

CITY OF MERCER ISLAND

KING COUNTY WASHINGTON



ROADSIDE SHOULDER IMPROVEMENTS

WEST MERCER WAY

PHASE 4

SEASHORE DRIVE TO AVALON DRIVE

PROJECT NO. 23-36

BID DOCUMENT

DECEMBER 2023

SHEET INDEX

SHEET NUMBER	SHEET TITLE
1	COVER
2	NOTES AND LEGENDS
3	TYPICAL SECTIONS
4-14	SHOULDER WIDENING AND UTILITY IMPROVEMENTS
15-20	CHANNELIZATION & SIGNAGE
21-24	DETAILS

PROJECT LOCATION

SURVEY INFORMATION

HORIZONTAL DATUM

HORIZONTAL DATUM: NAD 83/91, WASHINGTON COORDINATE SYSTEM NORTH ZONE. BASED ON CONVENTIONAL TRAVERSE THROUGH CITY OF MERCER ISLAND CONTROL POINTS:

VERTICAL DATUM

VERTICAL DATUM: NAVD 88 BASED ON CONVENTIONAL TRAVERSE THROUGH CITY OF MERCER ISLAND CONTROL POINTS:

DESIGNATION: 4332
 MONUMENT ID: 641Q-4.166
 DESCRIPTION: FOUND TACK IN 1" LEAD DOWN 1.1' IN CONCRETE WITH STANDARD CASE IN THE CENTERLINE OF 81ST AVE SE AT THE INTERSECTION WITH W MERCER WAY.

N=196212.46
 E=1294736.32
 ELEV.=140.59'

DESIGNATION: 4338
 MONUMENT ID: 641Q-4.167

DESCRIPTION: FOUND 3"x3" CONCRETE MONUMENT WITH TACK IN 1" LEAD DOWN 0.6' IN STANDARD CASE IN THE CENTERLINE OF 81ST AVE SE 100 FT NE OF THE INTERSECTION WITH W MERCER WAY.

N=196305.45
 E=1294791.63
 ELEV.=154.53'

DESIGNATION: 1521
 MONUMENT ID: 641Q-35.180

DESCRIPTION: FOUND 1" BRASS DISC IN CONCRETE DOWN 0.7' IN STANDARD CASE IN PRIVATE ROAD 7400 BLOCK OF W MERCER WAY.

N=198453.15
 E=1293136.14
 ELEV.=236.47'

ABBREVIATIONS

AC	ASBESTOS CEMENT	JB	JUNCTION BOX
ASP	ASPHALT	LF	LINEAR FEET
AVE	AVENUE	LT	LEFT
BM	BENCH MARK	MAX	MAXIMUM
CB	CATCH BASIN	MB	MAILBOX
C&G	CURB & GUTTER	MH	MANHOLE
CL	CENTER LINE	MIC	MONUMENT IN CASE
CMP	CORRUGATED METAL PIPE	MIN	MINIMUM
CONC	CONCRETE	MON	MONUMENT
CPE	CORRUGATED POLYETHYLENE	PG	PROPOSED GRADE
CU	COPPER	PL	PLASTIC
CULV	CULVERT	PV	POWER VAULT
DI	DUCTILE IRON	PVC	POLYVINYL CHLORIDE
DIA	DIAMETER	PVT	PRIVATE
DWY	DRIVEWAY	RT	RIGHT
ELEV	ELEVATION	R/W	RIGHT-OF-WAY
EOP	EDGE OF PAVEMENT	SD	STORM DRAIN
EX	EXISTING	SDMH	STORM DRAIN MANHOLE
FH	FIRE HYDRANT	SHT	SHEET
FL	FLOW LINE	SS	SANITARY SEWER
FT	FEET	SSMH	SANITARY SEWER MANHOLE
G	GAS	ST	STREET
GI	GALVANIZED IRON	STA	STATION
GV	GAS VALVE	TEL	TELEPHONE
HMA	HOT MIX ASPHALT	TYP	TYPICAL
IE	INVERT ELEVATION	W	WATER
IN	INCH	WM	WATER METER
		WS	WATER SERVICE
		WV	WATER VALVE

SURVEY LEGEND

	WATER VALVE		RIGHT-OF-WAY LINES FROM GIS DATA
	HYDRANT		LOT LINES FROM GIS DATA
	WATER METER		DITCH LINE
	MANHOLES (SS/SD)		FLOW LINE
	CB		WATER LINE
	POWER/UTILITY POLE		SANITARY SEWER LINE
	GUY ANCHOR		STORM DRAIN LINE
	POWER TRANSFORMER		GAS LINE
	POWER/TELEPHONE VAULT		OVERHEAD UTILITY LINES
	POWER METER		CHANNELIZATION BUTTONS
	TELEPHONE/TV RISER		FOGLINE BUTTONS
	GAS VALVE		
	GAS METER		
	STREET LIGHT		
	LUMINAIRE		
	SPOT ELEVATION		
	SIGN		
	MAILBOX		
	ROCKERY		
	CONIFEROUS TREE		
	DECIDUOUS TREE		
	FOUND CASSED MONUMENT		
	SET MAGNETIC NAIL W/ WASHER		
	SET 5/8" IRON REBAR W/ PLASTIC CAP STAMPED L.S. # UNLESS OTHERWISE STATED.		

DESIGN LEGEND

	HMA FOR PAVING CL 1/2" PG 58H-22 4" COMPACTED DEPTH		CB TYPE 1 OR CONC INLET PER PLAN
	HMA FOR PAVING CL 1/2" PG 58H-22 8" COMPACTED DEPTH		FIRE HYDRANT
	DRIVEWAY		WATER VALVE BOX
	HMA FOR PAVING CL 1/2" PG 58H-22 4" COMPACTED DEPTH		GAS VALVE BOX
	QUARRY SPALLS		WATER METER BOX
	SHOULDER RESTORATION (CSTC)		SEWER MH RING AND COVER
	SAWCUT LINE, FULL DEPTH		SIGN
	HMA THICKENED EDGE		SPILLWAY INLET/OUTLET
	HMA BERM		FLOW DIRECTION
	APPROX LIMIT OF CONSTRUCTION		MAIL BOX
	SD STORM DRAIN PIPE		MONUMENT CASE
	PIPE REMOVAL		
	SWALE FLOW LINE		

GENERAL WATER NOTES

1. TYPICAL TRENCH SECTION PER MI STD DTL W-3 ON SHT 21.

GENERAL CHANNELIZATION AND SIGNAGE NOTES

1. REMOVE PAVEMENT MARKINGS WITHIN PROJECT LIMITS WHERE IDENTIFIED ON THE PLANS UNLESS DIRECTED OTHERWISE BY ENGINEER.
2. ALL PAVEMENT MARKING MATERIAL SHALL CONFORM TO THE "STATE OF WASHINGTON STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION," LATEST EDITION, UNLESS OTHERWISE SPECIFIED BY THE SPECIAL PROVISIONS.
3. PLACE ONE BLUE TYPE 2 RPM AT EACH FIRE HYDRANT.

GENERAL NOTES

1. STATIONS, OFFSETS, AND ELEVATIONS ARE APPROXIMATE AND FOR REFERENCE ONLY. THE PLANS HAVE BEEN SET UP SO SURVEY CONTROL IS NOT REQUIRED. FIELD ADJUSTMENTS DURING CONSTRUCTION SHOULD BE EXPECTED.
2. WMW CL ALIGNMENT MATCHES EX CL CHANNELIZATION.
3. TRAFFIC CONTROL SIGNS SHALL CONFORM TO M.U.T.C.D.
4. UTILITIES THAT ARE NOT ABANDONED SHALL BE SUPPORTED AND MAINTAINED DURING CONSTRUCTION.
5. EXISTING UTILITY LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITY ELEVATIONS AND REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO CONSTRUCTION.
 - 6.1. GAS AND WATER MAINS HAVE BEEN ASSUMED TO BE 3' DEEP
 - 6.2. GAS AND WATER SERVICES HAVE BEEN ASSUMED TO BE 1.5' DEEP WHERE CROSSING SWALE FLOW LINES
 - 6.3. SEWER MAINS AND SERVICES HAVE BEEN ASSUMED TO BE BELOW NEW UTILITIES
7. CONTRACTOR SHALL COORDINATE WITH UTILITY PROVIDERS FOR UTILITY RELOCATIONS.
8. STATIONS AND OFFSETS OF EXISTING UTILITIES ARE TO CENTER OF UTILITY CASTING OR COVER.
9. ADJUST ALL SURFACE UTILITIES WITHIN PAVING LIMITS TO GRADE UNLESS NOTED OTHERWISE OR DIRECTED BY ENGINEER.
10. DRIVEWAY ACCESS MUST BE MAINTAINED AT ALL TIMES UNLESS OTHERWISE AGREED TO BY THE PROPERTY OWNER.
11. CALL ONE CALL 48 HOURS BEFORE YOU DIG FOR UTILITY LOCATES: 1-800-424-5555 OR 811
12. CITY OF MERCER ISLAND SHALL FURNISH NEW MANHOLE RING AND COVERS, WATER VALVE BOXES, WATER METER BOXES, AND WATER METERS.
13. CONTRACTOR SHALL FURNISH NEW CATCH BASIN FRAMES, GRATES, AND SOLID LIDS.
14. WHERE A NEW PIPE CLEARS AN EXISTING OR NEW UTILITY BY 6 INCHES OR LESS, POLYETHYLENE PLASTIC FOAM SHALL BE PLACED AS A CUSHION BETWEEN THE UTILITIES.
15. SEAL ALL NEW HMA-TO-EX ASPH PAVING JOINTS WITH LIQUID ASPHALT AND COAT WITH SAND AFTER COMPLETION OF HMA PAVING.
16. STORM DRAINAGE AND SANITARY SEWER STRUCTURES SHALL BE CLEANED AT PROJECT COMPLETION.

GENERAL TESC NOTES

1. CONTRACTOR SHALL INSTALL INLET PROTECTION PER DTL 1/23 AT ALL EXISTING AND NEW CATCH BASINS WITHIN THE PROJECT LIMITS AS WELL AS DOWNSTREAM OF THE WORK AREA, AS DIRECTED BY THE ENGINEER.
2. THE TESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED PRIOR TO OR IN CONJUNCTION WITH ALL CLEARING AND GRADING SO AS TO ENSURE THAT THE TRANSPORT OF SEDIMENT TO SURFACE WATERS, DRAINAGE SYSTEMS, AND ADJACENT PROPERTIES IS MINIMIZED.
3. THE TESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE TESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND MODIFIED TO ACCOUNT FOR CHANGING SITE CONDITIONS (E.G. ADDITIONAL COVER MEASURES, ADDITIONAL SUMP PUMPS, RELOCATION OF DITCHES AND SILT FENCES, PERIMETER PROTECTION ETC.).

GENERAL SITE PREPARATION NOTES

1. REMOVAL LIMITS ARE APPROXIMATE. LIMITS SHALL BE STAKED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER. TREES WITHIN THE CLEARING LIMITS SHALL BE REMOVED AFTER APPROVAL BY THE ENGINEER.
2. PROTECT ALL PLANT MATERIAL OUTSIDE OF SURFACE REMOVAL LIMITS.
3. PROTECT ALL EXISTING IRRIGATION SYSTEMS OUTSIDE OF SURFACE REMOVAL LIMITS.
4. SEE CHANNELIZATION AND SIGNING PLANS FOR SIGN REMOVAL AND RELOCATION.

GENERAL STORM DRAINAGE NOTES

1. STRUCTURE AND PIPE INFORMATION SHOWN ON THE PLANS ARE APPROXIMATE AND MAY BE FIELD ADJUSTED AS DIRECTED BY THE ENGINEER FOR FIELD CONDITIONS AND CONFLICTS DISCOVERED DURING CONSTRUCTION.
2. RIM ELEVATIONS ARE FOR BIDDING PURPOSES. CONTRACTOR SHALL FIELD ADJUST RIM ELEVATIONS TO ENSURE PROPER DRAINAGE.
3. TYPICAL TRENCH SECTION PER MI STD DTL W-3 ON SHT 21.
4. WITH PRIOR APPROVAL BY THE ENGINEER, CONCRETE INLET MAY BE SUBSTITUTED FOR A CATCH BASIN TYPE 1 TO AVOID CONFLICTS.
5. NEW TYPE 1 CATCH BASINS SHALL HAVE AN 18"x24" FRAME AND VANED GRATE UNLESS NOTED OTHERWISE.

File: Z:\2023 Projects\2009 WMW Ph. 4\Plans\2009_P-NOTE.dwg ID: cory Date: 01-Dec-23 11:47:26am



REV. NO.	DATE	DESCRIPTION

BID DOCUMENT

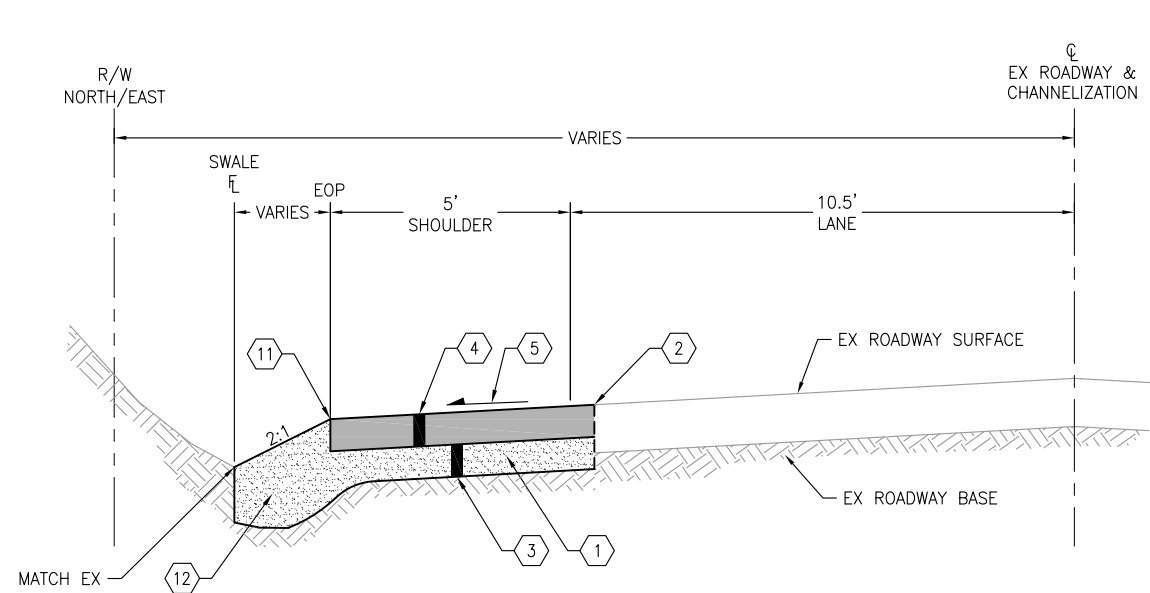


DATE	12/01/23
DESIGN	CFG
DRAFT	CFG
CHECK	CEM

CITY OF MERCER ISLAND
ROADSIDE SHOULDER IMPROVEMENTS
WEST MERCER WAY PHASE 4

NOTES AND LEGENDS

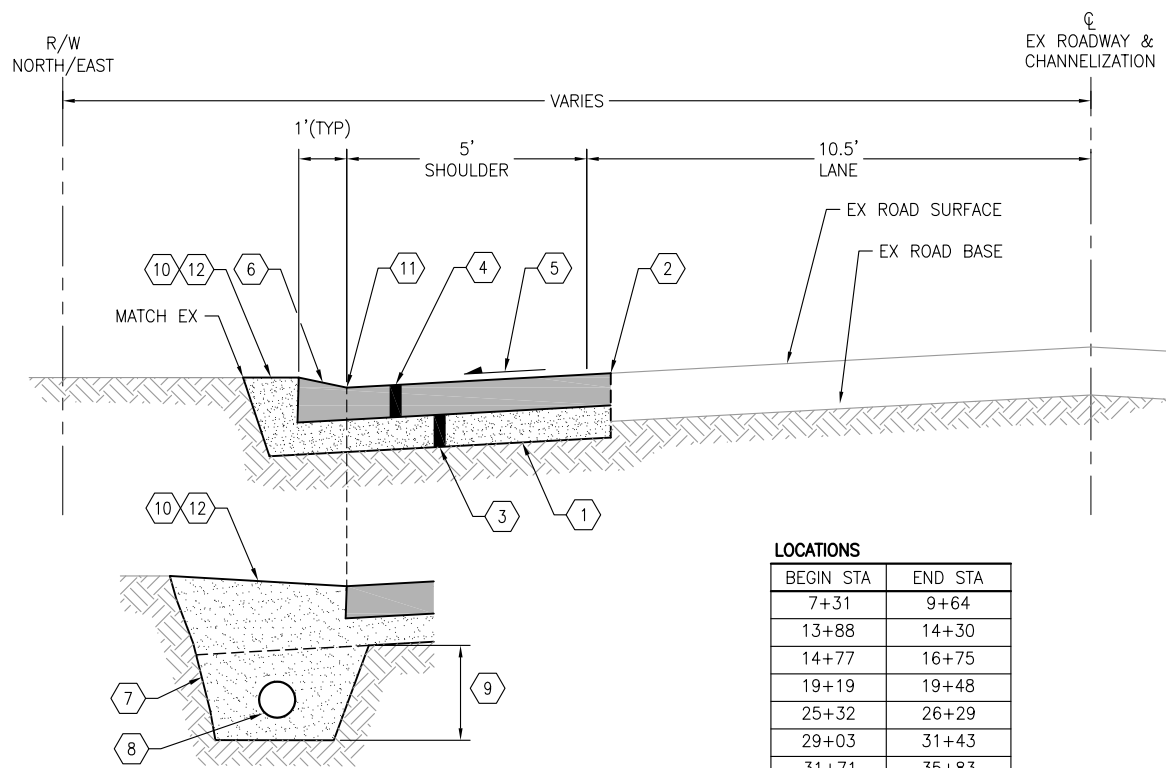
PROJECT	23-36
SCALE	NONE
SHEET	2 OF 24



LOCATIONS	
BEGIN STA	END STA
14+30	14+77
26+29	29+03
35+83	36+16

TYPICAL SECTION A

NTS



LOCATIONS	
BEGIN STA	END STA
7+31	9+64
13+88	14+30
14+77	16+75
19+19	19+48
25+32	26+29
29+03	31+43
31+71	35+83

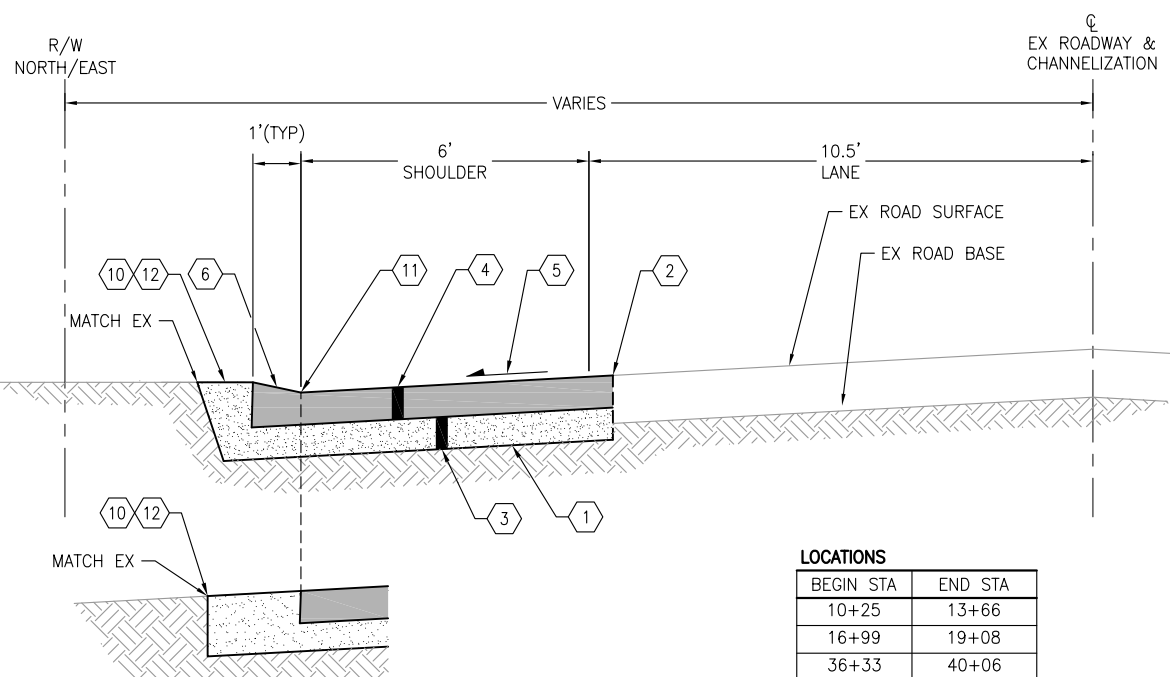
TYPICAL SECTION B

NTS

NOTE:
NEW OR EX STORM DRAIN LOCATIONS PER PLAN

SECTION NOTES

- 1 CLEAR AND GRUB TO REMOVE ALL TOPSOIL AND VEGETATION AND EXCAVATE TO FIRM NATIVE SOILS
- 2 SAWCUT, FULL DEPTH, 1'(TYP) FROM EOP OR AS FIELD MARKED
- 3 4" CSTC (OR CSBC). PLACE AND COMPACT ADDITIONAL CSTC (OR CSBC) AS NECESSARY TO ESTABLISH SUBGRADE
- 4 4" HMA FOR PAVING CL 1/2" PG 58H-22 PLACED AND COMPACTED IN 2" MAX LIFTS
- 5 MATCH EX ROADWAY CROSS-SLOPE UNLESS NOTED OTHERWISE
- 6 HMA THICKENED EDGE PER DTL 7/23
- 7 CLEAR AND GRUB SWALE FOR STORM DRAIN INSTALLATION OR BACKFILLING PER PLANS
- 8 NEW STORM DRAIN SIZE, MATERIAL, MIN SLOPE, AND MIN COVER PER PLAN OR AS FIELD DETERMINED WITH ENGINEER
- 9 TYPICAL TRENCH SECTION PER MI STD PLAN W-3 ON SHT 21. BACKFILL SWALE WITH CSTC (OR CSBC)
- 10 EDGE RESTORATION PER DTL 3/24
- 11 PROFILE POINT. SEE SHEETS 4-14 FOR ELEVATIONS
- 12 COMPACTED CSTC (OR CSBC)



LOCATIONS	
BEGIN STA	END STA
10+25	13+66
16+99	19+08
36+33	40+06

TYPICAL SECTION C

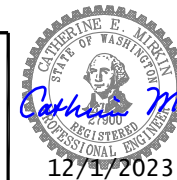
NTS

File: Z:\2023 Projects\2009 MW Ph. 4\Plans\2009_P-TSEC.dwg ID: cory Date: 01-Dec-23 11:47:38am



