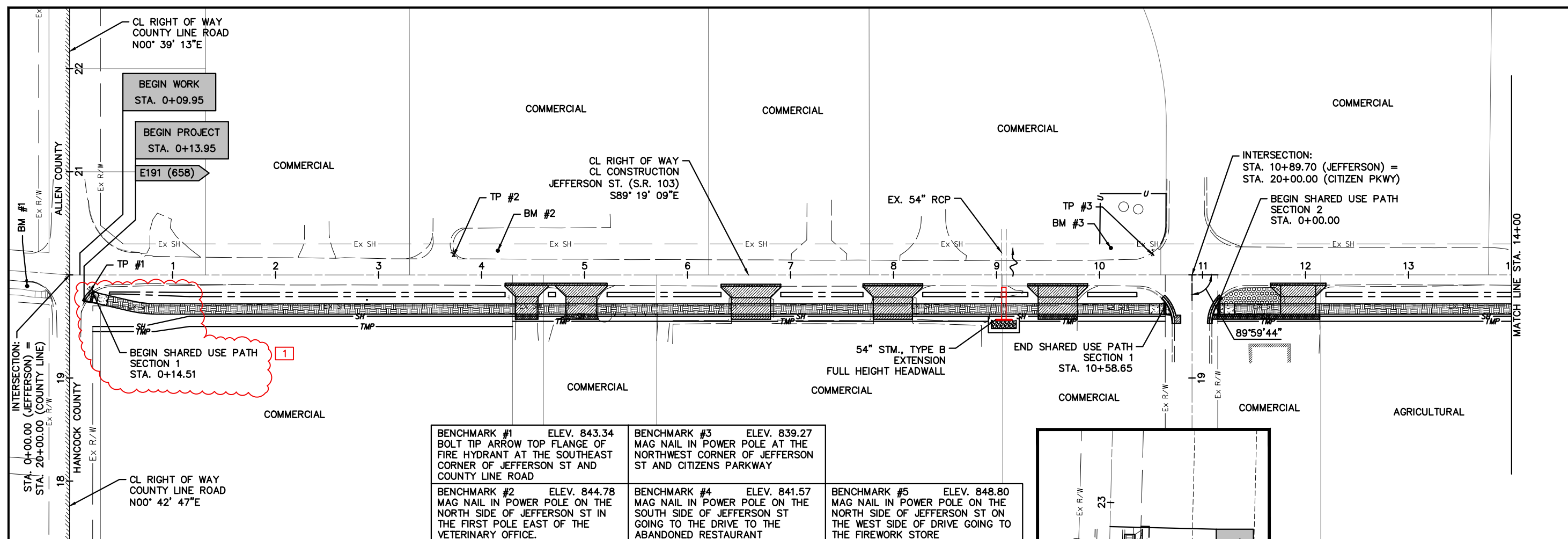


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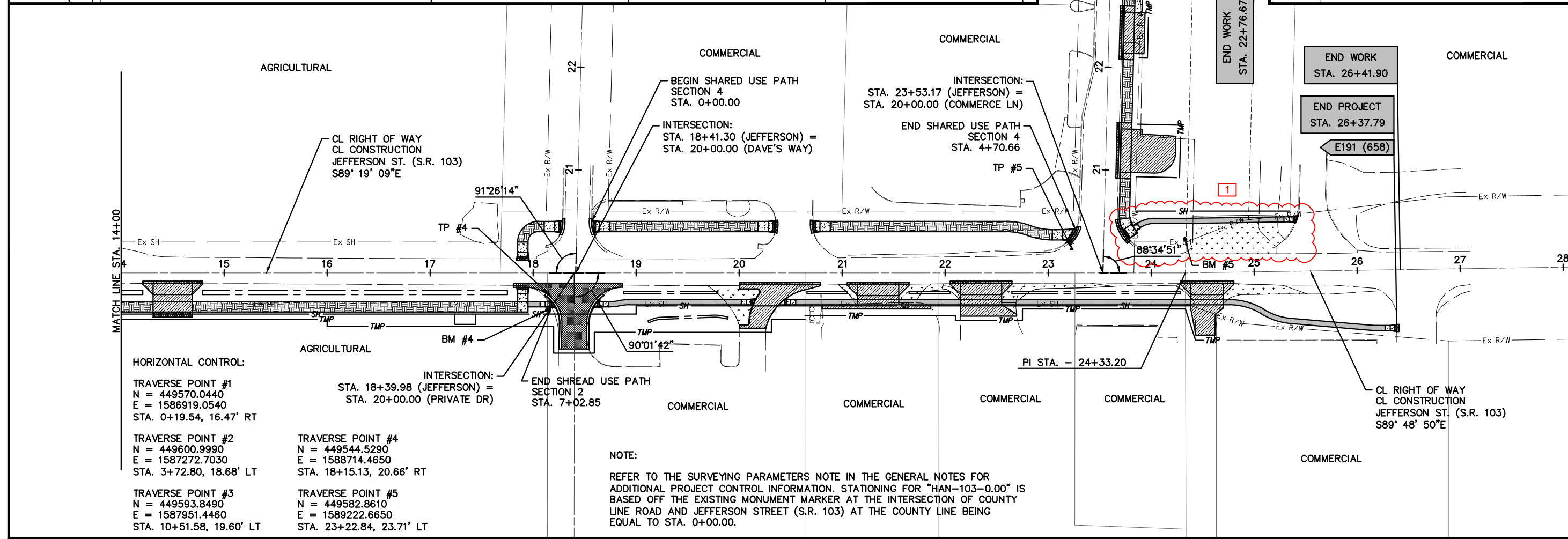
SCHEMATIC PLAN

HAN-103-0.00

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BENCHMARK #1 ELEV. 843.34 BOLT TIP ARROW TOP FLANGE OF FIRE HYDRANT AT THE SOUTHEAST CORNER OF JEFFERSON ST AND COUNTY LINE ROAD	BENCHMARK #3 ELEV. 839.27 MAG NAIL IN POWER POLE AT THE NORTHWEST CORNER OF JEFFERSON ST AND CITIZENS PARKWAY
BENCHMARK #2 ELEV. 844.78 MAG NAIL IN POWER POLE ON THE NORTH SIDE OF JEFFERSON ST IN THE FIRST POLE EAST OF THE VETERINARY OFFICE.	BENCHMARK #4 ELEV. 841.57 MAG NAIL IN POWER POLE ON THE SOUTH SIDE OF JEFFERSON ST GOING TO THE DRIVE TO THE ABANDONED RESTAURANT
BENCHMARK #5 ELEV. 848.80 MAG NAIL IN POWER POLE ON THE NORTH SIDE OF JEFFERSON ST ON THE WEST SIDE OF DRIVE GOING TO THE FIREWORK STORE	



HORIZONTAL CONTROL:

TRAVERSE POINT #1
N = 449570.0440
E = 1586919.0540
STA. 0+19.54, 16.47' RT

TRAVERSE POINT #2
N = 449600.9990
E = 1587272.7030
STA. 3+72.80, 18.66' LT

TRAVERSE POINT #3
N = 449593.8490
E = 1587951.4460
STA. 10+51.58, 19.60' LT

INTERSECTION:
STA. 18+39.98 (JEFFERSON) =
STA. 20+00.00 (PRIVATE DR)

TRAVERSE POINT #4
N = 449544.5290
E = 1588714.4650
STA. 18+15.13, 20.66' RT

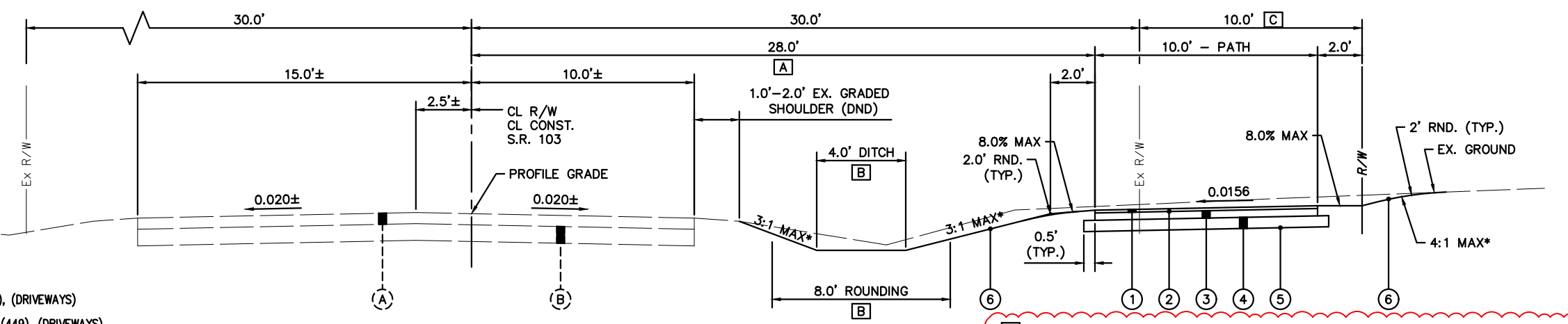
TRAVERSE POINT #5
N = 449582.8610
E = 1589222.6650
STA. 23+22.84, 23.71' LT

NOTE:

REFER TO THE SURVEYING PARAMETERS NOTE IN THE GENERAL NOTES FOR ADDITIONAL PROJECT CONTROL INFORMATION. STATIONING FOR "HAN-103-0.00" IS BASED OFF THE EXISTING MONUMENT MARKER AT THE INTERSECTION OF COUNTY LINE ROAD AND JEFFERSON STREET (S.R. 103) AT THE COUNTY LINE BEING EQUAL TO STA. 0+00.00.

LEGEND - TYPICAL SECTIONS

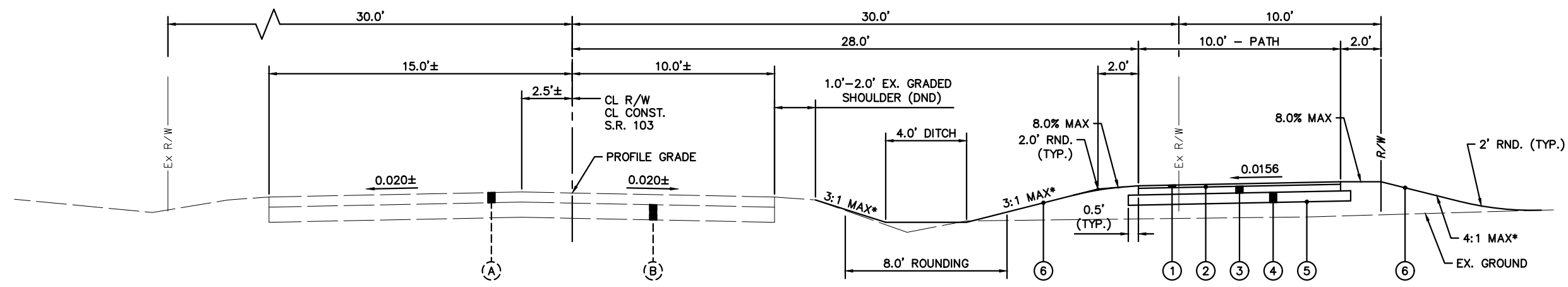
- ① - ITEM 823-1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449)
- ② - ITEM 407-NON-TRACKING TRACK COAT (AT 0.060 GAL/SY)
- ③ - ITEM 301-4" ASPHALT CONCRETE BASE COURSE, PG64-22, (449)
- ④ - ITEM 304-6" AGGREGATE BASE
- ⑤ - ITEM 204-SUBGRADE COMPACTION
- ⑥ - ITEM 659-SEEDING AND MULCHING, CLASS T
- ⑦ - ITEM 608-4" CONCRETE WALK
- ⑧ - ITEM 304-3" AGGREGATE BASE
- ⑨ - ITEM 441-1.25" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), (DRIVEWAYS)
- ⑩ - ITEM 441-2.75" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (449), (DRIVEWAYS)
- ⑪ - ITEM 304-8" AGGREGATE BASE
- (A) - EXISTING ASPHALT MATERIALS (UNKNOWN DEPTH)
- (B) - EXISTING GRANULAR BASE MATERIALS (UNKNOWN DEPTH)
- (C) - EXISTING CURB AND GUTTER



TYPICAL SECTION - JEFFERSON ST. (S.R. 103)

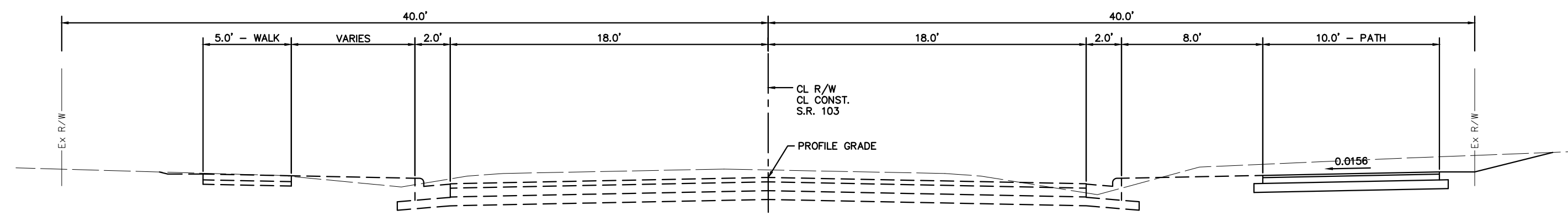
① STA. 0+38.07 TO STA. 15+45.00

- ① - OFFSET INCREASES FROM 20.0' RT AT STA. 0+38.07 TO 25.4' RT AT STA. 0+61.31, THEN CONTINUES TO 28.0' RT AT STA. 0+83.87.
- ② - DITCH WIDTH IS 2.0' FROM STA. 0+28.89 TO 0+50.00, THEN INCREASES TO 4.0' AT STA. 1+16.03. WHERE DITCH WIDTH IS 2.0' WIDE, ROUNDING IS 4.0' WIDE.
- ③ - PROPOSED RIGHT OF WAY IS 27.0' FROM STA. 0+19.98 TO STA. 0+70.28, THEN DECREASES BACK TO 10.0' AT STA. 1+16.28.



TYPICAL SECTION - JEFFERSON ST. (S.R. 103)

STA. 15+45.00 TO STA. 17+85.00



FUTURE TYPICAL SECTION - JEFFERSON ST. (S.R. 103)

STA. 0+30.82 TO STA. 17+85.00

ITEM 638 - FIRE HYDRANT EXTENDED AND ADJUSTED TO GRADE, AS PER PLAN

THIS ITEM OF WORK SHALL CONSIST OF THE WORK AS DESCRIBED IN OHIO DEPARTMENT OF TRANSPORTATION ITEM 638 – WATER MAINS AND SERVICE BRANCHES, EXCEPT AS HEREIN MODIFIED:

ALL MATERIALS, PROCEDURES, AND TESTING USED SHALL CONFORM TO VILLAGE OF BLUFFTON ENGINEERING STANDARDS AND SPECIFICATIONS AND THE ODOT CMS MANUAL ITEM 638. IN ADDITION, EXTENSION AND ADJUSTMENT SHALL FOLLOW ODOT CMS 638.15.A.

CONTRACTOR SHALL REMOVE EXISTING CONFLICTING HYDRANTS, EXTEND THE LATERAL TEE WITH APPROPRIATE BENDS OR EXTENSIONS, AND PLACE A NEW FIRE HYDRANT AT THE LOCATIONS SHOWN IN THE PLANS. THE FOLLOWING ARE VILLAGE OF BLUFFTON WATER STANDARDS:

WATER MAIN: AWWA C-900 DR-18, SLIP-ON JOINTS WITH RUBBER GASKETS. THE LAYING OF WATER MAIN ON DIRT WITH BELSS CUT OUT IS NOT PERMITTED.

FITTINGS: AWWA C-153 DUCTILE IRON, COMPACT. ALL RESTRAINTS SHOULD BE ROMAGRIP MANUFACTURED BY ROMAC INDUSTRIES OR STARGRIP MANUFACTURED BY STAR INDUSTRIES.

FIRE HYDRANTS: CLOW MEDALLION, AWWA-ULFM, 3-WAY, SS STEM, 5.25", NST, O/L, 6" MJ SHOE, PAINTED RED WITH WHITE CAPS, SSBN. SPECIFICATION CLOF2545-5BLUFFTON.

RESTRAINED JOINTS: INTERNAL RESTRAINED JOINTS SHALL BE USED. PIPE SHALL BE JM EAGLE EAGLE LOK 900, DIAMOND PLASTIC DIAMOND LOK, OR APPROVED EQUAL.

PAYMENT FOR ITEM 638 – FIRE HYDRANT EXTENDED AND ADJUSTED TO GRADE, AS PER PLAN, FOR ALL OPERATIONS DESCRIBED ABOVE AND MENTIONED IN ODOT CMS 638, SHALL BE AT THE CONTRACT EACH BID PRICE, COMPLETE IN PLACE, AND SHALL INCLUDE ALL LABOR, MATERIALS, PARTS, EXCAVATION, FILL MATERIALS, AND EQUIPMENT.

ITEM SPECIAL - MAILBOX REMOVED AND RESET

THE CONTRACTOR SHALL SALVAGE THE EXISTING BOX, SUPPORT, AND HARDWARE. DUE CARE SHALL BE EXERCISED IN SUCH AN OPERATION. THE CONTRACTOR WILL BE REQUIRED TO RESET THE EXISTING BOX AND SUPPORT USING THE EXISTING HARDWARE TO A CONDITION EQUAL TO THE CONDITION OF THE BOX AND SUPPORT PRIOR TO THE START OF CONSTRUCTION.

ANY BOX, SUPPORT, OR HARDWARE DAMAGED BY THE CONTRACTOR SHALL BE REPLACED WITH EQUAL OR BETTER MATERIALS, AS DETERMINED BY THE OWNER, AT THE CONTRACTOR'S EXPENSE.

ALL BOXES WILL BE REPLACED IN THE SAME LOCATION, OR A LOCATION APPROVED BY THE VILLAGE, THE ENGINEER, AND THE POST MATER, AND MUST BE RESET THE SAME DAY SO DELIVERY IS NOT INTERRUPTED.

MAILBOX, COMPLETE IN PLACE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH, FOR ITEM SPECIAL – MAILBOX REMOVED AND RESET.

COORDINATION OF CONTRACTORS

DURING CONSTRUCTION OF THIS PROJECT, S.R. 103 ALONG THE PROJECT ROUTE IS SCHEDULED FOR RESURFACING THROUGH THE OHIO DEPARTMENT OF TRANSPORTATION. THE FINAL SURFACE ASPHALT COURSE, TACK COAT AND PAVEMENT STRIPING ARE TO BE PERFORMED UNDER A SEPARATE CONTRACT NAMED "ALL/HAN-SR103-0.29/0.00" (PID: 110706). THE CONTRACTOR SHALL COOPERATE WITH THE CONTRACTOR FOR THIS RESURFACING PROJECT IN A MANNER TO NOT HINDER THE PROGRESS OR COMPLETION OF THE WORK BEING PERFORMED BY EACH OTHER. THE TIMING OF THE TWO PROJECTS SHALL BE COORDINATED TO ALLOW FOR COMPLETION OF EACH PROJECTS WORK AS DEFINED IN THE CONSTRUCTION PLANS AND RELATED BID DOCUMENTS. **ALL WORK ASSOCIATED WITH THE SHARED USE PATH WITH THE EXCEPTION OF THE HIGHWAY LIGHTING SHALL BE COMPLETED BY OCTOBER 1ST, 2023.** PLEASE CONTACT BEAU SMITH 419-422-2451 FOR ADDITIONAL INFORMATION REGARDING THIS PROJECT. THE ANTICIPATED AWARD DATE FOR THE PAVING PROJECT IS 10/24/2022, WITH AN ANTICIPATED BEGIN CONSTRUCTION DATE OF 5/1/2023.

INTERIM COMPLETION DATE

ALL WORK NOTED IN THESE PLANS WITH THE EXCEPTION OF THE HIGHWAY LIGHTING SHALL BE COMPLETED BY OCTOBER 1, 2023. THIS DATE SHALL BE CONSIDERED AN INTERIM COMPLETION DATE. IF THE NOTED ITEMS OF WORK ARE NOT COMPLETED BY THIS INTERIM COMPLETION DATE, THE CONTRACTOR SHALL BE SUBJECT TO DAILY DISINCENTIVES OF \$800/DAY FOR FAILURE TO COMPLETE THE WORK AS OUTLINED ABOVE. THE CONTRACTOR IS STILL SUBJECT TO LIQUIDATED DAMAGES AS OUTLINED IN CMS 108.07 FOR THE REMAINDER OF THE CONTRACT.

UTILITY COORDINATION NOTES

BUCKEYE PIPELINE REQUIREMENTS

THE CONTRACTOR SHALL REFER TO BUCKEYE PARTNERS, L.P. AND AFFILIATES RIGHT OF WAY USE RESTRICTIONS SPECIFICATION REVISION 6. THE CONTRACTOR SHALL COORDINATE WITH BUCKEYE PIPELINE PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITIES, ESPECIALLY WITHIN THE LIMITS OF THE UNDERGROUND PIPELINES. THE FOLLOWING ARE PERTINENT SECTIONS OF THE RESTRICTIONS SPECIFICATIONS RELEVANT TO THE PROJECT AT HAND:

1.0 GENERAL GUIDELINES

1.1. THE SAFETY OF THE PIPELINE MUST BE CONSIDERED AT ALL TIMES. NO ATTEMPT TO PROBE FOR OR ENGAGE IN ANY CONSTRUCTION ACTIVITIES WHICH MIGHT DAMAGE THE PIPELINE IS PERMITTED.

1.2. BEFORE ANY PRELIMINARY FIELD WORK OR CONSTRUCTION BEGINS IN THE VICINITY OF BUCKEYE'S PIPELINE, A DETERMINATION OF THE EXACT LOCATION AND ELEVATION OF THE PIPELINE MUST BE MADE. TO COORDINATE THIS PROCEDURE, PLEASE CONTACT OUR LOCAL FIELD OPERATIONS MANAGER AT THE BUCKEYE FACILITY NEAREST TO THE PROJECT:

BRANDON ALLEN
4800 EAST 49TH STREET
CLEVELAND, OHIO 44125
PH: 216-318-2124
EMAIL: BALLENB@BUCKEYE.COM

BUCKEYE MAKES NO ASSURANCE THAT ITS PERMANENT PIPELINE MARKERS ARE POSITIONED DIRECTLY OVER ITS PIPELINE. LINE MARKERS SHOULD BE PLACED AT INTERVALS DETERMINED BY "LINE OF SIGHT". THE RELOCATION, REMOVAL, OR DESTRUCTION OF BUCKEYE'S PIPELINE MARKERS ARE PROHIBITED BY FEDERAL LAW. PIPELINE MARKERS DAMAGED OR MADE UNUSABLE SHALL BE REPAIRED OR REPLACED AT THE ENROACHING PARTY'S EXPENSE.

1.5. WHEN ANY CONSTRUCTION ACTIVITY IS CONDUCTED IN OR AROUND OUR PIPELINE RIGHT-OF-WAY, BUCKEYE'S ON-SITE INSPECTOR MUST BE PRESENT AT ALL TIMES. NO WORK SHALL TAKE PLACE WITHOUT A BUCKEYE ON-SITE INSPECTOR PRESENT. FOR THIS FREE-OF-CHARGE SERVICE, CONTACT OUR LOCAL FIELD OPERATIONS MANAGER AT THE BUCKEYE FACILITY NEAREST TO THE PROPOSED PROJECT.

1.7. THE CROSSING PARTY (CONTRACTOR) SHALL NOT BURN TRASH, BRUSH, OR OTHER ITEMS OR SUBSTANCES WITHIN 50 FEET OF THE PIPELINE.

1.8. THE CROSSING PARTY (CONTRACTOR) SHALL NOT STORE ANY EQUIPMENT OR MATERIALS WITHIN THE PIPELINE RIGHT OF WAY. FULL ACCESS MUST BE MAINTAINED TO THE PIPELINE(S) AT ALL TIMES. THE STOCKPILING OF ITEMS INCLUDING SOIL, OR TOPSOIL OVER THE PIPELINE(S) IS NOT PERMITTED.

