

THE METROPOLITAN SEWER DISTRICT  
OF GREATER CINCINNATI  
HAMILTON COUNTY

CONTRACT  
DRAWING  
PRINTS NOT BEARING THIS STAMP WERE  
MADE PRIOR TO ADVERTISING FOR BIDS  
AND ARE TO BE CONSIDERED OBSOLETE  
FOR CONTRACT PURPOSES.

PROPOSED PROJECT NO. 10370025  
KENWOOD HILLS  
LOCAL SEWER

NOTES:

**MANHOLES:** ALL PROPOSED MANHOLES AND DROP MANHOLES SHALL BE TYPE "S". ALL MANHOLES LOCATED OUTSIDE OF ROAD RIGHT-OF-WAY AND OUTSIDE OF MAINTAINED RESIDENTIAL YARDS SHALL HAVE MANHOLE TOPS 18" ABOVE GROUND. THE STANDARD PRECAST MANHOLE BASE WITH FLEXIBLE MANHOLE JOINTS SHALL BE USED WITH P.V.C. PIPE. IF THE CONTRACTOR PROVIDES PRECAST MANHOLES, THE CONTRACTOR SHALL ASSUME ANY RISK OF MAKING FIELD MODIFICATIONS TO THE PRECAST MANHOLES, DUE TO FIELD CONDITIONS

**PIPE JOINTS:** ALL PROPOSED CONDUIT SHALL HAVE RESILIENT AND FLEXIBLE JOINTS.

**HOUSE CONNECTIONS:** ALL HOUSE CONNECTIONS SHALL BE TYPE "I" CONDUIT WITH RESILIENT AND FLEXIBLE JOINTS, EITHER P.V.C. OR ABS CONDUIT, SDR35 WITH ASTM D-3212 FLEXIBLE ELASTOMERIC SEALS.

**UNDERGROUND STRUCTURES:** LOCATION OF UNDERGROUND STRUCTURES ARE NOT GUARANTEED. APPROXIMATE LOCATION OF GAS, WATER & ELECTRIC SERVICE LATERALS ARE SHOWN IN PLAN VIEW ONLY.

**OVERHEAD UTILITY LINES:** LOCATION OF ABOVEGROUND UTILITY LINES ARE NOT SHOWN ON THE DRAWINGS. CONTRACTOR SHALL VISIT PROJECT SITE PRIOR TO BIDDING TO VERIFY OVERHEAD UTILITIES.

ROOF DRAINS, FOUNDATION DRAINS, AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER SYSTEMS ARE PROHIBITED.

THE CONTRACTOR SHALL FURNISH ALL MANHOLE FRAMES AND COVERS.

ALL FENCING DAMAGED BY SEWER CONSTRUCTION SHALL BE REPLACED IN KIND BY THE CONTRACTOR AND ALL ASSOCIATED COSTS SHOULD BE INCLUDED WITH VARIOUS CONTRACT ITEMS.

ALL ATU AND COLLECTOR/STORM TO REMAIN IN SERVICE.

BENCH MARKS:

BM #1:  
HAMILTON COUNTY/CITY OF CINCINNATI MONUMENTS  
HAMILTON COUNTY 2009, 2012, 2420, 4086, 8031, 8405  
CITY OF CINCINNATI MONUMENT 6913

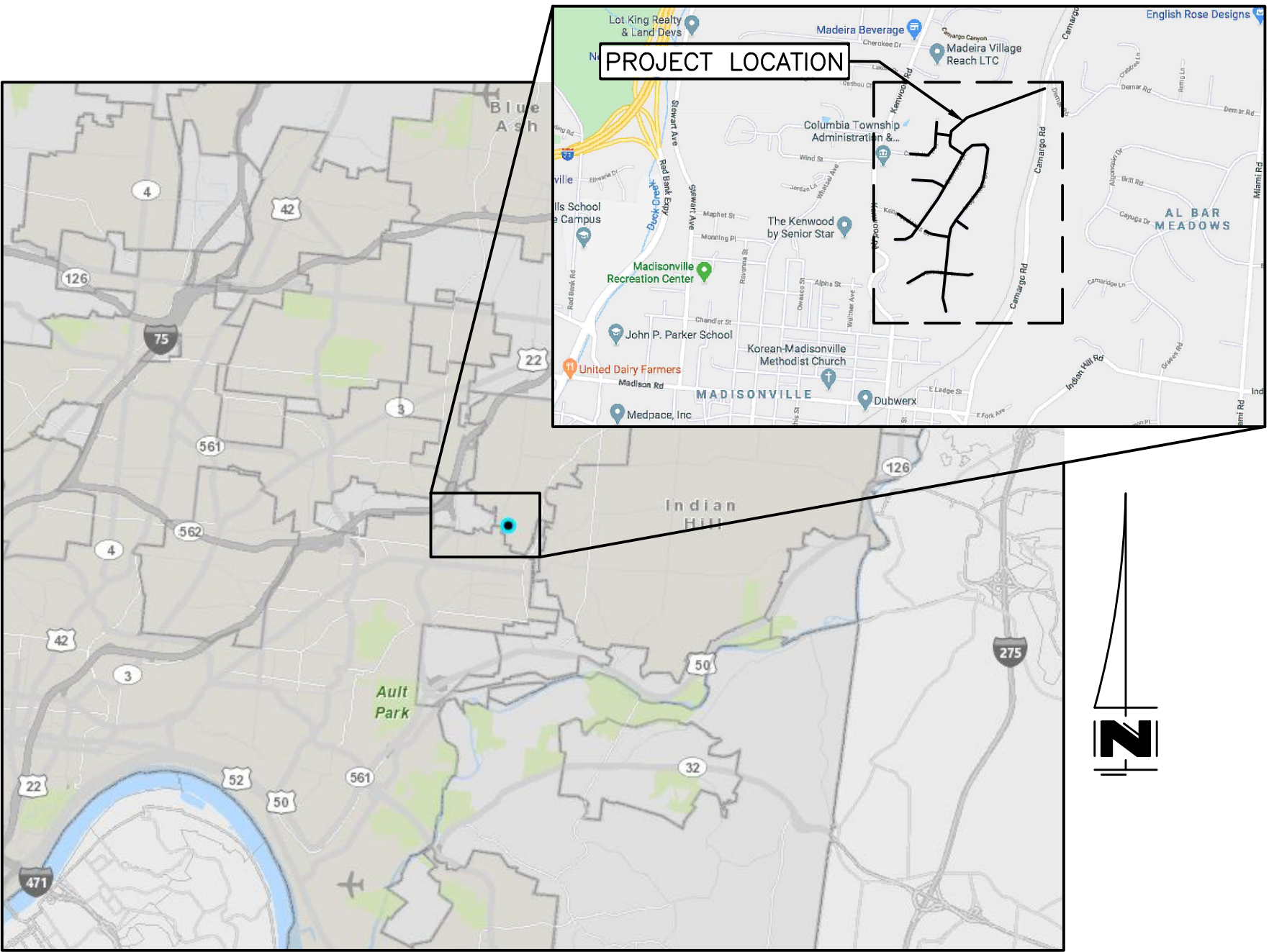
DATUM:

HORIZONTAL: NAD 83  
VERTICAL: NGVD 29

DESIGN EXCEPTION

SLOPE OF 0.40% IS EXCEPTION TO THE MSDGC STANDARD OF 0.70%  
0.40% MEETS THE MINIMUM SLOPE FOR THE 10 STATE STANDARDS.

FOR A SERVICE CONNECTION TO A LOW PRESSURE FORCE MAIN THE CONTRACTOR FOLLOW STANDARD DRAWING ACCESSION # 49069 STANDARD BUILDING CONNECTION TO A LOW PRESSURE FORCE MAIN EXCEPT THE CONTRACTOR SHALL DISREGARD THE "5'0" MAX." COVER DIMENSION.



VICINITY MAP

NO SCALE

SUBJECT TO REVISION

STANDARDS:  
(SEE MSDGC STANDARD DRAWINGS)

DESCRIPTION

|                                                           |                |
|-----------------------------------------------------------|----------------|
| STANDARD DROP MANHOLE                                     | 49003          |
| TYPICAL INVERTS                                           | 49004          |
| STANDARD CASTINGS FOR MANHOLES                            | 49005          |
| STANDARD CONCRETE COLLARS ON CONDUITS                     | 49031          |
| CONTROL DIMENSIONS FOR TYPICAL TRENCHES FOR CONDUITS      | 49032          |
| TYPICAL BUILDING SEWERS AND STACKS                        | 49033          |
| STANDARD, (TYPE "S") MANHOLE                              | 49037          |
| STANDARD CONCRETE CRADLE AND ENCASMENT                    | 49044          |
| STANDARD MANHOLE FOR SANITARY CONDUITS ON STEEP SLOPE     | 49046          |
| MODIFIED, (TYPE "S") MANHOLE                              | 49049          |
| WATERTIGHT MANHOLE                                        | 49051          |
| STANDARD PRECAST CONCRETE MANHOLE BASE                    | 49056          |
| TYPICAL INSTALLATION OF BUILDING SEWER LATERAL            | 49060          |
| LOW PRESSURE FORCE MAIN TYPICAL RECEIVING MANHOLE         | 49063          |
| STANDARD BUILDING CONNECTION TO A LOW PRESSURE FORCE MAIN | 49069          |
| STANDARD SYMBOLS                                          | 49072 TO 49076 |
| STANDARD TWO WAY CLEANOUT FOR BUILDING SEWERS             | 61979          |
| STANDARD CASTINGS OVER TWO WAY CLEANOUT                   | 61979-A        |
| 1" TO 2-1/2" LPFM TERMINAL FLUSHING CHAMBER DETAIL        | LPFM24         |
| 1" TO 2-1/2" LPFM AIR RELIEF CHAMBER                      | LPFM30         |

ACCESSION NO.

CONTENTS:

SHEET NO.

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| 1     | TITLE SHEET                  |
| 2     | SHEET INDEX                  |
| 3-31  | PLAN AND PROFILES            |
| 32-33 | PROJECT DETAILS AND CONTACTS |
| 34    | RAILROAD EASEMENT            |

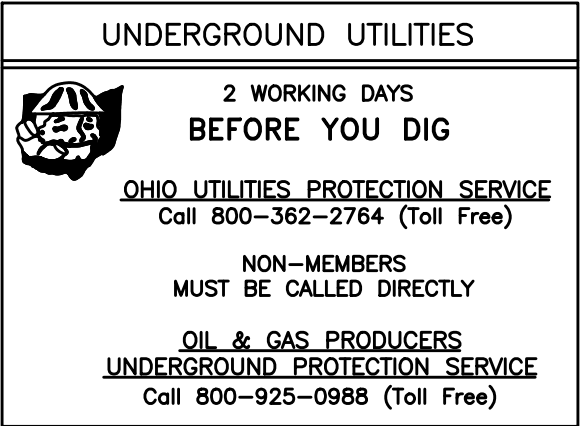
DESCRIPTION

DESIGNED BY:GEW  
DRAWN BY:GAU

ACAD DRAWING NAME:MSD-TITLE.DWG



ENGINEERS SEAL



SUBMITTED: \_\_\_\_\_  
CHIEF ENGINEER

APPROVED: \_\_\_\_\_  
DIRECTOR OF SEWERS

DATE: \_\_\_\_\_

ACC. NO. 78230

SHEET 1 OF 34

SS# 5933

| LAYOUT CONTROL COORDINATES |           |            |        |             |
|----------------------------|-----------|------------|--------|-------------|
| TRAVERSE PT                | NORTHING  | EASTING    | ELEV   | DESCRIPTION |
| PT 1                       | 432134.15 | 1433863.13 | 858.29 | IPIN T1     |
| PT 3                       | 432041.82 | 1434660.49 | 837.37 | IPIN T3     |
| PT 5                       | 432628.96 | 1434704.26 | 845.82 | MAG T5      |
| PT 7                       | 431139.50 | 1434050.14 | 855.99 | IPIN T7     |
| PT 8                       | 430910.60 | 1434402.87 | 868.53 | IPIN T8     |
| PT 9                       | 430752.89 | 1434618.35 | 863.44 | MAG T9      |
| PT 10                      | 430735.97 | 1434846.55 | 866.93 | MAG T10     |
| PT 11                      | 431006.67 | 1434986.83 | 876.79 | MAG T11     |
| PT 12                      | 431397.90 | 1435319.81 | 878.02 | MAG T12     |
| PT 13                      | 431859.78 | 1435492.04 | 868.11 | MAG T13     |
| PT 14                      | 432174.34 | 1435422.32 | 862.16 | MAG T14     |
| PT 15                      | 432075.55 | 1435154.08 | 845.28 | MAG T15     |
| PT 19                      | 430154.77 | 1434820.62 | 875.86 | MAG T19     |
| PT 51                      | 432918.17 | 1436389.02 | 663.67 | IPIN T51    |
| PT 52                      | 433348.03 | 1436490.56 | 675.51 | IPIN T52    |

CONTRACT  
DRAWING

PRINTS NOT BEARING THIS STAMP WERE  
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FOR CONTRACT PURPOSES.

| RECEIVING MANHOLES |           |            |
|--------------------|-----------|------------|
| MANHOLE ID.        | NORTHING  | EASTING    |
| MH #23             | 430165.70 | 1434794.48 |
| MH #35             | 431506.74 | 1434812.25 |
| MH #37             | 430897.10 | 1434376.14 |
| MH #50             | 432693.03 | 1435462.43 |

RECEIVING MANHOLE PER STANDARD DETAIL 49063

| TERMINAL FLUSHING MANHOLES |           |            |
|----------------------------|-----------|------------|
| MANHOLE ID.                | NORTHING  | EASTING    |
| MH #25                     | 429540.65 | 1434797.08 |
| MH #40                     | 431624.59 | 1434284.45 |
| MH #44                     | 430761.00 | 1434608.44 |
| MH #47                     | 429995.71 | 1434189.59 |

| TERMINAL AIR RELEASE VALVE<br>AND FLUSHING MANHOLES |           |            |
|-----------------------------------------------------|-----------|------------|
| MANHOLE ID.                                         | NORTHING  | EASTING    |
| MH #42                                              | 431180.71 | 1433838.73 |

SEE SHEET 33 FOR TERMINAL AIR RELEASE VALVE  
AND FLUSHING MANHOLE DETAIL.

NOTE:

ALL MANHOLES DENOTED AS "RECEIVING"  
SHALL BE CONSTRUCTED OF POLYMER  
CONCRETE (POLYCRETE, OR EQUAL) OR  
RECEIVE A CURED-IN-PLACE LINING.

| MANHOLES    |           |            |
|-------------|-----------|------------|
| MANHOLE ID. | NORTHING  | EASTING    |
| MH #1       | 433035.08 | 1436372.22 |
| MH #2       | 432987.60 | 1436244.99 |
| MH #3       | 432834.04 | 1435836.75 |
| MH #4       | 432594.39 | 1435200.61 |
| MH #5       | 432378.65 | 1434933.82 |
| MH #6       | 432310.92 | 1434925.46 |
| MH #7       | 432204.60 | 1434912.33 |
| MH #8       | 432146.96 | 1434937.44 |
| MH #9       | 432021.50 | 1435123.60 |
| MH #10      | 432119.77 | 1435209.24 |
| MH #11      | 432163.03 | 1435303.88 |
| MH #12      | 432165.75 | 1435434.46 |
| MH #13      | 432132.94 | 1435490.47 |
| MH #14      | 432081.95 | 1435514.87 |
| MH #15      | 431862.34 | 1435480.62 |
| MH #16      | 431615.14 | 1435441.78 |
| MH #17      | 431523.74 | 1435403.15 |
| MH #18      | 431270.33 | 1435204.09 |
| MH #19      | 430988.65 | 1434980.05 |
| MH #20      | 430881.32 | 1434906.43 |
| MH #21      | 430717.78 | 1434870.25 |
| MH #22      | 430410.90 | 1434826.40 |
| MH #24      | 429821.14 | 1434749.62 |
| MH #26      | 432335.52 | 1434699.24 |
| MH #27      | 432606.68 | 1434728.35 |
| MH #28      | 432148.85 | 1434979.20 |
| MH #29      | 432047.70 | 1434625.05 |
| MH #30      | 432014.43 | 1434511.64 |
| MH #31      | 432051.18 | 1434214.87 |
| MH #32      | 432084.70 | 1433944.17 |
| MH #33      | 431855.70 | 1435022.60 |
| MH #36      | 431224.82 | 1434605.89 |
| MH #38      | 430750.97 | 1434272.70 |
| MH #39      | 430696.14 | 1434163.75 |
| MH #41      | 431073.45 | 1434128.59 |
| MH #43      | 430848.50 | 1435156.75 |
| MH #45      | 430183.43 | 1434658.93 |
| MH #46      | 430191.02 | 1434562.46 |
| MH #48      | 430124.09 | 1435113.41 |
| MH #49      | 430146.53 | 1435246.75 |
| MH #51      | 432681.04 | 1435533.31 |

\* MH 34 NOT USED

| REVISIONS |       |              |  |
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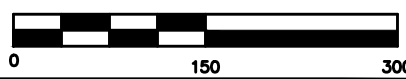
THE METROPOLITAN SEWER DISTRICT  
OF GREATER CINCINNATI  
HAMILTON COUNTY, OHIO



PROPOSED PROJECT NO. 10370025

FROM THE INT. OF KENWOOD HILLS DR. AND KENWOOD HILLS TO THE CABANA CLUB DR. FROM  
THE CUL-DE-SAC OF MAPLE RIDGE DR AND VISTA RIDGE DR TO THE CABANA CLUB DR ALONG  
COACHLITE

SCALE: HORIZ. 1"=150'



SHEET INDEX

SHEET INDEX

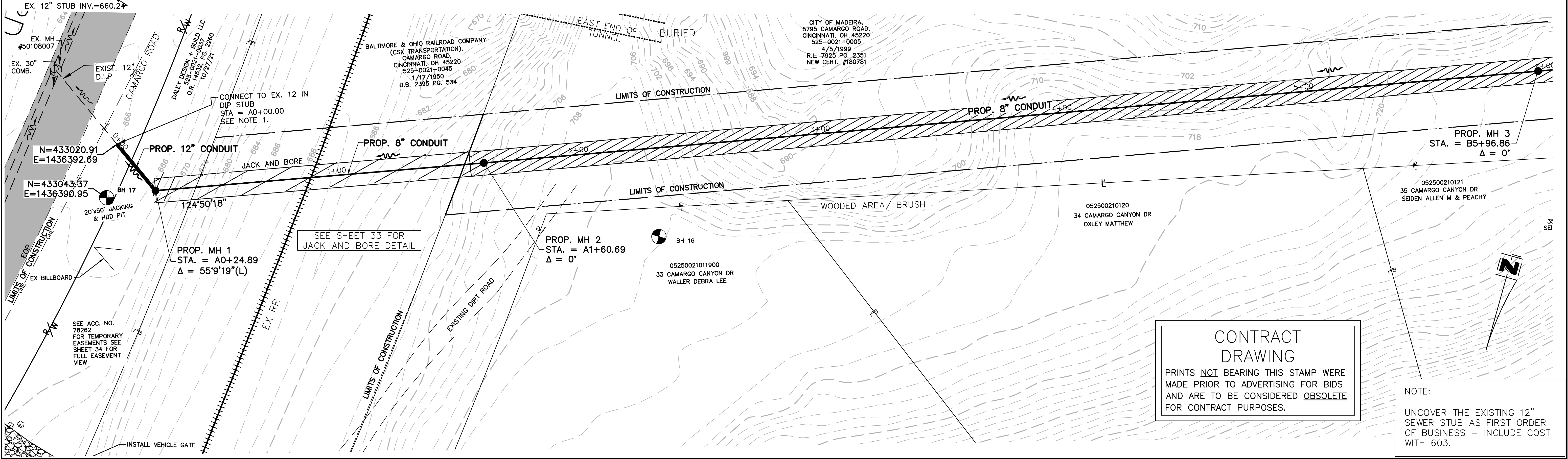
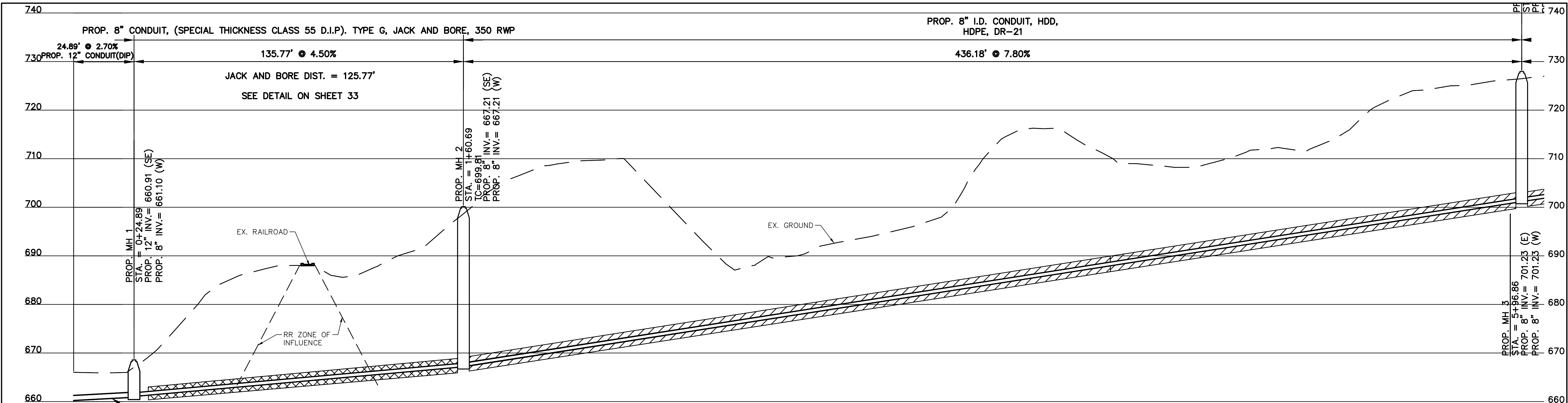
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SHEET 2 OF 34

SS# 5933

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DATE: Mar 19, 2025 - 12:18 PM  
PLOTTER: AR100

ACAD DRAWING NAME: KENWOOD HILLS BASEMAP.DWG



CONTRACT  
DRAWING

PRINTS NOT BEARING THIS STAMP WERE  
MADE PRIOR TO ADVERTISING FOR BIDS  
AND ARE TO BE CONSIDERED OBSELETE  
FOR CONTRACT PURPOSES.

NOTE:  
UNCOVER THE EXISTING 12"  
SEWER STUB AS FIRST ORDER  
OF BUSINESS - INCLUDE COST  
WITH 603.

| REVISIONS |       |              |  |
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THE METROPOLITAN SEWER DISTRICT  
OF GREATER CINCINNATI  
HAMILTON COUNTY, OHIO



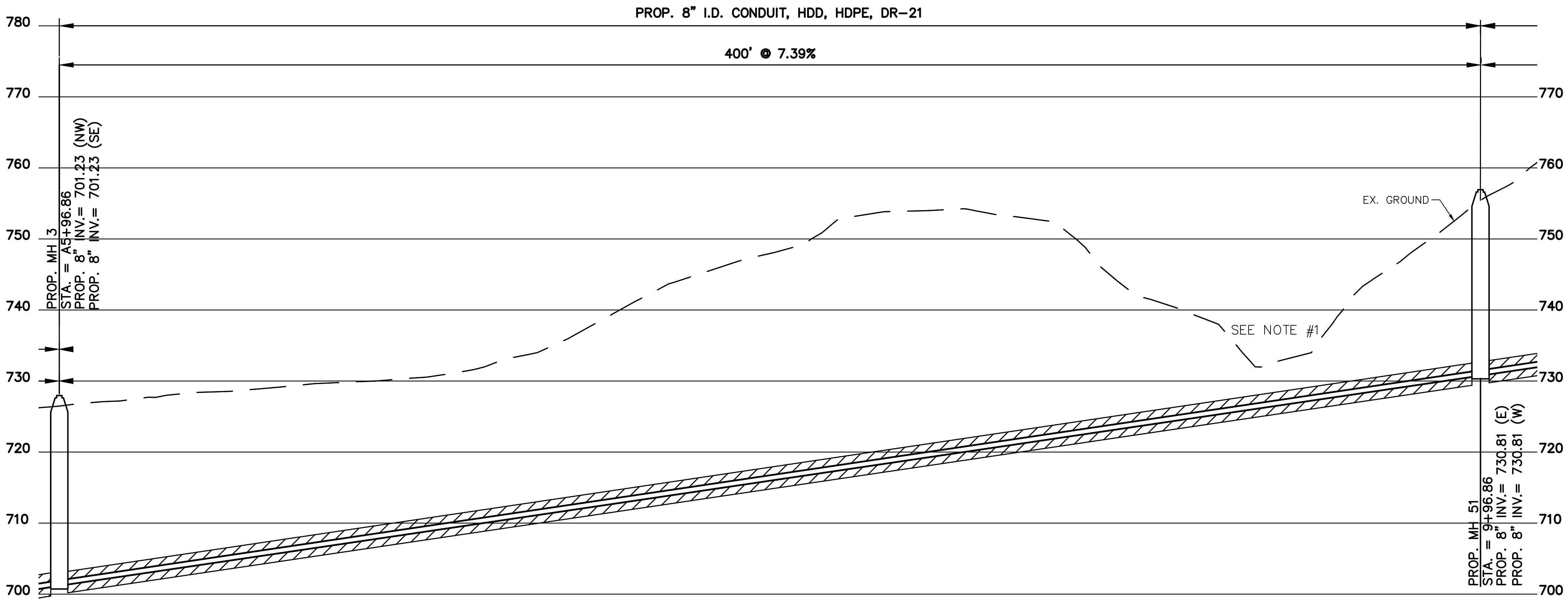
PROPOSED PROJECT NO. 10370025

FROM THE INT. OF KENWOOD HILLS DR. AND KENWOOD HILLS TO THE CABANA CLUB DR. FROM  
THE CUL-DE-SAC OF MAPLE RIDGE DR AND VISTA RIDGE DR TO THE CABANA CLUB DR ALONG  
COACHLITE

SCALE: HORIZ. 1"=20'  
VERT. 1"=10'

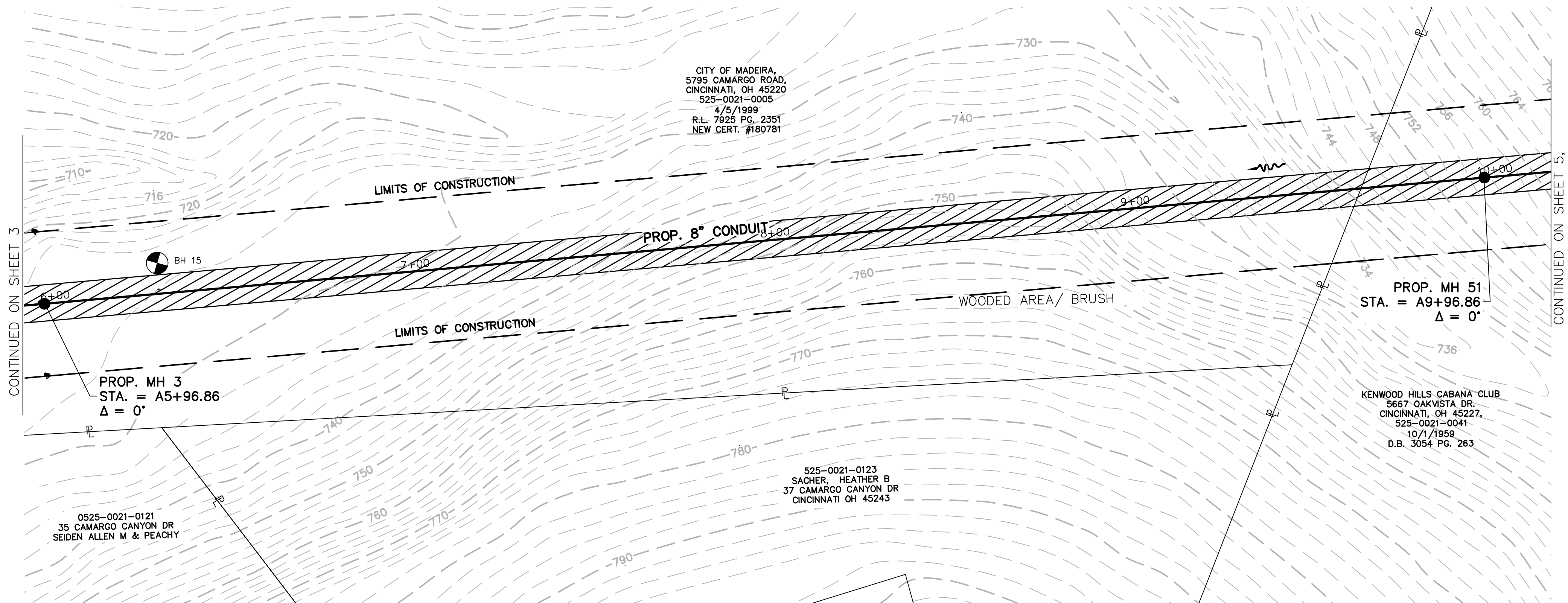
MH 1 TO MH 3

PLAN AND PROFILE



CONTRACT  
DRAWING

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- NOTES
1. DIRECTIONAL DRILLING  
RISK OF FRAC-OUT IN  
THIS AREA. CONTRACTOR  
TO PROVIDE  
MITIGATION/MONITORING  
PLAN BEFORE DRILLING IS  
STARTED



| DESIGNED BY: GEW | REVISIONS |       |  | DESCRIPTION: |
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| DRAWN BY: GAU    |           |       |  |              |
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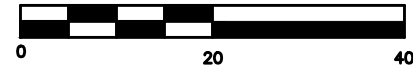
THE METROPOLITAN SEWER DISTRICT  
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HAMILTON COUNTY, OHIO



PROPOSED PROJECT NO. 10370025

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COACHLITE

SCALE: HORIZ. 1"=20'  
VERT. 1"=10'



