

UNIFIED SCHOOL DISTRICT NO. 261  
 SANITARY SEWER SERVICE  
 JUNE, 1972  
 PLANS AND SPECIFICATIONS

Superintendent W. H. Phillips

CAMPBELL & CASTLE, P.A.  
 Engineers  
 Wichita, Kansas

**NOTE TO CONTRACTOR**

This project will be constructed under the supervision of the CITY ENGINEER and conform to the SPECIFICATIONS of the CITY OF WICHITA. The CONTRACTOR will reimburse the City of Wichita for all cost of Engineering, Plans, and Inspection.

FILE: 7224

11. All backfill to be compacted.
12. The construction of the east-west segment of the sewer will entail the abandoning of an existing 8" vitrified clay pipe sewer which will be broken up when the trench is excavated.
13. The Sewer Connection listed in the Proposal entails connecting to a 12 inch wye in a precast manhole constructed by the City of Wichita. This connection will be made with a 12" cast iron pipe 10' long with a 12 x 8 cast iron reducer to connect with the 8" vitrified clay pipe.
14. The Lift Station Wet Well Modification listed in the Proposal entails converting the existing wet well to serve as a manhole.
15. The removal and replacement of the bituminous concrete pavement within 55th Street South must meet the approval of the Sedgwick County Engineer as to backfilling, compaction, etc.
16. The alternate item of Salvage Lift Station listed in the Proposal entails the removal of the Lift Station from its present location and transporting it for storage at 1745 West Grand, and filling the existing void with sand or compacted earth fill.
17. The pipe tunnel shown on the Plan and Profile shall be protected from damage during construction of the sewer.

1.0-2 of 2

FILE: 7224

SECTION 5.1  
 SANITARY SEWERS

GENERAL REQUIREMENTS

1. Construct sanitary sewers using vitrified clay pipe except where otherwise specified or shown on plans.
2. Construct appurtenances as detailed.
3. Complete construction as shown on plans to true line and grade, permitting "lamping" of lines between appurtenances.
4. Infiltration or exfiltration of sewer lines shall not exceed 500 gallons per day per inch nominal diameter per mile.
5. When water lines are crossed by the sanitary sewer in the construction of the project, the sanitary sewers will be constructed of cast iron pipe for a distance of 10 feet in each direction from the crossing unless the water line is 2 feet or more above the sanitary sewer.

