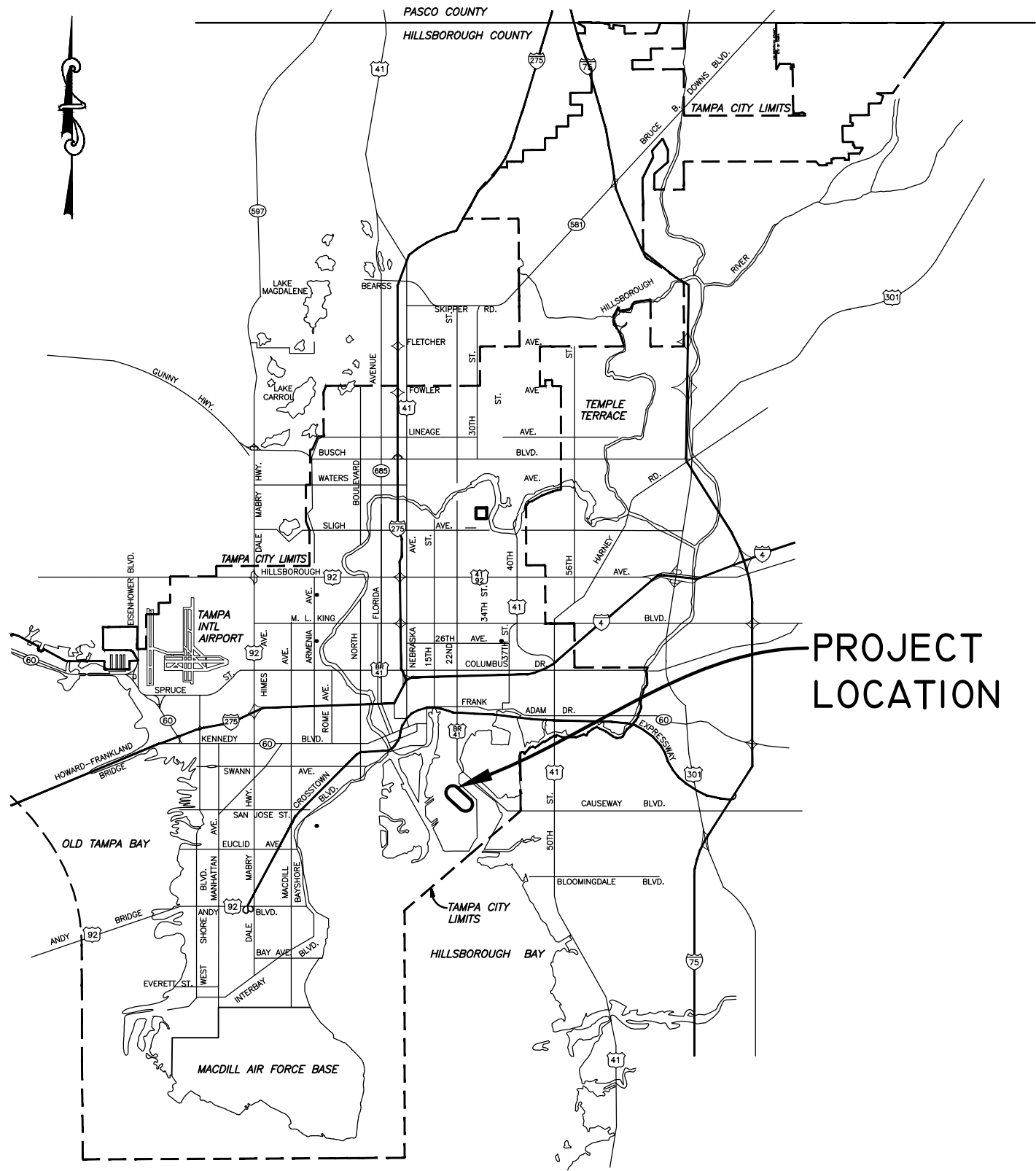


CITY of TAMPA




PROJECT
LOCATION

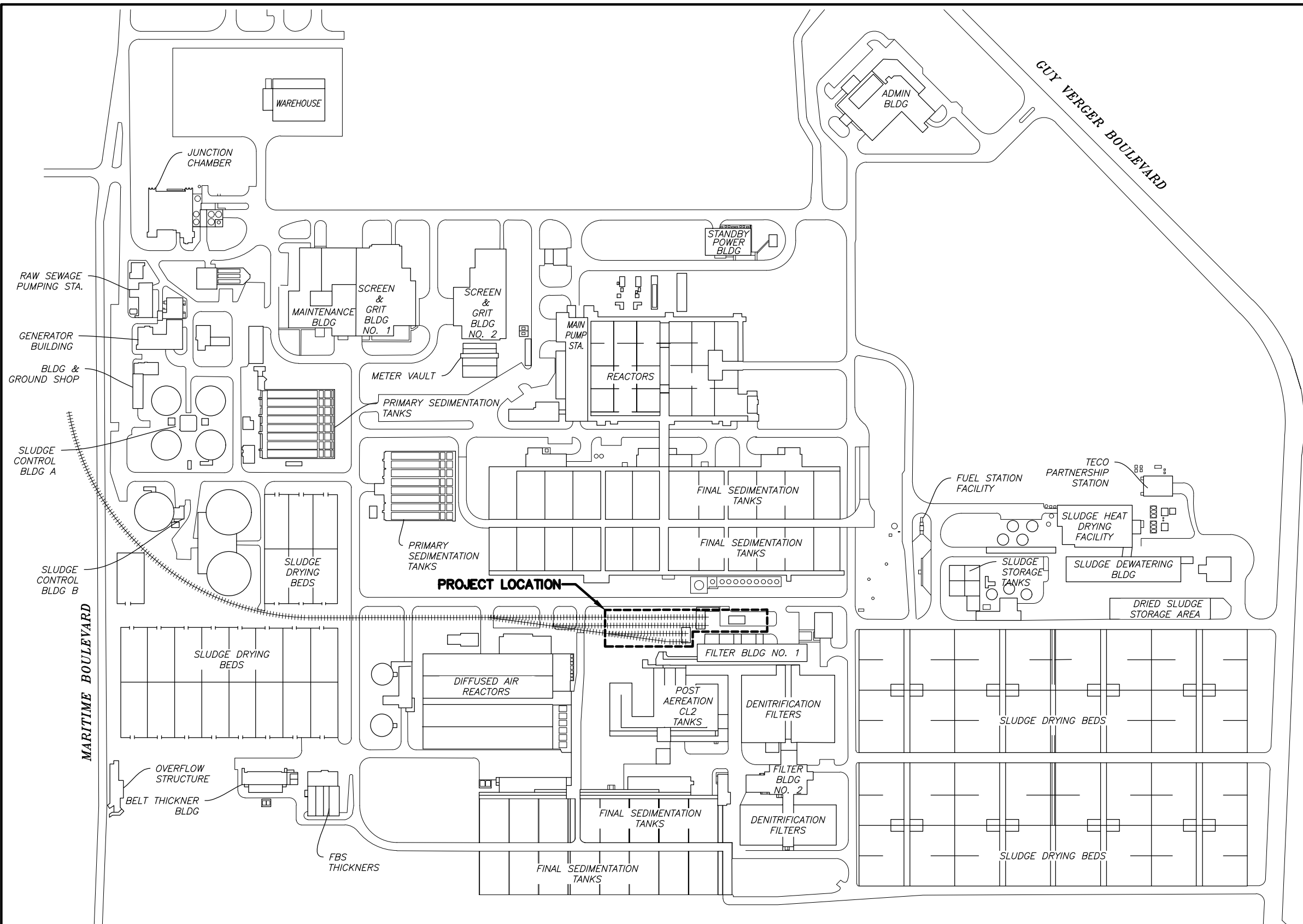
WASTEWATER DEPARTMENT
 PLANS FOR
**HOWARD F. CURREN AWTP
 TRAIN RAIL REPLACEMENTS**
 CONTRACT # 21-C-00019

ISSUED FOR BID

U:\ACCOUNTS\TAMPA\TAMPA20002 - TAMPA HFC AWTP TRAIN RAIL REPLACEMENTS\DESIGN\ SHEETS\ISSUED FOR BID\101 COVER SHEET.DWG
 PLOTTED: 1/31/2022 3:59:52 PM, BY: MICHAEL HENDERSON PLOTSTYLE: PENNONI.NCS,STB, PROJECT STATUS: 100%

No.	DATE	REVISIONS	 PENNONI ASSOCIATES INC. 5755 Rio Vista Drive Clearwater, FL 33760 Certificate of Authorization 7819		DES: MCH DRN: MCH CKD: EPN DATE: 1/31/22	CITY of TAMPA Wastewater Department 2545 Guy N. Verger Blvd. Tampa, FL 33605	HOWARD F. CURREN AWTP TRAIN RAIL REPLACEMENTS COVER SHEET	SHEET 1


INDEX OF CONTRACT PLANS	
SHEET NO	SHEET DESCRIPTION
1	COVER SHEET
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2A	NOTES TO REVIEWERS
3	NOTES, ABBREVIATIONS AND LEGEND
4	TYPICAL SECTION
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7-10	CONSTRUCTION PLANS-PROFILES
11	GRADING PLAN
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16-18	PIPING DEMOLITION PLANS AND DETAILS
19-20	PIPING CONSTRUCTION PLAN AND DETAILS
21	CLASSIFICATION AREA PLAN



HOWARD F CURREN ADVANCED WASTEWATER TREATMENT PLANT
PROJECT LOCATION MAP

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PLOTTED: 1/31/2022 3:59:58 PM, BY: MICHAEL HENDERSON PLOTSTYLE: PENNONI NCS.STB, PROJECT STATUS: 100%

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PENNONI ASSOCIATES INC.
 5755 Rio Vista Drive
 Clearwater, FL 33760
 Certificate of Authorization 7819

E. PETER NIKOLOV, P.E. DATE
 P.E. NO. 38766

DES: MCH
 DRN: MCH
 CKD: EPN
 DATE: 1/31/22

CITY of TAMPA
 Wastewater Department
 2545 Guy N. Verger Blvd.
 Tampa, FL 33605

HOWARD F. CURREN AWTP TRAIN RAIL REPLACEMENTS

 PROJECT LOCATION AND INDEX

SHEET
2

DESIGN CRITERIA

- ALL TRACKWORK SHALL CONFORM TO:
 - THE AMERICAN RAILROAD ENGINEERING AND MAINTENANCE-OF-WAY ASSOCIATION (AREMA), CURRENT EDITION.
 - CSX STANDARD SPECIFICATIONS FOR THE DESIGN AND CONSTRUCTION OF PRIVATE SIDETRACKS, CURRENT EDITION EXCEPT AS MODIFIED HEREIN.
 - THE FEDERAL RAILROAD ADMINISTRATION'S TRACK SAFETY STANDARDS.
- ALL PAVING SHALL CONFORM TO:
 - FDOT DESIGN STANDARDS (CURRENT VERSION).
 - FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (CURRENT VERSION).
 - FDOT FLEXIBLE PAVEMENT DESIGN MANUAL (CURRENT ADDITION),

GENERAL NOTES

- THIS SPUR IS CRITICAL TO SUPPLYING THE TREATMENT PLANT WITH CHEMICALS. THE CITY REQUIRES A MINIMUM OF 21 CALENDAR DAYS ADVANCE NOTICE PRIOR TO TAKING ANY TRACK OUT OF SERVICE IN ORDER TO HAVE SUFFICIENT RAIL CARS DELIVERED TO SUSTAIN DAILY OPERATIONS. A TRACK SHALL NOT BE TAKEN OUT OF SERVICE IF THE CITY DOES NOT HAVE ADEQUATE SUPPLIES ON SITE FOR ANY REASON, EVEN IF THE ADVANCE NOTICE REQUIREMENT IS MET. A TRACK SHALL BE TAKEN OUT OF SERVICE ONLY WITH THE PRIOR WRITTEN APPROVAL OF THE CITY. THE CONTRACTOR MAY START PRELIMINARY WORK SUCH AS ASPHALT REMOVAL, MATERIAL STAGING, ETC, BEFORE TAKING A TRACK OUT OF SERVICE.
- TWO DAYS PRIOR THE ANTICIPATED DATE OF A CSXT INSPECTION, NOTIFY THE CITY SO THEY MAY ORDER REMOVAL OF EMPTY RAIL CAR(S) TO TEST THE PERFORMANCE OF THE TRACK AND RAIL BED AFTER RECEIVING CSXT'S APPROVAL.
- THE CONTRACTOR SHALL FURNISH ALL MATERIALS, LABOR, TOOLS AND EQUIPMENT FOR ALL WORK INCLUDED IN THIS PLAN SET AND THE SPECIFICATIONS.
- THE PRE-CONSTRUCTION MEETING SHALL BE HELD PRIOR TO THE ORDERING OF MATERIALS AND TO INITIATING CONSTRUCTION. AT THIS MEETING, THE NOTICE TO PROCEED DATE WILL BE ESTABLISHED.
- NO FIELD CHANGES WILL BE PERMITTED WITHOUT DIRECT AUTHORIZATION FROM CAD (CONTRACT ADMINISTRATION DEPARTMENT).
- CONTRACTOR SHALL DEMOLISH SIX EXISTING ALUM LOADING STATIONS LOCATED ON THE NORTH SIDE OF TRACK 1. ALL PIPING AND CONDUITS SHALL BE PROPERLY CAPPED OR PLUGGED BELOW PAVEMENT BASE.

CONTRACTOR RESPONSIBILITIES

- THE CONTRACTOR IS TO VISIT THE SITE BEFORE BIDDING TO BECOME FAMILIAR WITH THE PRESENT CONDITION AND TO DETERMINE THE EXTENT AND NATURE OF THE WORK TO BE DONE UNDER THIS CONTRACT. NO EXTRA COMPENSATION WILL BE ALLOWED BECAUSE OF A FAILURE TO INCLUDE IN THE BID ALL ITEMS AND MATERIALS WHICH IS REQUIRED TO COMPLETE THE ITEM OF WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY ALL UTILITY RELOCATION PRIOR TO CONSTRUCTION. ALL UTILITIES TO BE PROTECTED UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL EXAMINE AND VERIFY IN THE FIELD ALL EXISTING AND GIVEN CONDITIONS AND DIMENSIONS WITH THOSE SHOWN ON THE PLANS, AND SHALL ALERT CAD ANY DISCREPANCIES.
- ON-SITE AND GENERATED CONSTRUCTION DEBRIS ARE TO BE DISPOSED OF AS NON-REGULATED SOLID WASTE IN COMPLIANCE WITH LOCAL REGULATIONS. IF SUSPECTED ENVIRONMENTAL ISSUES ARE ENCOUNTERED, CONTACT CAD FOR PROPER HANDLING AND REMOVAL.
- FIELD OFFICE STAGING, PARKING AND SERVICE AREA(S) SHALL BE SUBJECT TO THE APPROVAL OF THE WASTEWATER DEPARTMENT. SITES AVAILABLE FOR TEMPORARY STAGING OF SCRAPPED MATERIALS SHALL BE IDENTIFIED DURING THE PRE-CONSTRUCTION MEETING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SECURITY OF THE STORAGE AND SERVICE AREAS.
- THE CONTRACTOR SHALL MAINTAIN AND CLEAN ALL ACCESS AND SERVICE ROADS USED DURING CONSTRUCTION TO THE SATISFACTION OF THE WASTEWATER DEPARTMENT AND CAD.

PROJECT CONTACTS

- ALL CONTACTS WILL BE THROUGH CAD.

SAFETY

- CONTRACTOR IS FULLY RESPONSIBLE FOR THE SAFETY OF ALL ITS EMPLOYEES AND SUBCONTRACTORS. ALL WORK SHALL BE PERFORMED IN A MANNER THAT WILL ENSURE THE SAFETY OF WASTEWATER TREATMENT PLANT EMPLOYEES AND RAILROAD PERSONNEL IN THE DESIGNATED PROJECT AREA.
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH RULES, REGULATIONS, PROCEDURES AND SAFE PRACTICES OF CSXT, OSHA AND THE FRA.
- ALL DAMAGES CAUSED BY THE CONTRACTOR WHICH ARE NOT PART OF INTENDED WORK SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER WITHOUT COST TO THE OWNER OR RAILROAD.

