



CENTRAL AVENUE AND 151ST STREET  
 WATERLINE IMPROVEMENTS  
 PHASE 2 - ALONG CENTRAL AVE,  
 AND S 151ST STREET W,  
 PAUL GUNZELMAN, P.E. - CITY ENGINEER  
 CITY OF WICHITA PROJECT NO. 448-2020-033962

|             |                    |
|-------------|--------------------|
| Issue:      |                    |
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| JOB NO.     | 35-210255-002-0042 |
| DATE        | OCTOBER 2023       |
| PM          | TBK                |
| DESIGNED BY | GAS                |
| DRAWN BY    | CSL                |
| CHECKED BY  | TBK                |

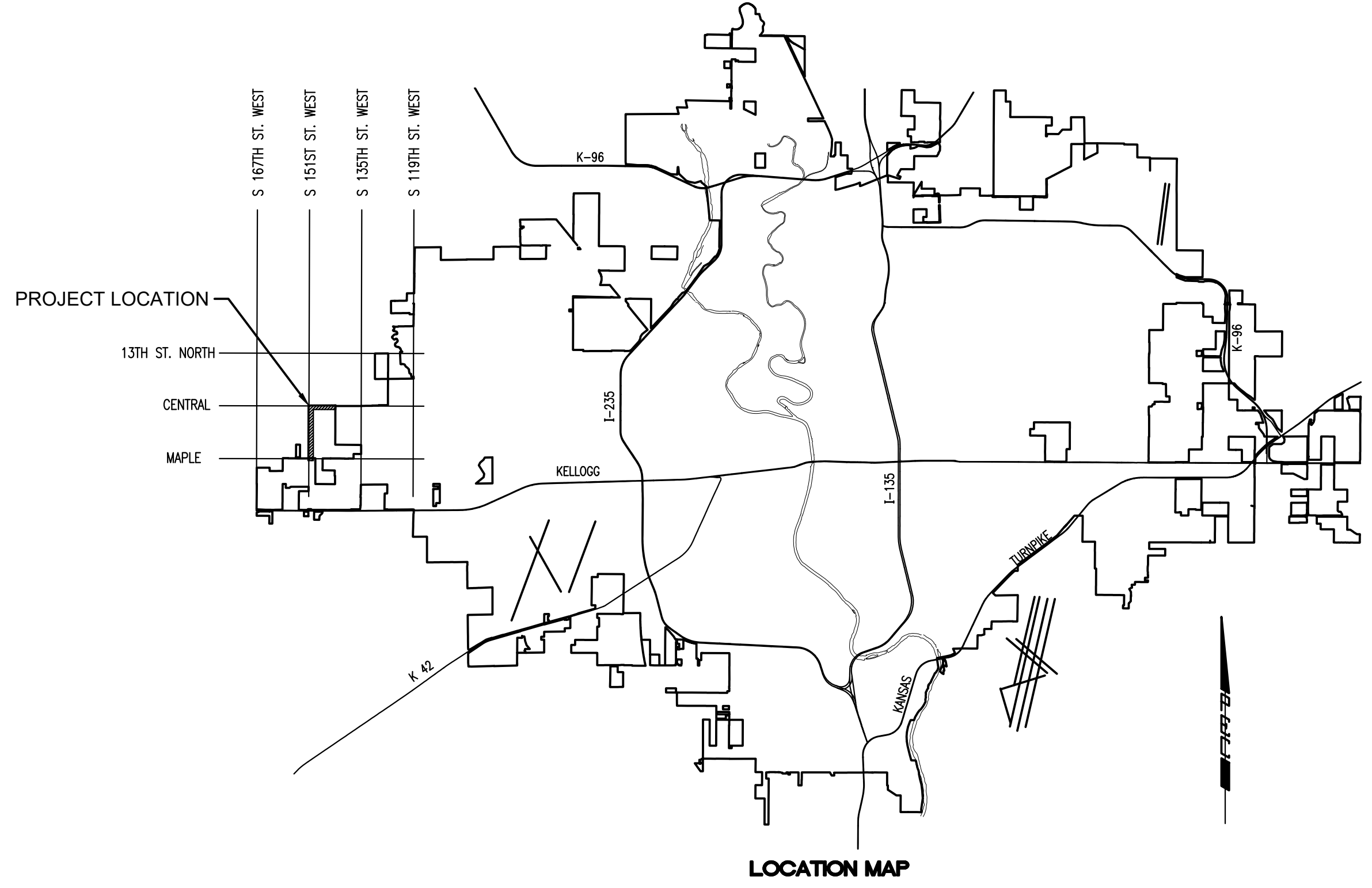
TITLE SHEET - PHASE 2  
**C-001**

# CENTRAL AVENUE AND 151ST STREET WATERLINE IMPROVEMENTS

## PHASE 2 - ALONG CENTRAL AVE, (WEST OF 135TH STREET) AND S 151ST STREET W, (BETWEEN CENTRAL AVE AND MAPLE STREET)

CITY OF WICHITA ENGINEERING PROJECT NO. 448-2020-033962  
ORG CODE 54250220, MUNIS NO. W0025

**CITY OF WICHITA, KANSAS**  
PAUL GUNZELMAN, P.E. - CITY ENGINEER



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| C-003        | KEY MAP-BUBBLE MAP - PHASE 2   |
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| CU507        | EROSION CONTROL DETAILS        |
| CU508        | EROSION CONTROL DETAILS        |
| CU509        | EROSION CONTROL DETAILS        |

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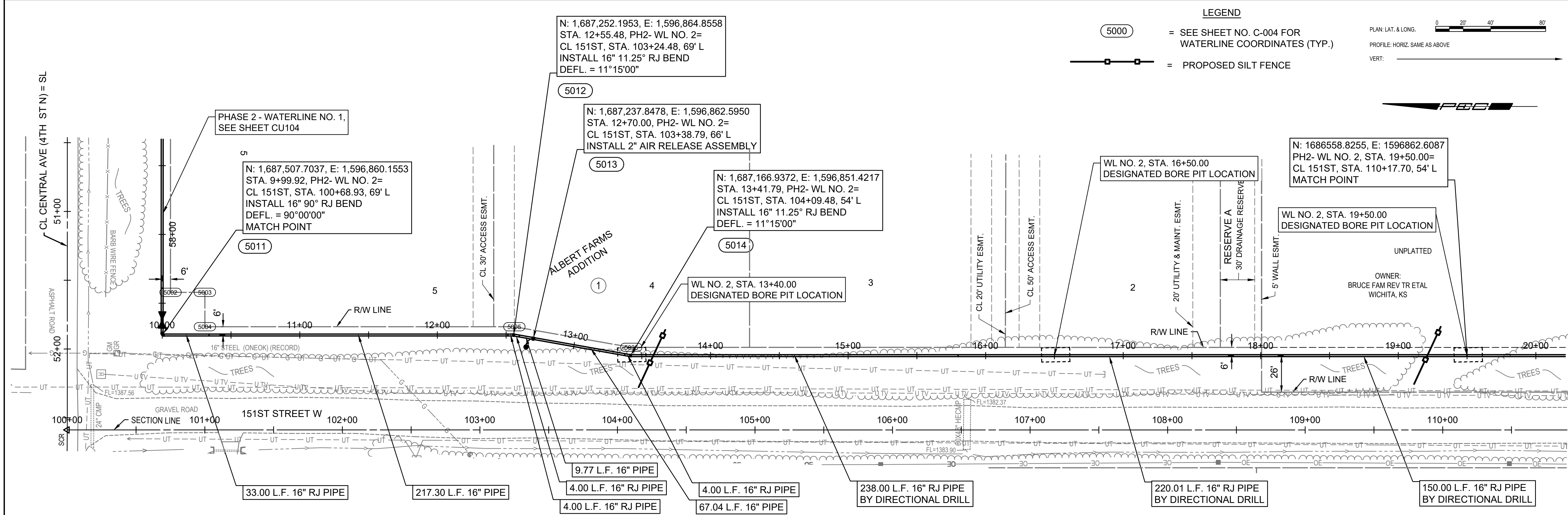




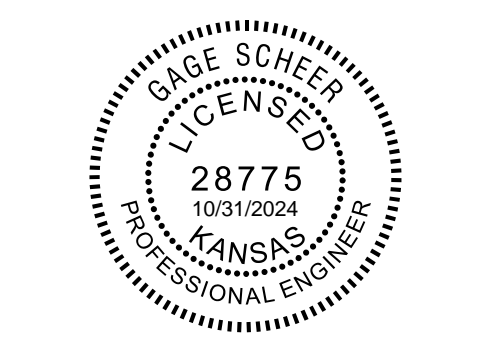
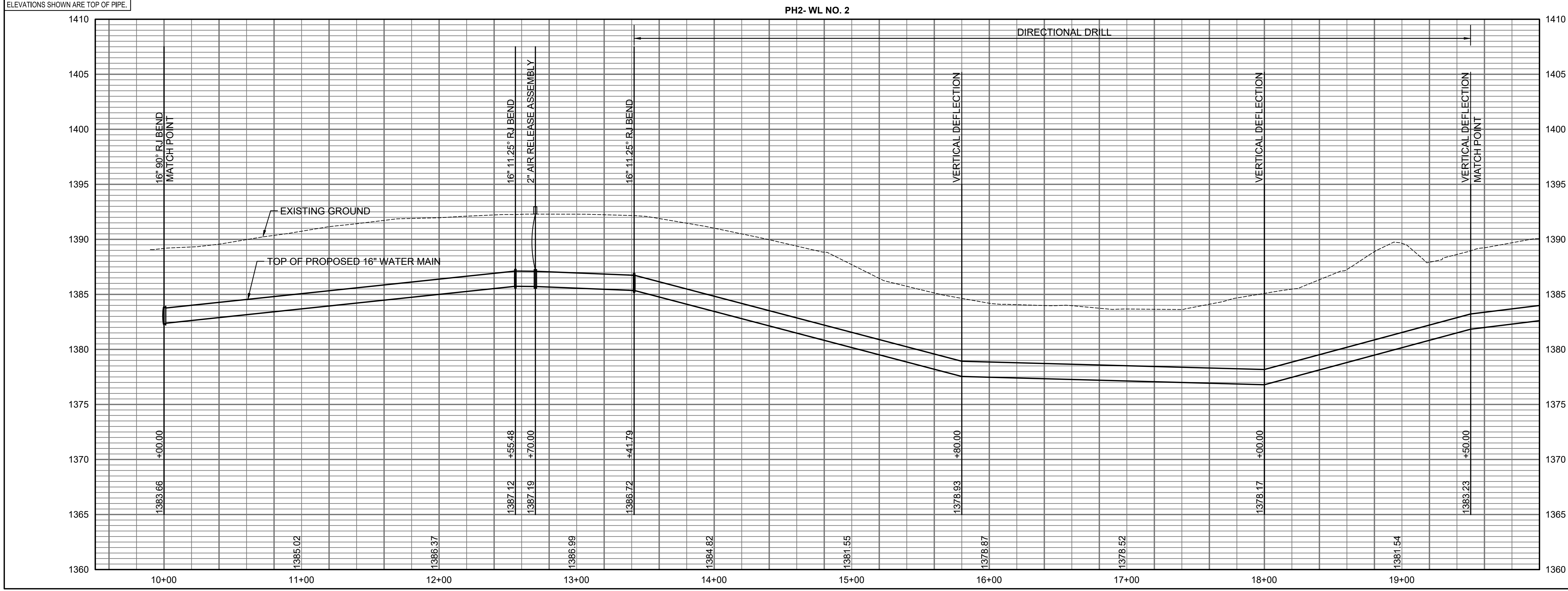




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UNLESS NOTED OTHERWISE,  
 ELEVATIONS SHOWN ARE TOP OF PIPE.

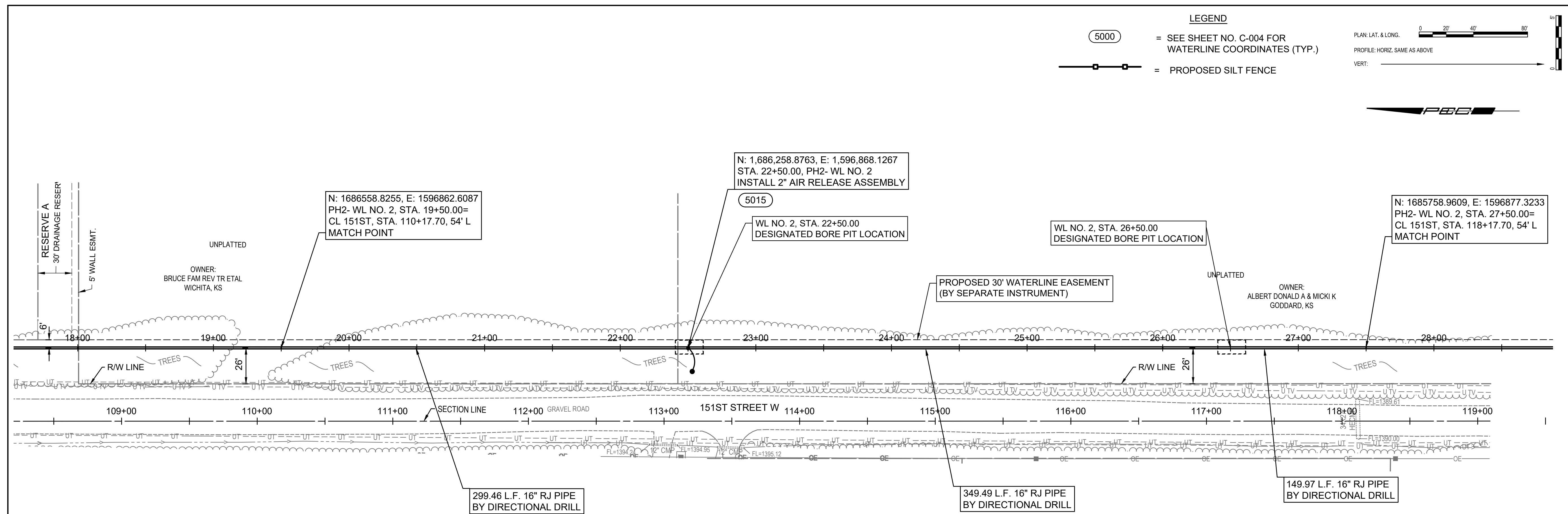


**CENTRAL AVENUE AND 151ST STREET  
 WATERLINE IMPROVEMENTS**  
 PHASE 2 - ALONG CENTRAL AVE,  
 AND S 151ST STREET W,  
 PAUL GUNZELMAN, P.E. - CITY ENGINEER  
 CITY OF WICHITA PROJECT NO. 448-2020-033962

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| PM          | TBK                |
| DESIGNED BY | GAS                |
| DRAWN BY    | CSL                |
| CHECKED BY  | TBK                |

WATERLINE NO. 2  
**CU105**

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**LEGEND**

(5000) = SEE SHEET NO. C-004 FOR WATERLINE COORDINATES (TYP.)