MH 3 TO MH 51

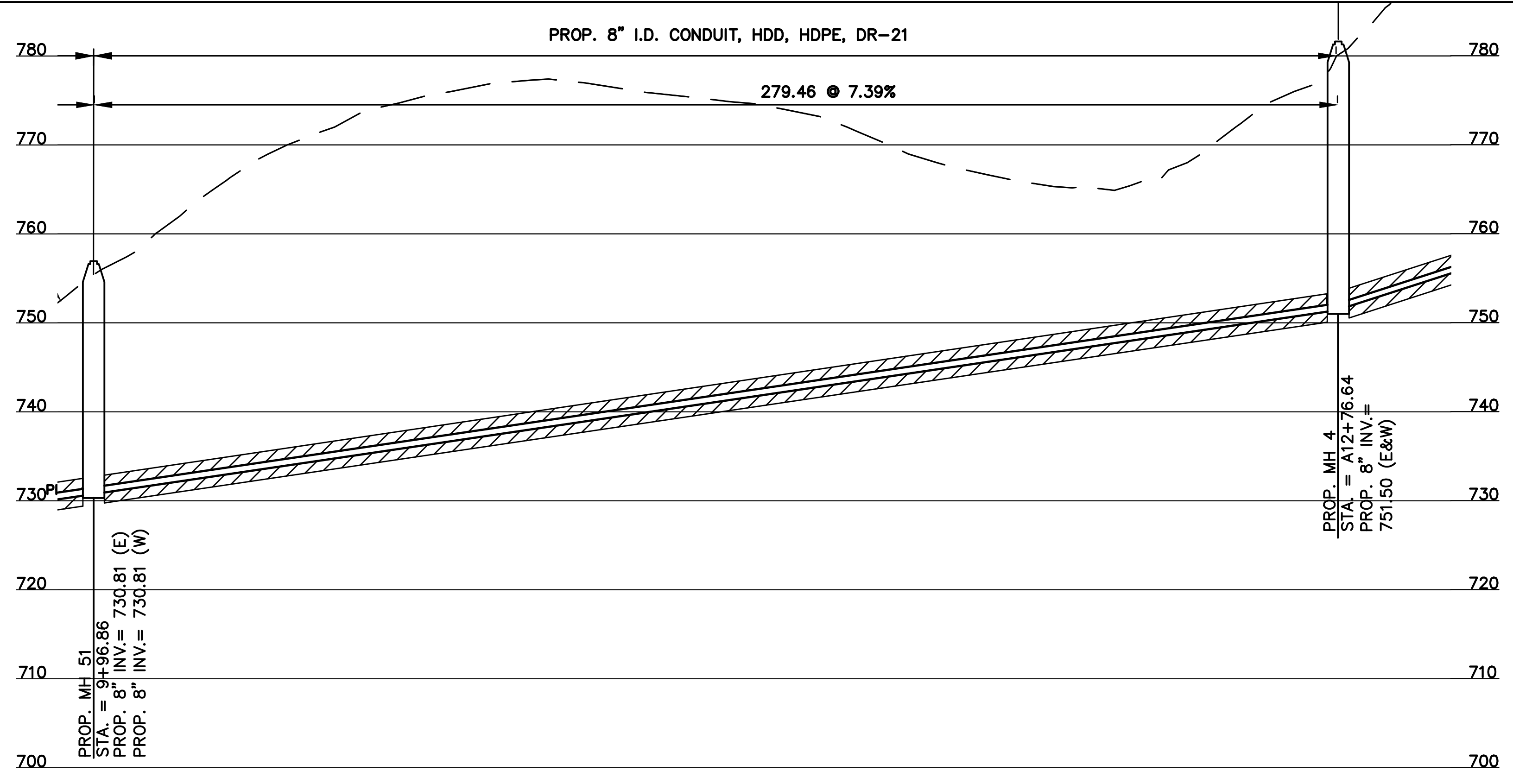
PLAN AND PROFILE

ACC. NO. 78233

SHEET 4 OF 34

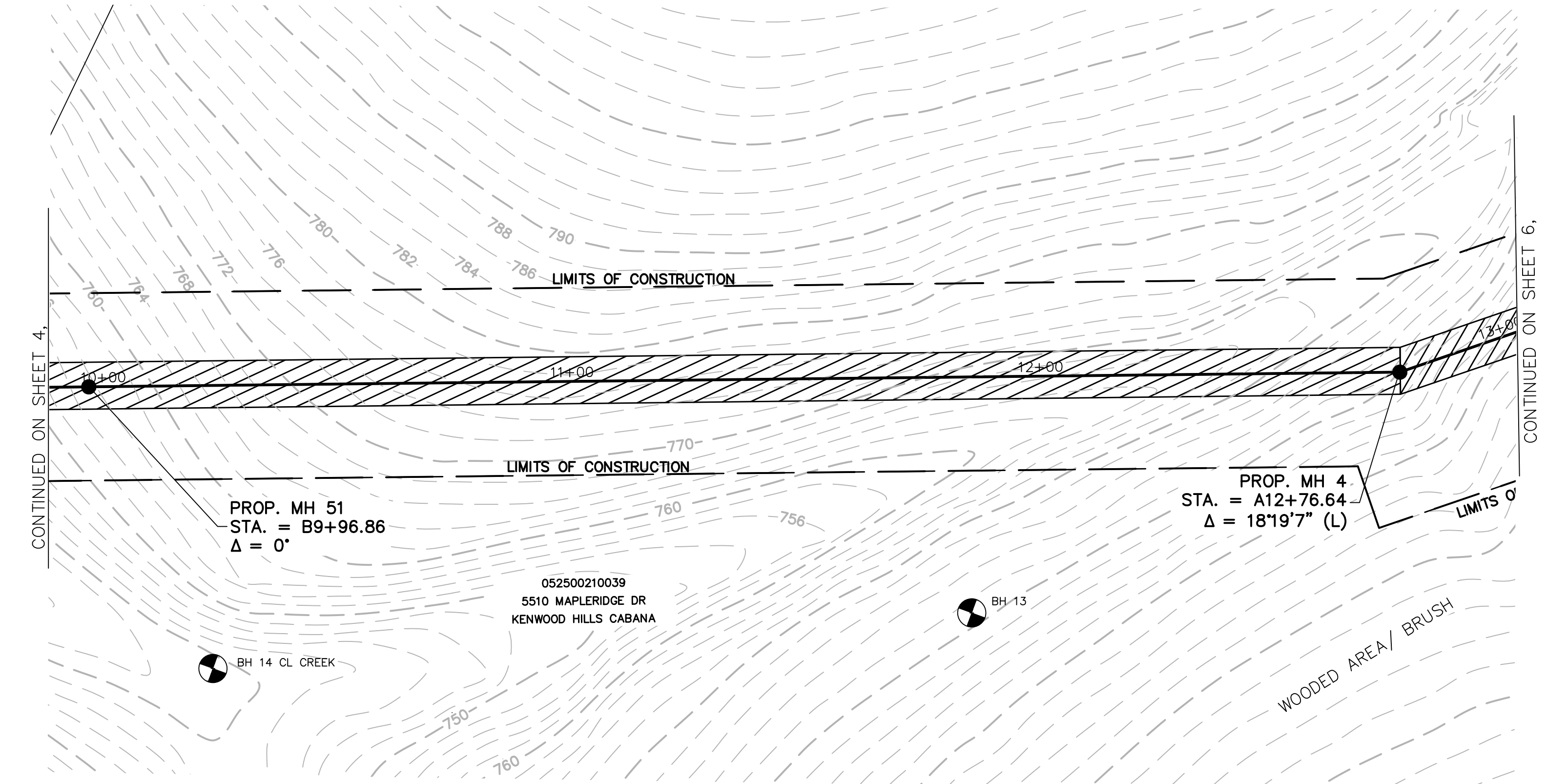
SS# 5933

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DATE: Mar 19, 2025 - 12:15 PM  
PLOTTED BY: AREND



CONTRACT  
DRAWING

PRINTS NOT BEARING THIS STAMP WERE  
MADE PRIOR TO ADVERTISING FOR BIDS  
AND ARE TO BE CONSIDERED OBSOLETE  
FOR CONTRACT PURPOSES.



| DESIGNED BY: GEW |       | REVISIONS    |  |  |
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THE METROPOLITAN SEWER DISTRICT  
OF GREATER CINCINNATI  
HAMILTON COUNTY, OHIO



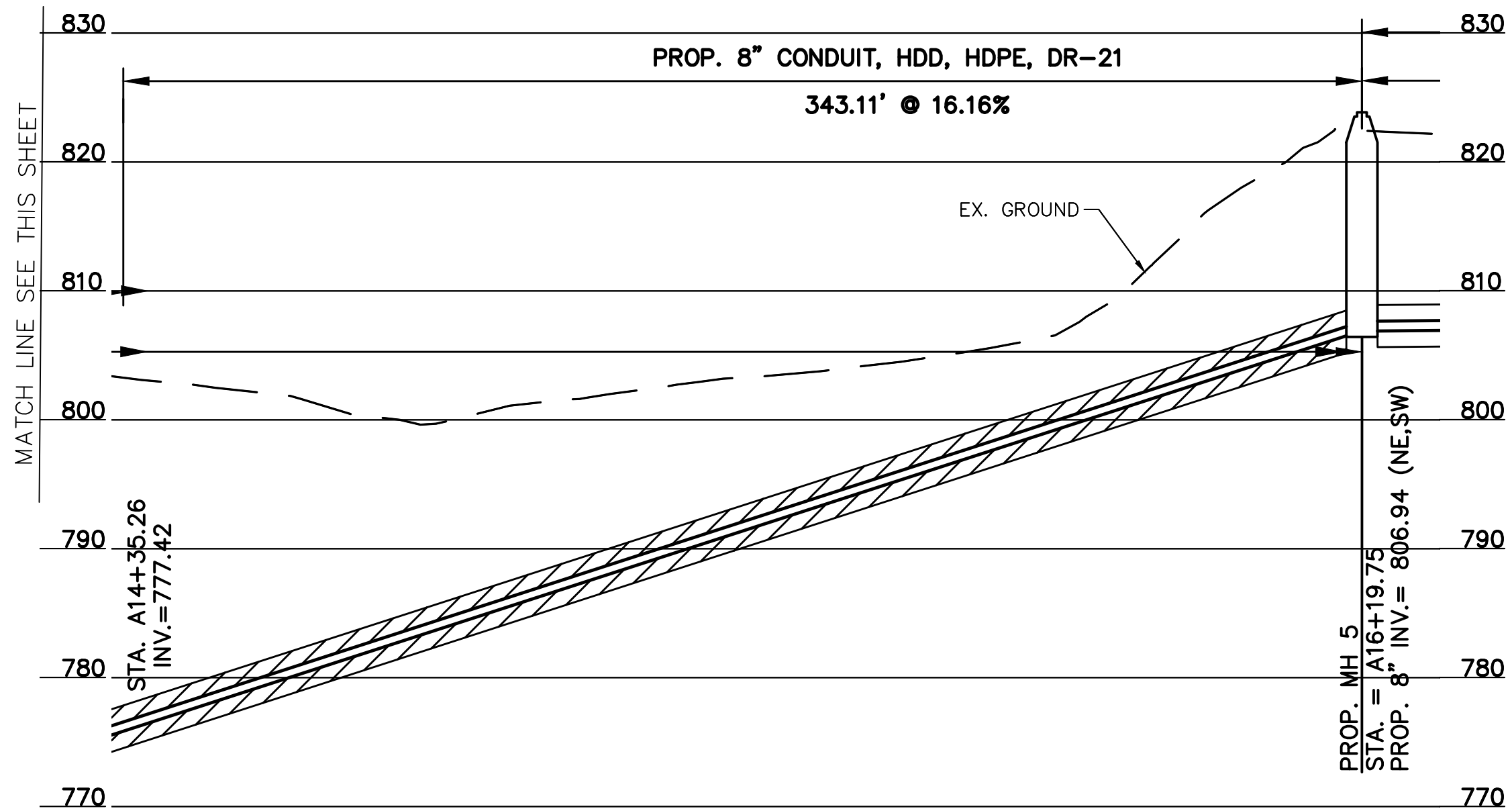
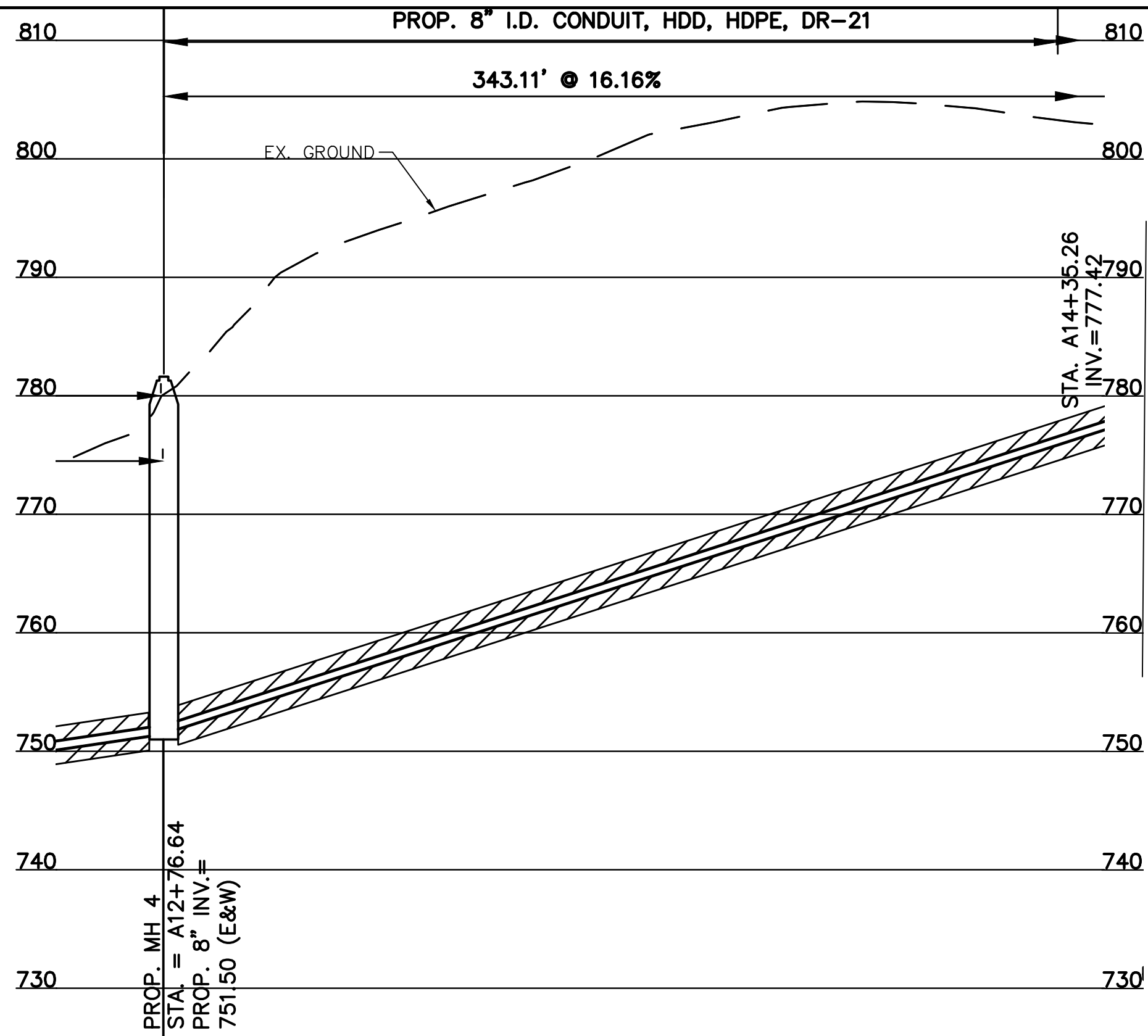
PROPOSED PROJECT NO. 10370025

FROM THE INT. OF KENWOOD HILLS DR. AND KENWOOD HILLS TO THE CABANA CLUB DR. FROM  
THE CUL-DE-SAC OF MAPLE RIDGE DR AND VISTA RIDGE DR TO THE CABANA CLUB DR ALONG  
COACHLITE

SCALE: HORIZ. 1"=20'  
VERT. 1"=10'

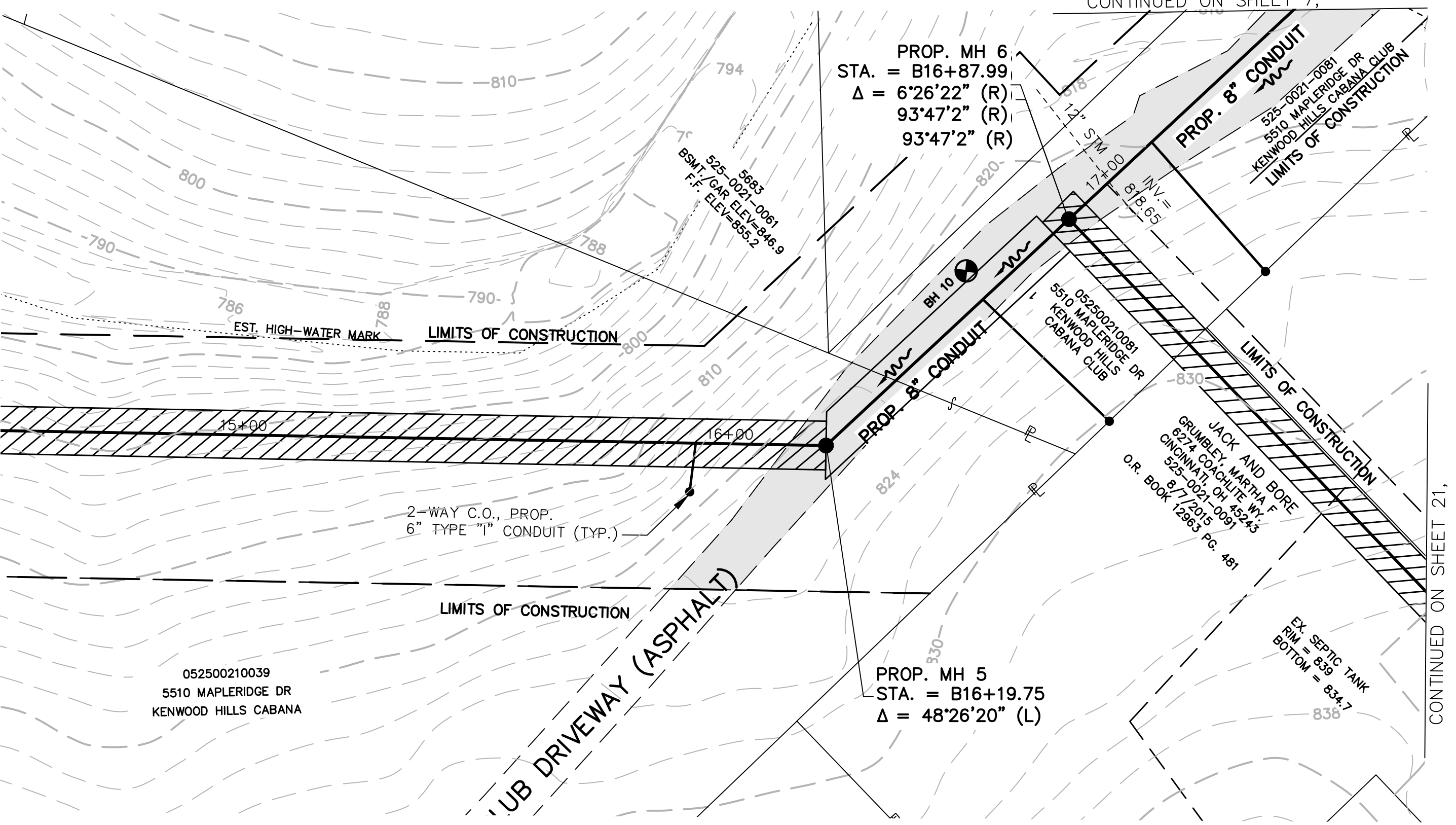
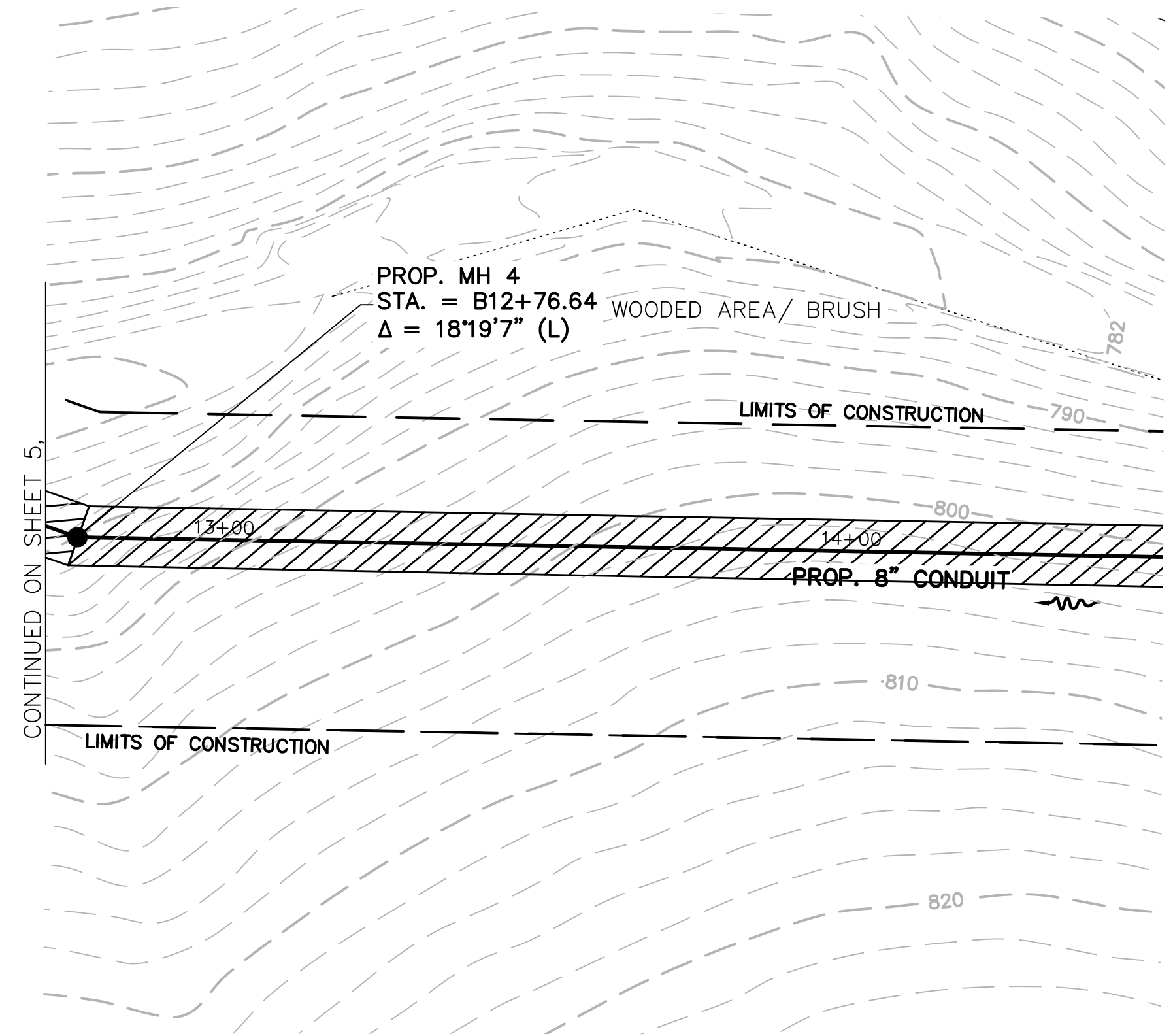
MH 51 TO MH 4

PLAN AND PROFILE



CONTRACT  
DRAWING

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| REVISIONS |       |              |  |
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THE METROPOLITAN SEWER DISTRICT  
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HAMILTON COUNTY, OHIO



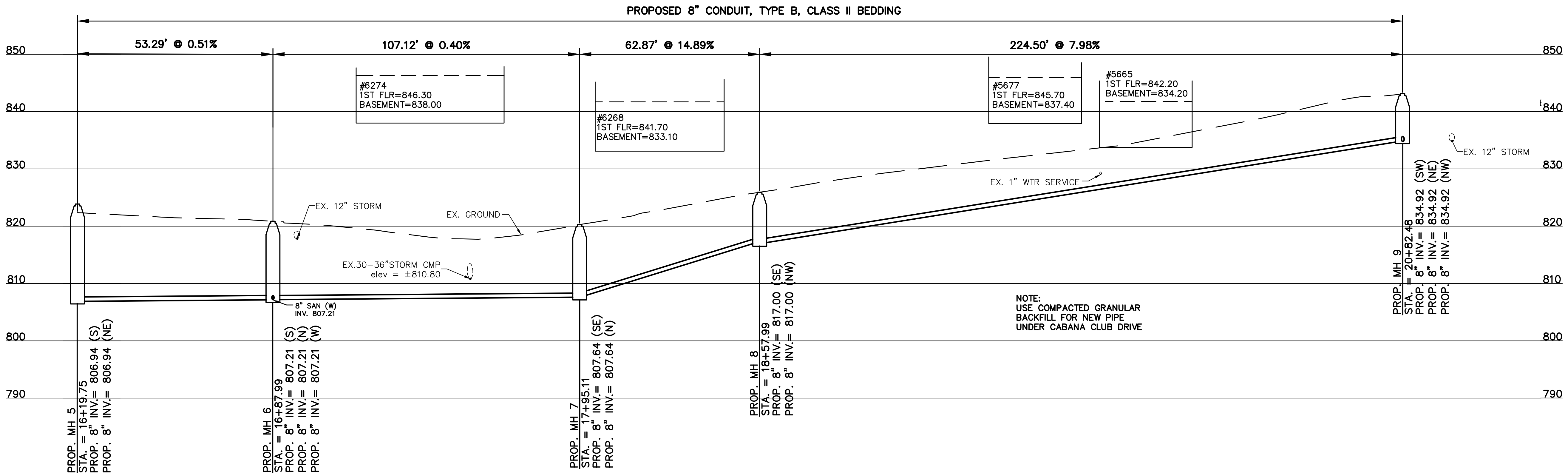
PROPOSED PROJECT NO. 10370025

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SCALE: HORIZ. 1"=20'  
VERT. 1"=10'

CABANA CLUB DRIVE

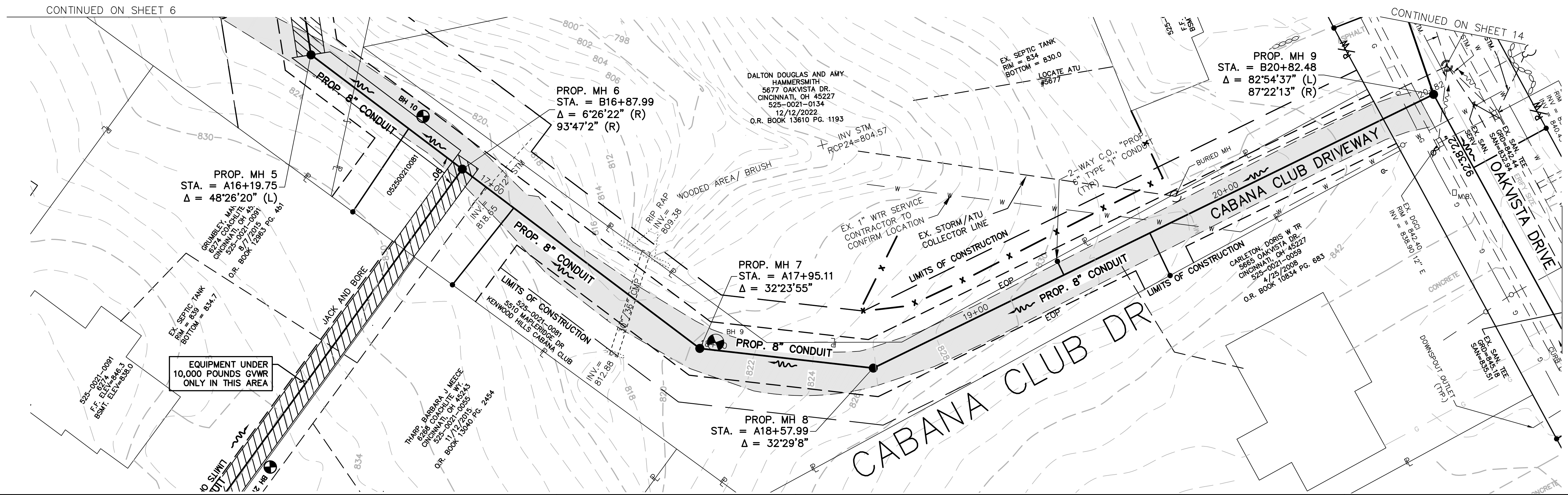
PLAN AND PROFILE



CONTRACT  
DRAWING

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NOTE:  
FULL DEPTH PAVEMENT REPAIR ON  
CABANA DRIVE.



