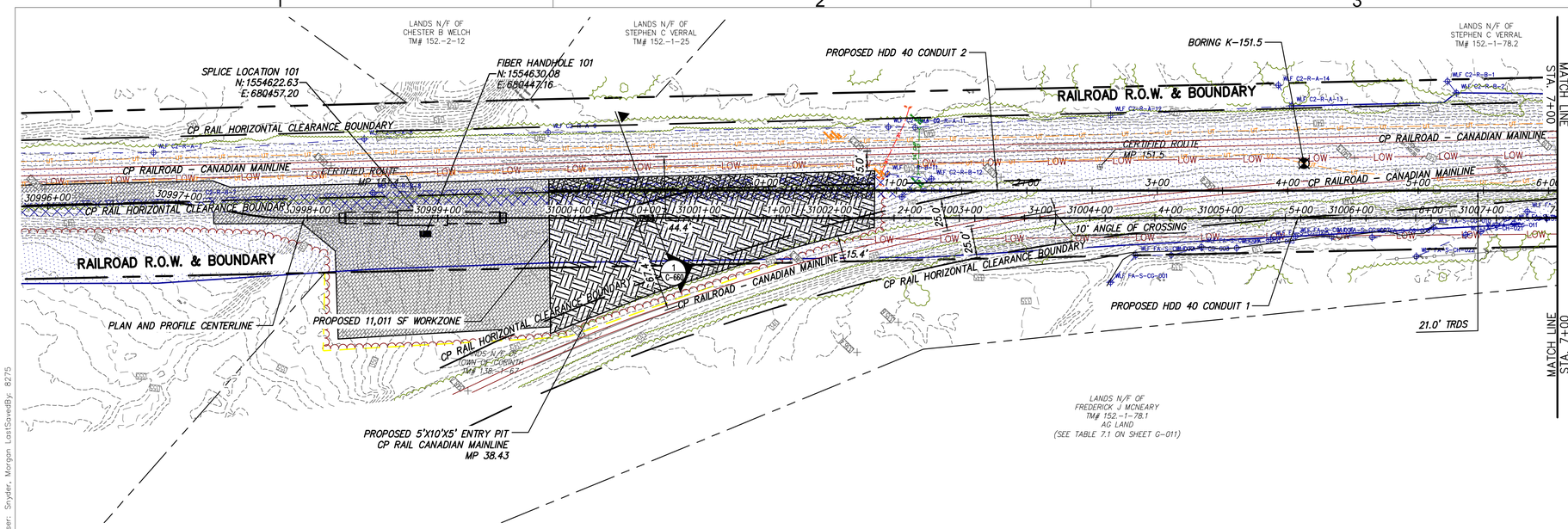
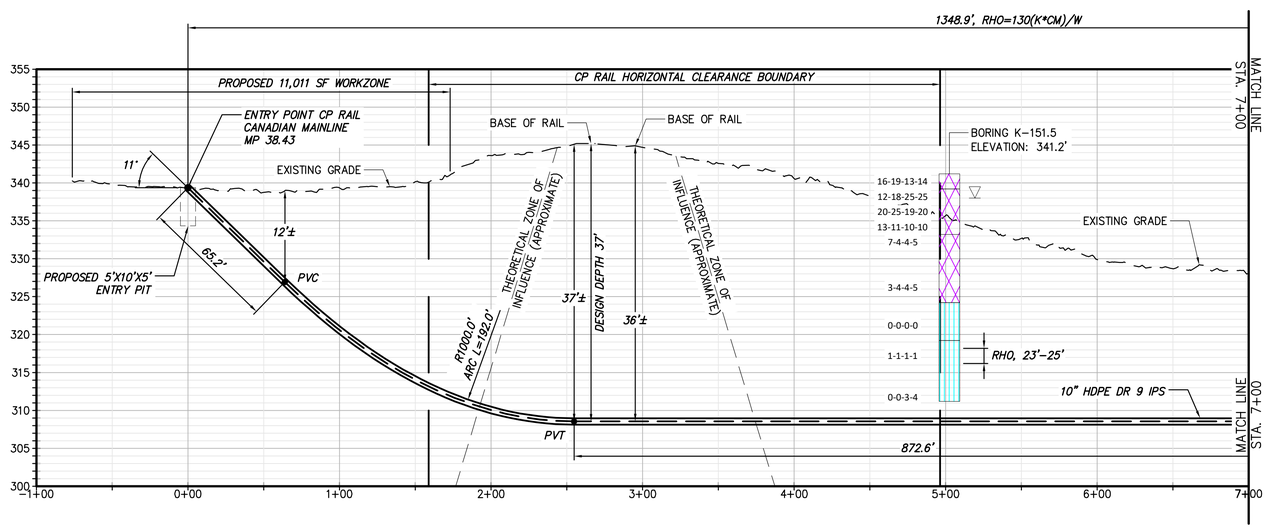


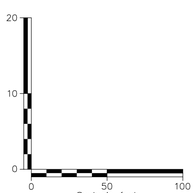
PROPOSED HDD 40 PLAN VIEW

CONDUIT 1



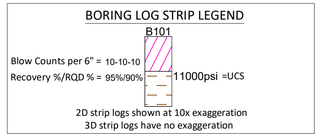
PROPOSED HDD 40 PROFILE

CONDUIT 1



NOTE:
1) THE USE OF CONDUCTOR CASINGS IS RECOMMENDED TO MITIGATE THE POTENTIAL RELEASE OF THE DRILLING FLUID.

BORING LOG STRIP LEGEND



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
▽	Delayed Water Table	Water Table after drilling

CHPE Champlain Hudson Power Express

Kiewit

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No.	DATE	SUBMITTAL / REVISION DESCRIPTION	DB	APP
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CHAMPLAIN HUDSON POWER EXPRESS

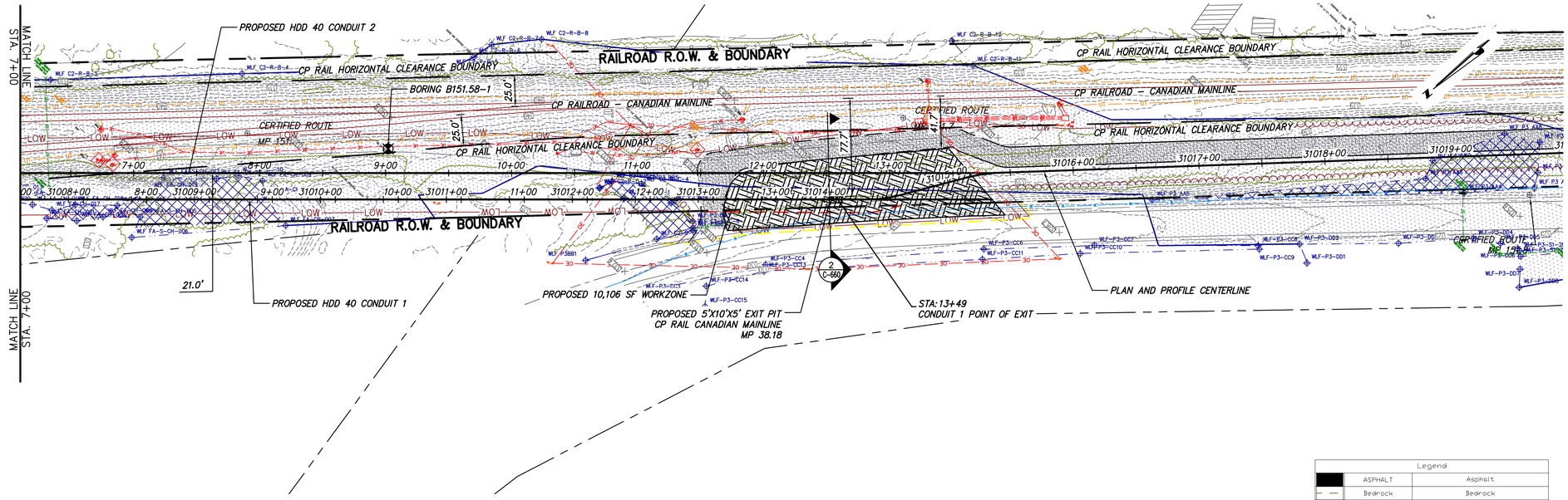
SEGMENTS 4 & 5 (PACKAGE 3) - CP: FORT EDWARD TO MILTON

PLAN AND PROFILE - HDD 40, CONDUIT 1

DRAWN BY: JAS | DESIGNED BY: ES | APPROVED BY: JEO | SCALE AS NOTED | REV. NO. 1

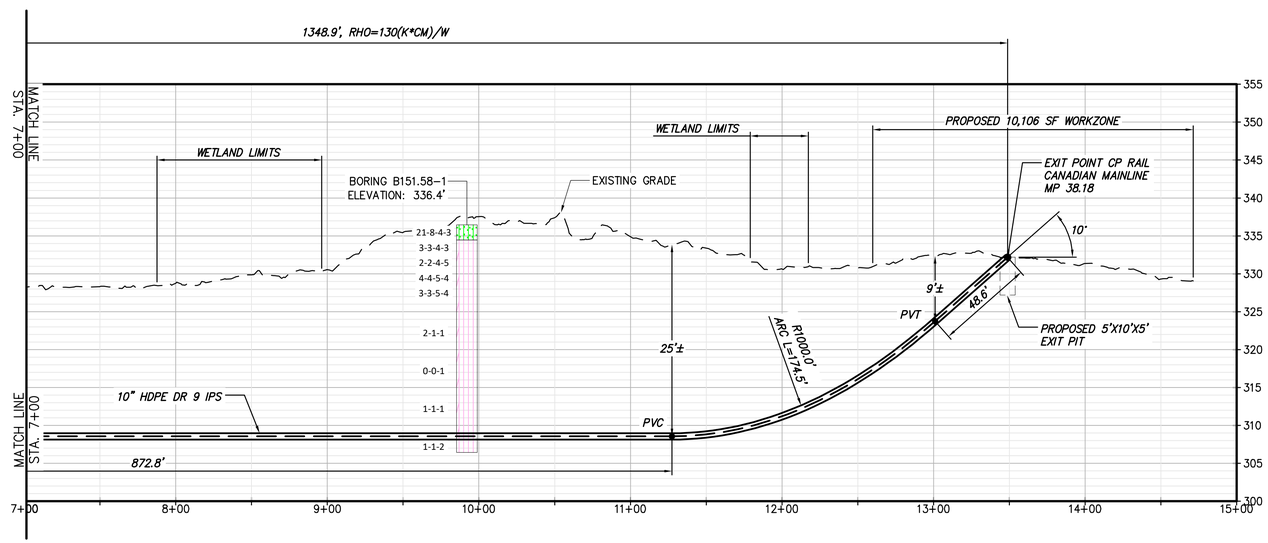
KIEWIT PROJECT NO. 21162
CHA PROJECT NO. 066076
DRAWING NO. **C-320**
DATE 04/05/2023
SH.NO.

File: V:\PROJECTS\ANY\K6\066076.000\09_DESIGN\DRAWINGS\01_SHEETS\DESIGN PACKAGE 3\066076_P3_C-321 C321A.DWG Saved: 4/4/2023 9:04:48 AM Plotted: 4/4/2023 4:08:15 PM Current User: Snyder, Morgan LastSavedBy: 8275



0 50 100
Scale in feet

PROPOSED HDD 40 PLAN VIEW
CONDUIT 1



PROPOSED HDD 40 PROFILE
CONDUIT 1

0 10 20
0 50 100
Scale in feet

NOTE:
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BORING LOG STRIP LEGEND

B101

Blow Counts per 6" = 10-10-10
Recovery %/RQD % = 95%/90%
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2D strip logs shown at 10x exaggeration
3D strip logs have no exaggeration

Legend

	ASPHALT	Asphalt
	Bedrock	Bedrock
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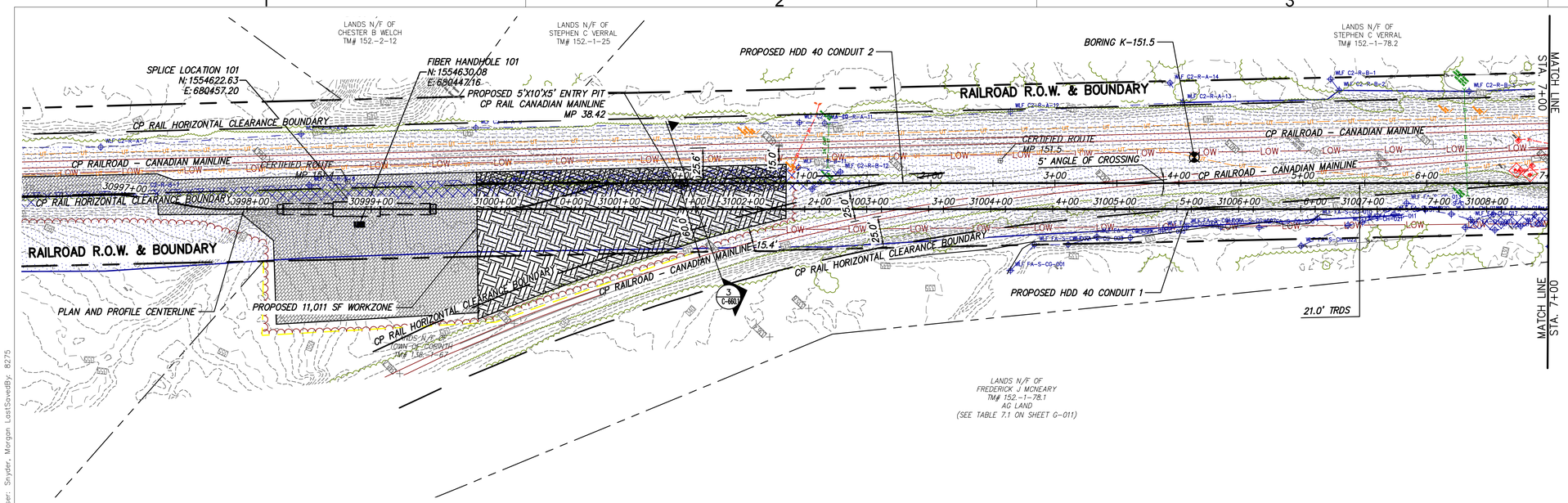
CHAMPLAIN HUDSON POWER EXPRESS
SEGMENTS 4 & 5 (PACKAGE 3) - CP: FORT EDWARD TO MILTON
PLAN AND PROFILE - HDD 40, CONDUIT 1

DRAWN BY: JAS | DESIGNED BY: ES | APPROVED BY: JEO | SCALE AS NOTED | REV. NO. 1

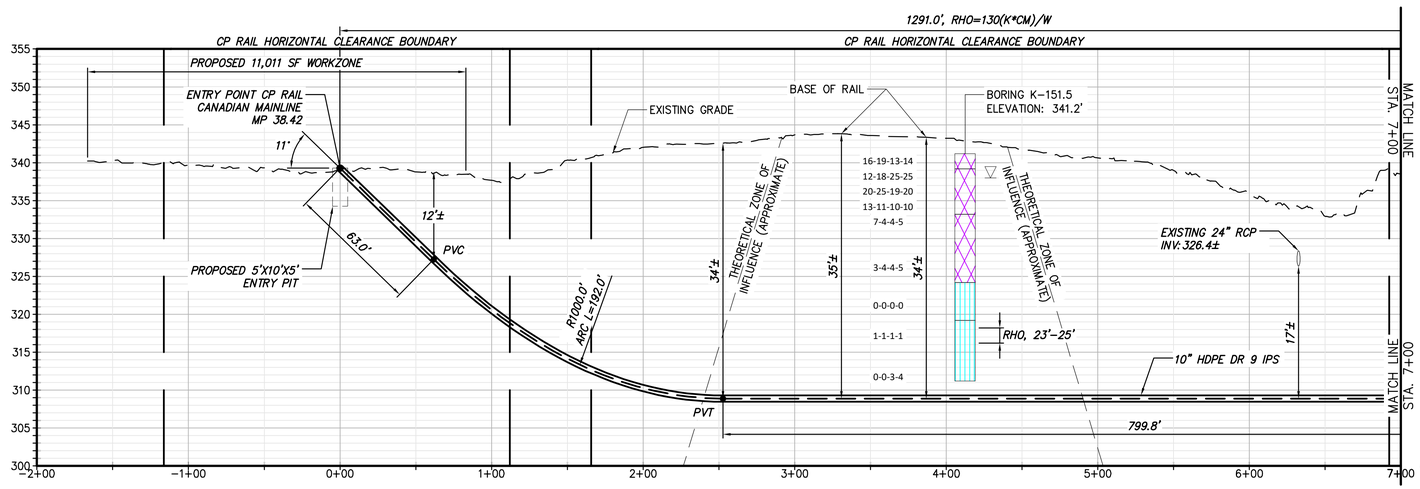
KIEWIT PROJECT NO. 21162
CHA PROJECT NO. 066076
DRAWING NO. **C-320.1**
DATE 04/05/2023
SH.NO.

File: V:\PROJECTS\ANY\K6\066076.000\09_DESIGN\DRAWINGS\01_SHEETS\DESIGN PACKAGE 3\066076_P3_C-321 C321A.DWG Saved: 4/4/2023 9:04:48 AM Plotted: 4/4/2023 4:09:32 PM Current User: Snyder, Morgan LastSavedBy: 8275



PROPOSED HDD 40 PLAN VIEW

CONDUIT 2



PROPOSED HDD 40 PROFILE

CONDUIT 2

NOTE:
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BORING LOG STRIP LEGEND

B101

Blow Counts per 6" = 10-10-10

Recovery %/RQD % = 95%/90%

11000psi =UCS

2D strip logs shown at 10x exaggeration

3D strip logs have no exaggeration

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	Boulder	Boulder
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	CL-ML	SILTY CLAY
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CHPE Champlain Hudson Power Express

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CHAMPLAIN HUDSON POWER EXPRESS

SEGMENTS 4 & 5 (PACKAGE 3) - CP: FORT EDWARD TO MILTON

PLAN AND PROFILE - HDD 40, CONDUIT 2

DRAWN BY: JAS | DESIGNED BY: ES | APPROVED BY: JEO | SCALE AS NOTED | REV. NO. 1

KIEWIT PROJECT NO. 21162

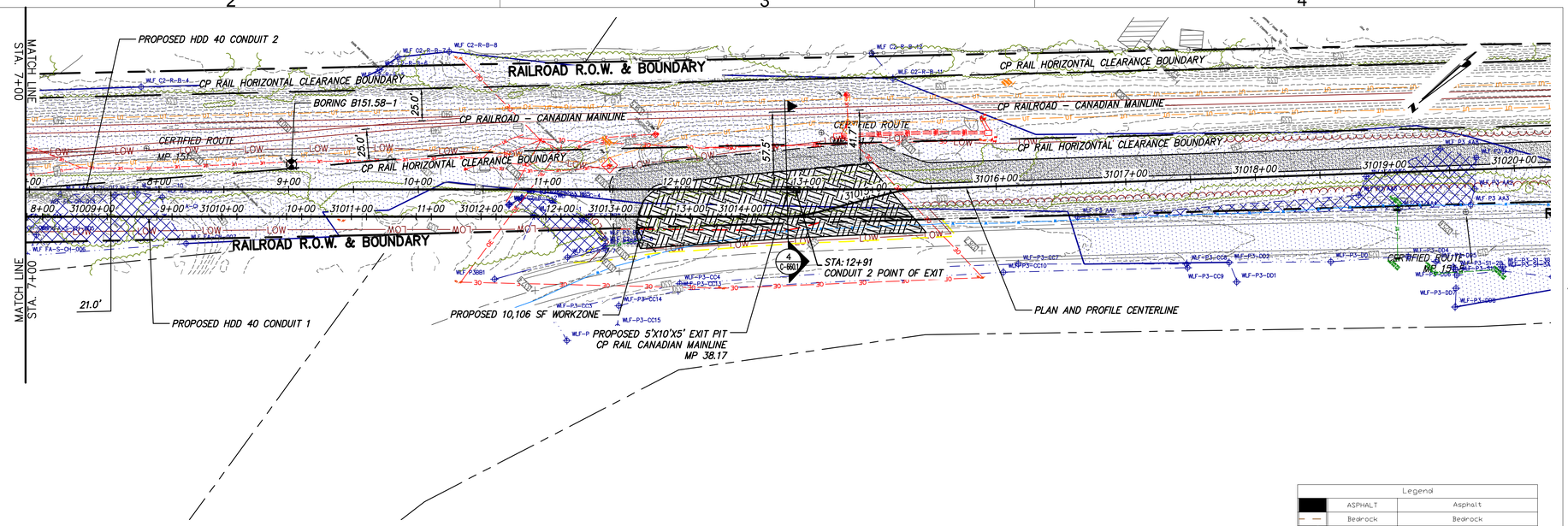
CHA PROJECT NO. 066076

DRAWING NO. **C-320A**

DATE 04/05/2023

SH.NO.

