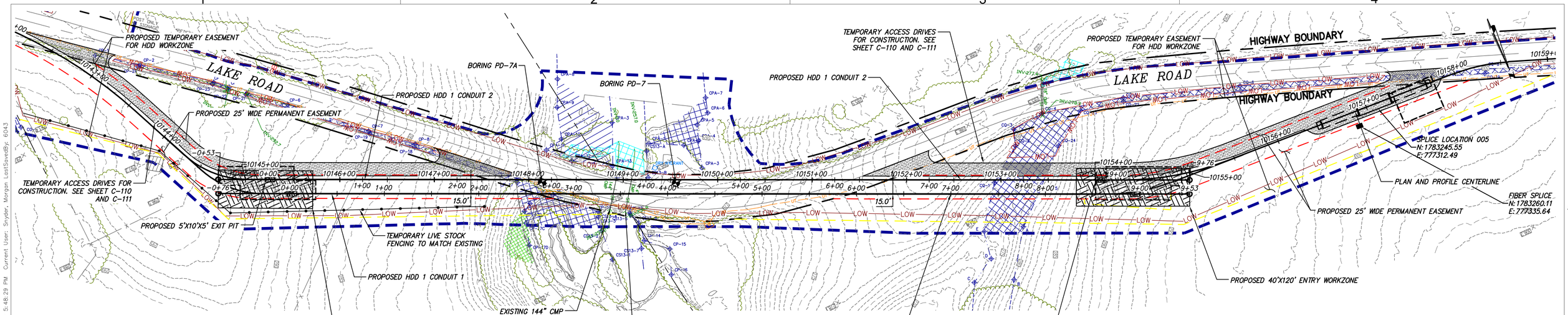
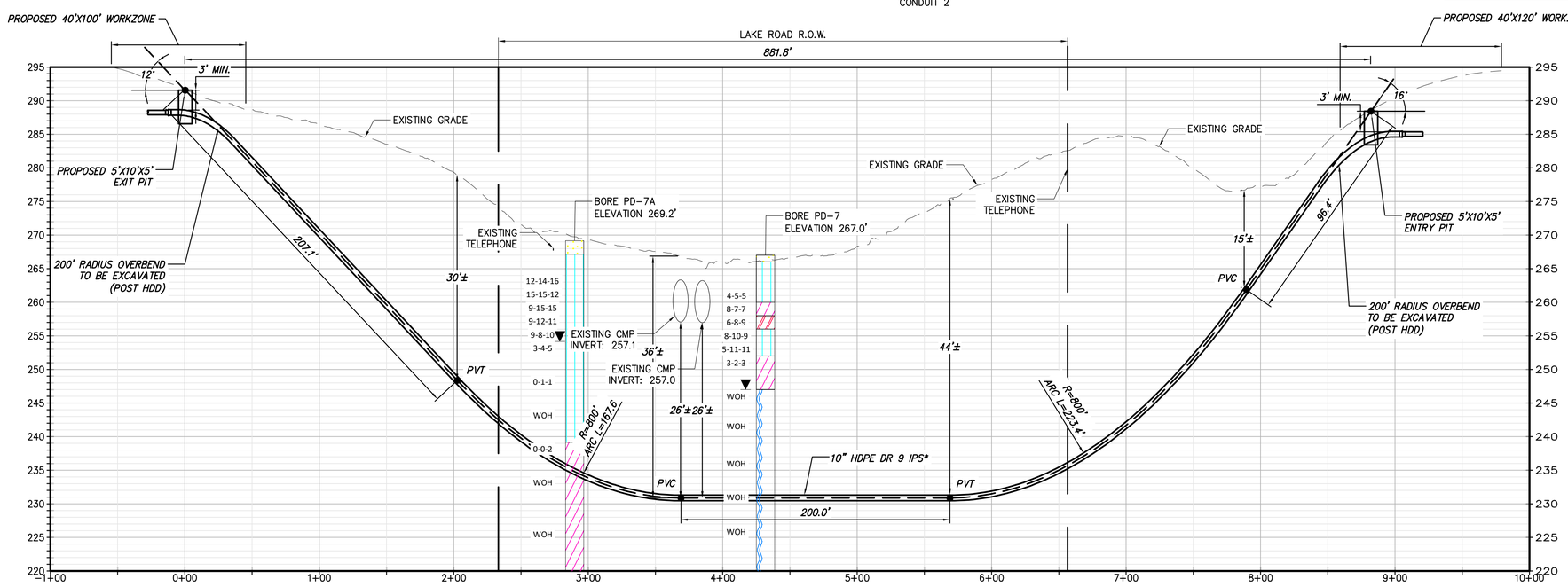


0 50 100
Scale in feet

PROPOSED HDD 1 PLAN VIEW

CONDUIT 2



0 50 100
Scale in feet

PROPOSED HDD 1 PROFILE

CONDUIT 2

*HDD 1 CONSIST OF (2) HVDC ELECTRICAL TRANSMISSION CABLES HOUSED IN INDIVIDUAL 10" DIAMETER CASINGS.

A THIRD 2" CASING WILL BE BUNDLED WITH ONE OF THE 10" CASINGS FOR A TELECOMMUNICATIONS LINE.

BORING LOG STRIP LEGEND

B101

Blow Counts per 6" =10-10-10

Recovery %/RQD % =95%/90%

11000 =UCS

Legend	
ASPHALT	Asphalt
Bedrock	Bedrock
Boulder	Boulder
CH	Fat CLAY
CH-MH	SILTY Fat CLAY
CL	Lean CLAY
CL-ML	SILTY CLAY
CONCRETE	Concrete
Fill	Fill
GC	CLAYEY GRAVEL
GC-GM	SILTY CLAYEY GRAVEL
GM	SILTY GRAVEL
GP	Poorly Graded GRAVEL
GP-GC	Poorly Graded Gravel with CLAY
GP-GM	Poorly Graded GRAVEL with SILT
GW	Well Graded GRAVEL
GW-GC	Well Graded GRAVEL with CLAY
GW-GM	Well Graded GRAVEL with SILT
Limestone	Limestone
MH	Elastic SILT
ML	SILT
OH	ORGANIC Fat CLAY
OL	ORGANIC Lean CLAY
OL/OH	ORGANIC SOIL
PT	PEAT
Rock	Rock
Sandstone	Sandstone
SC	CLAYEY SAND
SC-SM	SILT, CLAYEY SAND
SHALE	Shale
SILTSTONE	Siltstone
SM	SILTY SAND
SP	Poorly Graded SAND
SP-SC	Poorly Graded SAND with CLAY
SP-SM	Poorly Graded SAND with SILT
SW	Well graded SAND
SW-SC	Well Graded SAND with CLAY
SW-SM	Well Graded SAND with SILT
Topsoil	Topsoil
USGS 601	Gravel or Conglomerate 1
USGS 654	Subgraywacke
USGS 670	Interbedded Sandstone and Shale
USGS 702	Quartzite
USGS 705	Schist
USGS 705	Schist
USGS 708	Gneiss
USGS 708	Gneiss
USGS 718	Granite 1
Void	Void
Water	Water
Weathered Rock	Undefined
Water Table	Water Table during drilling
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No.	DATE	SUBMITTAL / REVISION DESCRIPTION	DB	APP
0	09/21/2022	FINAL EM&CP SUBMISSION	MCS	JEO