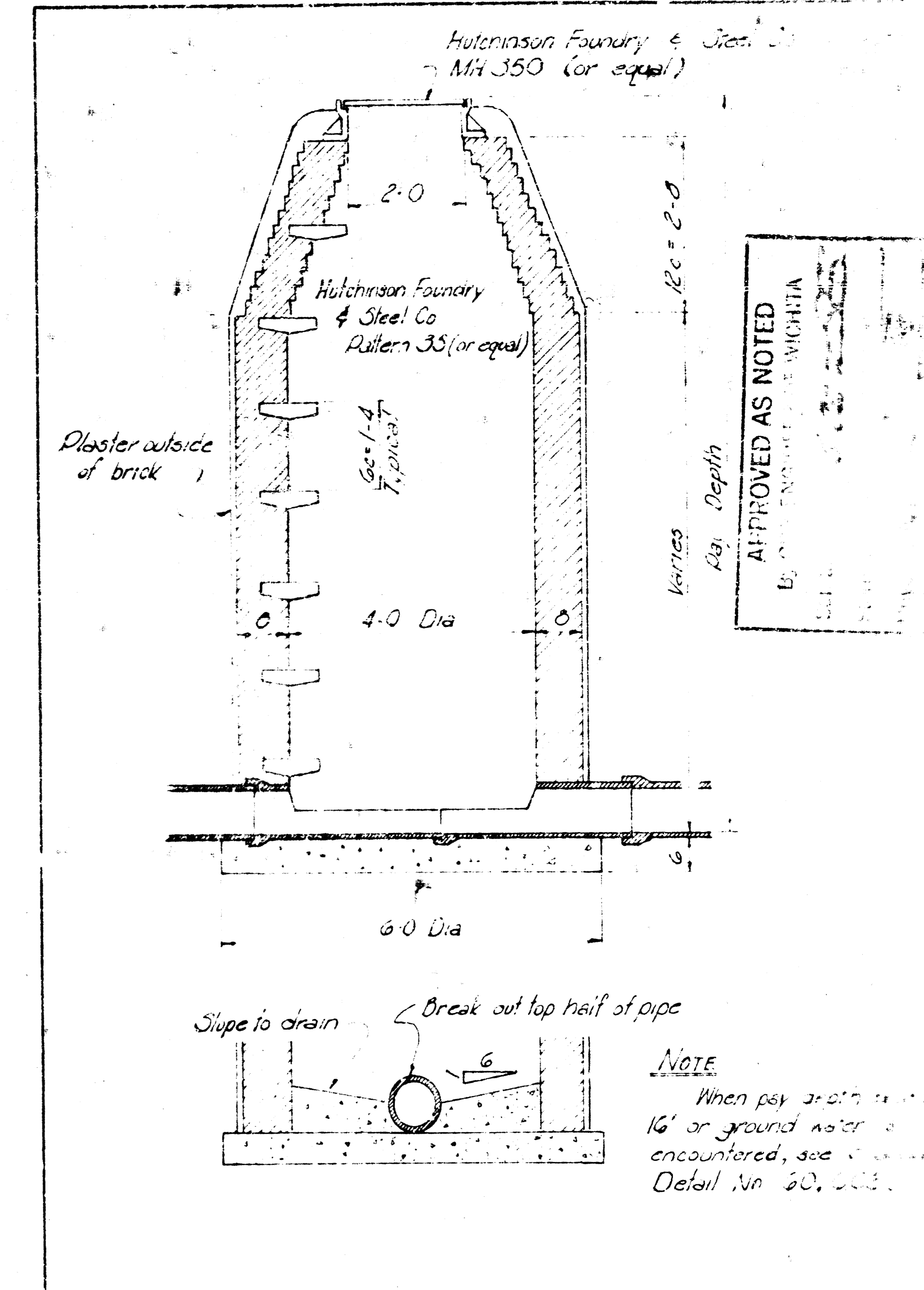
MATERIALS

1. Vitrified clay pipe.
  - a. New materials unless otherwise specified.
  - b. Designated strength, standard strength and extra strength conforming to ASTM C 13 and ASTM C 200 respectively.
  - c. Vitrified clay pipe, not otherwise specified or indicated on plans, to be standard strength.
  - d. Acid soluble matter not to exceed 0.25 percent.
  - e. Testing in accordance with ASTM C 301.
  - f. Each shipment accompanied by test certificate from manufacturer or independent laboratory.
2. Joints to be compression type conforming to ASTM C 425.
3. Concrete for appurtenances to be class 3 in accordance with Section 3.0.
4. Brick for appurtenances to be grade SW building brick or grade SW facing brick in accordance with ASTM C 62 and ASTM C 216 respectively.
5. Mortar and grout shall consist of materials as specified in Section 3.0, mixed in the following proportions by volume:
  - a. Mortar for brick laying 1 part cement, 2 parts sand
  - b. Mortar for plastering 1 part cement, 1-1/2 parts sand
  - c. Grout 1 part cement, 1 part sand
6. Castings to be class 30 gray iron in accordance with ASTM A 48.
7. Cast iron pipe.
  - a. Conform to ASA Spec. A 21.6 and/or A 21.8, thickness class 22, unless otherwise noted.
  - b. Exterior surfaces to have either coal-tar or asphalt base coating at least one mill thick.

CONSTRUCTION METHODS

1. Trench bottom to be manually graded and shaped.
2. Trenching and backfilling to be Class D for 8" VCP up to 8 feet in depth unless otherwise indicated. All other trenching and backfilling to be Class C unless otherwise indicated.
3. No pipe laid in water.

5.1-1



CAMPBELL & CASTLE ENGINEERS WICHITA, KANSAS	DSG OR APP	STANDARD DETAIL	NO. 50
DATE FEBRUARY 1972		4 BRICK SANITARY SEWER STANDARD MANHOLE	

SECTION 1.0  
 SPECIAL CONDITIONS

1. Work to be done under these specifications consists of the construction of an 8" vitrified clay pipe sewer service line, appurtenances and other necessary and incidental work in connection with the planned sanitary sewer service.
2. The work is located at Campus High School, 2100 West 55th Street South, Wichita, Kansas.
3. The plans governing and controlling the work are found at the back of these specifications and consist of one sheet numbered and entitled as follows:

Sheet	Title
1	PLAN AND PROFILE SANITARY SEWER SERVICE CAMPUS HIGH SCHOOL

4. The Contractor will be furnished 3 copies of the plans and specifications. Additional copies will be supplied at actual costs.
5. Materials and equipment incorporated into this project are exempt from the payment of sales tax under the laws of the State of Kansas and such sales tax shall not be included in the Proposal. The Owner will furnish an exemption certificate number to the Contractor. At the conclusion of the project the Contractor shall furnish to the Owner, copies of all invoices identified with the aforementioned exemption number covering all materials and equipment incorporated into the project.
6. The Contractor must schedule his operations so as to have the work completed and his equipment removed from the construction site by 8:00 A.M., Monday, August 14, 1972, in order that the pupils, teachers, and others will have no interference with the activities associated with enrollment and the opening of school.
7. Liquid damages in the amount of \$100.00 per day will be assessed against the Contractor for each calendar day or any portion thereof that the work remains incomplete after 8:00 A.M., Monday, August 14, 1972.
8. Prospective bidders may view the Lift Station by contacting Ray Landreth at 524-3491 for an appointment.
9. The Contractor shall dispose of excavated material as directed by the Owner within 1/2 mile of the project.
10. The Contractor shall plug all lines between the existing lift station and the existing wet well manhole as a subsidiary item.

1.0-1 of 2

FILE: 7224

SECTION 2.2  
 TRENCHING AND BACKFILLING

GENERAL REQUIREMENTS

1. Includes trenching and backfilling for pipe lines, excavation for appurtenances and minor structural excavation, filling, compacting, jetting, clearing, hauling and incidental work required to complete construction.
2. Includes borrowing additional material needed or disposal of excess excavated material.
3. Complete earthwork as shown on plans to line and grade as set.
4. Strip vegetation and other objectionable material from areas prior to beginning excavation or depositing embankment.
5. Provide crossings over trench where required to maintain traffic.
6. Repair cuts in improved streets and alleys.

