

PLANS FOR
SEWAGE DISPOSAL WORKS
AND
INTERCEPTING SEWERS
GRAND JUNCTION COLORADO



INDEX - CONTRACT NO. II
INTERCEPTING SEWERS

1. SEWERS, GRAND AVENUE LINE
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5. SEWERS, CROSBY - SOUTH LINE
6. SEWERS, CROSBY - SOUTH LINE
7. SEWERS, CROSBY - SOUTH LINE
8. SEWERS, NINTH STREET LINE
9. SEWERS, NINTH STREET LINE
10. FIFTH AND STRUTHERS PUMP STATION CONNECTING SEWERS
11. FIFTH AVENUE FORCE MAIN
12. STANDARD MANHOLE STRUCTURES

BLACK & VEATCH
CONSULTING ENGINEERS
KANSAS CITY MO.

INDEX - CONTRACT NO. III
SEWAGE DISPOSAL WORKS

13. GENERAL LAYOUT
14. PLANT PUMP STATION
15. SETTLING BASIN - PLAN AND SECTIONS
16. SETTLING BASIN - DETAILS
17. SETTLING BASIN - DETAILS
18. SLUDGE DIGESTION TANK
19. SLUDGE DIGESTION TANK AND SCREENING UNIT
20. MISCELLANEOUS DETAILS
21. STANDARD HEATING
22. PUMP STATION AT FIFTH AND STRUTHERS
12. STANDARD MANHOLE STRUCTURES

MAP OF PROPOSED COMBINED SEWER DISTRICT NO. 5

SHOWING
BOUNDARIES OF DISTRICT, IMPROVEMENTS TO BE MADE,
PROPERTY TO BE ASSESSED, ESTIMATED ASSESSMENTS
AND THE ESTIMATED COST

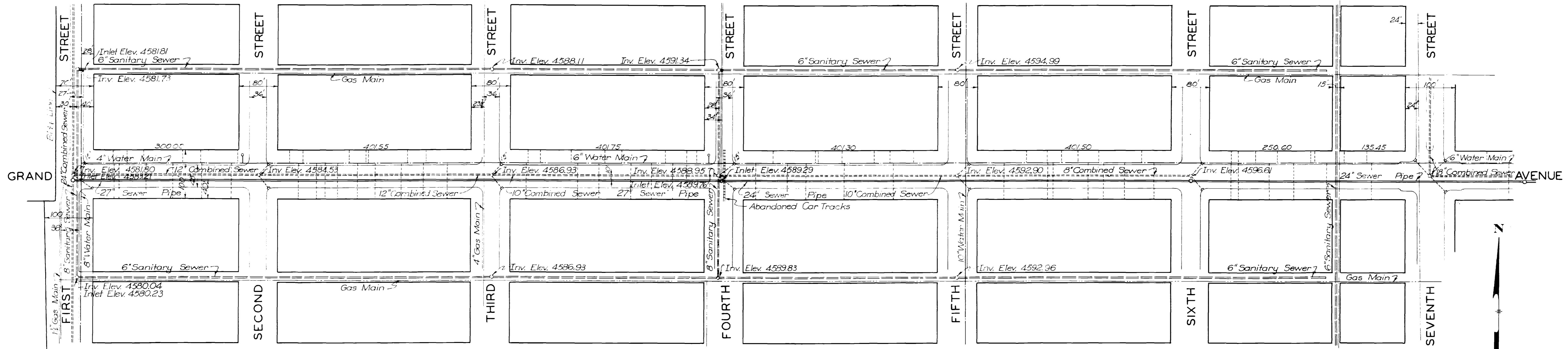


CITY ENGINEER

ESTIMATED ASSESSMENT PER SQ. FT. \$0.038612
" " " " LOT 25' X 125' \$12.07



PLAN	SURVEYED	DATE
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	NOTE BOOK	
	ALIGNED	CHECKED
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	NO.	NO.

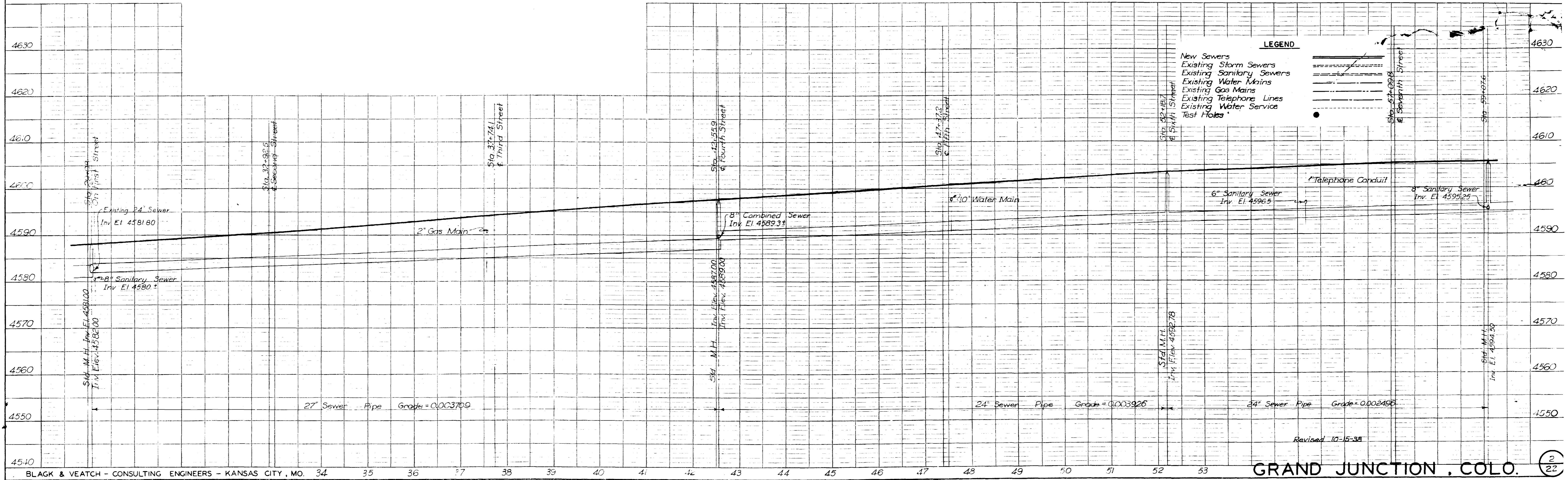


CONTRACT II
GRAND AVENUE

General Notes:
 The locations of existing public utilities as shown are taken from the best available data. The City will not be responsible for variations from locations as shown, whether above or below the ground surface.
 Elevations shown refer to City Datum.
 All pavement is oiled gravel unless otherwise noted.
 Hand base pavement is asphaltic concrete, asphalt on concrete base, or concrete.
 All M.H. to be 4'-0" dia. unless otherwise noted.

Scales
 Horizontal 1" = 100'-0"
 Vertical 1" = 10'-0"

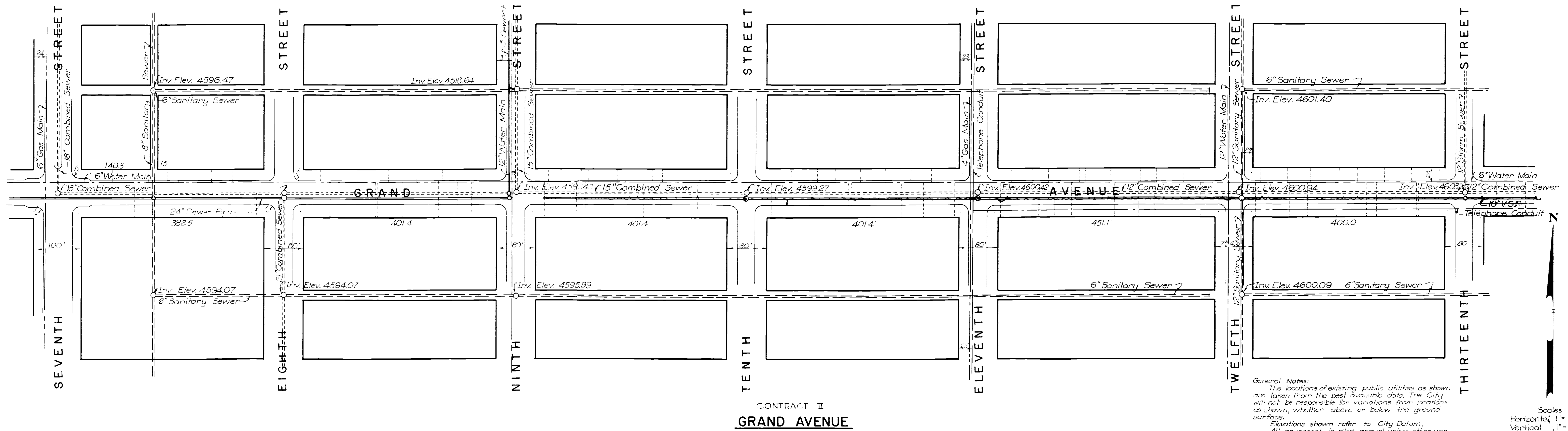
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Revised 10-15-38

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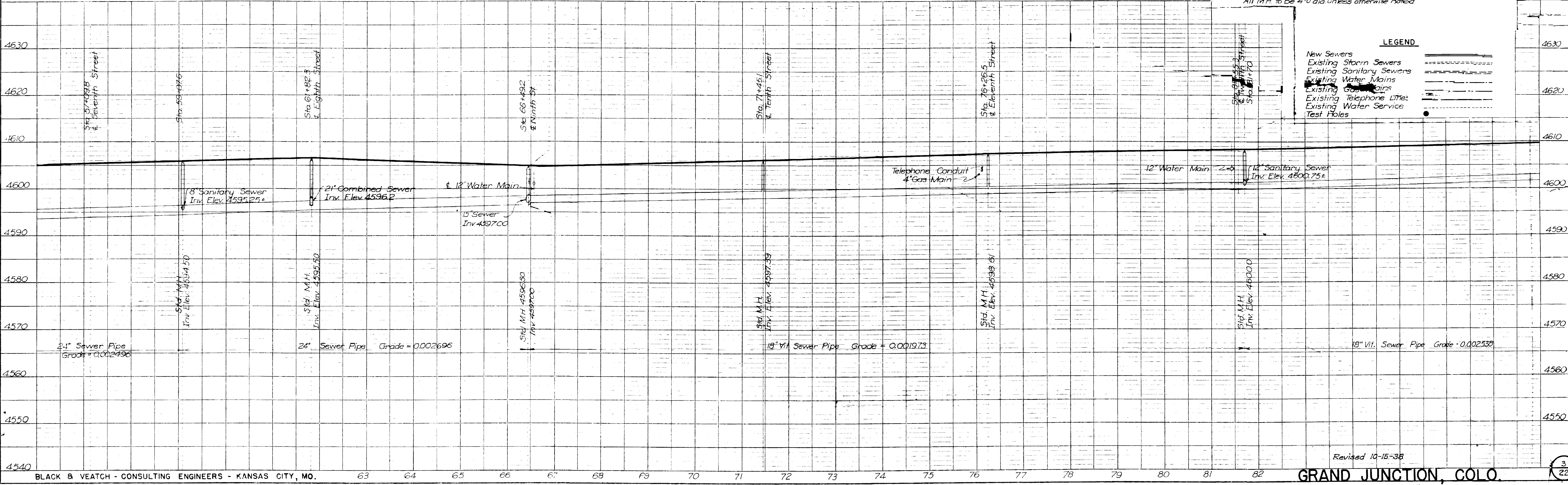
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CONTRACT II
GRAND AVENUE

