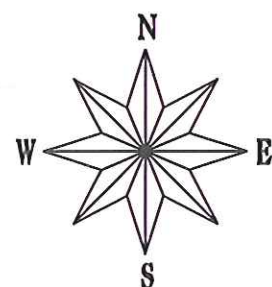


Madison, Wisconsin



NOTE: FIELD VERIFY UTILITIES

STORM SEWER — ST —
SANITARY SEWER — SAN —
WATER — W —
POWER POLE — □ —
RAILROAD — ———

INDEX OF SHEETS

SHEET NO.	DI-D2	DETAILS
SHEET NO.	EC1-EC4	EROSION CONTROL PLAN
SHEET NO.	P1-P4	PLAN/PROFILE
SHEET NO.	P5	STORM SCHEDULE
SHEET NO.	X1-X18	CROSS-SECTIONS

EARTHWORK SUMMARY

EXCAVATION	
(PAID AS PLAN QUANTITY)	812 CY
UNDERCUT (EST.)	0 CY
FILL BORROW	0 CY
(PAID ONLY FOR IMPORTED FILL)	812 CY
TOTAL	

CITY OF MADISON

CITY ENGINEERING DIVISION

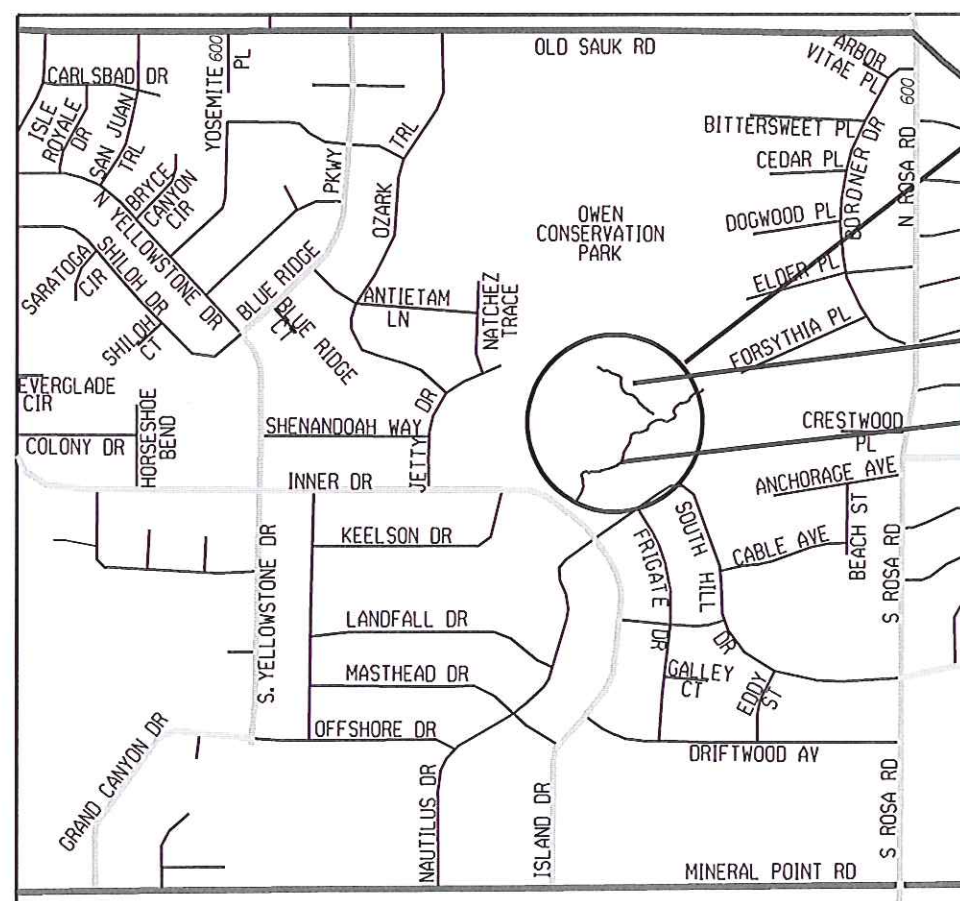
DEPARTMENT OF PUBLIC WORKS

PLAN OF PROPOSED IMPROVEMENT

OWEN PARK DRAINAGE CHANNEL

STABILIZATION – 2013

PROJECT NO. 53W1183
CONTRACT NO. 7182



PROJECT LOCATION

SECONDARY CHANNEL

PRIMARY CHANNEL

STREET PROJECT APPROVED
AUGUST 6, 2013
BY THE COMMON COUNCIL
OF MADISON, WISCONSIN

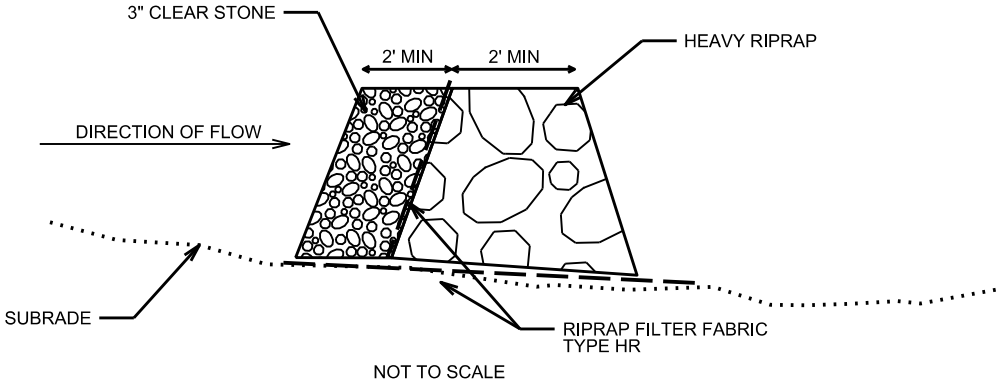
DESIGN
APPROVED BY:

Christy Buchman 8-26-13
City Engineer Date

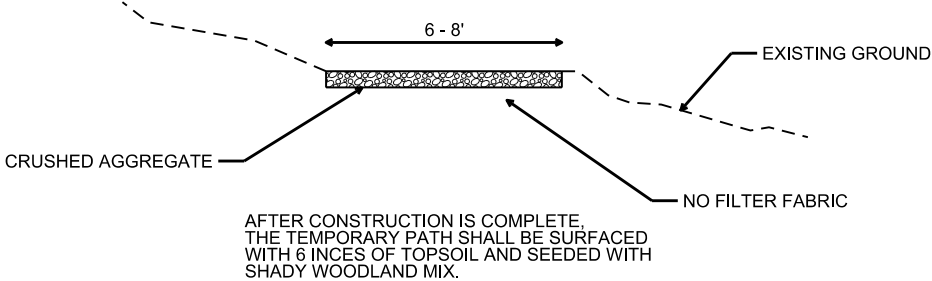
STORM SEWER
APPROVED BY:

Gregory Fries
GREGORY FRIES
E 30456
MADISON WI
Professional Engineer

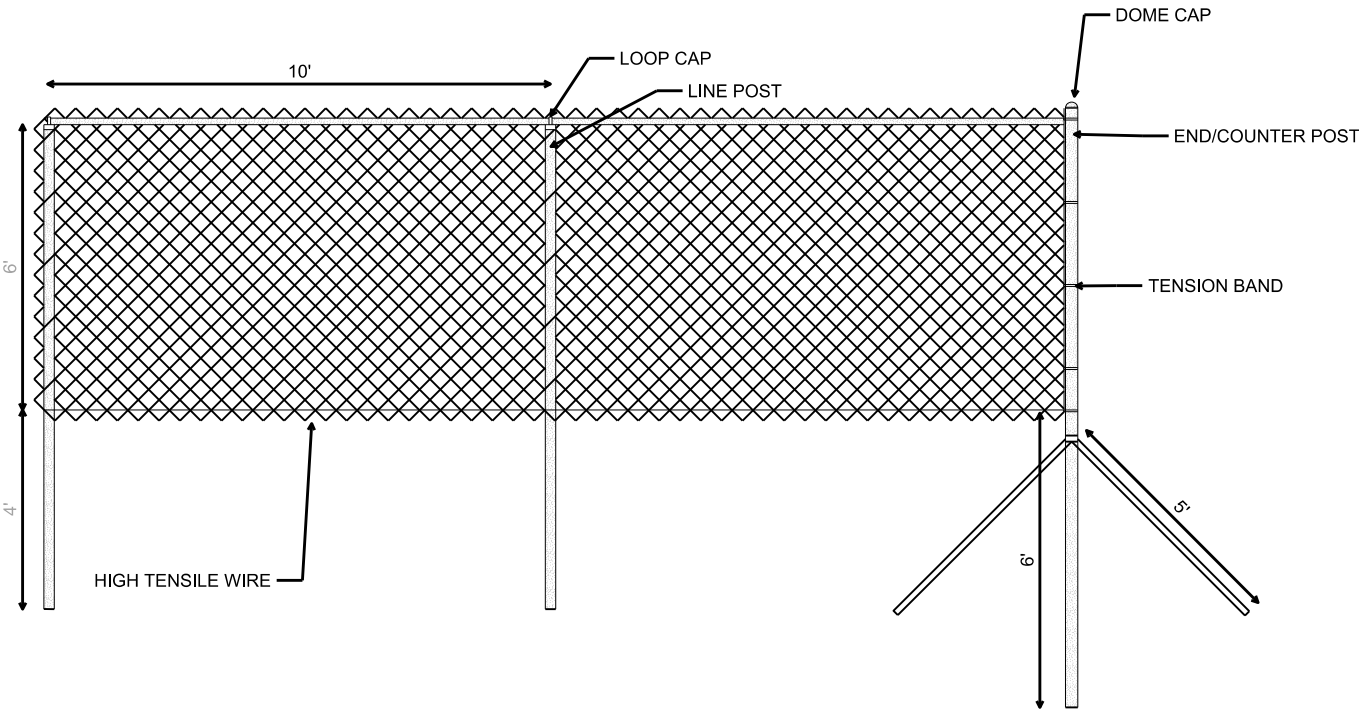
TEMPORARY DITCH CHECK



TEMPORARY PATH DETAIL



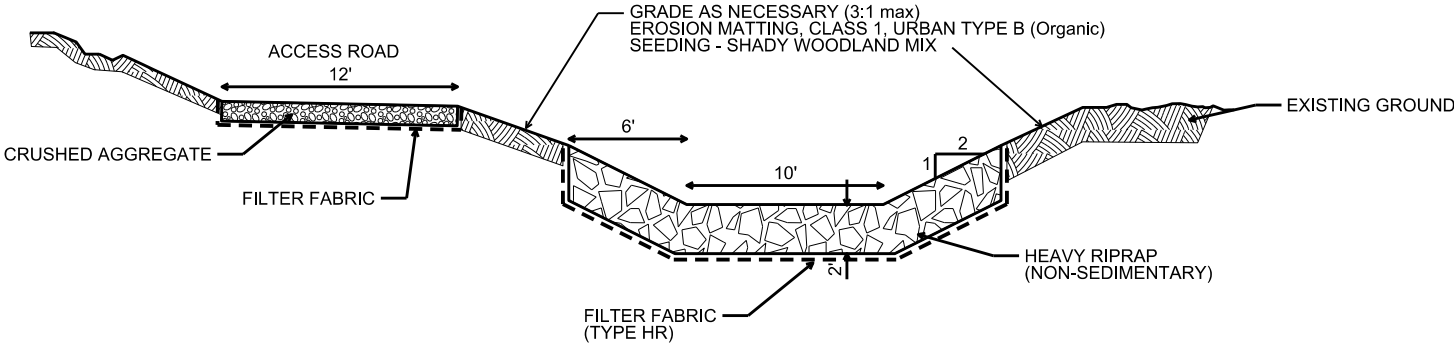
CHAINLINK FENCE DETAIL



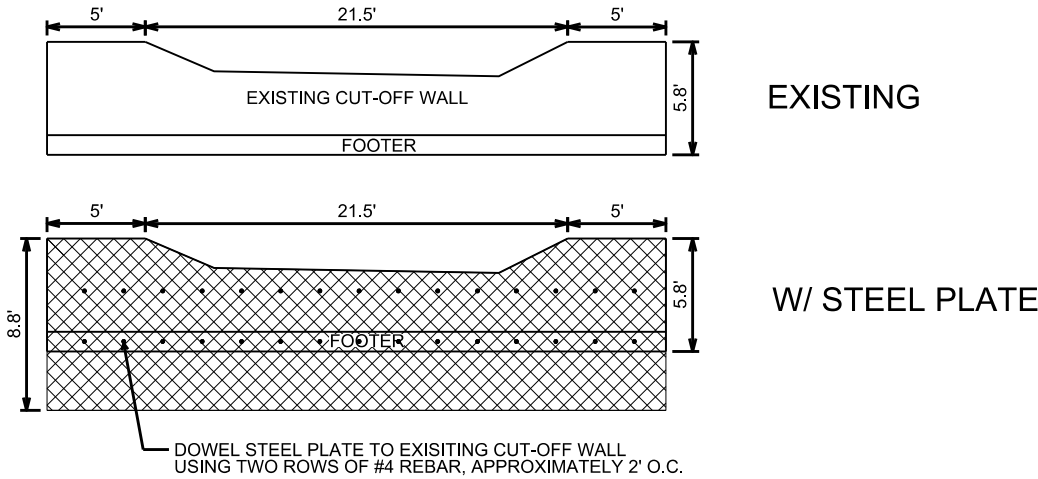
SCHEDULE 40 PIPE

FABRIC	HEIGHT 6'	MESH 2"	GAUGE 9	SELVAGE KK	FINISH ALUM.
FRAMEWORK	O.D.	WALL	WT. PER FT.	LENGTH	
END/CORNER POST	3"	0.203	5.79	12'	
LINE POST	2.5"	0.154	3.65	10'	
RAILS	1.625"	0.140	2.27	21'	