TRENCHING

1. Excavation of trenches for pipe lines and other excavation is unclassified.
2. Remove substances encountered regardless of nature, condition or moisture content.
3. Provide necessary bailing, pumping, and sheeting.
4. Width of trenching below pipe shall not be less than 12 or more than 16 inches wider than outside diameter of pipe.
5. Excavate trench to provide bearing for full length of pipe.
6. Excavate recesses to receive bells.
7. Provide firm foundation for pipe by excavating unsuitable material under pipe for full width of trench and replace with gravel or other suitable material properly compacted.

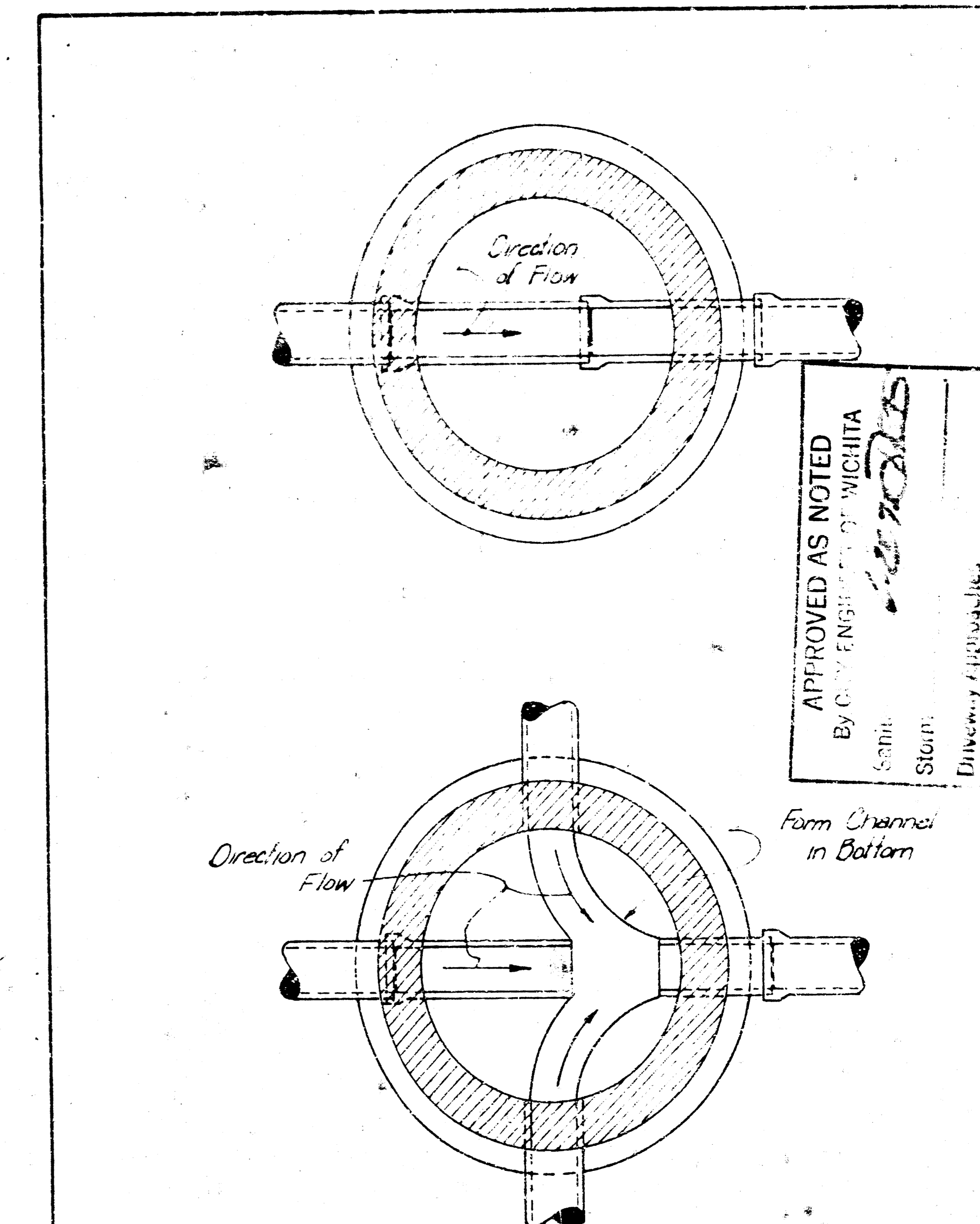
BACKFILLING

1. Use only approved materials producing dense, well-compacted backfill.
2. Use no sod, frozen soil, debris, or soil containing vegetation.
3. Tamp backfill in lower portion of trench to at least 6" above pipe.
4. Compact backfill in upper portion of trench, where shown on plans, by tamping material placed in layers not more than 6" in depth or by flushing and vibrating sand backfill.
5. Jet backfill in upper portion of trench, where shown on plans, by means of approved pressure jet.
6. Backfill of upper portion of trench, not otherwise specified or indicated on plans, to be neatly mounded over trench.