CHAMPLAIN HUDSON POWER EXPRESS
SEGMENT 1 (PACKAGE 1A) PUTNAM TO DRESDEN
HDD 1 PLAN AND PROFILE - CONDUIT 2
MILL BROOK CULVERTS CROSSING, CONDUIT 2
WHITEHALL, WASHINGTON COUNTY, NY

DRAWN BY: TAR | DESIGNED BY: TAR | APPROVED BY: JEO

KIEWIT PROJECT NO.	21162
CHA PROJECT NO.	066076
DRAWING NO.	C-301A
SCALE	AS NOTED
DATE	09/21/2022
REV. NO.	X
SH.NO.	XXX OF XXX

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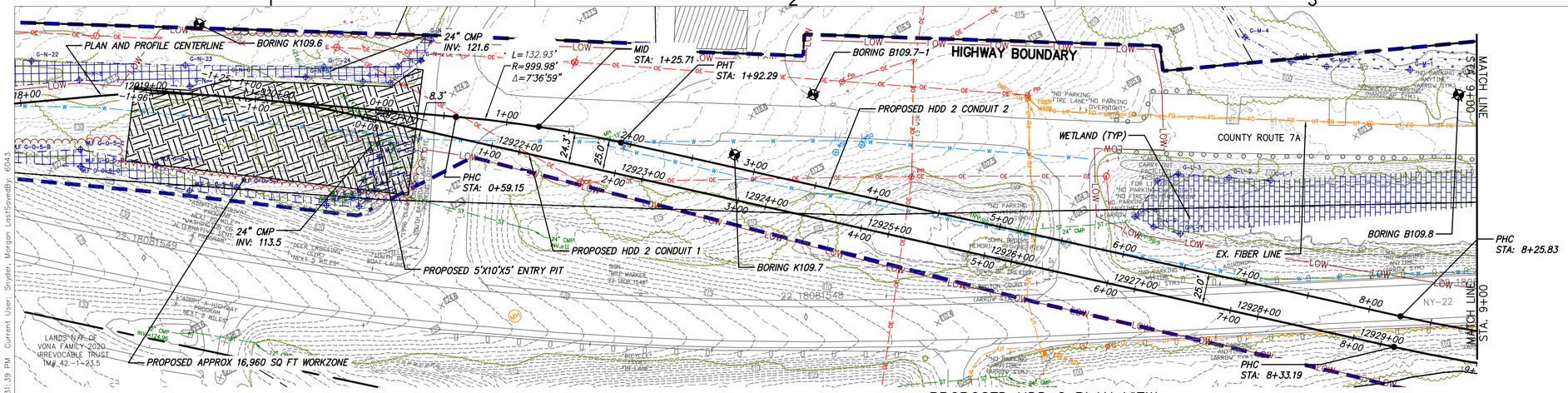
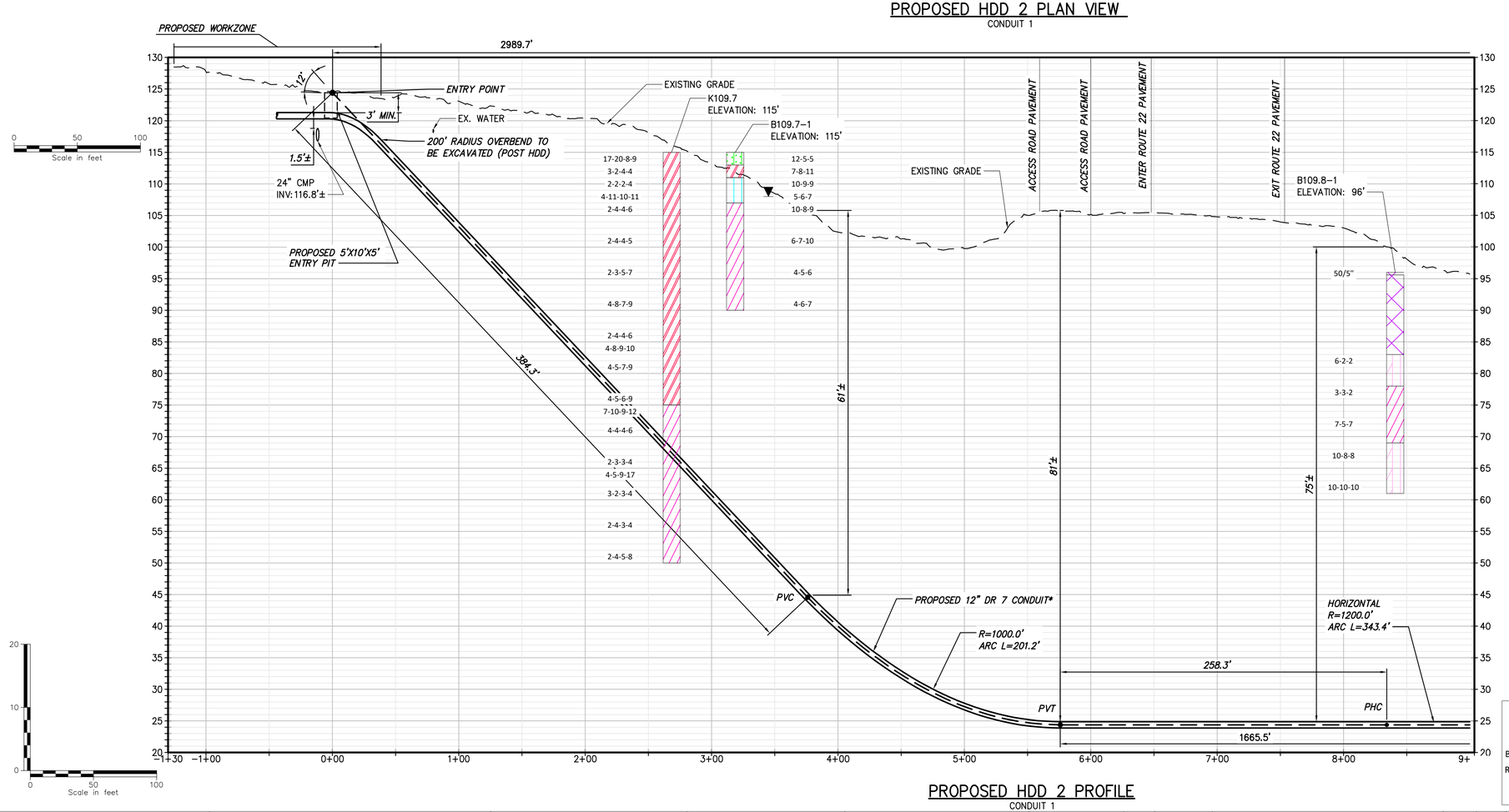


PROPOSED HDD 2 PLAN VIEW

CONDUIT 1



PROPOSED HDD 2 PROFILE

CONDUIT 1

* HDD2 CONSISTS OF (2) HVDC ELECTRICAL TRANSMISSION CABLES HOUSED IN INDIVIDUAL 12" HDPE DR 7 IPS CASINGS

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NOTE:

1) HDD SUBCONTRACTOR TO FIELD VERIFY THE WATER PIPE AND HYDRANT WATER PIPE LOCATION TO CHECK FOR INTERFERENCE.
2) RECOMMEND INTERSECTING BORE METHOD BE USED TO REDUCE DRILLING FLUID PRESSURES AT THE EAST END OF THE HDD ALIGNMENT.
3) IT IS EXPECTED THAT BALLASTING OR USE OF ROLLERS WILL BE REQUIRED.
4) BORES AND BORE HATCHING IN PROFILE IS NOT CLEARLY LEGIBLE DUE TO THE CLOSE PROXIMITY OF THE MULTIPLE BORES AT 50 SCALE. USERS MUST CONSULT THE ACTUAL BORE LOGS AND REPORTS FOR CLARIFICATION AND OR INTERPRETATION.

