

PLAN SYMBOLS

STATE LINE.
COUNTY LINE.
TOWNSHIP OR RANGE LINE.
SECTION LINE.
QUARTER LINE.
SIXTEENTH LINE.
RIGHT-OF-WAY LINE.
PRESENT RIGHT-OF-WAY LINE.
CONTROL OF ACCESS LINE.
PROPERTY LINE (Except Land Lines).
VACATED PLATTED PROPERTY.
CORPORATE OR CITY LIMITS.

TRUNK HIGHWAY CENTER LINE.
RETAINING WALL.
RAILROAD.
RAILROAD RIGHT-OF-WAY LINE.
RIVER OR CREEK.
DRY RUN.
DRAINAGE DITCH.
DRAIN TILE.
CULVERT.
DROP INLET.
GUARD RAIL.
BARBED WIRE FENCE.
WOVEN WIRE FENCE.
CHAIN LINK FENCE.
RAILROAD SNOW FENCE.
STONE WALL OR FENCE.
HEDGE.
RAILROAD CROSSING SIGN.
RAILROAD CROSSING BELL.
ELECTRIC WARNING SIGN.
CROSSING GATE.
MEANDER CORNER.

SPRINGS.
MARSH.
TIMBER.
ORCHARD.
BRUSH.
NURSERY.

CATCH BASIN.
FIRE HYDRANT.
GATE VALVE.
SANITARY SEWER MANHOLE.
STORM SEWER MANHOLE.

OVERPASS (Highway Over).
UNDERPASS (Highway Under).

BRIDGE.

BUILDING (One Story Frame).
F-FRAME C-CONCRETE
S-STONE T-TILE
B-BRICK ST-STUCCO

IRON PIPE OR ROD.
MONUMENT (STONE, CONCRETE, OR METAL).
WOODEN HUB.
GRAVEL PIT.
ROCK QUARRY.
MAILBOX.
SIGN.

UTILITY SYMBOLS

POWER POLE LINE.
TELEPHONE OR TELEGRAPH
POLE LINE.
JOINT TELEPHONE AND POWER
ON POWER POLES
ON TELEPHONE POLES

POWER POLE.
ANCHOR.
STEEL TOWER.
STREET LIGHT.

PEDESTAL (TELEPHONE CABLE TERMINAL).
GAS MAIN.
WATER MAIN.
CONDUIT.

TELEPHONE CABLE IN CONDUIT.
ELECTRIC CABLE IN CONDUIT.

TELEPHONE MANHOLE.
ELECTRIC MANHOLE.
BURIED TELEPHONE CABLE.
BURIED ELECTRIC CABLE.
BURIED TELEVISION CABLE.
BURIED FIBER OPTIC.

SEWER, (SANITARY).
SEWER, (STORM).
SEWER MANHOLE.



CITY OF PLYMOUTH

HENNEPIN COUNTY, MINNESOTA

CONSTRUCTION PLANS FOR :

UTILITY IMPROVEMENTS

FOUR SEASONS MALL WATER QUALITY IMPROVEMENT

CITY PROJECT NO. 11022



Item 7Aii.
BCWMC 9-19-13

INDEX :

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	GENERAL LAYOUTS AND NOTES
3	STRUCTURE SCHEDULES
4	IRON ENHANCED SAND FILTER DETAIL
5-7	DETAILS
8	TREE REMOVALS
9	POND GRADING
10	PLAN & PROFILE - LEFT CHANNEL
11	PLAN & PROFILE - CENTER CHANNEL
12-14	PLAN & PROFILE - RIGHT CHANNEL
15	PLAN & PROFILE - WETLAND STORM SEWER
16-18	RESTORATION
CROSS SECTIONS	
19	LEFT CHANNEL
20-21	CENTER CHANNEL
22-27	RIGHT CHANNEL

THIS PLAN SET CONTAINS 27 SHEETS

PROJECT AREA

GOVERNING SPECIFICATIONS:

THE 2005 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION THE MOST CURRENT, "STANDARD SPECIFICATIONS FOR CONSTRUCTION" THE MOST CURRENT CITY OF PLYMOUTH, "ENGINEERING GUIDELINES", AND THE CONTRACT DOCUMENTS, INCLUDING THE SPECIAL PROVISIONS, SHALL GOVERN. ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND ORDINANCES SHALL BE COMPLIED WITH IN THE CONSTRUCTION OF THIS PROJECT.

NOTE:

THE EXACT LOCATION OF UNDERGROUND UTILITIES SUCH AS GAS, TELEPHONE, WATER, ETC. ARE UNKNOWN. THE CONTRACTOR SHALL CONTACT THE APPROPRIATE UTILITIES BEFORE COMMENCING EXCAVATION.

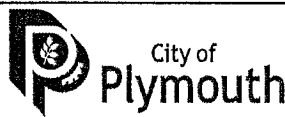
SCALES :

PLAN	50'
(PLAN)	30'
PROFILE	HORIZ. 50'
(X PROFILE)	HORIZ. 30'
	VERT. 5'
X-SECTIONS	HORIZ. 10'
	VERT. 5'

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

ENGR. _____
MICHAEL J. PAYNE, P.E., DESIGN MANAGER

Reg. No. _____ Date _____



STATE AID
PROJ. NO.

CITY PROJ. NO.

11022

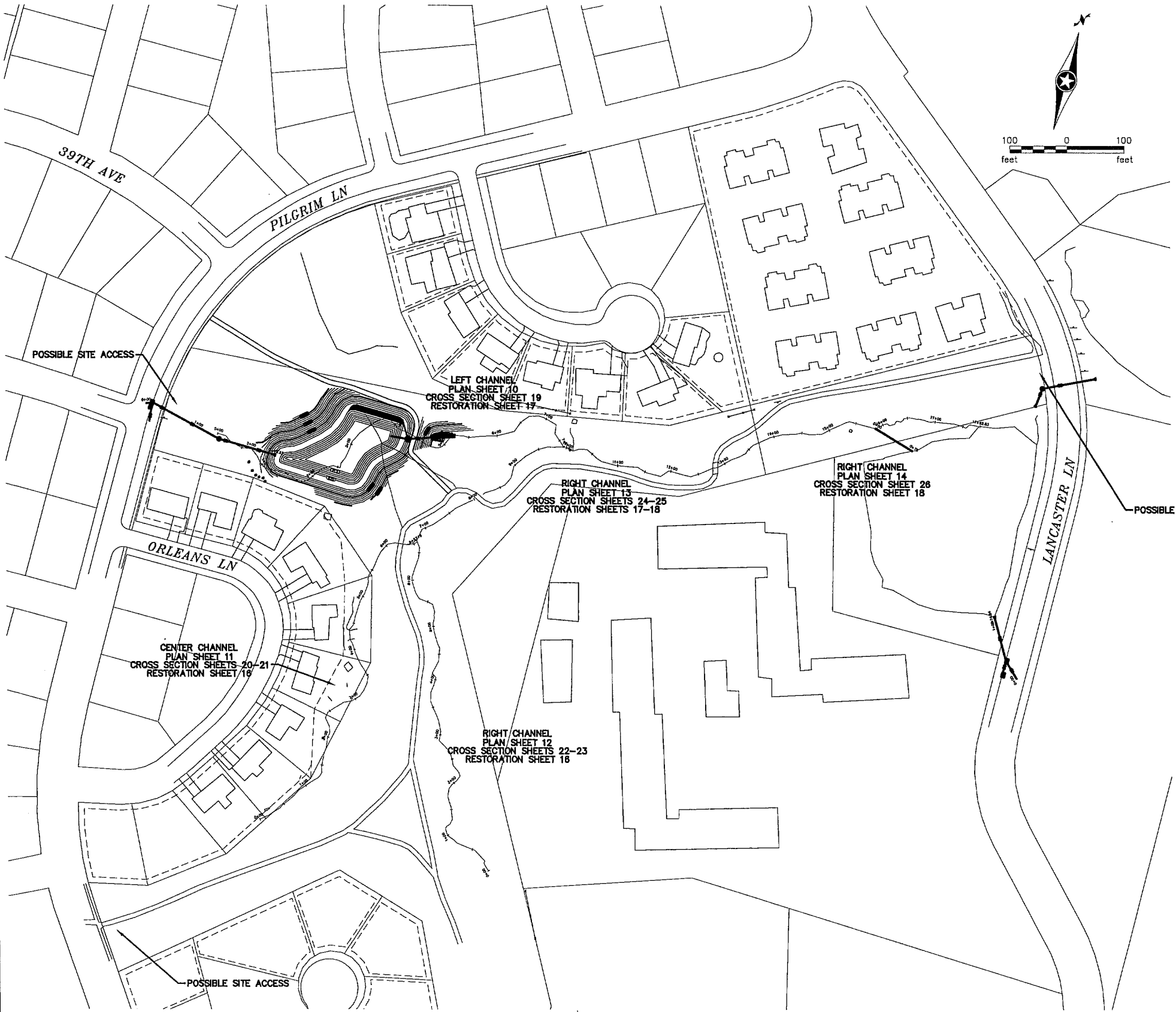
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27

THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY LEVEL QUALITY D. THIS QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF C/ASCE 38-02, ENTITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA."