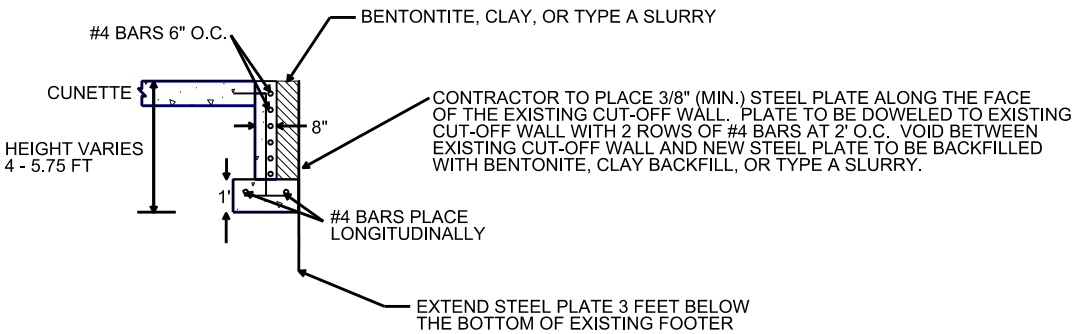
PRIMARY CHANNEL - TYPICAL SECTION



CUT-OFF WALL - CROSS SECTION

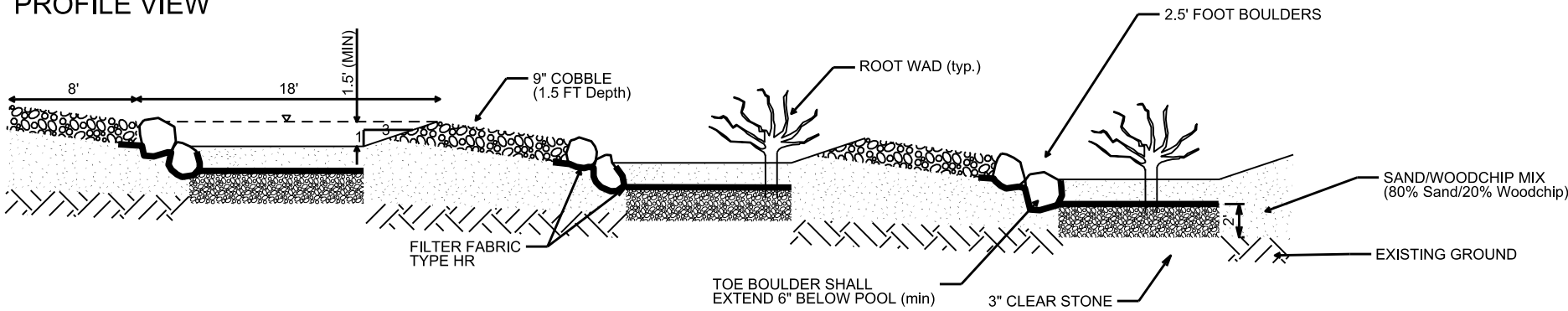


CUT-OFF WALL - PROFILE

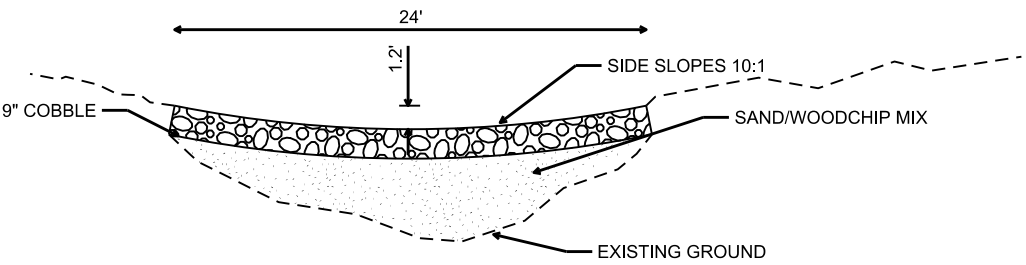


RIFFLE AND POOL CONVEYANCE SYSTEM

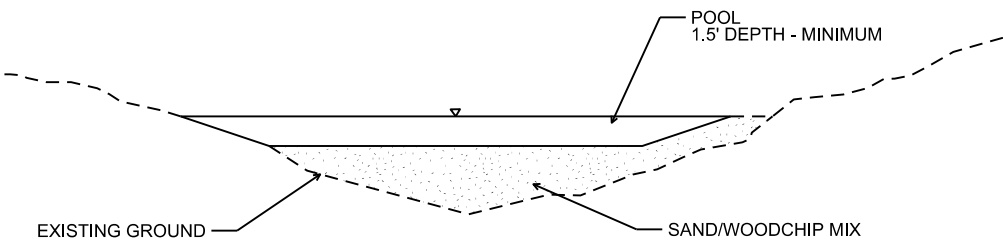
PROFILE VIEW



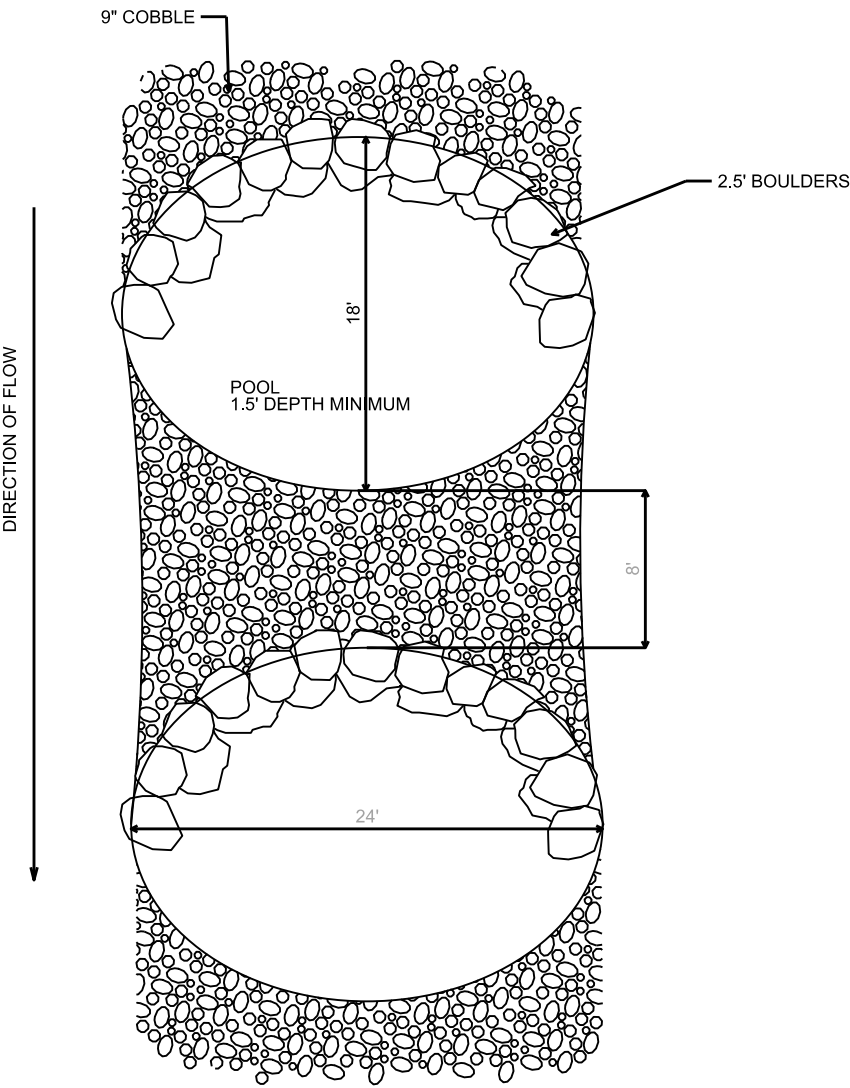
CROSS-SECTION VIEW - RIFFLE



CROSS-SECTION VIEW - POOL



PLAN VIEW



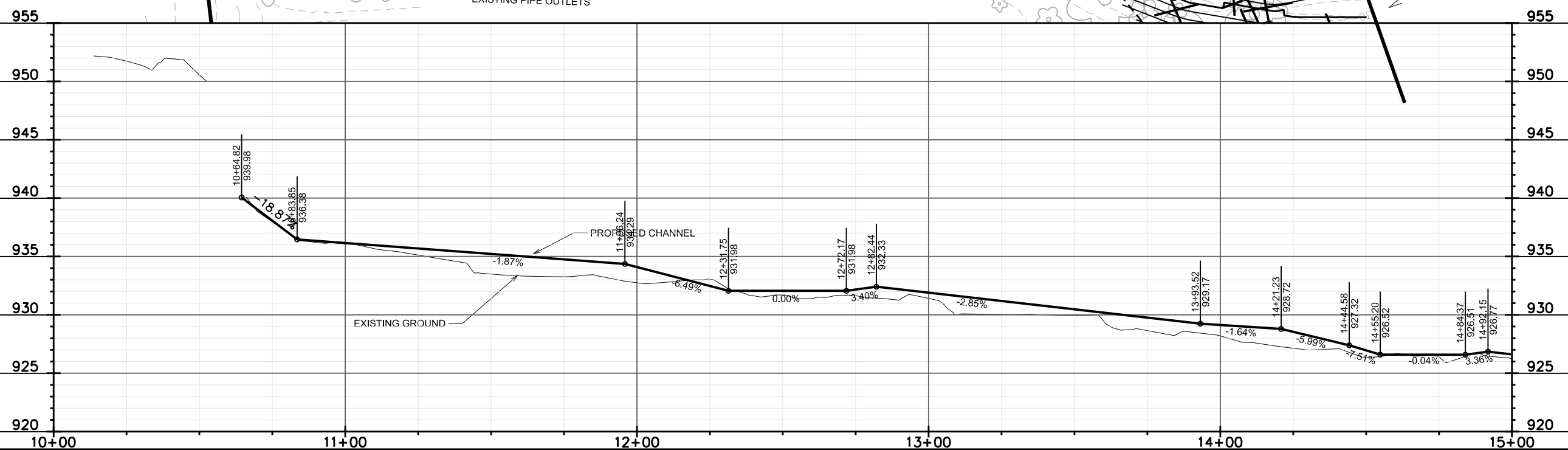
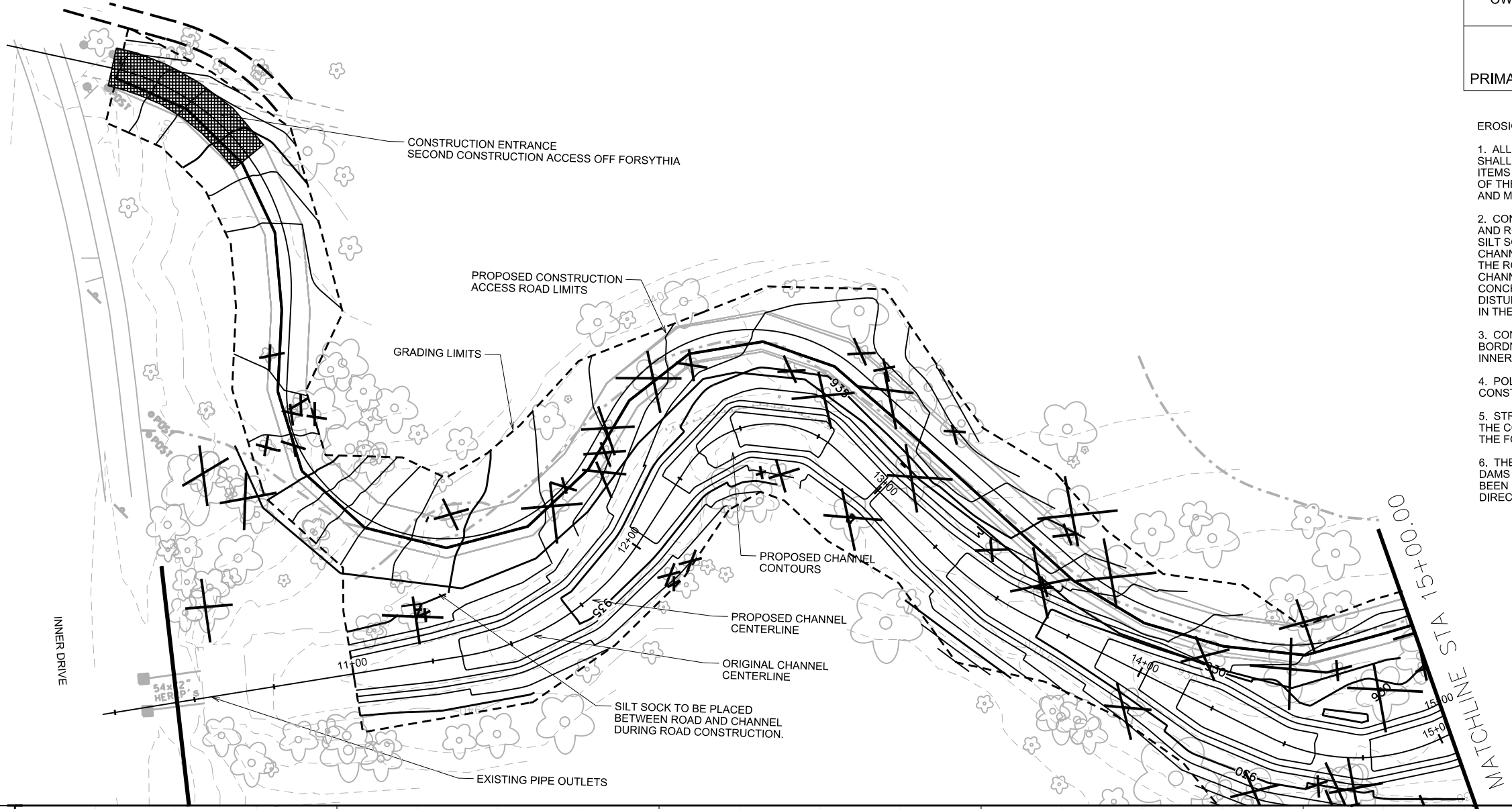
PLOT SCALE: _____

PLOT NAME: _____

REV. DATE: _____

ORIGINATOR: CITY OF MADISON, STREETS DIVISION

- EROSION CONTROL NOTES:
- ALL DISTURBED AREAS WITHIN THE GRADING LIMITS SHALL BE TOPSOILED, SEEDED, AND MATTED PER BID ITEMS 20221, 90007, AND 21062. DISTURBED AREAS OUTSIDE OF THE GRADING LIMITS SHALL BE TOPSOILED, SEEDED, AND MATTED AT THE EXPENSE OF THE CONTRACTOR.
 - CONSTRUCTION SHALL BE STAGED. TREE CLEARING AND ROAD CONSTRUCTION WILL BEGIN IN OCTOBER 2013. SILT SOCK WILL BE PLACED BETWEEN THE ROAD AND CHANNEL DURING CONSTRUCTION OF THE ROAD. AFTER THE ROAD IS STABILIZED, WORK ON THE CHANNEL CAN BEGIN. CHANNEL CONSTRUCTION WILL BEGIN AT THE EXISTING CONCRETE CUNNETTE AND PROCEED UP-STREAM. CHANNEL DISTURBANCE SHALL BE LIMITED TO WHAT CAN BE ARMORED IN THE SAME DAY.
 - CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT BORDNER DRIVE AND AT THE PARK PATH ENTRANCE, OFF INNER DRIVE.
 - POLYMER SHALL BE APPLIED AT THE DISCRETION OF THE CONSTRUCTION ENGINEER.
 - STREET SWEEPING SHALL OCCUR AS DIRECTED BY THE CONSTRUCTION ENGINEER AND MAY INCLUDE SWEEPING THE FORSYTHIA CUNNETTE.
 - THE CONTRACTOR SHALL INSTALL TEMPORARY CHECK DAMS DOWNSTREAM OF AREAS WHERE THE CHANNEL HAS BEEN DISTURBED AND NOT YET ARMORED, OR AT THE DIRECTION OF THE CONSTRUCTION ENGINEER.