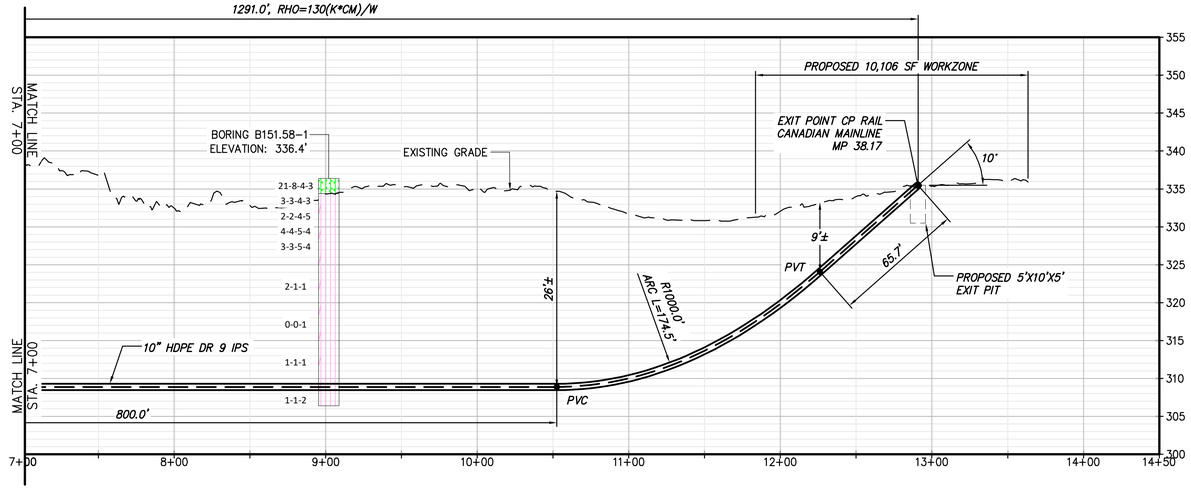
File: V:\PROJECTS\ANY\K6\066076.000\09_DESIGN\DRAWINGS\01_SHEETS\DESIGN PACKAGE 3\066076_P3_C-321 C321A.DWG Saved: 4/4/2023 9:04:48 AM Plotted: 4/4/2023 4:11:07 PM Current User: Snyder, Morgan LastSavedBy: 8275



PROPOSED HDD 40 PLAN VIEW

CONDUIT 2

0 50 100
Scale in feet



PROPOSED HDD 40 PROFILE

CONDUIT 2

20 10 0
0 50 100
Scale in feet

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BORING LOG STRIP LEGEND

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Legend		
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	Bedrock	Bedrock
	Boulder	Boulder
	CH	Fat CLAY
	CH-MH	SILTY Fat CLAY
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	CL-ML	SILTY CLAY
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	OL	ORGANIC Lean CLAY
	OL/OH	ORGANIC SOIL
	PT	PEAT
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	Sandstone	Sandstone
	SC	CLAYEY SAND
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CHPE Champlain Hudson Power Express

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CHAMPLAIN HUDSON POWER EXPRESS
SEGMENTS 4 & 5 (PACKAGE 3) - CP: FORT EDWARD TO MILTON
PLAN AND PROFILE - HDD 40, CONDUIT 2

DRAWN BY: JAS | DESIGNED BY: ES | APPROVED BY: JEO | SCALE AS NOTED | REV. NO. 1

KIEWIT PROJECT NO. 21162
CHA PROJECT NO. 066076
DRAWING NO. **C-320A.1**
DATE 04/05/2023
SH.NO.

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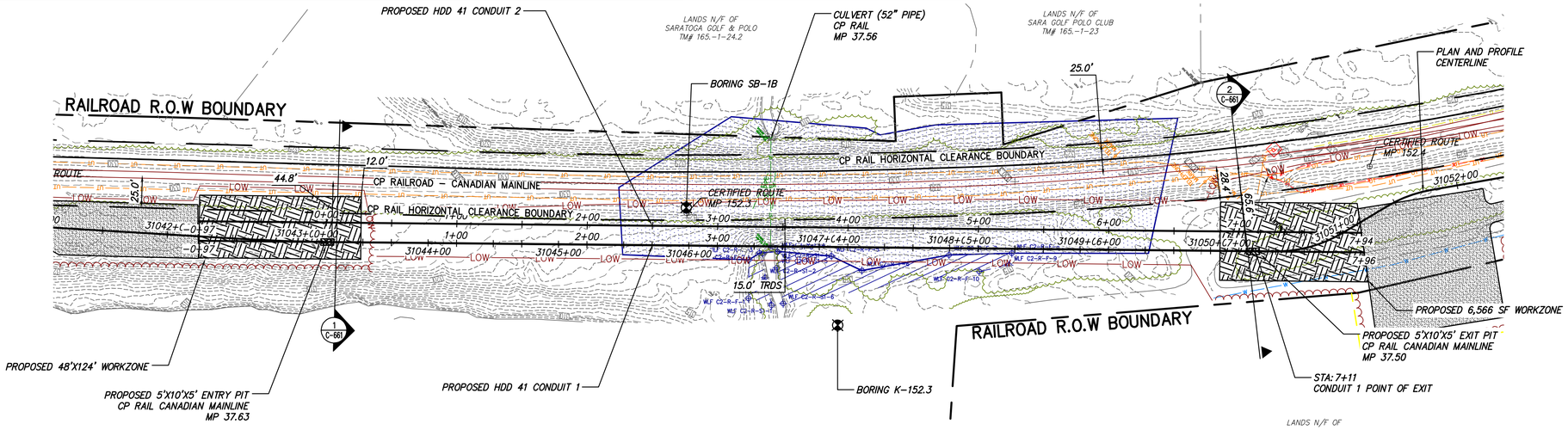
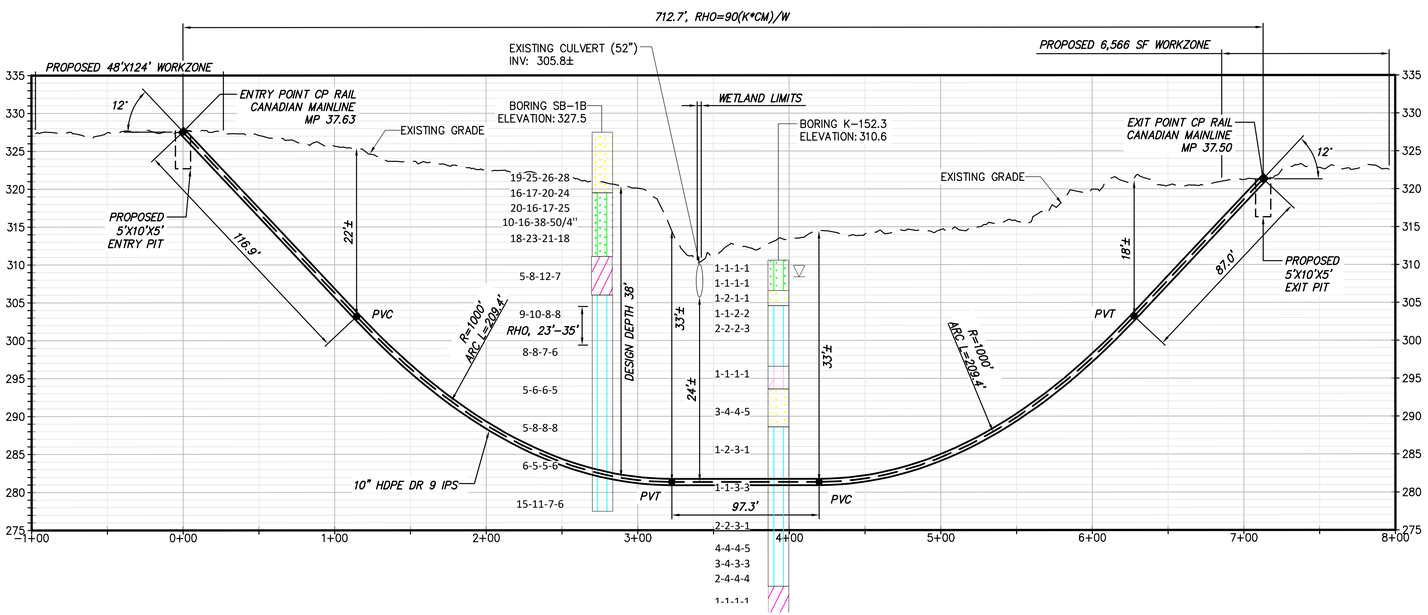


0 50 100
Scale in feet

PROPOSED HDD 41 PLAN VIEW

CONDUIT 1



20
10
0
0 50 100
Scale in feet

PROPOSED HDD 41 PROFILE

CONDUIT 1

BORING LOG STRIP LEGEND

B101

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11000psi =UCS

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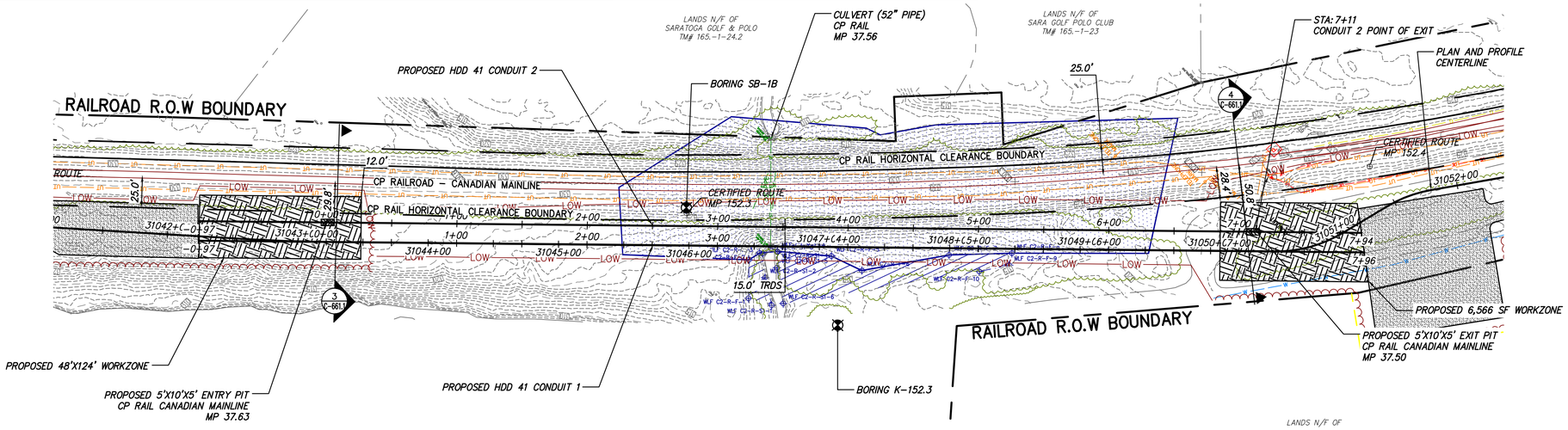
CHAMPLAIN HUDSON POWER EXPRESS
SEGMENTS 4 & 5 (PACKAGE 3) - CP: FORT EDWARD TO MILTON
PLAN AND PROFILE - HDD 41, CONDUIT 1

KIEWIT PROJECT NO. 21162
CHA PROJECT NO. 068076
DRAWING NO. **C-321**

DRAWN BY: JDL | DESIGNED BY: JDL | APPROVED BY: JEO | SCALE AS NOTED | REV. NO. X | DATE 04/05/2023 | SH.NO.

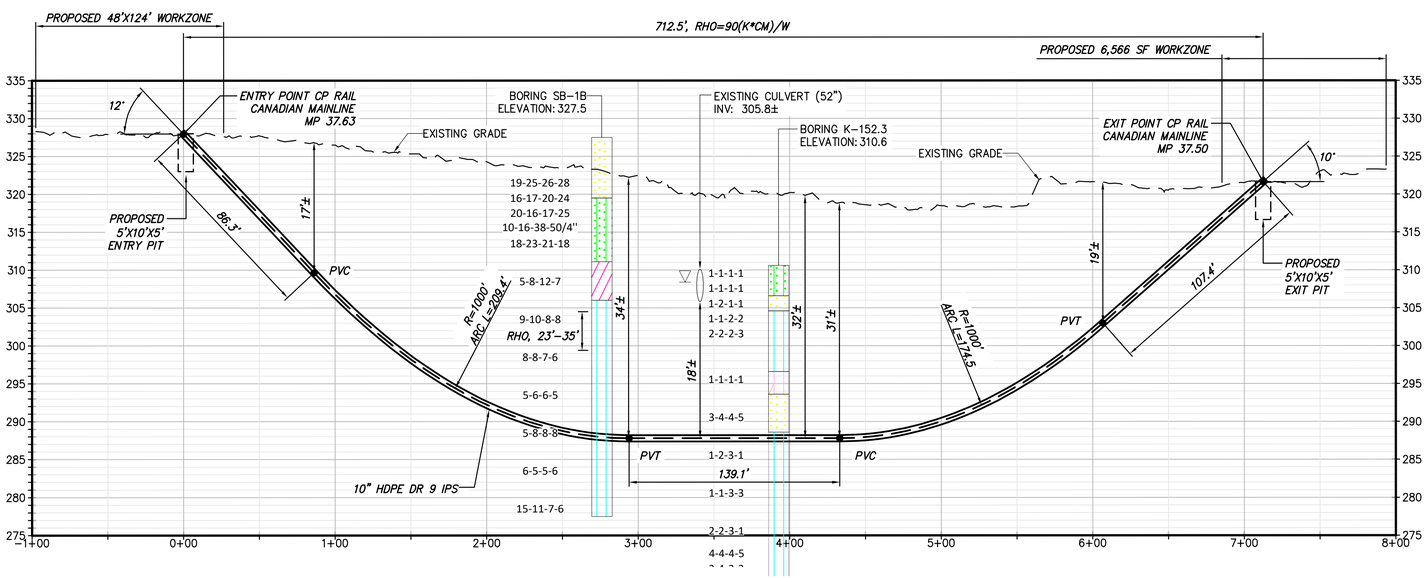
File: V:\PROJECTS\ANY\K6\068076.000\09_DESIGN\DRAWINGS\01_SHEETS\DESIGN PACKAGE 3\068076_P3_C-322-C-322A.DWG Saved: 4/3/2023 1:29:15 PM Plotted: 4/4/2023 4:13:42 PM Current User: Snyder, Morgan LastSavedBy: 8275



PROPOSED HDD 41 PLAN VIEW

CONDUIT 2

0 50 100
Scale in feet



PROPOSED HDD 41 PROFILE

CONDUIT 2

0 50 100
Scale in feet

BORING LOG STRIP LEGEND

B101

Blow Counts per 6" = 10-10-10
Recovery %/RQD % = 95%/90%
11000psi =UCS

2D strip logs shown at 10x exaggeration
3D strip logs have no exaggeration

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
Delayed Water Table	Water Table after drilling

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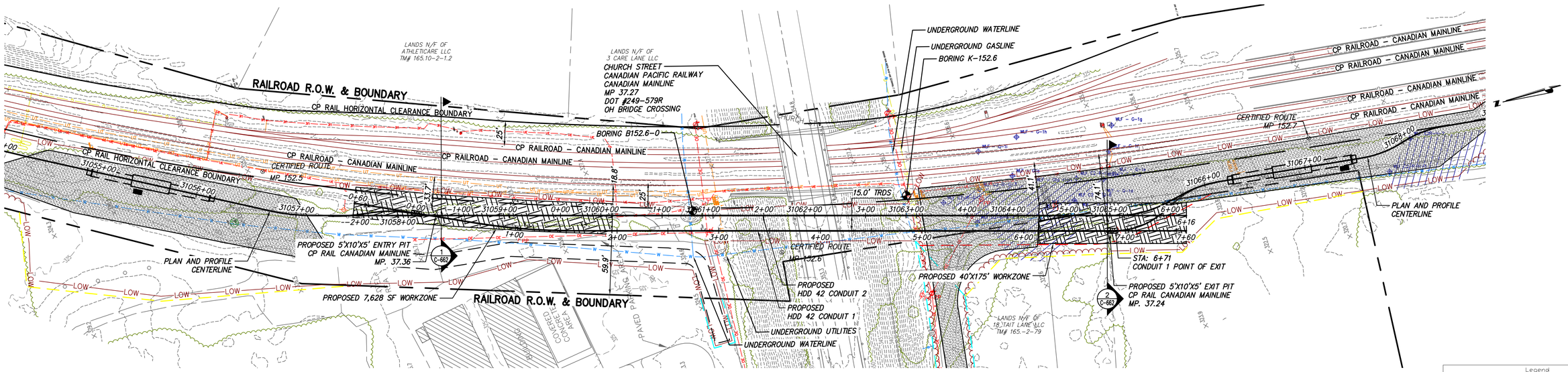
No.	DATE	SUBMITTAL / REVISION DESCRIPTION	DB	APP
0	04/05/2023	FINAL EM&CP SUBMISSION	MCS	JEO

CHAMPLAIN HUDSON POWER EXPRESS
SEGMENTS 4 & 5 (PACKAGE 3) - CP: FORT EDWARD TO MILTON
PLAN AND PROFILE - HDD 41, CONDUIT 2

KIEWIT PROJECT NO. 21162
CHA PROJECT NO. 066076
DRAWING NO. **C-321A**

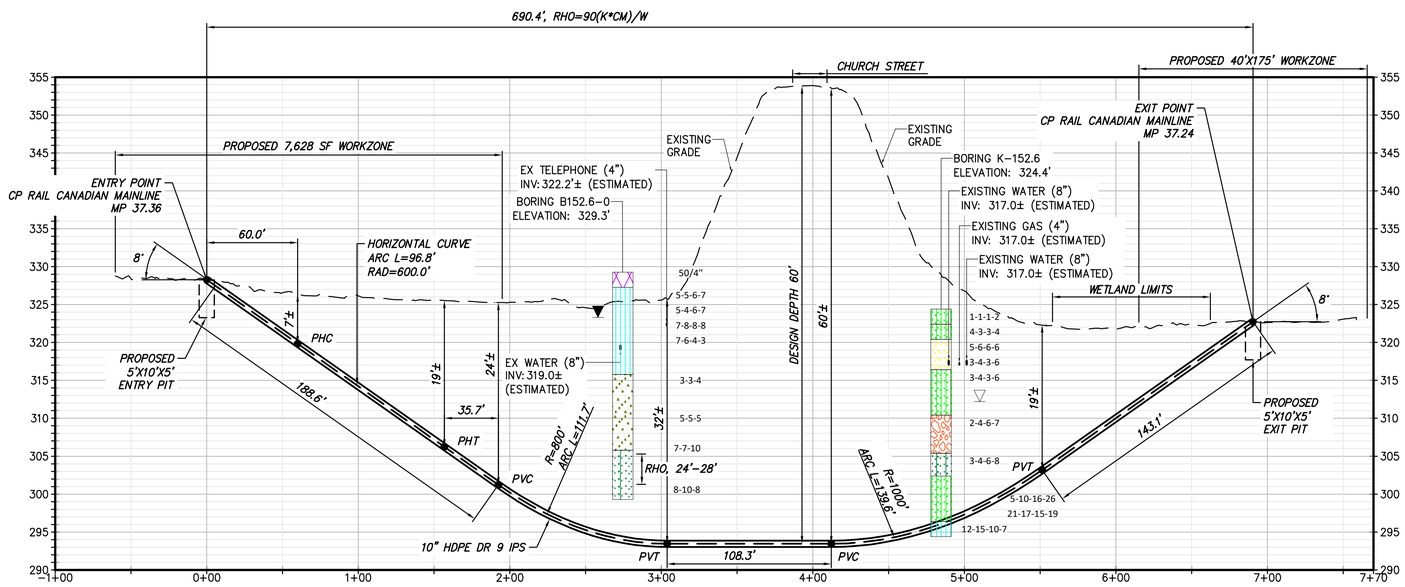
DRAWN BY: JDL DESIGNED BY: JDL APPROVED BY: JEO SCALE AS NOTED DATE 04/05/2023 REV. NO. X SH.NO.

File: V:\PROJECTS\ANY\K6\066076.000\09_DESIGN\DRAWINGS\01_SHEETS\DESIGN PACKAGE 3\066076_P3_C-322-C-322A.DWG Saved: 4/3/2023 1:29:15 PM Plotted: 4/4/2023 4:15:04 PM Current User: Snyder, Morgan LastSavedBy: 8275



0 50 100
Scale in feet

PROPOSED HDD 42 PLAN VIEW
CONDUIT 1



PROPOSED HDD 42 PROFILE
CONDUIT 1

0 50 100
Scale in feet

20 10 0

NOTE:
1) THE USE OF CONDUCTOR CASINGS IS RECOMMENDED TO MITIGATE THE POTENTIAL RELEASE OF THE DRILLING FLUIDS.