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GW-GM	Well Graded GRAVEL with SILT
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PT	PEAT
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Water Table	Water Table during drilling
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0	09/21/2022	FINAL EM&CP SUBMISSION	MCS	JEO

CHAMPLAIN HUDSON POWER EXPRESS

SEGMENT 2 - ROUTE 22: DRESDEN - WHITEHALL

PROPOSED HDD PLAN AND PROFILE - HDD 2

SOUTH BAY CROSSING, CONDUIT 1

WHITEHALL, WASHINGTON COUNTY, NY

DRAWN BY: MCS | DESIGNED BY: MB | APPROVED BY: JEO | SCALE AS NOTED | REV. NO. X

KIEWIT PROJECT NO. 21162

CHA PROJECT NO. 066076

DRAWING NO. C-301

DATE 09/21/2022 | SH.NO. XXX OF XXX

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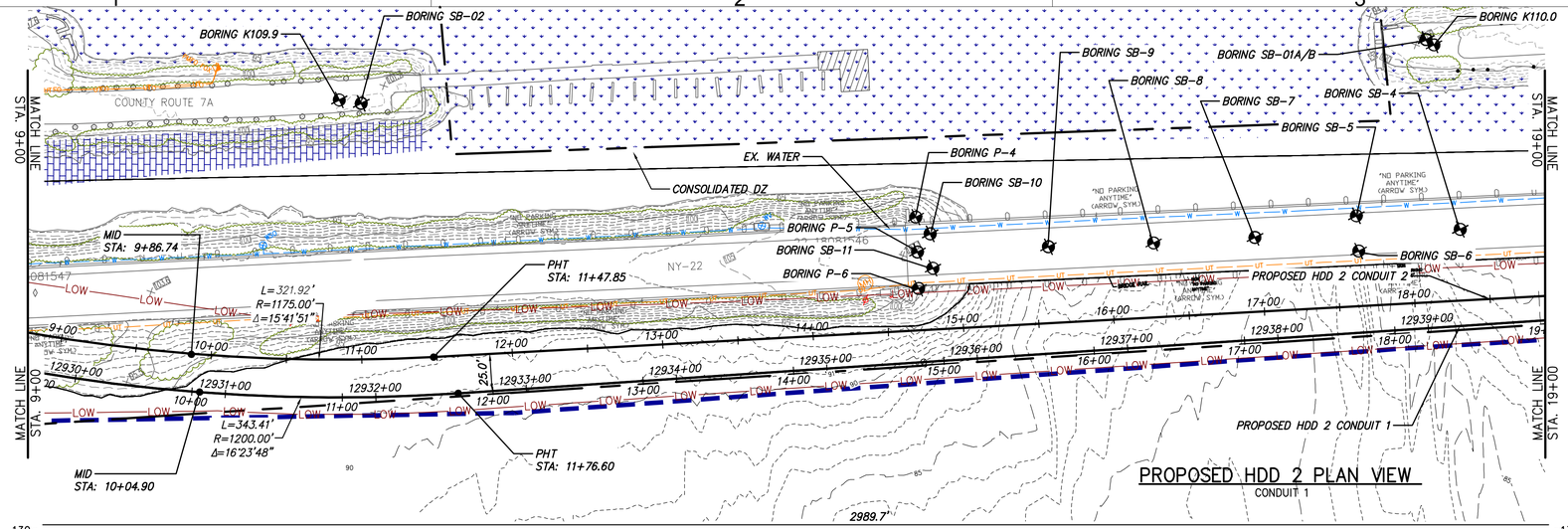
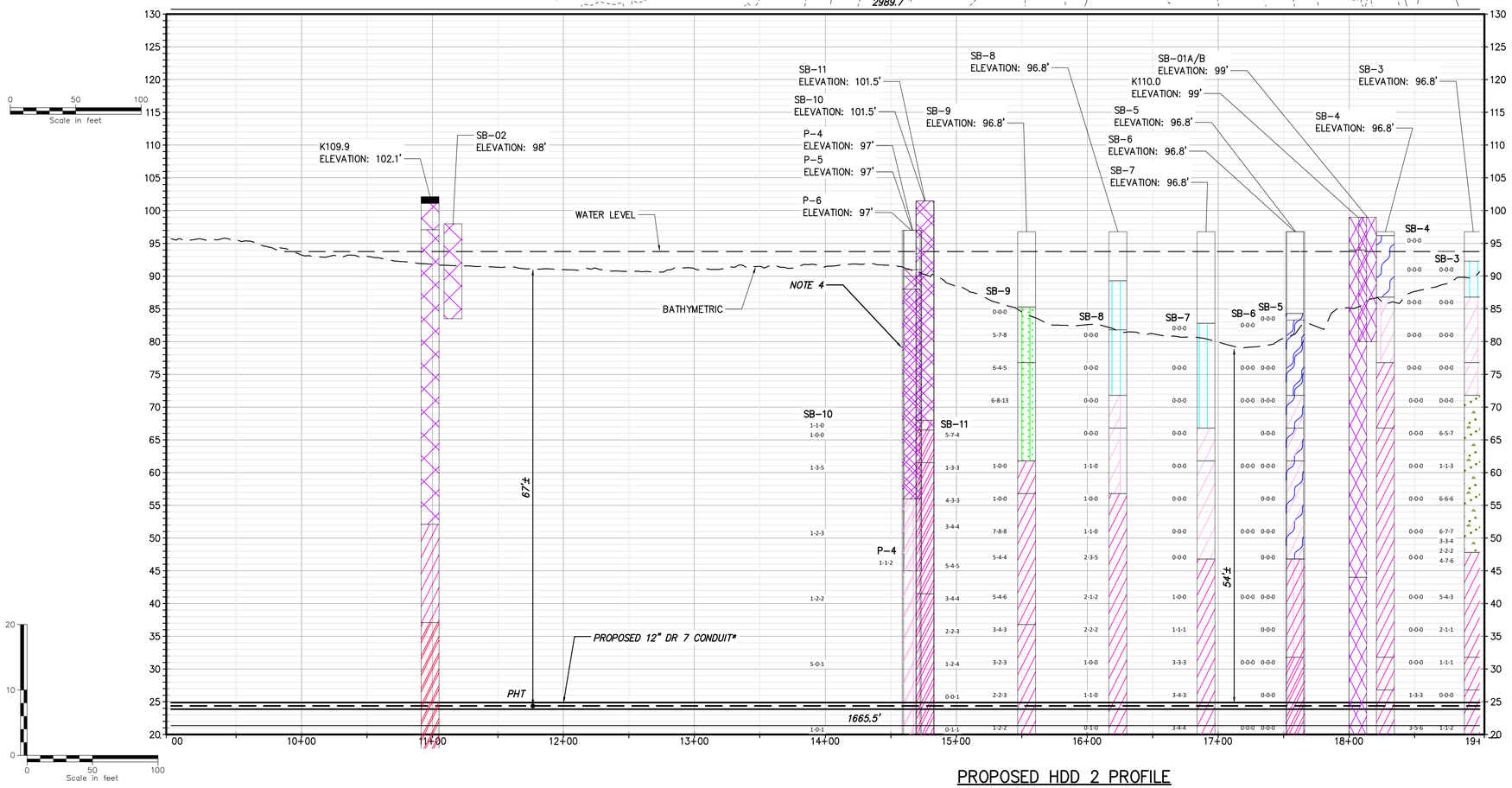