REV. NO.	DATE	DESCRIPTION

BID DOCUMENT

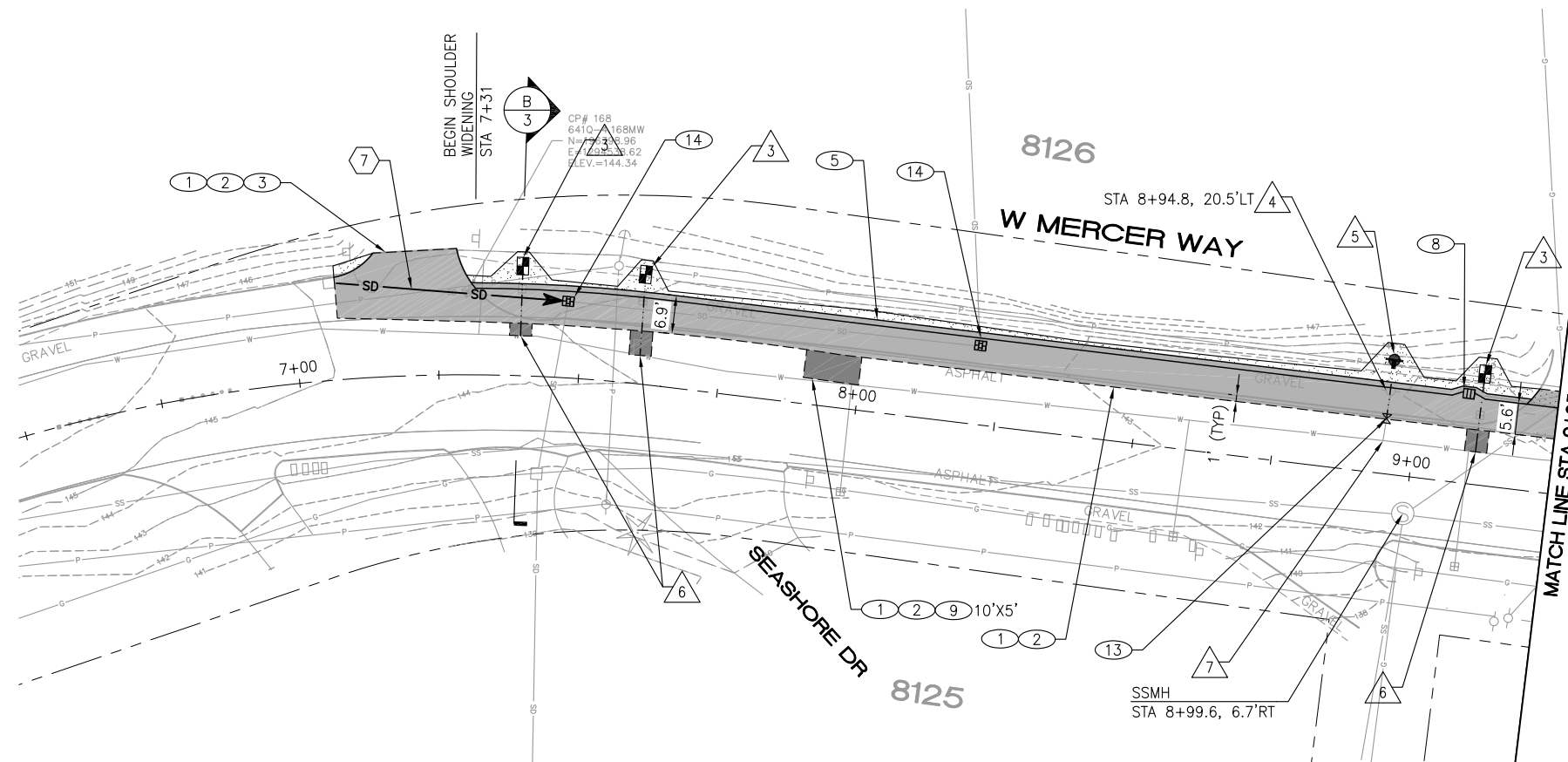


DATE	12/01/23
DESIGN	CFG
DRAFT	CFG
CHECK	CEM

CITY OF MERCER ISLAND
ROADSIDE SHOULDER IMPROVEMENTS
WEST MERCER WAY PHASE 4

TYPICAL SECTIONS

PROJECT	23-36
SCALE	NTS
SHEET	3 OF 24



CONSTRUCTION NOTES

SCHEDULE A – SHOULDER WIDENING

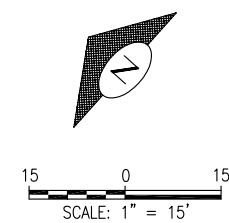
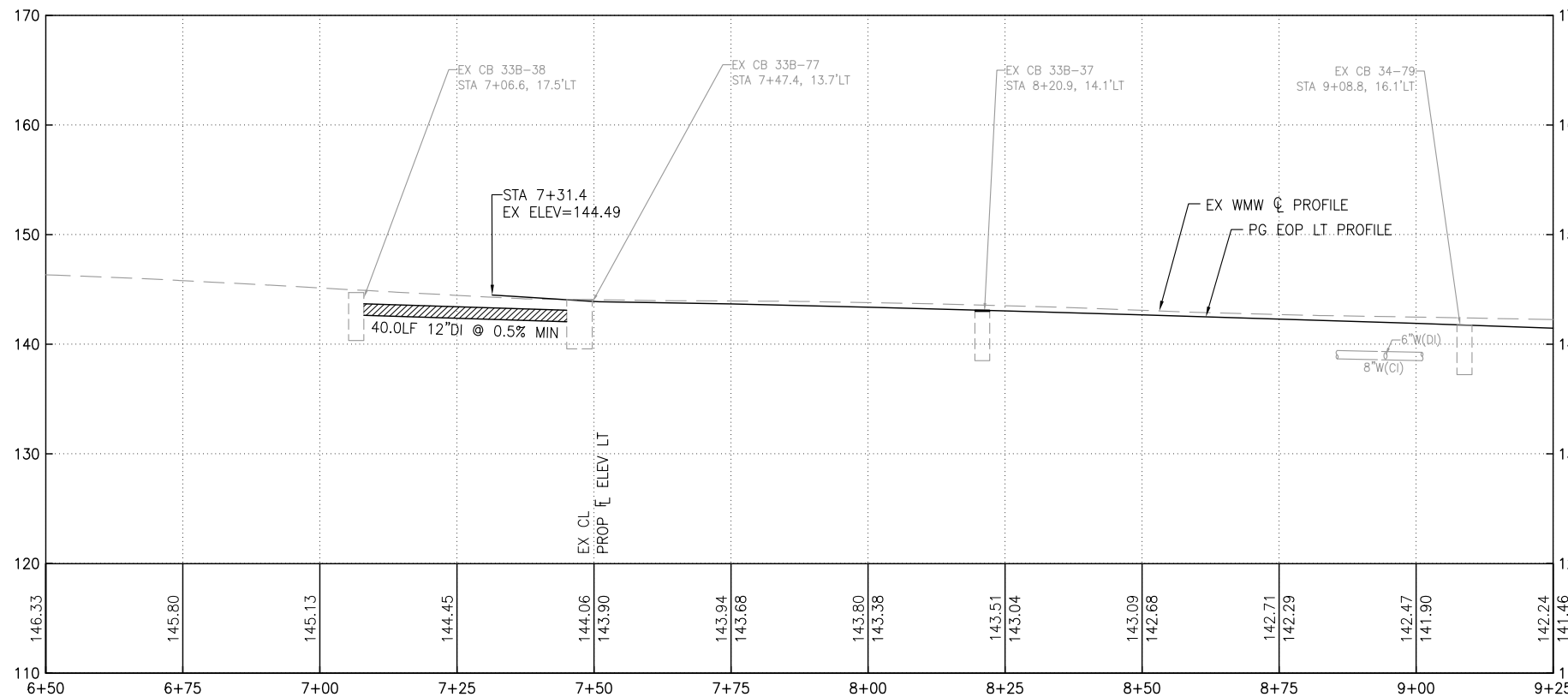
- ① SAWCUT, FULL DEPTH, AS FIELD MARKED
- ② REMOVE ASPH PAVEMENT
- ③ REMOVE CEM CONC PAVEMENT
- ⑤ PAVE HMA THICKENED EDGE PER DTL 7/23
- ⑧ ADJUST CB TO GRADE PER DTL 8/23
- ⑨ REPAIR PAVEMENT AS FIELD MARKED PER DTL 4/23
- ⑬ ADJUST VALVE BOX TO GRADE PER DTL 8/23
- ⑭ FURNISH AND INSTALL NEW 18"x24" CB FRAME AND VANED GRATE AND ADJUST TO GRADE PER DTL 8/23

SCHEDULE B – DRAINAGE IMPROVEMENTS

- ⑦ REPLACE EX 12" CMP W/ APPROX 40 LF OF 12" DI PIPE FROM EX CB 33B-38 TO EX CB 33B-77 AND CONNECT TO STRUCTURES. MATCH EX IE OR AS DIRECTED BY ENGINEER

SCHEDULE C – WATER IMPROVEMENTS

- ③ INSTALL/RELOCATE 1" WATER SERVICE PER MI STD DTL W-13 ON SHEET 22. DISCONNECT AND REMOVE EX WATER SERVICE. INSTALL NEW METER, SETTER, AND BOX BEHIND NEW PAVED SHOULDER AS DIRECTED BY ENGINEER. RECONNECT TO EX SERVICE
- ④ REMOVE EX FIRE HYDRANT ASSEMBLY TO EX GATE VALVE AND SALVAGE TO CITY SHOP
- ⑤ INSTALL NEW HYDRANT PER MI STD DTL W-24A ON SHEET 21 AND CONNECT TO EX GATE VALVE. IF EX TEE AT MAIN IS 4", REMOVE EX FIRE HYDRANT ASSEMBLY AND VALVE FROM EX TEE AND INSTALL NEW FIRE HYDRANT ON EX 8" CI MAIN USING TAPPING SLEEVE. FIELD DETERMINE HYDRANT LOCATION AS DIRECTED BY ENGINEER
- ⑥ POT HOLE TO EXPOSE THE WATER SERVICE ON THE CITY SIDE OF THE METER SO THE ENGINEER MAY VERIFY MATERIAL TYPE AND THE CONTRACTOR MAY VERIFY NECESSARY PARTS FOR REPLACEMENT AND TO EXPOSE THE EX SERVICE TAP AT THE MAIN SO THE ENGINEER MAY VERIFY IF EX TAP MAY BE REUSED OR IF A NEW TAP IS REQUIRED
- ⑦ POT HOLE TO EXPOSE THE EX FIRE HYDRANT CONNECTION TAP SO THE ENGINEER MAY VERIFY SIZE OF TEE AND CONNECTION AND THE CONTRACTOR MAY VERIFY NECESSARY PARTS FOR REPLACEMENT



File: Z:\2023 Projects\23009 WMW Ph. 4\Plans\23009_P-Road.dwg ID: cory Date: 01-Dec-23 11:48:57am



CM DESIGN GROUP
 1318 EAST PIKE ST
 SEATTLE, WA 98122
 (206) 659-0612

REV. NO.	DATE	DESCRIPTION

BID DOCUMENT

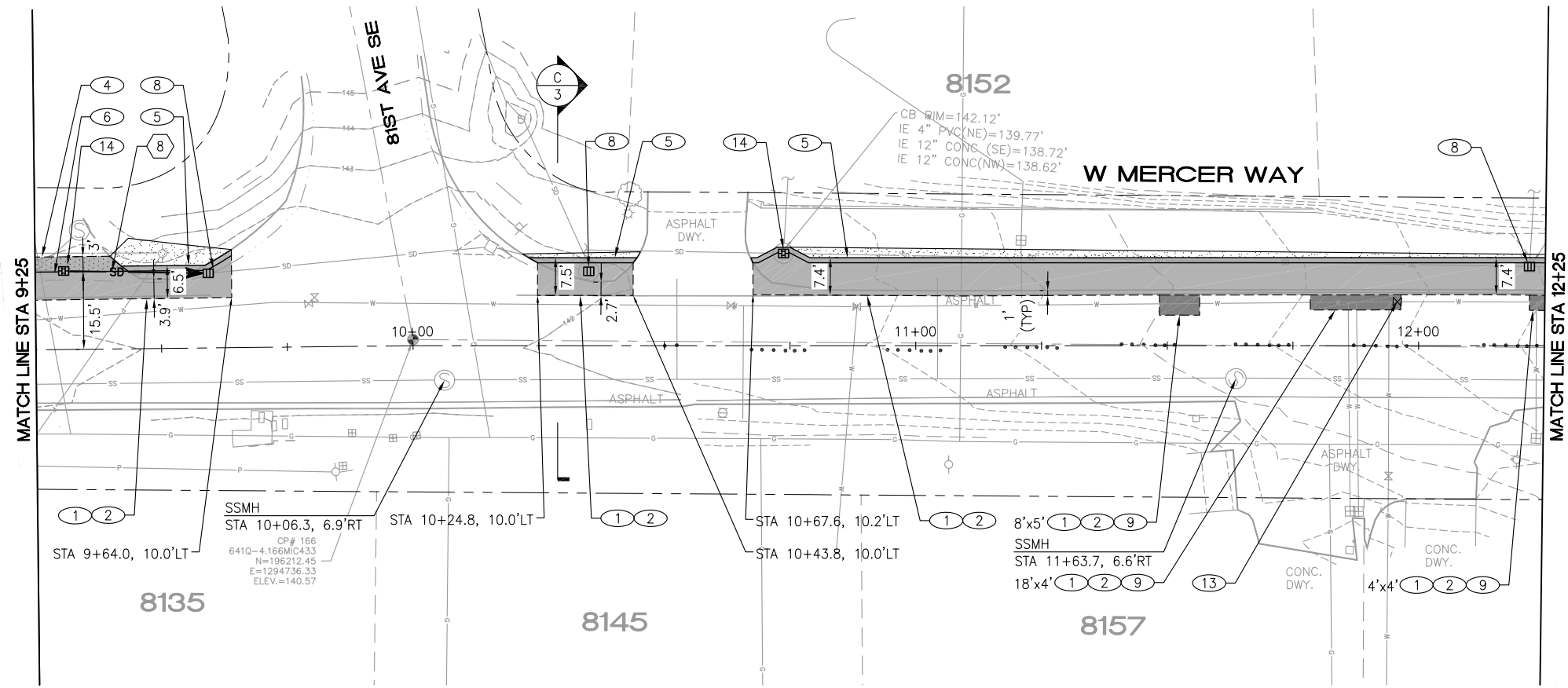


DATE	12/01/23
DESIGN	CFG
DRAFT	CFG
CHECK	CEM

CITY OF MERCER ISLAND
ROADSIDE SHOULDER IMPROVEMENTS
WEST MERCER WAY PHASE 4

SHOULDER WIDENING AND
UTILITY IMPROVEMENTS

PROJECT	23-36
SCALE	H: 1"=15' V: 1"=7.5'
SHEET	4 OF 24



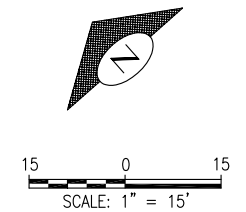
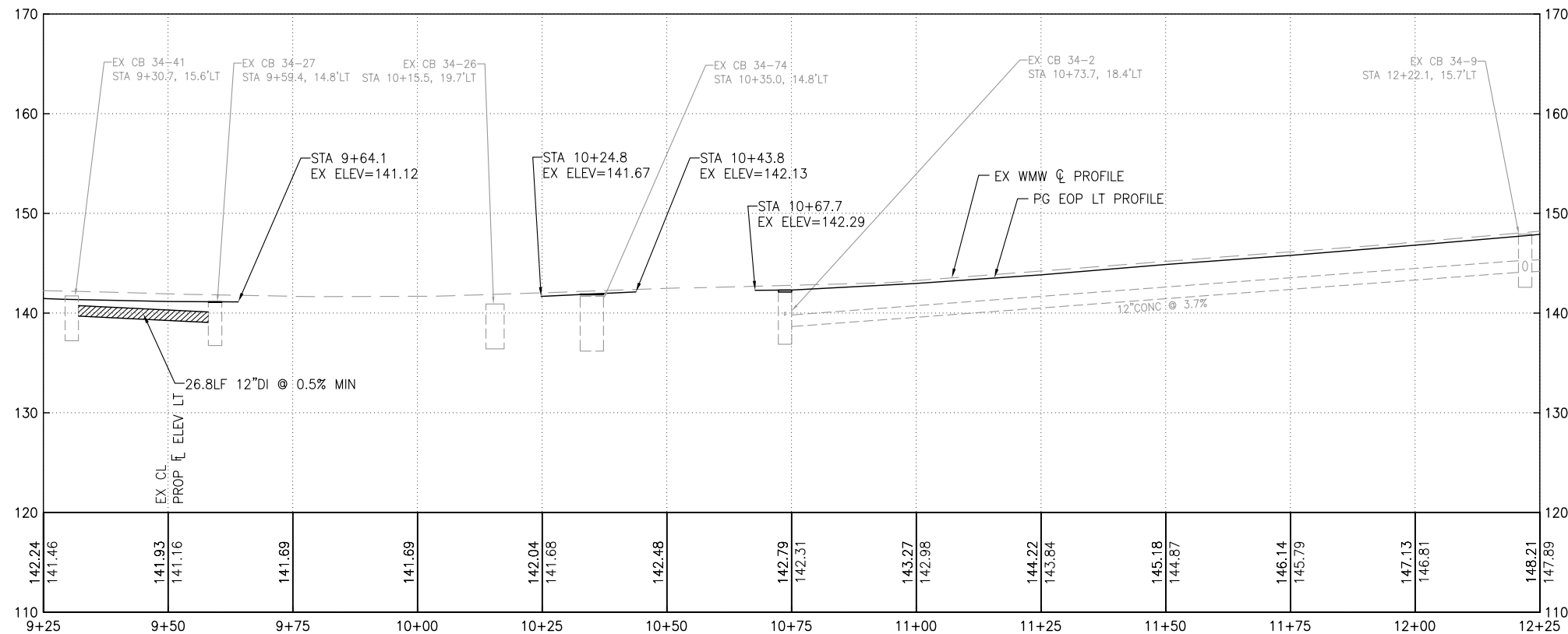
CONSTRUCTION NOTES

SCHEDULE A – SHOULDER WIDENING

- ① SAWCUT, FULL DEPTH, AS FIELD MARKED
- ② REMOVE ASPH PAVEMENT
- ④ PAVE DRIVEWAY, AS FIELD MARKED, PER DTL 5/23
- ⑤ PAVE HMA THICKENED EDGE PER DTL 7/23
- ⑥ PAVE DRIVEWAY FLOW LINE. DISTANCE FROM CENTER LINE TO FLOW LINE PER PLAN
- ⑧ ADJUST CB TO GRADE PER DTL 8/23
- ⑨ REPAIR PAVEMENT AS FIELD MARKED PER DTL 4/23
- ⑬ ADJUST VALVE BOX TO GRADE PER DTL 8/23
- ⑭ FURNISH AND INSTALL NEW 18"x24" CB FRAME AND VANED GRATE AND ADJUST TO GRADE PER DTL 8/23

SCHEDULE B – DRAINAGE IMPROVEMENTS

- ⑧ REPLACE EX 12" CMP W/ APPROX 26.8 LF OF 12" DI PIPE FROM EX CB 34-41 TO EX CB 34-27 AND CONNECT TO STRUCTURES. MATCH EX IE OR AS DIRECTED BY ENGINEER



File: Z:\2023 Projects\23009 MW Ph 4\Plans\23009_P-Road.dwg ID: cory Date: 01-Dec-23 11:49:38am