2.0 EXCAVATION AND CONSTRUCTION RESTRICTIONS

2.1. EXCAVATION OPERATIONS SHALL BE PERFORMED IN ACCORDANCE WITH APPROPRIATE STATE "ONE-CALL" UTILITY LOCATING SYSTEM REQUIREMENTS. AS A MATTER OF STATE LAW, ANYONE UNDERTAKING EXCAVATION WORK IS REQUIRED TO CALL TWO WORKING DAYS IN ADVANCE IN OHIO.

2.2. THE CROSSING PARTY (CONTRACTOR) WILL CONDUCT "WHITE-LINING" OF ANY PROPOSED EXCAVATION AREAS. BUCKEYE WILL ERECT TEMPORARY PIPELINE MARKERS/FLAGS (YELLOW) IDENTIFYING THE LOCATION OF THE PIPELINE WITHIN THE WORK AREA, AND WILL PROVIDE INFORMATION ON HOW TO RESPOND SHOULD THE PIPELINE BE DAMAGED OR A COMMODITY RELEASE OCCUR. ALL PERSONNEL OPERATING EQUIPMENT OVER OR AROUND THE PIPELINE MUST BE MADE AWARE OF ITS LOCATION AND WHAT TO DO IF THEY MAKE CONTACT WITH THE PIPELINE.

2.3. WHEN A CROSSING PARTY (CONTRACTOR) EXCAVATES NEAR BUCKEYE'S PIPELINE, A BUCKEYE REPRESENTATIVE MUST LOCATE THE PIPELINE AND DETERMINE THE DEPTH OF COVER BEFORE THE CROSSING PARTY (CONTRACTOR) BEGINS EXCAVATION. THE BUCKEYE REPRESENTATIVE AND THE EXCAVATOR MUST REVIEW AND COMPLETE AN EXCAVATION SAFETY CHECKLIST. THE CROSSING PARTY (CONTRACTOR) SHALL NOT PERFORM ANY EXCAVATION, CROSSING, BACKFILLING, OR CONSTRUCTION OPERATIONS UNTIL BUCKEYE'S ON-SITE INSPECTOR HAS REVIEWED THE PROPOSED WORK ON SITE AND GIVEN APPROVAL FOR WORK TO PROCEED. BUCKEYE'S ON-SITE INSPECTOR SHALL HAVE FULL AUTHORITY TO STOP THE WORK IF IT IS DETERMINED THAT THE WORK IS BEING PERFORMED IN AN UNSAFE MANNER.

2.6. NO EXCAVATIONS SHALL BE MADE ON LAND ADJACENT TO THE PIPELINE THAT WILL IN ANY WAY IMPAIR, WITHDRAW LATERAL SUPPORT, CAUSE SUBSIDENCE, CREATE THE ACCUMULATION OF WATER, OR CAUSE DAMAGE TO THE PIPELINE OR RIGHT OF WAY.

BUCKEYE PIPELINE (CONTINUED)

2.7. THE CROSSING PARTY SHALL ENSURE ALL EXCAVATION WORK COMPLIES WITH OSHA'S EXCAVATION STANDARDS OUTLINED IN 29 CFR 1926 AND CORRECT ANY NONCOMPLIANT EXCAVATION SITE BEFORE BUCKEYE'S ON-SITE INSPECTOR OR THE CROSSING PARTY ENTERS THE SITE TO PERFORM WORK.

3.0 SPECIFIC GUIDELINES

3.1.1.A. USE OF VIBRATORY EQUIPMENT LARGER THAN WALK-BEHIND UNITS ARE NOT PERMITTED WITHIN 25 FEET OF THE PIPELINE(S).

3.3.1.C. USE OF VIBRATORY EQUIPMENT LARGER THAN WALK-BEHIND UNITS IS NOT PERMITTED WITHIN WITHIN 25 FEET OF THE PIPELINE(S).

3.3.1.E. FOR ROADS AND DRIVEWAYS, A MINIMUM COVER OF 48 INCHES WITH A NET COVER OF 36 INCHES OF UNDISTURBED SOIL IS REQUIRED ABOVE THE PIPELINE.

3.3.1.F. A MINIMUM COVER OF 36 INCHES OVER THE PIPELINE IS REQUIRED AT ROAD DRAINAGE DITCHES. UPON BUCKEYE'S APPROVAL, THIS COVER CAN BE REDUCED TO 24 INCHES IF DITCH IS ROCK/RIP-RAP LINED AND 12 INCHES IF DITCH IS CONCRETE LINED.

3.3.1.G. FOR ASPHALT PARKING LOTS AND SIDEWALKS, A MINIMUM COVER OF 36 INCHES WITH A NET COVER OF 24 INCHES OF UNDISTURBED SOIL IS REQUIRED ABOVE THE PIPELINE. ADDITIONAL COVER MAY BE REQUIRED BY BUCKEYE BASED UPON SPECIFIC SITE CONDITIONS.

3.3.1.H. STOCKPILING OF MATERIALS ON THE RIGHT OF WAY IS NOT PERMITTED. THESE MATERIALS INCLUDE, BUT ARE NOT LIMITED TO SOIL, SNOW, STONE, BOULDERS, TREES, BRUSH, GRASS CLIPPINGS, LEAVES, ETC.

3.4.5.A.1. ELECTRICAL CONDUCTORS/CABLE INSTALLATIONS SHALL MEET MINIMUM REQUIREMENTS OF NATIONAL ELECTRIC CODE FOR BURIED CONDUCTORS AND BE ADEQUATELY SHIELDED AND BE IMPERVIOUS TO HYDROCARBON LIQUIDS.

3.4.5.A.2. CABLES ARE REQUIRED TO CROSS BENEATH THE PIPELINE WITH A MINIMUM CLEARANCE OF 24 INCHES.

3.4.5.A.3. SAND OR SELECT FILL SHALL BE PLACED BETWEEN THE PIPELINE AND CABLE.

3.4.5.A.4. ALL CABLES SHALL BE INSTALLED IN SCHEDULE 80 PVC PIPE AND ENCASED IN A 6-INCH ENVELOPE OF COLOR CODED (I.E. RED FOR ELECTRICAL CABLE) 3000 PSI CONCRETE FOR A MINIMUM DISTANCE OF 10 FEET TO EACH SIDE OF EACH BUCKEYE PIPELINE(S) ACROSS THE RIGHT OF WAY.

3.4.5.A.5. WARNING TAPE, IN ACCORDANCE WITH A.P.W.A. UNIFORM COLOR CODE, SHALL BE PLACED ABOVE THE UTILITY, 12 INCHES BELOW GROUND, FOR A DISTANCE OF 25 FEET ON EITHER SIDE OF CROSSING.

3.8 CONSTRUCTION-INDUCED VIBRATIONS

3.8.1.A. CONSTRUCTION ACTIVITIES THAT GENERATE GROUND VIBRATIONS, INCLUDING, BUT WITHOUT LIMITATION, PILE DRIVING, SHEET DRIVING, SOIL COMPACTION WORK, JACKHAMMERING, OR RAMMING, SHALL BE REVIEWED BY BUCKEYE ON A CASE-BY-CASE BASIS.

3.8.1.B. IF THE CROSSING PARTY ANTICIPATES SUCH AN ACTIVITY WITHIN 10 FEET OF THE PIPELINE, THEN CONTINUOUS TESTING MONITORED BY A SEISMOGRAPH LOCATED DIRECTLY OVER THE PIPELINE AT ITS CLOSES POINT TO THE ACTIVITY MUST BE CONDUCTED. THE CROSSING PARTY (CONTRACTOR) SHALL PROVIDE, AT THEIR EXPENSE, THE MONITORING SERVICE WHICH MUST BE APPROVED BY BUCKEYE.

ENERGY TRANSFER

THE CONTRACTOR SHALL REFER TO ENERGY TRANSFER'S GENERAL GUIDELINES FOR THIRD-PARTY CONSTRUCTION OR MAINTENANCE ACTIVITIES. THE FOLLOWING ARE PERTINENT SECTIONS OF THE GUIDELINES RELEVANT TO THE PROJECT AT HAND:

1.B.1. IN ACCORDANCE WITH THE STATE APPROVED NOTIFICATION CENTERS, ENERGY TRANSFER "ET" SHALL BE NOTIFIED AT LEAST 48 HOURS IN ADVANCE OF ANY CONSTRUCTION OR MAINTENANCE ACTIVITY. THE CONTRACTOR MUST CONTACT THE STATE APPROVED NOTIFICATION CENTER AT 811 BEFORE COMMENCING ANY CROSSING AT OR NEAR ET'S PIPELINE FACILITY. THE CONTRACTOR MUST ALSO CONTACT THE FOLLOWING FIELD REPRESENTATIVES:

SUNOCO/INLAND PIPELINES: JOHN FRANKART: 419-601-8944

MID-VALLEY PIPELINE: JOHN MAZUR: 260-437-2493
DENNY BOWEN: 419-308-2140

1.B.2. UNLESS OTHERWISE AGREED TO BY ET IN WRITING, AN ET INSPECTOR IS ON SITE TO MONITOR THE EXCAVATION ACTIVITIES.

ENERGY TRANSFER (CONTINUED)

5. CROSSING PIPELINES WITH EQUIPMENT: TO PROTECT ET'S PIPELINES OR RELATED FACILITIES FROM ADDITIONAL EXTERNAL LOADING, ET MAY PERFORM A FIELD SURVEY AND AN ENGINEERING STUDY TO DETERMINE THE EFFECTS OF ANY PROPOSED ACTIVITY OVER ITS PIPELINES OR RELATED FACILITIES. MATS, TIMBER, BRIDGES, OR OTHER PROTECTIVE MATERIALS DEEMED NECESSARY AND APPROPRIATE BY ET MAY BE REQUIRED AND PLACED OVER ET'S PIPELINES OR RELATED FACILITIES FOR THE DURATION OF ANY LOADING.

6.A. UNLESS OTHERWISE AGREED TO BY ET IN WRITING, AN ET REPRESENTATIVE WILL BE ON LOCATION PRIOR TO AN DURING CONSTRUCTION ACTIVITY WITHIN ET'S PIPELINE FACILITY.

6.B. NO HEAVY EQUIPMENT OF ANY TYPE WILL BE PERMITTED TO WORK DIRECTLY OVER ET'S PIPELINES OR RELATED FACILITIES, UNLESS OTHERWISE AGREED TO IN WRITING BY ET.

6.C. ALL EXCAVATION WITHIN EIGHTEEN (18") OF ANY PIPELINE WILL BE PERFORMED BY HAND. AT THE DISCRETION OF ET'S ONSITE REPRESENTATIVE, EXCAVATORS MAY BE REQUIRED TO HAND DIG BEGINNING AT A DISTANCE GREATER THAN EIGHTEEN INCHES (18").

6.D. ALL EXCAVATIONS WITHIN ET'S PIPELINE FACILITY SHALL BE BACKFILLED WITH A MINIMUM OF EIGHT INCHES (8") LIFTS OF BACKFILL MATERIAL, WHERE PIPELINE PADDING IS REDUCED. ENSURE BACKFILL IS CLEAN AND FREE FROM ROCK, TRASH, CONCRETE, RUBBISH, OR HAZARDOUS MATERIAL. SOIL BACKFILL MUST BE COMPACTED TO THE SATISFACTION OF THE ET ONSITE INSPECTOR SO THAT SETTLING DOES NOT OCCUR.

6.F. NO FILL SHALL BE PERMITTED WITHIN ET'S PIPELINE FACILITY UNLESS OTHERWISE AGREED TO IN WRITING BY ET. NO MORE THAN TWENTY-FOUR INCHES (24") OF EARTHEN FILL MATERIAL (PIPELINE COVER NOT TO EXCEED 7FT), FREE FROM ANY ROCKS, TRASH, CONCRETE, RUBBISH, REBAR, HAZARDOUS MATERIALS, ETC. WILL BE PERMITTED WITHIN ET'S PIPELINE FACILITY, UNLESS OTHERWISE AGREED TO IN WRITING BY ET.

6.H. NO TRASH OR DEBRIS SHALL BE PLACED IN ANY EXCAVATION OR LEFT IN OR ON ET'S PIPELINE FACILITY.

8.A.1. FOR THE SAFETY OF THE PUBLIC AND TO LESSEN THE RISK OF A BREAK, LEAK, RUPTURE OR OTHER DAMAGE TO ET'S PIPELINE FACILITY AND IN FURTHERANCE OF THE STATE CODE, ET'S PIPELINE FACILITY SHALL BE POSITIVELY LOCATED BY ET BEFORE ANY CROSSINGS ARE CONSTRUCTED OR INSTALLED NEAR ET'S PIPELINE FACILITY.

8.C.2. WHEN OPEN TRENCH CROSSING WITH UNDERGROUND ELECTRIC CABLES EXCEPT 24-VOLT DC POWER LINES (INCLUDING SINGLE RESIDENTIAL SERVICES DROPS) CROSSING ET'S FACILITIES SHALL BE INSTALLED IN NONMETALLIC CONDUIT WITH BAGS OF CONCRETE-MIX PLACED DIRECTLY ABOVE AND BELOW THE CONDUIT ACROSS COMPANY RIGHT OF WAY OR SIMILAR COMPANY APPROVED METHOD. A MINIMUM OF THIRTY SIX INCHES IS REQUIRED IF OVER 600 VOLTS.

8.C.6. ET RECOMMENDS THAT ALL UNDERGROUND RESIDENTIAL TELEPHONE, CABLE TV, AND 24 VOLT DC POWER LINES BE ENCASED IN PLASTIC CONDUIT FOR THE FULL WIDTH OF THE RIGHT OF WAY.

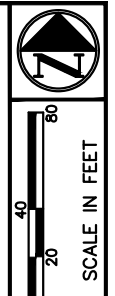
14. PIPELINE MARKERS: THE PARTY REQUEST SUCH CONSTRUCTION WORK WILL UNSURE THAT ALL TEMPORARY AND PERMANENT PIPELINE MARKERS INSTALLED BY ET ARE PROTECTED AND MAINTAINED AT ALL TIMES DURING CONSTRUCTION OR CROSSING RELATED ACTIVITY. ANY PERMANENT MARKERS DAMAGED OR REMOVED WILL BE REPLACED BY ET AT THE SOLE EXPENSE OF THE PARTY REQUESTING SUCH CROSSING. NO WORK WILL BE ALLOWED TO COMMENCE UNTIL, IN THE OPINION OF ET, SUFFICIENT PIPELINE MAKERS ARE IN PLACE. UNAUTHORIZED DAMAGE OR REMOVAL OF PIPELINE MARKERS IS PUNISHABLE BY FEDERAL LAW.

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GENERAL NOTES

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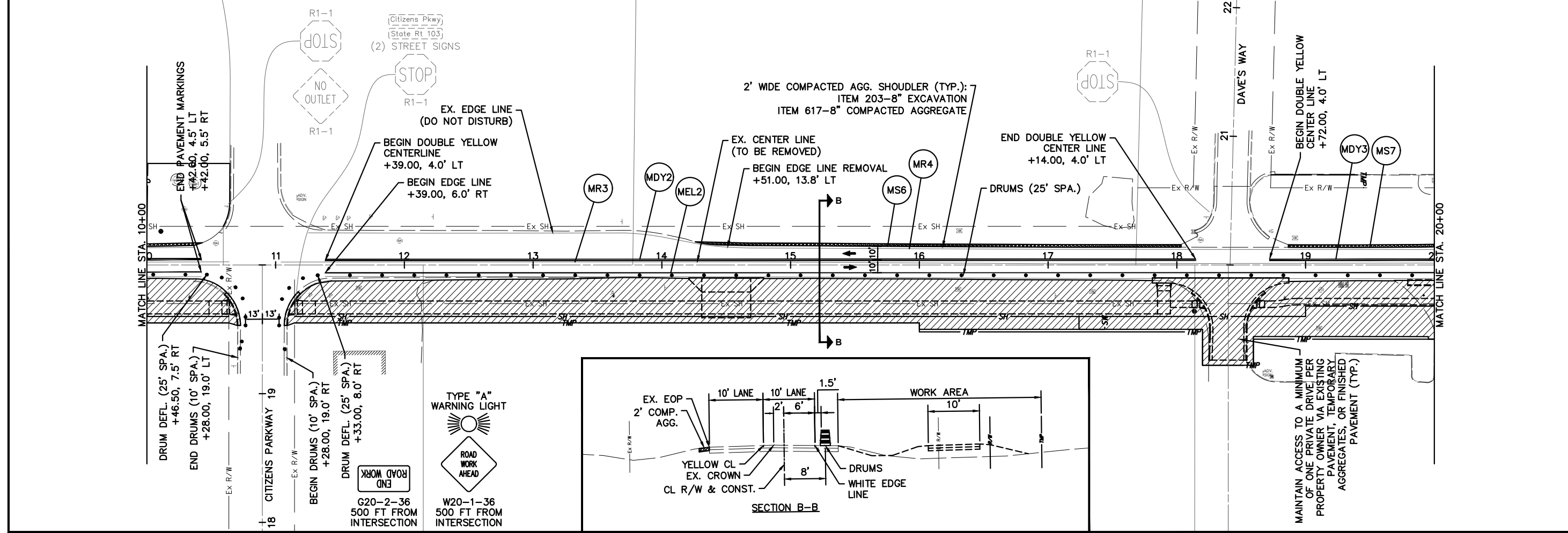
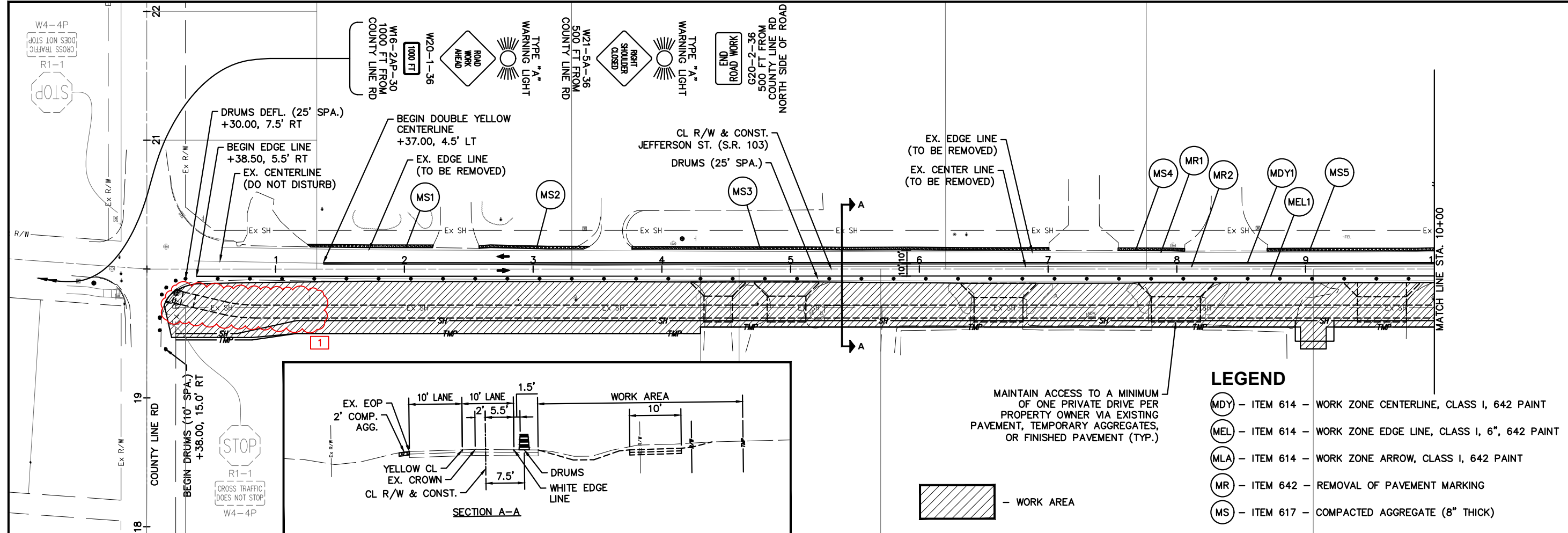


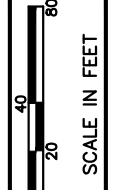
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MAINTENANCE OF TRAFFIC PLAN - PHASE 1

HAN-103-0.00

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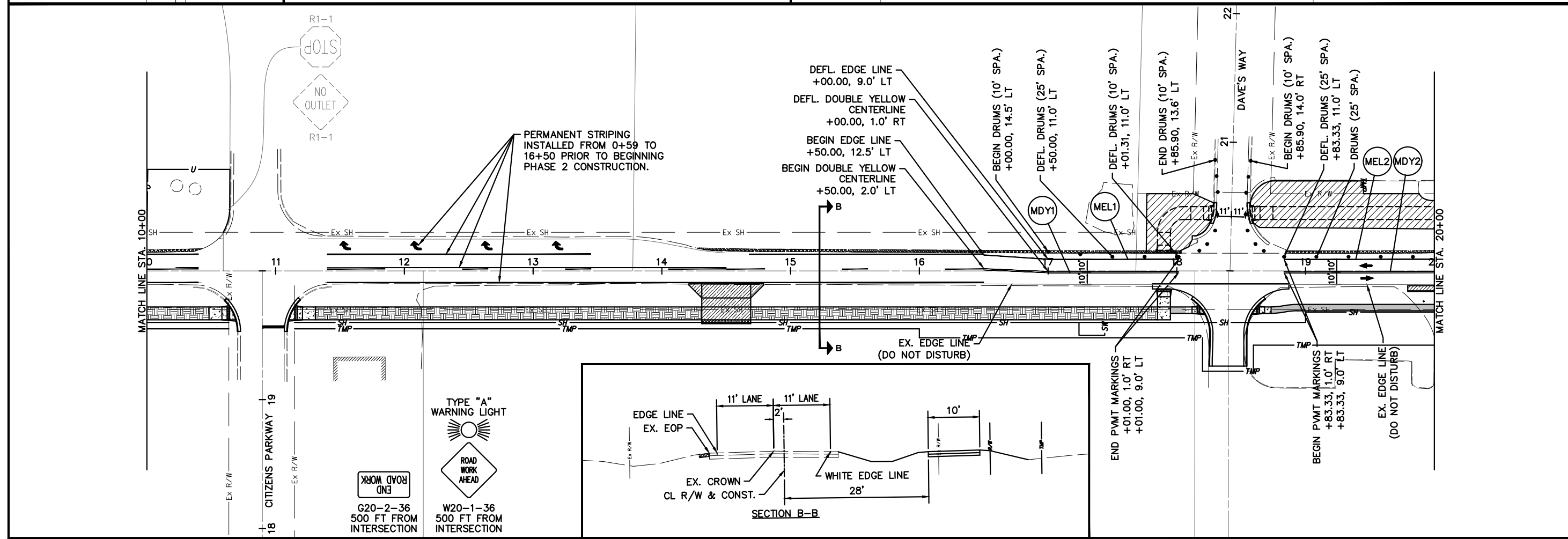
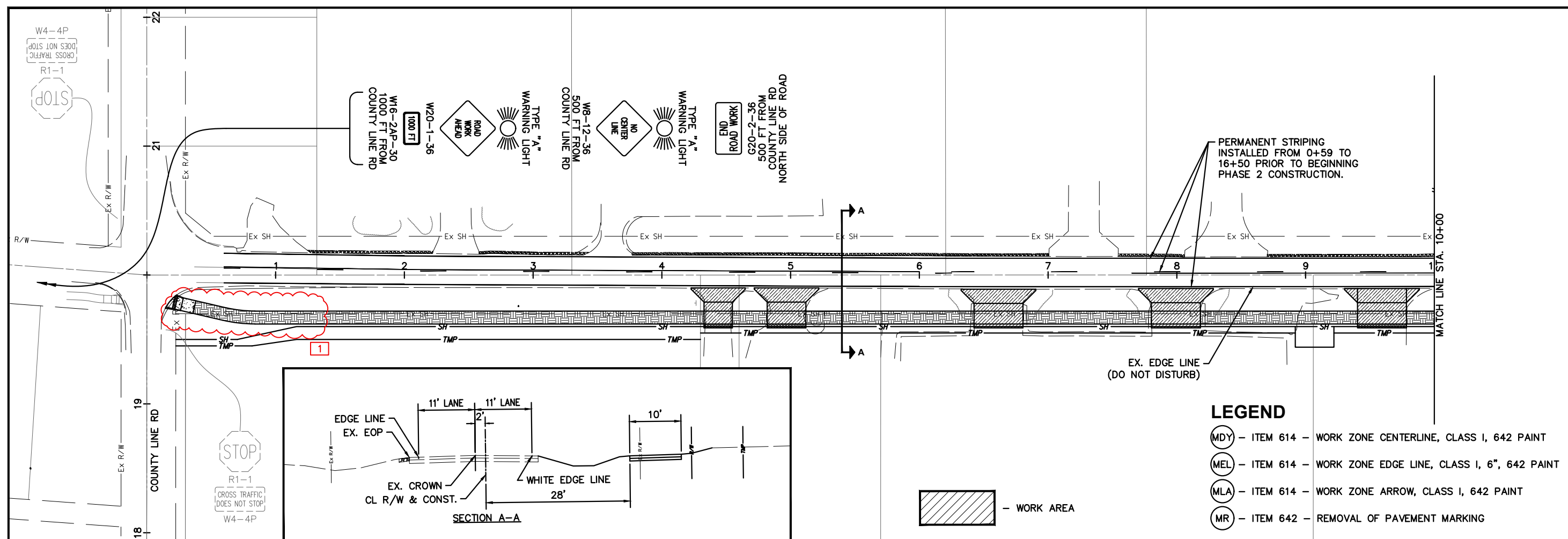


