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SANITARY SEWER SYSTEM

THE VILLAS AT CRESTVIEW

REISS AND GOODNESS ENGINEERS

2160 E. DOUGLAS WICHITA - KANSAS

1970

D-2 Armo Truss Pipe. Approval of the Engineer or when specifically called out on the contract for the pipe used on this project may be "Truss Pipe" as manufactured by the following Corporation, Baltimore, Md.

D-2.1 Laying Truss Pipe. Truss pipe shall be installed in accordance with the manufacturer's recommendations. Trenching, Laying, Backfilling shall be as specified elsewhere herein.

D-2.2 Truss Pipe Joints. Joints for truss pipe shall be of the solvent welded sleeve type, shall be water tight and made up in the following steps:

1. Remove dirt and mud from bell and spigot with rag or scraper.
2. Apply primer with brush liberally to outside of spigot and inside of coupling.
3. Apply cement immediately to the same surfaces.
4. Mate joint immediately (within one minute) by shoving home with 1/4 rotation.

The spigot may be at this discretion after the joint if extremes of temperature (either high or low) prevent making of a satisfactory joint.

D-2.3 Sewer Service Pipe. Unless approved in writing by the Engineer the service pipe to be used on this project shall be 12" or 6" vitrified clay pipe with factory molded joints as called out herein. A manhole specifically designed for connecting city pipe to the Truss Pipe shall be used at each pipe connection. Connection shall be water tight.

D-2.4 Plastic Service Pipe. Unless approved in writing by the Engineer or when specifically called out on the contract for the pipe used on this project may be ABS plastic pipe meeting the following specifications:

a. General. The service pipe specified herein shall be 12" or 6" diameter, rigid wall ABS pipe for use in sanitary applications. Couplings and fittings shall be solvent welded. The minimum allowable backfilling shall be as specified for vitrified clay pipe in this specification.

b. Excavation. Excavation shall be made to the full proposed form, right excavation shall be made for at the unit price set forth on the proposal. In this project, material shall be excavated only if it is limestone, hard shale or other material which, in the opinion of the Engineer, cannot be removed from the trench with the normal trenching equipment. Generally, rock excavation will require the use of jackhammer and dynamite.

c. Backfilling. Backfilling shall be made with the material specified in this specification. The trench shall be backfilled with the material specified in this specification. The trench shall be backfilled with the material specified in this specification.

d. Disinfection. The pipe shall conform to the dimensions and tolerances as shown in Table 1 when measured in accordance with Sections 4, 7 and 8 of SD-1-2000.

NOMINAL DIAMETER	OUTSIDE DIAMETER		WALL THICKNESS	
	AVERAGE	MINIMUM	AVERAGE	MINIMUM
4"	4.215	4.131	0.220	0.200
6"	6.285	6.206	0.240	0.220

The following specifications refer to Armo Extra Strength Solid Wall ABS Pipe. Other pipe types meeting these specifications may be permitted for the Engineer's approval.

b. Composition. The pipe shall be made of virgin high density polyethylene and shall conform to the requirements of ASTM D-1775, Type III and Type IV, except that the minimum heat deflection temperature (ASTM D-1625) shall be 100° F. Clean, recycled material, generated from the manufacturing process may be used if the manufacturer provides that the recycled material meets all the requirements of this specification.

c. Dimensions. The pipe shall conform to the dimensions and tolerances as shown in Table 1 when measured in accordance with Sections 4, 7 and 8 of SD-1-2000.

d. Performance. The pipe shall be non-toxic to humans and free from visible cracks, holes, foreign inclusions or other injurious defects. The pipe shall be as uniform as commercially practicable in color, specific gravity and other physical properties.

e. Identification. Upon request of the Engineer in the contract or order, a manufacturer's certification that the pipe was manufactured and tested in accordance with this specification, together with a report of the test results, shall be furnished at the time of shipment.

f. Marking. The pipe shall be marked on the outside of the barrel in letters 3/8 in. (9.525 mm) in height and of bold type. The marking shall indicate the name of the manufacturer or supplier, and the nominal diameter. Lettering shall be legible and permanent under normal conditions of handling and storage.

g. Backfilling Trenches. All trenches and excavations shall be backfilled immediately after use is laid therein, unless other protection of the pipeline is directed. Under no circumstances, however, shall water be permitted to rise in unbackfilled trenches after pipe has been placed.

h. Material. The pipe shall be made of backfilling that contains stones having a maximum diameter of 6" from earth, debris, or earth with an exceptionally high void content. For backfill up to a level of 1 ft. over the top of the pipe, only selected materials free from stones or other hard materials shall be used and the backfill shall be placed completely under the pipe branches.

