

**Memo To:** Plan Holders

**From:** Tom Williams, P.E.  
HWU General Manager



**Re:** KY 2084/Airline Road Utility Relocation Project- Addendum No. 1  
Bid Reference: 2021 - 28

**Erlanger, Kentucky Date:** 2 September 2021

Questions from Bidders, and Answers, so far:

1. Question: Can HWU provide information on the depths of the conflicting pipelines to be crossed by the relocated water mains and sewer force main?

Answer: A copy of the pertinent portions of the KYTC construction drawings showing the proposed storm sewers to be constructed as part of the intersection improvements is attached for the bidders' reference. The depth of cover to the top of the existing force main at an air release valve in the vicinity of the conflict relocation "Line D" is 42 inches.

NOTE: The proposed KYTC storm sewers will not yet exist at the time of this project, which is being done to clear the way for their later construction.

2. Question: Is the intent on both the 8" and 12" water main tie-ins to completely shut the system down in order to perform the cut-in work? If so, what are the allowable hours and duration for the work to be completed? Can you provide a map of additional information on where valves might be in the vicinity of the project?

Answer: Because an entire subdivision would be impacted by a complete shutdown of the water mains in the intersection, HWU will construct an 8 X 12-inch pressure tap at Connection 4, and an insertion valve at Connection 3 that will allow for a continuation of water service to customers to the east along Airline Rd. This will require that Line C water main be constructed first.

Once this work has been completed, the work area is anticipated to be able to be isolated for a period of up to 6 hours once the tanks serving the outlying areas have been filled. HWU staff will close existing valves or, where none are available, install insertion valves to isolate

the water mains for the remaining tie-ins. All work is to be coordinated through Jamie Wilke (270-823-6877).

The shut-down is to take place during normal working hours.

3. Question: On the 4" sanitary force main work, can flow data be provided to see how much material we would be dealing with? What direction is the force main fed from?

Answer: This force main runs from the Gardenmile Road Pump Station to a manhole next to Clay Street between Lincoln Avenue and Canoe Creek. The existence of an air release valve behind the roofing company property at the NW corner of KY 2084 and Airline Road implies that this work will be taking place near the high point of this force main. Therefore, it is not expected that an excessive amount of wastewater will need to be dealt with when opening this pipeline.

4. Question: Is it acceptable to bore the 8" water main across KY 2084 in lieu of open cutting?

Answer: Installing the 8-Inch water main across KY 2084 by HDD is an acceptable alternative using either HDPE, DR9, or Fusible C-900 PVC, pressure class 165, DR 25. Inside pipe dimension is to be approximately equivalent to that of the pipe product specified, with reducers employed at either end as necessary. Pipe joining to terminus fittings shall be as per HWU Standard Specifications for the pipe material used.

Bid opening date/time remains the same: **1:30 p.m., 9 September 2021.**

Bidders should submit their sealed bids by customary means, prior to the bid opening time. At the specified time, a video teleconference will be broadcast to the public as allowed under KRS 61.826 and KRS 45A.080(4). No primary location will be set for public attendance as per Kentucky Attorney General Opinion 20-05, and no public attendance will be permitted at this meeting due to the highly contagious nature of COVID-19.

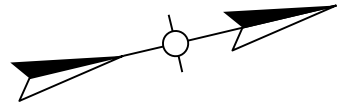
The Bid Opening will be broadcast on

Zoom: <https://zoom.us/j/93788399103?pwd=OUp3SmtpaGRIZkVnYUVMQVdUNTf2dz09>

If you have further questions, feel free to call me at 270.826.2421 (Office).