General Notes:
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 Elevations shown refer to City Datum.
 All pavement is laid gravel unless otherwise noted. Hard base pavement is asphaltic concrete, asphalt on concrete base, or concrete.
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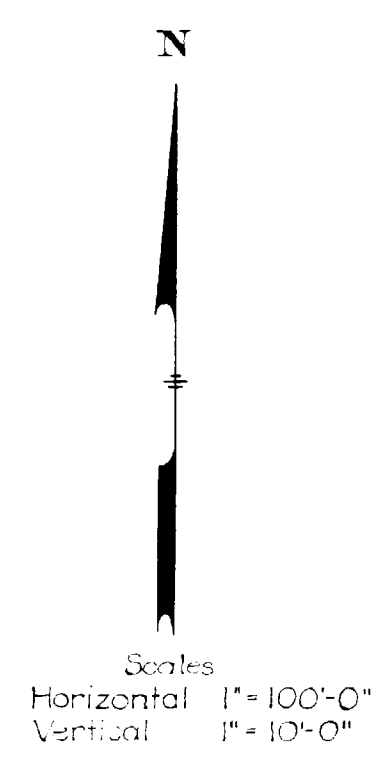
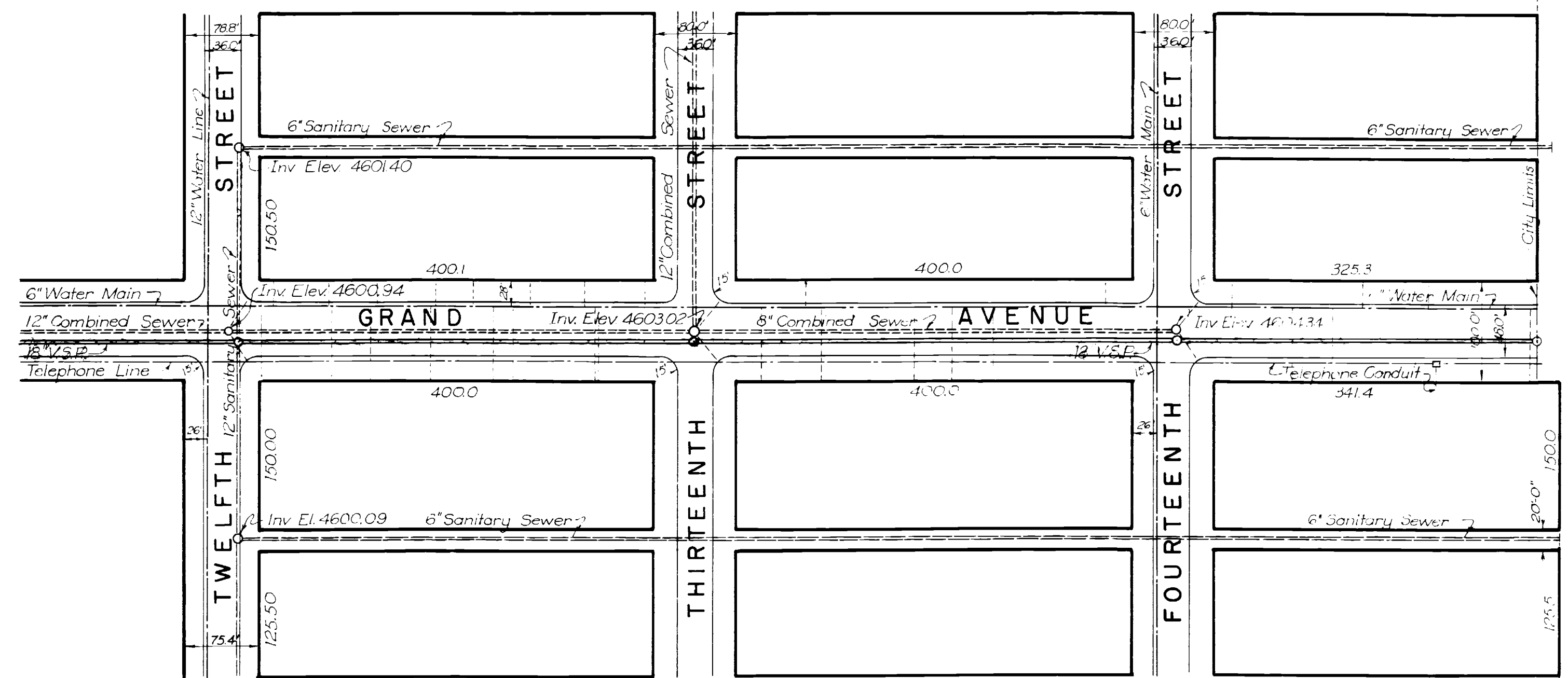
Scales
 Horizontal 1" = 100'-0"
 Vertical 1" = 10'-0"



LEGEND

—	New Sewers
- - -	Existing Storm Sewers
- · - · -	Existing Sanitary Sewers
- · - · - · -	Existing Water Mains
- · - · - · - · -	Existing Gas Mains
- · - · - · - · - · -	Existing Telephone Lines
- · - · - · - · - · - · -	Existing Water Service
●	Test Holes

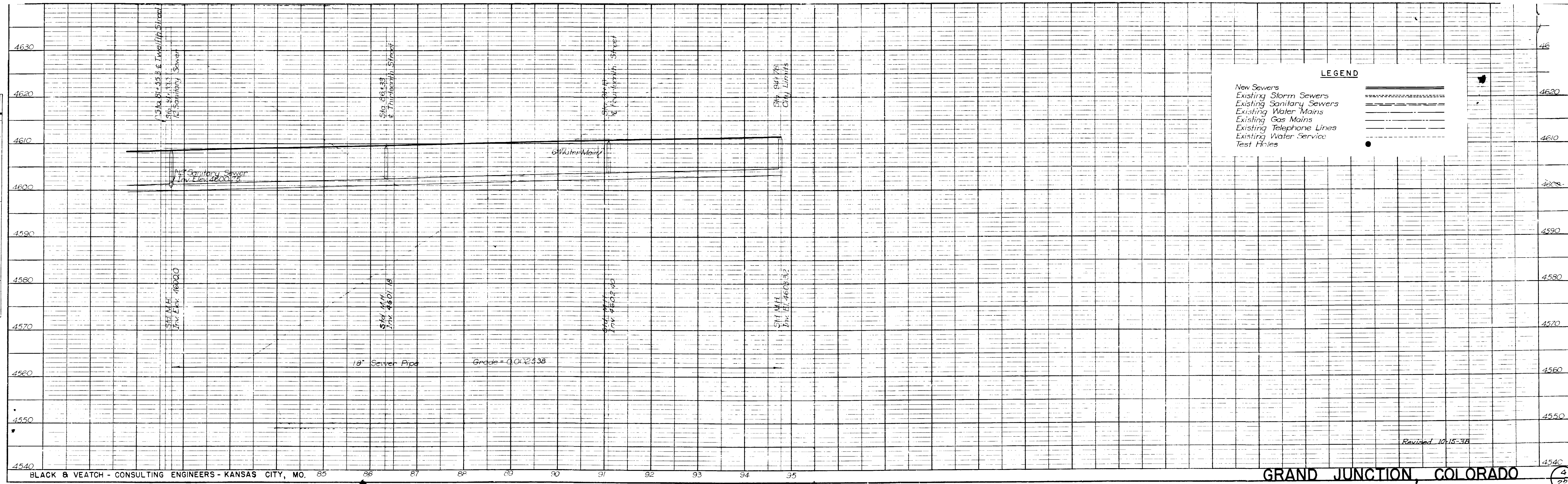
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CONTRACT II
GRAND AVENUE

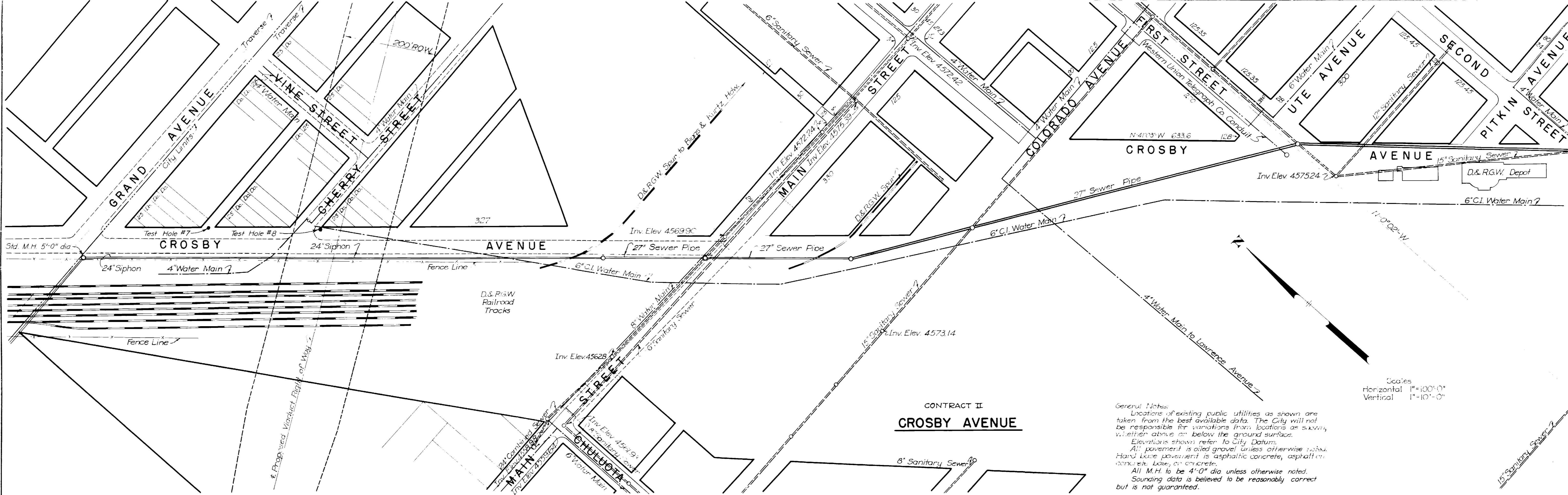
General Notes:
 The locations of existing public utilities as shown are taken from the best available data. The City will not be responsible for variations from locations as shown, whether above or below the ground surface.
 Elevations shown refer to City Datum.
 All pavement is oiled gravel unless otherwise noted.
 Hand base pavement is asphaltic concrete, asphalt on concrete base, or concrete.
 All M.H. to be 4'-0" dia. unless otherwise noted.