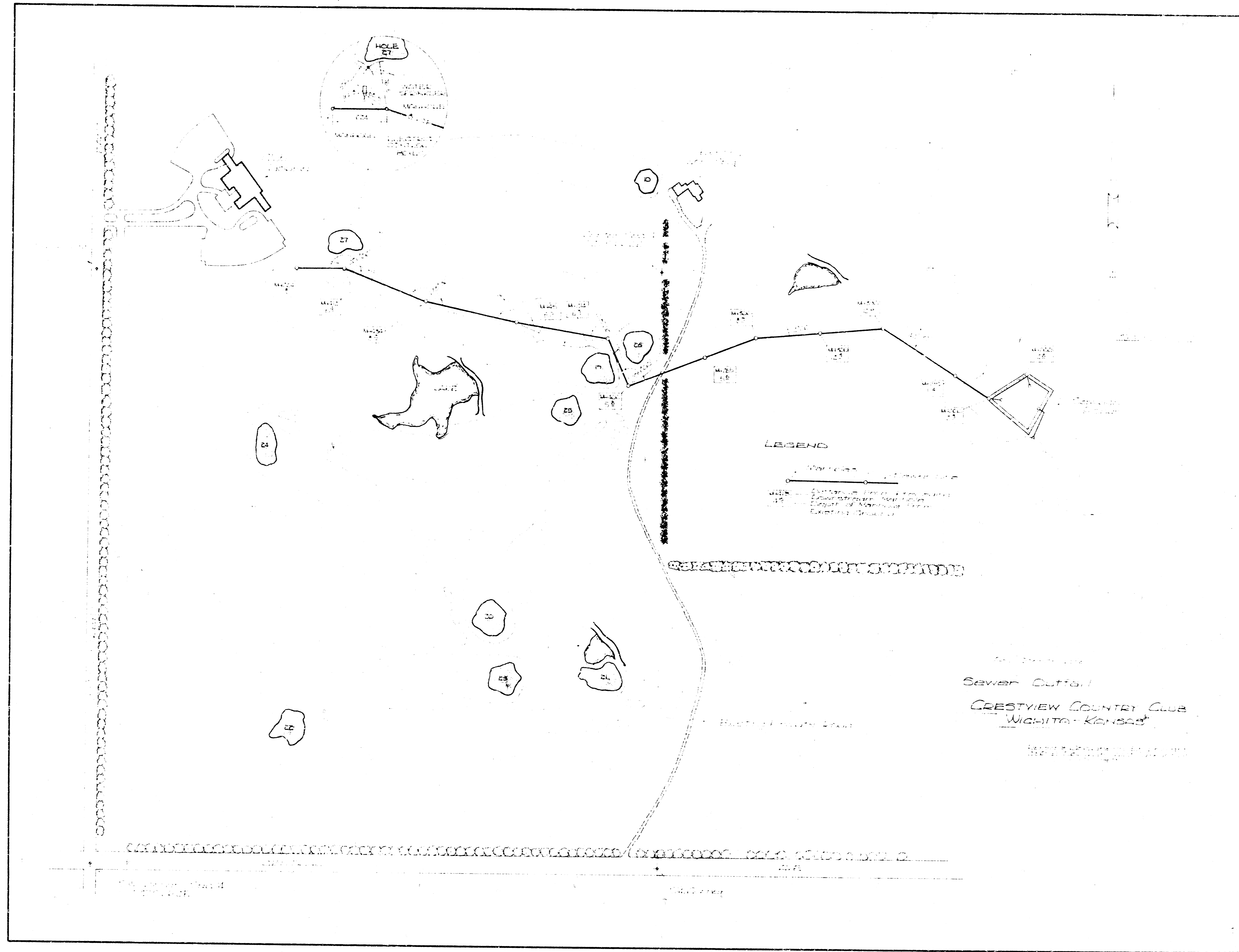
i. Backfill. The backfill shall be placed completely under the pipe branches in uniform layers not exceeding 6" in depth on each side. Each layer shall be placed, then carefully and uniformly tamped, so as to eliminate the possibility of lateral displacement.

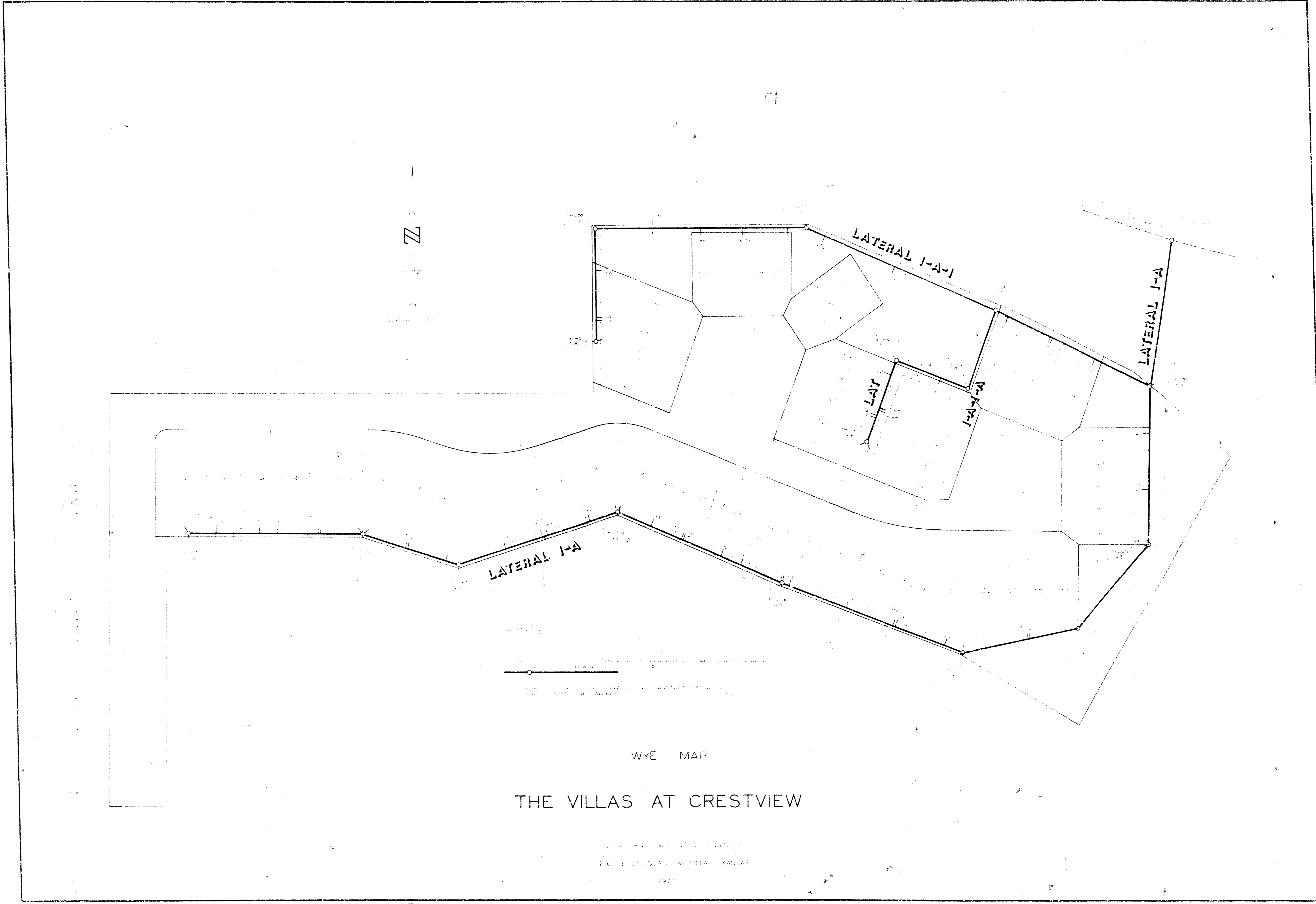
j. Areas requiring special attention shall be called out elsewhere herein on the contract. Areas or work shall be indicated by the Engineer. Special attention shall be given to areas where the degree of convection indicated should be in no case be less than 50% of maximum Friction Factor.