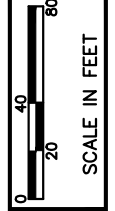
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MAINTENANCE OF TRAFFIC PLAN - PHASE 2

HAN-103-0.00

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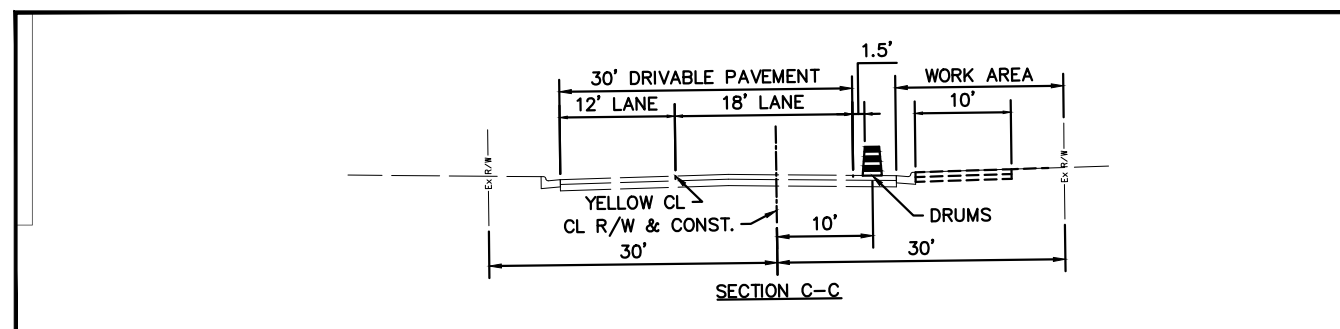
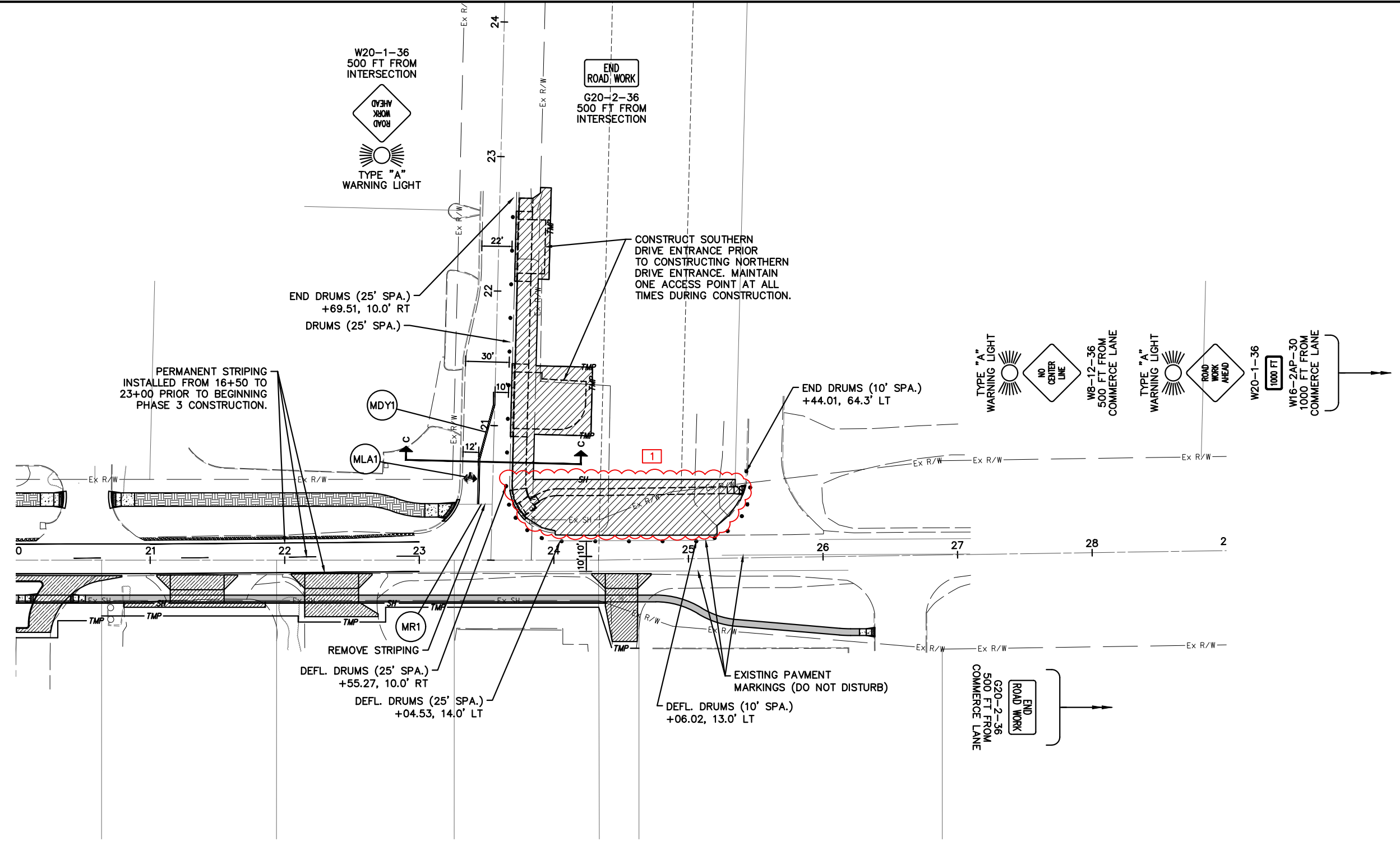


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MAINTENANCE OF TRAFFIC PLAN - PHASE 3

HAN-103-0.00

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LEGEND

- (MDY) - ITEM 614 - WORK ZONE CENTERLINE, CLASS I, 642 PAINT
- (MEL) - ITEM 614 - WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT
- (MLA) - ITEM 614 - WORK ZONE ARROW, CLASS I, 642 PAINT
- (MR) - ITEM 614 - REMOVAL OF PAVEMENT MARKING

SHEET NUM.								PART.		ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET NO.
6	18	19	20	59	62	01/ENH/O T		EXT	TOTAL						
ROADWAY															
						LS		201	11000	LS			CLEARING AND GRUBBING		
		44	1,437			1,481		202	23000	1,481	SY		PAVEMENT REMOVED (ASPHALT)		
			357			357		202	23000	357	SY		PAVEMENT REMOVED (CONCRETE)		
		48	8			56		202	32000	56	FT		CURB REMOVED		
		130	106			236		202	32500	236	FT		CURB AND GUTTER REMOVED		
			1,186			1,186		202	35100	1,186	FT		PIPE REMOVED, 24" AND UNDER		
			27			27		202	35200	27	FT		PIPE REMOVED, OVER 24"		
			1			1		202	58000	1	EACH		MANHOLE REMOVED		
			4			4		202	58100	4	EACH		CATCH BASIN REMOVED		
	74				2,219	160	2,453	203	10000	2,453	CY		EXCAVATION		
					619	3	622	203	20000	622	CY		EMBANKMENT		
		2,418	2,404			4,822		204	10000	4,822	SY		SUBGRADE COMPACTION		
		211				211		204	13000	211	CY		EXCAVATION OF SUBGRADE		
		211				211		204	30010	211	CY		GRANULAR MATERIAL, TYPE B		
		2				2		204	45000	2	HOUR		PROOF ROLLING		
		1,212				1,212		204	51000	1,212	SY		GEOGRID		
		3,738				3,738		608	10000	3,738	SF		4" CONCRETE WALK		
		2,562				2,562		608	52000	2,562	SF		CURB RAMP		
		6				6		SPECIAL	69050350	6	EACH		MAILBOX REMOVED AND RESET	8	
EROSION CONTROL															
			86			86		601	10970	86	SY		RIPRAP, TYPE A		
			10			10		601	32204	10	CY		ROCK CHANNEL PROTECTION, TYPE C WITH GEOTEXTILE FABRIC		
816						816		659	00300	816	CY		TOPSOIL		
7,350						7,350		659	00500	7,350	SY		SEEDING AND MULCHING, CLASS 1		
368						368		659	14000	368	SY		REPAIR SEEDING AND MULCHING		
368						368		659	15000	368	SY		INTER-SEEDING		
1						1		659	20000	1	TON		COMMERCIAL FERTILIZER		
1.5						1.5		659	31000	1.5	ACRE		LIME		
40						40		659	35000	40	MGAL		WATER		
			1,310			1,310		670	00700	1,310	SY		DITCH EROSION PROTECTION		
						LS		832	15000	LS			STORM WATER POLLUTION PREVENTION PLAN		
						LS		832	15002	LS			STORM WATER POLLUTION PREVENTION INSPECTIONS		
						LS		832	15010	LS			STORM WATER POLLUTION PREVENTION INSPECTION SOFTWARE		
						8,000		832	30000	8,000	EACH		EROSION CONTROL		
DRAINAGE															
			19			19		602	20000	19	CY		CONCRETE MASONRY		
50			11			61		611	00900	61	FT		6" CONDUIT, TYPE B		
50						50		611	01400	50	FT		6" CONDUIT, TYPE E		
50						50		611	01500	50	FT		6" CONDUIT, TYPE F		
50						50		611	01800	50	FT		8" CONDUIT, TYPE B		
50						50		611	02500	50	FT		8" CONDUIT, TYPE E		
50						50		611	02600	50	FT		8" CONDUIT, TYPE F		
			413			413		611	04400	413	FT		12" CONDUIT, TYPE B		
			382			382		611	04900	382	FT		12" CONDUIT, TYPE D		
			182			182		611	05900	182	FT		15" CONDUIT, TYPE B		
			145			145		611	10400	145	FT		24" CONDUIT, TYPE B		
			105			105		611	10900	105	FT		24" CONDUIT, TYPE D		
			32			32		611	22400	32	FT		54" CONDUIT, TYPE B		
			1			1		611	98180	1	EACH		CATCH BASIN, NO. 3A		
			6			6		611	98470	6	EACH		CATCH BASIN, NO. 2-2B		
			4			4		611	98510	4	EACH		CATCH BASIN, NO. 2-3		
			1			1		611	98600	1	EACH		CATCH BASIN, NO. 2-6		
2						2		611	99720	2	EACH		INSPECTION WELL		

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SHEET NUM.								PART.		ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
7	19			20	21	22	01/ENH/O T								
PAVEMENT															
	251			70			321		301	56000	321	CY	ASPHALT CONCRETE BASE, PG64-22, (449)		
	472			446			918		304	20000	918	CY	AGGREGATE BASE		
	138			72			210		407	20000	210	GAL	NON-TRACKING TACK COAT		
	3			23			26		441	70000	26	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG64-22		
				13			13		441	70300	13	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (449)		
				15			15		441	70500	15	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), (DRIVEWAYS)		
				32			32		441	70700	32	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (449), (DRIVEWAYS)		
				1,447			1,447		452	13010	1,447	SY	9" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P		
	114			220			334		609	12000	334	FT	COMBINATION CURB AND GUTTER, TYPE 2		
	40						40		609	24500	40	FT	CURB, TYPE 4-B		
	48			63			111		609	26000	111	FT	CURB, TYPE 6		
	98						98		823	40000	98	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449)		
WATER WORK															
	6						6		638	10301	6	EACH	FIRE HYDRANT EXTENDED AND ADJUSTED TO GRADE, AS PER PLAN	8	
	13						13		638	10800	13	EACH	VALVE BOX ADJUSTED TO GRADE		
LIGHTING															
						44	44		625	00450	44	EACH	CONNECTION, FUSED PULL APART		
						16	16		625	10500	16	EACH	LIGHT POLE, MISC.: DUAL ARM DAVIT LIGHT POLE (AT5B2B34.5)	71	
						6	6		625	10500	6	EACH	LIGHT POLE, MISC.: SINGLE ARM DAVIT LIGHT POLE (AT5B34.5)	71	
						22	22		625	14000	22	EACH	LIGHT POLE FOUNDATION, 24" X 6" DEEP		
						9,162	9,162		625	23000	9,162	FT	NO. 4 AWG 600 VOLT DISTRIBUTION CABLE		
						4,410	4,410		625	23400	4,410	FT	NO. 10 AWG POLE AND BRACKET CABLE		
						50	50		625	25408	50	FT	CONDUIT, 2", 725.051		
						2,430	2,430		625	25504	2,430	FT	CONDUIT, 3", 725.051		
						260	260		625	25909	260	FT	CONDUIT, JACKED OR DRILLED, 725.052, AS PER PLAN, 4"	71	
						16	16		625	27600	16	EACH	LUMINAIRE, MISC.: DECORATIVE PEDESTRIAN TEARDROP LUMINAIRE, SOLID STATE (LED), REFRACTIVE GLASS, 4000K, BLACK FINISH	71	
						22	22		625	27600	22	EACH	LUMINAIRE, MISC.: DECORATIVE TEARDROP LUMINAIRE, SOLID STATE (LED), REFRACTIVE GLASS, 4000K, BLACK FINISH	71	
						2,471	2,471		625	29000	2,471	FT	TRENCH		
						3	3		625	30520	3	EACH	PULL BOX, 725.06, SIZE 7		
						1	1		625	30530	1	EACH	PULL BOX, 725.06, SIZE 18		
						23	23		625	32000	23	EACH	GROUND ROD		
						1	1		625	34001	1	EACH	POWER SERVICE, AS PER PLAN	71	
						2,471	2,471		625	36010	2,471	FT	UNDERGROUND WARNING/MARKING TAPE		
						115	115		632	69950	115	FT	SERVICE CABLE, MISC.: 1/0 AWG., 600 VOLTS	71	
						1	1		632	70400	1	EACH	CONDUIT RISER, 2" DIAMETER		
TRAFFIC CONTROL															
						30	30		621	54000	30	EACH	RAISED PAVEMENT MARKER REMOVED		
						178	178		630	03100	178	FT	GROUND MOUNTED SUPPORT, NO. 3 POST		
						78.2	78.2		630	80100	78.2	SF	SIGN, FLAT SHEET		
						6	6		630	80500	6	EACH	SIGN, DOUBLE FACED, STREET NAME		
						15	15		630	84900	15	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL		
1						1	1		630	85701	1	EACH	REMOVAL OF GROUND MOUNTED MAJOR SIGN AND DELIVERY, AS PER PLAN	7	
						9	9		630	86002	9	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL		
						2	2		630	97700	2	EACH	SIGNING, MISC.: SOLAR-POWERED RECTANGULAR RAPID FLASHING BEACON (RRFB) SIGN ASSEMBLY	7	
						2	2		632	64020	2	EACH	PEDESTAL FOUNDATION		
						0.8	0.8		642	00104	0.8	MILE	EDGE LINE, 6", TYPE 1		
						0.44	0.44		642	00300	0.44	MILE	CENTER LINE, TYPE 1		
						250	250		642	00400	250	FT	CHANNELIZING LINE, 8", TYPE 1		
						53	53		642	00500	53	FT	STOP LINE, TYPE 1		
						97	97		642	00620	97	FT	CROSSWALK LINE, 12", TYPE 1		
						84	84		642	00630	84	FT	CROSSWALK LINE, 24", TYPE 1		
						6	6		642	01300	6	EACH	LANE ARROW, TYPE 1		

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REF NO.	SHEET NO.	STATION TO STATION		SIDE	HORIZONTAL LENGTH OF ASPHALT PATH (FT)	AREA OF ASPHALT PATH (SF)	AREA OF CONCRETE WALK (SF)	AREA OF CURB RAMP (SF)	FULL DEPTH PAVEMENT REPAIR (SF)	202	202	202	204	204	204	204	204	301	304	407	441	608	608	609	609	609		638	638		SPECIAL	823			
										PAVEMENT REMOVED (ASPHALT)	CURB REMOVED	CURB AND GUTTER REMOVED	SUBGRADE COMPACTION	EXCAVATION OF SUBGRADE	GRANULAR MATERIAL, TYPE B	PROOF ROLLING	GEOGRID	ASPHALT CONCRETE BASE, PG64-22, (449)	AGGREGATE BASE	NON-TRACKING TACK COAT	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG64-22	4" CONCRETE WALK	CURB RAMP	COMBINATION CURB AND GUTTER, TYPE 2	CURB, TYPE 4-B	CURB, TYPE 6		FIRE HYDRANT EXTENDED AND ADJUSTED TO GRADE, AS PER PLAN	VALVE BOX ADJUSTED TO GRADE		MAILBOX REMOVED AND RESET	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449)			
										SY	FT	FT	SY	CY	CY	HOURL	SY	CY	CY	GAL	CY	SF	SF	FT	FT	FT		EACH	EACH		EACH	CY			
1	B1	24-25	STA. 0+14.81 TO STA. 4+32.70	RT	397.71	3965.74		203.39	28.04	4			488	41	41	0.25	244	50	84	27	0.2										16				
	B2	25	STA. 4+54.70 TO STA. 4+81.82	RT	27.12	271.16							34	3	3	0.02	17	4	6	2											2				
	B3	25	STA. 5+11.82 TO STA. 6+42.43	RT	130.61	1306.18							160	14	14	0.08	80	17	27	9											7				
	B4	25	STA. 6+80.43 TO STA. 7+80.24	RT	99.81	998.09							122	11	11	0.07	61	13	21	7											5				
	B5	25-26	STA. 8+18.24 TO STA. 9+40.30	RT	122.06	1220.57							150	13	13	0.08	75	16	25	9											6				
	B6	26	STA. 9+78.30 TO STA. 10+69.49	RT	91.19	699.95		195.11	93.6	11		28	99	9	9	0.05	50	10	19	6	0.6		196	28							4				
	B7	26	STA. 11+10.40 TO STA. 11+75.70	RT	65.3	447.96		194.02	59.7	7		28	64	6	6	0.04	32	7	13	4	0.4		195	28	40						3				
	B8	26-27	STA. 12+09.70 TO STA. 14+31.00	RT	221.3	2212.97							271	23	23	0.14	136	28	46	15											11				
	B9	27	STA. 14+69.00 TO STA. 18+21.24	RT	316	3160	58.8	317.97					387	33	33	0.20	194	39	68	22		59	318								15				
	B10	27	STA. 17+85.00 TO STA. 18+28.36	LT	37.17	293.14		343.86	24	3		16	40	4	4	0.02	20	4	10	3	0.2		344								2				
	B11	27-28	STA. 18+57.00 TO STA. 20+35.09	LT	178.09	1438.3		346.02	24.88	3	14	16	183	16	16	0.10	92	19	34	10	0.2		347	16	14						7				
	B12	28	STA. 20+71.64 TO STA. 23+26.72	LT	255.08	2166.02		379.7	64.18	8	14	18	277	24	24	0.14	139	28	50	15	0.4		380	18	14						11				
1	B13	30	STA. 20+31.49 TO STA. 20+92.24	RT	38.25	390.07		230.73	51.08	6		24	54	5	5	0.03	27	6	12	3	0.4		231	24							2				
	B14	30	STA. 21+46.24 TO STA. 22+07.67	RT	61.43	614.35							76	7	7	0.04	38	8	13	5											3				
	B15	30	STA. 22+59.67 TO STA. 22+69.51	RT	9.84	98.44							13	2	2	0.01	7	2	3	1											1				
	MB1	25	STA. 6+41.38, 38.58'	RT																											1				
	MB2	28	STA. 19+28.46, 15.49'	RT																											3				
	MB3	28	STA. 21+95.58, 17.09'	RT																											1				
	MB4	29	STA. 24+01.38, 15.80'	RT																											1				
	W1	27-28	STA. 18+58.67 TO STA. 20+15.58	RT			645.82	139.98											8			646	140												
	W2	28	STA. 21+54.93 TO STA. 22+14.85	RT			299.61												3			300													
	W3	28-29	STA. 22+54.85 TO STA. 24+37.81	RT			917.12												9			918													
	W4	29	STA. 24+69.80 TO STA. 26+37.70	RT			802.38	61	14	2	10								9			803	61		10										
1	W5	29	STA. 23+86.53 TO STA. 25+43.23	LT			710.24	66.3			10								8			711	67		10										
	W6	28	STA. 20+38.41 TO STA. 21+14.93	RT			300.09	78.22											4			301	79												
	WW1	24	STA. 3+28.22, 24.0'	RT																							1				1				
	WW2	25	STA. 4+74.38, 27.14'	RT																							1				1				
	WW3	25	STA. 7+10.84, 24.0'	RT																							1				1				
	WW4	26	STA. 10+04.07, 24.0'	RT																							1				2				
	WW5	26	STA. 10+33.15, 25.2'	RT																							1				1				
	WW6	26	STA. 13+67.47, 24.0'	RT																							1				1				
	WW7	27	STA. 18+83.81, 25.9'	RT																											1				
	WW8	28	STA. 19+39.61, 31.42'	RT																											1				
	WW9	28	STA. 20+58.20, 24.0'	RT																							1				1				
	WW10	28	STA. 21+02.82, 32.58'	RT																											1				
	WW11	28	STA. 21+24.27, 35.93'	LT																											1				
	WW12	29	STA. 24+22.45, 24.0'	RT																							1				1				
TOTALS CARRIED TO GENERAL SUMMARY										44	48	130	2418	211	211	2	1212	251	472	138	3	3738	2562	114	40	48		6	13			6			98