PROPOSED HDD 2 PLAN VIEW

CONDUIT 1



PROPOSED HDD 2 PROFILE

CONDUIT 1

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GP-GM	Poorly Graded GRAVEL with SILT
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ML	SILT
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OL/OH	ORGANIC SOIL
PT	PEAT
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SHALE	Shale
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SW-SM	Well Graded SAND with SILT
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0	09/21/2022	FINAL EM&CP SUBMISSION	MCS	JEO

CHAMPLAIN HUDSON POWER EXPRESS
SEGMENT 2 - ROUTE 22: DRESDEN - WHITEHALL
PROPOSED HDD PLAN AND PROFILE - HDD 2
SOUTH BAY CROSSING, CONDUIT 1
WHITEHALL, WASHINGTON COUNTY, NY

KIEWIT PROJECT NO. 21162
CHA PROJECT NO. 066076
DRAWING NO. **C-301.1**

DRAWN BY: MCS DESIGNED BY: MB APPROVED BY: JEO SCALE AS NOTED DATE 09/21/2022 REV. NO. X SH.NO. XXX OF XXX

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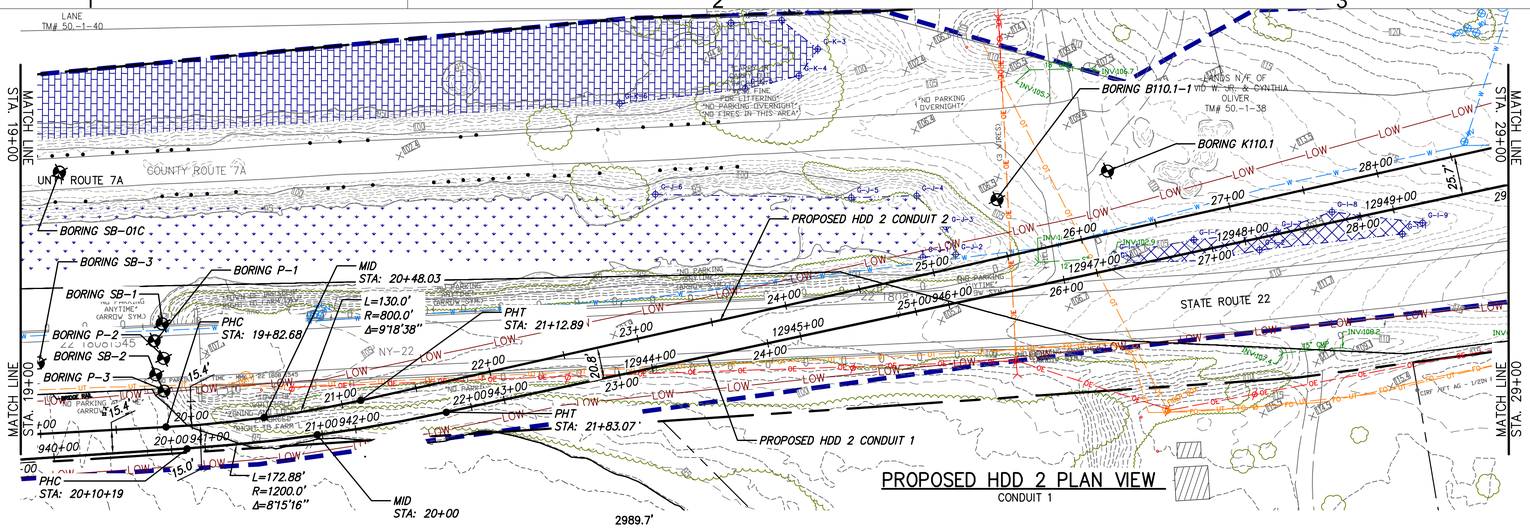
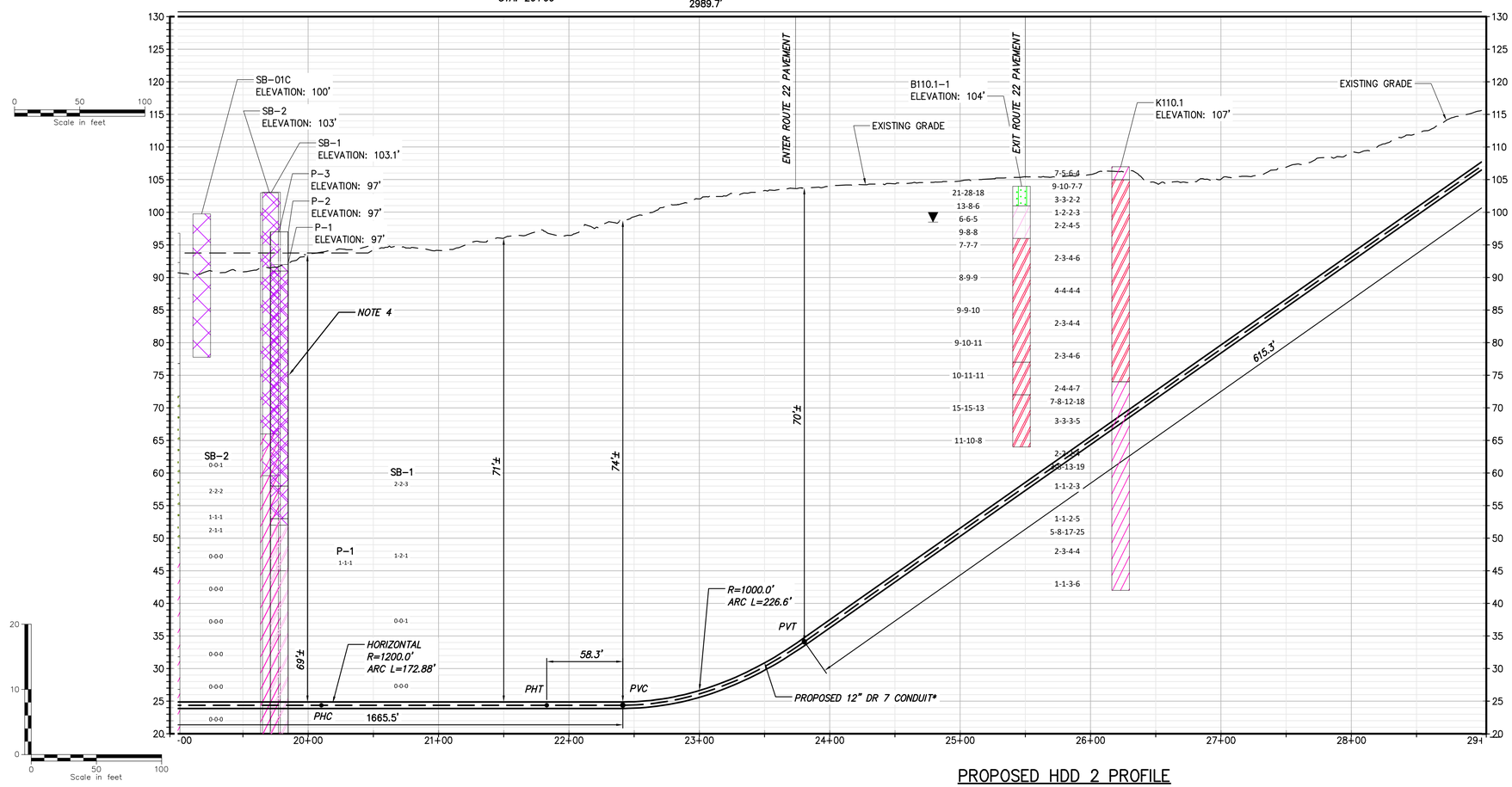