GOPHER STATE ONE CALL: (651) 454-0002

MAINTAIN LOCAL ACCESS
AT ALL TIMES



GENERAL NOTES

1. THE EXACT LOCATION OF UNDERGROUND UTILITIES SUCH AS GAS, TELEPHONE, WATER, ETC, ARE UNKNOWN AND THE CONTRACTOR SHALL CONTACT GOPHER ONE CALL BEFORE COMMENCING ANY EXCAVATION.
2. THE STRUCTURE LOCATIONS AND ELEVATIONS OF APPURTANCES SHOWN ON THE PLAN ARE APPROXIMATE AND SHALL BE FIELD VERIFIED PRIOR TO COMMENCING ANY UTILITY INSTALLATION.
3. ALL EXCESS EXCAVATED MATERIAL IS THE PROPERTY OF THE CONTRACTOR.
4. ALL USEABLE SALVAGED CASTINGS, VALVES, SIGNS, HYDRANTS, ETC. SHALL BE DELIVERED TO THE CITY OF PLYMOUTH PUBLIC WORKS.
5. ACCESS TO LOCAL RESIDENTS MUST BE MAINTAINED AT ALL TIMES THROUGHOUT CONSTRUCTION.
6. A MINIMUM OF 48 HRS. NOTICE IS REQUIRED FOR ALL SURVEY STAKING REQUESTS.
7. CONTRACTOR MUST MAINTAIN EROSION CONTROL FOR ENTIRE PROJECT.
8. CONTRACTOR MUST SUBMIT A TRAFFIC CONTROL PLAN FOR APPROVAL, ADDRESSING ANY TEMPORARY CLOSURES OR DETOURS. REVIEW IS REQUIRED BY THE CITY OF PLYMOUTH.
9. TRAFFIC CONTROL MUST BE PROPERLY MAINTAINED AT ALL TIMES IN ACCORDANCE WITH THE MNDOT TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS BOOKLET.
10. ONE LANE MUST BE OPEN TO TRAFFIC AT ALL TIMES.
11. THE 2013 CITY OF PLYMOUTH ENGINEERING STANDARD DETAIL SPECIFICATIONS FOR SEWER, WATER, STORM SEWER, & STREETS APPLY TO THIS PROJECT.
12. NO TREES OR SHRUBS ARE TO BE REMOVED UNLESS MARKED BY THE CITY OF PLYMOUTH FOR REMOVAL.
13. ALL PAVEMENT, INCLUDING TRAILS, IS TO BE SAWCUT AT THE MATCH POINT.
14. CONTRACTOR SHALL PROVIDE 48 HOUR NOTICE TO CITY + AFFECTED RESIDENTS WHEN WATER SERVICE WILL BE DISRUPTED.
15. NO RESIDENTS SHALL BE WITHOUT WATER SERVICE BEFORE 9AM OR AFTER 3PM WEEKDAYS AND NO DISRUPTION ON WEEKENDS.
16. REMOVE OR ABANDON EXISTING STORM SEWER PIPE AS DIRECTED BY ENGINEER.
17. CONTRACTOR SHALL INSTALL A ROCK ENTRANCE AT ALL SITE ACCESS LOCATIONS.
18. CONTRACTOR SHALL REPLACE DAMAGED EXISTING TRAILS AS DIRECTED BY ENGINEER AT COMPLETION OF PROJECT.

NO	DATE	BY	CKD	APPR	REVISION

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Signature: _____
MICHAEL J. PAYNE

Date: 9-24-13 License#: 50484



PLYMOUTH, MINNESOTA
FOUR SEASONS MALL
WATER QUALITY IMPROVEMENT
CITY PROJECT NO. 11022

LAYOUT & NOTES

STATE AID PROJ. NO.	DRAWN BY M. PAYNE	DATE 7-13
	DESIGNED BY M. PAYNE	7-13
DWG NAME	CHECKED BY D. ASCHE	7-13
FOUR SEASONS	REVIEWED BY J. RENNEBERG	7-13

EXISTING STRUCTURE SCHEDULE								
STRUCT.		LOCATION	ADJUST	REMOVE &	REMOVE	GROUT	GROUT INV.	
NO.	TYPE	STREET	[EACH]	REPLACE RINGS	[EACH]	DOGHOUSE	[EACH]	REMARKS:
1	STORM MH	PILGRIM LN		X				BULKHEAD EX. N. 42" RCP
2	CATCH BASIN	PILGRIM LN			X			
3	CATCH BASIN	PILGRIM LN						BULKHEAD EX. 12" CMP
4	CATCH BASIN	PILGRIM LN						NO WORK NEEDED
5	STORM MH	39TH AVE						NO WORK NEEDED
6	CATCH BASIN	39TH AVE						NO WORK NEEDED
7	STORM MH	39TH AVE						NO WORK NEEDED
8	CATCH BASIN	39TH AVE						NO WORK NEEDED
9	CATCH BASIN	PILGRIM LN						NO WORK NEEDED
10	SANITARY MH	PILGRIM LN						NO WORK NEEDED
11	STORM MH	LANCASTER LN			X			
12	CATCH BASIN	LANCASTER LN						NO WORK NEEDED
13	STORM MH	LANCASTER LN						NO WORK NEEDED
14	CATCH BASIN	LANCASTER LN						NO WORK NEEDED
15	STORM MH	LANCASTER LN						ABANDON MH
16	SANITARY MH	LANCASTER LN						NO WORK NEEDED
17	SANITARY MH	LANCASTER LN						NO WORK NEEDED
18	STORM MH	LANCASTER LN						ABANDON MH
19	SANITARY MH	LANCASTER LN						NO WORK NEEDED
20	STORM MH	LANCASTER LN						BULKHEAD EX. N 30" RCP
21	CATCH BASIN	LANCASTER LN						NO WORK NEEDED
22	SANITARY MH	LANCASTER LN						NO WORK NEEDED
23	CATCH BASIN	LANCASTER LN			X			

PROPOSED STORM SEWER STRUCTURE SCHEDULE										
STRUCT.		LOCATION	DESIGN			CASTING	TOP OF			
NO.	STREET	STATION	R/L	MH	CB	DEPTH	TYPE	CASTING	INVERT	NOTES:
APR 1	PILGRIM LN	2+37.63		APRON	ST-3	N/A	N/A	N/A	923.50	
STMH 2	PILGRIM LN	1+43.07		ST-6 (72")		6.30	R-1642	930.75	924.45	
CB 3	PILGRIM LN	0+11.49			ST-6 (72")	6.98	R-3067	932.75	925.77	
CB 4	PILGRIM LN		R		ST-2	2.94	R-3067	932.75	929.81	
APR 5	POND			APRON	ST-3	N/A	N/A	N/A	914.88	
STMH 6	POND				ST-15 (108")	7.26	GRATE	922.50	915.24	WEIR ELEV = 921.00
APR 7	LANCASTER LN	1+14.84		APRON	ST-3	N/A	N/A	N/A	891.43	
CB 8	LANCASTER LN	0+35.60			ST-6 (72")	7.14	R-3067	898.96	891.82	
CB 9	LANCASTER LN		L		ST-2	3.50	R-3067	899.16	895.66	
APR 10	LANCASTER LN		R	APRON	ST-3	N/A	N/A	N/A	888.22	
STMH 11	LANCASTER LN		L		ST-6 (72")	5.84	R-4342	895.00	889.17	
APR 12	LANCASTER LN		L	APRON	ST-3	N/A	N/A	N/A	889.50	

CROSS VANE LOCATIONS					
NO.	CHANNEL	STATION	UPSTREAM ELEV.	DROP (FT)	NOTES
1	LEFT	7+00	912.22	2.0	
2	CENTER	0+75	946.31	1.5	
3	CENTER	1+35	944.31	1.5	
4	CENTER	2+55	941.71	1.5	
5	CENTER	2+90	939.96	1.5	
6	CENTER	3+25	938.21	1.5	
7	CENTER	3+60	936.46	1.5	
8	CENTER	4+61.25	931.87	1.5	
9	CENTER	4+96.25	930.12	2.0	
10	CENTER	5+31.25	927.87	2.0	
11	CENTER	5+66.25	925.62	2.0	
12	RIGHT	0+60	945.95	1.5	
13	RIGHT	1+20	943.95	1.5	
14	RIGHT	2+40	941.35	1.5	
15	RIGHT	3+15	939.20	2.0	
16	RIGHT	3+75	936.70	2.0	
17	RIGHT	4+35	934.20	2.0	
18	RIGHT	4+70	931.95	2.0	
19	RIGHT	5+30	929.45	2.0	
20	RIGHT	5+65	927.20	2.0	
21	RIGHT	6+00	924.95	2.0	
22	RIGHT	6+35	922.70	2.0	
23	RIGHT	6+95	920.20	2.0	
24	RIGHT	8+42.97	915.88	2.0	
25	RIGHT	8+77.97	913.63	2.0	
26	RIGHT	9+37.97	911.13	1.5	
27	RIGHT	10+50	908.61	1.5	
28	RIGHT	11+50	906.21	1.5	
29	RIGHT	12+35	903.96	1.5	
30	RIGHT	14+00	900.91	2.0	
31	PROPOSED	0+25	895.94	2.0	

