

# STREET IMPROVEMENTS FOR FOURTH ADDITION TO CEDAR RIDGE

MT. VERNON — FROM THE WEST LINE LOT 10, BLOCK 3, FOURTH ADDITION TO CEDAR RIDGE AND THE WEST LINE LOT 8, BLOCK 1, HEDGECLIFF 3RD ADDITION TO THE WEST LINE WEBB ROAD.

STACEY — FROM THE NORTH LINE MT. VERNON TO THE SOUTH LINE SKINNER

**INDEX NO. 602177**

CITY OF WICHITA, KANSAS

MIKE E. LINDEBAK

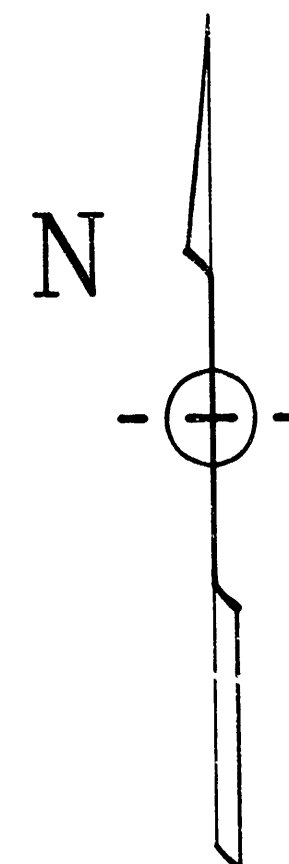
CITY ENGINEER

PROJECT NO.

472-76-245-81351-000-000-001

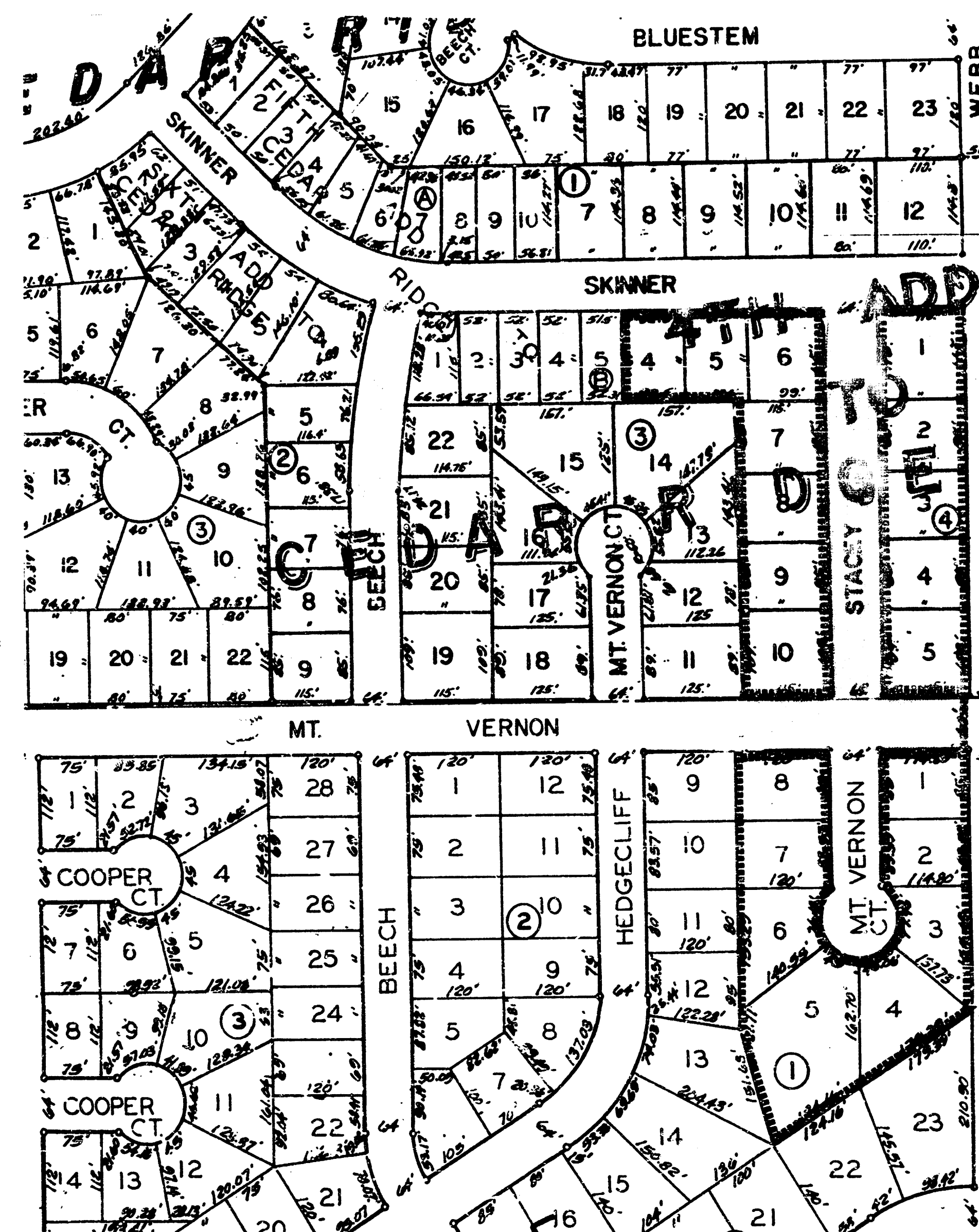
## INDEX

|                                          |      |
|------------------------------------------|------|
| Cover Sheet                              | 1    |
| 37' Pavement Detail                      | 2    |
| 35' Pavement Detail                      | 3    |
| Mt. Vernon                               | 4    |
| Stacey                                   | 5    |
| Storm W. Sewer Extension Plan            | 6    |
| Non-Standard Ditch Inlet Detail          | 7    |
| Modified Shallow Type 'B' Manhole Detail | 8    |
| Earthwork Cross Sections                 | 9-10 |



BENCH MARK — Elevation 182.48. City Standard Disc located 47' West and 44' North of 1/4 Section Corner at Webb Road and Mt. Vernon

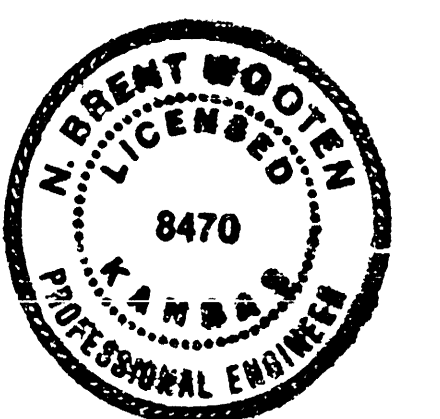
BENCH MARK — Elevation 173.50. "B" Cut in Top of Curb @ End of Return of Valley Gutter, East Side of Skinner & Beech.



BENEFIT DISTRICT

## GENERAL NOTES

1. The Contractor shall notify pipeline companies at least 24 hours in advance of any work being performed over and/or adjacent to pipelines.
2. Utility service lines, poles, valve boxes, meters, and etcetera are to be adjusted as necessary by others prior to construction unless the plans specifically call for their adjustment by the Contractor or unless the plans specifically identify a utility to be adjusted by its owner during construction. Existing utilities and their location, as shown on the plans, represent the best information obtainable for design. The contractor will be required to work around existing utilities within the right-of-way which do not conflict with proposed construction.
3. No more than 3 drives 20 feet in width, or equivalent combinations thereof, are to be constructed with this project.
4. The Contractor will be permitted to bid only one of the alternate types of subgrade treatment. The type bid by the successful bidder will be the type of subgrade treatment used to construct the project.
5. The Contractor shall be responsible for preserving property irons. The Contractor will be required to re-establish any property irons which are damaged or destroyed by his construction operations. Such irons shall be re-established by a licensed land surveyor in accordance with state laws.
6. The Contractor shall contact Cliff Nies of Nies Construction for verification and location of the drives to be constructed with this project.
7. The Contractor shall coordinate construction of this project with Project number 472-76-245-81352-000-000-001, the paving to the west so that the construction of both projects occurs simultaneously.



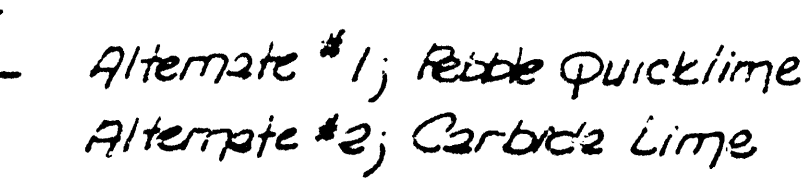
BOOKED: 1-11-89 MCG

AUG. 4, 1988

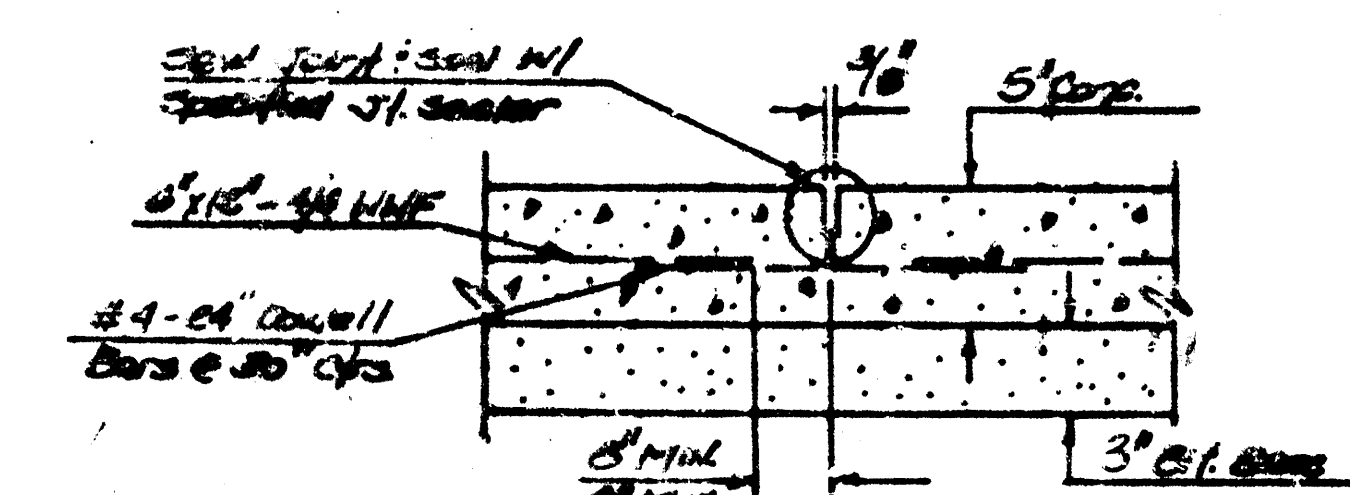
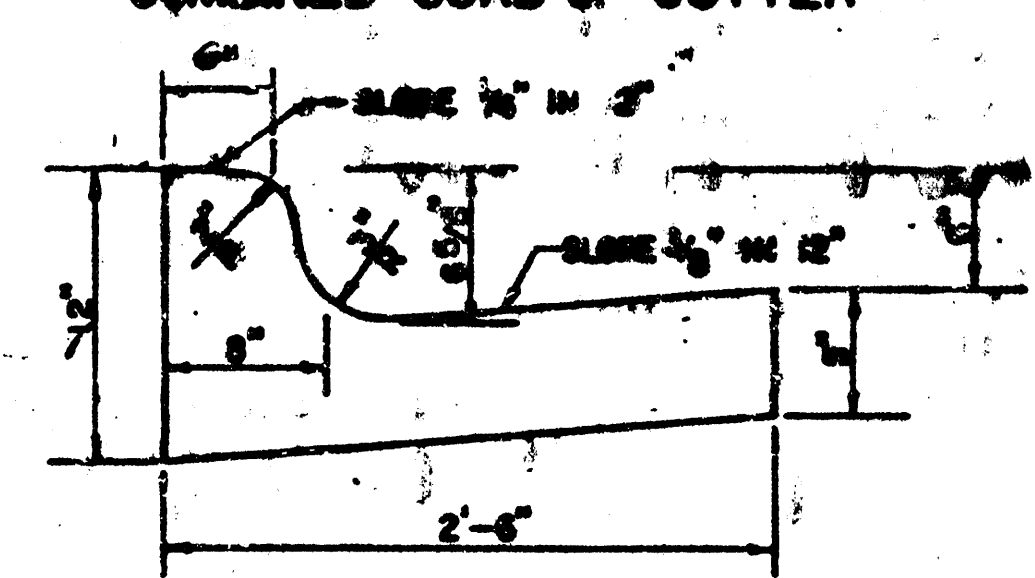
**BAUGHMAN COMPANY P. A.**  
SURVEYING & ENGINEERING  
316/262-7271 • 315 ELLIS • WICHITA, KANSAS 67211



## !



2



Hand-drawn cross-section diagram of a road structure. The diagram shows a 24-inch wide road surface with a 5-degree crown. A 6-inch thick layer is indicated on the left. A circular feature is shown with a 4-inch diameter. The top surface is labeled "Sewer Joint - Seal w/ Specified 5% Sealant". The bottom layer is labeled "24 inch".

