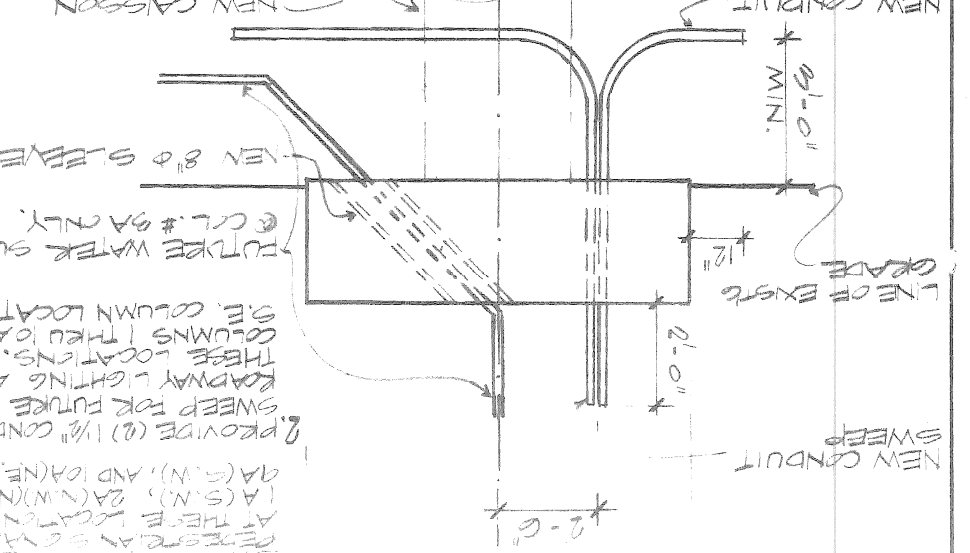
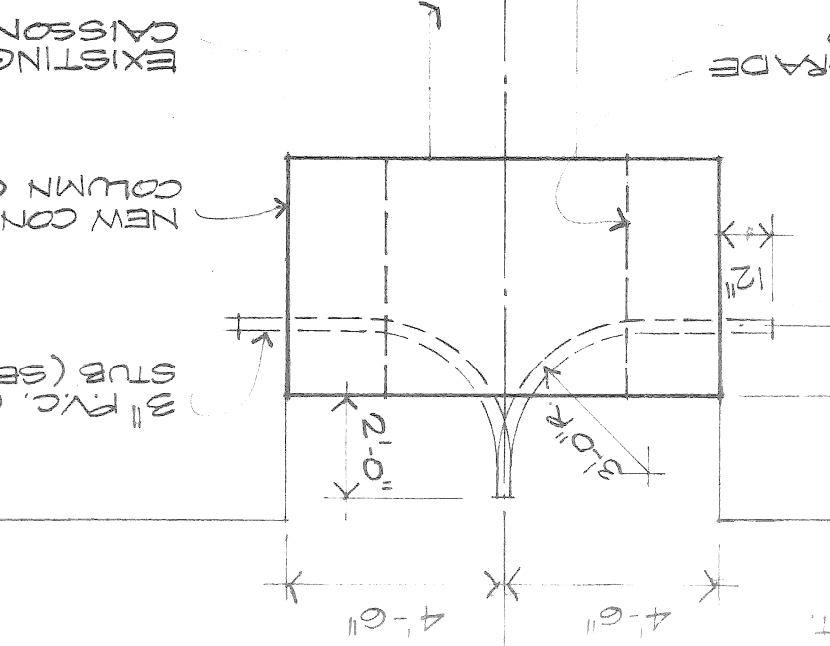
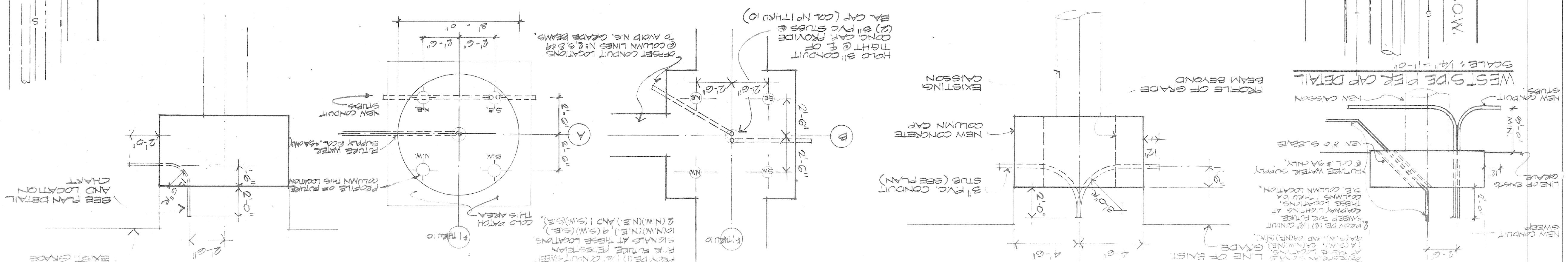


WEST SIDE PER CAP DETAIL 1 1/2\"/>

PLAN DETAIL @ CAP SCALE: 1/4\"/>

3\"/>

WEST SIDE PER CAP DETAIL SCALE: 1/4\"/>



NOTE

1. DURING PLAZA CONSTRUCTION MICH. CONSUMERS GAS CO. WILL INSTALL APPROX. 75' OF 3\"/>
2. DURING PLAZA CONSTRUCTION MICH. CONSUMERS GAS CO. WILL INSTALL APPROX. 75' OF 3\"/>
3. FIVE-HYDRANT CONSTRUCTION TO BE DONE BY THE CONTRACTOR UNDER D.W.S.D. INSPECTION. WE WILL REQUIRE AN INSPECTION DEPOSIT OF \$1,250 PER HYDRANT OR TOTAL OF \$440.00 (ESTIMATED). SEE SHEET S-2 FOR DETAIL.
4. NOTIFY D.W.S.D. FIELD ENGINEERING (PHONE 224-4841) 48 HOURS PRIOR TO START OF HYDRANT WORK.
5. D.W.S.D. WATER SYSTEM ALTERATION SPECIFICATIONS TO BE INCLUDED IN THE CONTRACT DOCUMENTS OR SPECIFICATIONS.
6. UNDERCUT TRENCH ALONG COLUMN LINE(S) NO. 1, 2, & 3 TO REDUCE ALL SOLATION BEHIND EXIST. SEWER.
7. EXPLORATORY EXCAVATION UNDER BIPAK #1 DOCUMENTS INDICATE ALL UTILITIES (EXCEPT HYDRANTS & GAS) ARE LOCATED ON THE EAST SIDE OF WESTWARD. MAN LOCATED ON THE WEST SIDE OF WESTWARD. REPLACE THE MAINLINE OF WESTWARD AND 3\"/>

REMAINING UTILITY RUN BETWEEN BEAMS. CAP PIPING @ TRENCH WALLS & ABANDON AREAS HAVE BEEN ABANDONED. REVERSE AS REQUIRED THEN CUT UTILITY OUT OF TRENCH AREA. EXCEPT HYDRANTS & GAS.