k. Manholes. Manholes shall be built of brick and cement mortar, precast reinforced concrete, or cast-in-place concrete, as approved. Manholes shall be of the form and dimensions shown on the detailed drawings. The manhole shall be built so that the cover is flush with the road surface in all roads and driveways, or one (1) foot below the surrounding ground level, as directed by the Engineer. Greater burial may be provided in special cases at the Engineer's direction.

l. Brick and Mortar Manholes. m. Manhole Bricks. n. Manhole Mortar. o. Manhole Covers. p. Manhole Frames. q. Manhole Linings. r. Manhole Sillings. s. Manhole Sillings. t. Manhole Sillings. u. Manhole Sillings. v. Manhole Sillings. w. Manhole Sillings. x. Manhole Sillings. y. Manhole Sillings. z. Manhole Sillings.

1. Manhole Bricks. 2. Manhole Mortar. 3. Manhole Covers. 4. Manhole Frames. 5. Manhole Linings. 6. Manhole Sillings. 7. Manhole Sillings. 8. Manhole Sillings. 9. Manhole Sillings. 10. Manhole Sillings. 11. Manhole Sillings. 12. Manhole Sillings. 13. Manhole Sillings. 14. Manhole Sillings. 15. Manhole Sillings. 16. Manhole Sillings. 17. Manhole Sillings. 18. Manhole Sillings. 19. Manhole Sillings. 20. Manhole Sillings. 21. Manhole Sillings. 22. Manhole Sillings. 23. Manhole Sillings. 24. Manhole Sillings. 25. Manhole Sillings. 26. Manhole Sillings. 27. Manhole Sillings. 28. Manhole Sillings. 29. Manhole Sillings. 30. Manhole Sillings. 31. Manhole Sillings. 32. Manhole Sillings. 33. Manhole Sillings. 34. Manhole Sillings. 35. Manhole Sillings. 36. Manhole Sillings. 37. Manhole Sillings. 38. Manhole Sillings. 39. Manhole Sillings. 40. Manhole Sillings. 41. Manhole Sillings. 42. Manhole Sillings. 43. Manhole Sillings. 44. Manhole Sillings. 45. Manhole Sillings. 46. Manhole Sillings. 47. 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LATERAL I-A