SURVEYORS NOTES

- THIS SURVEY DOES NOT REFLECT OR DETERMINE OWNERSHIP.
- THERE MAY BE ITEMS DRAWN OUT OF SCALE TO GRAPHICALLY SHOW THEIR LOCATION.
- ELEVATIONS BASED ON BENCHMARKS PROVIDED BY CRAIG KURIAL, ASSISTANT PORT SURVEYOR, PORT OF TAMPA BENCHMARK NUMBER "GPS POINT 3", BEING A BRASS DISK STAMPED "HORIZONTAL CONTROL 0003 1991", ELEVATION 9.28 FEET, NUMBER "140", BEING A NAIL AND DISK STAMPED "TAMPA PORT AUTHORITY", ELEVATION 13.60 FEET, AND NUMBER "195", BEING A SQUARE CUT, ELEVATION 14.70 FEET. NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

ABBREVIATIONS

ATR	ABOVE TOP OF RAIL
BBR	BELOW BASE OF RAIL
BM	BENCHMARK
BVCE	BEGINNING VERTICAL CURVE ELEVATION
BVCS	BEGINNING VERTICAL CURVE STATION
CC	COMPOUND CURVE
CLF	CHAIN LINK FENCE
CS	CURVE TO SPIRAL
COMP.	COMPROMISE
CONC	CONCRETE
CONST	CONSTRUCT
COT	CITY OF TAMPA
CSXT	CSX TRANSPORTATION
CWR	CONTINUOUS WELDED RAIL
CY	CUBIC YARD
DIA.	DIAMETER
DC	DEGREE OF CURVE
EOP	EDGE OF PAVEMENT
EL.	ELEVATION

ABBREVIATIONS

EOT	END OF TRACK
EVCE	ENDING VERTICAL CURVE ELEVATION
EVCS	ENDING VERTICAL CURVE STATION
EXIST	EXISTING
FDOT	FL DEPARTMENT OF TRANSPORTATION
HORIZ.	HORIZONTAL
INV	INVERT
IE	INVERT ELEVATION
IJ	INSULATED JOINT
JB	JUNCTION BOX
LC	LENGTH OF CURVE
LF	LINEAR FEET
LS	LENGTH OF SPIRAL
LT	LEFT
MH	MANHOLE
No.	NUMBER
O.C.	ON CENTER
PI	POINT OF INFLECTION
PC	POINT OF CURVE

ABBREVIATIONS

PVC	POINT OF VERTICAL CURVATURE
PT	POINT OF TANGENCY
PVI	POINT OF VERTICAL INTERSECTION
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
ROW	RIGHT OF WAY
SC	POINT OF SPIRAL TO CURVE
SCS	SPIRAL-CURVE-SPIRAL
SF	SQUARE FEET
STA	STATION
SW	STORMWATER
TBM	TEMPORARY BENCHMARK
TOB	TOP OF BANK
TOs	TOE OF SLOPE
T/R	TOP OF RAIL
TYP	TYPICAL
UG	UNDERGROUND
UNK	UNKNOWN
W	WATER

LEGEND

	BENCHMARK		IR	IRRIGATION PIPE
	BOLLARD/POST		LA	LIQUID ALUM PIPE
	COVERED AREA		MF	METHANOL FEED PIPE
	GROUNDING ROD		MT	METHANOL TRANSFER PIPE
	METAL LIGHT POLE		UE	ELECTRIC CONDUIT
	STORMWATER MANHOLE		UE-1	
	COMPRESSED AIR PIPE		UE-2	1, 2 & 3 CONDUIT DUCT BANKS
	STORMWATER PIPE		UE-3	
				LIMIT OF PIPING REMOVAL/INSTALLATION

ID	RIM ELEV	INV IN	INV OUT
s-20	8.66		5.84 (N)
s-22	8.67	5.73 (S)	5.77 (N)
s-24	8.72	5.61 (S)	5.57 (N)
s-26	8.37	5.60 (S)	5.55 (N)
s-28	8.53	5.39 (S)	

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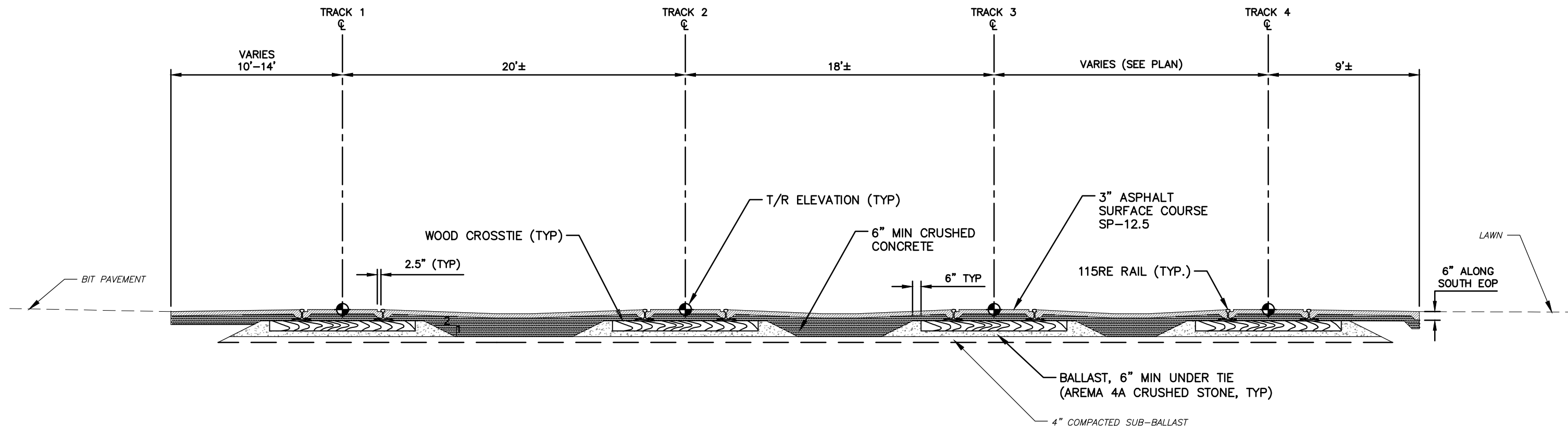
E. PETER NIKOLOV, P.E. DATE
 P.E. NO. 38766

DES: MCH
 DRN: MCH
 CKD: EPN
 DATE: 1/31/22

CITY of TAMPA
 Wastewater Department
 2545 Guy N. Verger Blvd.
 Tampa, FL 33605

HOWARD F. CURREN AWTP TRAIN RAIL REPLACEMENTS
 NOTES, ABBREVIATIONS AND LEGEND

SHEET
3

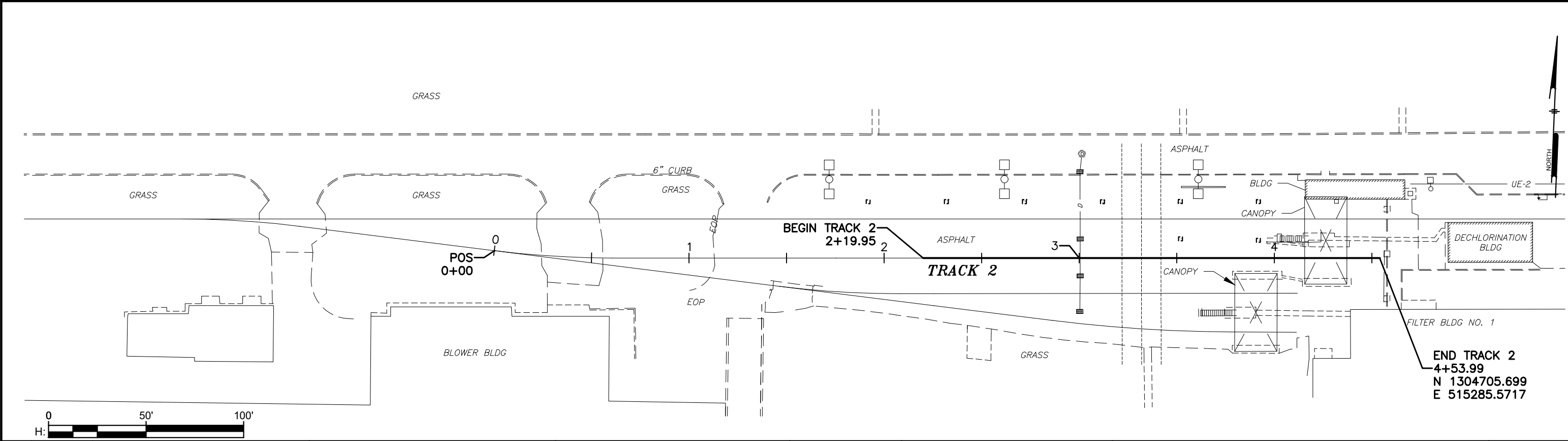
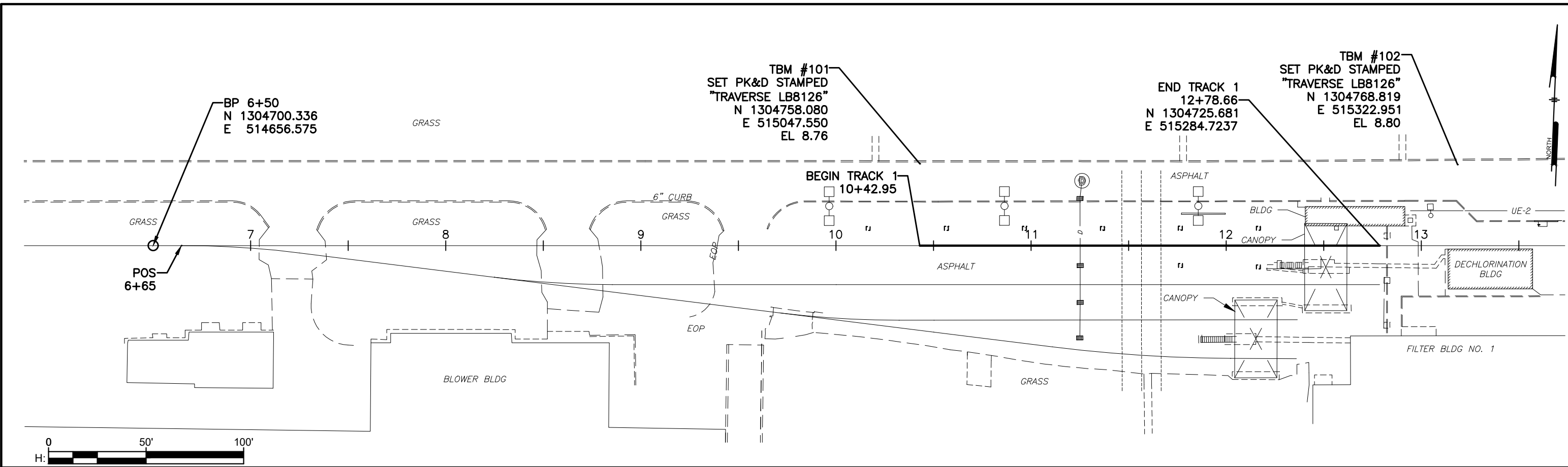


NOTES:


1. REFER TO PLAN SHEETS FOR PLATFORM LOCATIONS
2. 4" MIN EXISTING BALLAST DEPTH UNDER TIES PER RECORD DRAWINGS.
3. 6" EXISTING SUB-BALLAST PER RECORD DRAWINGS

No.	DATE	REVISIONS	PENNONI ASSOCIATES INC.		DES: MCH	CITY of TAMPA Wastewater Department 2545 Guy N. Verger Blvd. Tampa, FL 33605	HOWARD F. CURREN AWTP TRAIN RAIL REPLACEMENTS	SHEET 4
				5755 Rio Vista Drive Clearwater, FL 33760 Certificate of Authorization 7819	E. PETER NIKOLOV, P.E. DATE P.E. NO. 38766			

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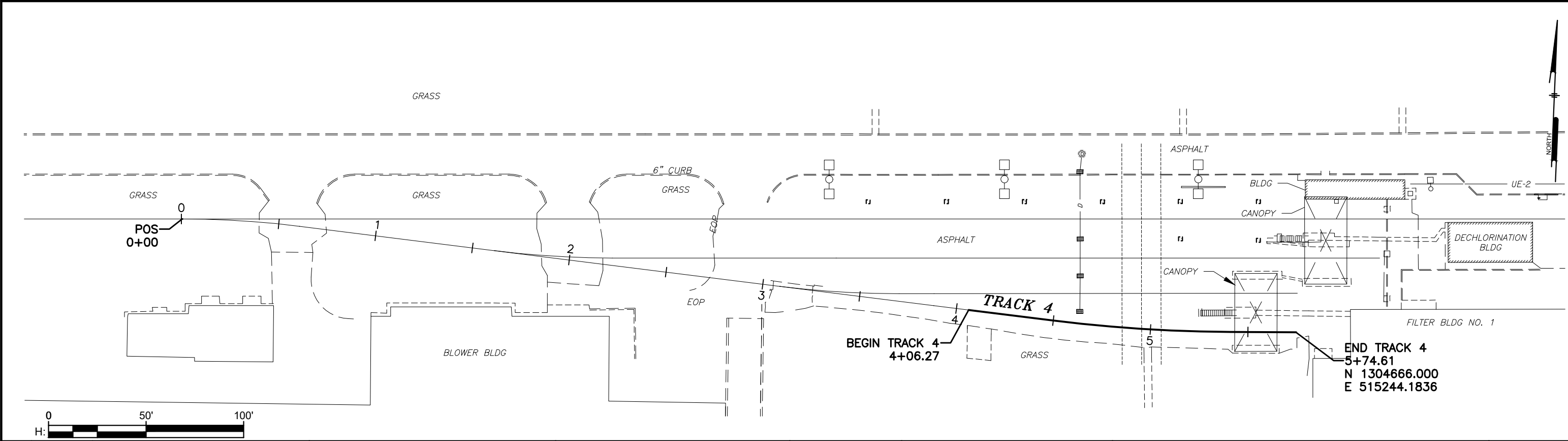
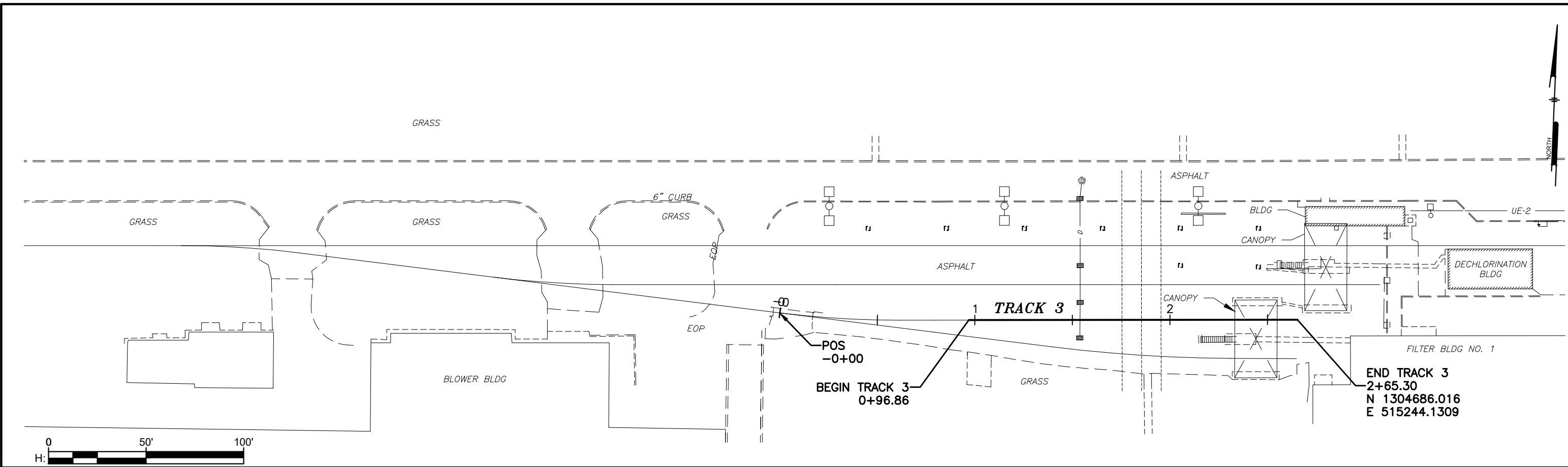
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HOWARD F. CURREN AWTP TRAIN RAIL REPLACEMENTS
 PROJECT LAYOUT (I)