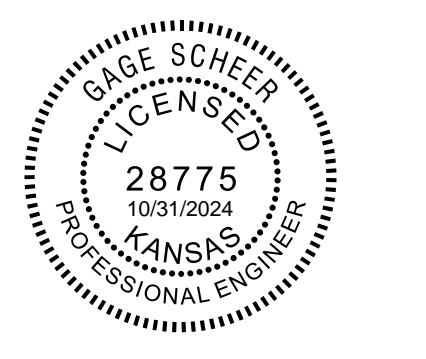
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PLAN: LAT. & LONG. 0 20' 40' 80'

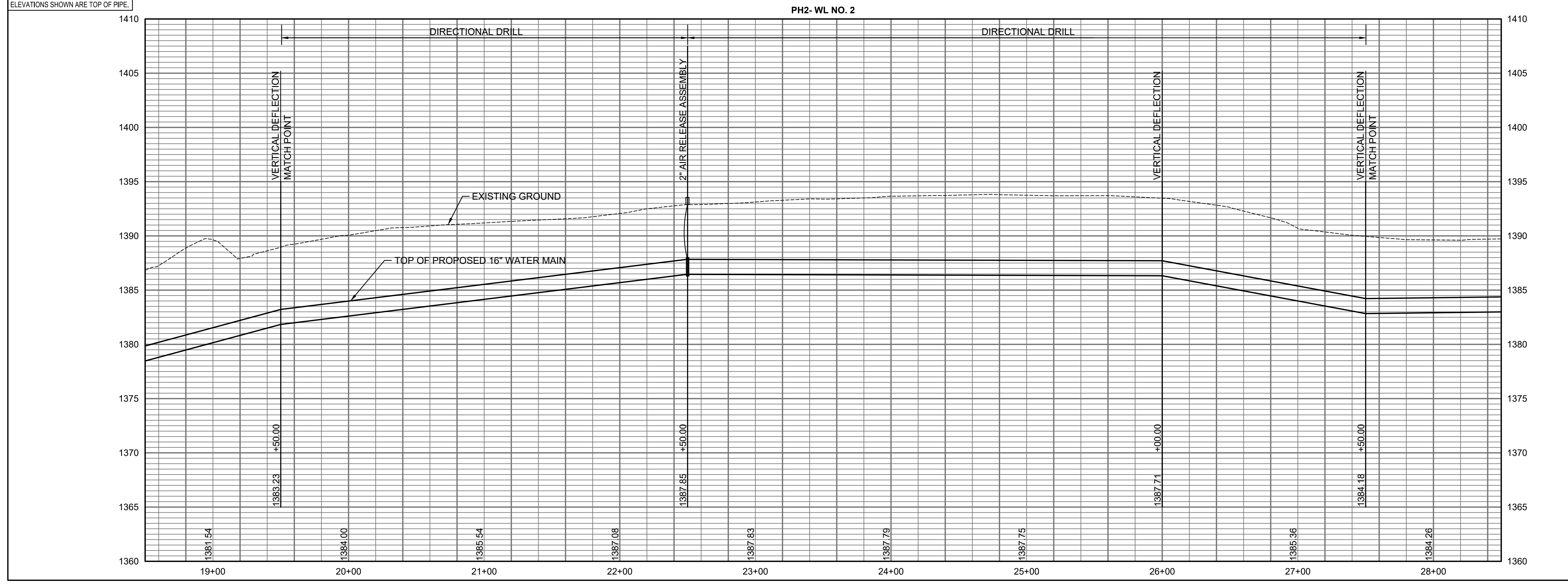
PROFILE: HORIZ. SAME AS ABOVE

VERT: 0 5'

PEC



UNLESS NOTED OTHERWISE, ELEVATIONS SHOWN ARE TOP OF PIPE.



**CENTRAL AVENUE AND 151ST STREET WATERLINE IMPROVEMENTS**  
 PHASE 2 - ALONG CENTRAL AVE, AND S 151ST STREET W,  
 PAUL GUNZELMAN, P.E. - CITY ENGINEER  
 CITY OF WICHITA PROJECT NO. 448-2020-033962

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| DRAWN BY        | CSL                |
| CHECKED BY      | TBK                |
| WATERLINE NO. 2 |                    |
| <b>CU106</b>    |                    |

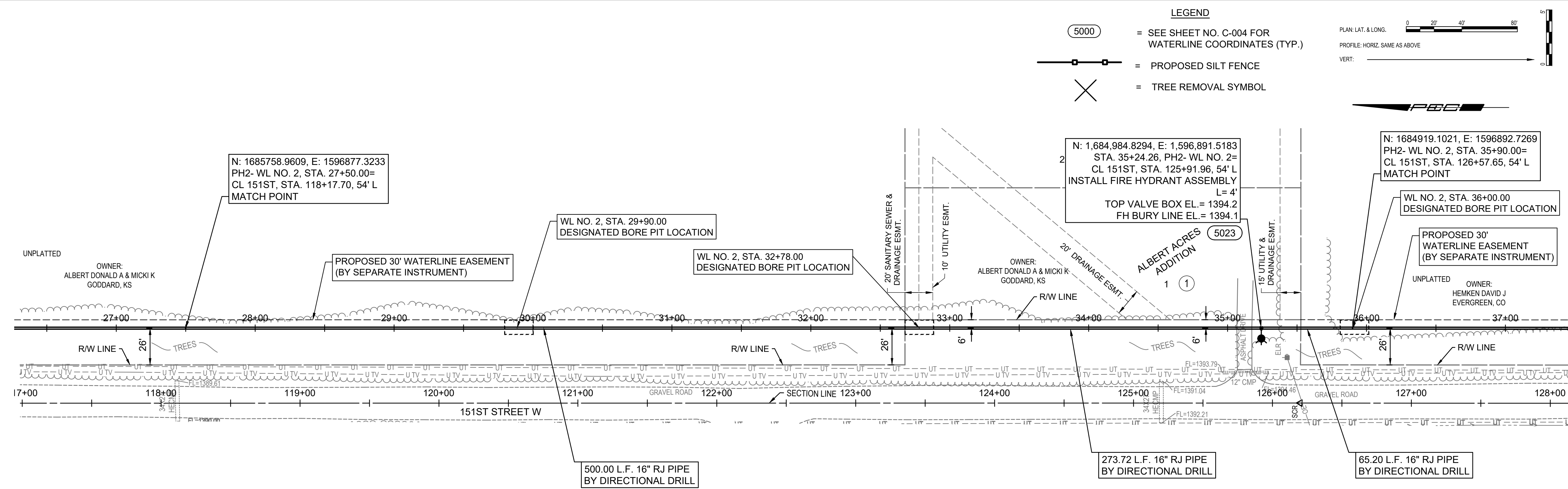
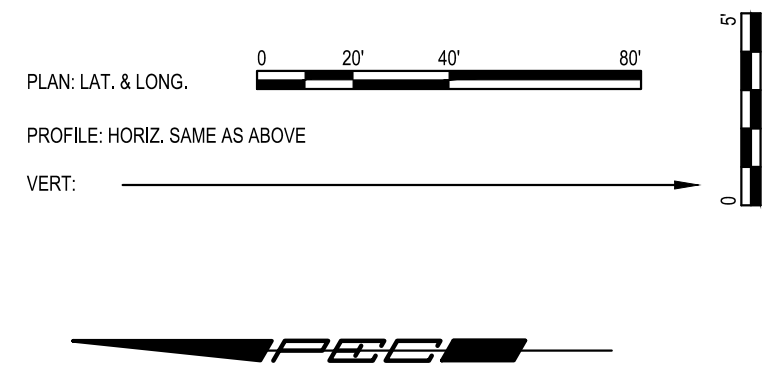


**CENTRAL AVENUE AND 151ST STREET WATERLINE IMPROVEMENTS**  
 PHASE 2 - ALONG CENTRAL AVE, AND S 151ST STREET W,  
 PAUL GUNZELMAN, P.E. - CITY ENGINEER  
 CITY OF WICHITA PROJECT NO. 448-2020-033962

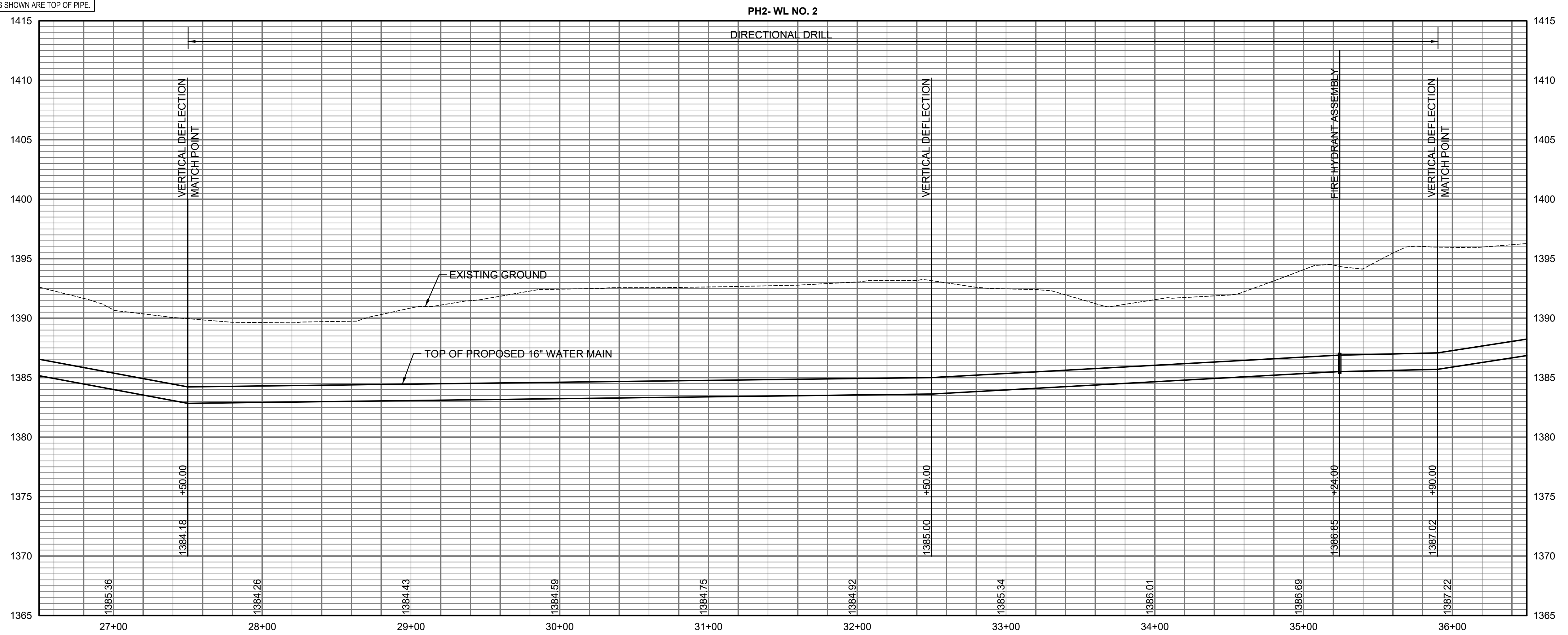
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| JOB NO.     | 35-210255-002-0042 |
| DATE        | OCTOBER 2023       |
| PM          | TBK                |
| DESIGNED BY | GAS                |
| DRAWN BY    | CSL                |
| CHECKED BY  | TBK                |

WATERLINE NO. 2  
**CU107**

- LEGEND**
- (5000) = SEE SHEET NO. C-004 FOR WATERLINE COORDINATES (TYP.)
  - = PROPOSED SILT FENCE
  - ✕ = TREE REMOVAL SYMBOL



UNLESS NOTED OTHERWISE, ELEVATIONS SHOWN ARE TOP OF PIPE.