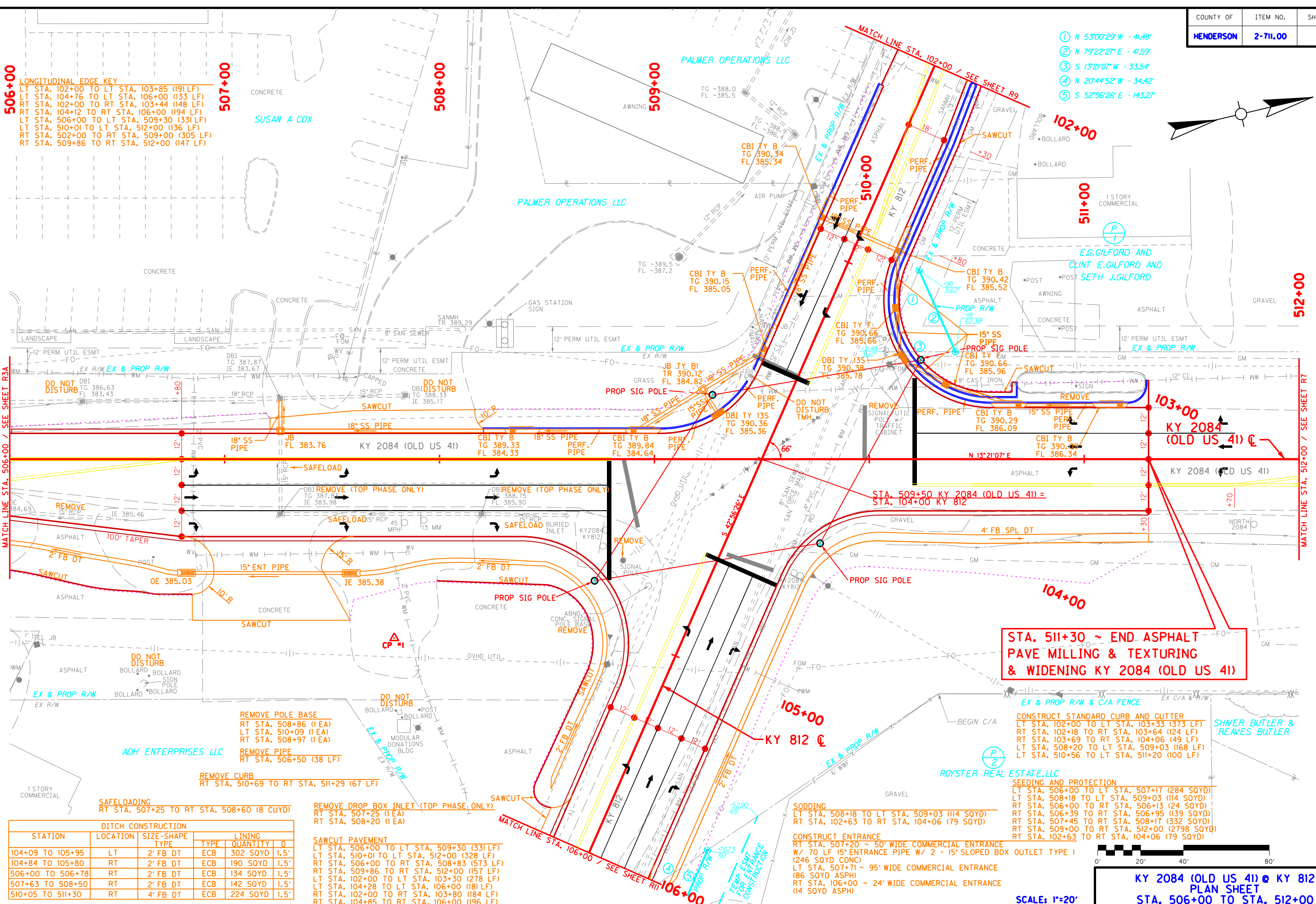
Cc: Bart Boles, HWU Project Engineer  
Warner Mattingly, HWU Project Engineer  
Kathy Manker, HWU Procurement Manager

- ① N 53°00'29" W - 41.48'
- ② N 79°22'27" E - 41.59'
- ③ S 13°21'07" W - 33.54'
- ④ N 20°44'52" W - 34.42'
- ⑤ S 52°56'26" E - 143.27'



**506+00**  
**LONGITUDINAL EDGE KEY**  
 LT STA. 102+00 TO LT STA. 103+85 (191 LF)  
 LT STA. 104+76 TO LT STA. 106+00 (133 LF)  
 RT STA. 102+00 TO RT STA. 103+44 (148 LF)  
 RT STA. 104+12 TO RT STA. 106+00 (194 LF)  
 LT STA. 506+00 TO LT STA. 509+30 (331 LF)  
 LT STA. 510+01 TO LT STA. 512+00 (136 LF)  
 RT STA. 502+00 TO RT STA. 509+00 (305 LF)  
 RT STA. 509+86 TO RT STA. 512+00 (147 LF)

FILE NAME: C:\PWORKING\AECOM\_DS20\_NA\_2019\MITCH\_THOMAS\AECOM.COM\DM508043\RD0500PL.DGN  
 USER: \*\*\*\*\*  
 DATE PLOTTED: September 10, 2020  
 E-SHEET NAME:  
 MicroStation v8.11.9.867



**STA. 511+30 ~ END ASPHALT  
 PAVE MILLING & TEXTURING  
 & WIDENING KY 2084 (OLD US 41)**

**CONSTRUCT STANDARD CURB AND GUTTER**  
 LT STA. 102+00 TO LT STA. 103+33 (373 LF)  
 RT STA. 102+18 TO RT STA. 103+64 (124 LF)  
 RT STA. 103+69 TO RT STA. 104+06 (49 LF)  
 LT STA. 508+20 TO LT STA. 509+03 (168 LF)  
 LT STA. 510+56 TO LT STA. 511+20 (100 LF)

**SEEDING AND PROTECTION**  
 LT STA. 506+00 TO LT STA. 507+17 (284 SOYD)  
 LT STA. 508+18 TO LT STA. 509+03 (114 SOYD)  
 RT STA. 506+00 TO RT STA. 506+13 (24 SOYD)  
 RT STA. 506+39 TO RT STA. 506+95 (139 SOYD)  
 RT STA. 507+45 TO RT STA. 508+17 (332 SOYD)  
 RT STA. 509+00 TO RT STA. 512+00 (2798 SOYD)  
 RT STA. 102+63 TO RT STA. 104+06 (179 SOYD)