Hand-drawn cross-section diagram of a roof assembly. The layers, from top to bottom, are:

- Hot Rolled Steel (1/8" thick)
- 1/4" Sloaker Roof
- Sawdust (16" thick)
- 1/2" (Compressed) Soil

The total height of the assembly is 30". A horizontal line at the bottom is labeled "Finish Surface".

- 1) THE ASPHALTIC CONCRETE PAVEMENT BETWEEN THE COMBINED CURB AND GUTTER SHALL BE PAID AS SQUARE YARDS OF 8" ASPHALTIC CONCRETE (8" BITUMINOUS BASE).
- 2) THE BITUMINOUS BASE UNDER AND BEHIND THE COMBINED CURB AND GUTTER SHALL BE PAID AS SQUARE YARDS OF 3" BITUMINOUS BASE.
- 3) A TACK COAT OF EMULSIFIED ASPHALT (SC-1H OR CS-1H) SHALL BE APPLIED AT AN APPLICATION RATE OF 0.05 GALLONS PER SQUARE YARD BETWEEN EACH LIFT OF ASPHALTIC MATERIAL.
- 4) BITUMINOUS BASE AND ASPHALTIC CONCRETE WEARING SURFACE SHALL BE PLACED WITH A LAUNDRY MACHINE HAVING AUTOMATIC CONTROLS FOR LINE AND GRADE.
- 5) CONSTRUCTION JOINTS IN EACH LIFT SHALL BE STAGGERED A MINIMUM DISTANCE OF ONE (1) FOOT FROM JOINTS IN PRECEDING LIFTS AND PLACED SO THAT A JOINT WILL BE CONSTRUCTED ON THE CENTERLINE OF THE TOP LIFT.
- 6) CONTRACTOR TO BID ONLY ONE SUBGRADE TREATMENT ALTERNATE WHEN ALTERNATES ARE PROVIDED IN THE PROPOSAL AND CONTRACT. THE ALTERNATE OFFER BY THE SUCCESSFUL BIDDER SHALL BE USED IN CONSTRUCTING THIS PROJECT.

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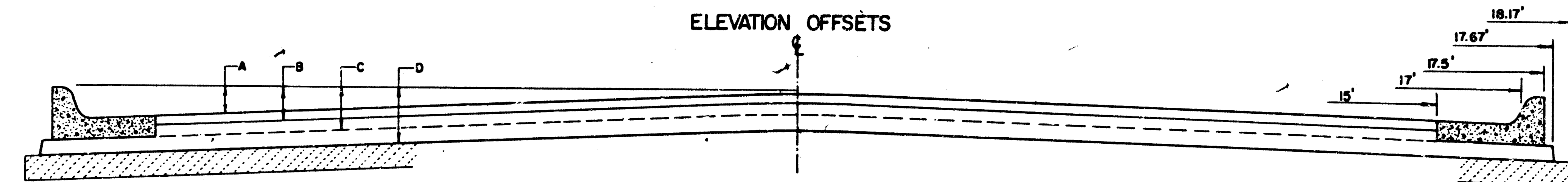
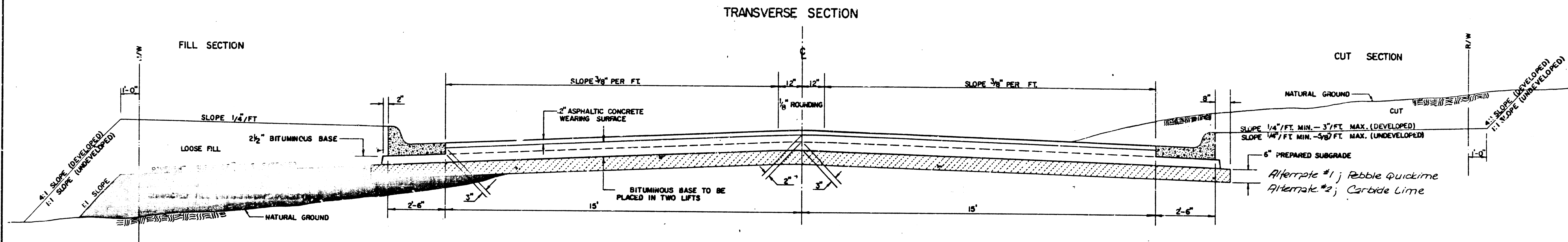
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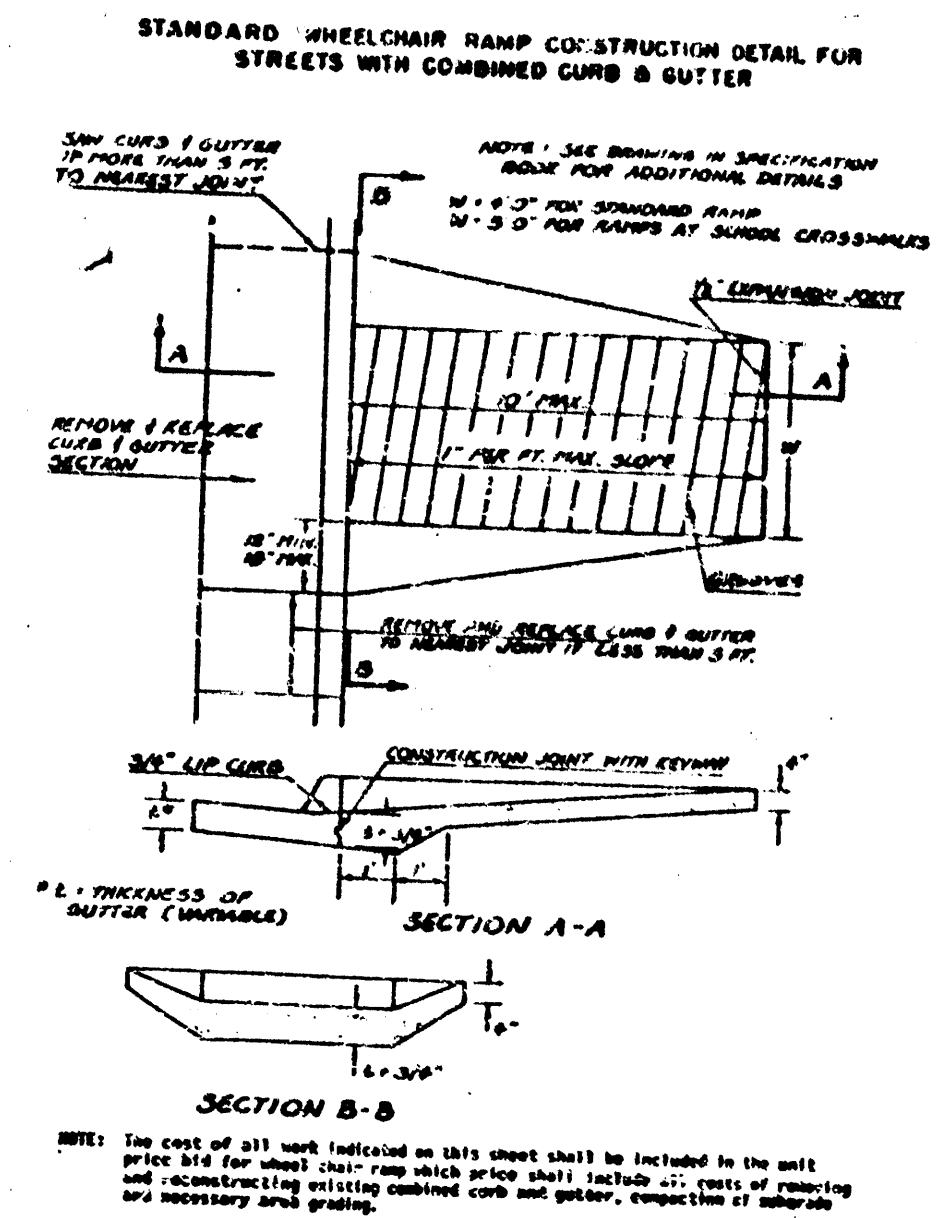
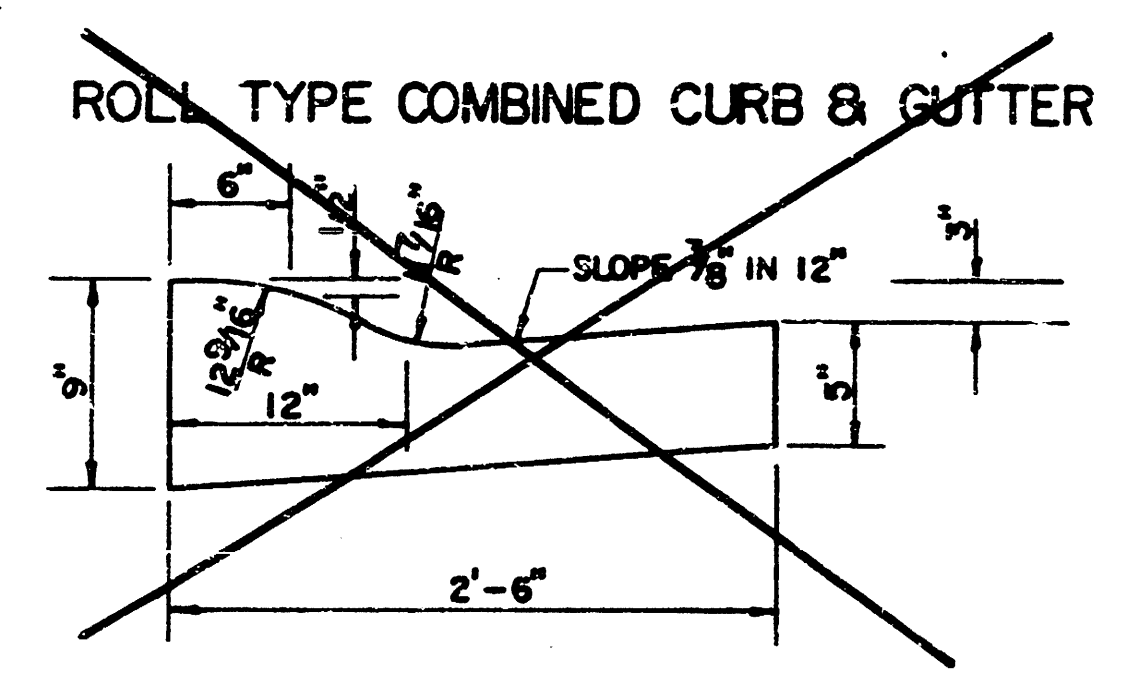
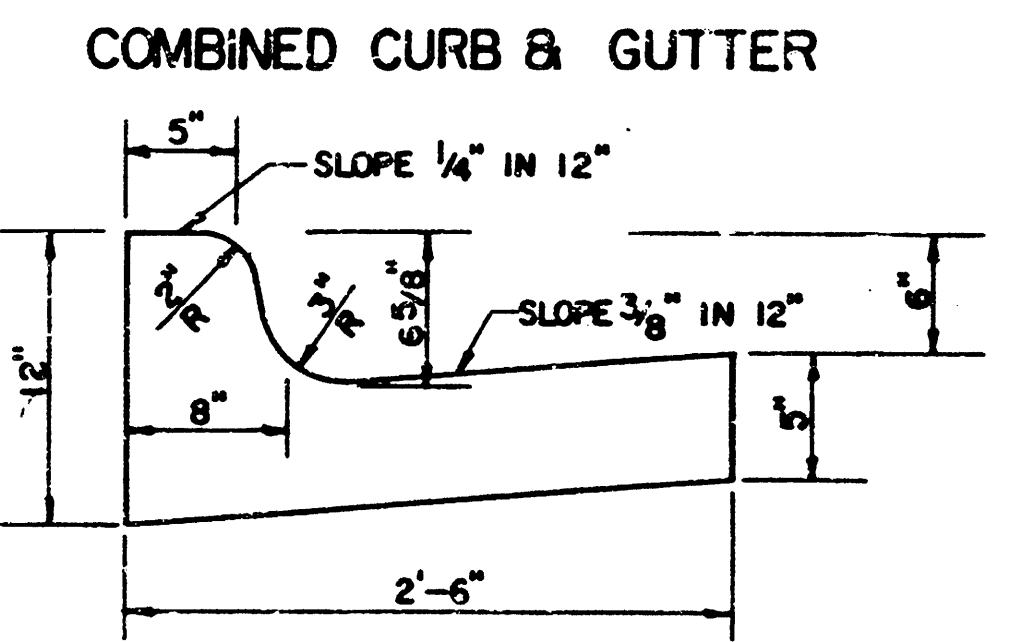
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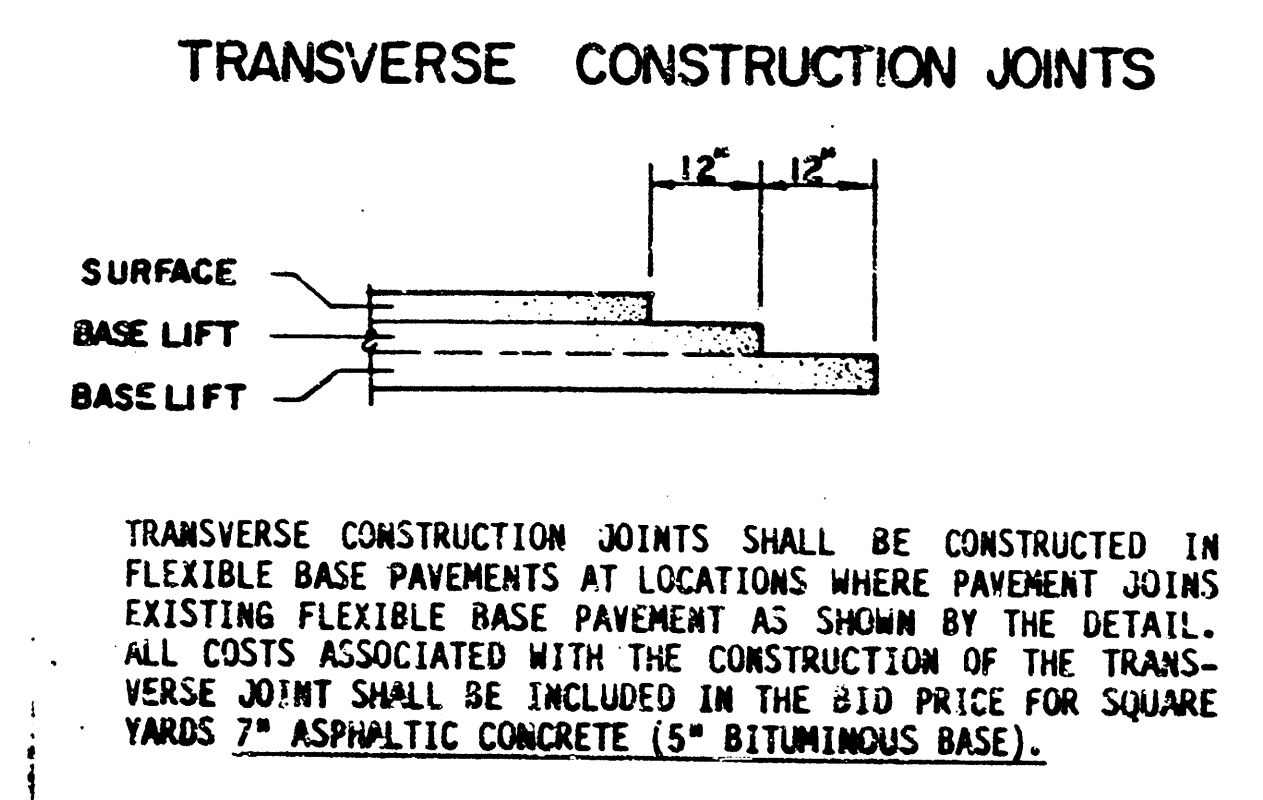
# TYPICAL 35' PAVEMENT DETAILS