BORING LOG STRIP LEGEND
B101
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Legend

	ASPHALT	Asphalt
	Bedrock	Bedrock
	Boulder	Boulder
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	CH-MH	SILTY Fat CLAY
	CL	Lean CLAY
	CL-ML	SILTY CLAY
	CONCRETE	Concrete
	Fill	Fill
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	GC-GM	SILTY CLAYEY GRAVEL
	GM	SILTY GRAVEL
	GP	Poorly Graded GRAVEL
	GP-GC	Poorly Graded Gravel with CLAY
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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
	SM	SILTY SAND
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	SP-SC	Poorly Graded SAND with CLAY
	SP-SM	Poorly Graded SAND with SILT
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	SW-SC	Well Graded SAND with CLAY
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	USGS 670	Interbedded Sandstone and Shale
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	USGS 705	Schist
	USGS 705	Schist
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	Void	Void
	Water	Water
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▼	Water Table	Water Table during drilling
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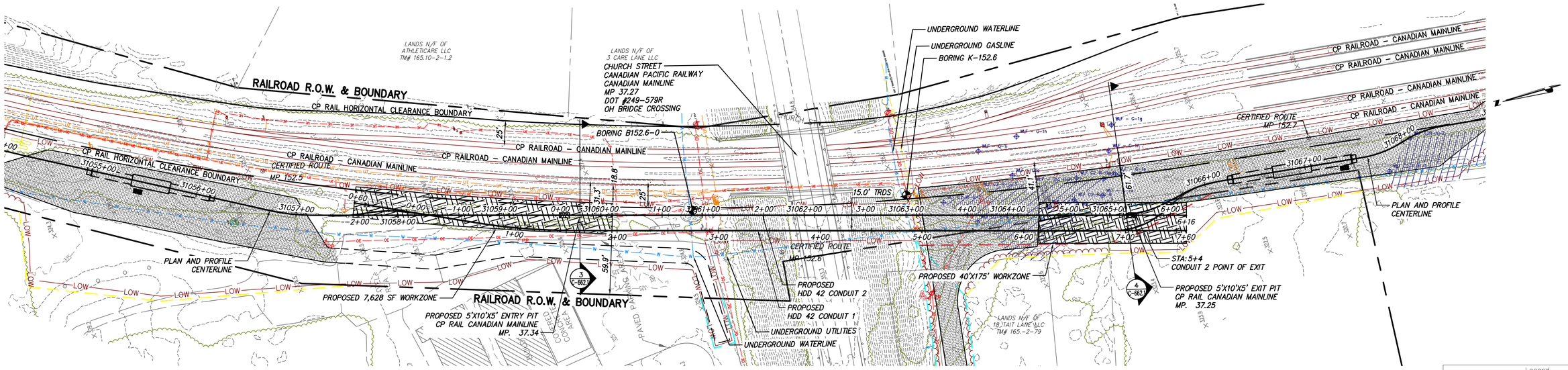
CHAMPLAIN HUDSON POWER EXPRESS
SEGMENTS 4 & 5 (PACKAGE 3) - CP: FORT EDWARD TO MILTON
PLAN AND PROFILE - HDD 42, CONDUIT 1

KIEWIT PROJECT NO. 21162
CHA PROJECT NO. 066076
DRAWING NO. **C-322**

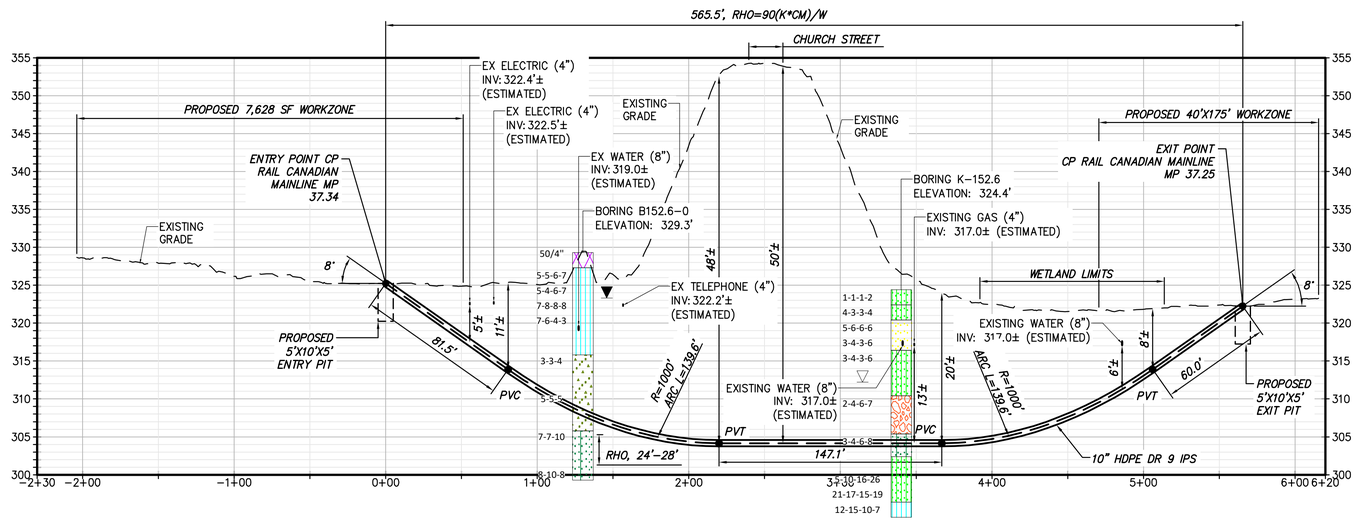
DRAWN BY: CJL | DESIGNED BY: CJL | APPROVED BY: XXX | SCALE AS NOTED | REV. NO. X | DATE 04/05/2023 | SH.NO.

File: V:\PROJECTS\ANY\K6\066076.000\09_DESIGN\DRAWINGS\01_SHEETS\DESIGN PACKAGE 3\066076_P3_C-323 - C-323A.DWG Saved: 4/3/2023 12:53:57 PM Plotted: 4/4/2023 4:18:19 PM Current User: Snyder, Morgan LastSavedBy: 8275



0 50 100
Scale in feet

PROPOSED HDD 42 PLAN VIEW
CONDUIT 2



0 10 20
0 50 100
Scale in feet

PROPOSED HDD 42 PROFILE
CONDUIT 2

NOTE:
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3D strip logs have no exaggeration

Legend

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	Bedrock	Bedrock
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	CH-MH	SILTY Fat CLAY
	CL	Lean CLAY
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	CONCRETE	Concrete
	Fill	Fill
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	GC-GM	SILTY CLAYEY GRAVEL
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CHAMPLAIN HUDSON POWER EXPRESS
SEGMENTS 4 & 5 (PACKAGE 3) - CP: FORT EDWARD TO MILTON
PLAN AND PROFILE - HDD 42, CONDUIT 2

KIEWIT PROJECT NO. 21162
CHA PROJECT NO. 066076
DRAWING NO. **C-322A**

DRAWN BY: CJL | DESIGNED BY: CJL | APPROVED BY: XXX | SCALE AS NOTED | REV. NO. X | DATE 04/05/2023 | SH.NO.

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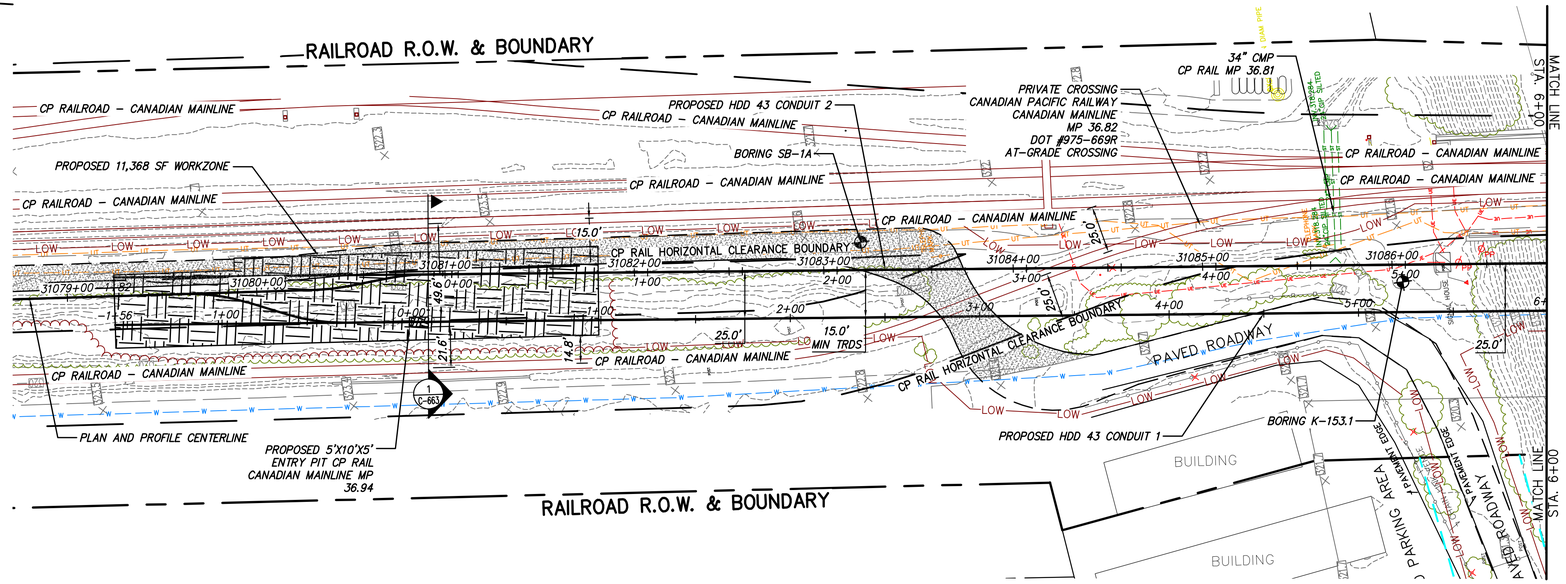
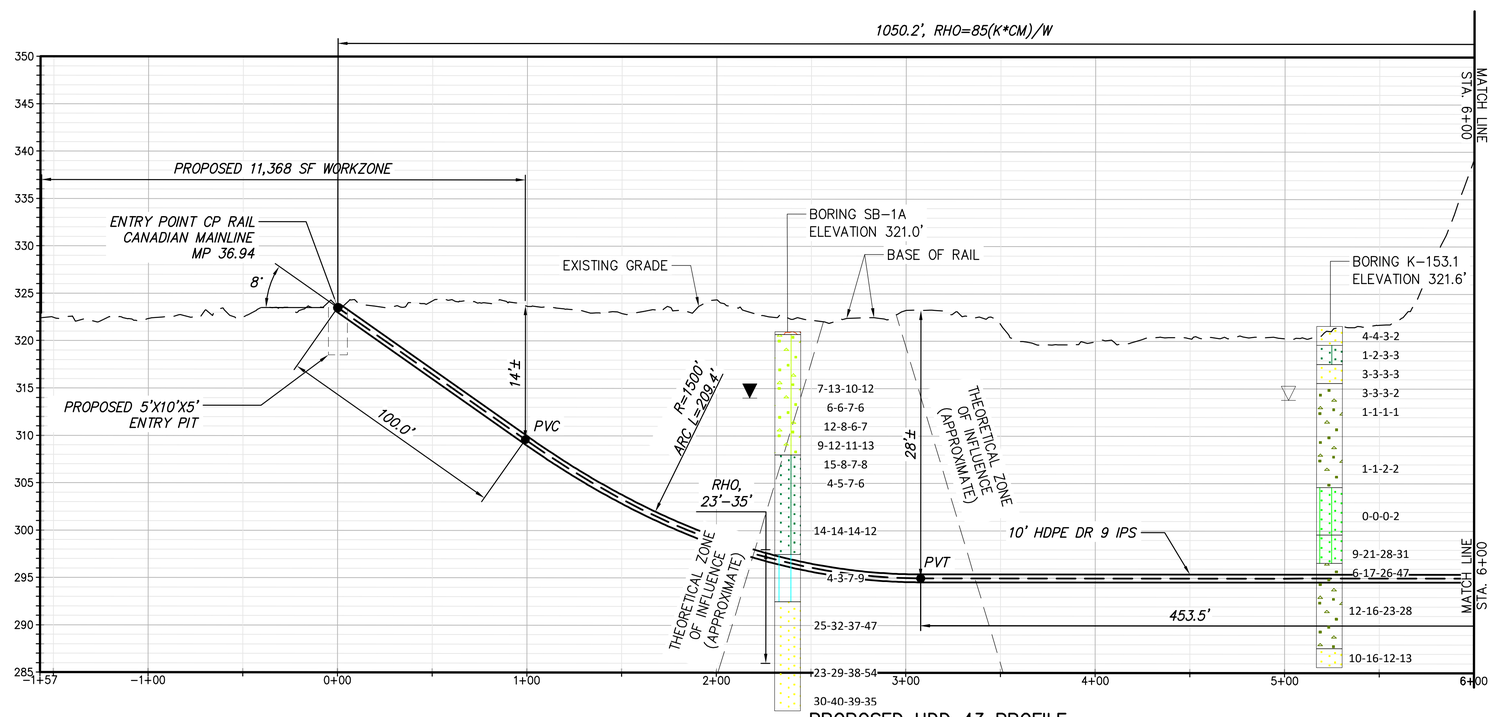


0 50 100
Scale in feet

PROPOSED HDD 43 PLAN VIEW

CONDUIT 1



PROPOSED HDD 43 PROFILE

CONDUIT 1

0 50 100
Scale in feet

BORING LOG STRIP LEGEND

B101

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	Bedrock	Bedrock
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	CONCRETE	Concrete
	Fill	Fill
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CHAMPLAIN HUDSON POWER EXPRESS

SEGMENTS 4 & 5 (PACKAGE 3) - CP: FORT EDWARD TO MILTON

PLAN AND PROFILE - HDD 43, CONDUIT 1

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

KIEWIT PROJECT NO. 21162

CHA PROJECT NO. 066076

DRAWING NO. **C-323**

DATE 04/05/2023

SH.NO.

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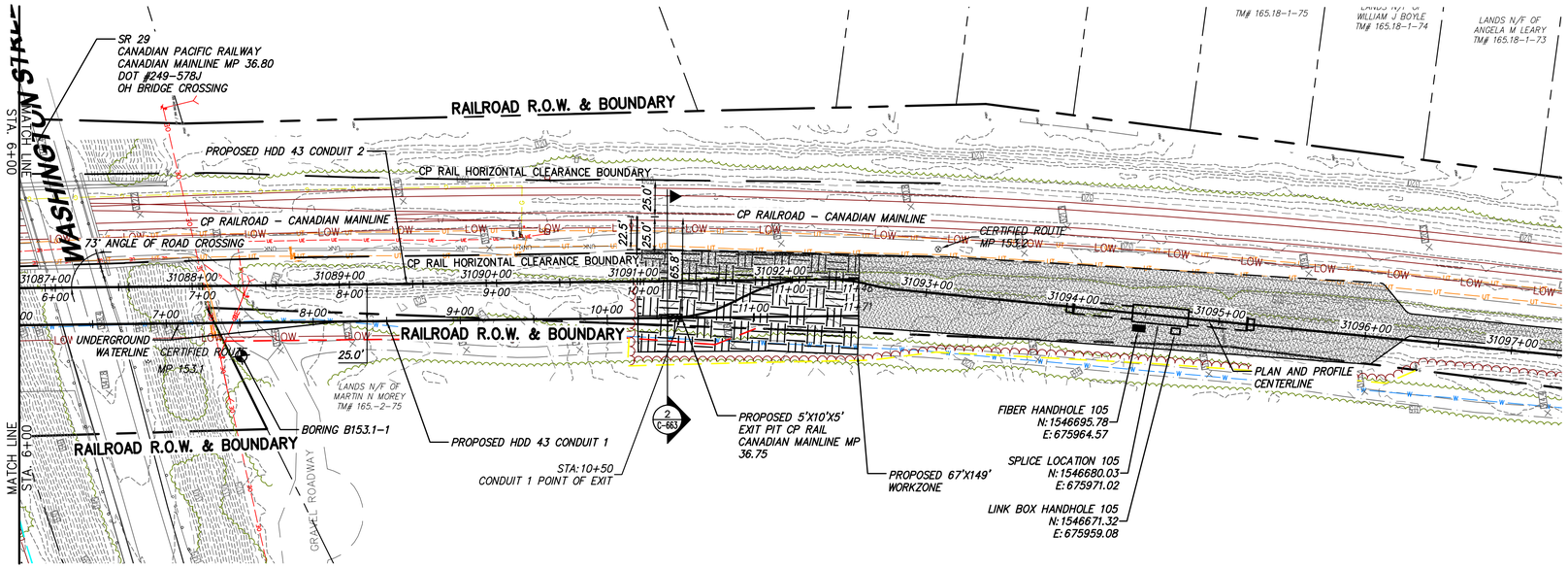
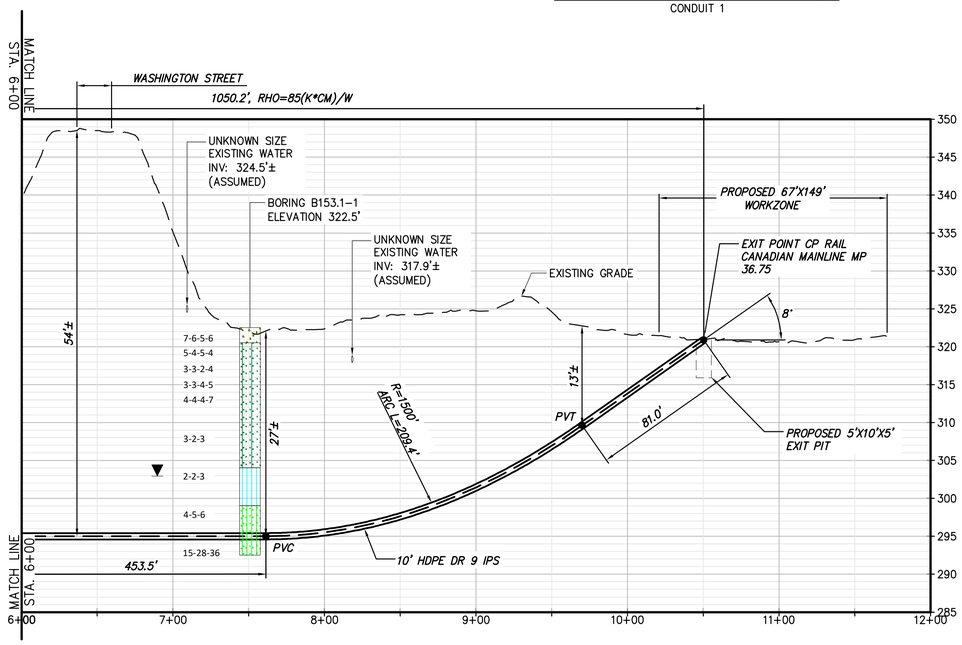


PROPOSED HDD 43 PLAN VIEW

CONDUIT 1

0 50 100
Scale in feet



PROPOSED HDD 43 PROFILE

CONDUIT 1

20
10
0
0 50 100
Scale in feet

BORING LOG STRIP LEGEND

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CHAMPLAIN HUDSON POWER EXPRESS
SEGMENTS 4 & 5 (PACKAGE 3) - CP: FORT EDWARD TO MILTON
PLAN AND PROFILE - HDD 43, CONDUIT 1

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

KIEWIT PROJECT NO. 21162
CHA PROJECT NO. 066076
DRAWING NO. **C-323.1**
DATE 04/05/2023
SH.NO.