SUBSUMMARIES - SHARED USE PATH & INCIDENTALS

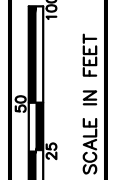
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REF NO.	SHEET NO.	STATION	SIDE	DRIVE REMOVAL (ASPHALT AREA) (SF)	DRIVE REMOVAL (CONCRETE AREA) (SF)	DRIVE AREA (CONCRETE) (MEASURED) (SF)	DRIVE AREA (ASPHALT) (MEASURED) (SF)	PAVEMENT REPAIR AREA (ASPHALT) (MEASURED) (SF)	DRIVE AREA (GRAVEL) (MEASURED) (SF)	202	202	202	202	204	301	304		407		441	441	441	441	452		609	609
										PAVEMENT REMOVED (ASPHALT)	PAVEMENT REMOVED (CONCRETE)	CURB REMOVED	CURB AND GUTTER REMOVED	SUBGRADE COMPACTION	ASPHALT CONCRETE BASE, PG64-22, (449)	AGGREGATE BASE	NON-TRACKING TACK COAT	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG64-22	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (449)	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), (DRIVEWAYS)	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (449), (DRIVEWAYS)	5" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC-1P	COMBINATION CURB AND GUTTER, TYPE 2	CURB, TYPE 6			
P1	25	STA. 4+43.70	RT	198.23		736.00	198.23	110.00		23				117	3	22		2		2			82				
P2	25	STA. 4+96.82	RT			960.00		164.89						125		24							107				
P3	25	STA. 6+61.43	RT	1398.51		1146.00	190.00	116.00		156				162	2	29		3		1		1	2	128			
P4	25	STA. 7+99.24	RT	1496.36		1165.00	190.00	116.00		167				164	2	29		3		1		1	2	130			
P5	26	STA. 9+59.30	RT	116.00		1165.00		116.00	190.00	13				164	2	31		1		1				130			
P6	26	STA. 11+94.70	RT	108.00		1072.00		108.00	491.22	12				186	2	41		1		1				120			
P7	27	STA. 14+50.00	RT	116.00		1184.00		116.00		13				145	2	25		1		1				132			
P8	27	STA. 17+80.96 TO STA. 18+86.96	RT	2743.31			2393.85			305		8		304	45	51		32		10	13				114		
P9	28	STA. 20+13.33	RT	2082.14		1273.58		156.58		232				159	2	27		2		1				142		63	
P10	28	STA. 21+34.93	RT	661.93	1328.22	920.00	420.06	120.00		74	148			163	2	30		4		1		2	4	103			
P11	28	STA. 22+34.85	RT	120.00	1880.36	1494.57		120.00		14	209			180	2	30		1		1				167			
P12	29	STA. 24+54.12	RT	104.00		792.00	683.30	104.00		12				176	2	34		6		1		3	6	88			
P13	30	STA. 21+92.24 TO STA. 21+46.24	RT	181.50		540.00	1548.13	108.00		21		54		245	2	51		12		1		6	14	60	54		
P14	30	STA. 22+07.67 TO STA. 22+59.67	RT	952.46		520.00	400.00	104.00		106		52	114	2	22		4		1		2	4	58		52		
P15	29	STA. 24+28.48 TO STA. 25+21.55	LT	2593.83						289																	
TOTALS CARRIED TO GENERAL SUMMARY										1437	357	8	106	2404	70	446		72		23	13	15	32	1447		220	63

REF NO.	SHEET NO.	STATION TO STATION	SIDE	202	202	202	202	601	601	602		611	611	611	611	611	611	611	611	611	611	611	611	611	611	670
				PIPE REMOVED, 24" AND UNDER	PIPE REMOVED, OVER 24"	MANHOLE REMOVED	CATCH BASIN REMOVED	RIPRAP, TYPE A	ROCK CHANNEL PROTECTION, TYPE C WITH GEOTEXTILE FABRIC	CONCRETE MASONRY	6" CONDUIT, TYPE B	12" CONDUIT, TYPE B	12" CONDUIT, TYPE D	15" CONDUIT, TYPE B	24" CONDUIT, TYPE B	24" CONDUIT, TYPE D	54" CONDUIT, TYPE B	CATCH BASIN, NO. 3A	CATCH BASIN, NO. 2-2B	CATCH BASIN, NO. 2-3	CATCH BASIN, NO. 2-6	DITCH EROSION PROTECTION				
				FT	FT	EACH	EACH	SY	CY	CY		FT	FT	FT	FT	FT	FT	FT	FT		EACH	EACH	EACH	EACH	SY	
D1	25-26	7+70.24 TO 9+06.99	RT		27																					
D2	26	9+06.99 TO 10+27.26	RT	118														15	105							
D3	26	12+21.94 TO 12+38.06	RT	16														16								
D4	27	16+20.50 TO 16+30.50	RT	15			1									5	10									
D5	27	16+30.50 TO 17+34.00	RT	104			1			0.2								104								
D6	27-28	17+34.00 TO 19+11.00	RT	188			1					11														
D7	28	20+78.97 TO 21+75.00	RT											96												
D8	28	21+75.00 TO 22+67.00	RT											92												
D9	26	10+69.96, 42.97'	RT	15			1							15												
D10	25	4+22.70 TO 5+21.82	RT	91																						
D11	25	6+32.43 TO 6+90.43	RT																							
D12	27	14+21.00 TO 14+79.00	RT																							
D13	28	19+11.00 TO 20+78.97	RT																							
D14	24	0+23.48 TO 0+65.00	RT	4			1							168												
DR1	25-26	5+81.78 TO 8+98.62	RT	317										42												
DR2	27	17+97.42 TO 18+78.96	RT	162																						
DR3	28	19+67.72 TO 19+88.92	RT	48																						
DR4	28	20+78.71 TO 21+85.76	RT	108																						
EC1	24-25	1+16.03 TO 4+22.70	RT																							621
EC2	26	11+16.16 TO 11+75.70	RT																							
EC3	26-27	12+09.70 TO 14+21.00	RT																							400
EC4	27	14+79.00 TO 16+29.00	RT																							289
TOTALS CARRIED TO GENERAL SUMMARY				1186	27	1	4	86	10	19		11	413	382	182	145	105	32		1	6	4	1			1310

CALCULATED DWS CHECKED MUT
SUBSUMMARIES - DRIVES & DRAINAGE
HAN-103-0.00
 20
 92

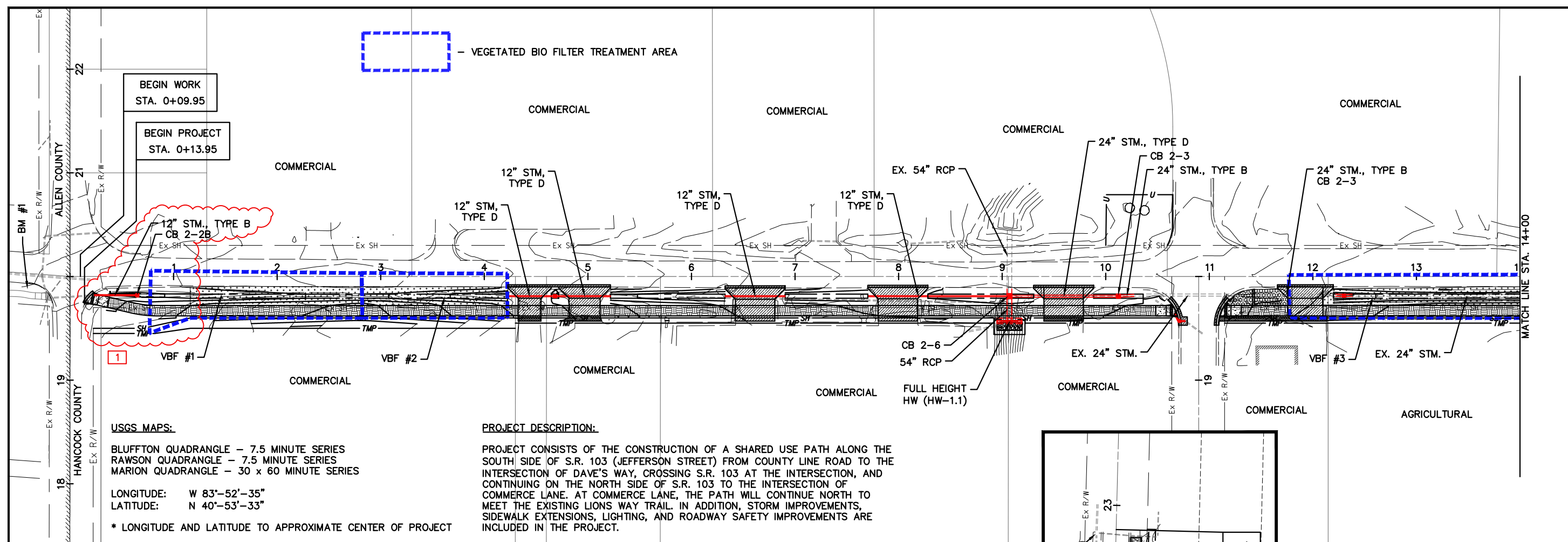


CALCULATED
DMS
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MJT

SITE PLAN

HAN-103-0.00

23
92



USGS MAPS:

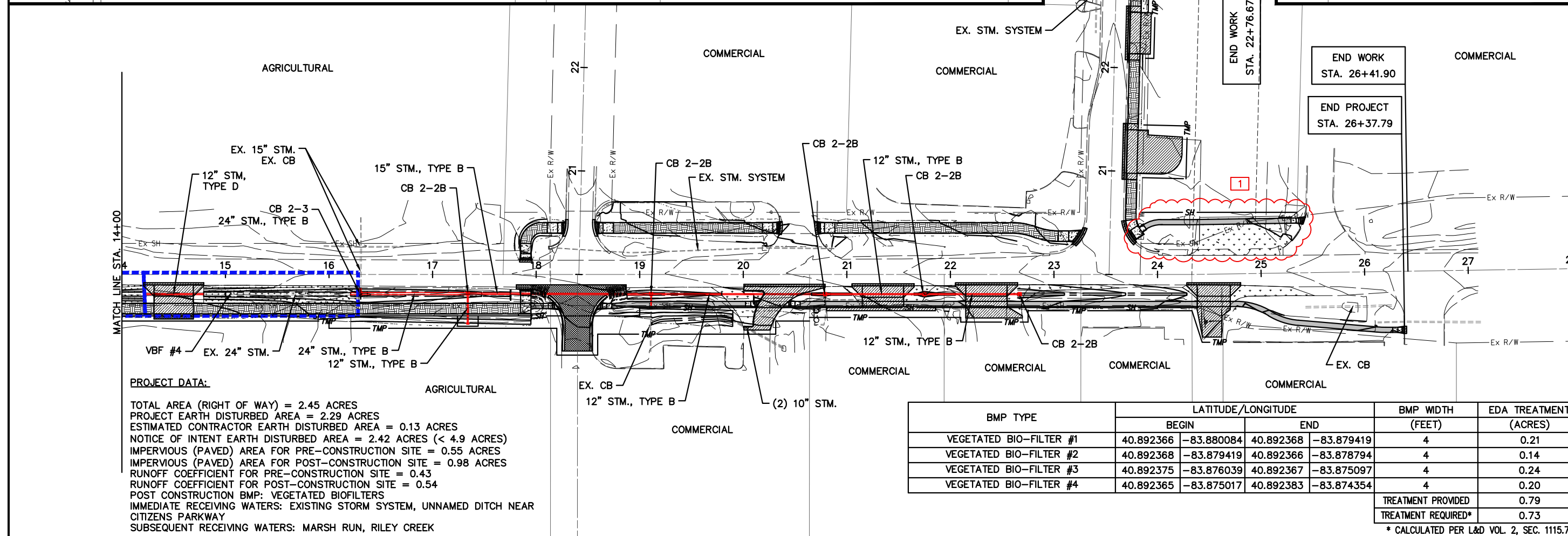
BLUFFTON QUADRANGLE - 7.5 MINUTE SERIES
RAWSON QUADRANGLE - 7.5 MINUTE SERIES
MARION QUADRANGLE - 30 x 60 MINUTE SERIES

LONGITUDE: W 83°-52'-35"
LATITUDE: N 40°-53'-33"

* LONGITUDE AND LATITUDE TO APPROXIMATE CENTER OF PROJECT

PROJECT DESCRIPTION:

PROJECT CONSISTS OF THE CONSTRUCTION OF A SHARED USE PATH ALONG THE SOUTH SIDE OF S.R. 103 (JEFFERSON STREET) FROM COUNTY LINE ROAD TO THE INTERSECTION OF DAVE'S WAY, CROSSING S.R. 103 AT THE INTERSECTION, AND CONTINUING ON THE NORTH SIDE OF S.R. 103 TO THE INTERSECTION OF COMMERCE LANE. AT COMMERCE LANE, THE PATH WILL CONTINUE NORTH TO MEET THE EXISTING LIONS WAY TRAIL. IN ADDITION, STORM IMPROVEMENTS, SIDEWALK EXTENSIONS, LIGHTING, AND ROADWAY SAFETY IMPROVEMENTS ARE INCLUDED IN THE PROJECT.



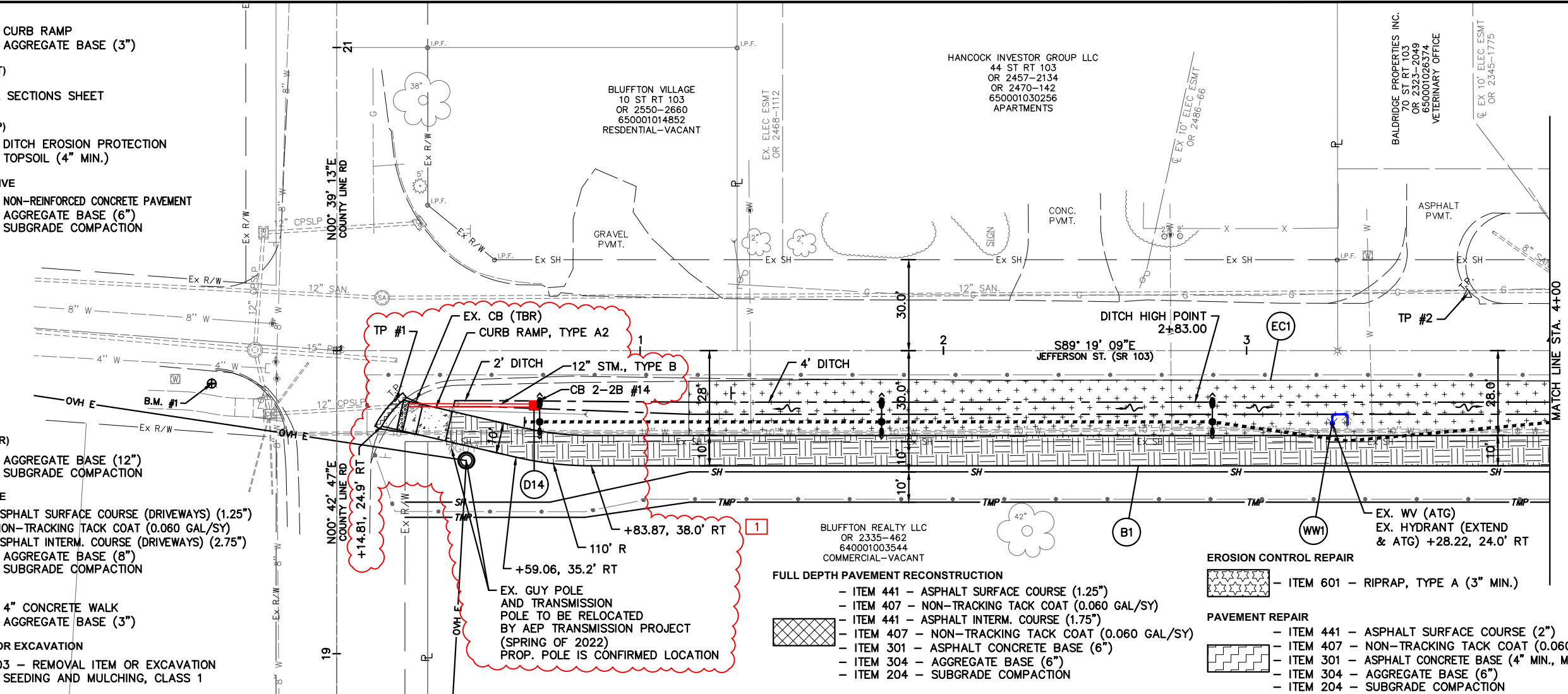
PROJECT DATA:

TOTAL AREA (RIGHT OF WAY) = 2.45 ACRES
PROJECT EARTH DISTURBED AREA = 2.29 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA = 0.13 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA = 2.42 ACRES (< 4.9 ACRES)
IMPERVIOUS (PAVED) AREA FOR PRE-CONSTRUCTION SITE = 0.55 ACRES
IMPERVIOUS (PAVED) AREA FOR POST-CONSTRUCTION SITE = 0.98 ACRES
RUNOFF COEFFICIENT FOR PRE-CONSTRUCTION SITE = 0.43
RUNOFF COEFFICIENT FOR POST-CONSTRUCTION SITE = 0.54
POST CONSTRUCTION BMP: VEGETATED BIOFILTERS
IMMEDIATE RECEIVING WATERS: EXISTING STORM SYSTEM, UNNAMED DITCH NEAR CITIZENS PARKWAY
SUBSEQUENT RECEIVING WATERS: MARSH RUN, RILEY CREEK

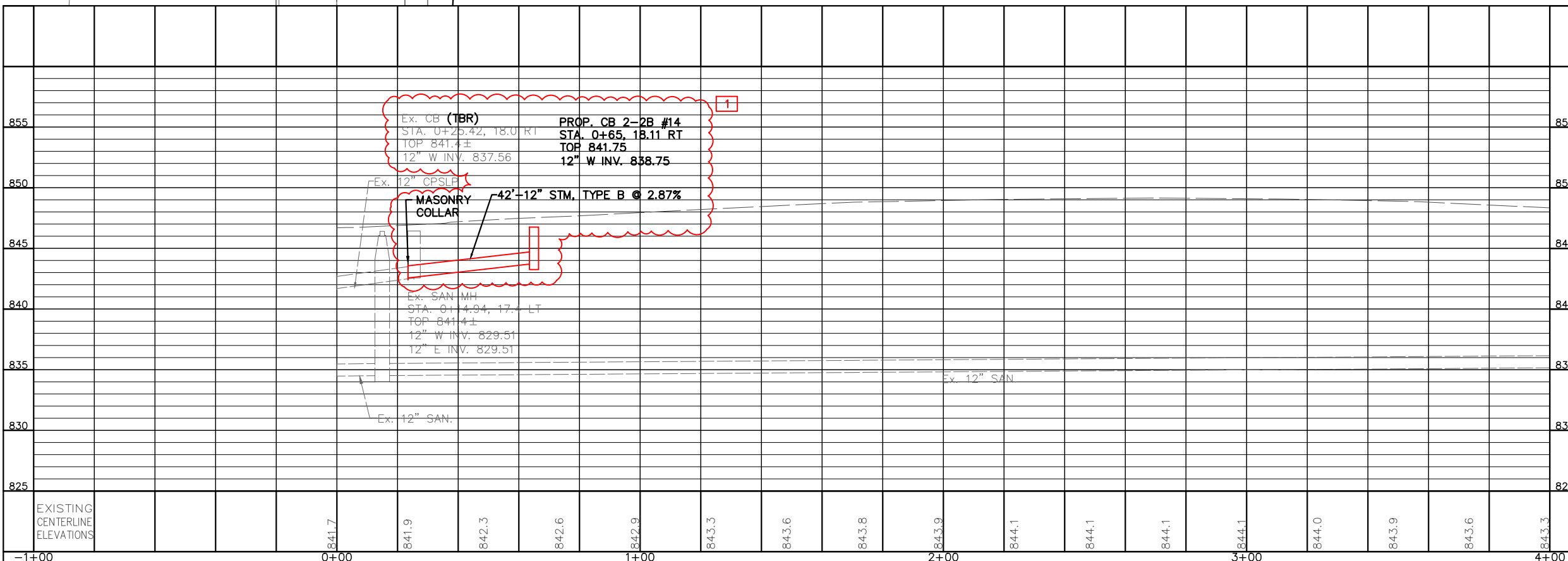
BMP TYPE	LATITUDE/LONGITUDE		BMP WIDTH (FEET)	EDA TREATMENT (ACRES)
	BEGIN	END		
VEGETATED BIO-FILTER #1	40.892366 -83.880084	40.892368 -83.879419	4	0.21
VEGETATED BIO-FILTER #2	40.892368 -83.879419	40.892366 -83.878794	4	0.14
VEGETATED BIO-FILTER #3	40.892375 -83.876039	40.892367 -83.875097	4	0.24
VEGETATED BIO-FILTER #4	40.892365 -83.875017	40.892383 -83.874354	4	0.20
			TREATMENT PROVIDED	0.79
			TREATMENT REQUIRED*	0.73

* CALCULATED PER L&D VOL. 2, SEC. 1115.7

- CURB RAMP**
- ITEM 608 - CURB RAMP
 - ITEM 304 - AGGREGATE BASE (3")
- SHARED USE PATH (ASPHALT)**
- SEE TYPICAL SECTIONS SHEET
- VEGETATED BIO-FILTER (BMP)**
- ITEM 670 - DITCH EROSION PROTECTION
 - ITEM 659 - TOPSOIL (4" MIN.)
- COMMERCIAL CONCRETE DRIVE**
- ITEM 452 - 9" NON-REINFORCED CONCRETE PAVEMENT
 - ITEM 304 - AGGREGATE BASE (6")
 - ITEM 204 - SUBGRADE COMPACTION
- GRAVEL DRIVE (DRIVE REPAIR)**
- ITEM 304 - AGGREGATE BASE (12")
 - ITEM 204 - SUBGRADE COMPACTION
- COMMERCIAL ASPHALT DRIVE**
- ITEM 441 - ASPHALT SURFACE COURSE (DRIVEWAYS) (1.25")
 - ITEM 407 - NON-TRACKING TACK COAT (0.060 GAL/SY)
 - ITEM 441 - ASPHALT INTERM. COURSE (DRIVEWAYS) (2.75")
 - ITEM 304 - AGGREGATE BASE (8")
 - ITEM 204 - SUBGRADE COMPACTION
- CONCRETE SIDEWALK**
- ITEM 608 - 4" CONCRETE WALK
 - ITEM 304 - AGGREGATE BASE (3")
- MISCELLANEOUS REMOVAL OR EXCAVATION**
- ITEM 202/203 - REMOVAL ITEM OR EXCAVATION
 - ITEM 659 - SEEDING AND MULCHING, CLASS 1



