

City of Broken Arrow

Drainage Advisory Committee



PROJECT REPORT

DATE:	4/25/23
NAME	Patrick Wilson, PE, CFM, Stormwater Division Manager, City of Broken Arrow
ADDRESS / LOCATION	E Dallas St. between 2 nd St and Haskell Park
WATERSHED	Haikey Creek
ESTIMATE	\$155,000.00
CASE NO.	24-010

DESCRIPTION

The storm sewer along the south side of Dallas between 2nd St and 4th St is corrugated metal pipe (CMP) and is estimated have been installed between 1970 and 1990. Residents in the area have contacted the City about potential issues with the storm sewer in relation to holes forming around their driveways.

The Stormwater Division Manager inspected the site in February 2023 while it was raining. The holes were noted to be about in the same location as the storm sewer. The CMP was visible in one of the holes. Moving water was also noted in the hole. After the site visit, Streets & Stormwater sent a camera through the line. The camera showed some separation at the joints and areas where the bottom has rusted out.

The holes in the pipe could be allowing water to be flowing underneath and around the pipe. This could allow for the soil to be transported and cause voids in the area between the pipe and the surface. This item was presented to the DAC in March 2023 Case 23-001 for design.

Further investigation after the design in April 2024 has revealed continued infrastructure deterioration.

The City is requesting \$155,000.00 of unnamed funds to alleviate a funding shortfall and to cover private property improvements. The City has already secured \$256,122.00 from other sources for this project.

BENEFIT

Replace City infrastructure that has deteriorated and prevent further issues surrounding the pipe.

RECOMMENDATION

Replace the storm sewer from line from Haskell Park to the outfall at the tributary to East Branch Haikey Creek.

COMPLETED BY: Patrick P. Wilson

DATE: 4/25/24

City of Broken Arrow

Drainage Advisory Committee



APPLICATION

DATE:	April 25, 2024
OWNER NAME:	City of Broken Arrow
PHONE NUMBER:	918-259-7000
EMAIL ADDRESS:	
OWNER MAILING ADDRESS:	PO Box 610 Broken Arrow, OK 74013
ADDRESS OF PROPERTY WITH DRAINAGE PROBLEM:	Dallas St from 2 nd St to 4 th St
LOCATION OF DRAINAGE ISSUE ON PROPERTY:	Dallas St from 2 nd St to 4 th St

DESCRIPTION OF PROBLEM: (*PHOTOS SHOULD ACCOMPANY APPLICATION)

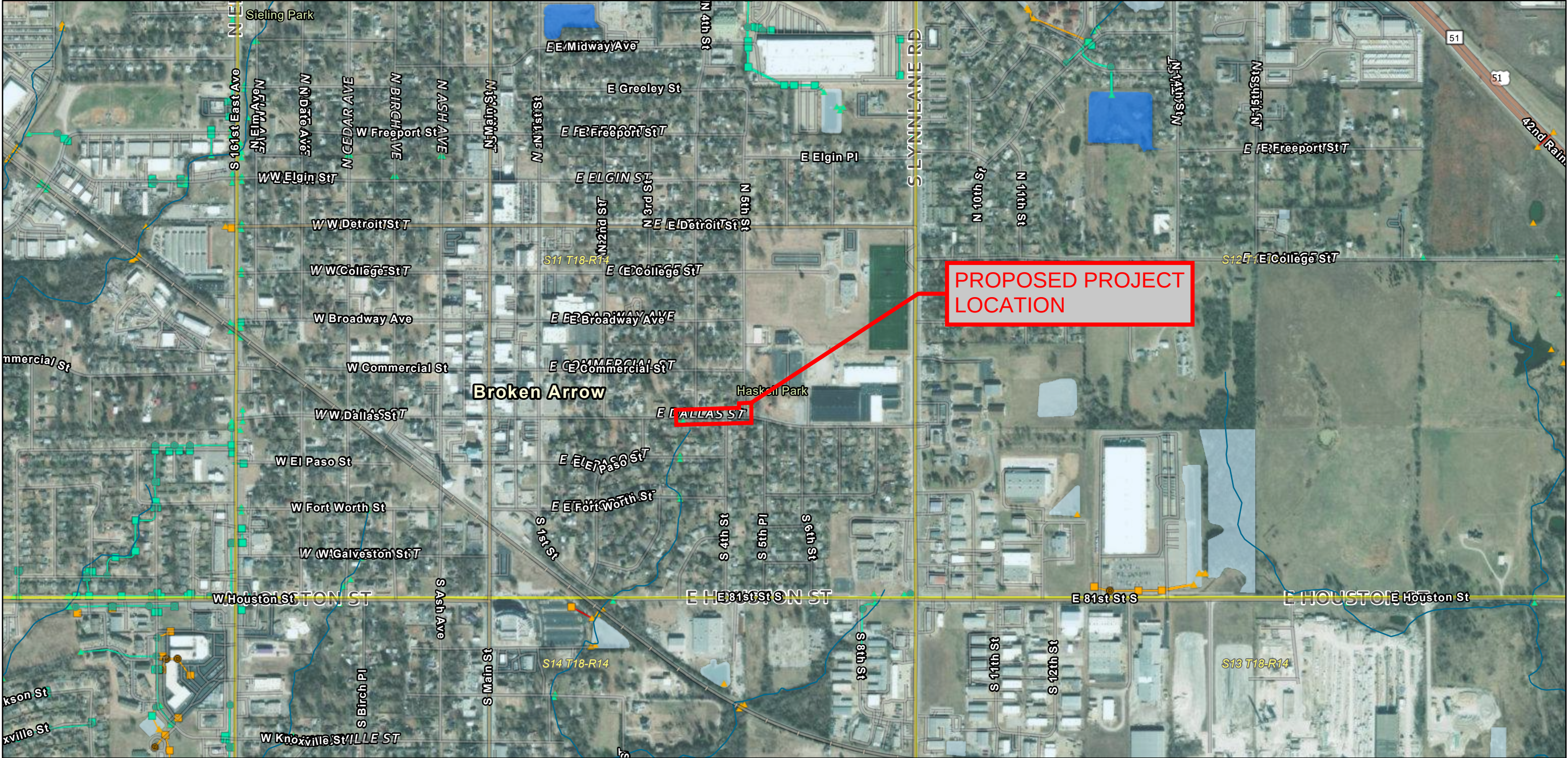
Holes are forming around residential driveways on the south side of Dallas St in between 2nd St. and 4th St. Residents have contacted the City to investigate. Driveways over the storm sewer are beginning to collapse.