PROFILE	SURVEYED	BY	DATE
	PLOTTED		
	STRUCTURE NOTATIONS CHECKED		
	NO.		



LEGEND	
New Sewers	—————
Existing Storm Sewers	-----
Existing Sanitary Sewers	-----
Existing Water Mains	-----
Existing Gas Mains	-----
Existing Telephone Lines	-----
Existing Water Service	-----
Test Holes	•

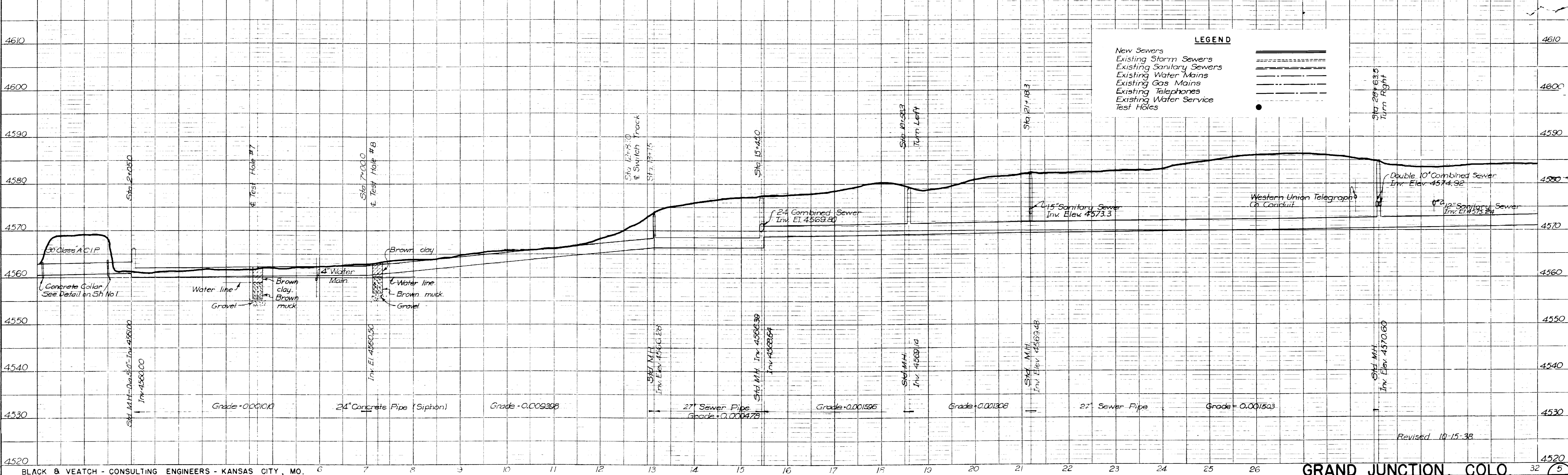
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	PLOTTED	
	NOTE BOOK	
	GRADES CHECKED	
	STRUTTING NOTATION	



General Notes:
 Locations of existing public utilities as shown are taken from the best available data. The City will not be responsible for variations from locations as shown, whether above or below the ground surface.
 Elevations shown refer to City Datum.
 All pavement is oiled gravel unless otherwise noted.
 Hand laid pavement is asphaltic concrete, asphalt on concrete base, or concrete.
 All M.H. to be 4'-0" dia unless otherwise noted.
 Sounding data is believed to be reasonably correct but is not guaranteed.

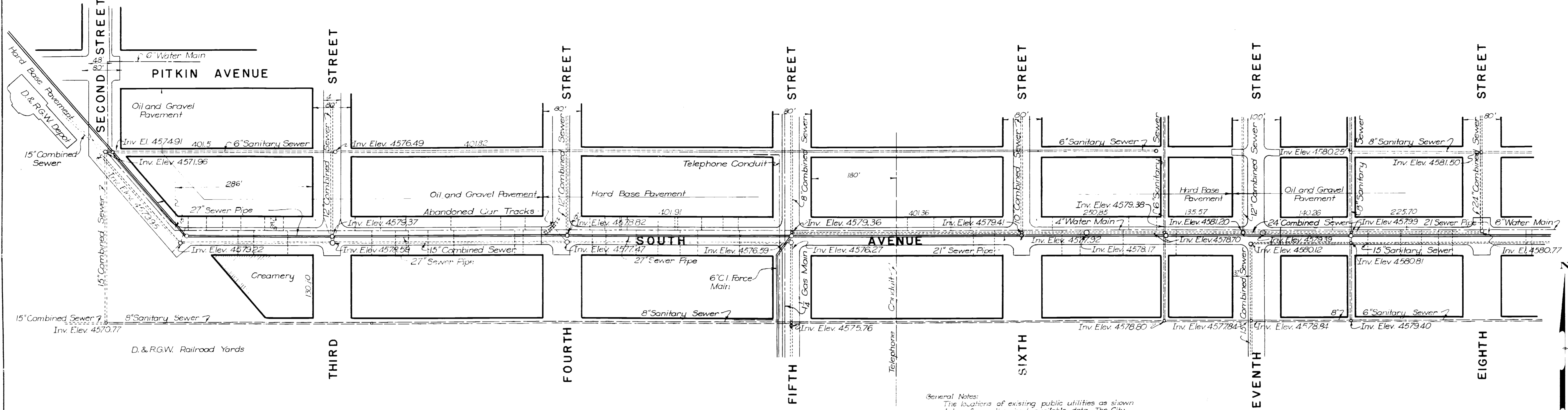
**CONTRACT II
 CROSBY AVENUE**

PROFILE	SURVEYED	DATE
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	NOTE BOOK	
	GRADES CHECKED	
	STRUTTING NOTATION	