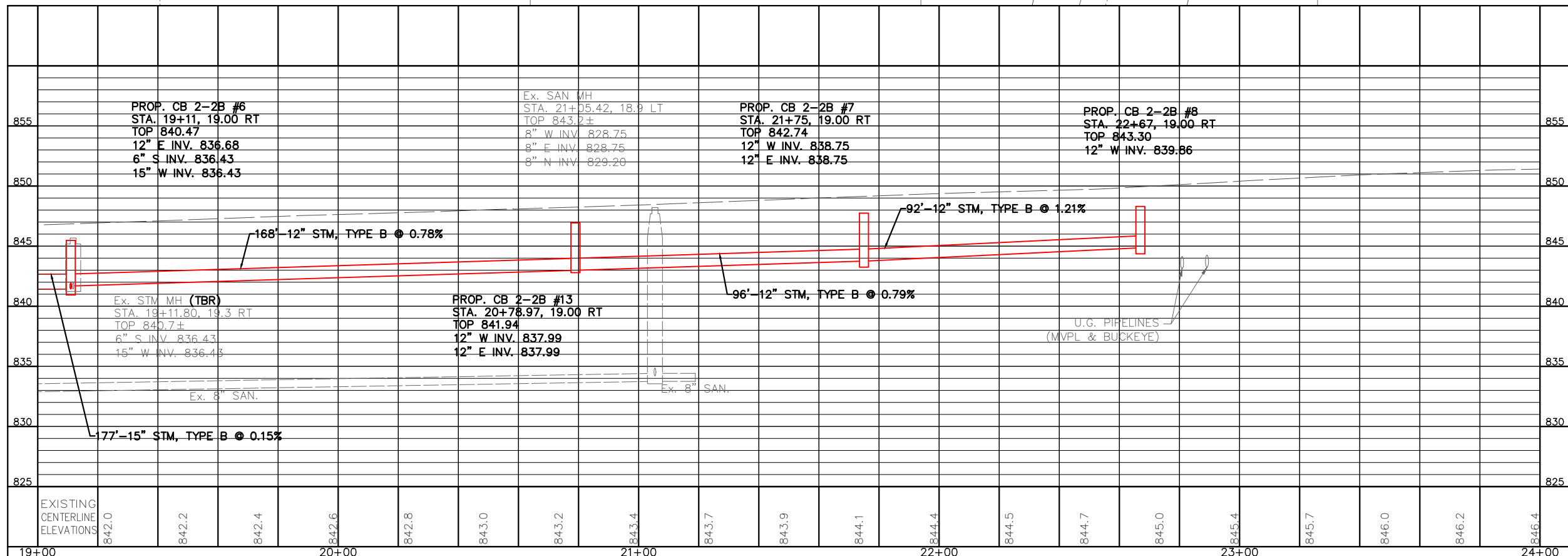
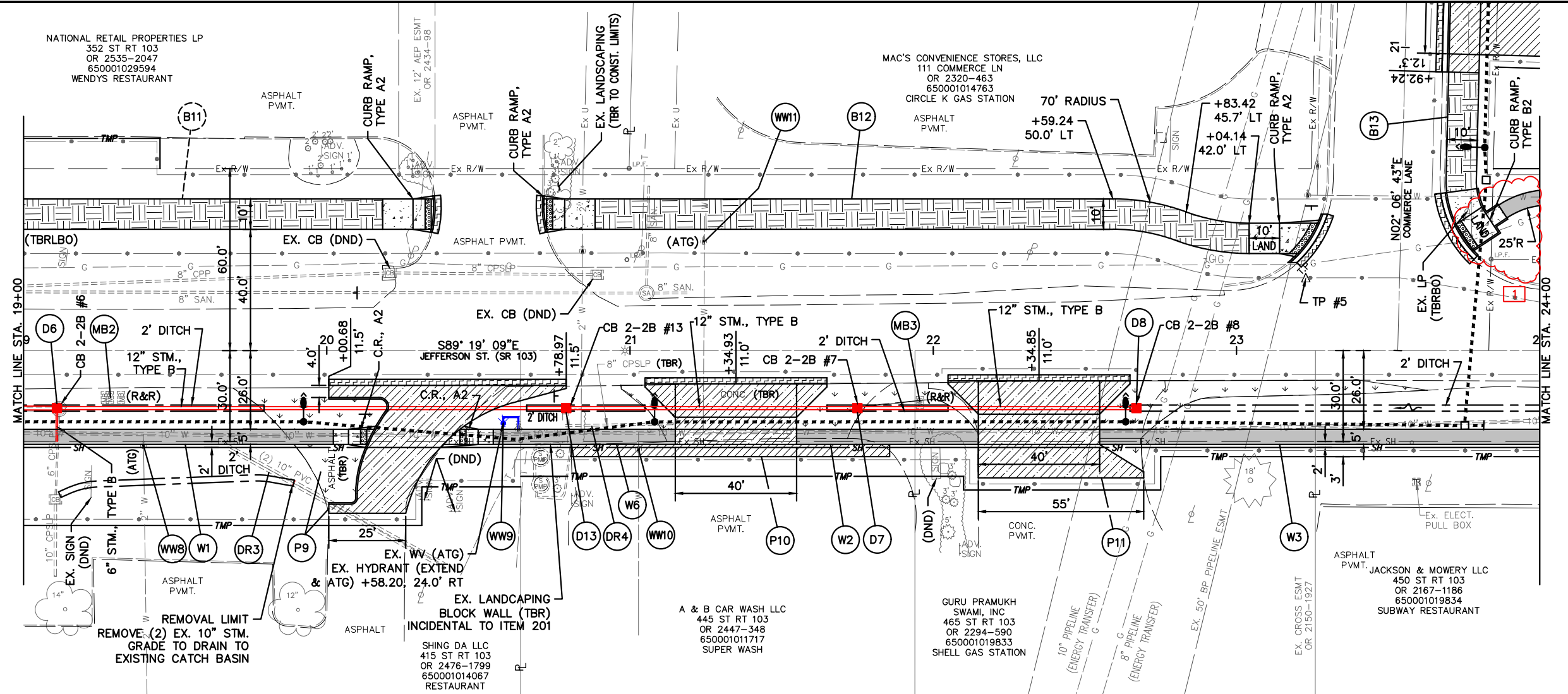
- FULL DEPTH PAVEMENT RECONSTRUCTION**
- ITEM 441 - ASPHALT SURFACE COURSE (1.25")
 - ITEM 407 - NON-TRACKING TACK COAT (0.060 GAL/SY)
 - ITEM 441 - ASPHALT INTERM. COURSE (1.75")
 - ITEM 407 - NON-TRACKING TACK COAT (0.060 GAL/SY)
 - ITEM 301 - ASPHALT CONCRETE BASE (6")
 - ITEM 304 - AGGREGATE BASE (6")
 - ITEM 204 - SUBGRADE COMPACTION
- EROSION CONTROL REPAIR**
- ITEM 601 - RIPRAP, TYPE A (3" MIN.)
- PAVEMENT REPAIR**
- ITEM 441 - ASPHALT SURFACE COURSE (2")
 - ITEM 407 - NON-TRACKING TACK COAT (0.060 GAL/SY)
 - ITEM 301 - ASPHALT CONCRETE BASE (4" MIN., MATCH EXISTING)
 - ITEM 304 - AGGREGATE BASE (6")
 - ITEM 204 - SUBGRADE COMPACTION



PLAN AND PROFILE - JEFFERSON STREET (S.R. 103)
STA. 0+00 TO STA. 4+00

HAN-103-0.00

24
92



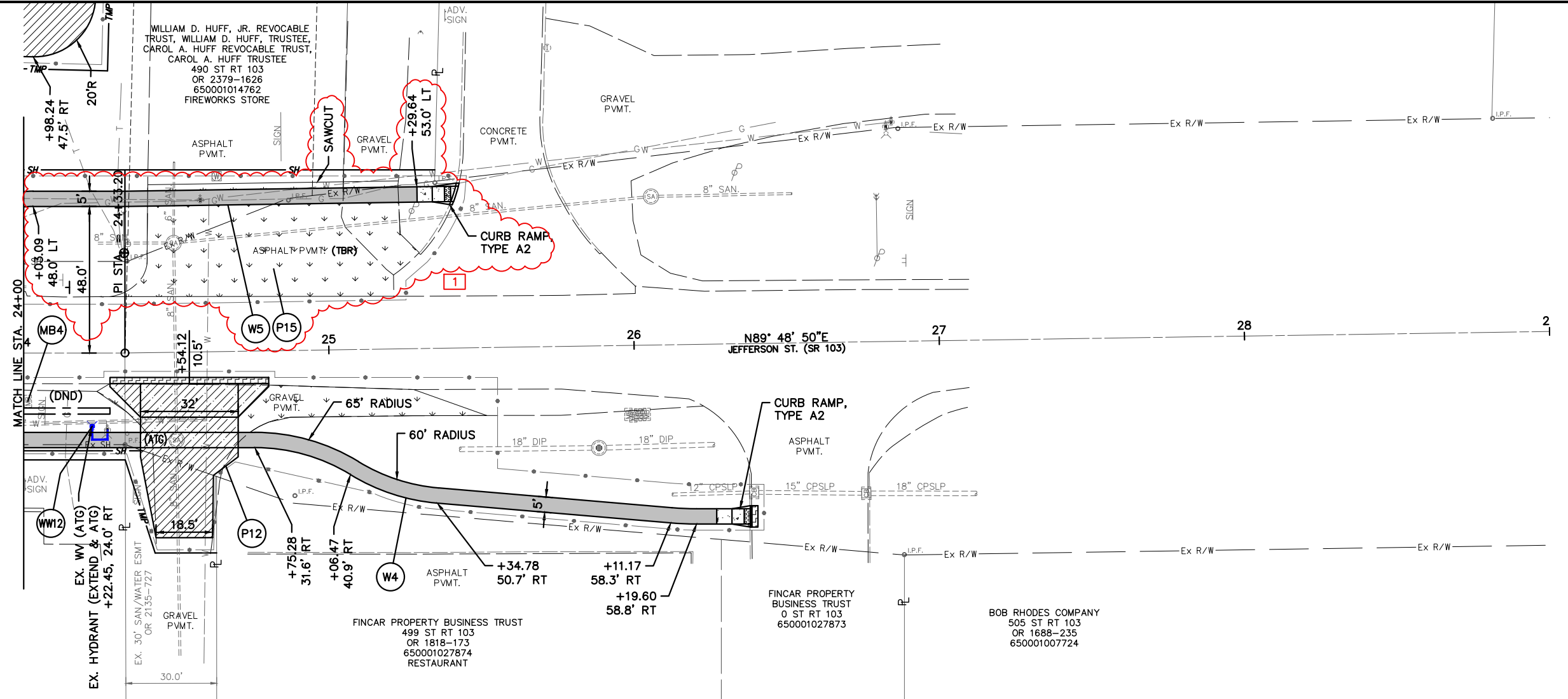
SCALE IN FEET
0 10 20 40

CALCULATED DMS CHECKED MJT

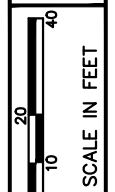
**PLAN AND PROFILE - JEFFERSON STREET (S.R. 103)
STA. 19+00 TO STA. 24+00**

HAN-103-0.00

28
92



855																												855
850																												850
845																												845
840																												840
835																												835
830																												830
825																												825
	EXISTING CENTERLINE ELEVATIONS	846.5	846.6	846.6	846.8	847.0	847.2	847.4	847.8	848.1	848.5	849.0	849.6															
		24+00				25+00				26+00					27+00											28+00		29+00



**PLAN AND PROFILE - JEFFERSON STREET (S.R. 103)
STA. 24+00 TO STA. 29+00**

HAN-103-0.00

29
92

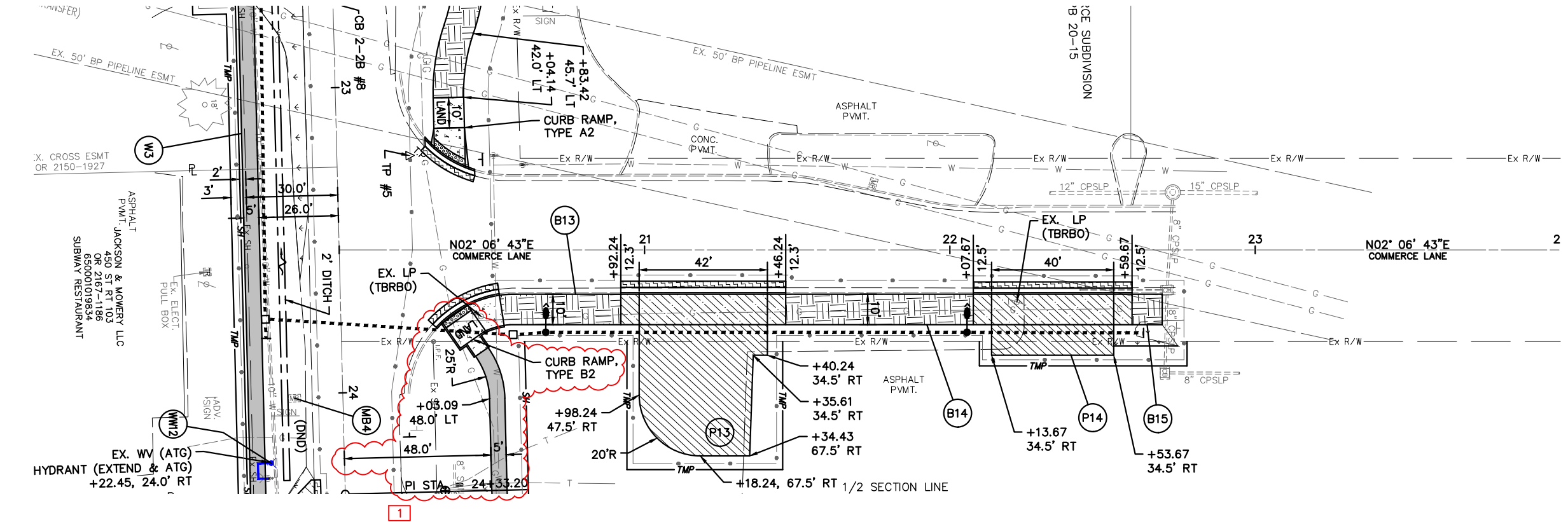


CALCULATED	DMS	CHECKED	MJT
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**PLAN AND PROFILE - COMMERCE LANE
STA. 20+00 TO STA. 24+00**

HAN-103-0.00

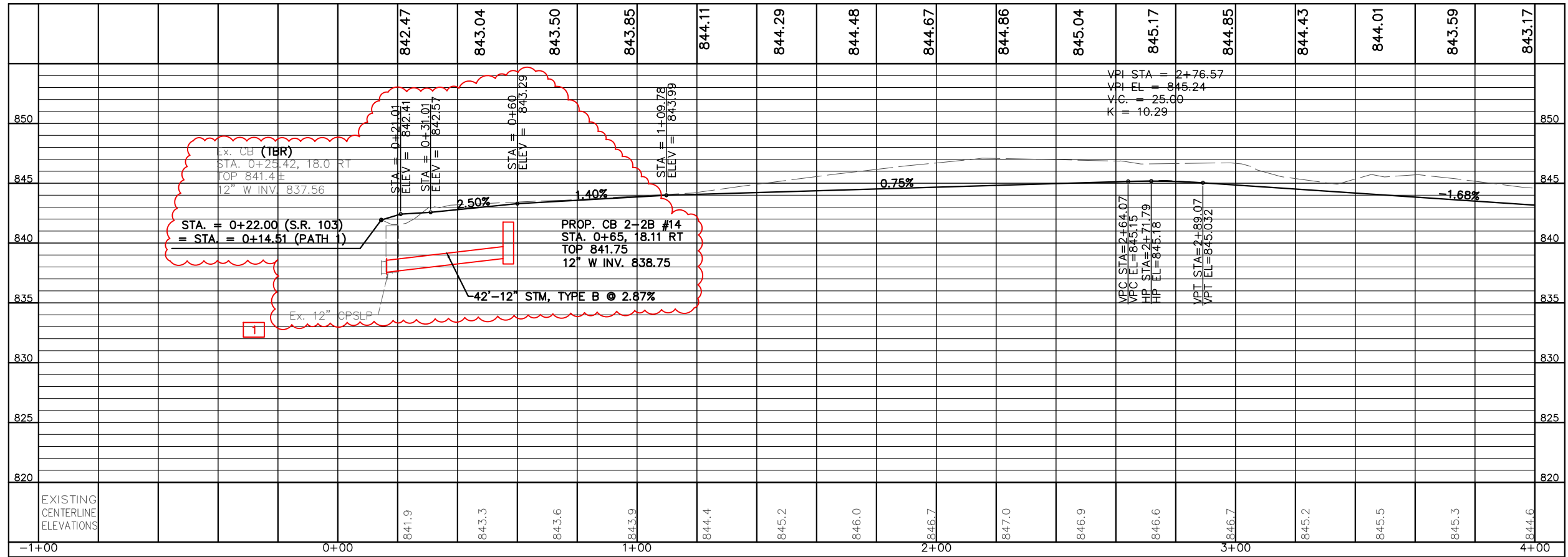
30
92



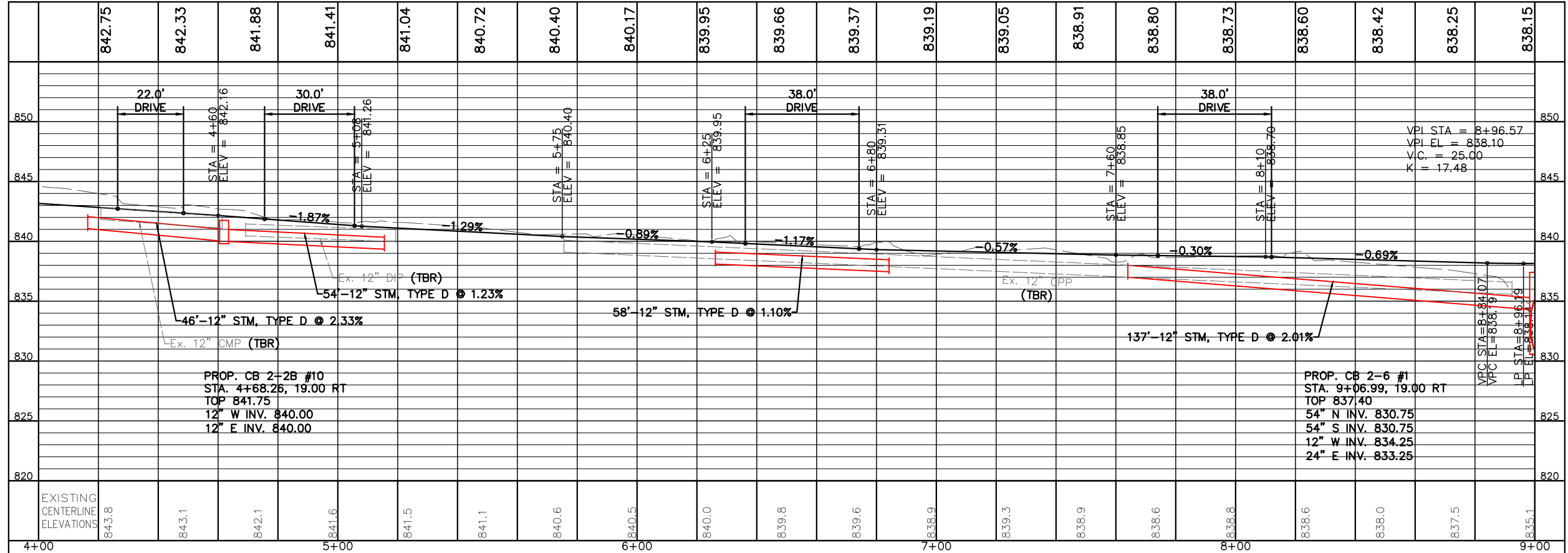
Station	Existing Centerline Elevation	Right of Way	Proposed Profile	Right of Way	Elevation
19+00					855
20+00	846.0				855
20+20	846.2				850
20+40	846.7				845
20+60	846.6				840
20+80	846.5				835
21+00	846.4				830
21+20	846.3				825
21+40					
21+60					
21+82.4					
22+00	846.2				
22+20	846.1				
22+40	845.9				
23+00					
24+00					
24+00					855

Ex. S M MH
 STA. 22+73.01, 18.9 LT
 TOP 845.3±
 8" E INV. 837.41
 12" S INV. 837.63
 15" N INV. 837.53

Ex. 12" CPSP
 Ex. 15" CPSP



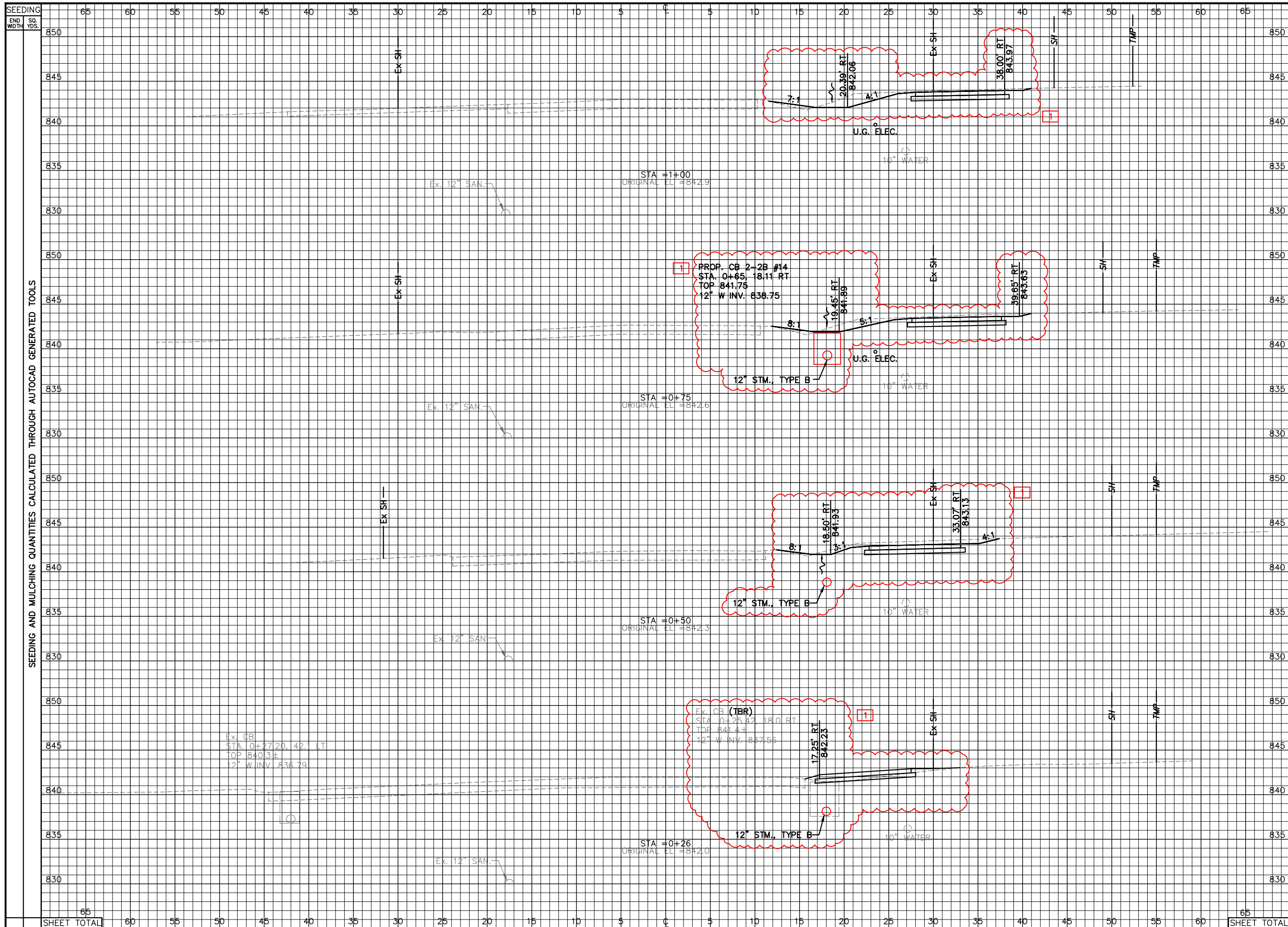
NOTE: EXISTING AND PROPOSED STORM STATIONING IS REFERENCED TO THE CENTERLINE OF JEFFERSON STREET (S.R. 103)