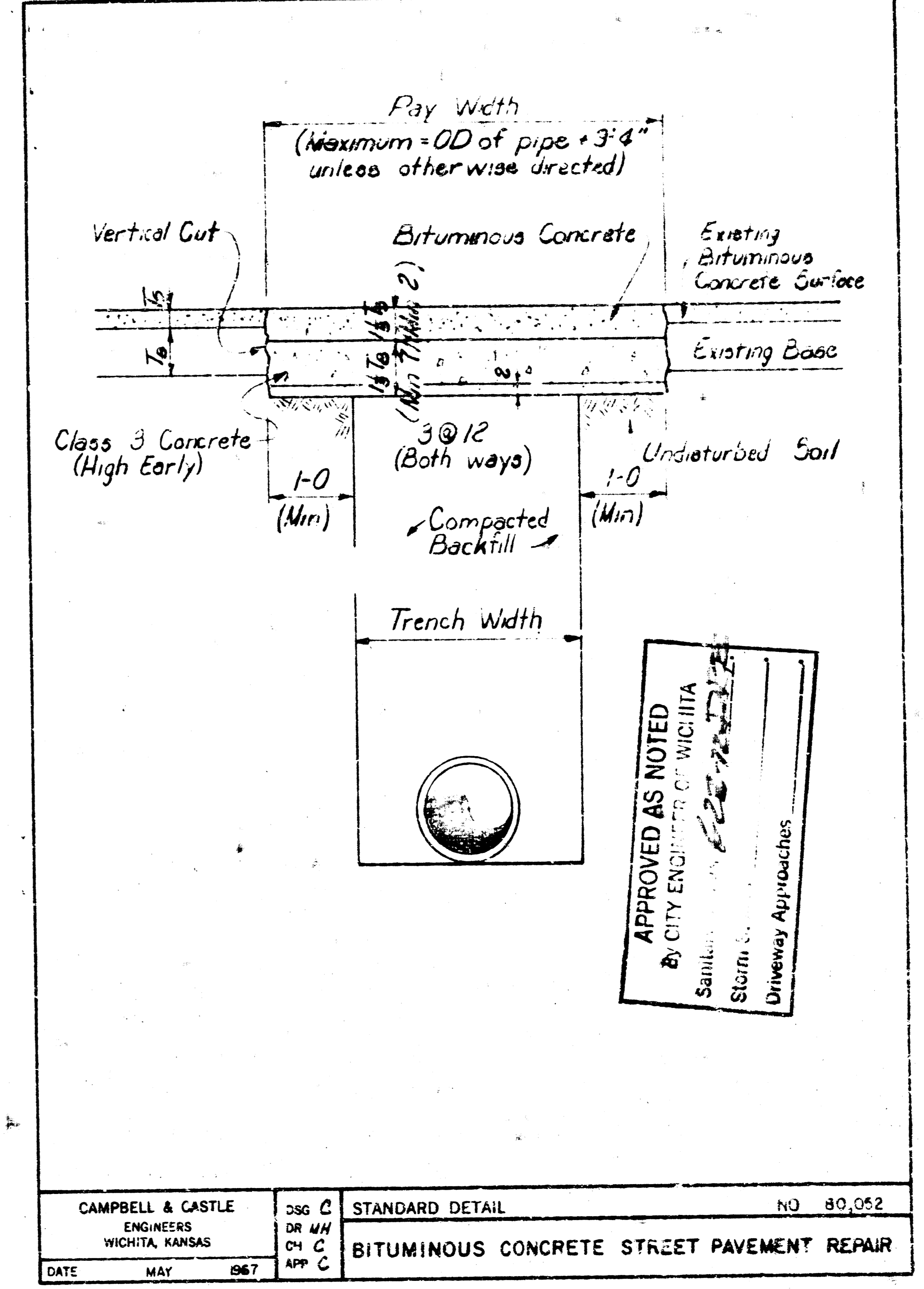
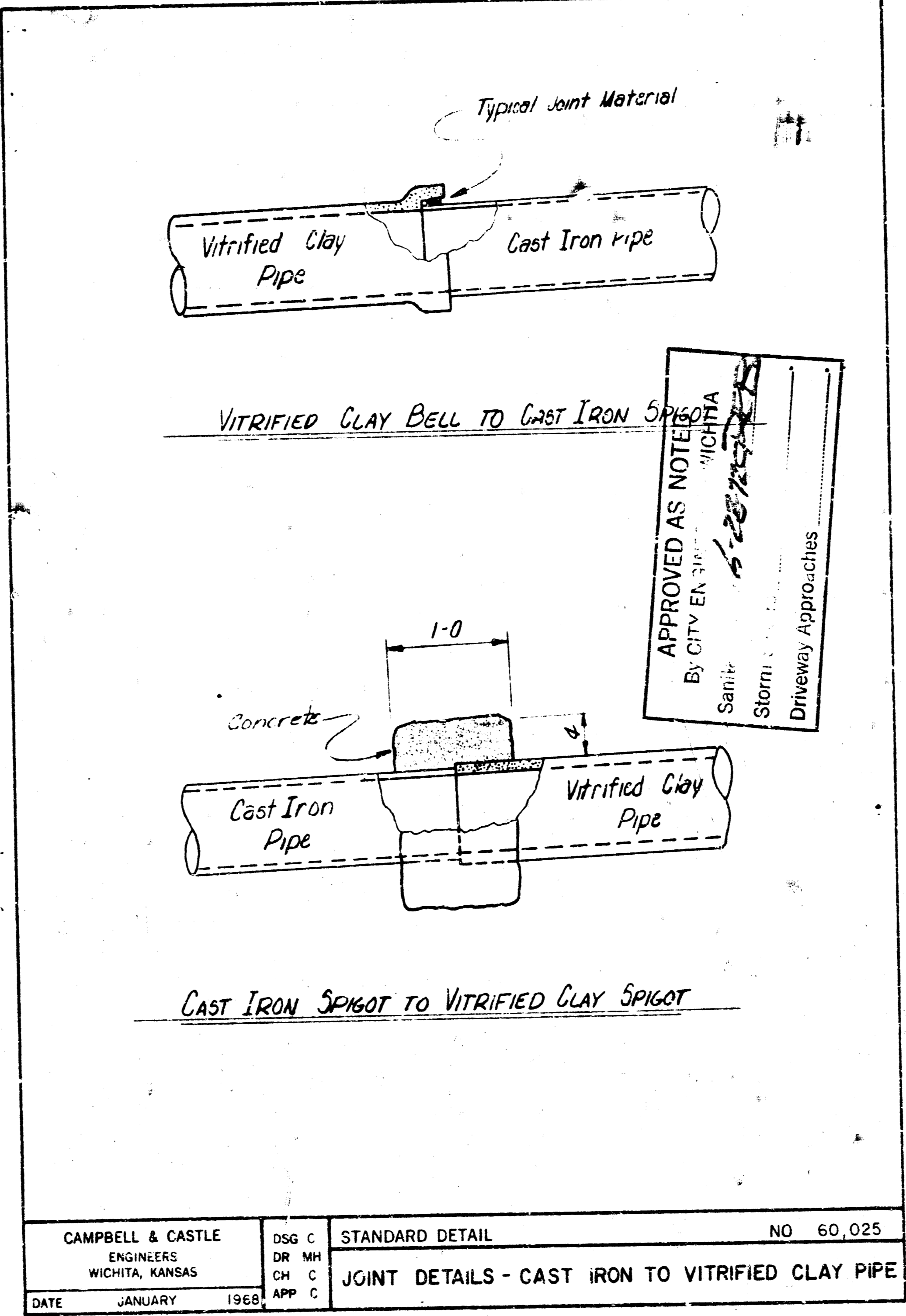