|                                           | DISTANCE FROM CENTERLINE (LT. & RT.) |      |      |      |      |      |      |      |      |      |       |        |        |
|-------------------------------------------|--------------------------------------|------|------|------|------|------|------|------|------|------|-------|--------|--------|
|                                           | 0'                                   | 2'   | 4'   | 6'   | 8'   | 10'  | 12'  | 14'  | 15'  | 17'  | 17.5' | 17.67' | 18.17' |
| A: TOP OF CURBS TO TOP OF SURFACE LIFT    | 0.04                                 | 0.08 | 0.14 | 0.21 | 0.29 | 0.33 | 0.39 | 0.46 | 0.49 | —    | —     | —      | —      |
| B: TOP OF CURBS TO TOP OF UPPER BASE LIFT | 0.21                                 | 0.25 | 0.31 | 0.37 | 0.45 | 0.50 | 0.56 | 0.62 | 0.65 | —    | —     | —      | —      |
| C: TOP OF CURBS TO TOP OF LOWER BASE LIFT | 0.37                                 | 0.43 | 0.50 | 0.57 | 0.67 | 0.72 | 0.79 | 0.87 | 0.90 | 0.96 | 1.00  | 1.00   | —      |
| D: TOP OF CURBS TO TOP OF SUBGRADE        | 0.62                                 | 0.67 | 0.74 | 0.81 | 0.90 | 0.95 | 1.02 | 1.08 | 1.12 | 1.19 | 1.21  | 1.21   | 1.23   |



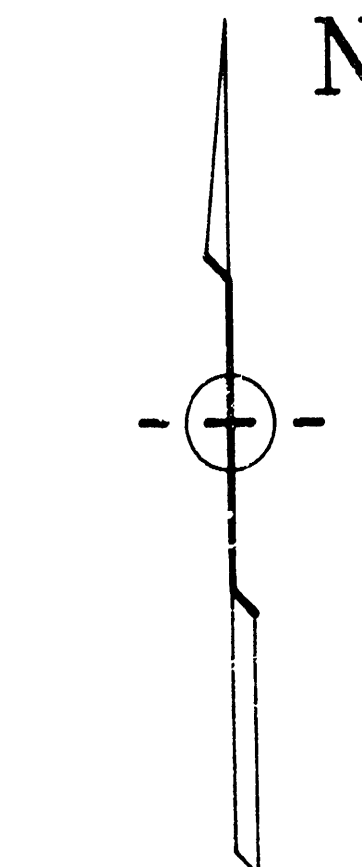
- ### GENERAL NOTES
- 1) THE ASPHALTIC CONCRETE PAVEMENT BETWEEN THE COMBINED CURB AND GUTTER SHALL BE PAID AS SQUARE YARDS OF 7" ASPHALTIC CONCRETE (2" BITUMINOUS BASE).
  - 2) THE BITUMINOUS BASE UNDER AND BEHIND THE COMBINED CURB AND GUTTER SHALL BE PAID AS SQUARE YARDS OF 2 1/2" BITUMINOUS BASE.
  - 3) A TACK COAT OF EMULSIFIED ASPHALT (SC-1H OR CSS-1H) SHALL BE APPLIED AT AN APPROXIMATE RATE OF 0.05 GALLONS PER SQUARE YARD BETWEEN EACH LIFT OF ASPHALTIC MATERIAL.
  - 4) BITUMINOUS BASE AND ASPHALTIC CONCRETE WEARING SURFACE SHALL BE PLACED WITH A LAYDOWN MACHINE HAVING AUTOMATIC CONTROLS FOR LINE AND GRADE.
  - 5) CONSTRUCTION JOINTS IN EACH LIFT SHALL BE STAGGERED A MINIMUM DISTANCE OF ONE (1) FOOT FROM JOINTS IN PRECEDING LIFTS AND PLACED SO THAT A JOINT WILL BE CONSTRUCTED ON THE CENTERLINE OF THE TOP LIFT.
  - 6) CONTRACTOR TO BID ONLY ONE SUBGRADE TREATMENT ALTERNATE WHEN ALTERNATES ARE PROVIDED IN THE PROPOSAL AND CONTRACT. THE ALTERNATE CHOSEN BY THE SUCCESSFUL BIDDER SHALL BE USED IN CONSTRUCTING THIS PROJECT.





**BENCHMARK:**  
City Disc Webb Rd. & Mt. Vernon  
47' W., 44' N. of 1/4 Sec. Cor.  
Elev. = 132.45

**BENCHMARK:** '0' CUL in Top of Curb  
in Southeast Return & Mt. Vernon & Booth  
Elev. = 173.70 City Datum



SCALE: 1" = 20'

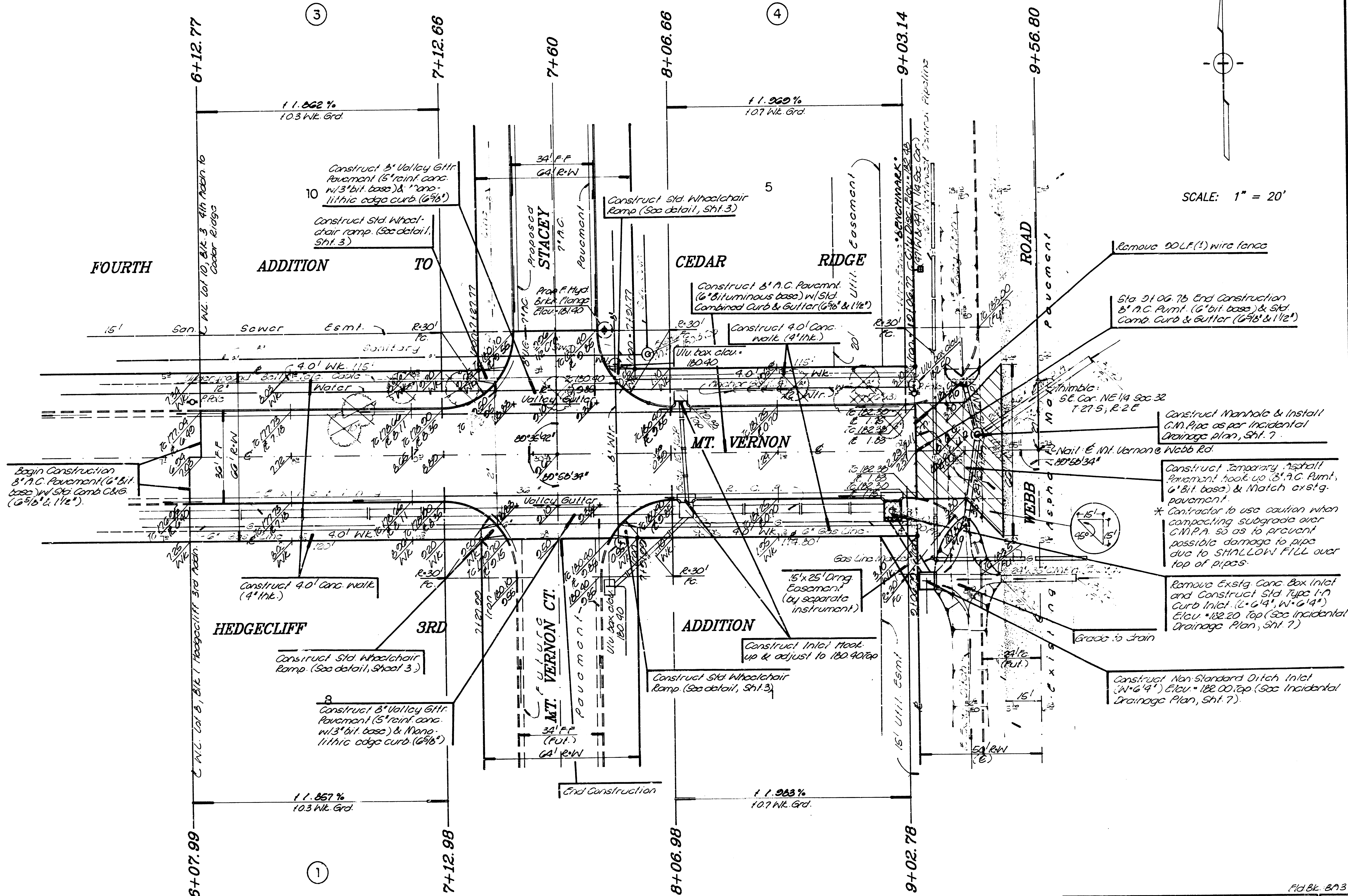
**INTERSECTION QUANTITIES**

|       |                                                      |
|-------|------------------------------------------------------|
| 334.2 | SY Concrete Pavement                                 |
| 157.1 | SY Asphaltic Conc. Pavement (6" Bituminous Base)     |
|       | LF Combined Curb & Gutter                            |
|       | LF Monolithic Edge Curb                              |
|       | SP 4" Wheelchair Ramp                                |
|       | SP 4" Walk                                           |
|       | CY Excavation                                        |
|       | CY Compacted Fill                                    |
|       | Lbs Reinforcing Steel                                |
| 445.0 | SY Manipulation                                      |
| 301.0 | Tons Lime or Cement                                  |
|       | SY Valley Gtr. 5" Concrete & 3" Asphaltic Conc. Base |