RIGHT CHANNEL GRADING

STATION	AREAS		VOLUMES		CUMULATIVE VOLUMES	
	Square Feet		Cubic Yards		Cubic Yards	
	CUT	FILL	CUT	FILL	CUT	FILL
0+00	11.55	0.00	12.83	0.00	12.83	0.00
0+25	16.17	0.00	10.40	0.00	23.23	0.00
0+50	6.31	0.00	3.85	0.67	27.08	0.67
0+75	2.00	1.45	0.93	2.28	28.00	2.96
1+00	0.00	3.48	3.21	1.95	31.21	4.90
1+25	8.92	0.72	11.57	0.34	42.78	5.24
1+50	18.06	0.01	11.70	0.93	54.48	6.17
1+75	7.22	2.00	3.34	4.08	57.82	10.25
2+00	0.00	6.82	0.00	6.00	57.82	16.25
2+25	0.00	6.14	14.92	3.46	72.75	19.71
2+50	32.23	1.33	21.80	1.09	94.54	20.81
2+75	14.86	1.03	6.88	1.35	101.42	22.16
3+00	0.00	1.89	12.90	0.88	114.32	23.05
3+25	27.86	0.02	30.48	0.07	144.80	23.12
3+50	37.98	0.14	31.90	0.37	176.70	23.49
3+75	30.92	0.85	32.20	0.30	208.90	23.79
4+00	38.62	0.00	17.88	1.98	226.78	25.76
4+25	0.00	4.27	5.19	2.31	231.97	28.07
4+50	11.22	0.72	21.22	0.61	253.19	28.68
4+75	34.62	0.50	41.12	0.28	294.31	28.95
5+00	54.20	0.00	25.09	1.03	319.40	29.98
5+25	0.00	2.22	0.00	4.55	319.40	34.53
5+50	0.00	7.50	0.00	4.75	319.40	39.28
5+75	0.00	2.67	0.00	5.83	319.40	45.11
6+00	0.00	9.94	0.00	10.14	319.40	55.26
6+25	0.00	11.98	14.00	8.23	333.40	61.49
6+50	30.23	1.49	14.00	6.24	347.40	67.74
6+75	0.00	12.00	12.37	5.85	359.77	73.59
7+00	26.73	0.64	21.09	0.30	380.87	73.88
7+25	18.84	0.00	16.29	0.00	397.15	73.88
7+50	16.34	0.00	15.65	0.00	412.80	73.88
7+75	17.47	0.00	14.25	0.00	427.05	73.88
7+97.38	16.92	0.00	1.10	0.00	428.15	73.88
8+00	5.67	0.00	4.96	0.00	433.11	73.88
8+17.97	9.24	0.00	1.20	2.64	434.31	76.52
8+25	0.00	20.29	0.00	17.24	434.31	93.76
8+50	0.00	16.94	0.00	15.62	434.31	109.38
8+75	0.00	16.81	0.00	9.48	434.31	118.86
9+00	0.00	3.66	0.00	4.81	434.31	123.67
9+25	0.00	6.72	6.52	3.30	440.83	126.97
9+50	14.09	0.40	6.52	3.79	447.36	130.76
9+75	0.00	7.78	0.00	8.08	447.36	138.84
10+00	0.00	9.67	0.00	10.23	447.36	149.07
10+25	0.00	12.44	0.00	11.83	447.36	160.90
10+50	0.00	13.12	4.72	6.15	452.08	167.05
10+75	10.20	0.17	6.67	0.23	458.75	167.29
11+00	4.21	0.33	2.30	0.82	461.05	168.10
11+25	0.76	1.43	1.25	2.42	462.30	170.52
11+50	1.94	3.80	25.58	1.76	487.88	172.29
11+75	53.31	0.00	59.32	0.07	547.20	172.36
12+00	74.82	0.15	54.95	0.31	602.16	172.67
12+25	43.99	0.52	63.52	0.24	665.68	172.91
12+50	93.30	0.00	70.64	0.12	736.31	173.03
12+75	59.28	0.25	3.73	0.03	740.04	173.06
12+77.53	20.20	0.32	5.13	0.23	745.17	173.29
12+85.88	13.03	1.18	5.68	1.08	750.85	174.37
13+00	6.68	2.95	4.70	2.40	755.55	176.77
13+25	1.46	2.24	0.68	8.54	756.23	185.31
13+50	0.00	16.21	0.00	11.05	756.23	196.36
13+75	0.00	7.65	0.01	7.30	756.24	203.65
14+00	0.02	8.11	13.42	3.75	769.66	207.41
14+25	28.97	0.00	15.22	0.17	784.88	207.58
14+50	3.91	0.37	2.19	0.36	787.07	207.93
14+75	0.83	0.40	6.30	0.19	793.37	208.12
15+00	12.78	0.00	11.19	0.00	804.57	208.12
15+25	11.39	0.00	19.89	0.00	824.46	208.12
15+50	31.58	0.00	17.34	0.00	841.80	208.12
15+75	5.88	0.00	2.72	0.00	844.52	208.12
16+00	0.00	0.00	0.00	0.00	844.52	208.12