PROPOSED HDD 2 PLAN VIEW

CONDUIT 1



PROPOSED HDD 2 PROFILE

CONDUIT 1

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NOTE:

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CHAMPLAIN HUDSON POWER EXPRESS
SEGMENT 2 - ROUTE 22: DRESDEN - WHITEHALL
PROPOSED HDD PLAN AND PROFILE - HDD 2
SOUTH BAY CROSSING, CONDUIT 1
WHITEHALL, WASHINGTON COUNTY, NY

KIEWIT PROJECT NO. 21162
CHA PROJECT NO. 066076
DRAWING NO. **C-301.2**

DRAWN BY: MCS | DESIGNED BY: MB | APPROVED BY: JEO | SCALE AS NOTED | DATE 09/21/2022 | REV. NO. X | SH.NO. XXX OF XXX

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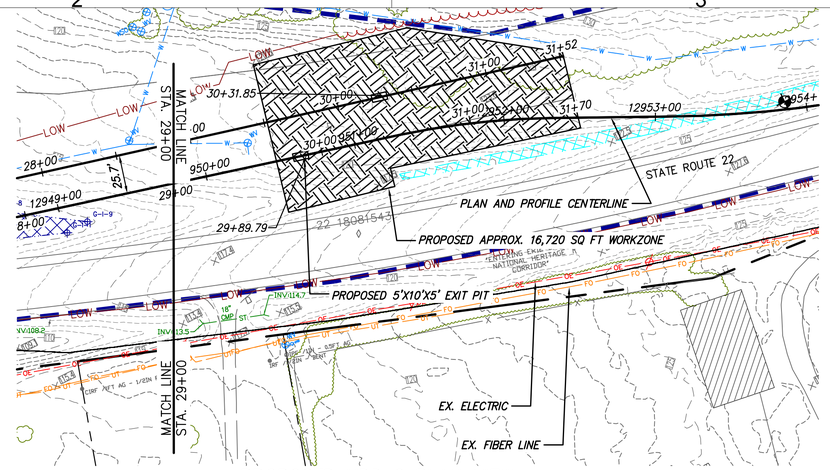
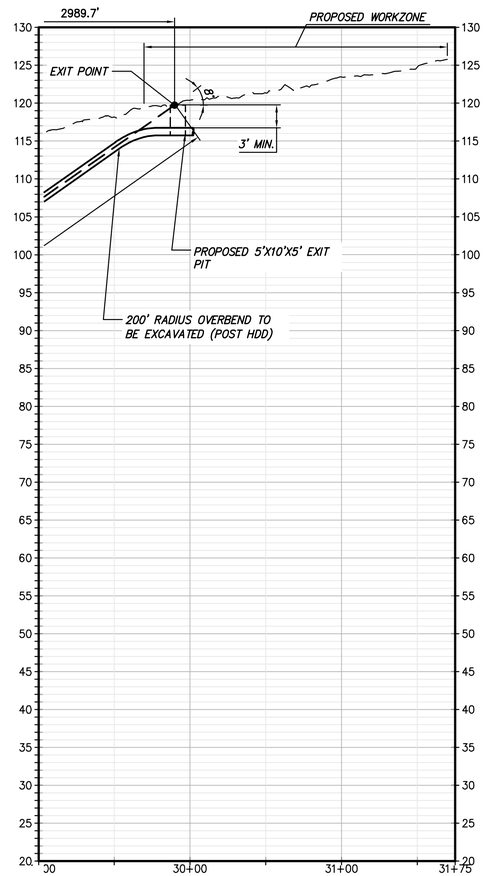


PROPOSED HDD 2 PLAN VIEW

CONDUIT 1



PROPOSED HDD 2 PROFILE

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0 50 100
Scale in feet

20 10 0
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Scale in feet

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No.	DATE	SUBMITTAL / REVISION DESCRIPTION	DB	APP
0	09/21/2022	FINAL EM&CP SUBMISSION	MCS	JEO

CHAMPLAIN HUDSON POWER EXPRESS
SEGMENT 2 - ROUTE 22: DRESDEN - WHITEHALL
PROPOSED HDD PLAN AND PROFILE - HDD 2
SOUTH BAY CROSSING, CONDUIT 1
WHITEHALL, WASHINGTON COUNTY, NY

KIEWIT PROJECT NO. 21162
CHA PROJECT NO. 066076
DRAWING NO. **C-301.3**

DRAWN BY: MCS | DESIGNED BY: MB | APPROVED BY: JEO | SCALE AS NOTED | DATE 09/21/2022 | REV. NO. X | SH.NO. XXX OF XXX

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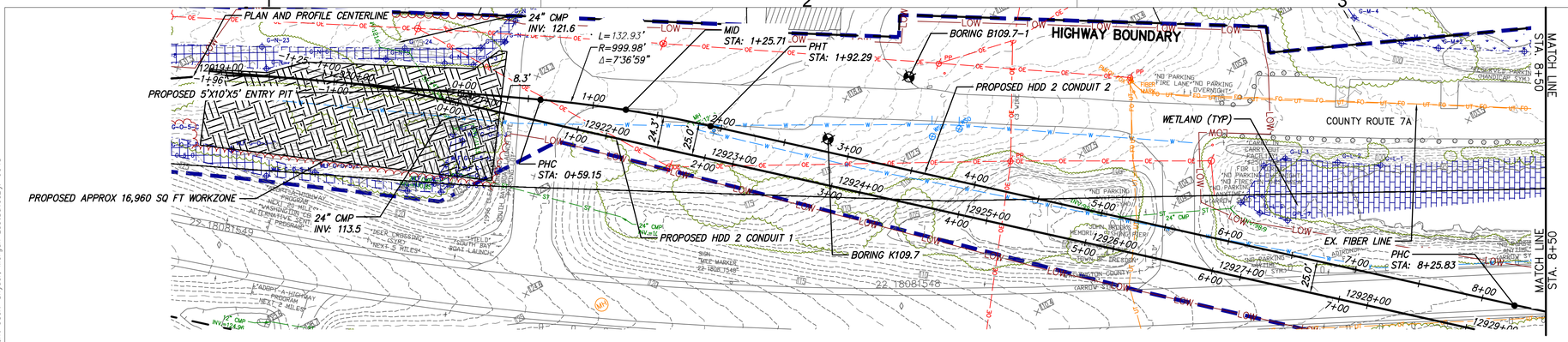