**EARTHWORK QUANTITIES**

|                       |        |    |                |      |    |
|-----------------------|--------|----|----------------|------|----|
| Excavation            | 1132.7 | cy | Compacted Fill | 64.0 | cy |
| + 10%                 | 113.3  |    | + 10%          | 6.4  |    |
| Total                 | 1246.0 | cy | Total          | 70.4 | cy |
| Subgrade Manipulation | 3566.0 | sy |                |      |    |
| Borrow Material       | 0      | cy |                |      |    |

Note:  
Trass to be removed marked thus:

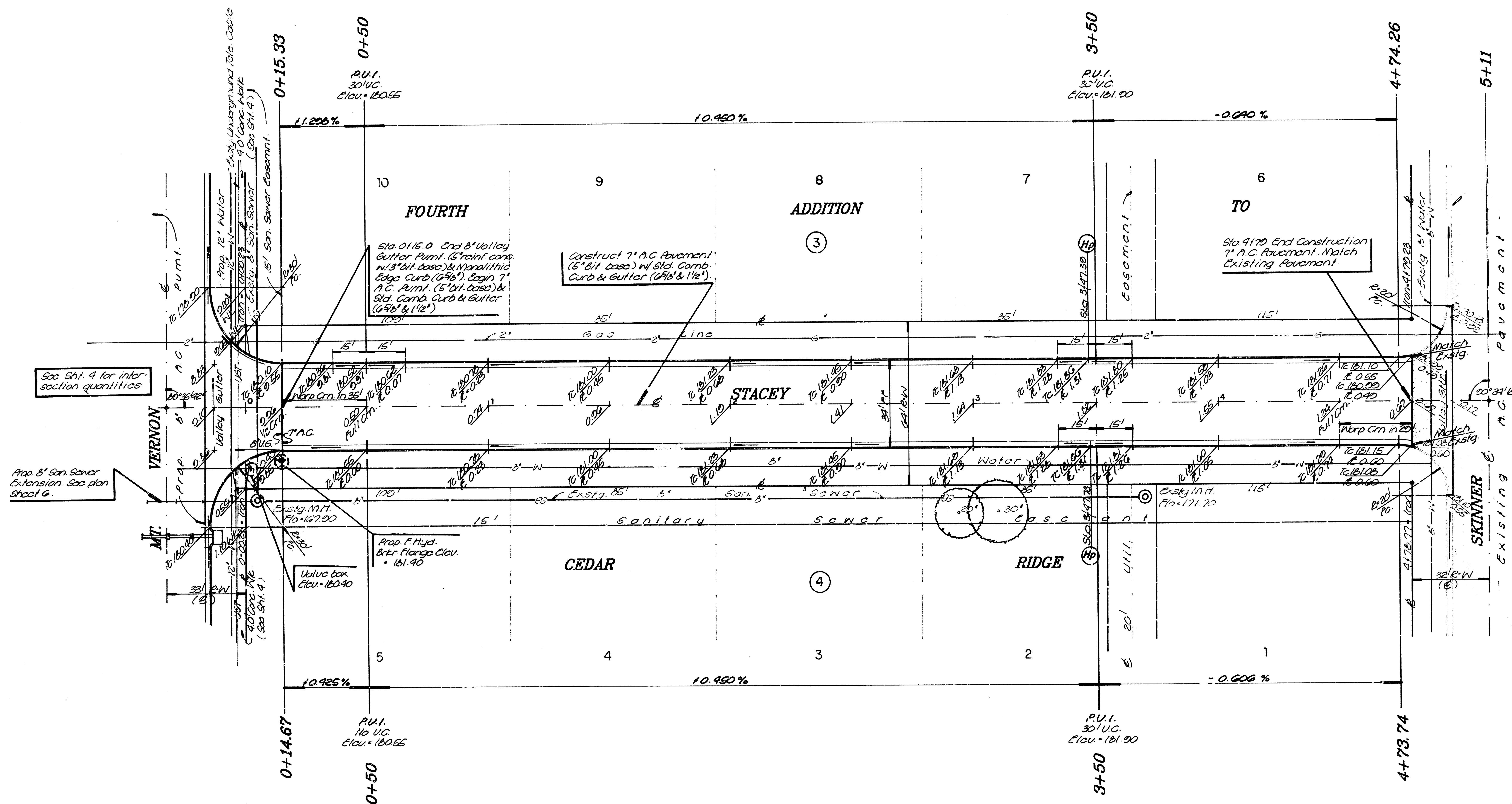
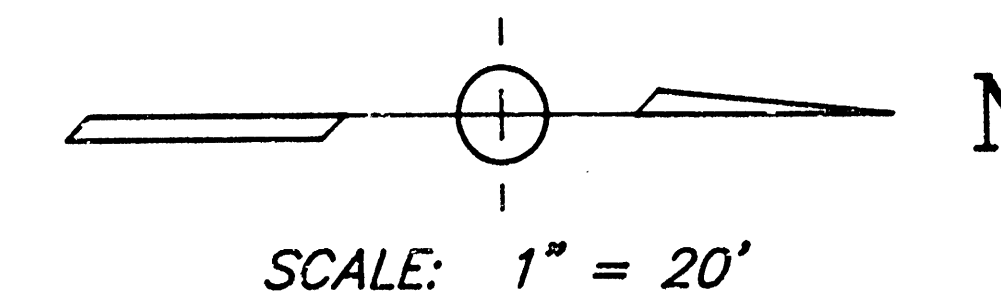


File No. 873

| MT. VERNON                                       |       |          |      |          |
|--------------------------------------------------|-------|----------|------|----------|
| PROJECT NO. 472-76-245-81351-000-000-001         |       |          |      |          |
| BAUGHMAN COMPANY P. A.                           |       |          |      |          |
| SURVEYING & ENGINEERING                          |       |          |      |          |
| 316/262-7271 • 315 ELLIS • WICHITA, KANSAS 67211 |       |          |      |          |
| DESIGN                                           | DRAWN | APPROVED | DATE | SCALE    |
|                                                  |       |          |      | 1" = 20' |
| SHEET 4 OF 10                                    |       |          |      | REV.     |



**BENCHMARK:** 'd' Cut in Top  
of Curb in Southeast Return  
@ Mt Vernon & Beach  
Elev. = 173.76



|                                                                                       |                                                         |          |      |                   |
|---------------------------------------------------------------------------------------|---------------------------------------------------------|----------|------|-------------------|
| <h1 style="margin: 0;">STACEY</h1>                                                    |                                                         |          |      |                   |
| PROJECT NO. 472-76-245-81351-000-000-001                                              |                                                         |          |      |                   |
|  | <h2 style="margin: 0;">BAUGHMAN COMPANY P. A.</h2>      |          |      |                   |
|                                                                                       | <h3 style="margin: 0;">SURVEYING &amp; ENGINEERING</h3> |          |      |                   |
|                                                                                       | 316/262-7271 • 315 ELLIS • WICHITA, KANSAS 67211        |          |      |                   |
| DESIGN                                                                                | DRAWN<br><i>D.M.H.</i>                                  | APPROVED | DATE | SCALE<br>1" = 20' |

RE

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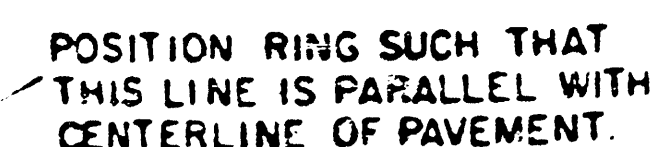
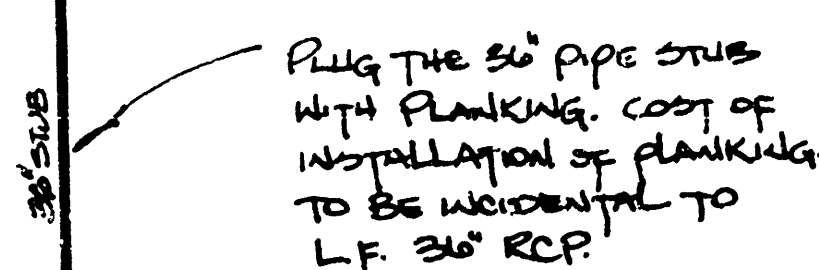
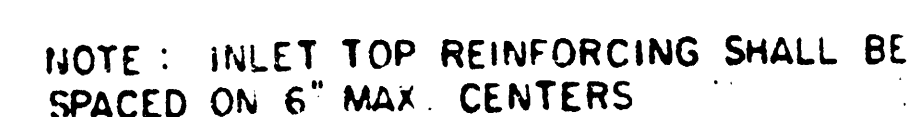
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PLAN.

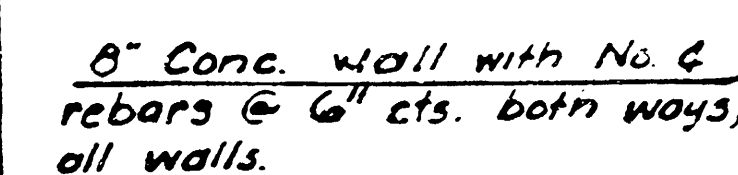
BENDING DIAGRAM

\* NOTE: C<sub>2</sub> BARS TO BE PLACED APPROX 2' BELOW TOP OF WLET COVER

NOTE: CONTRACTOR SHALL HAVE THE OPTION OF CONSTRUCTING 8" BRICK MASONRY WALLS BETWEEN THE CONCRETE INLET BASE AND TOP ON THIS INLET WHEN W = 4'4" AND H = 6'0" OR LESS.

~~ADDITIONAL CUTS AND BUTTER CONSTRUCTION NECESSARY TO CONNECT SE  
TANKS TO MAINWAY WILL BE PAID FOR BY THE OWNER. SEE ATTACH  
MENT FOR DETAILS.~~