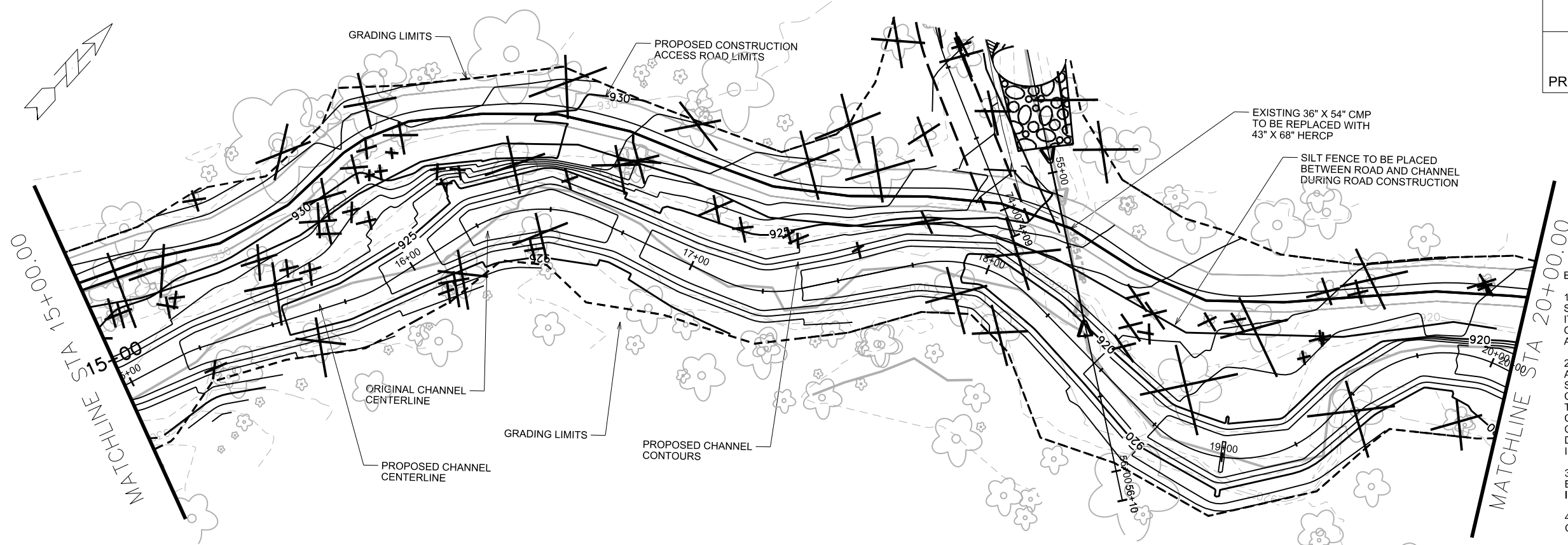


ORIGINATOR: CITY OF MADISON, STREETS DIVISION

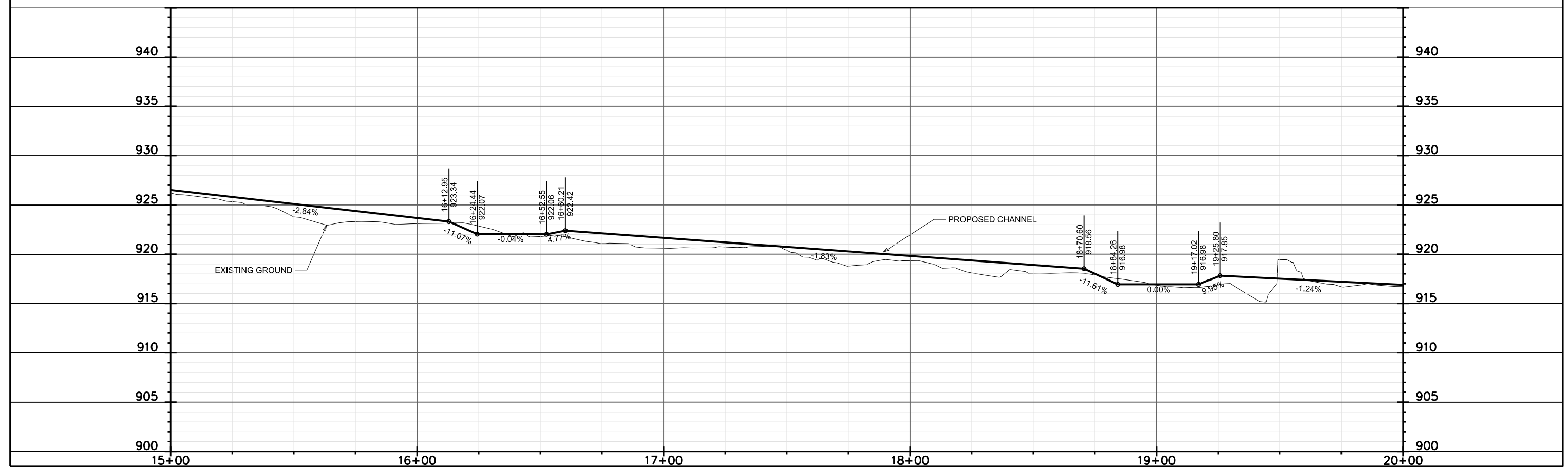
REV. DATE: _____

PLOT NAME: _____

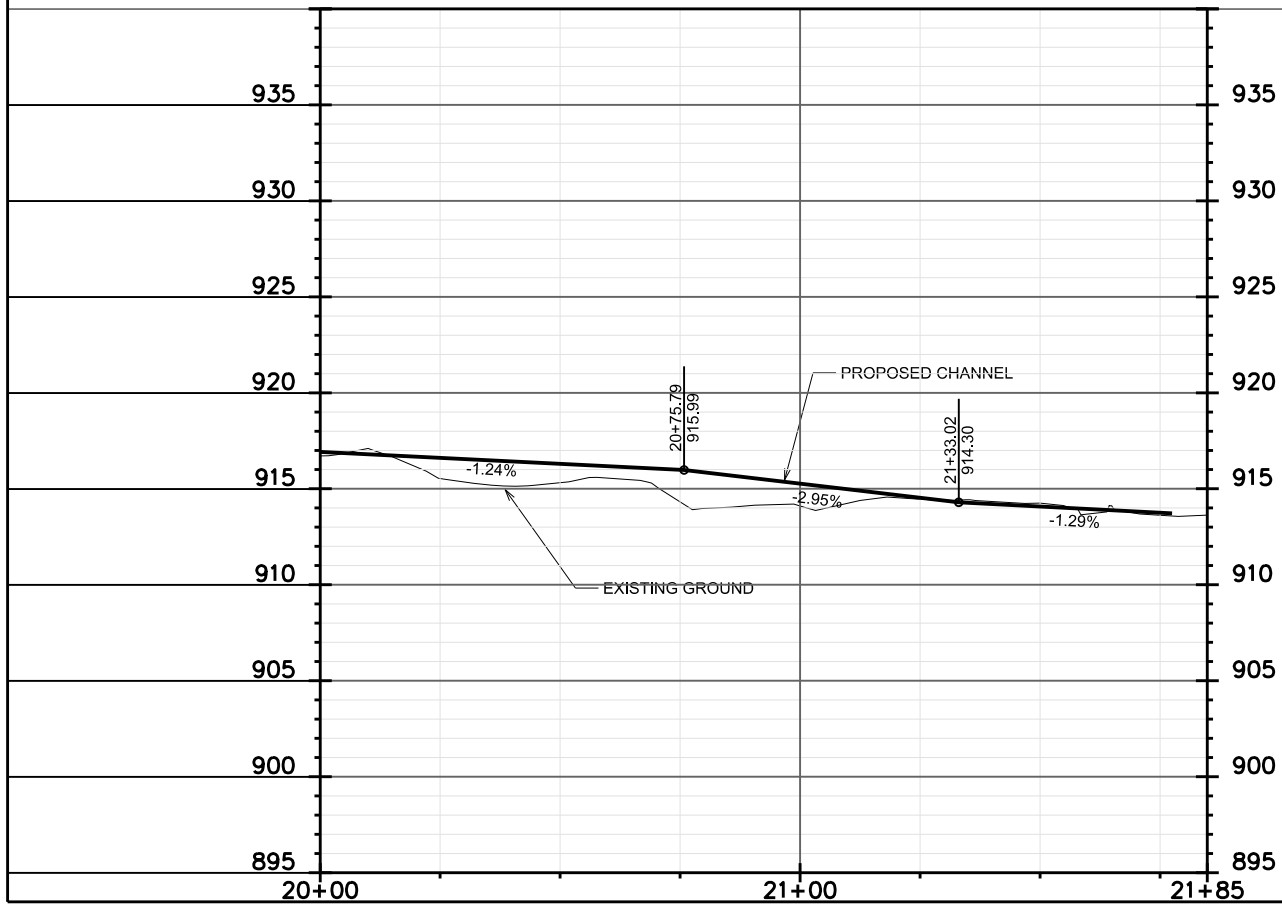
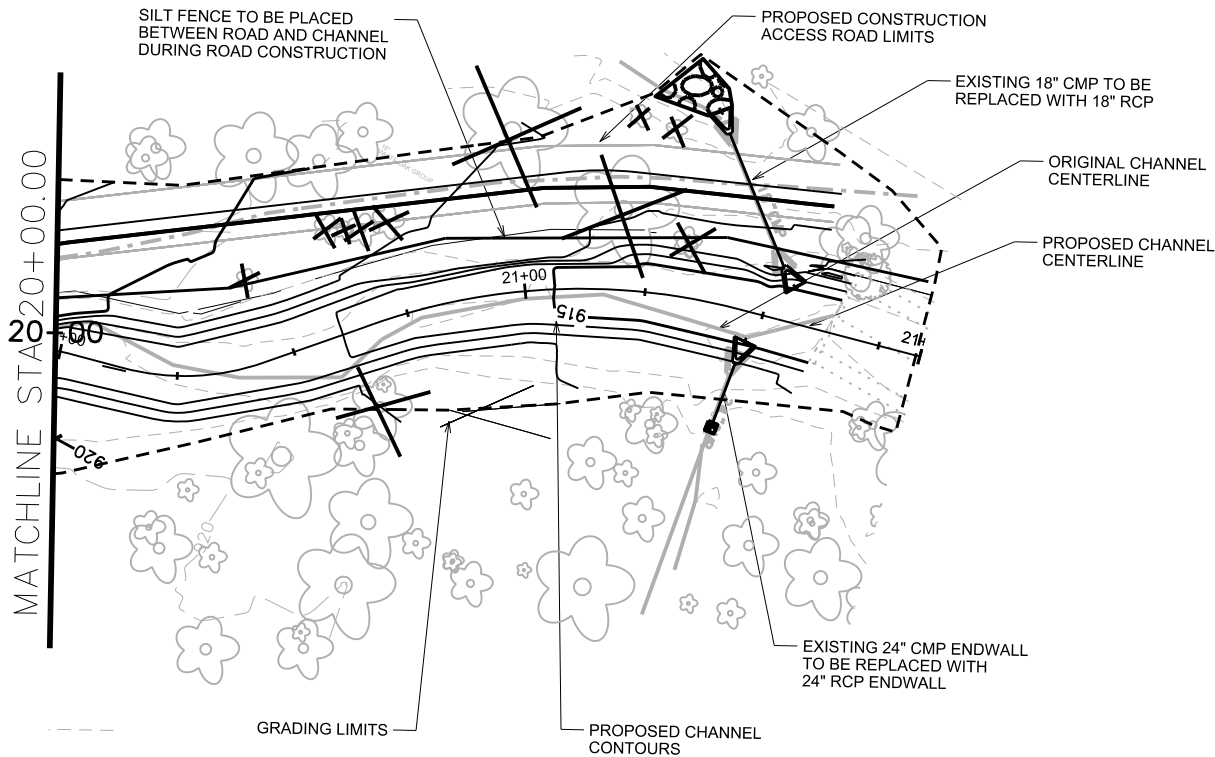
PLOT SCALE: _____

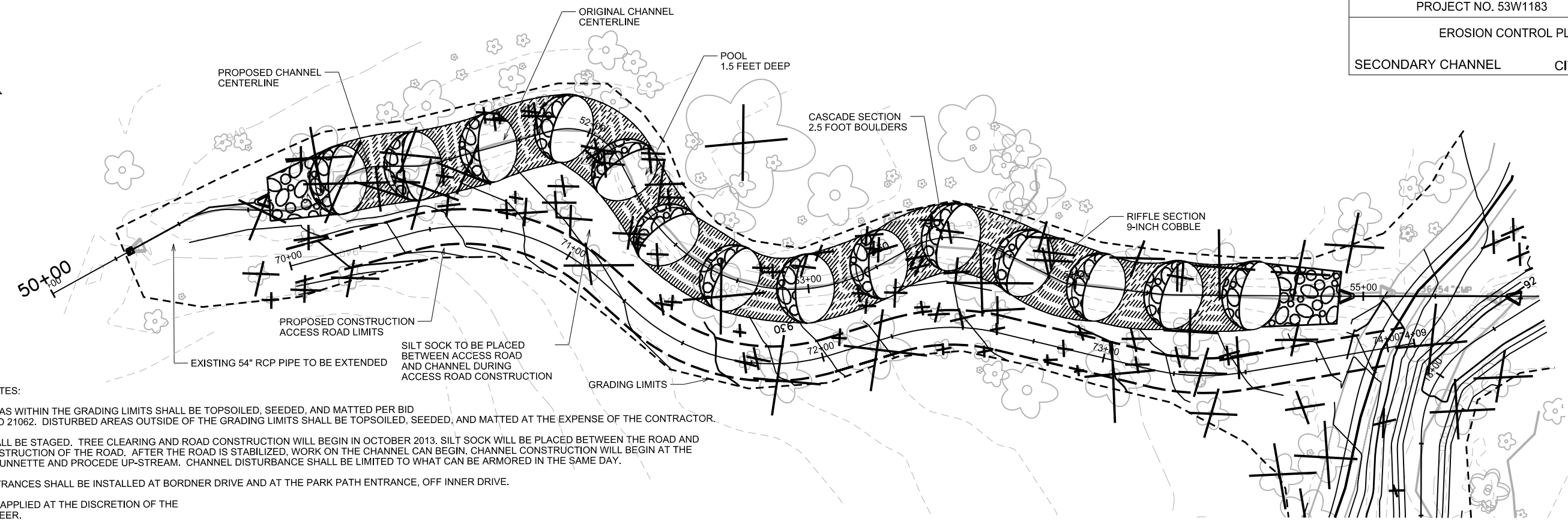


- EROSION CONTROL NOTES:
1. ALL DISTURBED AREAS WITHIN THE GRADING LIMITS SHALL BE TOPSOILED, SEEDED, AND MATTED PER BID ITEMS 20221, 90007, AND 21062. DISTURBED AREAS OUTSIDE OF THE GRADING LIMITS SHALL BE TOPSOILED, SEEDED, AND MATTED AT THE EXPENSE OF THE CONTRACTOR.
 2. CONSTRUCTION SHALL BE STAGED. TREE CLEARING AND ROAD CONSTRUCTION WILL BEGIN IN OCTOBER 2013. SILT SOCK WILL BE PLACED BETWEEN THE ROAD AND CHANNEL DURING CONSTRUCTION OF THE ROAD. AFTER THE ROAD IS STABILIZED, WORK ON THE CHANNEL CAN BEGIN. CHANNEL CONSTRUCTION WILL BEGIN AT THE EXISTING CONCRETE CUNNETTE AND PROCEED UP-STREAM. CHANNEL DISTURBANCE SHALL BE LIMITED TO WHAT CAN BE ARMORED IN THE SAME DAY.
 3. CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT BORDNER DRIVE AND AT THE PARK PATH ENTRANCE, OFF INNER DRIVE.
 4. POLYMER SHALL BE APPLIED AT THE DISCRETION OF THE CONSTRUCTION ENGINEER.
 5. STREET SWEEPING SHALL OCCUR AS DIRECTED BY THE CONSTRUCTION ENGINEER AND MAY INCLUDE SWEEPING THE FORSYTHIA CUNNETTE.
 6. THE CONTRACTOR SHALL INSTALL TEMPORARY CHECK DAMS DOWNSTREAM OF AREAS WHERE THE CHANNEL HAS BEEN DISTURBED AND NOT YET ARMORED, OR AT THE DIRECTION OF THE CONSTRUCTION ENGINEER.

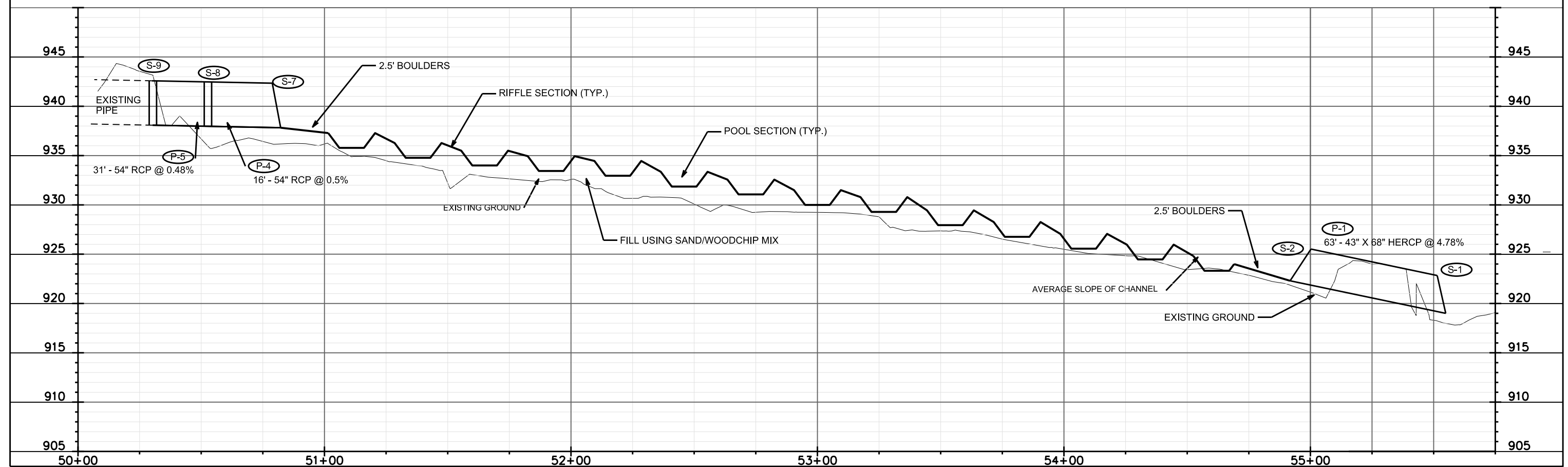


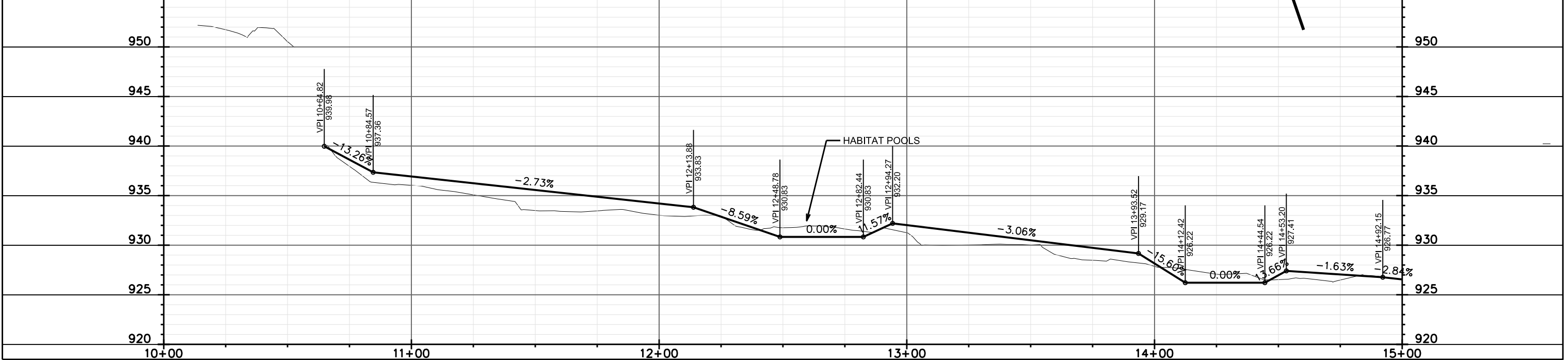
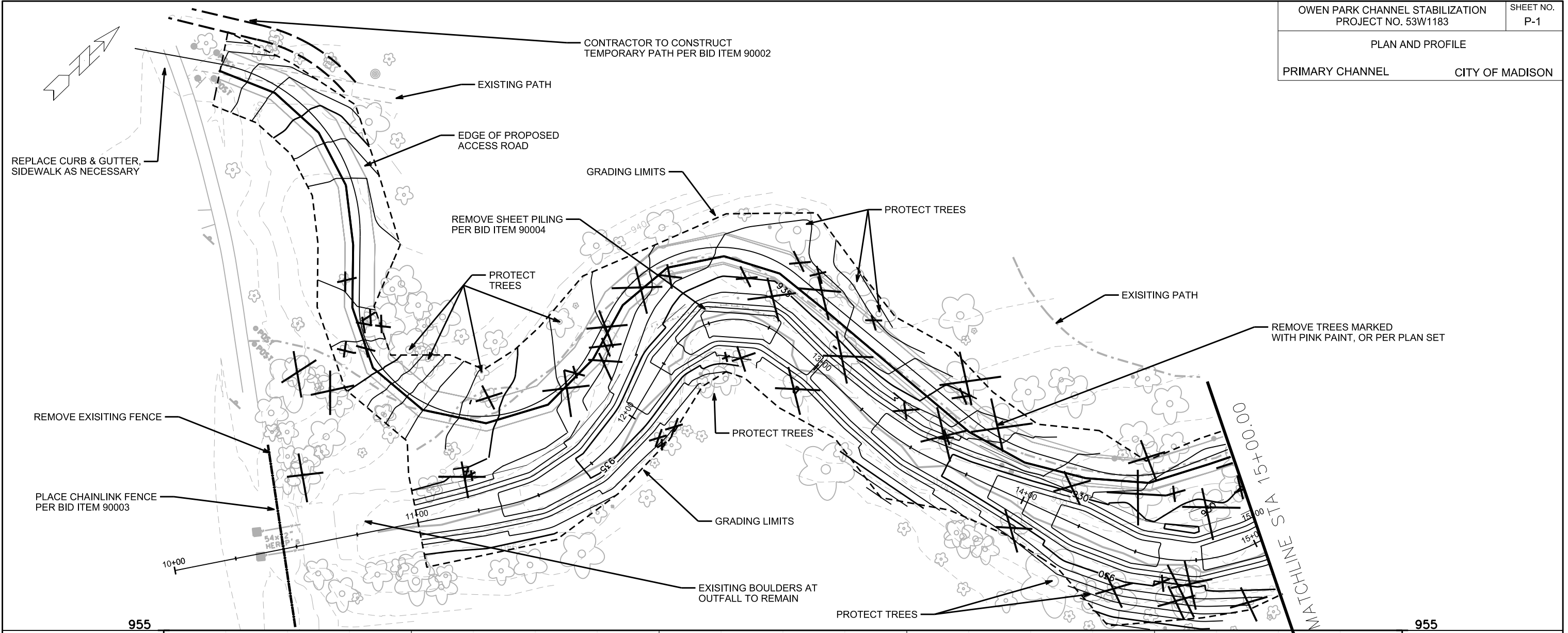
- EROSION CONTROL NOTES:
- ALL DISTURBED AREAS WITHIN THE GRADING LIMITS SHALL BE TOPSOILED, SEEDED, AND MATTED PER BID ITEMS 20221, 90007, AND 21062. DISTURBED AREAS OUTSIDE OF THE GRADING LIMITS SHALL BE TOPSOILED, SEEDED, AND MATTED AT THE EXPENSE OF THE CONTRACTOR.
 - CONSTRUCTION SHALL BE STAGED. TREE CLEARING AND ROAD CONSTRUCTION WILL BEGIN IN OCTOBER 2013. SILT SOCK WILL BE PLACED BETWEEN THE ROAD AND CHANNEL DURING CONSTRUCTION OF THE ROAD. AFTER THE ROAD IS STABILIZED, WORK ON THE CHANNEL CAN BEGIN. CHANNEL CONSTRUCTION WILL BEGIN AT THE EXISTING CONCRETE CUNNETTE AND PROCEED UP-STREAM. CHANNEL DISTURBANCE SHALL BE LIMITED TO WHAT CAN BE ARMORED IN THE SAME DAY.
 - CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT BORDNER DRIVE AND AT THE PARK PATH ENTRANCE, OFF INNER DRIVE.
 - POLYMER SHALL BE APPLIED AT THE DISCRETION OF THE CONSTRUCTION ENGINEER.
 - STREET SWEEPING SHALL OCCUR AS DIRECTED BY THE CONSTRUCTION ENGINEER AND MAY INCLUDE SWEEPING THE FORSYTHIA CUNNETTE.
 - THE CONTRACTOR SHALL INSTALL TEMPORARY CHECK DAMS DOWNSTREAM OF AREAS WHERE THE CHANNEL HAS BEEN DISTURBED AND NOT YET ARMORED, OR AT THE DIRECTION OF THE CONSTRUCTION ENGINEER.