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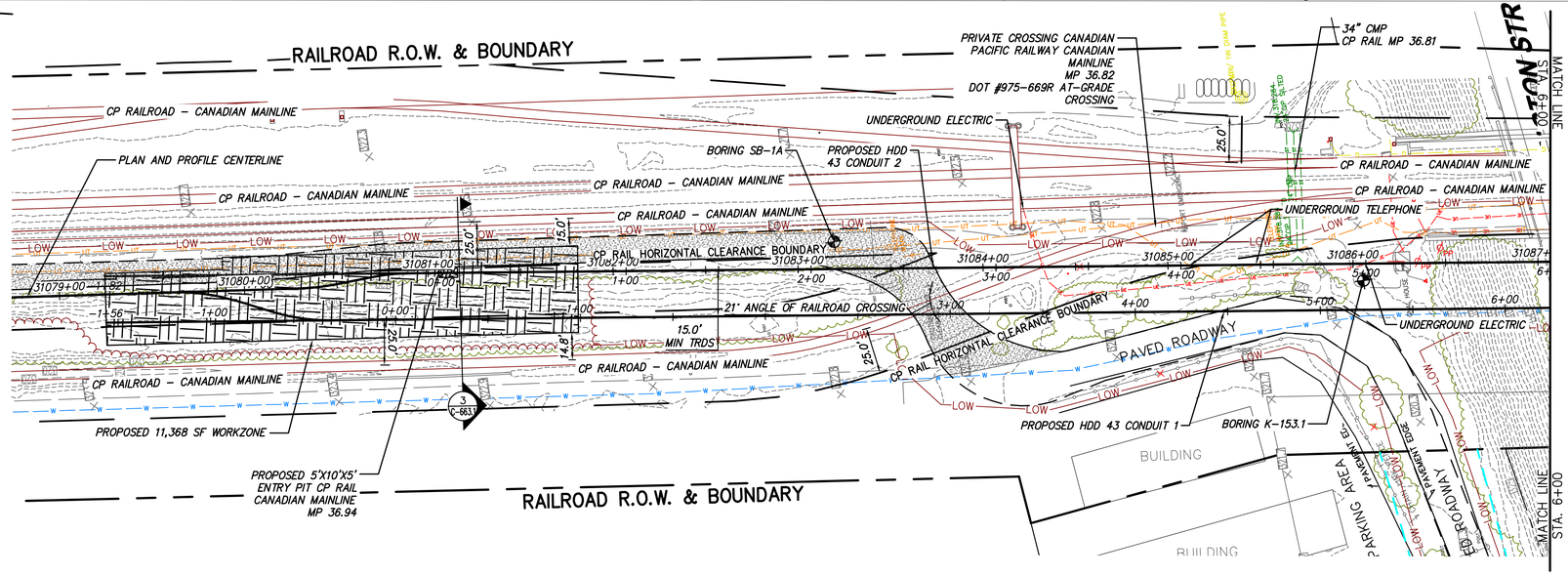
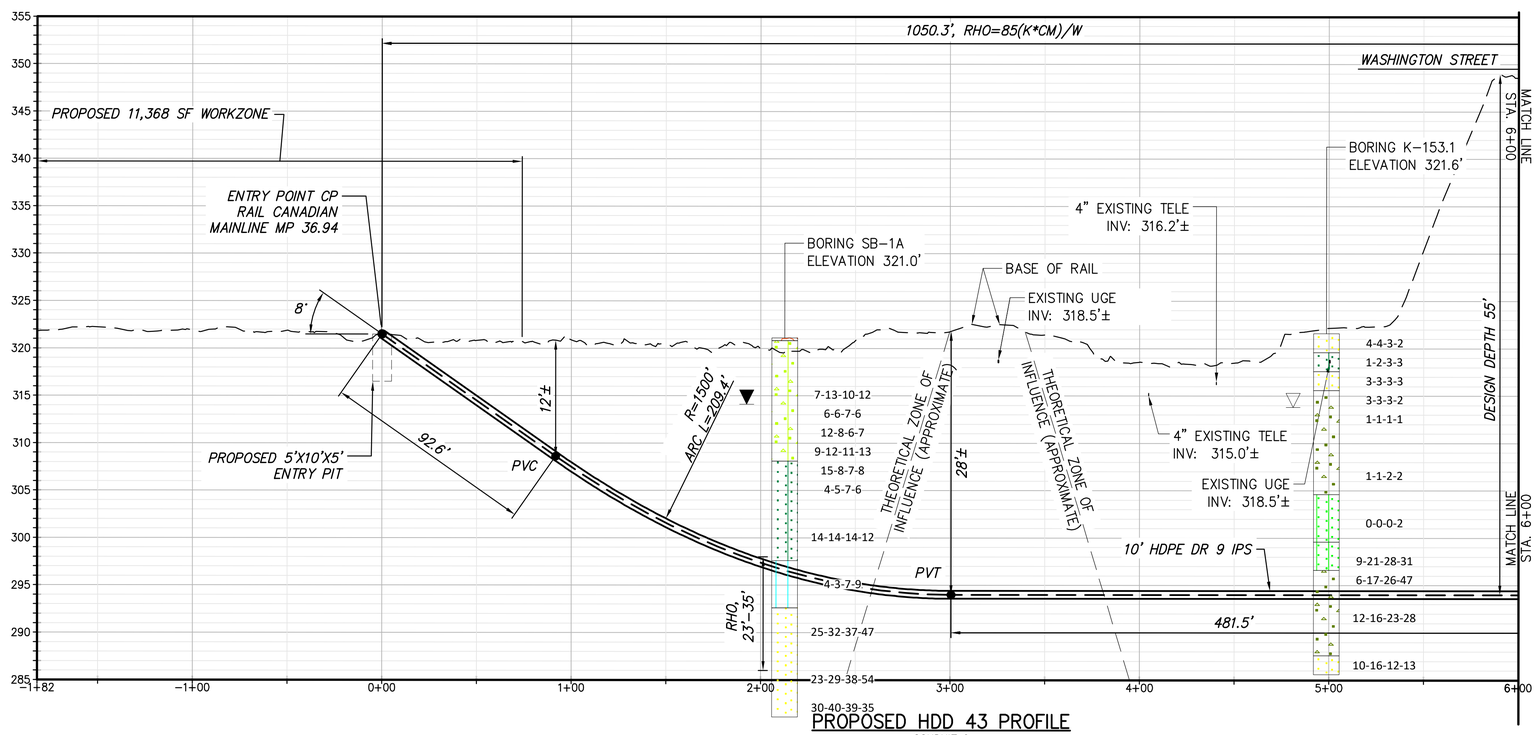


Scale in feet

PROPOSED HDD 43 PLAN VIEW

CONDUIT 2



Scale in feet

PROPOSED HDD 43 PROFILE

CONDUIT 2

BORING LOG STRIP LEGEND

B101

Blow Counts per 6" = 10-10-10

Recovery %/RQD % = 95%/90%

11000psi =UCS

2D strip logs shown at 10x exaggeration

3D strip logs have no exaggeration

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
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USGS 718	Granite 1
Void	Void
Water	Water
Weathered Rock	Undefined
Water Table	Water Table during drilling
Delayed Water Table	Water Table after drilling

CHPE Champlain Hudson Power Express

Kiewit

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No.	DATE	SUBMITTAL / REVISION DESCRIPTION	DB	APP
0	04/05/2023	FINAL EM&CP SUBMISSION	MCS	JEO

CHAMPLAIN HUDSON POWER EXPRESS

SEGMENTS 4 & 5 (PACKAGE 3) - CP: FORT EDWARD TO MILTON

PLAN AND PROFILE - HDD 43, CONDUIT 2

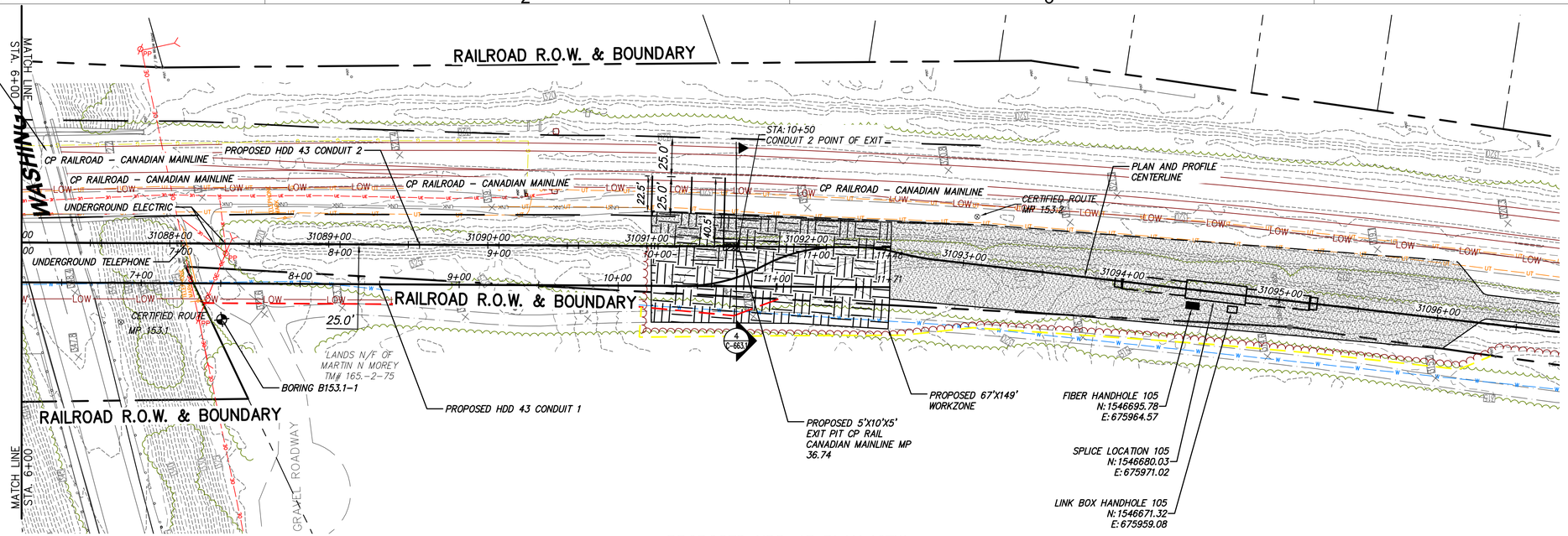
DRAWN BY: JAS | DESIGNED BY: JAS | APPROVED BY: JEO | SCALE AS NOTED | REV. NO. X | DATE 04/05/2023 | SH.NO.

KIEWIT PROJECT NO. 21162

CHA PROJECT NO. 066076

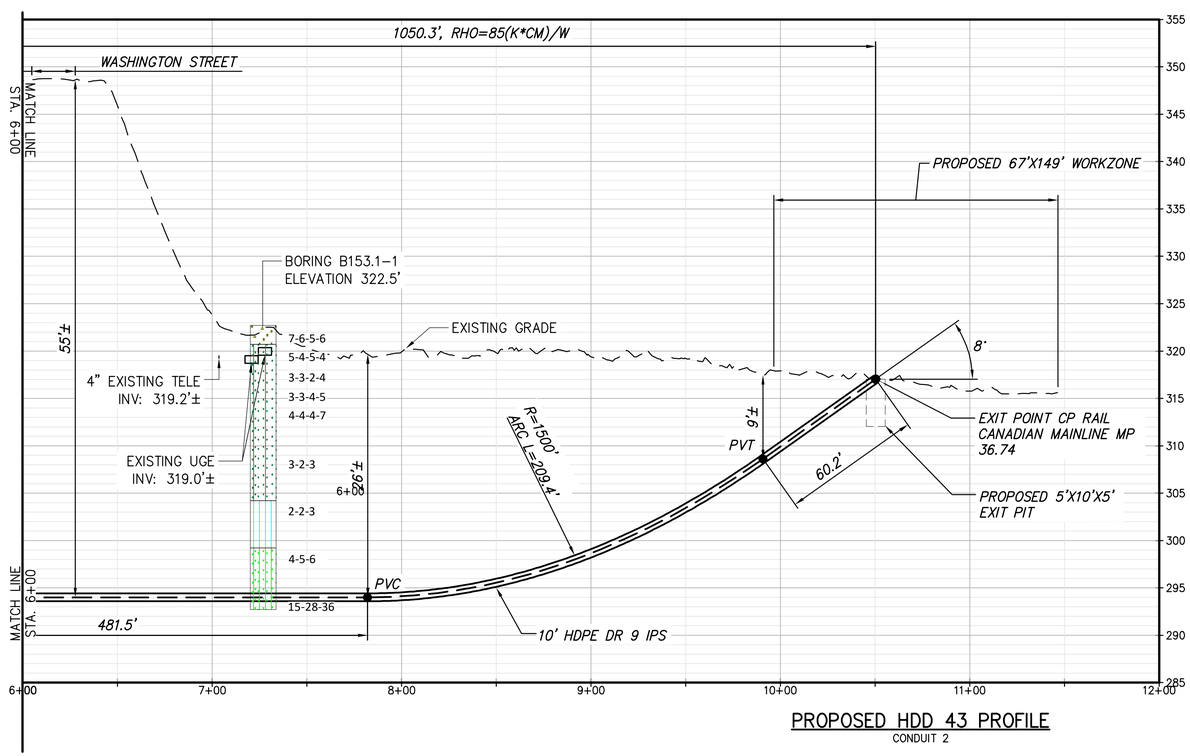
DRAWING NO. **C-323A**

File: V:\PROJECTS\ANY\K6\066076.000\09_DESIGN\DRAWINGS\01_SHEETS\DESIGN PACKAGE 3\066076_P3_C-324-C-324A (LONGER).DWG Saved: 4/4/2023 9:04:40 AM Plotted: 4/4/2023 4:25:33 PM Current User: Snyder, Morgan LastSavedBy: 8275



PROPOSED HDD 43 PLAN VIEW

CONDUIT 2



PROPOSED HDD 43 PROFILE

CONDUIT 2

BORING LOG STRIP LEGEND

B101

Blow Counts per 6" = 10-10-10

Recovery %/RQD % = 95%/90%

11000psi =UCS

2D strip logs shown at 10x exaggeration

3D strip logs have no exaggeration

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
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CHAMPLAIN HUDSON POWER EXPRESS

SEGMENTS 4 & 5 (PACKAGE 3) - CP: FORT EDWARD TO MILTON

PLAN AND PROFILE - HDD 43, CONDUIT 2

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

KIEWIT PROJECT NO. 21162

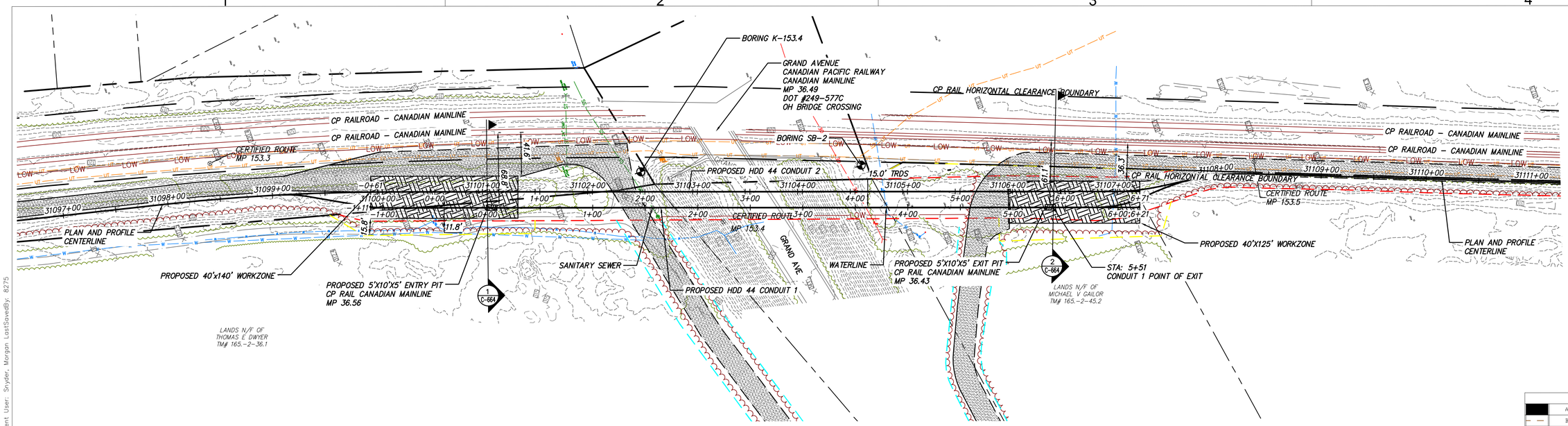
CHA PROJECT NO. 066076

DRAWING NO. C-323A.1

DATE 04/05/2023

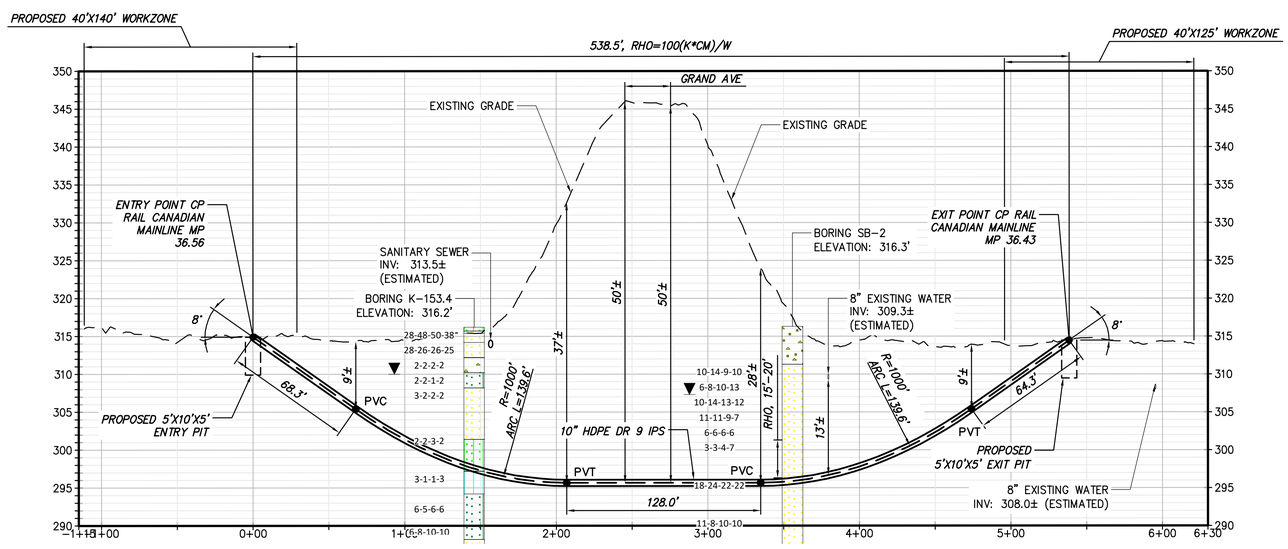
SH.NO.

File: V:\PROJECTS\ANY\K6\066076.000\09_DESIGN\DRAWINGS\01_SHEETS\DESIGN PACKAGE 3\066076_P3_C-324-C-324A (LONGER).DWG Saved: 4/4/2023 9:04:40 AM Plotted: 4/4/2023 4:26:33 PM Current User: Snyder, Morgan LastSavedBy: 8275



PROPOSED HDD 44 PLAN VIEW

CONDUIT 1



PROPOSED HDD 44 PROFILE

CONDUIT 1

BORING LOG STRIP LEGEND

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CHAMPLAIN HUDSON POWER EXPRESS

SEGMENTS 4 & 5 (PACKAGE 3) - CP: FORT EDWARD TO MILTON

PLAN AND PROFILE - HDD 44, CONDUIT 1

KIEWIT PROJECT NO. 21162

CHA PROJECT NO. 066076

DRAWING NO. **C-324**

DRAWN BY: CJL | DESIGNED BY: CJL | APPROVED BY: JEO | SCALE AS NOTED | REV. NO. X | DATE 04/05/2023 | SH.NO.

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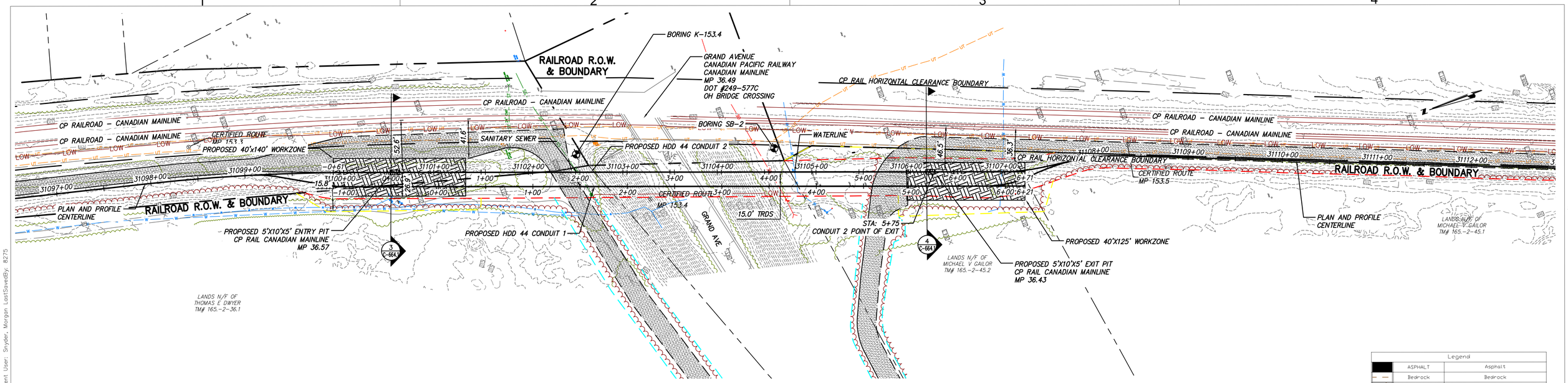
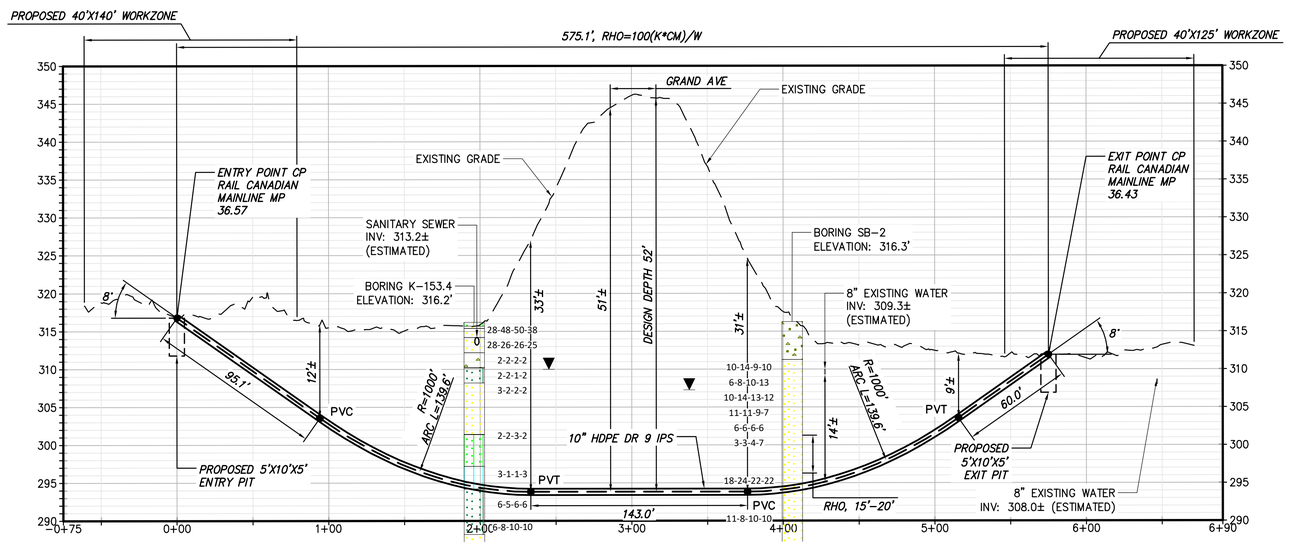


PROPOSED HDD 44 PLAN VIEW

CONDUIT 2



PROPOSED HDD 44 PROFILE

CONDUIT 2

BORING LOG STRIP LEGEND

B101

Blow Counts per 6" = 10-10-10

Recovery %/RQD % = 95%/90%

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Legend		
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	PT	PEAT
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CHAMPLAIN HUDSON POWER EXPRESS