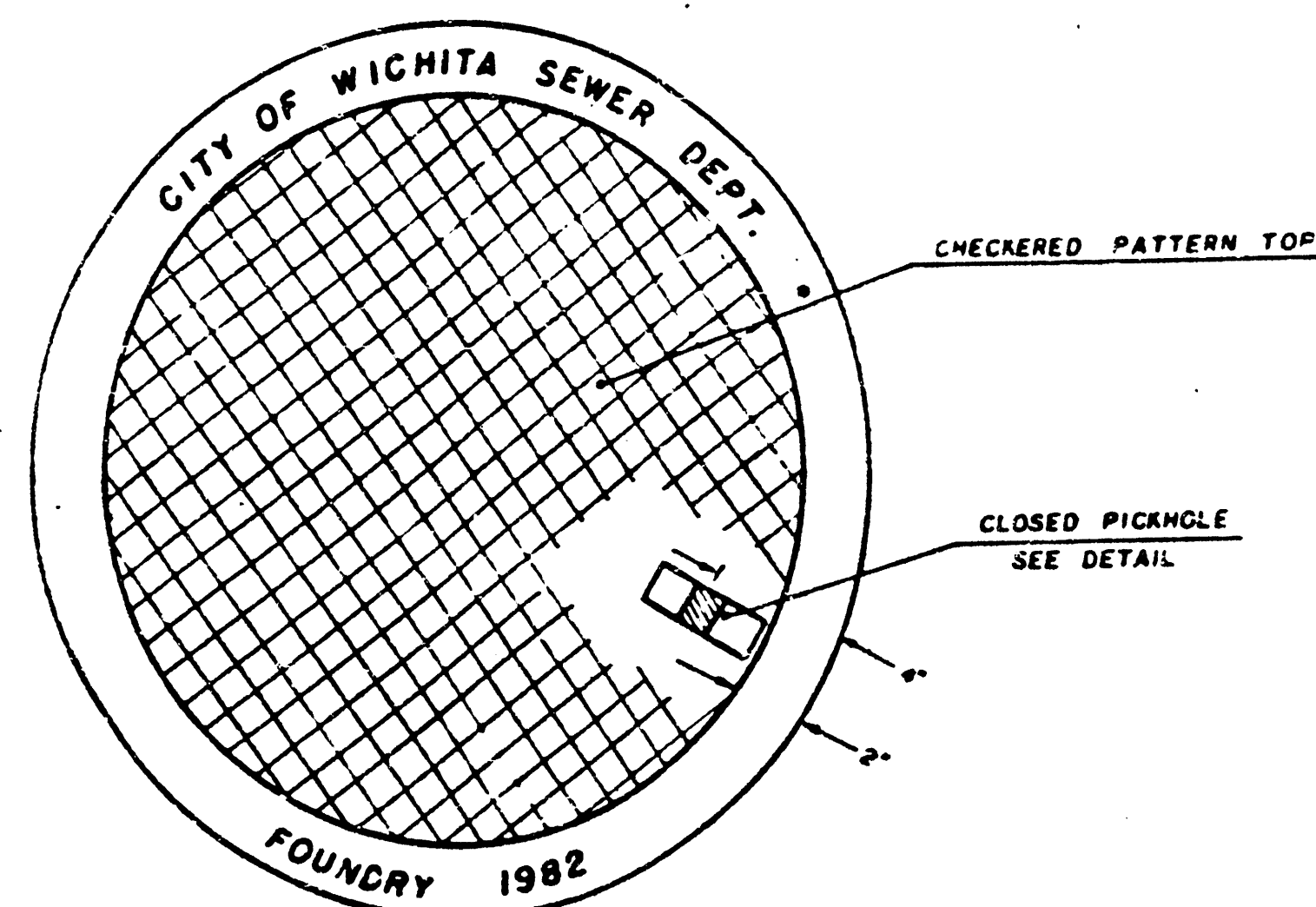
INLET INVERT SHALL BE SHAPED WITH 8 SACK SAND MIX CONCRETE TO  
CREATE FLOW CHANNELS AND TO INCREASE HYDRAULIC EFFICIENCY SUCH  
THAT THE INLET WILL BE SELF CLEANING BETWEEN ALL INLET AND/OR  
OUTLET PIPES.

 $\frac{7}{11}$



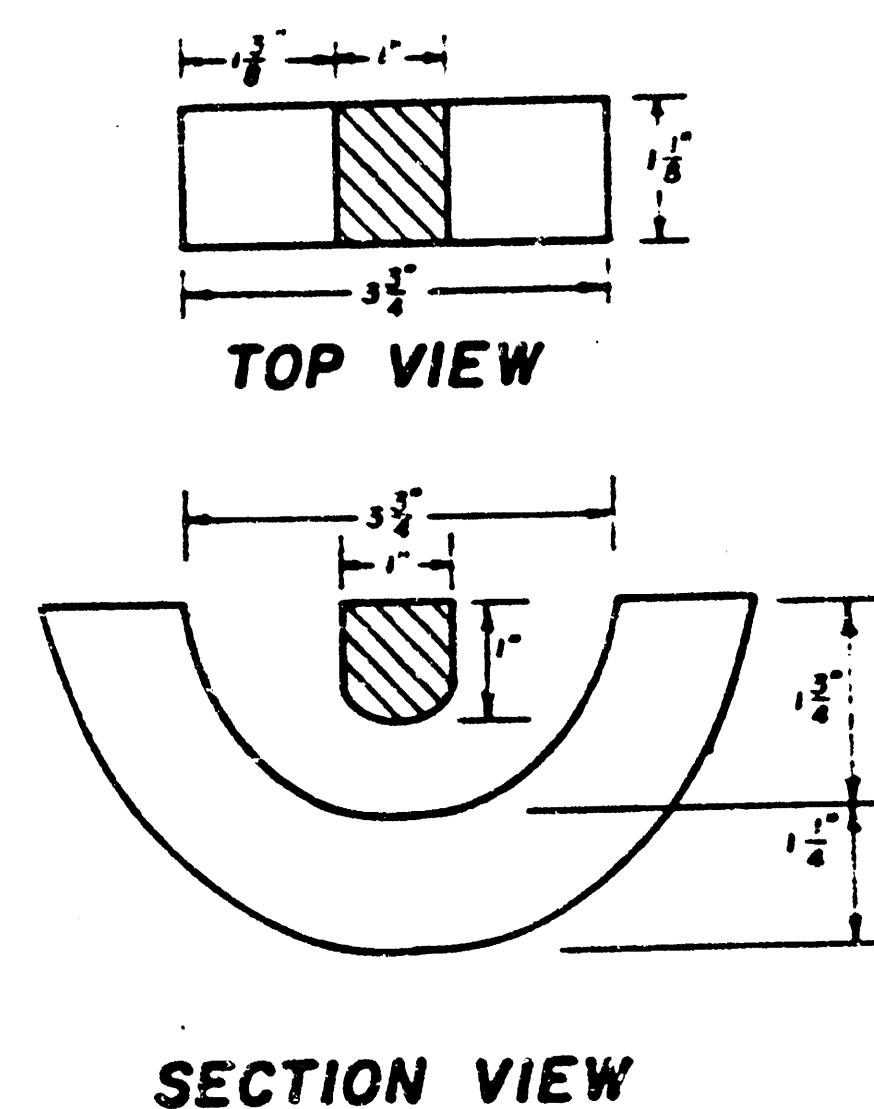
# MANHOLE COVER

Weight: 180 Lbs.