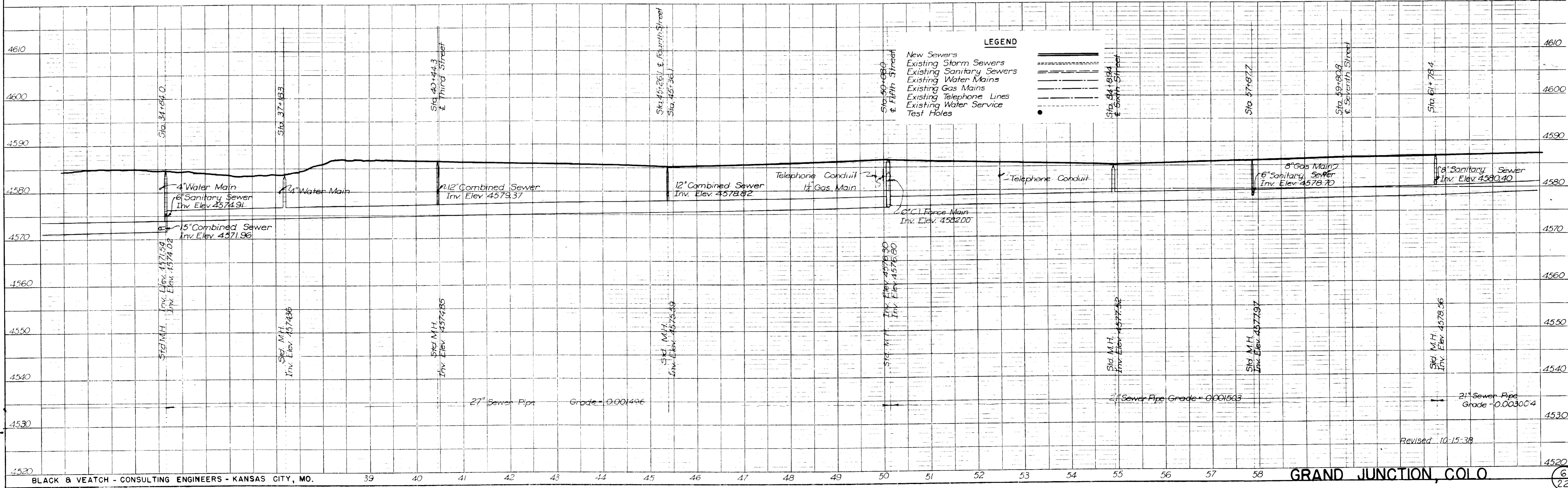


Revised 10-15-38

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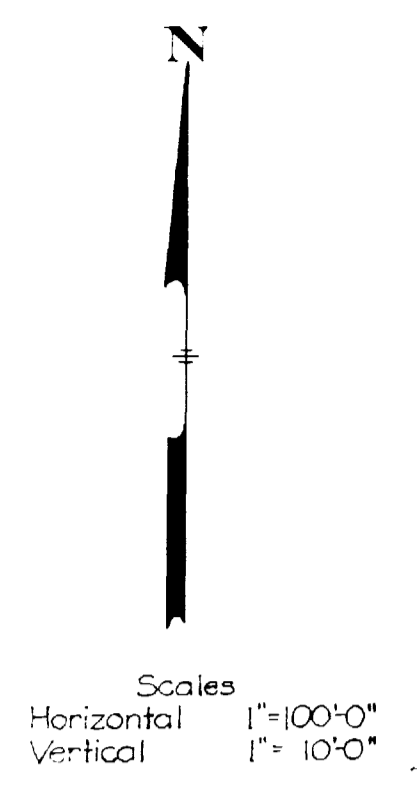
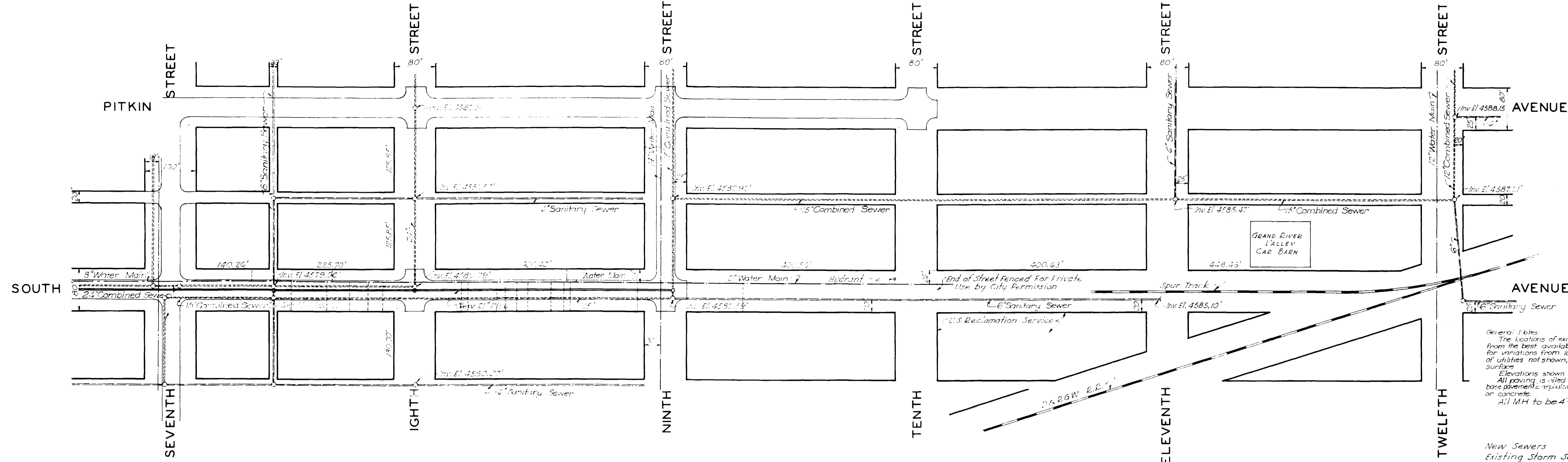


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DATE	



PLAN	SURVEYED	DATE
	NOTE BOOK	
	ALIGNMENT CHECKED	
	RT. OF WAY CHECKED	
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	NOTE BOOK	
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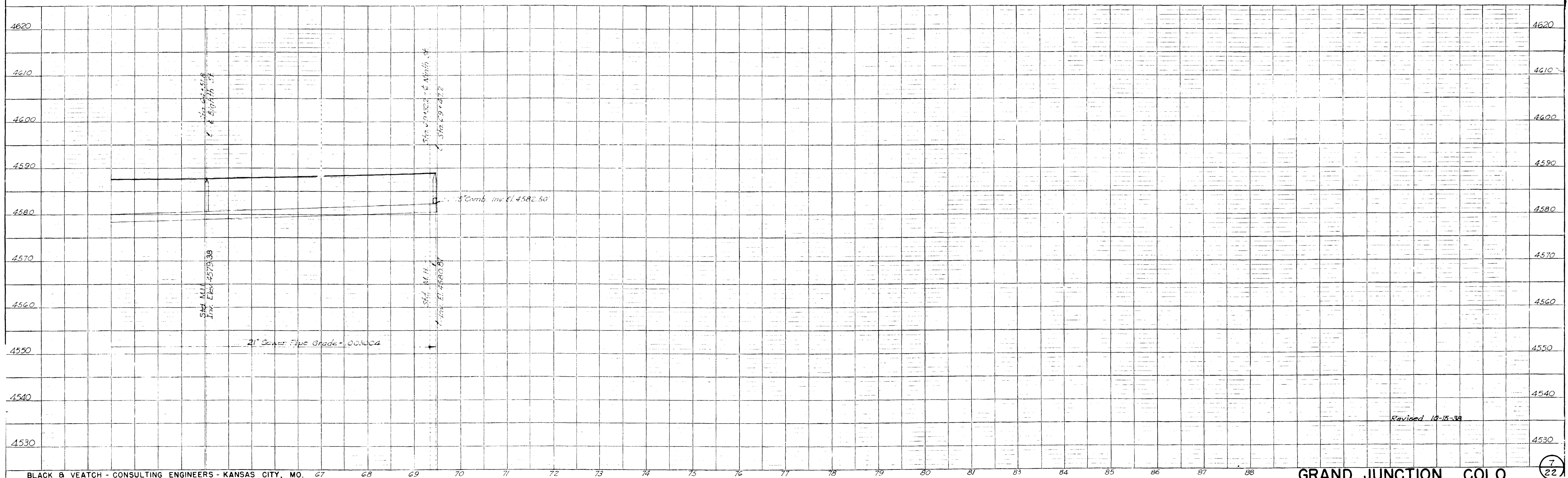


General Notes
 The locations of existing public utilities as shown are taken from the best available data. The City will not be responsible for variations from locations as shown nor for the locations of utilities not shown, whether above or below the ground surface.
 Elevations shown refer to City Datum.
 All paving is noted gravel unless otherwise noted. Hard base pavement is required concrete, asphalt with concrete base, or concrete.
 All MH to be 4'-0" dia. unless otherwise noted.

LEGEND

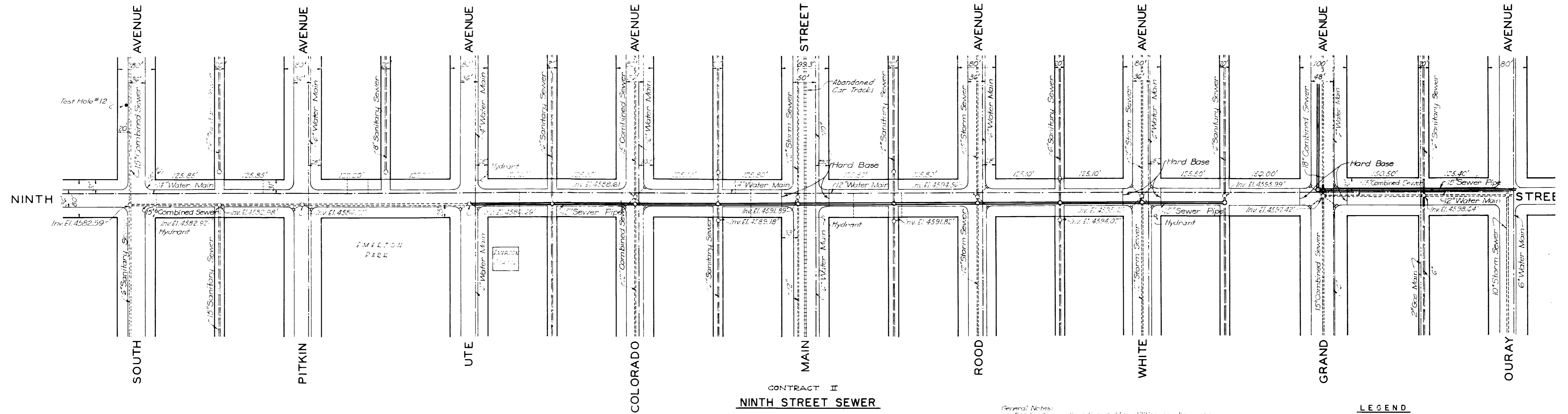
- New Sewers
- Existing Storm Sewers
- Existing Sanitary Sewers
- Existing Water Mains
- Existing Gas Mains
- Existing Telephone Lines
- Existing Water Service
- Test Holes

CONTRACT II
CROSBY - SOUTH AVENUE



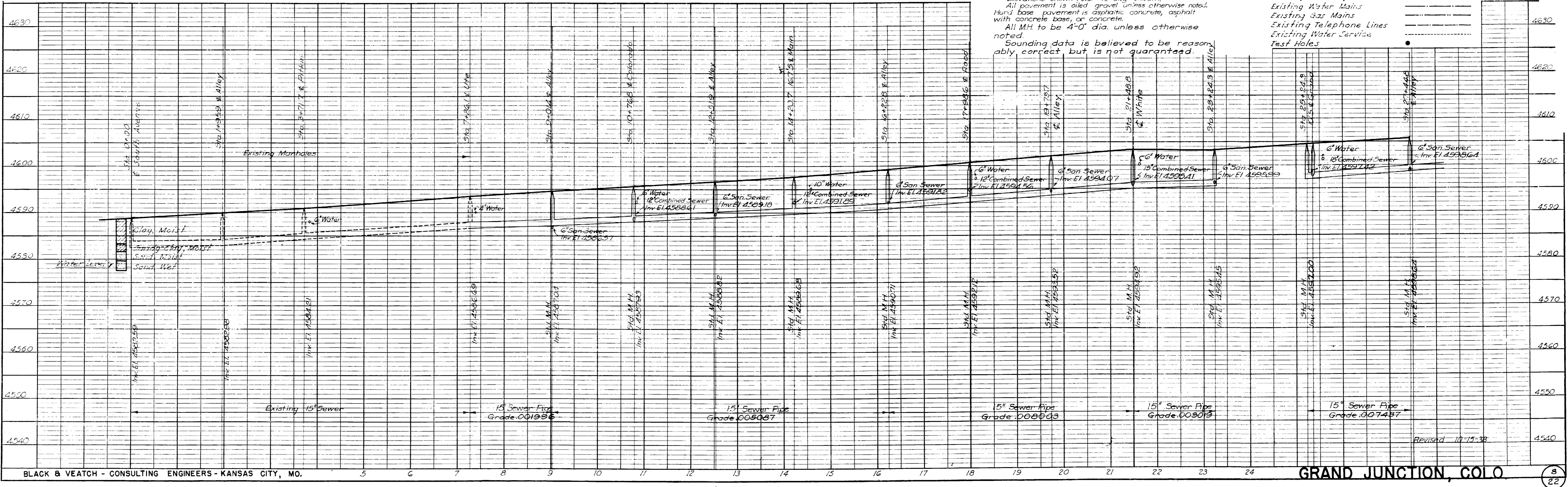
SCALES
 Horizontal 1" = 100'-0"
 Vertical 1" = 10'-0"

DATE	
BY	
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PLAN	SURVEYED
	PLOTTED
	ALIGNED CHECKED
	RT. OF WAY CHECKED
	NO.