SHEET
5

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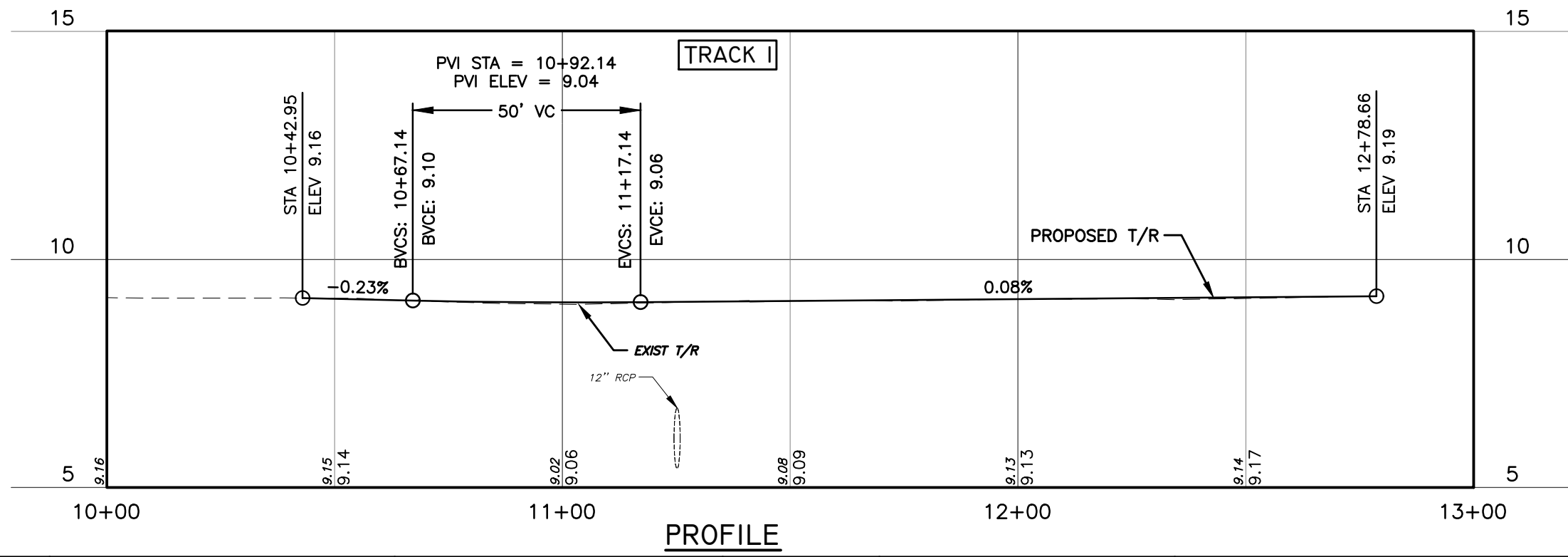
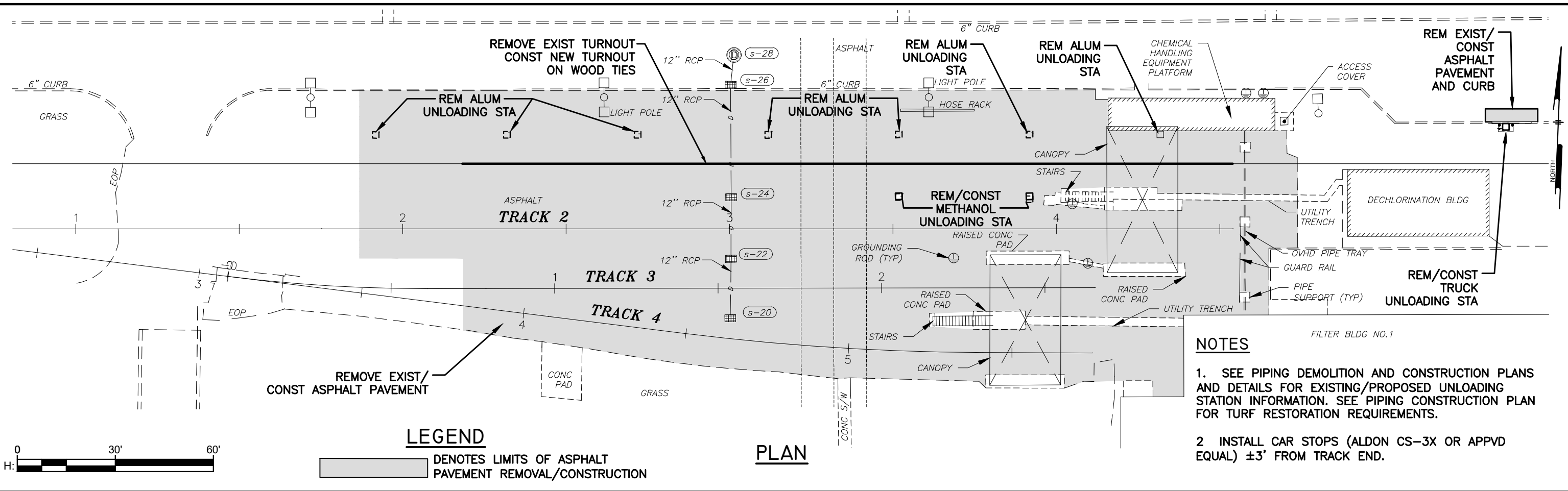
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 DRN: MCH
 CKD: EPN
 DATE: 1/31/22

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 Tampa, FL 33605

HOWARD F. CURREN AWTP TRAIN RAIL REPLACEMENTS
PROJECT LAYOUT (2)

SHEET
6

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 5755 Rio Vista Drive
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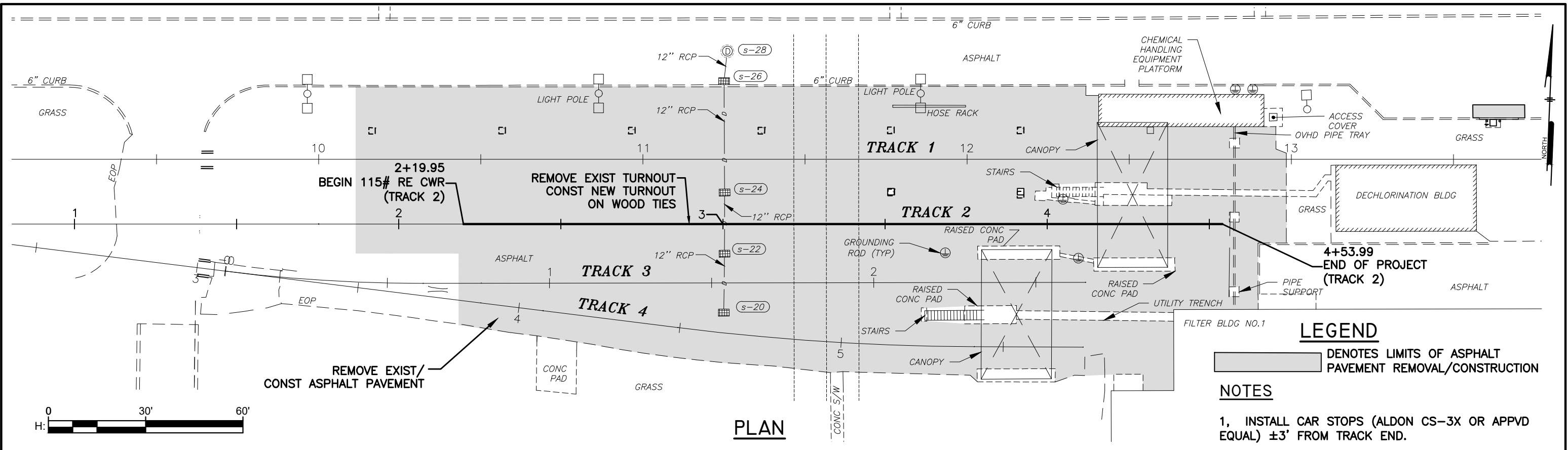
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 DATE: 1/31/22

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 Wastewater Department
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HOWARD F. CURREN AWTP TRAIN RAIL REPLACEMENTS
 CONSTRUCTION PLAN-PROFILE
 TRACK I

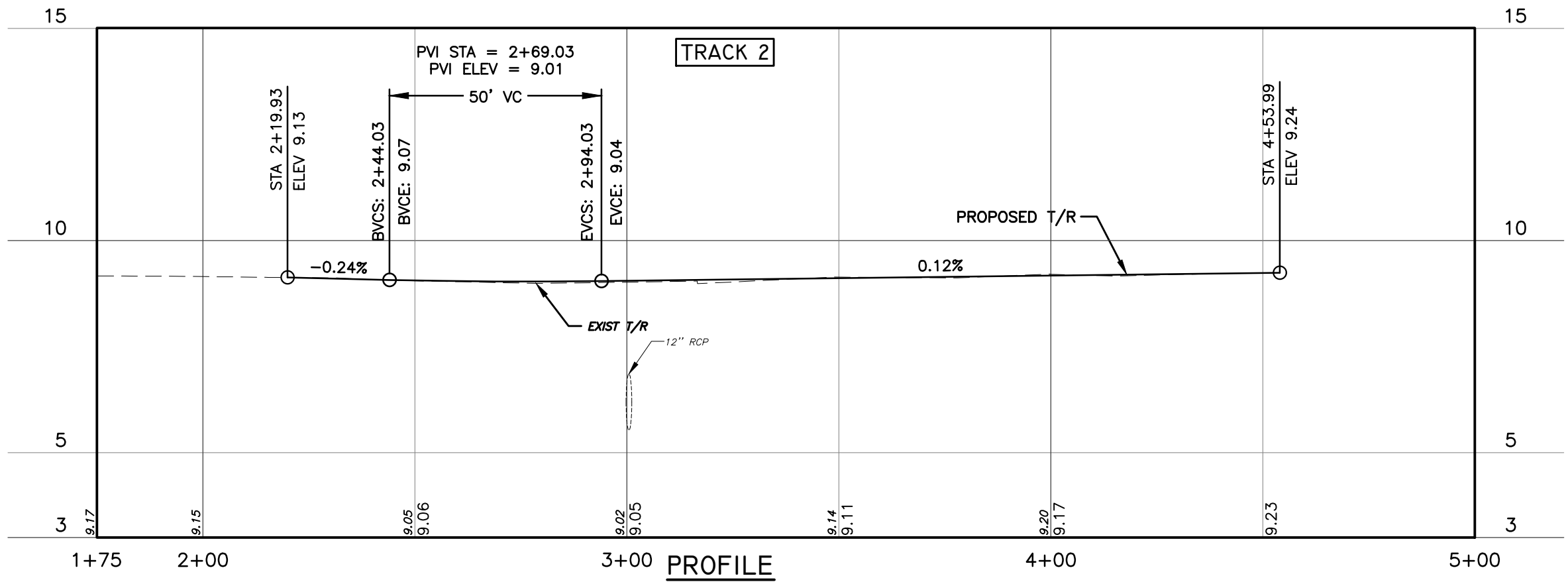
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 PLOTTED: 1/31/2022 4:00:57 PM, BY: MICHAEL HENDERSON PLOTSTYLE: PENNONI NCS.STB, PROJECT STATUS: 100%



PLAN

- LEGEND**
 [Shaded Area] DENOTES LIMITS OF ASPHALT PAVEMENT REMOVAL/CONSTRUCTION
- NOTES**
 1, INSTALL CAR STOPS (ALDON CS-3X OR APPVD EQUAL) ±3' FROM TRACK END.



PROFILE

No.	DATE	REVISIONS

PENNONI ASSOCIATES INC.
 5755 Rio Vista Drive
 Clearwater, FL 33760
 Certificate of Authorization 7819

E. PETER NIKOLOV, P.E. DATE
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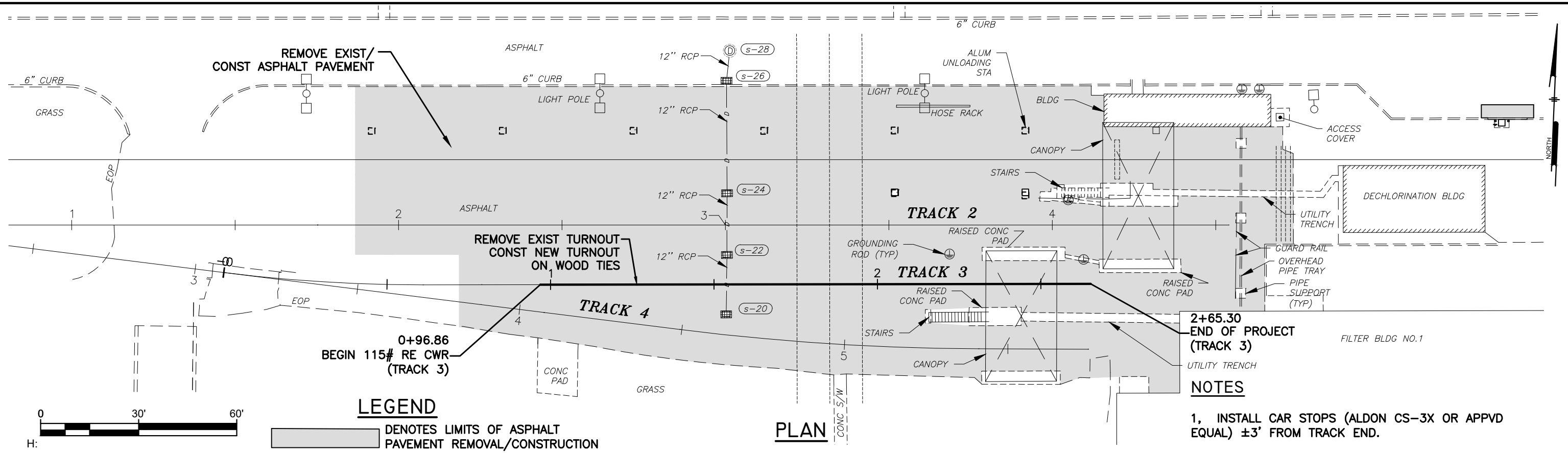
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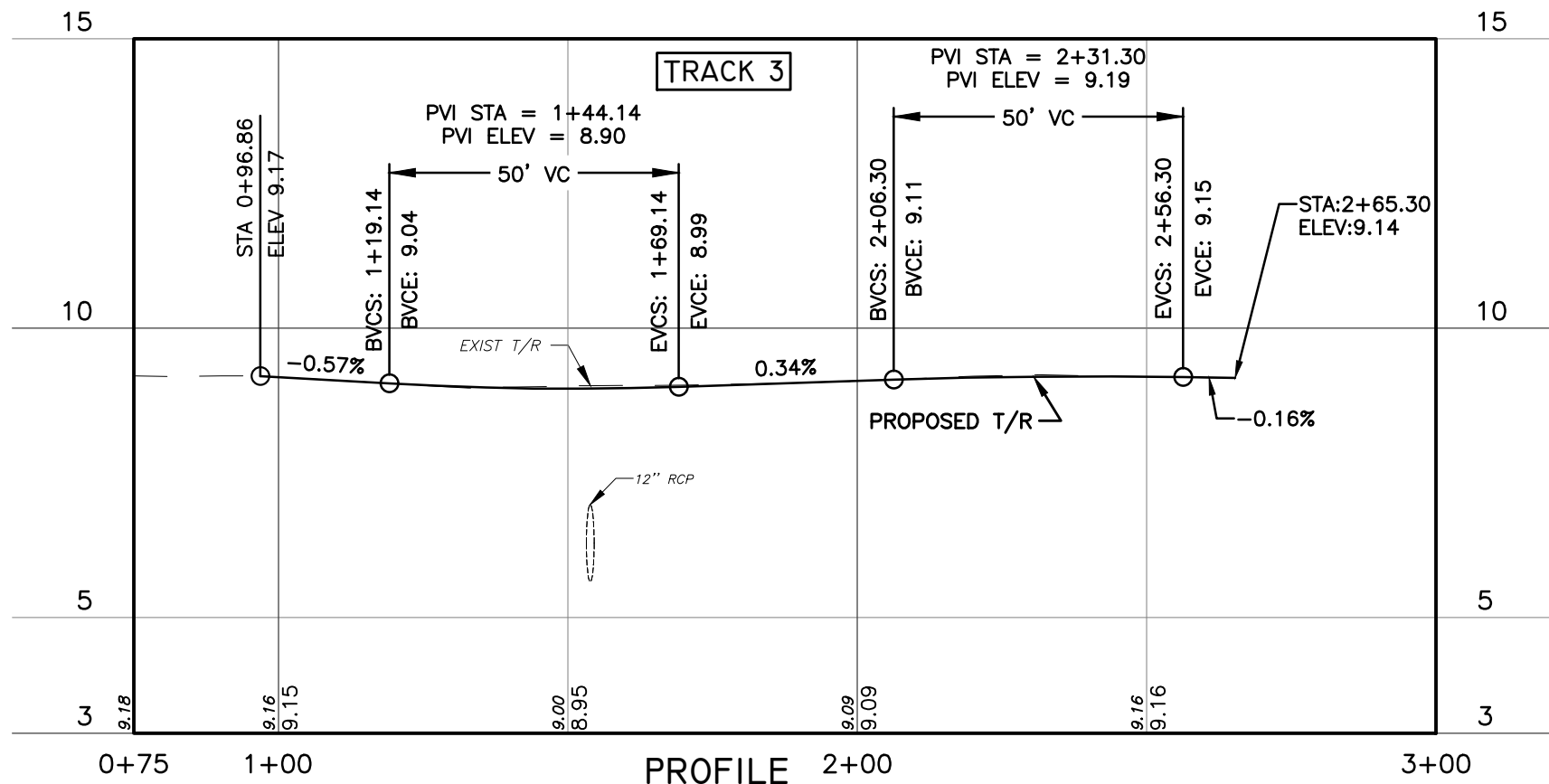
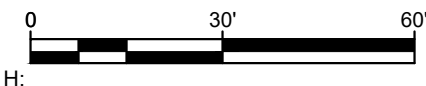
HOWARD F. CURREN AWTP TRAIN RAIL REPLACEMENTS
 CONSTRUCTION PLAN-PROFILE
 TRACK 2

SHEET
8

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 PLOTTED: 1/31/2022 4:01:07 PM, BY: MICHAEL HENDERSON PLOTSTYLE: PENNONI NCS.STB, PROJECT STATUS: 100%



