(2.75) — Q = 91 (0.2178)
Q = 16.9 CFS — Q = 10.8 CFS
V = 11.2 FPS

INLET 2: D.A. = 1.90 AC — 18" @ 1.00%
Q = (.75)(C)(1.90) — Q = 91 (0.1056)
Q = 8.6 CFS — Q = 5.1 CFS
V = 6.2 FPS

INLET 3: D.A. = 2.30 + 1.90 + 4.20 AC — 18" @ 4.00%
Q = (.75)(C)(4.20) — Q = 91 (.1871)
Q = 18.5 CFS — Q = 10.3 CFS
V = 10.9 FPS

INLET 4: D.A. = .40 + 4.25 + 4.60 AC — 24" @ 1.54%
Q = (.75)(C)(6.00) — Q = 199 (.1225)
Q = 26.75 CFS — Q = 24.3 CFS
V = 7.8 FPS

INLET 5: D.A. = 3.50 AC — 18" @ 5.36%
Q = (.75)(C)(3.50) — Q = 93 (.1991)
Q = 16.8 CFS — Q = 10.4 CFS
V = 8.2 FPS

INLET 6: D.A. = 2.30 + 3.50 = 5.80 AC — 24" @ 2.50%
Q = (.75)(C)(5.80) — Q = 199 (0.1581)
Q = 26.1 CFS — Q = 31.5 CFS
V = 9.9 FPS

INLET 7: D.A. = 5.90 AC — 24" @ 2.56%
Q = (.75)(C)(5.90) — Q = 200(.1588)
Q = 22.5 CFS — Q = 31.7 CFS
V = 11.6 FPS

INLET 8: D.A. = 12.55 AC — 36" @ 2.56%
Q = (.75)(C)(12.55) — Q = 366 (.3414)
Q = 86.3 CFS — Q = 86.3 CFS
V = 11.4 FPS

INLET 10: D.A. = 1.55 AC — 18" @ 1.06%
Q = (.75)(C)(1.5) — Q = 91 (.1000)
Q = 8.75 CFS — Q = 5.1 CFS
V = 5.2 FPS

INLET 11: D.A. = 1.50 + 1.50 = 3.00 AC — 18" @ 2.50%
Q = (.75)(C)(3.0) — Q = 91 (.1581)
Q = 13.5 CFS — Q = 14.4 CFS
V = 8.1 FPS

WESTFIELD OF DINSMOR

BEFORE AND AFTER CONSTRUCTION DRAINAGE CALCULATIONS

Before Construction: (Pervious Area)
A = 20.6 Acres
I = 4.4 inches/hour
C = 0.6
Q = CIA,
= (0.6)(4.4)(20.6)
= 54.4 cfs

Total: Before Construction Runoff = 54.4 cfs

After Construction: (Pervious Area)
A = 16.3 Acres
I = 4.4 inches/ hour
C = 0.6
Q = CIA
= (0.6)(4.4)(3.5)
= 43.0 cfs

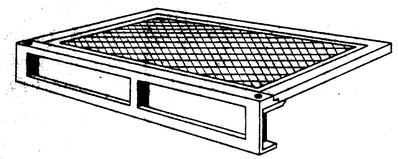
After Construction: (Impervious Area)
A = 43.0 Acres
I = 4.4 inches/hour
C = 0.9
Q = CIA
= (0.9)(4.4)(43.0)
= 17.0 cfs

Total: After Construction Runoff = 60.0 cfs

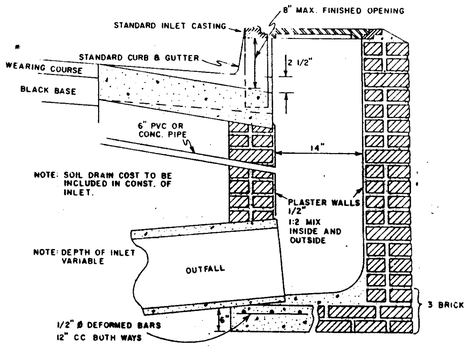
SUMMARY:

After Construction Runoff = 60.0 cfs
Before Construction Runoff = 54.4 cfs
Additional Runoff = 5.6 cfs