CONTRACT II
NINTH STREET SEWER

DATE	
BY	
NO.	
PROFILE	SURVEYED
	PLOTTED
	GRADES CHECKED
	MANHOLE LOCATIONS CHECKED
	STRUCTURE NOT'NS CHK'D.

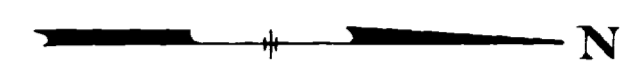
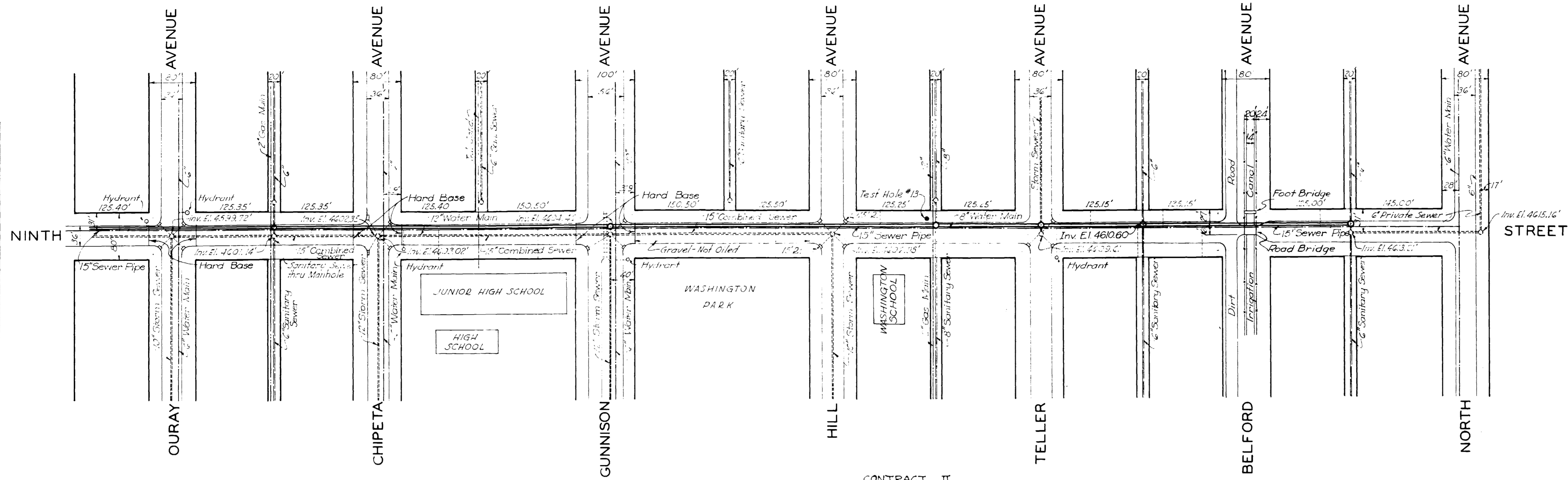


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 Elevations shown refer to City Datum.
 All pavement is oiled gravel unless otherwise noted.
 Hard base pavement is asphaltic concrete, asphalt with concrete base, or concrete.
 All MH to be 4'-0" dia. unless otherwise noted.
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LEGEND

—	New Sewers
-----	Existing Storm Sewers
- - - - -	Existing Sanitary Sewers
-----	Existing Water Mains
-----	Existing Gas Mains
-----	Existing Telephone Lines
-----	Existing Water Service
●	Test Holes

PLAN	SURVEYED	DATE
	PLOTTED	
	CHECKED	
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Scales
Horizontal 1" = 100'-0"
Vertical 1" = 10'-0"

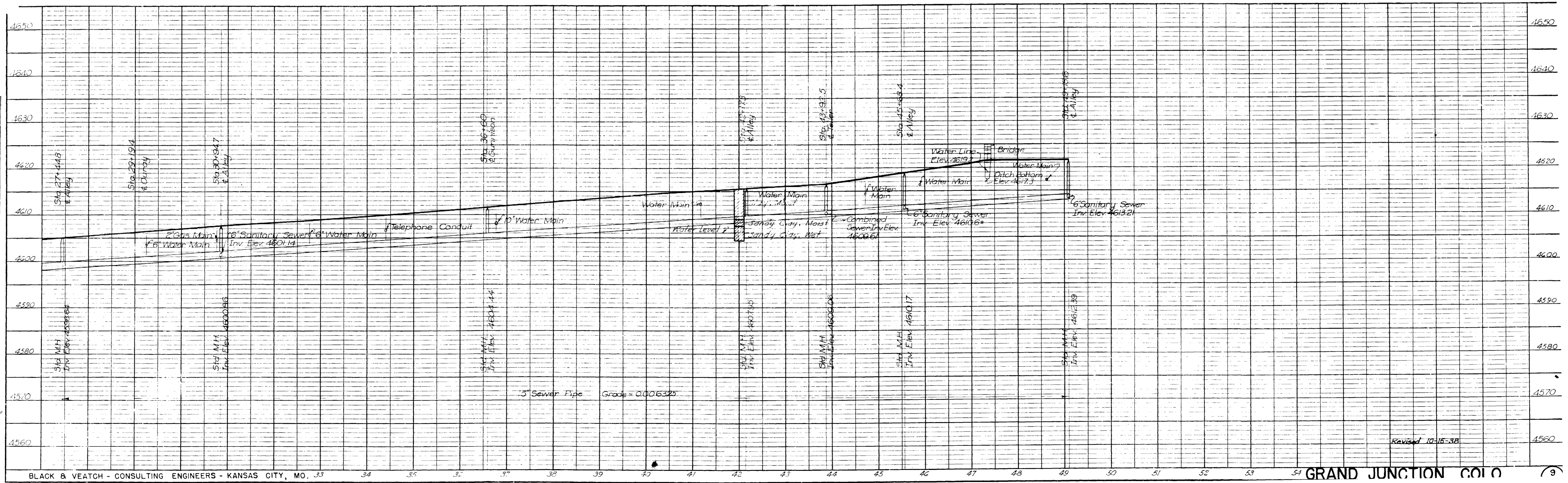
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LEGEND

- New Sewers
- Existing Storm Sewers
- Existing Sanitary Sewers
- Existing Water Mains
- Existing Gas Mains
- Existing Telephone Lines
- Existing Water Service
- Test Holes