LEGEND
 [Shaded Area] DENOTES LIMITS OF ASPHALT PAVEMENT REMOVAL/CONSTRUCTION



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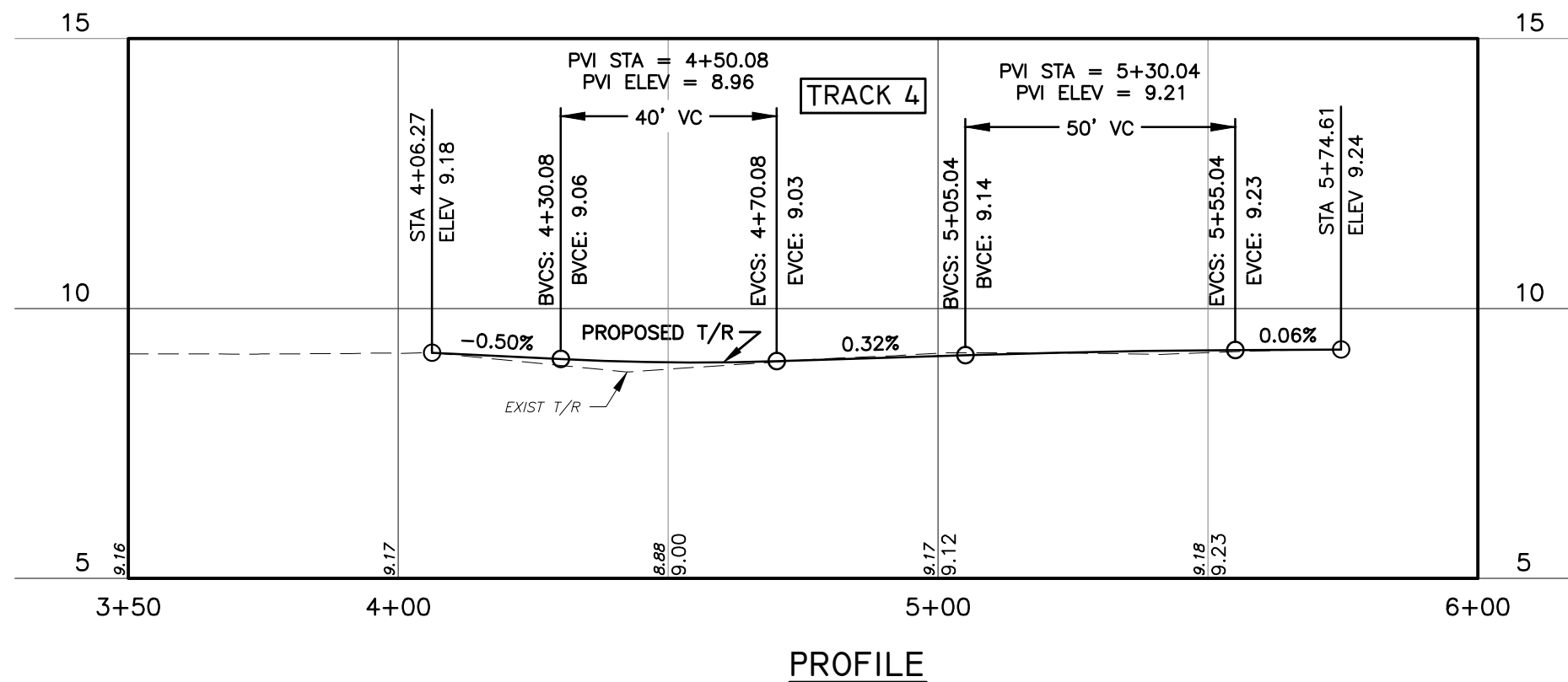
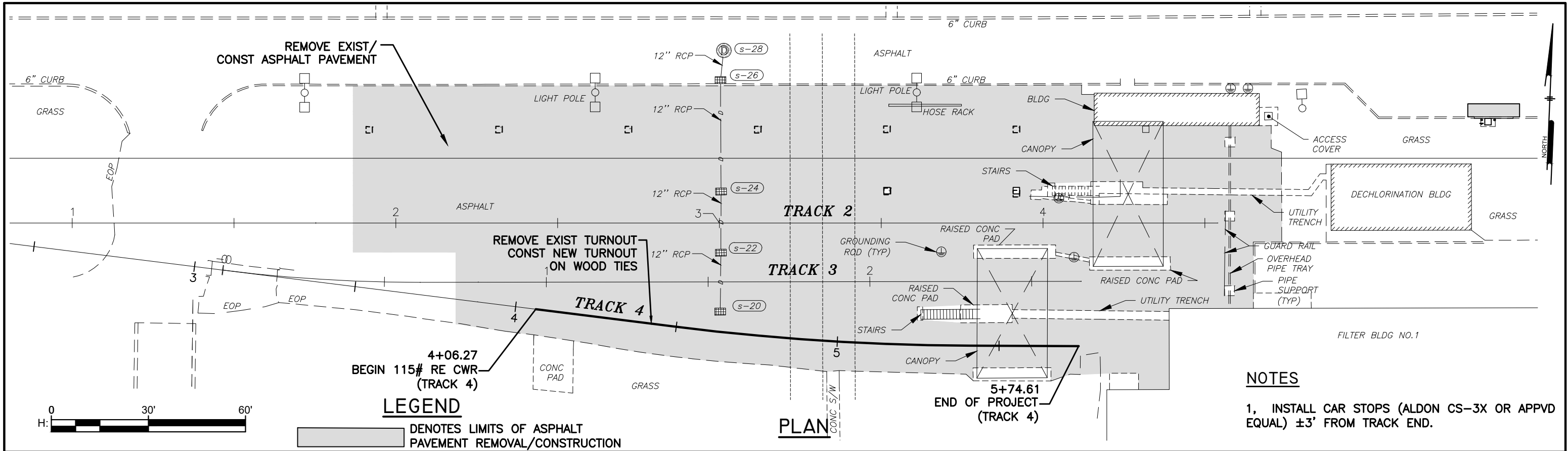
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HOWARD F. CURREN AWTP TRAIN RAIL REPLACEMENTS
 CONSTRUCTION PLAN-PROFILE
 TRACK 3

SHEET
9

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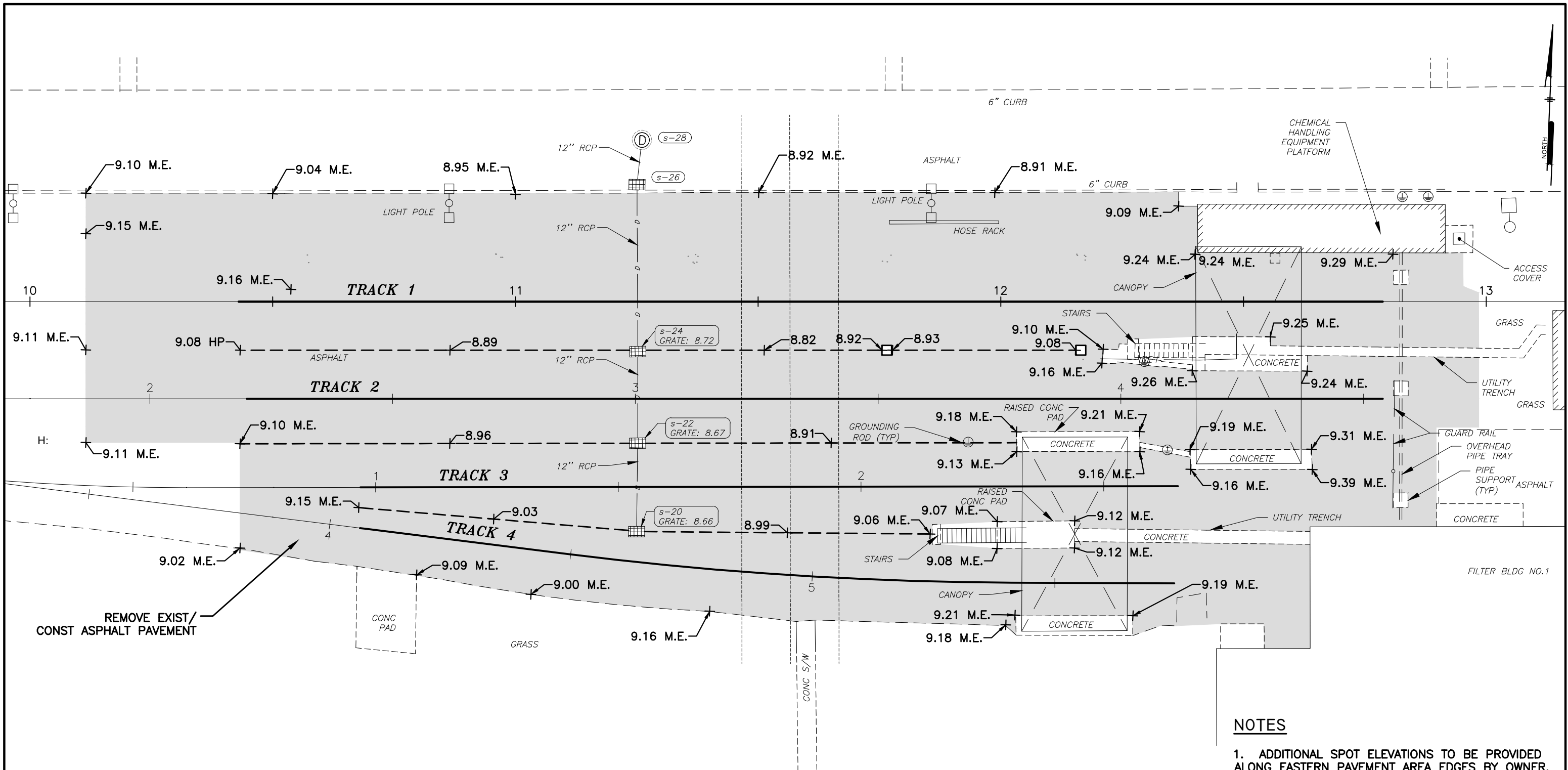
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CONSTRUCTION PLAN-PROFILE
TRACK 4

SHEET
10

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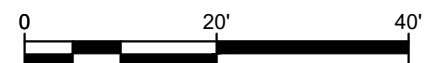


NOTES

- 1. ADDITIONAL SPOT ELEVATIONS TO BE PROVIDED ALONG EASTERN PAVEMENT AREA EDGES BY OWNER.

LEGEND

DENOTES LIMITS OF ASPHALT PAVEMENT REMOVAL/CONSTRUCTION



No.	DATE	REVISIONS

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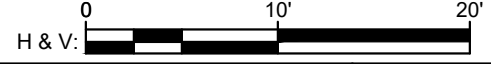
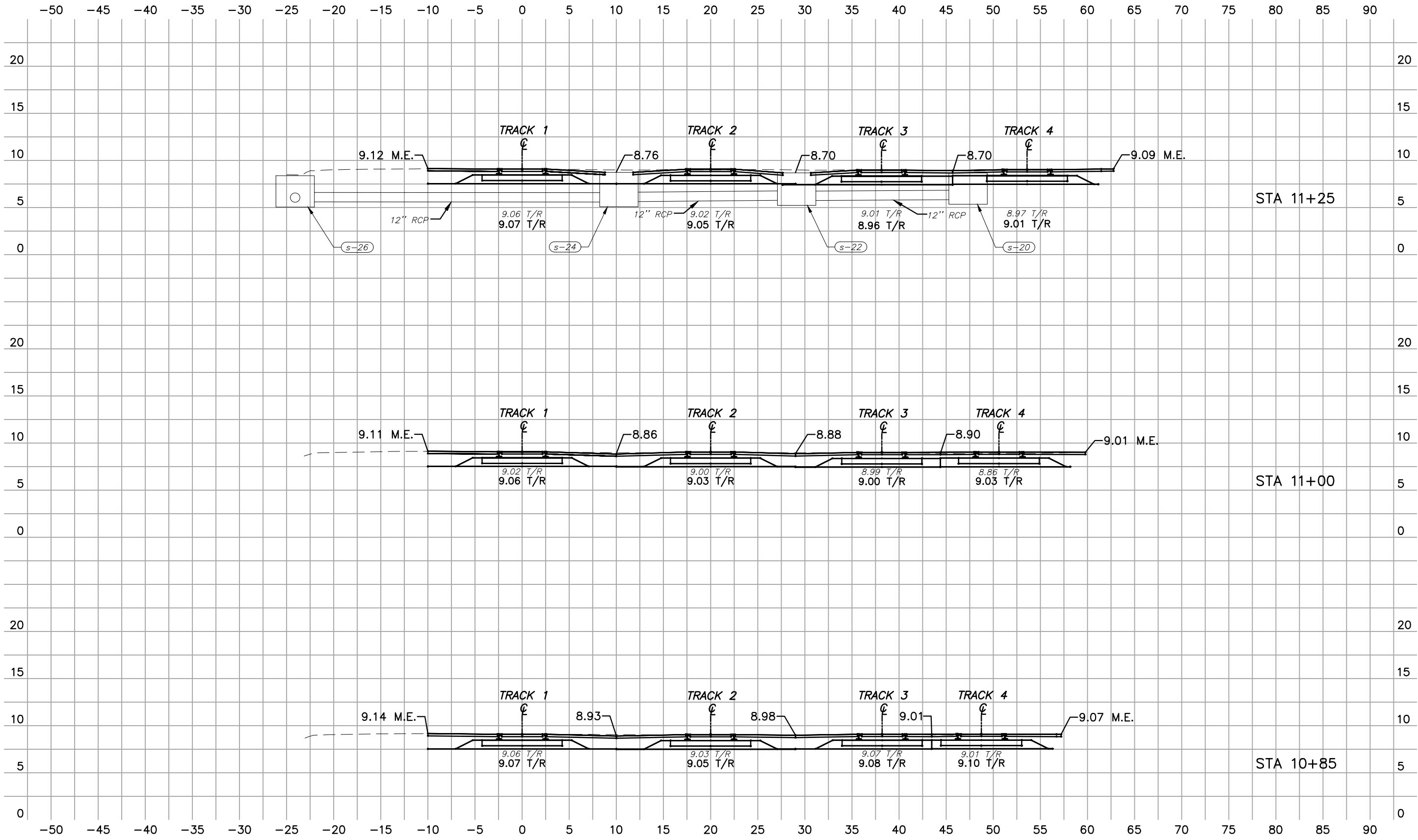
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HOWARD F. CURREN AWTP TRAIN RAIL REPLACEMENTS
 GRADING PLAN

SHEET
 11

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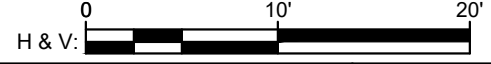
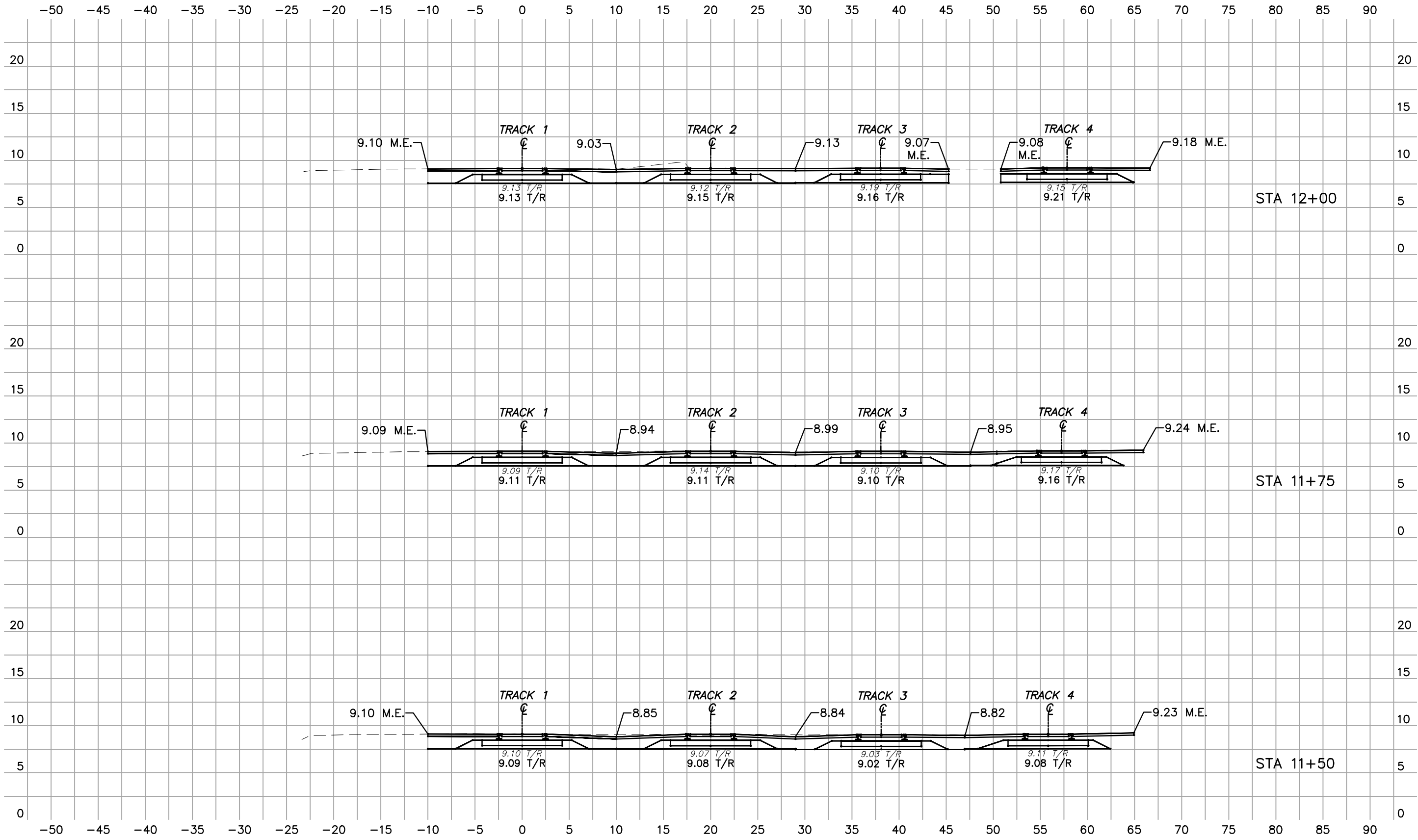
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HOWARD F. CURREN AWTP TRAIN RAIL REPLACEMENTS
 CROSS SECTION (I)

SHEET
12

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E. PETER NIKOLOV, P.E. DATE
 P.E. NO. 38766