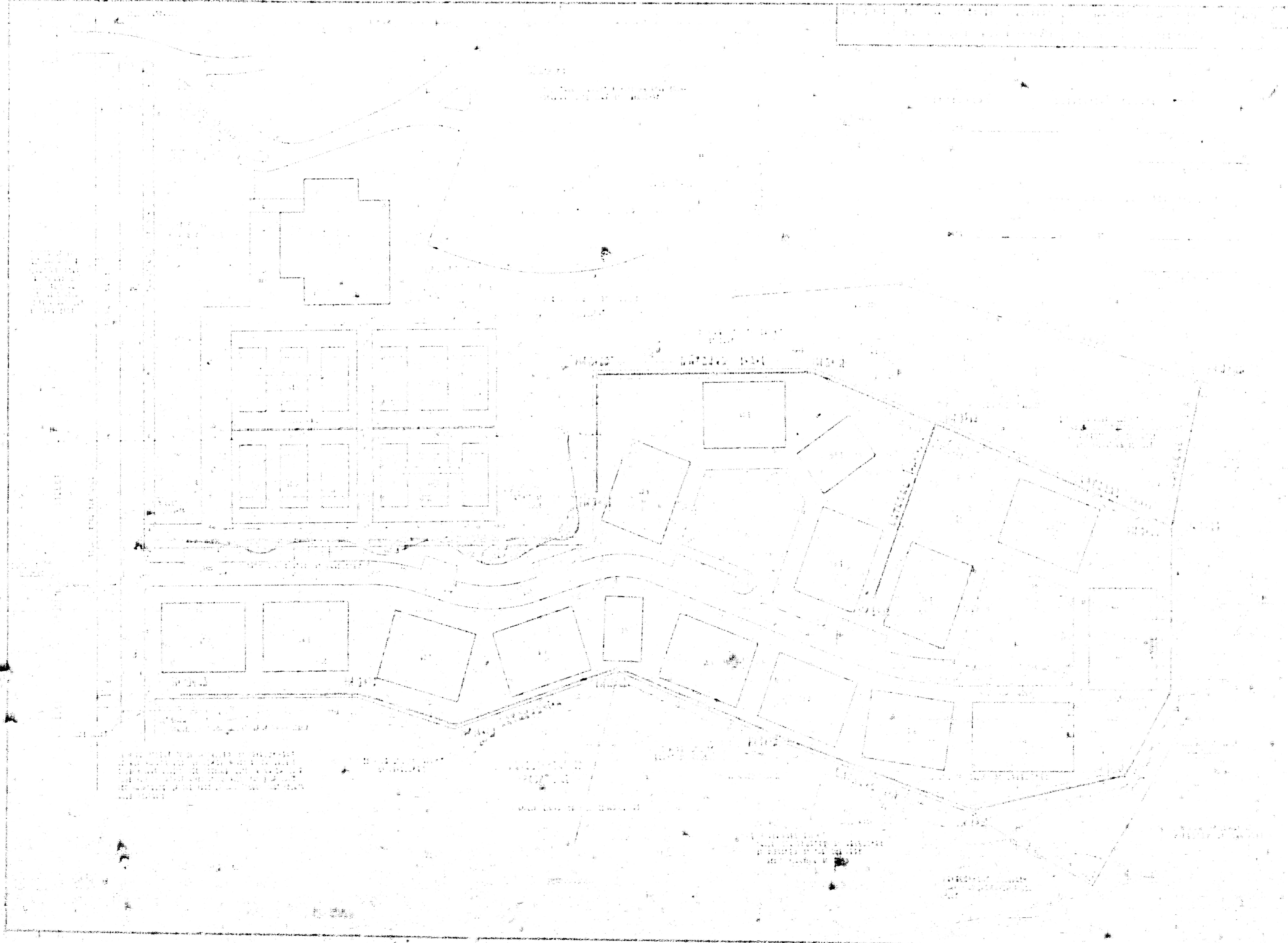
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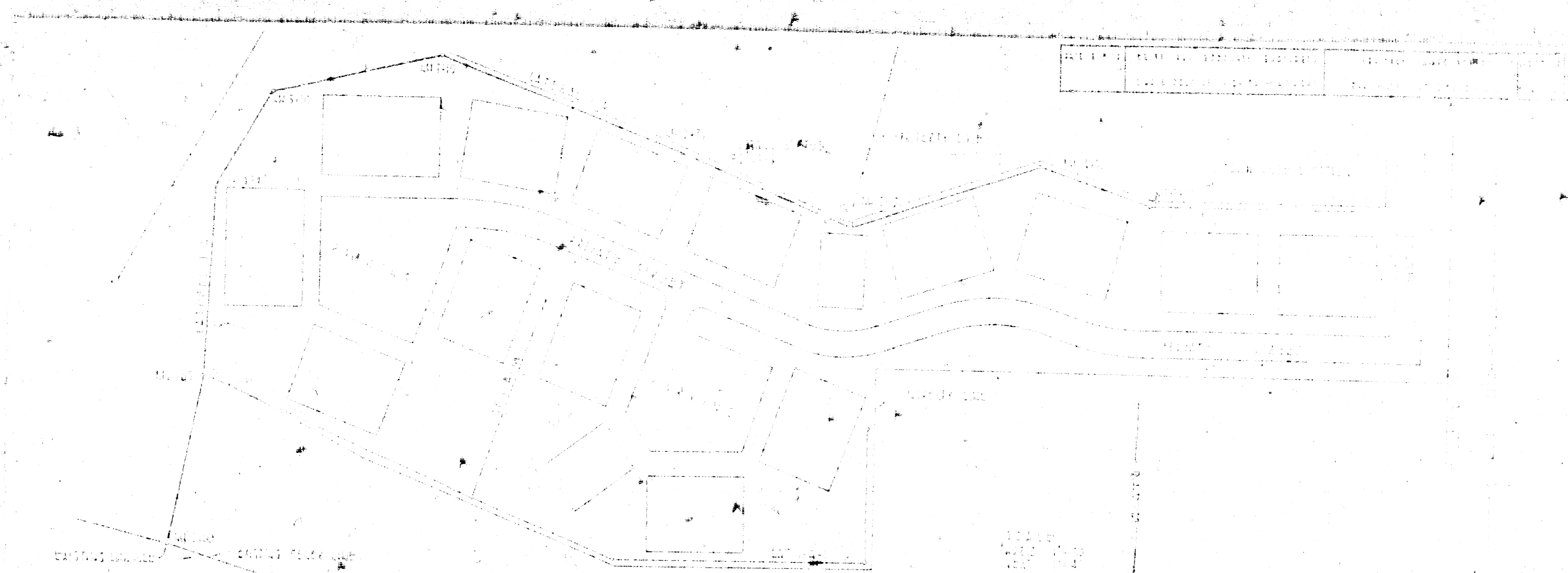
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WYE MAP