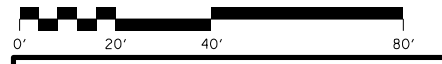
**SODDING**  
 LT STA. 508+18 TO LT STA. 509+03 (114 SOYD)  
 RT STA. 507+63 TO RT STA. 509+06 (79 SOYD)

**CONSTRUCT ENTRANCE**  
 RT STA. 507+20 ~ 50' WIDE COMMERCIAL ENTRANCE  
 W/ 70 LF 15" ENTRANCE PIPE W/ 2 - 15" SLOPED BOX OUTLET TYPE 1  
 (246 SOYD CONC)  
 LT STA. 507+71 ~ 95' WIDE COMMERCIAL ENTRANCE  
 (86 SOYD ASPH)  
 RT STA. 106+00 ~ 24' WIDE COMMERCIAL ENTRANCE  
 (14 SOYD ASPH)

DITCH CONSTRUCTION					
STATION	LOCATION	SIZE-SHAPE	TYPE	QUANTITY	D
104+09 TO 105+95	LT	2' FB DT	ECB	302 SOYD	1.5'
104+84 TO 105+80	RT	2' FB DT	ECB	190 SOYD	1.5'
506+00 TO 506+78	RT	2' FB DT	ECB	134 SOYD	1.5'
507+63 TO 508+50	RT	2' FB DT	ECB	142 SOYD	1.5'
510+05 TO 511+30	RT	4' FB DT	ECB	224 SOYD	1.5'

**REMOVE DROP BOX INLET (TOP PHASE ONLY)**  
 RT STA. 507+25 (1 EA)  
 RT STA. 508+20 (1 EA)

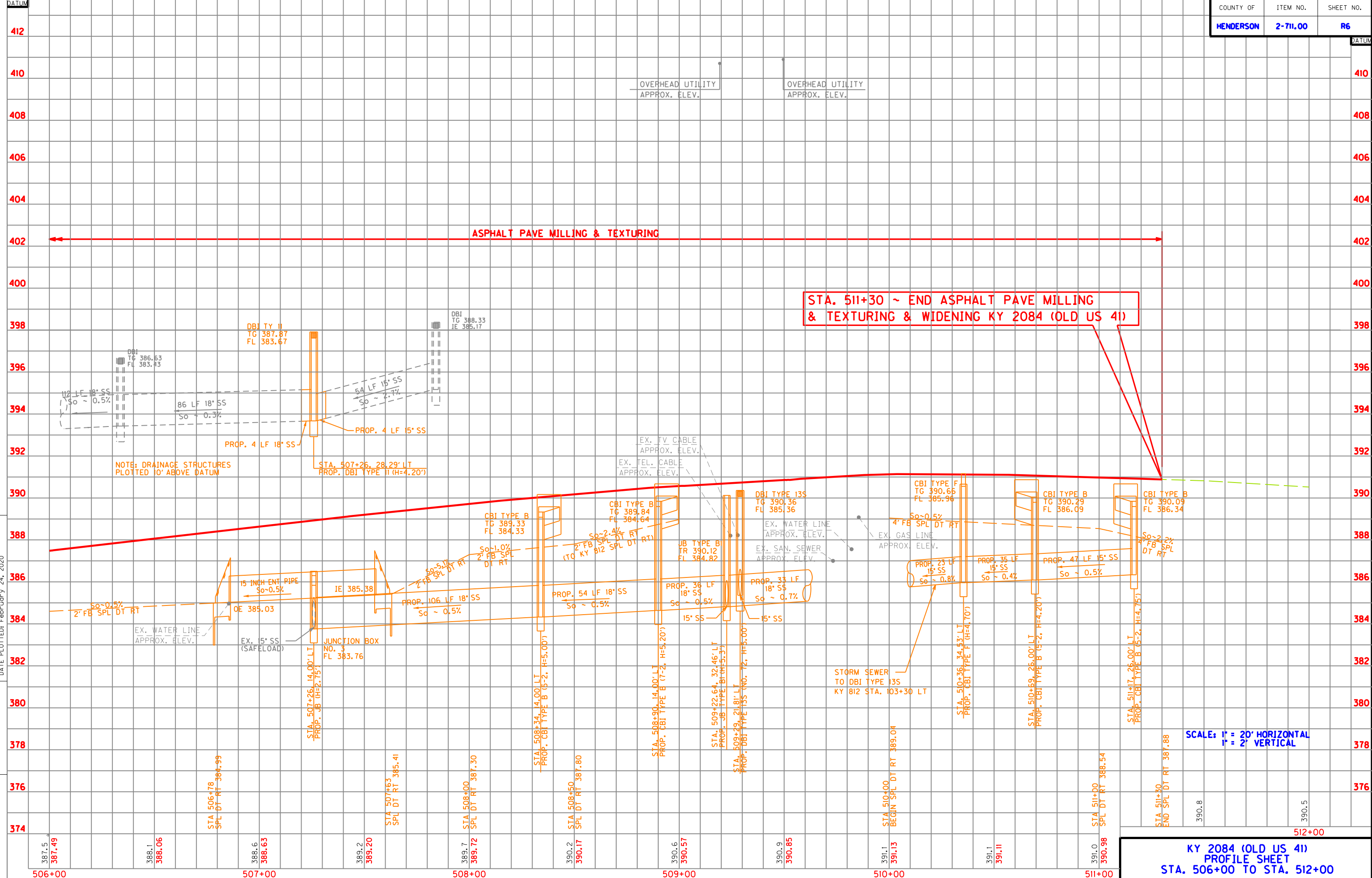
**SAWCUT PAVEMENT**  
 LT STA. 506+00 TO LT STA. 509+30 (331 LF)  
 LT STA. 510+01 TO LT STA. 512+00 (328 LF)  
 RT STA. 506+00 TO RT STA. 508+83 (573 LF)  
 RT STA. 509+86 TO RT STA. 512+00 (157 LF)  
 LT STA. 102+00 TO LT STA. 103+30 (278 LF)  
 LT STA. 104+28 TO LT STA. 106+00 (181 LF)  
 RT STA. 102+00 TO RT STA. 103+80 (184 LF)  
 RT STA. 104+85 TO RT STA. 106+00 (196 LF)