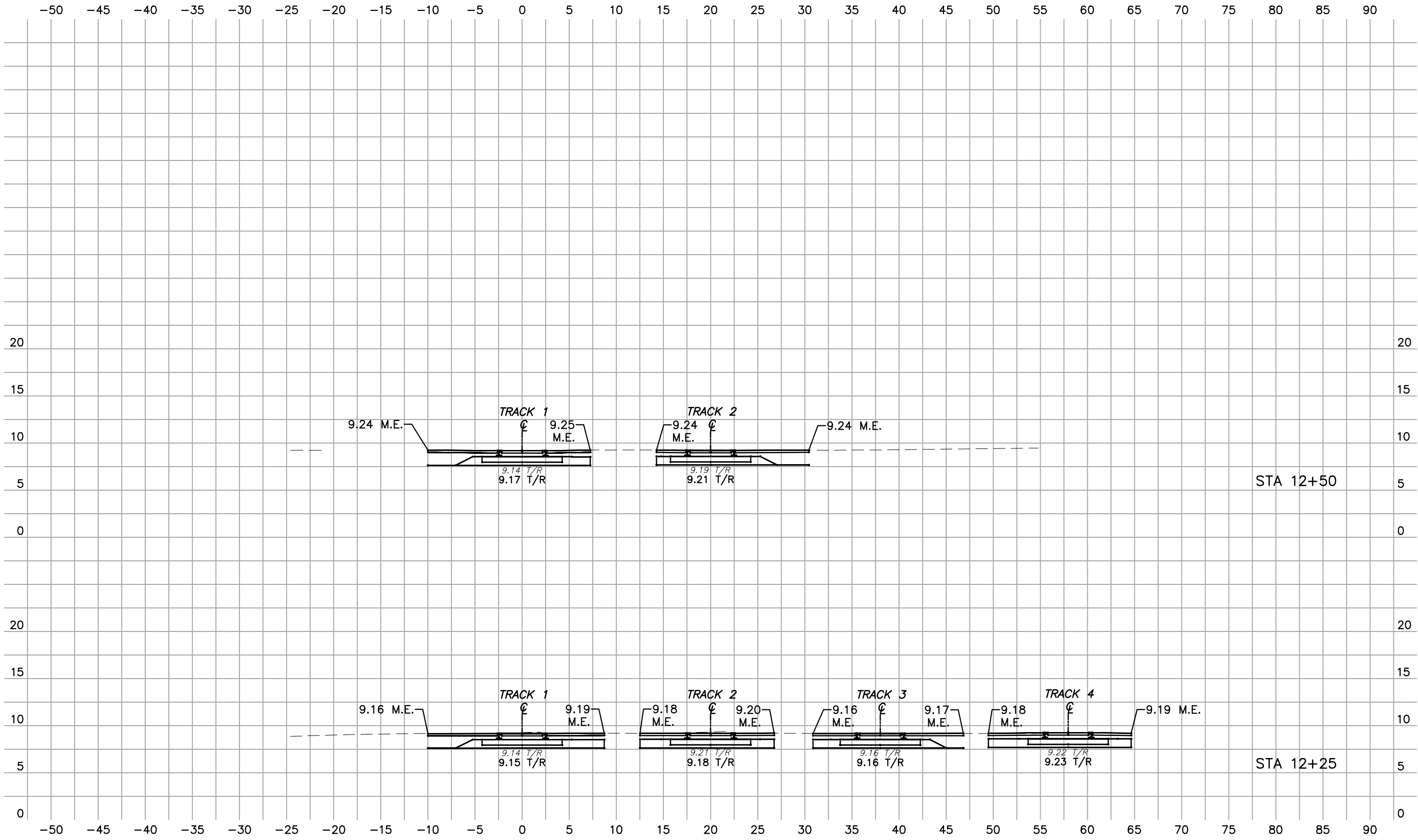
DES: MCH
 DRN: MCH
 CKD: EPN
 DATE: 1/31/22

CITY of TAMPA
 Wastewater Department
 2545 Guy N. Verger Blvd.
 Tampa, FL 33605


HOWARD F. CURREN AWTP TRAIN RAIL REPLACEMENTS
 CROSS SECTION (2)

SHEET
13

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 PLOTTED: 1/31/2022 4:01:44 PM, BY: MICHAEL HENDERSON PLOTSTYLE: PENNONI NCS.STB, PROJECT STATUS: 100%



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PENNONI ASSOCIATES INC.

 5755 Rio Vista Drive
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E. PETER NIKOLOV, P.E. DATE
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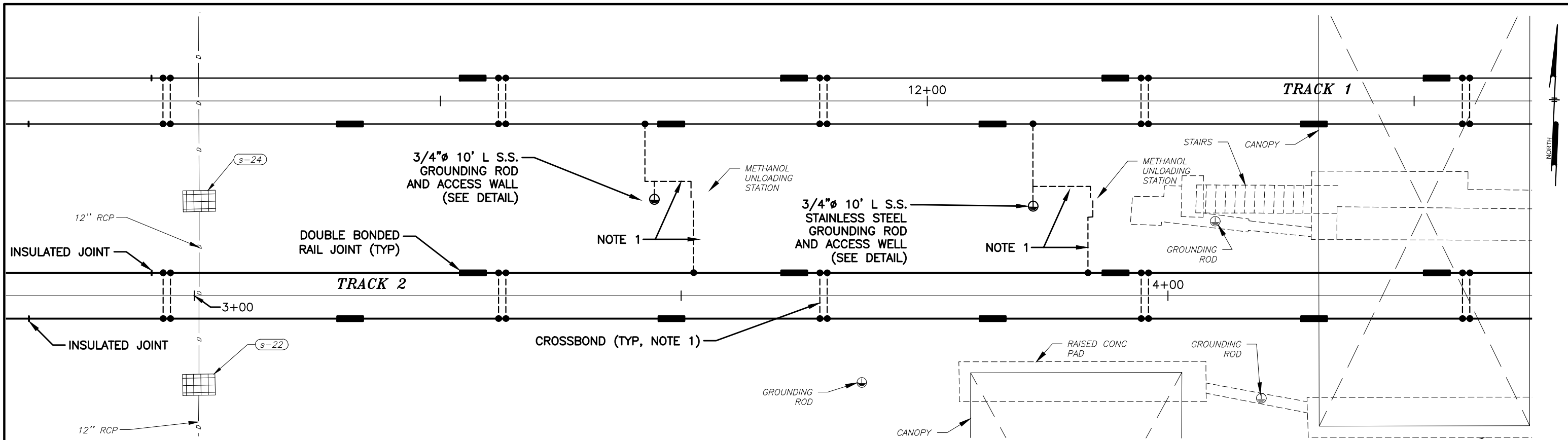
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 DRN: MCH
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HOWARD F. CURREN AWTP TRAIN RAIL REPLACEMENTS
CROSS SECTION (3)

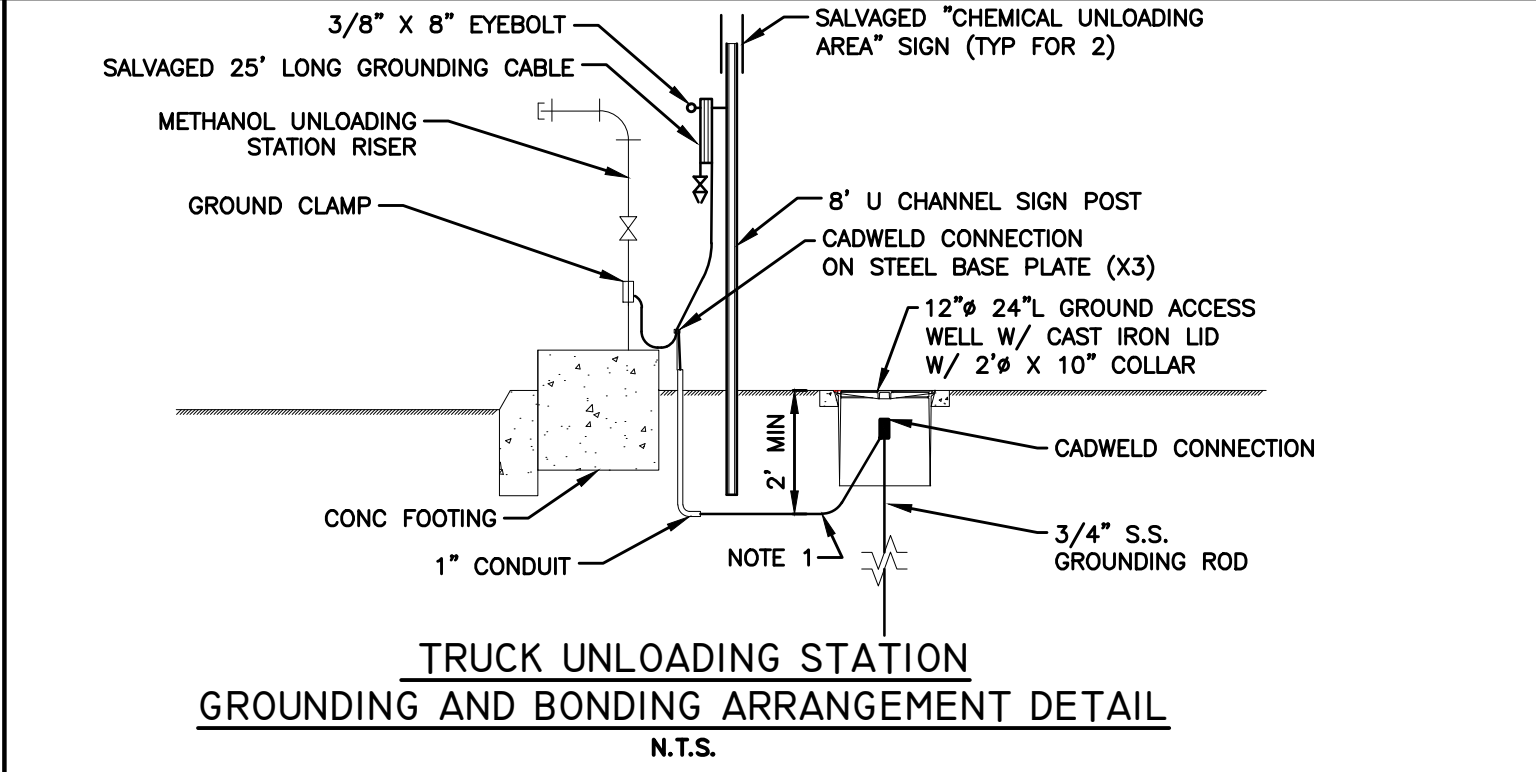
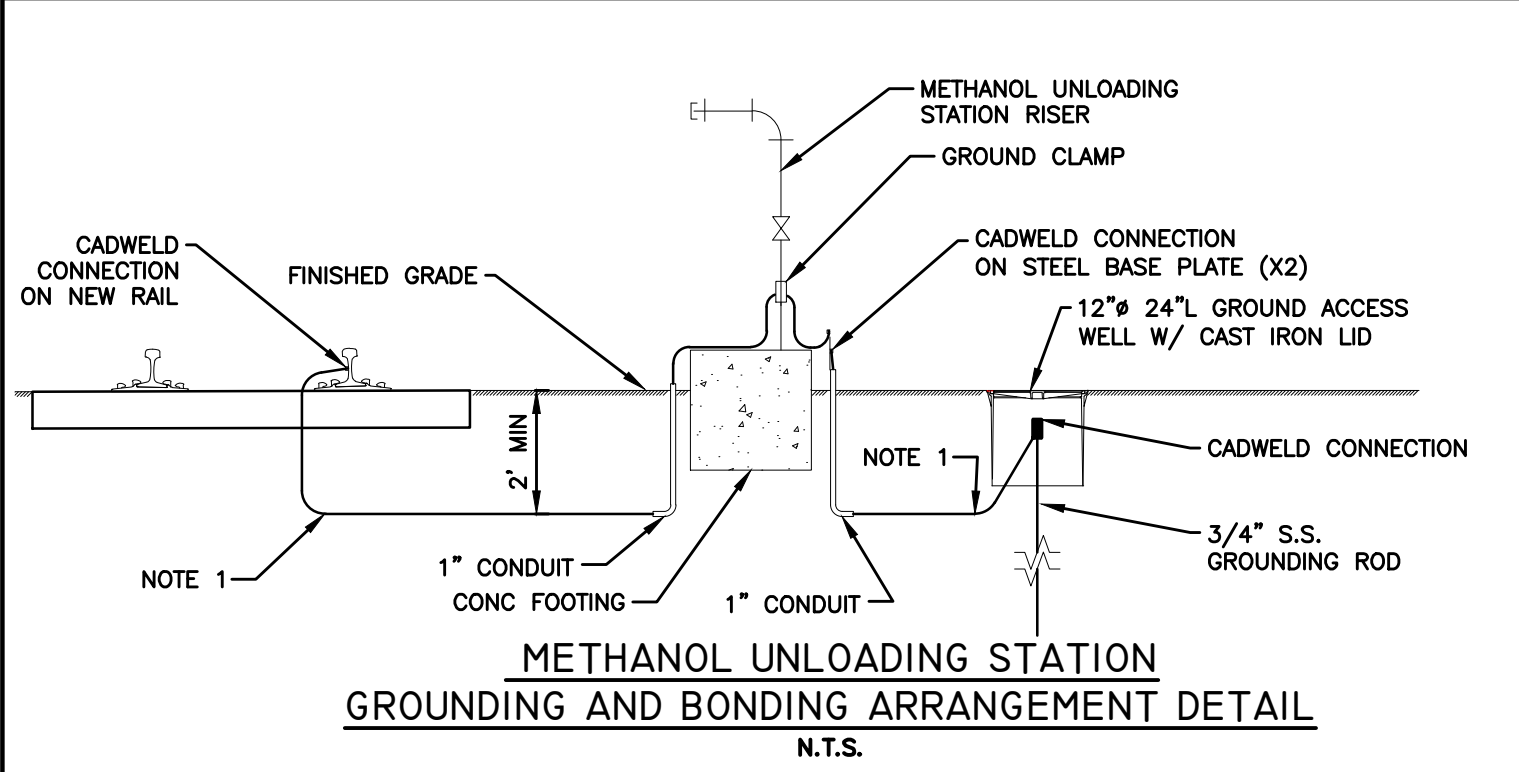
SHEET
14

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 PLOTTED: 1/31/22 4:01:58 PM, BY: MICHAEL HENDERSON PLOTSTYLE: PENNONI NCS.STB, PROJECT STATUS: 100%



NOTES

1. ELECTRICAL CONNECTIONS SHALL BE NO. 4 AWG COPPER COVERED STEEL WIRE.



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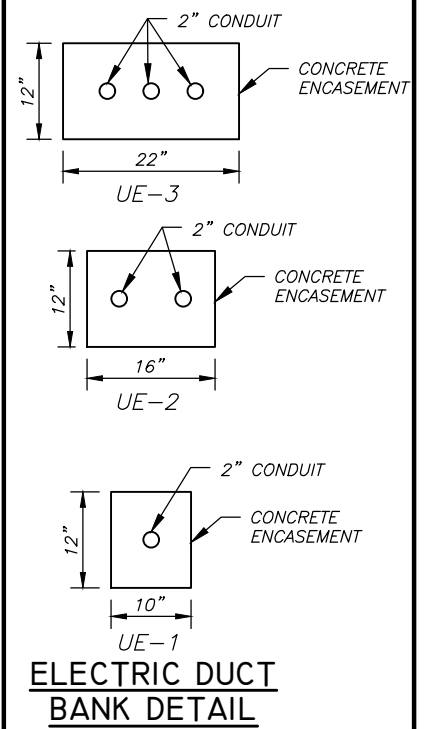
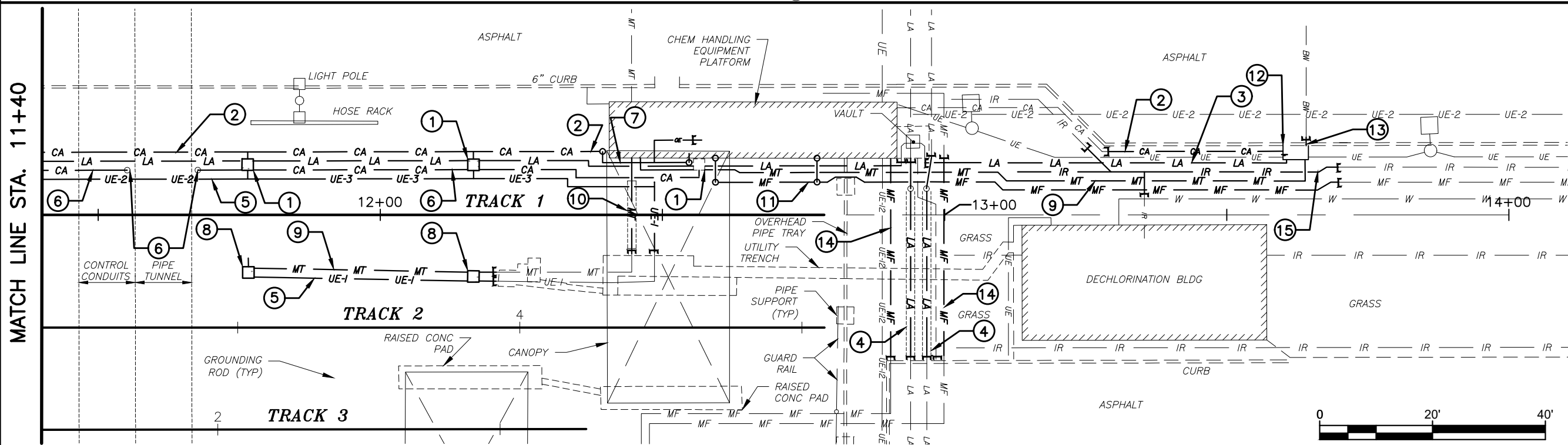
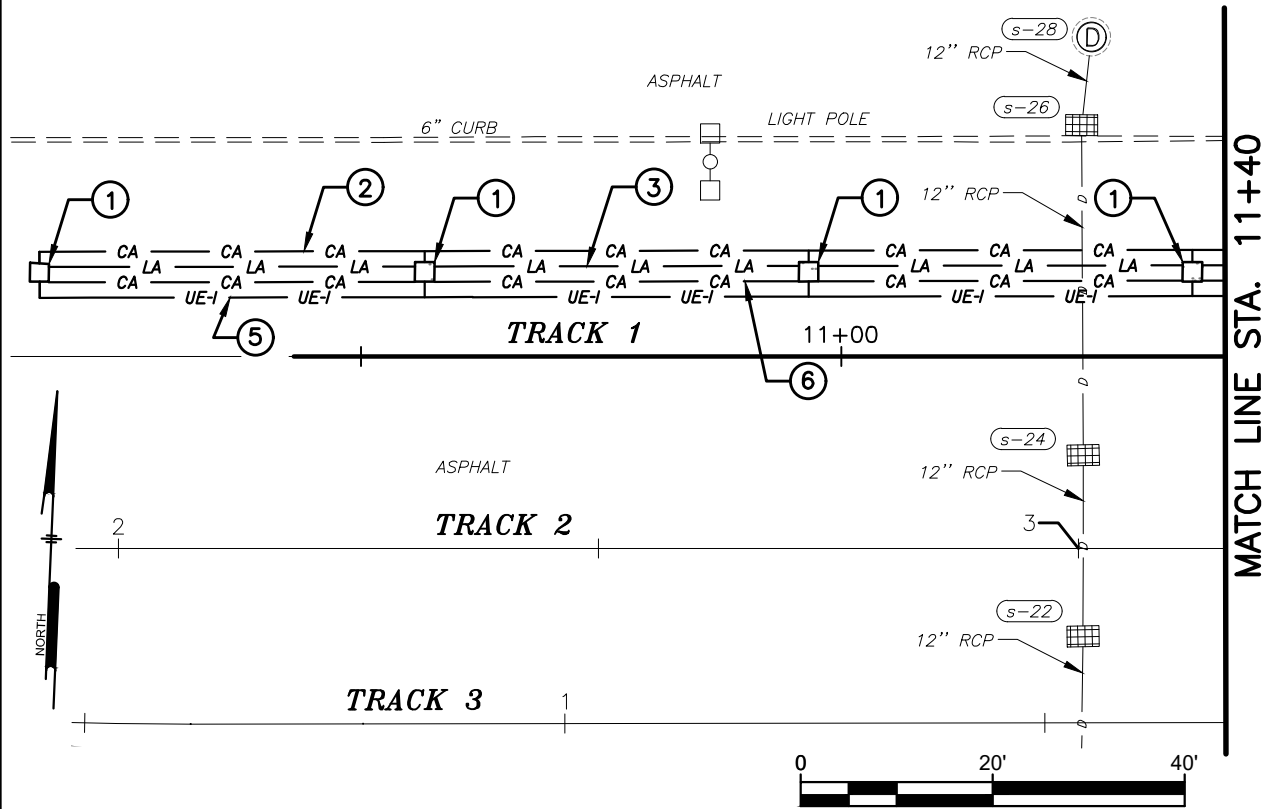
HOWARD F. CURREN AWTP TRAIN RAIL REPLACEMENTS
BONDING PLAN AND DETAILS