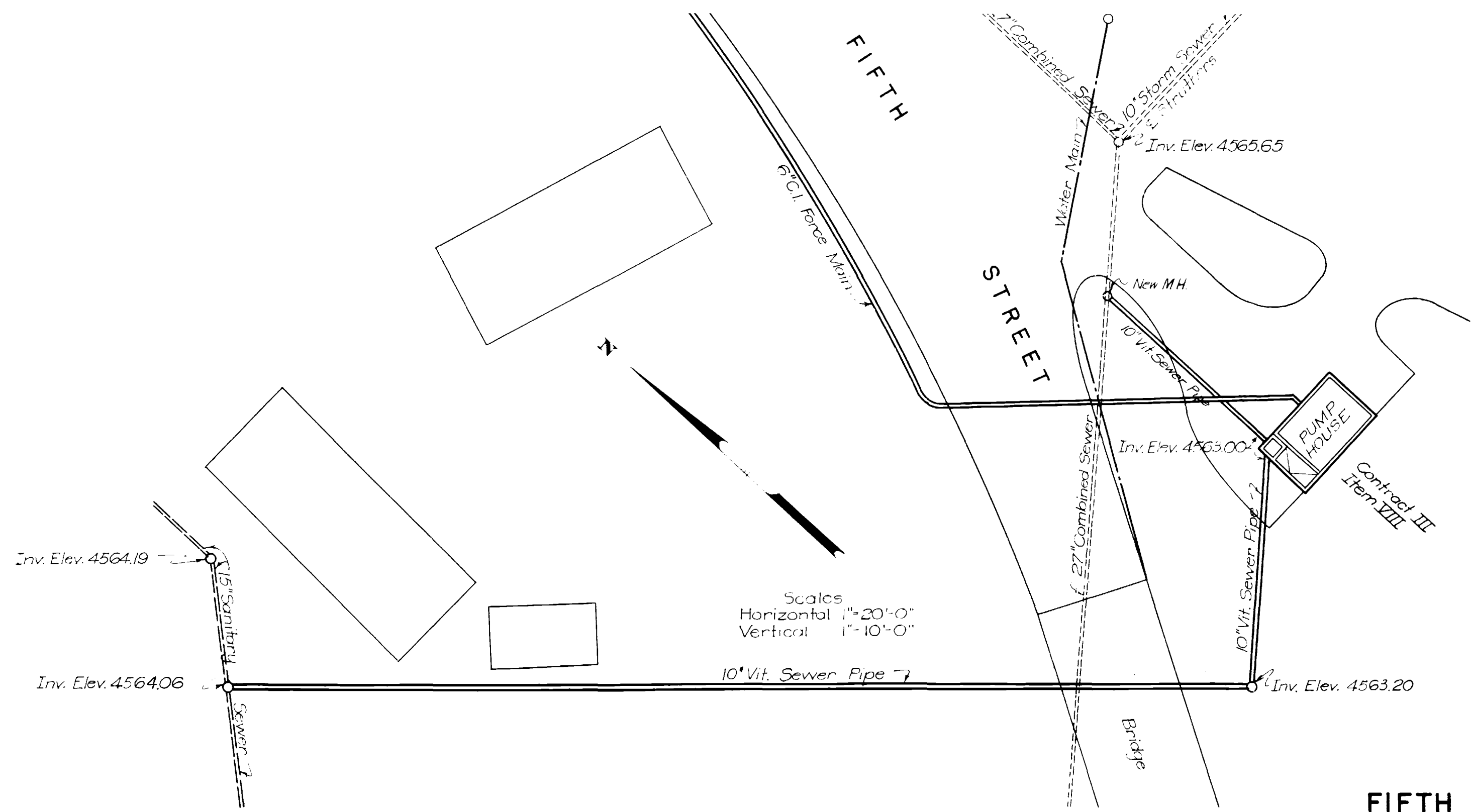
**CONTRACT II
NINTH STREET**

PROFILE	SURVEYED	DATE
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PLAN	SURVEYED	DATE
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	NOTE BOOK	
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	BY	
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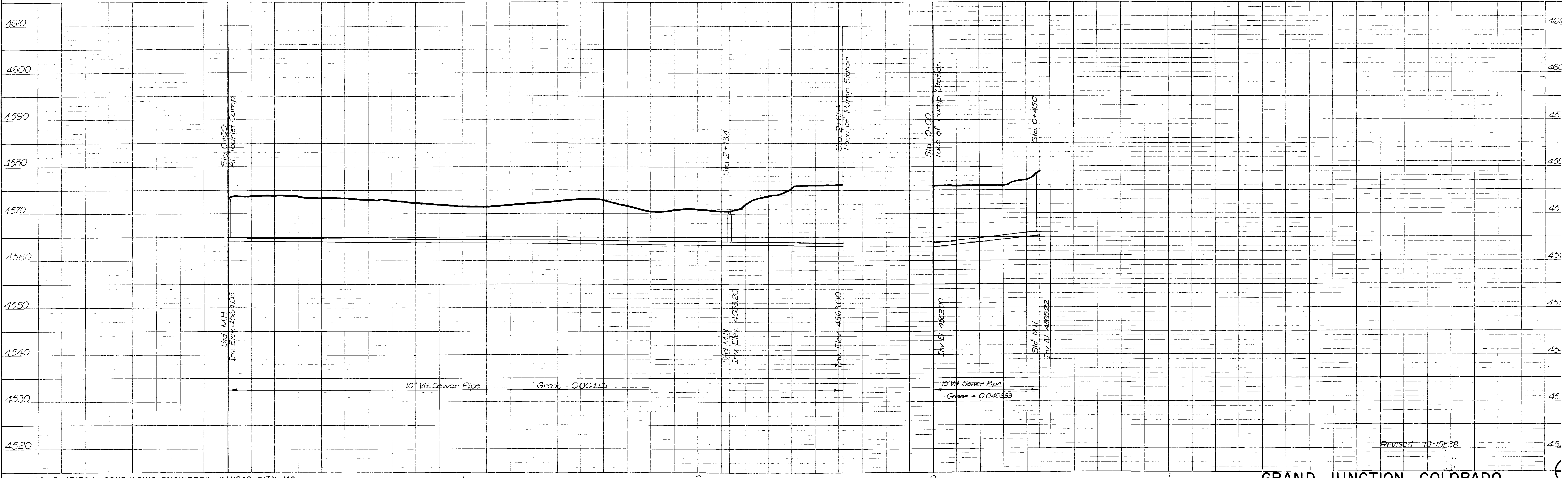
CONTRACT II
FIFTH AND STRUTHERS
CONNECTING SEWERS

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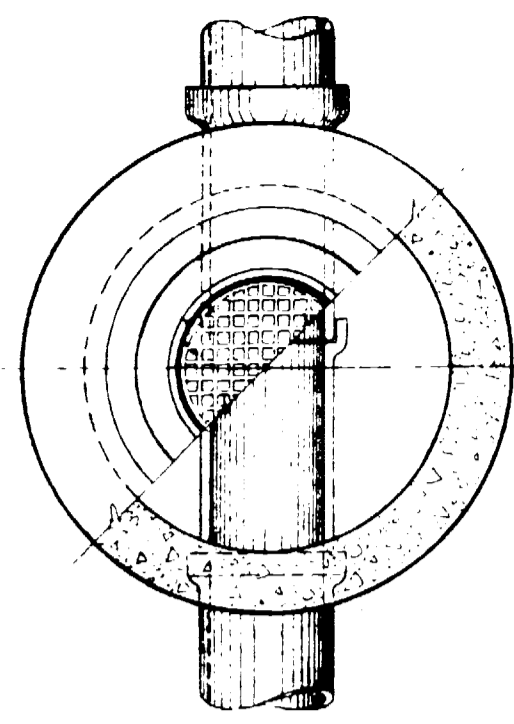
LEGEND

New Sewers	—————
Existing Storm Sewers	- - - - -
Existing Sanitary Sewers	- - - - -
Existing Water Mains	—————
Existing Gas Mains	—————
Existing Telephone Lines	—————
Existing Water Service	—————
Test Holes	●

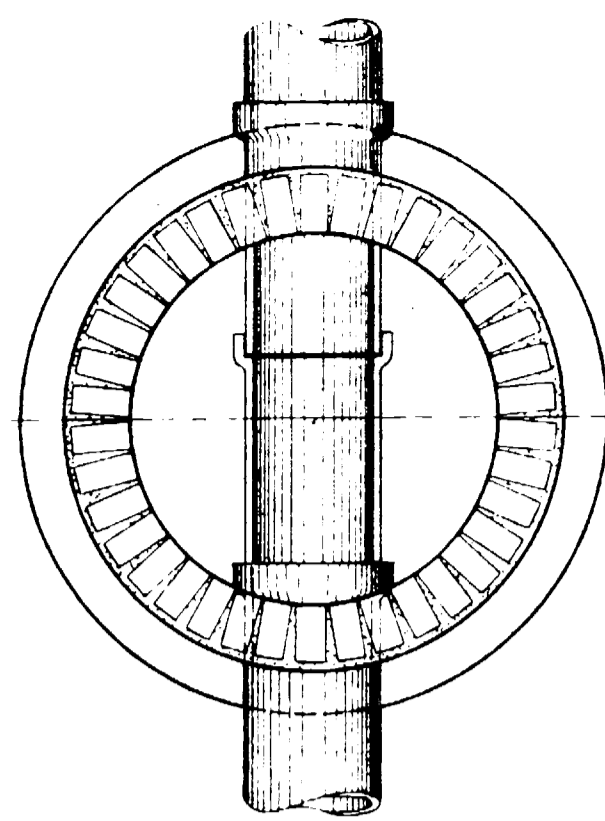
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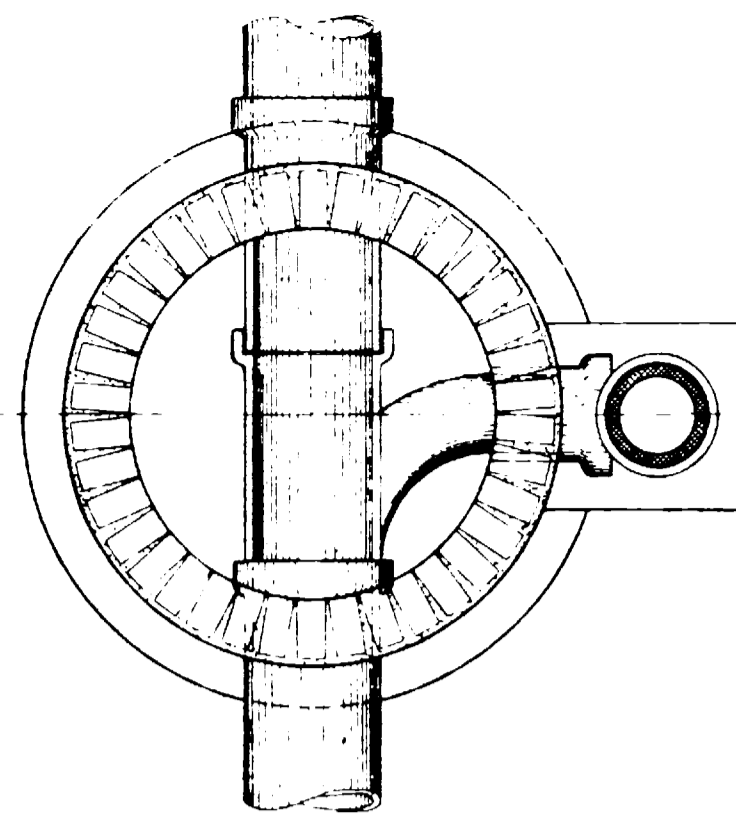
Revised 10-15-38