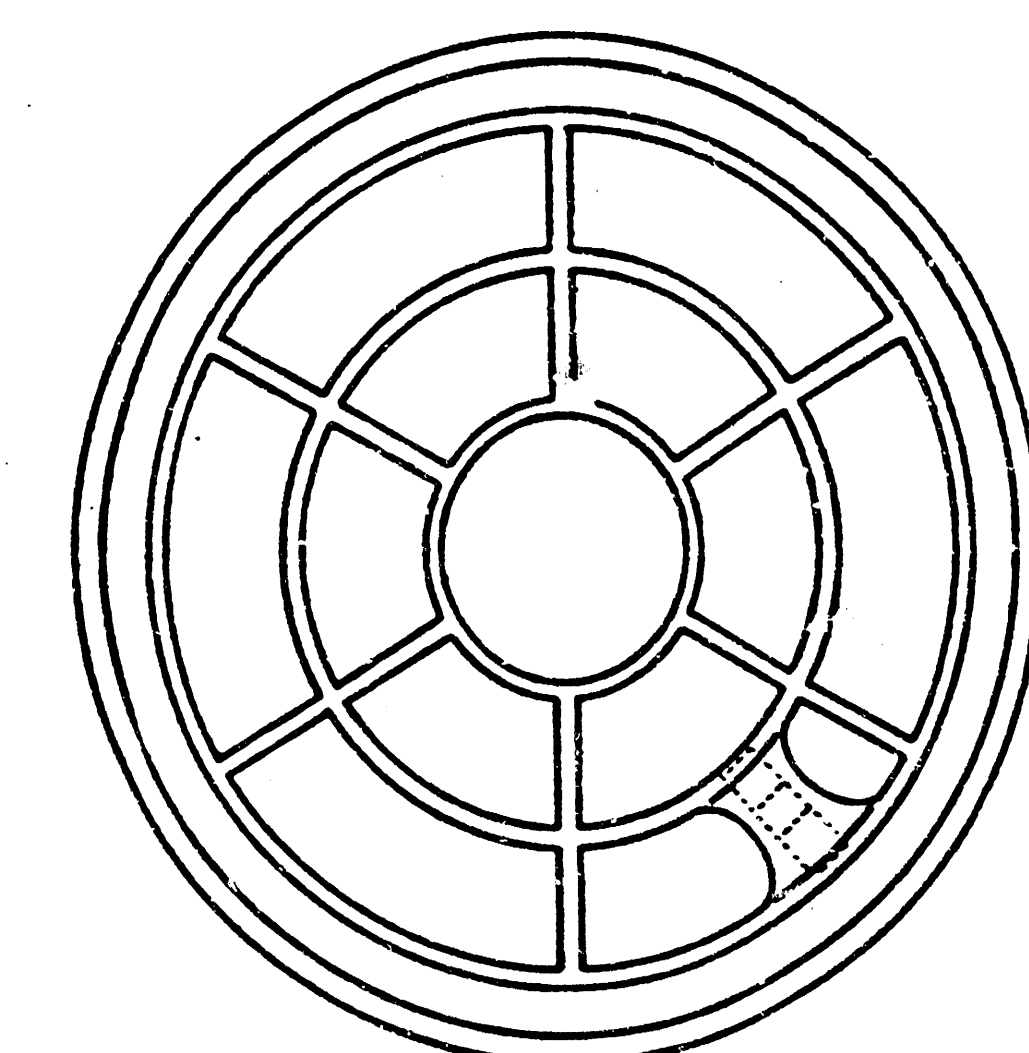


TOP VIEW

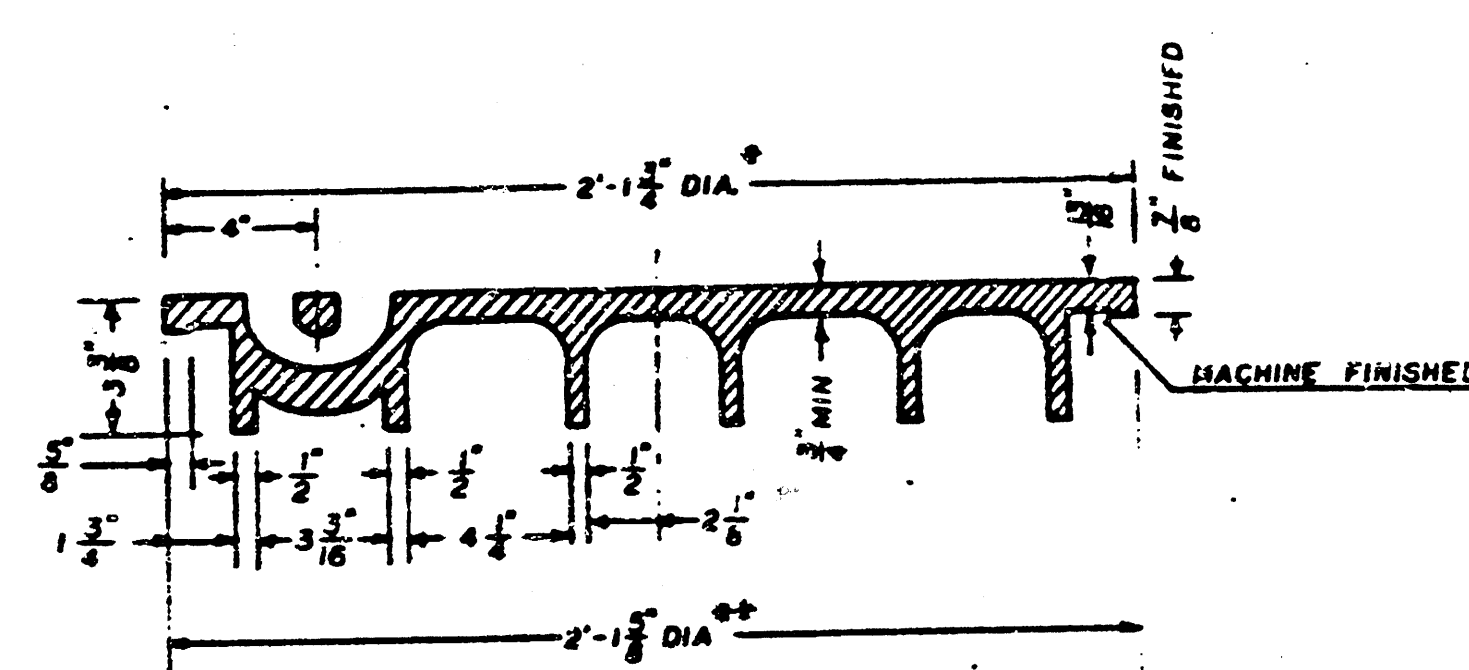
## PICKHOLE DETAIL



SECTION VIEW

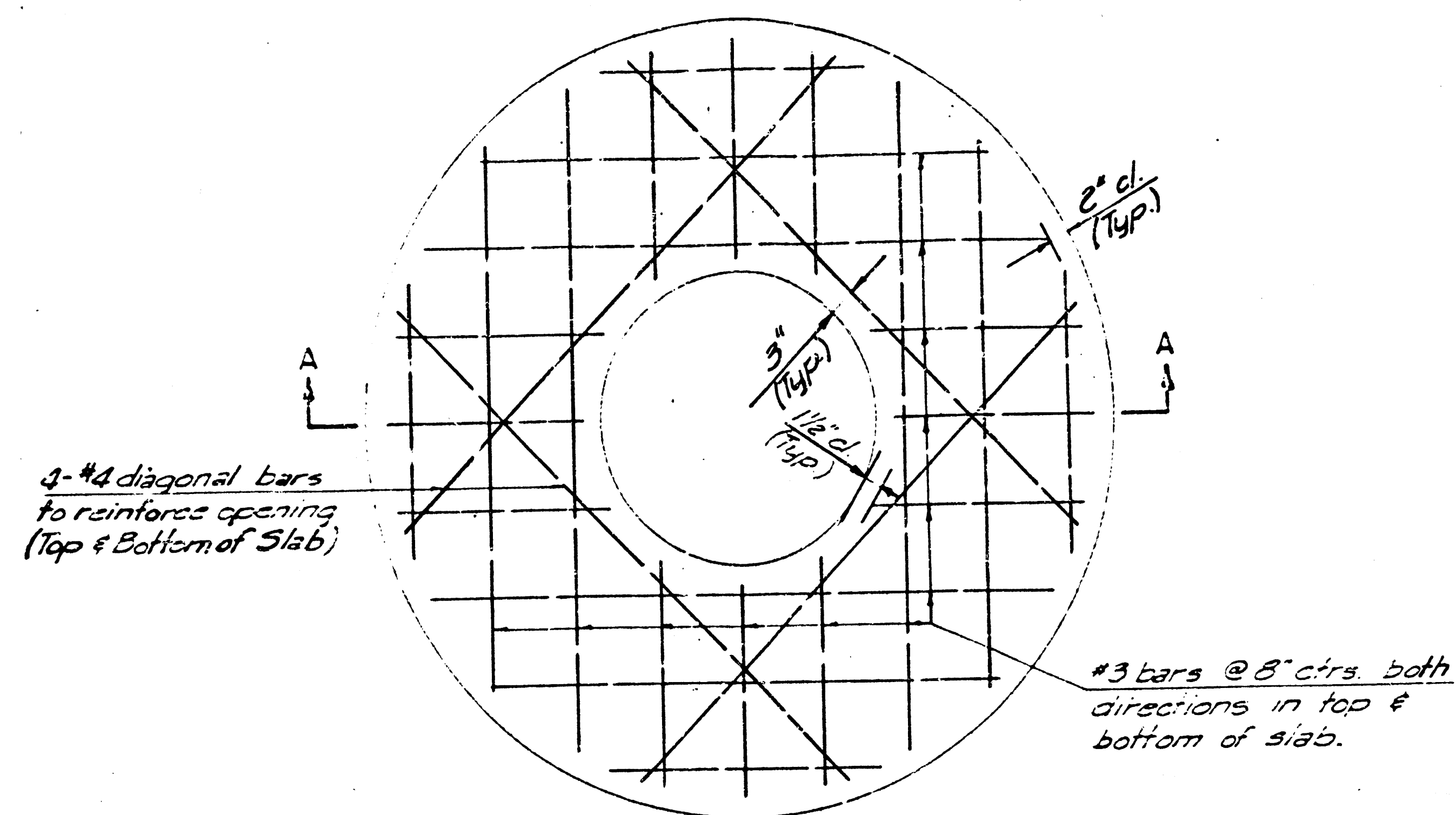


BOTTOM VIEW

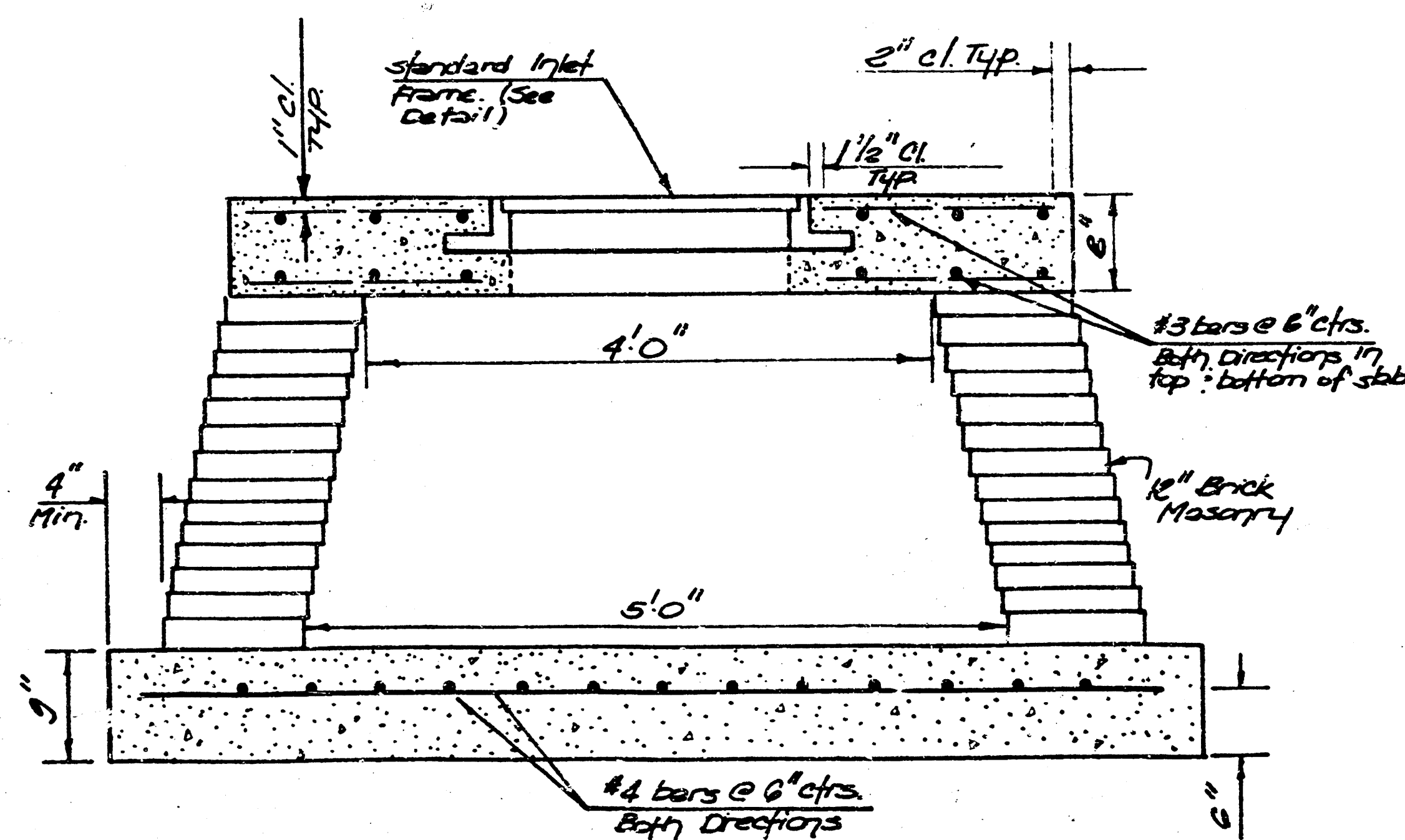


SECTION VIEW

\* OUTSIDE DIA. TOP OF COVER  
\*\* OUTSIDE DIA. BOTTOM OF COVER



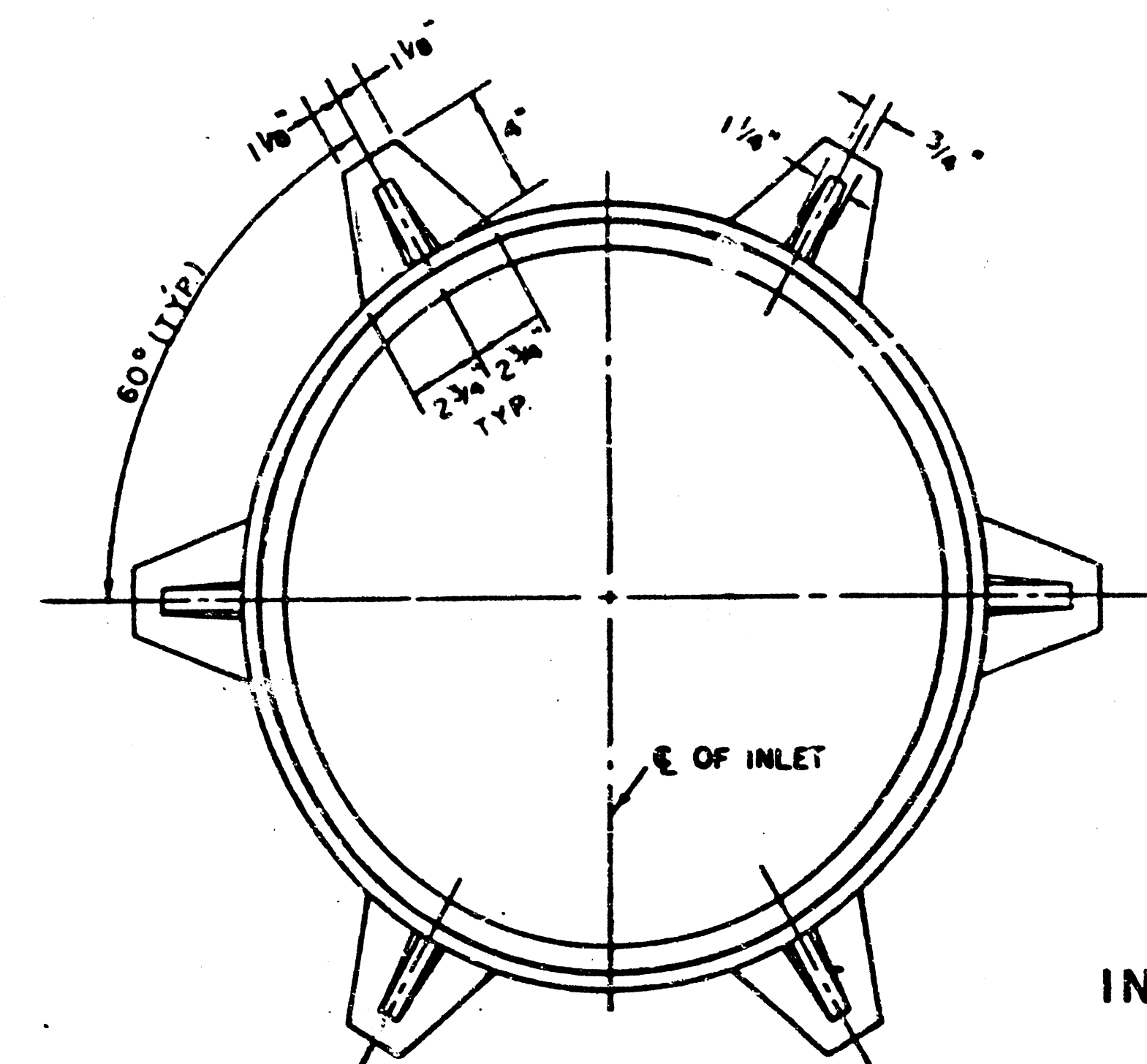
PLAN



SECTION A-A

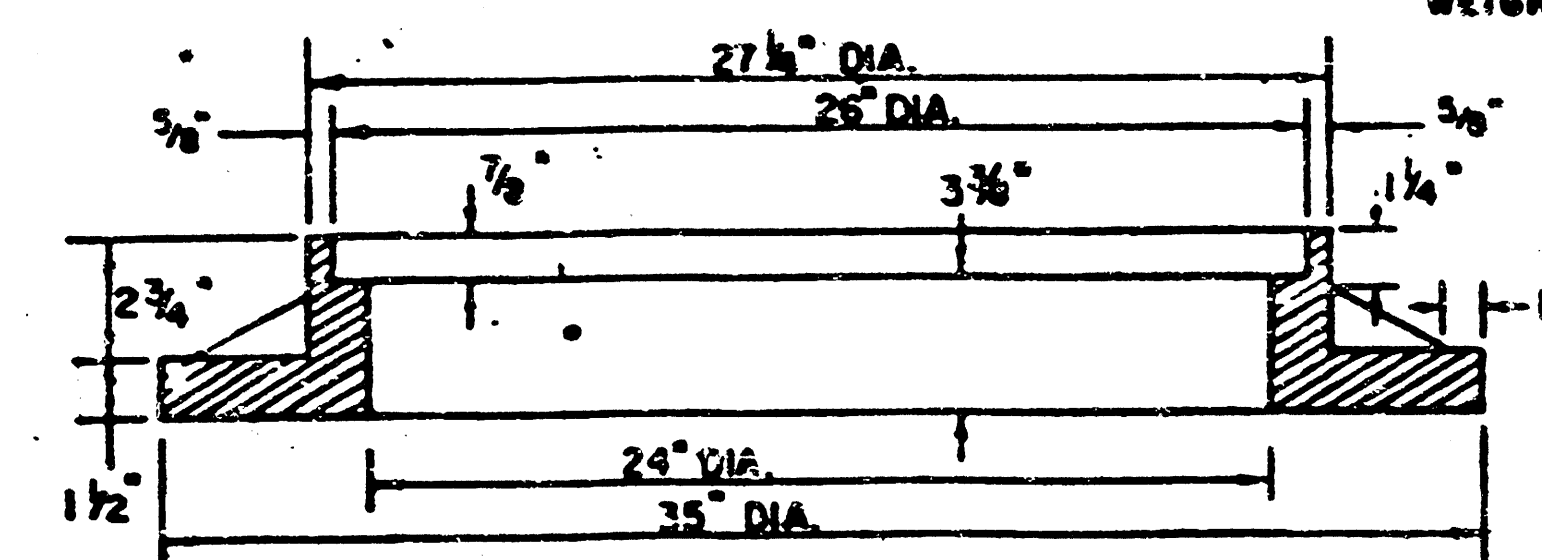
## GENERAL NOTES

1. MANHOLE CASTINGS SHALL BE MANUFACTURED USING GOOD QUALITY GRAY IRON CONFORMING TO CLASS 30 OF A.S.T.M. DESIGNATION A-48. DIMENSIONS AND WEIGHTS SHOWN ON THE DETAILED DRAWINGS SHALL BE CONSIDERED AS MINIMUM REQUIREMENTS AND ANY DEVIATIONS FROM THE DIMENSIONS SHOWN MUST BE SPECIFICALLY APPROVED. THE FINISHED CASTINGS SHALL BE OF UNIFORM QUALITY, FREE FROM BLOWHOLES, POROSITY, HARD SPOTS, SHRINKAGE DISTORTIONS OR OTHER DEFECTS.
2. MANHOLE CASTINGS SHALL BE COATED WITH AN ASPHALT PAINT RESULTING IN A SMOOTH, TOUGH AND TENACIOUS COATING WHICH IS NOT BRITTLE OR TACKY.
3. MANHOLE CASTINGS SHALL BE MANUFACTURED SUCH THAT A COVER MANUFACTURED BY ANY ONE FOUNDRY WILL FIT INTERCHANGEABLY INTO A FRAME MANUFACTURED BY ANOTHER FOUNDRY AND STILL MEET ALLOWABLE CLEARANCES AND NON-ROCKING REQUIREMENTS. THIS WILL REQUIRE MANUFACTURING OF THE MATCHING FACES ON THE COVER AND THE FRAME TO CLOSE TOLERANCES.