- EROSION CONTROL NOTES:
1. ALL DISTURBED AREAS WITHIN THE GRADING LIMITS SHALL BE TOPSOILED, SEEDED, AND MATTED PER BID ITEMS 20221, 90007, AND 21062. DISTURBED AREAS OUTSIDE OF THE GRADING LIMITS SHALL BE TOPSOILED, SEEDED, AND MATTED AT THE EXPENSE OF THE CONTRACTOR.
 2. CONSTRUCTION SHALL BE STAGED. TREE CLEARING AND ROAD CONSTRUCTION WILL BEGIN IN OCTOBER 2013. SILT SOCK WILL BE PLACED BETWEEN THE ROAD AND CHANNEL DURING CONSTRUCTION OF THE ROAD. AFTER THE ROAD IS STABILIZED, WORK ON THE CHANNEL CAN BEGIN. CHANNEL CONSTRUCTION WILL BEGIN AT THE EXISTING CONCRETE CUNNETTE AND PROCEED UP-STREAM. CHANNEL DISTURBANCE SHALL BE LIMITED TO WHAT CAN BE ARMORED IN THE SAME DAY.
 3. CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT BORDNER DRIVE AND AT THE PARK PATH ENTRANCE, OFF INNER DRIVE.
 4. POLYMER SHALL BE APPLIED AT THE DISCRETION OF THE CONSTRUCTION ENGINEER.
 5. STREET SWEEPING SHALL OCCUR AS DIRECTED BY THE CONSTRUCTION ENGINEER AND MAY INCLUDE SWEEPING THE FORSYTHIA CUNNETTE.
 6. THE CONTRACTOR SHALL INSTALL TEMPORARY CHECK DAMS DOWNSTREAM OF AREAS WHERE THE CHANNEL HAS BEEN DISTURBED AND NOT YET ARMORED, OR AT THE DIRECTION OF THE CONSTRUCTION ENGINEER.



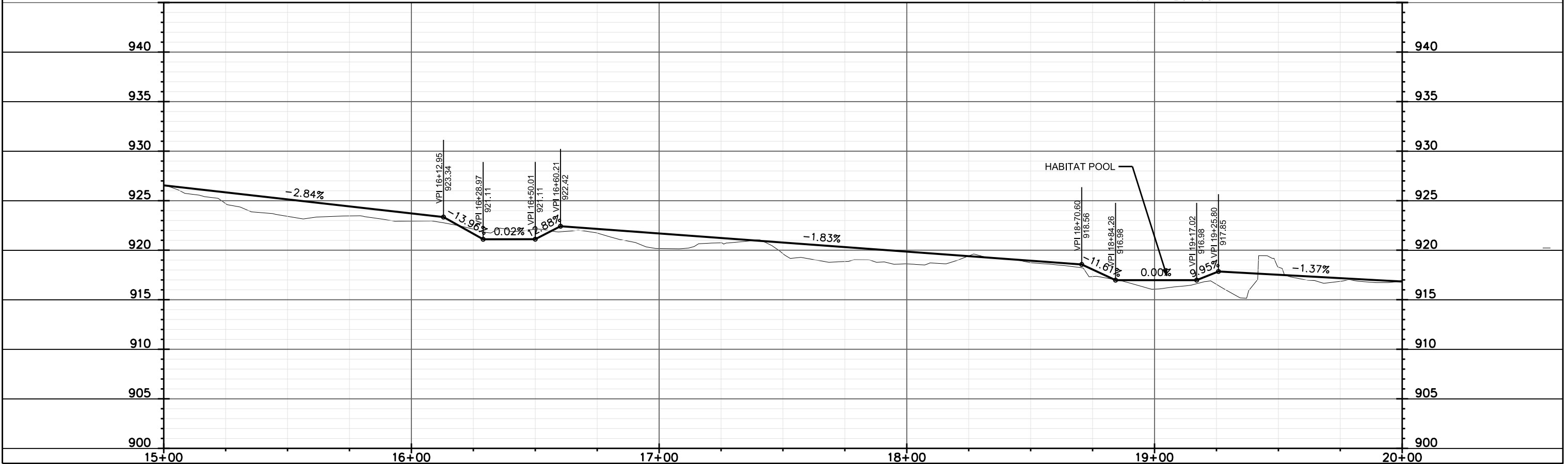
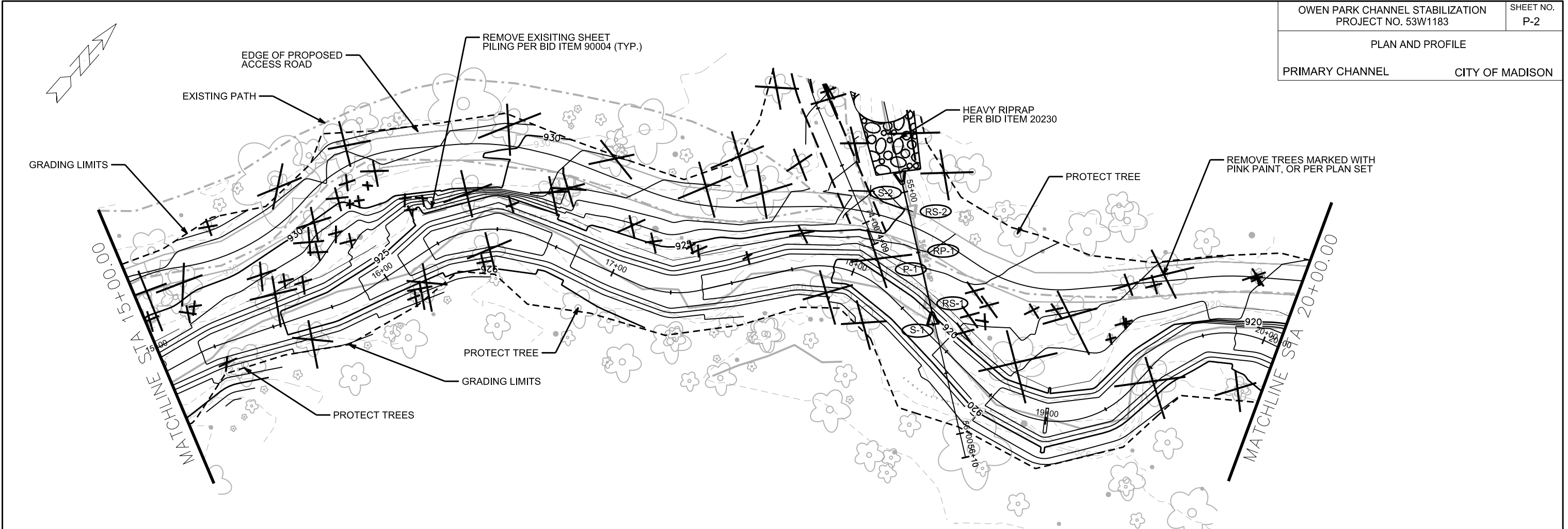


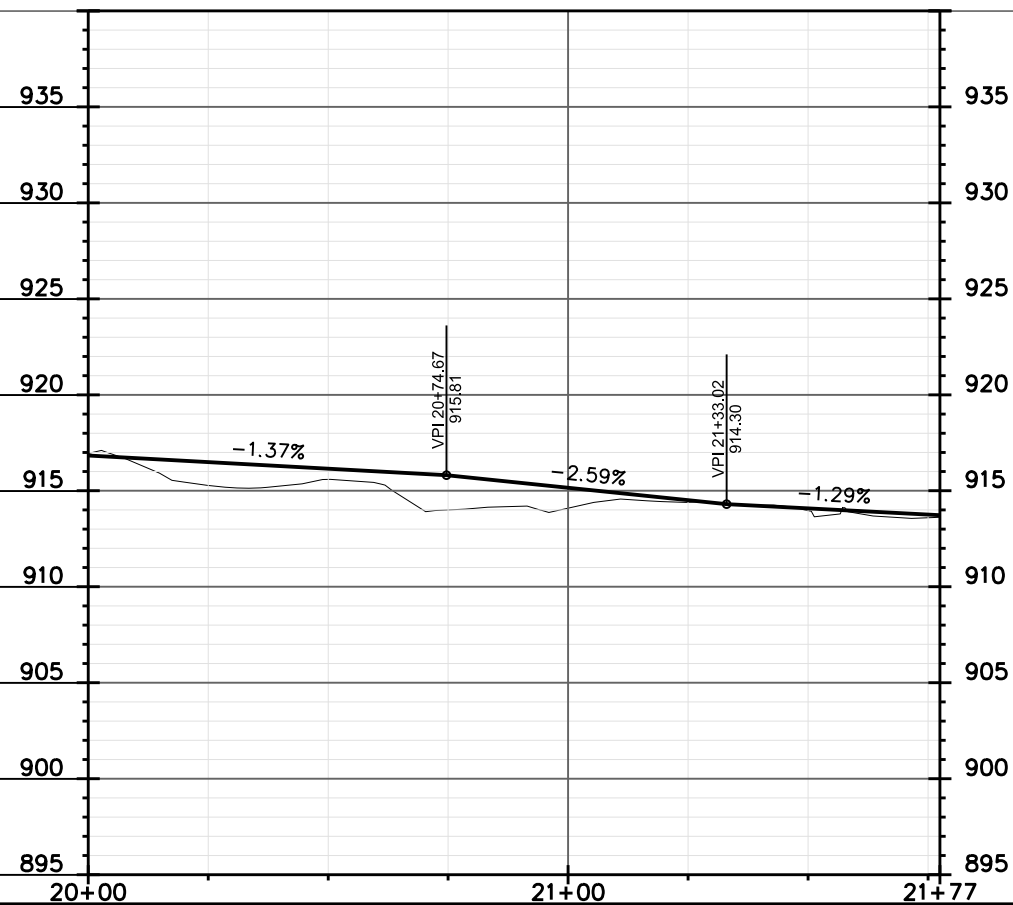
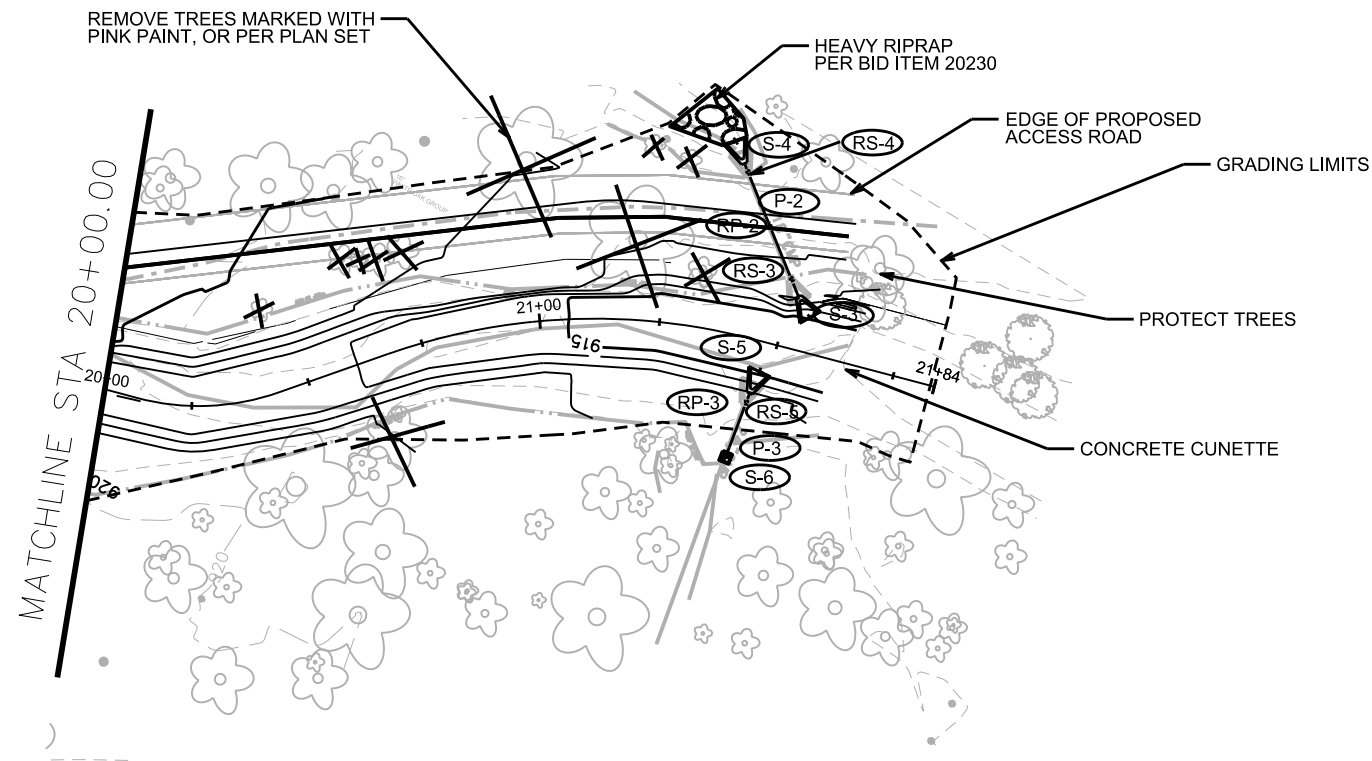
PLOT SCALE: _____

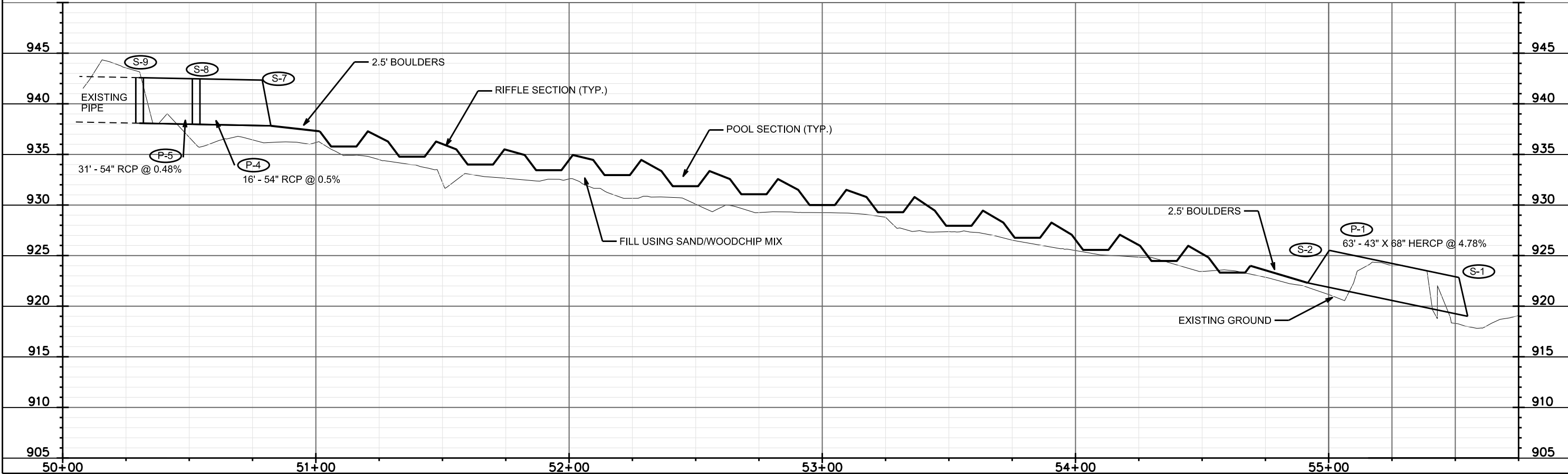
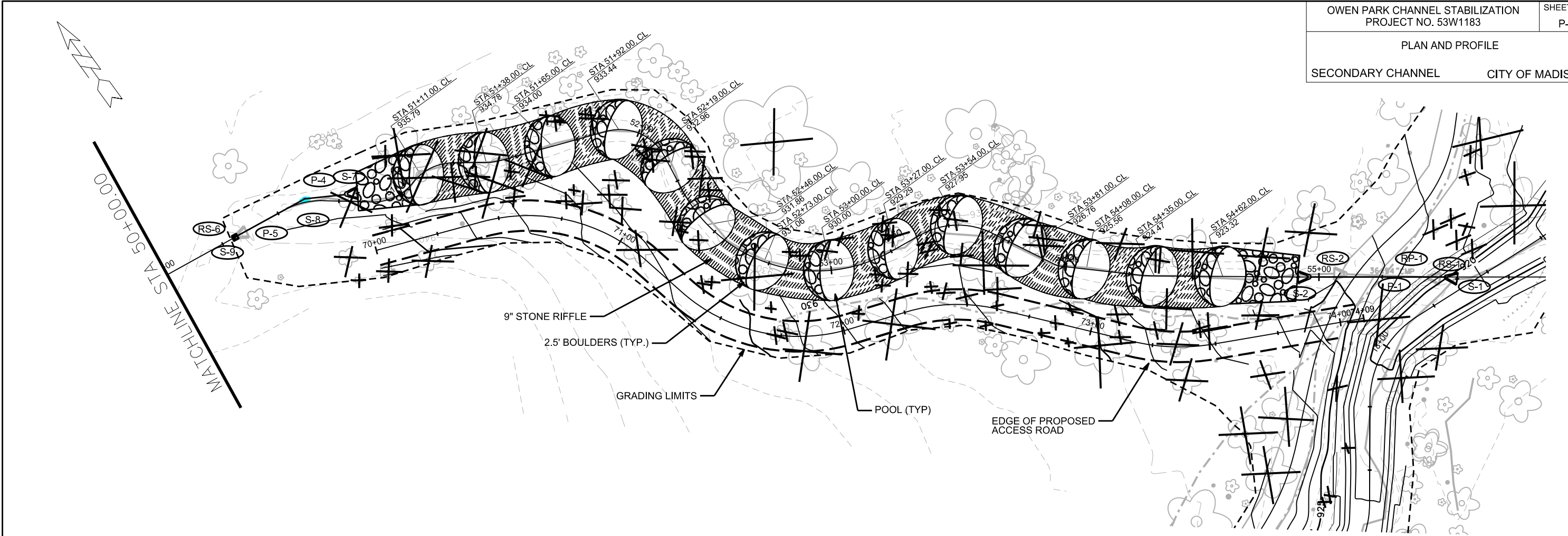
PLOT NAME: _____

REV. DATE: _____

ORIGINATOR: CITY OF MADISON, STREETS DIVISION







ORIGINATOR: CITY OF MADISON, STREETS DIVISION

REV. DATE: _____

PLOT NAME: _____

PLOT SCALE: _____

STORM SEWER SCHEDULE

ALIGNMENT CODES:

PC' - PRIMARY CHANNEL
SC' - SECONDARY CHANNEL

2508-2544 UNIVERSITY AVENUE &
516-518 HIGHLAND AVENUE PUD

SHEET NO.
P-5

PROJECT NO. 53B2270
STORM SEWER SCHEDULE
CITY OF MADISON

STRUCTURES

STRUC. NO.	STATION	LOCATION (OFFSET)	TYPE	TOP OF CASTING	E.I.	DEPTH	NOTES
S-1	55'SC'+47.31	RT-.73	(1), APRON ENDWALL	--	919.30	--	43" X 68" AE W/ GATE
S-2	54'SC'+91.76	CL	(1), APRON ENDWALL	--	922.30	--	43" X 68" AE W/ GATE
S-3	21'PC'+55.21	LT-7.37	(1), APRON ENDWALL	--	914.15	--	18" AE W/ GATE
S-4	21'PC'+34.11	LT-39.55	(1), APRON ENDWALL	--	914.77	--	18" AE W/ GATE
S-5	21'PC'+47.87	RT-6.12	(1), APRON ENDWALL	--	914.20	--	24" AE W/ GATE
S-6	21'PC'+39.13	RT-25.27	(2), CONCRETE COLLAR	--	914.35	--	24" COLLAR
S-7	50'SC'+82.25	LT-3.37	(1), (3) APRON ENDWALL	--	937.85	--	54" AE W/ GATE
S-8	50'SC'+52.71	RT-.26	FIELD BEND	--	937.93	--	FP, 54" FIELD BEND
S-9	50'SC'+30.59	CL	CONCRETE COLLAR	--	937.85	--	54" COLLAR

PIPES

PIPE NO.	FROM (DNSTM)	TO (UPSTM)	LGTH (FT)	DISCH. E.I.	INLET E.I.	SLOPE (%)	PIPE SIZE	TYPE	NOTES
P-1	S-1	S-2	62.7	919.30	922.30	4.78%	43" X 68"	HERCP	
P-2	S-3	S-4	29.9	914.15	914.77	2.07%	18"	RCP	
P-3	S-5	S-6	14.2	914.20	914.35	1.06%	24"	RCP	
P-4	S-7	S-8	16.0	937.85	937.93	0.50%	54"	RCP	
P-5	S-8	S-9	31.3	937.93	938.08	0.48%	54"	RCP	

STRUCTURE REMOVALS

STRUC. NO.	STATION	LOCATION (OFFSET)	TYPE	TOP OF CASTING	E.I.	DEPTH	NOTES
RS-1	55"SC"+46.21	LT-.13	APRON ENDWALL	--	919.00	--	
RS-2	55'SC'+07.91	LT-1.49	APRON ENDWALL	--	921.00	--	
RS-3	21'PC'+44.33	LT-12.06	APRON ENDWALL	--	917.00	--	
RS-4	21'PC'+29.43	LT-35.94	APRON ENDWALL	--	918.00	--	
RS-5	21'PC'+40.58	RT-11.13	APRON ENDWALL	--	917.00	--	
RS-6	50'SC'+30.59	CL	APRON ENDWALL	--	938.00	--	

PIPE REMOVALS AND ABANDONMENTS

PIPE NO.	FROM (DNSTM)	TO (UPSTM)	LGTH (FT)	PIPE SIZE	TYPE	NOTES
RP-1	RS-1	RS-2	32	36" X 54"	CMP	NOT PAID REMOVAL
RP-2	RS-2	RS-3	23	18"	CMP	NOT PAID REMOVAL
RP-3	RS-5	S-6	12	18"	CMP	NOT PAID REMOVAL

SPECIFIC NOTES

- (1) STATION, LOCATION, AND E.I. IS TO END OF THE APRON CL
(2) LISTED E.I. IS APPROXIMATE
(3) IF POSSIBLE, CONTRACTOR SHALL SALVAGE AND REUSE EXISITING AE AND GATE

STANDARD NOTES:

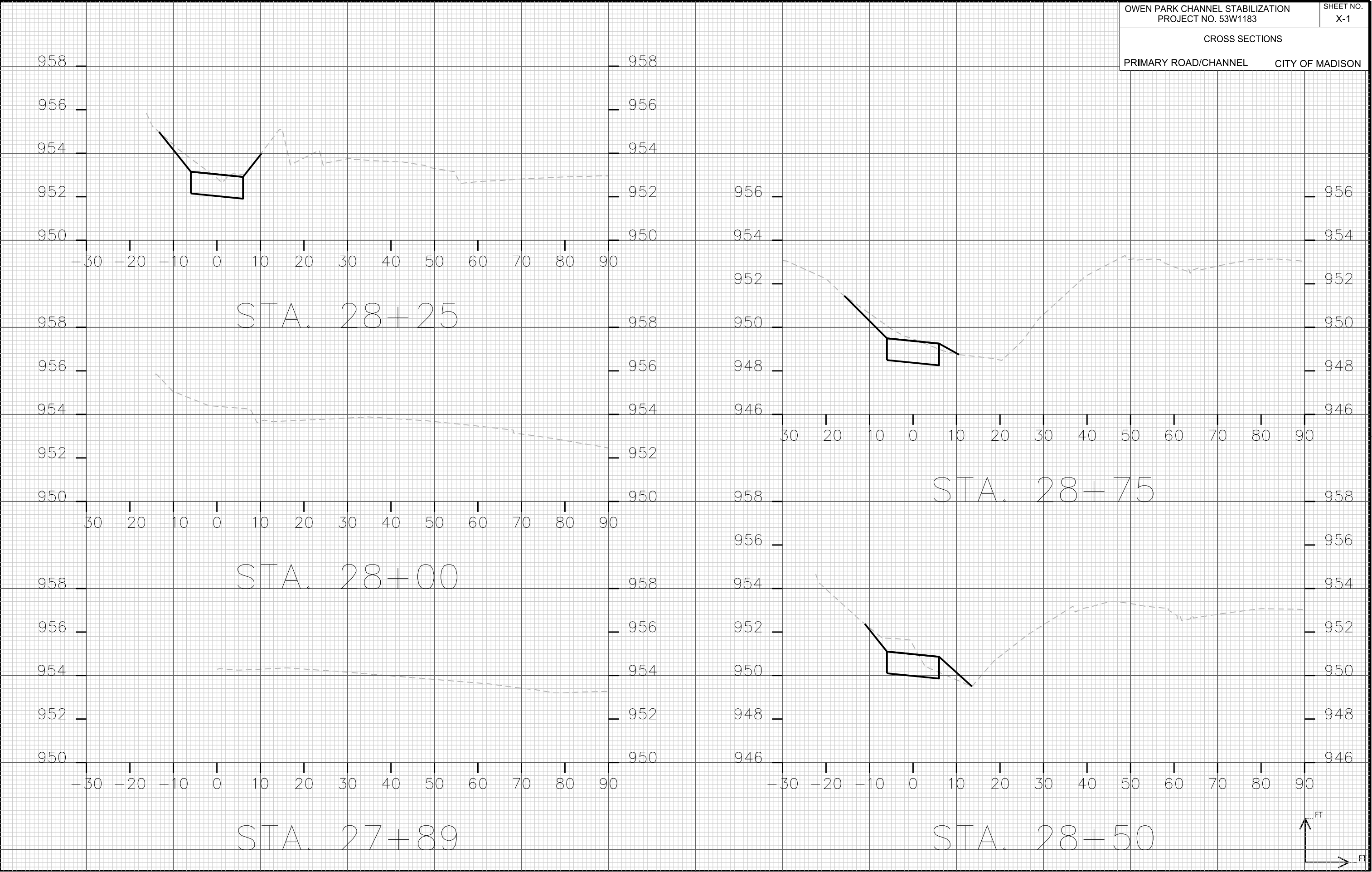
- ABBREVIATIONS: AE = APRON ENDWALL; RCP = REINFORCED CONCRETE PIPE; HERCP = HORIZONTAL ELLIPTICAL REINFORCED CONCRETE PIPE; DNA = DOES NOT APPLY; SAS = SEWER ACCESS STRUCTURE; LP = LOW POINT INLET STRUCTURE; FP = FIELD POURED STRUCTURE; TR = TOP OF CONCRETE ROOF; NCM = NO CROWN MATCH FOR PIPES
- APPROXIMATE DISCHARGE E.I. GIVEN, ADJUST E.I. AND PIPE SLOPE IN THE FIELD.
- TOP OF CASTING GRADE GIVEN IS THE TOP OF CURB FOR INLET STRUCTURES AND THE FLOWLINE OF THE CLOSED CASTING FOR SAS's.
- TOP OF CONCRETE ROOF (TR) IS 1.25' BELOW TOP OF CASTING UNLESS OTHERWISE NOTED.
- ALL REINFORCED CONCRETE PIPES TO BE CLASS III UNLESS OTHERWISE NOTED.
- SURVEYOR TO CONFIRM THAT ALL INLET STATION / OFFSETS LINE UP WITH PROPOSED CURB AND GUTTER.
- ALL STRUCTURES CALLED OUT AS FIELD POURED SHALL BE FIELD POURED. ALL OTHER STRUCTURES (NOT INDICATED AS FIELD POURED) SHALL BE SUBMITTED TO CITY ENGINEERING FOR APPROVAL IF PRECAST STRUCTURES ARE PREFERRED. CONTACT SALLY SWENSON OF CITY ENGINEERING AT (608) 266-4862 FOR PRECAST APPROVALS, OR FAX SHOP DRAWINGS TO (608)264-9275.

PLOT SCALE: _____

PLOT NAME: _____

REV. DATE: _____

ORIGINATOR: CITY OF MADISON, STREETS DIVISION



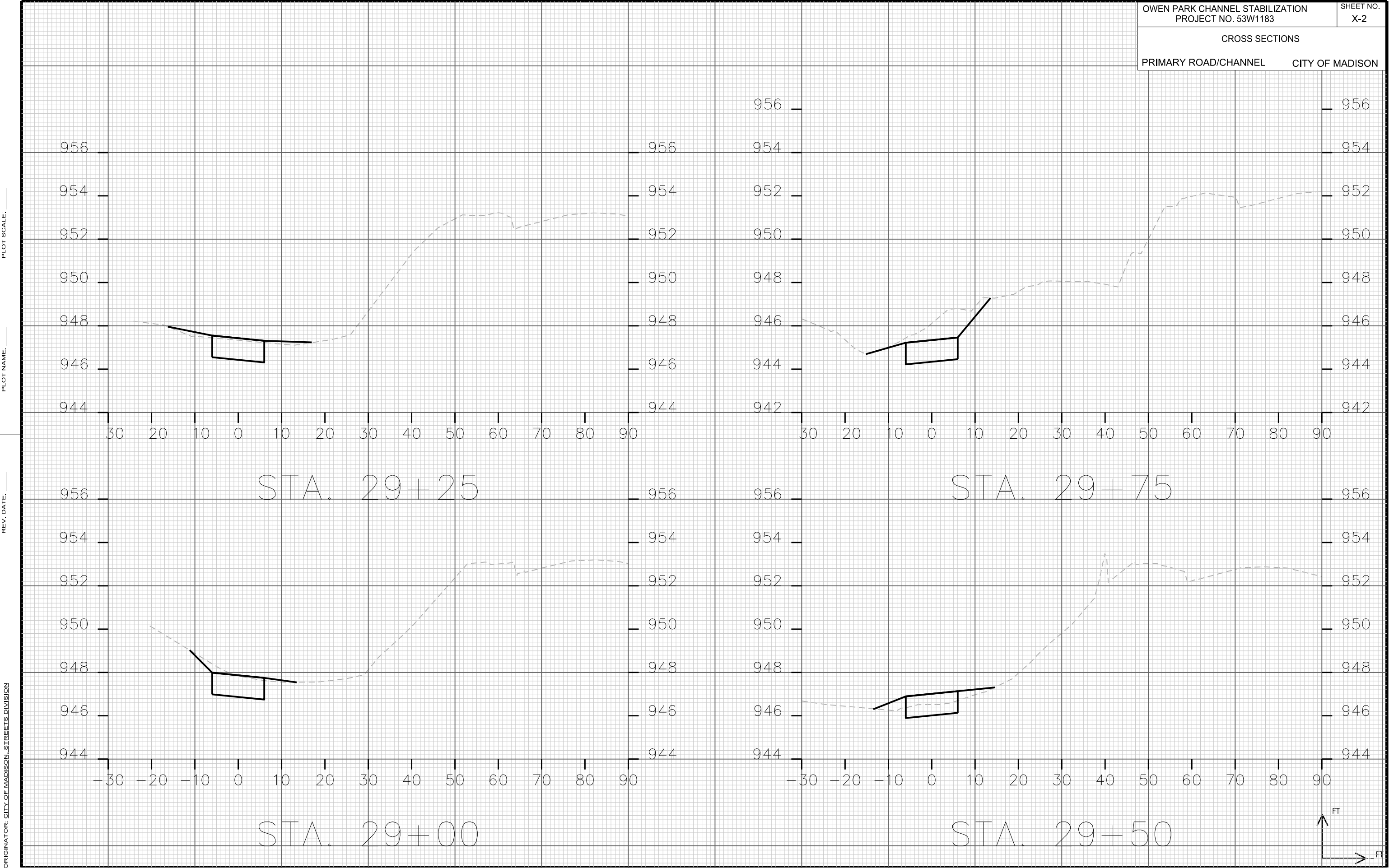
OWEN PARK CHANNEL STABILIZATION
PROJECT NO. 53W1183

SHEET NO.
X-1

CROSS SECTIONS

PRIMARY ROAD/CHANNEL

CITY OF MADISON

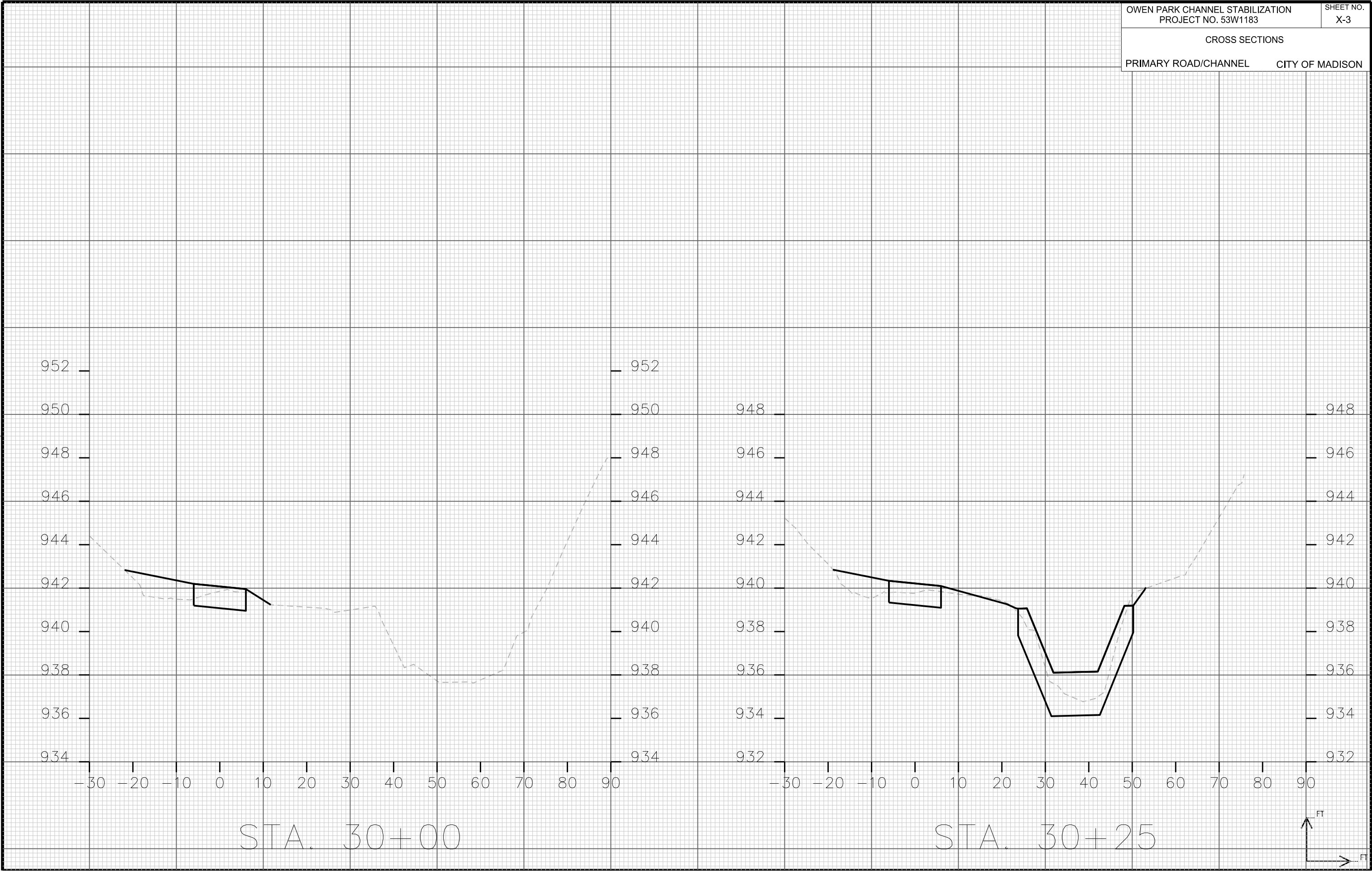


PLOT SCALE: _____

PLOT NAME: _____

REV. DATE: _____

ORIGINATOR: CITY OF MADISON, STREETS DIVISION



PLOT SCALE: _____

PLOT NAME: _____

REV. DATE: _____

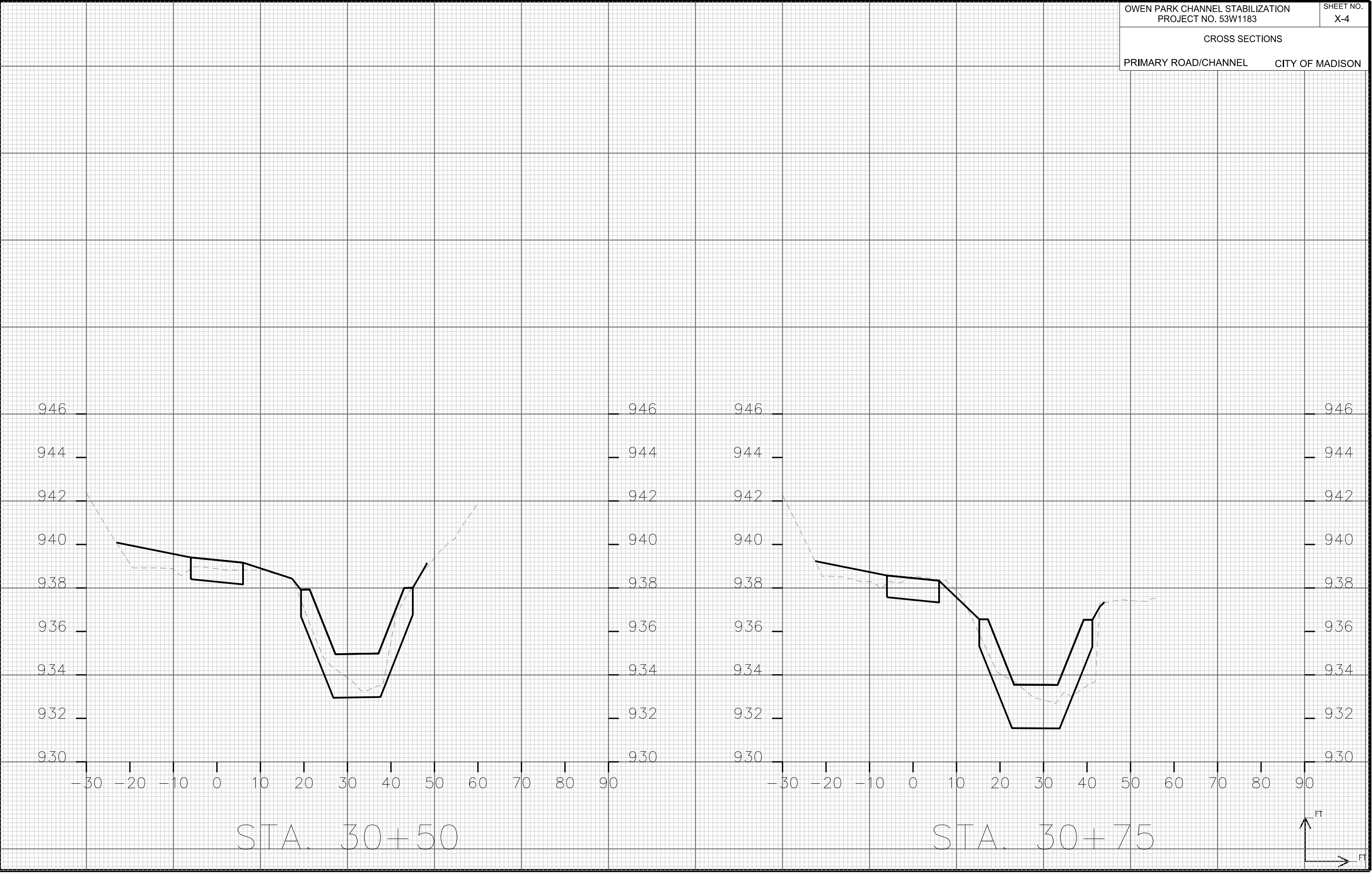
ORIGINATOR: CITY OF MADISON, STREETS DIVISION