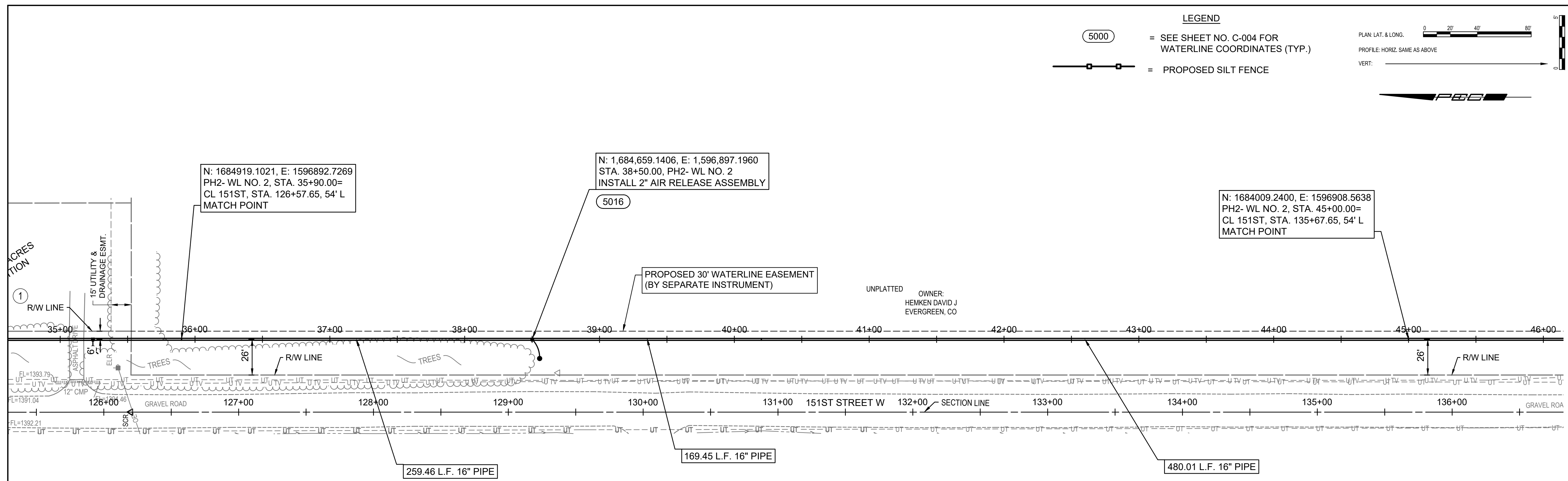
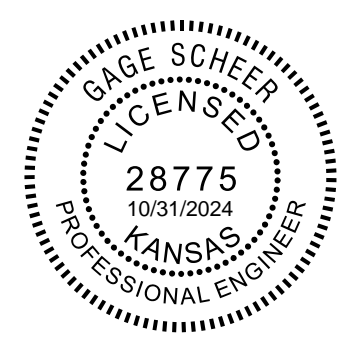
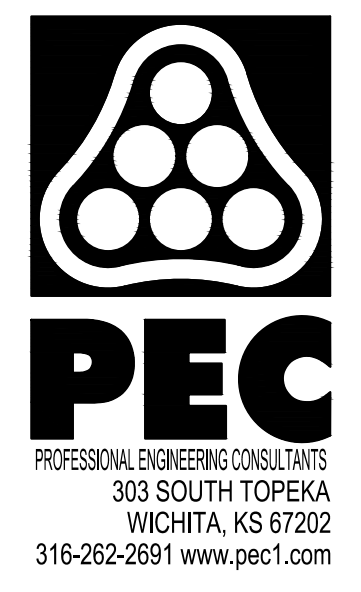
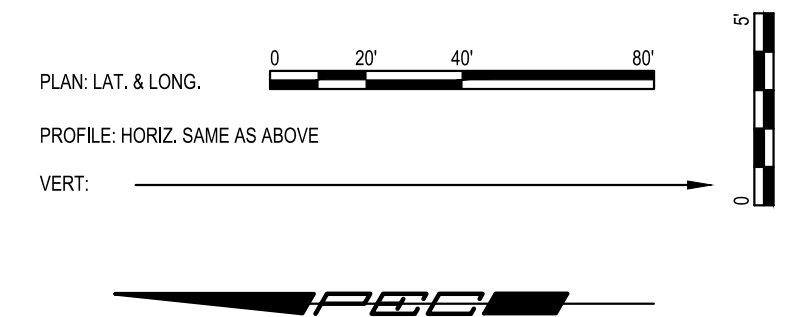


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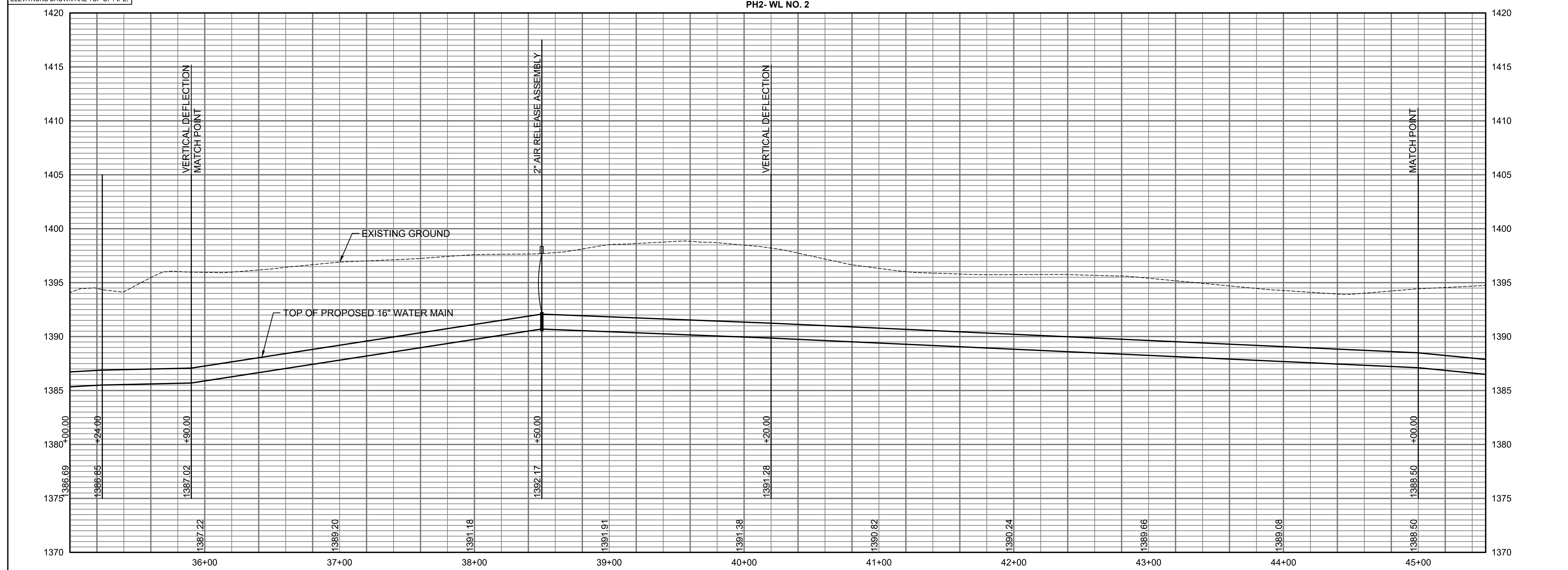
**LEGEND**

(5000) = SEE SHEET NO. C-004 FOR WATERLINE COORDINATES (TYP.)

—○— = PROPOSED SILT FENCE



UNLESS NOTED OTHERWISE, ELEVATIONS SHOWN ARE TOP OF PIPE.



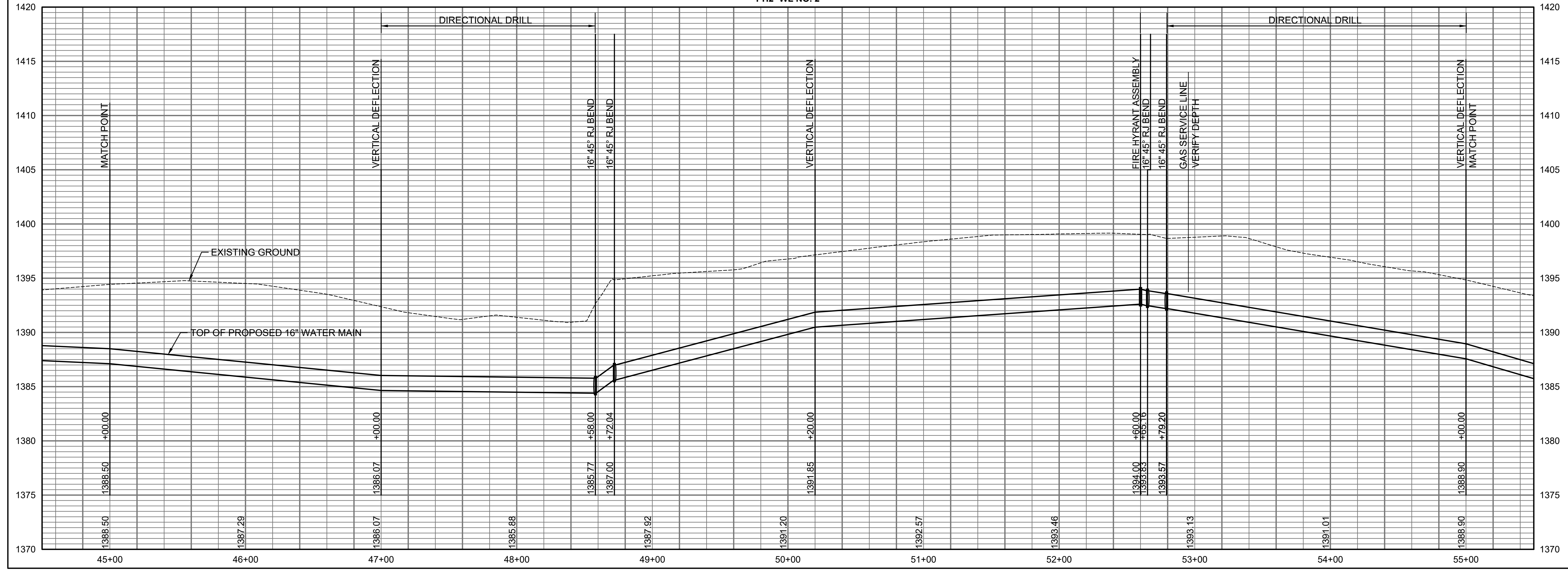
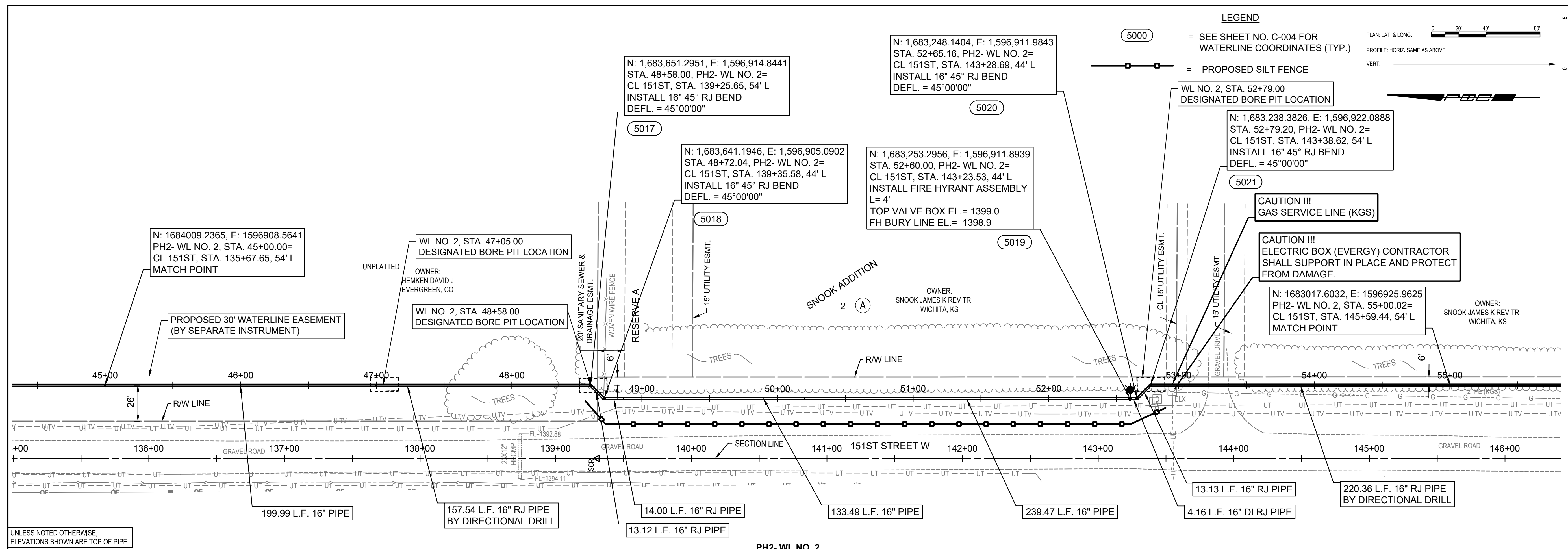
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**CENTRAL AVENUE AND 151ST STREET WATERLINE IMPROVEMENTS**  
 PHASE 2 - ALONG CENTRAL AVE, AND S 151ST STREET W,  
 PAUL GUNZELMAN, P.E. - CITY ENGINEER  
 CITY OF WICHITA PROJECT NO. 448-2020-033962

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| DATE        | OCTOBER 2023       |
| PM          | TBK                |
| DESIGNED BY | GAS                |
| DRAWN BY    | CSL                |
| CHECKED BY  | TBK                |

WATERLINE NO. 2  
**CU108**

SAVED 10/30/2024 11:33:17 AM BY KURTIS DEKAT  
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**LEGEND**

5000 = SEE SHEET NO. C-004 FOR WATERLINE COORDINATES (TYP.)