SEE ACC. NO. 78263  
FOR EASEMENTS

| DESIGNED BY: GEW | REVISIONS |       |              |  |
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THE METROPOLITAN SEWER DISTRICT  
OF GREATER CINCINNATI  
HAMILTON COUNTY, OHIO

WASTEWATER  
ENGINEERING

PROPOSED PROJECT NO. 10370025

FROM THE INT. OF KENWOOD HILLS DR. AND KENWOOD HILLS TO THE CABANA CLUB DR. FROM  
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COACHLITE

SCALE: HORIZ. 1"=20'  
VERT. 1"=10'

CABANA CLUB DRIVE

PLAN AND PROFILE

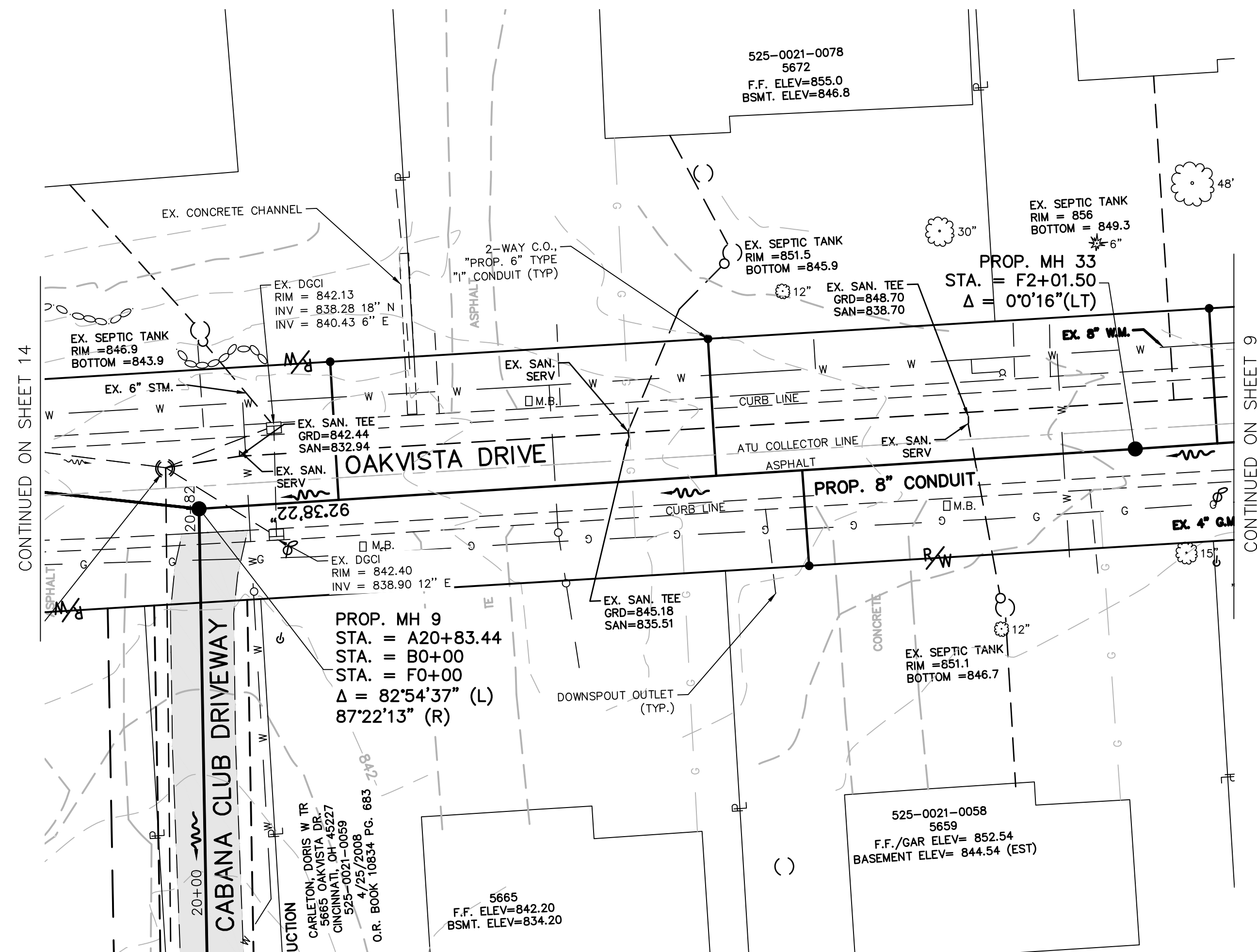
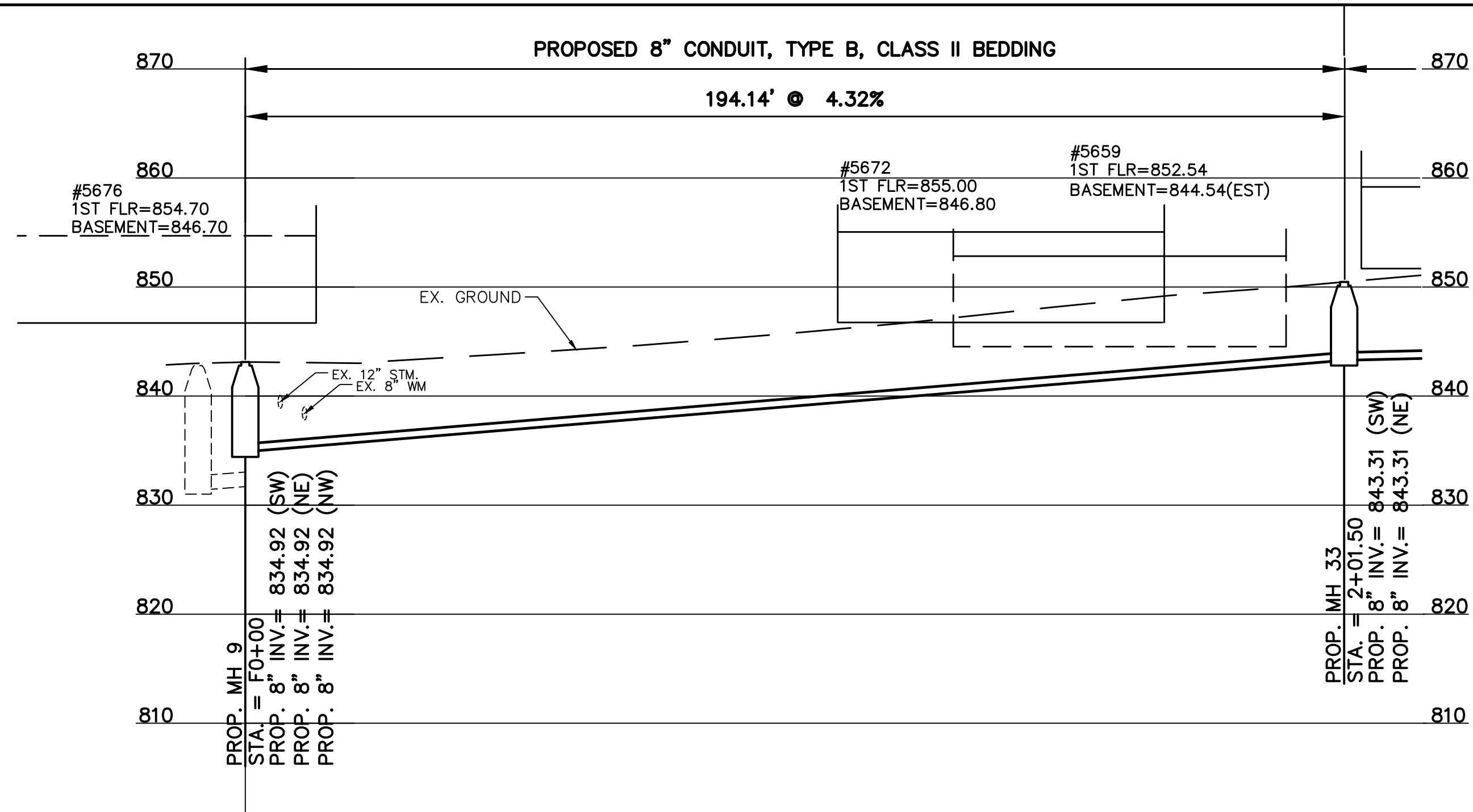
ACC. NO. 78235

SHEET 7 OF 34

SS# 5933

CONTRACT  
DRAWING

PRINTS NOT BEARING THIS STAMP WERE  
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FOR CONTRACT PURPOSES.



NOTE:  
OAKVISTA DRIVE REQUIRES  
FULL WIDTH MILL AND PAVE.

| REVISIONS        |       |              |  |
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| DESIGNED BY: GEW |       |              |  |
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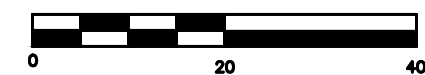
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SCALE: HORIZ. 1"=20'  
VERT. 1"=10'



OAKVISTA DRIVE

PLAN AND PROFILE



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FOR CONTRACT PURPOSES.



**DYNOTEC**

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|                           |
|---------------------------|
| OAKVISTA DR AT MARGO LANE |
| PLAN AND PROFILE          |

PATH: N:\005\2018\18926 - KENWOOD HILLS LOCAL SEWER WATER\600 CAD\SSA\BASE\KENWOOD HILLS BASEMAP.DWG  
DATE: Mar 19, 2025 - 12:17 PM  
PLOTTED BY: AREND

| REVISIONS    |     |       |              |
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| GEW          |     |       |              |
| DRAWN BY:    | GAU |       |              |
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THE METROPOLITAN SEWER DISTRICT  
OF GREATER CINCINNATI  
HAMILTON COUNTY, OHIO

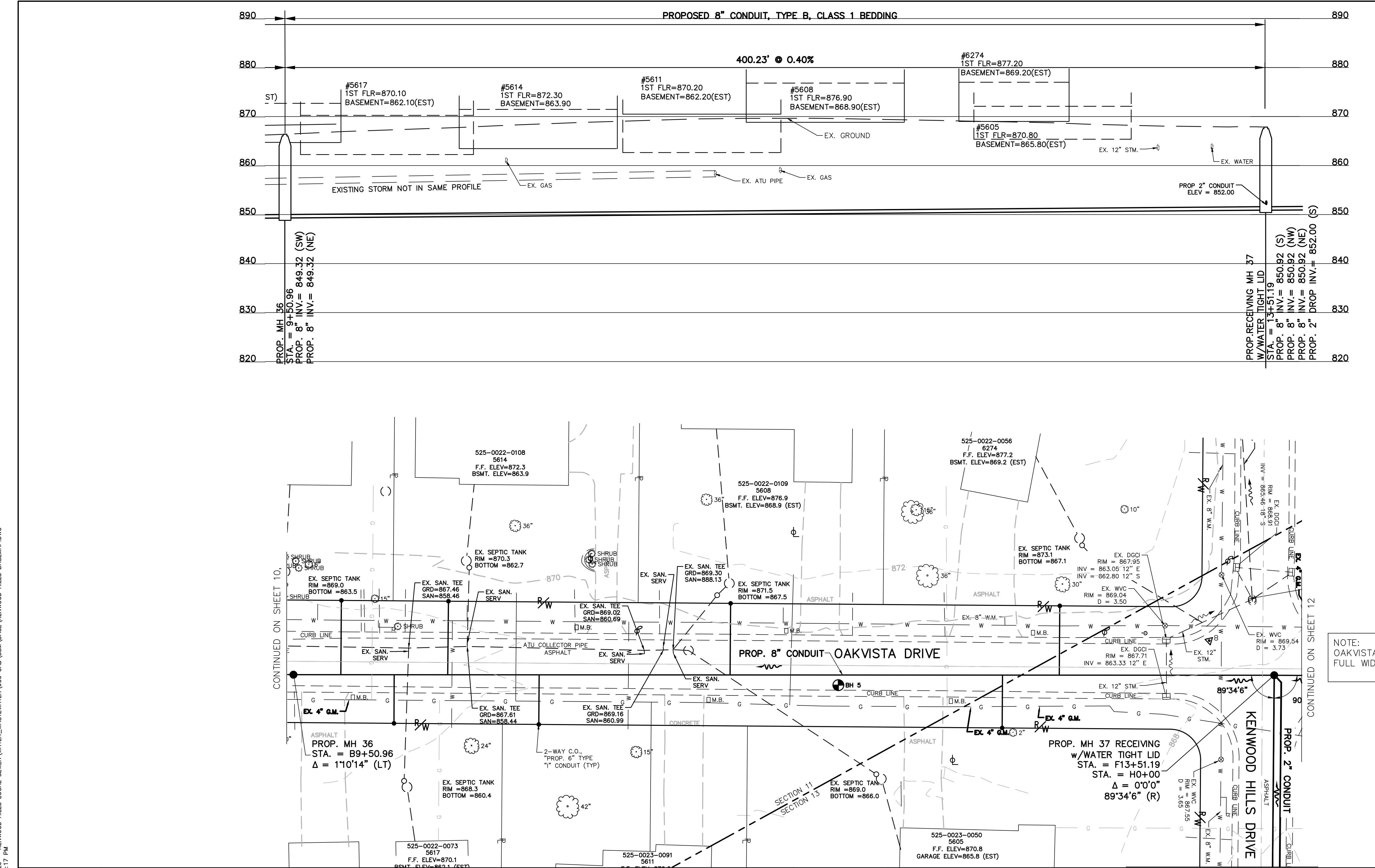


**PROPOSED PROJECT NO. 10370025**  
FROM THE INT. OF KENWOOD HILLS DR. AND KENWOOD HILLS TO THE CABANA CLUB DR. FROM  
THE CUL-DE-SAC OF MAPLE RIDGE DR AND VISTA RIDGE DR TO THE CABANA CLUB DR ALONG  
COACHLITE

SCALE: HORIZ. 1"=20'  
VERT. 1"=10'

**OAKVISTA DR AT MARGO LANE**

**PLAN AND PROFILE**



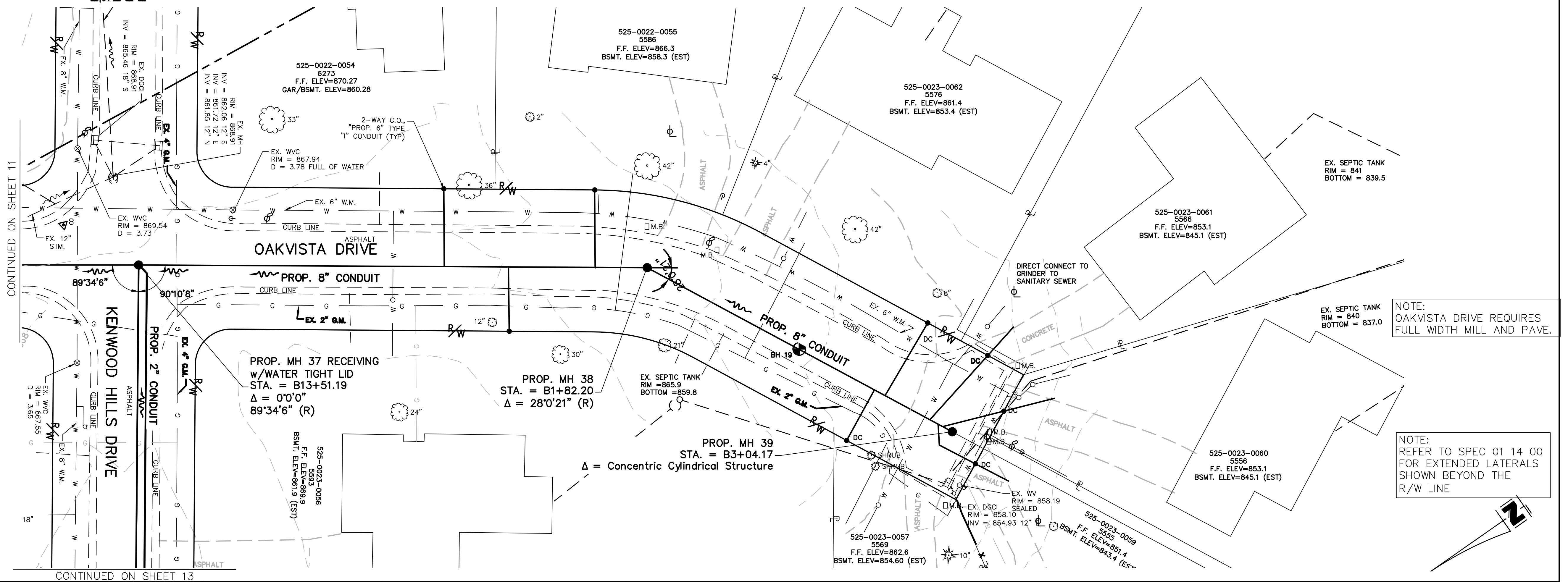
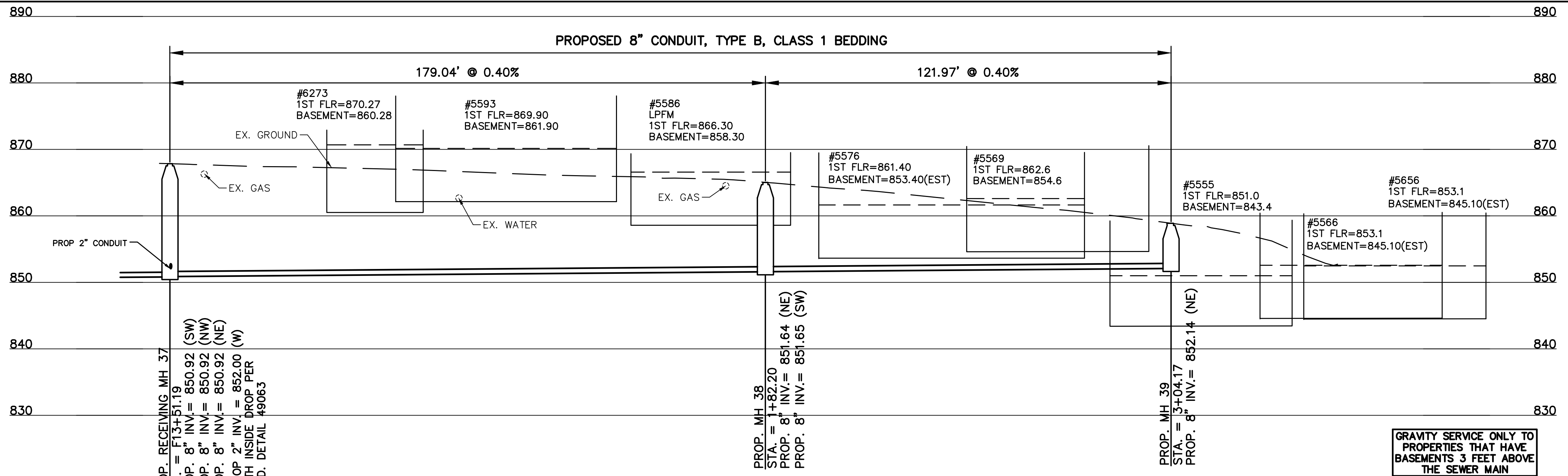
**CONTRACT  
DRAWING**

PRINTS NOT BEARING THIS STAMP WERE  
MADE PRIOR TO ADVERTISING FOR BIDS  
AND ARE TO BE CONSIDERED OBSOLETE  
FOR CONTRACT PURPOSES.

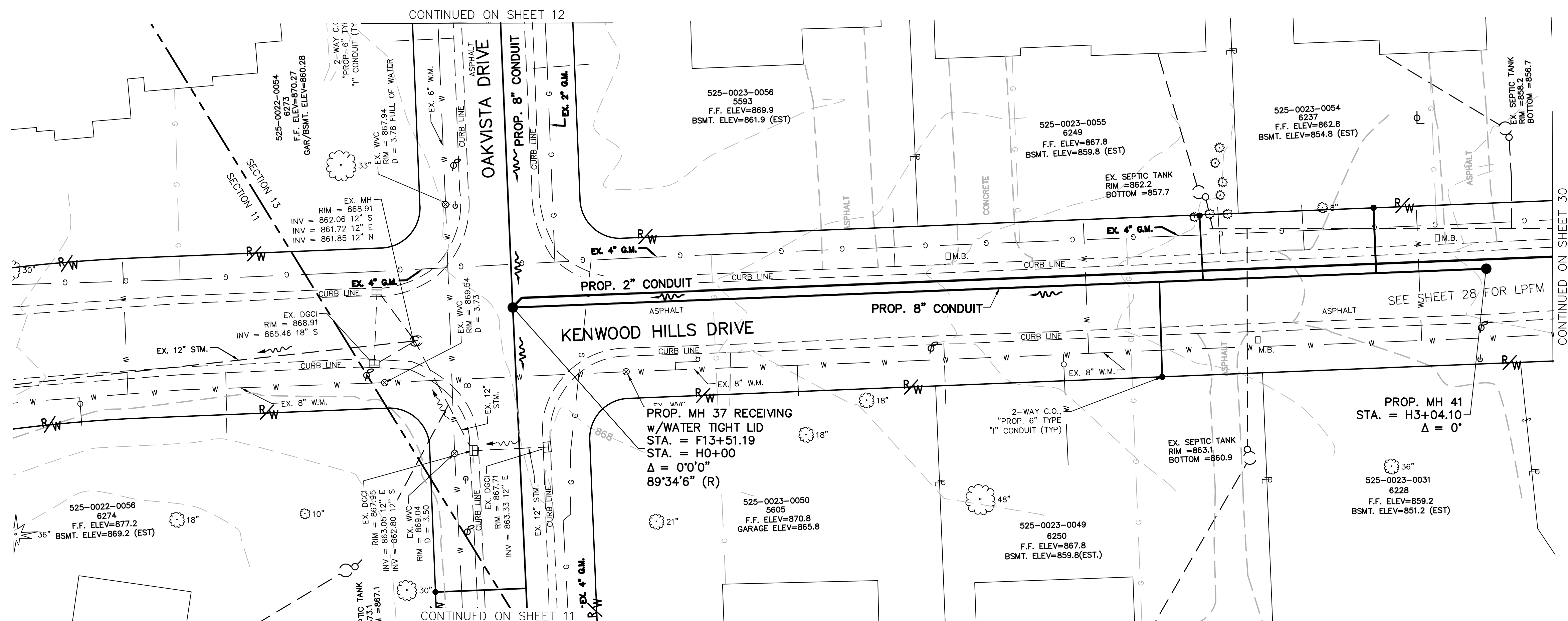
NOTE:  
OAKVISTA DRIVE REQUIRES  
FULL WIDTH MILL AND PAVE.

CONTRACT  
DRAWING

PRINTS NOT BEARING THIS STAMP WERE  
MADE PRIOR TO ADVERTISING FOR BIDS  
AND ARE TO BE CONSIDERED OBSOLETE  
FOR CONTRACT PURPOSES.



PRINTS NOT BEARING THIS STAMP WERE  
MADE PRIOR TO ADVERTISING FOR BIDS  
AND ARE TO BE CONSIDERED OBSOLETE  
FOR CONTRACT PURPOSES.

[illegible]

MSD  
WASTEWATER  
ENGINEERING

FROM THE INT. OF KENWOOD HILLS DR. AND KENWOOD HILLS TO THE CABANA CLUB DR. FROM  
THE CUL-DE-SAC OF MAPLE RIDGE DR AND VISTA RIDGE DR TO THE CABANA CLUB DR ALONG  
COACHLITE

SCALE: HORIZ. 1"=20'  
VERT. 1"=10'



## PLAN AND PROFILE

SHEET 13 OF 34

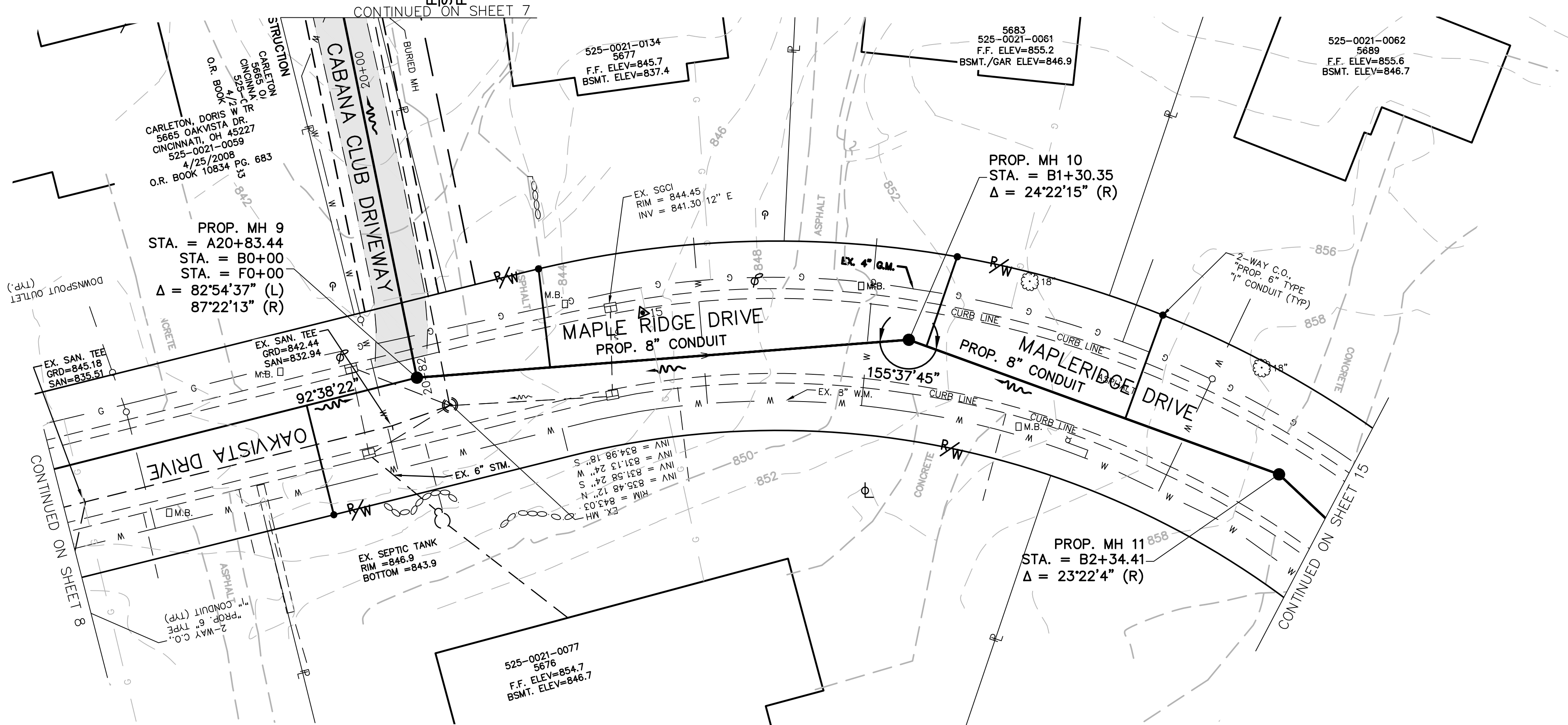
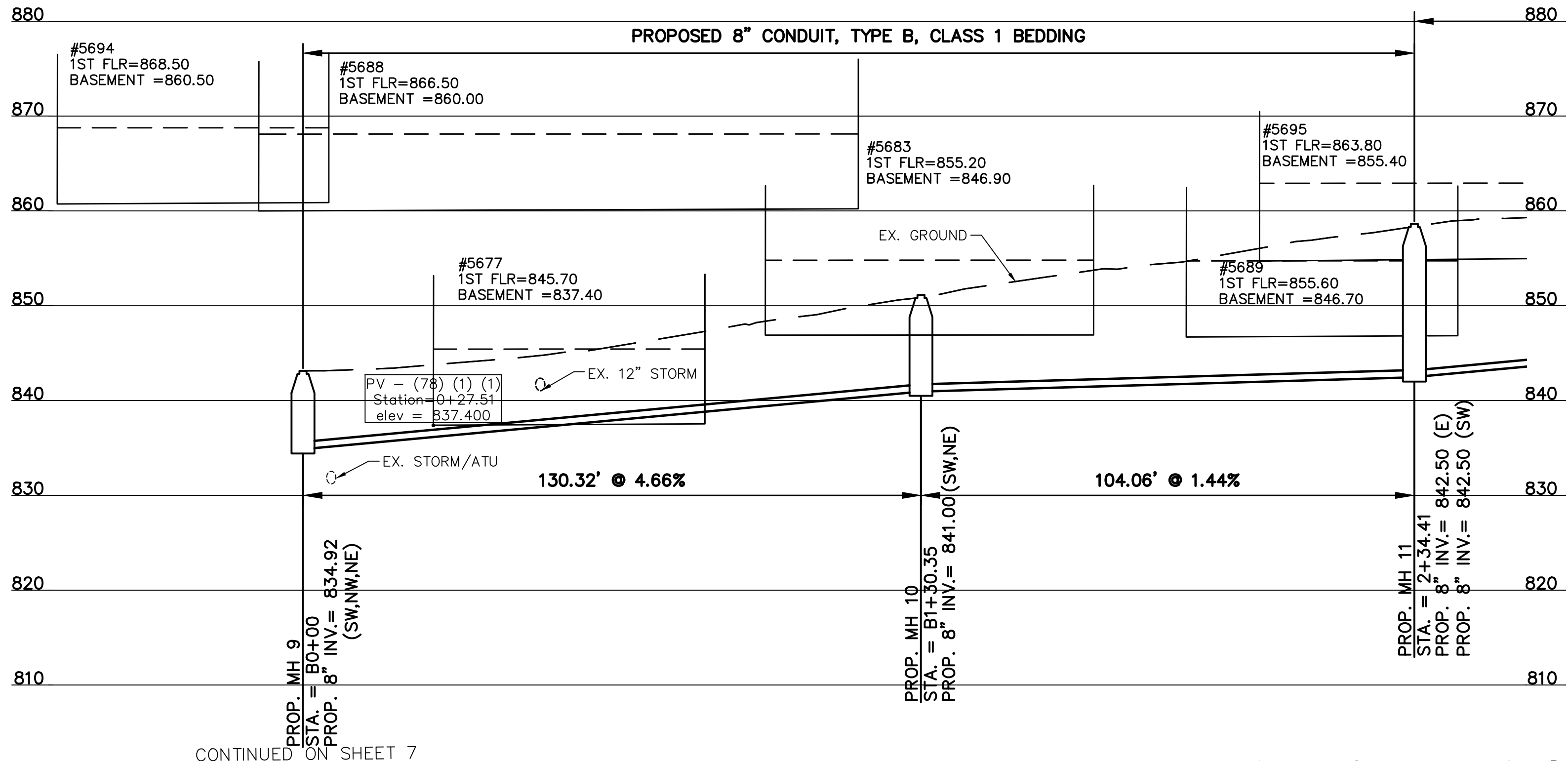
SS# 5933

ACAD DRAWING NAME: KENWOOD HILLS BASEMAP.DWG

PATH: N:\JOBS\2018\18976 - KENWOOD HILLS LOCAL SEWER WASTE\WATER\600 CAD\SSM\BASE\KENWOOD HILLS BASE\MXP\JWING

CONTRACT  
DRAWING

PRINTS NOT BEARING THIS STAMP WERE  
MADE PRIOR TO ADVERTISING FOR BIDS  
AND ARE TO BE CONSIDERED OBSOLETE  
FOR CONTRACT PURPOSES.