SCALE IN FEET
 CALCULATED
 DMS
 CHECKED
 MJT

PROFILE - SHARED USE PATH - SECTION 1
STA. -1+00 TO STA. 8+00

HAN-103-0.00

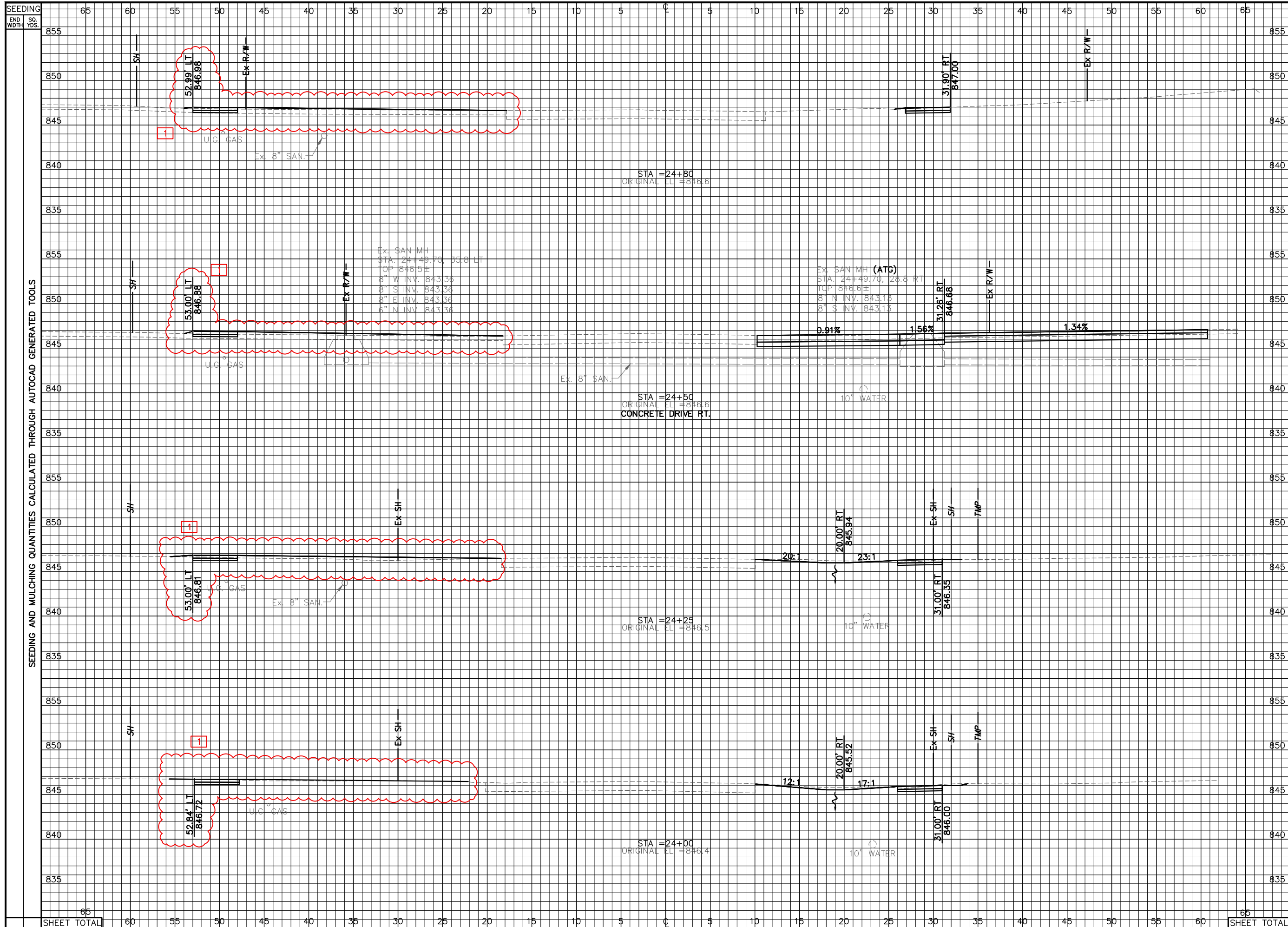


SEEDING AND MULCHING QUANTITIES CALCULATED THROUGH AUTOCAD GENERATED TOOLS

END STA	AREA CUT	AREA FILL	VOLUME CUT	VOLUME FILL	CALCULATED DMS	CHECKED MJT
19						
20						
22						
28						
30						
36						
21						
12						

CROSS SECTIONS - JEFFERSON STREET (S.R. 103)
STA. 0+26 TO STA. 1+00

HAN-103-0.00

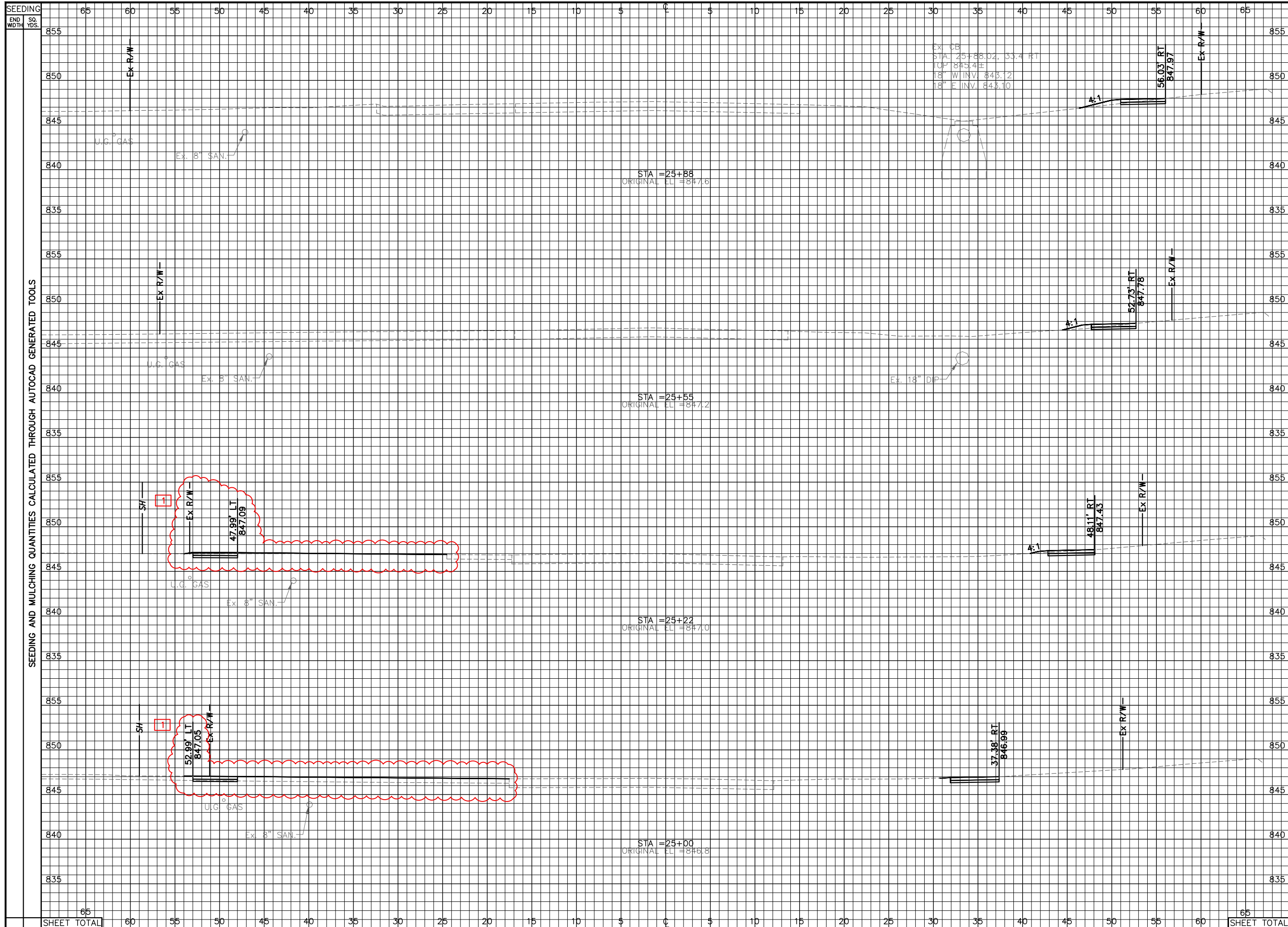


END STA	AREA CUT	AREA FILL	VOLUME CUT	VOLUME FILL	CALCULATED	DMS	CHECKED	MJT
24+00	3	12						
24+25	33	17						
24+50	56	15						
24+80	29	8						
TOTAL	99	52						

CROSS SECTIONS - JEFFERSON STREET (S.R. 103)
STA. 24+00 TO STA. 24+80

HAN-103-0.00

57
92

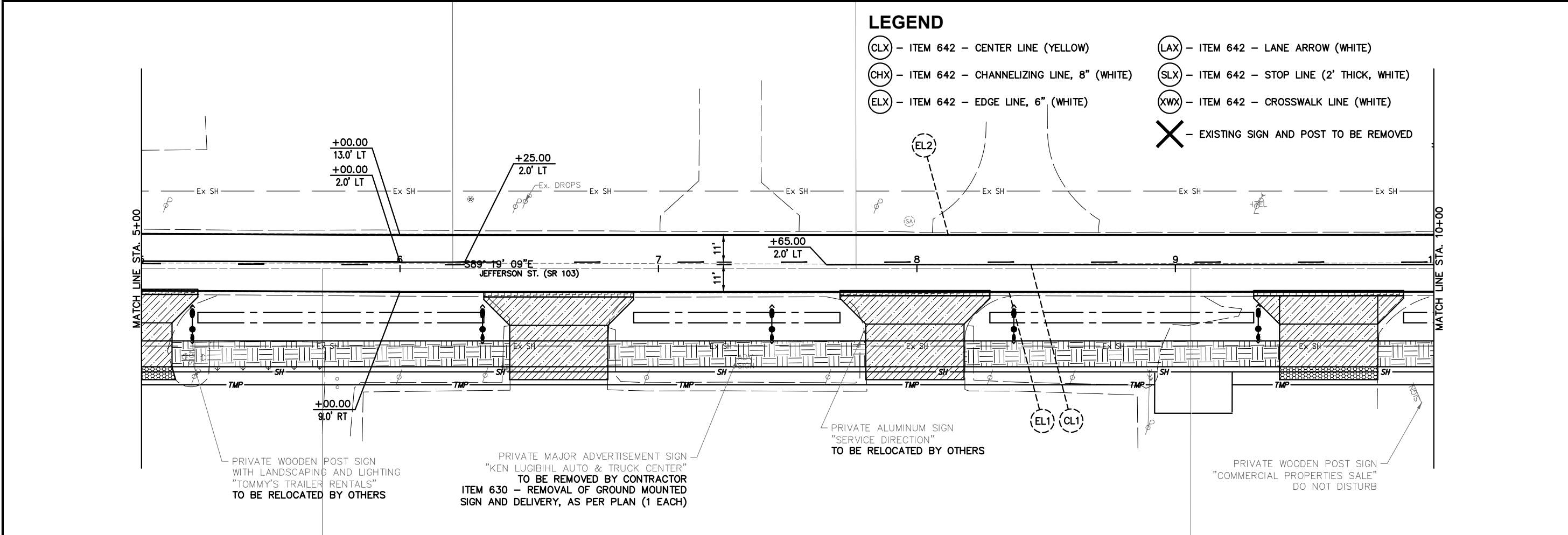
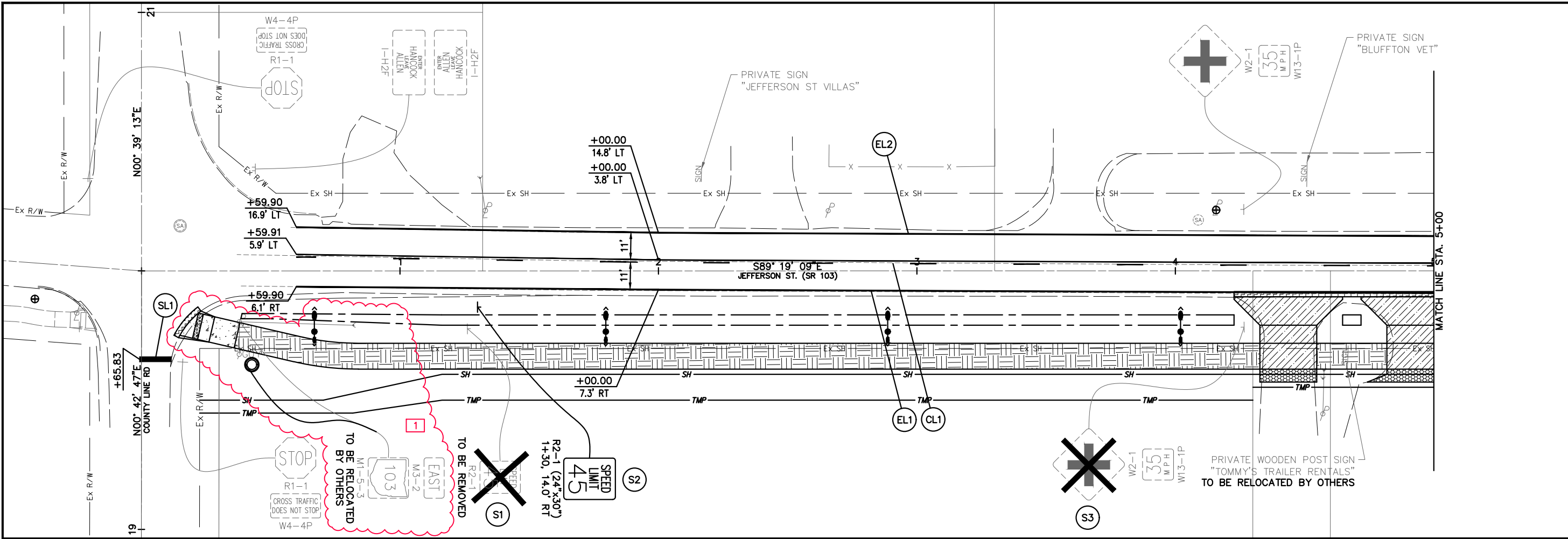


STA	END CUT	AREA FILL	VOLUME CUT	VOLUME FILL	CALCULATED DMS	CHECKED MJT
25+88	2	2	2	2		
25+55	2	1	2	2		
25+22	6	1	5	1		
25+00	4	7	4	7		
TOTAL	14	11	13	13		

CROSS SECTIONS - JEFFERSON STREET (S.R. 103)
STA. 25+00 TO STA. 25+88

HAN-103-0.00

58
92



TRAFFIC CONTROL PLAN

HAN-103-0.00

66
92

SCALE IN FEET
0 10 20 40

CALCULATED DMS CHECKED MJT

[1] ADDENDA #1 - 4-21-2023

SYMBOL SCHEDULE

MARK	LAMP TYPE	VOLTS	SOURCE AND WATTAGE BALLAST	DESCRIPTION	MFR. AND CATALOG SERIES
A	LED	120-277V	112 WATT (HOLOPHANE) 120 WATT (KING)	HOLOPHANE ESPLANADE TEARDROP LED LUMINAIRE KING LUMINAIRE K804 CORONET SR. - LED LUMINAIRE	HOLOPHANE FIXTURE: ESL3 P35S 40K MVOLT SG3 QSM BK PR7 SH KING FIXTURE: K804-P4SA-III-75-SSL-8060-120V-KPL11-PE-4K-BK DUAL ARM POLE: AT5B2B34.5 WITH SINGLE FLAG HOLDER AND OUTLET ENCLOSURE SINGLE ARM POLE: AT5B34.5 WITH SINGLE FLAG HOLDER AND OUTLET ENCLOSURE
B	LED	120-277V	73 WATT(HOLOPHANE) 75 WATT (KING)	HOLOPHANE ESPLANADE TEARDROP LED LUMINAIRE KING LUMINAIRE K804 CORONET SR. - LED LUMINAIRE	HOLOPHANE FIXTURE: ESL3 P20S 40K MVOLT SG3 QSM BK PR7 SH KING FIXTURE: K804-P4SA-IV-120-SSL-8060-120V-KPL11-PE-4K-BK DUAL ARM POLE: AT5B2B34.5 WITH SINGLE FLAG HOLDER AND OUTLET ENCLOSURE
C	LED	120-277V	51 WATT(HOLOPHANE) 40 WATT (KING)	HOLOPHANE ESPLANADE PEDESTRAIN TEARDROP LED LUMINAIRE KING LUMINAIRE K704 CORONET JR. - LED LUMINAIRE	HOLOPHANE FIXTURE: ESPL2 P30 40K MVOLT QSM BK SG4 KING FIXTURE: K704N-P4SA-II-40-SSL-120V-7030-KPL11-PE-4K-BK DUAL ARM POLE: AT5B2B34.5 WITH SINGLE FLAG HOLDER AND OUTLET ENCLOSURE
				PC & PG STYLE POLYMER CONCRETE BOX & COVER, OPEN BASE BOX, 36" DEPTH, LIGHTING LOGO	PULL BOX, 725.06 *SIZES LISTED IN PULLBOX TABLE

PULLBOX TABLE

PULL BOX #	STATION	SIDE	OFFSET	SIZE* (725.06)
PB-1	10+27.12	LT	26.67'	18
PB-2	10+38.60	RT	22.39'	7
PB-3	23+75.28	RT	24.74'	7
PB-4	23+82.32	LT	56.24'	7

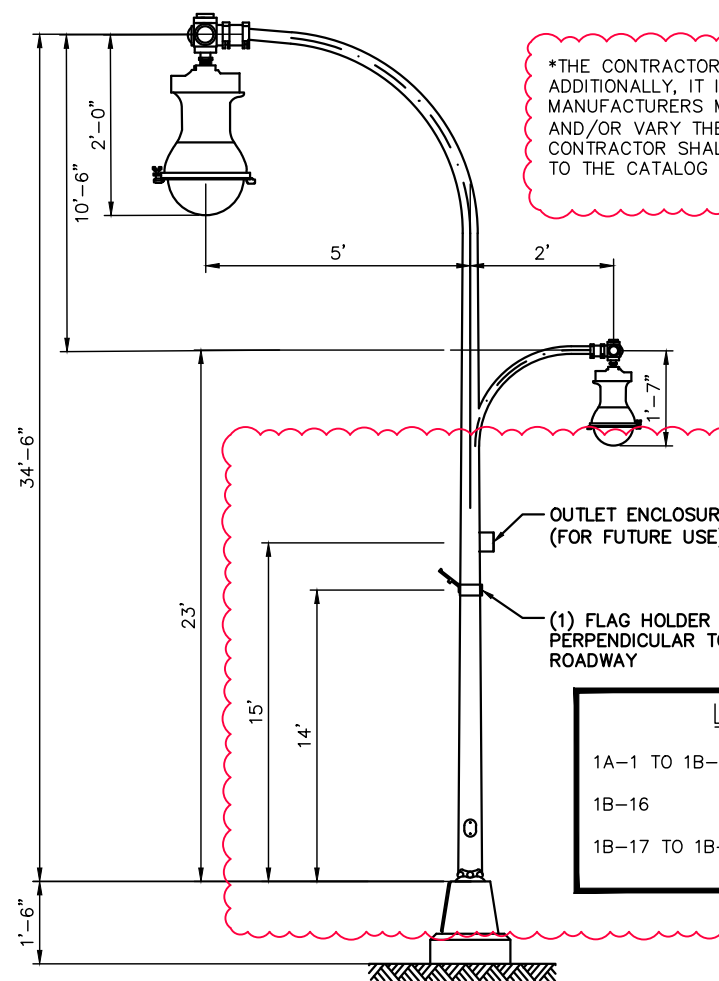
*ALL PULL BOXES SHALL BE ODOT SCD HL-30.11.

ELECTRICAL GENERAL NOTES

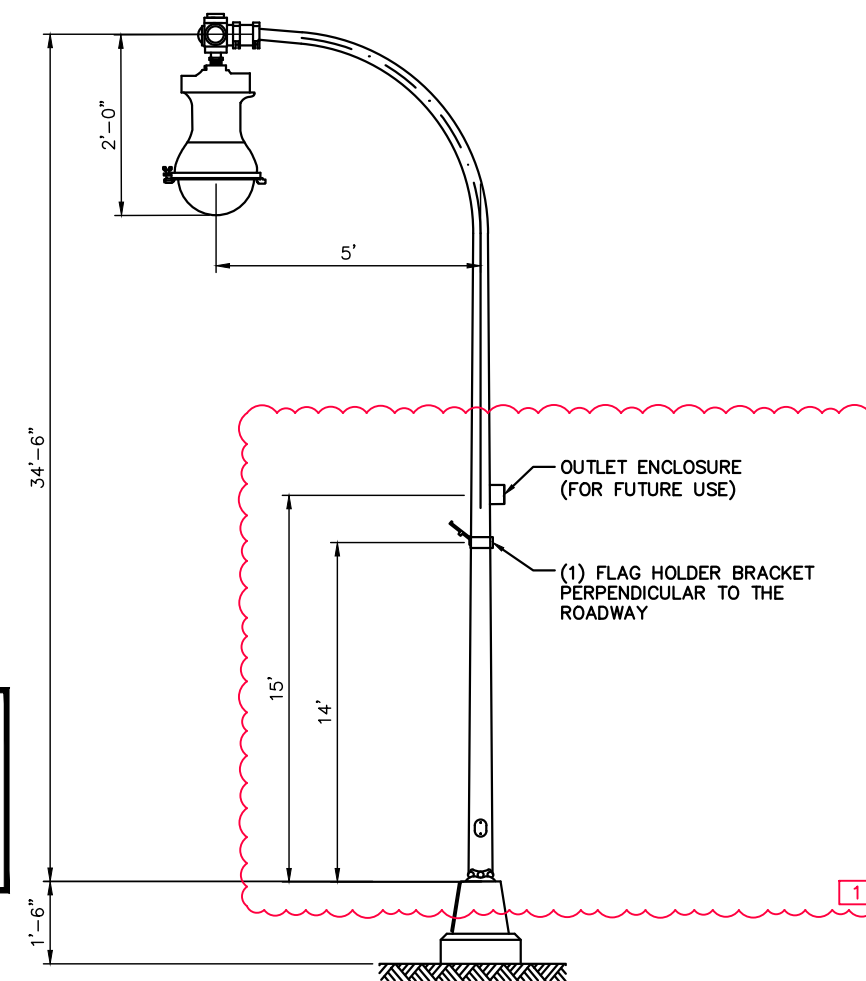
- ALL ELECTRICAL WORK SHALL CONFORM WITH THE REQUIREMENTS OF THE MOST RECENT VERSION OF THE OHIO BUILDING CODE, THE N.E.C. AND N.F.P.A. STANDARD NO. 70, AND IS SUBJECT TO THE APPROVAL OF THE AUTHORITY HAVING JURISDICTION.
- ALL NOTED MOUNTING HEIGHTS ARE FROM FINISHED GRADE TO CENTER OF DEVICE UNLESS OTHERWISE NOTED.
- THREE No. 4 AWG. 600 VOLT DISTRIBUTION CABLES SHALL BE USED FOR SUPPLYING POWER TO THE POLES.
- THREE No. 10 AWG. POLE AND BRACKET CABLES SHALL BE USED TO SUPPLY POWER TO THE LUMINAIRE.

GENERAL NOTES

- CONDUIT PLACEMENT IN ELECTRICAL DRAWINGS ARE DRAWN FOR CLARITY. ACTUAL CONDUIT SHOULD BE INSTALLED IN EXISTING RIGHT-OF-WAYS. COORDINATE EXACT CONDUIT ROUTES WITH THE ENGINEER TO AVOID CONFLICT WITH WATER SERVICE VALVES, SIGNAGE, CURBS, TREES AND OTHER LANDSCAPING.
- CONTRACTOR SHALL LOCATE ALL EXISTING UNDERGROUND UTILITIES AND MISCELLANEOUS CONDUIT AND PIPES PRIOR TO DIGGING. ANY DAMAGE TO UNDERGROUND UTILITIES WHEN DIGGING MUST BE REPAIRED BY THIS CONTRACTOR. NOTE: ALL REPAIRS AND MODIFICATIONS SHALL BE CLOSELY COORDINATED WITH OWNING UTILITIES OFFICIALS.
- STUB CONDUIT THROUGH PULL BOX SIDEWALLS. USE A MANUFACTURER'S RECOMMENDED WALL PUNCH AS NECESSARY FOR CONDUIT KNOCKOUTS. SIZE KNOCKOUT ONE TRADE SIZE LARGER THAN CONDUIT TO ALLOW FOR CONDUIT MOVEMENT. COORDINATE WITH THE ENGINEER FOR LOCATIONS. MOUNT BOX SUCH THAT THE TOP OF THE BOX WILL BE FLUSH WITH THE TOP OF FINISH SURFACE.
- CONTRACTOR TO SUPPLY/INSTALL/WIRE ELECTRIC SERVICE ENCLOSURE WITH CONTENTS AND FOUNDATION.
- THE LOCATION OF UNDERGROUND CONDUIT, SHALL BE MARKED BY USE OF CONTINUOUS IDENTIFYING TAPE BURIED IN THE TRENCH ABOVE THE LINE PER ODOT CMS 625.20. THE IDENTIFYING TAPE SHALL BE AN INERT MATERIAL, APPROXIMATELY 6" WIDE, COMPOSED OF POLYETHYLENE PLASTIC, HIGHLY RESISTANT TO ALKALIS, ACID OR OTHER CHEMICAL COMPONENTS LIKELY TO BE ENCOUNTERED IN SOILS. THE TAPE SHALL BE BRIGHT YELLOW WITH IDENTIFYING PRINTING "ELECTRIC" IN BLACK LETTERS, ONE SIDE ONLY. TAPES SHALL BE SUPPLIED IN CONTINUOUS ROLLS WITH IDENTIFYING LETTERING REPEATED THE FULL LENGTH OF THE TAPE. IDENTIFYING TAPES SHALL BE BURIED IN THE ELECTRIC LINE TRENCH WITH ONE STRIP PLACED APPROXIMATELY DOWN THE CENTERLINE AND LOCATED APPROXIMATELY 8" TO 12" BELOW FINISHED GRADE. THE TAPE SHALL BE PLACED IN THE TRENCH WITH THE PRINTED SIDE UP AND SHALL BE ESSENTIALLY PARALLEL WITH THE FINISHED SURFACE. THE CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO ENSURE THAT THE TAPE IS NOT PULLED, DISTORTED OR OTHERWISE MISPLACED IN COMPLETING THE TRENCH BACKFILL. TAPE SHALL BE ALLEN SYSTEM'S TERRA TAPE, TECTA TAPE OR EQUAL AS APPROVED BY THE ENGINEER.