**KY 2084 (OLD US 41) @ KY 812  
 PLAN SHEET  
 STA. 506+00 TO STA. 512+00**

SCALE: 1"=20'

FILE NAME: C:\PWORKING\AECOM\_DS20\_NA\_2019\MITCH\_THOMAS\AECOM.COM\DS08043\RO0600PPA.DGN  
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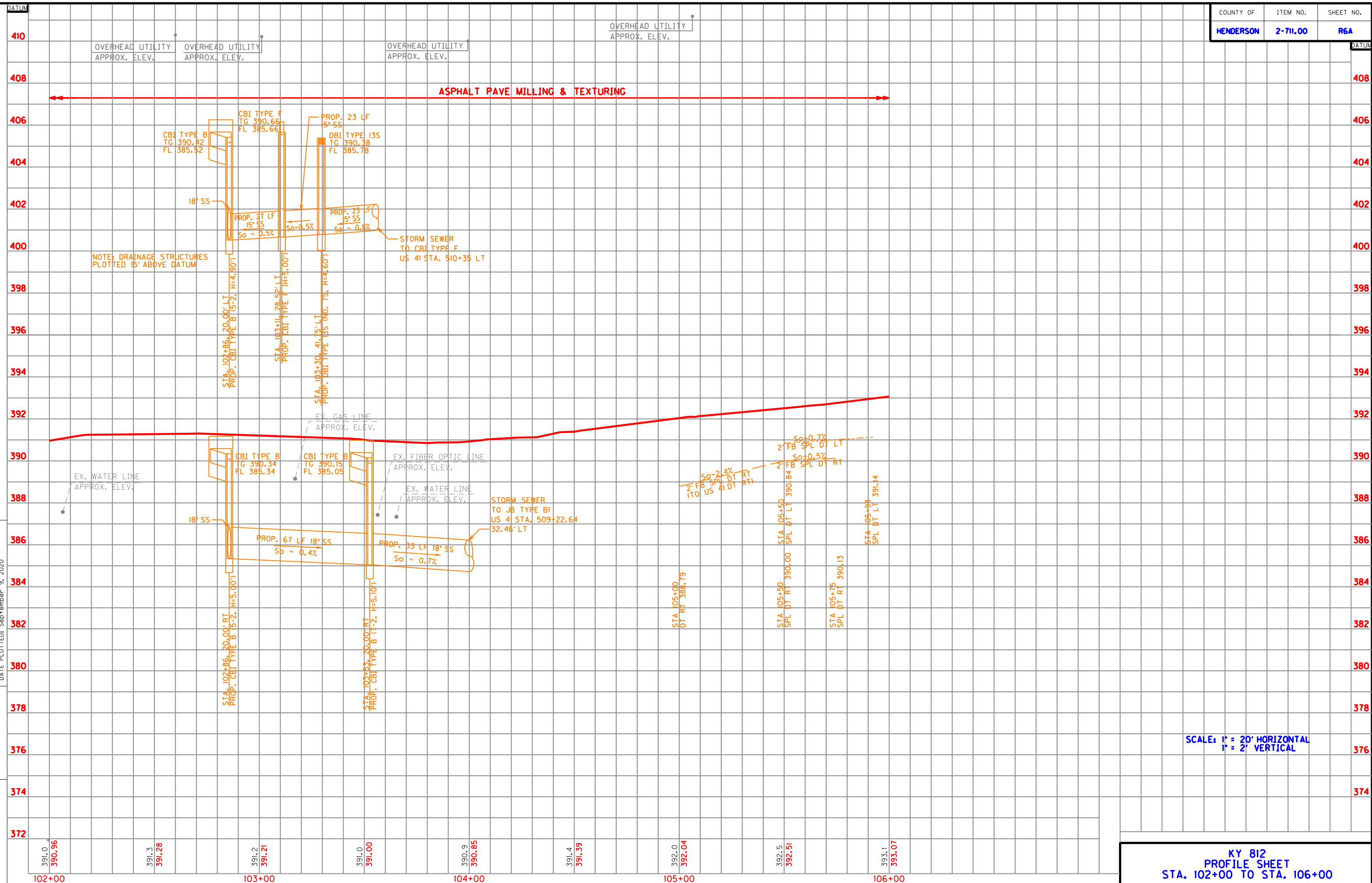