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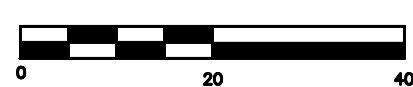
THE METROPOLITAN SEWER DISTRICT  
OF GREATER CINCINNATI  
HAMILTON COUNTY, OHIO

M S D  
WASTEWATER  
ENGINEERING

PROPOSED PROJECT NO. 10370025

FROM THE INT. OF KENWOOD HILLS DR. AND KENWOOD HILLS TO THE CABANA CLUB DR. FROM  
THE CUL-DE-SAC OF MAPLE RIDGE DR AND VISTA RIDGE DR TO THE CABANA CLUB DR ALONG  
COACHLITE

SCALE: HORIZ. 1"=20'  
VERT. 1"=10'



MAPLERIDGE DRIVE AT NORTH END

PLAN AND PROFILE

ACC. NO. 78241

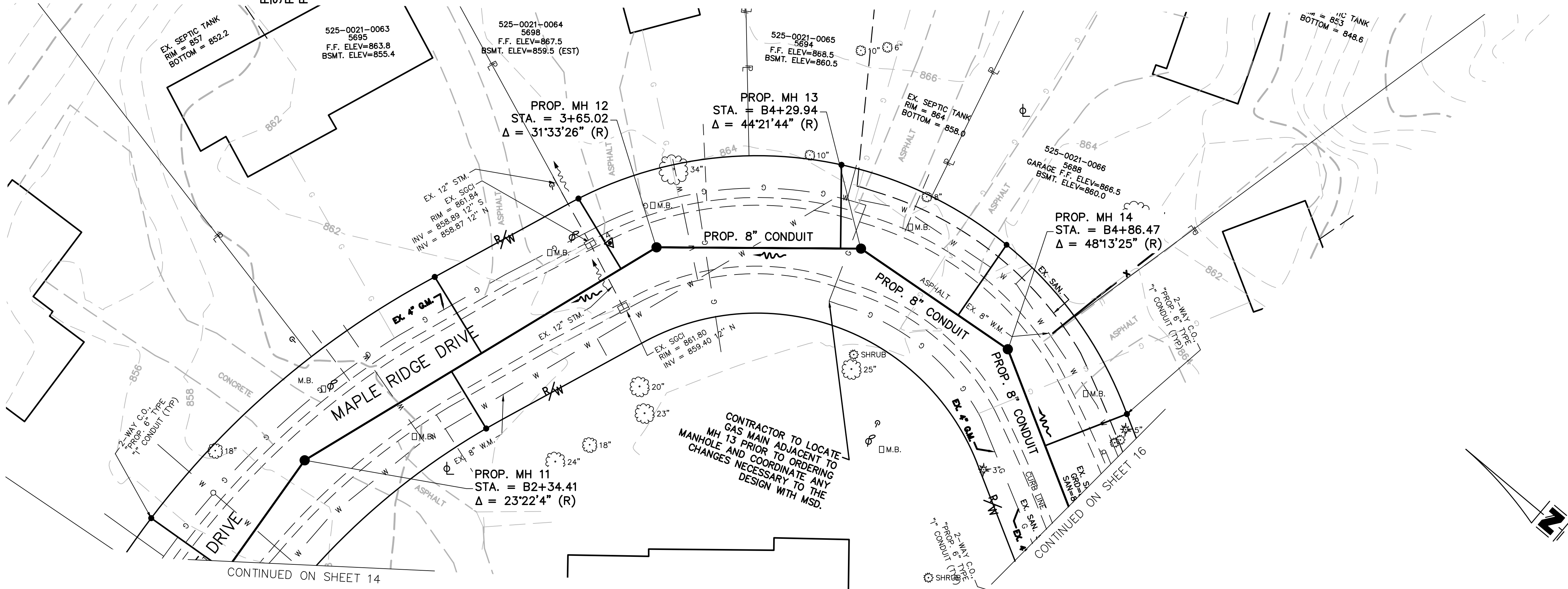
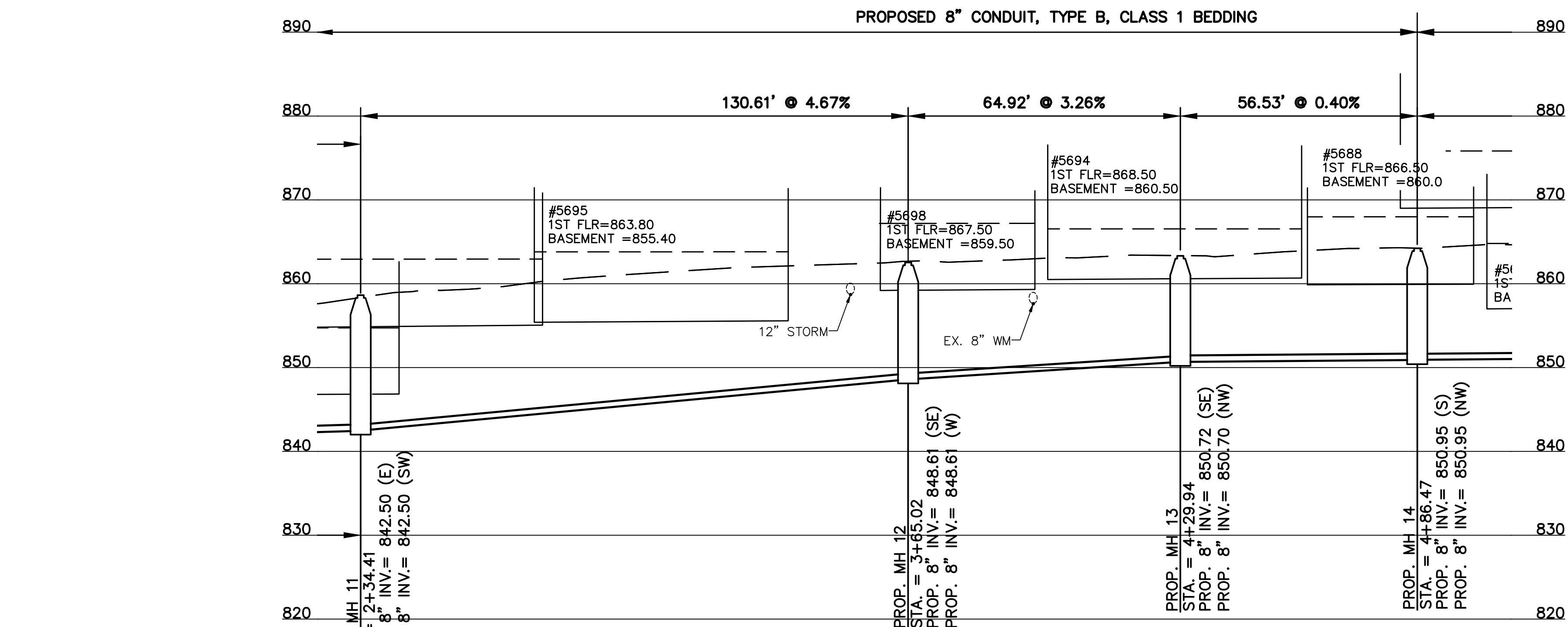
SHEET 14 OF 34

SS# 5933

CONTRACT  
DRAWING

PRINTS NOT BEARING THIS STAMP WERE  
MADE PRIOR TO ADVERTISING FOR BIDS  
AND ARE TO BE CONSIDERED OBSOLETE  
FOR CONTRACT PURPOSES.

NOTE:  
MAPLE RIDGE DRIVE REQUIRES  
FULL WIDTH MILL AND PAVE.



| REVISIONS        |       |              |  |
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| BY:              | DATE: | DESCRIPTION: |  |
| DESIGNED BY: GEW |       |              |  |
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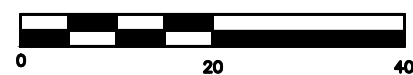
THE METROPOLITAN SEWER DISTRICT  
OF GREATER CINCINNATI  
HAMILTON COUNTY, OHIO



### PROPOSED PROJECT NO. 10370025

FROM THE INT. OF KENWOOD HILLS DR. AND KENWOOD HILLS TO THE CABANA CLUB DR. FROM  
THE CUL-DE-SAC OF MAPLE RIDGE DR AND VISTA RIDGE DR TO THE CABANA CLUB DR ALONG  
COACHLITE

SCALE: HORIZ. 1"=20'  
VERT. 1"=10'



MAPLERIDGE DRIVE AT NORTH END

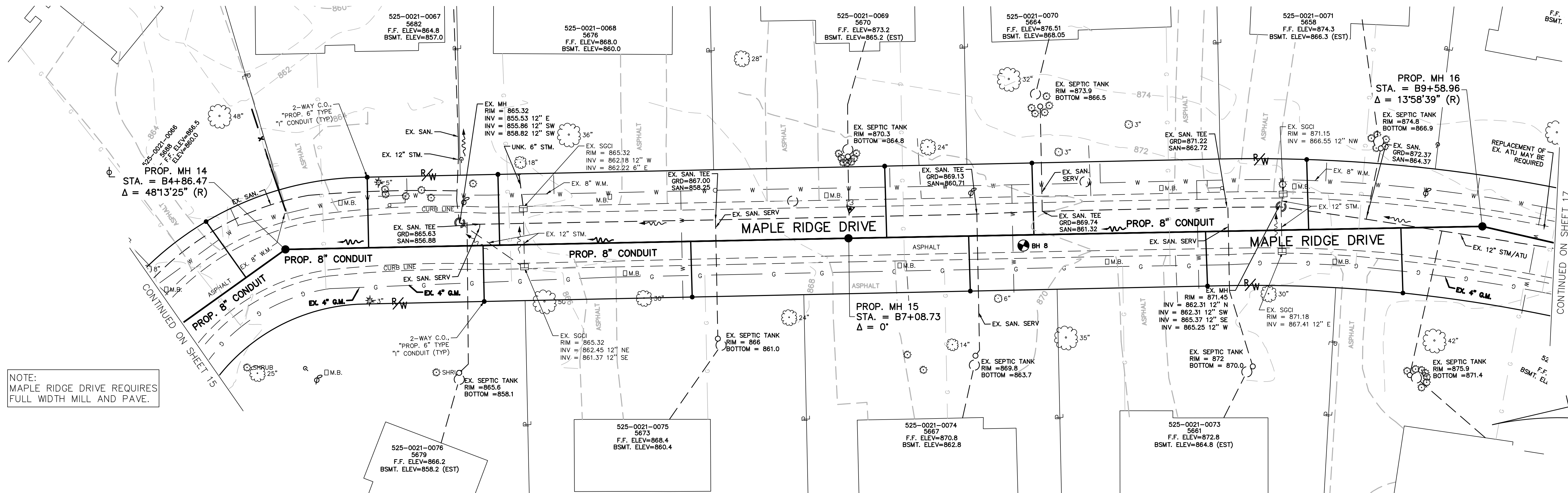
PLAN AND PROFILE

ACC. NO. 78242

SHEET 15 OF 34

SS# 5933

PRINTS NOT BEARING THIS STAMP WERE  
MADE PRIOR TO ADVERTISING FOR BIDS  
AND ARE TO BE CONSIDERED OBSOLETE  
FOR CONTRACT PURPOSES.



NOTE:  
MAPLE RIDGE DRIVE REQUIRES  
FULL WIDTH MILL AND PAVE.

[illegible]

THE METROPOLITAN SEWER DISTRICT  
OF GREATER CINCINNATI  
HAMILTON COUNTY, OHIO



FROM THE INT. OF KENWOOD HILLS DR. AND KENWOOD HILLS TO THE CABANA CLUB DR. FROM  
THE CUL-DE-SAC OF MAPLE RIDGE DR AND VISTA RIDGE DR TO THE CABANA CLUB DR ALONG  
COACHLITE

SCALE: HORIZ. 1"=20'  
VERT. 1"=10'



## PLAN AND PROFILE

ACC. NO. 78243

SHEET 16 OF 34

CS# 5933

PATH: N:\JOBS\2018\18926 - KENWOOD HILLS LOCAL SEWER WATER\600 CAD\SSA\BASE\KENWOOD HILLS BASEMAP.DWG  
DATE: Mar 19, 2025 - 12:18 PM  
PLOT BY: AREND

| REVISIONS    |     |       |              |
|--------------|-----|-------|--------------|
| DESIGNED BY: | BY: | DATE: | DESCRIPTION: |
| GEW          |     |       |              |
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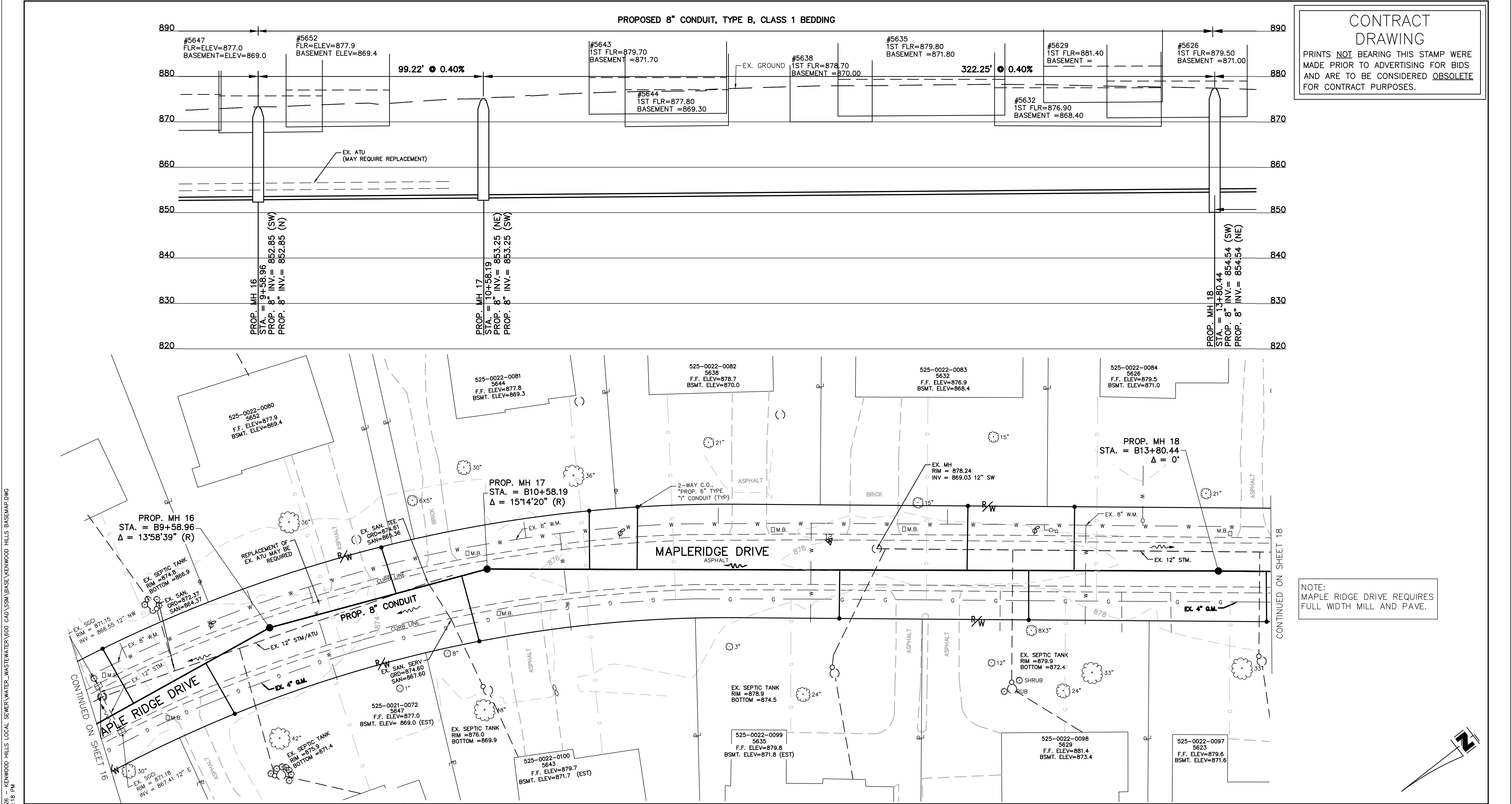


THE METROPOLITAN SEWER DISTRICT  
OF GREATER CINCINNATI  
HAMILTON COUNTY, OHIO

**PROPOSED PROJECT NO. 10370025**  
FROM THE INT. OF KENWOOD HILLS DR. AND KENWOOD HILLS TO THE CABANA CLUB DR. FROM  
THE CUL-DE-SAC OF MAPLE RIDGE DR AND VISTA RIDGE DR TO THE CABANA CLUB DR ALONG  
COACHLITE

SCALE: HORIZ. 1"=20'  
VERT. 1"=10'

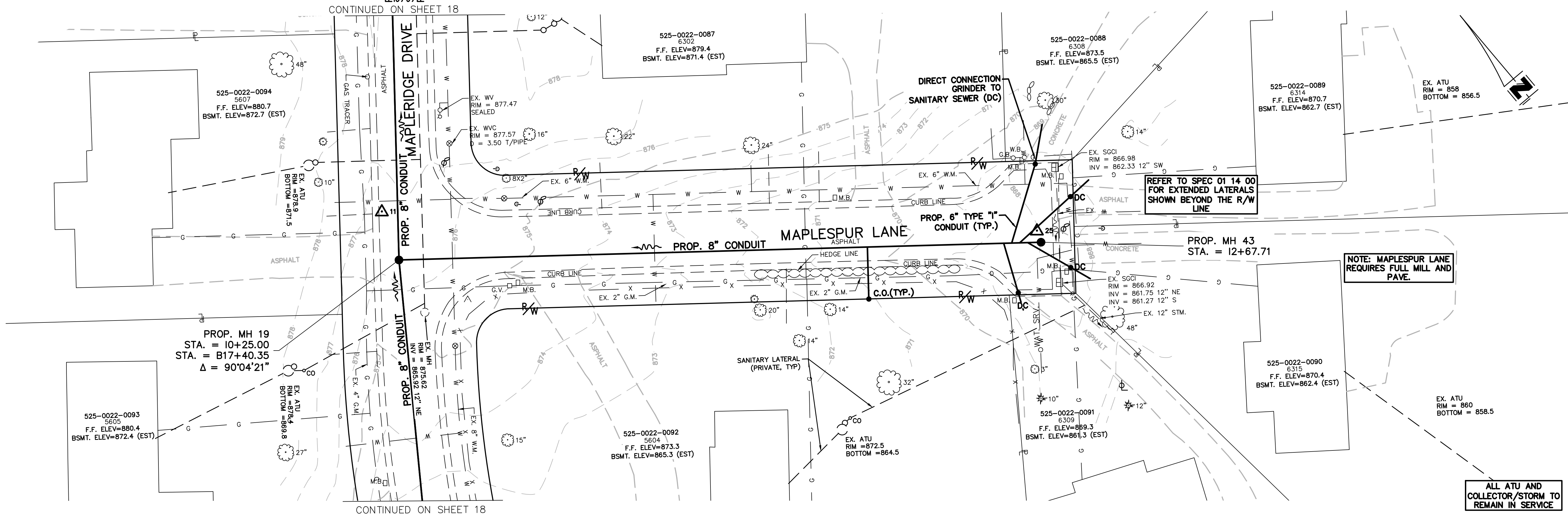
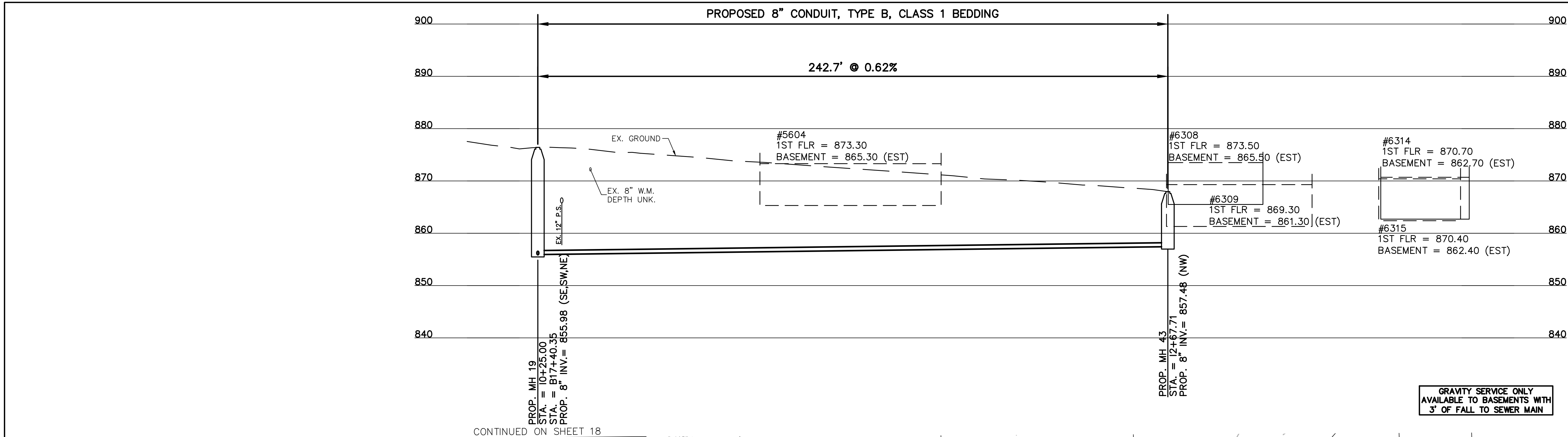
**MAPLERIDGE DRIVE N of MAPLESPUR**  
**PLAN AND PROFILE**  
ACC. NO. 78244  
SHEET 17 OF 34  
SS# 5933



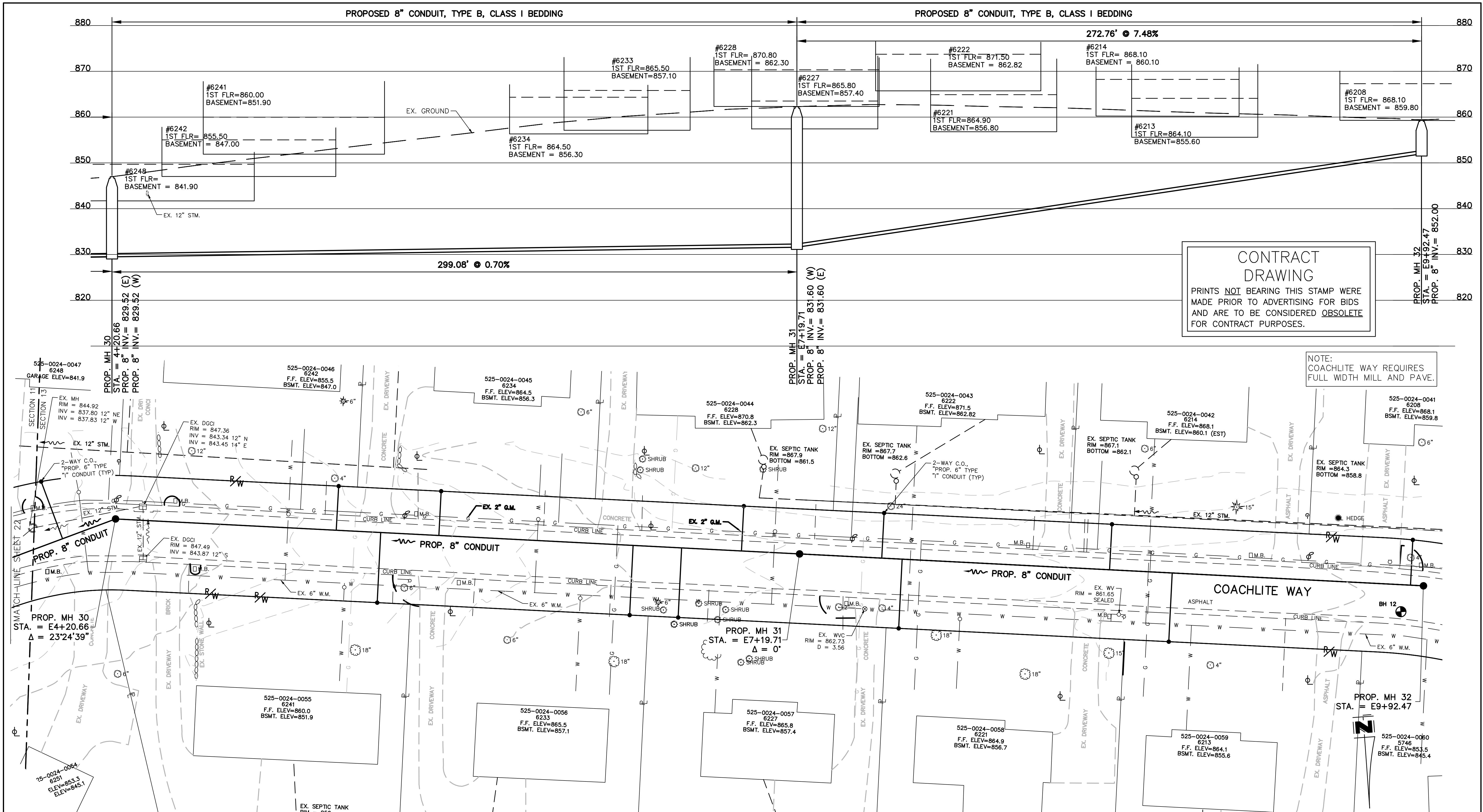
**CONTRACT  
DRAWING**  
PRINTS NOT BEARING THIS STAMP WERE  
MADE PRIOR TO ADVERTISING FOR BIDS  
AND ARE TO BE CONSIDERED OBSOLETE  
FOR CONTRACT PURPOSES.



PATH: N:\J085\2019\18026 - KENWOOD HILLS LOCAL SEWER\WATER\_WASTEWATER\600 CAD\BASE\RA CONSULTANTS KENWOOD.DWG  
DATE: Mar 19, 2025 - 12:19 PM  
PLOT BY: AREND



PATH: C:\Users\jchry\OneDrive - KENWOOD HILLS LOCAL SEWER WATER WASTEWATER\KID CADD\BASE\KENWOOD HILLS BASEMAP.DWG  
DATE: Mar 19, 2025 - 12:19 PM  
PLOTTED BY: FRIEND



CONTRACT  
DRAWING

PRINTS NOT BEARING THIS STAMP WERE  
MADE PRIOR TO ADVERTISING FOR BIDS  
AND ARE TO BE CONSIDERED OBSOLETE  
FOR CONTRACT PURPOSES.

NOTE:  
COACHLITE WAY REQUIRES  
FULL WIDTH MILL AND PAVE.

| REVISIONS        |       |              |  |
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THE METROPOLITAN SEWER DISTRICT  
OF GREATER CINCINNATI  
HAMILTON COUNTY, OHIO



MSD  
WASTEWATER  
ENGINEERING

**PROPOSED PROJECT NO. 10370025**

FROM THE INT. OF KENWOOD HILLS DR. AND KENWOOD HILLS TO THE CABANA CLUB DR. FROM  
THE CUL-DE-SAC OF MAPLE RIDGE DR AND VISTA RIDGE DR TO THE CABANA CLUB DR ALONG  
COACHLITE

SCALE: HORIZ. 1"=20'  
VERT. 1"=10'



**COACHLITE WAY**

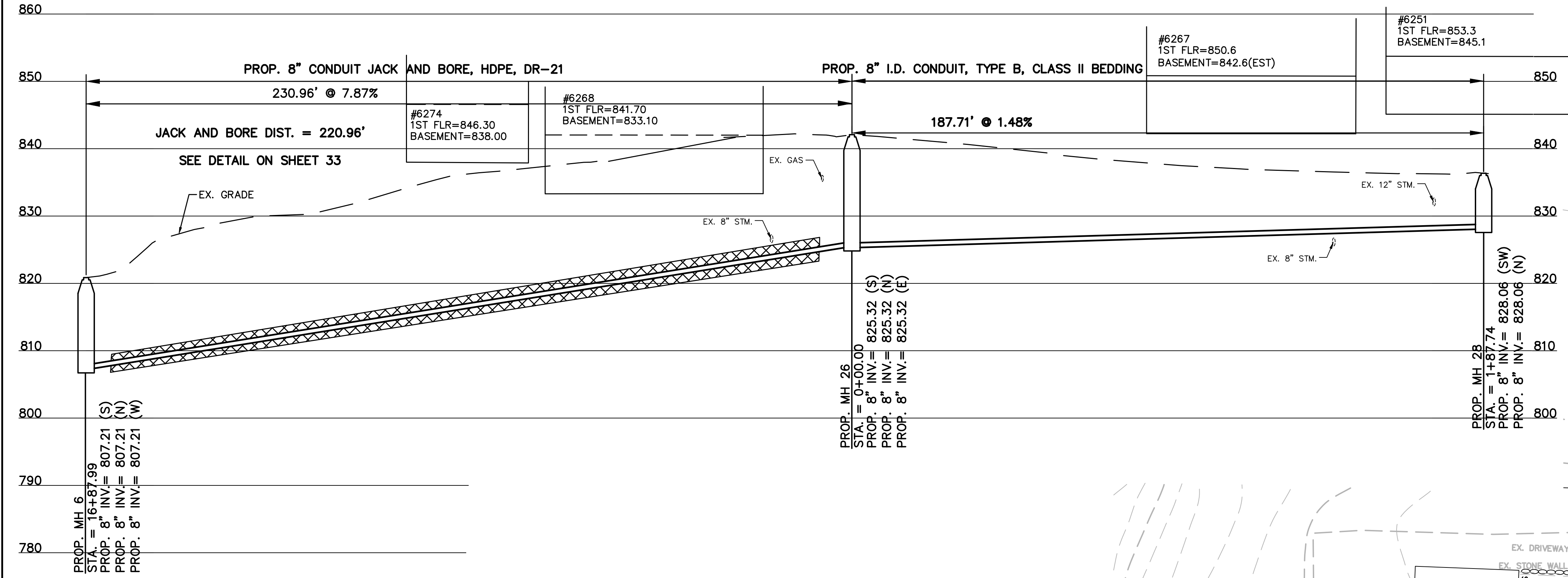
**PLAN AND PROFILE**

ACC. NO. 78249

SHEET 20 OF 34

SS# 5933

PATH: N:\005\2018\18926 - KENWOOD HILLS LOCAL SEWER WATER WASTEWATER\600 CAD\SSA\BASE\KENWOOD HILLS BASEMAP.DWG  
DATE: Mar 19, 2025 - 12:19 PM  
PLOT BY: AREND



NOTE:  
COACHLITE WAY REQUIRES  
FULL WIDTH MILL AND PAVE.

CONTRACTOR TO VERIFY STORM  
LOCATION AND DEPTH PRIOR TO  
ORDERING MATERIALS AND COORDINATE  
ANY CHANGES WITH MSD.