CENTER CHANNEL GRADING

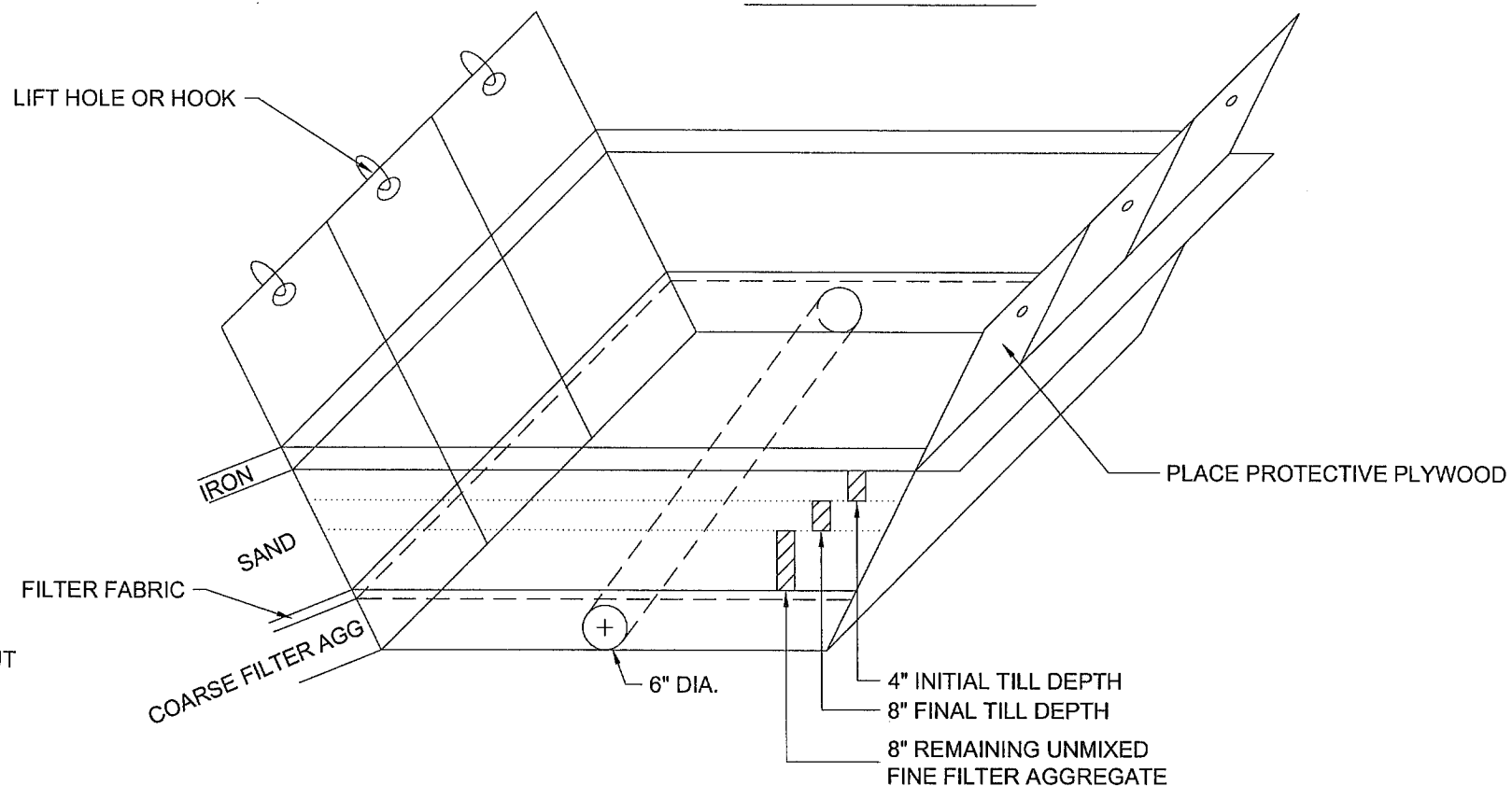
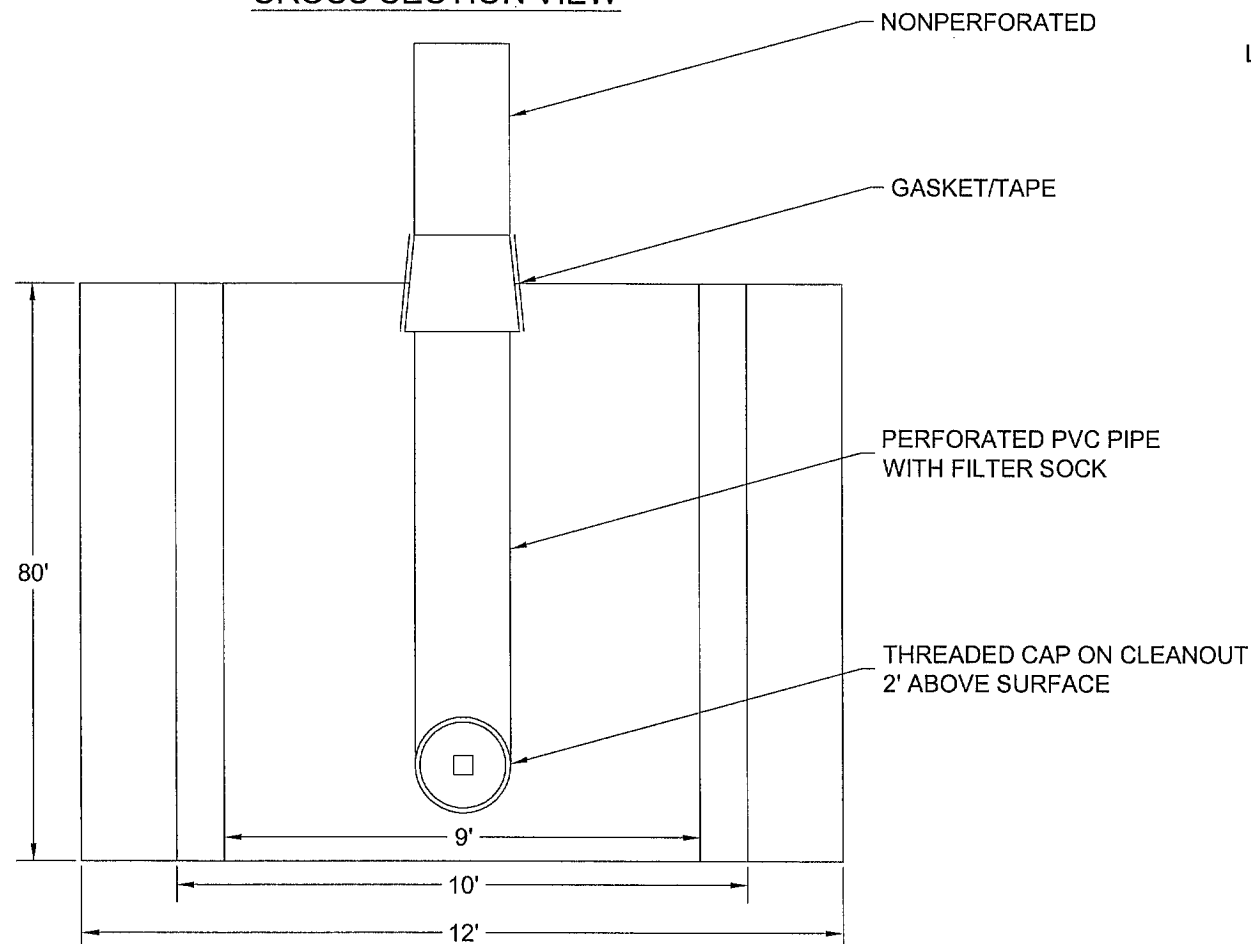
STATION	AREAS		VOLUMES		CUMULATIVE VOLUMES	
	Square Feet		Cubic Yards		Cubic Yards	
	CUT	FILL	CUT	FILL	CUT	FILL
0+00	0.00	0.00				
0+25	0.00	0.00	0.00	0.00	0.00	0.00
0+50	1.20	0.00	0.55	0.00	0.55	0.00
0+75	0.87	0.00	0.96	0.00	1.51	0.00
1+00	13.15	0.00	6.49	0.00	8.01	0.00
1+25	0.00	7.63	6.09	3.53	14.10	3.53
1+50	6.45	0.00	2.98	3.53	17.08	7.07
1+75	0.29	0.05	3.12	0.02	20.20	7.09
2+00	0.99	0.08	0.59	0.06	20.79	7.15
2+25	4.35	0.07	2.48	0.07	23.27	7.22
2+50	8.02	0.82	5.73	0.41	29.00	7.63
2+75	7.06	1.54	6.98	1.09	35.98	8.73
3+00	16.42	0.30	10.87	0.86	46.84	9.58
3+25	0.00	3.98	7.60	1.99	54.45	11.57
3+50	11.25	0.67	5.21	2.16	59.65	13.72
3+75	27.34	0.50	17.86	0.54	77.52	14.27
4+00	23.44	0.36	23.51	0.40	101.03	14.66
4+25	16.46	0.00	18.47	0.17	119.49	14.83
4+50	27.33	0.81	20.27	0.38	139.76	15.20
4+75	20.53	0.38	22.16	0.55	161.92	15.75
5+00	0.00	8.62	9.50	3.24	171.42	18.99
5+25	0.00	4.22	0.00	5.01	171.42	24.01
5+50	5.79	2.41	2.68	3.07	174.11	27.08
5+75	32.86	0.01	17.89	1.12	192.00	28.20
6+00	25.51	0.00	27.02	0.00	219.02	28.20
6+25	10.05	0.00	16.46	0.00	235.48	28.20
6+50	0.00	33.37	4.65	15.45	240.13	43.65
6+75	0.00	29.47	0.00	8.37	240.13	52.02
6+97.19	0.00	29.47	0.00	0.00	240.13	52.02

LEFT CHANNEL GRADING

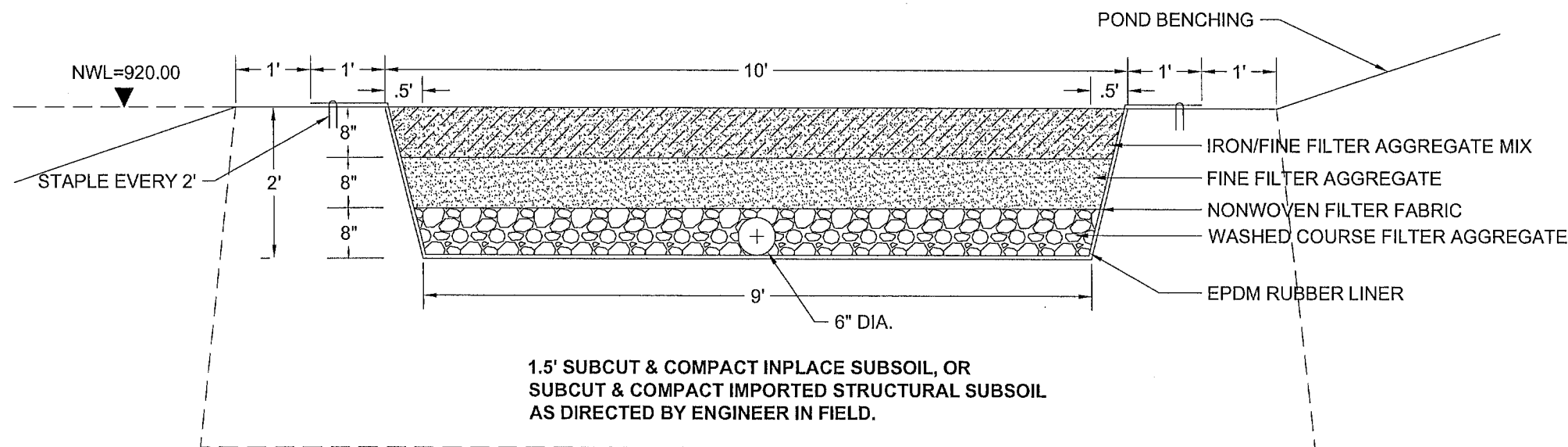
STATION	AREAS		VOLUMES		CUMULATIVE VOLUMES	
	Square Feet		Cubic Yards		Cubic Yards	
	CUT	FILL	CUT	FILL	CUT	FILL
5+00	0.00	0.00				
5+25	13.84	0.38	6.41	0.17	5.41	0.17
5+50	12.35	0.57	12.13	0.44	18.54	0.61
5+75	9.28	0.31	10.01	0.41	28.55	1.02
6+00	9.14	0.44	8.53	0.35	37.06	1.36
6+25	2.84	0.35	5.45	0.37	42.54	1.73
6+50	1.10	0.81	1.73	0.54	44.27	2.27
6+75	0.66	2.05	0.81	1.32	45.08	3.59
7+00	0.00	11.07	0.30	6.07	45.38	9.66
7+25	2.23	0.59	1.03	5.40	46.42	15.06
7+50	0.00	30.92	1.03	14.58	47.45	29.54
			0.00	10.52	47.45	40.17
7+62.98	0.00	12.85	0.00	0.00	47.45	40.17