SCALE: 1" = 20' HORIZONTAL  
1" = 2' VERTICAL

**KY 2084 (OLD US 41)  
PROFILE SHEET  
STA. 506+00 TO STA. 512+00**

MicroStation v8.11.9.867 E-SHEET NAME: DATE PLOTTED: September 9, 2020 USER: \*\*\* FILE NAME: C:\PWORKING\AECOM\DS20\_NA\_2019\MITCH\_THOMAS\AECOM.COM\DS08043\060600PRA.DGN

COUNTY OF	ITEM NO.	SHEET NO.
HENDERSON	2-711.00	R6A



SCALE: 1" = 20' HORIZONTAL  
1" = 2' VERTICAL

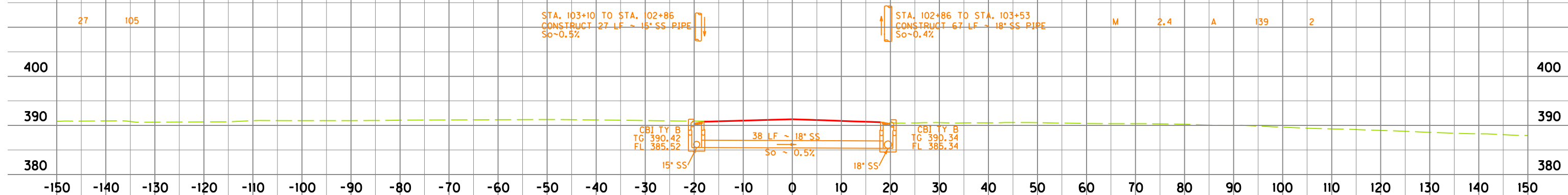
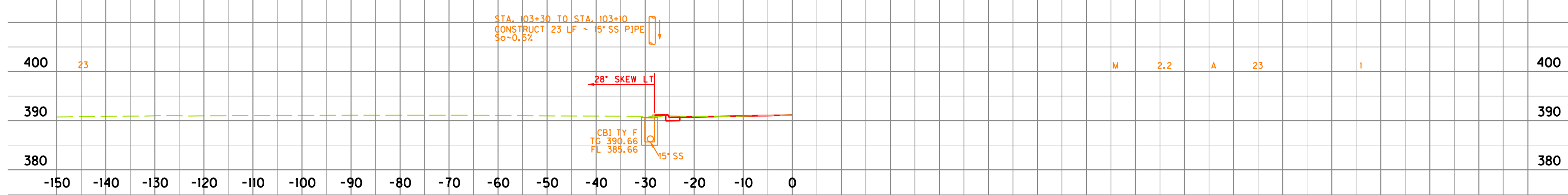
KY 812  
PROFILE SHEET  
STA. 102+00 TO STA. 106+00

PIPE DRAINAGE SHEET 1 of 5

COUNTY OF	ITEM NO.	SHEET NO.
HENDERSON	2-711.00	R33

STORM SEWER PIPE

15"	18"																			DESIGN PH LEVEL	COVER HEIGHT	ABRASION	FABRIC-GEOTEXTILE CLASS. 2 FOR PIPE	CBI TY B	CBI TY F
L	I	N	E	A	R	F	E	E	T												FT		SOYD	EACH	EACH



SCALE: 1"=10'

KY 2084 (OLD US 41) & KY 812  
PIPE SECTIONS  
STA. 102+86 & STA. 103+11

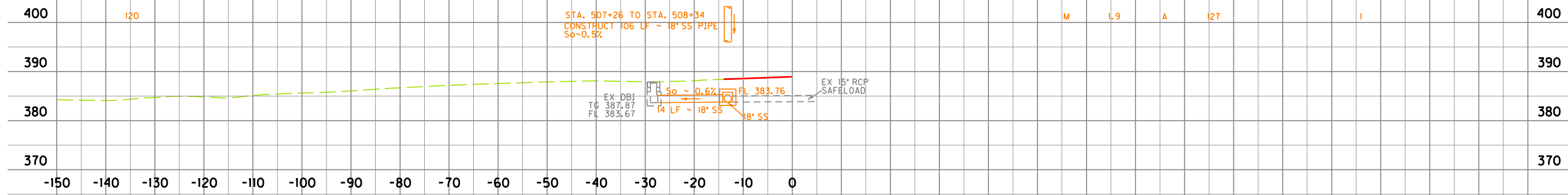
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 E-SHEET NAME: MicroStation v8.11.9.867