CM DESIGN GROUP
 1318 EAST PIKE ST
 SEATTLE, WA 98122
 (206) 659-0612

REV. NO.	DATE	DESCRIPTION

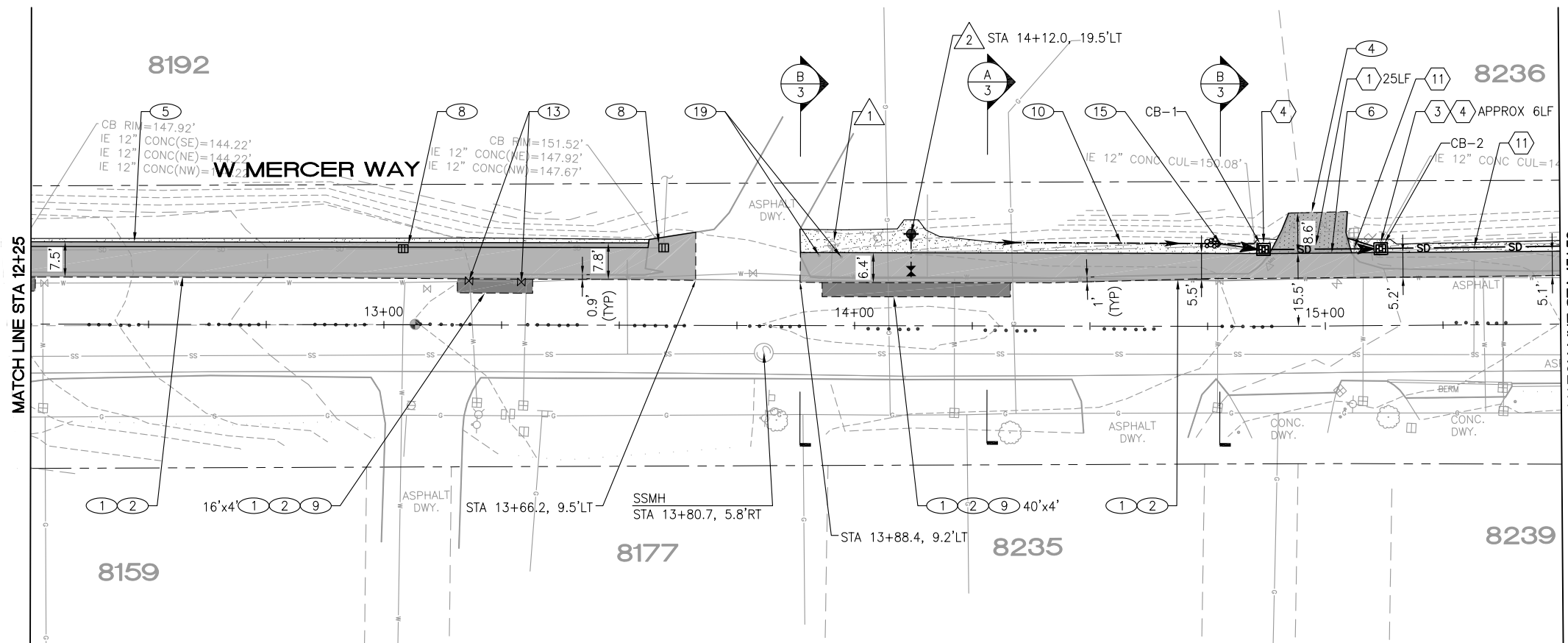
BID DOCUMENT



DATE	12/01/23
DESIGN	CFG
DRAFT	CFG
CHECK	CEM

CITY OF MERCER ISLAND
ROADSIDE SHOULDER IMPROVEMENTS
WEST MERCER WAY PHASE 4
SHOULDER WIDENING AND
UTILITY IMPROVEMENTS

PROJECT	23-36
SCALE	H: 1"=15' V: 1"=7.5'
SHEET	5 OF 24



CONSTRUCTION NOTES

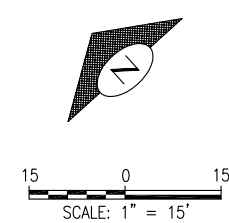
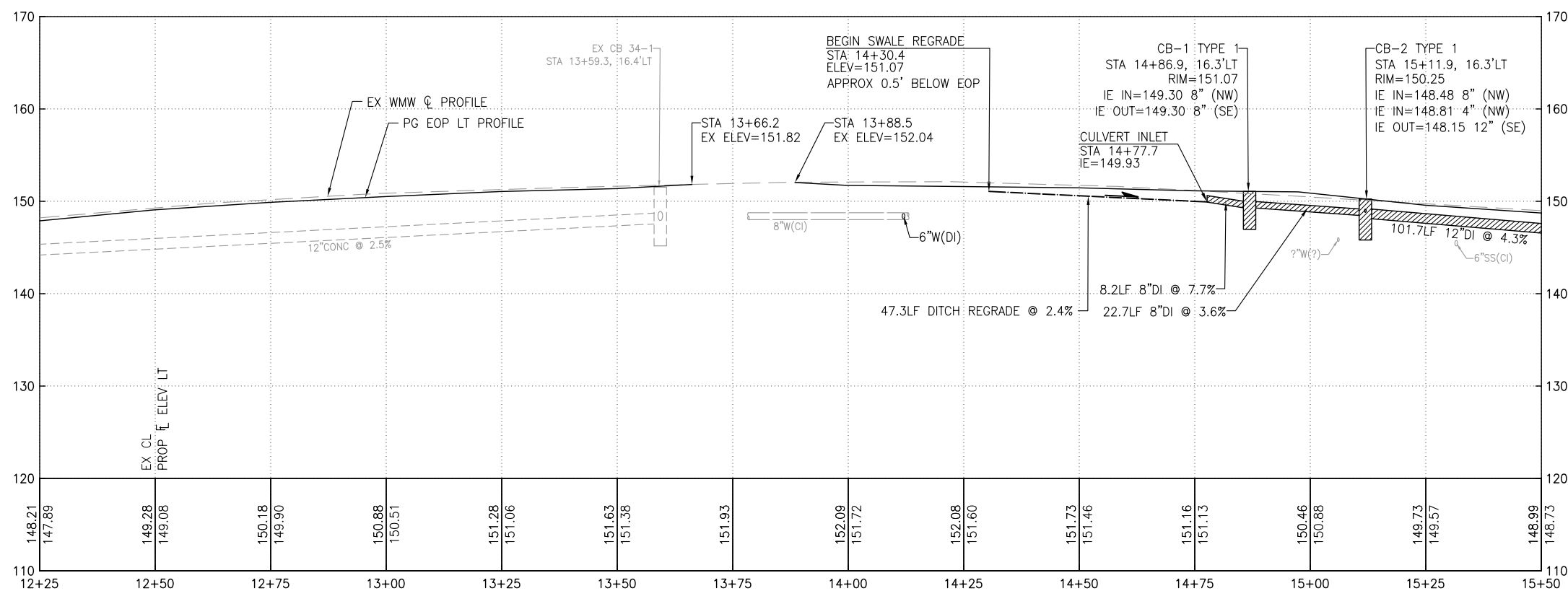
- SCHEDULE A – SHOULDER WIDENING**
- ① SAWCUT, FULL DEPTH, AS FIELD MARKED
 - ② REMOVE ASPH PAVEMENT
 - ④ PAVE DRIVEWAY, AS FIELD MARKED, PER DTL 5/23
 - ⑤ PAVE HMA THICKENED EDGE PER DTL 7/23
 - ⑥ PAVE DRIVEWAY FLOW LINE. DISTANCE FROM CENTER LINE TO FLOW LINE PER PLAN
 - ⑧ ADJUST CB TO GRADE PER DTL 8/23
 - ⑨ REPAIR PAVEMENT AS FIELD MARKED PER DTL 4/23
 - ⑩ CONSTRUCT NEW CSTC SWALE AND REGRADE EX FLOW LINE FOR POSITIVE DRAINAGE
 - ⑬ ADJUST VALVE BOX TO GRADE PER DTL 8/23
 - ⑮ CONSTRUCT CULVERT INLET-OUTLET PER DTL 2/23
 - ⑰ REMOVE BOLLARD

SCHEDULE B – DRAINAGE IMPROVEMENTS

- ① REMOVE PIPE
- ③ CONNECT PRIVATE DRAIN LINE TO CB
- ④ INSTALL NEW CB OR CONC INLET
- ⑪ POTHOLE EX UTILITY AHEAD OF PIPE LAYING

SCHEDULE C – WATER IMPROVEMENTS

- ① REMOVE EX FIRE HYDRANT ASSEMBLY AND VALVE FROM EX TEE AND SALVAGE TO CITY SHOP
- ② INSTALL NEW FIRE HYDRANT PER MI STD DTL W-24A ON SHEET 21 ON EX 8" CI MAIN USING TAPPING SLEEVE. FIELD DETERMINE HYDRANT LOCATION AS DIRECTED BY ENGINEER



File: Z:\2023 Projects\23009_MW Ph 4\Plans\23009_P-Road.dwg ID: cory Date: 01-Dec-23 11:50:27am



CM DESIGN GROUP
 1318 EAST PIKE ST
 SEATTLE, WA 98122
 (206) 659-0612

REV. NO.	DATE	DESCRIPTION

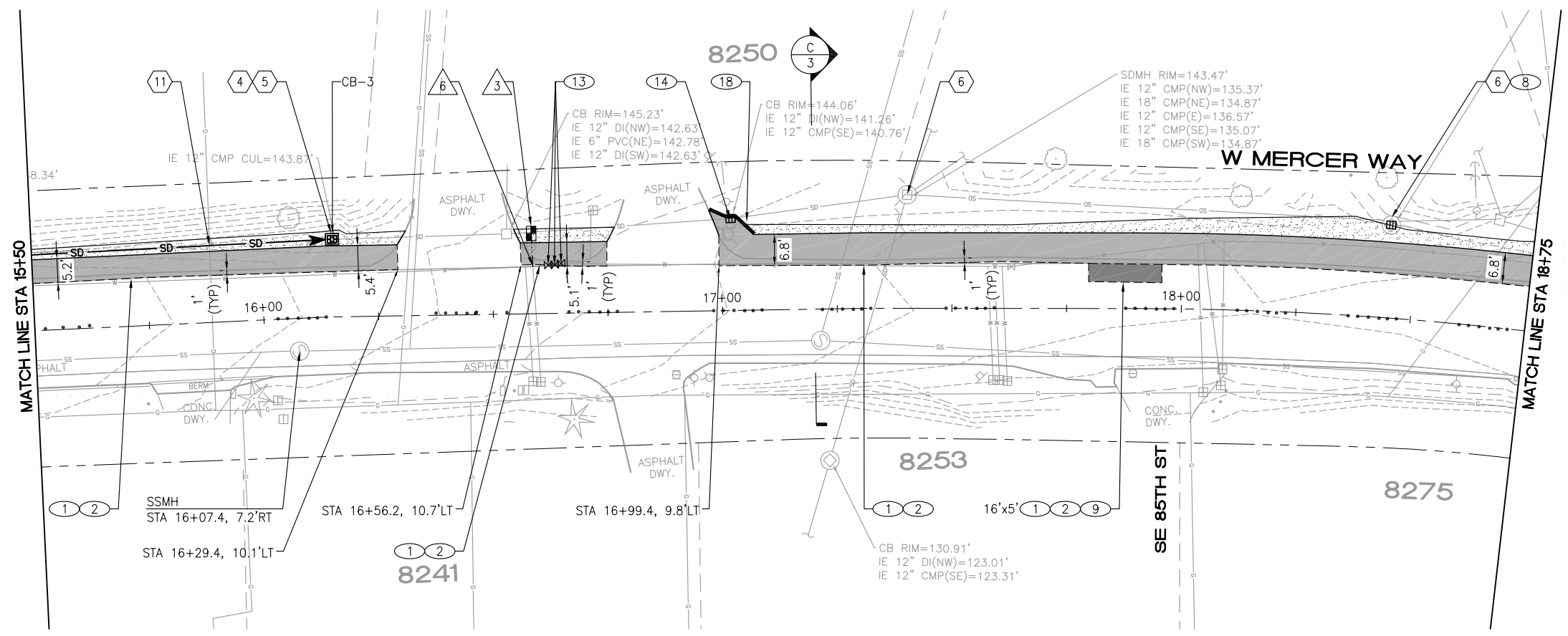
BID DOCUMENT



DATE	12/01/23
DESIGN	CFG
DRAFT	CFG
CHECK	CEM

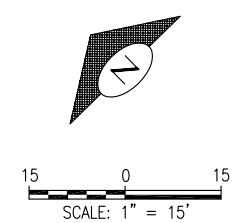
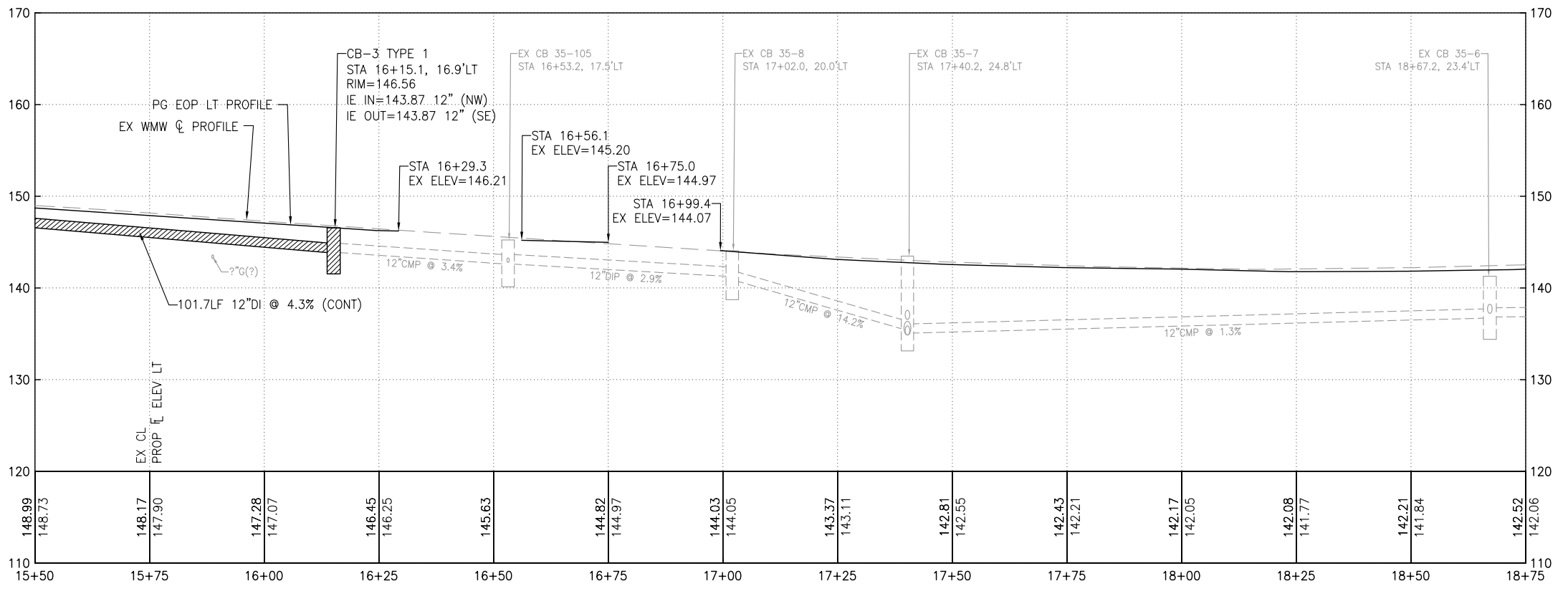
CITY OF MERCER ISLAND
ROADSIDE SHOULDER IMPROVEMENTS
WEST MERCER WAY PHASE 4
SHOULDER WIDENING AND
UTILITY IMPROVEMENTS

PROJECT	23-36
SCALE	H: 1"=15' V: 1"=7.5'
SHEET	6 OF 24



CONSTRUCTION NOTES

- SCHEDULE A – SHOULDER WIDENING**
- ① SAWCUT, FULL DEPTH, AS FIELD MARKED
 - ② REMOVE ASPH PAVEMENT
 - ③ ADJUST CB TO GRADE PER DTL 8/23
 - ④ REPAIR PAVEMENT AS FIELD MARKED PER DTL 4/23
 - ⑤ ADJUST VALVE BOX TO GRADE PER DTL 8/23
 - ⑥ FURNISH AND INSTALL NEW 18"x24" CB FRAME AND VANED GRATE AND ADJUST TO GRADE PER DTL 8/23
 - ⑦ PAVE HMA BERM PER DTL 6/23
- SCHEDULE B – DRAINAGE IMPROVEMENTS**
- ④ INSTALL NEW CB OR CONC INLET
 - ⑤ CONNECT TO EX PIPE
 - ⑥ REPAIR CB AS DIRECTED BY ENGINEER
 - ⑪ POT HOLE EX UTILITY AHEAD OF PIPE LAYING
- SCHEDULE C – WATER IMPROVEMENTS**
- ③ INSTALL/RELOCATE 1" WATER SERVICE PER MI STD DTL W-13 ON SHEET 22. DISCONNECT AND REMOVE EX WATER SERVICE. INSTALL NEW METER, SETTER, AND BOX BEHIND NEW PAVED SHOULDER AS DIRECTED BY ENGINEER. RECONNECT TO EX SERVICE
 - ⑥ POT HOLE TO EXPOSE THE WATER SERVICE ON THE CITY SIDE OF THE METER SO THE ENGINEER MAY VERIFY MATERIAL TYPE AND THE CONTRACTOR MAY VERIFY NECESSARY PARTS FOR REPLACEMENT AND TO EXPOSE THE EX SERVICE TAP AT THE MAIN SO THE ENGINEER MAY VERIFY IF EX TAP MAY BE REUSED OR IF A NEW TAP IS REQUIRED



File: Z:\2023 Projects\23009 MW Ph 4\Plans\23009_P-Road.dwg ID: cory Date: 01-Dec-23 11:51:22am



CM DESIGN GROUP
 1318 EAST PIKE ST
 SEATTLE, WA 98122
 (206) 659-0612

REV. NO.	DATE	DESCRIPTION

BID DOCUMENT

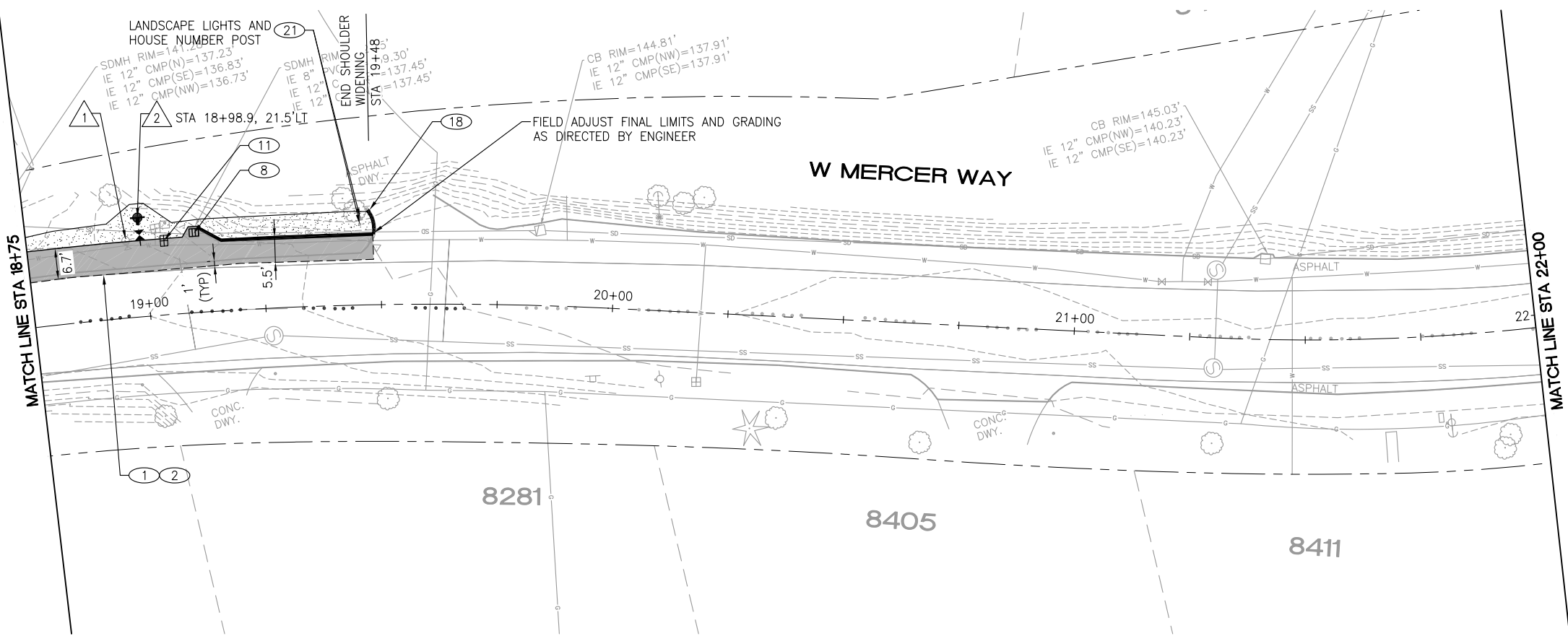


DATE	12/01/23
DESIGN	CFG
DRAFT	CFG
CHECK	CEM

CITY OF MERCER ISLAND
ROADSIDE SHOULDER IMPROVEMENTS
WEST MERCER WAY PHASE 4

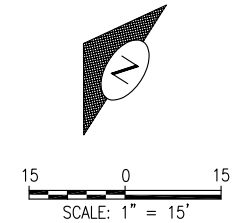
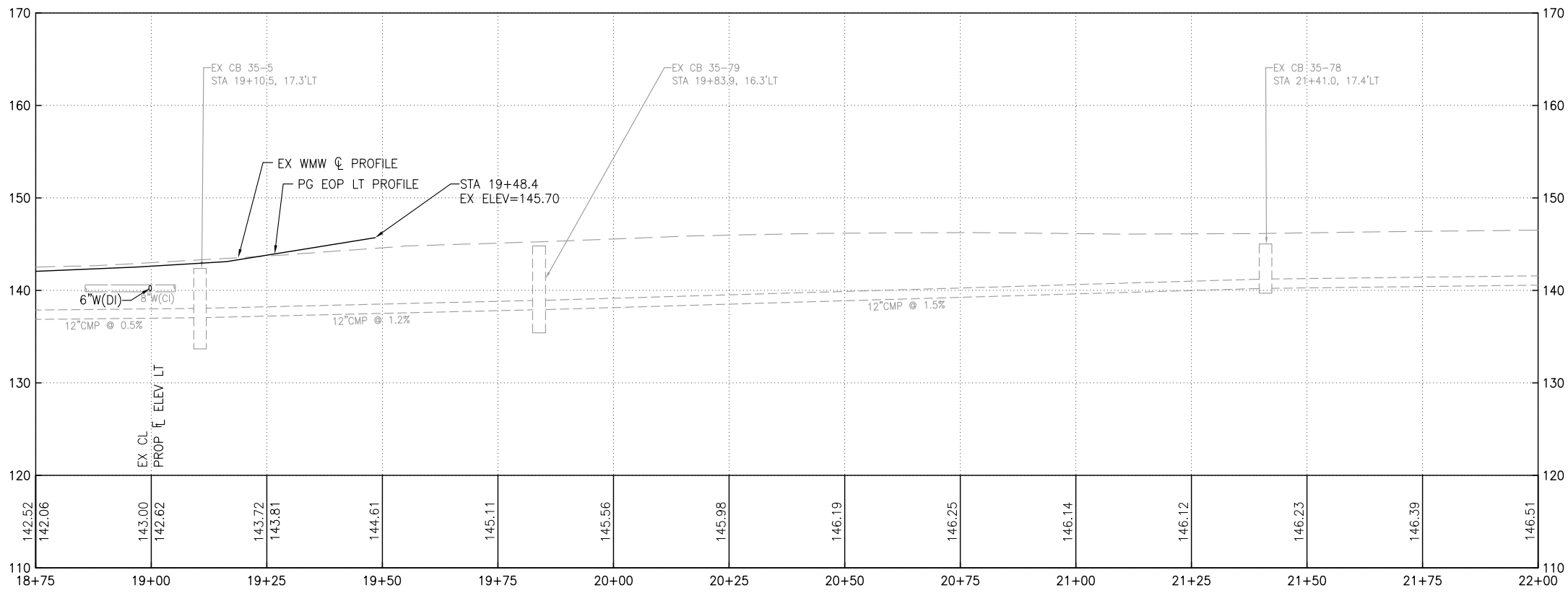
SHOULDER WIDENING AND
UTILITY IMPROVEMENTS

PROJECT	23-36
SCALE	H: 1"=15' V: 1"=7.5'
SHEET	7 OF 24



CONSTRUCTION NOTES

- SCHEDULE A – SHOULDER WIDENING**
- ① SAWCUT, FULL DEPTH, AS FIELD MARKED
 - ② REMOVE ASPH PAVEMENT
 - ⑧ ADJUST CB TO GRADE PER DTL 8/23
 - ⑪ ADJUST WM BOX TO GRADE PER DTL 8/23
 - ⑱ PAVE HMA BERM PER DTL 6/23
 - ⑳ REMOVE AND/OR RESET MISCELLANEOUS ITEM
- SCHEDULE C – WATER IMPROVEMENTS**
- ① REMOVE EX FIRE HYDRANT ASSEMBLY AND VALVE FROM EX TEE AND SALVAGE TO CITY SHOP
 - ② INSTALL NEW FIRE HYDRANT PER MI STD DTL W-24A ON SHEET 21 ON EX 8\"/>