**CONTRACT  
DRAWING**  
PRINTS NOT BEARING THIS STAMP WERE  
MADE PRIOR TO ADVERTISING FOR BIDS  
AND ARE TO BE CONSIDERED OBSOLETE  
FOR CONTRACT PURPOSES.

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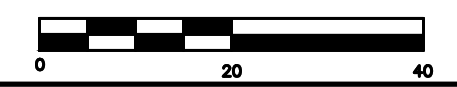
THE METROPOLITAN SEWER DISTRICT  
OF GREATER CINCINNATI  
HAMILTON COUNTY, OHIO



WASTEWATER  
ENGINEERING

**PROPOSED PROJECT NO. 10370025**  
FROM THE INT. OF KENWOOD HILLS DR. AND KENWOOD HILLS TO THE CABANA CLUB DR. FROM  
THE CUL-DE-SAC OF MAPLE RIDGE DR AND VISTA RIDGE DR TO THE CABANA CLUB DR ALONG  
COACHLITE

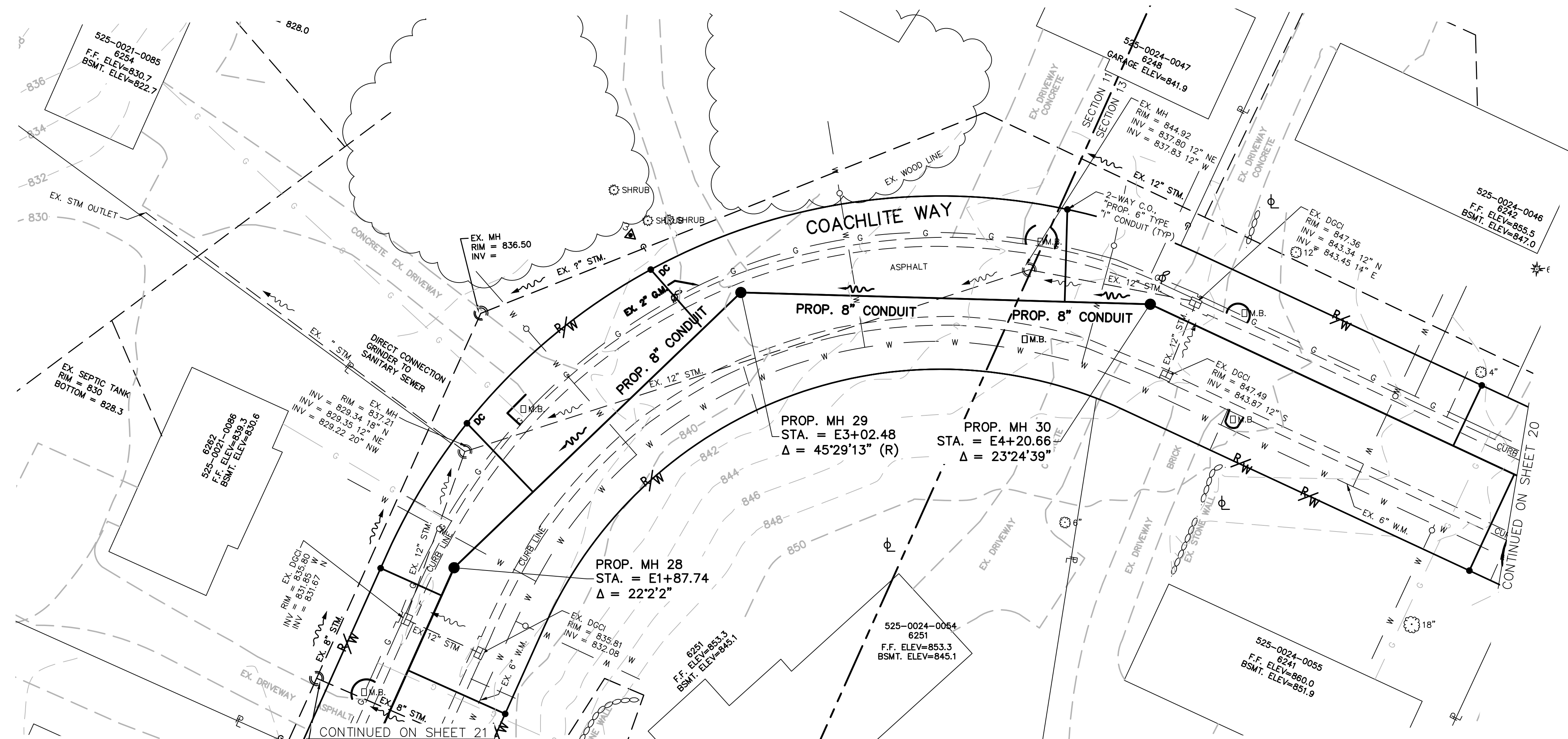
SCALE: HORIZ. 1"=20'  
VERT. 1"=10'



**COACHLITE WAY to CABANA  
CLUB DR.**

**PLAN AND PROFILE**

PRINTS NOT BEARING THIS STAMP WERE  
MADE PRIOR TO ADVERTISING FOR BIDS  
AND ARE TO BE CONSIDERED OBSOLETE  
FOR CONTRACT PURPOSES.

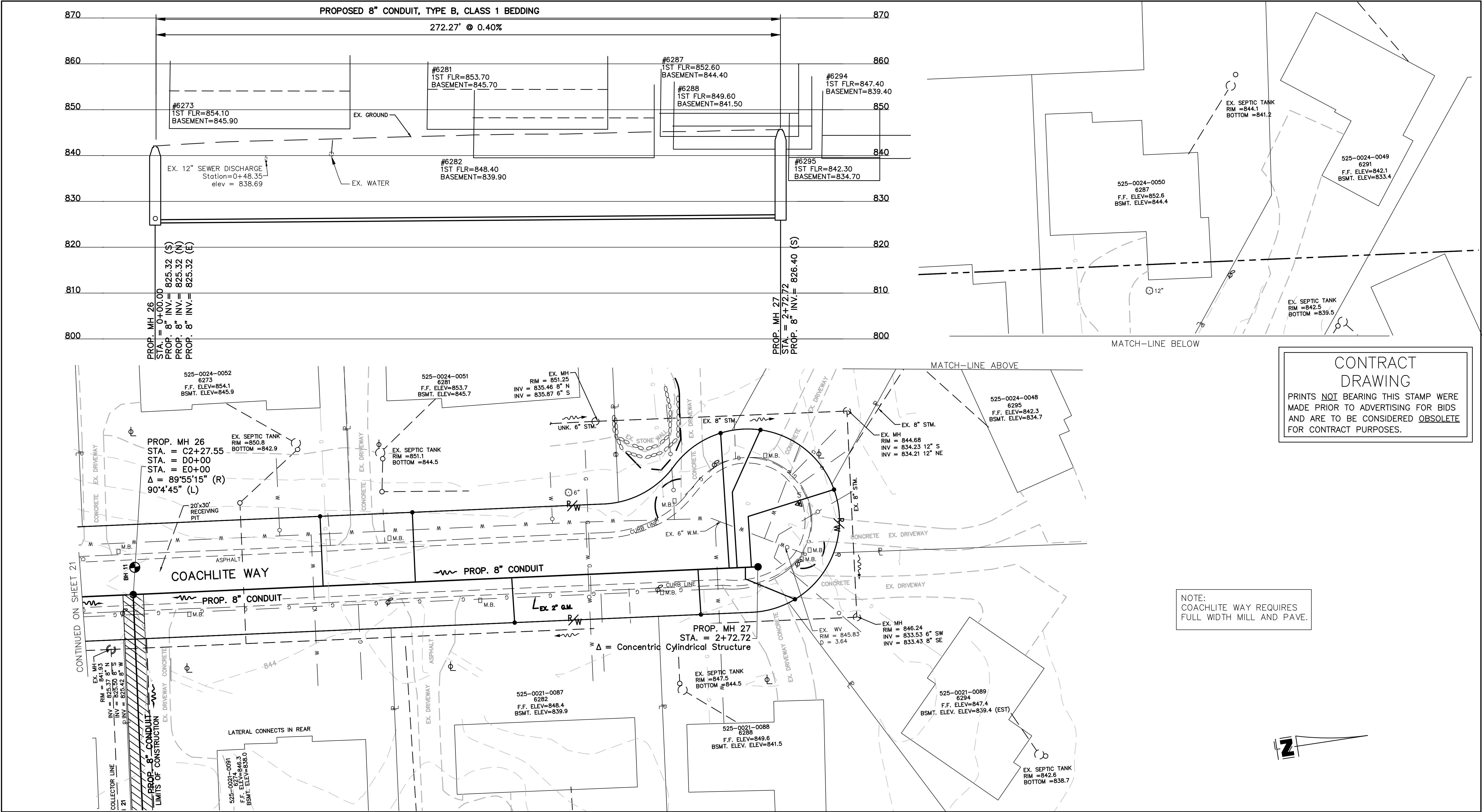


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|  <b>DYNOTEC</b> | THE METROPOLITAN SEWER DISTRICT<br>OF GREATER CINCINNATI<br>HAMILTON COUNTY, OHIO | <br><b>M S D</b><br><b>WASTEWATER<br/>ENGINEERING</b> |
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SS# 5933

PATH: N:\JOBS\2018\18926 - KENWOOD HILLS LOCAL SEWER WATER\600 CAD\SSM\BASE\KENWOOD HILLS BASEMAP.DWG  
DATE: Mar 19, 2025 - 12:20 PM  
PLOT BY: ARIEND



CONTRACT  
DRAWING  
PRINTS NOT BEARING THIS STAMP WERE  
MADE PRIOR TO ADVERTISING FOR BIDS  
AND ARE TO BE CONSIDERED OBsolete  
FOR CONTRACT PURPOSES.

NOTE:  
COACHLITE WAY REQUIRES  
FULL WIDTH MILL AND PAVE.

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THE METROPOLITAN SEWER DISTRICT  
OF GREATER CINCINNATI  
HAMILTON COUNTY, OHIO



MSD  
WASTEWATER  
ENGINEERING

**PROPOSED PROJECT NO. 10370025**

FROM THE INT. OF KENWOOD HILLS DR. AND KENWOOD HILLS TO THE CABANA CLUB DR. FROM  
THE CUL-DE-SAC OF MAPLE RIDGE DR AND VISTA RIDGE DR TO THE CABANA CLUB DR ALONG  
COACHLITE

SCALE: HORIZ. 1"=20'  
VERT. 1"=10'



**COACHLITE WAY**

**PLAN AND PROFILE**

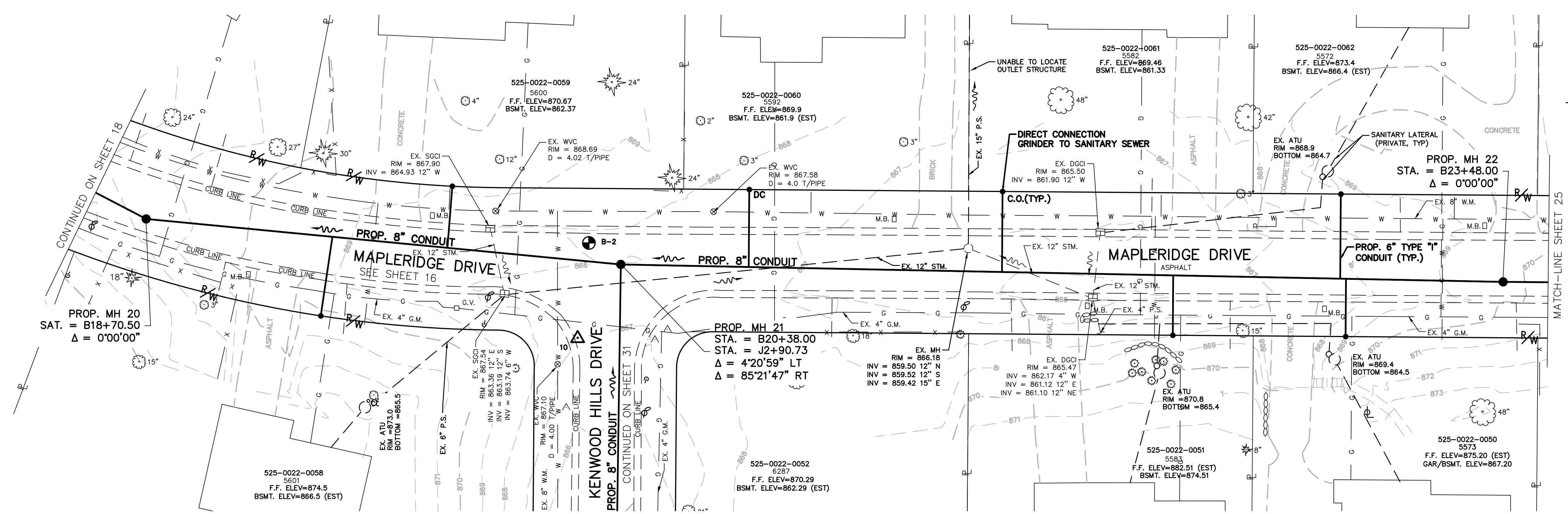
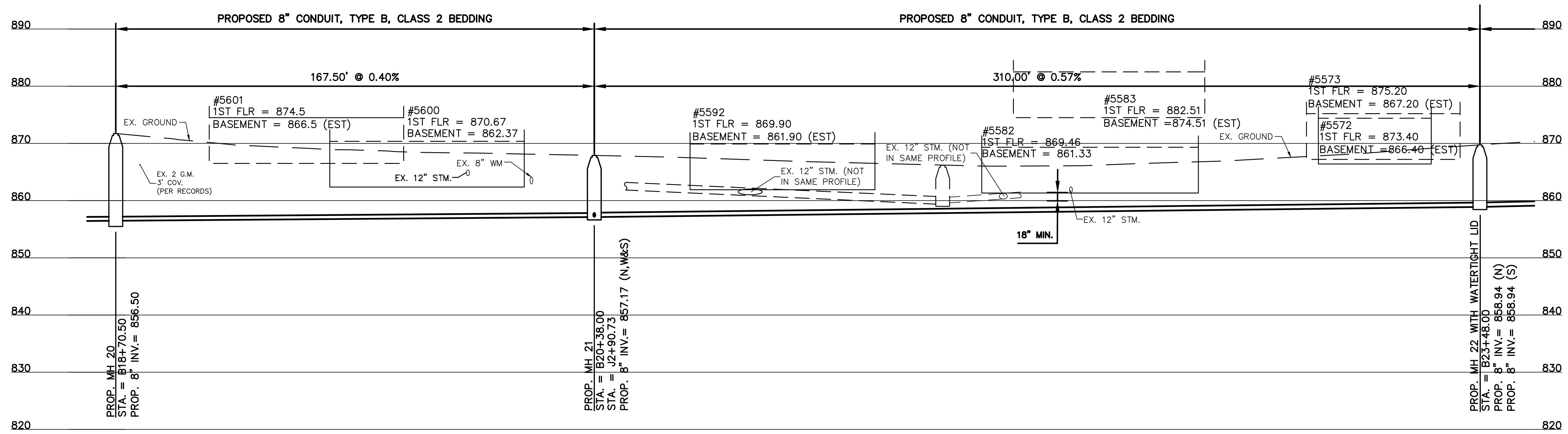
ACC. NO. **78250**

SHEET **23** OF **34**

SS# **5933**

CONTRACT  
DRAWING

PRINTS NOT BEARING THIS STAMP WERE  
MADE PRIOR TO ADVERTISING FOR BIDS  
AND ARE TO BE CONSIDERED OBsolete  
FOR CONTRACT PURPOSES.



NOTE:  
MAPLERIDGE DRIVE REQUIRES  
FULL MILL AND PAVE.

ALL ATU AND  
COLLECTOR/STORM TO  
REMAIN IN SERVICE

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THE METROPOLITAN SEWER DISTRICT  
OF GREATER CINCINNATI  
HAMILTON COUNTY, OHIO

WASTEWATER  
ENGINEERING

PROPOSED PROJECT NO. 10370025

FROM THE INT. OF KENWOOD HILLS DR. AND KENWOOD HILLS TO THE CABANA CLUB DR. FROM  
THE CUL-DE-SAC OF MAPLE RIDGE DR AND VISTA RIDGE DR TO THE CABANA CLUB DR ALONG  
COACHLITE

SCALE: HORIZ. 1"=20'  
VERT. 1"=10'

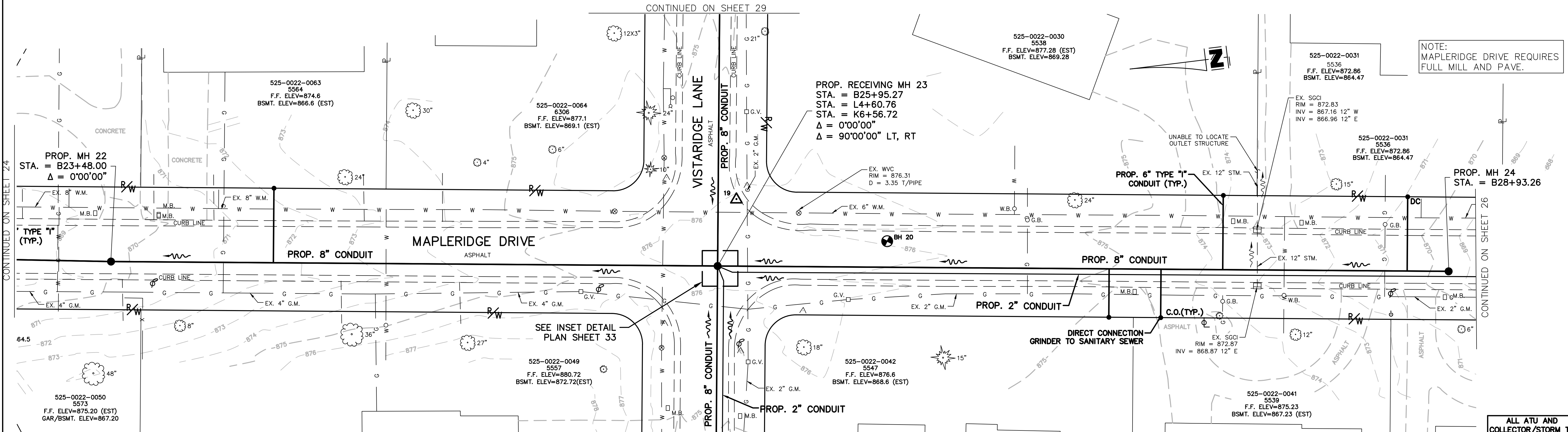
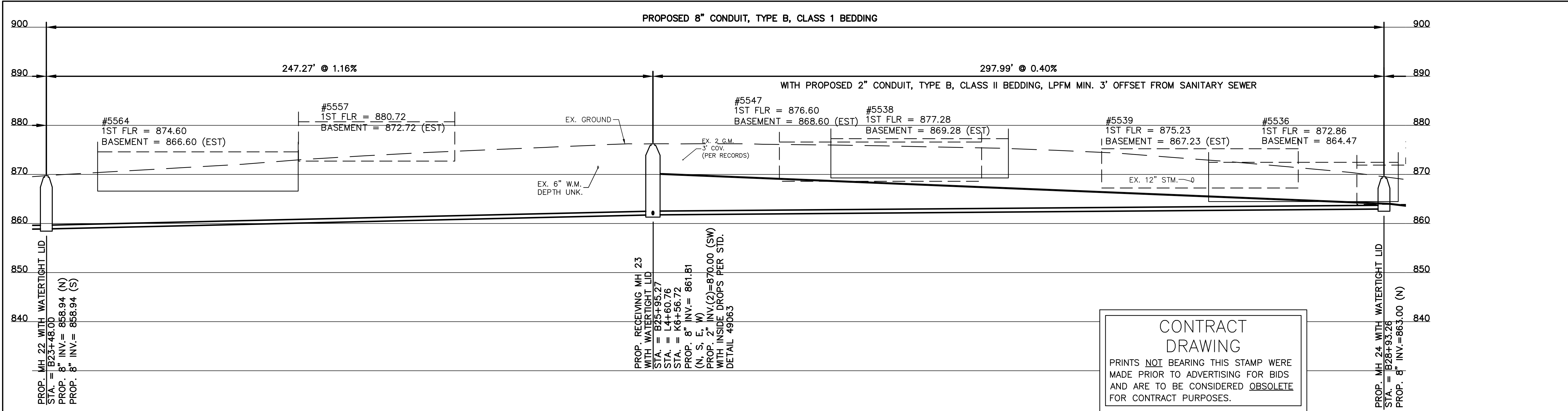
MAPLERIDGE PI & Pr

PLAN AND PROFILE

ACC. NO. 78251

SHEET 24 OF 34

SS# 5933



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Consultants, LLC

THE METROPOLITAN SEWER DISTRICT  
OF GREATER CINCINNATI  
HAMILTON COUNTY, OHIO

M S D  
WASTEWATER  
ENGINEERING

**PROPOSED PROJECT NO. 10370025**

FROM THE INT. OF KENWOOD HILLS DR. AND KENWOOD HILLS TO THE CABANA CLUB DR. FROM  
THE CUL-DE-SAC OF MAPLE RIDGE DR AND VISTA RIDGE DR TO THE CABANA CLUB DR ALONG  
COACHLITE

SCALE: HORIZ. 1"=20'  
VERT. 1"=10'

**MAPLERIDGE DRIVE**

**PLAN AND PROFILE**

ACC. NO. 78252

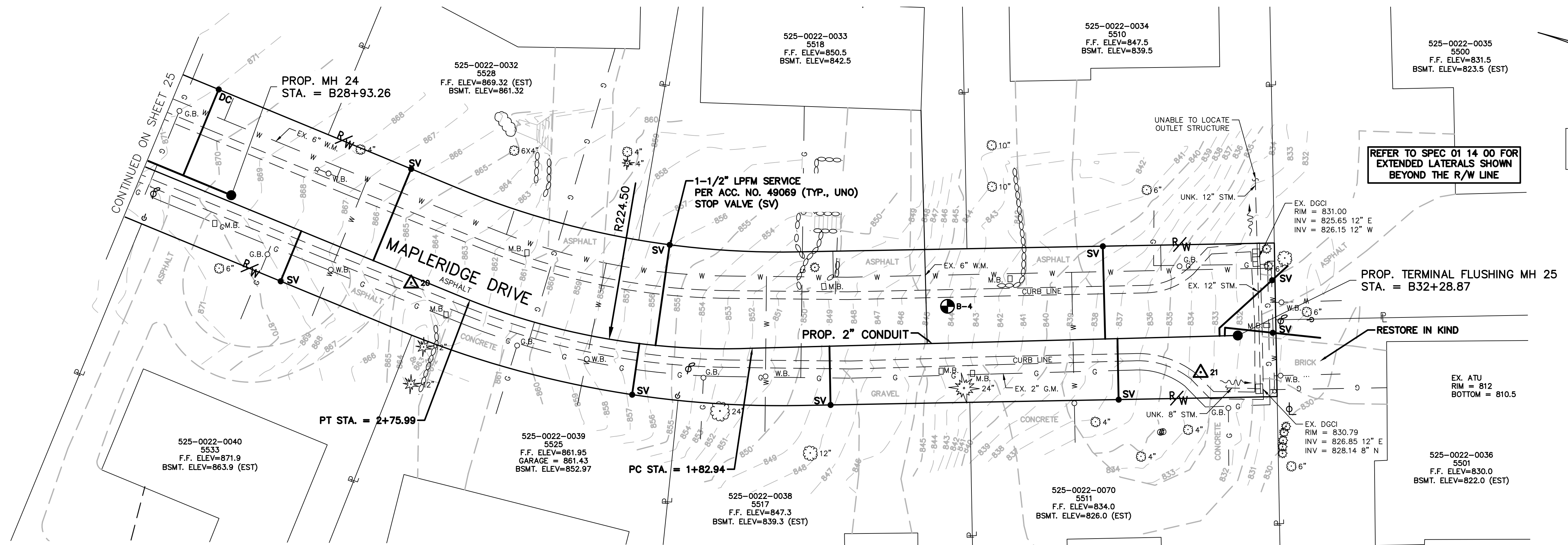
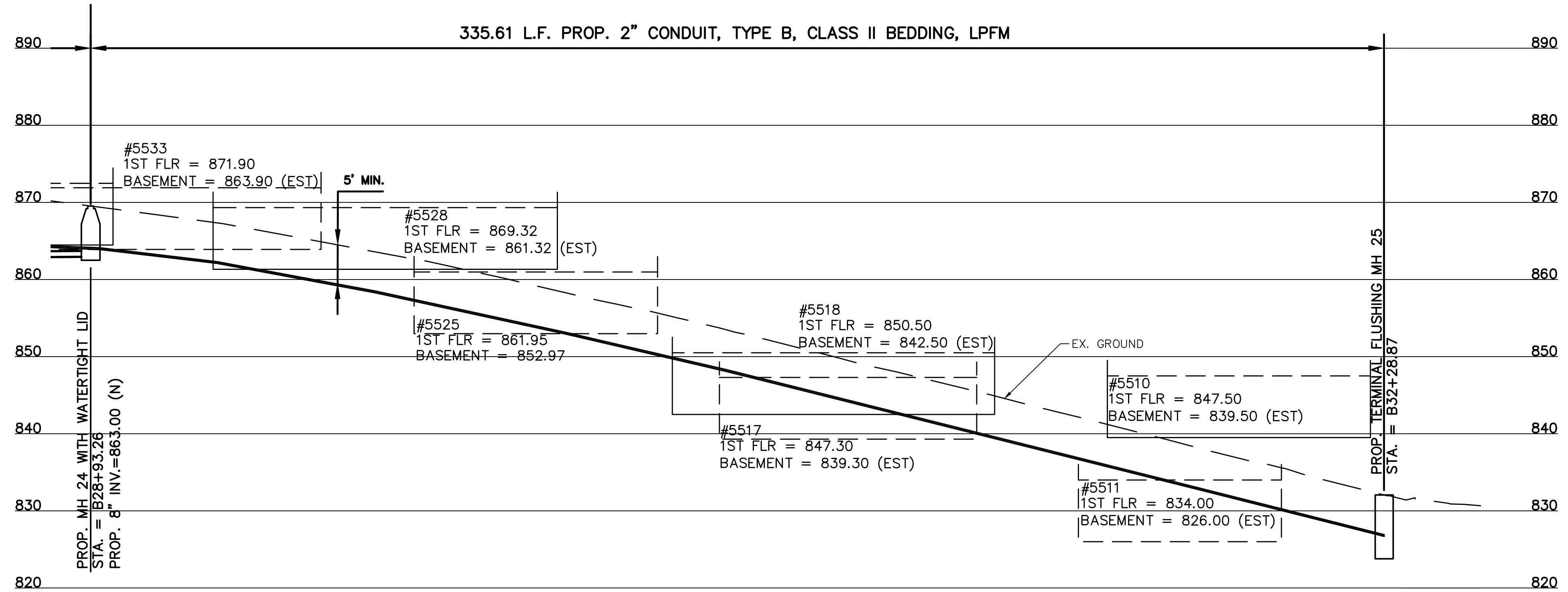
SHEET 25 OF 34

SS# 5933

PATH: N:\J085\2019\18926 - KENWOOD HILLS LOCAL SEWER\WATER\_WASTEWATER\600 CAD\BASE\RA CONSULTANTS KENWOOD.DWG  
DATE: Mar 19, 2025 - 12:21 PM  
PLOT BY: AREND

CONTRACT  
DRAWING

PRINTS NOT BEARING THIS STAMP WERE  
MADE PRIOR TO ADVERTISING FOR BIDS  
AND ARE TO BE CONSIDERED OBSOLETE  
FOR CONTRACT PURPOSES.



REFER TO SPEC 01 14 00 FOR  
EXTENDED LATERALS SHOWN  
BEYOND THE R/W LINE

NOTE:  
MAPLERIDGE DRIVE REQUIRES  
FULL MILL AND PAVE.