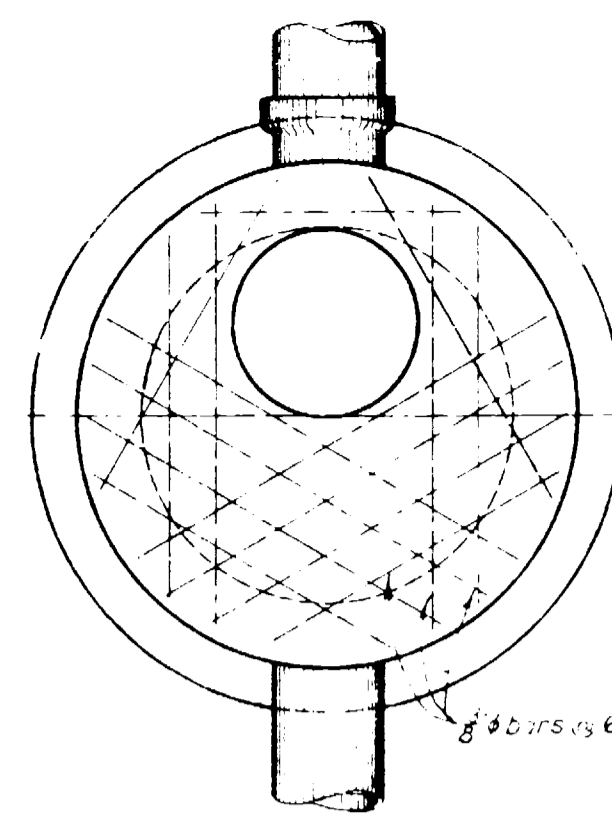
PLAN
STANDARD CONCRETE MANHOLE



PLAN
STANDARD BRICK MANHOLE
STRAIGHT INVERT

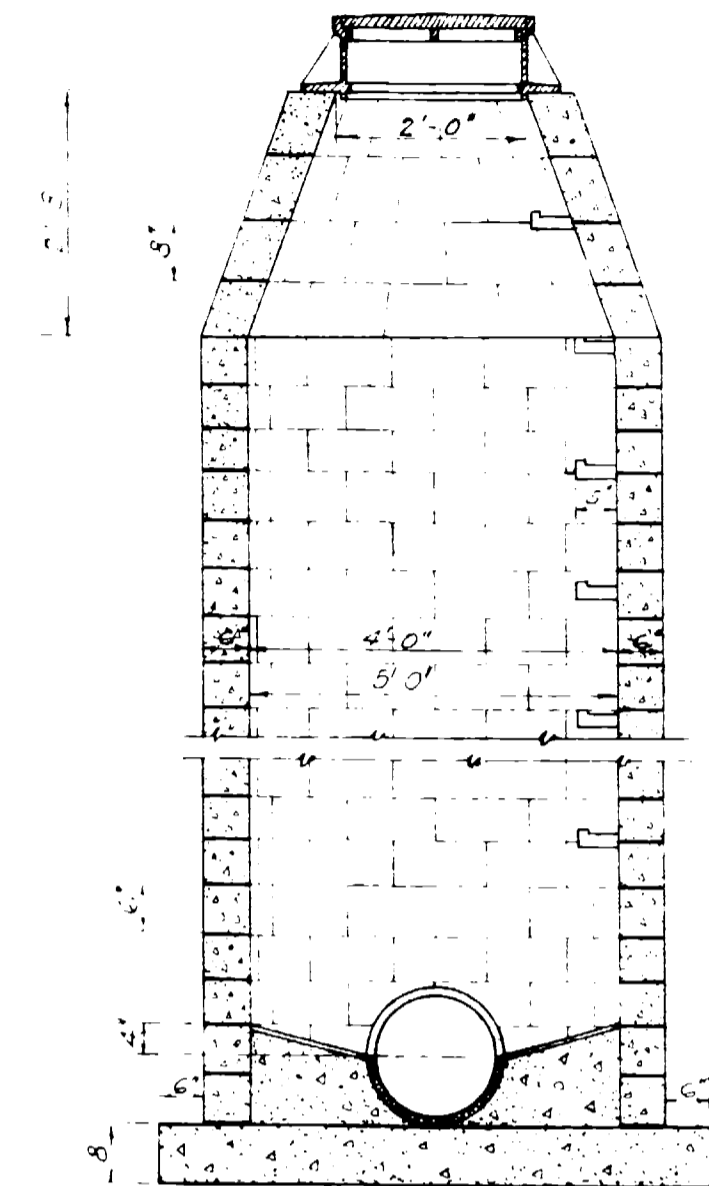


PLAN
DROP MANHOLE

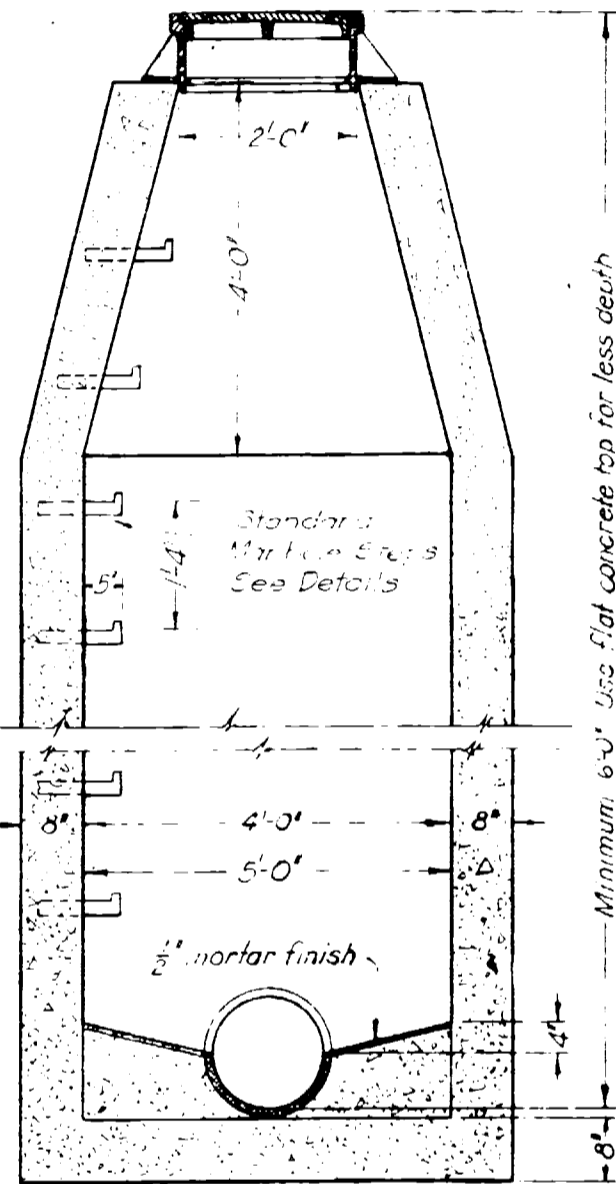


PLAN
STANDARD SHALLOW MANHOLE

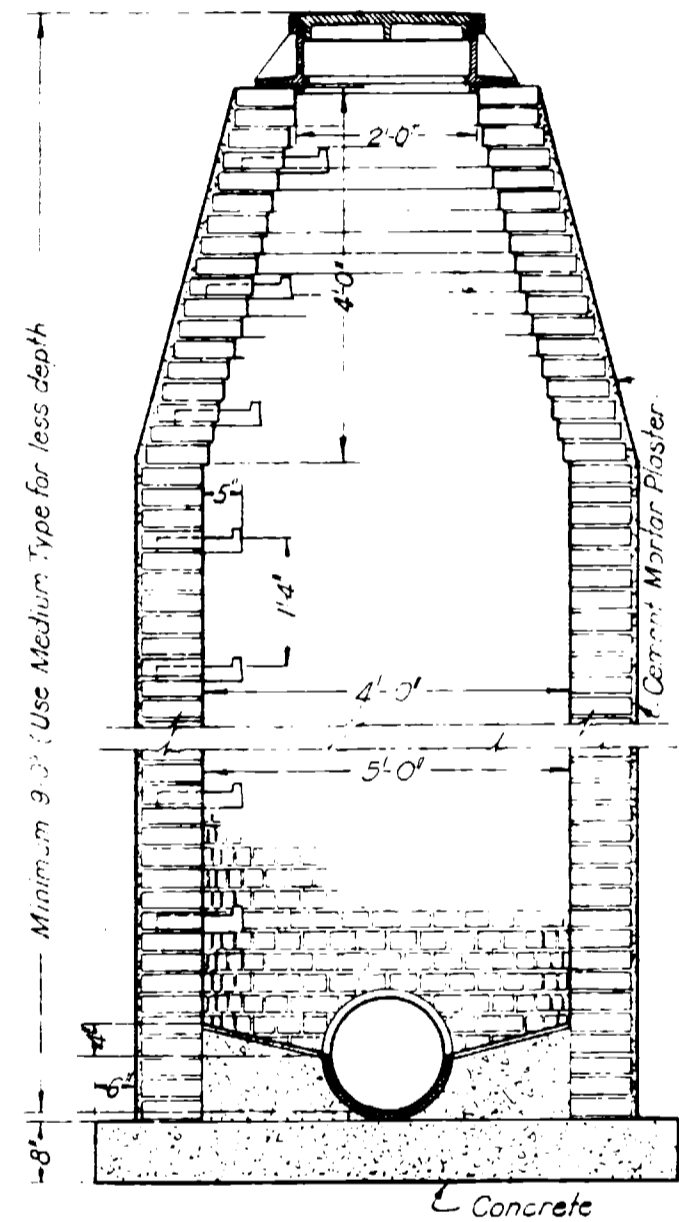
Plan is similar to standard brick or concrete manhole.



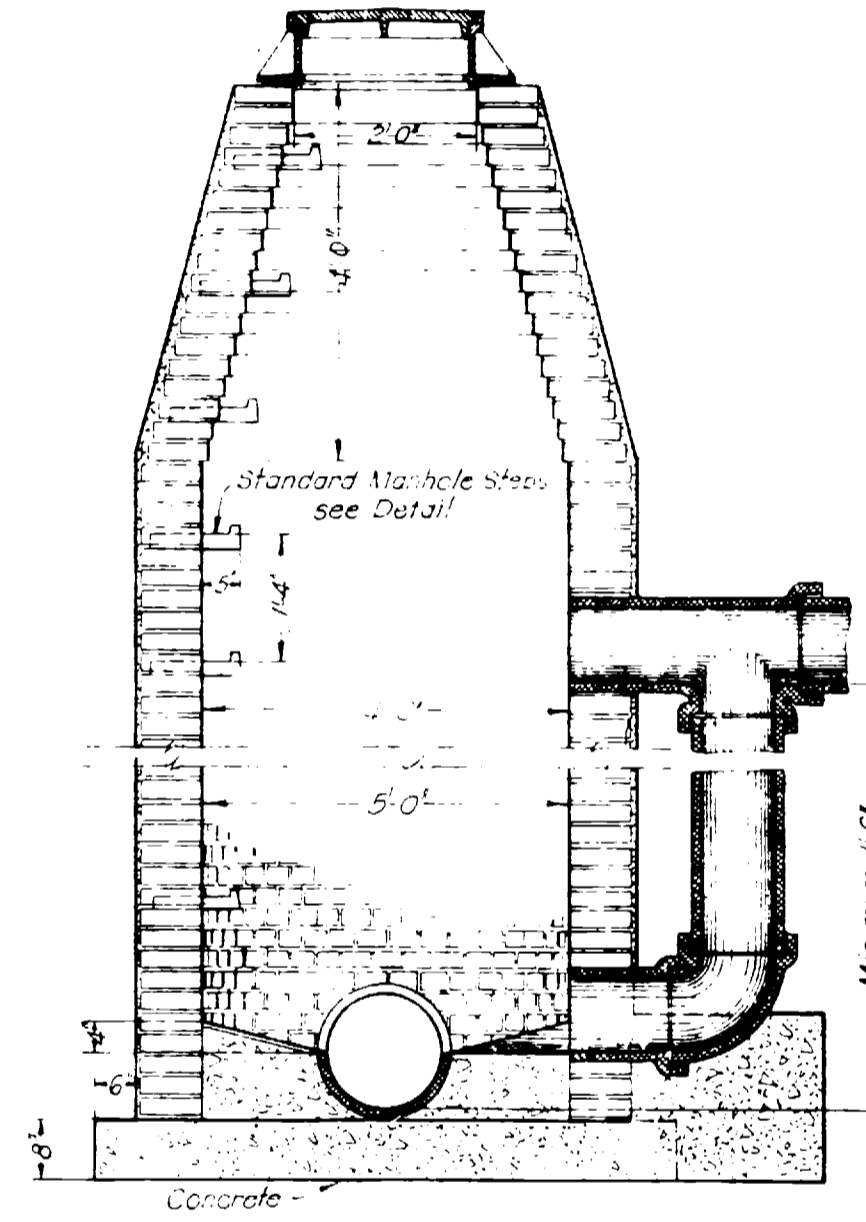
SECTION
STANDARD CONCRETE BLOCK MANHOLE



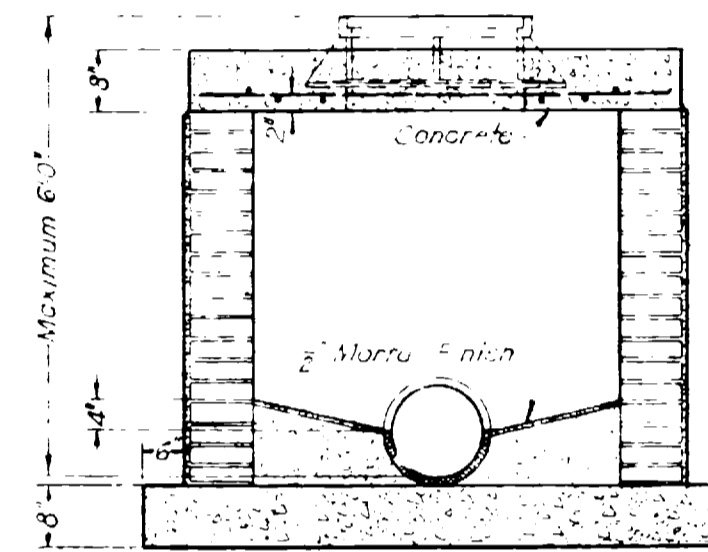
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STANDARD CONCRETE MANHOLE