File: Z:\2023 Projects\23009_WMW Ph. 4\Plans\23009_P-Road.dwg ID: cory Date: 01-Dec-23 11:51:58am



CM DESIGN GROUP
 1318 EAST PIKE ST
 SEATTLE, WA 98122
 (206) 659-0612

REV. NO.	DATE	DESCRIPTION

BID DOCUMENT

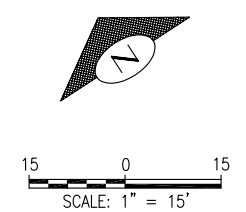
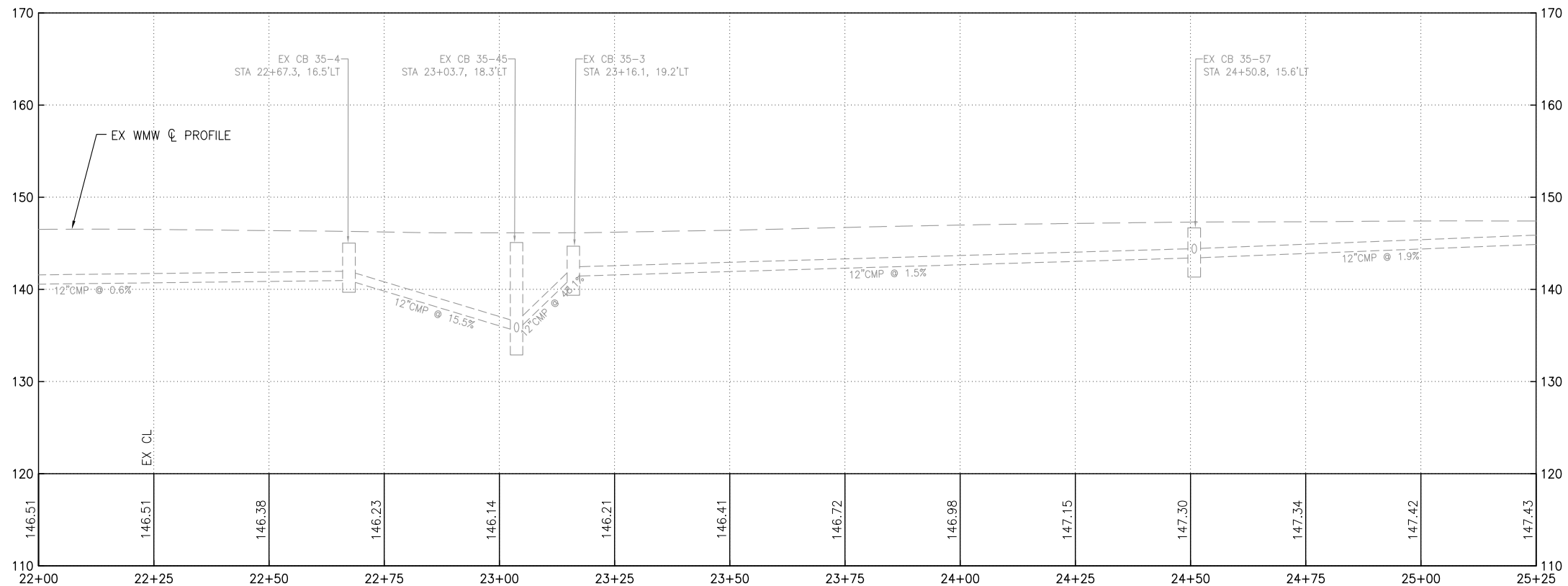
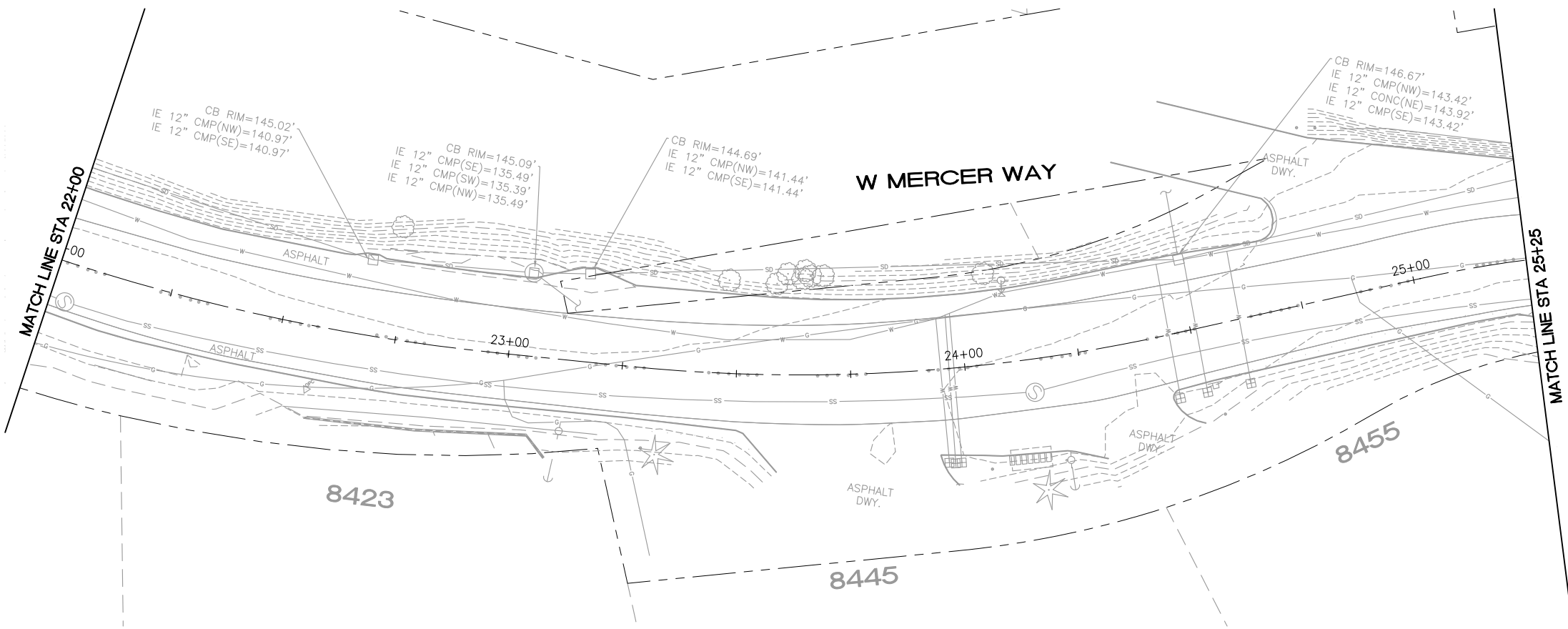


DATE	12/01/23
DESIGN	CFG
DRAFT	CFG
CHECK	CEM

CITY OF MERCER ISLAND
ROADSIDE SHOULDER IMPROVEMENTS
WEST MERCER WAY PHASE 4

SHOULDER WIDENING AND
UTILITY IMPROVEMENTS

PROJECT	23-36
SCALE	H: 1"=15' V: 1"=7.5'
SHEET	8 OF 24

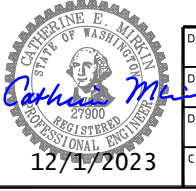


File: Z:\2023 Projects\23009_WMW Ph. 4\Plans\23009_P-Road.dwg ID: cory Date: 01-Dec-23 11:52:06am



REV. NO.	DATE	DESCRIPTION

BID DOCUMENT

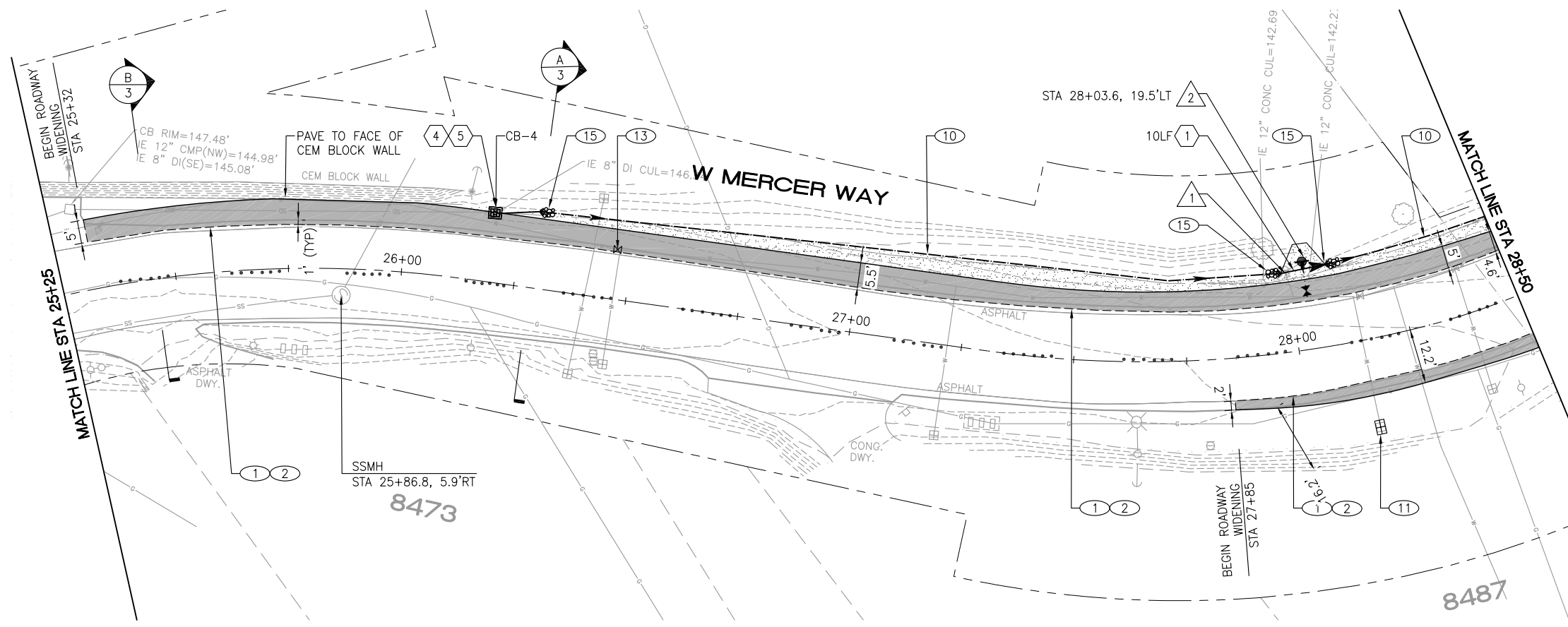


DATE	12/01/23
DESIGN	CFG
DRAFT	CFG
CHECK	CEM

CITY OF MERCER ISLAND
ROADSIDE SHOULDER IMPROVEMENTS
WEST MERCER WAY PHASE 4

SHOULDER WIDENING AND
UTILITY IMPROVEMENTS

PROJECT	23-36
SCALE	H: 1"=15' V: 1"=7.5'
SHEET	9 OF 24



CONSTRUCTION NOTES

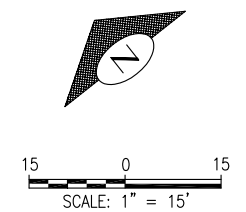
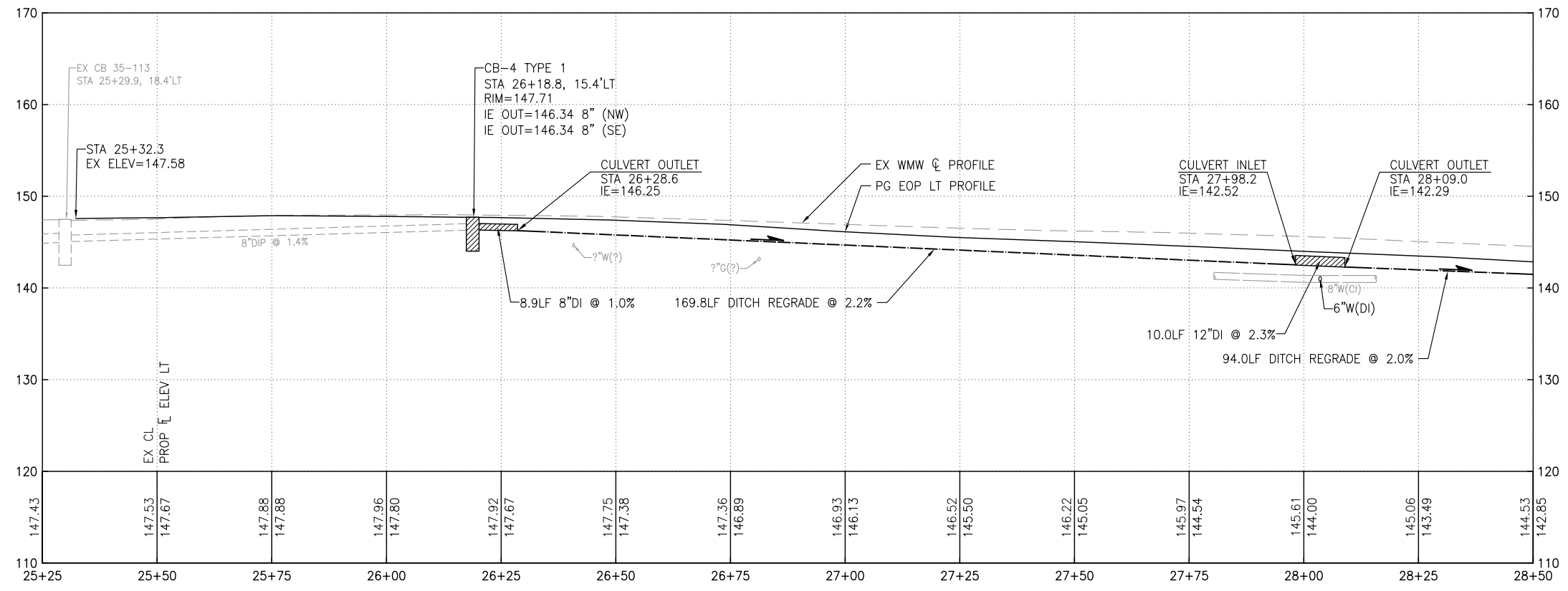
- SCHEDULE A – SHOULDER WIDENING**
- ① SAWCUT, FULL DEPTH, AS FIELD MARKED
 - ② REMOVE ASPH PAVEMENT
 - ⑩ CONSTRUCT NEW CSTC SWALE AND REGRADE EX FLOW LINE FOR POSITIVE DRAINAGE
 - ⑪ ADJUST WM BOX TO GRADE PER DTL 8/23
 - ⑬ ADJUST VALVE BOX TO GRADE PER DTL 8/23
 - ⑮ CONSTRUCT CULVERT INLET-OUTLET PER DTL 2/23

SCHEDULE B – DRAINAGE IMPROVEMENTS

- ① REMOVE PIPE
- ④ INSTALL NEW CB OR CONC INLET
- ⑤ CONNECT TO EX PIPE

SCHEDULE C – WATER IMPROVEMENTS

- ① REMOVE EX FIRE HYDRANT ASSEMBLY AND VALVE FROM EX TEE AND SALVAGE TO CITY SHOP
- ② INSTALL NEW FIRE HYDRANT PER MI STD DTL W-24A ON SHEET 21 ON EX 8" CI MAIN USING TAPPING SLEEVE. FIELD DETERMINE HYDRANT LOCATION AS DIRECTED BY ENGINEER



File: Z:\2023 Projects\23009 MW Ph 4\Plans\23009_P-Road.dwg ID: cory Date: 01-Dec-23 11:52:47am



CM DESIGN GROUP
 1318 EAST PIKE ST
 SEATTLE, WA 98122
 (206) 659-0612

REV. NO.	DATE	DESCRIPTION

BID DOCUMENT

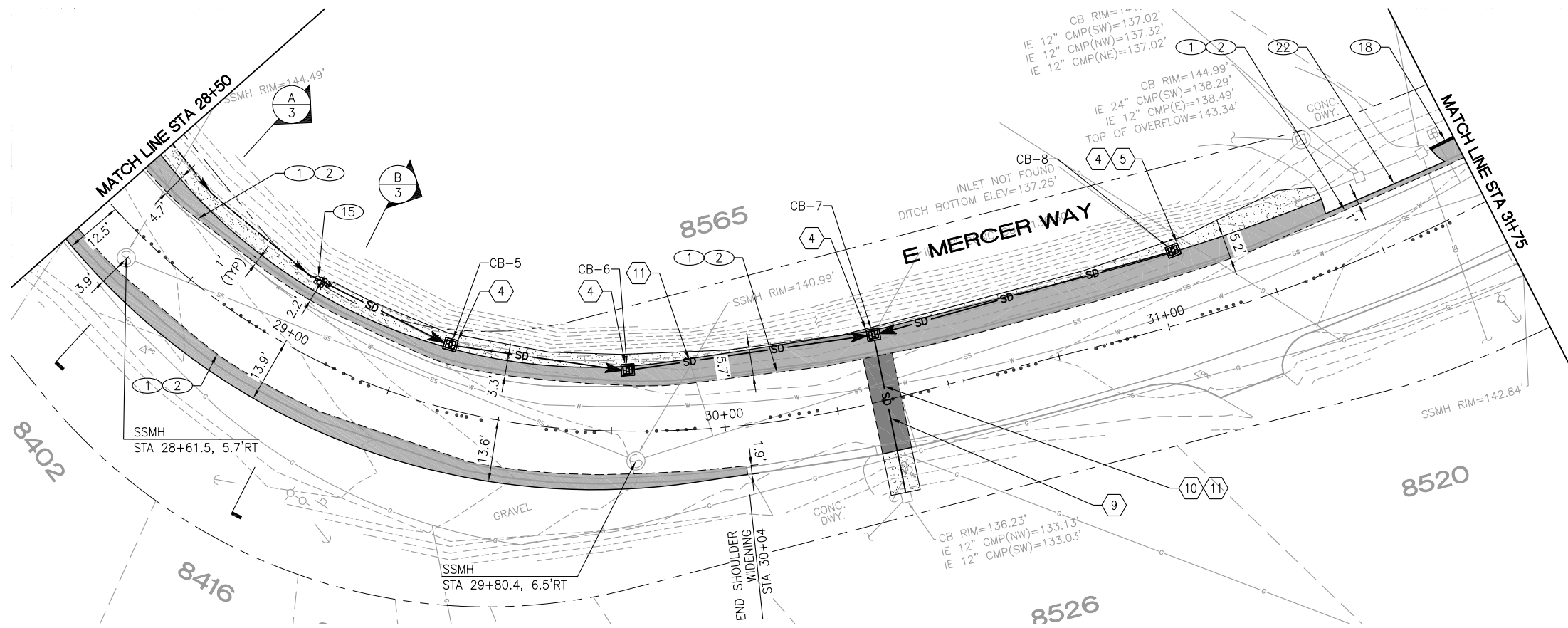


DATE	12/01/23
DESIGN	CFG
DRAFT	CFG
CHECK	CEM

CITY OF MERCER ISLAND
ROADSIDE SHOULDER IMPROVEMENTS
WEST MERCER WAY PHASE 4

SHOULDER WIDENING AND
UTILITY IMPROVEMENTS

PROJECT	23-36
SCALE	H: 1"=15' V: 1"=7.5'
SHEET	10 OF 24



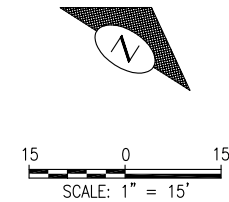
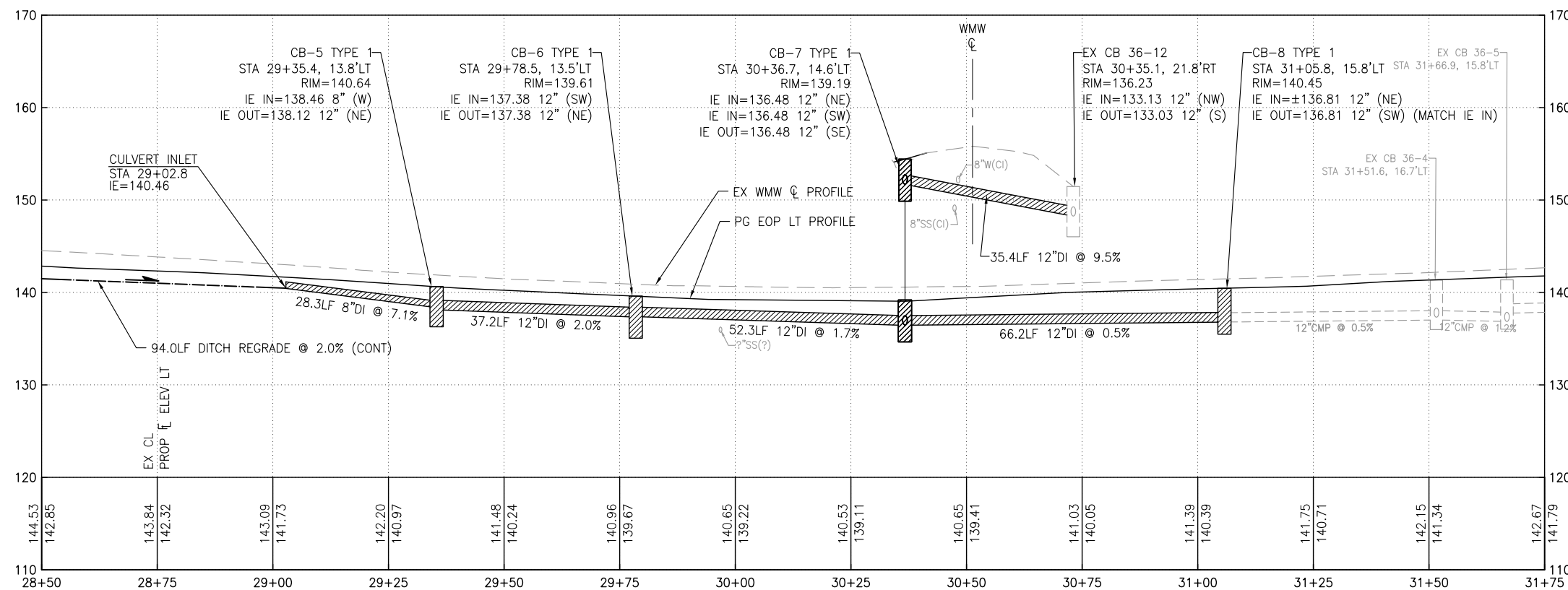
CONSTRUCTION NOTES

SCHEDULE A – SHOULDER WIDENING

- ① SAWCUT, FULL DEPTH, AS FIELD MARKED
- ② REMOVE ASPH PAVEMENT
- ⑮ CONSTRUCT CULVERT INLET-OUTLET PER DTL 2/23
- ⑱ PAVE HMA BERM PER DTL 6/23
- ⑳ PAVE TO MATCH EX CONC DWY