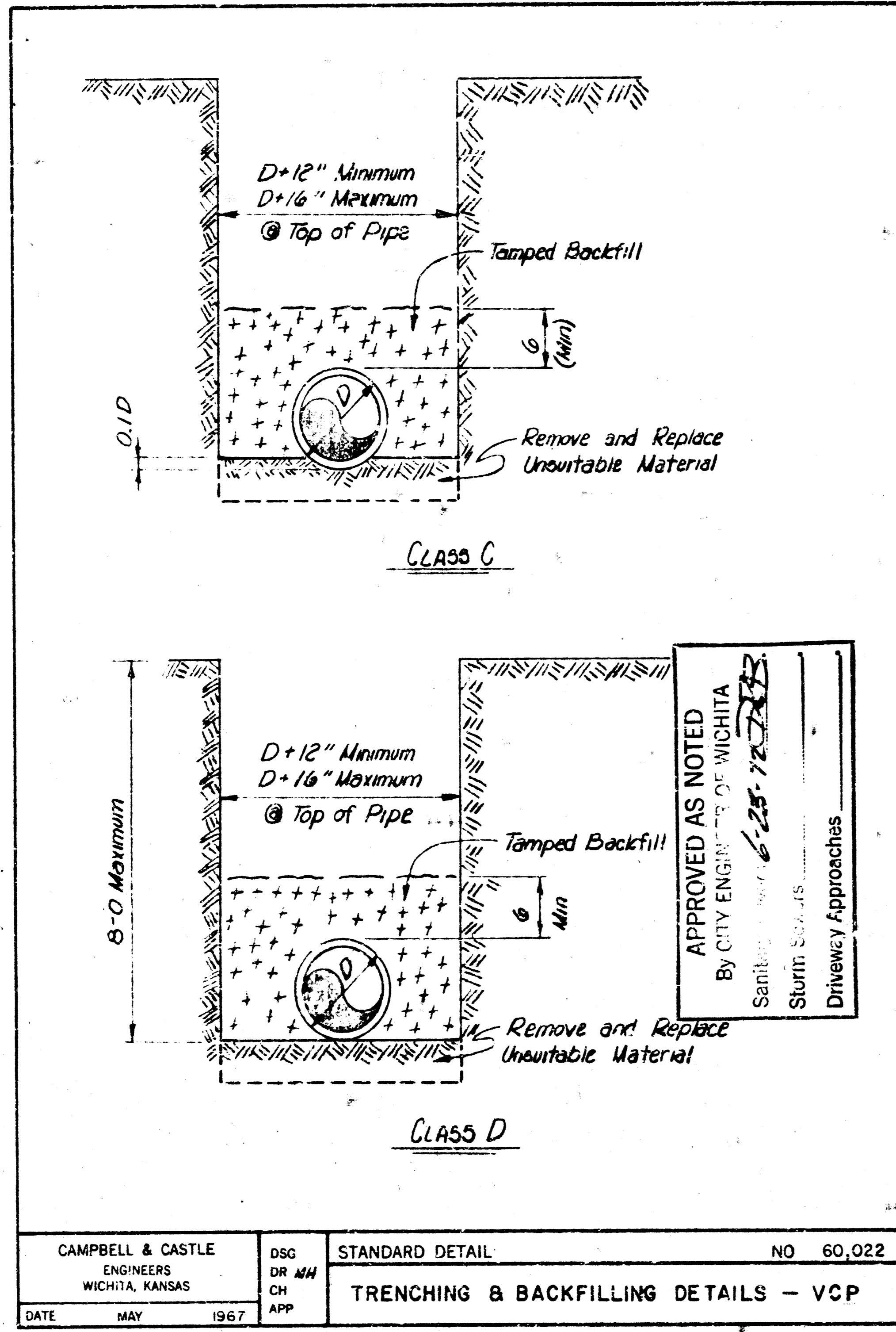
2.2-1