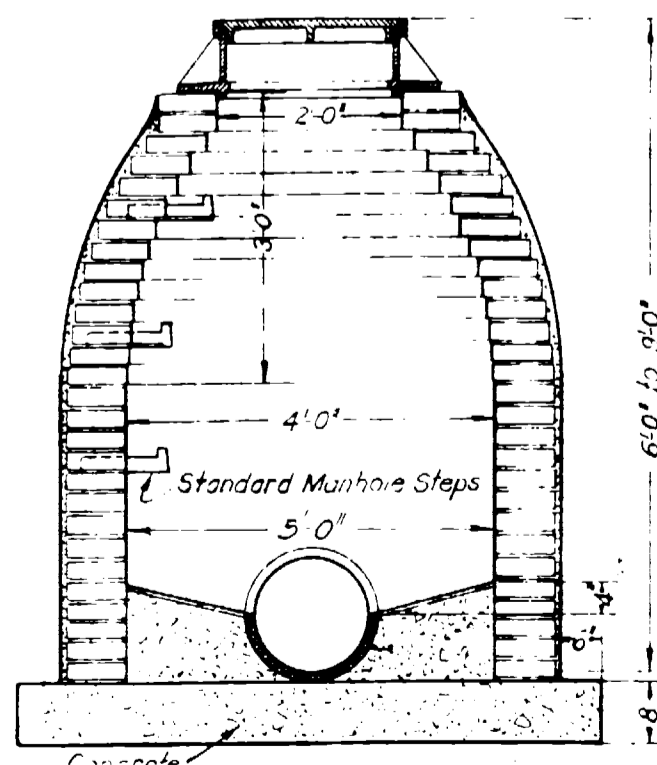
SECTION
STANDARD BRICK MANHOLE
DEEP TYPE



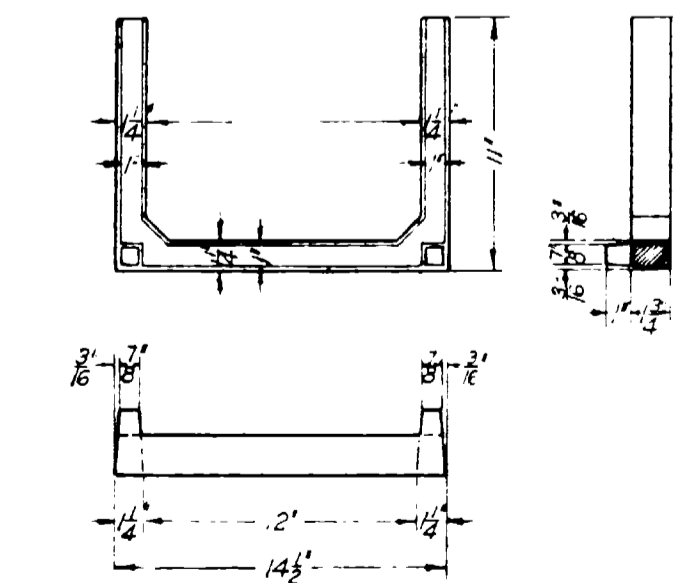
SECTION
DROP MANHOLE
Note in this Contract



SECTION
STANDARD SHALLOW MANHOLE



SECTION
STANDARD BRICK MANHOLE
FOR MEDIUM DEPTH



DETAIL OF STANDARD CAST IRON STEP

Note
Manhole diameters are double dimensioned for the two standard sizes 4'-0" diameter, and 5'-0" diameter.

CONTRACT II
ITEM IV

STANDARD MANHOLES
4 & 5 FOOT DIAMETERS

SEWAGE DISPOSAL WORK

GRAND JUNCTION, COL

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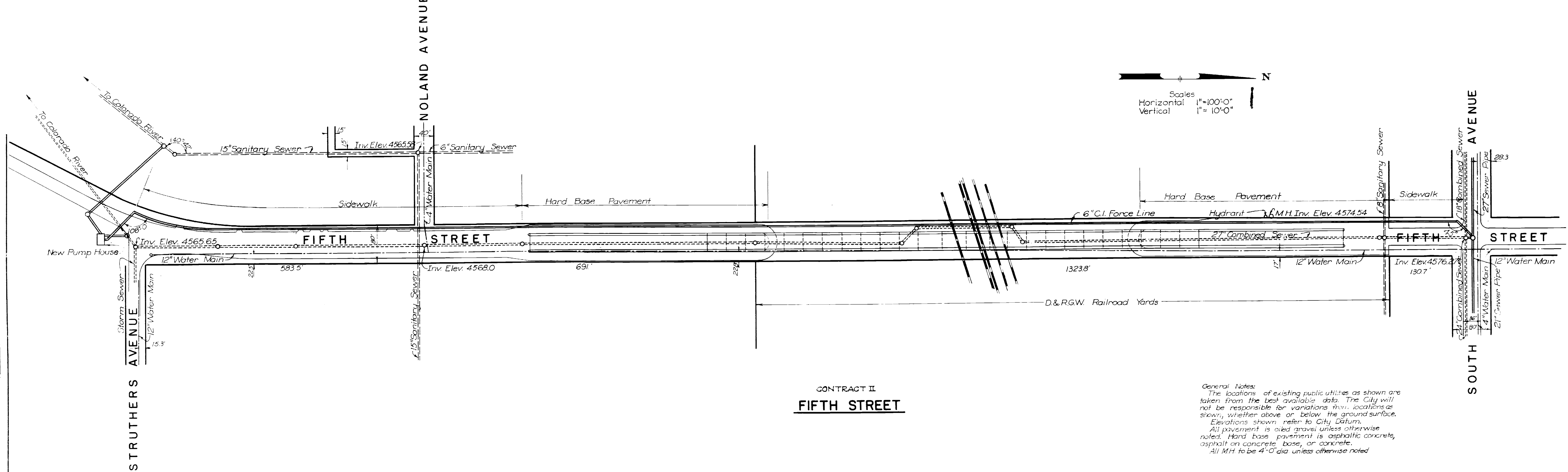
BLACK & VEATCH
CONSULTING ENGINEERS
KANSAS CITY MO

Revised 10-15-38

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DATE	
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PLAN	
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NOTE BOOK	
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RT. OF WAY CHECKED	
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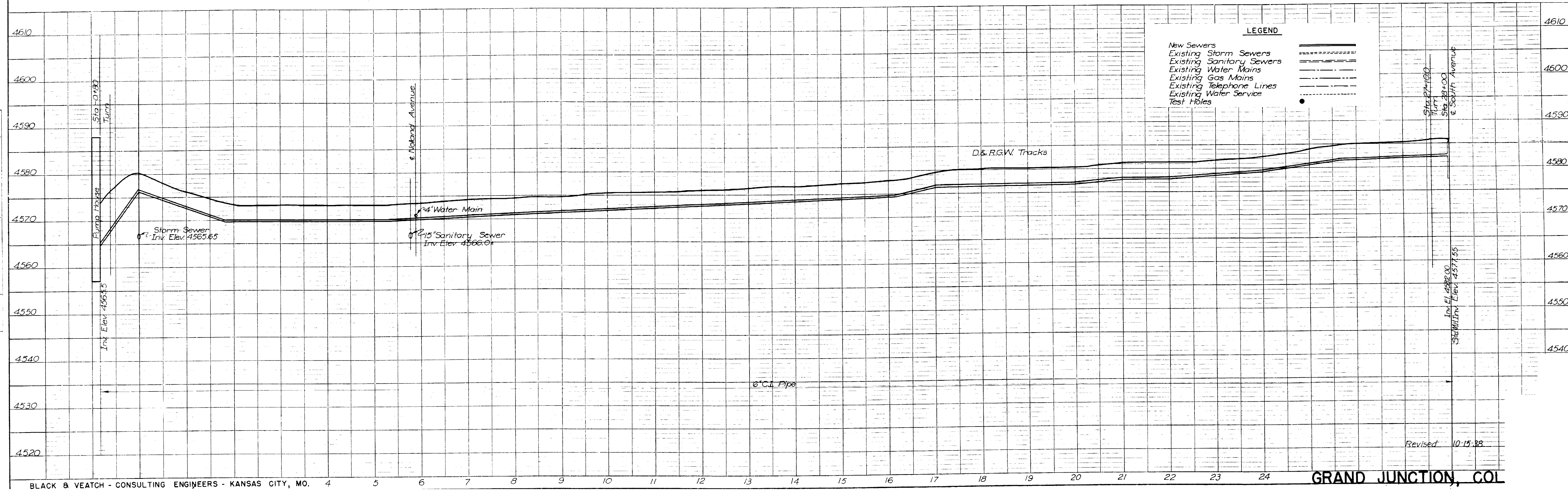
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NO.	



Scales
Horizontal 1"=100'-0"
Vertical 1"=10'-0"

CONTRACT II
FIFTH STREET

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LEGEND

New Sewers	—
Existing Storm Sewers	- - - - -
Existing Sanitary Sewers	- - - - -
Existing Water Mains	- - - - -
Existing Gas Mains	- - - - -
Existing Telephone Lines	- - - - -
Existing Water Service	- - - - -
Test Holes	•