SAND/IRON MIXING

CROSS SECTION VIEW



CROSS SECTION VIEW



SAND/IRON CONSTRUCTION SEQUENCING

1. IMPORT STRUCTURAL SUBSOIL (COMMON BORROW (CY)) IF NEEDED
2. SUBCUT & COMPACT SUBSOIL, TO 1.5' BELOW IESF BOTTOM TO 95% STANDARD PROCTOR (COMMON EX. CY) (IF NEEDED)
3. GRADE IN 14' BENCH
4. EXCAVATE 10' WIDE X 2' DEPTH BENCH
5. ROLL OUT 45 MILL EPDM LINER (EPDM LINER (SF))
6. PLACE COARSE FILTER AGGREGATE ON BOTTOM 8" (COARSE FILTER AGGREGATE 3149.2H (CY))
7. LAY FILTER FABRIC OVER TOP COARSE FILTER AGGREGATE AND PIPE (NONWOVEN FILTER FABRIC (SY))
8. PUT TEMPORARY PROTECTIVE PLYWOOD IN PLACE (OR OTHER METHOD APPROVED BY ENGINEER TO PREVENT PUNCTURE OF EPDM)
9. PLACE FINE FILTER AGGREGATE TO TOP OF BENCH (FINE FILTER AGGREGATE 3149.2J (CY))
10. PLACE 5.2 LBS/SF (FOR 8" DEPTH) IRON FILINGS ON TOP OF SAND (ETI-CC-1004(-8+50) CONNELLY GPM, INC. OR APPROVED EQUAL (TONS))
11. TILL IN IRON FILINGS TO 4" DEPTH USING SMALL GARDEN STYLE TILLER
12. HAND MIX SIDES NEAR 2.67'X4' PROTECTIVE PLYWOOD
13. SET TILLER DEPTH TO 8" AND MIX AGAIN WITH SAME PROCESS
14. REMOVE PROTECTIVE PLYWOOD & RAKE SURFACE FLAT
15. STALE LINER DOWN EVERY 2'

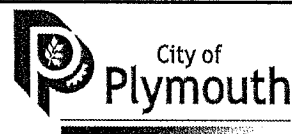
NOTE: ALL ITEMS LISTED WITHOUT A PAY ITEM ARE CONSIDERED INCIDENTAL INCLUDING: PLACING PLYWOOD, STAPLING LINER, TILLING, PIPE CLEANOUTS, RAKING SURFACE, ETC.

NO	DATE	BY	CKD	APPR	REVISION

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Signature: MICHAEL J. PAYNE

Date: 9-24-13 License #: 50484



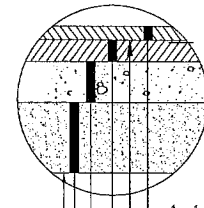
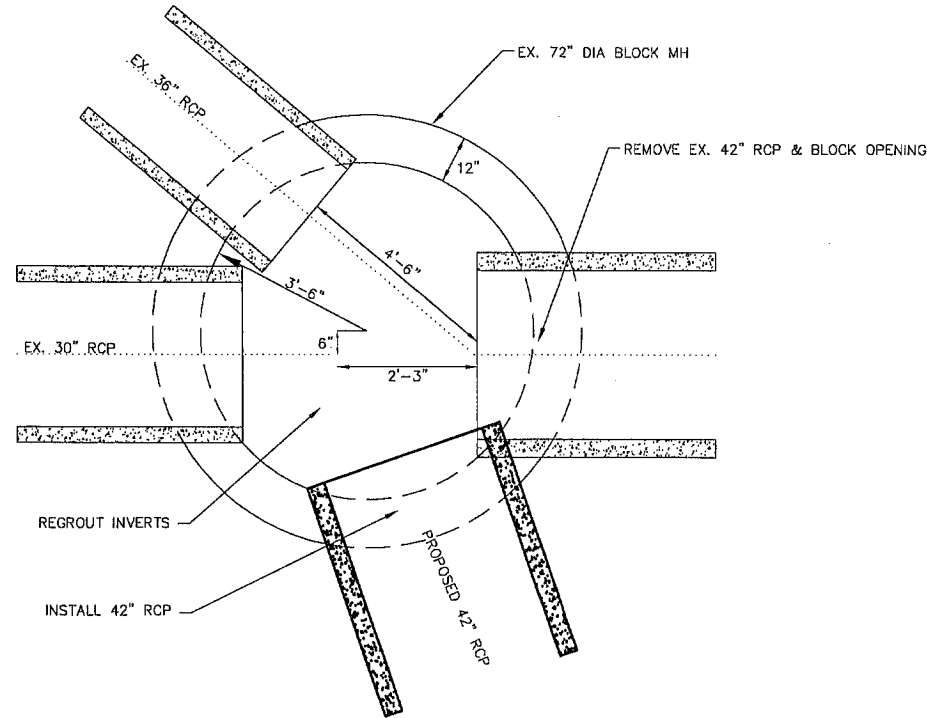
PLYMOUTH, MINNESOTA
FOUR SEASONS MALL
WATER QUALITY IMPROVEMENT
CITY PROJECT NO. 11022

IRON ENHANCED SAND FILTER DETAIL

STATE AID PROJ. NO.	DRAWN BY M. PAYNE	DATE 7-13
DWG NAME	DESIGNED BY M. PAYNE	DATE 7-13
FOUR SEASONS	CHECKED BY D. ASCHE	DATE 7-13
	REVIEWED BY J. RENNEBERG	DATE 7-13

DETAIL A

PILGRIM LN STORM SEWER CONNECTION



- 1-1/2" BITUMINOUS WEARING COURSE
MN/DOT SPEC. 2360, TYPE SPWEA240C
- 2357 TACK COAT
- 2-1/2" BITUMINOUS BASE COURSE
MN/DOT SPEC. 2360, TYPE SPNWB230C
- 8" AGG. BASE CLASS 7
MN/DOT SPEC. 3138 A2(a)
- 12" SELECT GRANULAR BORROW SPEC. 3149.2B
- GEOTEXTILE FILTER FABRIC TYPE V
(AS DIRECTED BY ENGINEER)

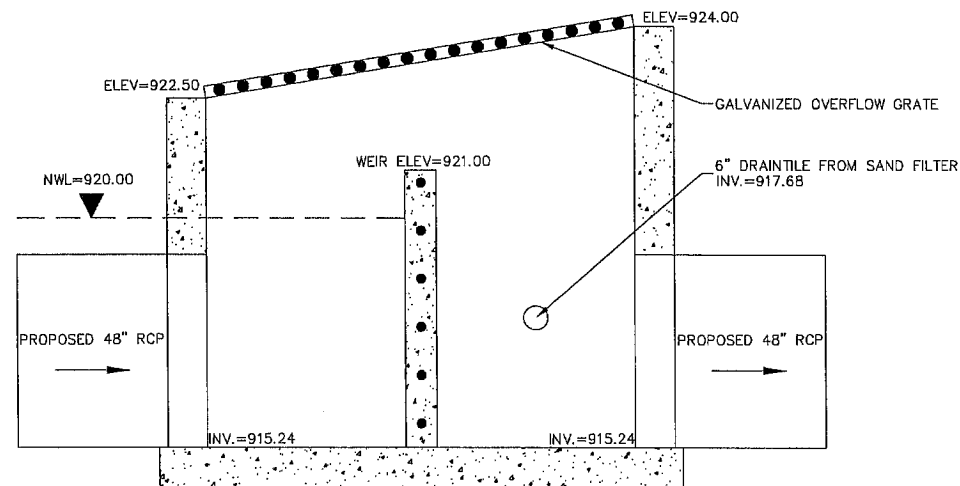
ROADWAY PATCH DETAIL

DETAIL C

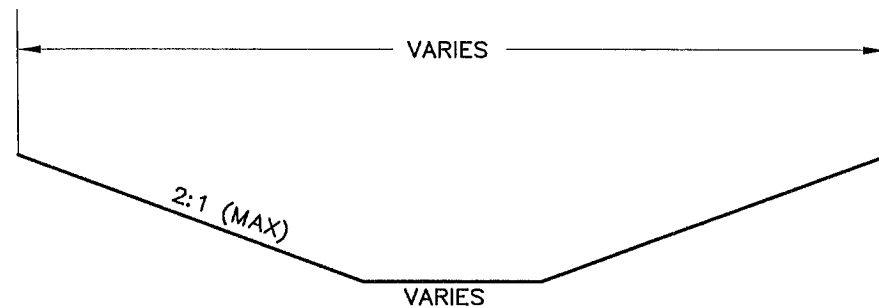
CROSS VANE DETAIL

DETAIL B

108" DIA. POND OUTLET STRUCTURE



TYPICAL CHANNEL



DETAIL D

ROCK WEIR DETAIL
TOP OF WEIR ELEVATION=891.00

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PLYMOUTH, MINNESOTA
FOUR SEASONS MALL
WATER QUALITY IMPROVEMENT
CITY PROJECT NO. 11022