ALL ATU AND  
COLLECTOR/STORM TO  
REMAIN IN SERVICE

| REVISIONS        |     |       |              |
|------------------|-----|-------|--------------|
| DESIGNED BY: GEW | BY: | DATE: | DESCRIPTION: |
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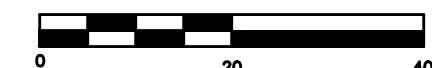
THE METROPOLITAN SEWER DISTRICT  
OF GREATER CINCINNATI  
HAMILTON COUNTY, OHIO



PROPOSED PROJECT NO. 10370025

FROM THE INT. OF KENWOOD HILLS DR. AND KENWOOD HILLS TO THE CABANA CLUB DR. FROM  
THE CUL-DE-SAC OF MAPLE RIDGE DR AND VISTA RIDGE DR TO THE CABANA CLUB DR ALONG  
COACHLITE

SCALE: HORIZ. 1"=20'  
VERT. 1"=10'



MAPLERIDGE DRIVE

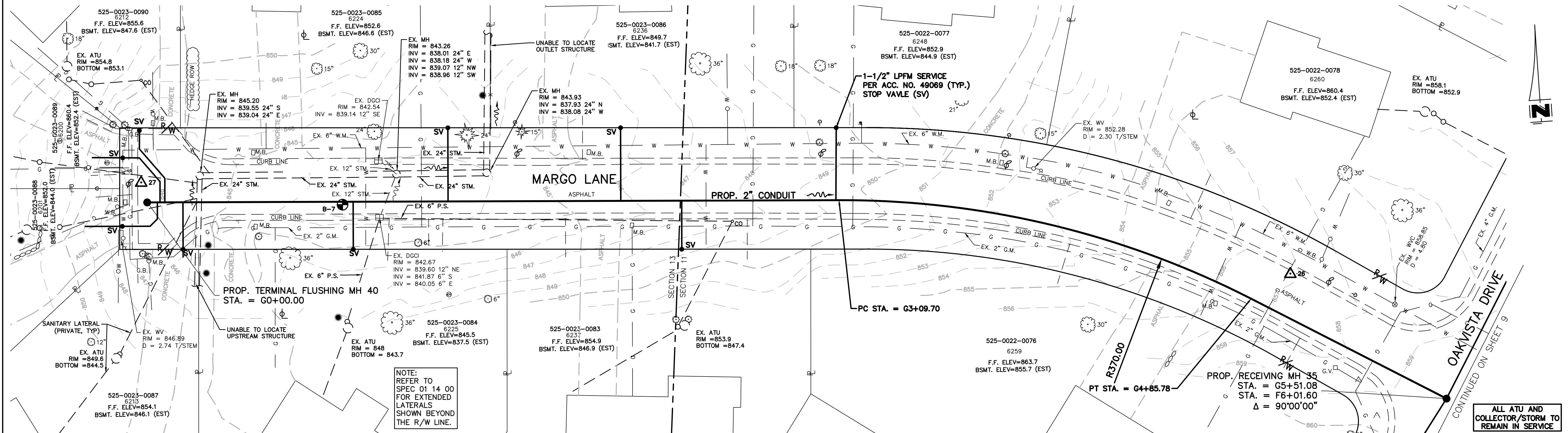
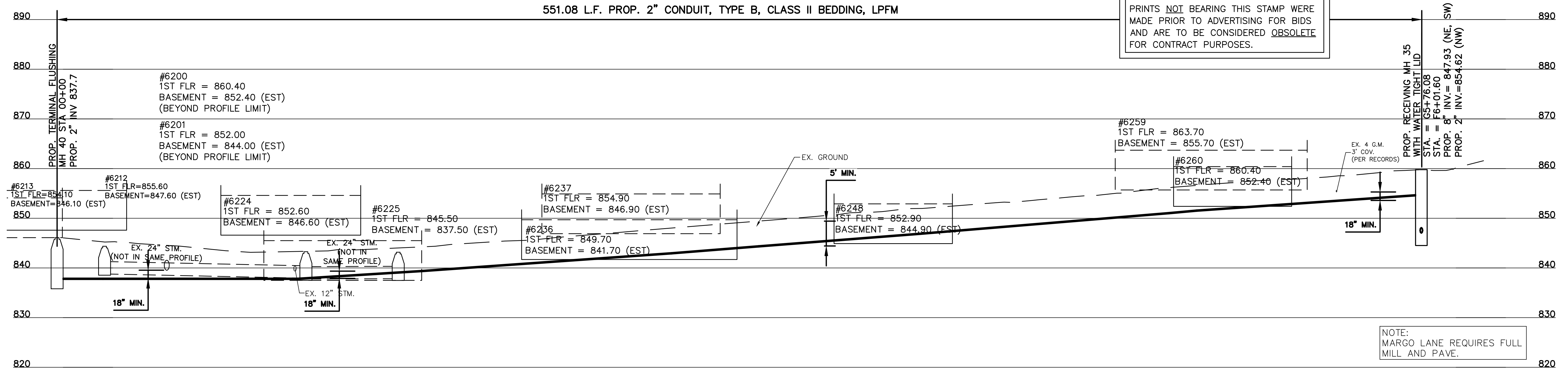
PLAN AND PROFILE

ACC. NO. 78253

SHEET 26 OF 34

SS# 5933

PRINTS NOT BEARING THIS STAMP WERE  
MADE PRIOR TO ADVERTISING FOR BIDS  
AND ARE TO BE CONSIDERED OBSOLETE  
FOR CONTRACT PURPOSES.

[illegible]

THE METROPOLITAN SEWER DISTRICT  
OF GREATER CINCINNATI  
HAMILTON COUNTY, OHIO



FROM THE INT. OF KENWOOD HILLS DR. AND KENWOOD HILLS TO THE CABANA CLUB DR. FROM  
THE CUL-DE-SAC OF MAPLE RIDGE DR AND VISTA RIDGE DR TO THE CABANA CLUB DR ALONG  
COACHLITE

SCALE: HORIZ. 1"=20'  
VERT. 1"=10'



## PLAN AND PROFILE

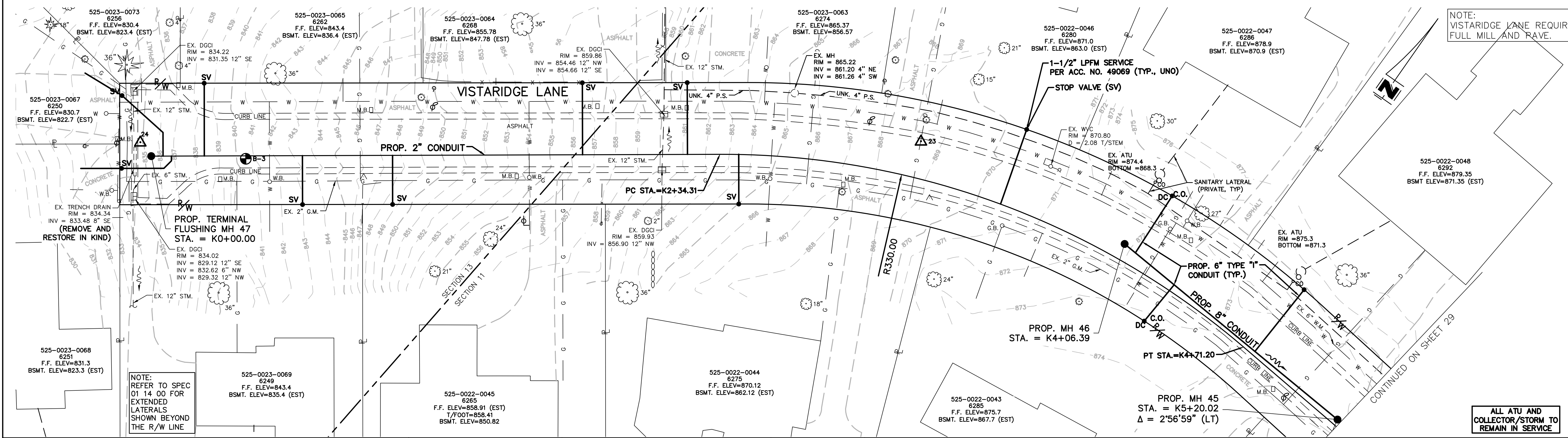
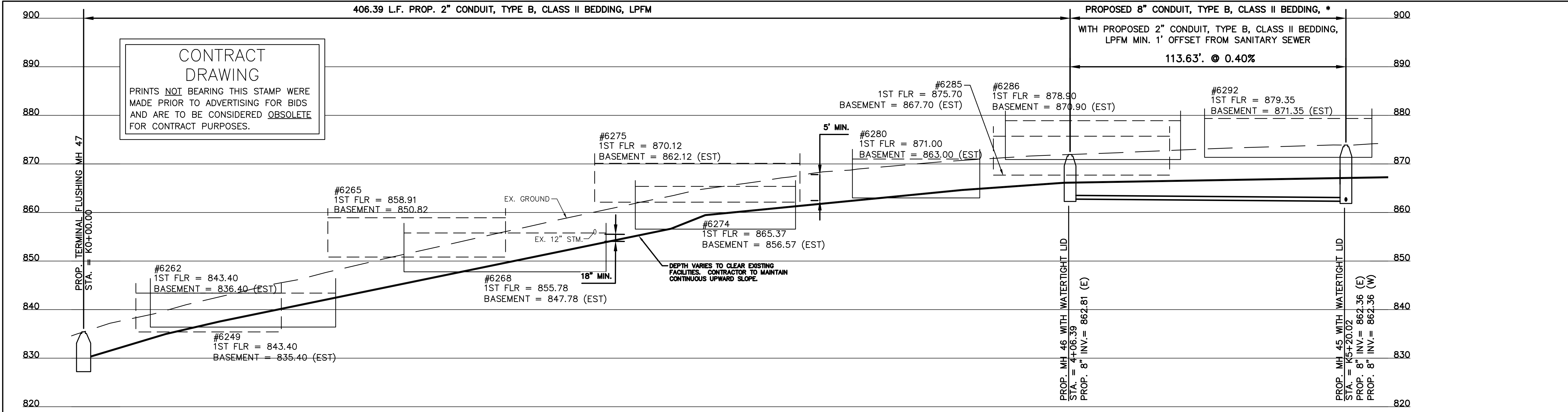
ACC. NO. 78254

SHEET27 OF 34

SS# 5933

ACAD DRAWING NAME: RA CONSULTANTS KENWOOD.DWG

PATH: N:\OBS\2018\18926 - KENWOOD HILLS LOCAL SEWER\WATER\_WASTEWATER\600 CAD\BASE\RA CONSULTANTS KENWOOD.DWG  
 DATE: Mar 19, 2025 - 12:21 PM  
 PLOTTED BY: AFREND

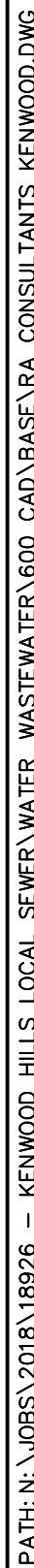


| DESIGNED BY: GEW |       | REVISIONS    |  | DYNOTEC<br>RA Consultants, LLC | THE METROPOLITAN SEWER DISTRICT<br>OF GREATER CINCINNATI<br>HAMILTON COUNTY, OHIO | PROPOSED PROJECT NO. 10370025<br>FROM THE INT. OF KENWOOD HILLS DR. AND KENWOOD HILLS TO THE CABANA CLUB DR. FROM<br>THE CUL-DE-SAC OF MAPLE RIDGE DR AND VISTA RIDGE DR TO THE CABANA CLUB DR ALONG<br>COACHLITE | VISTA RIDGE LANE<br>PLAN AND PROFILE | ACC. NO. 78255 | SHEET 28 OF 34 | SS# 5933 |
|------------------|-------|--------------|--|--------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|----------------|----------------|----------|
| BY:              | DATE: | DESCRIPTION: |  |                                |                                                                                   |                                                                                                                                                                                                                   |                                      |                |                |          |
| DRAWN BY: GAU    |       |              |  |                                |                                                                                   |                                                                                                                                                                                                                   |                                      |                |                |          |
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ACAD DRAWING NAME: RA CONSULTANTS KENWOOD.DWG

SCALE: HORIZ. 1"=20'  
VERT. 1"=10'

0 20 40



**DYNOTEC**  
**RA** Consultants, LLC



MSD  
WASTEWATER  
ENGINEERING

0 20

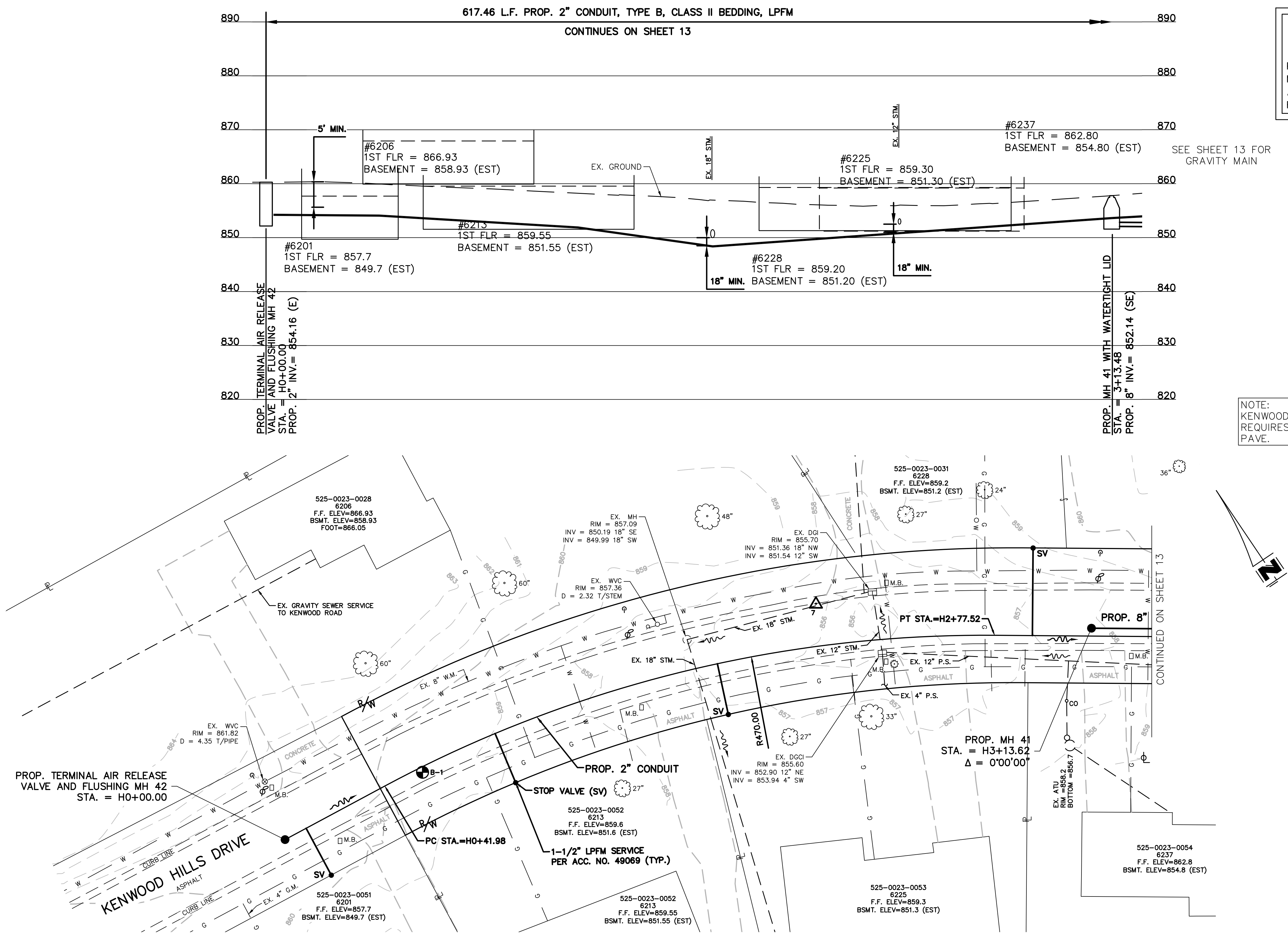
ACC. NO. 78256 SHEET 29 OF 34 SS# 5933

CONTRACT  
DRAWING

PRINTS NOT BEARING THIS STAMP WERE  
MADE PRIOR TO ADVERTISING FOR BIDS  
AND ARE TO BE CONSIDERED OBSOLETE  
FOR CONTRACT PURPOSES.

SEE SHEET 13 FOR  
GRAVITY MAIN

NOTE:  
KENWOOD HILLS DRIVE  
REQUIRES FULL MILL AND  
PAVE.



| DESIGNED BY: GEW | REVISIONS |       |  | DESCRIPTION: |
|------------------|-----------|-------|--|--------------|
|                  | BY:       | DATE: |  |              |
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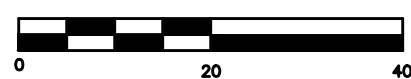
THE METROPOLITAN SEWER DISTRICT  
OF GREATER CINCINNATI  
HAMILTON COUNTY, OHIO



PROPOSED PROJECT NO. 10370025

FROM THE INT. OF KENWOOD HILLS DR. AND KENWOOD HILLS TO THE CABANA CLUB DR. FROM  
THE CUL-DE-SAC OF MAPLE RIDGE DR AND VISTA RIDGE DR TO THE CABANA CLUB DR ALONG  
COACHLITE

SCALE: HORIZ. 1"=20'  
VERT. 1"=10'



KENWOOD HILLS DRIVE

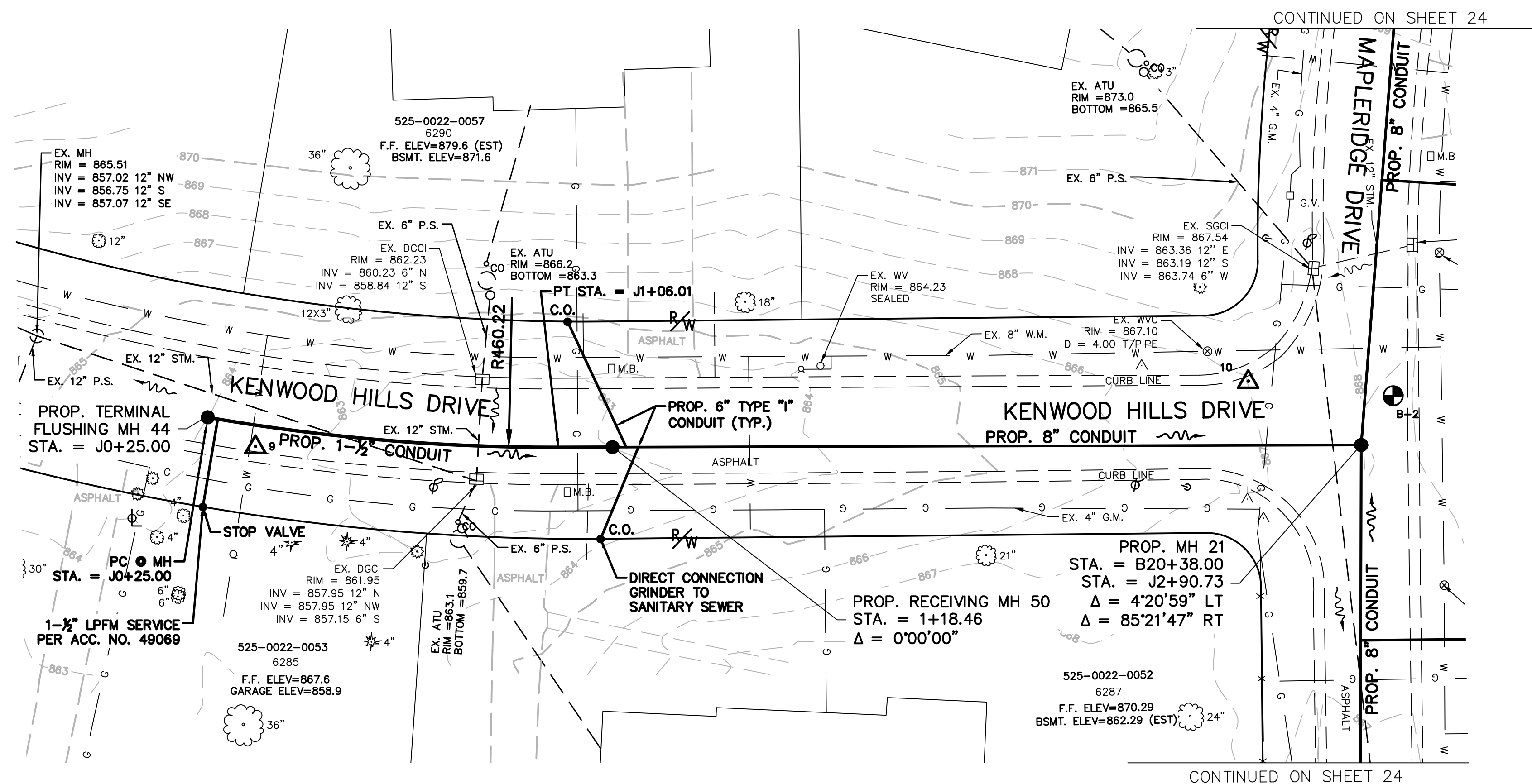
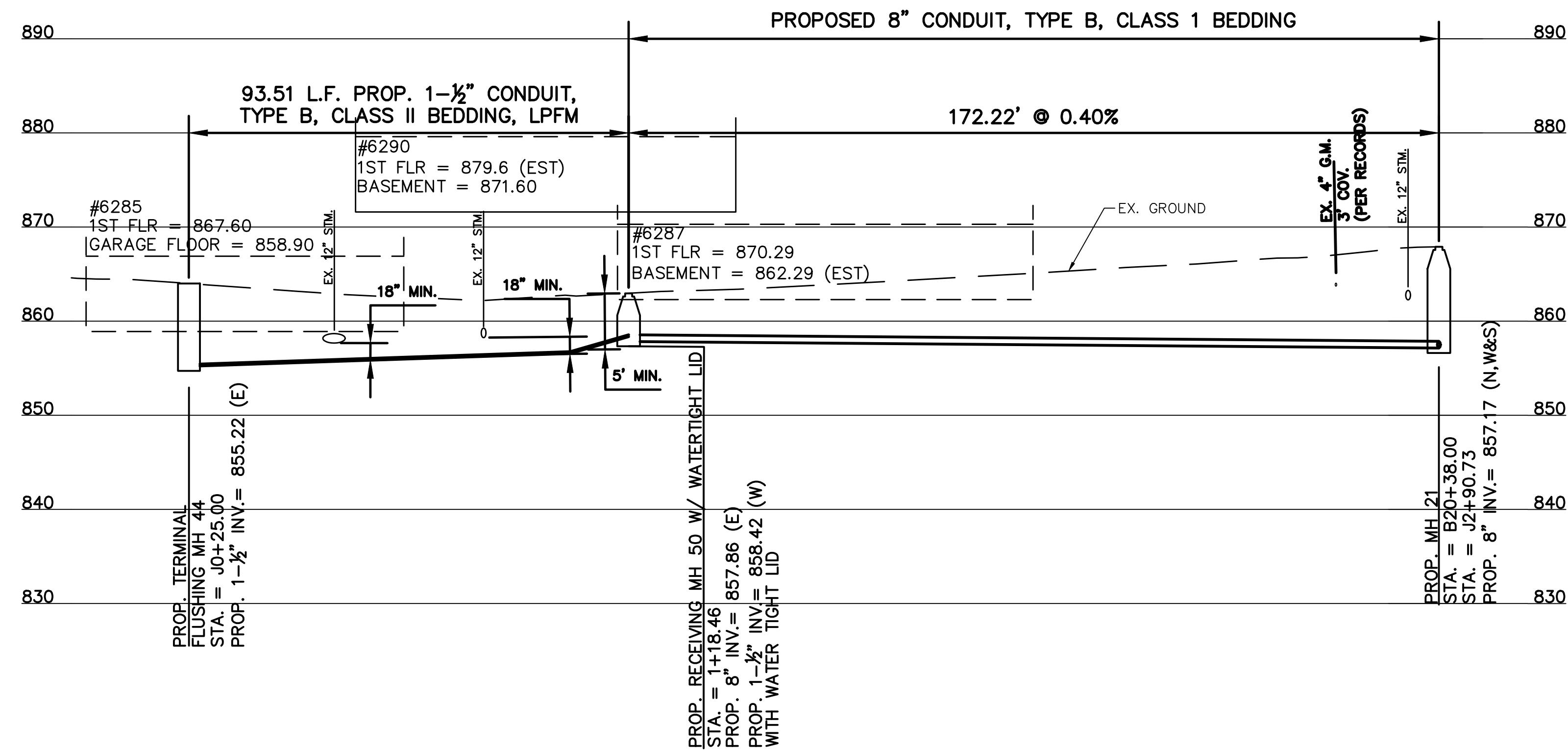
PLAN AND PROFILE

ACC. NO. 78257

SHEET 30 OF 34

SS# 5933

PRINTS NOT BEARING THIS STAMP WERE  
MADE PRIOR TO ADVERTISING FOR BIDS  
AND ARE TO BE CONSIDERED OBSOLETE  
FOR CONTRACT PURPOSES.



NOTE:  
KENWOOD HILLS DRIVE  
REQUIRES FULL MILL AND  
PAVE.

ALL ATU AND  
COLLECTOR/STORM TO  
REMAIN IN SERVICE

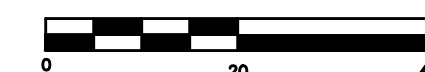
[illegible]

THE METROPOLITAN SEWER DISTRICT  
OF GREATER CINCINNATI  
HAMILTON COUNTY, OHIO



FROM THE INT. OF KENWOOD HILLS DR. AND KENWOOD HILLS TO THE CABANA CLUB DR. FROM  
THE CUL-DE-SAC OF MAPLE RIDGE DR AND VISTA RIDGE DR TO THE CABANA CLUB DR ALONG  
COACHLITE

SCALE: HORIZ. 1"=20'  
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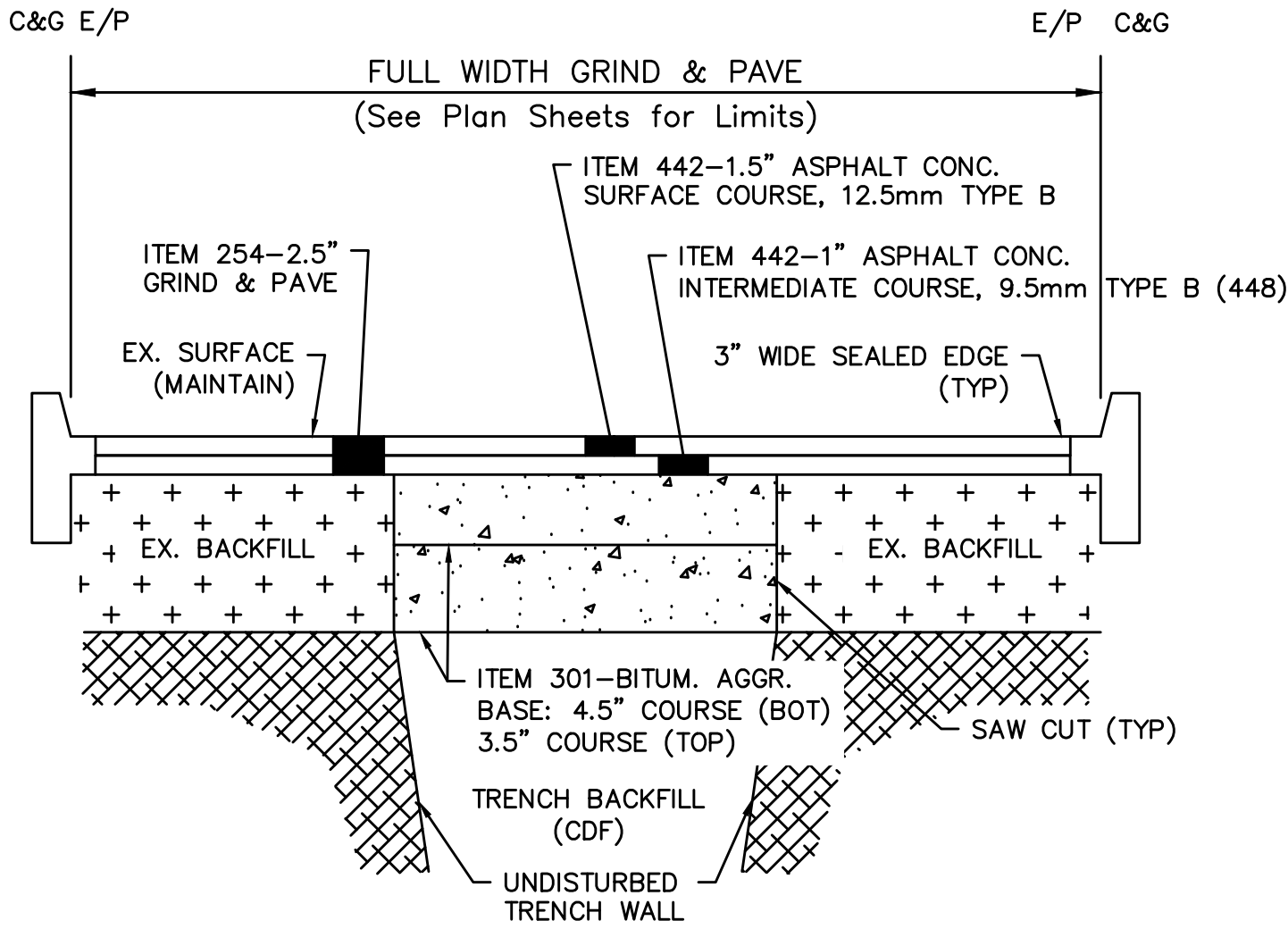
## PLAN AND PROFILE

ACC. NO. 78258

SHEET 31 OF 34

S# 5933

PATH: N:\J085\2018\18026 - KENWOOD HILLS LOCAL SEWER\WATER\_WASTEWATER\600 CAD\BASE\RA CONSULTANTS KENWOOD.DWG  
DATE: Mar 19, 2025 - 12:22 PM  
PLOTTED BY: AREND



HCEO ROADWAY NOTES:

- SAW CUT FULL DEPTH PAVEMENT WITH WET DIAMOND BLADE SAW. VERMEER WILL NOT BE PERMITTED.
- VERTICAL FACE OF EXISTING PAVEMENT SHALL BE CLEANED BY COMPRESSED AIR AND WETTED PRIOR TO PLACING CONCRETE.
- PLACE AND COMPACT ASPHALT CONCRETE SURFACE COURSE IN ACCORDANCE WITH ODOT CMS ITEM 401.
- ITEM 702.04-EDGES OF NEW ASPHALT SURFACE COURSE SHALL BE SEALED WITH A UNIFORM 3" WIDTH OF HOT APPLIED ASPHALT BINDER.
- IF THE PROPOSED PAVEMENT WIDTH IS GREATER THAN 3'-0", THE CONTRACTOR HAS THE OPTION TO USE ODOT CMS ITEM 301-ASPHALT CONCRETE BASE.
  - ASPHALT CONCRETE BASE MUST BE PLACED AND COMPACTED IN TWO EQUAL LIFTS, THE TOTAL THICKNESS OF ASPHALT BASE SHALL BE 8".
  - PRIOR TO PLACING THE ASPHALT BASE, ALL VERTICAL SURFACE SHALL BE CLEANED AND COATED WITH BITUMINOUS MATERIAL IN ACCORDANCE WITH ODOT 407.02.
- BUTT JOINTS ARE NECESSARY AT INTERSECTING STREETS.
- ALL CASTING ADJUSTMENTS, REMOVAL OF PAVEMENT MARKERS, AND THE INSTALLATION OF NEW LINE STRIPING AND MARKERS SHALL BE INCLUDED.
- ALL NECESSARY DRIVEWAY ADJUSTMENTS AND SEALING SHALL ALSO BE INCLUDED. THERE WILL BE NO ADDITIONAL COMPENSATION FOR PAVING WORK; ALL COST ASSOCIATED WITH PAVING AND DRIVEWAYS SHOULD BE INCLUDED IN THE BID PRICE UNDER INSTALLATION OF 8" SEWER CONDUIT.