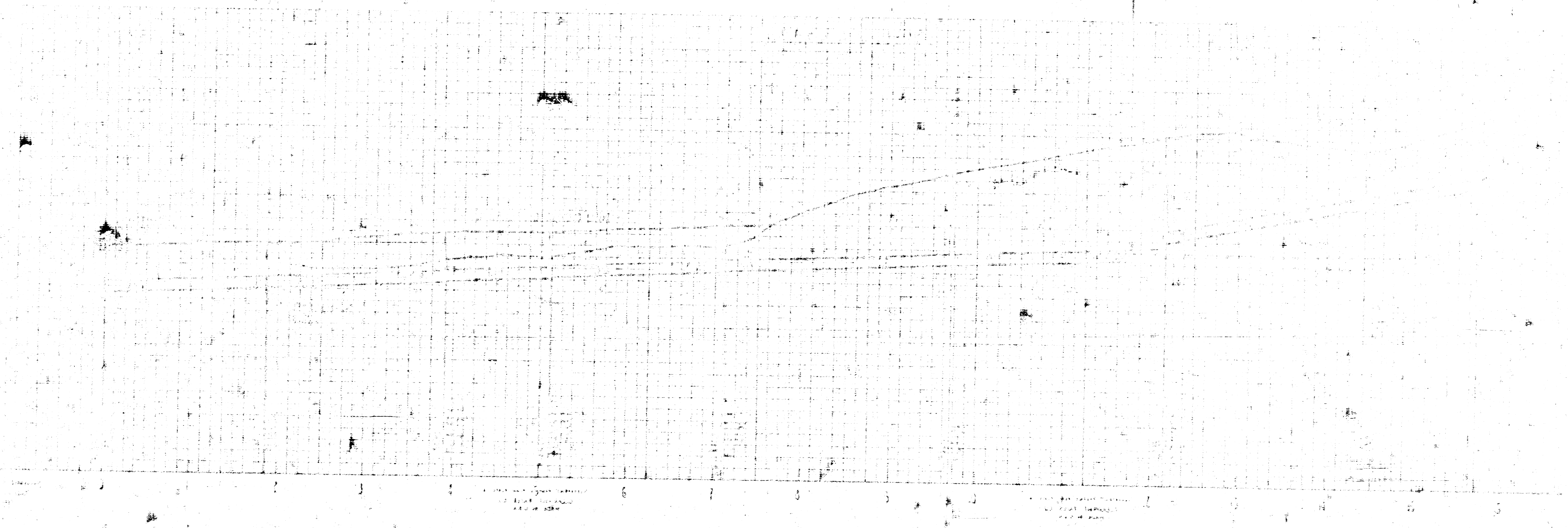
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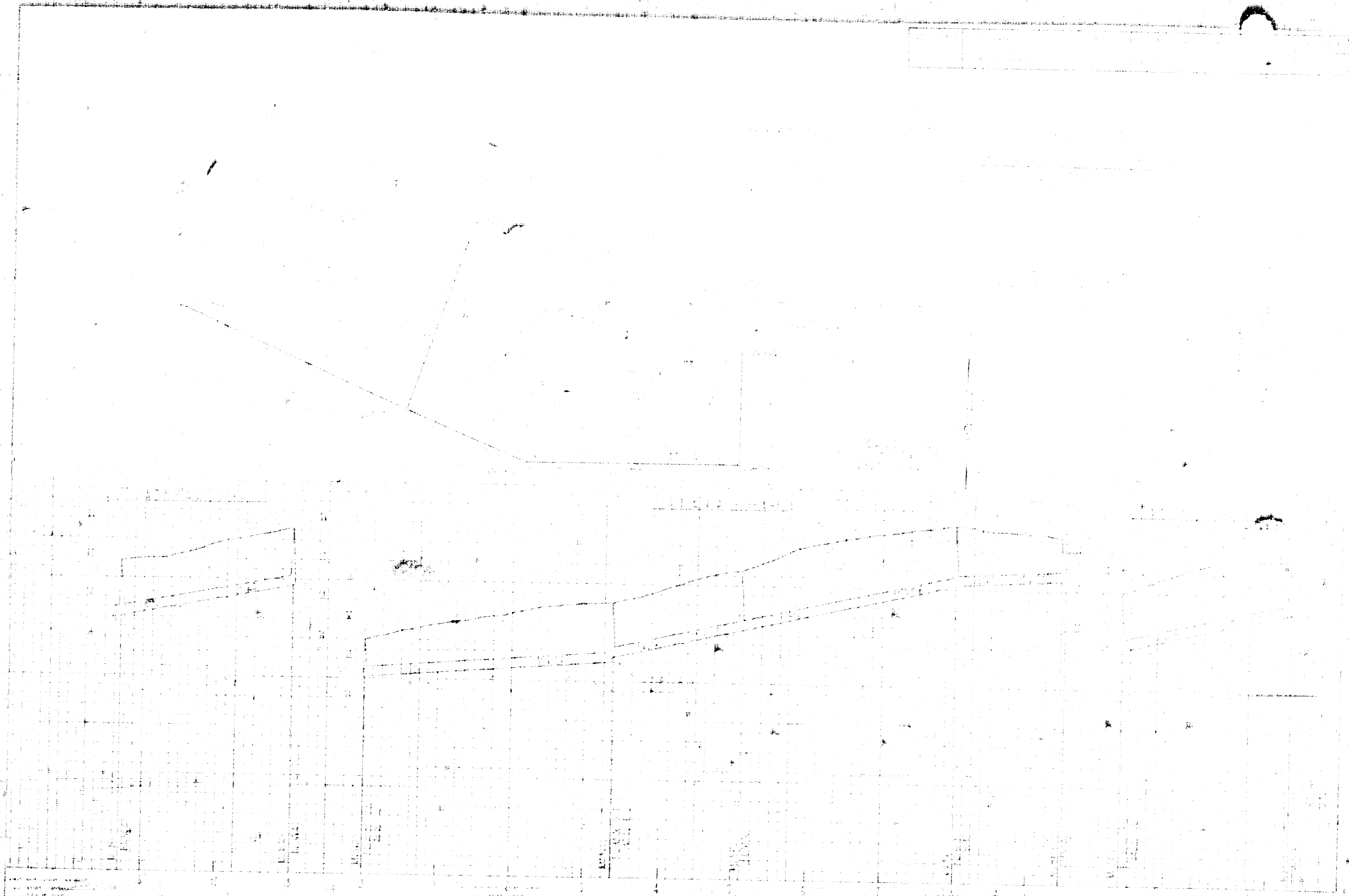
2631 WINDSOR WICHITA, KANSAS
1977