SCHEDULE B – DRAINAGE IMPROVEMENTS

- ④ INSTALL NEW CB OR CONC INLET
- ⑤ CONNECT TO EX PIPE
- ⑨ REPLACE EX 12" CONC PIPE W/ APPROX 35.4 LF OF 12" DI PIPE FROM CB-7 TO EX CB 36-12 AND CONNECT TO STRUCTURES
- ⑩ MAINTAIN 6" MIN CLEARANCE BETWEEN PIPES OR INSTALL POLYETHYLENE FOAM CUSHION AS DIRECTED BY ENGINEER
- ⑪ POTHOLE EX UTILITY AHEAD OF PIPE LAYING



File: Z:\2023 Projects\23009 WMW Ph. 4\Plans\23009_P-Road.dwg ID: copy Date: 01-Dec-23 11:53:27am



REV. NO.	DATE	DESCRIPTION

BID DOCUMENT

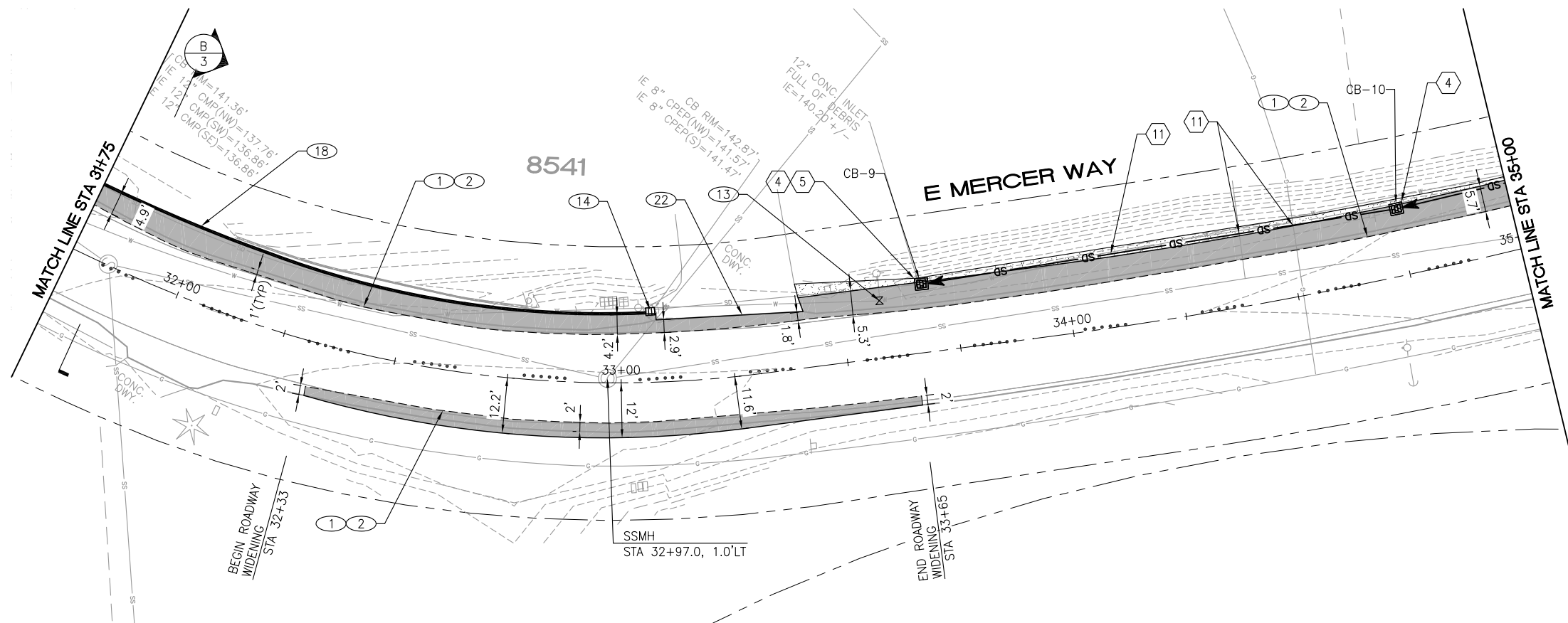


DATE	12/01/23
DESIGN	CFG
DRAFT	CFG
CHECK	CEM

CITY OF MERCER ISLAND
ROADSIDE SHOULDER IMPROVEMENTS
WEST MERCER WAY PHASE 4

SHOULDER WIDENING AND
UTILITY IMPROVEMENTS

PROJECT	23-36
SCALE	H: 1"=15' V: 1"=7.5'
SHEET	11 OF 24



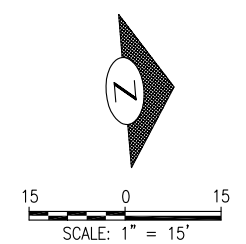
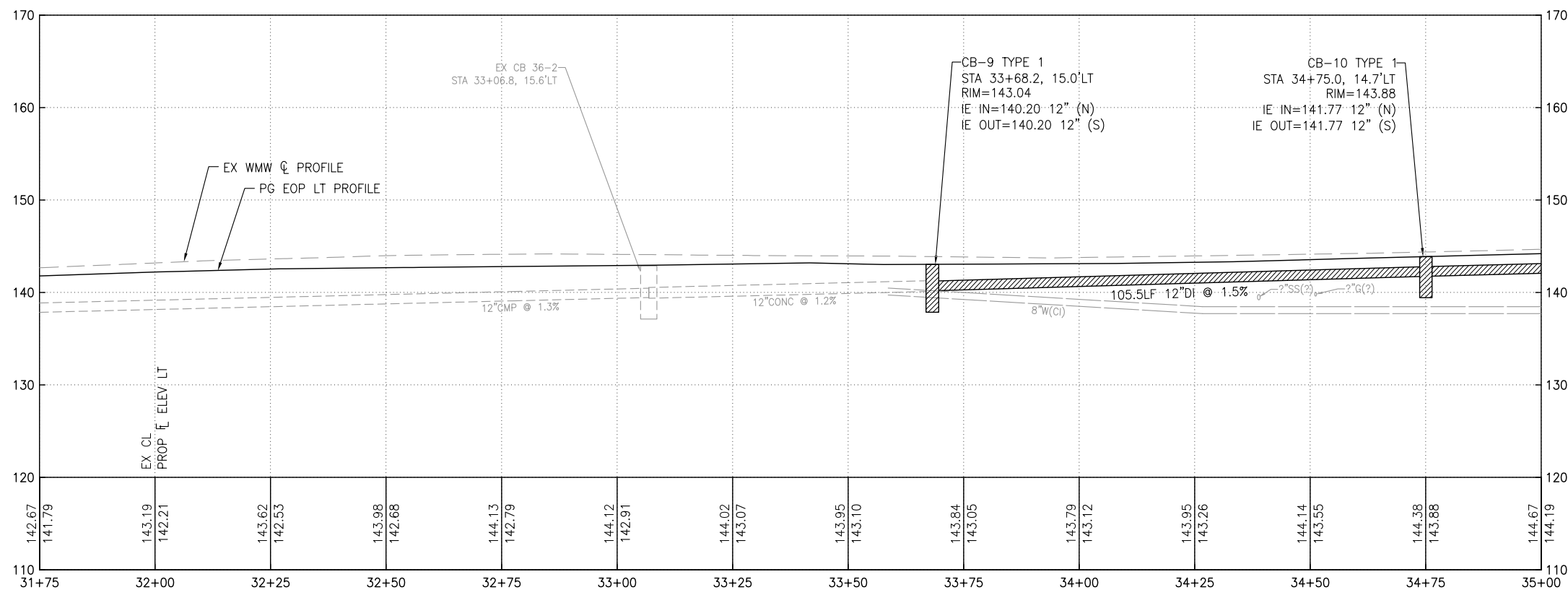
CONSTRUCTION NOTES

SCHEDULE A – SHOULDER WIDENING

- ① SAWCUT, FULL DEPTH, AS FIELD MARKED
- ② REMOVE ASPH PAVEMENT
- ⑬ ADJUST VALVE BOX TO GRADE PER DTL 8/23
- ⑭ FURNISH AND INSTALL NEW 18"x24" CB FRAME AND VANED GRATE AND ADJUST TO GRADE PER DTL 8/23
- ⑱ PAVE HMA BERM PER DTL 6/23
- ⑳ PAVE TO MATCH EX CONC DWY

SCHEDULE B – DRAINAGE IMPROVEMENTS

- ④ INSTALL NEW CB OR CONC INLET
- ⑤ CONNECT TO EX PIPE
- ⑪ POTHOLE EX UTILITY AHEAD OF PIPE LAYING



File: Z:\2023 Projects\23009 WMW Ph. 4\Plans\23009_P-Road.dwg ID: cory Date: 01-Dec-23 11:54:05am



REV. NO.	DATE	DESCRIPTION

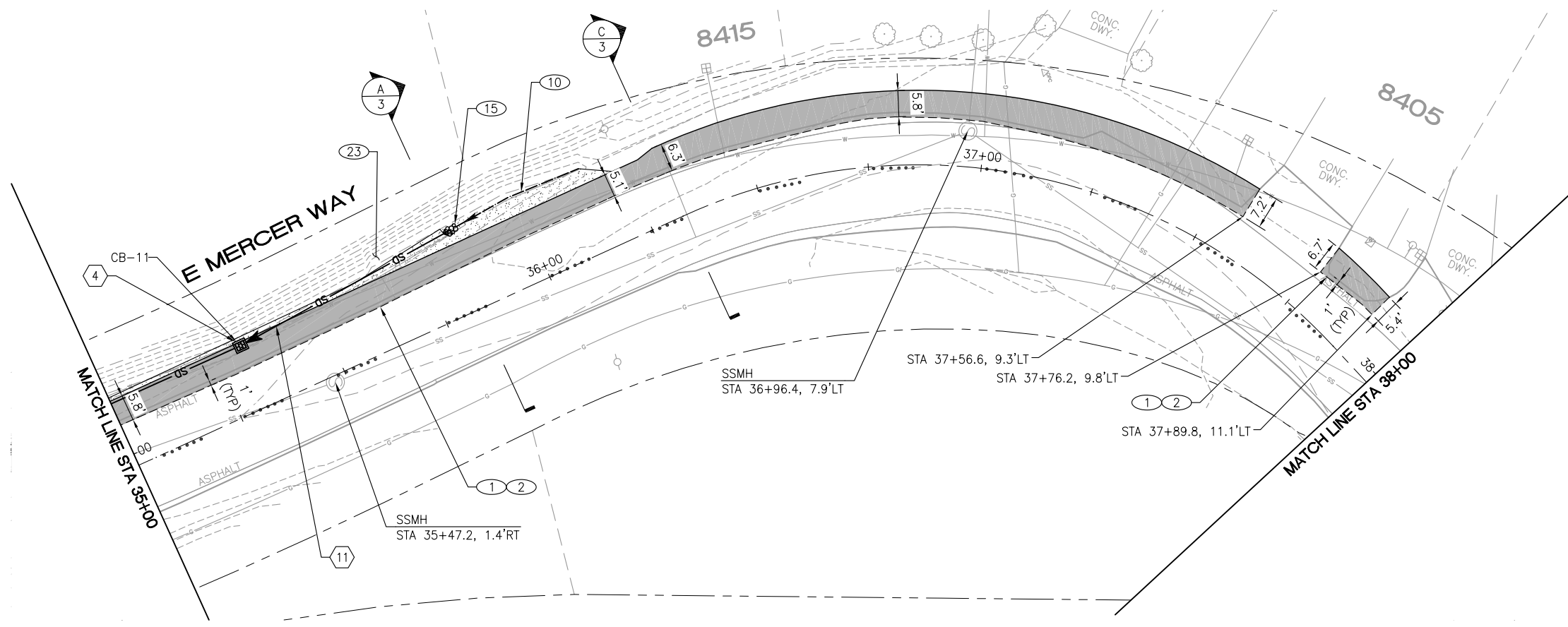
BID DOCUMENT



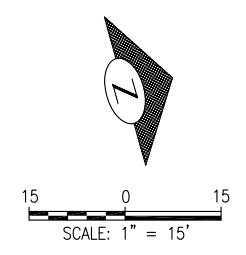
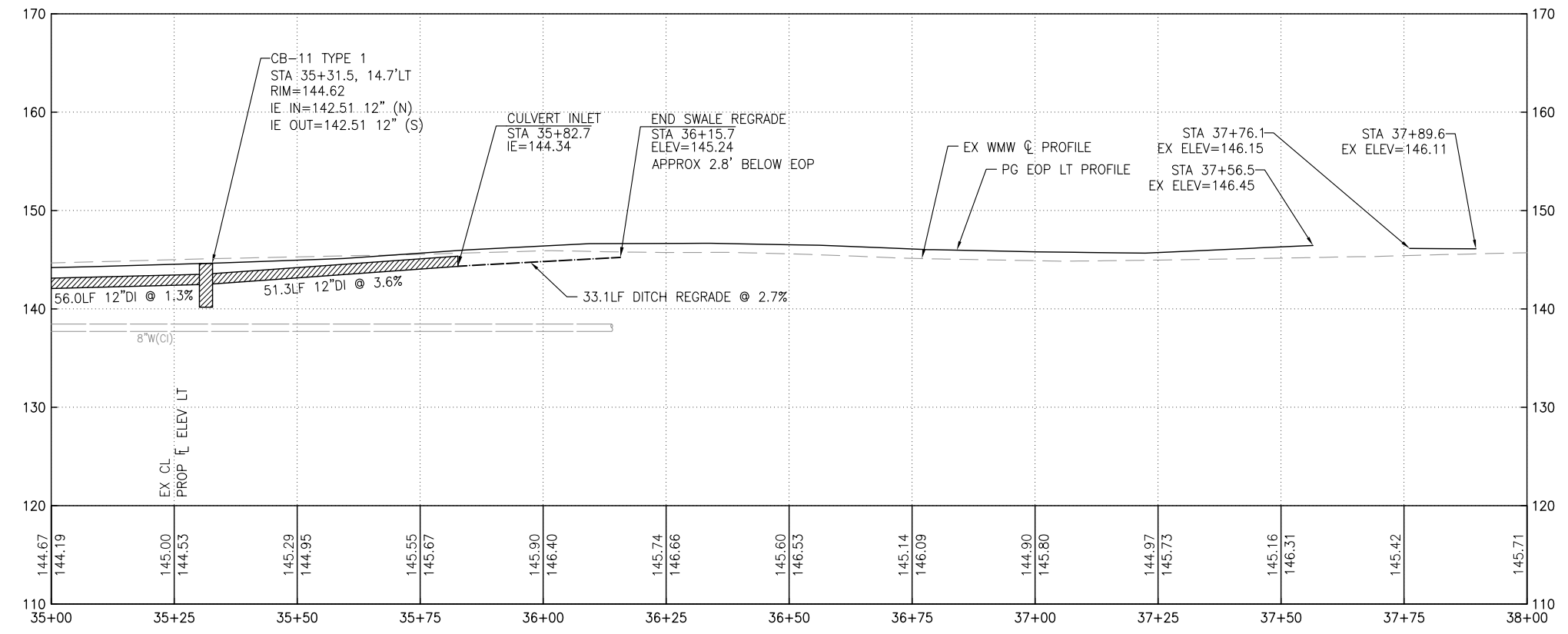
DATE	12/01/23
DESIGN	CFG
DRAFT	CFG
CHECK	CEM

CITY OF MERCER ISLAND
ROADSIDE SHOULDER IMPROVEMENTS
WEST MERCER WAY PHASE 4
SHOULDER WIDENING AND
UTILITY IMPROVEMENTS

PROJECT	23-36
SCALE	H: 1"=15' V: 1"=7.5'
SHEET	12 OF 24



- CONSTRUCTION NOTES**
- SCHEDULE A – SHOULDER WIDENING**
- ① SAWCUT, FULL DEPTH, AS FIELD MARKED
 - ② REMOVE ASPH PAVEMENT
 - ⑩ CONSTRUCT NEW CSTC SWALE AND REGRADE EX FLOW LINE FOR POSITIVE DRAINAGE
 - ⑮ CONSTRUCT CULVERT INLET-OUTLET PER DTL 2/23
 - ⑳ REMOVE APPROX 7 FALLEN TREES AND DEBRIS FROM APPROX STA 35+00 TO STA 36+10
- SCHEDULE B – DRAINAGE IMPROVEMENTS**
- ④ INSTALL NEW CB OR CONC INLET
 - ⑤ CONNECT TO EX PIPE
 - ⑪ POTHOLE EX UTILITY AHEAD OF PIPE LAYING



File: Z:\2023 Projects\23009 W/M Ph 4\Plans\23009_P-Road.dwg ID: cory Date: 01-Dec-23 11:54:45am

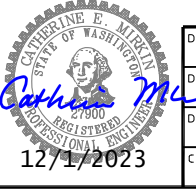


CM DESIGN GROUP

1318 EAST PIKE ST
SEATTLE, WA 98122
(206) 659-0612

REV. NO.	DATE	DESCRIPTION

BID DOCUMENT

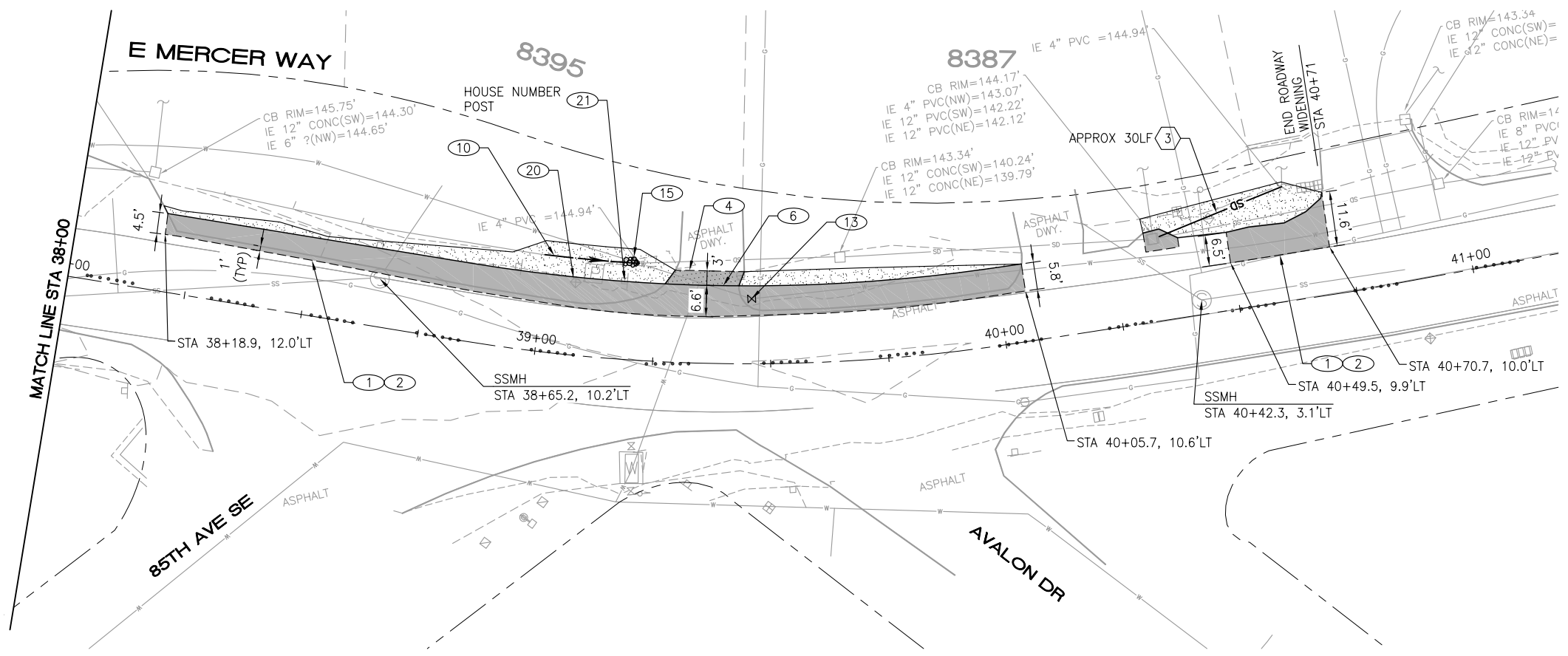


DATE	12/01/23
DESIGN	CFG
DRAFT	CFG
CHECK	CEM

CITY OF MERCER ISLAND
ROADSIDE SHOULDER IMPROVEMENTS WEST
MERCER WAY PHASE 4

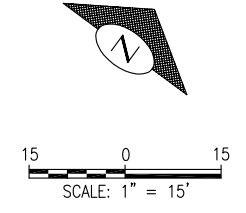
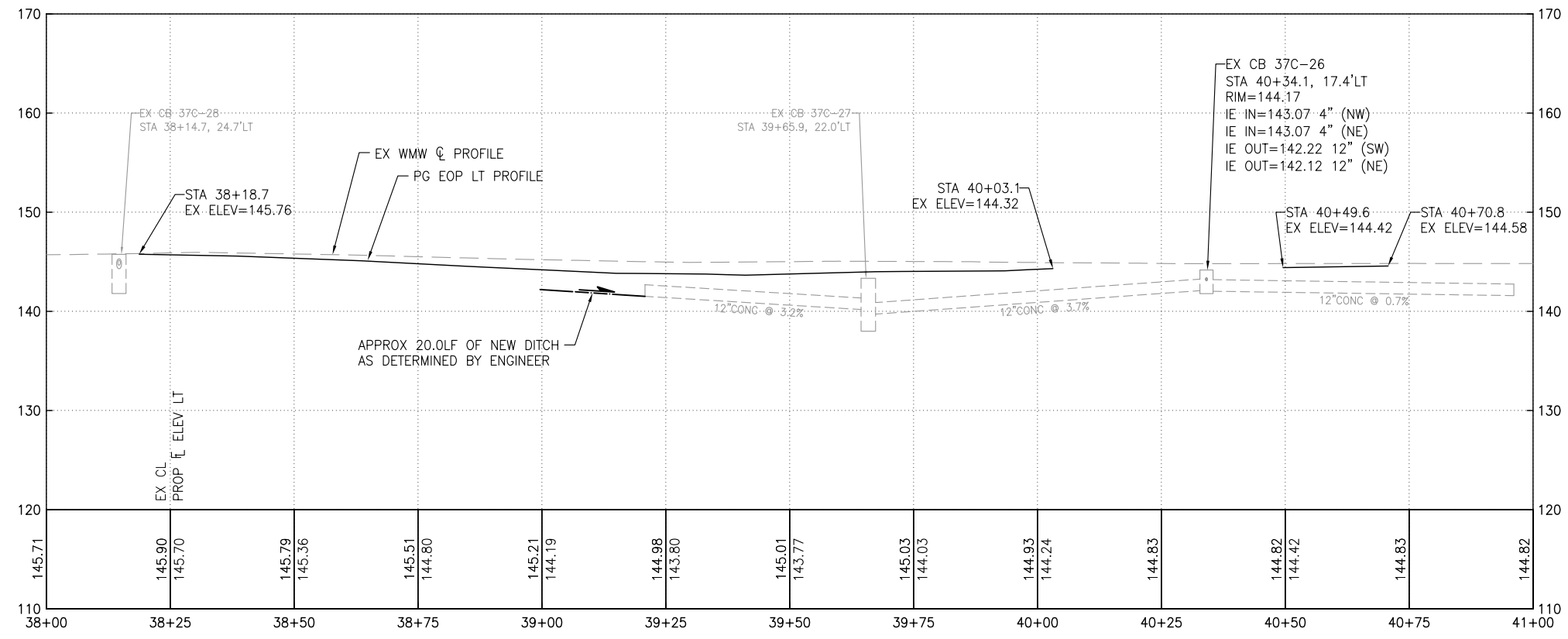
**SHOULDER WIDENING AND
UTILITY IMPROVEMENTS**