NEW FIRE HYDRANT (N.I.C.) LOCATION (TEMP.) BY OTHERS. NEW CONNECTION TO EXISTING MAIN. 1\"/>

EXIST. 12\"/>

EXIST. MAIN & ABANDON. REMOVE & RELOCATE EXIST. HYDRANT. 12\"/>

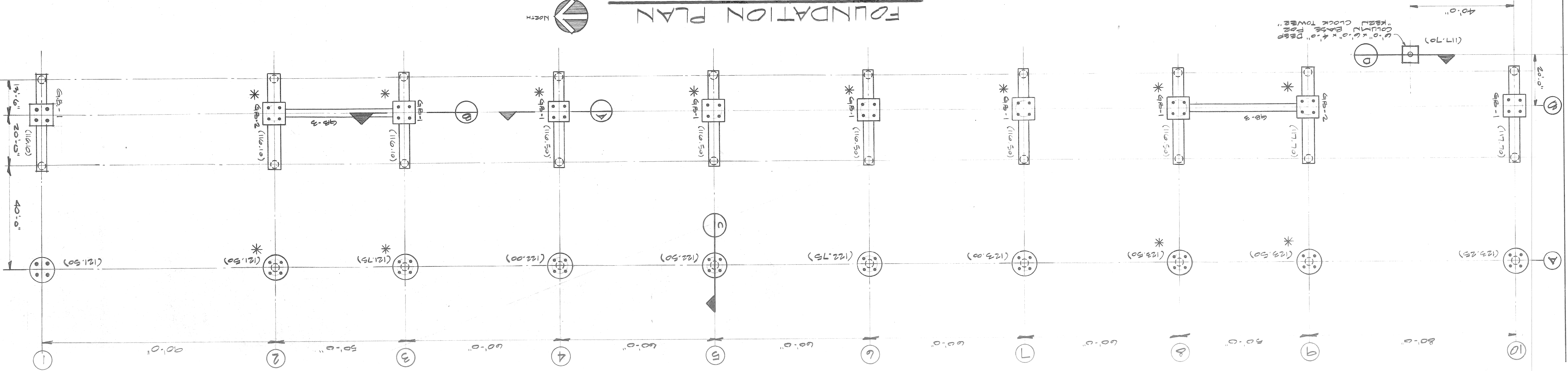
EXIST. 12\"/>

EXIST. 12\"/>

EXIST. 12\"/>

EXIST. 12\"/>

EXIST. 12\"/>



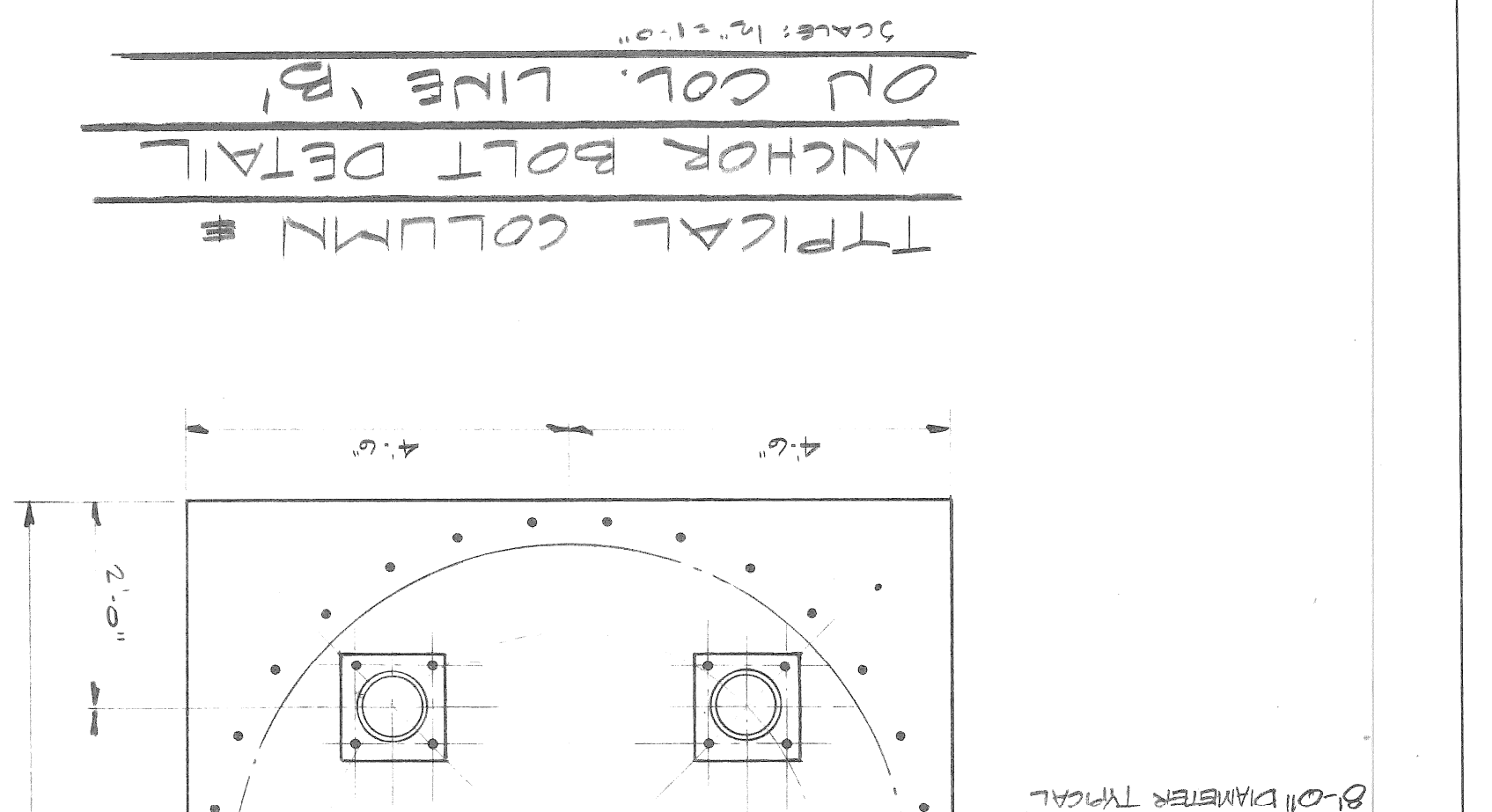
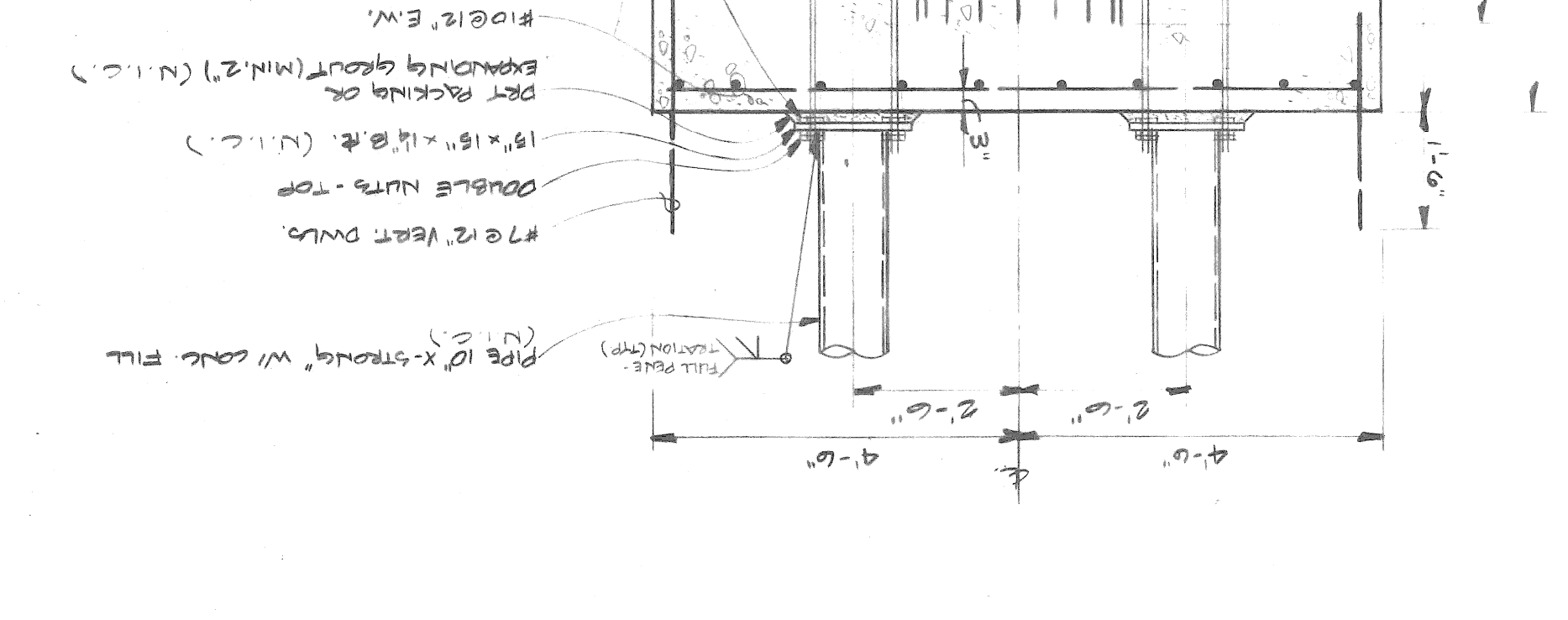
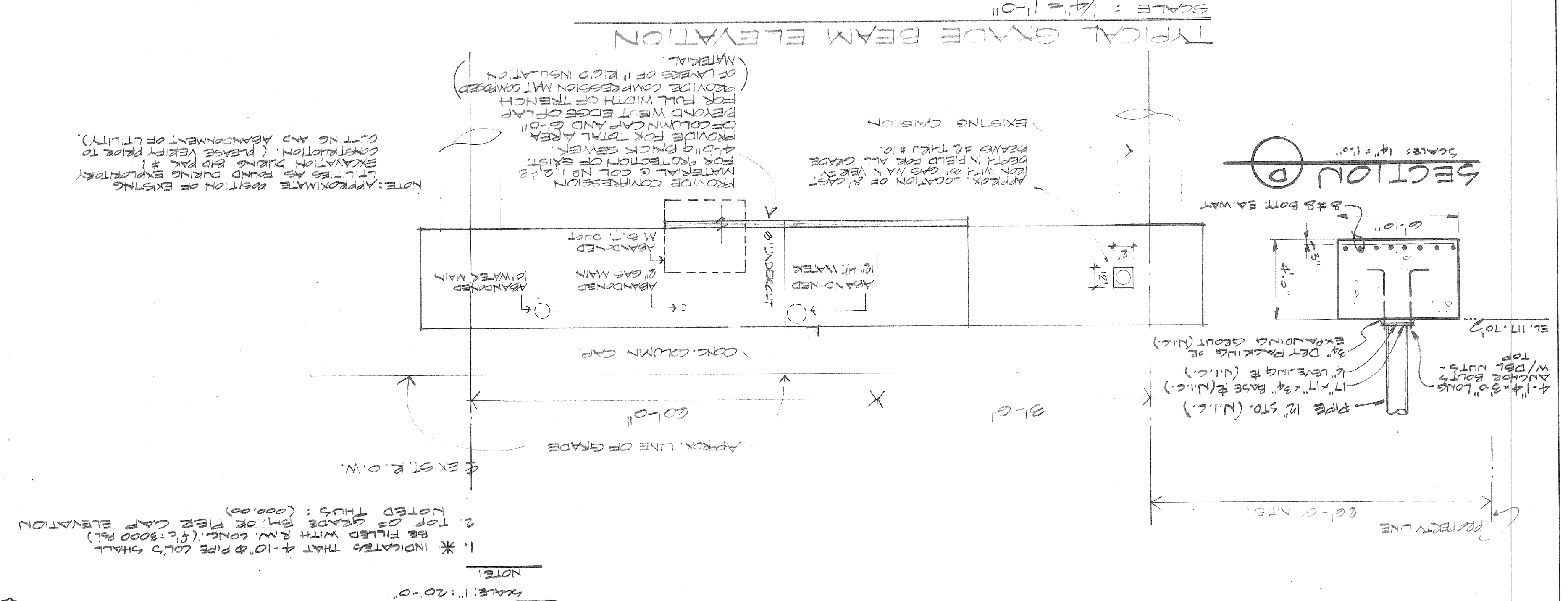
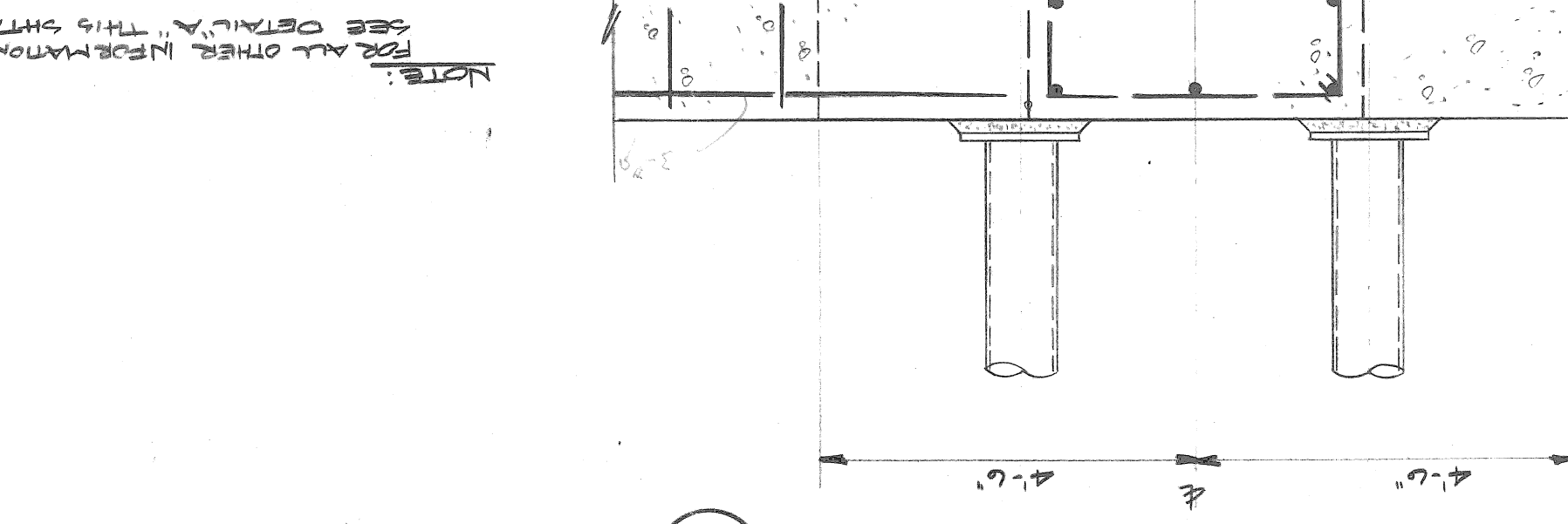
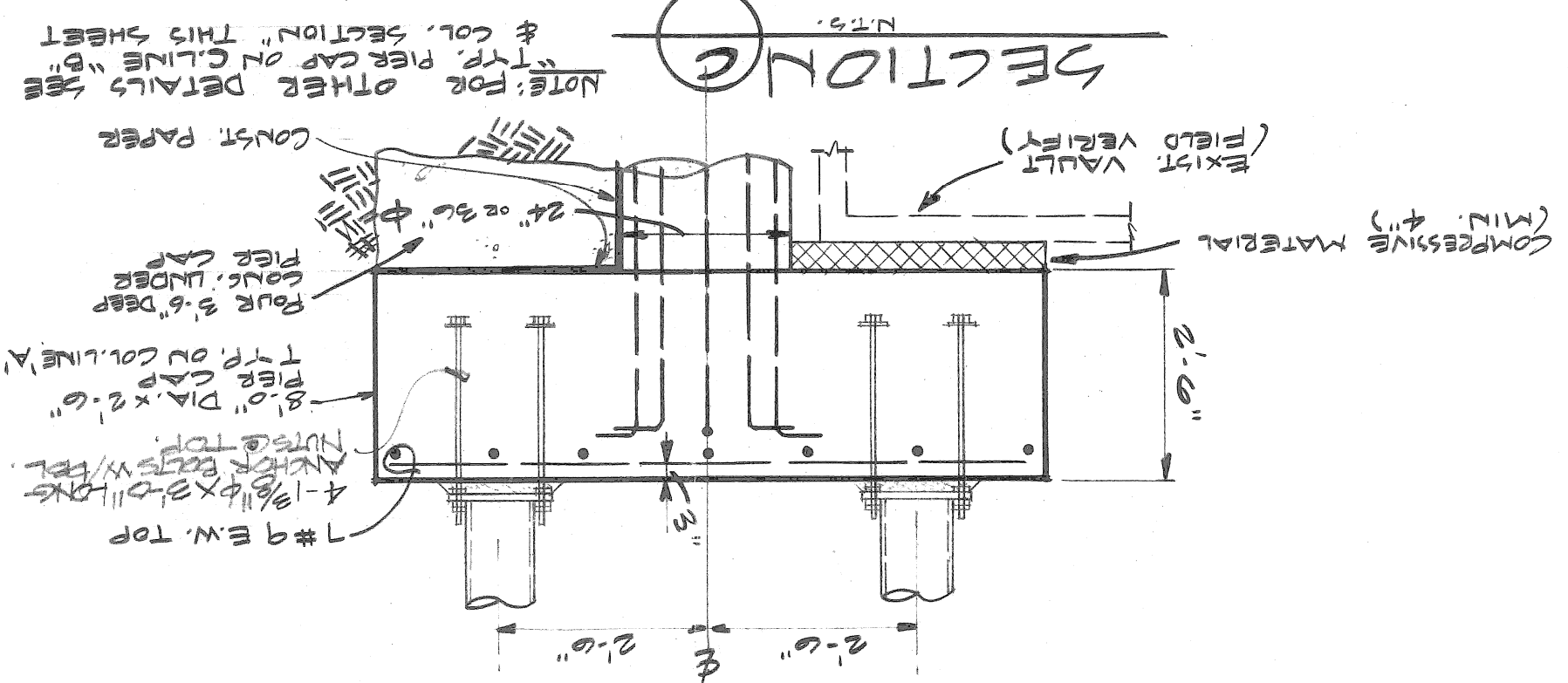
FOUNDATION PLAN
SCALE: 1" = 20'-0"