DETAILS

STATE AID PROJ. NO.	DRAWN BY M. PAYNE	DATE 7-13
DWG NAME FOUR SEASONS	DESIGNED BY M. PAYNE	7-13
	CHECKED BY D. ASCHE	7-13
	REVIEWED BY J. RENNEBERG	7-13

CITY OF PLYMOUTH[6"]

IMPROVEMENT PROJECT: [3"]
(PROJECT NAME) [3"]
(PROJECT NO.) [2-1/2"]

PROCEED WITH CAUTION [6"]

FOR INFORMATION CALL: [2-1/2"]
PROJECT HOTLINE NO. (763) 509-55XX [WHERE APPLICABLE]
PROJECT WEBSITE WWW.PLYMOUTH.MN.US [WHERE APPLICABLE]

(NAME OF CONSULTING ENGINEER) CITY ENGINEERING DIVISION:
(NAME OF PROJECT MANAGER) [2-1/2"] (CITY REPRESENTATIVE)
(PHONE NO.) PHONE NO. (763) 509-5500

(CONTRACTOR'S NAME) SCHEDULED COMPLETION DATE:
(ADDRESS) [2-1/2"] (DATE)
(LOCAL PHONE NO.)

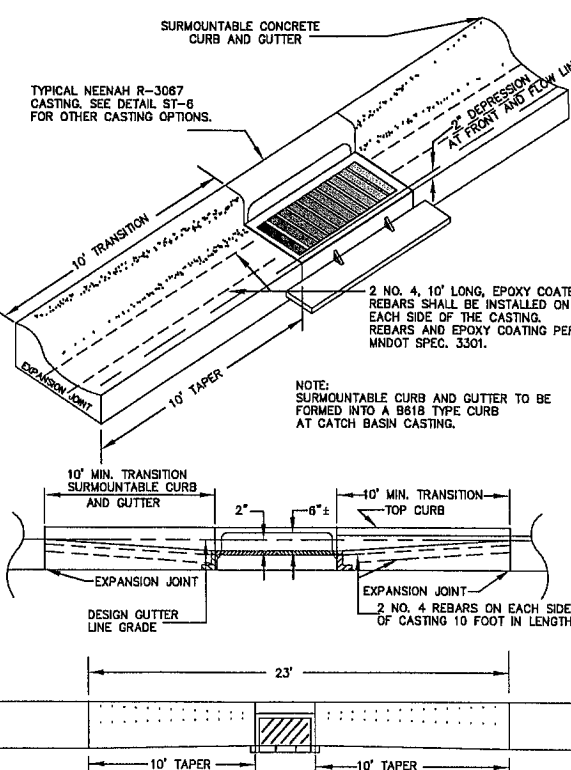
NOTE:
Sign shall be 4' x 6' with a white background with black letters, (no hand lettering) and of proper height to be readily visible from an automobile, and located as directed by engineer. Sign shall be mounted on 4' x 4' posts