SEGMENTS 4 & 5 (PACKAGE 3) - CP: FORT EDWARD TO MILTON

PLAN AND PROFILE - HDD 44, CONDUIT 2

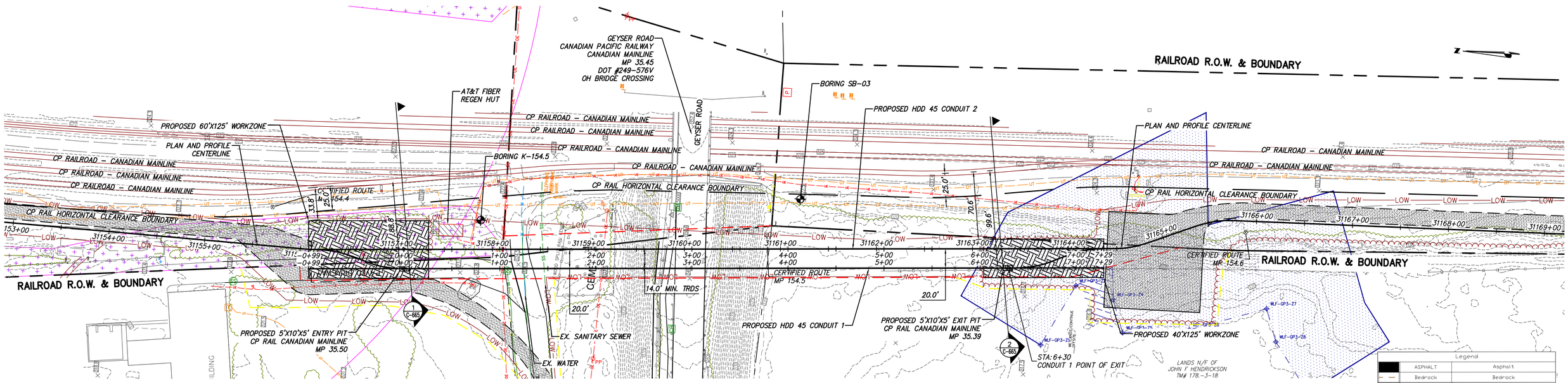
KIEWIT PROJECT NO. 21162

CHA PROJECT NO. 066076

DRAWING NO. **C-324A**

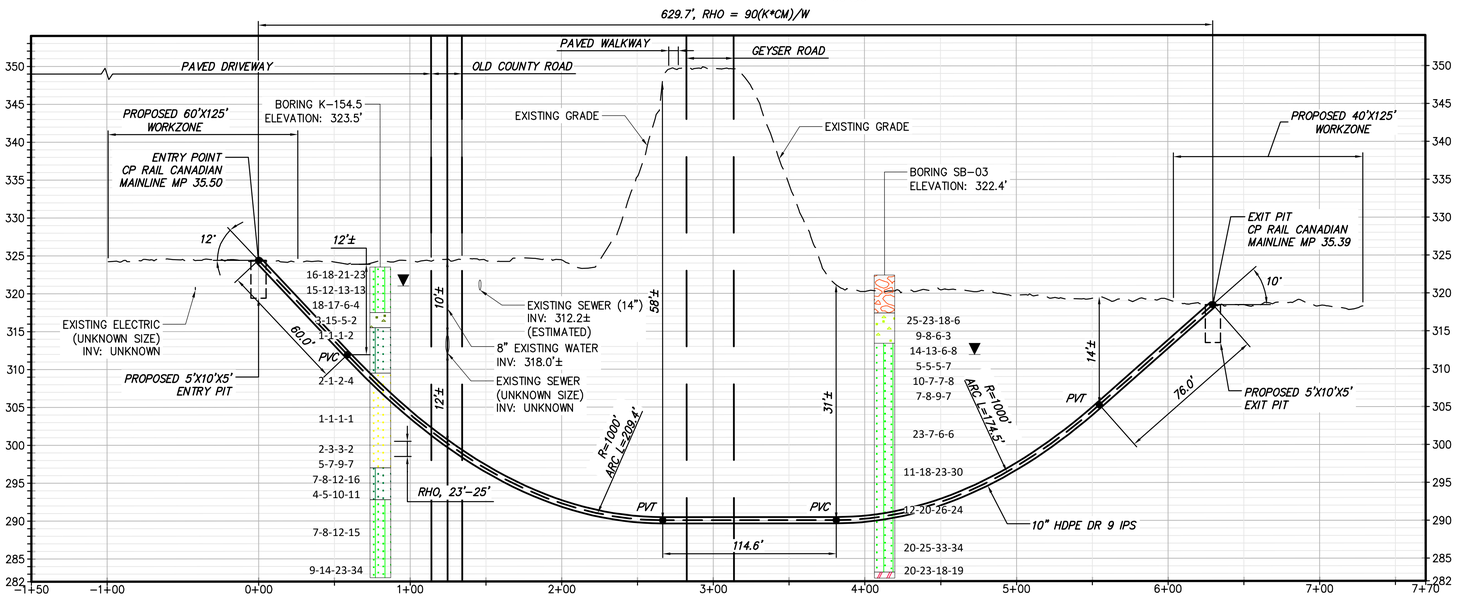
DRAWN BY: CJL | DESIGNED BY: CJL | APPROVED BY: JEO | SCALE AS NOTED | DATE 04/05/2023 | REV. NO. X | SH.NO.

File: V:\PROJECTS\ANY\K6\066076.000\09_DESIGN\DRAWINGS\01_SHEETS\DESIGN PACKAGE 3\066076_P3_C-325 - C-325A.DWG Saved: 4/3/2023 12:25:07 PM Plotted: 4/4/2023 4:32:05 PM Current User: Snyder, Morgan LastSavedBy: 8275



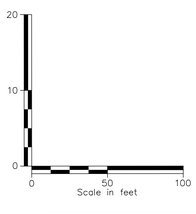
PROPOSED HDD 45 PLAN VIEW

CONDUIT 1



PROPOSED HDD 45 PROFILE

CONDUIT 1



BORING LOG STRIP LEGEND

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CHAMPLAIN HUDSON POWER EXPRESS

SEGMENTS 4 & 5 (PACKAGE 3) - CP: FORT EDWARD TO MILTON

PLAN AND PROFILE - HDD 45, CONDUIT 1

KIEWIT PROJECT NO. 21162

CHA PROJECT NO. 066076

DRAWING NO. **C-325**

DRAWN BY: JAS | DESIGNED BY: JDL | APPROVED BY: JEO | SCALE AS NOTED | REV. NO. 1 | DATE 04/05/2023 | SH.NO.

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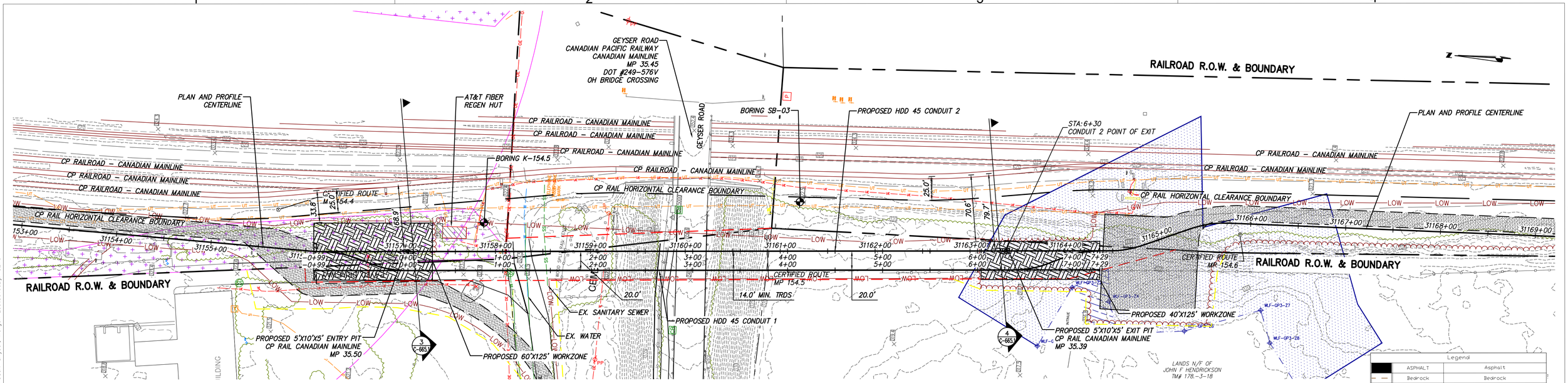
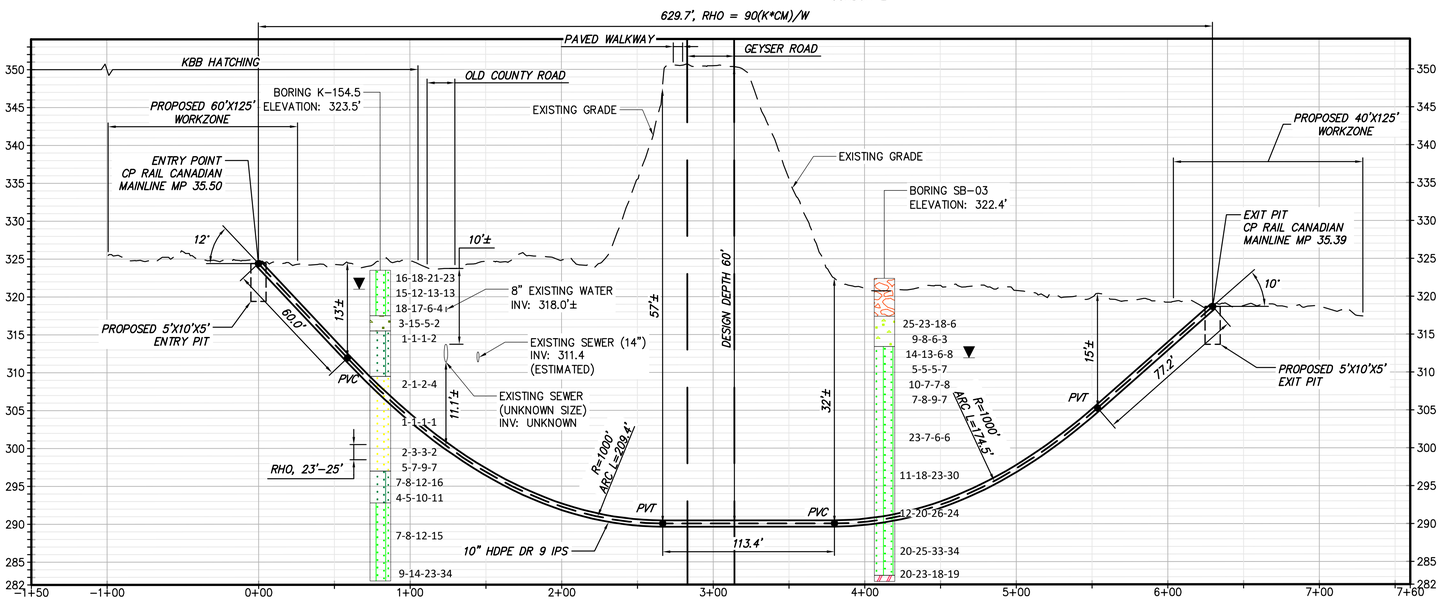


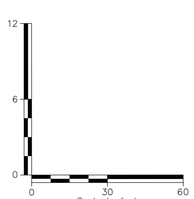
PROPOSED HDD 45 PLAN VIEW

CONDUIT 2



PROPOSED HDD 45 PROFILE

CONDUIT 2



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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
Delayed Water Table	Water Table after drilling

CHPE Champlain Hudson Power Express

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III Winners Circle, PO Box 5269
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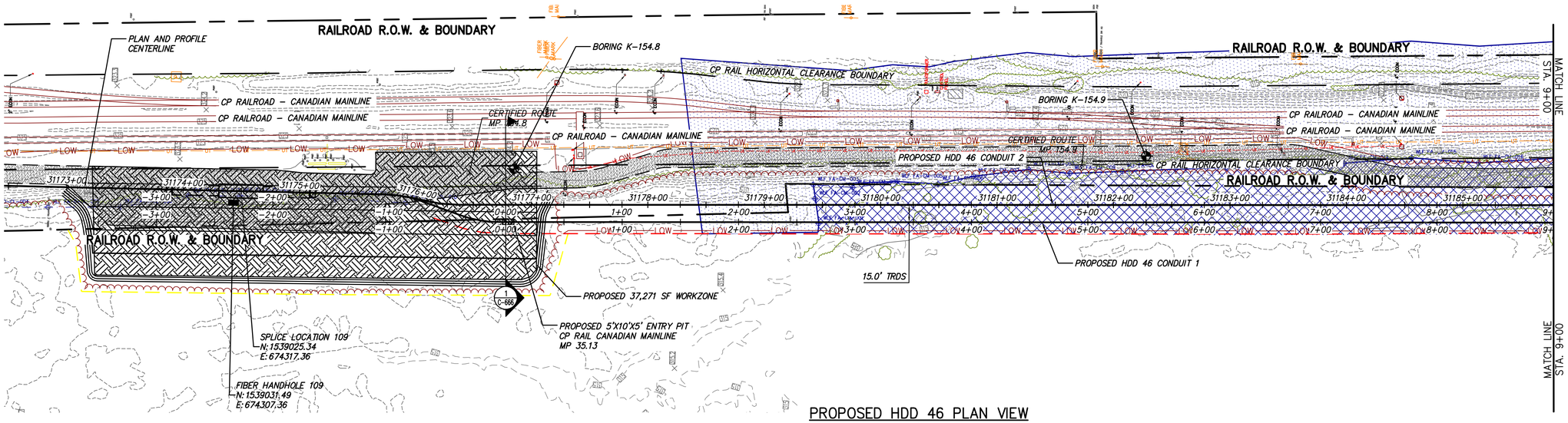
No.	DATE	SUBMITTAL / REVISION DESCRIPTION	DB	APP
0	04/05/2023	FINAL EM&CP SUBMISSION	MCS	JEO

CHAMPLAIN HUDSON POWER EXPRESS
SEGMENTS 4 & 5 (PACKAGE 3) - CP: FORT EDWARD TO MILTON
PLAN AND PROFILE - HDD 45, CONDUIT 2

KIEWIT PROJECT NO. 21162
CHA PROJECT NO. 066076
DRAWING NO. **C-325A**

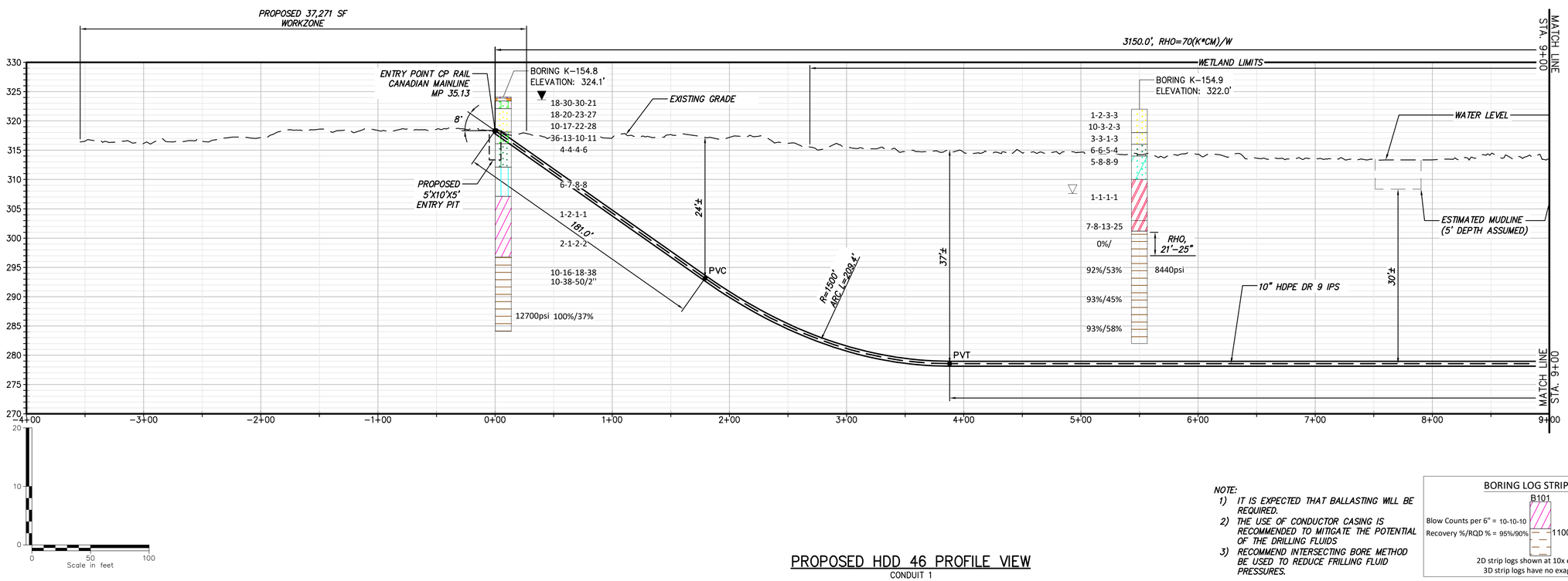
DRAWN BY: JAS | DESIGNED BY: JDL | APPROVED BY: JEO | SCALE AS NOTED | DATE 04/05/2023 | REV. NO. 1 | SH.NO.

File: V:\PROJECTS\ANY\K6\066076.000\09_DESIGN\DRAWINGS\01_SHEETS\DESIGN PACKAGE 3\066076_P3_C-326-C-326A.DWG Saved: 4/3/2023 12:12:14 PM Plotted: 4/4/2023 4:37:31 PM Current User: Snyder, Morgan LastSavedBy: 8275



PROPOSED HDD 46 PLAN VIEW

CONDUIT 1



PROPOSED HDD 46 PROFILE VIEW

CONDUIT 1

NOTE:
1) IT IS EXPECTED THAT BALLASTING WILL BE REQUIRED.
2) THE USE OF CONDUCTOR CASING IS RECOMMENDED TO MITIGATE THE POTENTIAL OF THE DRILLING FLUIDS
3) RECOMMEND INTERSECTING BORE METHOD BE USED TO REDUCE FRILLING FLUID PRESSURES.

BORING LOG STRIP LEGEND

B101

Blow Counts per 6" = 10-10-10
Recovery %/RQD % = 95%/90%
11000psi =UCS

2D strip logs shown at 10x exaggeration
3D strip logs have no exaggeration

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
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CHAMPLAIN HUDSON POWER EXPRESS
SEGMENTS 4 & 5 (PACKAGE 3) - CP: FORT EDWARD TO MILTON
PLAN AND PROFILE - HDD 46, CONDUIT 1

DRAWN BY: CJL | DESIGNED BY: CJL | APPROVED BY: JEO | SCALE AS NOTED | REV. NO. 1

KIEWIT PROJECT NO. 21162
CHA PROJECT NO. 066076
DRAWING NO. **C-326**
DATE 04/05/2023
SH.NO.