4. Clean pipe of foreign matter before placing in trench.
5. Keep pipe clean during laying operation.
6. Begin laying pipe at outlet end, proceeding toward upper end.
7. Lay pipe with spigot end toward the lower end of the pipeline.
8. Make all joints with pipe in place in trench.
9. Installation to be in accordance with recommendations of the manufacturer.
10. Remove joint material protruding into pipe.
11. Keep water out of trench until joint material has hardened.
12. Replace any pipe disturbed after completion of joints.
13. Keep ends of pipe closed when work is not in progress.
14. Mark all wye and riser locations by a 1" x 4" x 5" wooden board nailed to the side of the trench.
15. Immediately after pipe is laid and wye measurements are taken, backfill in accordance with Section 2.2.
16. Complete connection to existing manhole where shown on plans.
  - a. Make neat opening through manhole wall and invert if necessary.
  - b. Insert pipe at proper location and elevation.
  - c. Close annular space tightly with concrete or with brick and mortar.
  - d. Reshape invert with grout.

5.1-2



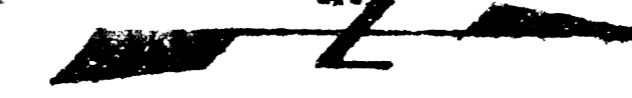
CAMPBELL & CASTLE ENGINEERS WICHITA, KANSAS	DSG OR APP	STANDARD DETAIL	NO. 50
		BRICK SANITARY SEWER MANHOLE BOTTOM	



B.M. 22 630'± West, 47.6' South  
of M.H. C-50 (US&S B.M.) El. 84.23

City of Wichita  
Existing  
CATV  
Cable  
Center  
Site 184-44.6

Telephone Line



Existing Utility  
Not Reel FL BVCP in 70.03

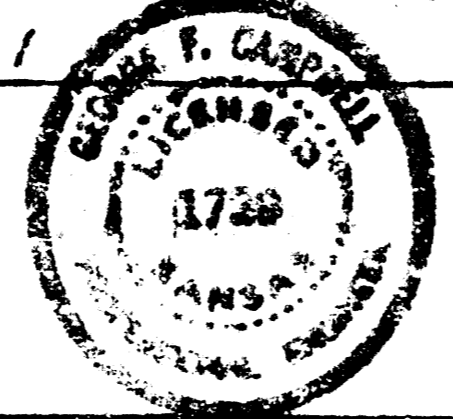
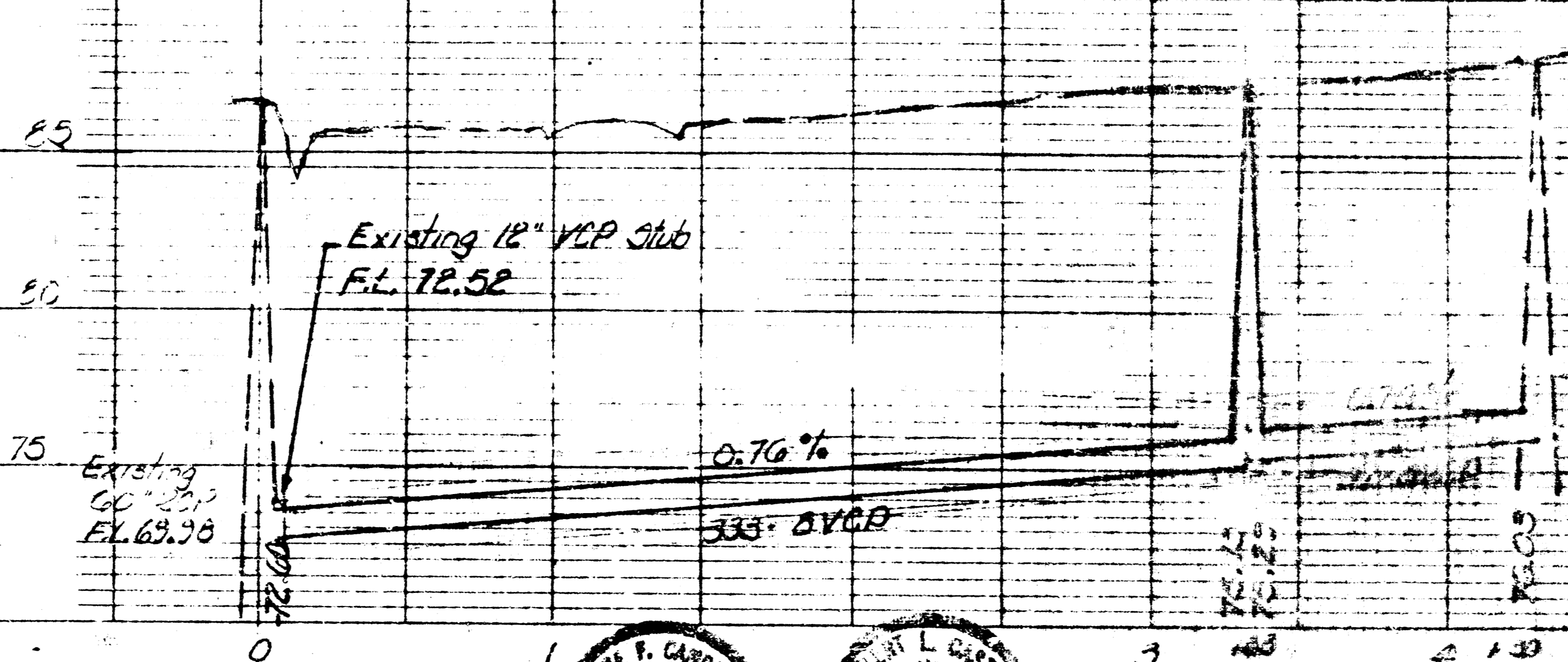
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Remove 37 L.F. BVCP