GRADE BEAM SCHEDULE

| MARK | SIZE | REINFORCING | STIRRUPS | EACH END | REMARKS |
|------|-------|-------------|---------------|----------|---|
| GB-1 | 4'-0" | 3#4 | 2" DIA. @ 12" | 2' | BOTT. BARS IN TWO LAYERS, 3#4 HORIZ. EA. FACE |
| GB-2 | 5'-0" | 3#4 | 2" DIA. @ 12" | 2' | BOTT. BARS IN TWO LAYERS, 3#4 HORIZ. EA. FACE |
| GB-3 | 3'-0" | 3#4 | 2" DIA. @ 12" | 2' | BOTT. BARS IN TWO LAYERS, 3#4 HORIZ. EA. FACE |

GENERAL NOTES:

2. ALL COMPRESSIVE STRENGTH FOR ALL CONCRETE SHALL BE 3000 P.S.I.
- ALL REIN. STEEL SHALL HAVE A MINIMUM YIELD POINT OF 60 K.S.I.
- PROVIDE DOWELS FROM PIPE CAP INTO FOUNDATION WALL AS SHOWN ON DETAILS. EXCEPT STIRRUPS WHICH SHALL BE 40 K.S.I.



Community and Economic Development Department
City of Detroit
150 Michigan Avenue
Detroit, Michigan 48226