PROJECT	23-36
SCALE	H: 1"=15' V: 1"=7.5'
SHEET	13 OF 24



CONSTRUCTION NOTES

- SCHEDULE A – SHOULDER WIDENING**
- ① SAWCUT, FULL DEPTH, AS FIELD MARKED
 - ② REMOVE ASPH PAVEMENT
 - ④ PAVE DRIVEWAY, AS FIELD MARKED, PER DTL 5/23
 - ⑤ PAVE HMA THICKENED EDGE PER DTL 7/23
 - ⑥ PAVE DRIVEWAY FLOW LINE. DISTANCE FROM CENTER LINE TO FLOW LINE PER PLAN
 - ⑩ CONSTRUCT NEW CSTC SWALE AND REGRADE EX FLOW LINE FOR POSITIVE DRAINAGE
 - ⑬ ADJUST VALVE BOX TO GRADE PER DTL 8/23
 - ⑮ CONSTRUCT CULVERT INLET-OUTLET PER DTL 2/23
 - ⑳ ADJUST MISCELLANEOUS UTILITY TO GRADE
 - ㉑ REMOVE AND/OR RESET MISCELLANEOUS ITEM
- SCHEDULE B – DRAINAGE IMPROVEMENTS**
- ③ CONNECT PRIVATE DRAIN LINE TO CB



File: Z:\2023 Projects\23009 MW Ph 4\Plans\23009_P-Road.dwg ID: cory Date: 01-Dec-23 11:55:30am



CM DESIGN GROUP
 1318 EAST PIKE ST
 SEATTLE, WA 98122
 (206) 659-0612

REV. NO.	DATE	DESCRIPTION

BID DOCUMENT

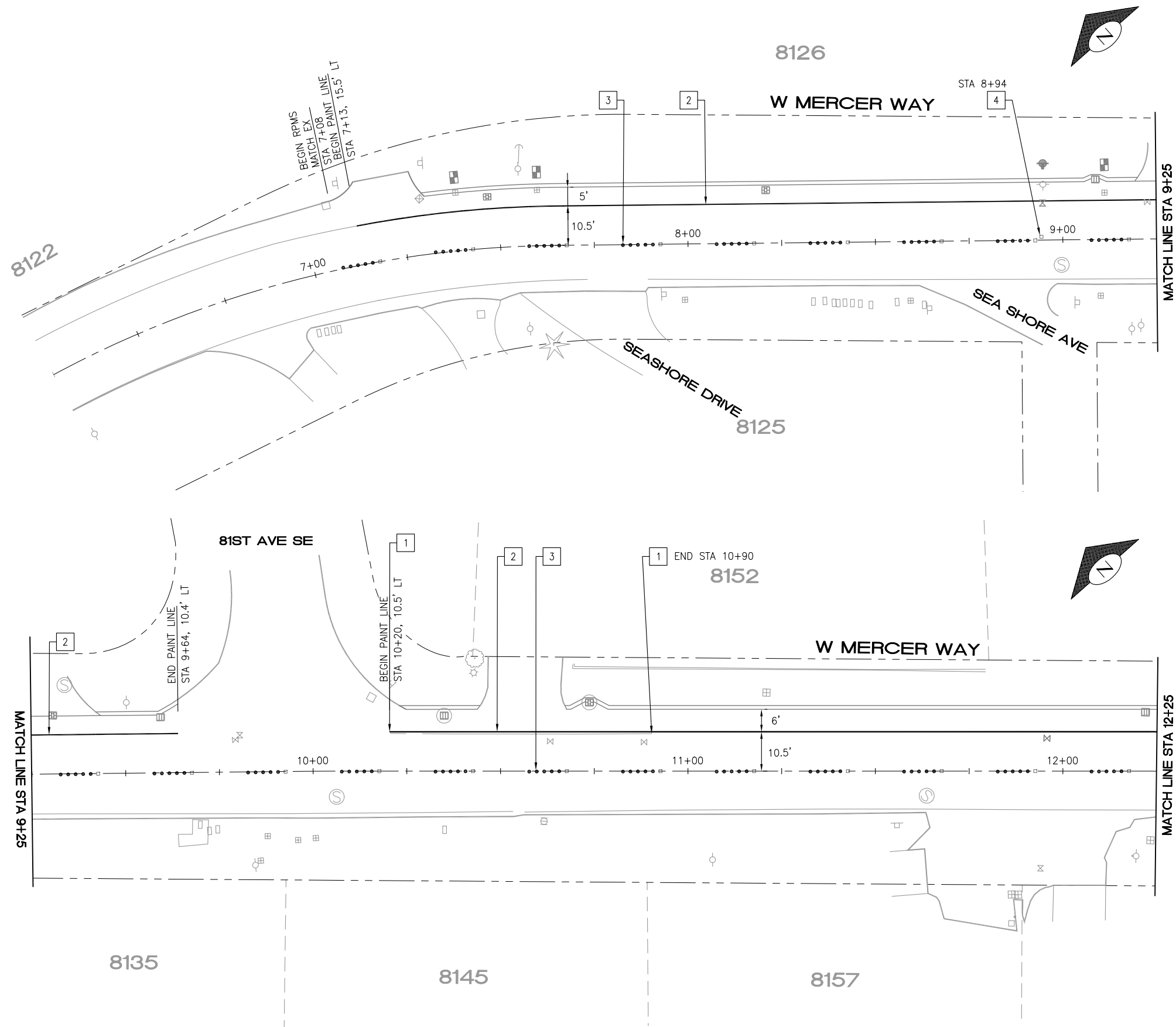


DATE	12/01/23
DESIGN	CFG
DRAFT	CFG
CHECK	CEM

CITY OF MERCER ISLAND
ROADSIDE SHOULDER IMPROVEMENTS
WEST MERCER WAY PHASE 4

SHOULDER WIDENING AND
UTILITY IMPROVEMENTS

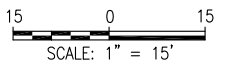
PROJECT	23-36
SCALE	H: 1"=15' V: 1"=7.5'
SHEET	14 OF 24



CHANNELIZATION NOTES

SCHEDULE A - SHOULDER WIDENING

- 1 REMOVE PAINT LINE. STATIONS ARE APPROXIMATE
- 2 APPLY PAINT LINE, 4" WHITE, TWO COATS
- 3 APPLY BROKEN CENTER LINE RPMs PER DTL 1/24
- 4 PLACE ONE BLUE TYPE 2 RPM AT FIRE HYDRANT



File: Z:\2023 Projects\23009 WNW Ph. 4\Plans\23009_P-4\RRK.dwg ID: cory Date: 01-Dec-23 11:55:52am



CM DESIGN GROUP
 1318 EAST PIKE ST
 SEATTLE, WA 98122
 (206) 659-0612

REV. NO.	DATE	DESCRIPTION

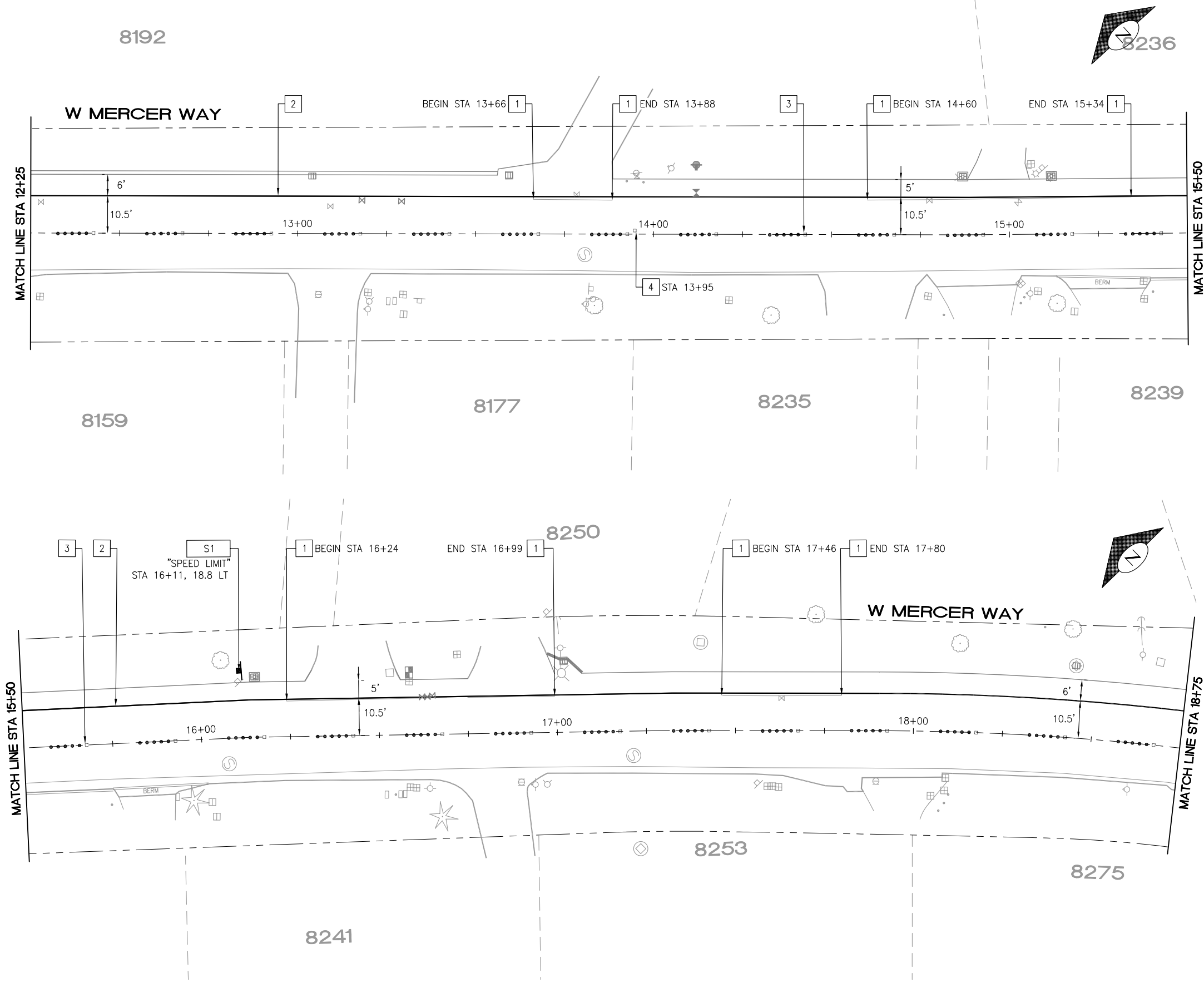
BID DOCUMENT



DATE	12/01/23
DESIGN	CFG
DRAFT	KTN
CHECK	CEM

CITY OF MERCER ISLAND
 ROADSIDE SHOULDER IMPROVEMENTS
 WEST MERCER WAY PHASE 4
CHANNELIZATION & SIGNAGE

PROJECT	23-36
SCALE	1"=15'
SHEET	15 OF 24



CHANNELIZATION NOTES

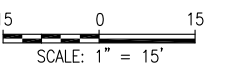
SCHEDULE A – SHOULDER WIDENING

- 1 REMOVE PAINT LINE. STATIONS ARE APPROXIMATE
- 2 APPLY PAINT LINE, 4" WHITE, TWO COATS
- 3 APPLY BROKEN CENTER LINE RPMs PER DTL 1/24
- 4 PLACE ONE BLUE TYPE 2 RPM AT FIRE HYDRANT

SIGNING NOTES

SCHEDULE A – SHOULDER WIDENING

- M- REINSTALL EX KC METRO BUS STOP SIGN AND EX POST SIMILAR TO DETAIL 2/24
- S- RELOCATE EX SIGN AND EX POST PER DTL 2/24



File: Z:\2023 Projects\23009 MW Ph 4\Plans\23009_P-4\WK6.dwg ID: cory Date: 01-Dec-23 11:55:58am



CM DESIGN GROUP
 1318 EAST PIKE ST
 SEATTLE, WA 98122
 (206) 659-0612

REV. NO.	DATE	DESCRIPTION

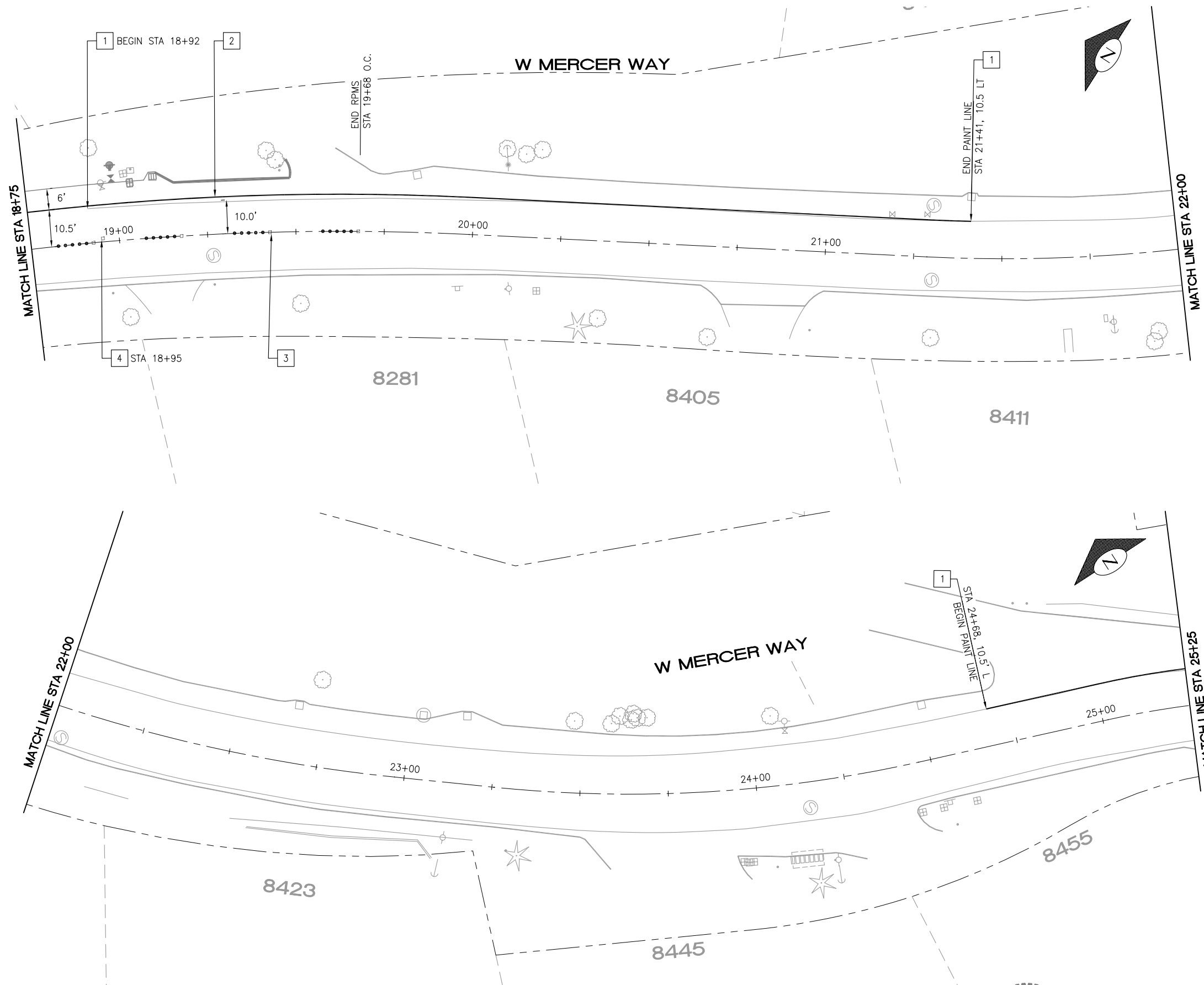
BID DOCUMENT



DATE	12/01/23
DESIGN	CFG
DRAFT	KTN
CHECK	CEM

CITY OF MERCER ISLAND
 ROADSIDE SHOULDER IMPROVEMENTS
 WEST MERCER WAY PHASE 4
CHANNELIZATION & SIGNAGE

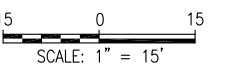
PROJECT	23-36
SCALE	1"=15'
SHEET	16 OF 24



CHANNELIZATION NOTES

SCHEDULE A - SHOULDER WIDENING

- 1 REMOVE PAINT LINE. STATIONS ARE APPROXIMATE
- 2 APPLY PAINT LINE, 4" WHITE, TWO COATS
- 3 APPLY BROKEN CENTER LINE RPMS PER DTL 1/24
- 4 PLACE ONE BLUE TYPE 2 RPM AT FIRE HYDRANT



File: Z:\2023 Projects\23009 MW Ph 4\Plans\23009_P-4\RPMS.dwg ID: cory Date: 01-Dec-23 11:56:04am



CM DESIGN GROUP
 1318 EAST PIKE ST
 SEATTLE, WA 98122
 (206) 659-0612

REV. NO.	DATE	DESCRIPTION

BID DOCUMENT



DATE	12/01/23
DESIGN	CFG
DRAFT	KTN
CHECK	CEM

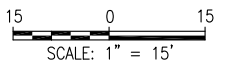
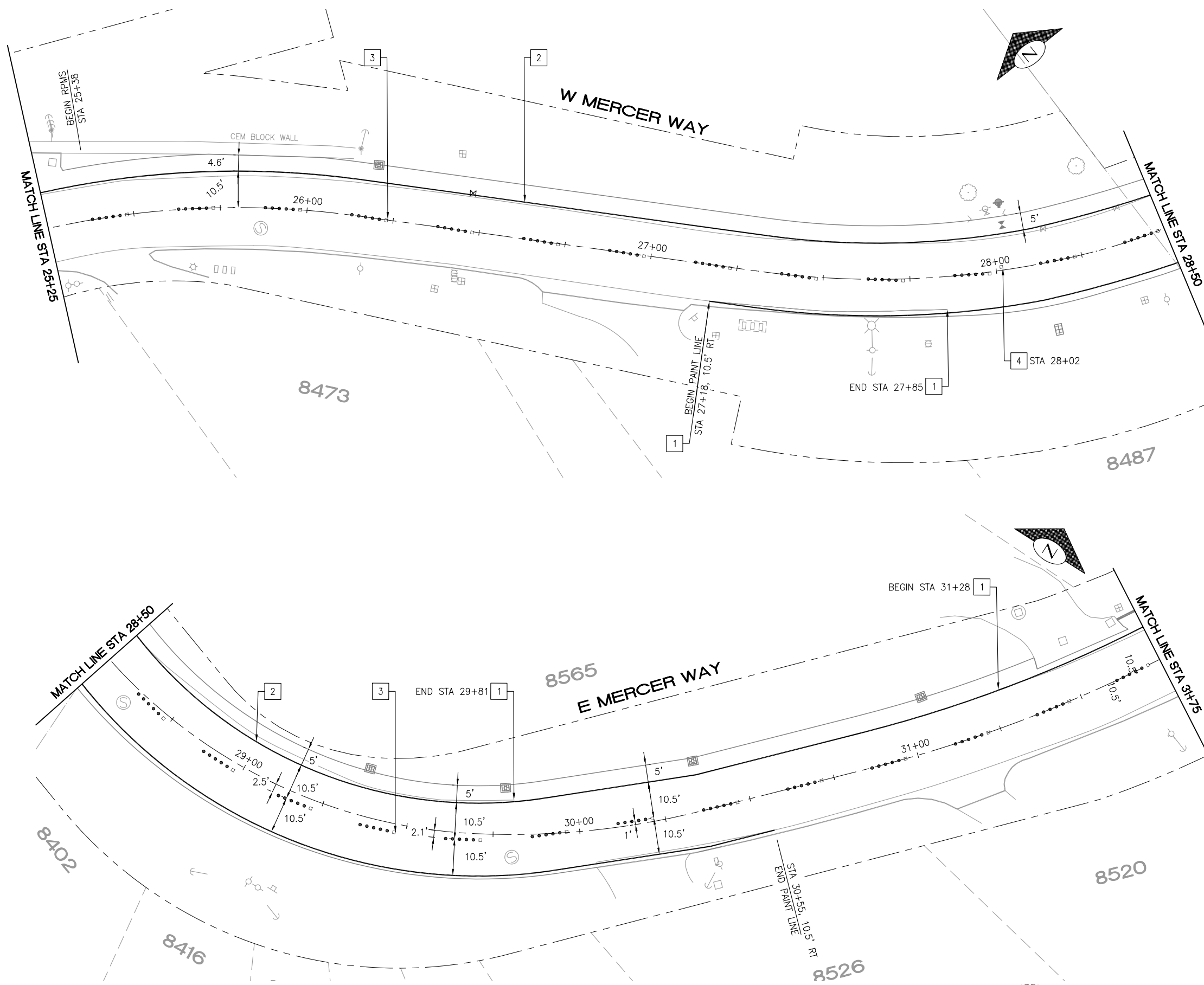
CITY OF MERCER ISLAND
 ROADSIDE SHOULDER IMPROVEMENTS
 WEST MERCER WAY PHASE 4
CHANNELIZATION & SIGNAGE

PROJECT	23-36
SCALE	1"=15'
SHEET	17 OF 24

CHANNELIZATION NOTES

SCHEDULE A - SHOULDER WIDENING

- 1 REMOVE PAINT LINE. STATIONS ARE APPROXIMATE
- 2 APPLY PAINT LINE, 4" WHITE, TWO COATS
- 3 APPLY BROKEN CENTER LINE RPMs PER DTL 1/24
- 4 PLACE ONE BLUE TYPE 2 RPM AT FIRE HYDRANT