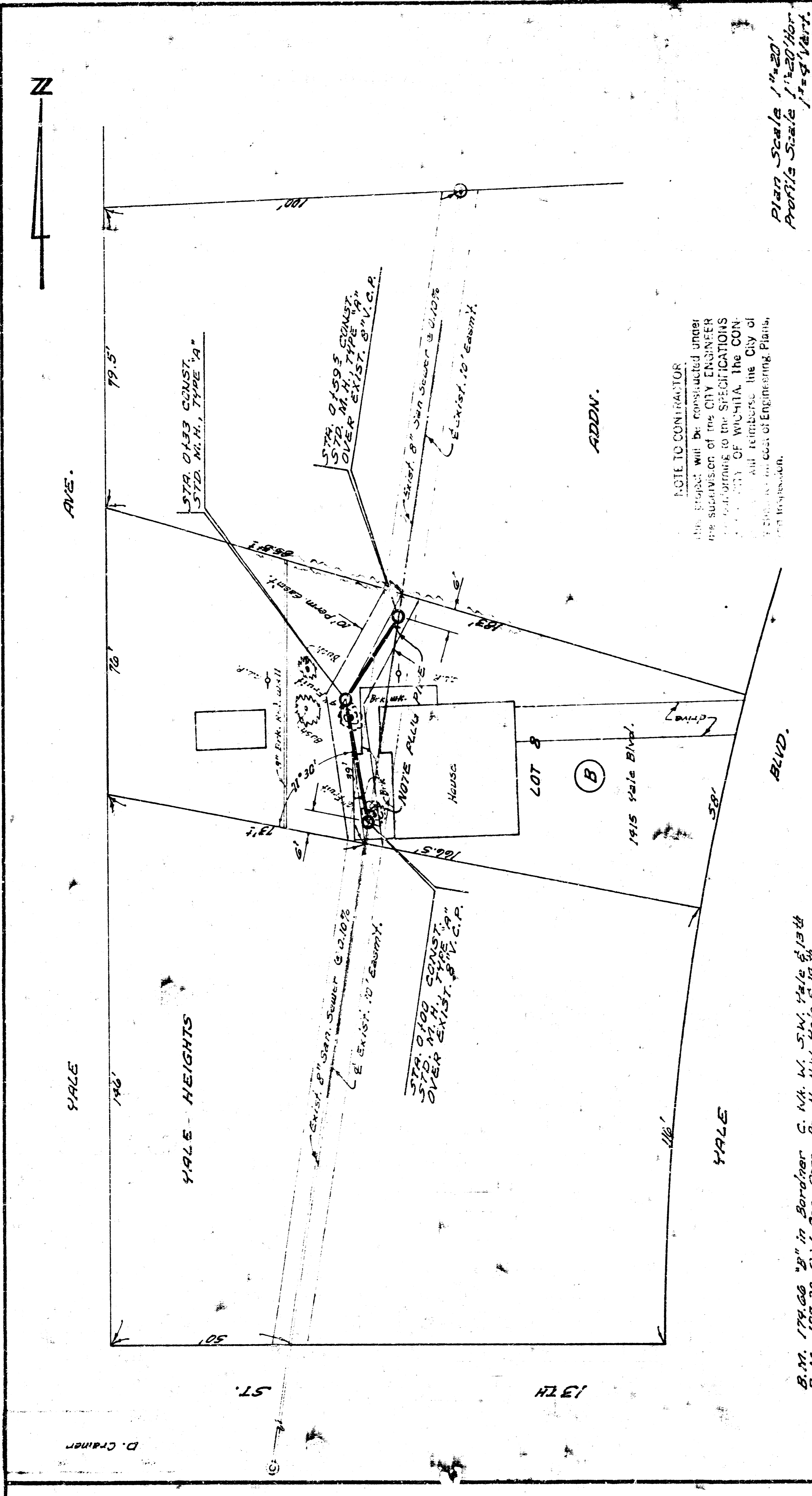
**NOTES**  
All backfill to be compacted.