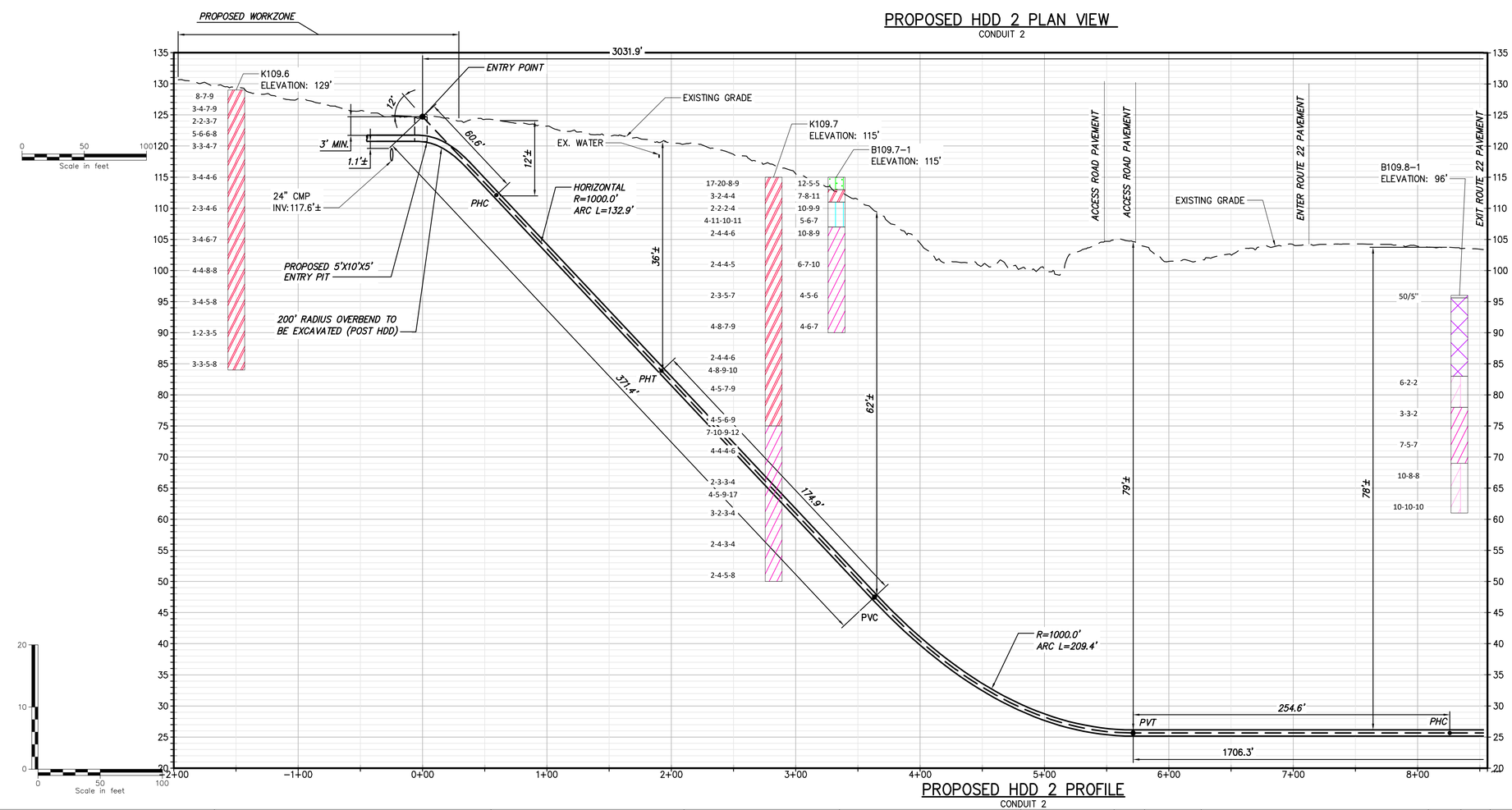

PROPOSED HDD 2 PROFILE
CONDUIT 2

* HDD2 CONSISTS OF (2) HVDC ELECTRICAL TRANSMISSION CABLES HOUSED IN INDIVIDUAL 12" HDPE DR 7 IPS CASINGS

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B101

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Recovery %/RQD % =95%/90%

11000 =UCS

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CH-MH	SILTY Fat CLAY
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CL-ML	SILTY CLAY
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GP	Poorly Graded GRAVEL
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ML	SILT
OH	ORGANIC Fat CLAY
OL	ORGANIC Lean CLAY
OL/OH	ORGANIC SOIL
PT	PEAT
Rock	Rock
Sandstone	Sandstone
SC	CLAYEY SAND
SC-SM	SILT, CLAYEY SAND
SHALE	Shale
SILTSTONE	Siltstone
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CHPE Champlain Hudson Power Express

Kiewit

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CHAMPLAIN HUDSON POWER EXPRESS
SEGMENT 2 - ROUTE 22: DRESDEN - WHITEHALL
PROPOSED HDD PLAN AND PROFILE - HDD 2
SOUTH BAY CROSSING, CONDUIT 2
WHITEHALL, WASHINGTON COUNTY, NY