Approved: *[Signature]*
Date: 5-11-77

Change Order No. _____
Date: _____

Issued For: _____
Date: _____

EDA project no. 06-51-01429
Contract No. 2434
File No. 1800

4-11-77 BIDPAK 2 OWNER APPROVAL
4-15-77 BIDPAK 2 OWNER APPROVAL
4-28-77 BIDPAK 2 BIDS
5-11-77 BIDPAK 2 BIDS

Title
GRADE BEAM CONSTRUCTION

Project Number
75-01 B

S-2

| NO. | REVISIONS | DATE | BY |
|-----|-----------|------|----|
| | | | |
| | | | |
| | | | |
| | | | |

MISCELLANEOUS DETAILS

FIRE HYDRANT

PROJECT NO. 1800
 ASSIGN NO. 1800

Contract No. 2434
 E.D.A. PROJECT NO. 06-BI-01493

Issued For: _____
 Date: _____

Change Order No. _____
 Date: _____

Approved: *[Signature]*
 Date: 5-11-77

150 Michigan Avenue
 Detroit, Michigan 48226

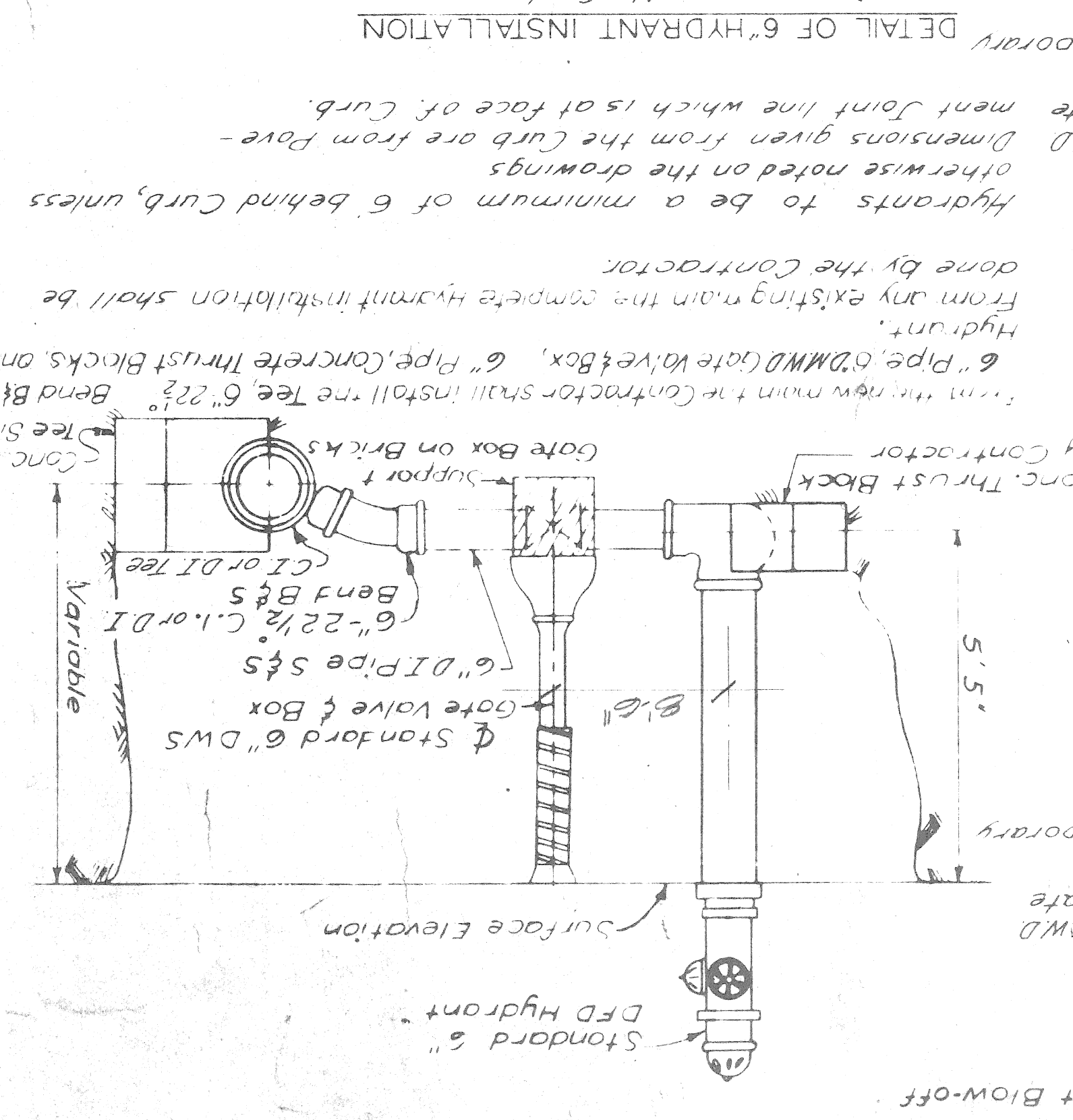
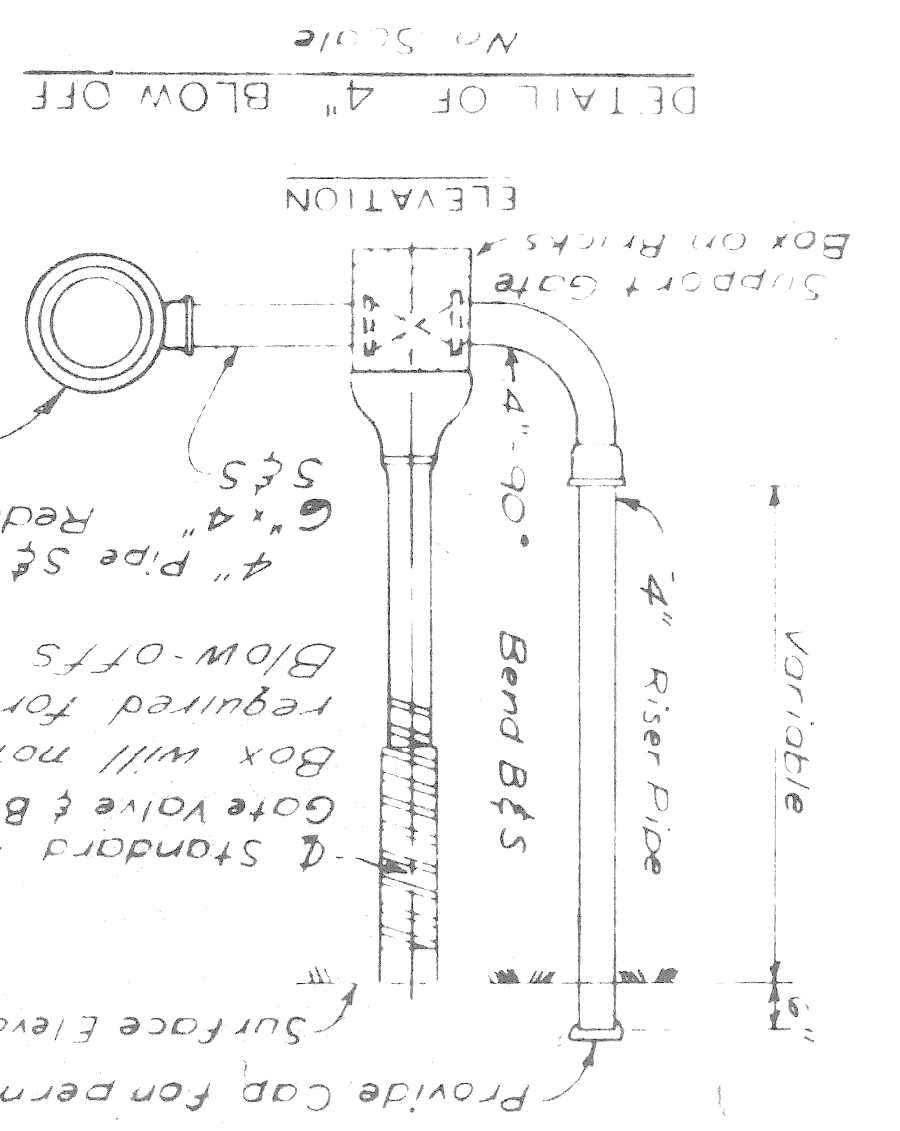
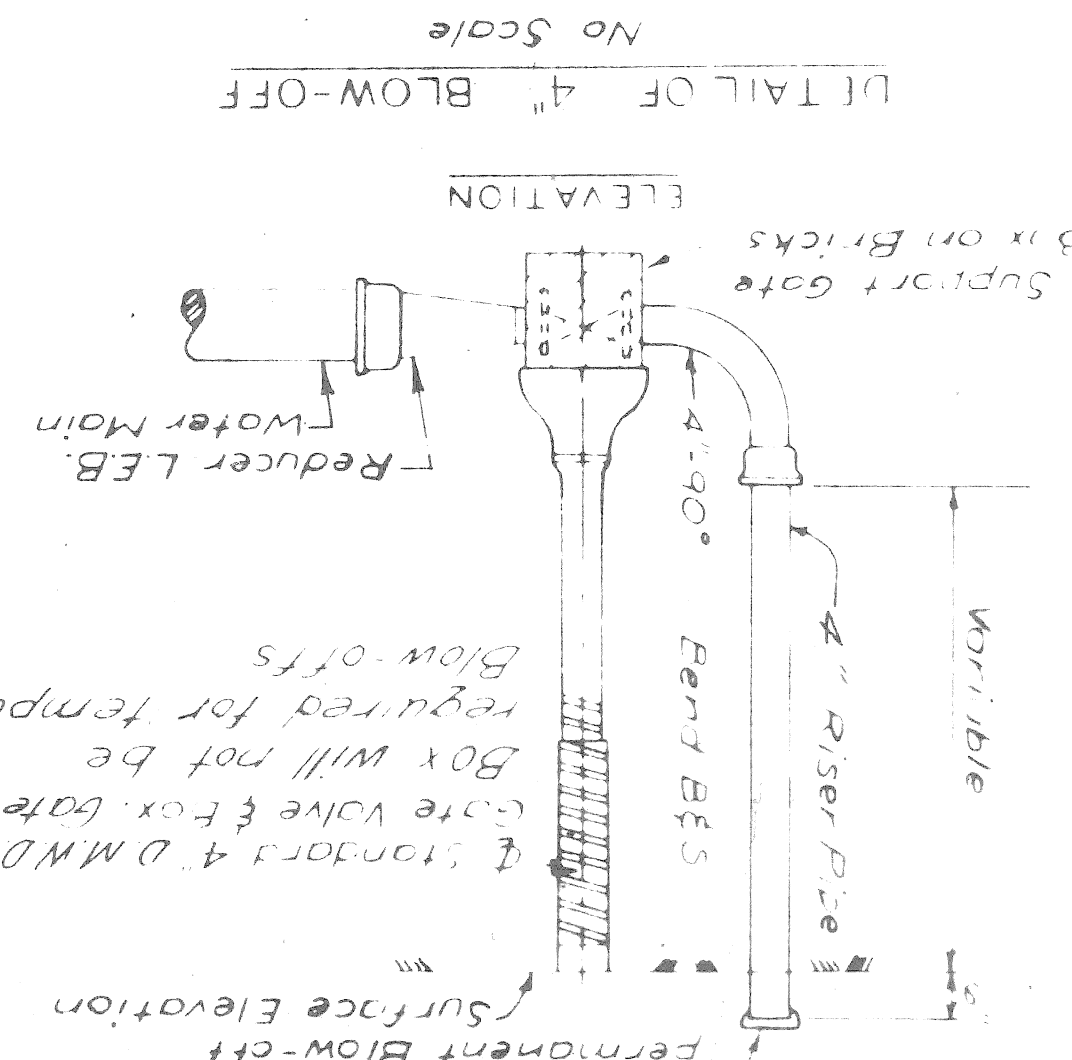
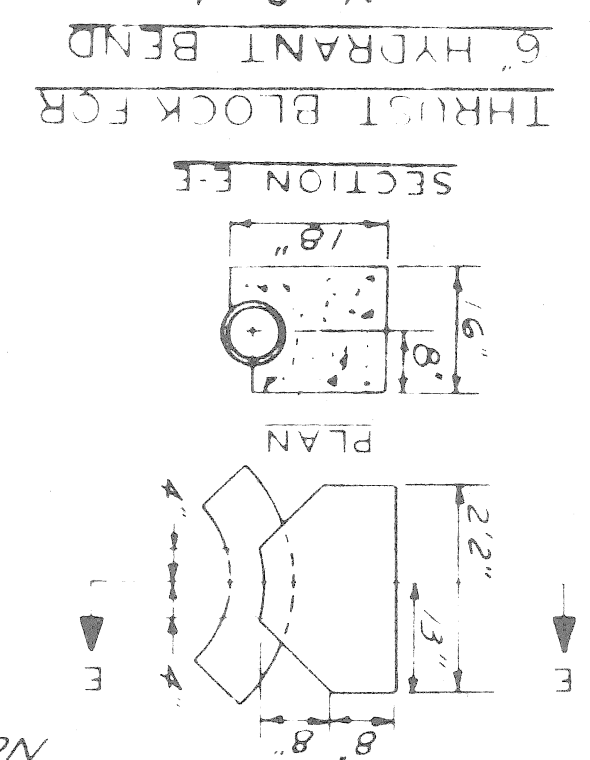
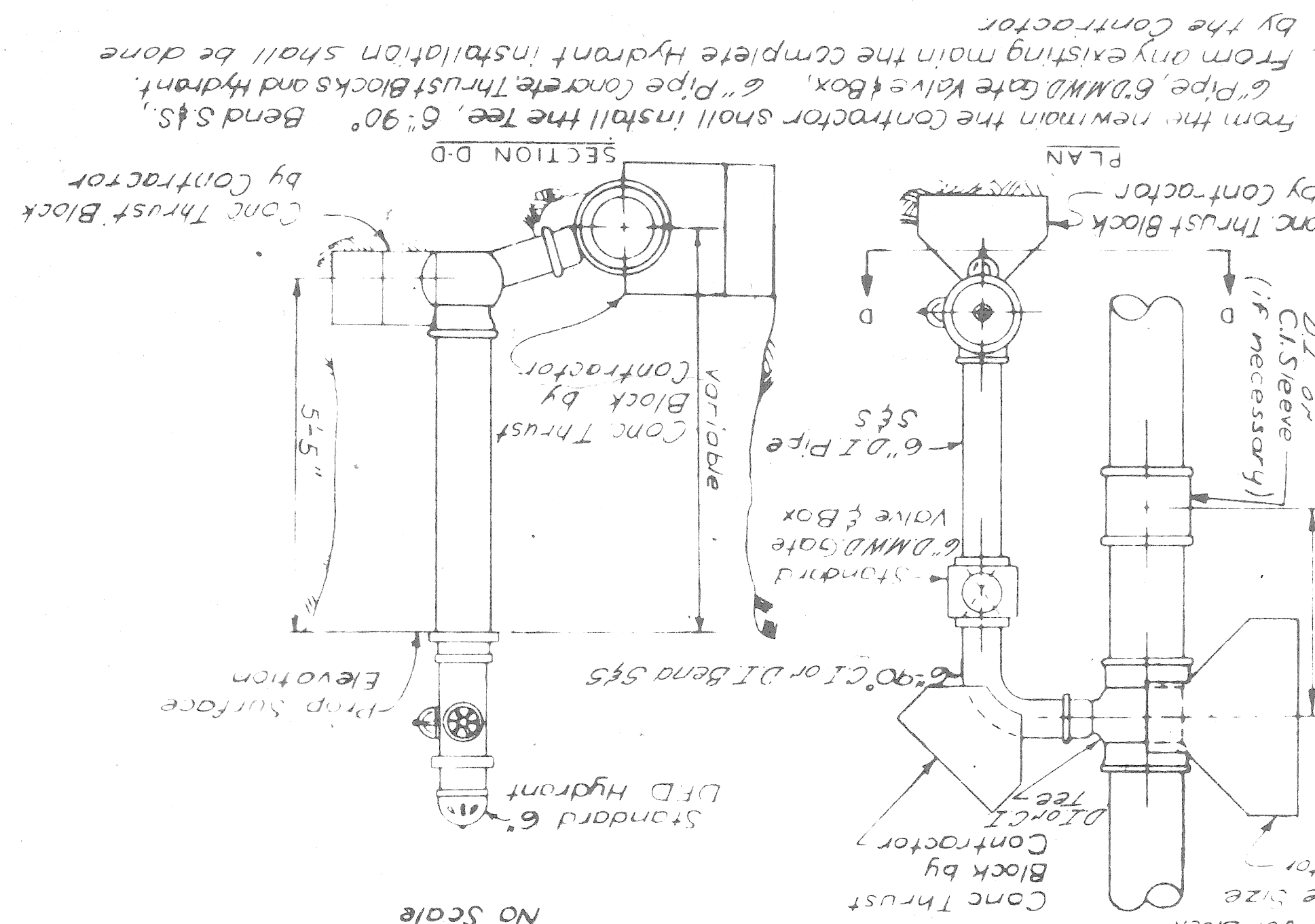
Community and Economic Development Department
 City of Detroit