SHEET
15

NOTES

GENERAL: ALL PIPING AND CONDUITS TO BE REMOVED ARE ABANDONED IN PLACE.

- ① REMOVE 7 LIQUID ALUM STATIONS INCLUDING FOUNDATIONS, AG PIPING, CONDUIT, JUNCTION BOXES AND ELECTRICAL CIRCUITS (SEE DETAIL).
- ② REMOVE ±300 LF 2" UG COMPRESSED AIR PIPING. CAP UG PIPING TO REMAIN.
- ③ REMOVE ±330 LF 3" UG LIQUID ALUM UNLOADING PIPING. CAP PIPES ±1' OUTSIDE VAULT.
- ④ REMOVE ±70 LF 3" UG LIQUID ALUM CIRCULATING PIPING AND ±60 LF UG CASING PIPING. CAP PIPES ±1' OUTSIDE VAULT.
- ⑤ REMOVE ±340 LF UG AND ±35 LF AG ELECTRICAL CONDUITS. PLUG CONDUIT TO REMAIN IN EQUIPMENT PLATFORM OVERHEAD. (SEE DETAIL). NOTE UG ELECTRICAL CONDUITS ARE ENCASED IN CONCRETE DUCT BANKS (SEE CROSS SECTION DETAILS THIS SHEET).
- ⑥ REMOVE ±220 LF 2" UG PLANT AIR PIPING. INSTALL BLANKS ON PIPING INSIDE UTILITY TUNNEL.
- ⑦ REMOVE ±20 LF 2" AG COMP AIR PIPING (SEE DETAIL FOR TERMINATION POINT).
- ⑧ REMOVE 2 METHANOL STATIONS INCLUDING FOUNDATIONS, AG PIPING, CONDUIT, JUNCTION BOXES AND ELECTRICAL CIRCUITS (SEE DETAIL).
- ⑨ REMOVE ±240 LF 4" UG METHANOL TRANSFER PUMP SUCTION PIPING. TERMINATE REMOVAL UPSTREAM OF VALVES AT EQUIPMENT PLATFORM (SEE DETAIL).
- ⑩ REMOVE ±14 LF 12" UG CASING AND 2" AG VENT PIPING RISER
- ⑪ REMOVE ±120 LF 2" UG METHANOL FEED PUMP PIPING. INSTALL BLANKS ON RISERS ±4' ABVGD AT EQUIPMENT PLATFORM (SEE DETAIL). CAP UG PIPING TO REMAIN.
- ⑫ REMOVE TRUCK UNLOADING STATION INCLUDING FOUNDATION, AG PIPING, CONDUIT AND ELECTRICAL CIRCUITS (SEE DETAIL).
- ⑬ REMOVE ±5 LF 2" UG BREWERY WASTE PIPING. CAP PIPING TO REMAIN.
- ⑭ REMOVE ±70 LF 2-2" UG METHANOL FEED PUMP PIPING (±140 LF TOTAL). CAP UG PIPING TO REMAIN.
- ⑮ REMOVE ±65 LF 1/2" & 1" UG IRRIGATION PIPING.. CAP UG PIPING TO REMAIN.



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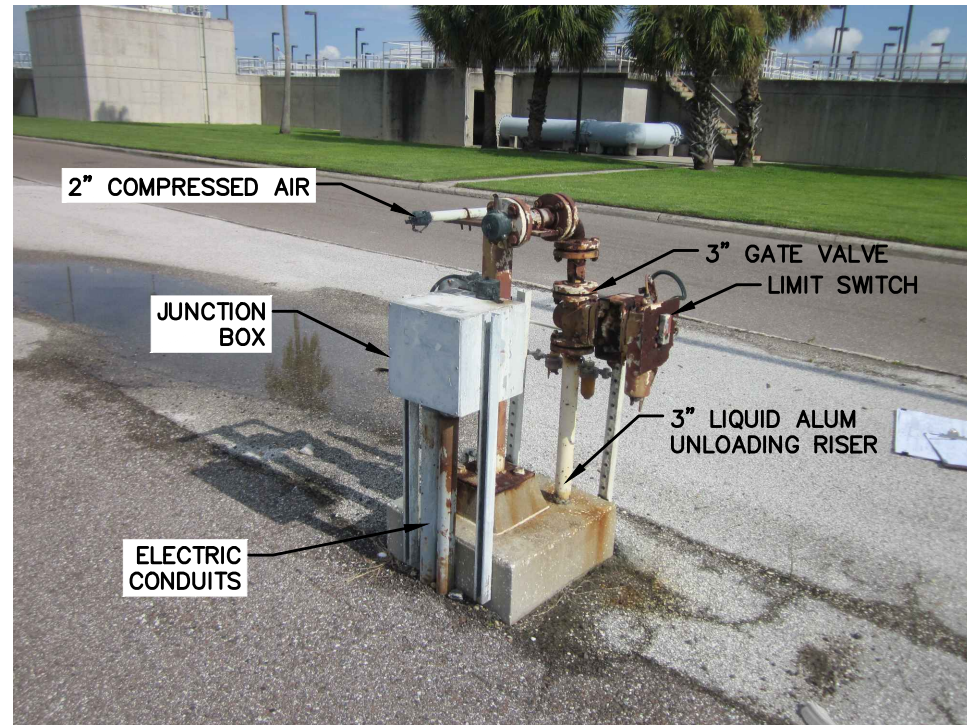
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 DRN: MCH
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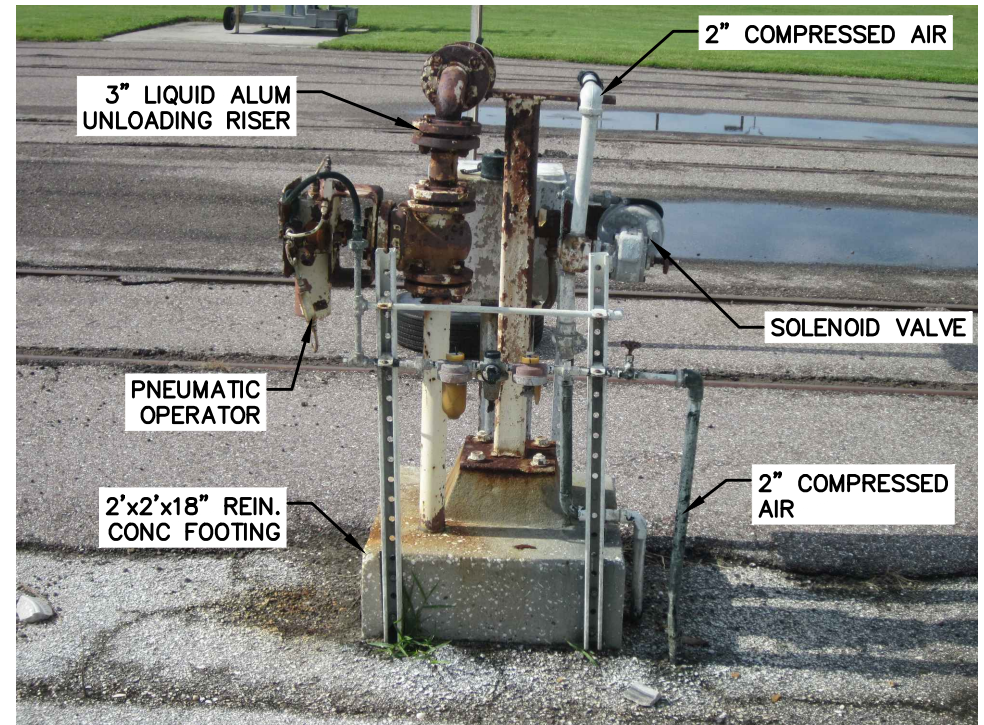
HOWARD F. CURREN AWTP TRAIN RAIL REPLACEMENTS
 PIPING DEMOLITION PLAN

SHEET
16

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 PLOTTED: 1/31/2022 4:02:07 PM, BY: MICHAEL HENDERSON PLOTSTYLE: PENNONI.NCS,STB, PROJECT STATUS: 100%

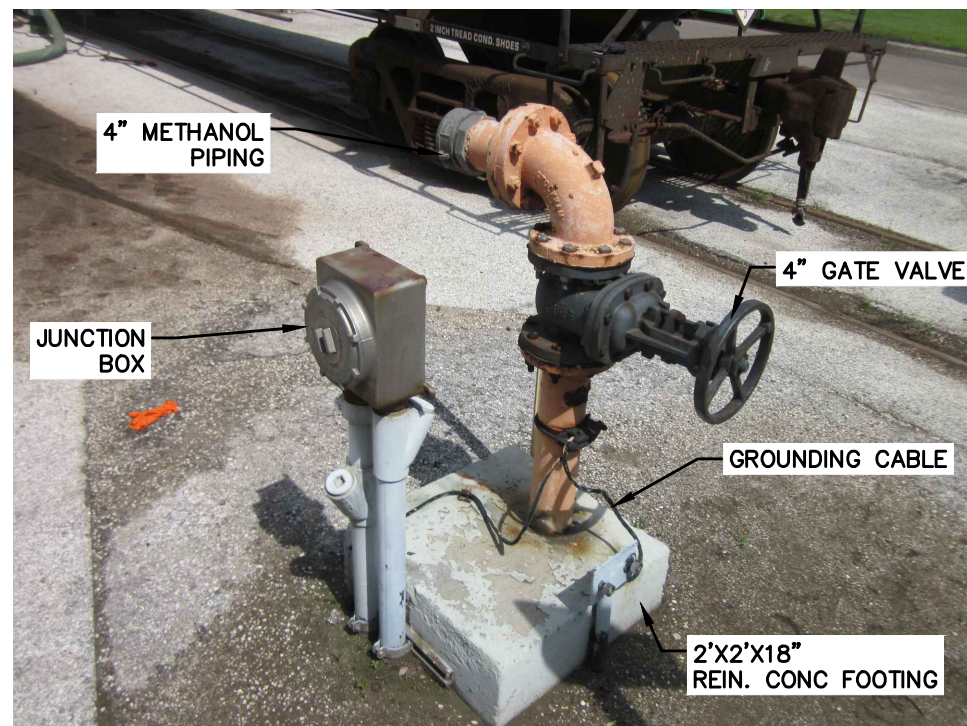


SOUTHEAST ELEVATION

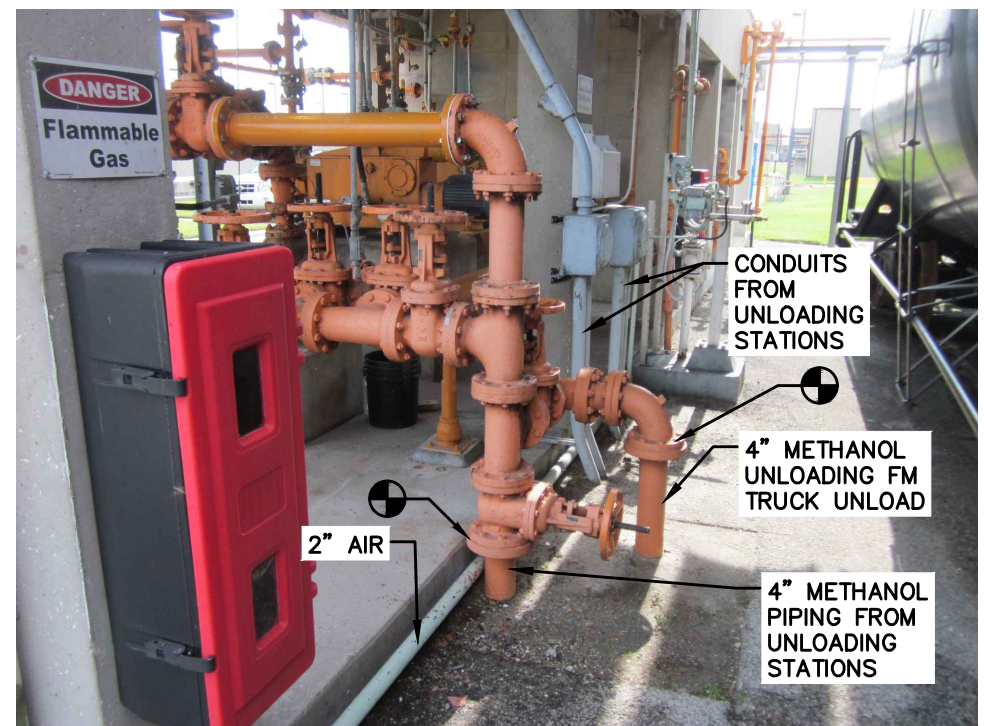


NORTH ELEVATION

LIQUID ALUM UNLOADING STATION




METHANOL UNLOADING STATION



METHANOL PIPING REMOVAL LIMITS

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PENNONI ASSOCIATES INC.
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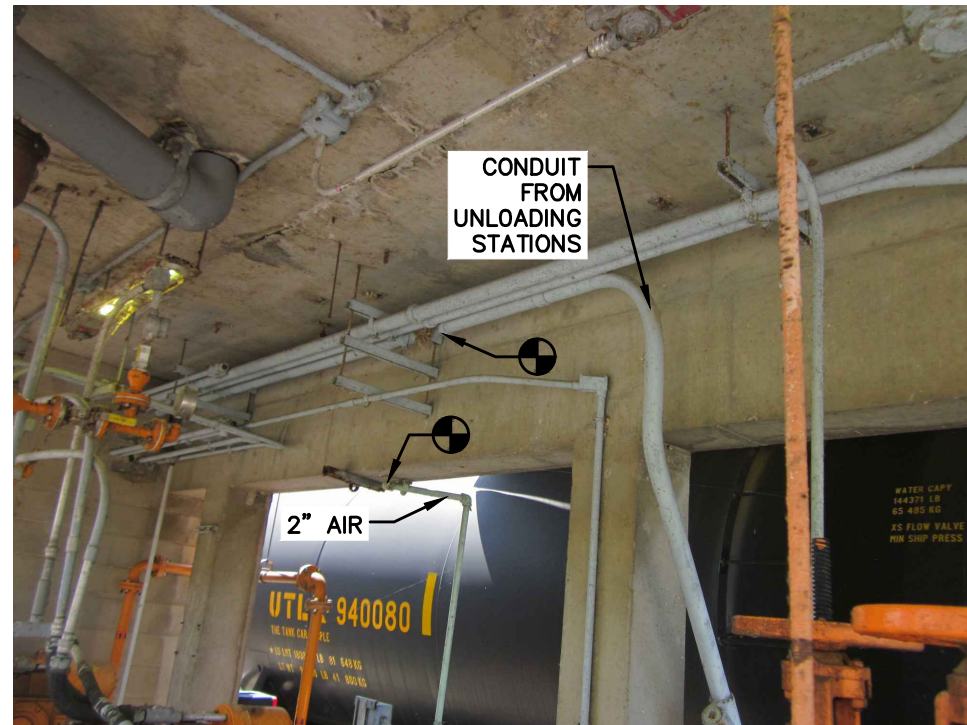
E. PETER NIKOLOV, P.E. DATE
 P.E. NO. 38766