THIS DRAWING APPROVED AS BUILT
DATE 2/14/90
ISSUED BTH



STANDARD CURB INLET CASTING
(VULCAN RCB-7)



SECTION OF STANDARD CURB INLET

DRAINAGE PLAN
WESTFIELD OF DINSMOR

SITUATED IN THE NE 1/4 OF SECTION 26, T7N-R1E, MADISON COUNTY, MISSISSIPPI

DEVELOPED BY : S.M.C.D.C. INC. GENERAL PARTNER
5 LAKELAND CIRCLE JACKSON, MS

REV.-APRIL 9,1990
JANUARY 12,1990

CENTRAL MISSISSIPPI ENGINEERING
P.O. BOX 4506 JACKSON, MS 39296-4506 601-355-6439

	CURVE "A"	℄	CURVE "B"
Δ =	14° 25' 19"	14° 25' 19"	14° 25' 19"
R =	1310.64'	1335.64'	1360.64'
T =	165.83'	168.99'	172.15'
L =	329.90'	336.19'	342.49'
CH =	329.03'	335.31'	341.58'
D =	4° 22' 18"	4° 17' 23"	4° 12' 39"

	CURVE "C"	℄	CURVE "D"
Δ =	103° 30'	103° 30'	103° 30'
R =	225.00'	200.00'	175.00'
T =	285.41'	253.70'	221.99'
L =	406.44'	361.28'	316.12'
CH =	353.39'	314.13'	274.86'
D =	25° 27' 53"	28° 38' 52"	32° 44' 26"

PLAN — NOTE BOOK — No. — SURVEYED — PLOTTED — ALIGNMENT CHECKED — RT. OF WAY CHECKED — BY — DATE

PROFILE — NOTE BOOK — No. — SURVEYED — PLOTTED — GRADES CHECKED — B. M.'s NOTED — STRUCTURE NOTATIONS CHECKED — BY — DATE

THIS DRAWING CORRECTED
AS BUILT
DATE 9/4/90
SIGNED BJT

HIGHWAY FEDERAL AID SHEET
PLATE 1-SINGLE PLAN AND PROFILE-FULL LINE
PRINTED IN U.S.A.

WESTFIELD OF DINSMOR
PLAN · PROFILE - WINSMERE WAY
JANUARY 12, 1990
REV. - APRIL 9, 1990

CENTRAL MISSISSIPPI ENGINEERING
P.O. BOX 4506 JACKSON, MS 39296-4506

TBM#2-ELEV.=361.41 MSL
R.R. SPIKE IN 20" OAK NEAR
NW COR. OF LOT 153
CURVE "K"
CURVE "F"
Δ = 39° 00'
R = 257.39'
T = 91.16'
L = 175.20'
CH = 171.84'
D = 22° 15' 37"
39° 00'
282.39'
100.00'
192.22'
188.53'
20° 17' 22"
39° 00'
307.39'
108.85'
209.23'
205.22'
18° 38' 22"
RIP-RAP REQ'D.
F.E.S.
8" SAN. SEWER
15' UTILITY EASEMENT
15' DRAINAGE EASEMENT
200'-18" RCP @ 4.75%
CURB INLET
D.A.=3.75 AC.
E=342.50
F.H.
M.H.
M.H. REQ'D.
HILLSIDE STREET
WINSMERE WAY
15' DRAINAGE EASEMENT
0+00 HILLSIDE ST.=
1+66.20 WINSMERE WAY
CURB INLET
D.A.=1.5 AC.
E=356.40
10' UTILITY EASEMENT
TBM#3-ELEV.=358.23 MSL
R.R. SPIKE IN 12" ELM NEAR
SW COR. OF LOT 165
P.T.=0+44.10
RAD. PT.=2+31.12
10' UTILITY EASEMENT
WESTFIELD ROAD
0+00-WESTFIELD ROAD (NORTH)=
0+00-WESTFIELD ROAD (SOUTH)=
7+42.11-WINSMERE WAY
8" W.M.
PLAN·PROFILE-HILLSIDE STREET
SCALE: 1"=50' (HORZ.) / 1"=5' (VERT.)
PLAN·PROFILE-WESTFIELD ROAD
SCALE: 1"=50' (HORZ.) / 1"=5' (VERT.)
100' V.C.
N.G.
15'-8" SAN. SEW. @ 0.40%
210'-8" SAN. SEW. @ 5.40%
CURB INLET
M.H.
FINISH GRADE