4-15-77 BIDPAK 2 OWNER APPL.
 4-28-77 BIDPAK 2 BIDS
 5-11-77 BIDPAK 2 BIDS

DETAIL OF 6" HYDRANT INSTALLATION
 No Scale

Hydrants to be a minimum of 6' behind the curb, unless otherwise shown on the drawings. Dimensions given from pavement joint line which is at face of curb.

From the new main the Contractor shall install the Tee, 6" 90° Bend S&S, 6" Pipe, 6" D.M.W.D. Gate Valve & Box, 6" Pipe Concrete Thrust Blocks and Hydrant. From any existing main the complete Hydrant installation shall be done by the Contractor.



DETAIL OF STANDARD THRUST BLOCKS
 FOR FLUGS & CAPS

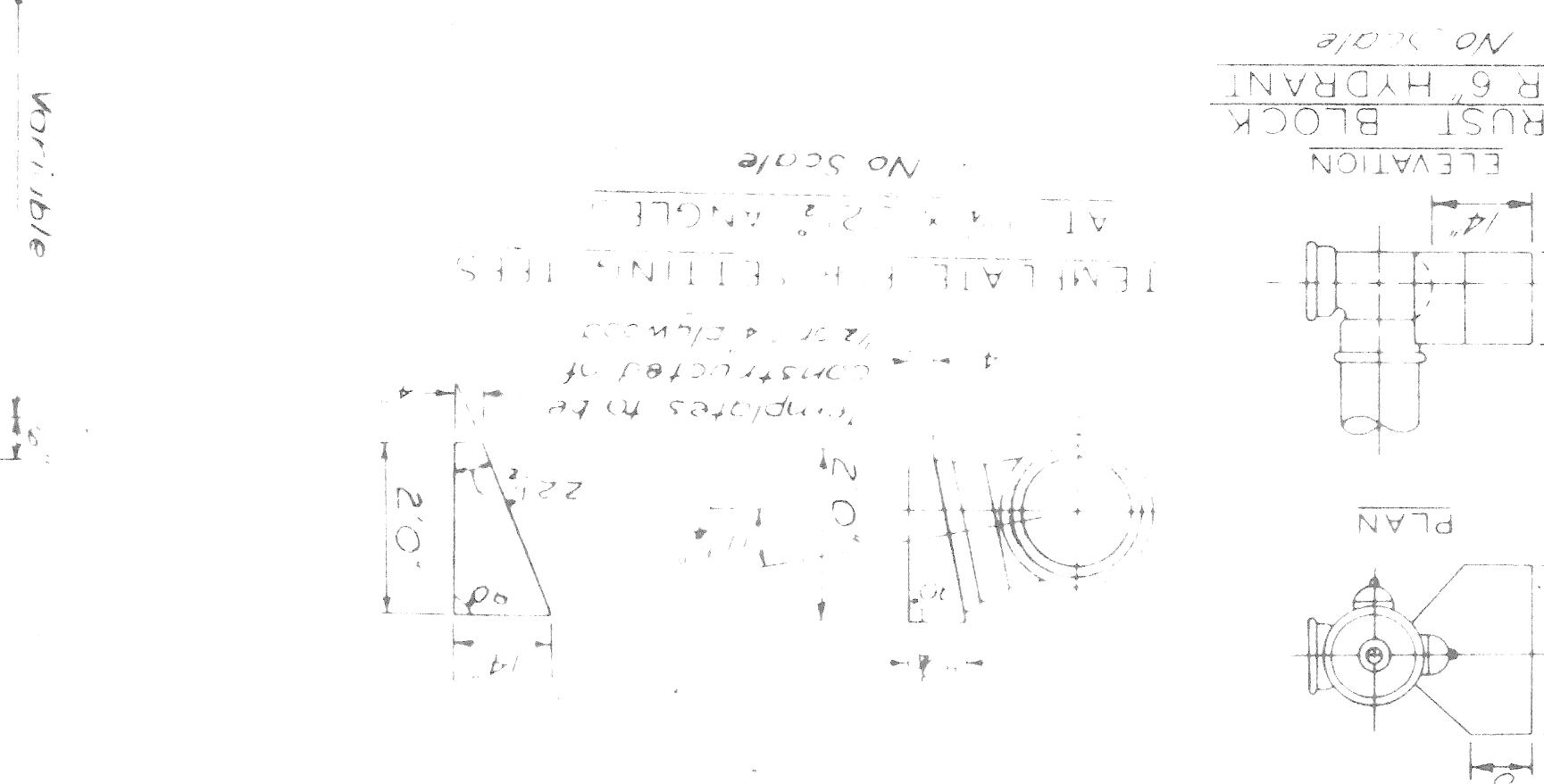
No Scale

| FLUG | A | B | C | D | E | F | G | H | I | J | K | L | M | N |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1.6 | 1.0 | 1.8 | 5.0 | 2.6 | 4.0 | 2.0 | 2.6 | 4.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.8 |
| 1.2 | 0.4 | 1.4 | 4.0 | 2.0 | 3.0 | 1.6 | 3.0 | 1.6 | 2.0 | 1.6 | 2.0 | 1.6 | 2.0 | 2.1 |
| 1.4 | 0.9 | 1.2 | 3.0 | 1.6 | 2.0 | 1.6 | 2.0 | 1.6 | 2.0 | 1.6 | 2.0 | 1.6 | 2.0 | 2.1 |
| 1.6 | 1.0 | 1.8 | 5.0 | 2.6 | 4.0 | 2.0 | 2.6 | 4.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.8 |