() Project Specific Information



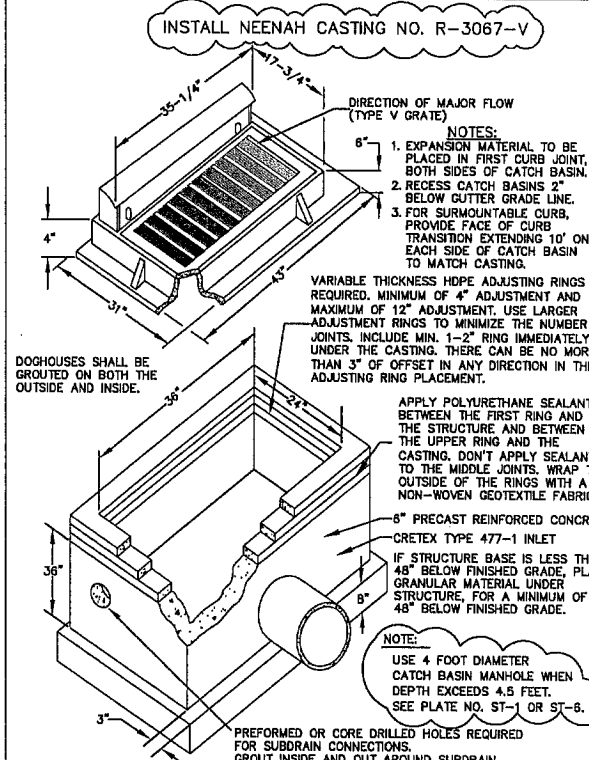
STANDARD DETAILS
STANDARD CITY PROJECT SIGN
CITY OF PLYMOUTH

PUBLISHED
3-13
CITY PL. NO.
DWG-1
REVISED 3-11



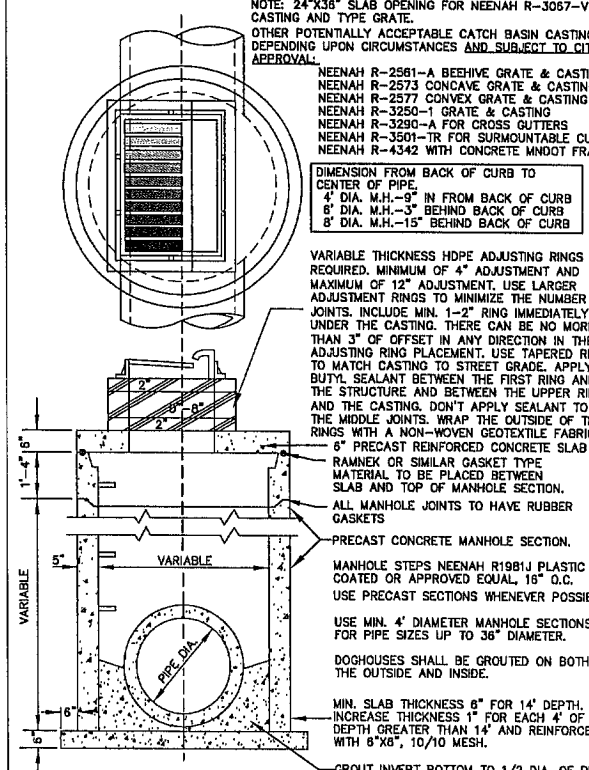
STANDARD DETAILS
CATCH BASIN CASTING INSTALLATION DETAIL
CITY OF PLYMOUTH

PUBLISHED
3-13
CITY PL. NO.
ST-6
REVISED 3-13



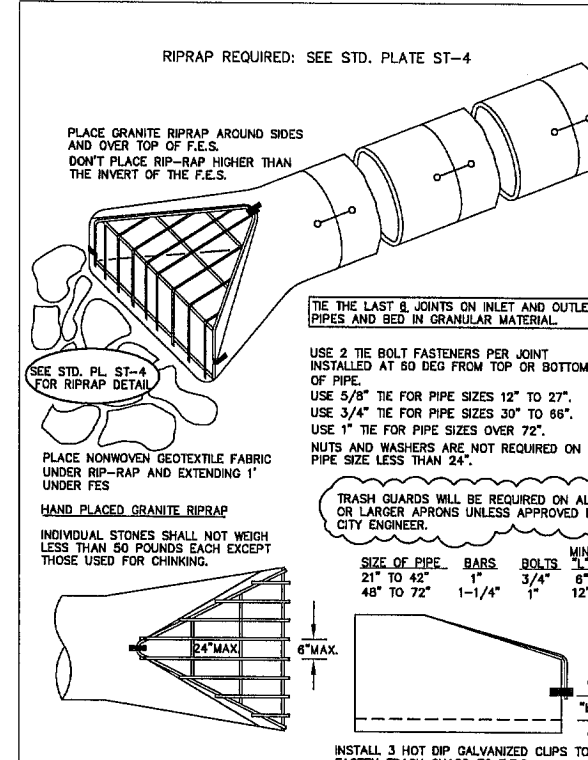
STANDARD DETAILS
CATCH BASIN (MAX. DEPTH 4.5')
CITY OF PLYMOUTH

PUBLISHED
3-13
CITY PL. NO.
ST-2
REVISED 3-13



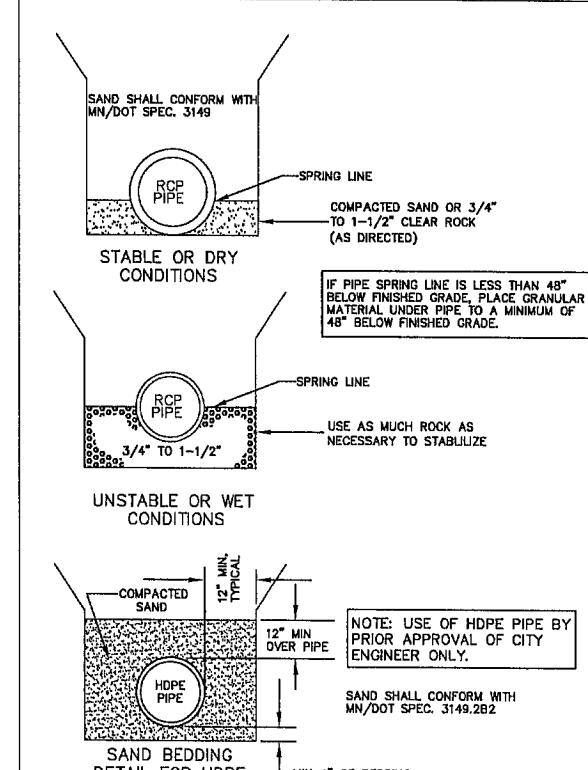
STANDARD DETAILS
PRECAST STORM SEWER CATCH BASIN MANHOLE
WITH REINFORCED CONCRETE TOP SLAB
CITY OF PLYMOUTH

PUBLISHED
3-13
CITY PL. NO.
ST-6
REVISED 3-11



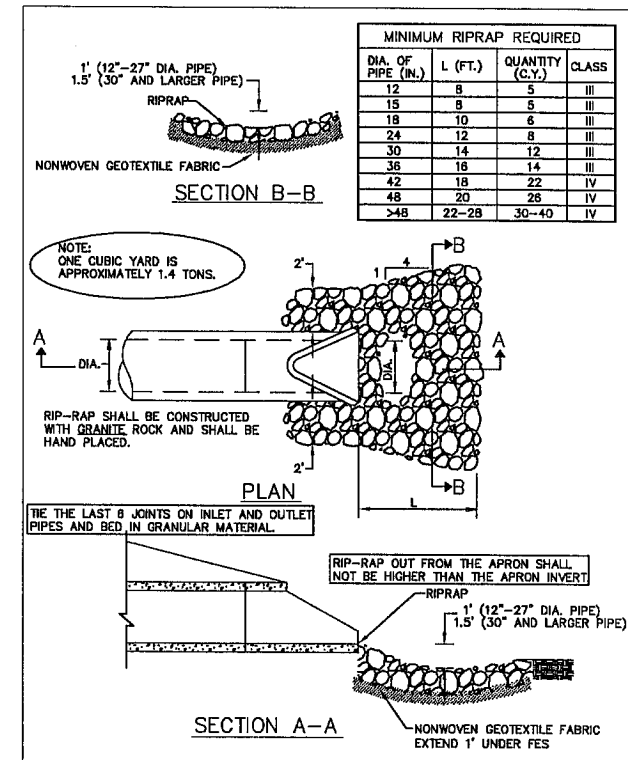
STANDARD DETAILS
INLET & OUTLET F.E.S. WITH TRASH GUARD
CITY OF PLYMOUTH

PUBLISHED
3-13
CITY PL. NO.
ST-3
REVISED 3-13



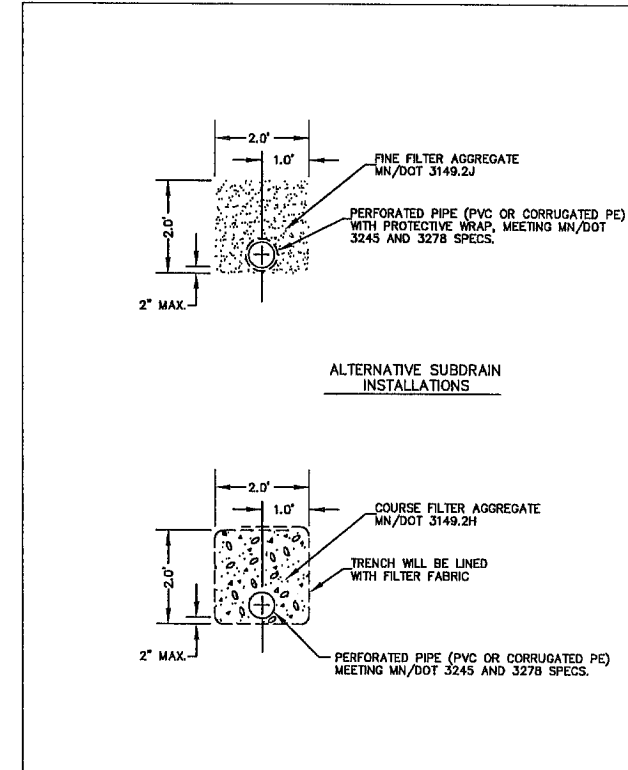
STANDARD DETAILS
STORM SEWER BEDDING
CITY OF PLYMOUTH

PUBLISHED
3-13
CITY PL. NO.
ST-8
REVISED 3-12



STANDARD DETAILS
RIPRAP DETAIL FOR FLARED END SECTIONS
CITY OF PLYMOUTH

PUBLISHED
3-13
CITY PL. NO.
ST-4
REVISED 3-12



STANDARD DETAILS
PERFORATED DRAIN TILE PIPE
CITY OF PLYMOUTH

PUBLISHED
3-13
CITY PL. NO.
ST-10
REVISED 3-11

NO	DATE	BY	CKD	APPR	REVISION

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Date: 9-24-13 License#: 50484