PIPE DRAINAGE SHEET 2 of 5

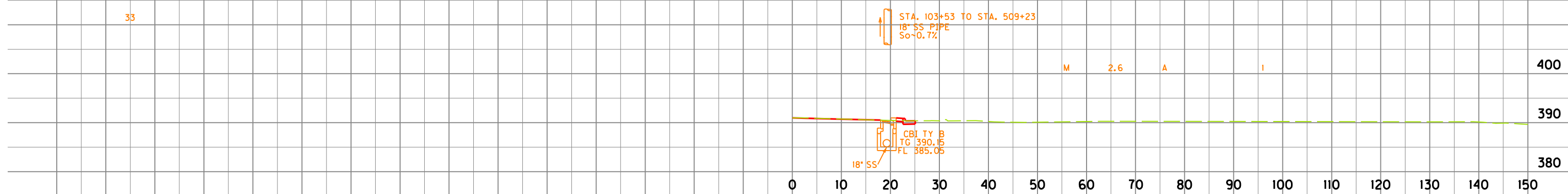
COUNTY OF	ITEM NO.	SHEET NO.
HENDERSON	2-711.00	R34

STORM SEWER PIPE

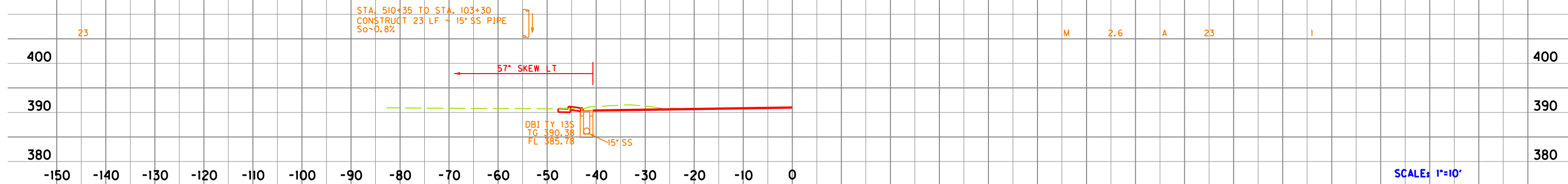
15"	18"																		DESIGN PH LEVEL	COVER HEIGHT	ABRASION	FABRIC-GEOTEXTILE CLASS FOR PIPE	CBI TY B	DBI TY 135	JUNCTION BOX NO. 3
L	I	N	E	A	R	F	E	E	T											FT	SOYD	EACH	EACH	EACH	



507+26 @ 0° SKEW  
 CONSTRUCT JUNCTION BOX (No. 3)  
 CONSTRUCT 14 LF 18" SS



103+53 @ 0° SKEW  
 CONSTRUCT CBI TYPE B (7-2, H=5.10')



103+30 @ 0° SKEW  
 CONSTRUCT DBI TYPE 135 (No. 75, H=4.60')

SCALE: 1"=10'

KY 2084 (OLD US 41) & KY 812  
 PIPE SECTIONS  
 STA. 103+53 & STA. 507+26

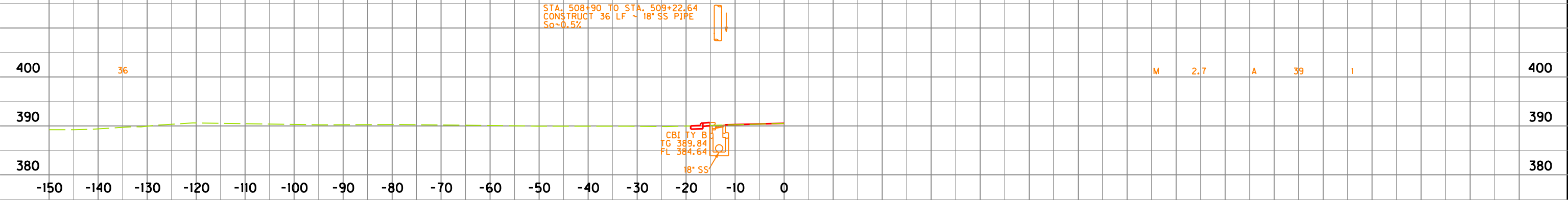
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 DATE PLOTTED: September 10, 2020  
 E-SHEET NAME:  
 MicroStation v8.11.9.867

PIPE DRAINAGE SHEET 3 of 5

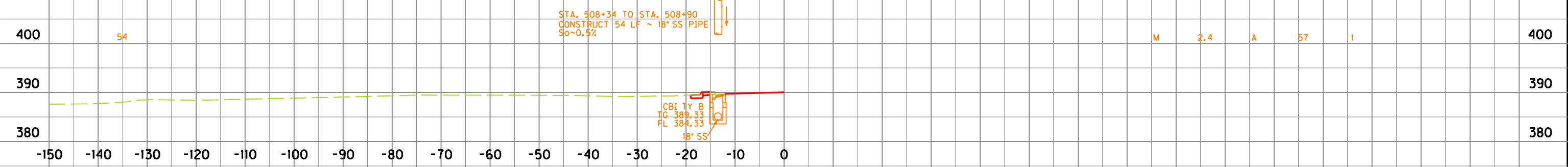
COUNTY OF	ITEM NO.	SHEET NO.
HENDERSON	2-711.00	R35