| 1.2 | 0.4 | 1.4 | 4.0 | 2.0 | 3.0 | 1.6 | 3.0 | 1.6 | 2.0 | 1.6 | 2.0 | 1.6 | 2.0 | 2.1 |
| 1.4 | 0.9 | 1.2 | 3.0 | 1.6 | 2.0 | 1.6 | 2.0 | 1.6 | 2.0 | 1.6 | 2.0 | 1.6 | 2.0 | 2.1 |

DETAIL OF STANDARD THRUST BLOCKS FOR TEES

No Scale

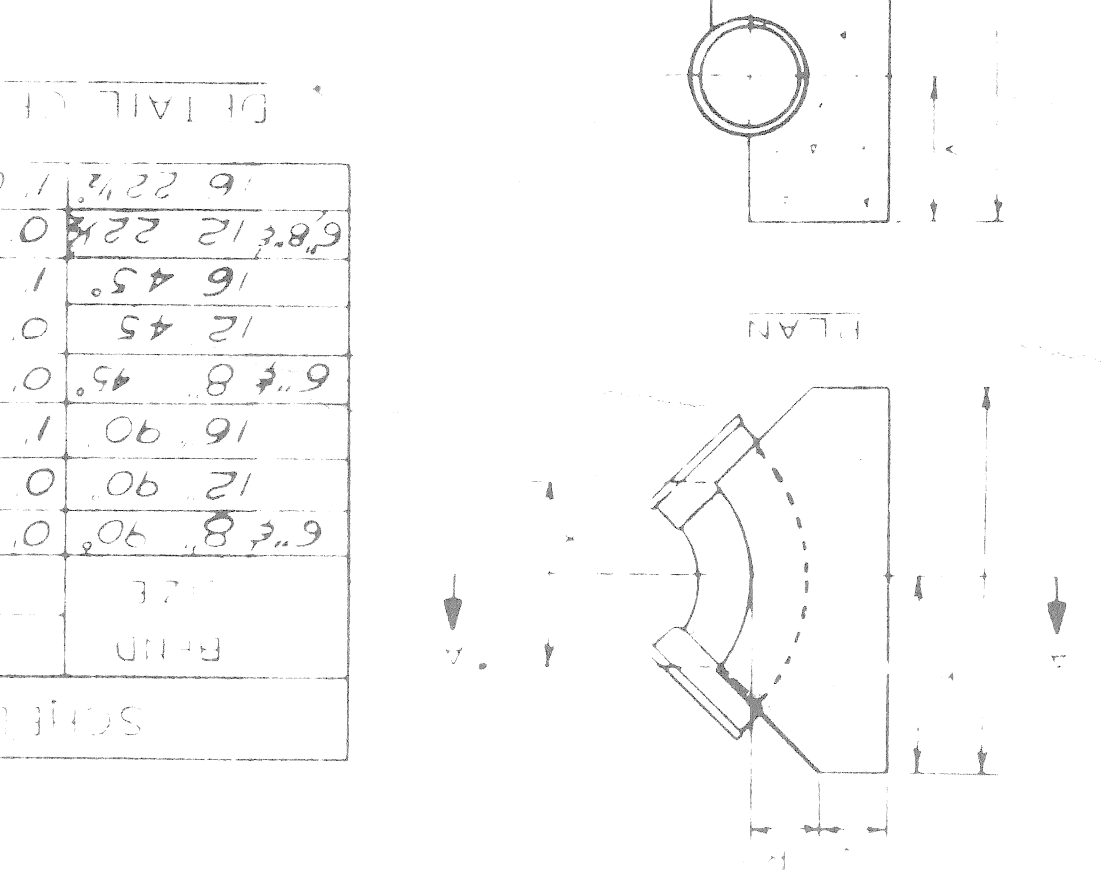
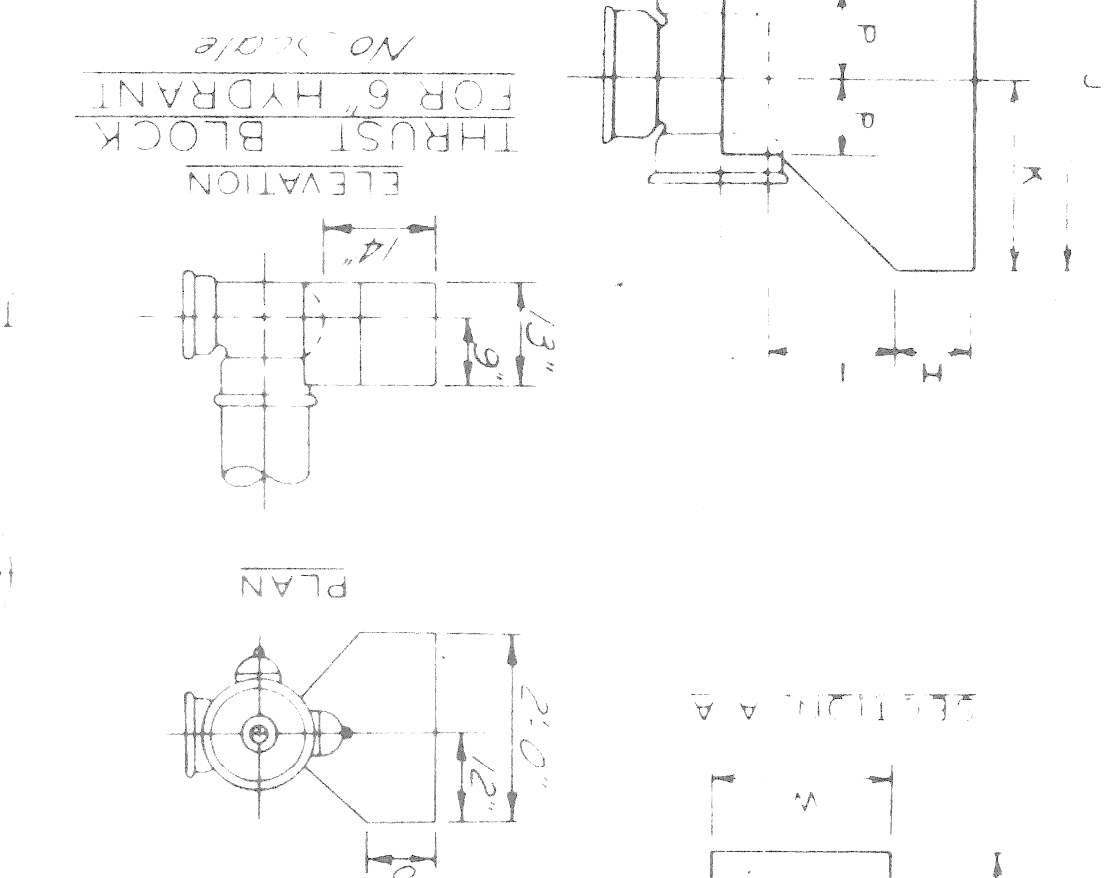
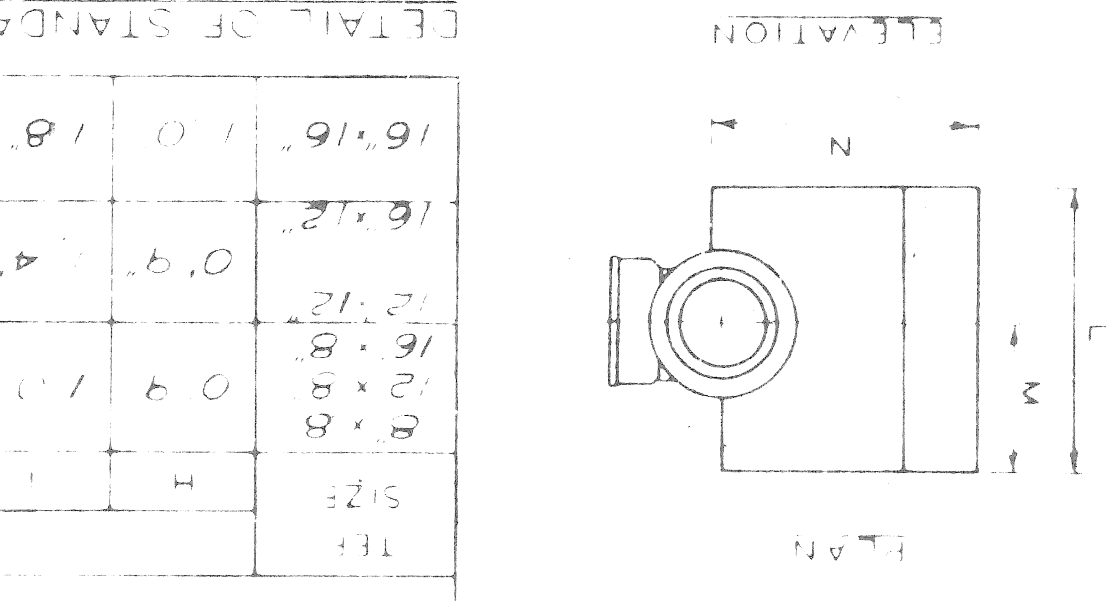
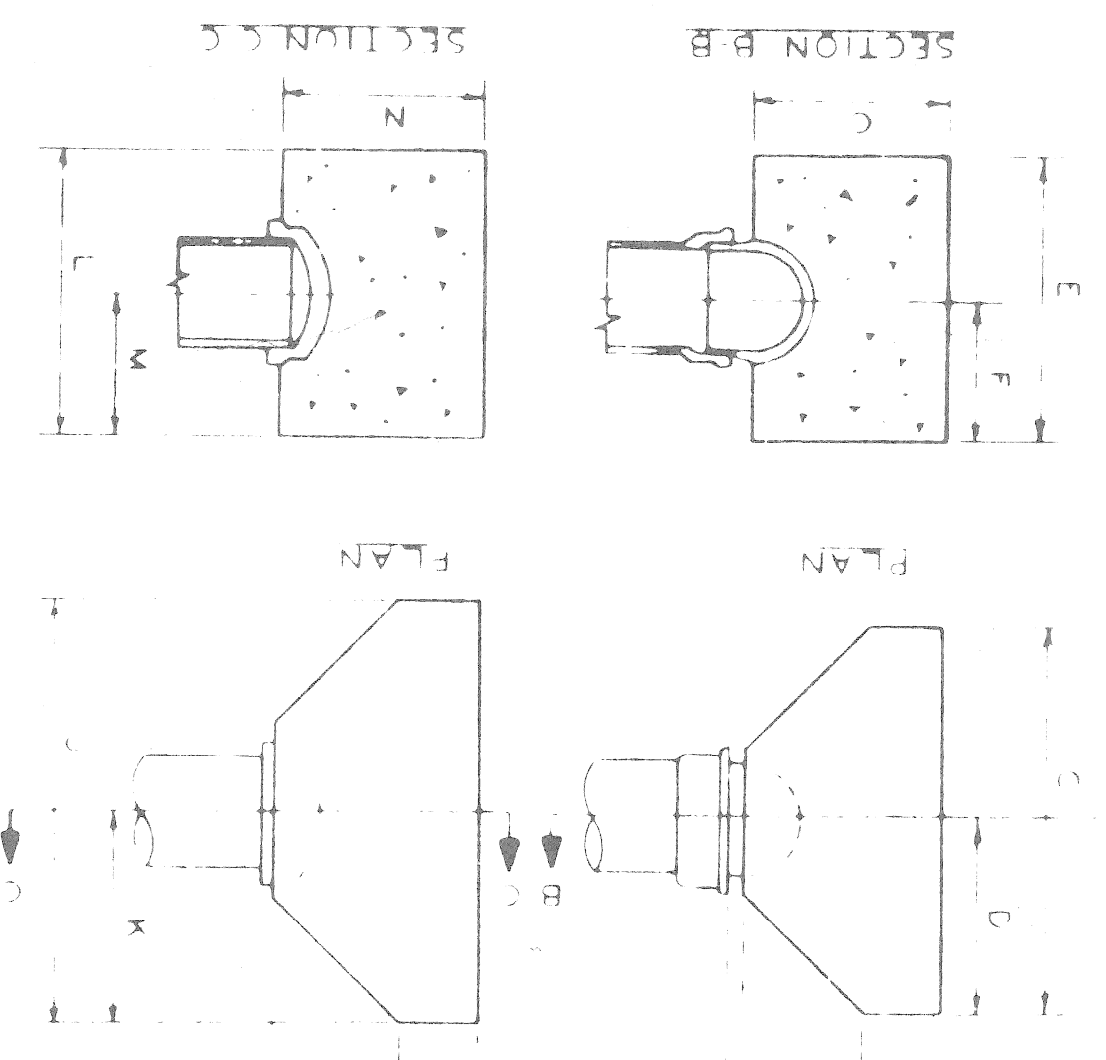
| TEE | A | B | C | D | E | F | G | H | I | J | K | L | M | N |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 16.16 | 1.0 | 1.8 | 5.0 | 2.6 | 4.0 | 2.0 | 2.6 | 4.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.8 |
| 16.12 | 0.9 | 1.4 | 4.0 | 2.0 | 3.0 | 1.6 | 3.0 | 1.6 | 2.0 | 1.6 | 2.0 | 1.6 | 2.0 | 2.1 |
| 12.12 | 0.9 | 1.0 | 3.0 | 1.6 | 2.0 | 1.6 | 2.0 | 1.6 | 2.0 | 1.6 | 2.0 | 1.6 | 2.0 | 2.1 |
| 16.16 | 1.0 | 1.8 | 5.0 | 2.6 | 4.0 | 2.0 | 2.6 | 4.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.8 |
| 16.12 | 0.9 | 1.4 | 4.0 | 2.0 | 3.0 | 1.6 | 3.0 | 1.6 | 2.0 | 1.6 | 2.0 | 1.6 | 2.0 | 2.1 |
| 12.12 | 0.9 | 1.0 | 3.0 | 1.6 | 2.0 | 1.6 | 2.0 | 1.6 | 2.0 | 1.6 | 2.0 | 1.6 | 2.0 | 2.1 |