PLOT SCALE: _____

PLOT NAME: _____

REV. DATE: _____

ORIGINATOR: CITY OF MADISON, STREETS DIVISION



PLOT SCALE: _____

PLOT NAME: _____

REV. DATE: _____

ORIGINATOR: CITY OF MADISON, STREETS DIVISION

OWEN PARK CHANNEL STABILIZATION
PROJECT NO. 53W1183

SHEET NO.
X-5

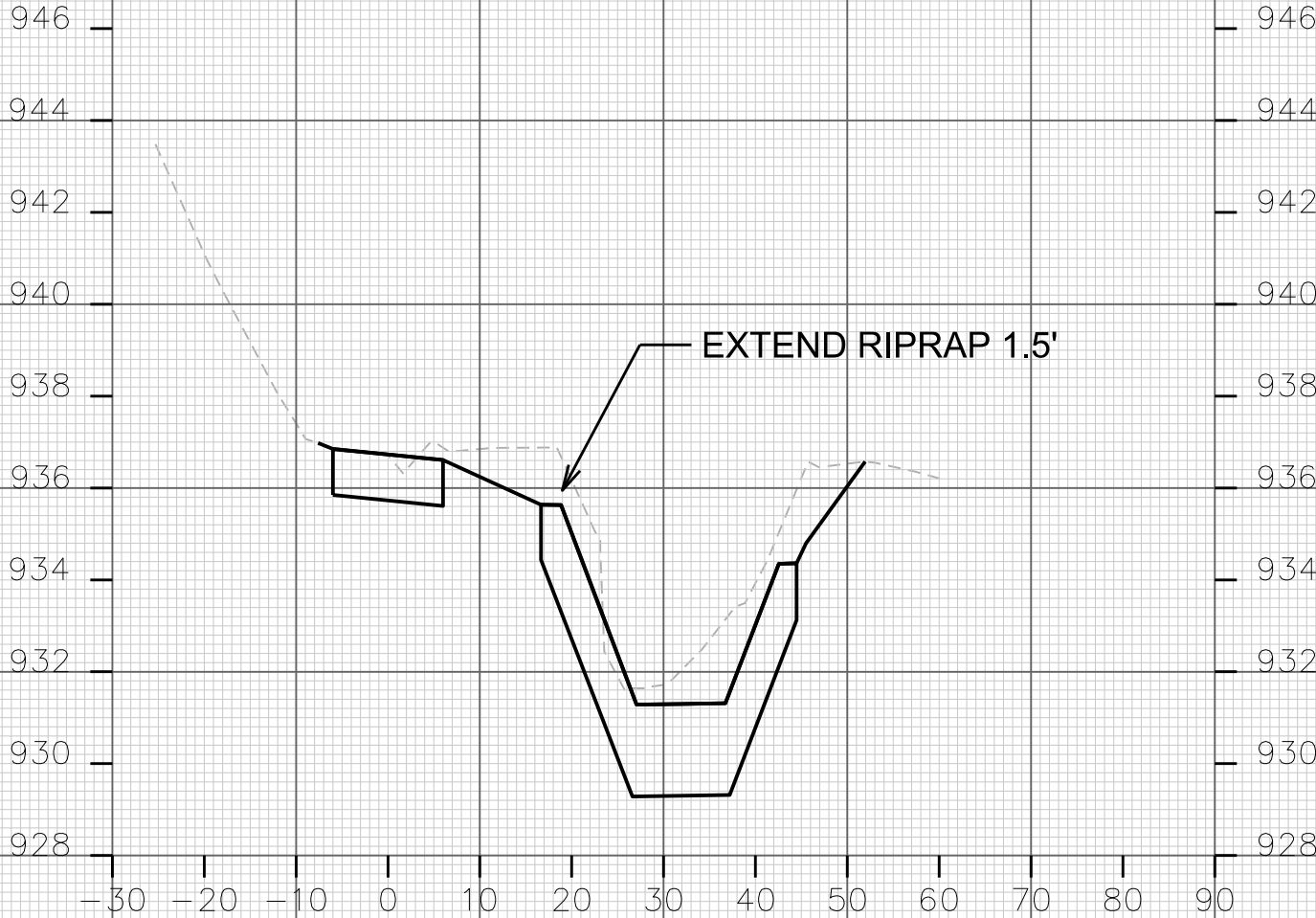
CROSS SECTIONS

PRIMARY ROAD/CHANNEL

CITY OF MADISON



STA. 31+00



STA. 31+25

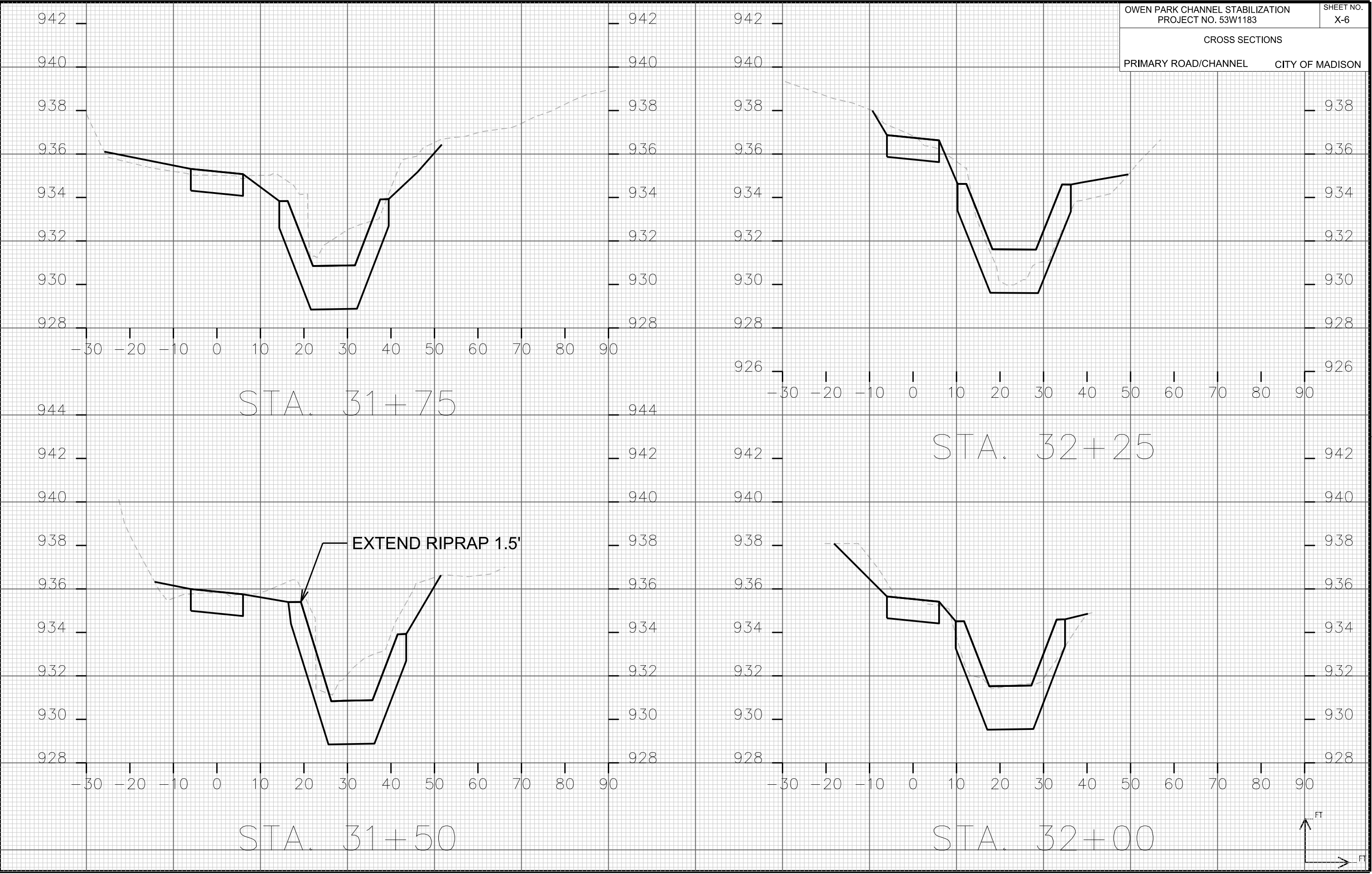


PLOT SCALE: _____

PLOT NAME: _____

REV. DATE: _____

ORIGINATOR: CITY OF MADISON, STREETS DIVISION



PLOT SCALE: _____

PLOT NAME: _____

REV. DATE: _____

ORIGINATOR: CITY OF MADISON, STREETS DIVISION

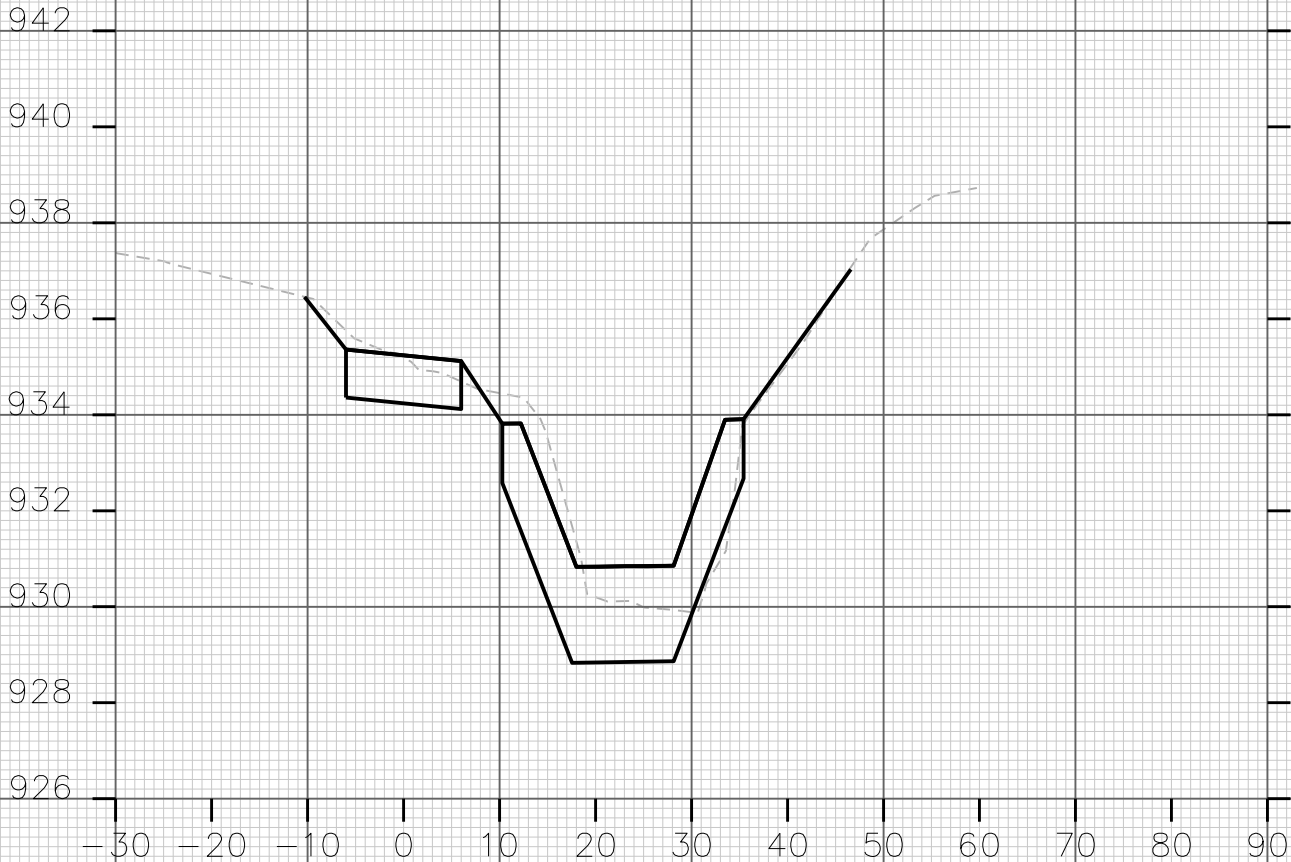
OWEN PARK CHANNEL STABILIZATION
PROJECT NO. 53W1183