KIEWIT PROJECT NO. 21162
CHA PROJECT NO. 066076
DRAWING NO. **C-301A**

DRAWN BY: MCS | DESIGNED BY: MB | APPROVED BY: JEO | SCALE AS NOTED | REV. NO. X | DATE 09/21/2022 | SH.NO. XXX OF XXX

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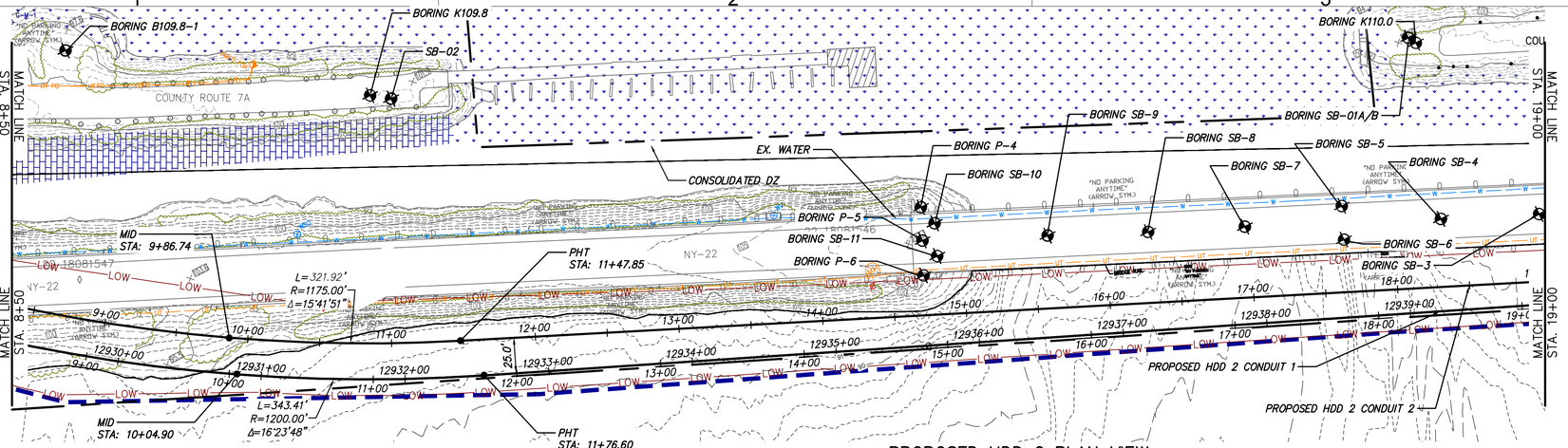
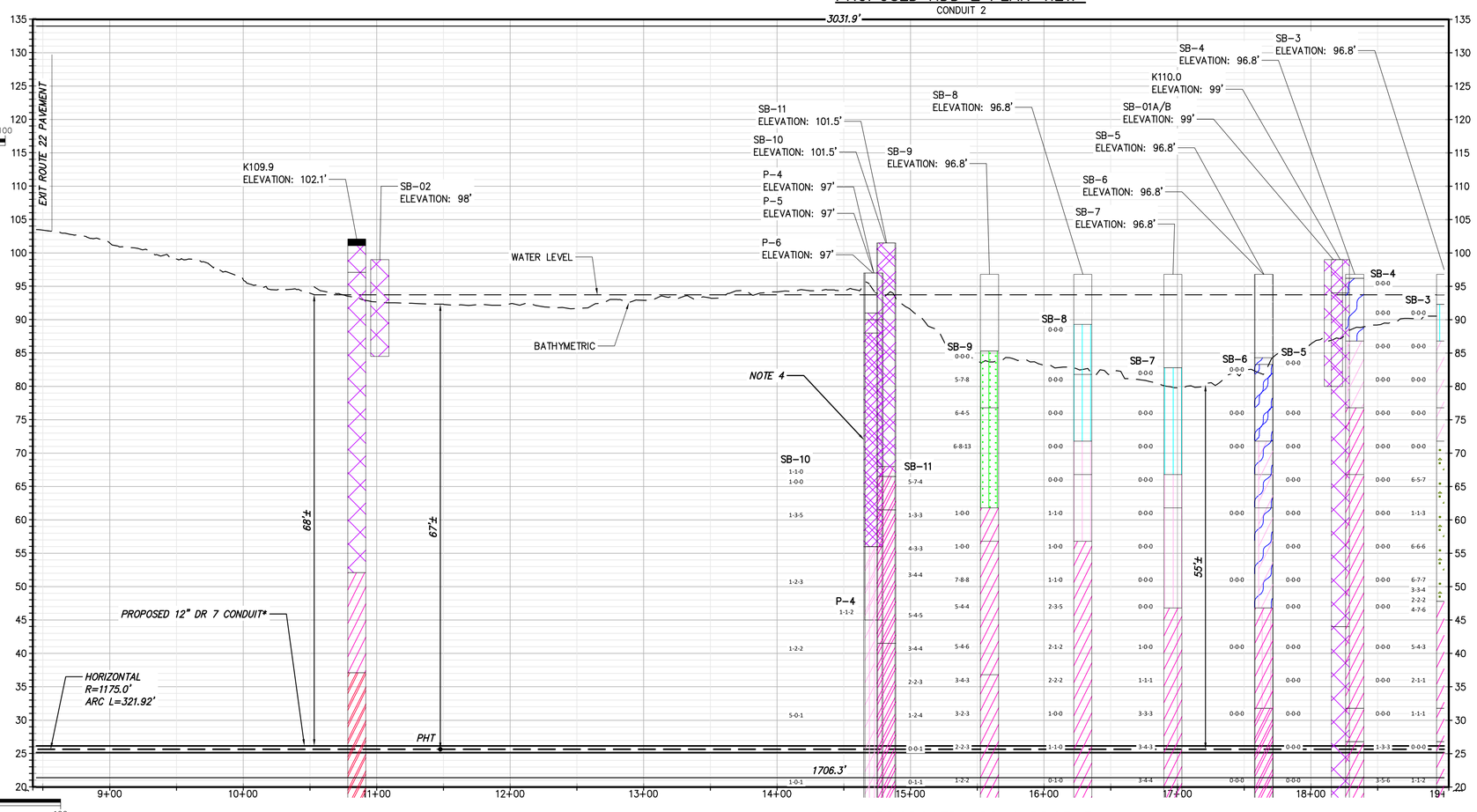


PROPOSED HDD 2 PLAN VIEW

CONDUIT 2



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CONDUIT 2

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CHAMPLAIN HUDSON POWER EXPRESS