Investigation after plans were designed revealed that the existing public storm sewer infrastructure has deteriorated more.

Signature:

RETURN TO STORMWATER DIVISION MANAGER'S OFFICE, PO BOX 610 Broken Arrow, OK 74013

Aerial



3/15/2023, 11:41:30 AM

 Sections (PLSS)

Blue Line Streams (ODOT)

Address Points

Dentention Ponds

☐ NO

☒ YES

Stormwater Lines

Broken Arrow

State-Federal

Private

Stormwater Structures (Private) Stormwater Structures

 Inlet

Manhole

Other

 Inlet

● Manhole

Other

City Limits 2021

1:11,285

0 0.1 0.2 0.4 mi

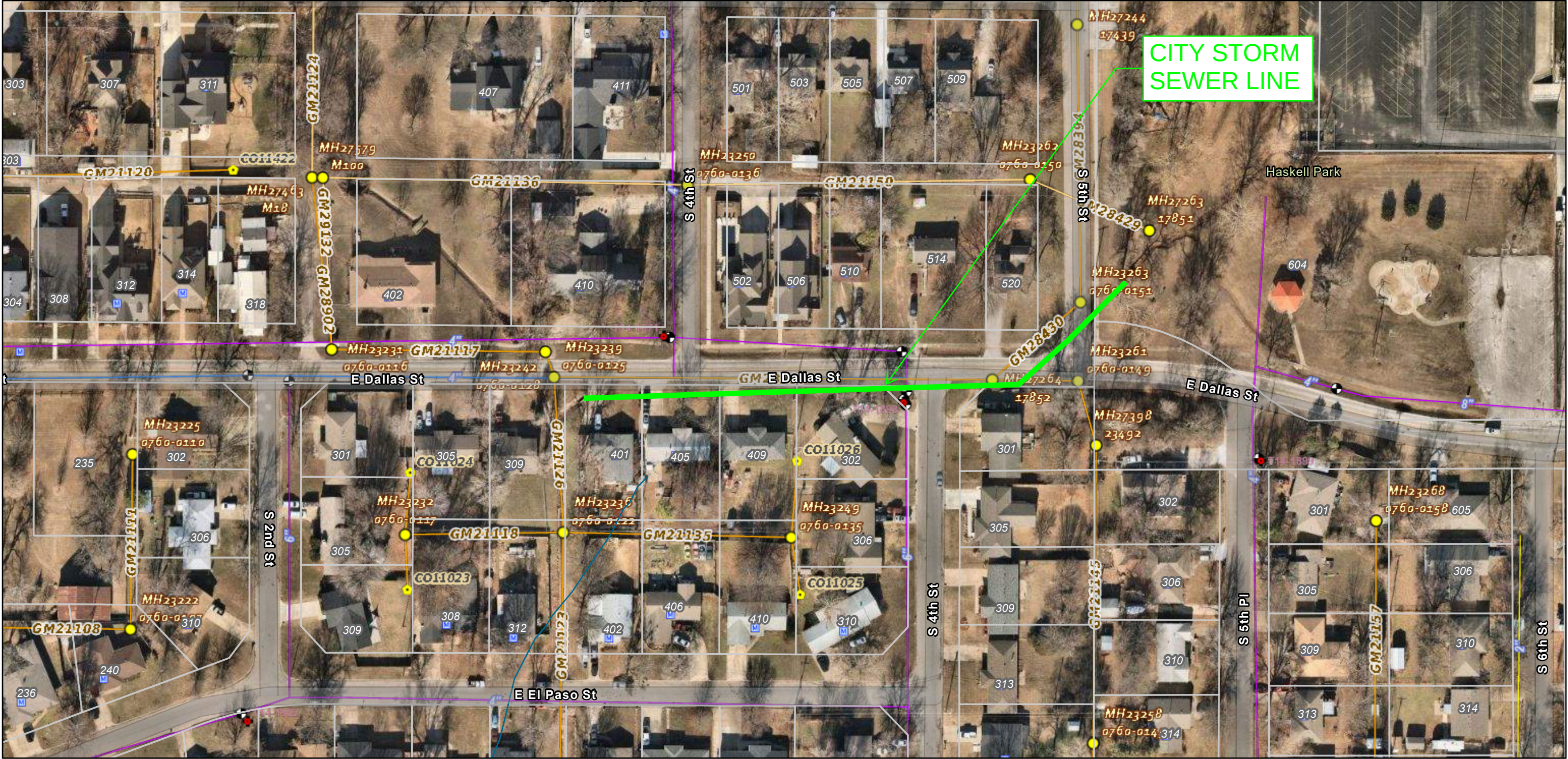
0 0.17 0.35 0.7 km

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E Dallast St



3/14/2023, 4:22:22 PM

Parcels

Sections (PLSS)

Blue Line Streams (ODOT)

Address Points

GravityMain

Polyvinyl Chloride

Vitrified Clay

Manhole

No Inspection

CleanOut

No Inspection

Mains

Cast Iron

Polyvinyl Chloride

Unknown

Service Meters

System Valves

Gate

Hydrants

1:1,411

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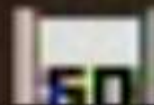