SHEET NO.
X-7

CROSS SECTIONS

PRIMARY ROAD/CHANNEL

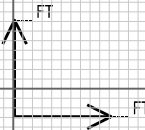
CITY OF MADISON



STA. 32+50



STA. 32+75

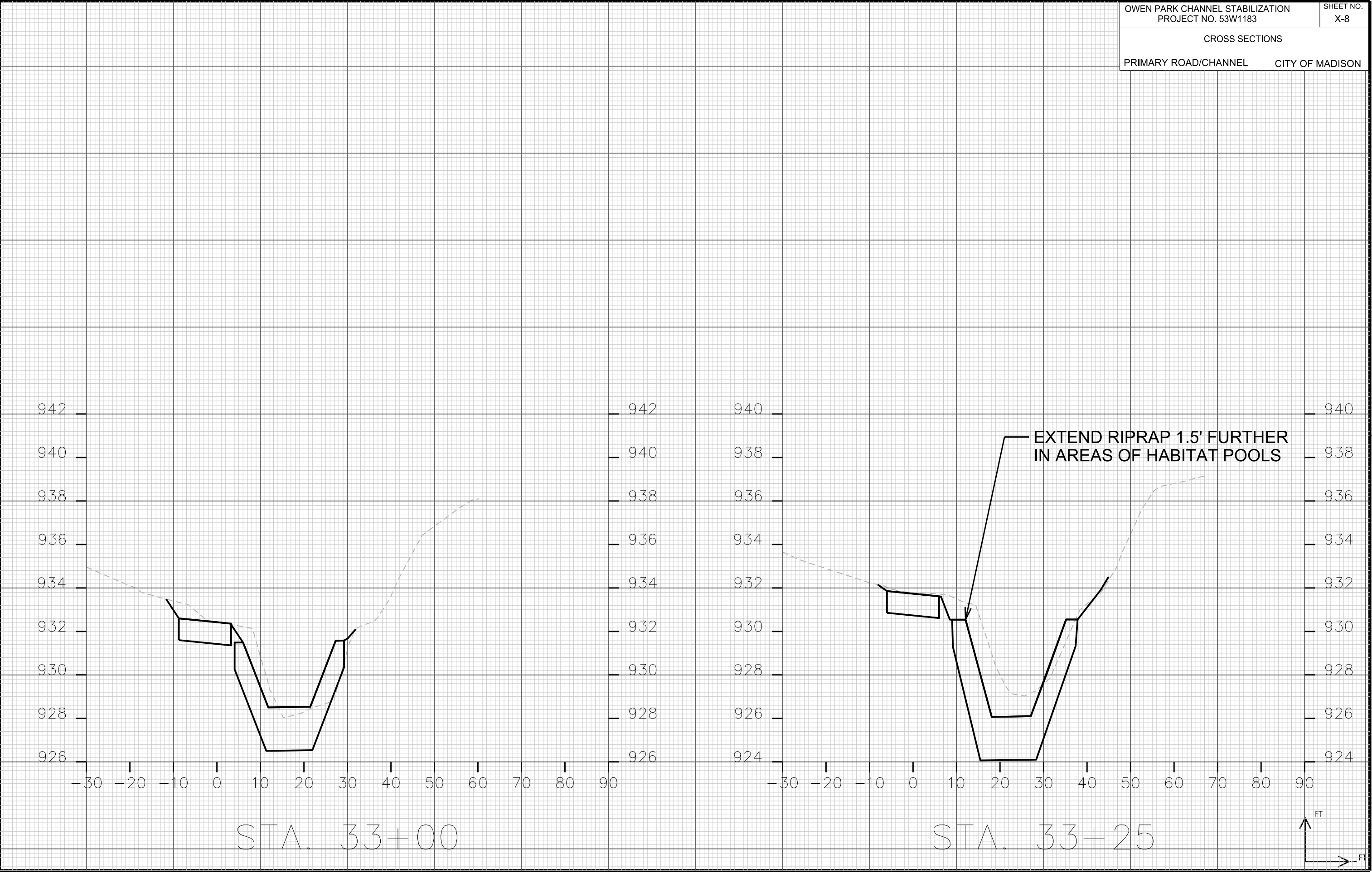


PLOT SCALE: _____

PLOT NAME: _____

REV. DATE: _____

ORIGINATOR: CITY OF MADISON, STREETS DIVISION



CROSS SECTIONS

PRIMARY ROAD/CHANNEL

CITY OF MADISON

PLOT SCALE: _____

PLOT NAME: _____

REV. DATE: _____

ORIGINATOR: CITY OF MADISON, STREETS DIVISION

CROSS SECTIONS

PRIMARY ROAD/CHANNEL

CITY OF MADISON



STA. 33+50

BENCH RIPRAP IN 1-1.5' LIFTS
3-4' WIDE



STA. 33+75



PLOT SCALE: _____

PLOT NAME: _____

REV. DATE: _____

ORIGINATOR: CITY OF MADISON, STREETS DIVISION

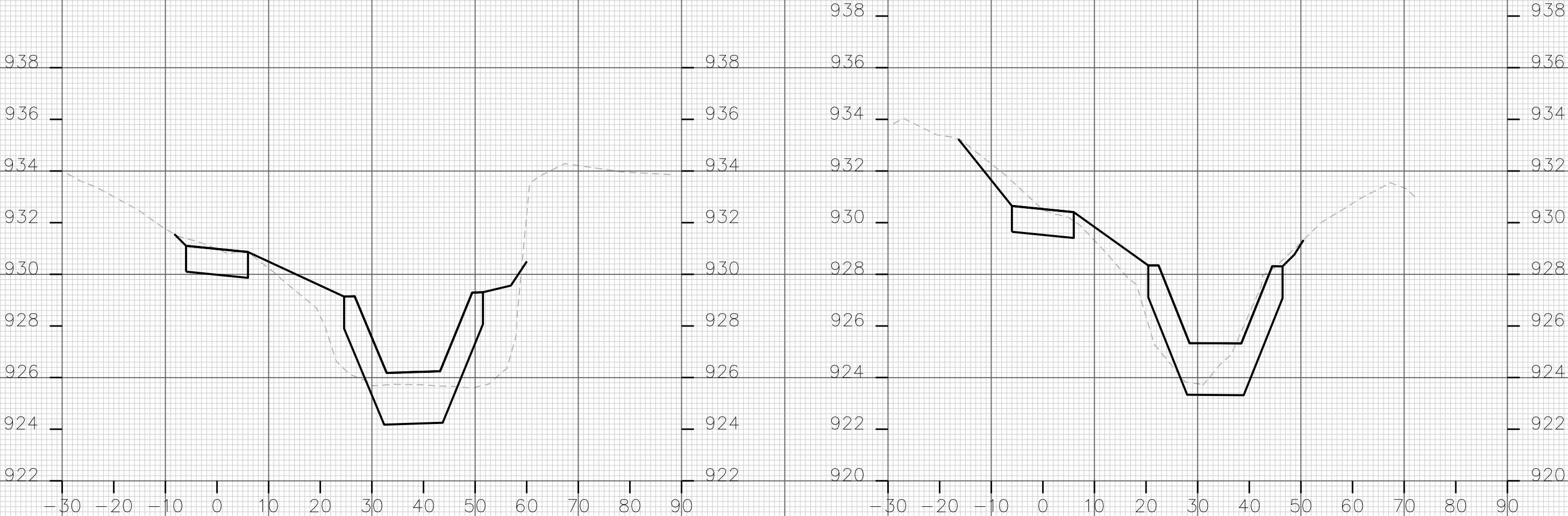
OWEN PARK CHANNEL STABILIZATION
PROJECT NO. 53W1183