File: Z:\2023 Projects\23009 MW Ph 4\Plans\23009_P-4\WK0.dwg ID: cory Date: 01-Dec-23 11:56:11am



CM DESIGN GROUP
 1318 EAST PIKE ST
 SEATTLE, WA 98122
 (206) 659-0612

REV. NO.	DATE	DESCRIPTION

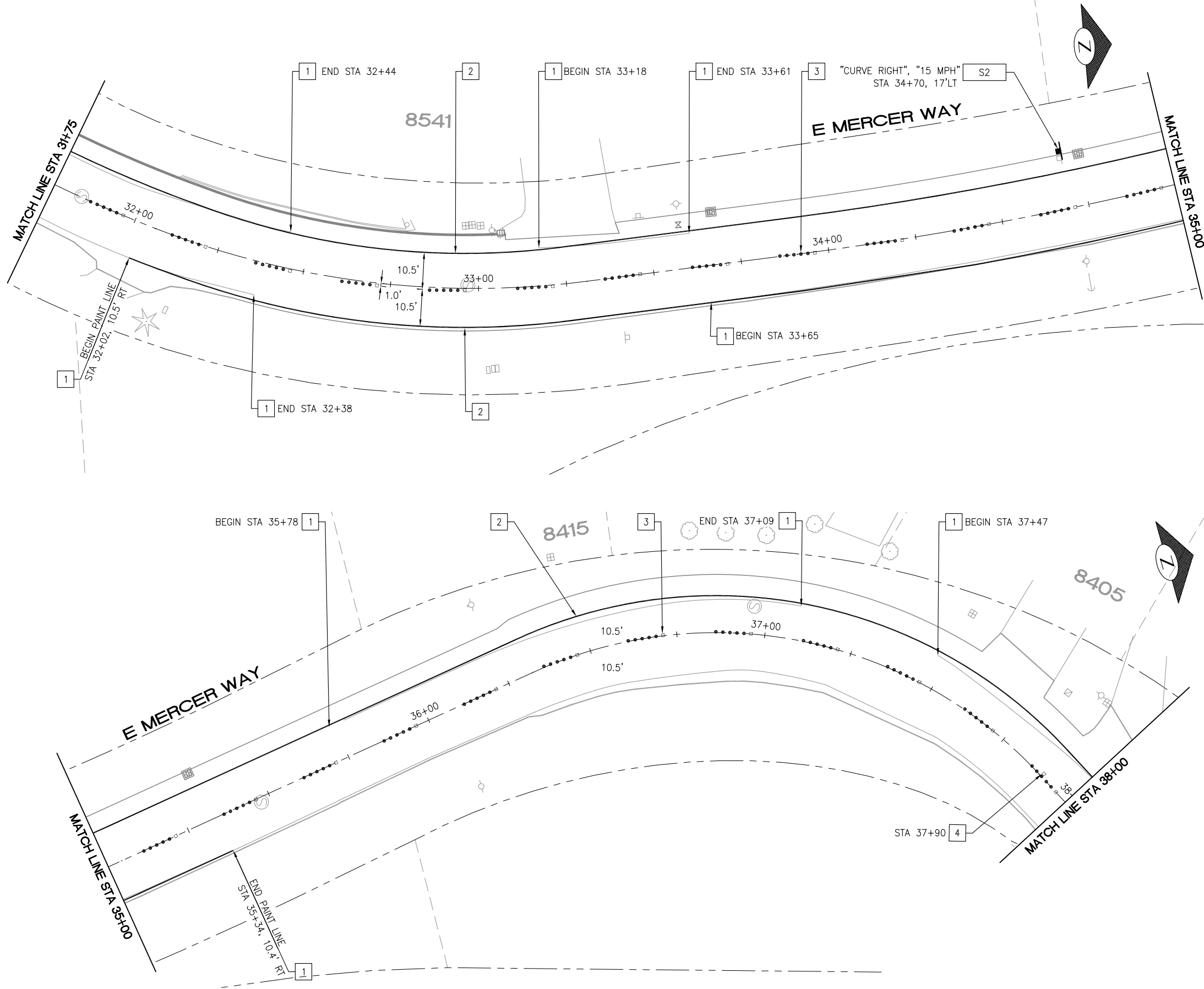
BID DOCUMENT



DATE	12/01/23
DESIGN	CFG
DRAFT	KTN
CHECK	CEM

CITY OF MERCER ISLAND
 ROADSIDE SHOULDER IMPROVEMENTS
 WEST MERCER WAY PHASE 4
CHANNELIZATION & SIGNAGE

PROJECT	23-36
SCALE	1"=15'
SHEET	18 OF 24



CHANNELIZATION NOTES

SCHEDULE A – SHOULDER WIDENING

- 1 REMOVE PAINT LINE. STATIONS ARE APPROXIMATE
- 2 APPLY PAINT LINE, 4" WHITE, TWO COATS
- 3 APPLY BROKEN CENTER LINE RPMs PER DTL 1/24
- 4 PLACE ONE BLUE TYPE 2 RPM AT FIRE HYDRANT

SIGNING NOTES

SCHEDULE A – SHOULDER WIDENING

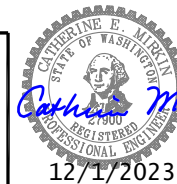
- M- REINSTALL EX KC METRO BUS STOP SIGN AND EX POST SIMILAR TO DETAIL 2/24
- S- RELOCATE EX SIGN AND EX POST PER DTL 2/24

File: Z:\2023 Projects\23009 MW Ph 4\Plans\23009_P-4\WK0.dwg ID: copy Date: 01-Dec-23 11:56:18am



REV. NO.	DATE	DESCRIPTION

BID DOCUMENT

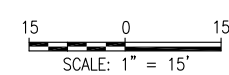


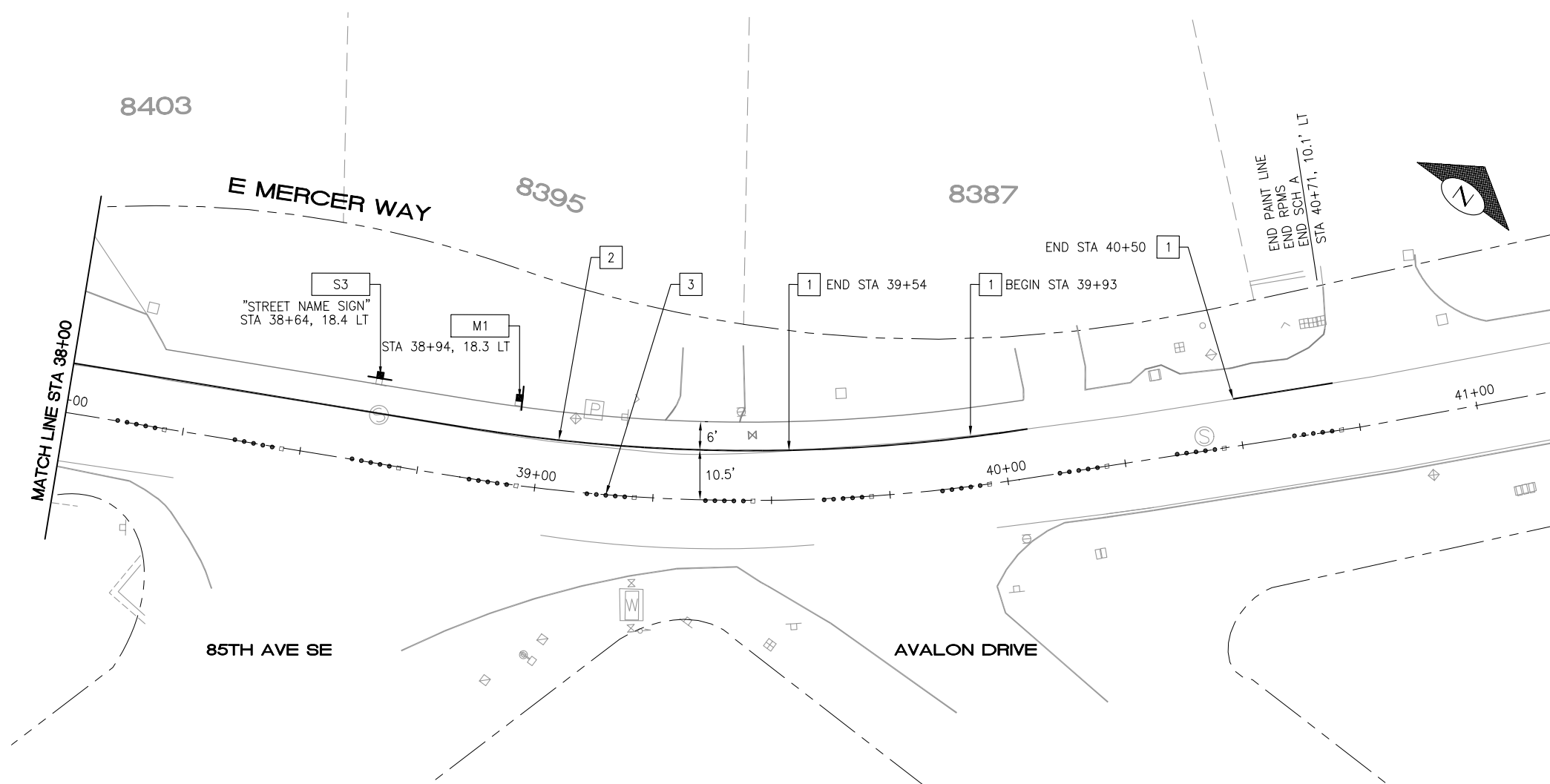
DATE	12/01/23
DESIGN	CFG
DRAFT	KTN
CHECK	CEM

**CITY OF MERCER ISLAND
ROADSIDE SHOULDER IMPROVEMENTS
WEST MERCER WAY PHASE 4**

CHANNELIZATION & SIGNAGE

PROJECT	23-36
SCALE	1"=15'
SHEET	19 OF 24





CHANNELIZATION NOTES

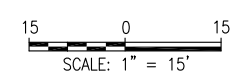
SCHEDULE A – SHOULDER WIDENING

- 1 REMOVE PAINT LINE. STATIONS ARE APPROXIMATE
- 2 APPLY PAINT LINE, 4" WHITE, TWO COATS
- 3 APPLY BROKEN CENTER LINE RPMs PER DTL 1/24
- 4 PLACE ONE BLUE TYPE 2 RPM AT FIRE HYDRANT

SIGNING NOTES

SCHEDULE A – SHOULDER WIDENING

- M- REINSTALL EX KC METRO BUS STOP SIGN AND EX POST SIMILAR TO DETAIL 2/24
- S- RELOCATE EX SIGN AND EX POST PER DTL 2/24



File: Z:\2023 Projects\23009 MW Ph 4\Plans\23009_P-4\BKG.dwg ID: cory Date: 01-Dec-23 11:56:25am



CM DESIGN GROUP
 1318 EAST PIKE ST
 SEATTLE, WA 98122
 (206) 659-0612

REV. NO.	DATE	DESCRIPTION

BID DOCUMENT

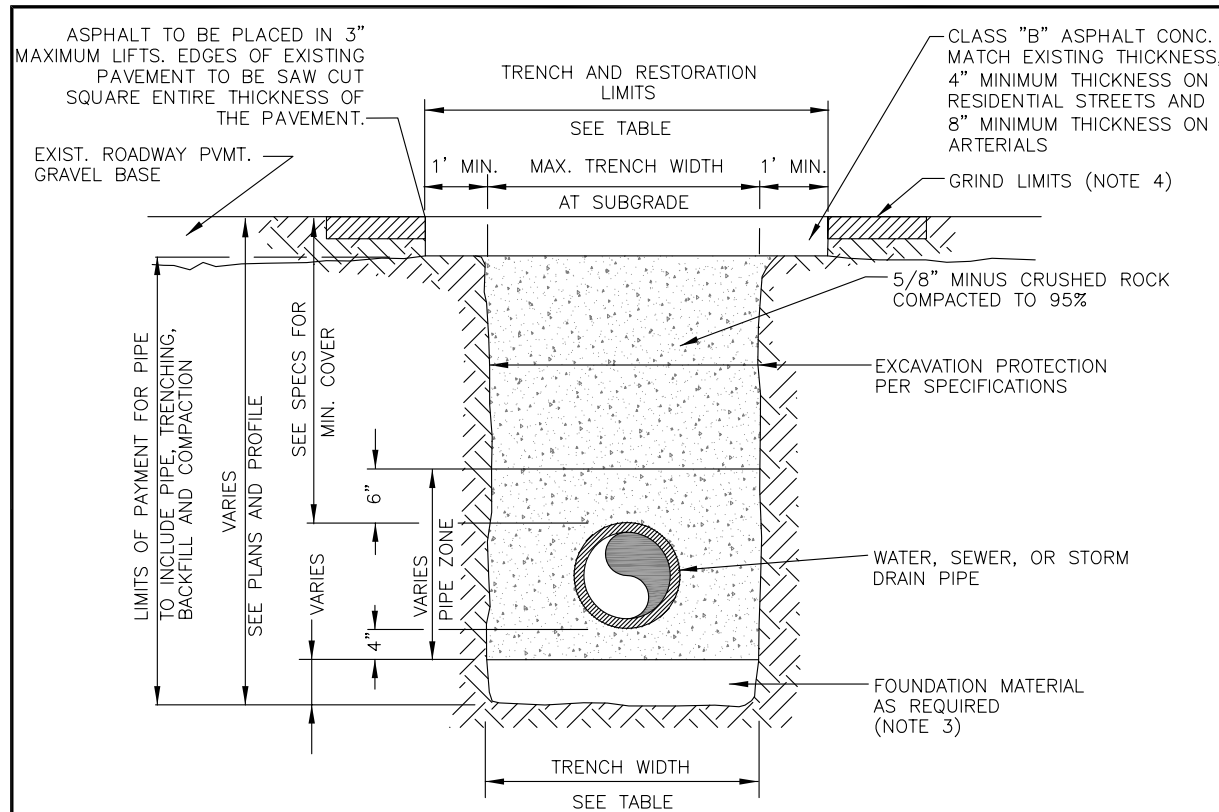


DATE	12/01/23
DESIGN	CFG
DRAFT	KTN
CHECK	CEM

**CITY OF MERCER ISLAND
 ROADSIDE SHOULDER IMPROVEMENTS
 WEST MERCER WAY PHASE 4**

CHANNELIZATION & SIGNAGE

PROJECT	23-36
SCALE	1"=15'
SHEET	20 OF 24

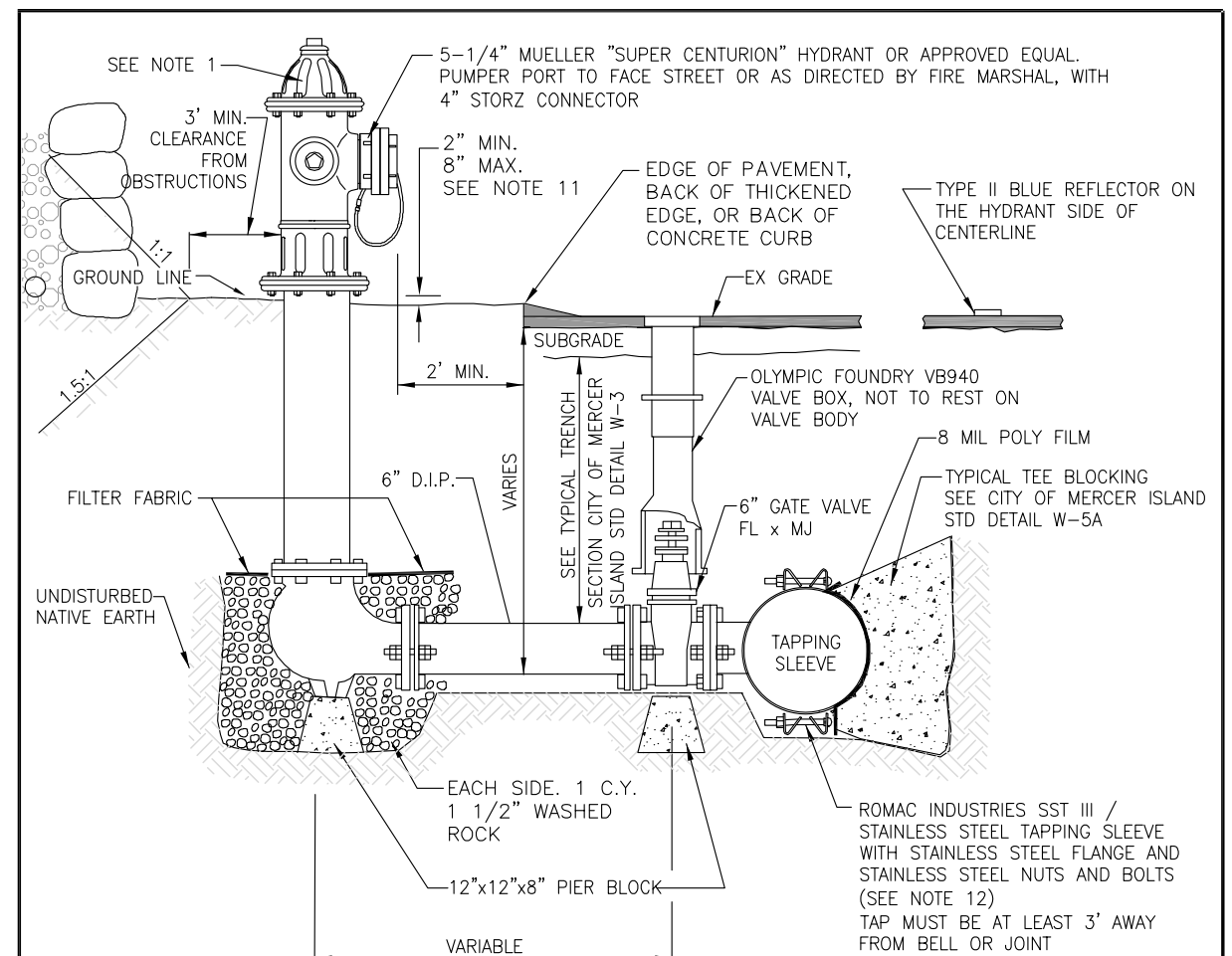


WIDTH TRENCH			
PIPE SIZE	PIPE ZONE MAX. TRENCH WIDTH	MAX. TRENCH WIDTH AT SUBGRADE	MAX. RESTORATION WIDTH AT SURFACE
WATER SERVICES	2'-0"	2'-0"	4'-0"
4" OR 6"	2'-2"	3'-0"	5'-0"
8"	2'-4"	4'-0"	6'-0"
10"	2'-6"	4'-0"	6'-0"
12"	2'-8"	4'-6"	6'-6"
16"	3'-0"	5'-0"	7'-0"

NOTES

- CALL IN LOCATES TWO BUSINESS DAYS BEFORE YOU DIG. (1-800-424-5555)
- IN RIGHT-OF-WAY USE 100% 5/8 MINUS CRUSHED ROCK FOR BEDDING, PIPE ZONE AND BACKFILL
- FOUNDATION MATERIAL SHALL BE 1 1/4" MINUS CRUSHED ROCK OR OTHER AGGREGATE AS APPROVED BY CITY ENGINEER.
- GRIND AND OVERLAY LIMITS SHALL EXTEND A MINIMUM OF 10' PAST THE END OF TRENCH AREAS.
- SEAL ALL FINAL PATCHING AND PAVING SEAMS WITH LIQUID ASPHALT. SQUEEGEE OR MOP THE SEALER. COVER WITH DRY SAND.

CITY OF MERCER ISLAND STANDARD DETAILS WATER		
TRENCH SECTION		
3-29-2021	NO SCALE	W-3
APPROVED		



NOTE:

- 1-5 1/4" M.V.O. HYDRANT WITH 2-2 1/2" N.T.S. M.J. INLET WITH LUGS, BRASS-TO-BRASS SUB-SEAT AND 1-4 1/2" PUMPER, SEATTLE STANDARD PIPE THREAD WITH 4" STORZ CONNECTOR ITEM NUMBER HPHA40-40-004/CAP SIZE 4.875-INCH BY 6-INCH.
- WET TAP IS ALLOWED ONLY UPON CITY'S APPROVAL. NO SIZE ON SIZE WET TAPS.
- NO DOMESTIC CONNECTIONS CAN BE MADE TO THE FIRE HYDRANT RUNS.
- ANY FIRE HYDRANT RUN OVER 18 FEET IN LENGTH OF PIPE SHALL HAVE RESTRAINED JOINT GASKETS.
- USE ROMA GRIP, OR APPROVED EQUAL, PIPE RESTRAINERS AT VALVE AND HYDRANT BASE.
- HYDRANT SHALL BE PAINTED WITH 2 COATS OF FARWEST #250 HIGH GLOSS WHITE PAINT, OR APPROVED EQUAL, APPLIED WITH A PAINT BRUSH. DO NOT APPLY PAINT TO STORZ FITTING, BRASS PORT THREADS, OR BELOW SAFETY FLANGE.
- BOLLARDS MAY BE USED TO PROTECT THE HYDRANT ONLY IN PARKING LOTS WHEN NO CURBS ARE PRESENT OR IN EXPOSED AREAS OF PARKING LOTS.
- STRAIGHT PIPE TO HYDRANTS FROM MAIN, NO BENDS.
- REMOVE CHAINS FROM HYDRANT CAPS.
- VALVE AND HYDRANT MUST BE PLUMB.
- THIS DISTANCE IS MEASURED FROM BOTTOM OF SAFETY FLANGE TO LEVEL OF FINISH GRADE BELOW HYDRANT.
- TAPPING SLEEVE O.D. (OUTSIDE DIAMETER) RANGE MUST BE COMMENSURATE WITH PIPE O.D.