4. THE OUTSIDE CIRCUMFERENCE OF THE VERTICAL FACE OF THE COVER AND THE INSIDE CIRCUMFERENCE OF THE VERTICAL FACE IN ITS FRAME RECESS SHALL BE MANUFACTURED TO TOLERANCES SUCH THAT THE CLEARANCE BETWEEN THE COVER AND FRAME WILL NOT EXCEED 1/8" AT ANY POINT AROUND THE CIRCUMFERENCE OF THE COVER. THE SEATING SURFACES BETWEEN THE COVER AND FRAME SHALL BE MACHINED SUCH THAT THESE SURFACES SHALL MAKE FULL CONTACT FOR THEIR FULL CIRCUMFERENCE TO PRECLUDE THE COVER FROM ROCKING IN THE FRAME.
5. THE MANHOLE FRAME AND COVER SHALL BE MARKED WITH LETTERING INDICATING THE NAME OF THE MANUFACTURER AND THE YEAR WHEN THE COVER OR FRAME WAS CAST. THE COVER SHALL BE FURTHER IDENTIFIED WITH REGARDS TO OWNERSHIP USING LETTERS AT LEAST 1" IN HEIGHT. THIS IDENTIFICATION SHALL BE "CITY OF WICHITA SEWER DEPARTMENT". THE WORD DEPARTMENT MAY BE ABBREVIATED. THE TEXTURE OF THE TOP SURFACE OF THE COVER SHALL BE MANUFACTURED IN A CHECKERED PATTERN DESIGN AS INDICATED ON THE DRAWINGS. SMOOTH BLOCKOUTS SHALL BE UTILIZED TO HIGHLIGHT THE LETTERING ON THE COVER SURFACE. THE TOTAL AREA OF SMOOTH SURFACE BLOCKOUT SHALL NOT EXCEED THE AREA AS INDICATED ON THE DRAWING. POSITIONING OF SMOOTH BLOCKOUTS AND LETTERING MAY VARY FROM THAT SHOWN ON THE DETAILED DRAWING.



INLET FRAME

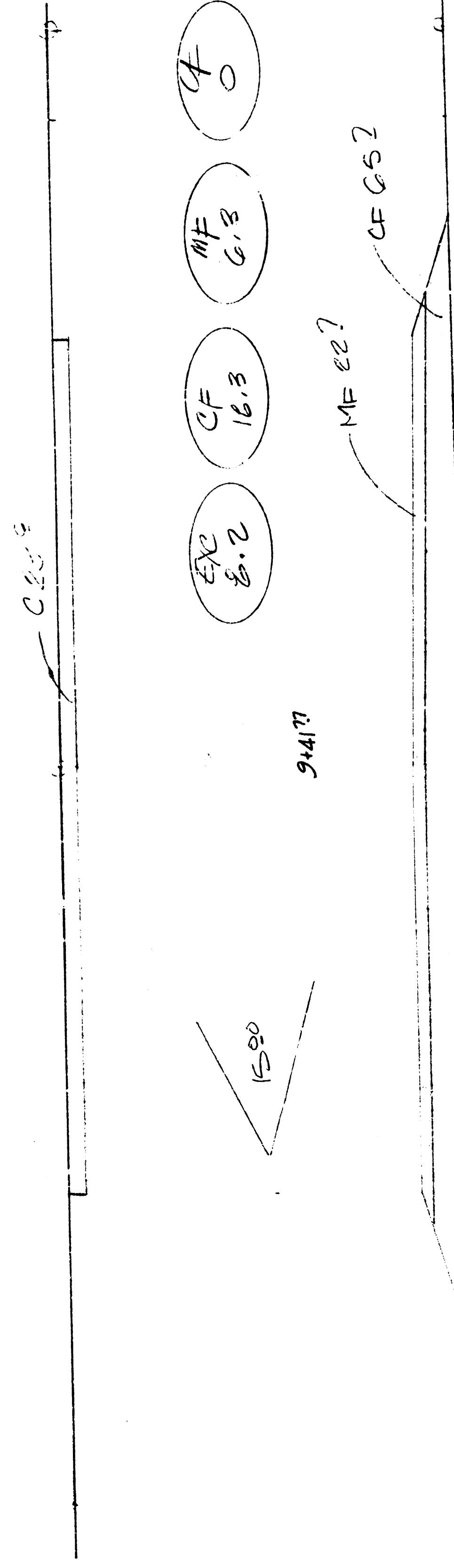
WEIGHT = 180 LBS.



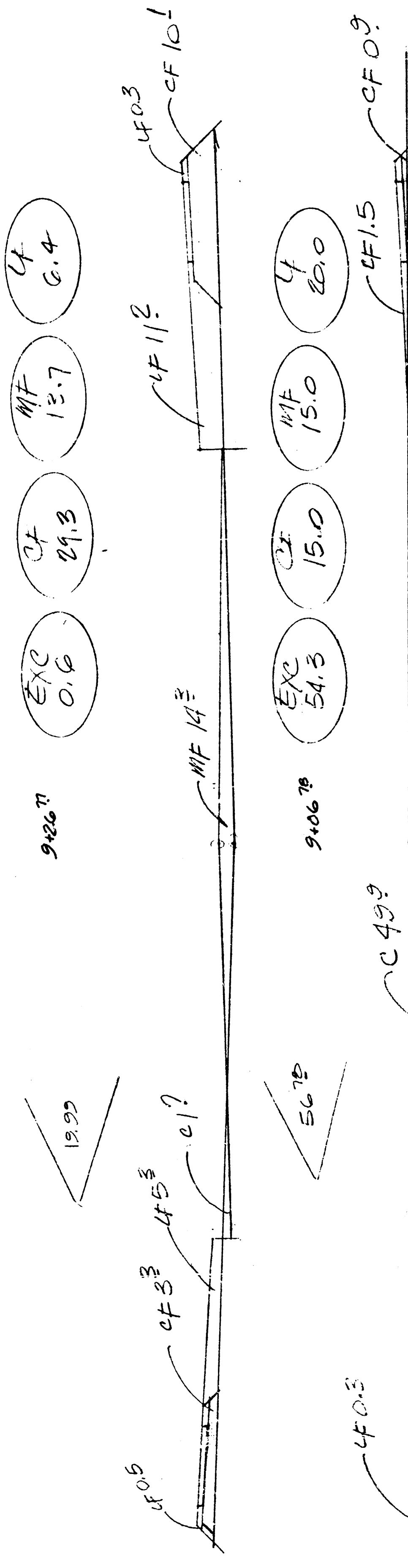
SEE CITY OF WICHITA STANDARD MANHOLE FRAME AND COVER DETAIL SHEET FOR COVER DETAILS TO BE USED WITH INLET FRAME.



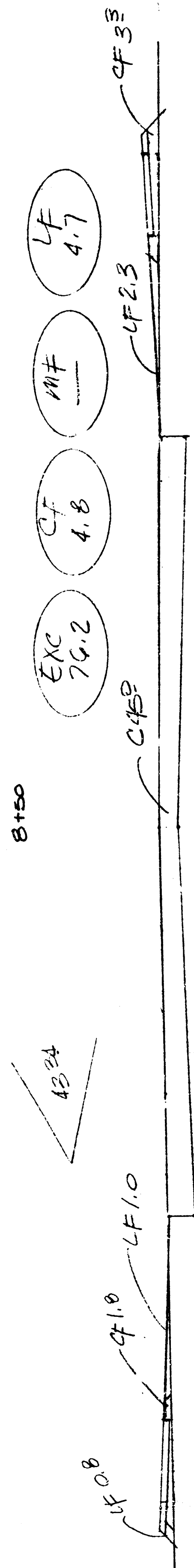
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180