DUAL ARM DAVIT LIGHT POLE



SINGLE ARM DAVIT LIGHT POLE

*THE CONTRACTOR SHALL PROVIDE SHOP DRAWINGS. ADDITIONALLY, IT IS UNDERSTOOD THAT THE MANUFACTURERS MAY CHANGE CATALOG NUMBERS AND/OR VARY THEM TO THE CORRECT MODELS. THE CONTRACTOR SHALL ADHERE AS CLOSELY AS POSSIBLE TO THE CATALOG MODEL SYSTEM.

LUMINAIRE NOTES:	
1A-1 TO 1B-15	"B" AND "C" FIXTURES
1B-16	"A" AND "C" FIXTURES
1B-17 TO 1B-22	"A" FIXTURE ONLY

NOTE:

- CONTRACTOR SHALL CONTACT THE POLE MANUFACTURER FOR BOLT CIRCLE DIMENSIONS. FAILURE TO VERIFY THE FOUNDATION WITH THE MANUFACTURER PRIOR TO ITS INSTALLATION WILL REQUIRE THE CONTRACTOR TO RECONSTRUCT, OR RESET AT THE CONTRACTOR'S EXPENSE.
- LIGHT POLE FOUNDATION SHALL BE 2" EXPOSED FOUNDATION WHEN LOCATED IN CURB LAWN.
- LIGHT POLE FOUNDATION TO CONFORM TO ODOT C&MS 625.10 AND SCD HL-20.11.

CALCULATED: BMW
 CHECKED: AJH
HAN-103-0.00
 70
 92

ITEM 625 LIGHT POLE, MISC.: DUAL ARM DAVIT LIGHT POLE (AT5B2B34.5) [1]

THIS ITEM OF WORK SHALL CONSIST OF INSTALLING THE LIGHT POLE INCLUDING ALL HARDWARE, MATERIALS, AND EQUIPMENT NECESSARY.

LIGHT POLES SHALL BE THE DAVIT DECORATIVE STYLE POLE PER ODOT SCD. HL-10.11.

LIGHT POLE DESIGN NUMBER SHALL BE AT5B2B34.5 PER SCD. HL-10.11 FOR POLES 1A-1 TO 1B-16. THE POLES SHALL INCLUDE OUTLET ENCLOSURE (FOR FUTURE USE), AND FLAG HOLDER AS SHOWN IN POLE DETAILS. POLE, TRANSFORMER BASE, WEATHER TIGHT OUTLET BOX, FLAG HOLDER, AND HARDWARE SHALL BE GALVANIZED WITH A BLACK FINISH PER ODOT SS 916.

LIGHT POLES SHALL HAVE DUAL ARMS MOUNTED AT 34'-6" AND 23'-0" AS SHOWN ON THE DETAIL.

PAYMENT FOR ITEM 625 LIGHT POLE, MISC.: DUAL ARM DAVIT LIGHT POLE (AT5B2B34.5), FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE AT THE CONTRACT EACH BID PRICE AND SHALL INCLUDE ALL LABOR, MATERIAL, AND EQUIPMENT REQUIRED TO COMPLETE THIS ITEM OF WORK.

ITEM 625 LIGHT POLE, MISC.: SINGLE ARM DAVIT LIGHT POLE (AT5B34.5)

THIS ITEM OF WORK SHALL CONSIST OF INSTALLING THE LIGHT POLE INCLUDING ALL HARDWARE, MATERIALS, AND EQUIPMENT NECESSARY.

LIGHT POLES SHALL BE THE DAVIT DECORATIVE STYLE POLE PER ODOT SCD. HL-10.11.

LIGHT POLE DESIGN NUMBERS SHALL BE AT5B34.5 PER SCD. HL-10.11 FOR POLES 1B-17 TO 1B-22. THE POLES SHALL INCLUDE OUTLET ENCLOSURE (FOR FUTURE USE), AND FLAG HOLDER AS SHOWN IN POLE DETAILS. POLE, TRANSFORMER BASE, WEATHER TIGHT OUTLET BOX, FLAG HOLDER, AND HARDWARE SHALL BE GALVANIZED WITH A BLACK FINISH PER ODOT SS 916.

PAYMENT FOR ITEM 625 LIGHT POLE, MISC.: SINGLE ARM DAVIT LIGHT POLE (AT5B34.5), FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE AT THE CONTRACT EACH BID PRICE AND SHALL INCLUDE ALL LABOR, MATERIAL, AND EQUIPMENT REQUIRED TO COMPLETE THIS ITEM OF WORK.

ITEM 625 CONDUIT, JACKED OR DRILLED, 725.052, AS PER PLAN, (DIAMETER)

THIS ITEM OF WORK SHALL CONSIST OF THE WORK AS DESCRIBED IN OHIO DEPARTMENT OF TRANSPORTATION ITEM 625 - CONDUIT JACKED OR DRILLED, EXCEPT AS HEREIN MODIFIED.

ALL MATERIALS, PROCEDURES, AND TESTING USED SHALL CONFORM WITH THE ENCLOSED STANDARDS AND SPECIFICATIONS.

ALL CONDUIT CAPABLE OF HORIZONTAL DIRECTIONAL DRILLING SHALL BE EPEC-40-HDPE.

THE HORIZONTAL DIRECTIONAL DRILLING SHALL BE IN ACCORDANCE WITH ASTM F1962 AT THE LOCATIONS SHOWN ON THE PLANS.

AN EXTRA PULL STRING, FOR FUTURE USE, SHALL BE INSTALLED IN ALL CONDUIT.

THIS ITEM OF WORK SHALL INCLUDE FURNISHING AND INSTALLING ALL FITTINGS, BENDS, TEES, COUPLINGS, RESTRAINTS, TRACING WIRE, PULL STRING, ETC. AND SHALL INCLUDE THE COST FOR THE HORIZONTAL DIRECTIONAL DRILLING OF THE CONDUIT.

THIS ITEM OF WORK SHALL INCLUDE ALL COSTS ASSOCIATED WITH THE HORIZONTAL DIRECTIONAL DRILLING OF THE CONDUIT. THIS INCLUDES ANY REQUIRED BORING PITS, DEWATERING, BACKFILLING OF PITS, COMPACTION, ASPHALT, GRAVEL AND CONCRETE REPAIR, SEEDING AND MULCHING, LANDSCAPING REPAIR, ETC. NECESSARY TO RESTORE THE AREA BACK TO EQUAL OR BETTER CONDITIONS.

PAYMENT FOR ITEM 625 - CONDUIT, JACKED OR DRILLED, 725.052, AS PER PLAN, (DIAMETER), FOR ALL OPERATIONS DESCRIBED (INCLUDING TESTING AND PURITIES) ABOVE SHALL BE AT THE CONTRACT FOOT BID PRICE AND SHALL INCLUDE ALL LABOR, MATERIAL, AND EQUIPMENT REQUIRED TO COMPLETE THIS ITEM OF WORK.

ITEM 625 LUMINAIRE, MISC.: DECORATIVE TEARDROP LUMINAIRE, SOLID STATE (LED), REFRACTIVE GLASS, 4000K, BLACK FINISH [1]

THIS ITEM CONSISTS OF SUPPLYING AND INSTALLING A DECORATIVE TEARDROP-STYLE LED LUMINAIRE INCLUDING ALL WIRING, CONNECTIONS, GROUNDING HARDWARE, MATERIALS, AND EQUIPMENT NECESSARY.

LUMINAIRES SHALL BE HOLOPHANE ESPLANADE TEARDROP LED 3 AS LISTED IN THE LUMINAIRE SCHEDULE OR AN APPROVED EQUAL. LUMINAIRES SHALL HAVE A BLACK FINISH PER ODOT SS 916. LUMINAIRE COLOR SHALL MATCH THE POLE.

THIS ITEM CONSISTS OF A BASEFITTER, GLASS GLOBE AND A ROUNDED TOP WITH NO DECORATIVE FEATURES SUCH AS FINIAL, CROWN, BAND OR RIBS.

PROVIDE A LUMINAIRE WITH 3G VIBRATION RATING. PROTECT EACH LUMINAIRE USING A SURGE PROTECTIVE DEVICE (SPD) CONFORMING TO ODOT SUPPLEMENTAL SPEC 913.

- APPROVED EQUAL LUMINAIRES:
1. HOLOPHANE ESPLANADE #ESL3 XXX 40K MVOLT SG3 QSM BK PR7 SH
 2. KING CORONET #K804-P4SA-XX-XX-SSL-8060-120V-KPL11-PE-4K-BK

PAYMENT FOR ITEM 625 LUMINAIRE, MISC.: DECORATIVE TEARDROP LUMINAIRE, SOLID STATE (LED), REFRACTIVE GLASS, 4000K, BLACK FINISH, FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE AT THE CONTRACT EACH BID PRICE AND SHALL INCLUDE ALL LABOR, MATERIAL, AND EQUIPMENT REQUIRED TO COMPLETE THIS ITEM OF WORK.

ITEM 625 LUMINAIRE, MISC.: DECORATIVE PEDESTRIAN TEARDROP LUMINAIRE, SOLID STATE (LED), REFRACTIVE GLASS, 4000K, BLACK FINISH

THIS ITEM CONSISTS OF SUPPLYING AND INSTALLING A DECORATIVE PEDESTRIAN TEARDROP-STYLE LED LUMINAIRE INCLUDING ALL WIRING, CONNECTIONS, GROUNDING HARDWARE, MATERIALS, AND EQUIPMENT NECESSARY.

LUMINAIRES SHALL BE HOLOPHANE PEDESTRIAN TEARDROP LED AS LISTED IN THE LUMINAIRE SCHEDULE OR APPROVED EQUAL. LUMINAIRES SHALL HAVE A BLACK FINISH PER ODOT SS 916. LUMINAIRE COLOR SHALL MATCH THE POLE.

THIS ITEM CONSISTS OF A BASEFITTER, GLASS GLOBE AND A ROUNDED TOP WITH NO DECORATIVE FEATURES SUCH AS FINIAL, CROWN, BAND OR RIBS.

PROVIDE A LUMINAIRE WITH 3G VIBRATION RATING. PROTECT EACH LUMINAIRE USING A SURGE PROTECTIVE DEVICE (SPD) CONFORMING TO ODOT SUPPLEMENTAL SPEC 913.

- APPROVED EQUAL LUMINAIRES:
1. HOLOPHANE ESPLANADE #ESPL2 P30 40K MVOLT QSM BKSG4 PR7 SH
 2. KING CORONET #K704N-P4SA-II-40-SSL-120V-7030-KPL11-PE-4K-BK

PAYMENT FOR ITEM 625 LUMINAIRE, MISC.: DECORATIVE PEDESTRIAN TEARDROP LUMINAIRE, SOLID STATE (LED), REFRACTIVE GLASS, 4000K, BLACK FINISH, FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE AT THE CONTRACT EACH BID PRICE AND SHALL INCLUDE ALL LABOR, MATERIAL, AND EQUIPMENT REQUIRED TO COMPLETE THIS ITEM OF WORK.

ITEM 625 POWER SERVICE, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF ODOT SPECIFICATIONS 625 AND 725 AND SCD HL-40.20, THE FOLLOWING REQUIREMENTS SHALL APPLY:

CONTRACTOR SHALL INSTALL A PAD MOUNTED ENCLOSED POWER SERVICE PER ODOT STD. CONSTRUCTION DWG. HL-40.20. THE PAD MOUNTED POWER SERVICE CABINET SHALL HAVE A NATURAL STAINLESS STEEL FINISH AND INCLUDE A 30" RECTANGULAR CONCRETE WORK PAD.

AMERICAN ELECTRIC POWER (AEP) IS THE ELECTRICAL POWER SERVICE PROVIDER. ALL CONNECTIONS TO THE POWER SYSTEM SHALL BE COORDINATED WITH THE VILLAGE, ENGINEER, AND AEP. THE INCOMING POWER SERVICE SHALL BE RUN THROUGH THE CONCRETE WORK PAD TO CONNECT TO THE POWER DISCONNECT AND METER BASE AS SHOWN IN DETAIL.

PS #1: PAD MOUNTED (SC-100) - STA. 10+17.86, 26.57' LT

THE VOLTAGE SUPPLIED SHALL BE NOMINALLY 120/240 VOLTS (120V FOR FUTURE OUTLETS AND 240V FOR LUMINAIRES) THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY NECESSARY PERMITS, INSPECTIONS AND THE PAYING OF ALL FEES.

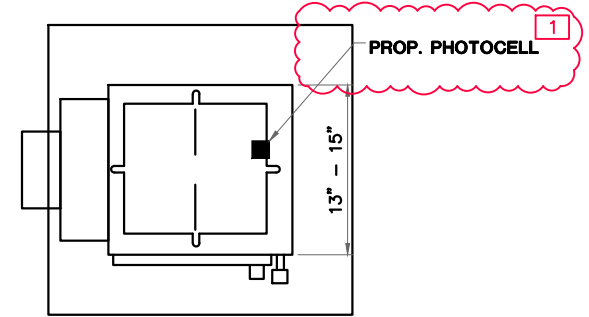
PAYMENT FOR ITEM 625 POWER SERVICE, AS PER PLAN, FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE AT THE CONTRACT EACH BID PRICE AND SHALL INCLUDE ALL LABOR, MATERIAL AND EQUIPMENT REQUIRED TO COMPLETE THIS ITEM OF WORK.

ITEM 632 SERVICE CABLE, MISC.: 1/0 AWG., 600 VOLTS [1]

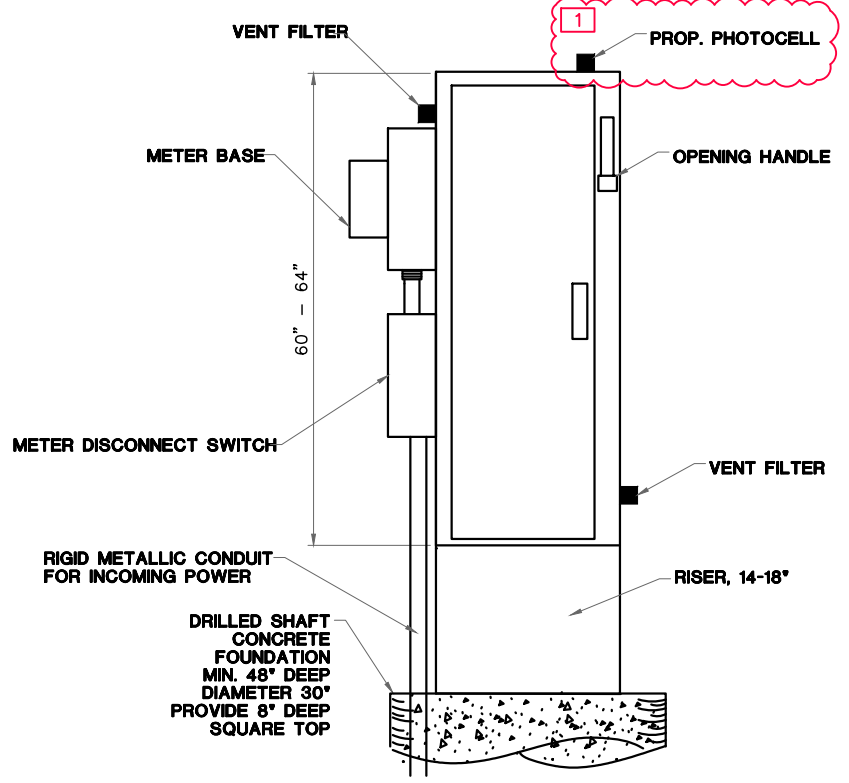
IN ADDITION TO THE REQUIREMENTS OF ODOT SPECIFICATIONS 632 AND 732, THE FOLLOWING REQUIREMENTS SHALL APPLY:

THE CONTRACTOR SHALL SUPPLY 3 CONDUCTOR NO. 1/0 AWG. SERVICE CABLE AT THE POWER SERVICE LOCATION.

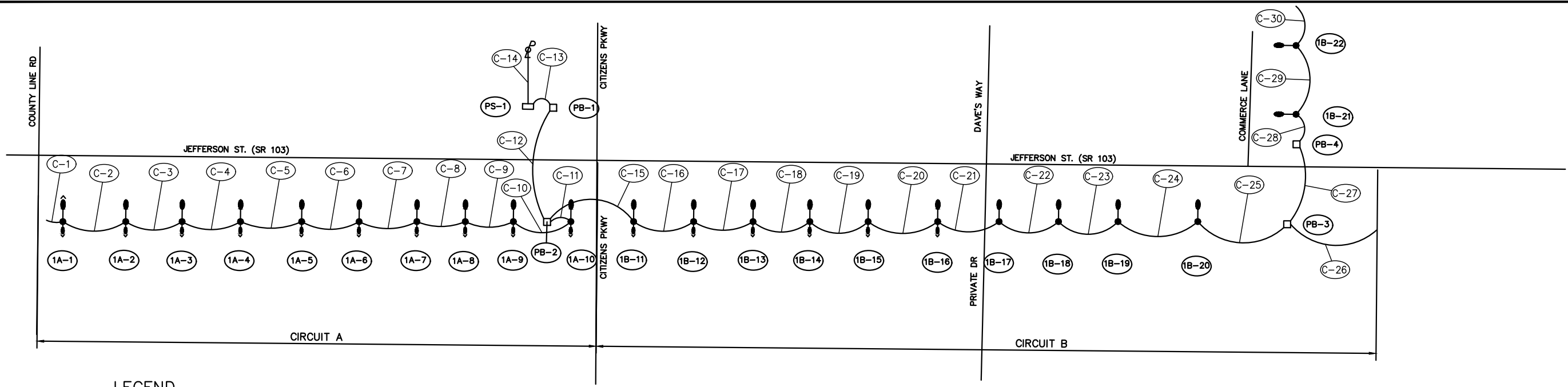
PAYMENT FOR ITEM 632 SERVICE CABLE, MISC.: 1/0 AWG., 600 VOLTS, FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE AT THE CONTRACT FOOT BID PRICE AND SHALL INCLUDE ALL LABOR, MATERIAL AND EQUIPMENT REQUIRED TO COMPLETE THIS ITEM OF WORK.



POWER SERVICE, PAD MOUNTED TOP VIEW



POWER SERVICE, PAD MOUNTED FRONT VIEW



WIRING SCHEMATIC

LEGEND

POLE IDENTIFICATION NO.
 1 = POWER SERVICE
 A = CIRCUIT
 4 = POLE NO. WITH CIRCUIT

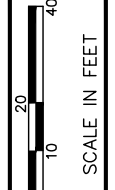
1A-4

LIGHT POLE

LUMINAIRE NOTES:

1A-1 TO 1B-15 "B" AND "C" FIXTURES
 1B-16 "A" AND "C" FIXTURES
 1B-17 TO 1B-22 "A" FIXTURE ONLY

POWER SERVICE AND CIRCUIT SCHEDULE			
POWER SERVICE No.1 --> STA. 10+17.86, 26.57' LT		WATTS	CIRCUIT BREAKER SIZE
CKT. A LUMINAIRE:	1A-1 1A-2 1A-3 1A-4 1A-5 1A-6 1A-7 1A-8 1A-9 1A-10		
TOTAL CKT. A LUMINAIRE		1260	40 AMPS
POWER SERVICE No.1 --> STA. 10+17.86, 26.57' LT			
CKT. B LUMINAIRE:	1B-11 1B-12 1B-13 1B-14 1B-15 1B-16 1B-17 1B-18 1B-19 1B-20 1B-21 1B-22		
TOTAL CKT. B LUMINAIRE		1521	40 AMPS
TOTAL		2781	



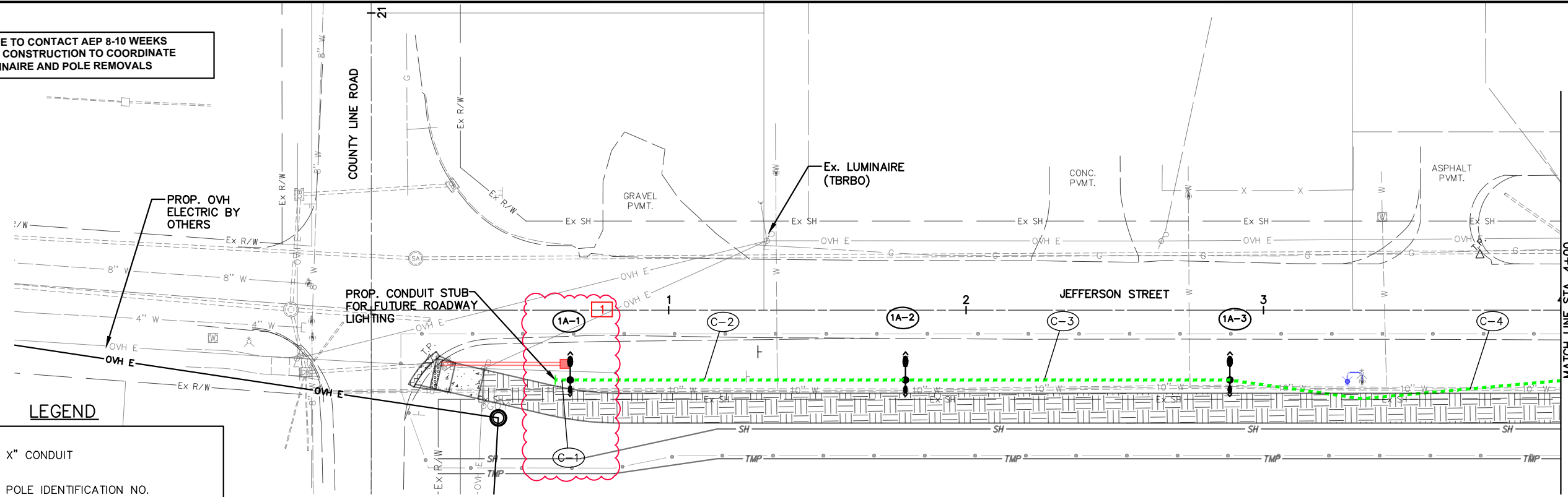
CALCULATED
BMW
CHECKED
AJH

LIGHTING PLAN SHEETS - JEFFERSON STREET
STA. -1+00 TO STA. 9+00

HAN-103-0.00

74
92

*VILLAGE TO CONTACT AEP 8-10 WEEKS
PRIOR TO CONSTRUCTION TO COORDINATE
LUMINAIRE AND POLE REMOVALS

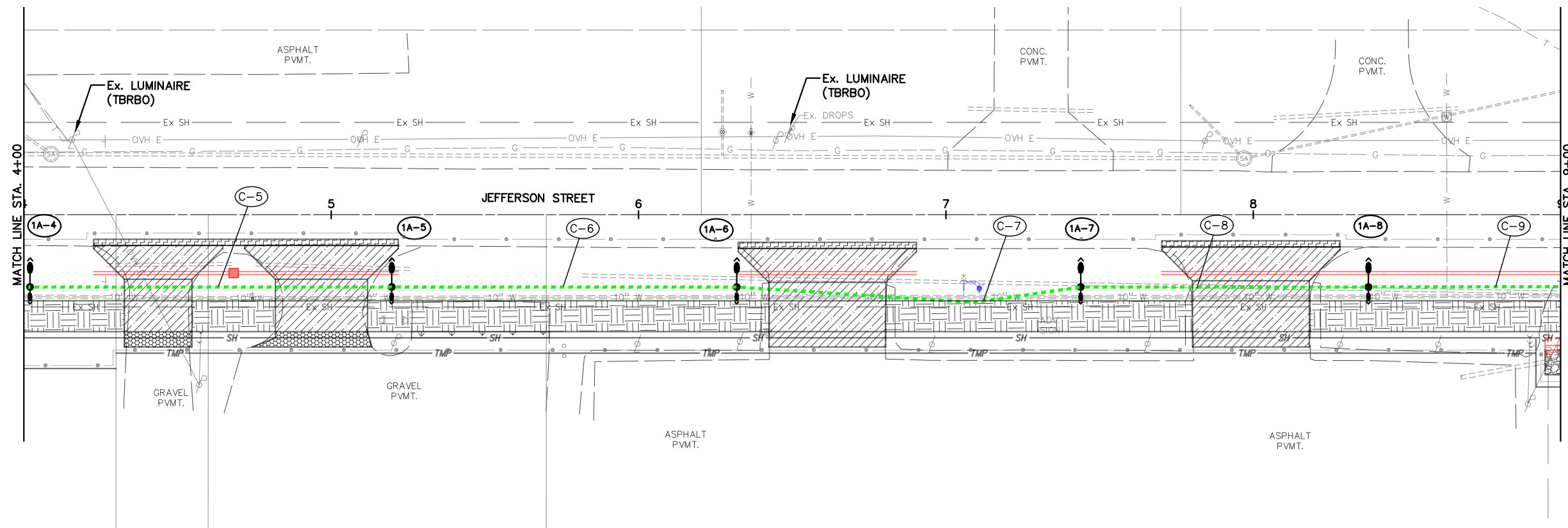


LEGEND

- X" CONDUIT
- POLE IDENTIFICATION NO.
1 = POWER SERVICE
A = CIRCUIT
4 = POLE NO. WITH CIRCUIT
- LIGHT POLE, STATION, OFFSET
(TBRBO) TO BE REMOVED BY OTHERS