5020 = PROPOSED SILT FENCE

PLAN: LAT. & LONG. 0 20' 40' 80'

PROFILE: HORIZ. SAME AS ABOVE

VERT: 10'

PEC

**PEC**  
 PROFESSIONAL ENGINEERING CONSULTANTS  
 303 SOUTH TOPEKA  
 WICHITA, KS 67202  
 316-262-2691 www.pec1.com

**CITY OF WICHITA**

BASE SCHEER  
 LICENSED  
 28775  
 10/31/2024  
 KANSAS  
 PROFESSIONAL ENGINEER

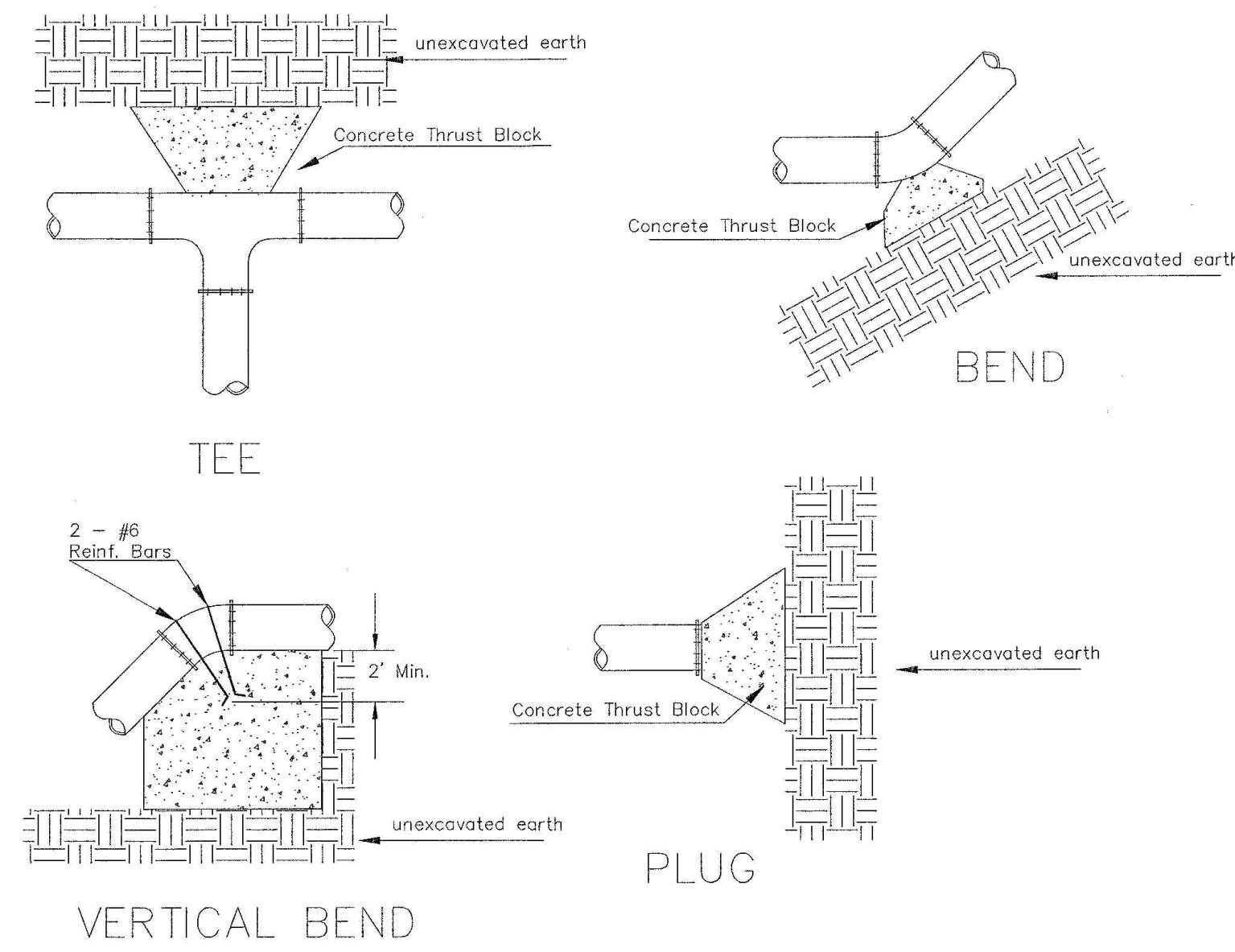
**CENTRAL AVENUE AND 151ST STREET  
 WATERLINE IMPROVEMENTS**  
 PHASE 2 - ALONG CENTRAL AVE,  
 AND S 151ST STREET W,  
 PAUL GUNZELMAN, P.E. - CITY ENGINEER  
 CITY OF WICHITA PROJECT NO. 448-2020-033962

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| Issue:          |              |
| JOB NO. #####   |              |
| DATE            | OCTOBER 2023 |
| PM              | TBK          |
| DESIGNED BY     | GAS          |
| DRAWN BY        | CSL          |
| CHECKED BY      | TBK          |
| WATERLINE NO. 2 |              |
| <b>CU109</b>    |              |



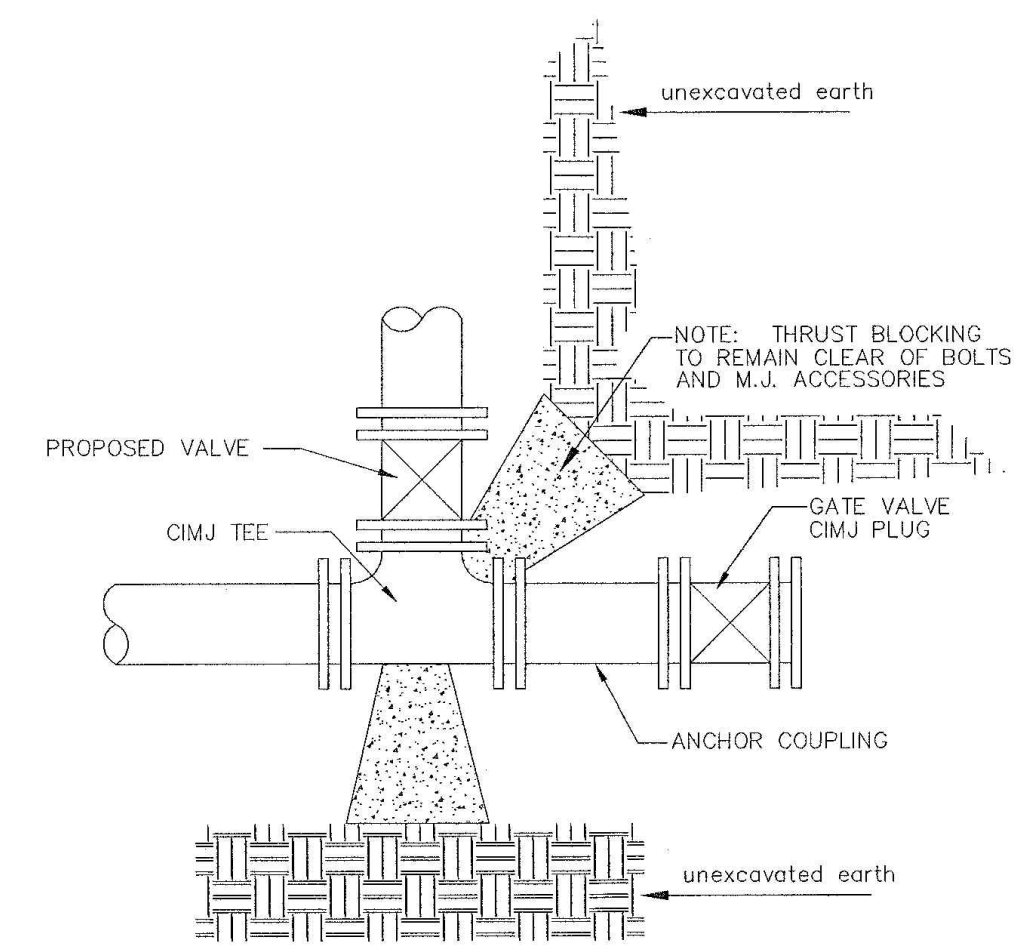


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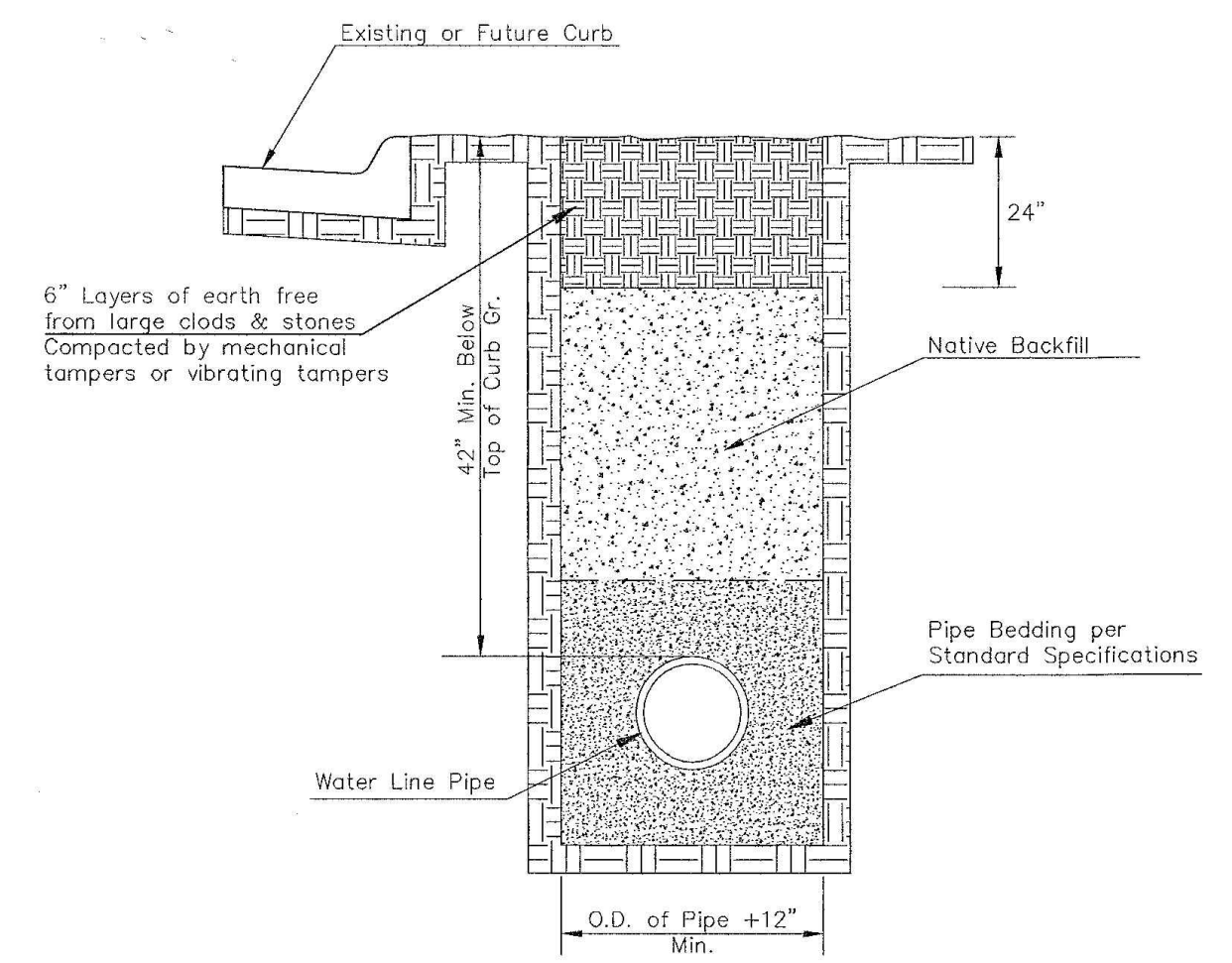
| PIPE SIZE | THRUST AT FITTINGS IN TONS-AT 150#/IN <sup>2</sup> P |      |       |         |         |       |
|-----------|--|------|-------|---------|---------|-------|
|           | PLUG   | 90°  | 45°   | 22 1/2° | 11 1/4° | TEE   |
| 6"        | 2.8  | 3.95 | 2.15  | 1.09    | .55     | 2.8   |
| 8"        | 4.9  | 6.95 | 3.75  | 1.90    | .96     | 4.9   |
| 12"       | 11.4   | 16.1 | 8.75  | 4.45    | 2.25    | 11.4  |
| 16"       | 20.15  | 28.5 | 15.4  | 7.85    | 3.95    | 20.15 |
| 20"       | 31.15  | 44.0 | 23.85 | 12.15   | 6.10    | 31.15 |
| 24"       | 44.55  | 63.0 | 34.1  | 17.4    | 8.75    | 44.55 |