DETAIL OF STANDARD THRUST BLOCKS FOR BENDS

No Scale

| BEND | A | B | C | D | E | F | G | H | I | J | K | L | M | N |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 6.25 | 1.0 | 1.8 | 5.0 | 2.6 | 4.0 | 2.0 | 2.6 | 4.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.8 |
| 6.45 | 1.0 | 1.8 | 5.0 | 2.6 | 4.0 | 2.0 | 2.6 | 4.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.8 |
| 12.45 | 0.9 | 1.4 | 4.0 | 2.0 | 3.0 | 1.6 | 3.0 | 1.6 | 2.0 | 1.6 | 2.0 | 1.6 | 2.0 | 2.1 |
| 6.45 | 1.0 | 1.8 | 5.0 | 2.6 | 4.0 | 2.0 | 2.6 | 4.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.8 |
| 16.90 | 1.0 | 1.8 | 5.0 | 2.6 | 4.0 | 2.0 | 2.6 | 4.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.8 |
| 12.90 | 0.9 | 1.4 | 4.0 | 2.0 | 3.0 | 1.6 | 3.0 | 1.6 | 2.0 | 1.6 | 2.0 | 1.6 | 2.0 | 2.1 |
| 6.45 | 1.0 | 1.8 | 5.0 | 2.6 | 4.0 | 2.0 | 2.6 | 4.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.8 |



NOTES

The bearing face of all thrust blocks shall be poured against undisturbed earth. Thrust blocks will be required on all bends 6 inches in diameter or larger and greater than 1 1/2'.

NOTES

Hydrants to be a minimum of 6' behind the curb, unless otherwise shown on the drawings. Dimensions given from pavement joint line which is at face of curb.

GENERAL NOTES

Ductile Iron Pipe in sizes 3" through 16" is permitted as a part of the cast iron pipe specifications.

GENERAL NOTES

Ductile Iron Pipe in sizes 3" through 16" is permitted as a part of the cast iron pipe specifications.