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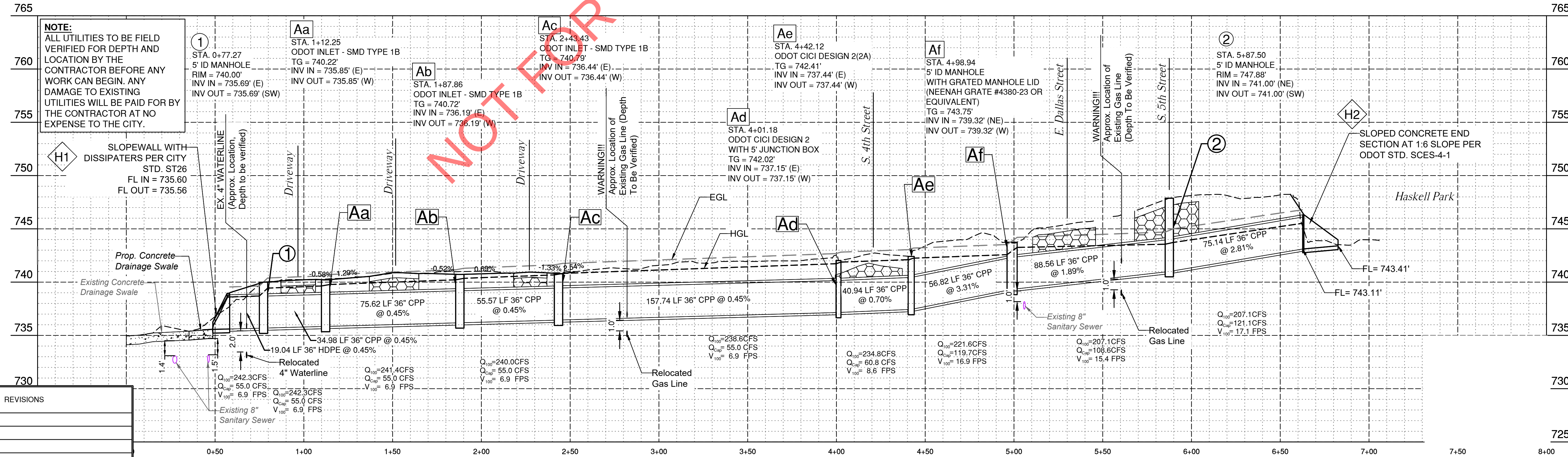
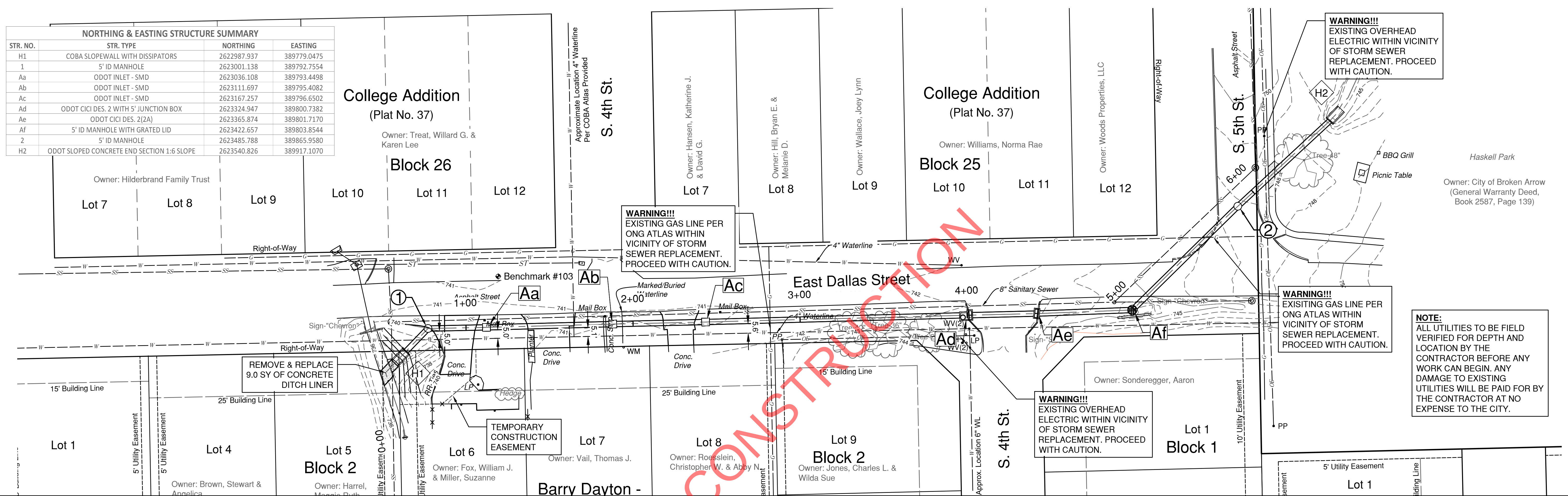




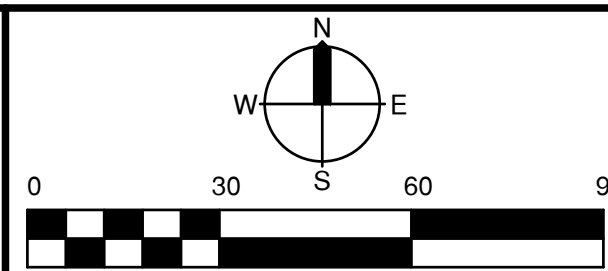




NORTHING & EASTING STRUCTURE SUMMARY			
STR. NO.	STR. TYPE	NORTHING	EASTING
H1	COBA SLOPEWALL WITH DISSIPATORS	2622987.937	389779.0475
1	5' ID MANHOLE	2623001.138	389792.7554
Aa	ODOT INLET - SMD	2623036.108	389793.4498
Ab	ODOT INLET - SMD	2623111.697	389795.4082
Ac	ODOT INLET - SMD	2623167.257	389796.6502
Ad	ODOT CICI DES. 2 WITH 5' JUNCTION BOX	2623234.947	389800.7382
Ae	ODOT CICI DES. 2(2A)	2623365.874	389801.7170
Af	5' ID MANHOLE WITH GRATED LID	2623422.657	389803.8544
2	5' ID MANHOLE	2623485.788	389865.9580
H2	ODOT SLOPED CONCRETE END SECTION 1:6 SLOPE	2623540.826	389917.1070



DATE	REVISIONS



DALLAS STREET STORM SEWER IMPROVEMENTS

STORM SEWER PLAN & PROFILE

PROFILE SCALE:		DESIGN	DATE	DRAFTED	DATE
HORIZ.	1"=30'	SAW	10/23	SAW	10/23
VERT.	1"=5'	REVIEWED	DATE	APPROVED	DATE
		SAW	10/23	KDS	03/24/20
DRAWING NAME: STORM & P		SHEET <u>8</u> OF <u>12</u>		PROJECT NO. SW 2266	