DES: MCH
 DRN: MCH
 CKD: EPN
 DATE: 1/31/22

CITY of TAMPA
 Wastewater Department
 2545 Guy N. Verger Blvd.
 Tampa, FL 33605

HOWARD F. CURREN AWTP TRAIN RAIL REPLACEMENTS
 DEMOLITION DETAILS (I)

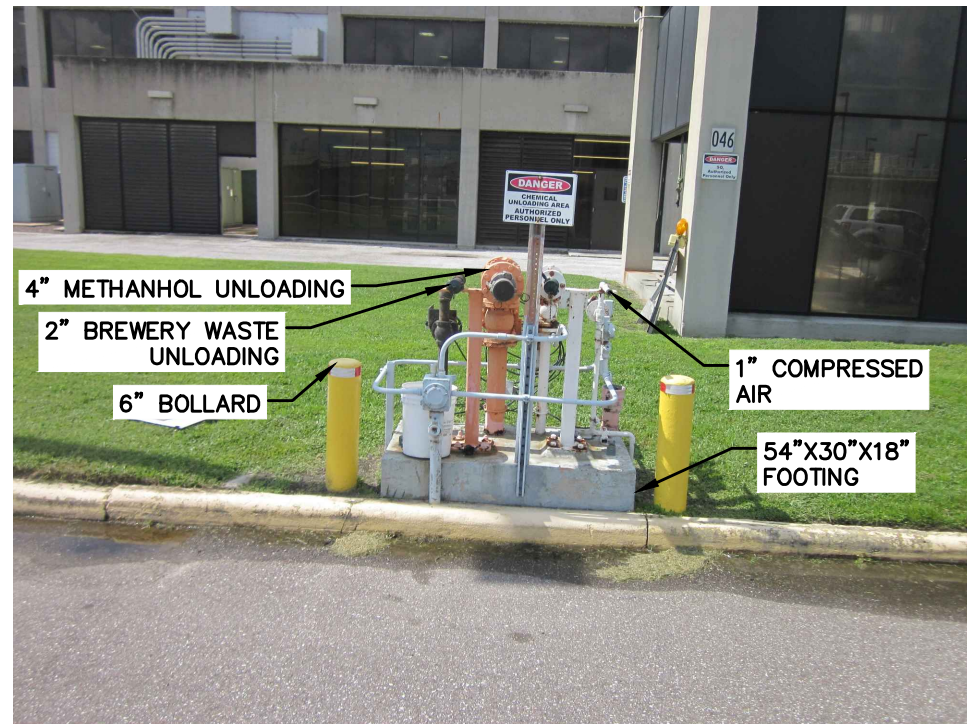
SHEET
17



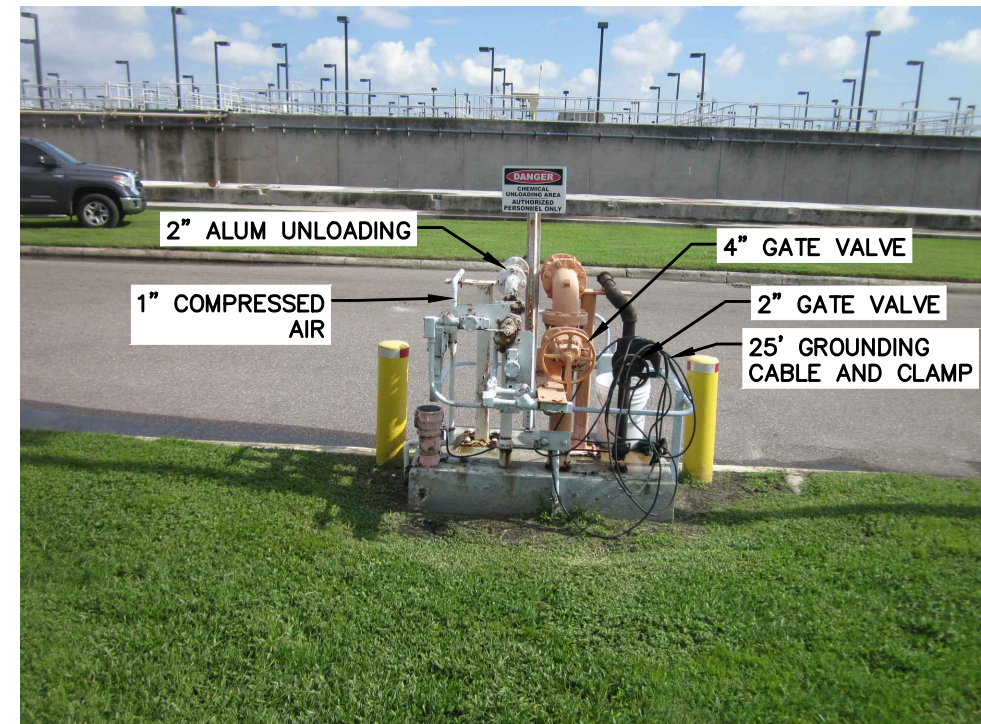
ELECTRICAL CONDUIT AND COMPRESSED AIR PIPING REMOVAL LIMITS



METHANOL FEED PIPING REMOVAL LIMIT




NORTH ELEVATION

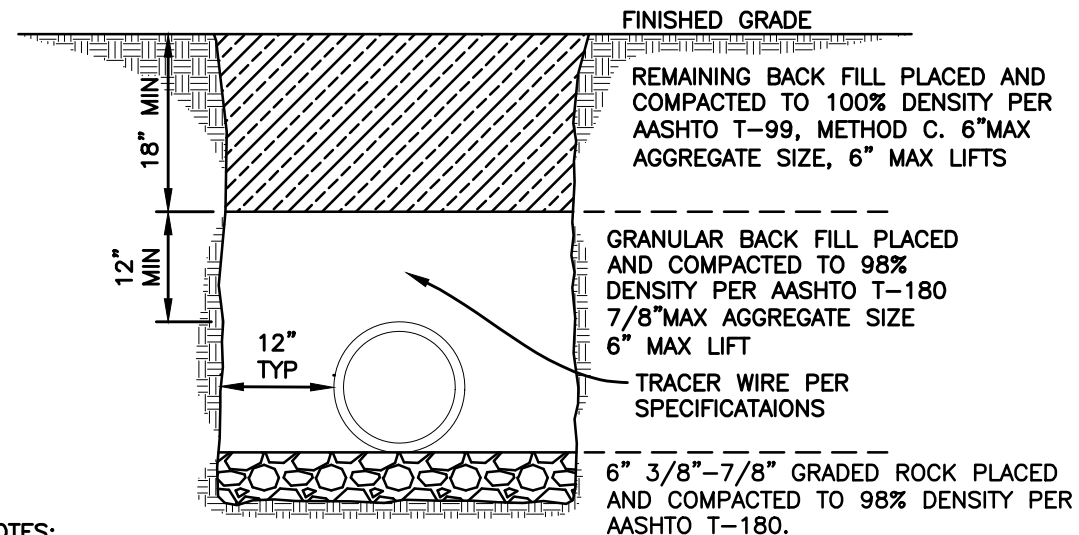
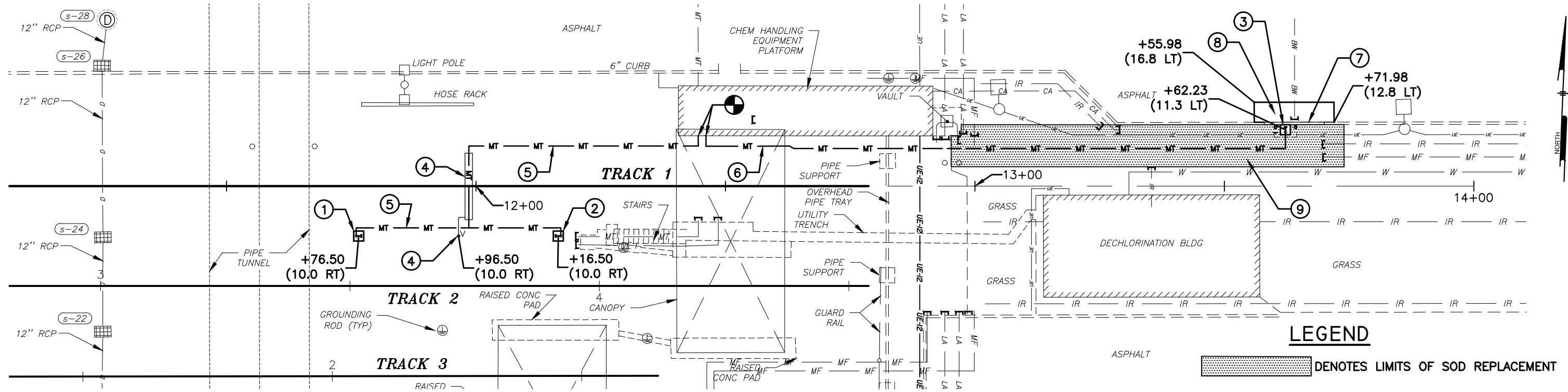


SOUTH ELEVATION

LIQUID ALUM UNLOADING STATION

No.	DATE	REVISIONS	PENNONI ASSOCIATES INC.		DES: MCH	CITY of TAMPA Wastewater Department 2545 Guy N. Verger Blvd. Tampa, FL 33605	HOWARD F. CURREN AWTP TRAIN RAIL REPLACEMENTS DEMOLITION DETAILS (2)	SHEET 18
				5755 Rio Vista Drive Clearwater, FL 33760 Certificate of Authorization 7819	E. PETER NIKOLOV, P.E. DATE P.E. NO. 38766			

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 PLOTTED: 1/31/2022 4:02:32 PM, BY: MICHAEL HENDERSON PLOTSTYLE: PENNONI.NCS,STB, PROJECT STATUS: 100%



- NOTES:**
- BACK FILL SHALL BE FREE OF UNSUITABLE MATERIAL SUCH AS LARGE ROCK, MUCK AND DEBRIS.
 - THE PIPE SHALL BE FULLY SUPPORTED FOR ITS ENTIRE LENGTH WITH APPROPRIATE COMPACTION UNDER THE PIPE HAUNCHES.
 - WRAP ENTIRE LENGTH OF PIPE IN POLYURETHANE SHEETING AS PER SPECIFICATIONS.

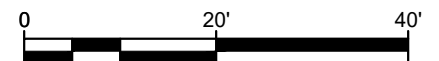
PIPE TRENCH DETAIL
N.T.S.

KEYNOTES

- CONSTRUCT METHANOL UNLOADING STATION, WITH COUPLING LOCATED ON EAST SIDE OF RISER (SEE DETAIL).
- CONSTRUCT METHANOL UNLOADING STATION, WITH COUPLING LOCATED ON WEST SIDE OF RISER. (SEE DETAIL).
- CONSTRUCT TRUCK METHANOL UNLOADING STATION (SEE DETAIL).
- INSTALL ±14 LF OF 12" UG STEEL PIPE CASING CENTERED UNDER TRACK 1. INSTALL VENT RISER CAP BETWEEN METHANOL UNLOADING STATIONS. INSTALL ±5 LF OF 2" UG VENT PIPING BETWEEN CASING AND RISER (SEE DETAIL).
- INSTALL ±110 LF OF 4" UG METHANOL UNLOADING PIPING BETWEEN UNLOADING STATIONS AND WESTERN TRANSFER PUMP SUCTION VALVE AT EQUIPMENT PLATFORM.
- INSTALL ±115 LF 4" UG METHANOL UNLOADING PIPING BETWEEN TRUCK UNLOADING STATIONS AND EASTERN TRANSFER PUMP SUCTION VALVE AT EQUIPMENT PLATFORM.
- CONSTRUCT ±12 LF TYPE D CURB. MATCH EXISTING ELEVATIONS.
- CONSTRUCT ±64 SF BITUMINOUS PAVEMENT. MATCH EXISTING ELEVATIONS. SEE TYPICAL DETAIL FOR PAVEMENT AND BASE COURSE REQUIREMENTS.
- RESOD ±600 SF AREA DISTURBED BY PIPING AND TRUCK UNLOADING STATION REMOVAL AND INSTALLATION.

NOTES

- REFER TO RAILWAY CONSTRUCTION PLANS FOR ADDITIONAL PAVEMENT RESTORATION REQUIREMENTS.
- REFER TO BONDING PLAN FOR GROUNDING WIRE INSTALLATION REQUIREMENTS AT UNLOADING STATIONS.



No.	DATE	REVISIONS

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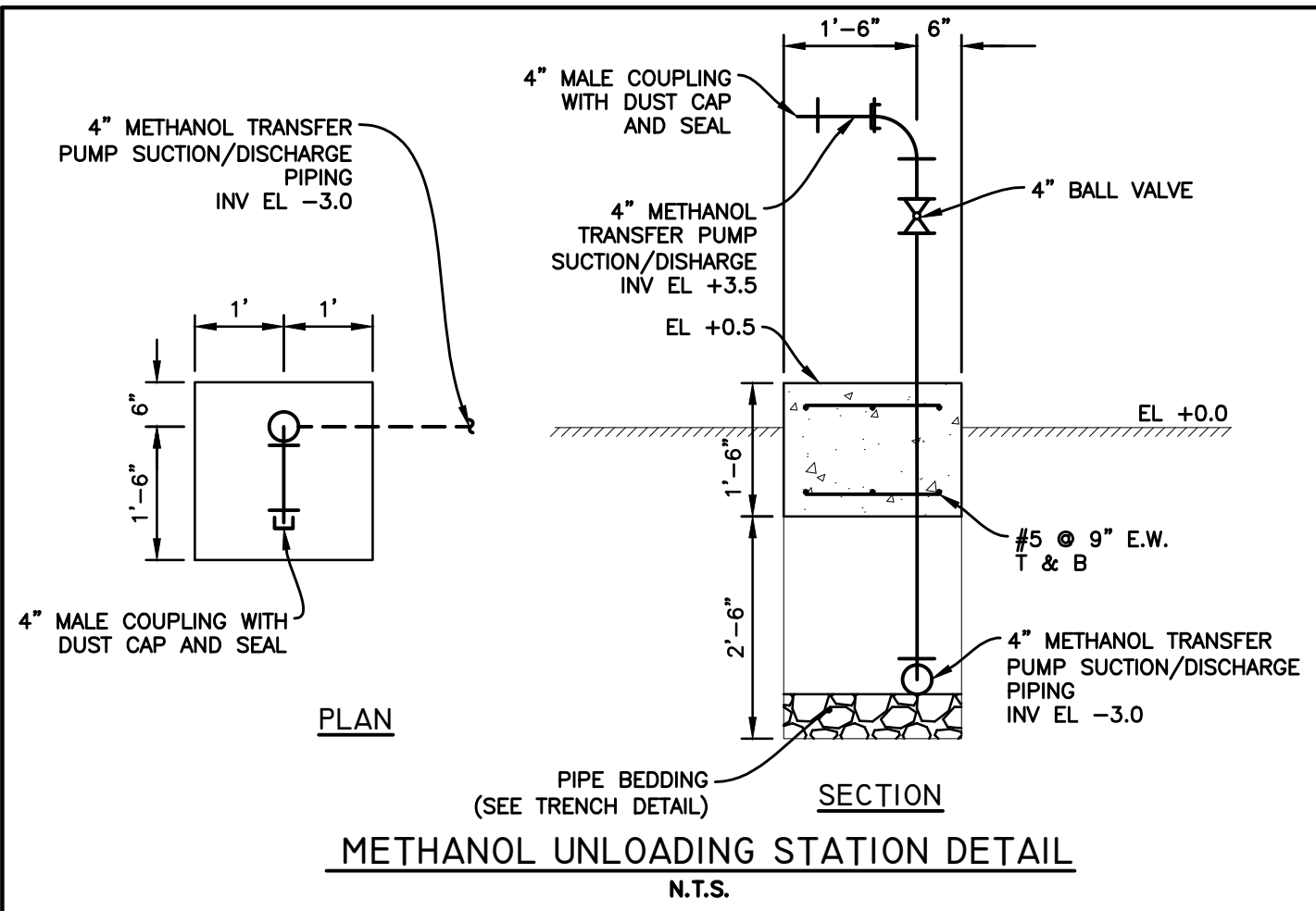
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 DRN: MCH
 CKD: EPN
 DATE: 1/31/22