TYPICAL THRUST BLOCKS



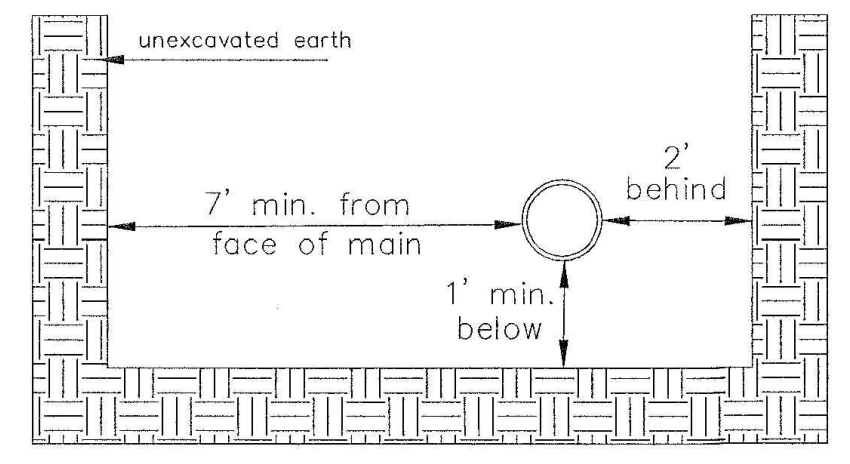
KEY BLOCK DETAIL

\* PLANS GOVERN  
 UNLESS OTHERWISE NOTED ON PLANS



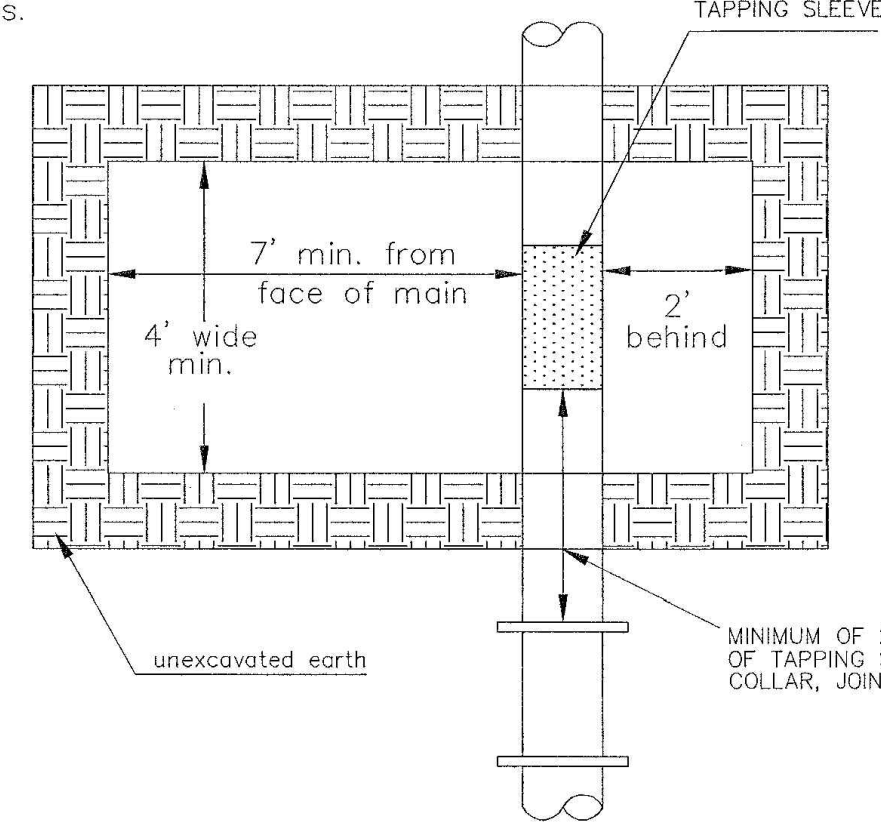
TRENCH COMPACTION IN ROAD RIGHT-OF-WAY

SIDE VIEW

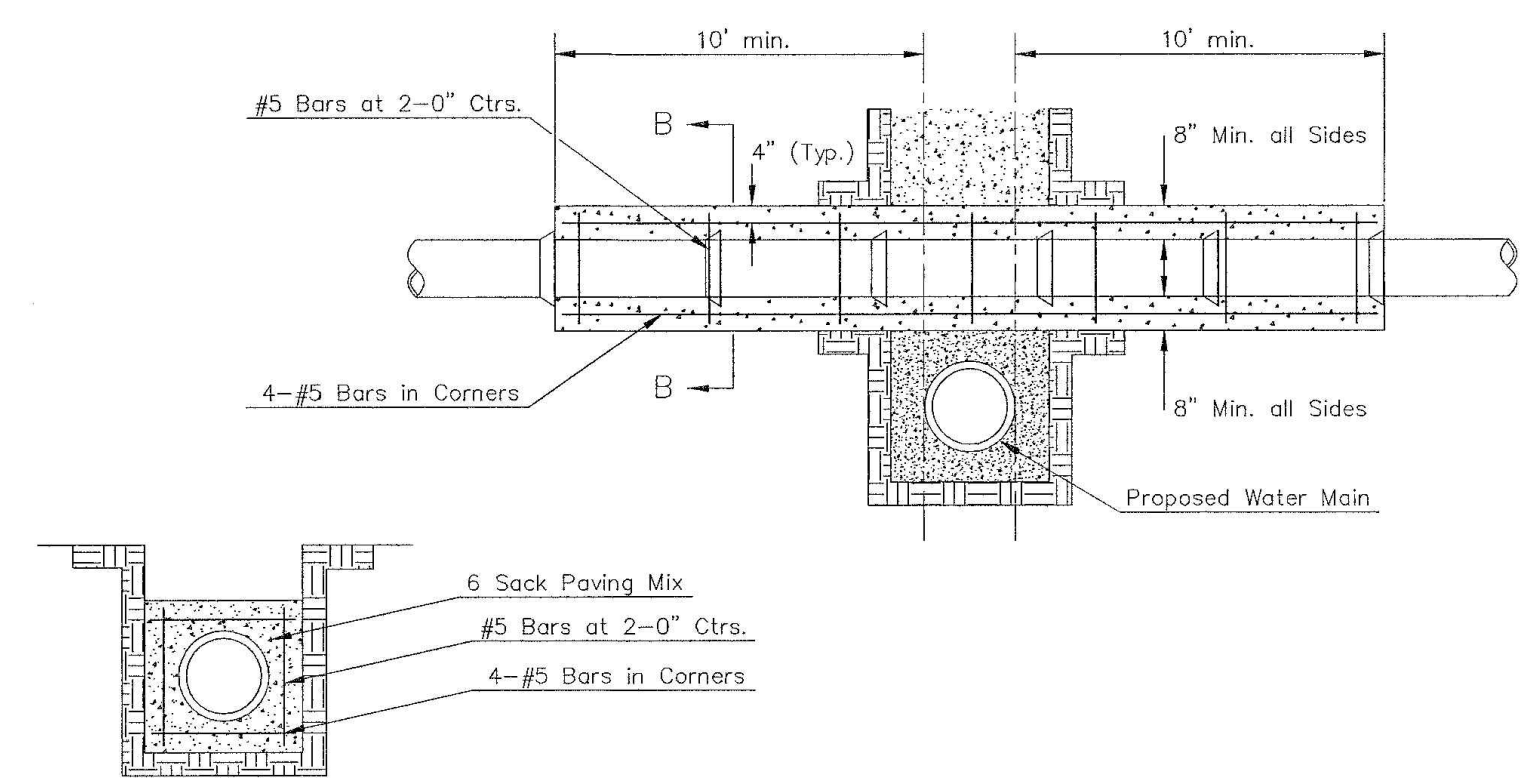


Note: When shoring is required it is to be per The City of Wichita Standard Specifications.

TOP VIEW



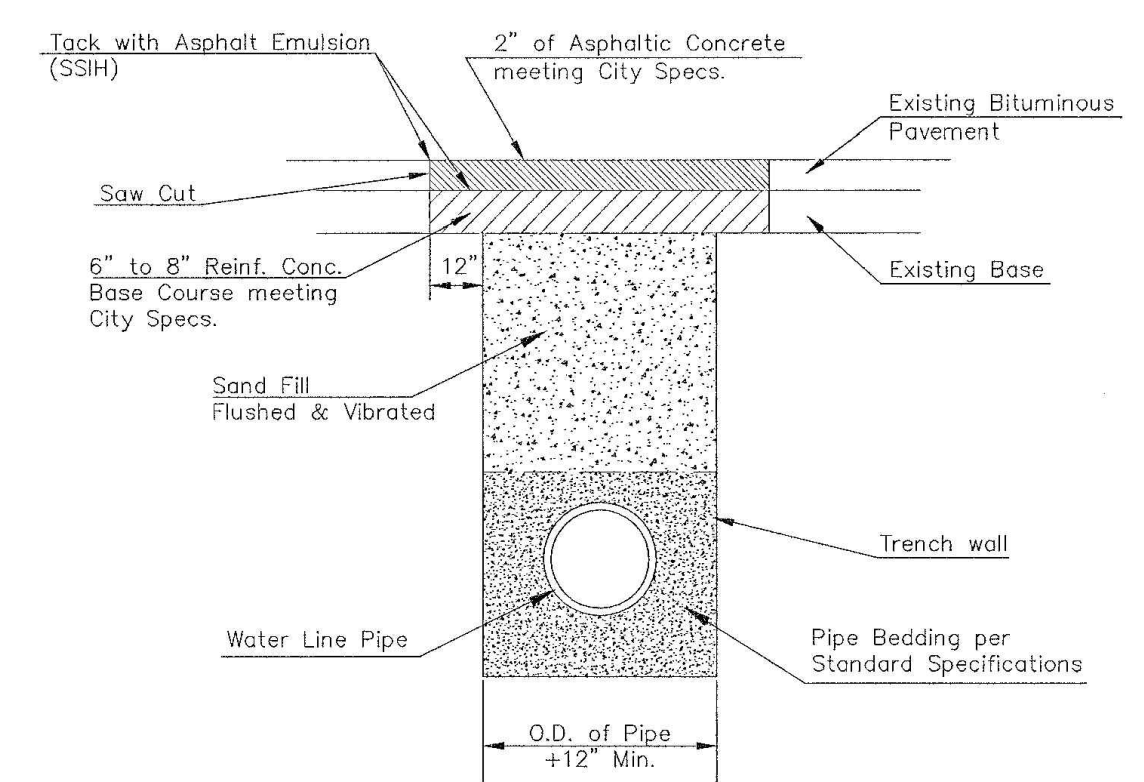
EXCAVATION FOR WET TAP



SECTION B-B

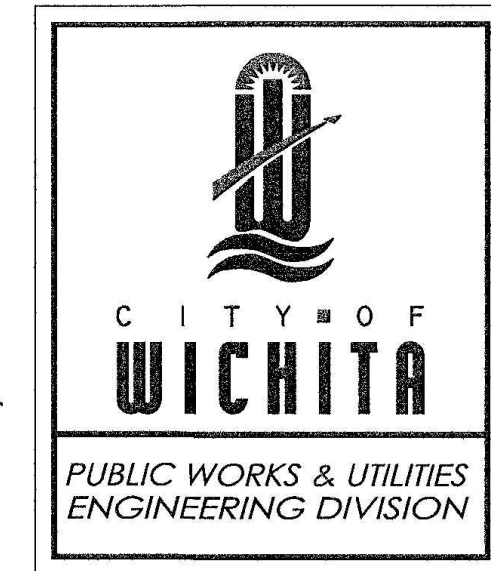
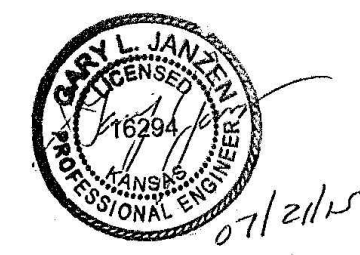
REINFORCED CONCRETE ENCASUREMENT OF SANITARY SEWER

Note: Encasement to begin and end at a Bell on Sanitary Sewer Pipe.



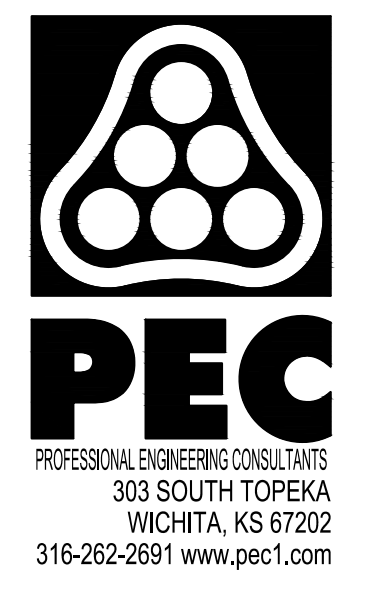
PAVEMENT REPLACEMENT & TRENCH COMPACTION UNDER EXISTING AND PROPOSED CITY ROADS

REVISED: JULY 2015



|  |            |      |
|--|------------|------|
| MISCELLANEOUS WATER DETAILS  |            |      |
| CITY ENGINEER<br>GARY JANZEN, P.E.   |            |      |
| PROJECT NUMBER   | OCA NUMBER | DATE |
| CITY ENGINEER'S OFFICE   | SHEET      |      |
| CITY HALL - SEVENTH FLOOR<br>455 NORTH MAIN STREET<br>WICHITA, KANSAS 67202-1620<br>(316) 268-4501 |            |      |

WL-104



CENTRAL AVENUE AND 151ST STREET  
 WATERLINE IMPROVEMENTS  
 PHASE 2 - ALONG CENTRAL AVE,  
 AND S 151ST STREET W.

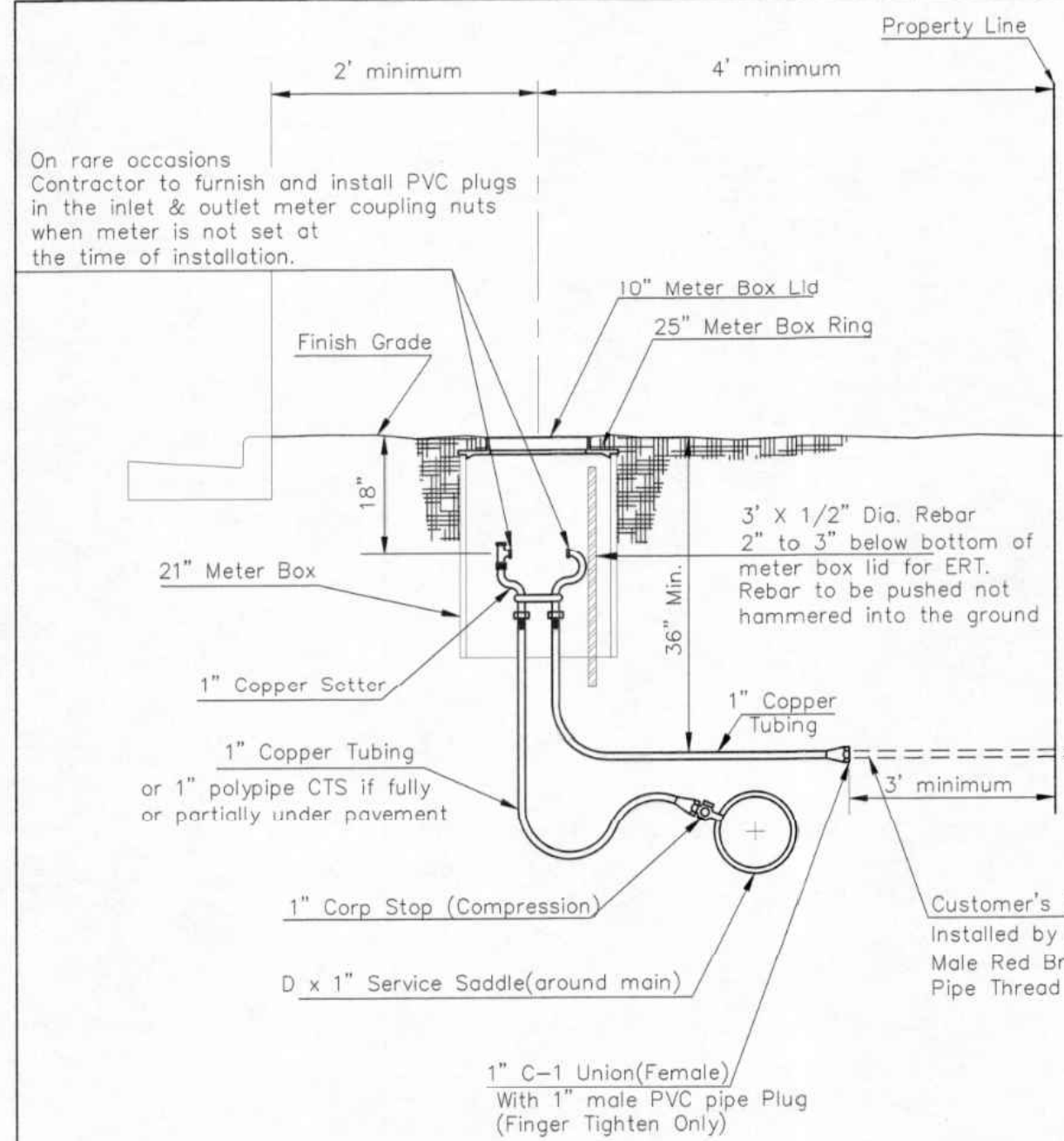
PAUL GUNZELMAN, P.E. - CITY ENGINEER  
 CITY OF WICHITA PROJECT NO. 448-2020-033962