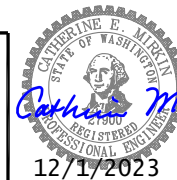
CITY OF MERCER ISLAND STANDARD DETAILS WATER		
FIRE HYDRANT ASSEMBLY - WET TAP INSTALLATION		
02-23-2021	NO SCALE	W-24A
APPROVED		

File: Z:\2023 Projects\23009 MW Ph. 4\Plans\23009_P-01-DTL.dwg ID: copy Date: 01-Dec-23 11:56:35am



REV. NO.	DATE	DESCRIPTION

BID DOCUMENT

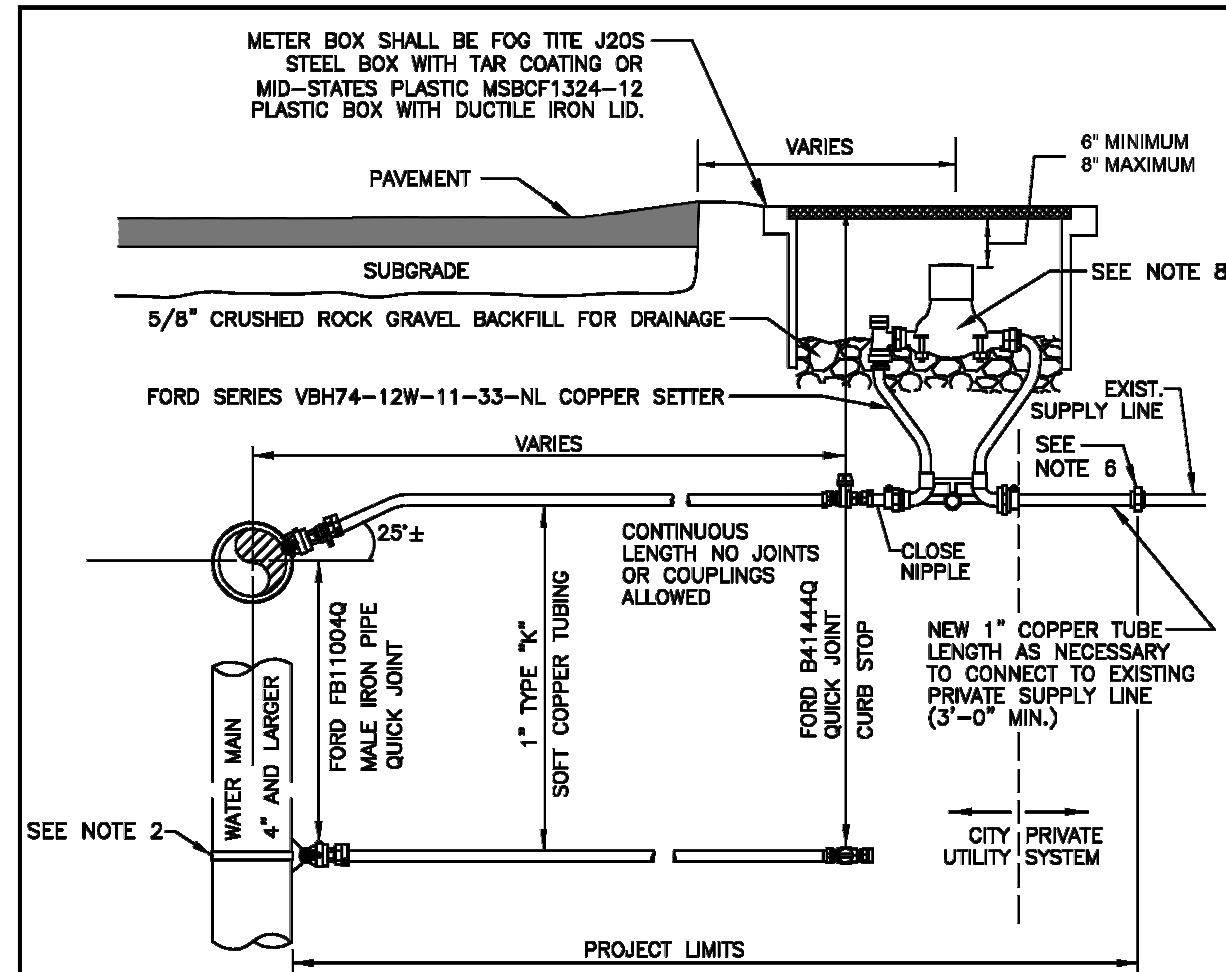


DATE	12/01/23
DESIGN	CFG
DRAFT	CFG
CHECK	CEM

**CITY OF MERCER ISLAND
ROADSIDE SHOULDER IMPROVEMENTS
WEST MERCER WAY PHASE 4**

DETAILS

PROJECT	23-36
SCALE	N.T.S.
SHEET	21 OF 24



NOTES

1. WATER SERVICES SHALL COMPLY WITH THE REDUCTION OF LEAD IN DRINKING WATER ACT DATED 01/04/2014.
2. ON EXISTING WATER MAINS USE NYLON COATED D.I. SADDLE WITH STAINLESS STEEL DOUBLE STRAPS, ROMAC 202NS, OR APPROVED EQUAL.
3. MINIMUM DISTANCE BETWEEN CORP STOPS SHALL BE 18". MINIMUM DISTANCE BETWEEN TAPS, BETWEEN CORP STOP AND PIPE ENDS SHALL BE 24', ALL HORIZONALLY STAGGERED.
4. PLASTIC METER BOXES SHALL NOT BE INSTALLED WITHIN ROADWAY, SIDEWALK, OR DRIVEWAYS.
5. UPON CITY ENGINEER'S APPROVAL, METER BOXES ARE ALLOWED TO BE INSTALLED IN PORTLAND CEMENT CONCRETE PAVEMENT OR SIDEWALK.
6. WHEN CONNECTING TO EXISTING PRIVATE SUPPLY LINE CONTAINING FERROUS METAL, PROVIDE INSULATING COUPLING (DB SERIES WITH C21 SERIES ADAPTERS) AND PROVIDE REDUCER AS NECESSARY TO MATCH EXISTING PRIVATE SUPPLY LINE DIAMETER.
7. SERVICE LINE SHALL BE PERPENDICULAR TO THE WATER MAIN AND STRAIGHT TO WATER METER, UNLESS OTHERWISE APPROVED BY CITY ENGINEER. PROVIDE WINDING SLACK IN THE SERVICE LINE BETWEEN THE MAIN AND WATER METER.
8. WATER METER SUPPLIED BY CITY.
9. ALL FITTINGS TO BE BRASS COMPRESSION TYPE, FORD QUICK JOINT OR EQUAL.
10. NO SERVICE CONNECTIONS BETWEEN BLOW-OFF AND END OF MAIN.

CITY OF MERCER ISLAND STANDARD DETAILS WATER			
1" WATER METER INSTALLATION			
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">02-05-2021</td> <td style="width: 33%;">NO SCALE</td> <td style="width: 33%; text-align: right;">W-13</td> </tr> </table>	02-05-2021	NO SCALE	W-13
02-05-2021	NO SCALE	W-13	

REV DATE			APPROVED
----------	--	--	----------

File: Z:\2023 Projects\2009 WNW Ph. 4\Plans\23009_P-001.dwg ID: copy Date: 01-Dec-23 11:56:36am



CM DESIGN GROUP
 1318 EAST PIKE ST
 SEATTLE, WA 98122
 (206) 659-0612

REV. NO.	DATE	DESCRIPTION

BID DOCUMENT

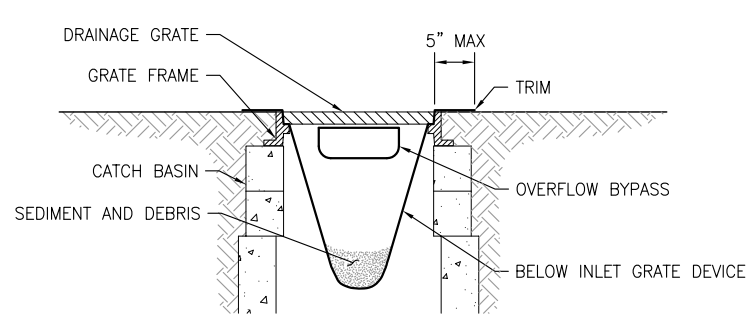


DATE	12/01/23
DESIGN	CFG
DRAFT	CFG
CHECK	CEM

CITY OF MERCER ISLAND
ROADSIDE SHOULDER IMPROVEMENTS
WEST MERCER WAY PHASE 4

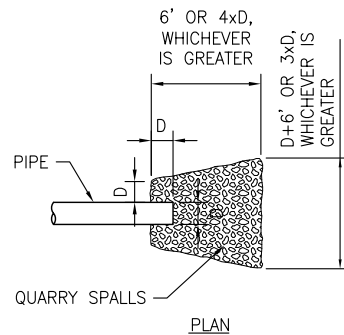
DETAILS

PROJECT	23-36
SCALE	NTS
SHEET	22 OF 24



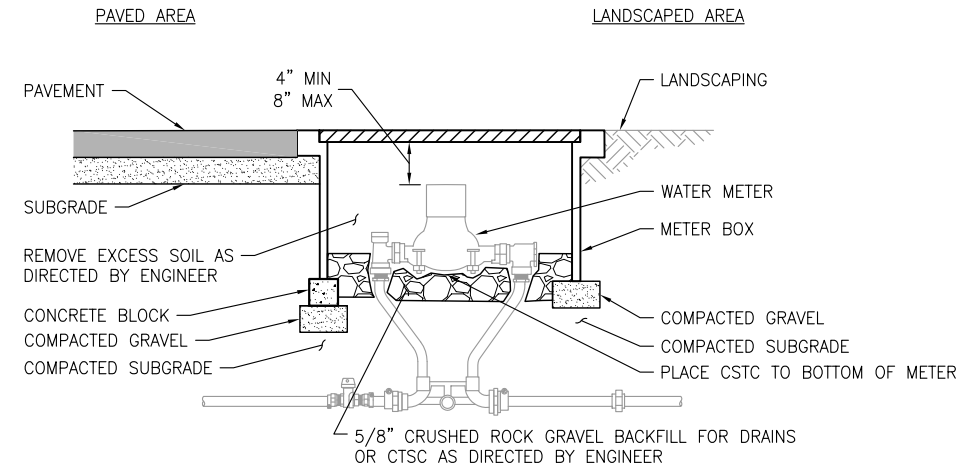
- NOTES:
1. SIZE THE BELOW INLET GRATE DEVICE (BIGD) FOR THE STORM WATER STRUCTURE IT WILL SERVICE.
 2. THE BIGD SHALL HAVE A BUILT-IN HIGH-FLOW RELIEF SYSTEM (OVERFLOW BYPASS).
 3. THE RETRIEVAL SYSTEM MUST ALLOW REMOVAL OF THE BIGD WITHOUT SPILLING THE COLLECTED MATERIAL.

1 INLET PROTECTION
NTS



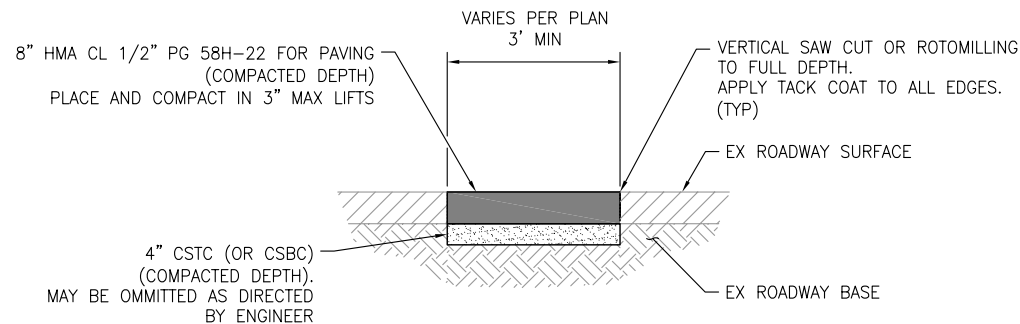
- NOTES:
1. SQUARE CUT END OF PIPE UNLESS DIRECTED OTHERWISE.
 2. PIPE IS NOT IN ALL LOCATIONS. REFER TO PLAN FOR PIPE LOCATIONS.
 3. DEPTH SHALL BE:
12" MIN DEPTH (12"Ø PIPE)
18" MIN DEPTH (15"-18"Ø PIPE)
24" MIN DEPTH (21"-24"Ø PIPE)

2 CULVERT INLET-OUTLET
NTS

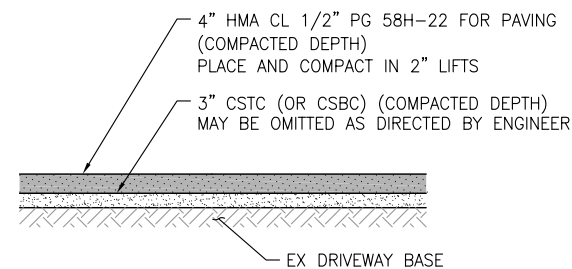


- NOTES:
1. PLACE CRUSHED ROCK BACKFILL TO THE BOTTOM OF THE METER TO PREVENT FREEZING.
 2. PLACE THE METER BOX SO VALVES ON EITHER SIDE OF THE METER ARE OPERABLE FROM THE INSIDE OF THE METER BOX.
 3. METER BOX SHALL BE PROVIDED BY CITY (FOG TITE J20S STEEL BOX OR EQUAL).

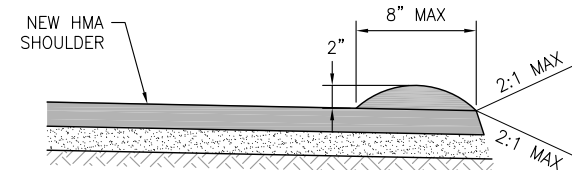
3 WATER METER BOX
NTS



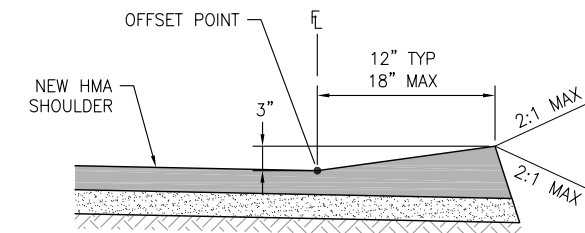
4 TYPICAL PAVEMENT REPAIR
NTS



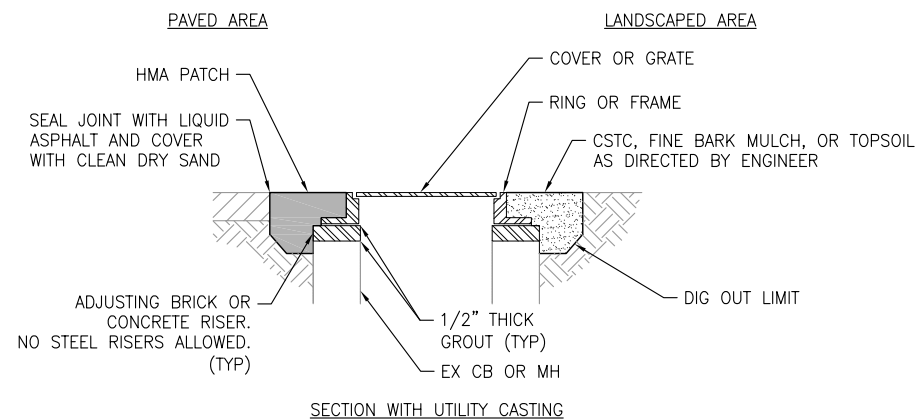
5 HMA DRIVEWAY
NTS



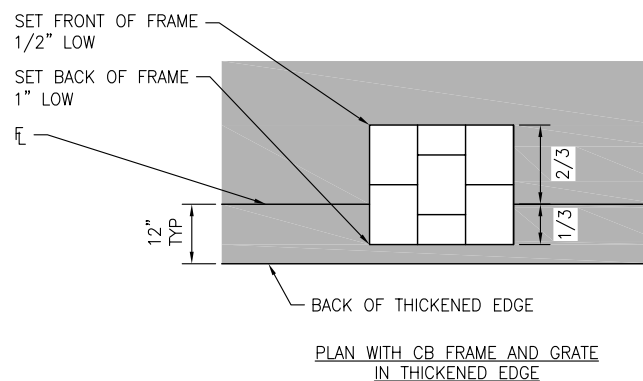
6 HMA BERM
NTS



7 HMA THICKENED EDGE
NTS



8 TYPICAL UTILITY ADJUSTMENT
NTS



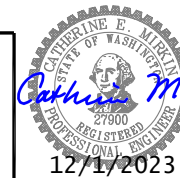
- NOTES:
1. ASPHALT PERIMETER SHALL EXTEND 2" BELOW ADJUSTMENT RINGS.
 2. UTILITIES WITH CONCRETE RINGS AROUND STRUCTURE SHALL HAVE CONCRETE REMOVED AND REPLACED WITH HMA PER THIS DETAIL.
 3. ADD OR REMOVE BRICK AND/OR RISERS TO ACHIEVE REQUIRED FINISHED RIM ELEVATION.
 4. CATCH BASINS IN THE FLOWLINE SHALL BE ADJUSTED TO FINISH GRADE PRIOR TO PAVING UNLESS DIRECTED BY THE ENGINEER.
 5. MANHOLES, VALVE BOXES, AND MONUMENTS SHALL BE ADJUSTED TO FINISH GRADE AFTER PAVING.

File: Z:\2023 Projects\23009 MW Ph. 4\Plans\23009_P-001.dwg ID: copy Date: 01-Dec-23 11:57:13am



REV. NO.	DATE	DESCRIPTION

BID DOCUMENT

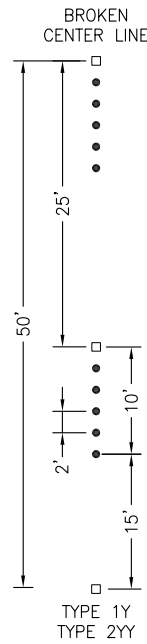


DATE	12/01/23
DESIGN	CFG
DRAFT	CFG
CHECK	CEM

**CITY OF MERCER ISLAND
ROADSIDE SHOULDER IMPROVEMENTS
WEST MERCER WAY PHASE 4**

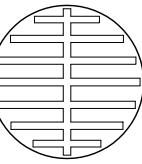
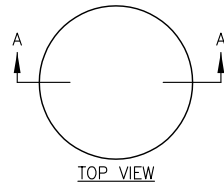
DETAILS

PROJECT	23-36
SCALE	NTS
SHEET	23 OF 24

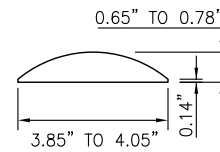


- TYPE 1 RAISED PAVEMENT MARKER
- TYPE 2 RAISED PAVEMENT MARKER

TYPE 2 RPM RAISED FACE COLORS	
TYPE 2YY	YELLOW AND YELLOW
TYPE 2W	WHITE-ONE SIDE ONLY
TYPE 2WW	WHITE-ONE SIDE ONLY
TYPE 1 RPM COLORS	
TYPE 1W	WHITE
TYPE 1Y	YELLOW

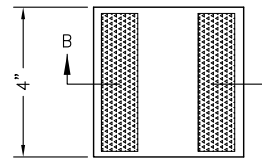


BOTTOM VIEW
(SEE NOTE 2)



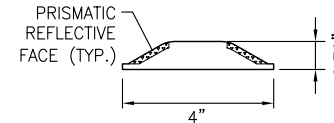
SECTION A-A

TYPE 1



PLAN

DIRECTION OF TRAFFIC



SECTION B-B

TYPE 2

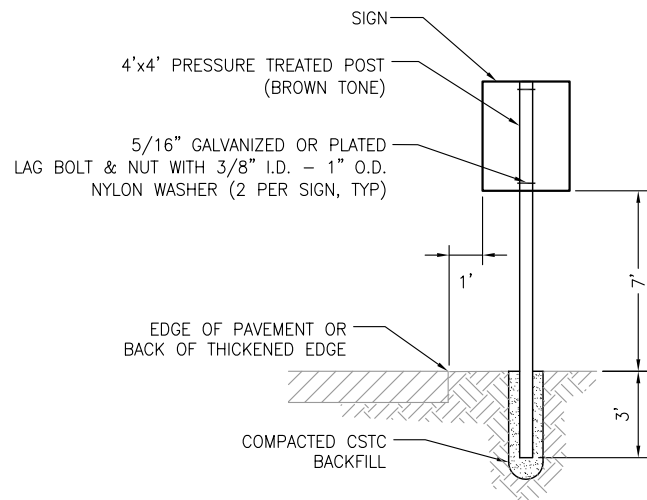
GENERAL NOTE:
ALL MARKERS INSTALLED ON HMA PAVEMENTS SHALL BE INSTALLED WITH BITUMINOUS ADHESIVE, CRAFCO STANDARD PAVEMENT MARKER ADHESIVE. SEE SPECIFICATION SECTION 9-02.1(8) AND 8-09.

TYPE 1 NOTES:
1. TYPE 1 MATERIAL-MARKER SHALL BE MOLDED OF A HIGH IMPACT, RECYCLED ACRYLONITRILE BUTADIENE STYRENE (ABS),

2. MARKER BOTTOM SHALL ALLOW UPWARD FLOW OF ADHESIVE AND VENTING TO PREVENT AIR ENTRAPMENT.

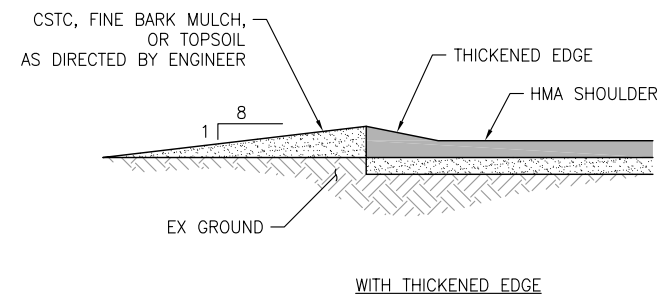
TYPE 2 NOTES:
1. RAISED PAVEMENT MARKERS TYPE 2 SHALL BE STIMSONITE C80 OR APPROVED EQUAL.
2. SUBSTITUTE PAVEMENT MARKERS SHALL NOT BE ACCEPTED WITHOUT WRITTEN APPROVAL BY THE ENGINEER, PRIOR TO THE INSTALLATION.

1 **RAISED PAVEMENT MARKERS**
NTS

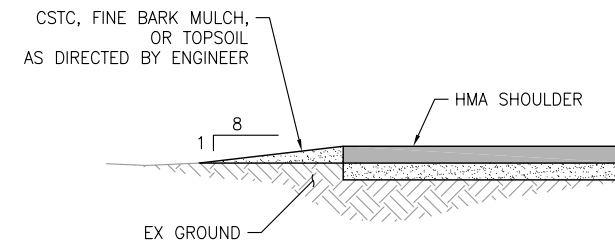


NOTES:
SIGN SHALL BE ATTACHED WITH TOP EDGE OF SIGN FLUSH WITH TOP OF POST.

2 **SIGN INSTALLATION**
NTS



WITH THICKENED EDGE



WITHOUT THICKENED EDGE

3 **EDGE RESTORATION**
NTS

File: Z:\2023 Projects\23009 MW Ph 4\Plans\23009_P-DET.dwg ID: cony Date: 01-Dec-23 11:57:16am



REV. NO.	DATE	DESCRIPTION

BID DOCUMENT



DATE	
DESIGN	12/01/23
DRAFT	CFG
CHECK	CEM

**CITY OF MERCER ISLAND
ROADSIDE SHOULDER IMPROVEMENTS
WEST MERCER WAY PHASE 4**

DETAILS

PROJECT	23-36
SCALE	NTS
SHEET	24 OF 24