HCEO DRIVEWAY NOTES:

- REGULATED HAMILTON COUNTY ENGINEERS OFFICE DETAILS (SEE HCEO "DRIVEWAY RULES AND REGULATIONS" MANUAL ([http://www.hamilton-co.org/engineer/permits\\_manuals.htm](http://www.hamilton-co.org/engineer/permits_manuals.htm)))
- PLATE 13 - TEMPORARY PAVEMENT RESTORATION
  - PLATE 15 - TYPICAL RESTORATION SECTIONS
  - PLATE 30 - TRENCH PLATES

PIPE ALTERNATES  
(SEE PROFILE VIEW CONDUIT LABELS)

| * | LPFM (INSTALLED PER ASTM D321) | <ul style="list-style-type: none"><li>PVC SDR 35 (ASTM D3034) w/ FLEXIBLE ELASTOMERIC SEALS (ASTM D3212)</li><li>DUCTILE IRON PIPE (ASTM A746) w/ PUSH-ON JOINTS (AWWA C111)</li></ul>                                                                                                                                |
|---|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|   |                                | <ul style="list-style-type: none"><li>HDPE DR11 (ASTM D3035) IPS w/ BUTT FUSION JOINTS (ASTM F1055) AND MOLDED FITTINGS (ASTM 3261)</li><li>PVC SDR 21 PIPE AND FITTINGS (ASTM D2241) w/ FLEXIBLE ELASTOMERIC SEALS (ASTM D3139); ALL FITTINGS SHALL BE RESTRAINED AND CONFORM TO THE REQUIREMENTS OF SDR21</li></ul> |

UTILITY CONTACT INFORMATION

|            |                                                                                                                                                                       |           |                                                                                                                                                                                  |
|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ELECTRIC:  | DUKE ENERGY<br>139 EAST FOURTH STREET, ROOM 467A<br>CINCINNATI, OHIO 45202<br>MR. CONAN GIBSON<br>(513) 287-4653<br>conan.gibson@duke-energy.com                      | SANITARY: | METROPOLITAN SEWER DISTRICT<br>OF GREATER CINCINNATI<br>1600 GEST STREET<br>CINCINNATI, OHIO 45204<br>MR. DANIEL ANDERSON<br>(513) 582-0475<br>daniel.anderson@cincinnati-oh.gov |
|            | GAS:                                                                                                                                                                  |           | GREATER CINCINNATI WATER WORKS<br>4747 SPRING GROVE AVENUE<br>CINCINNATI, OHIO 45232<br>MR. RICK RIESS<br>(513) 591-5058<br>rick.riess@gcww.cincinnati-oh.gov                    |
| TELEPHONE: | DUKE ENERGY<br>139 EAST FOURTH STREET, ROOM 406A<br>CINCINNATI, OHIO 45202<br>MR. RICHARD HACKER<br>(513) 287-4653<br>richard.hacker@duke-energy.com                  | CABLE:    | SPECTRUM/TIME WARNER CABLE<br>11252 CORNELL PARK DRIVE<br>CINCINNATI, OHIO 45242<br>MR. JIM O'REILLY<br>(513) 386-5483<br>Jim.O'Reilly@charter.com                               |
|            | ALTA FIBER<br>221 EAST FOURTH STREET, BLDG. 121-900<br>P.O. BOX 2301<br>CINCINNATI, OHIO 45201-2301<br>MR. BRECK COWEN<br>(513) 565-7187<br>breck.cowen@altafiber.com |           |                                                                                                                                                                                  |

DUKE ENERGY NOTES TO CONTRACTOR:

CONTRACTOR SHALL CONTACT THE COMPANY PRIOR TO EXCAVATION IN THE VICINITY OF ELECTRIC UNDERGROUND FACILITIES OR WHEN WORKING IN CLOSE PROXIMITY OF OVERHEAD ELECTRIC FACILITIES.

- FOR FIELD INSPECTOR TO LOCATE UNDERGROUND ELECTRIC LINES: IN OHIO, CALL "OHIO UTILITIES PROTECTION SERVICE", 1-800-362-2764; IN KENTUCKY, CALL "KENTUCKY DIG SAFELY", 1-800-752-6007. THESE CALLS SHOULD BE MADE AT LEAST 48 HOURS IN ADVANCE, EXCLUDING SATURDAYS, SUNDAYS, AND STATE LEGAL HOLIDAYS.
- FOR NOTIFICATION OF CONSTRUCTION ACTIVITY NEAR ENERGIZED ELECTRIC FACILITIES OR NEEDING A POLE SUPPORTED, CALL (513) 421-9500. WITHIN 2 DAYS A REPRESENTATIVE FROM OUR CONSTRUCTION DIVISION WILL CONTACT THE CUSTOMER AND VERIFY THE LOCATION AND CONDITIONS OF THE JOB SITE. AFTER THIS CONTACT HAS BEEN MADE, A LINE CREW WILL BE OUT TO COVER UP ELECTRIC LINES OR HOLD THE POLE WITHIN 2 TO 3 DAYS.
- FOR ADDITIONAL UNDERGROUND ELECTRIC RECORD INFORMATION CALL (513) 287-2454.
- FOR ELECTRIC ENGINEERING NOTIFICATION, AGREEMENTS AND CORRESPONDENCE, ADDRESS TO: MR. TOM BIRKENHAUER, DUKE ENERGY CORPORATION, DISTRIBUTION DESIGN ENGINEERING, ROOM 467A, 139 E. FOURTH STREET, P.O. BOX 960 CINCINNATI, OHIO 45202-0960

CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGES TO ELECTRIC FACILITIES DURING CONSTRUCTION.

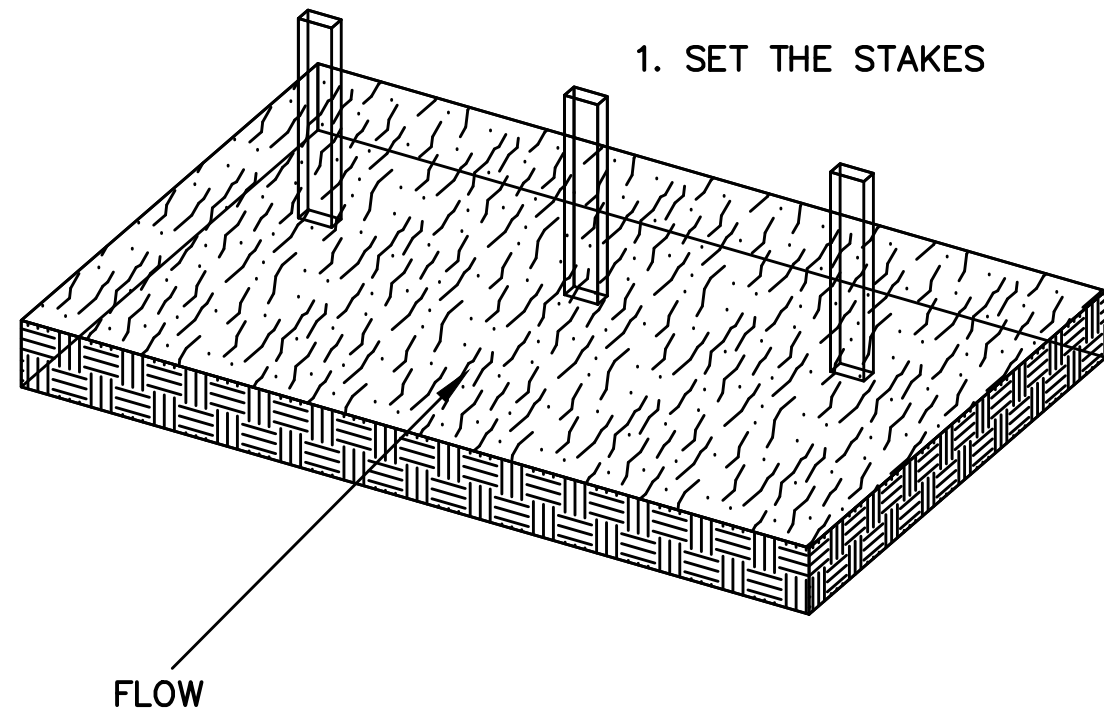
ELECTRIC FACILITIES TO BE KEPT IN SERVICE AT ALL TIMES.

CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPORTING EXISTING ELECTRIC FACILITIES AFFECTED BY THE PROPOSED CONSTRUCTION

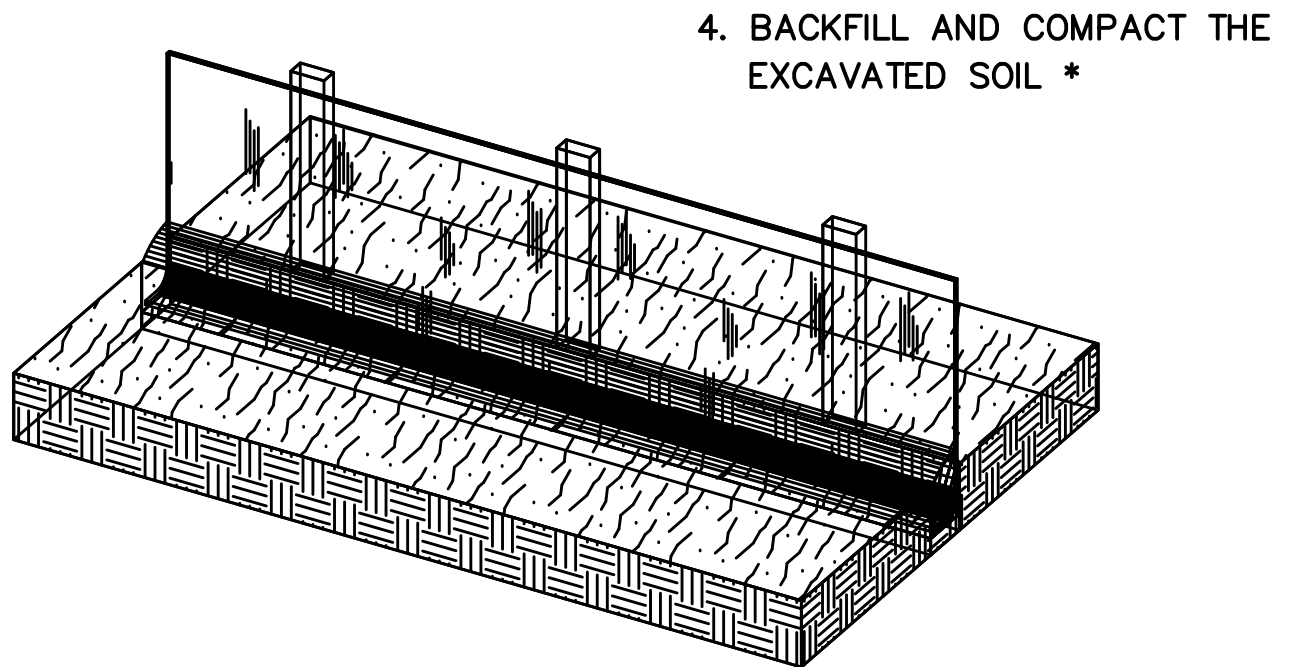
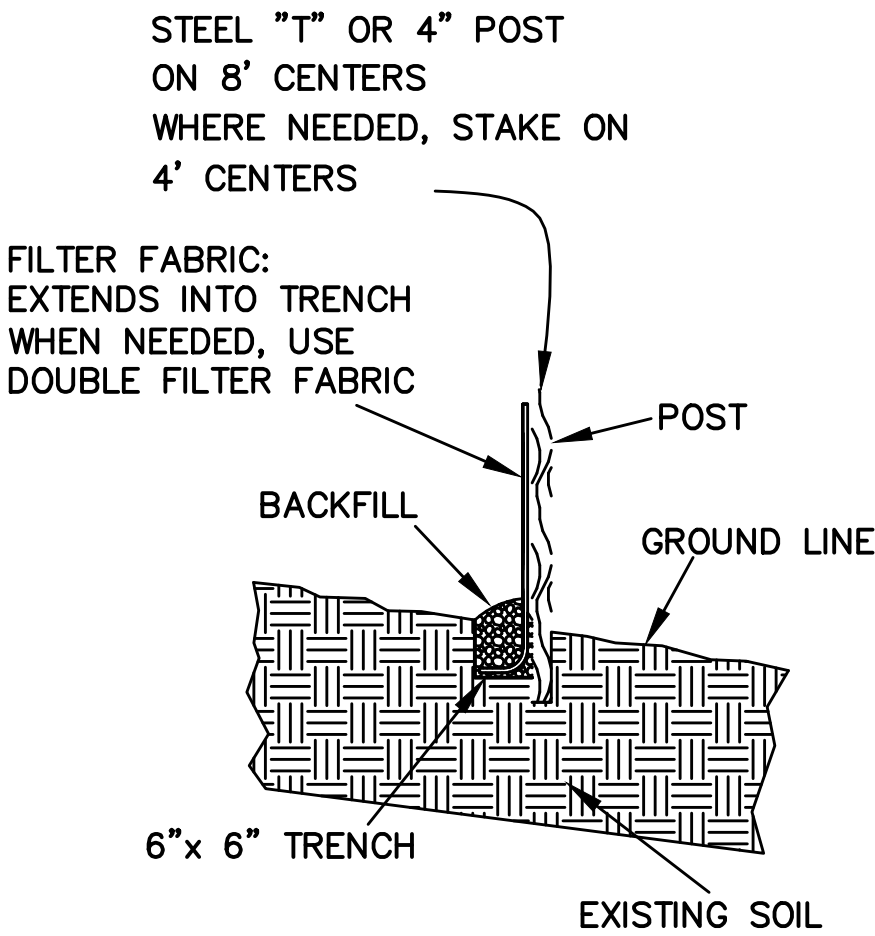
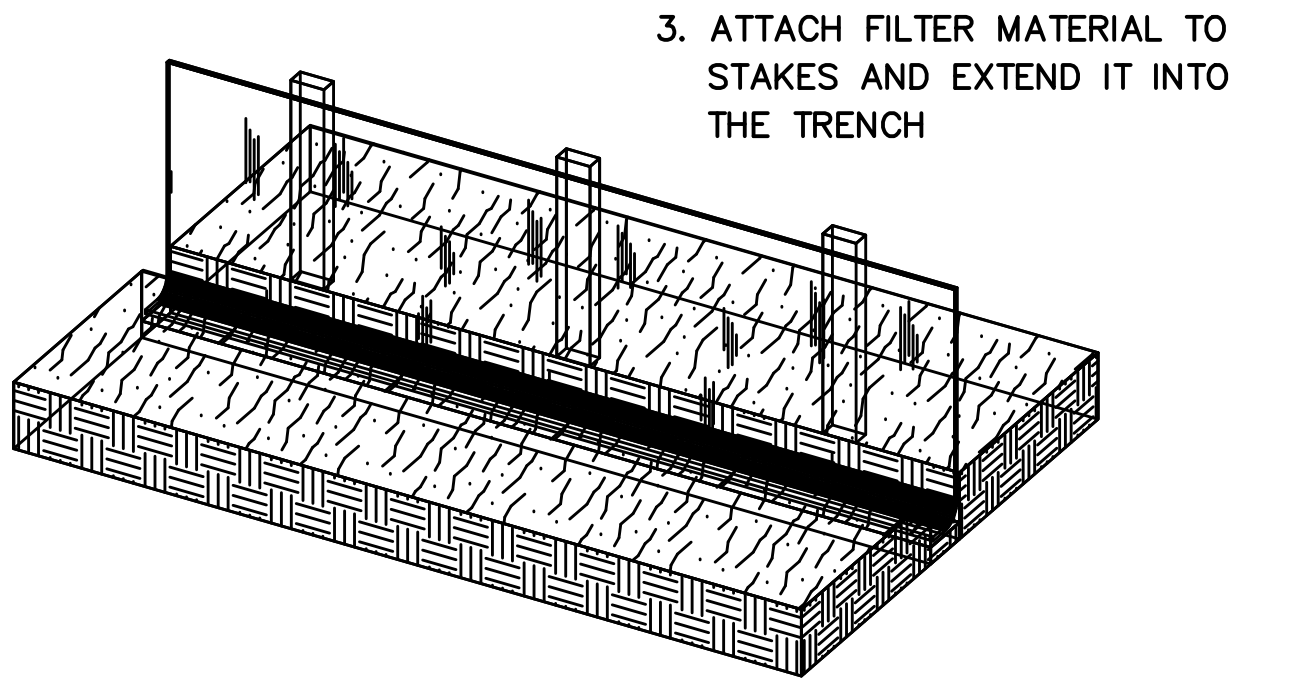
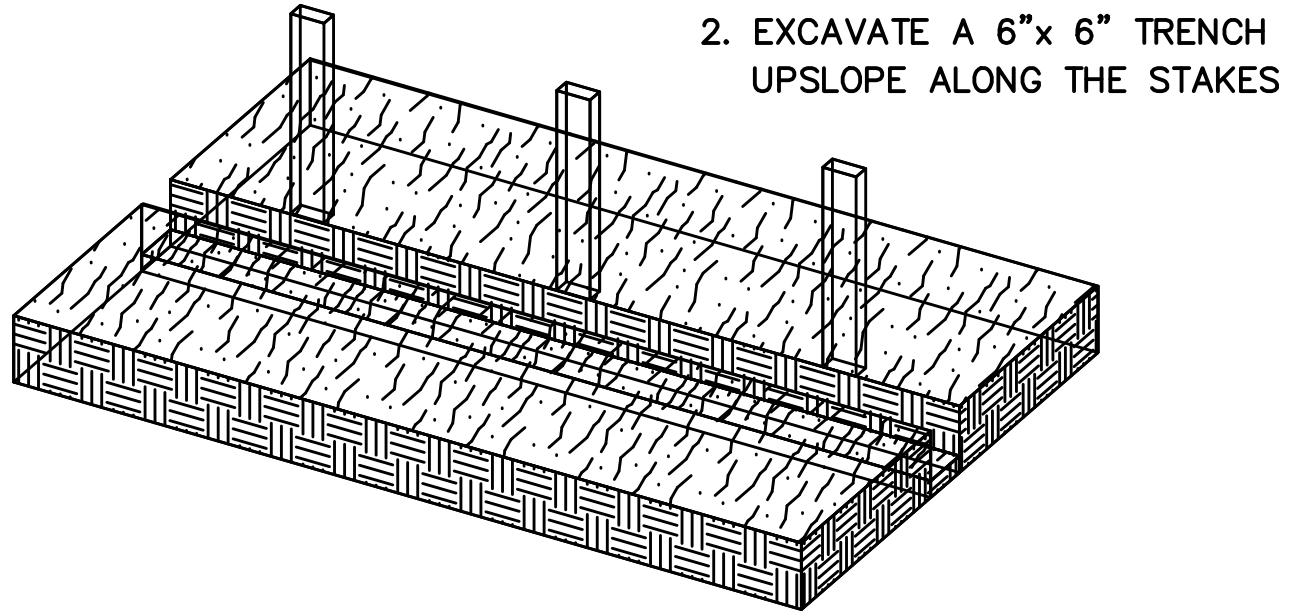
- WHERE HIGH PRESSURE OIL FILLED PIPE TYPE CABLE INSTALLATION ARE EXPOSED OR OTHERWISE INTERFERED WITH BY THE CONTRACTOR, PROTECTION BY THE CONTRACTOR WILL BE REQUIRED AGAINST DAMAGE TO THE COATING OR SURROUNDING THERMAL SAND ENVELOPE.
- WHERE CONCRETE ENCASED CONDUIT SYSTEMS OR DIRECT BURIED CABLE SYSTEMS ARE EXPOSED OR OTHERWISE INTERFERED WITH, THE CONTRACTOR SHALL PROTECT THE SYSTEM AS NECESSARY AGAINST DAMAGE. AS SOON AS FEASIBLE, THE CONTRACTOR SHALL TAKE ADDITIONAL APPROPRIATE STEPS TO PROVIDE PERMANENT MEASURES TO RESTORE SUPPORT. THE METHODS USED SHALL BE BASED ON CONDITIONS TO BE DETERMINED BY THE UTILITY.
- WHERE POLES OR ANCHORS THAT SUPPORT OVERHEAD ELECTRIC FACILITIES ARE EXPOSED OR OTHERWISE INTERFERED WITH, THE CONTRACTOR SHALL PROTECT THEM FROM DAMAGE AND PROVIDE TEMPORARY SUPPORT TO INSURE THE INTEGRITY OF THE SYSTEM. AS SOON AS FEASIBLE, THE CONTRACTOR SHALL TAKE ADDITIONAL APPROPRIATE STEPS TO PROVIDE PERMANENT MEASURES TO RESTORE SUPPORT. THE METHODS USED SHALL BE BASED ON CONDITIONS TO BE DETERMINED BY THE UTILITY.
- WHERE THE DEPTH OF EXCAVATION FOR THE PROPOSED WORK IS GREATER THAN FIVE (5) FEET, THE CONTRACTOR SHALL SHEET AND SHORE THE TRENCH TO CONTINUOUSLY MAINTAIN THE SUPPORT OF ELECTRIC FACILITIES AT LOCATIONS WHERE THE ELECTRIC FACILITIES ARE WITHIN THE ZONE OF INFLUENCE ADJACENT TO THE EXCAVATION AS DETERMINED BY THE NATURAL ANGLE OF RESPONSE OF THE SOIL.
- ALL DAMAGE TO ELECTRIC FACILITIES AND SERVICE REQUIRING ADJUSTMENTS, RELOCATION AND/OR REPAIRS WILL BE MADE AT THE CONTRACTOR'S COST.

CONTRACTOR SHALL NOT BACKFILL EXPOSED ELECTRIC FACILITIES UNTIL THE COMPANY HAS INSPECTED ITS FACILITY OR PERFORMED ANY ADJUSTMENTS AND/OR MAINTENANCE THAT MAY BE REQUIRED.

SHOULD CONTRACTOR DAMAGE ELECTRIC FACILITIES, CONTRACTOR SHALL IMMEDIATELY NOTIFY THE DUKE ENERGY CALL CENTER AT (513) 421-9500. CONTRACTOR SHALL KEEP EVERYONE CLEAR OF DAMAGED ELECTRIC FACILITIES UNTIL COMPANY PERSONNEL ARRIVE AT THE WORK SITE.



CONTRACT  
DRAWING  
PRINTS NOT BEARING THIS STAMP WERE  
MADE PRIOR TO ADVERTISING FOR BIDS  
AND ARE TO BE CONSIDERED OBSOLETE  
FOR CONTRACT PURPOSES.



REINFORCED SILT FENCE INSTALLATION DETAIL  
NOT TO SCALE

| DESIGNED BY: GEW | REVISIONS |       |              |
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|                  | BY:       | DATE: | DESCRIPTION: |
| DRAWN BY: GAU    |           |       |              |
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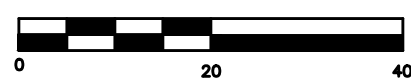
THE METROPOLITAN SEWER DISTRICT  
OF GREATER CINCINNATI  
HAMILTON COUNTY, OHIO



PROPOSED PROJECT NO. 10370025

FROM THE INT. OF KENWOOD HILLS DR. AND KENWOOD HILLS TO THE CABANA CLUB DR. FROM THE CUL-DE-SAC OF MAPLE RIDGE DR AND VISTA RIDGE DR TO THE CABANA CLUB DR ALONG COACHLITE

SCALE: HORIZ. 1"=20'  
VERT. 1"=10'



NOTES & DETAILS

PLAN

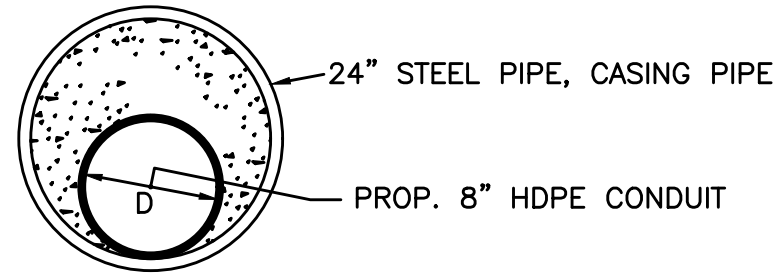
ACC. NO. 78259

SHEET 32 OF 34

SS# 5933

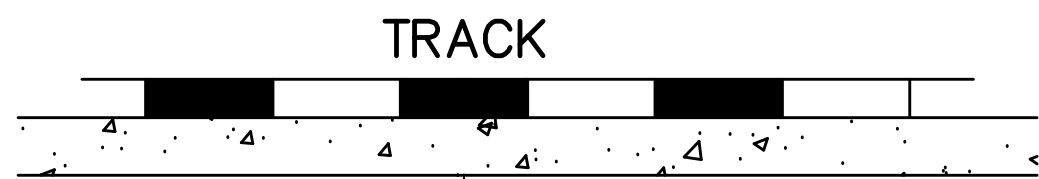
FILL WITH A LEAN (1 TO 8) MIXTURE OF CEMENT AND SAND OR CEMENT, SAND AND PEA GRAVEL RAMMED OR BLOWN INTO PLACE DRY. SOME POSITIVE MEANS TO ASSURE THAT THE SPACE IS COMPLETELY FILLED, FREE OF ANY VOIDS, SHALL BE USED.

| PROP. CONDUIT SIZE "D" | MINIMUM STEEL CASING WALL THICKNESS |
|------------------------|-------------------------------------|
| 8"                     | 0.375"                              |



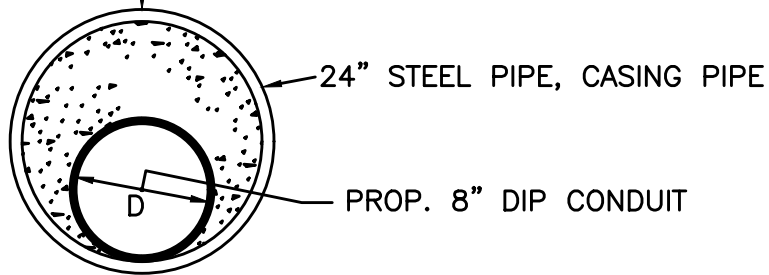
NO SCALE

JACK AND BORE INSTALLATION OF  
HDPE PIPE DETAIL, BETWEEN  
COACHLITE WAY AND CABANA CLUB  
NOT TO SCALE

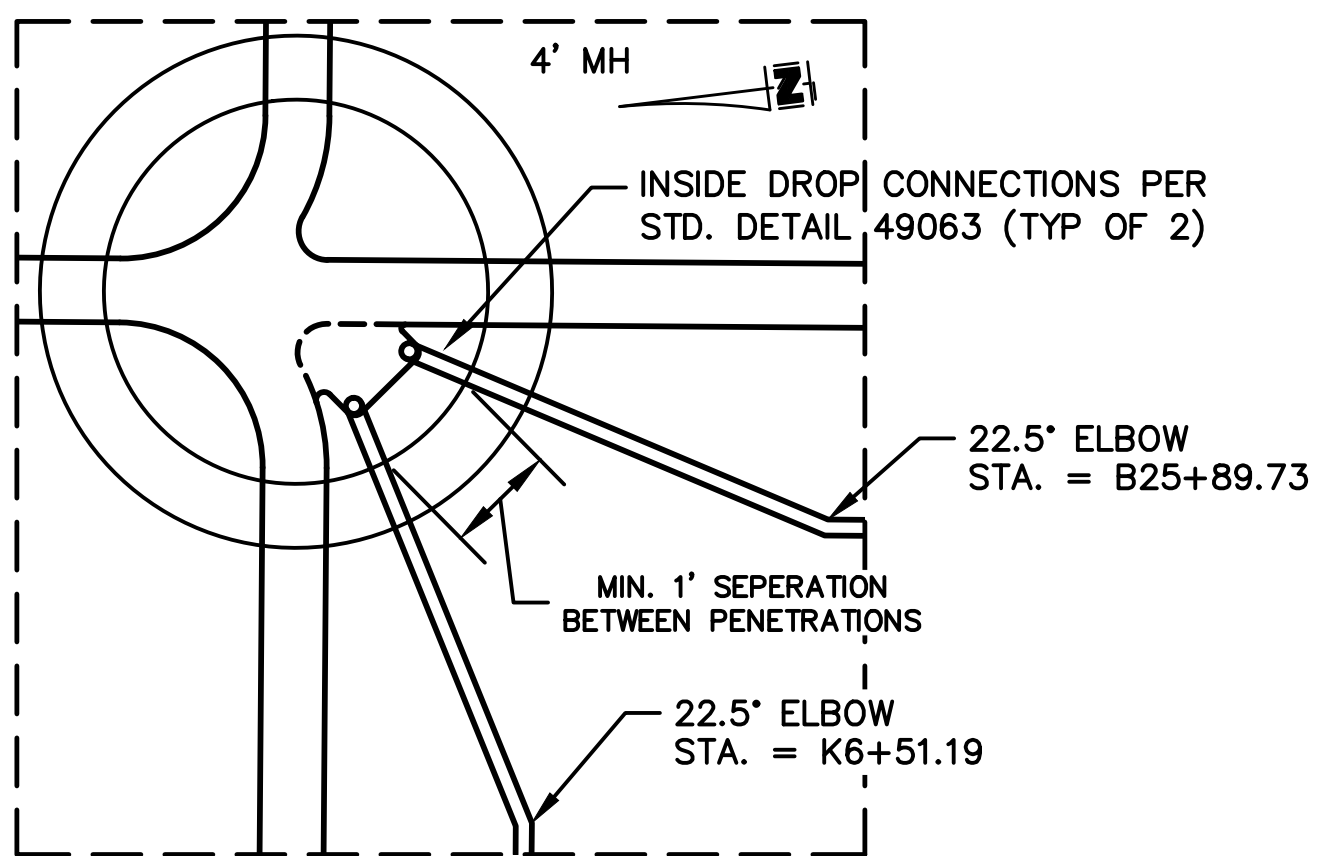


FILL WITH A LEAN (1 TO 8) MIXTURE OF CEMENT AND SAND OR CEMENT, SAND AND PEA GRAVEL RAMMED OR BLOWN INTO PLACE DRY. SOME POSITIVE MEANS TO ASSURE THAT THE SPACE IS COMPLETELY FILLED, FREE OF ANY VOIDS, SHALL BE USED.

| PROP. CONDUIT SIZE "D" | MINIMUM STEEL CASING WALL THICKNESS |
|------------------------|-------------------------------------|
| 8"                     | 0.375"                              |