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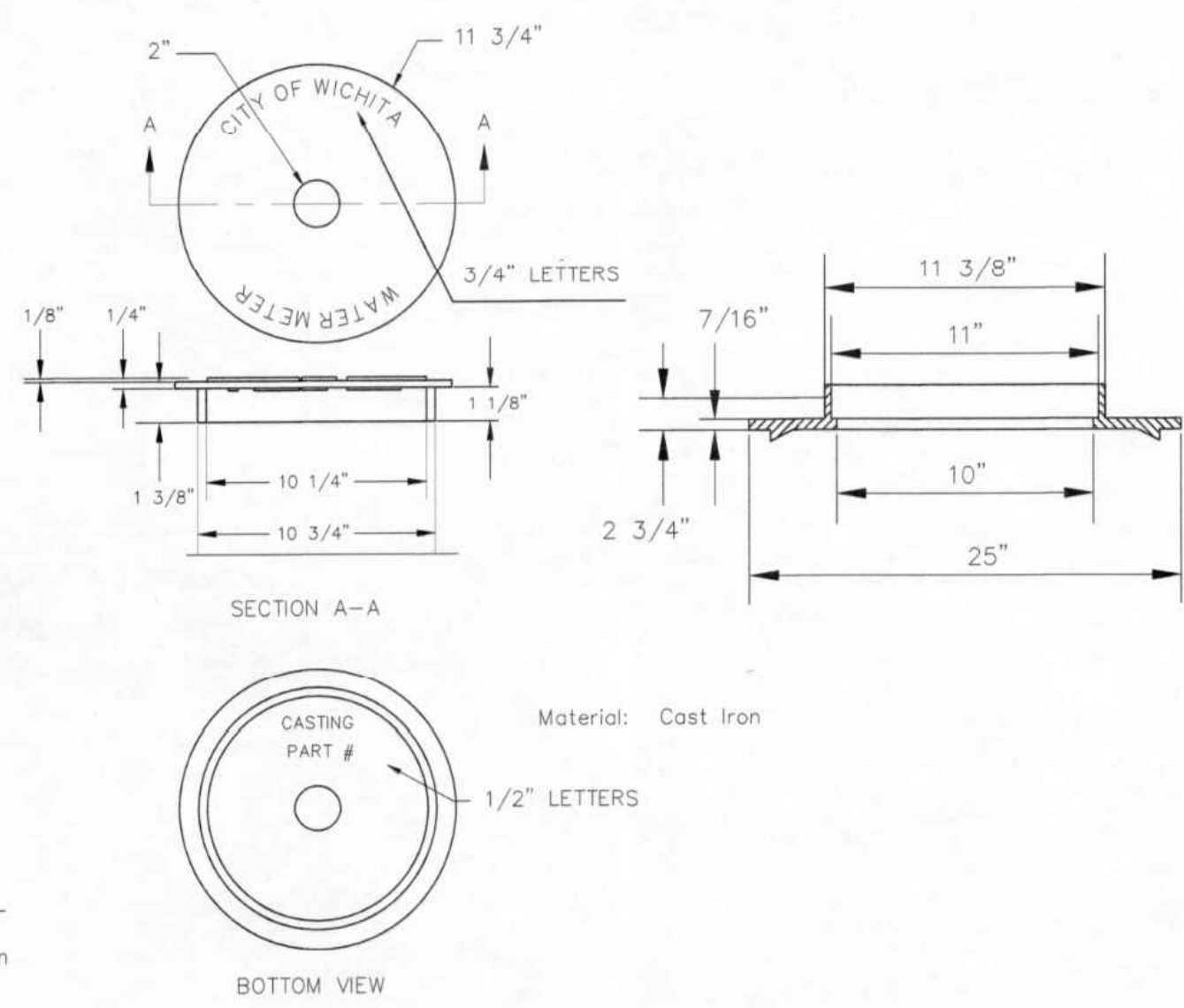
MISCELLANEOUS WATER DETAILS

CU502

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 PLOTTED 10/30/2024 11:36:30 AM BY KURTIS DEKAT  
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TYPICAL 1" METER SETTING

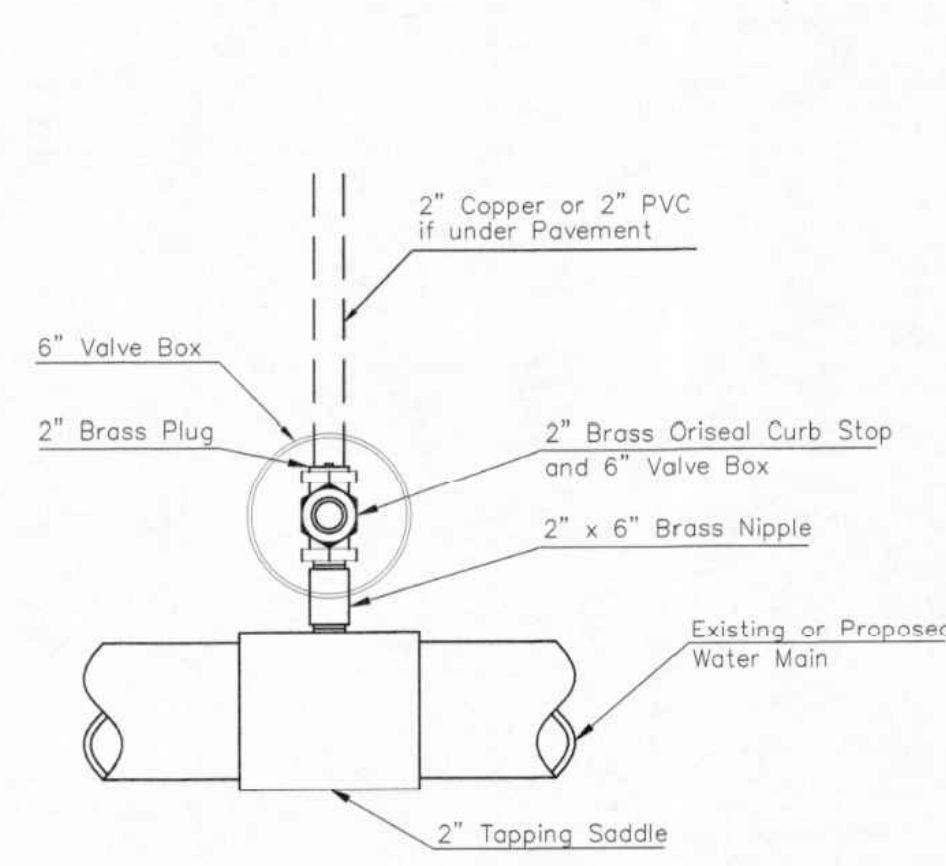


NOT TRAFFIC RATED RING & LID FOR 1" METER BOX

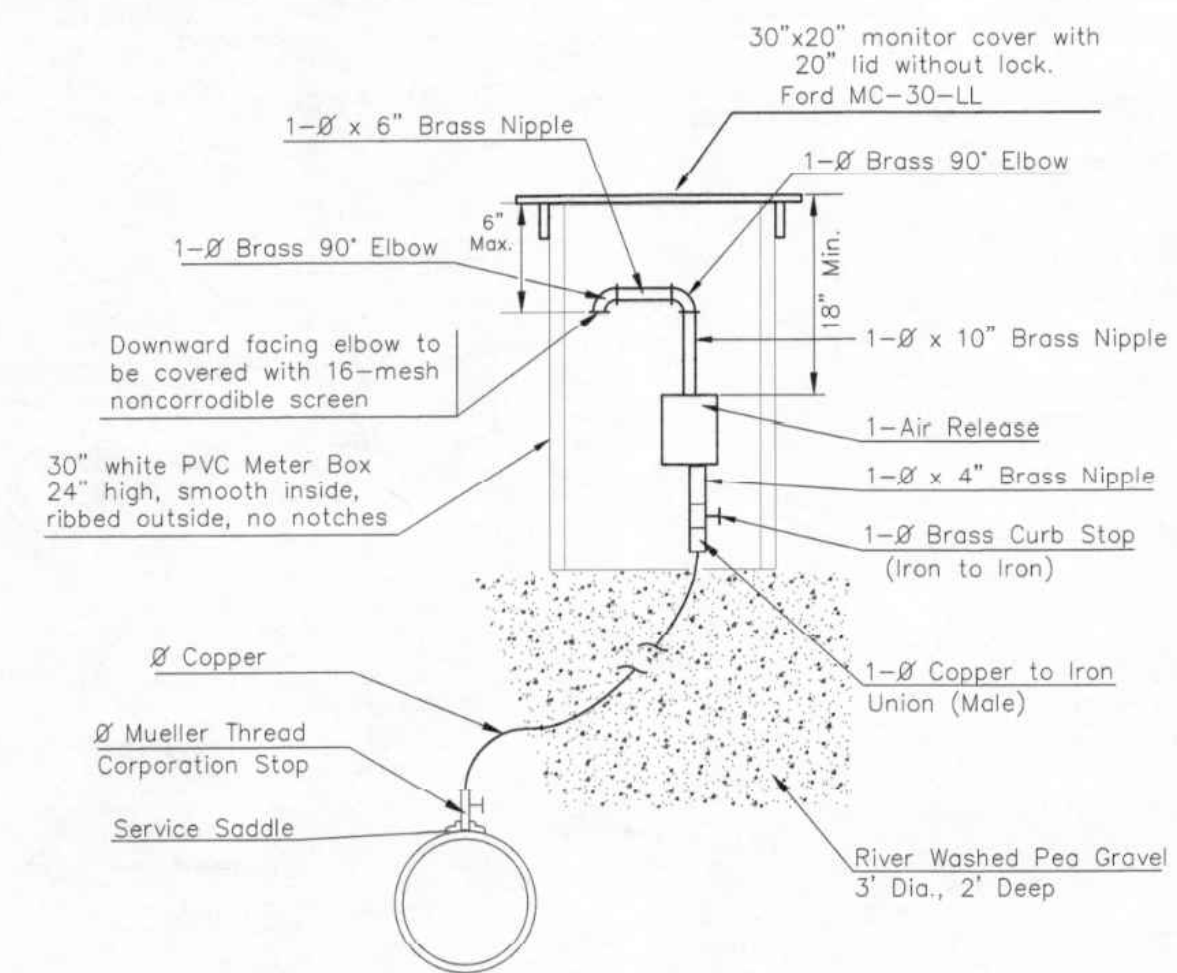
NOTE:

THE 1 1/2" AIR RELEASE ASSEMBLY WILL TYPICALLY BE USED ON WATER MAINS 24" AND SMALLER, AS SPECIFICALLY DESIGNATED IN THE PLANS. COMBINATION AIR RELEASE ASSEMBLIES WILL BE SPECIFICALLY DESIGNED FOR PROJECTS WITH LARGER MAINS, AND WILL BE INCLUDED IN THE PLANS.