SHEET NO.
X-10

CROSS SECTIONS

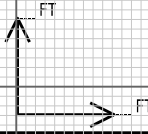
PRIMARY ROAD/CHANNEL

CITY OF MADISON



STA. 34+00

STA. 34+25



PLOT SCALE: _____

PLOT NAME: _____

REV. DATE: _____

ORIGINATOR: CITY OF MADISON, STREETS DIVISION

OWEN PARK CHANNEL STABILIZATION
PROJECT NO. 53W1183

SHEET NO.
X-11

CROSS SECTIONS

PRIMARY ROAD/CHANNEL

CITY OF MADISON



STA. 34+50



STA. 34+75

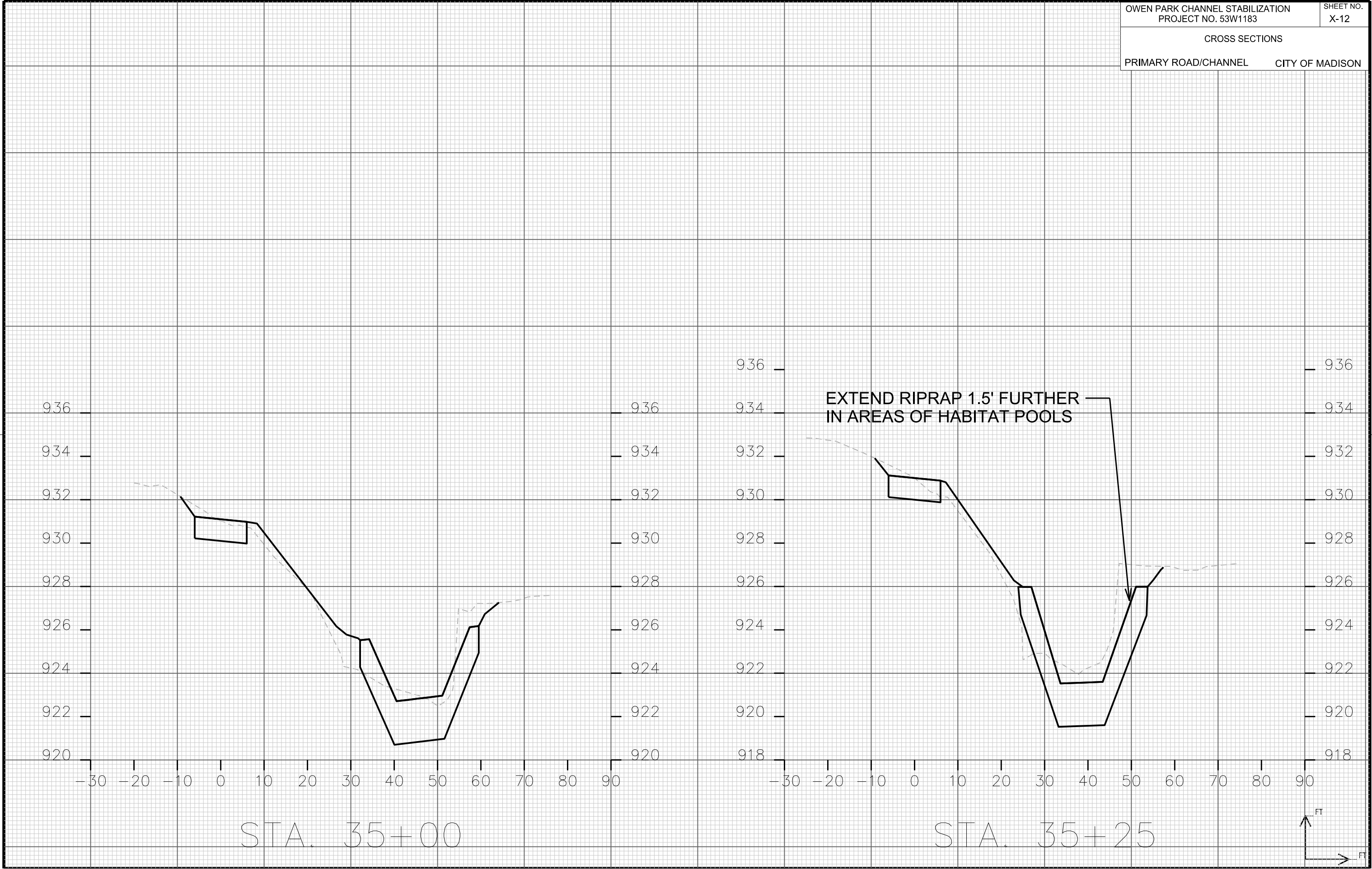


PLOT SCALE: _____

PLOT NAME: _____

REV. DATE: _____

ORIGINATOR: CITY OF MADISON, STREETS DIVISION



PLOT SCALE: _____

PLOT NAME: _____

REV. DATE: _____

ORIGINATOR: CITY OF MADISON, STREETS DIVISION

OWEN PARK CHANNEL STABILIZATION
PROJECT NO. 53W1183

SHEET NO.
X-13

CROSS SECTIONS

PRIMARY ROAD/CHANNEL

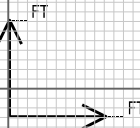
CITY OF MADISON



STA. 35+50



STA. 35+75

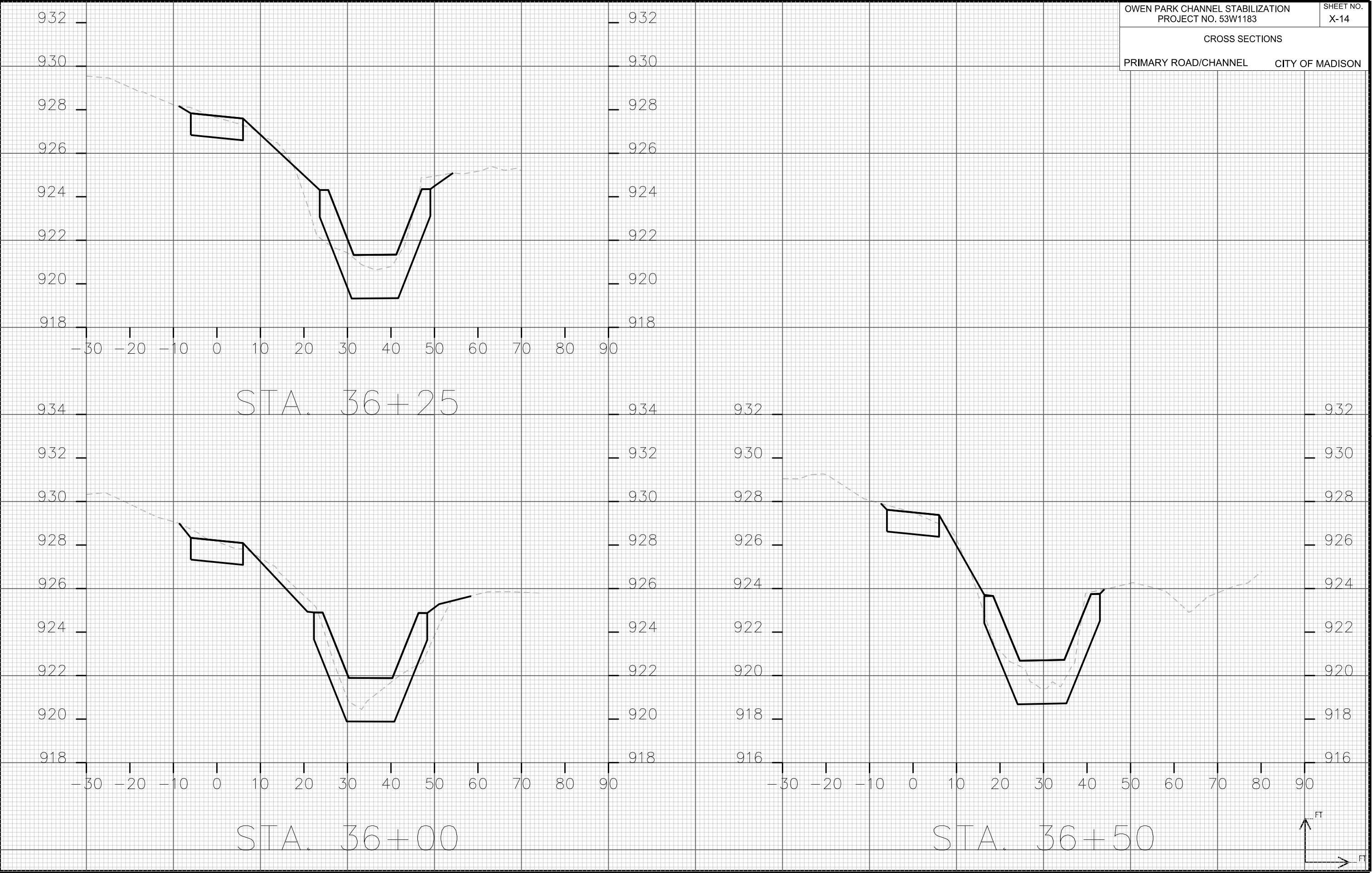


PLOT SCALE: _____

PLOT NAME: _____

REV. DATE: _____

ORIGINATOR: CITY OF MADISON, STREETS DIVISION

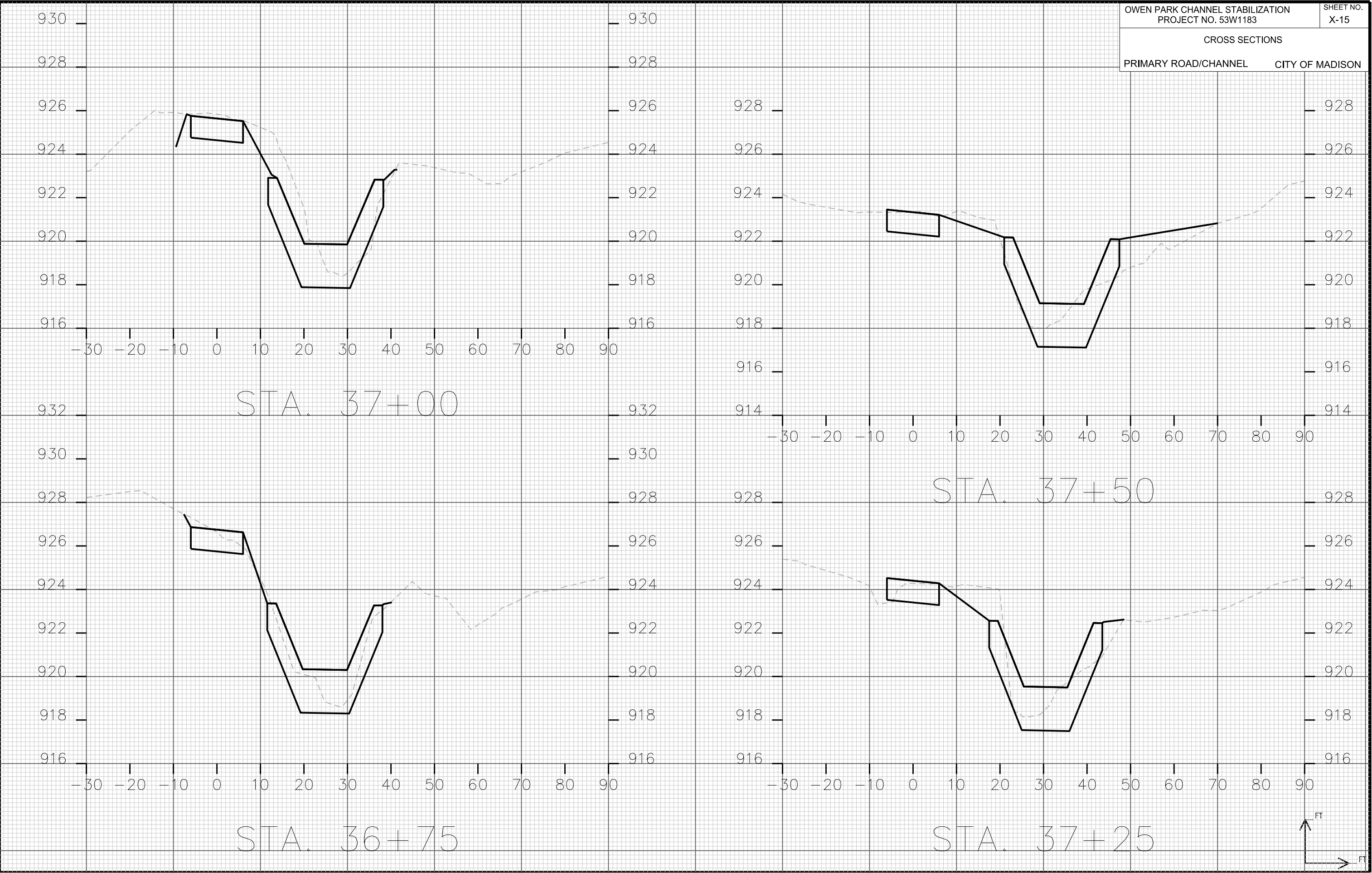


PLOT SCALE: _____

PLOT NAME: _____

REV. DATE: _____

ORIGINATOR: CITY OF MADISON, STREETS DIVISION

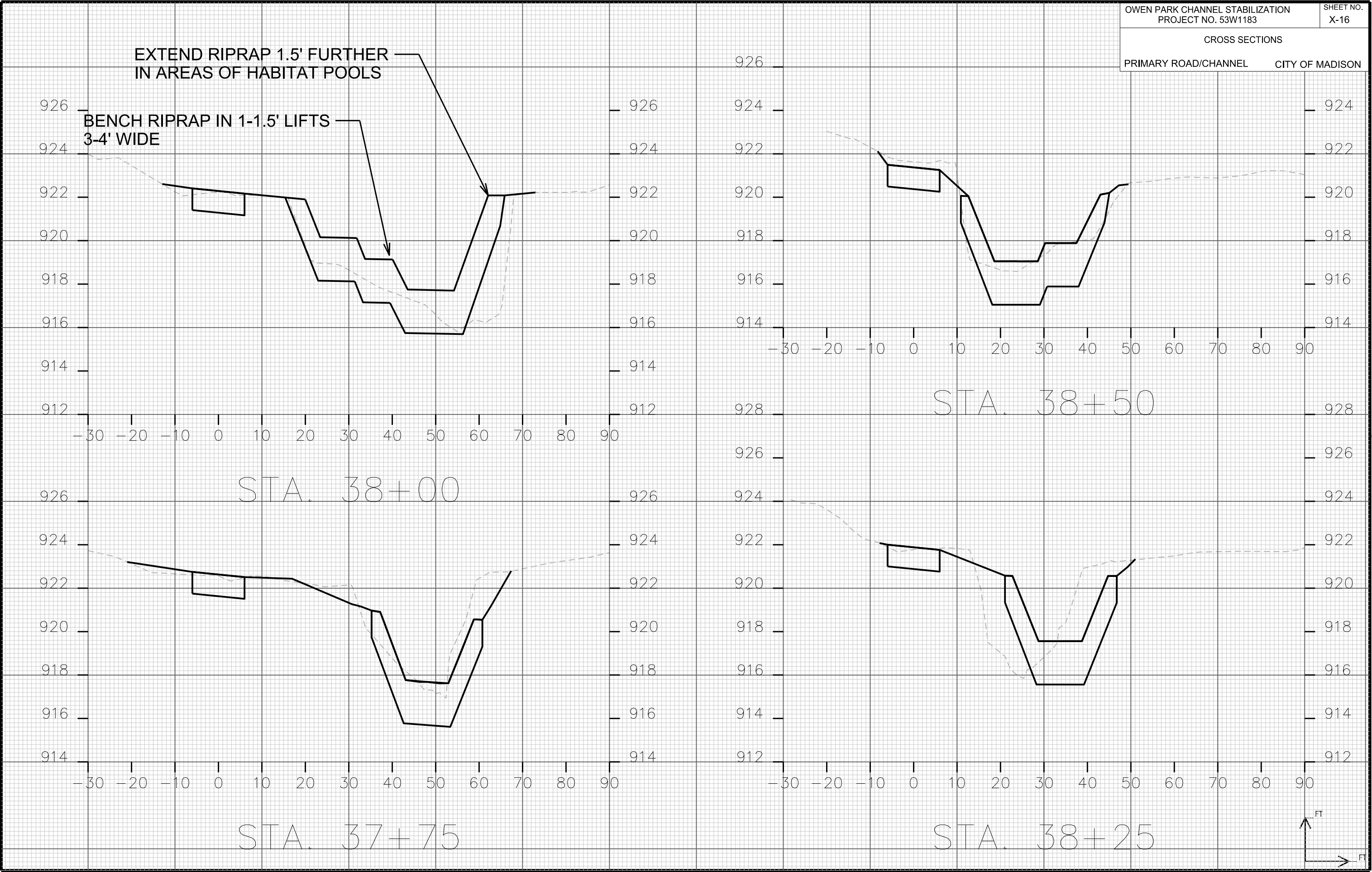


PLOT SCALE: _____

PLOT NAME: _____

REV. DATE: _____

ORIGINATOR: CITY OF MADISON, STREETS DIVISION



PLOT SCALE: _____

PLOT NAME: _____

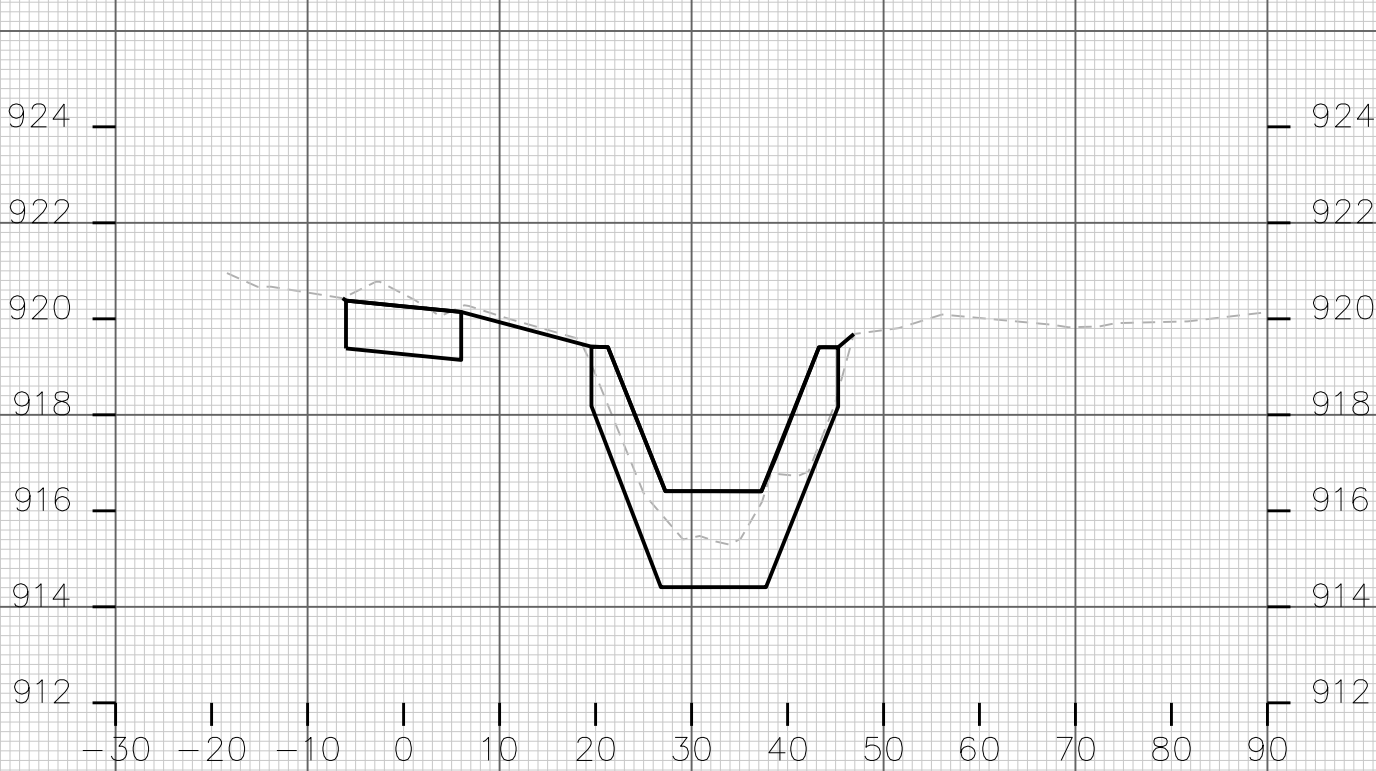
REV. DATE: _____

ORIGINATOR: CITY OF MADISON, STREETS DIVISION

CROSS SECTIONS

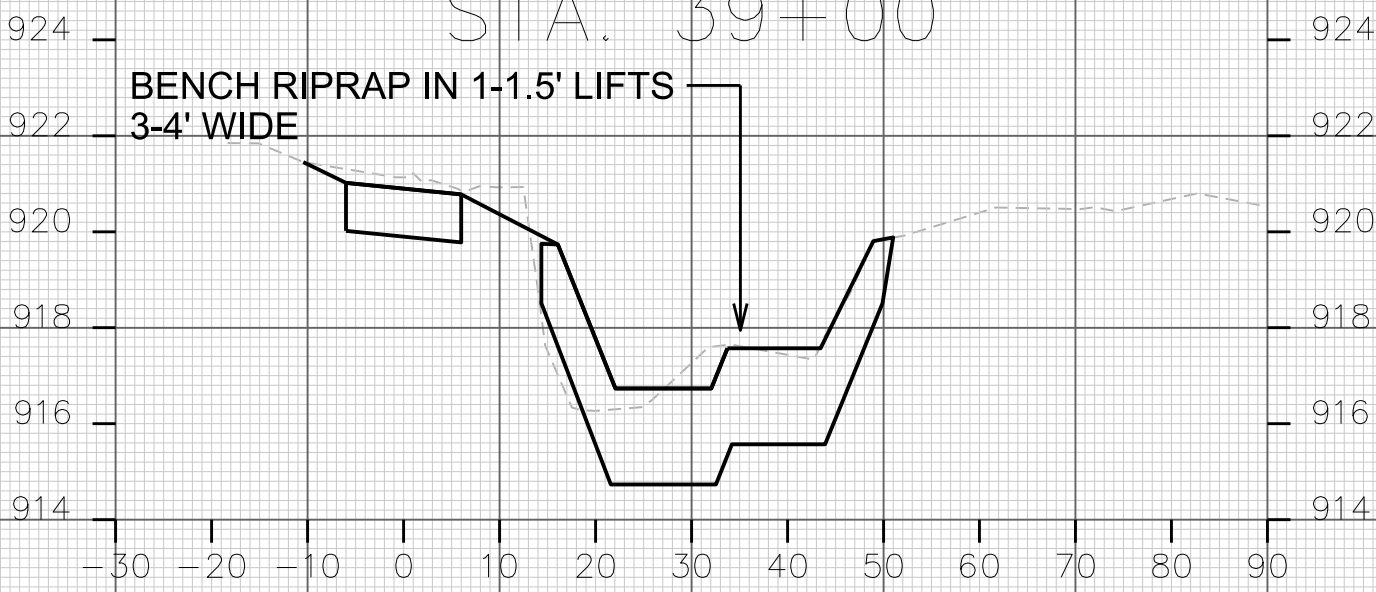
PRIMARY ROAD/CHANNEL

CITY OF MADISON



STA. 39+00

BENCH RIPRAP IN 1-1.5' LIFTS
3-4' WIDE



STA. 38+75



STA. 39+50



STA. 39+25



PLOT SCALE: _____

PLOT NAME: _____

REV. DATE: _____

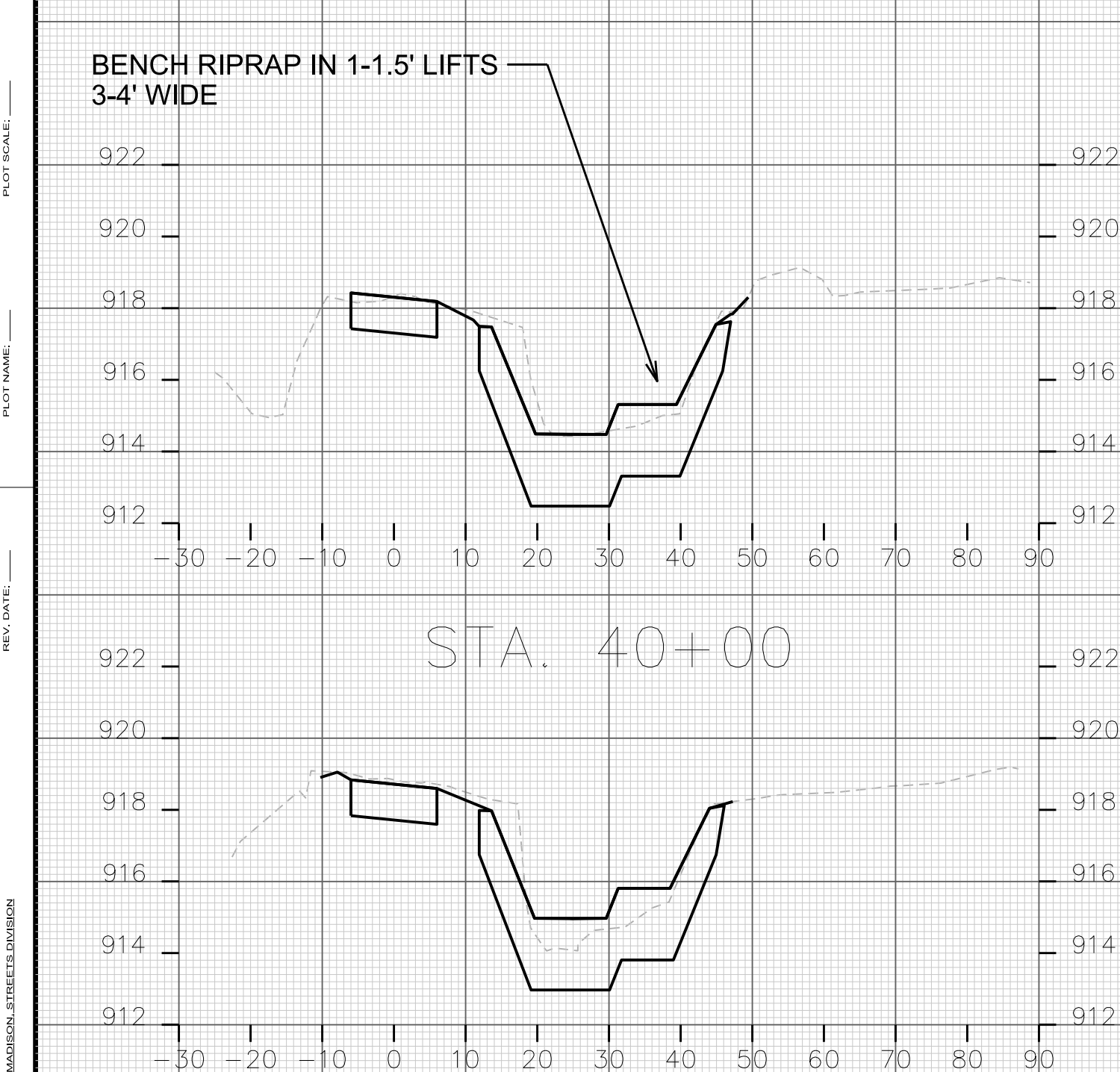
ORIGINATOR: CITY OF MADISON, STREETS DIVISION

CROSS SECTIONS

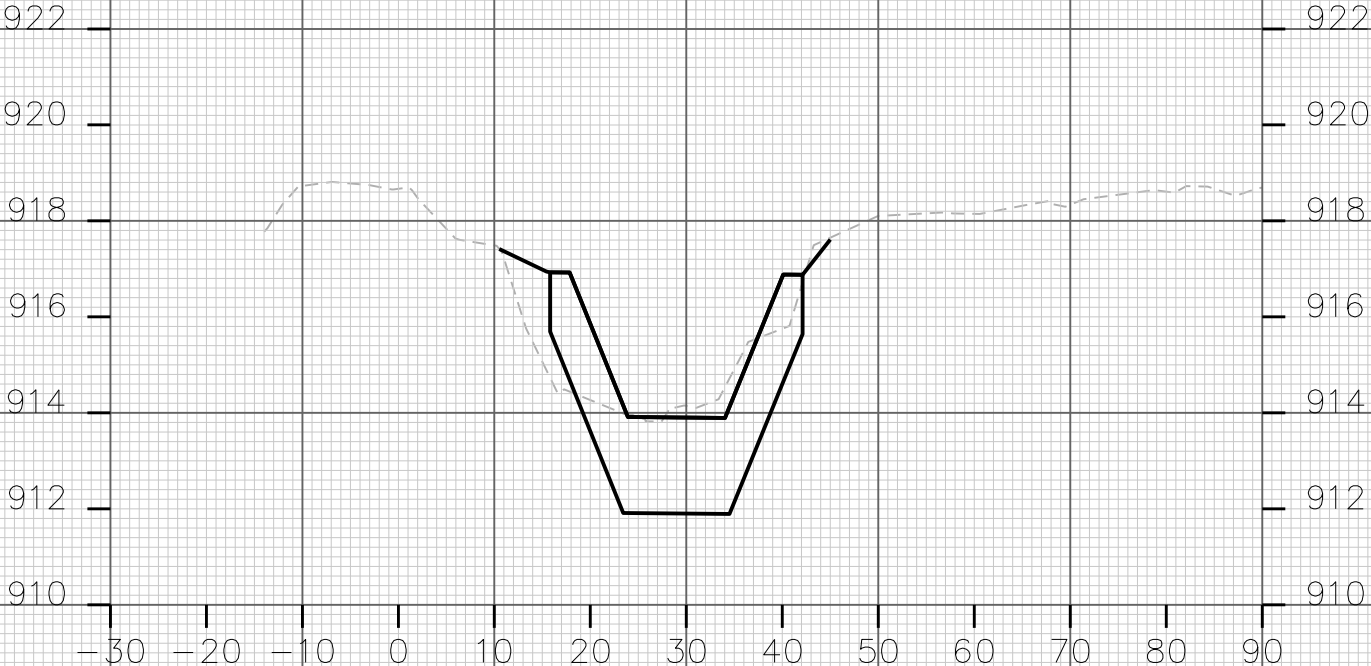
PRIMARY ROAD/CHANNEL

CITY OF MADISON

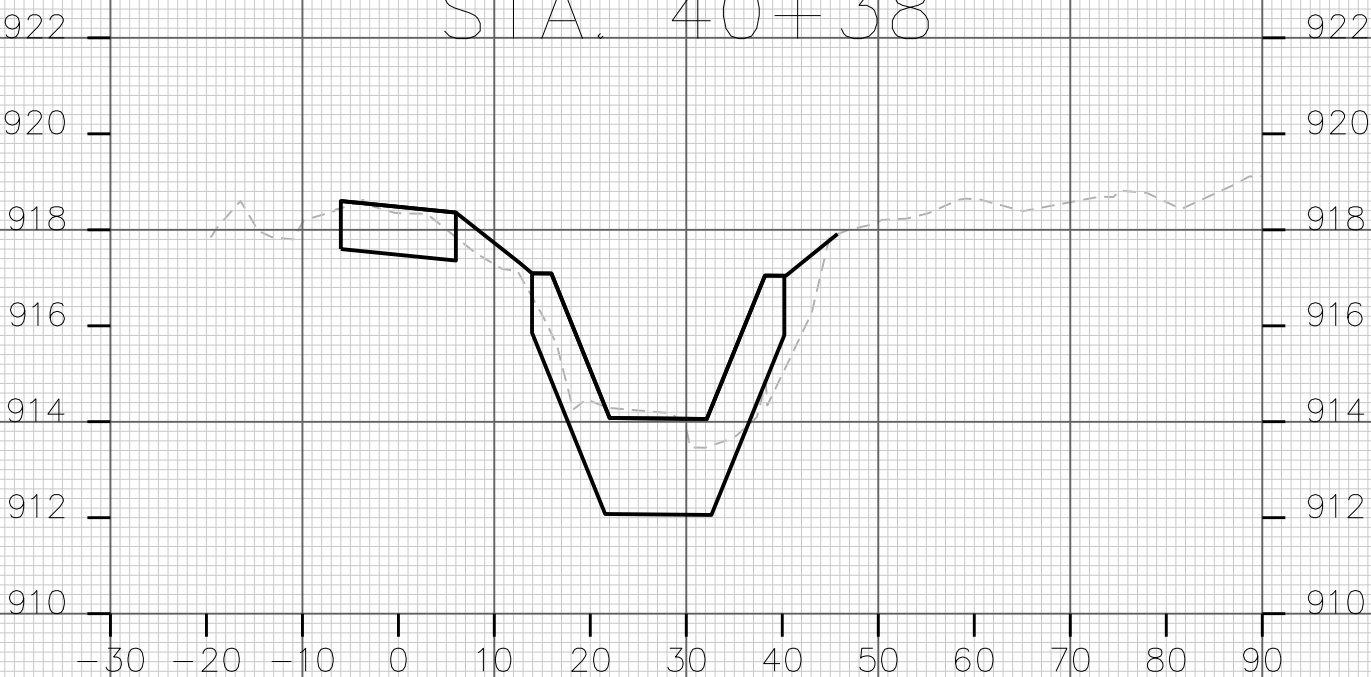
BENCH RIPRAP IN 1-1.5' LIFTS
3-4' WIDE



STA. 40+00



STA. 40+38



STA. 40+25