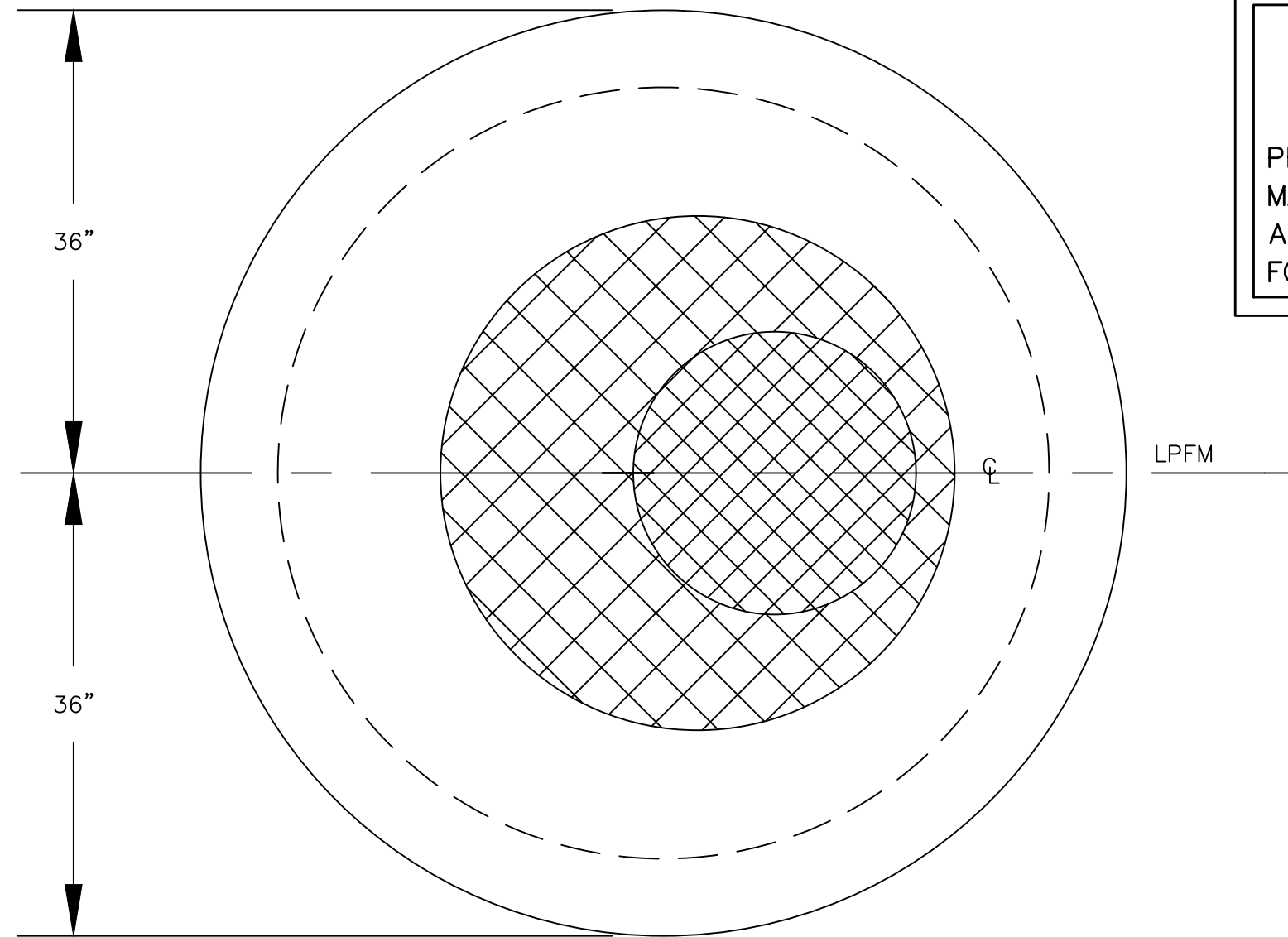
PROPOSED JACK AND BORE INSTALLATION OF DIP  
PIPE DETAIL RAILROAD SECTION  
NOT TO SCALE



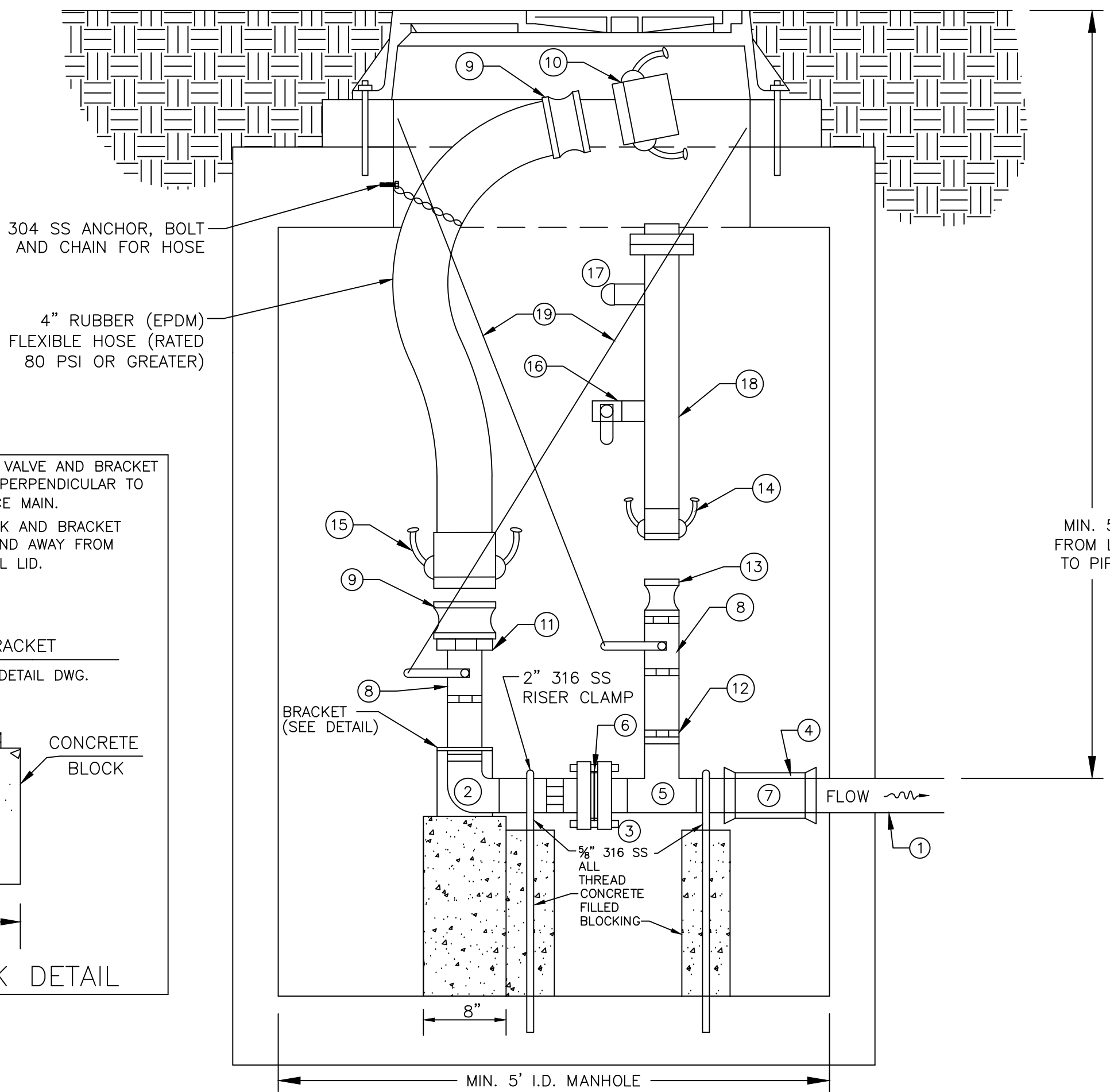
PROP. MH 23 DETAIL PLAN  
SCALE: 1"=2'  
SEE SHEET 25

MATERIAL LIST - ALL MATERIAL TO BE 316  
STAINLESS STEEL

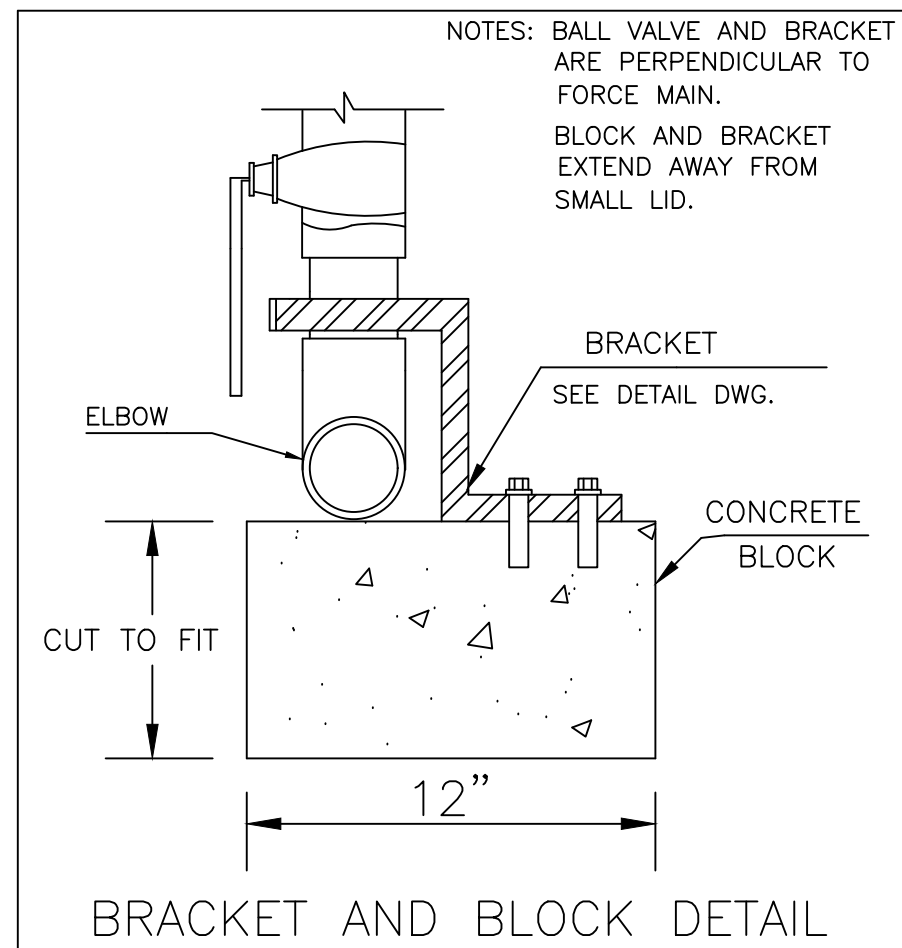
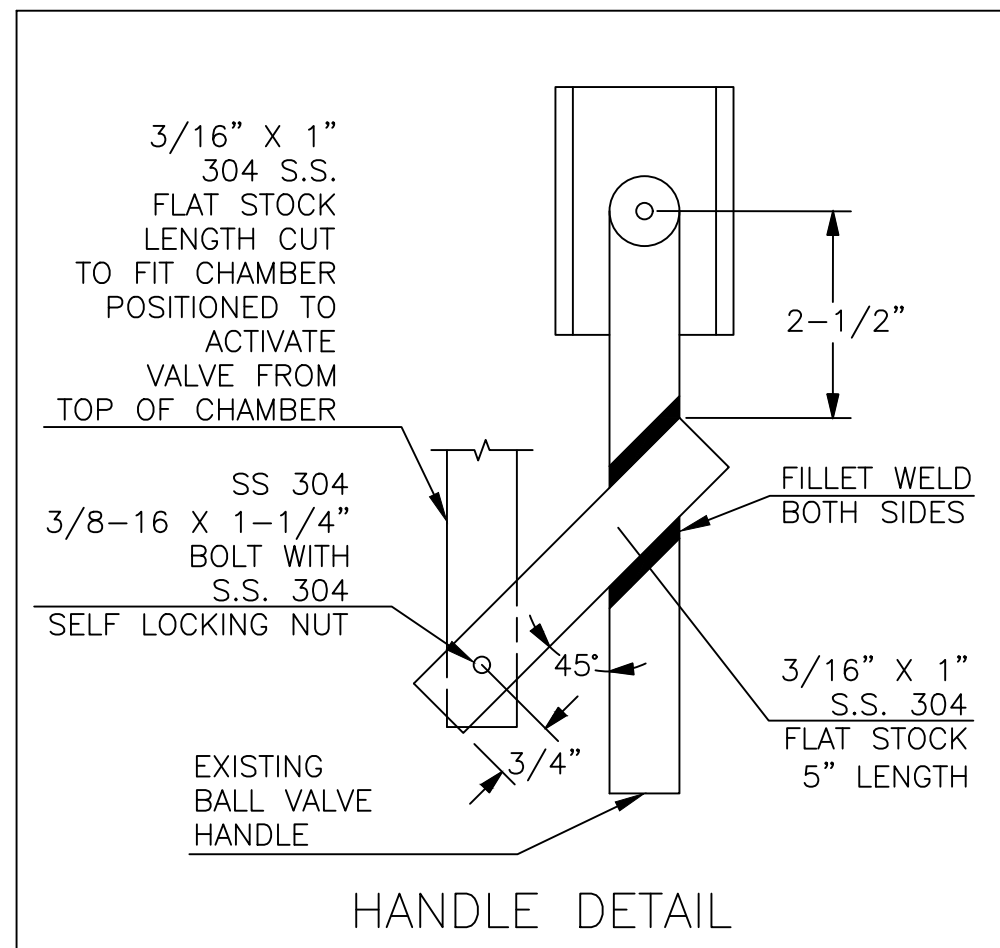
- 2" SCHEDULE 40 PVC SOCKET FEMALE ADAPTER OR HDPE EQUIVALENT
- 2" 90° ELBOW
- FLANGES WITH HEX HEAD CAP SCREW 5/8" x 3-1/2"  
18-8 SS WITH 18-8 WASHER AND 18-8 5/8"-11 NYLOCK NUT
- 2" THREADED PIPE CUT TO LENGTH
- 2"x2"x2" TEE
- 1/8" RUBBER GASKET
- ROMAC MODEL #511 EPOXY COATED WITH SS HARDWARE
- 2" FULL PORT BALL VALVE
- 4" MALE CAMLOCK
- 4" DUST CAP
- 2"x4" REDUCER
- 2" NIPPLE
- 2" MALE CAMLOCK
- 2" FEMALE CAMLOCK WITH HITCH PINS INSTALLED IN LOCK POSITION
- 4" FEMALE CAMLOCK WITH HITCH PINS INSTALLED IN LOCK POSITION
- 1" FULL PORT BALL VALVE
- 1" PIPE CAP
- VENT-TECH OR VENT-O-MAT AIR RELEASE VALVE
- VALVE ACTIVATION HANDLES (SEE DETAIL)



CONTRACT  
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PRINTS NOT BEARING THIS STAMP WERE  
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FOR CONTRACT PURPOSES.



2 INCH TERMINAL  
AIR RELEASE VALVE (ARV)  
AND FLUSHING MANHOLE  
NOT TO SCALE



| DESIGNED BY: GEW | BY: | DATE: | REVISIONS | DESCRIPTION: |
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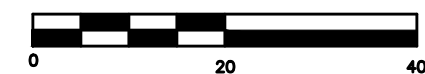
THE METROPOLITAN SEWER DISTRICT  
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PROPOSED PROJECT NO. 10370025

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NOTES & DETAILS

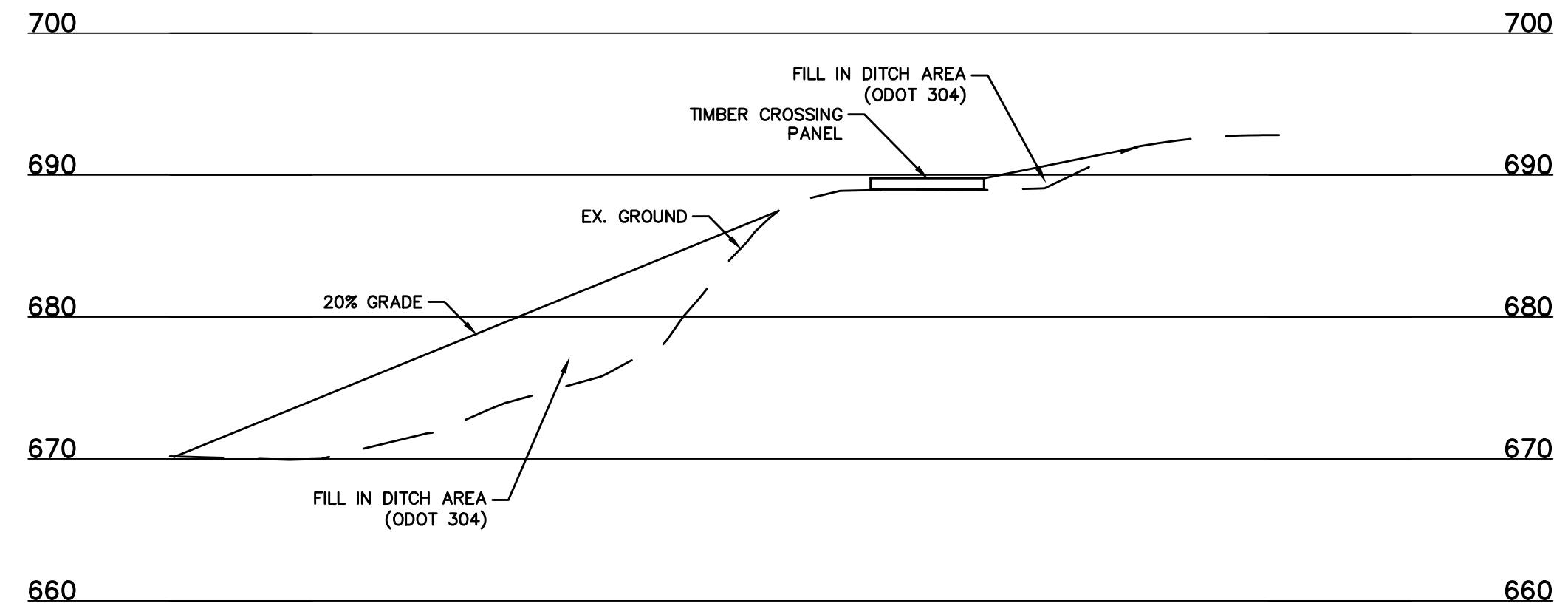
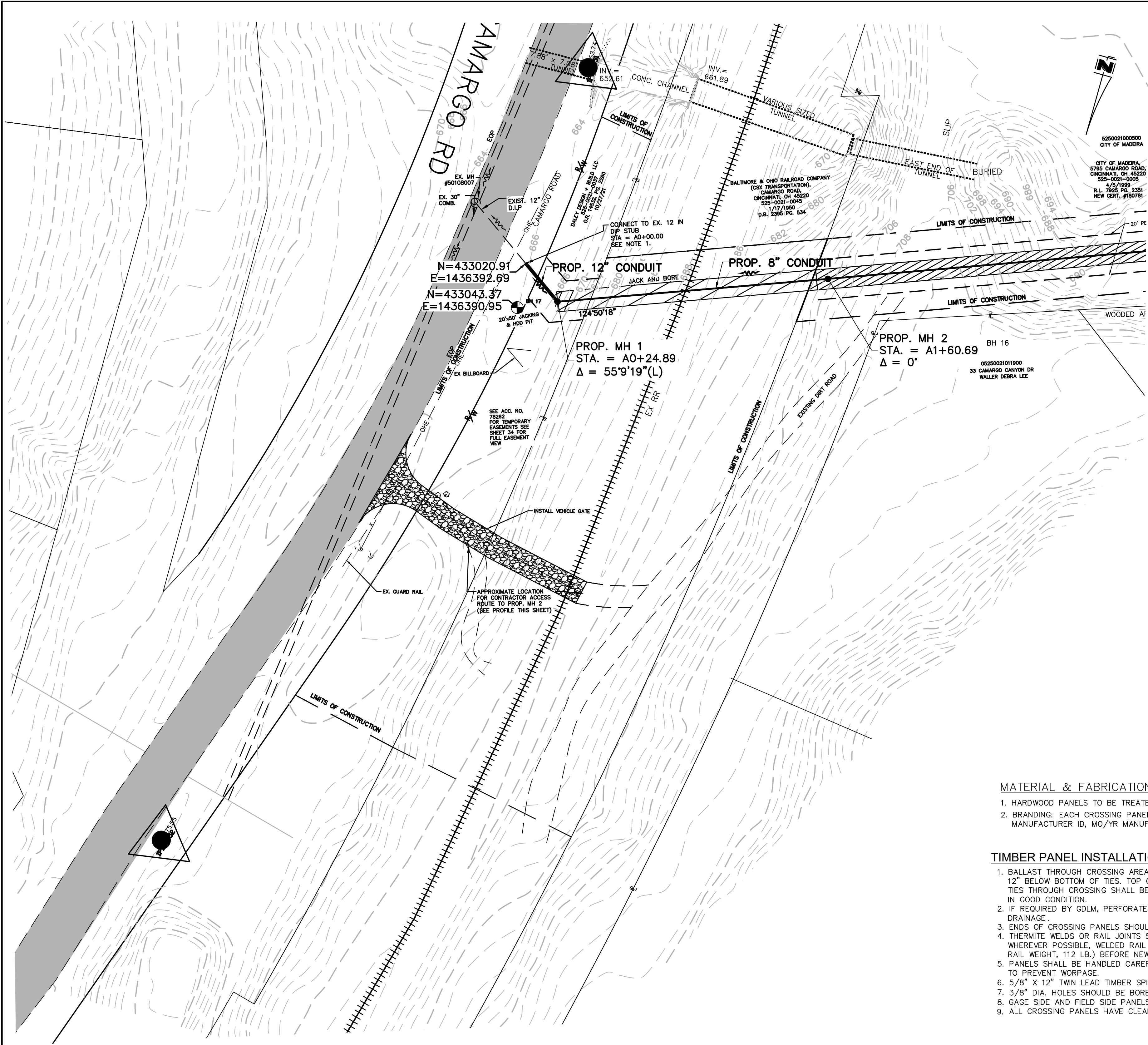
PLAN

ACC. NO. 78260

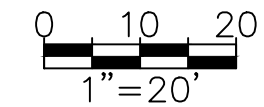
SHEET 33 OF 34

SS# 5933

Details



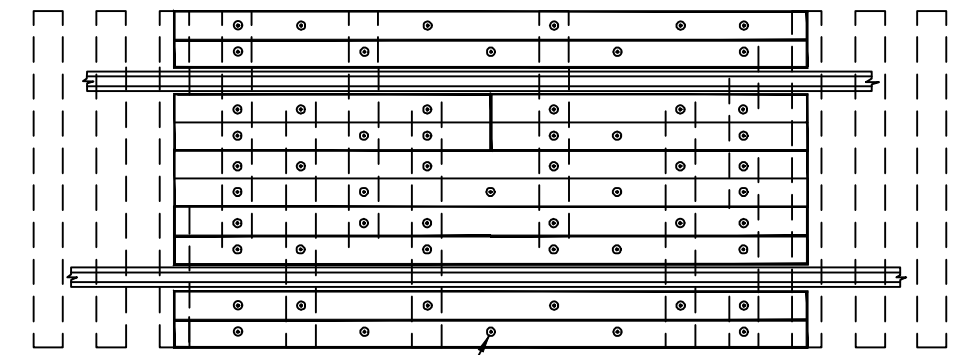
PROFILE OF ACCESS ROAD AT RAILROAD CROSSING



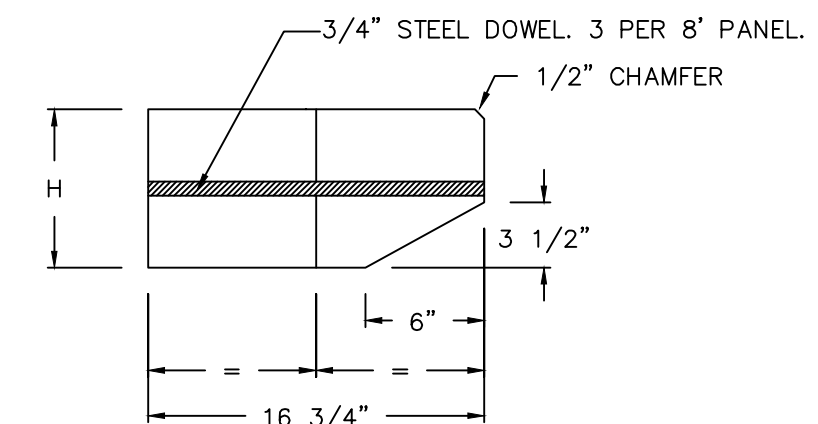
### CONTRACT DRAWING

PRINTS **NOT** BEARING THIS STAMP WERE  
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FOR CONTRACT PURPOSES.

TYPICAL 16' CROSSING

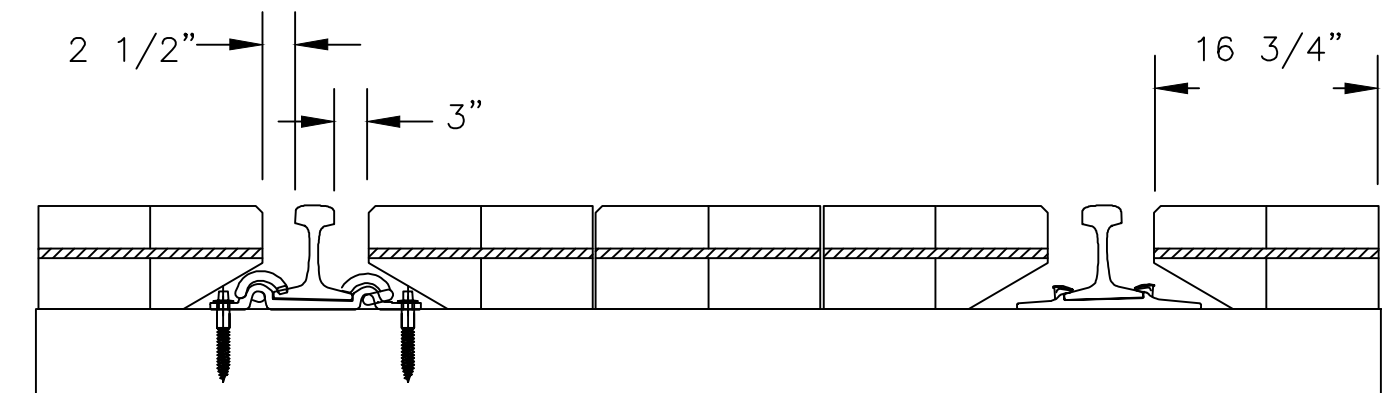


LOCATION TIMBER SPIKES  
8' & 16' PANELS SHOWN, TYPICAL



TWO PIECE PANEL

H = 7" FOR 100 LB RAIL  
H = 7 1/2" FOR 115 LB RAIL  
H = 8" FOR 136 LB. RAIL



8'6" CROSS TIE

TIMBER CROSSING PANEL FOR  
LOW DENSITY RAIL TRAFFIC ON 8'-6" TIES

### MATERIAL & FABRICATION

1. HARDWOOD PANELS TO BE TREATED MIXED HARDWOOD, FREE OF WANE.
2. BRANDING: EACH CROSSING PANEL SHALL BE IDENTIFIED ON THE END WITH MANUFACTURER ID, MO/YR MANUFACTURED, WEIGHT RAIL.

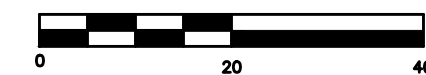
### TIMBER PANEL INSTALLATION

1. BALLAST THROUGH CROSSING AREA SHALL BE CLEAN CRUSHED ROCK BALLAST, 12" BELOW BOTTOM OF TIES. TOP OF BALLAST TO BE 2" BELOW TOP OF TIES. TIES THROUGH CROSSING SHALL BE NO. 5 TREATED HARDWOOD 19 3/16" ON CENTERS, IN GOOD CONDITION.
2. IF REQUIRED BY GDLN, PERFORATED DRAINAGE PIPE RECOMMENDED FOR PROPER DRAINAGE.
3. ENDS OF CROSSING PANELS SHOULD BE CENTERED ON TIE.
4. THERMITE WELDS OR RAIL JOINTS SHOULD BE LOCATED OUTSIDE THE CROSSING. WHEREVER POSSIBLE, WELDED RAIL SHOULD BE RELAYED THROUGH CROSSING (MINIMUM RAIL WEIGHT, 112 LB.) BEFORE NEW TIES AND CROSSING PANELS ARE INSTALLED.
5. PANELS SHALL BE HANDLED CAREFULLY, SLATTED AND STACKED ON LEVEL GROUND TO PREVENT WORKPAGE.
6. 5/8" X 12" TWIN LEAD TIMBER SPIKES FURNISHED SEPARATELY.
7. 3/8" DIA. HOLES SHOULD BE BORED IN FIELD, TO PATTERN SHOWN.
8. GAGE SIDE AND FIELD SIDE PANELS ARE INTERCHANGEABLE.
9. ALL CROSSING PANELS HAVE CLEARANCE FOR PANDROL PLATES AND CLIPS.

### PROPOSED PROJECT NO. 10370025

FROM THE INT. OF KENWOOD HILLS DR. AND KENWOOD HILLS TO THE CABANA CLUB DR. FROM  
THE CUL-DE-SAC OF MAPLE RIDGE DR AND VISTA RIDGE DR TO THE CABANA CLUB DR ALONG  
COACHLITE

SCALE HORIZ. 1"=30'



### RAILROAD ESMT

### PLAN AND PROFILE

ACC. NO. 78261

SHEET 34 OF 34

SS# 5933

| DESIGNED BY: GEW | REVISIONS |       |  | DESCRIPTION: |
|------------------|-----------|-------|--|--------------|
|                  | BY:       | DATE: |  |              |
| DRAWN BY: GAU    |           |       |  |              |
|                  |           |       |  |              |
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|                  |           |       |  |              |



THE METROPOLITAN SEWER DISTRICT  
OF GREATER CINCINNATI  
HAMILTON COUNTY, OHIO



FOR EASEMENT DRAWING SEE ACC. NO. 78262

ACAD DRAWING NAME: KENWOOD HILLS BASEMAP.DWG

PATH: N:\0085\2018\18926 - KENWOOD HILLS LOCAL SEWER WATER\600 CAD\SSM\BASE\KENWOOD HILLS BASEMAP.DWG  
DATE: Mar 19, 2025 - 12:22 PM  
PLOTTED BY: AREND