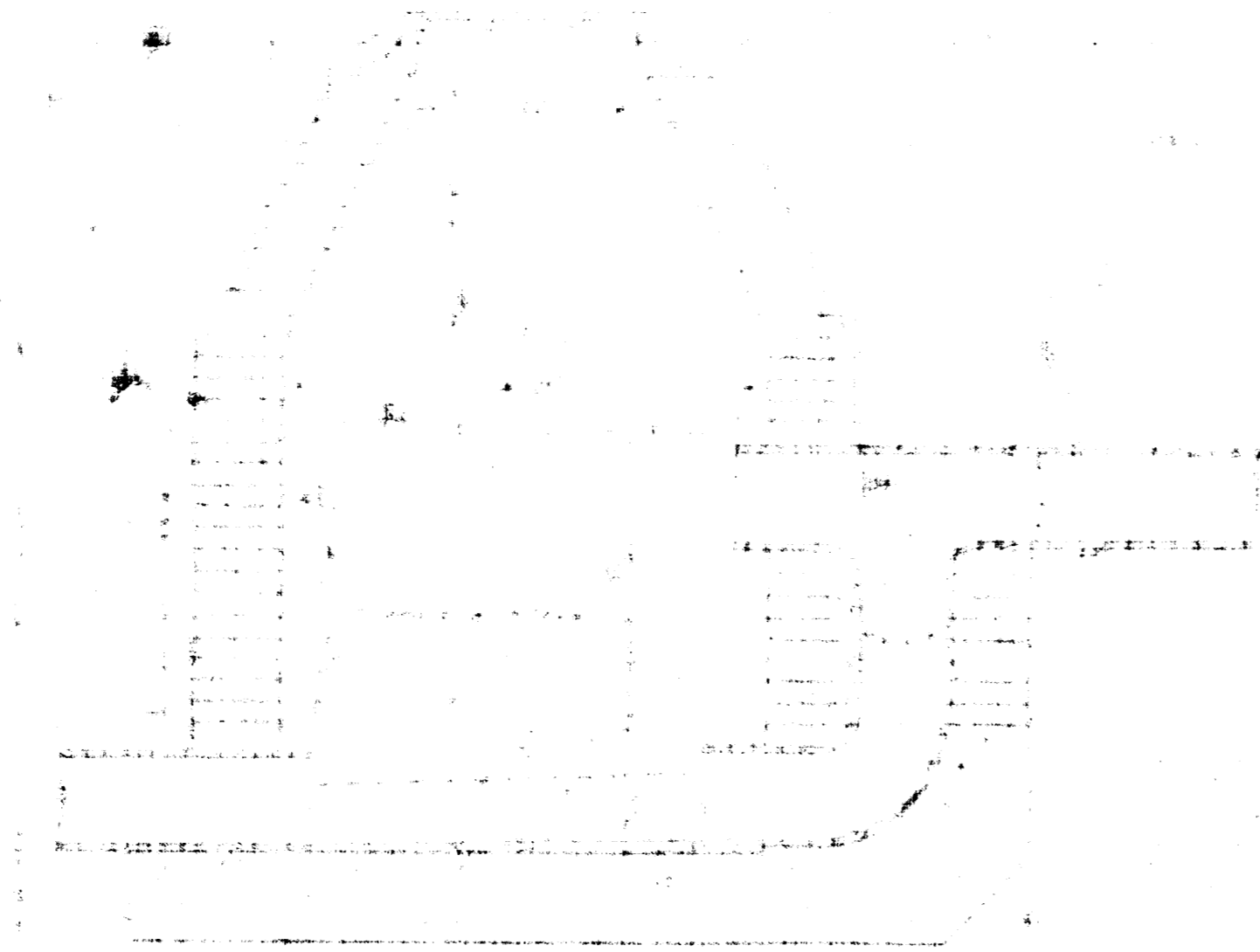
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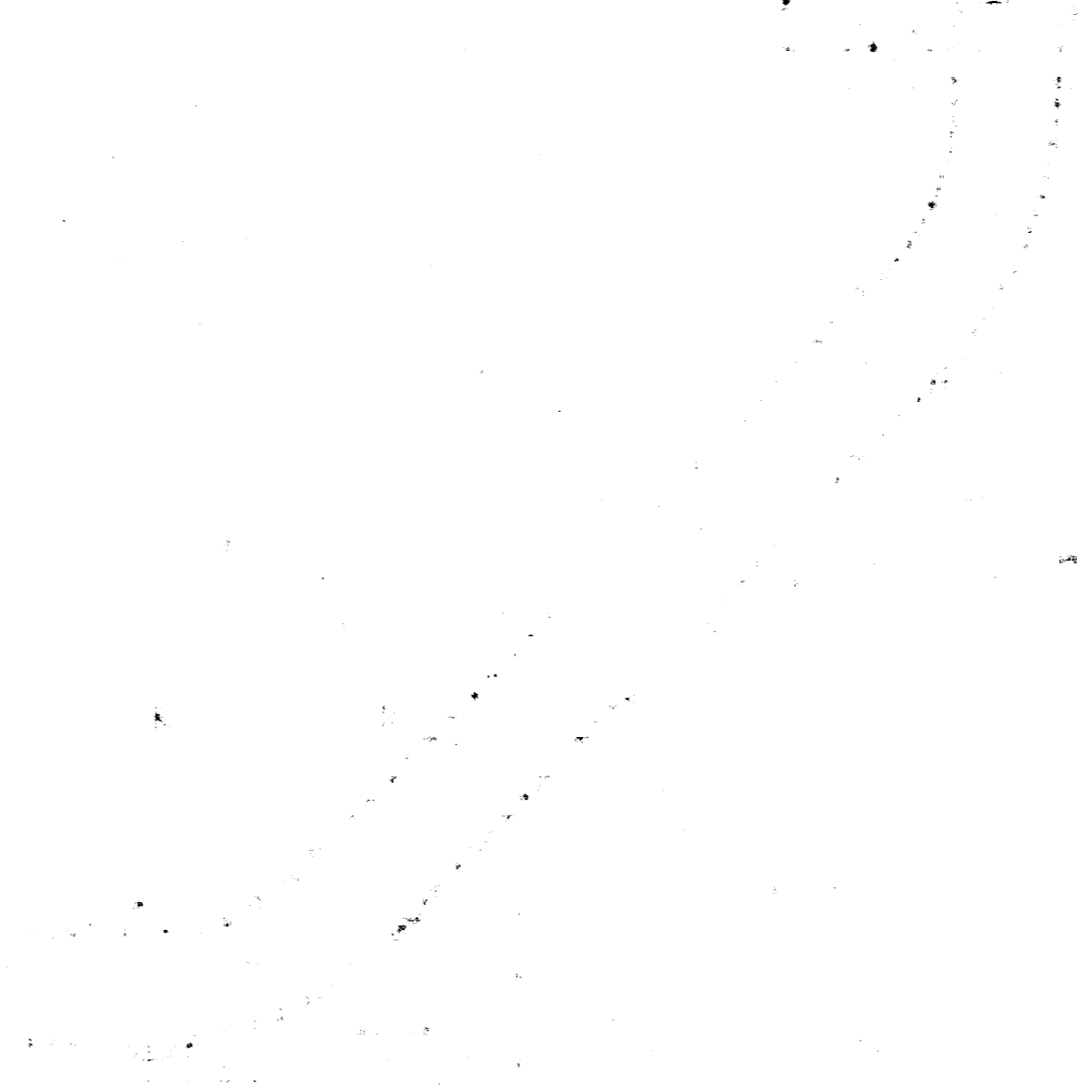