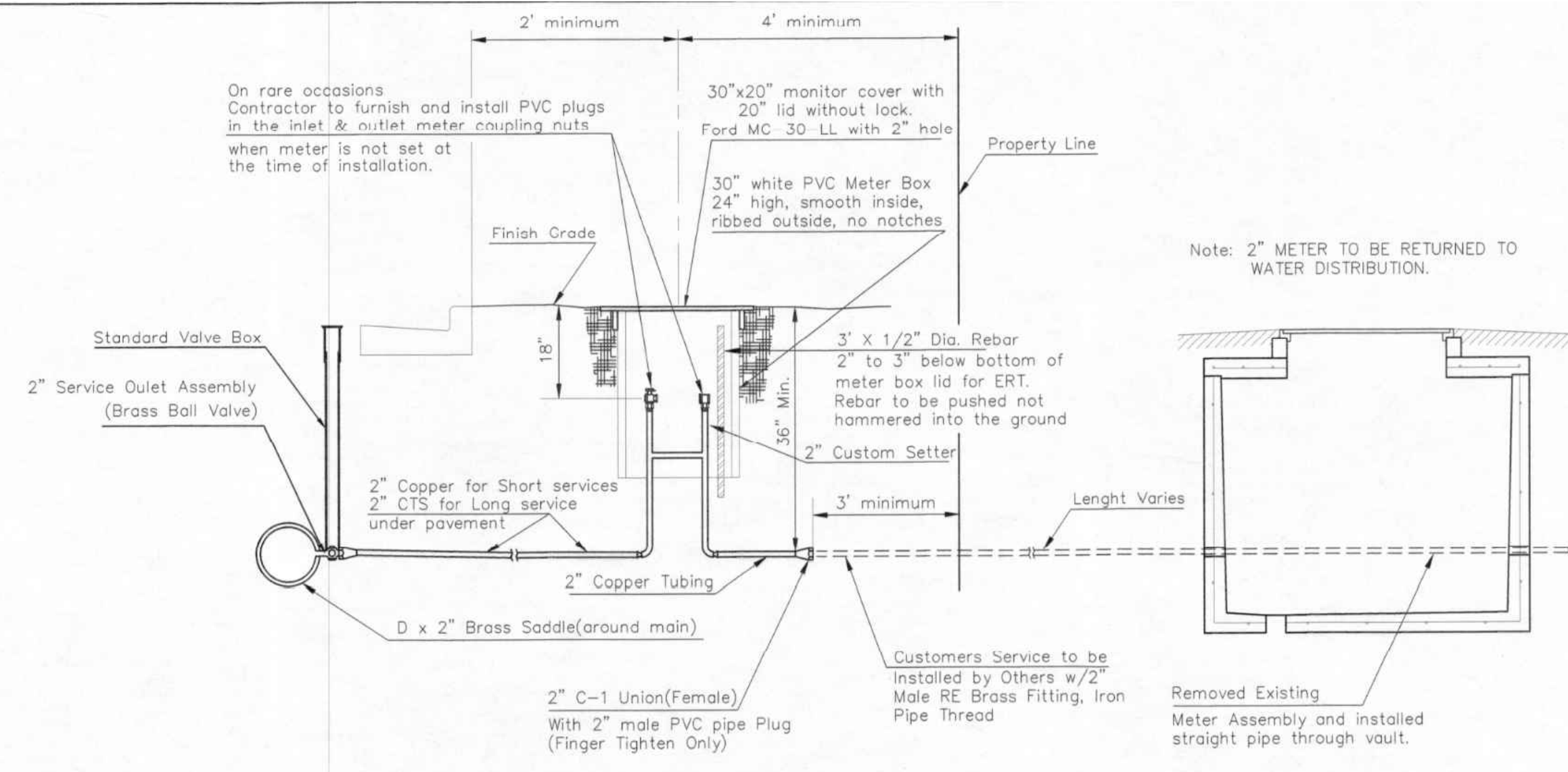
- 1 - 1/2" Mueller Thread Corporation Stop
- 2 - 1/2" Type "K" Copper Tubing
- 1 - 1/2" Copper to Iron Union (Male)
- 1 - 1/2" Brass Curb Stop (Iron to Iron)
- 2 - 1/2" x 4" Brass Nipple
- Air Release
- 2 - 1/2" Brass Elbows (90°)
- 1 - 1" x 6" Brass Nipple
- 1 - 30" Monitor Cover
- 1 - 20" Meter Lid



2" SERVICE OUTLET ASSEMBLY TOP VIEW



MATERIALS FOR 1" or 2" AIR RELEASE ASSEMBLY  
 Ø = 1" or 2"

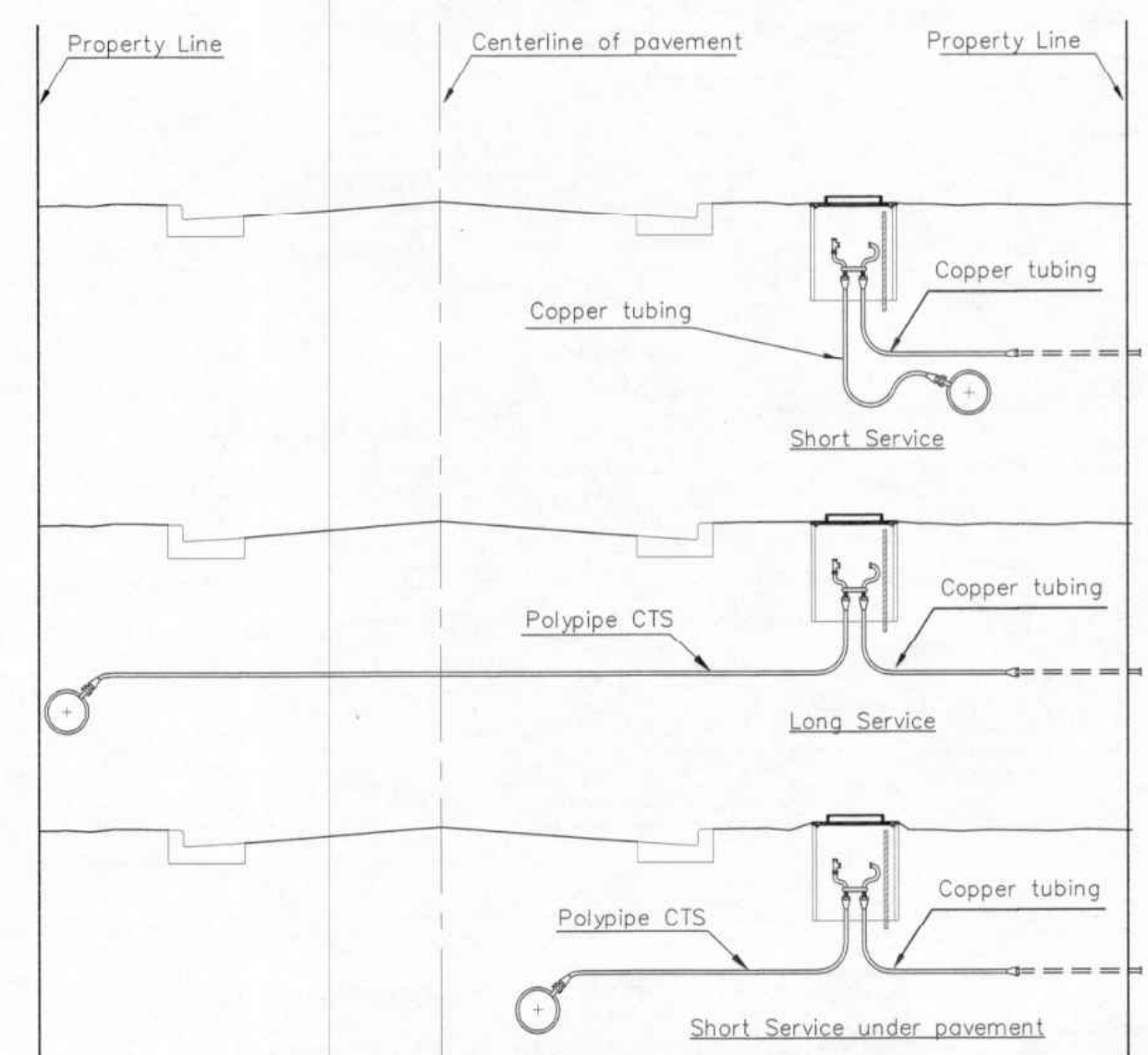


TYPICAL 2" METER SETTING

Note: ONE VALVE STEM EXTENSION FOR EACH VALVE BURIED GREATER THAN 5'.

TYPICAL 2" METER SETTING INVOLVING EXISTING 2" METER VAULT

Note: ONE VALVE STEM EXTENSION FOR EACH VALVE BURIED GREATER THAN 5'.



SERVICE TYPES



REVISED: NOVEMBER 2019 TM 3"x1/2" REBAR IN 1" & 2" METER SETTINGS FOR ERT.

**CITY OF WICHITA**  
 PUBLIC WORKS & UTILITIES ENGINEERING DIVISION

**STANDARD WATER SERVICE DETAIL**  
 CITY ENGINEER  
**GARY JANZEN, P.E.**

PROJECT NUMBER: \_\_\_\_\_ OCA NUMBER: \_\_\_\_\_ DATE: \_\_\_\_\_

CITY ENGINEER'S OFFICE  
 CITY HALL - SEVENTH FLOOR  
 455 NORTH MAIN STREET  
 WICHITA, KANSAS 67202-1620  
 (316) 268-4501

SHEET \_\_\_\_\_ of \_\_\_\_\_



**CENTRAL AVENUE AND 151ST STREET WATERLINE IMPROVEMENTS**  
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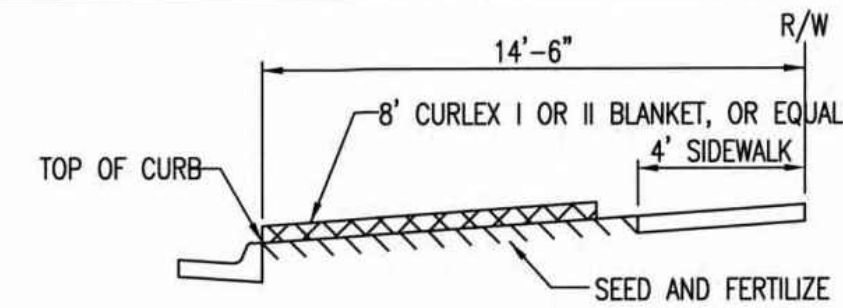
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STANDARD WATER SERVICE DETAIL

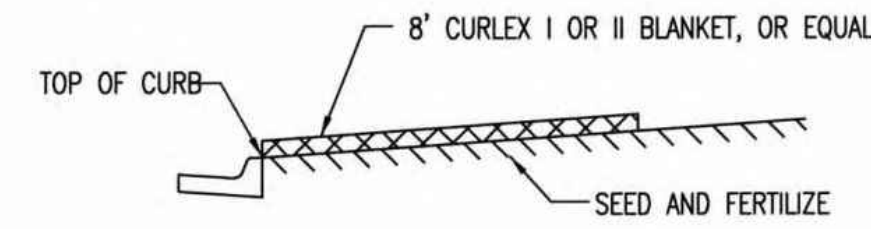
CU503



SAVED 10/19/2023 10:50:49 AM BY CATHY LINK  
 PLOTTED 10/30/2024 11:36:36 AM BY KURTIS DEKAT  
 U:\WICHITA-CIVIL\2021\210235\002\PEC\DRAWINGS\PHASE 2\210235-002-CU505.DWG

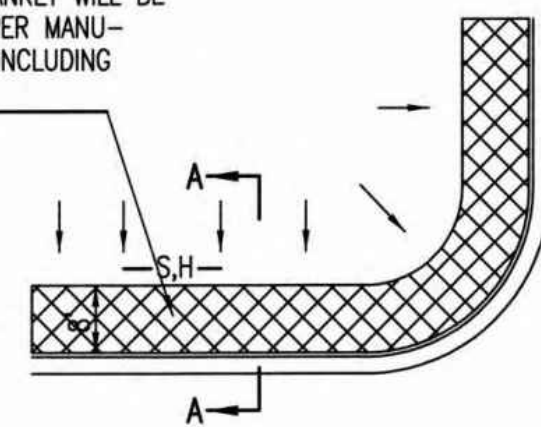


SECTION B-B

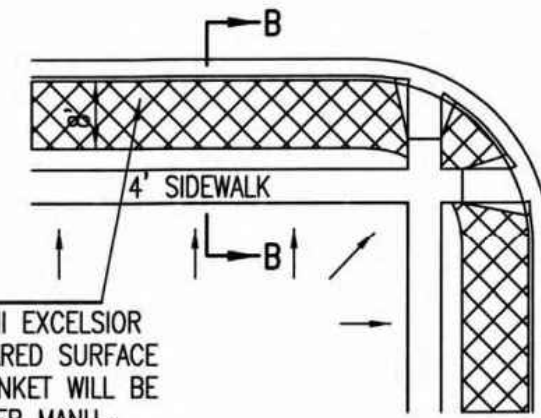


SECTION A-A

INSTALL 8' WIDE CURLEX I OR II EXCELSIOR BLANKET, OR EQUAL, ON PREPARED SURFACE BACK OF CURB. EDGE OF BLANKET WILL BE AT BACK OF CURB. INSTALL PER MANUFACTURERS RECOMMENDATION, INCLUDING STAPLES. (SEE DETAIL)



SOUTH STREET

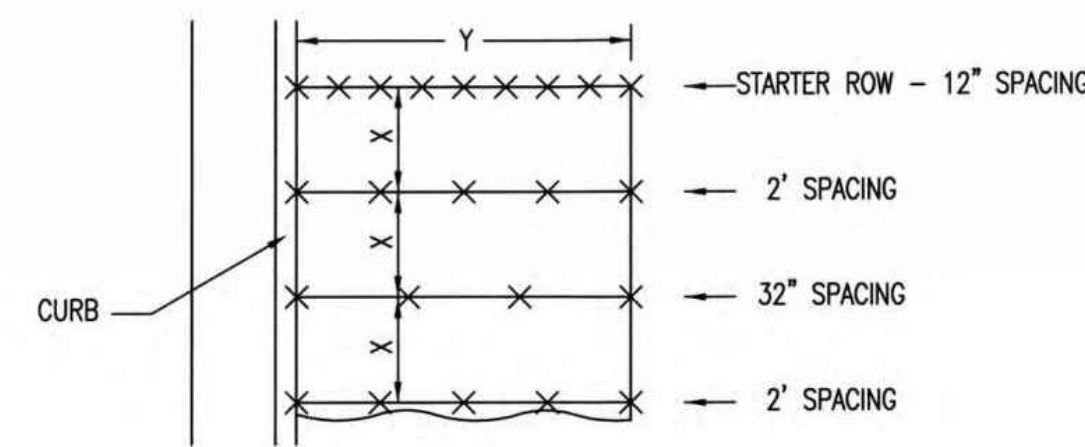


INSTALL 8' WIDE CURLEX I OR II EXCELSIOR BLANKET, OR EQUAL, ON PREPARED SURFACE BACK OF CURB. EDGE OF BLANKET WILL BE AT BACK OF CURB. INSTALL PER MANUFACTURERS RECOMMENDATION, INCLUDING STAPLES. (SEE DETAIL)

**GENERAL NOTES**

- EXCELSIOR MAT TO BE INSTALLED WHEN SOD IS NOT SPECIFIED ON PROJECT.
- EXCELSIOR BLANKET TO BE INSTALLED OVER SEED AND FERTILIZER, AS SPECIFIED IN THE PROJECT SPECIFICATIONS.
- AFTER INSTALLATION OF EXCELSIOR BLANKET, AT LOCATIONS WHERE CONCENTRATED FLOW CARRIES SEDIMENT OVER THE CURB AND INTO THE GUTTER, SUPPLEMENTAL EROSION CONTROL DEVICES WILL BE INSTALLED BY THE CONTRACTOR AS NEEDED, TO FIX THE PROBLEM.