STORM SEWER PIPE

18"																				DESIGN PH LEVEL	COVER HEIGHT	ABRASION	FABRIC- GEOTEXTILE COVER FOR PIPE	CBI TY B
L	I	N	E	A	R	F	E	E	T												FT		SOYD	EACH



508+90 @ 0° SKEW  
CONSTRUCT CBI TYPE B (7-2, H=5.20')



508+34 @ 0° SKEW  
CONSTRUCT CBI TYPE B (5-2, H=5.00')

SCALE: 1"=10'

KY 2084 (OLD US 41) & KY 812  
PIPE SECTIONS  
STA. 508+27 & STA. 508+90

FILE NAME: C:\PWORKING\AECOM\_DS20\_NA\_2019\MITCH\_THOMAS\AECOM.COM\DM508043\RO3500PPL.DGN  
 USER: \*\*\*\*\*  
 DATE PLOTTED: September 10, 2020  
 E-SHEET NAME: MicroStation v8.11.9.867

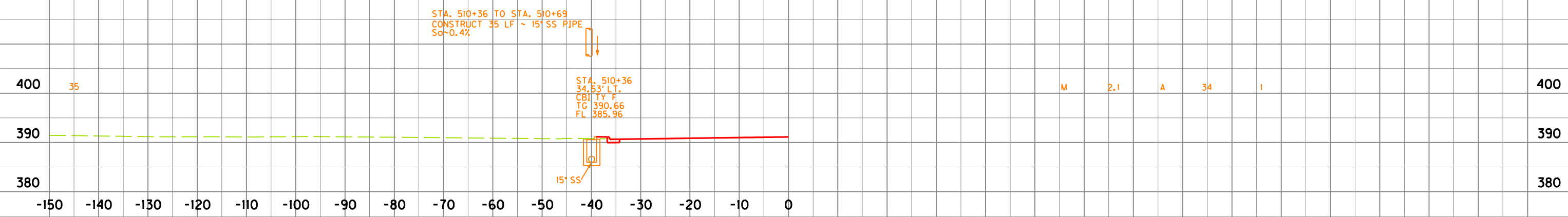


PIPE DRAINAGE SHEET 4 of 5

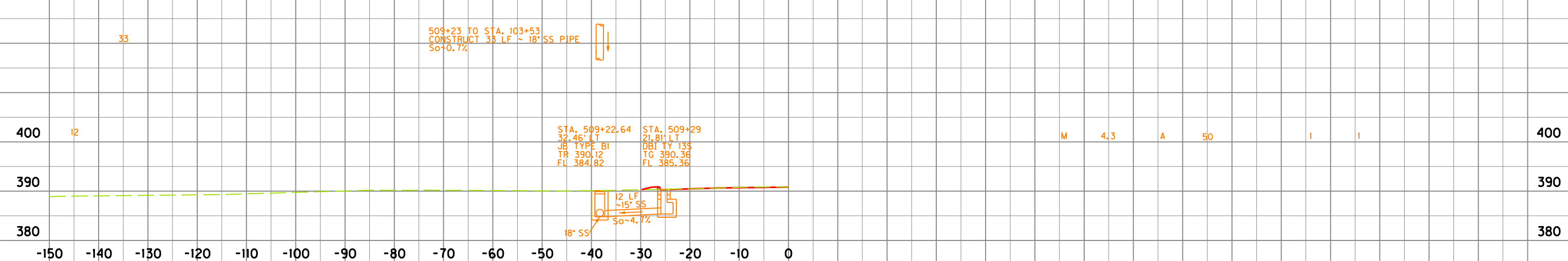
COUNTY OF	ITEM NO.	SHEET NO.
HENDERSON	2-711.00	R36

STORM SEWER PIPE

15"	18"																		DESIGN PH LEVEL	COVER HEIGHT	ABRASION	FABRIC-GEOTEXTILE CLASS 2 FOR PIPE	CBI TY F	DBI TY 13S	JUNCTION BOX
L	I	N	E	A	R	F	E	E	T											FT		SOYD	EACH	EACH	EACH



510+16 @ 29° SKEW RT  
CONSTRUCT CBI TYPE F (H=4.70')



509+43 @ 32° SKEW LT.  
CONSTRUCT DBI TYPE 13S (No. 78, H=5.50')

SCALE: 1"=10'

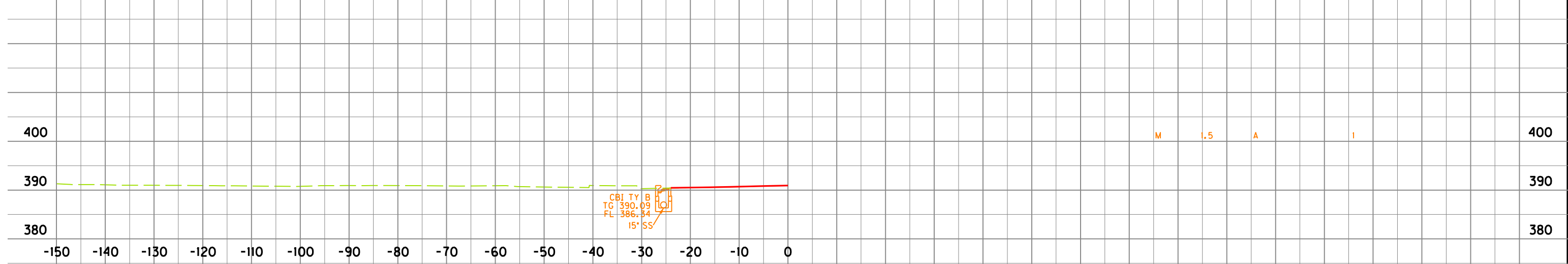
KY 2084 (OLD US 41) & KY 812  
PIPE SECTIONS  
STA. 509+43 & STA. 510+16