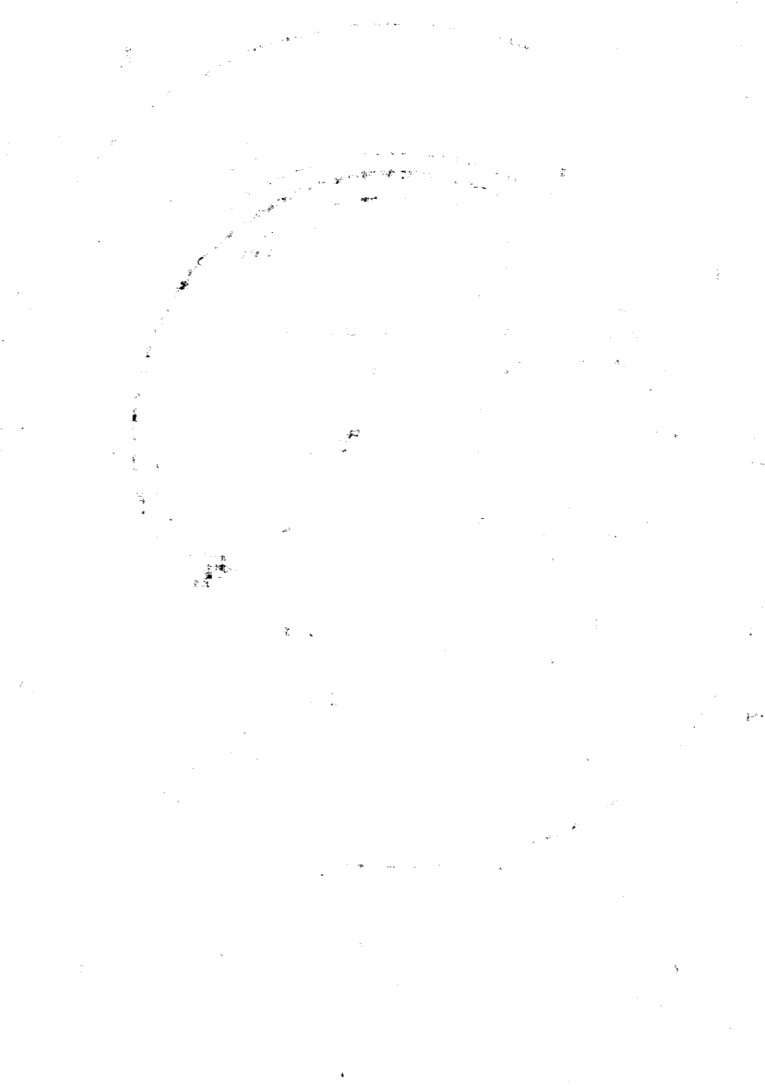
BRICK MANHOLE



BRICK DROP MANHOLE



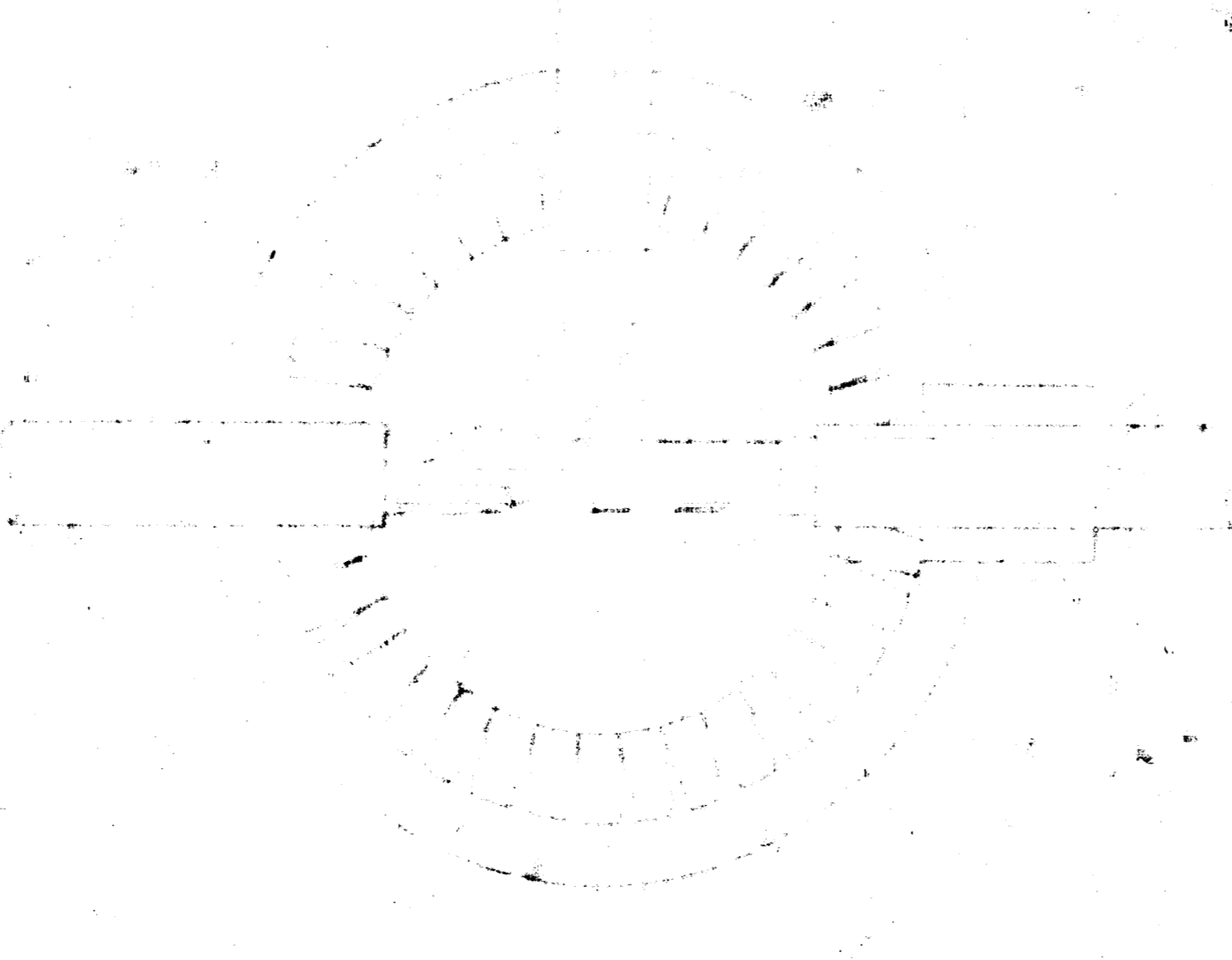
LAMP HOLE



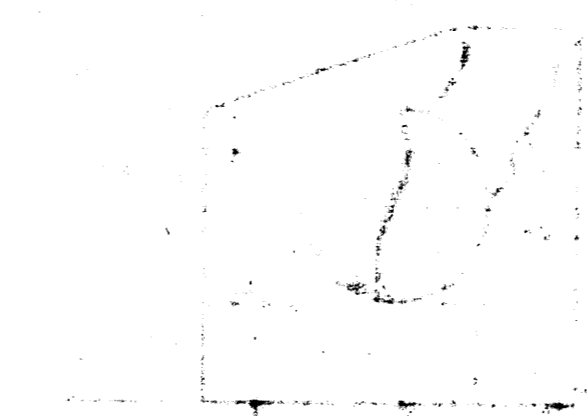
MANHOLE COVER



BRICK MANHOLE



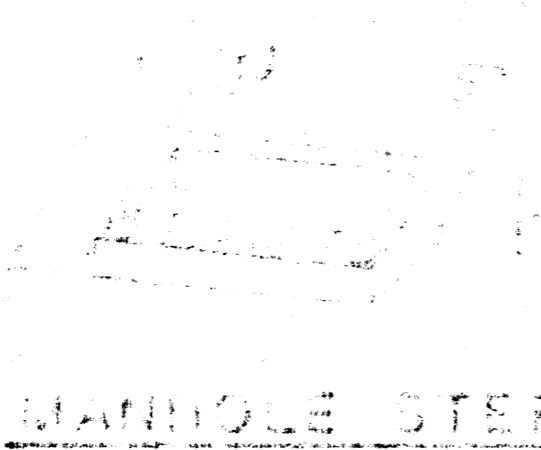