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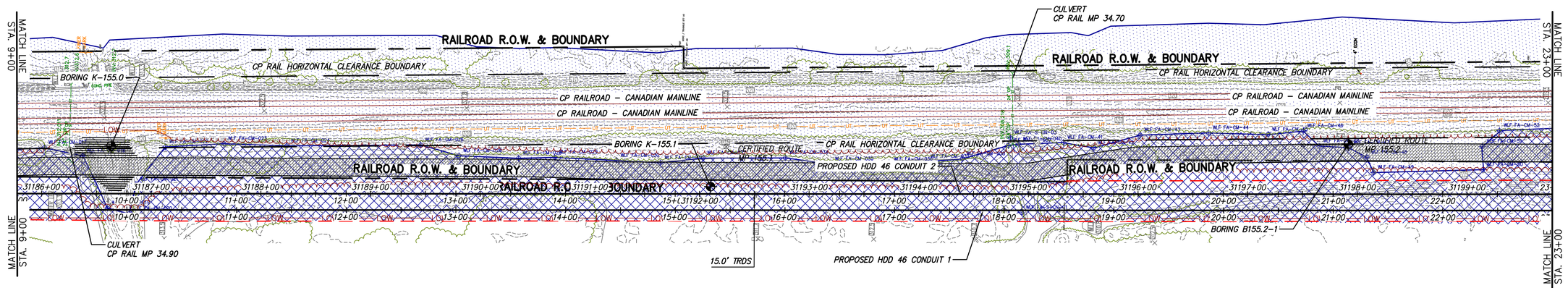
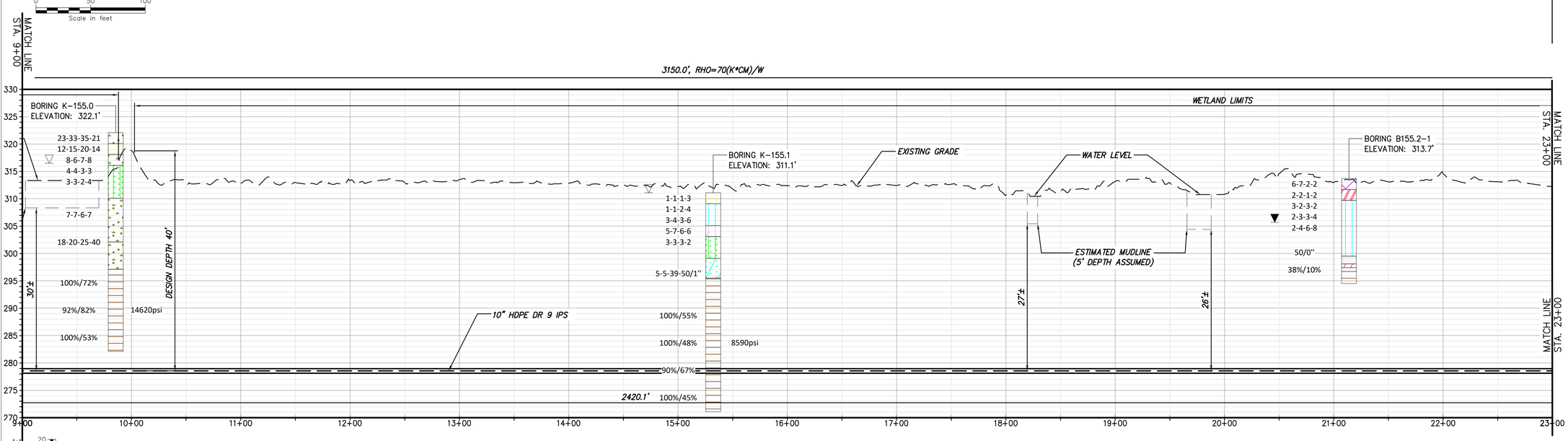
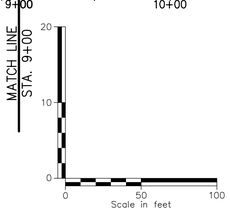


PROPOSED HDD 46 PLAN VIEW

CONDUIT 1

0 50 100
Scale in feet





PROPOSED HDD 46 PROFILE VIEW

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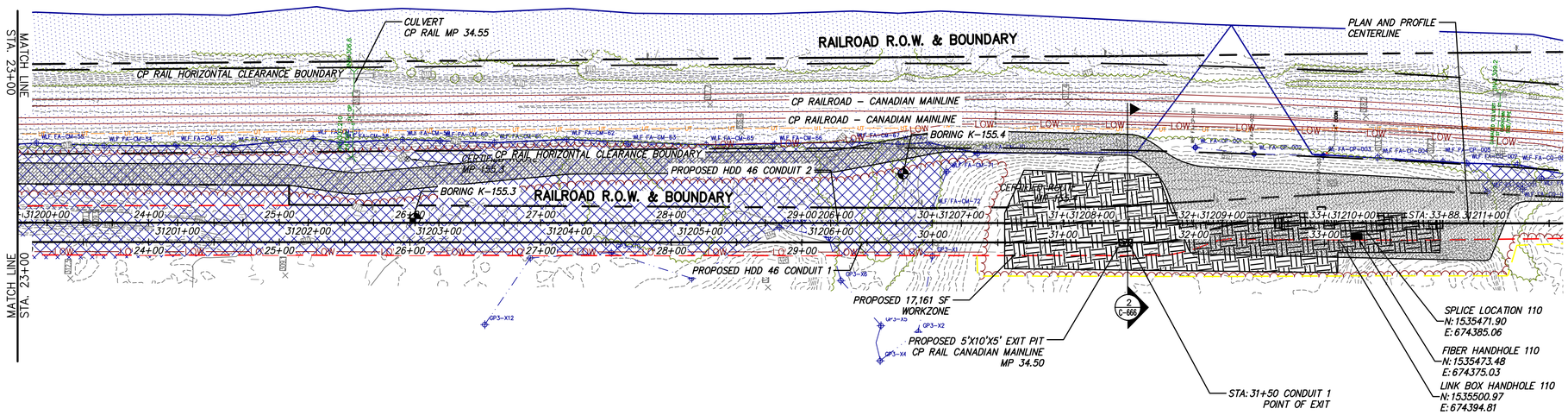
CHAMPLAIN HUDSON POWER EXPRESS
SEGMENTS 4 & 5 (PACKAGE 3) - CP: FORT EDWARD TO MILTON
PLAN AND PROFILE - HDD 46, CONDUIT 1

KIEWIT PROJECT NO. 21162
CHA PROJECT NO. 066076
DRAWING NO. **C-326.1**

DRAWN BY: CJL | DESIGNED BY: CJL | APPROVED BY: JEO | SCALE AS NOTED | REV. NO. 1 | DATE 04/05/2023 | SH.NO.

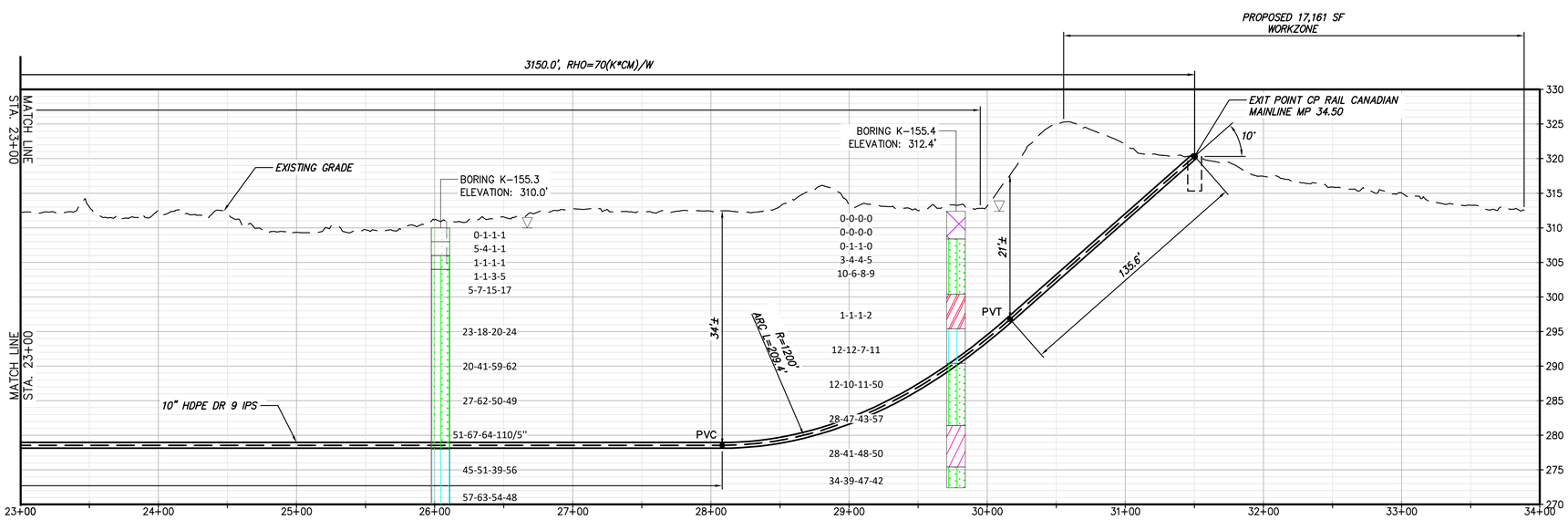
File: V:\PROJECTS\ANY\K6\066076.000\09_DESIGN\DRAWINGS\01_SHEETS\DESIGN PACKAGE 3\066076_P3_C-327 – C-327A.DWG Saved: 4/4/2023 10:15:07 AM Plotted: 4/4/2023 4:42:13 PM Current User: Snyder, Morgan LastSavedBy: 6043



PROPOSED HDD 46 PLAN VIEW

CONDUIT 1

0 50 100
Scale in feet



PROPOSED HDD 46 PROFILE VIEW

CONDUIT 1

20
10
0
0 50 100
Scale in feet

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CHAMPLAIN HUDSON POWER EXPRESS

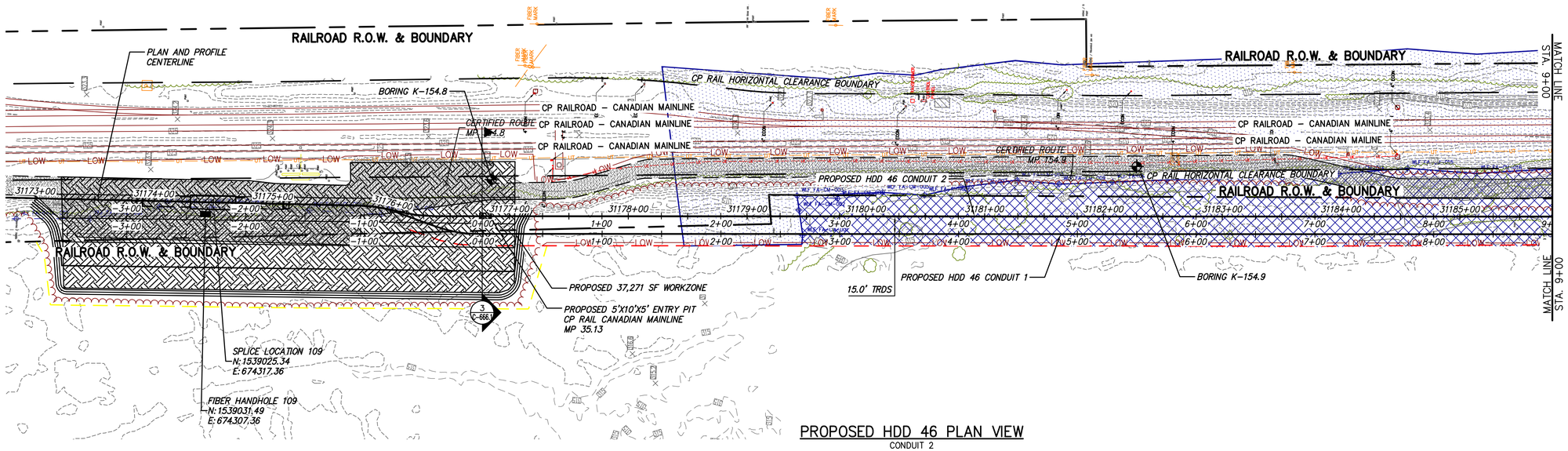
SEGMENTS 4 & 5 (PACKAGE 3) - CP: FORT EDWARD TO MILTON

PLAN AND PROFILE - HDD 46, CONDUIT 1

KIEWIT PROJECT NO. 21162
CHA PROJECT NO. 066076
DRAWING NO. **C-326.2**

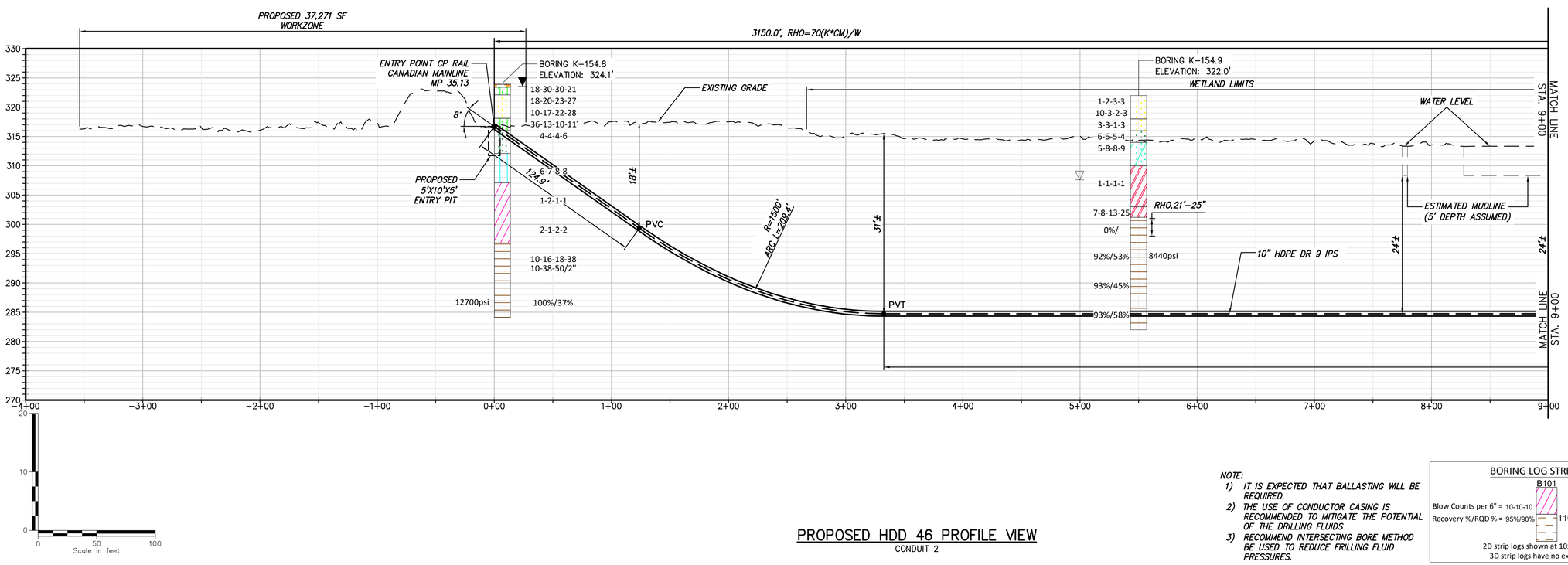
DRAWN BY: CJL | DESIGNED BY: CJL | APPROVED BY: JEO | SCALE AS NOTED | REV. NO. 1 | DATE 04/05/2023 | SH.NO.

File: V:\PROJECTS\ANY\K6\066076.000\09_DESIGN\DRAWINGS\01_SHEETS\DESIGN PACKAGE 3\066076_P3_C-327 - C-327A.DWG Saved: 4/4/2023 10:15:07 AM Plotted: 4/4/2023 4:43:33 PM Current User: Snyder, Morgan LastSavedBy: 6043



PROPOSED HDD 46 PLAN VIEW

CONDUIT 2



PROPOSED HDD 46 PROFILE VIEW

CONDUIT 2

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CHAMPLAIN HUDSON POWER EXPRESS

SEGMENTS 4 & 5 (PACKAGE 3) - CP: FORT EDWARD TO MILTON

PLAN AND PROFILE - HDD 46, CONDUIT 2

KIEWIT PROJECT NO. 21162
CHA PROJECT NO. 066076
DRAWING NO. **C-326A**

DRAWN BY: CJL | DESIGNED BY: CJL | APPROVED BY: JEO | SCALE AS NOTED | REV. NO. 1 | DATE 04/05/2023 | SH.NO.

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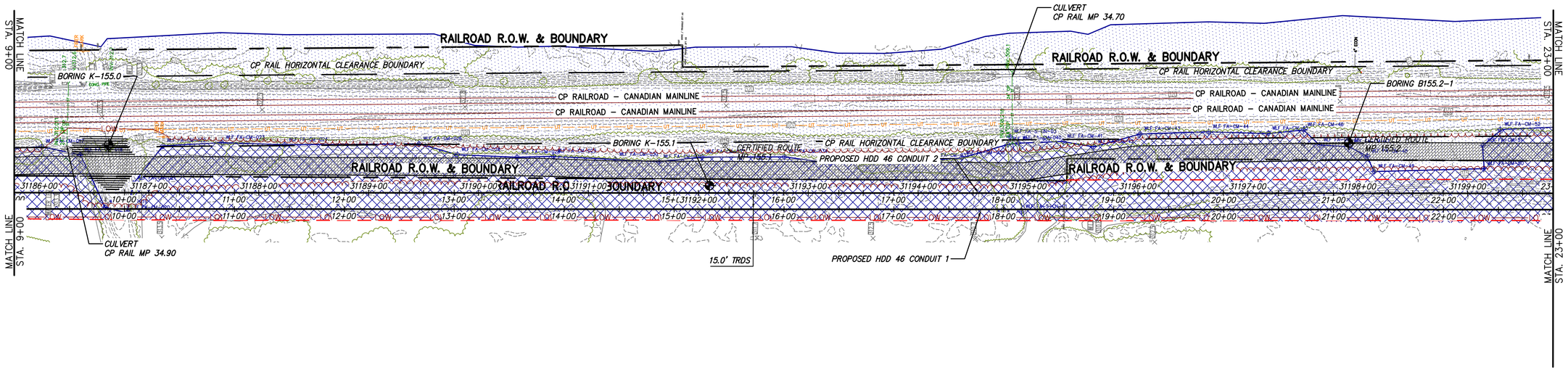
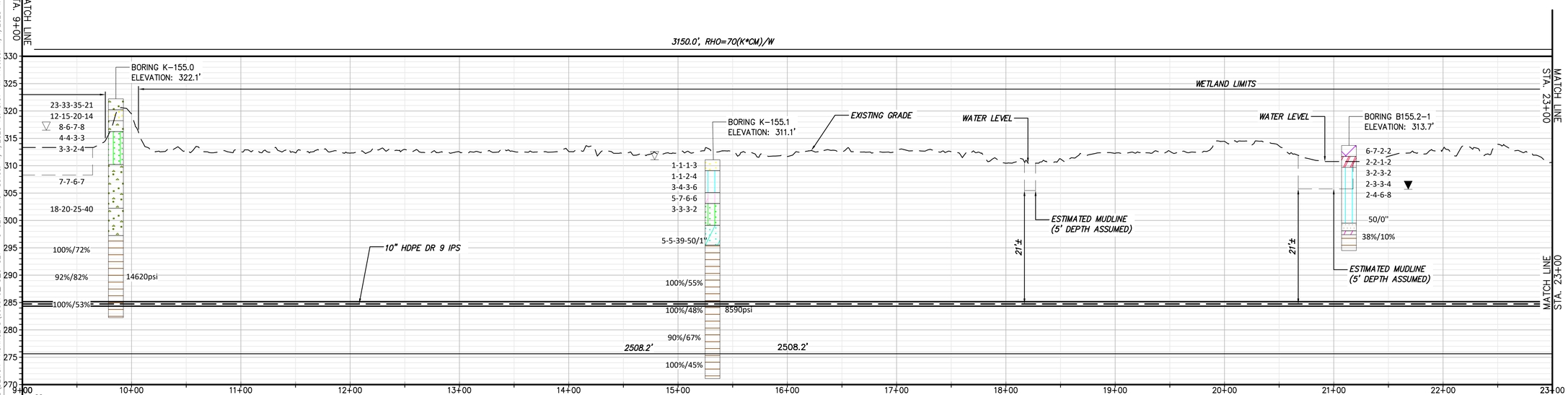
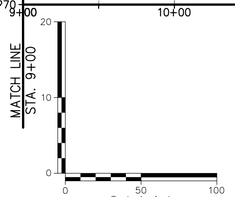


PROPOSED HDD 46 PLAN VIEW

CONDUIT 2

0 50 100
Scale in feet





PROPOSED HDD 46 PROFILE VIEW

CONDUIT 2

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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
Delayed Water Table	Water Table after drilling

CHPE Champlain Hudson Power Express

Kiewit

CHA
III Winners Circle, PO Box 5269
Albany, NY 12205-0269
518.453.4500 . www.chacompanies.com

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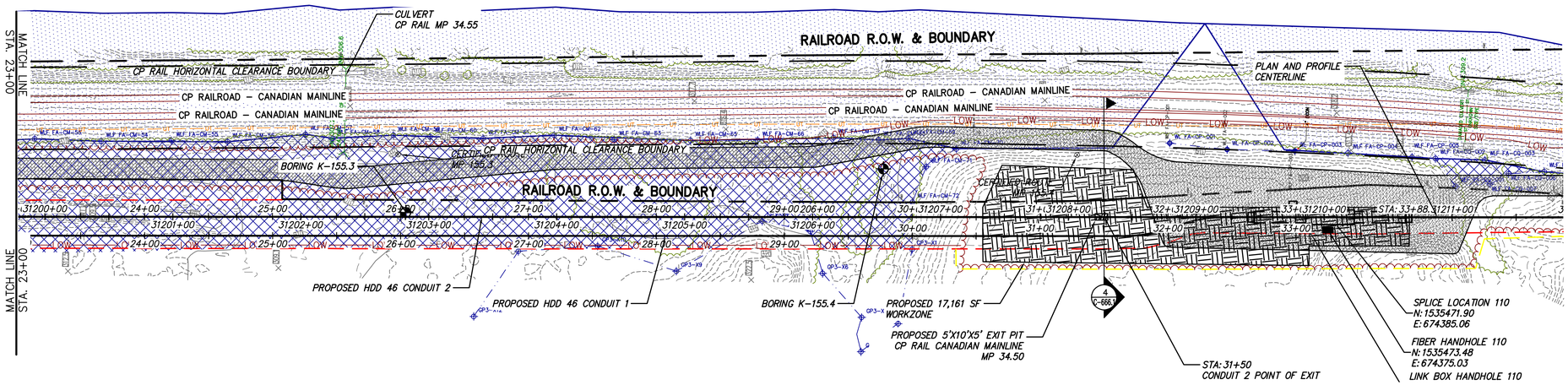
No.	DATE	SUBMITTAL / REVISION DESCRIPTION	DB	APP
0	04/05/2023	FINAL EM&CP SUBMISSION	MCS	JEO

CHAMPLAIN HUDSON POWER EXPRESS
SEGMENTS 4 & 5 (PACKAGE 3) - CP: FORT EDWARD TO MILTON
PLAN AND PROFILE - HDD 46, CONDUIT 2

KIEWIT PROJECT NO. 21162
CHA PROJECT NO. 066076
DRAWING NO. **C-326A.1**

DRAWN BY: CJL | DESIGNED BY: CJL | APPROVED BY: JEO | SCALE AS NOTED | REV. NO. 1 | DATE 04/05/2023 | SH.NO.