MicroStation v8.11.9.867 E-SHEET NAME: DATE PLOTTED: September 10, 2020 USER: \*\*\*\* FILE NAME: C:\PWORKING\AECOM\_DS20\_NA\_2019\MITCH\_THOMAS\AECOM.COM\DM808043\RO3600PPL.DGN

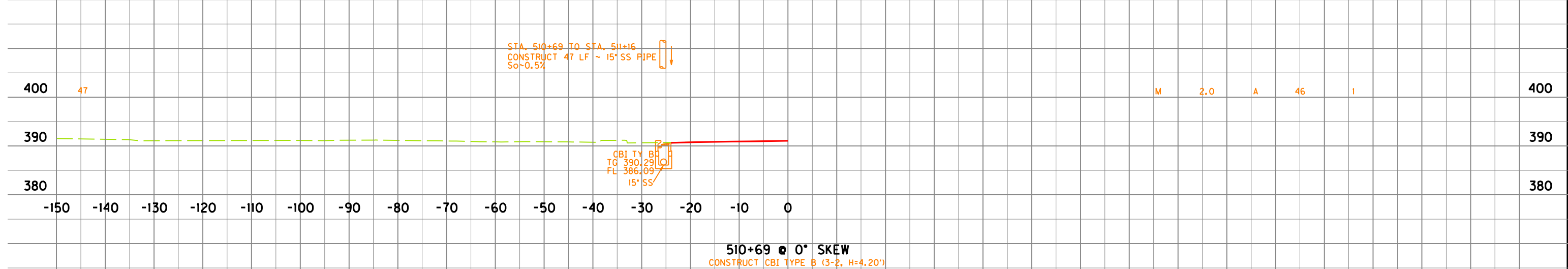
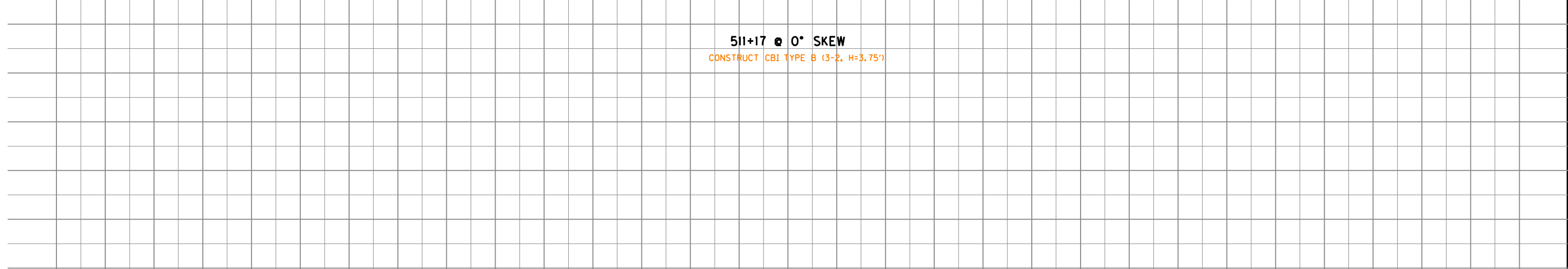
PIPE DRAINAGE SHEET 5 of 5

COUNTY OF	ITEM NO.	SHEET NO.
HENDERSON	2-711.00	R37

STORM SEWER PIPE										DESIGN PH LEVEL	COVER HEIGHT	ABRASION	FABRIC- GEOTEXTILE COVER FOR PIPE	CBI TY B
15"											FT		SOYD	EACH
L	I	N	E	A	R	F	E	E	T					



511+17 @ 0° SKEW  
CONSTRUCT CBI TYPE B (3-2, H=3.75')



STA. 510+69 TO STA. 511+16  
CONSTRUCT 47 LF ~ 15\"/>

510+69 @ 0° SKEW  
CONSTRUCT CBI TYPE B (3-2, H=4.20')

SCALE: 1"=10'

KY 2084 (OLD US 41) & KY 812  
PIPE SECTIONS  
STA. 510+69 TO STA. 511+17

FILE NAME: C:\PWORKING\AECOM\_DS20\_NA\_2019\MITCH\_THOMAS\AECOM.COM\DM508043\RO3700PPL.DGN  
 USER: \*\*\*\*\*  
 DATE PLOTTED: July 7, 2020  
 E-SHEET NAME: MicroStation v8.11.9.867