THIS DRAWING CORRECTED AS BUILT

DATE ____________

SIGNED ____________

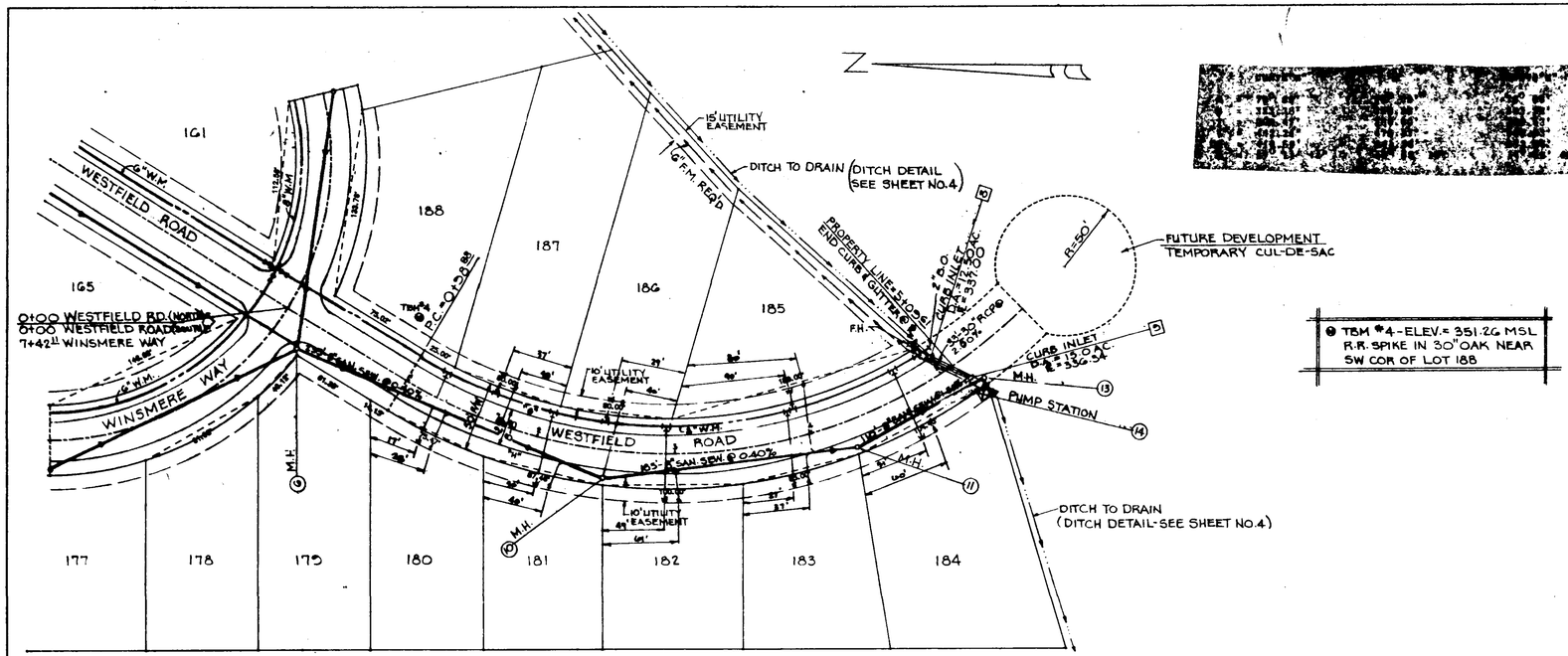
PLATE 1-SINGLE PLAN AND PROFILE

WESTFIELD OF DINSMOR-PLAN-PROFILE
HILLSIDE STREET, WESTFIELD ROAD

JANUARY 12, 1950,
REV. APRIL 5, 1950

PLAN · PROFILE - WESTFIELD ROAD

SCALE: 1"=50' (HORIZ.) / 1"=5' (VERT.)



● TBM #4 - ELEV.= 351.26 MSL
R.R. SPIKE IN 30" OAK NEAR SW COR OF LOT 188