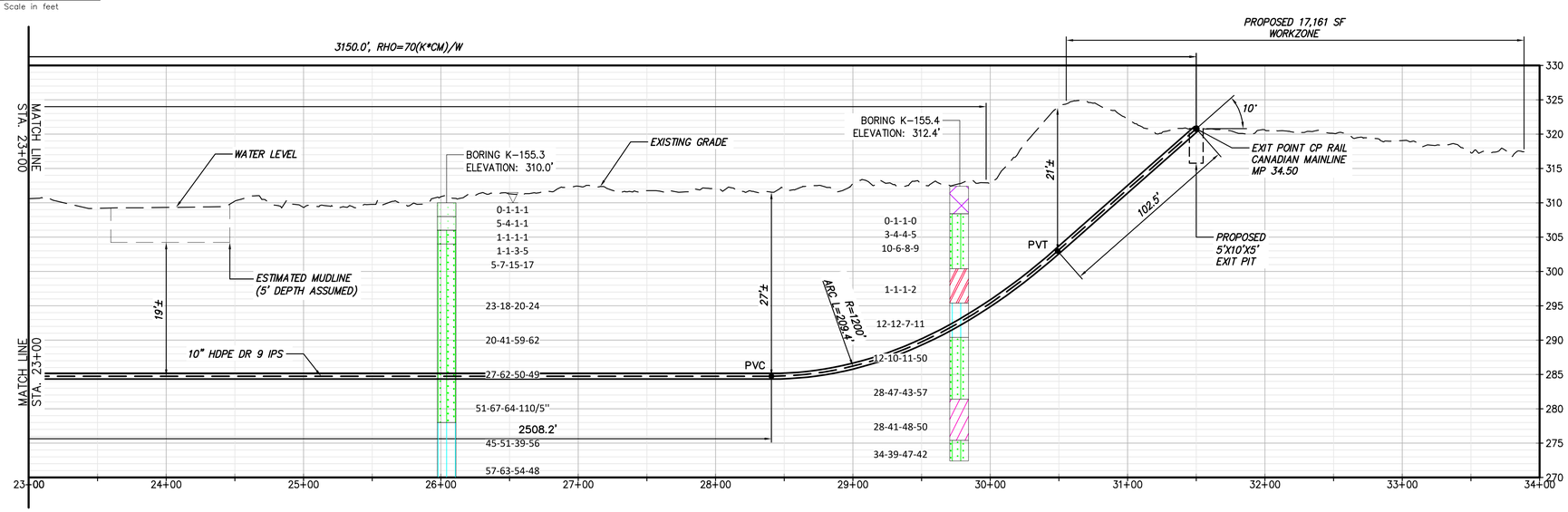
File: V:\PROJECTS\ANY\K6\066076.000\09_DESIGN\DRAWINGS\01_SHEETS\DESIGN PACKAGE 3\066076_P3_C-327 — C-327A.DWG Saved: 4/4/2023 10:15:07 AM Plotted: 4/4/2023 4:46:11 PM Current User: Snyder, Morgan LastSavedBy: 6043



PROPOSED HDD 46 PLAN VIEW

CONDUIT 2

0 50 100
Scale in feet



PROPOSED HDD 46 PROFILE VIEW

CONDUIT 2

20
10
0
0 50 100
Scale in feet

NOTE:
1) IT IS EXPECTED THAT BALLASTING WILL BE REQUIRED.
2) THE USE OF CONDUCTOR CASING IS RECOMMENDED TO MITIGATE THE POTENTIAL OF THE DRILLING FLUIDS
3) RECOMMEND INTERSECTING BORE METHOD BE USED TO REDUCE FRILLING FLUID PRESSURES.

BORING LOG STRIP LEGEND

B101
Blow Counts per 6" = 10-10-10
Recovery %/RQD % = 95%/90%
11000psi =UCS

2D strip logs shown at 10x exaggeration
3D strip logs have no exaggeration

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
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	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
▽	Delayed Water Table	Water Table after drilling

CHPE Champlain Hudson Power Express

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0	04/05/2023	FINAL EM&CP SUBMISSION	MCS	JEO

CHAMPLAIN HUDSON POWER EXPRESS
SEGMENTS 4 & 5 (PACKAGE 3) - CP: FORT EDWARD TO MILTON
PLAN AND PROFILE - HDD 46, CONDUIT 2

KIEWIT PROJECT NO. 21162
CHA PROJECT NO. 066076
DRAWING NO. **C-326A.2**

DRAWN BY: CJL DESIGNED BY: CJL APPROVED BY: JEO SCALE AS NOTED DATE 04/05/2023 REV. NO. 1 SH.NO.

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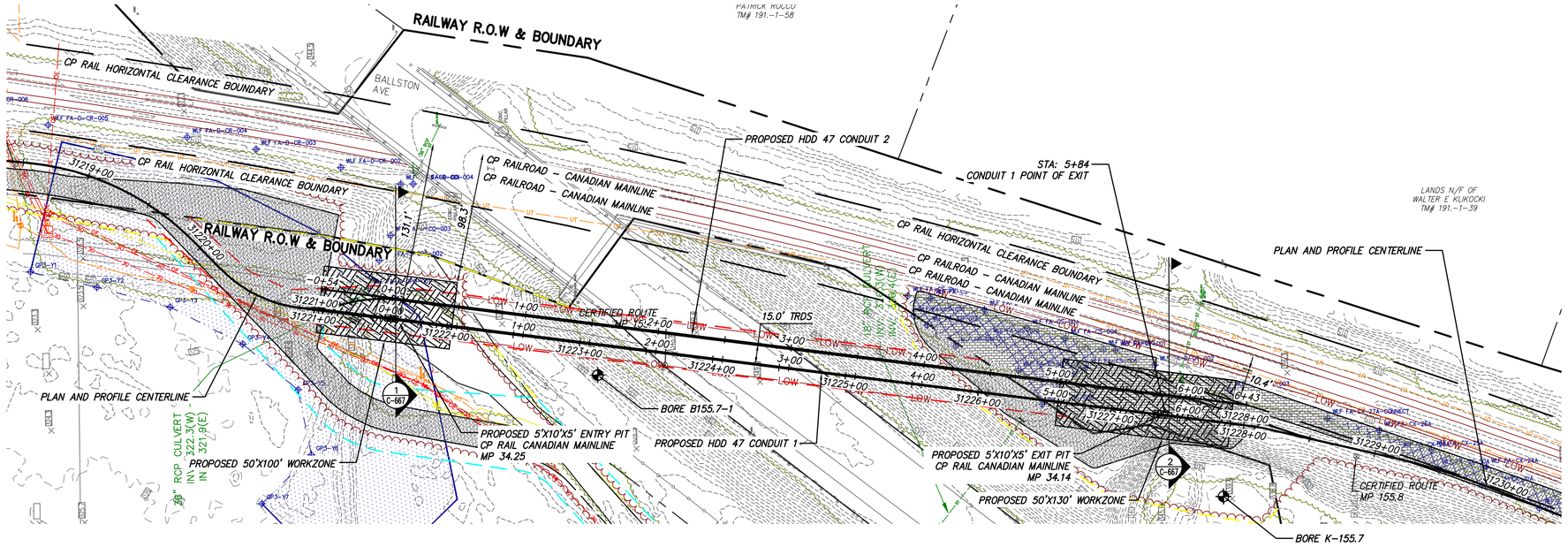
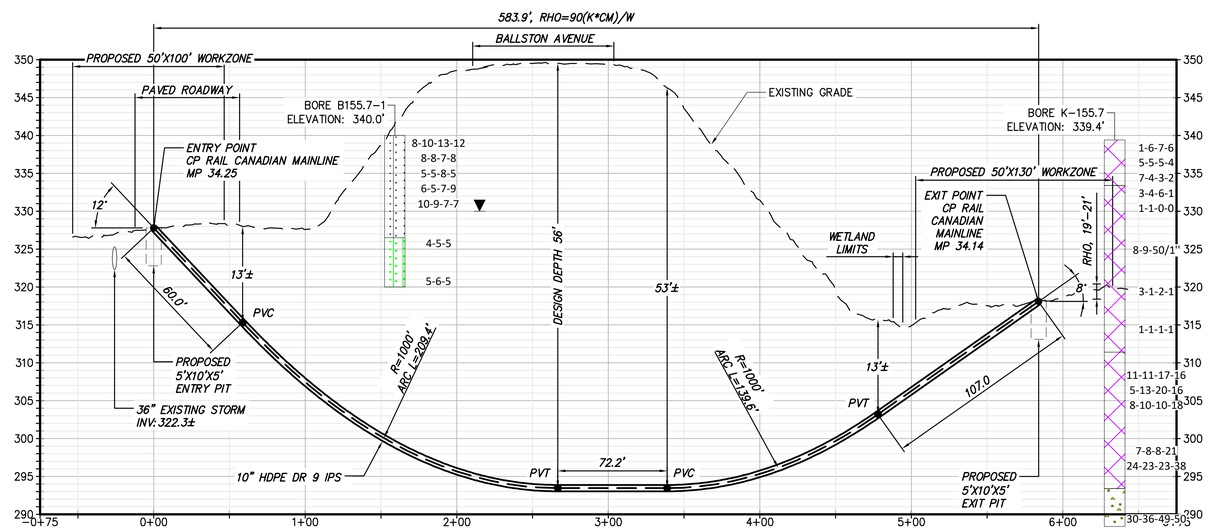


PROPOSED HDD 47 PLAN VIEW

CONDUIT 1



PROPOSED HDD 47 PROFILE

CONDUIT 1

NOTE:
1) POTENTIAL CULVERT IN AREA. SIZE, INVERT, LOCATION ARE NOT YET KNOWN.
2) THE USE OF CONDUCTOR CASINGS IS RECOMMENDED TO MITIGATE THE POTENTIAL RELEASES OF DRILLING FLUIDS.

BORING LOG STRIP LEGEND

B101

Blow Counts per 6" = 10-10-10
Recovery %/RQD % = 95%/90%
11000psi =UCS

2D strip logs shown at 10x exaggeration
3D strip logs have no exaggeration

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
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USGS 708	Gneiss
USGS 718	Granite 1
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Water	Water
Weathered Rock	Undefined
Water Table	Water Table during drilling
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CHPE Champlain Hudson Power Express

Kiewit

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0	04/05/2023	FINAL EM&CP SUBMISSION	MCS	JEO

CHAMPLAIN HUDSON POWER EXPRESS
SEGMENTS 4 & 5 (PACKAGE 3) - CP: FORT EDWARD TO MILTON
PLAN AND PROFILE - HDD 47, CONDUIT 1

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

KIEWIT PROJECT NO. 21162
CHA PROJECT NO. 066076
DRAWING NO. C-327
DATE 04/05/2023
SH.NO.

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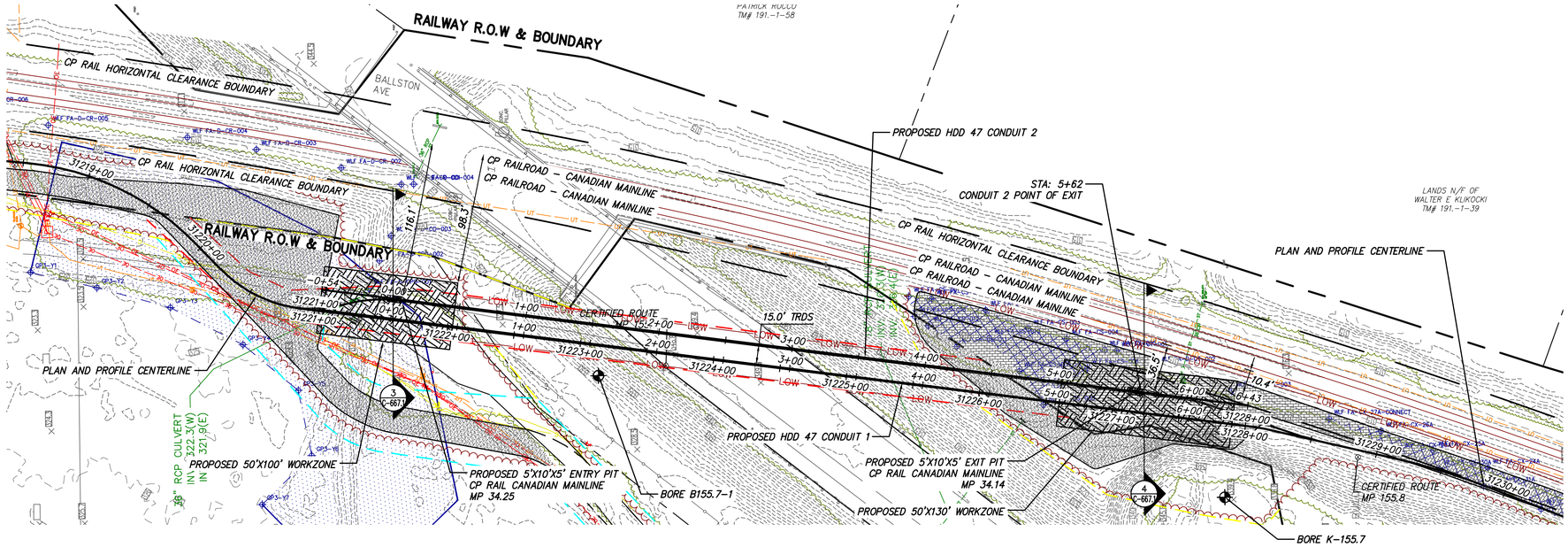
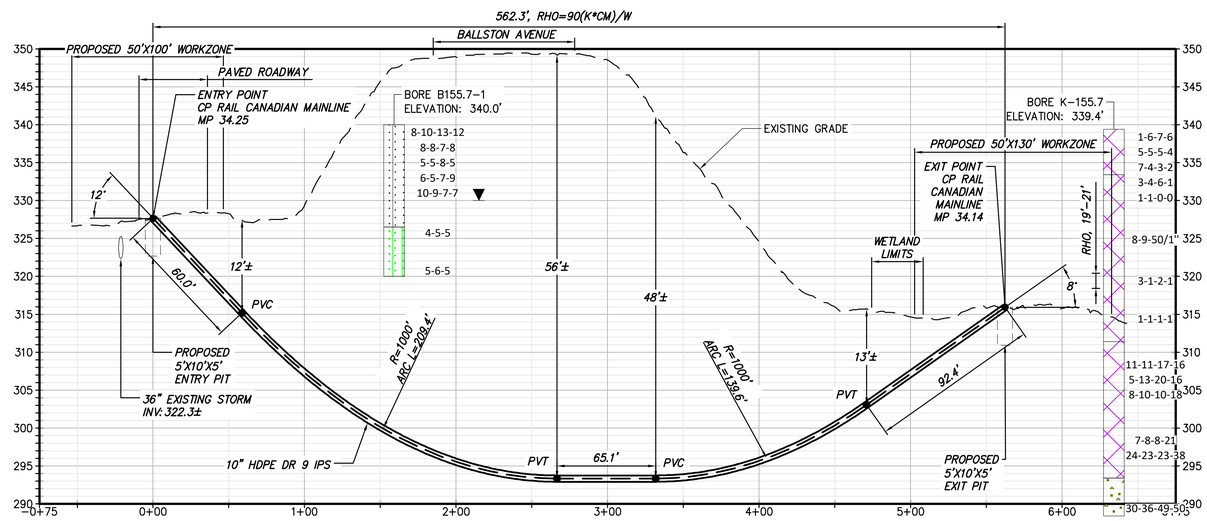


0 50 100
Scale in feet

PROPOSED HDD 47 PLAN VIEW
CONDUIT 2



PROPOSED HDD 47 PROFILE
CONDUIT 2

0 50 100
Scale in feet

12
8
0

NOTE:
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BORING LOG STRIP LEGEND

B101

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Recovery %/RQD % = 95%/90%
11000psi =UCS

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3D strip logs have no exaggeration

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
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USGS 702	Quartzite
USGS 705	Schist
USGS 705	Schist
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USGS 718	Granite 1
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Water	Water
Weathered Rock	Undefined
Water Table	Water Table during drilling
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CHPE Champlain Hudson Power Express

Kiewit

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No.	DATE	SUBMITTAL / REVISION DESCRIPTION	DB	APP
0	04/05/2023	FINAL EM&CP SUBMISSION	MCS	JEO

CHAMPLAIN HUDSON POWER EXPRESS
SEGMENTS 4 & 5 (PACKAGE 3) - CP: FORT EDWARD TO MILTON
PLAN AND PROFILE - HDD 47, CONDUIT 2

KIEWIT PROJECT NO. 21162
CHA PROJECT NO. 066076
DRAWING NO. **C-327A**

DRAWN BY: CJL | DESIGNED BY: CJL | APPROVED BY: JEO | SCALE AS NOTED | REV. NO. X | DATE 04/05/2023 | SH.NO.

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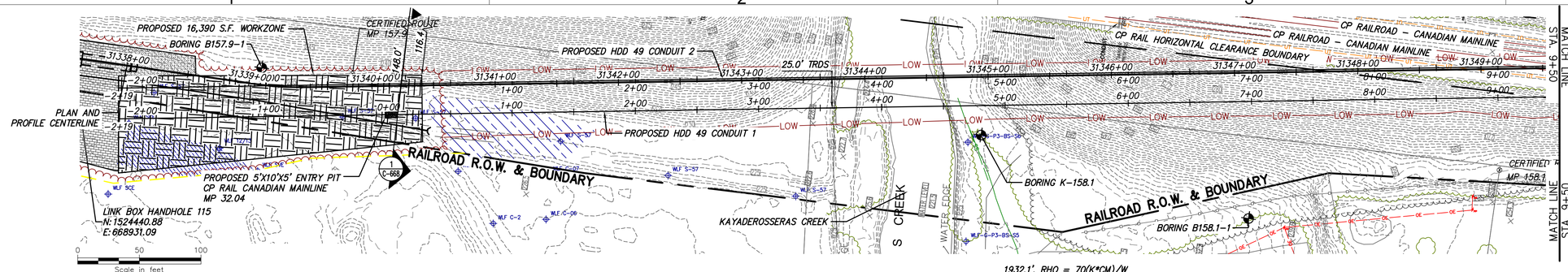

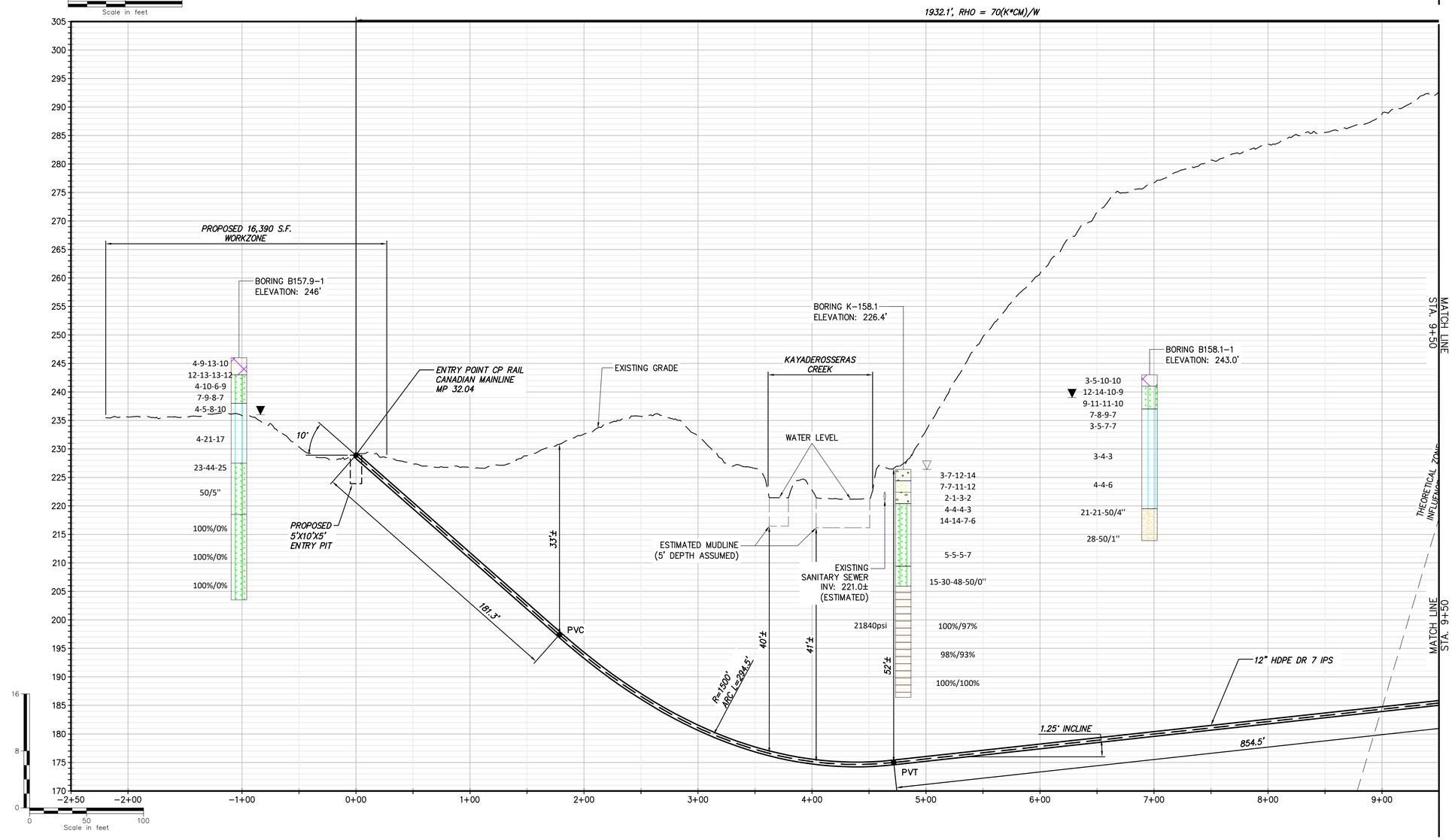

PROPOSED HDD 49 PLAN VIEW

CONDUIT 1

NOTE:

1) EACH HDD CONSISTS OF A PAIR OF (2) HVDC ELECTRICAL TRANSMISSION CABLES HOUSED IN INDIVIDUAL 12" DIAMETER CASINGS/CONDUITS, HDPE DR7, AND A THIRD 3" DIAMETER CASING/CONDUIT, HDPE DR7, WILL BE BUNDLED IN PULLBACK WITH ONE OF THE 12" CASINGS/CONDUITS FOR A TELECOMMUNICATION LINE.
2) THE USE OF CONDUCTOR CASINGS IS RECOMMENDED TO MITIGATE THE POTENTIAL RELEASE OF THE DRILLING FLUIDS.