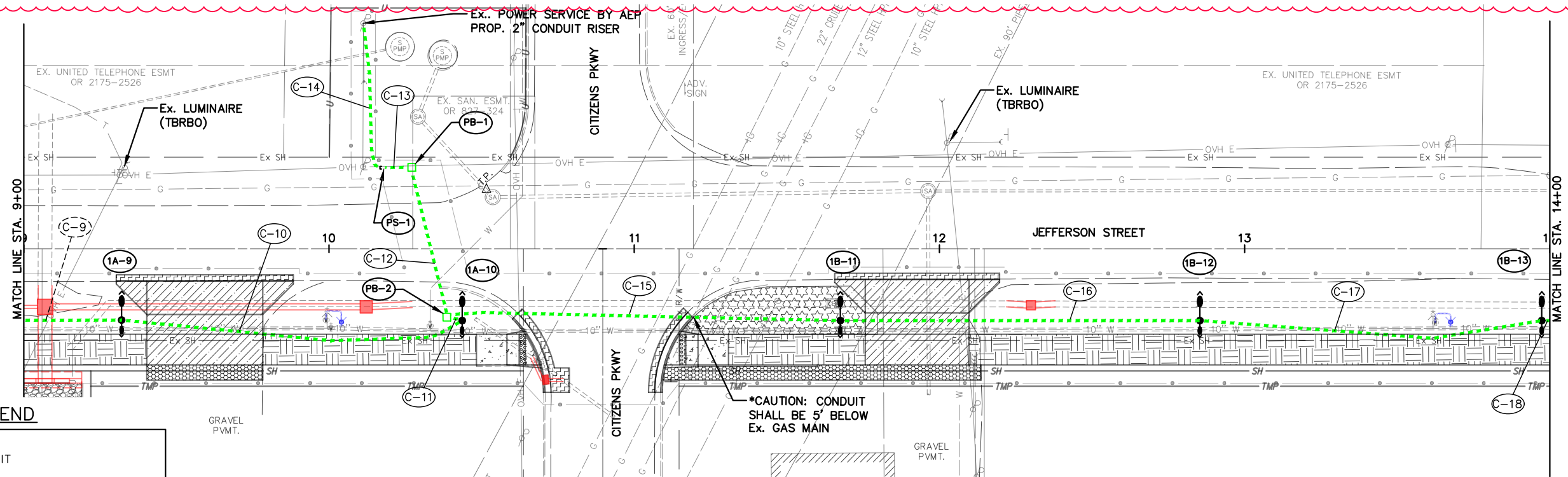
CONDUIT DETAILS

- C-1** 3" CONDUIT, 725.051
W/FUTURE PULL STRING
IN TRENCH (5')
- C-2** 3" CONDUIT, 725.051
W/(3)-No. 4 DIST. CABLE (LUMINAIRE-CKT. A)
IN TRENCH (113')
- C-3** 3" CONDUIT, 725.051
W/(3)-No. 4 DIST. CABLE (LUMINAIRE-CKT. A)
IN TRENCH (109')
- C-4** 3" CONDUIT, 725.051
W/(3)-No. 4 DIST. CABLE (LUMINAIRE-CKT. A)
IN TRENCH (114')
- C-5** 3" CONDUIT, 725.051
W/(3)-No. 4 DIST. CABLE (LUMINAIRE-CKT. A)
IN TRENCH (118')
- C-6** 3" CONDUIT, 725.051
W/(3)-No. 4 DIST. CABLE (LUMINAIRE-CKT. A)
IN TRENCH (112')
- C-7** 3" CONDUIT, 725.051
W/(3)-No. 4 DIST. CABLE (LUMINAIRE-CKT. A)
IN TRENCH (112')
- C-8** 3" CONDUIT, 725.051
W/(3)-No. 4 DIST. CABLE (LUMINAIRE-CKT. A)
IN TRENCH (94')
- C-9** 3" CONDUIT, 725.051
W/(3)-No. 4 DIST. CABLE (LUMINAIRE-CKT. A)
IN TRENCH (95')



CONDUIT DETAILS

- (C-10) 3" CONDUIT, 725.051
W/(3)-No. 4 DIST. CABLE (LUMINAIRES-CKT. A)
IN TRENCH (113')
- (C-11) 3" CONDUIT, 725.051
W/(3)-No. 4 DIST. CABLE (LUMINAIRES-CKT. A)
IN TRENCH (5')
- (C-12) 4" CONDUIT, 725.052
W/(3)-No. 4 DIST. CABLE (LUMINAIRES-CKT. A)
W/(3)-No. 4 DIST. CABLE (LUMINAIRES-CKT. B)
JACKED OR DRILLED (50')
- (C-13) 2-3" CONDUIT, 725.051
W/(3)-No. 4 DIST. CABLE (LUMINAIRES-CKT. A)
W/(3)-No. 4 DIST. CABLE (LUMINAIRES-CKT. B)
IN TRENCH (9')
- (C-14) 2" CONDUIT, 725.051
W/(3)-No. 4 SERVICE CABLE, (POWER SERVICE)
IN TRENCH (50')
- (C-15) 4" CONDUIT, 725.052
W/(3)-No. 4 DIST. CABLE (LUMINAIRES-CKT. B)
JACKED OR DRILLED (129')
- (C-16) 3" CONDUIT, 725.051
W/(3)-No. 4 DIST. CABLE (LUMINAIRES-CKT. B)
IN TRENCH (118')
- (C-17) 3" CONDUIT, 725.051
W/(3)-No. 4 DIST. CABLE (LUMINAIRES-CKT. B)
IN TRENCH (113')
- (C-18) 3" CONDUIT, 725.051
W/(3)-No. 4 DIST. CABLE (LUMINAIRES-CKT. B)
IN TRENCH (113')



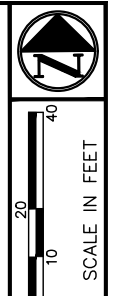
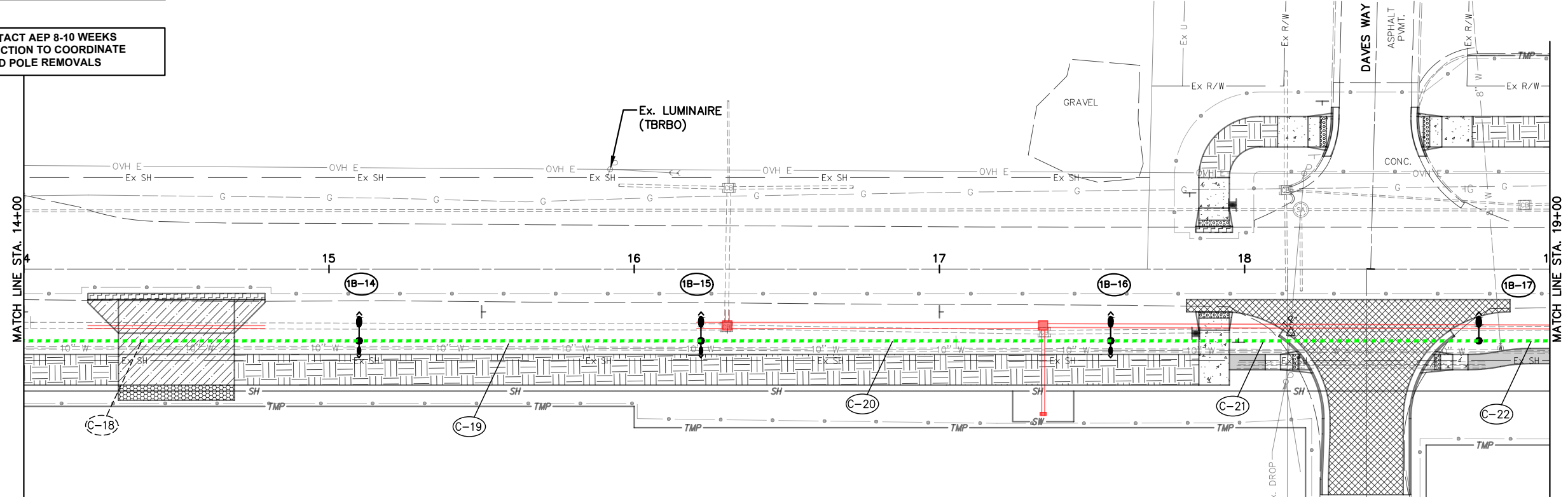
LEGEND

- - - X" CONDUIT
- (1A-4) POLE IDENTIFICATION NO.
1 = POWER SERVICE
A = CIRCUIT
4 = POLE NO. WITH CIRCUIT
- LIGHT POLE, STATION, OFFSET
(TBRBO) TO BE REMOVED BY OTHERS

*VILLAGE TO CONTACT AEP 8-10 WEEKS PRIOR TO CONSTRUCTION TO COORDINATE LUMINAIRE AND POLE REMOVALS

CONDUIT DETAILS

- (C-19) 3" CONDUIT, 725.051
W/(3)-No. 4 DIST. CABLE (LUMINAIRES-CKT. B)
IN TRENCH (112')
- (C-20) 3" CONDUIT, 725.051
W/(3)-No. 4 DIST. CABLE (LUMINAIRES-CKT. B)
IN TRENCH (134')
- (C-21) 3" CONDUIT, 725.051
W/(3)-No. 4 DIST. CABLE (LUMINAIRES-CKT. B)
IN TRENCH (121')
- (C-22) 3" CONDUIT, 725.051
W/(3)-No. 4 DIST. CABLE (LUMINAIRES-CKT. B)
IN TRENCH (116')

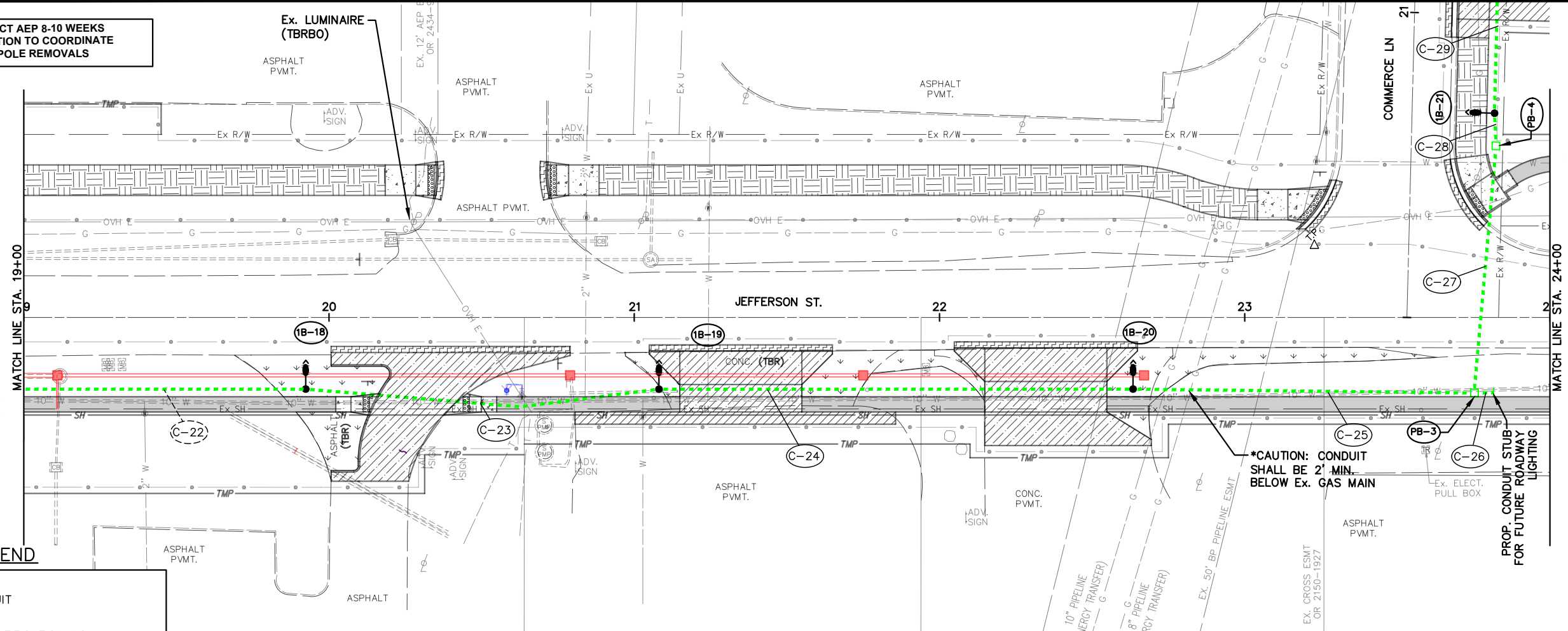


LIGHTING PLAN SHEETS - JEFFERSON STREET
STA. 9+00 TO STA. 19+00



HAN-103-0.00

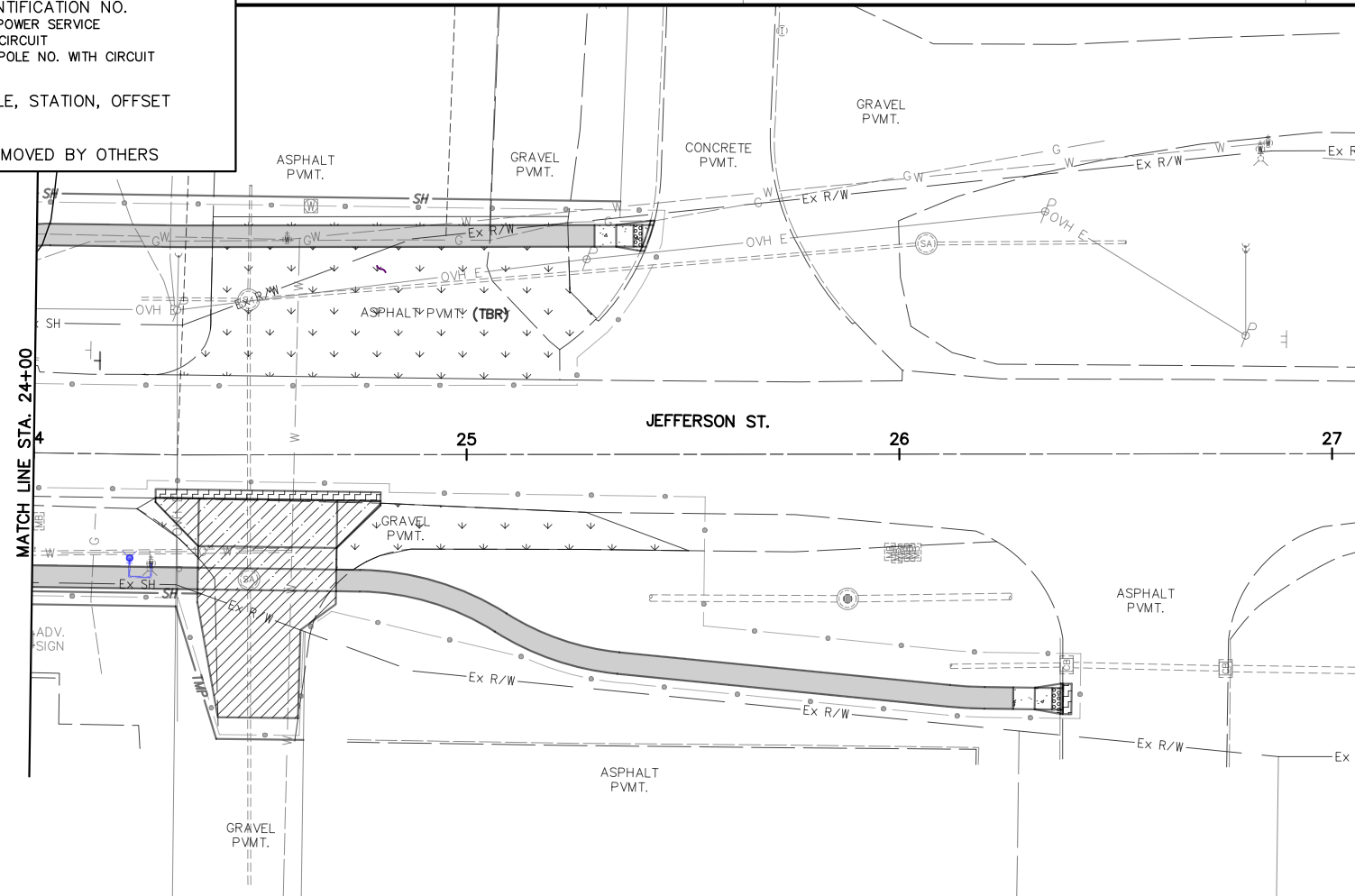
75
92

*VILLAGE TO CONTACT AEP 8-10 WEEKS PRIOR TO CONSTRUCTION TO COORDINATE LUMINAIRE AND POLE REMOVALS



LEGEND

--- X" CONDUIT
1A-4 POLE IDENTIFICATION NO.
 1 = POWER SERVICE
 A = CIRCUIT
 4 = POLE NO. WITH CIRCUIT
 LIGHT POLE, STATION, OFFSET
 (TBRBO) TO BE REMOVED BY OTHERS



CONDUIT DETAILS

<p>C-23 3" CONDUIT, 725.051 W/(3)-NO. 4 DIST. CABLE (LUMINAIRE-CKT. B) IN TRENCH (116')</p>	<p>C-24 3" CONDUIT, 725.051 W/(3)-NO. 4 DIST. CABLE (LUMINAIRE-CKT. B) IN TRENCH (155')</p>
<p>C-25 3" CONDUIT, 725.051 W/(3)-NO. 4 DIST. CABLE (LUMINAIRE-CKT. B) IN TRENCH (112')</p>	<p>C-26 3" CONDUIT, 725.051 W/ FUTURE PULL STRING IN TRENCH (5')</p>
<p>C-27 4" CONDUIT, 725.052 W/(3)-NO. 4 DIST. CABLE (LUMINAIRE-CKT. B) JACKED OR DRILLED (81')</p>	<p>C-28 3" CONDUIT, 725.051 W/(3)-NO. 4 DIST. CABLE (LUMINAIRE-CKT. B) IN TRENCH (11')</p>
<p>C-29 3" CONDUIT, 725.051 W/(3)-NO. 4 DIST. CABLE (LUMINAIRE-CKT. B) IN TRENCH (138')</p>	



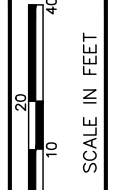
CALCULATED
BMW
CHECKED
AJH

LIGHTING PLAN SHEETS - JEFFERSON STREET
STA. 19+00 TO STA. 29+00

HAN-103-0.00

76
92

*VILLAGE TO CONTACT AEP 8-10 WEEKS
PRIOR TO CONSTRUCTION TO COORDINATE
LUMINAIRE AND POLE REMOVALS

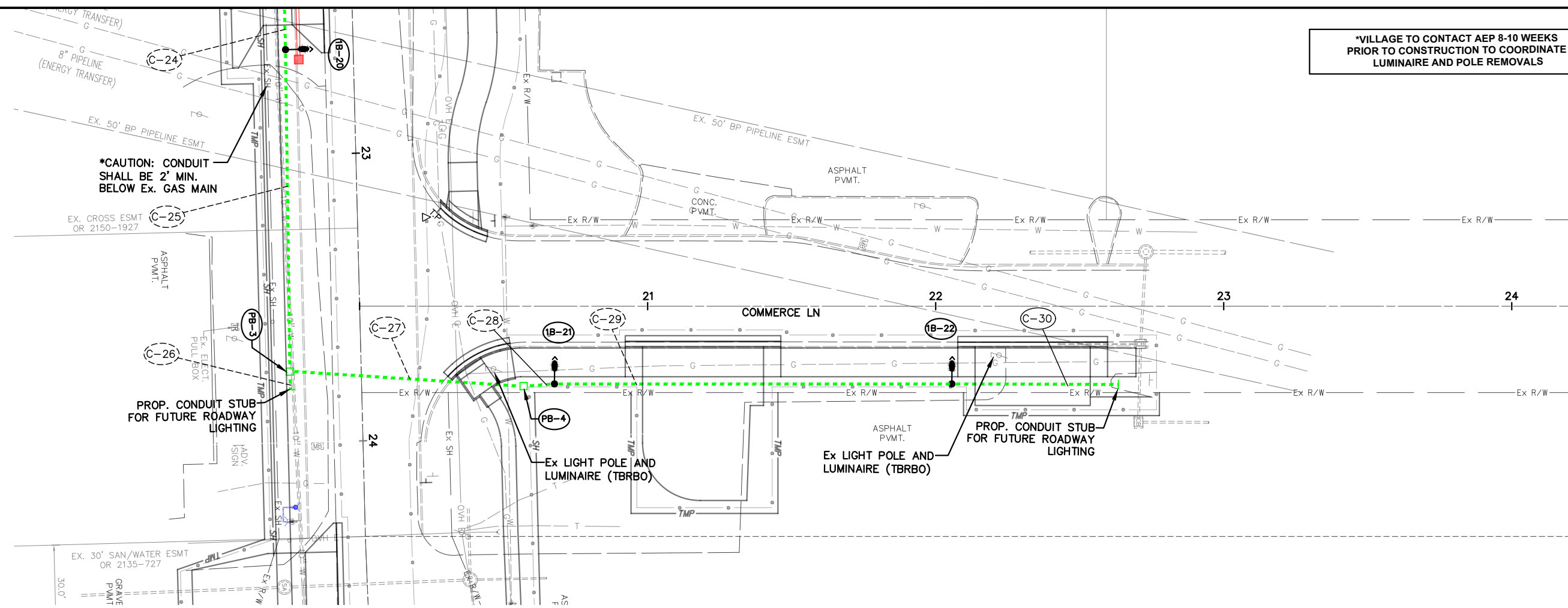


CALCULATED
BMW
CHECKED
AJH

LIGHTING PLAN SHEETS - COMMERCE LANE
STA. 19+00 TO STA. 24+00

HAN-103-0.00

77
92



LEGEND

- X" CONDUIT
- POLE IDENTIFICATION NO.
1 = POWER SERVICE
A = CIRCUIT
4 = POLE NO. WITH CIRCUIT
- LIGHT POLE, STATION, OFFSET
(TBRBO) TO BE REMOVED BY OTHERS

CONDUIT DETAILS

C-30 3" CONDUIT, 725.051
W/ FUTURE PULL STRING
IN TRENCH (58')