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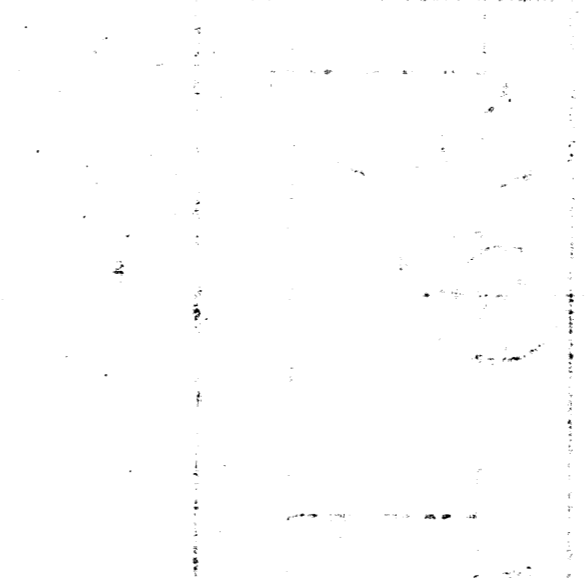
SERVICE CONNECTION



LAMP HOLE



MANHOLE STEP



SERVICE CONNECTION

GENERAL NOTES
MANHOLE COVER
APPLICABLE
SEE DRAWING FOR
DIMENSIONS