PROPOSED HDD 49 PROFILE

CONDUIT 1

BORING LOG STRIP LEGEND

B101

Blow Counts per 6" = 10-10-10

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11000psi =UCS

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3D strip logs have no exaggeration

Legend	
ASPHALT	Asphalt
Bedrock	Bedrock
Boulder	Boulder
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CL-ML	SILTY CLAY
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CHAMPLAIN HUDSON POWER EXPRESS

SEGMENTS 4 & 5 (PACKAGE 3) - CP: FORT EDWARD TO MILTON

PLAN AND PROFILE - HDD 49, CONDUIT 1

DRAWN BY: CKZ DESIGNED BY: CKZ APPROVED BY: JEO

SCALE AS NOTED REV. NO. X

KIEWIT PROJECT NO. 21162

CHA PROJECT NO. 066076

DRAWING NO. C-328

DATE 04/05/2023 SH.NO.

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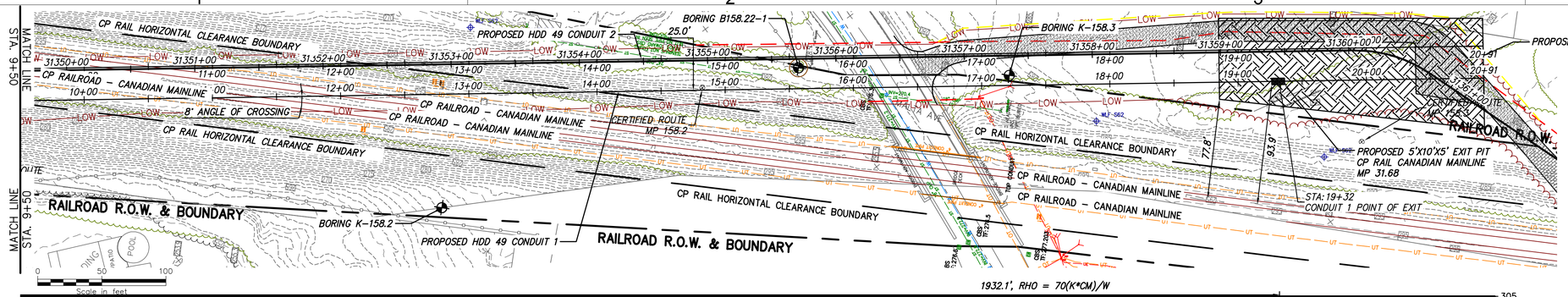
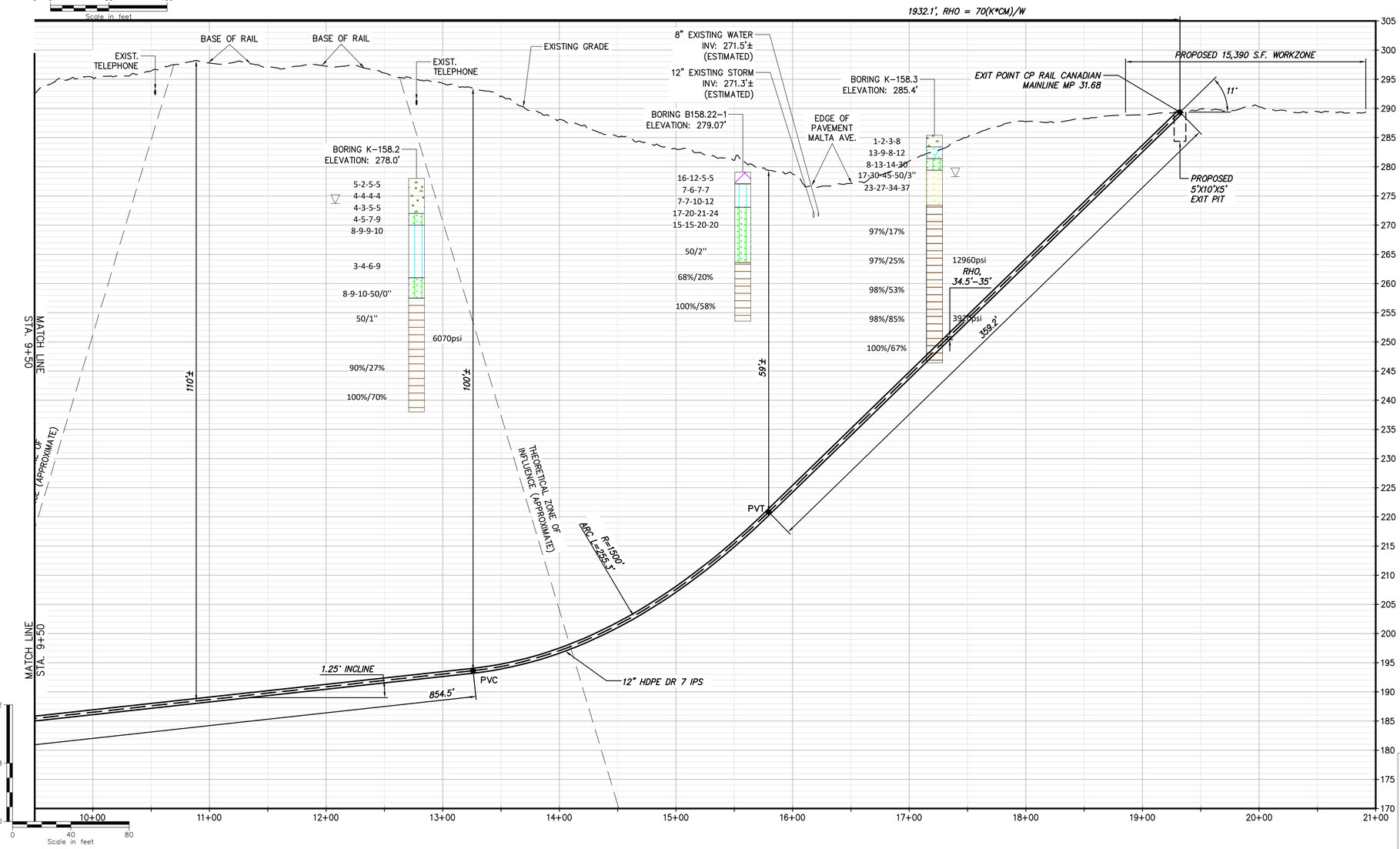


PROPOSED HDD 49 PLAN VIEW

CONDUIT 1



PROPOSED HDD 49 PROFILE

CONDUIT 1

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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
Delayed Water Table	Water Table after drilling

BORING LOG STRIP LEGEND

B101

Blow Counts per 6" = 10-10-10
Recovery %/RQD % = 95%/90%
11000psi =UCS

2D strip logs shown at 10x exaggeration
3D strip logs have no exaggeration

CHPE Champlain Hudson Power Express

Kiewit

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III Winners Circle, PO Box 5269
Albany, NY 12205-0269
518.453.4500 . www.chacompanies.com

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No.	DATE	SUBMITTAL / REVISION DESCRIPTION	DB	APP
0	04/05/2023	FINAL EM&CP SUBMISSION	MCS	JEO

CHAMPLAIN HUDSON POWER EXPRESS

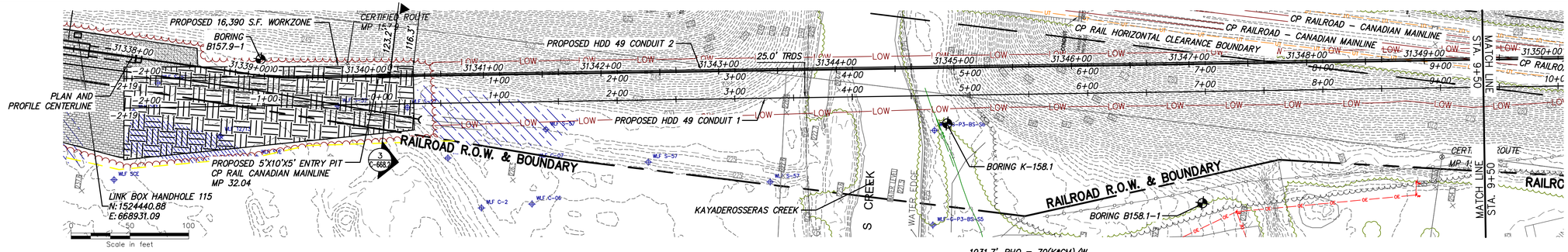
SEGMENTS 4 & 5 (PACKAGE 3) - CP: FORT EDWARD TO MILTON

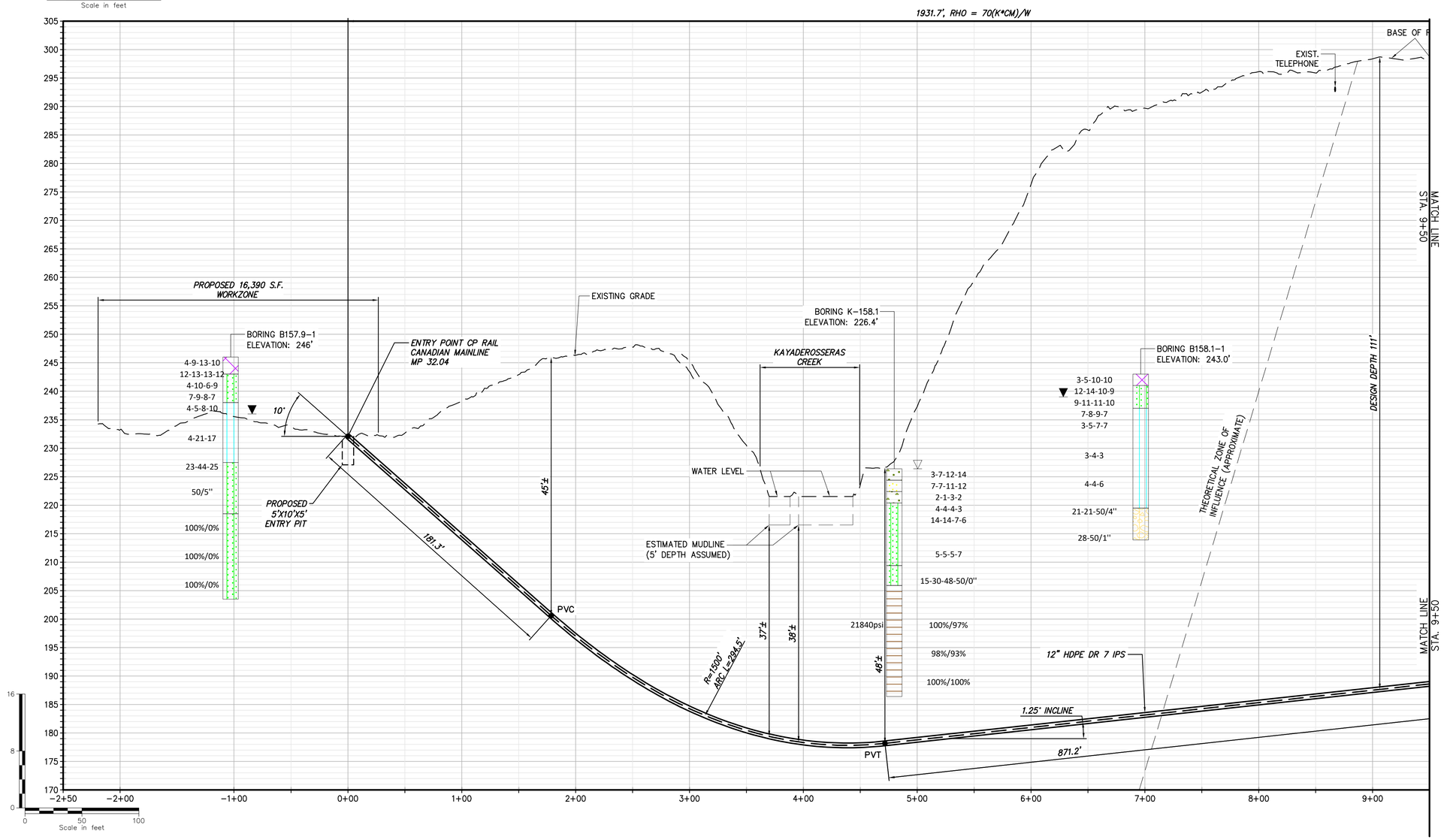
PLAN AND PROFILE - HDD 49, CONDUIT 1

DRAWN BY: CKZ | DESIGNED BY: CKZ | APPROVED BY: JEO | SCALE AS NOTED | REV. NO. X | DATE 04/05/2023 | SH.NO.

KIEWIT PROJECT NO. 21162
CHA PROJECT NO. 066076
DRAWING NO. **C-328.1**

File: V:\PROJECTS\ANY\K6\066076.000\09_DESIGN\DRAWINGS\01_SHEETS\DESIGN PACKAGE 3\48-49 TEST SHEET.DWG Saved: 4/4/2023 12:09:30 PM Plotted: 4/4/2023 4:55:58 PM Current User: Snyder, Morgan LastSavedBy: 7894





PROPOSED HDD 49 PLAN VIEW

CONDUIT 2

NOTE:

1) EACH HDD CONSISTS OF A PAIR OF (2) HVDC ELECTRICAL TRANSMISSION CABLES HOUSED IN INDIVIDUAL 12" DIAMETER CASINGS/CONDUITS, HDPE DR7, AND A THIRD 3" DIAMETER CASING/CONDUIT, HDPE DR7, WILL BE BUNDLED IN PULLBACK WITH ONE OF THE 12" CASINGS/CONDUITS FOR A TELECOMMUNICATION LINE.
2) THE USE OF CONDUCTOR CASINGS IS RECOMMENDED TO MITIGATE THE POTENTIAL RELEASE OF THE DRILLING FLUIDS.

PROPOSED HDD 49 PROFILE

CONDUIT 2

BORING LOG STRIP LEGEND

B101

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3D strip logs have no exaggeration

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
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CHAMPLAIN HUDSON POWER EXPRESS

SEGMENTS 4 & 5 (PACKAGE 3) - CP: FORT EDWARD TO MILTON

PLAN AND PROFILE - HDD 49, CONDUIT 2

KIEWIT PROJECT NO. 21162

CHA PROJECT NO. 066076

DRAWING NO. **C-328A**

DRAWN BY: CKZ | DESIGNED BY: CKZ | APPROVED BY: JEO | SCALE AS NOTED | DATE 04/05/2023 | REV. NO. X | SH.NO.

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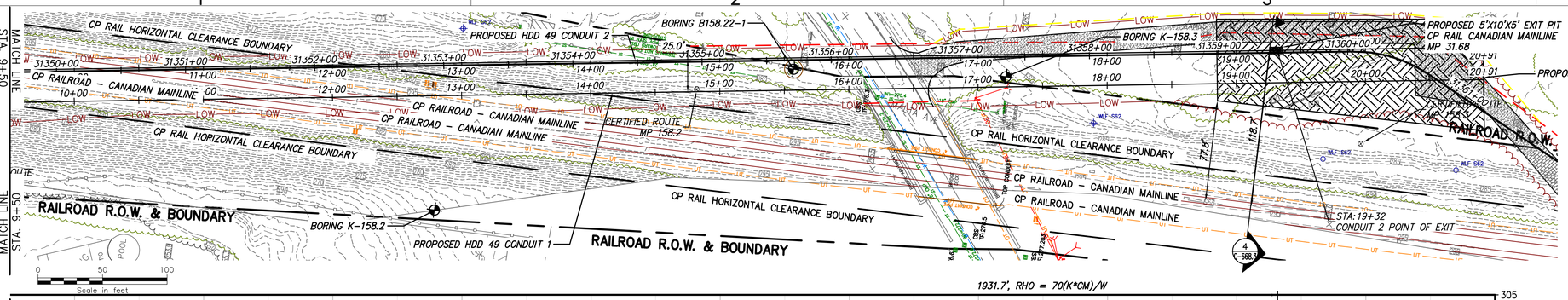
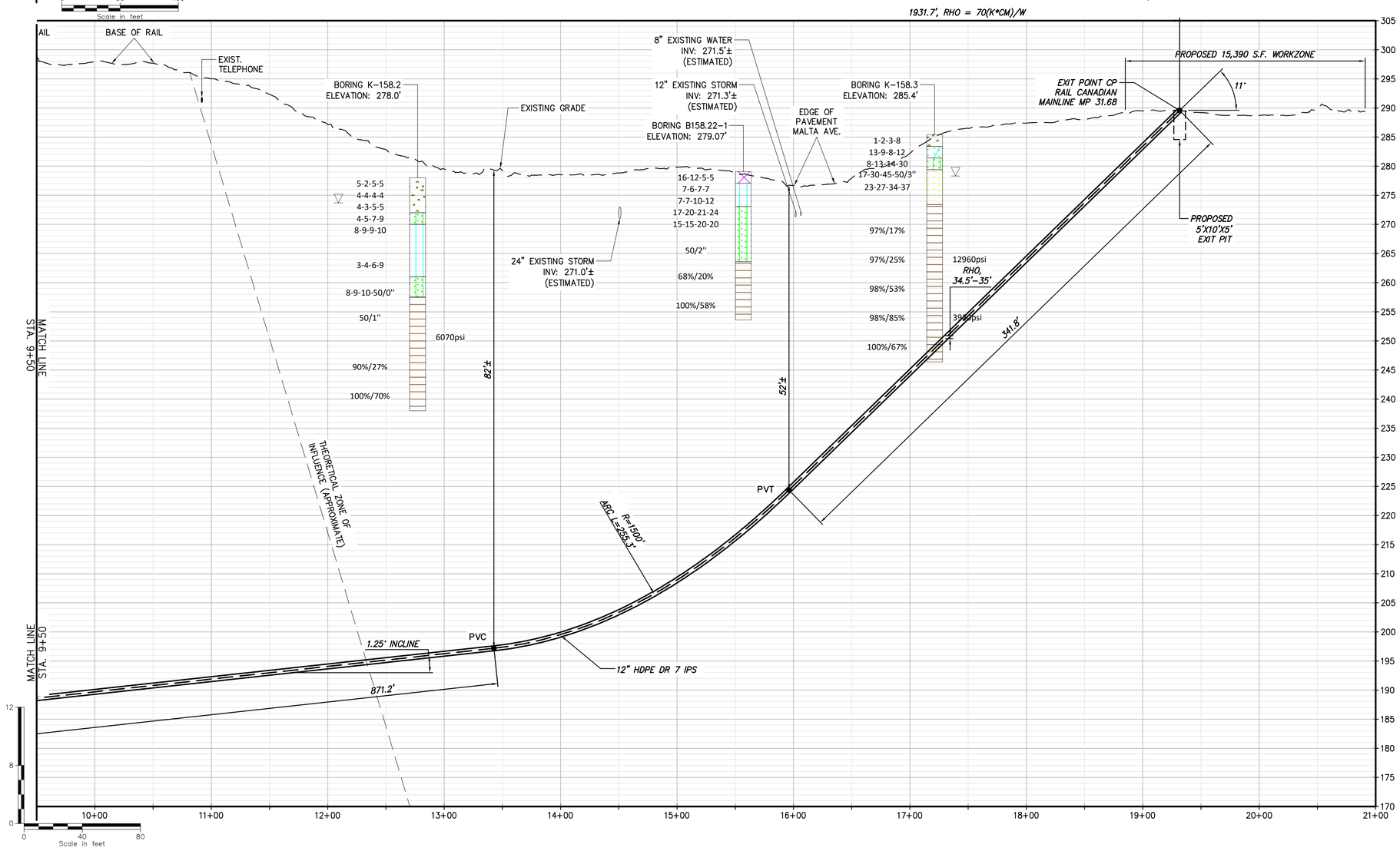


PROPOSED HDD 49 PLAN VIEW

CONDUIT 2



PROPOSED HDD 49 PROFILE

CONDUIT 2

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CHAMPLAIN HUDSON POWER EXPRESS

SEGMENTS 4 & 5 (PACKAGE 3) - CP: FORT EDWARD TO MILTON

PLAN AND PROFILE - HDD 49, CONDUIT 2

DRAWN BY: CKZ | DESIGNED BY: CKZ | APPROVED BY: JEO | SCALE AS NOTED | REV. NO. X | DATE 04/05/2023 | SH.NO.

KIEWIT PROJECT NO. 21162

CHA PROJECT NO. 066076

DRAWING NO. C-328A.1

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