4-15-77 BIDPAK 2 OWNER APPV.
 4-28-77 BIDPAK 2 BIDS
 5-11-77 BIDPAK 2 BIDS
 City of Detroit
 Development Department
 150 Michigan Avenue
 Detroit, Michigan 48226
 Approved: [Signature] Date: 5-11-77
 Change Order No. _____ Date _____
 Issued For: _____ Date _____
 Contract No. 2434
 File No. 1800

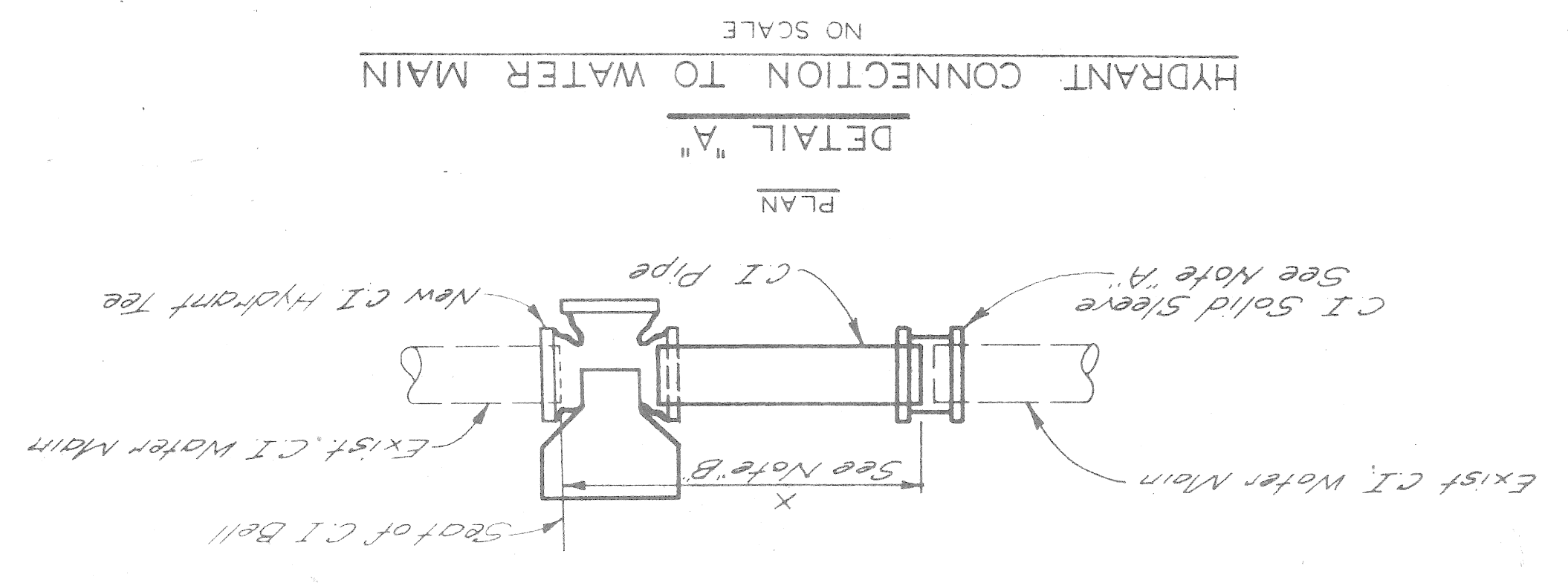
PAY ITEMS
 ALL "A" DETAILS, "C" DETAILS, GATE BOXES, VALVES, TEES, EXCAVATION, BACKFILL, WATER MAIN PIPING AND CONNECTIONS TO WATER MAINS ARE INCIDENTAL TO THE INSTALLATION OF THE NEW FIRE HYDRANTS AND ARE, THEREFORE, INCLUDED IN THE PAY ITEM "6"-FIRE HYDRANT.

SCHEDULE OF HYDRANT INSTALLATION ON EXISTING MAINS

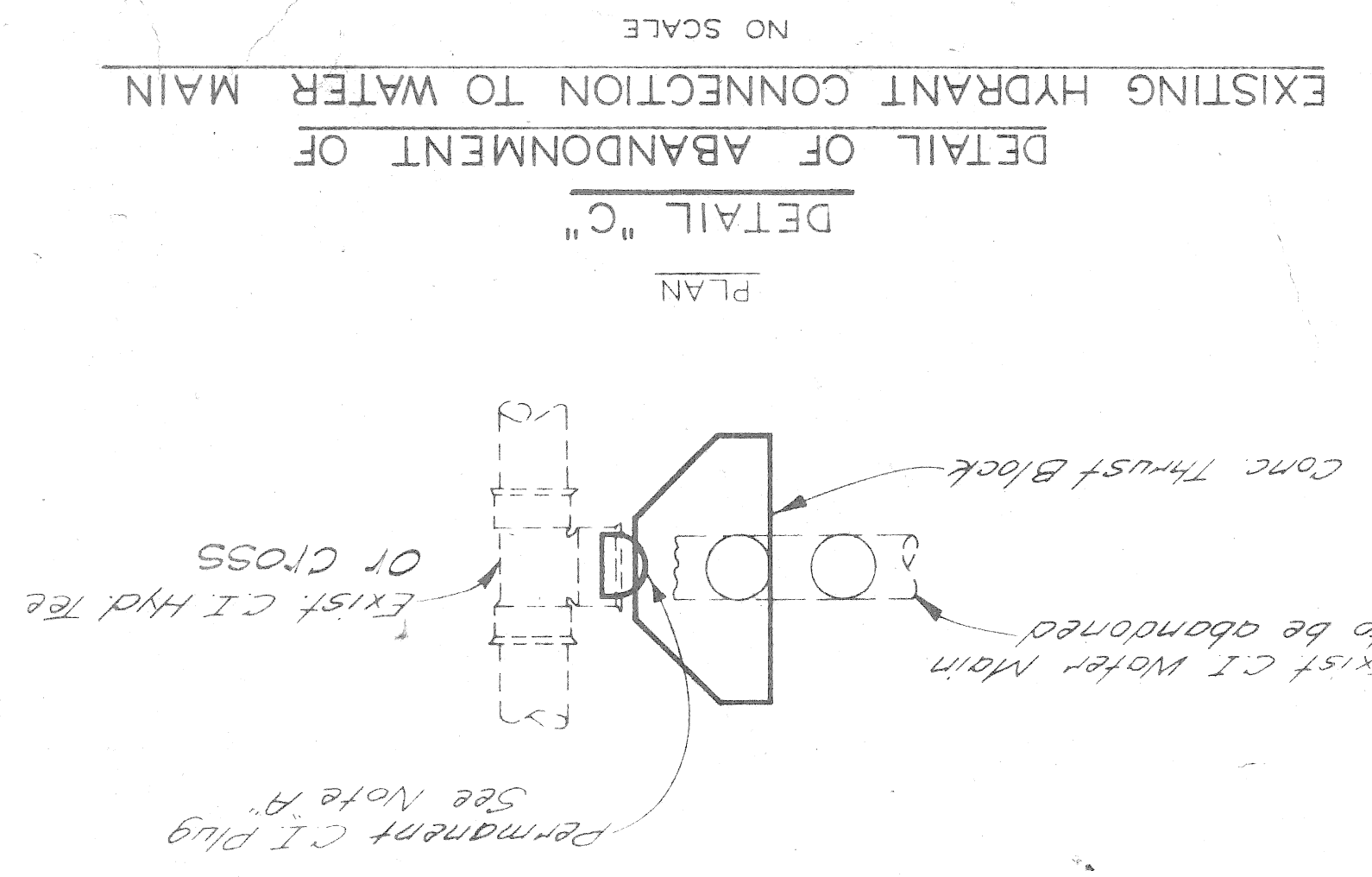
| DETAIL | FROM | SIZE OF NEW HYDRANT TO EX MAIN | PIPE FROM HYDRANT TO EX MAIN | TRANCH LENGTH | DETAIL | TRENCH LENGTH | PIPE SIZE | DETAIL |
|--------|------|--------------------------------|------------------------------|---------------|--------|---------------|-----------|--------|
| H-1 | S-1 | 10" x 6" | 40' | 10" | S1 | 10" | S1 | S1 |
| H-2 | S-1 | 10" x 6" | 10' | 10" | S1 | 10" | S1 | S1 |
| H-3 | S-1 | 12" x 6" | 25' | 12" | S1 | 12" | S1 | S1 |

* Information herein is to be considered only as a guide. Final figures depend upon the exact location of the hydrant as determined by the fire Department just prior to installation.

GENERAL NOTES
 Existing Water Mains, as shown, indicate approximate location only as shown by D.M.W.D. records and no guarantee is made as to completeness or accuracy. The locations and elevations of existing utilities are shown in accordance with available data. The Contractor shall expose these utilities, where required, to determine other utilities may be making alterations to their existing systems in the vicinity of the Water Main construction shown on the plans. These utilities should be consulted for the latest information regarding the location of their facilities.
 A minimum clearance of one foot vertically and three and one half feet horizontally shall be maintained between the Water Main and other utilities, unless otherwise shown on the plans or approved by the Engineer. If a conflict is indicated between the Water Main and any other utility, that utility should be consulted. The location of fire hydrants, as shown, are approximate. D.F.D. will give exact location of proposed fire hydrants prior to installation.
 "Ductile Iron Pipe in sizes 3" through 16" is permitted as a part of the Cast Iron Pipe Specifications."
CONSTRUCTION NOTES
 Encasements and Thrust Blocks shall terminate at the face of pipe bells.
 Removal of abandoned Water Mains as required for clearance to construct the proposed Water Mains is incidental to Water Main construction.
 Sheeting and bracing, where required, shall be installed by the contractor as incidental to Water Main construction. Scheduling of the connections shall be governed by the "Sequence of Operations and Flushing and Chlorination" specifications which are included in the Water Main portion of the Proposal.



NOTES FOR CONTRACTOR'S CONNECTIONS
 Contractor shall cut and cap or plug existing Water Mains to remain in service where required in accordance with supplemental specifications.
 A CI Blow-off Assemblies, CI Plugs and Caps to be installed and/or removed by Contractor have not been shown.
 Contractor shall install and later remove all temporary CI Plugs, tees and Blow-off Assemblies.
 Contractor shall furnish and install CI Pipe and Fittings necessary to complete the connections shown.
 Contractor shall construct all Concrete Thrust Blocks and Gate Wells.
 Contractor shall install all temporary bracing for Water Main work.
 It is not normally anticipated that bends requiring Thrust Blocks will be required for connections unless otherwise shown.
NOTE "A"
 Plugs and caps, temporary blow-offs, air valves, corporation stops, pipe jacks, solid sleeves, jointing material, bracing and blocking are incidental to water main construction and will not be paid for separately.
NOTE "B"
 Limits shown for dimension "X" shall be used to measure laid length of pipe.



Community and Economic
 Development Department
 City of Detroit
 150 Michigan Avenue
 Detroit, Michigan 48226
 Approved: [Signature] Date: 5-11-77
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