CITY of TAMPA
 Wastewater Department
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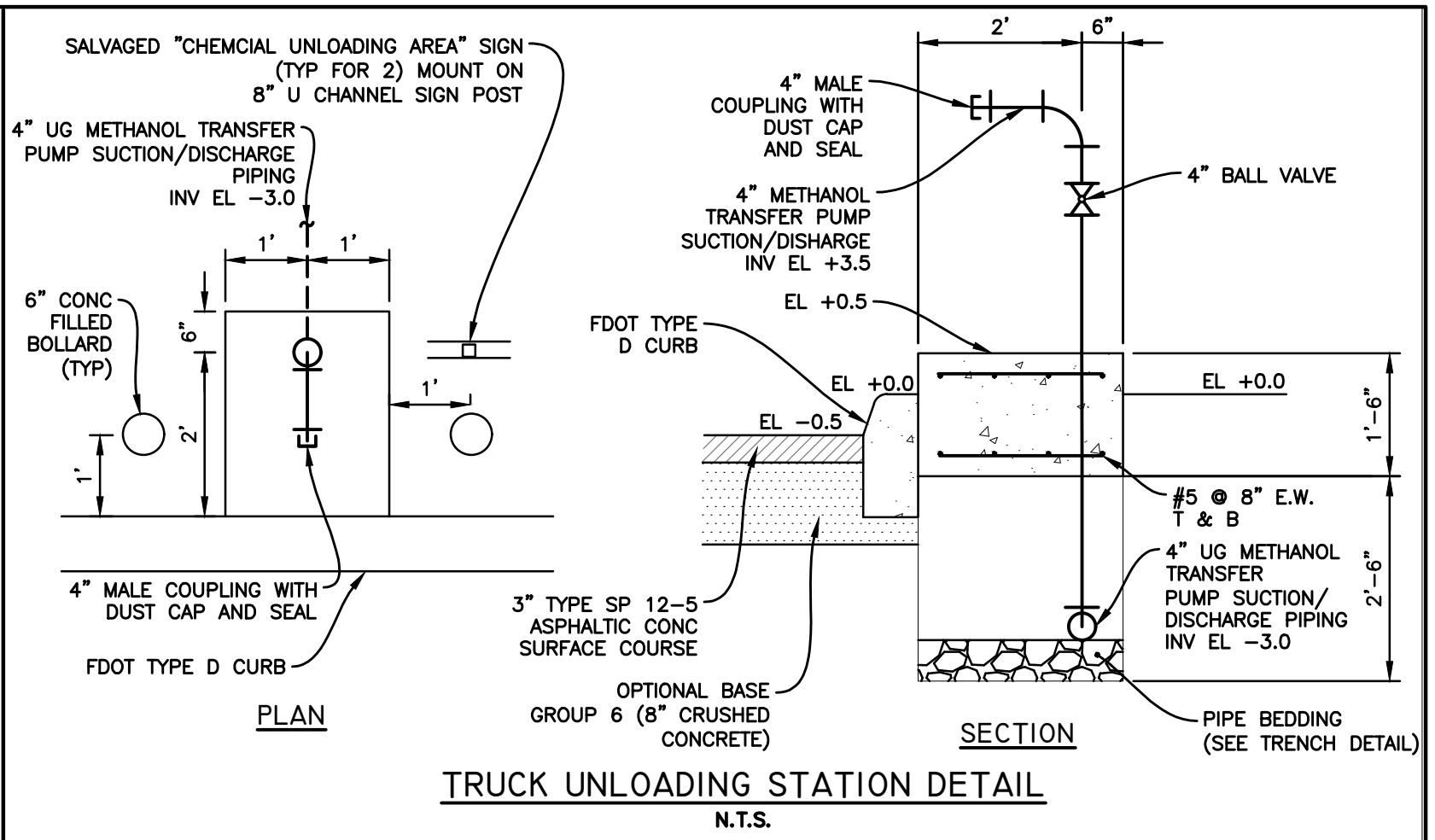
HOWARD F. CURREN AWTP TRAIN RAIL REPLACEMENTS
PIPING CONSTRUCTION PLAN AND DETAILS

SHEET
19

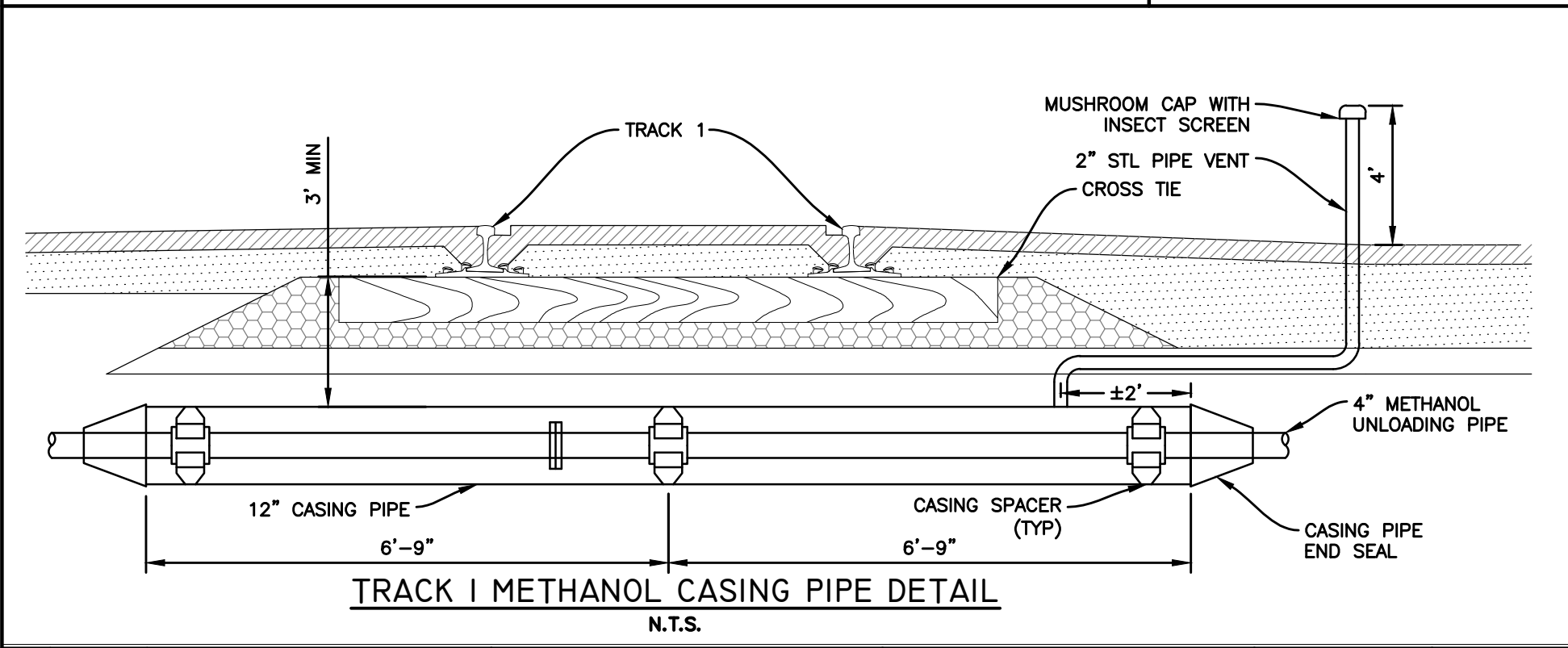
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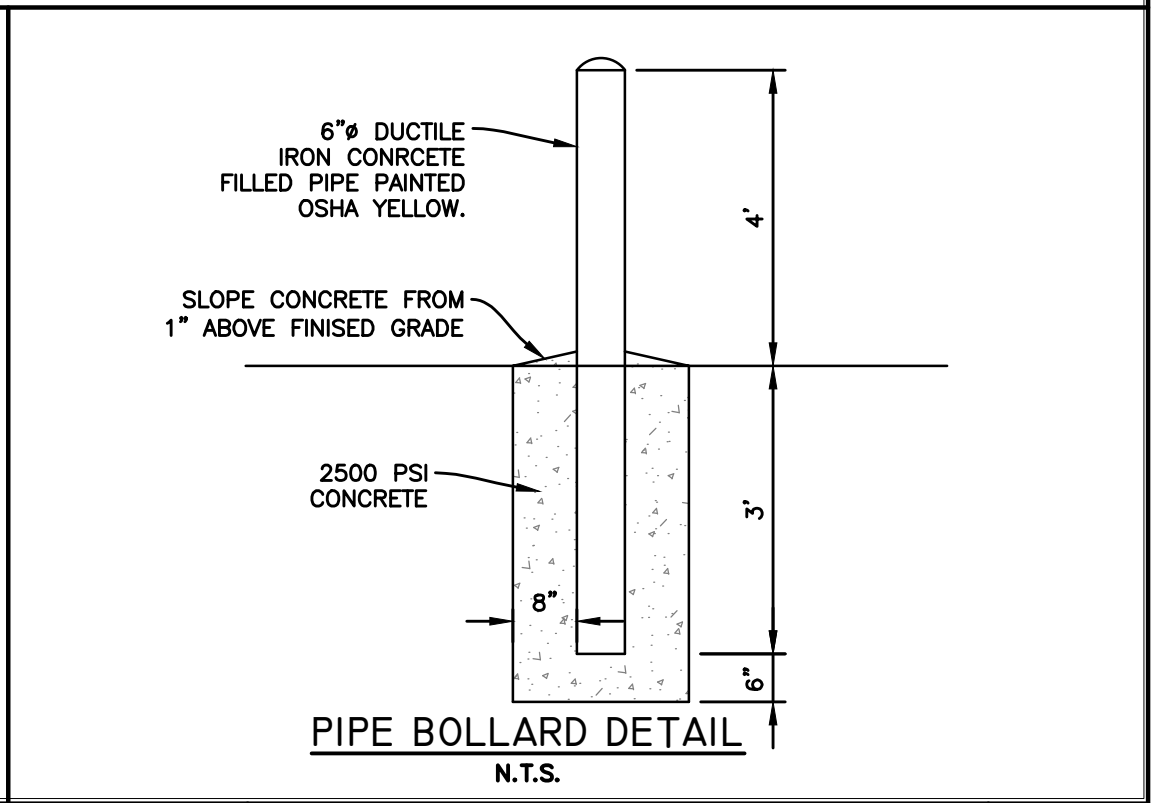
METHANOL UNLOADING STATION DETAIL
N.T.S.



TRUCK UNLOADING STATION DETAIL
N.T.S.



TRACK 1 METHANOL CASING PIPE DETAIL
N.T.S.



PIPE BOLLARD DETAIL
N.T.S.

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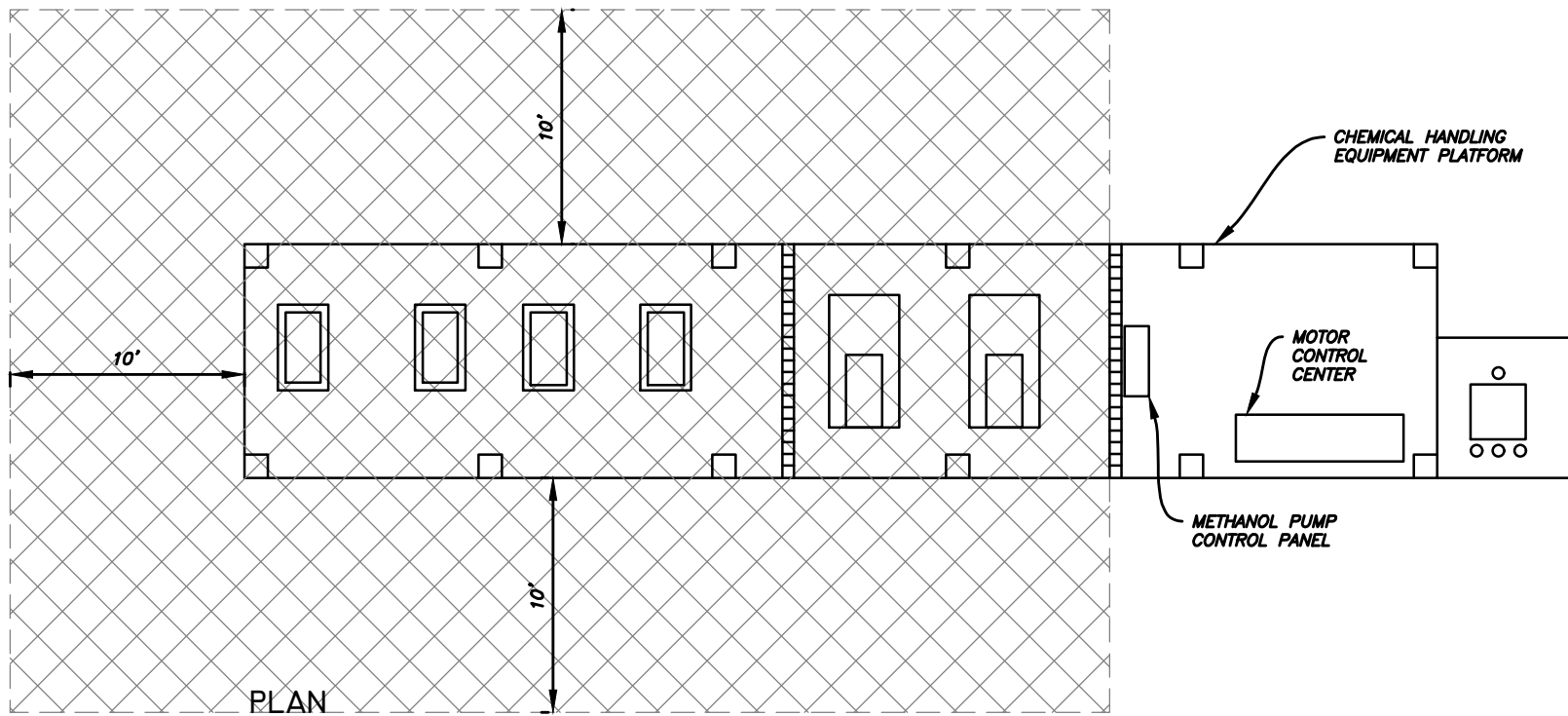
E. PETER NIKOLOV, P.E. DATE
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HOWARD F. CURREN AWTP TRAIN RAIL REPLACEMENTS
CONSTRUCTION DETAILS

SHEET
20



CLASSIFICATION CRITERIA:

THE CLASSIFICATION OF THE CHEMICAL HANDLING EQUIPMENT PLATFORM IS BASED ON NFPA 30 – FLAMMABLE AND COMBUSTIBLE LIQUIDS CODE – 2012 EDITION.

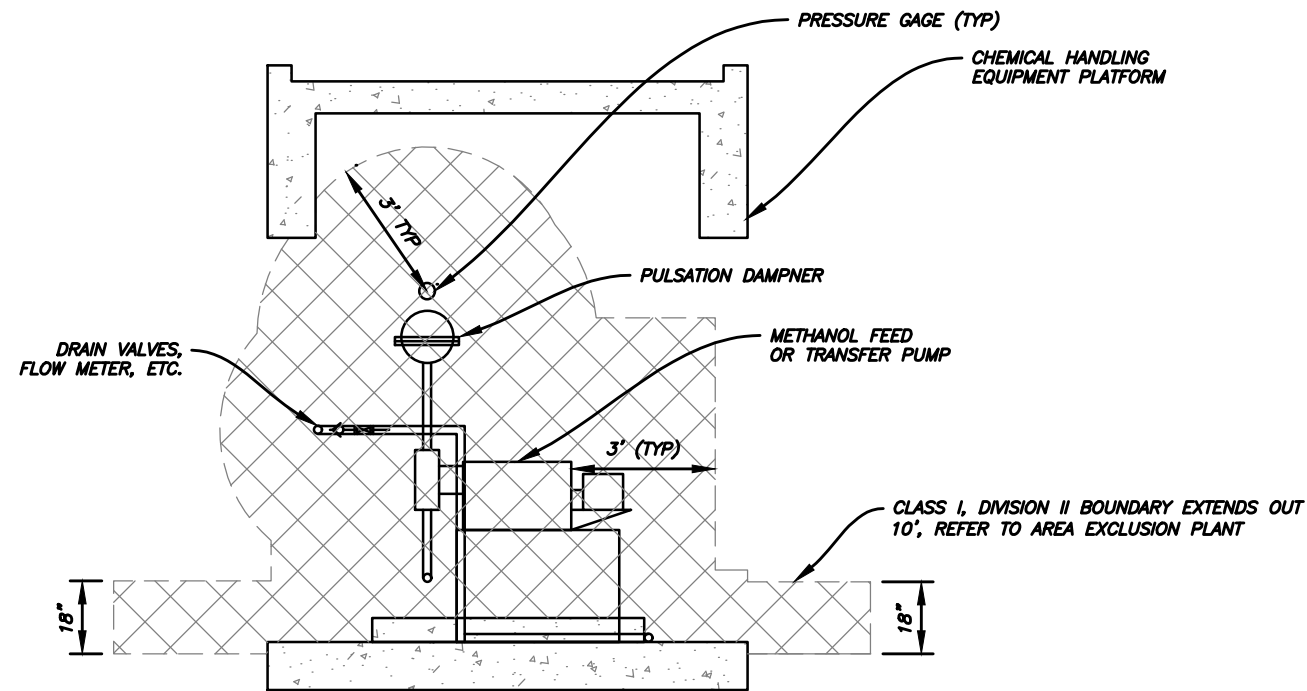
APPLICATION:

REMOVAL AND INSTALLATION OF EQUIPMENT WITHIN THE CLASSIFIED AREA OF THE CHEMICAL HANDLING EQUIPMENT PLATFORM SHALL CONFORM TO THE REQUIREMENTS OF NFPA CHAPTER 7 (ELECTRICAL SYSTEMS). THE FACILITY DELIVERS METHANOL VIA A PUMPING SYSTEM. PER TABLE 7.3.3 (ELECTRICAL AREA CLASSIFICATIONS) THE PUMPING EQUIPMENT, VALVES, PRESSURE GAUGES, FLOW METERS AND ALL OTHER MECHANICAL EQUIPMENT SHALL BE CONSIDERED WITHIN A CLASS I, DIVISION II AREA. THESE AREAS SHALL EXTEND FROM THE DEVICES AS FOLLOWS:

3 FEET FROM ANY SUCH DEVICES, EXTENDING IN ALL DIRECTIONS; ALSO, UP TO 18" ABOVE GRADE LEVEL WITHIN 10 FEET HORIZONTALLY FROM ANY EDGE OF SUCH DEVICES.

CHEP AREA CLASSIFICATION PLAN

N.T.S.




TYPICAL PUMP MOTOR ELEVATION

N.T.S.

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HOWARD F. CURREN AWTP TRAIN RAIL REPLACEMENTS
CLASSIFICATION AREA PLAN

SHEET
21