APPROVED AS NOTED  
E. J. ENYING, WICHITA

Scale	1" = 20' (Horizontal)
Stems	1" = 10' (Vertical)
Drawings	As Projected



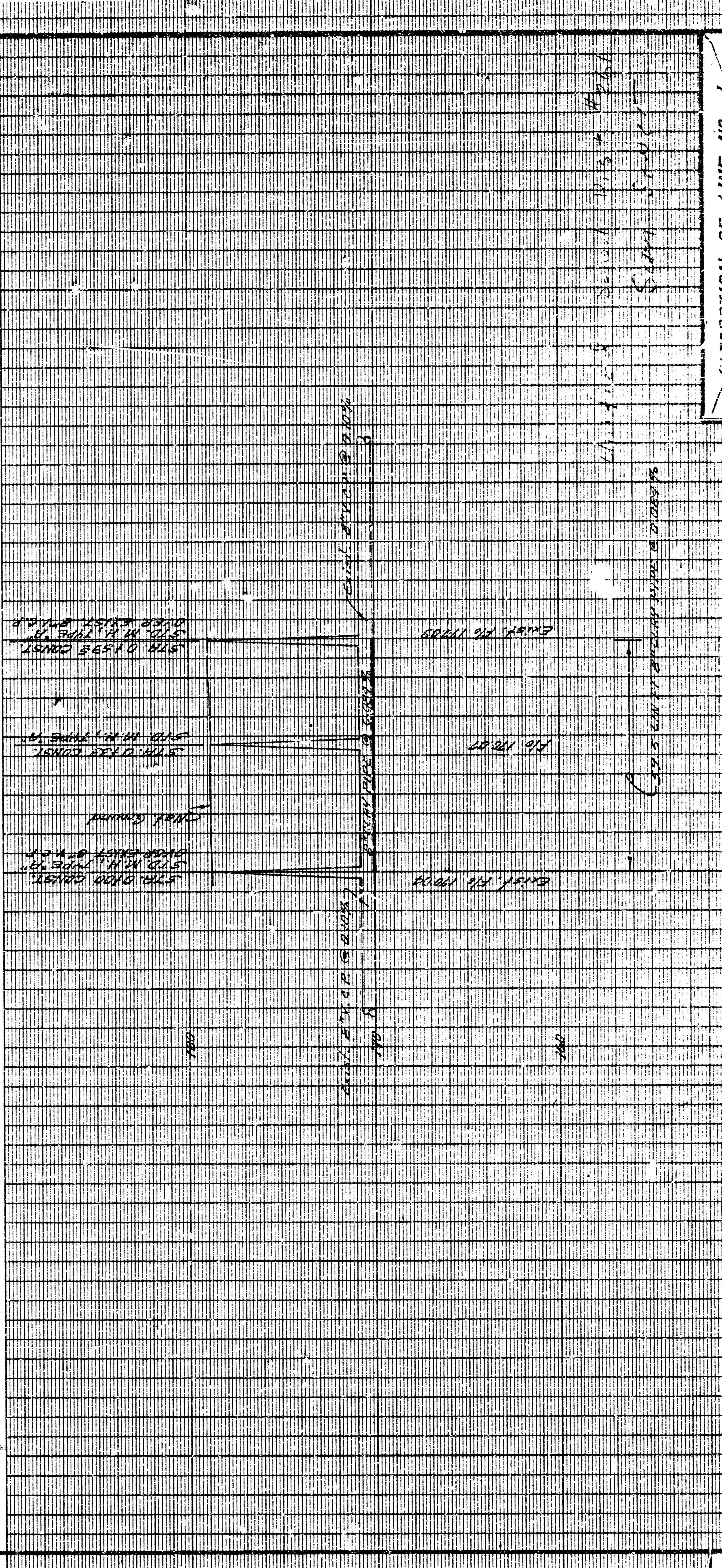
DESIGNED BY CAMPBELL & CASTLE ENGINEERS WICHITA, KANSAS	DATE JUNE 1974	PROJECT SANITARY SEWER SERVICE CAMPBELL HIGH SCHOOL	LOCATION WICHITA, KANSAS	PROJECT NO. 72-3-B-5010-17	SHEET NO. 1 OF 1
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Plan Scale 1"=20'  
 Profile Scale 1"=20' Hor.  
 1"=20' Vert.

B.M. 174.00 "B" in Border of C. N. W. S.W. 1/4, 5th & 13th St.  
 B.M. 187.20 S.W. Cor. Conc. Pg. N. W. 1/4, 5th & 14th St.



ALTERATION OF LINE NO. 13  
 DIST. E., S., S. 40.12  
 CITY OF WICHITA, KANSAS  
 B. E. SMITH, CITY ENGINEER  
 PRIVATE PROJECT  
 DATE: 11/11/11



D. CRAMER