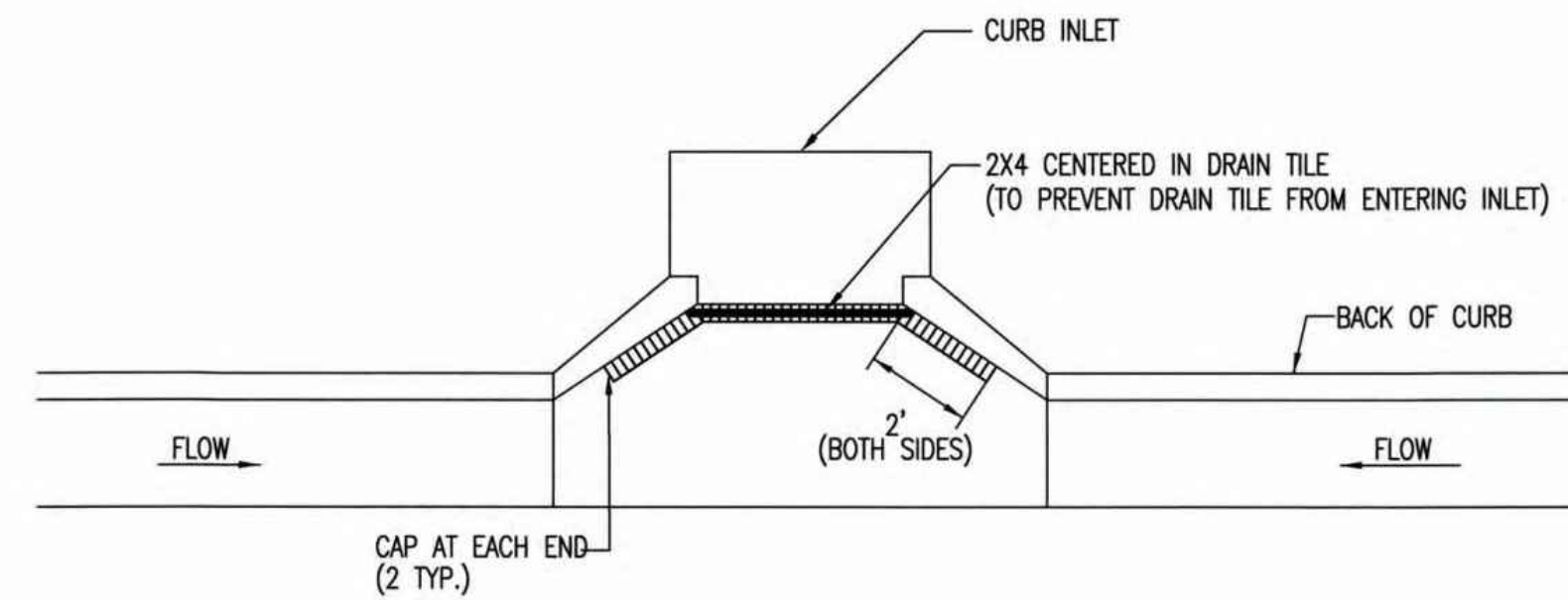
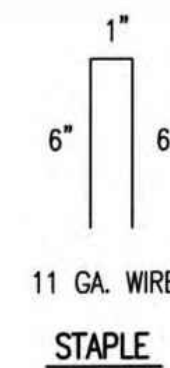
**BACK OF CURB PROTECTION DETAIL**



**STAPLE PATTERN**

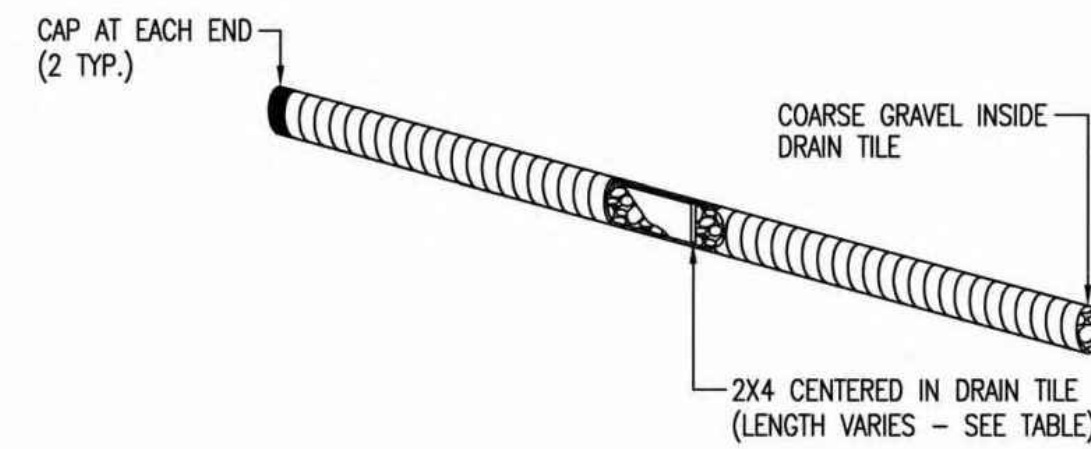
NOTES: USE 6\"/>

**DETAILS FOR APPROVED EROSION CONTROL MAT**

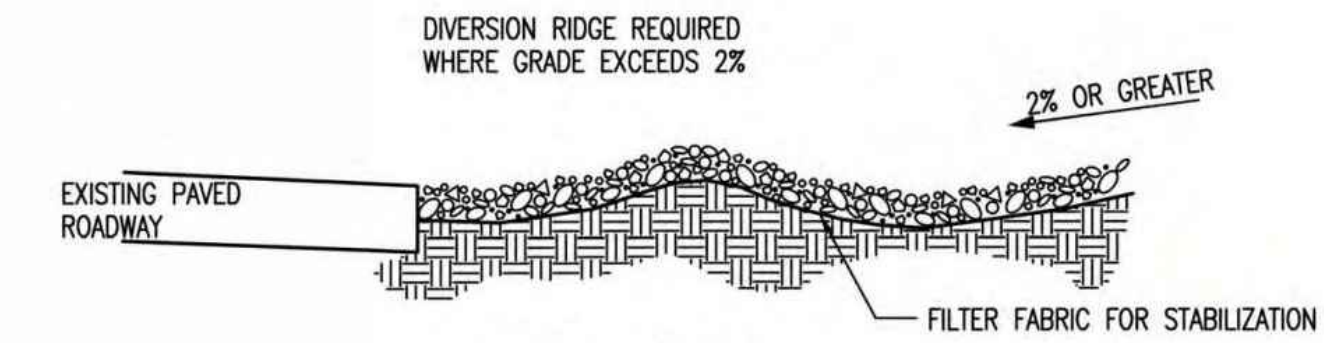


NOTE: PLACE 4\"/>

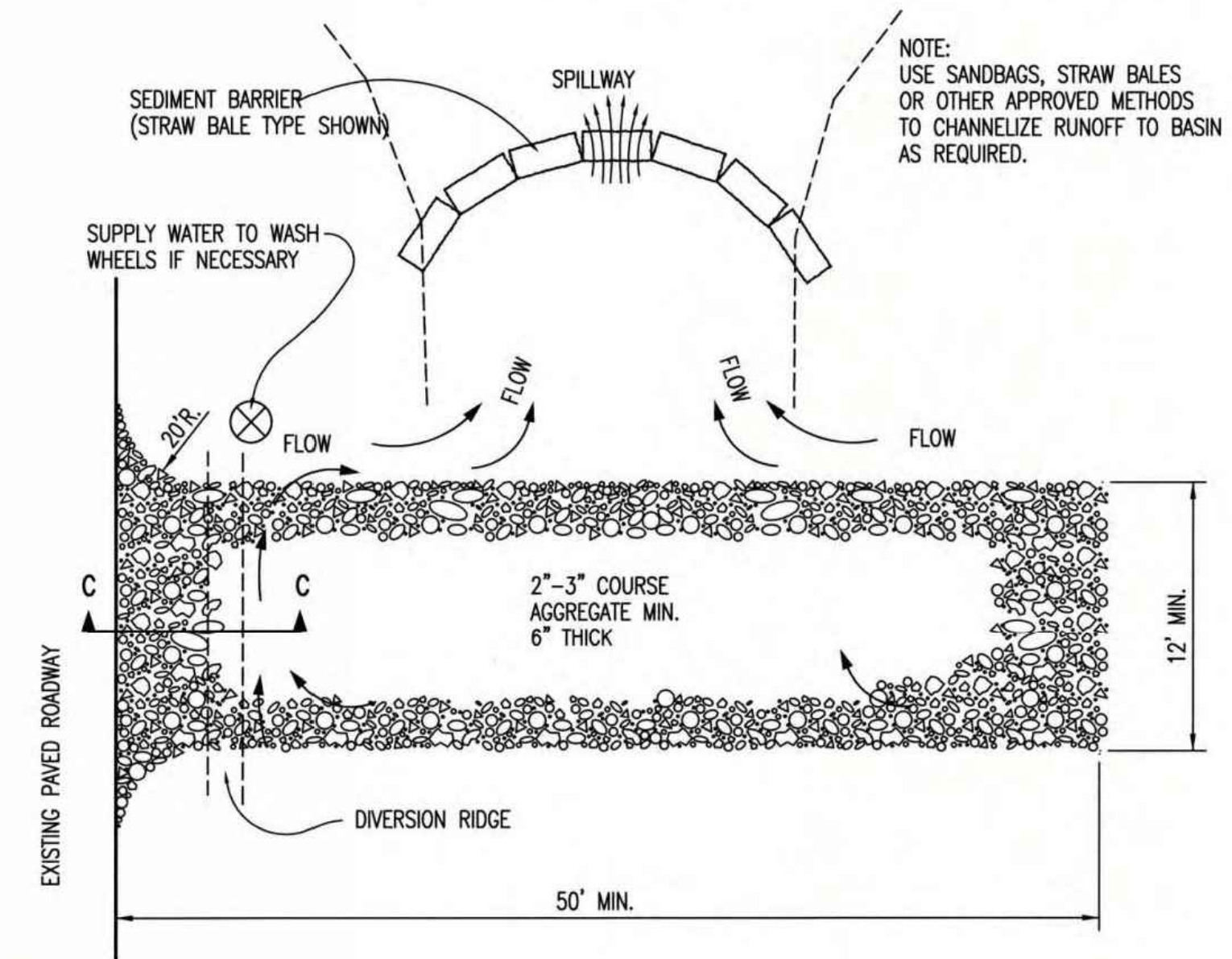
| 2X4 LENGTH | INLET TYPE | INLET OPENING |
|------------|------------|---------------|
| 5'-6"      | 1-A        | 5'-0"         |
| 10'-6"     | 1-A        | 10'-0"        |
| 15'-6"     | 1-A        | 15'-0"        |



**CURB INLET PROTECTION**  
4\"/>



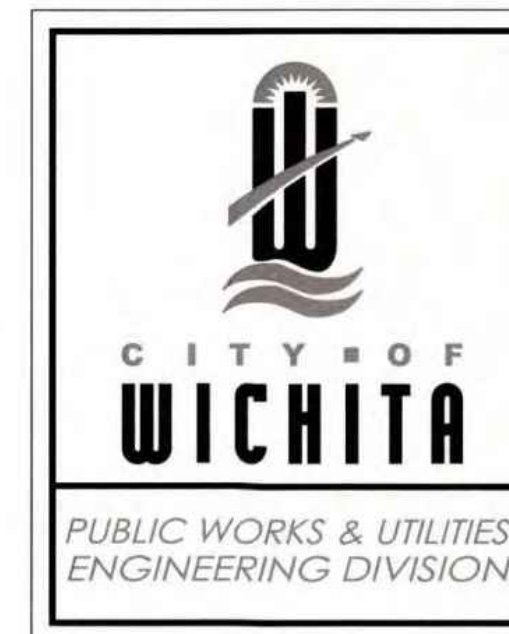
SECTION C-C



**STABILIZED CONSTRUCTION ENTRANCE**

**GENERAL NOTES**

- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
- WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
- WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN, AS SHOWN ABOVE.
- DRIVE ENTRANCES ONTO RESIDENTIAL LOTS WILL NOT BE REQUIRED TO HAVE THE SEDIMENT BARRIER SHOWN, BUT WHEEL WASHING MAY BE REQUIRED IF STABILIZED ENTRANCE IS NOT SUFFICIENT TO KEEP MUD FROM BEING TRACKED ONTO ADJACENT STREET. ENTRANCE SHALL EXTEND FROM BACK OF CURB TO DWELLING.



**BACK OF CURB PROTECTION, CURB INLET PROTECTION AND CONSTRUCTION ENTRANCE**

CITY ENGINEER  
**GARY JANZEN, P.E.**

PROJECT NUMBER OCA NUMBER DATE

CITY ENGINEER'S OFFICE  
CITY HALL - SEVENTH FLOOR  
455 NORTH MAIN STREET  
WICHITA, KANSAS 67202-1620  
(316) 268-4501

SHEET

**CENTRAL AVENUE AND 151ST STREET WATERLINE IMPROVEMENTS**  
 PHASE 2 - ALONG CENTRAL AVE. AND S 151ST STREET W.

PAUL GUNZELMAN, P.E. - CITY ENGINEER  
 CITY OF WICHITA PROJECT NO. 448-2020-033962

|             |                    |
|-------------|--------------------|
| Issue:      |                    |
| JOB NO.     | 35-210255-002-0042 |
| DATE        | OCTOBER 2023       |
| PM          | TBK                |
| DESIGNED BY | GAS                |
| DRAWN BY    | CSL                |
| CHECKED BY  | TBK                |

EROSION CONTROL DETAILS

**CU505**