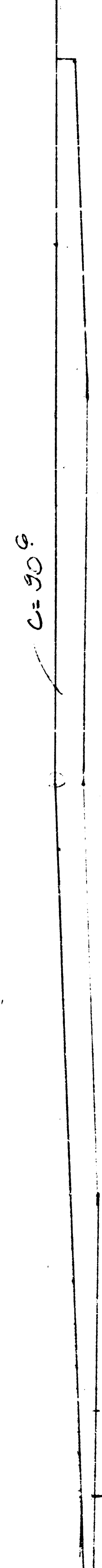
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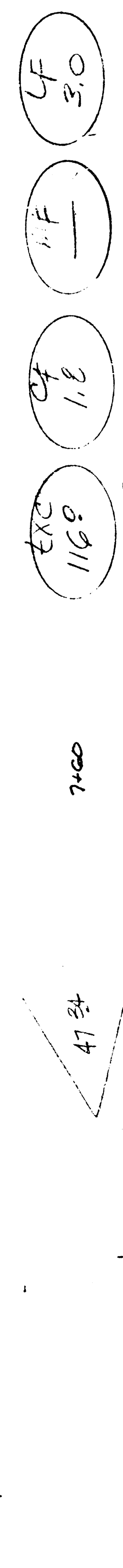
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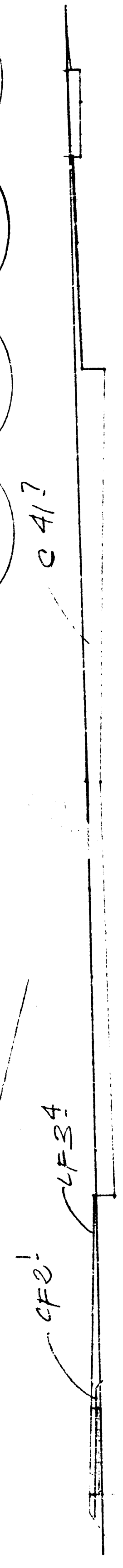
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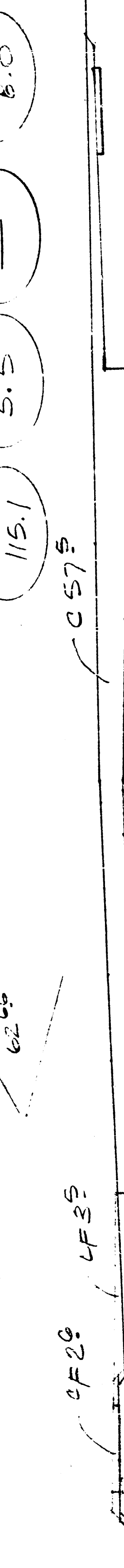
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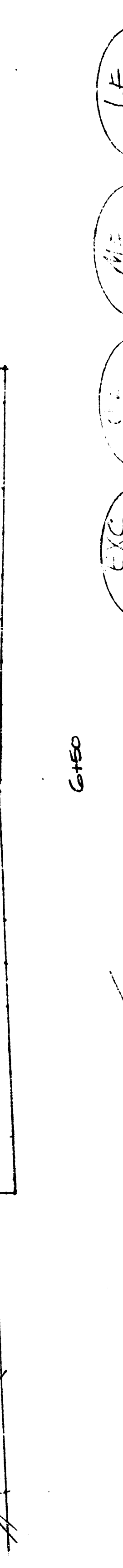
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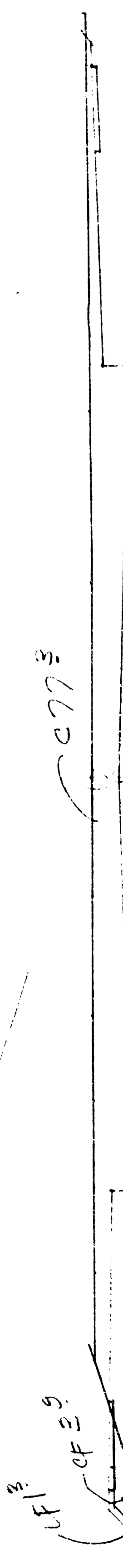
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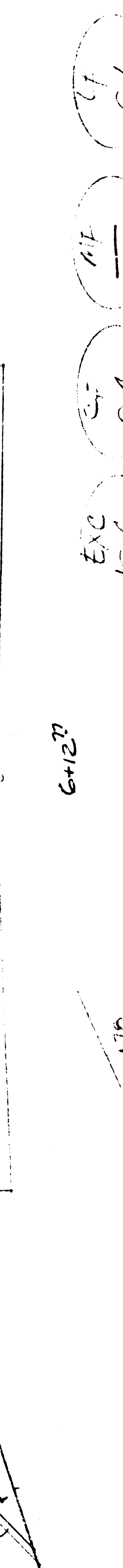
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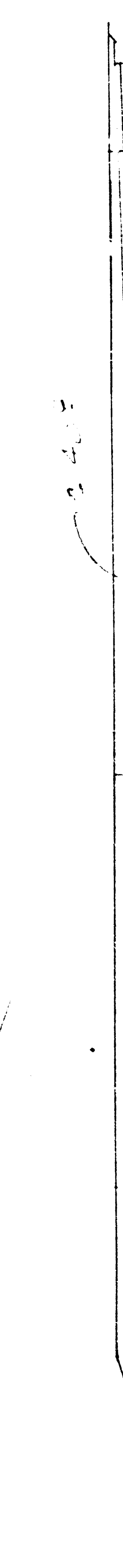
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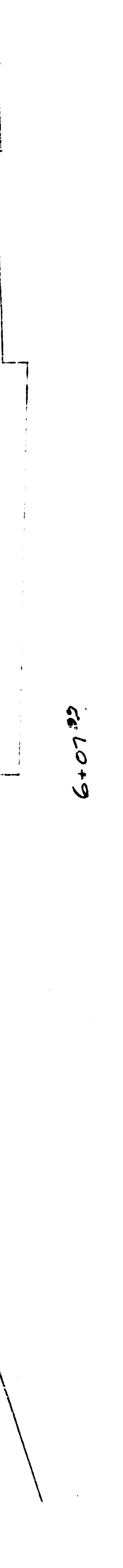
175



180



175



Final Totals

|     |       |    |
|-----|-------|----|
| Exc | 590.9 | cy |
| CF  | 84.0  | cy |
| MF  | 5.0   | cy |
| LF  | 4.0   | cy |

EARTHWORK SECTIONS  
MT. VERNON

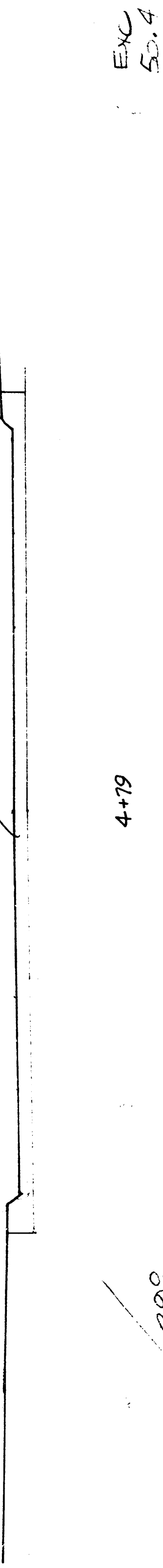
PROJECT NO. 472-76-245-81351-000-000-001

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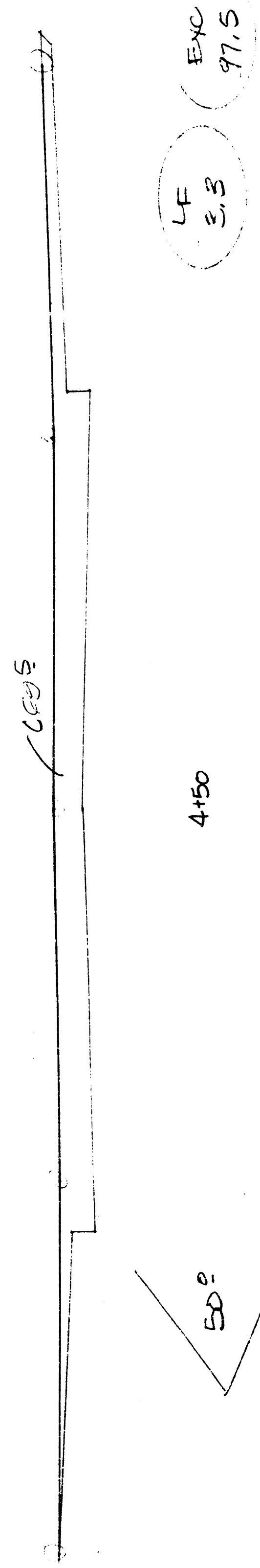
MT. VERNON



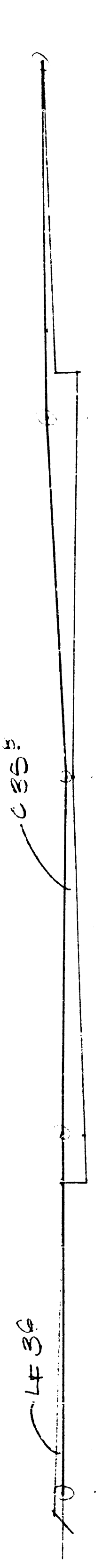
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BS



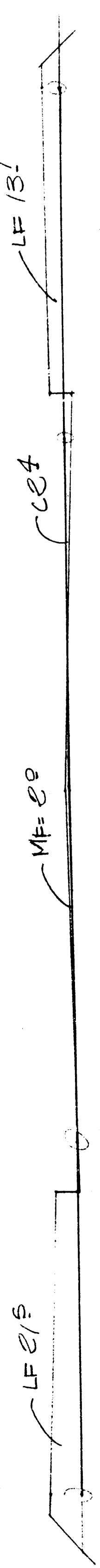
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BS



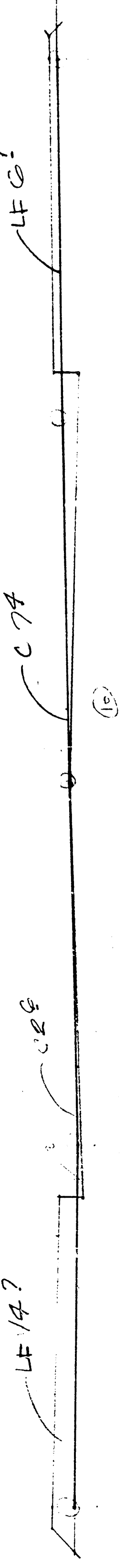
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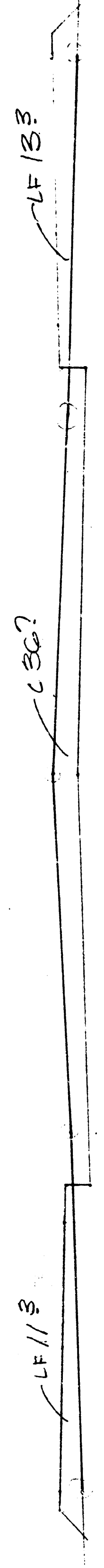
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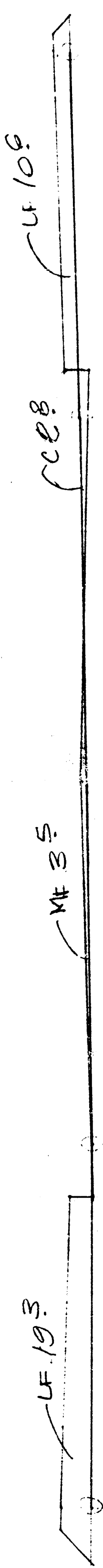
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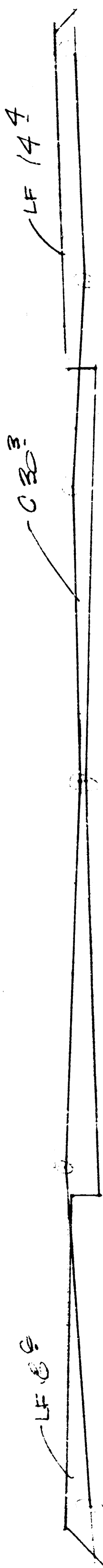
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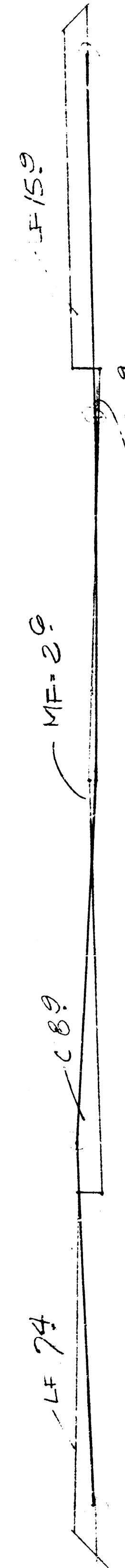
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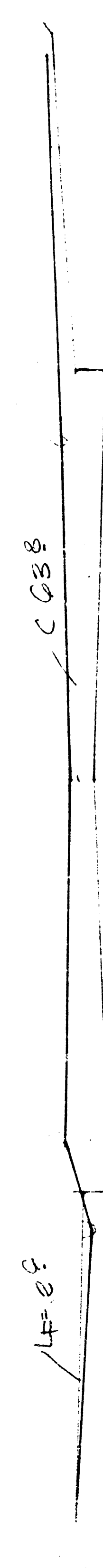
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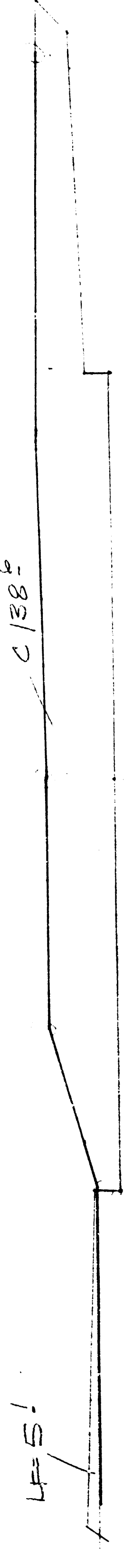
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BS



BS



STACEY

ENC: 1132.7  
CE: 84.0  
LF: 552.4  
MF: 50.0

ENC: 541.8 cy  
MF: 15.0 cy  
LF: 303.4 cy