SEGMENT 2 - ROUTE 22: DRESDEN - WHITEHALL

PROPOSED HDD PLAN AND PROFILE - HDD 2

SOUTH BAY CROSSING, CONDUIT 2

WHITEHALL, WASHINGTON COUNTY, NY

KIEWIT PROJECT NO. 21162

CHA PROJECT NO. 066076

DRAWING NO. C-301A.1

DRAWN BY: MCS | DESIGNED BY: MB | APPROVED BY: JEO | SCALE AS NOTED | REV. NO. X | DATE 09/21/2022 | SH.NO. XXX OF XXX

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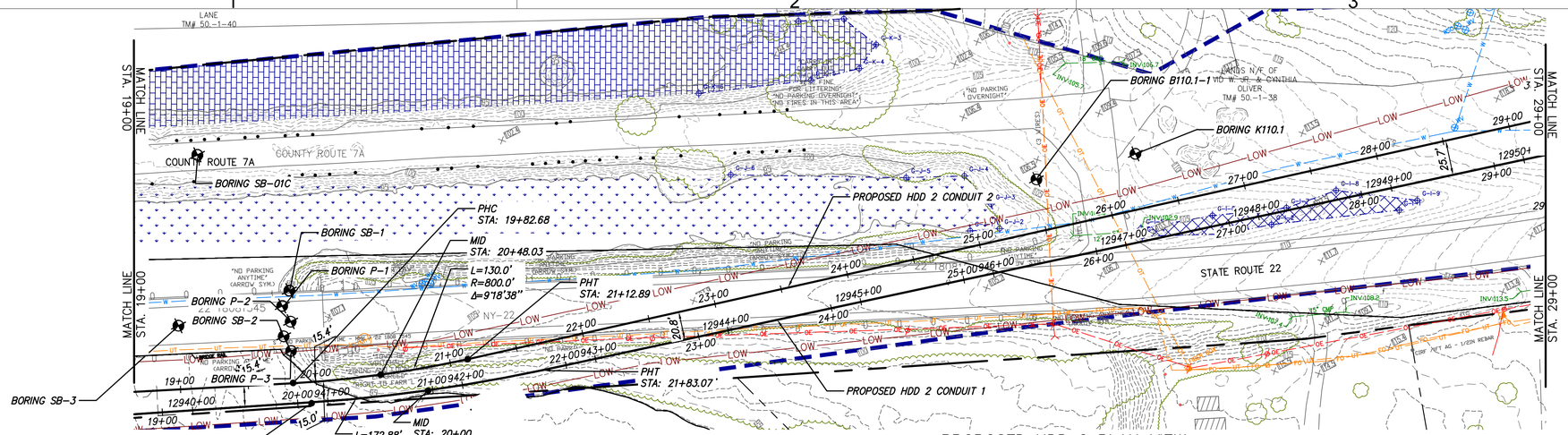
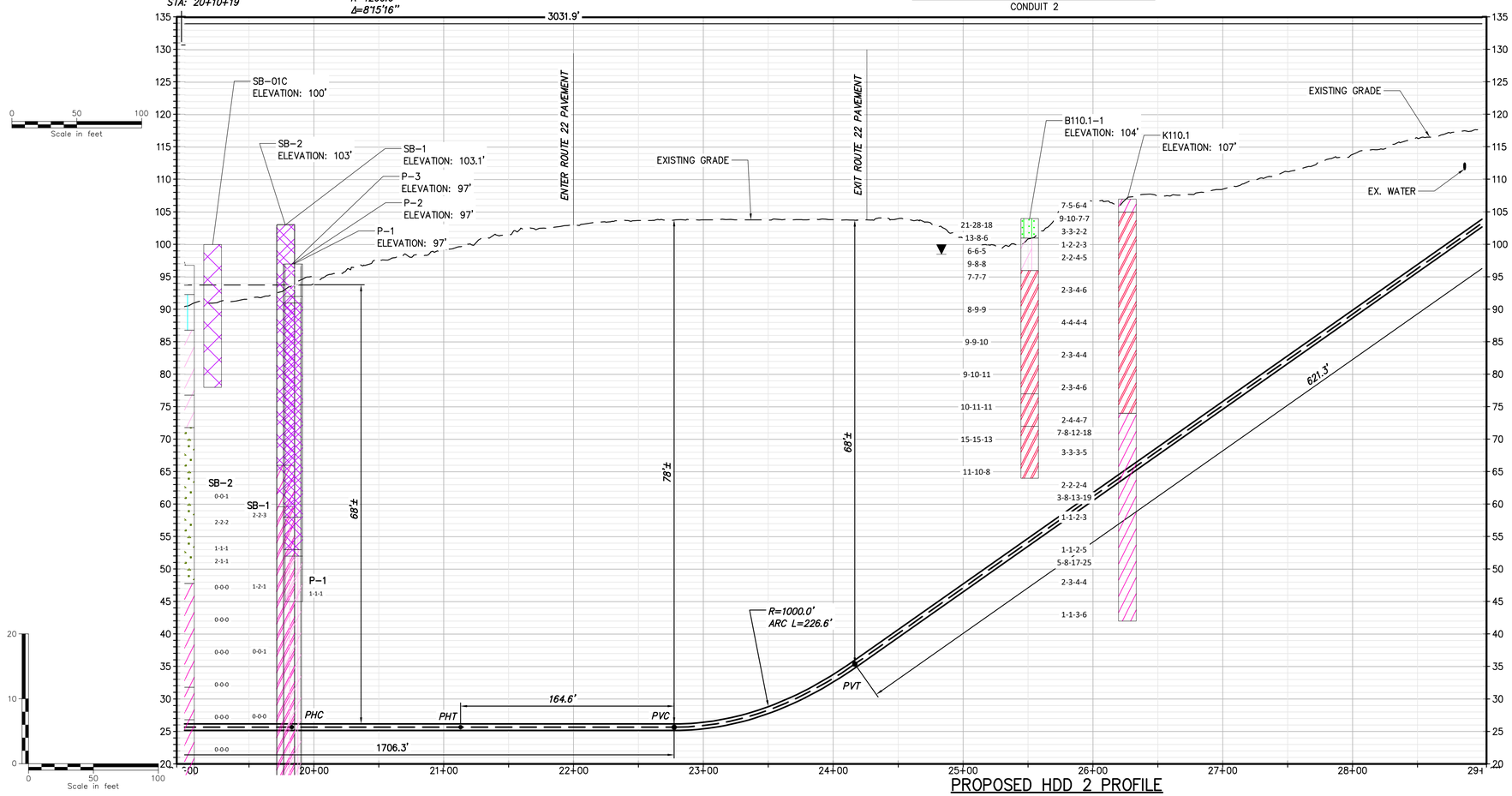


PROPOSED HDD 2 PLAN VIEW

CONDUIT 2



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CHAMPLAIN HUDSON POWER EXPRESS
SEGMENT 2 - ROUTE 22: DRESDEN - WHITEHALL
PROPOSED HDD PLAN AND PROFILE - HDD 2
SOUTH BAY CROSSING, CONDUIT 2
WHITEHALL, WASHINGTON COUNTY, NY

KIEWIT PROJECT NO. 21162
CHA PROJECT NO. 066076
DRAWING NO. **C-301A.2**

DRAWN BY: MCS | DESIGNED BY: MB | APPROVED BY: JEO | SCALE AS NOTED | REV. NO. X | DATE 09/21/2022 | SH.NO. XXX OF XXX

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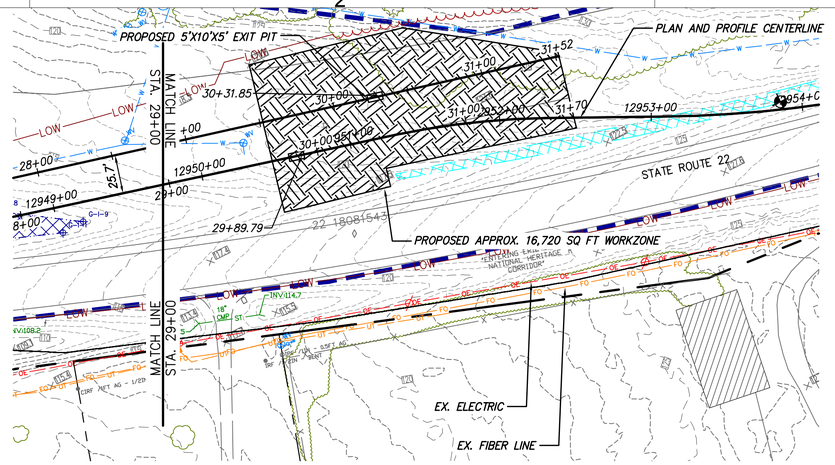
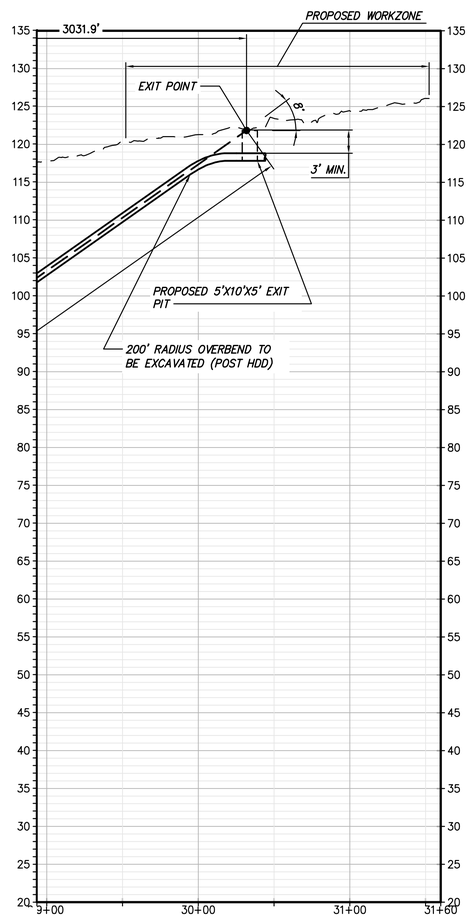


PROPOSED HDD 2 PLAN VIEW

CONDUIT 2



PROPOSED HDD 2 PROFILE

CONDUIT 2

0 50 100
Scale in feet

0 50 100
Scale in feet

20
10
0

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DRAWN BY: MCS DESIGNED BY: MB APPROVED BY: JEO

SCALE AS NOTED REV. NO. X

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DRAWING NO. **C-301A.3**
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