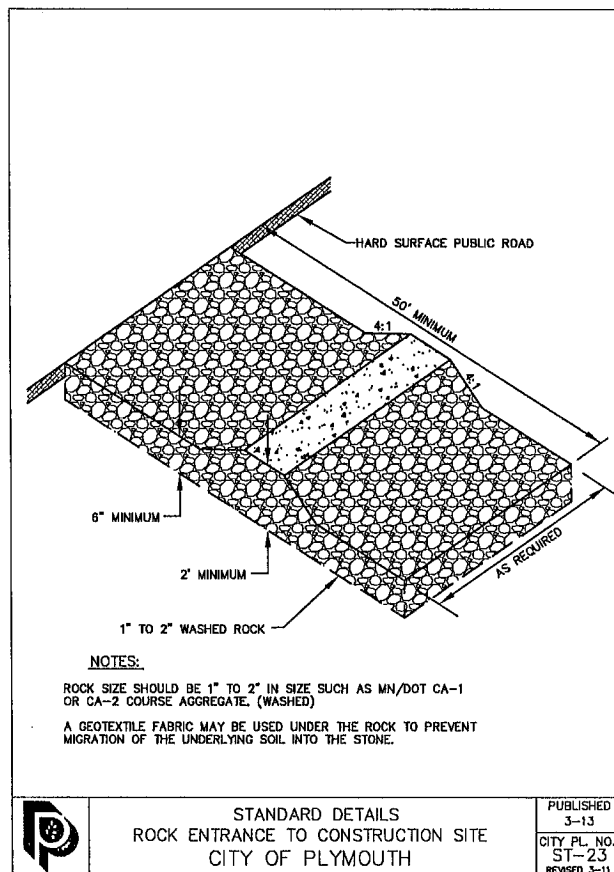
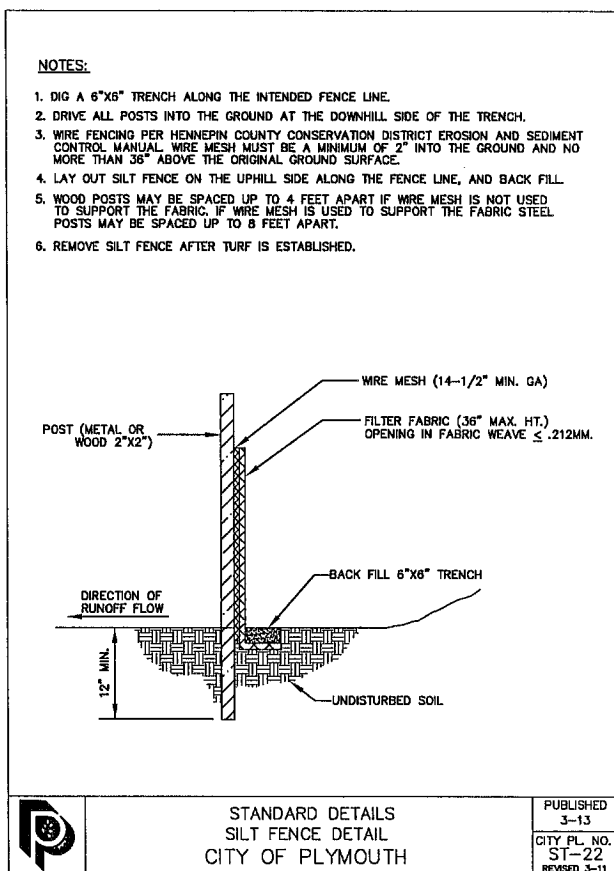
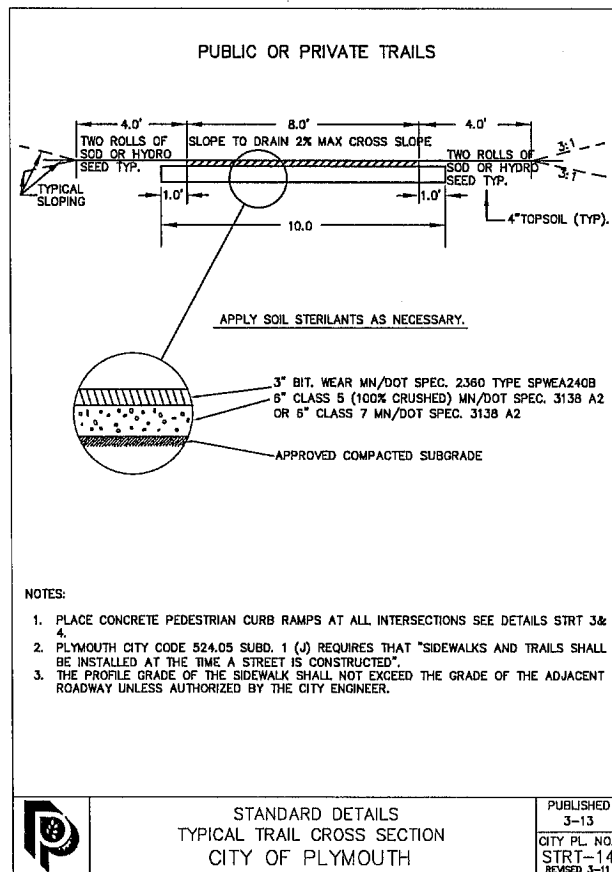
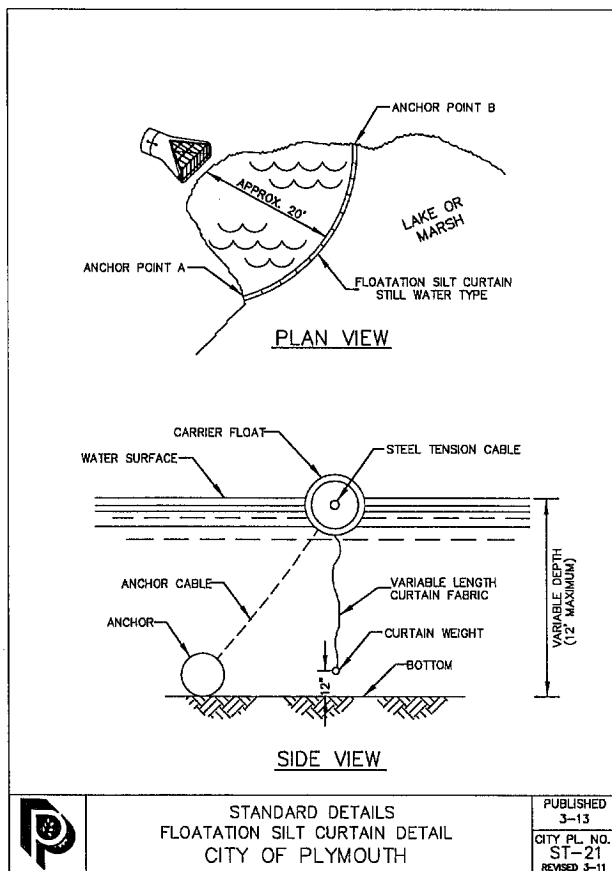
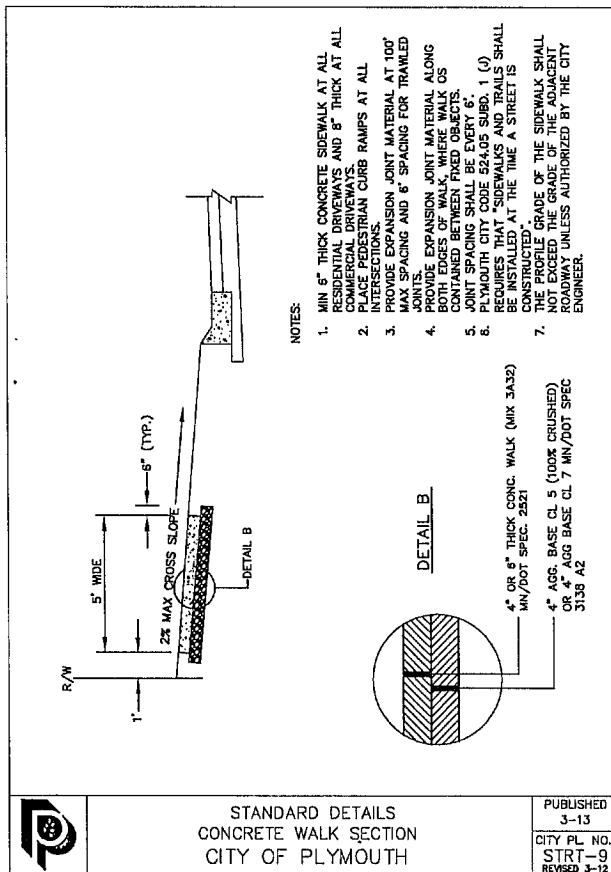
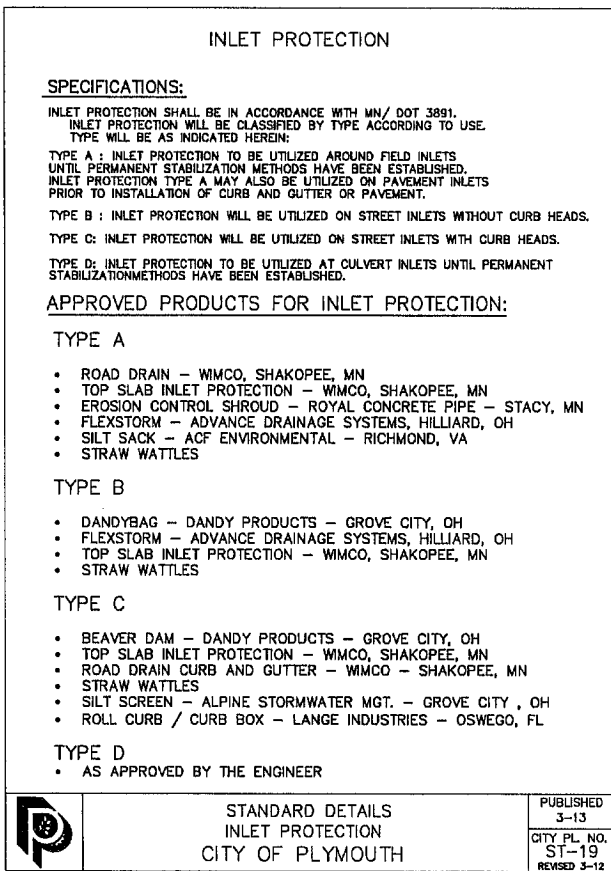
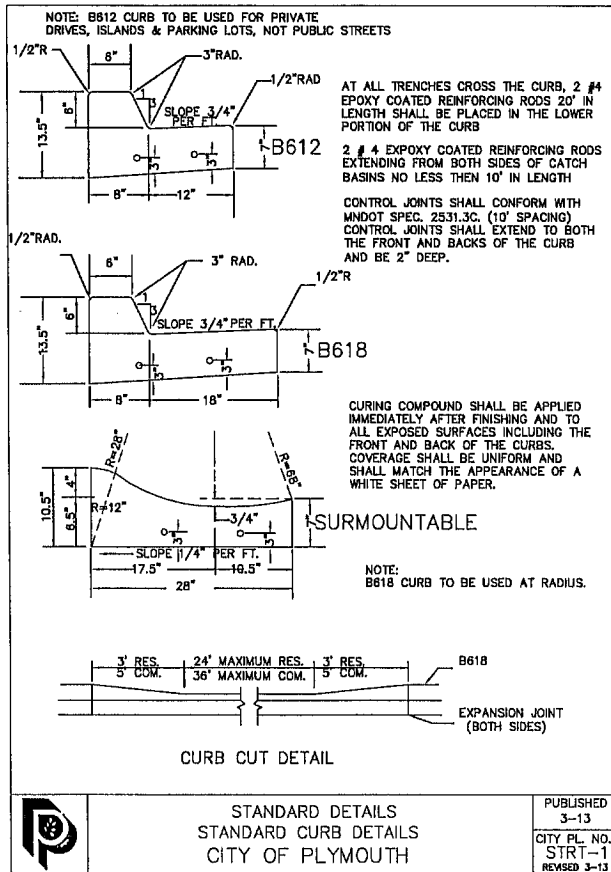
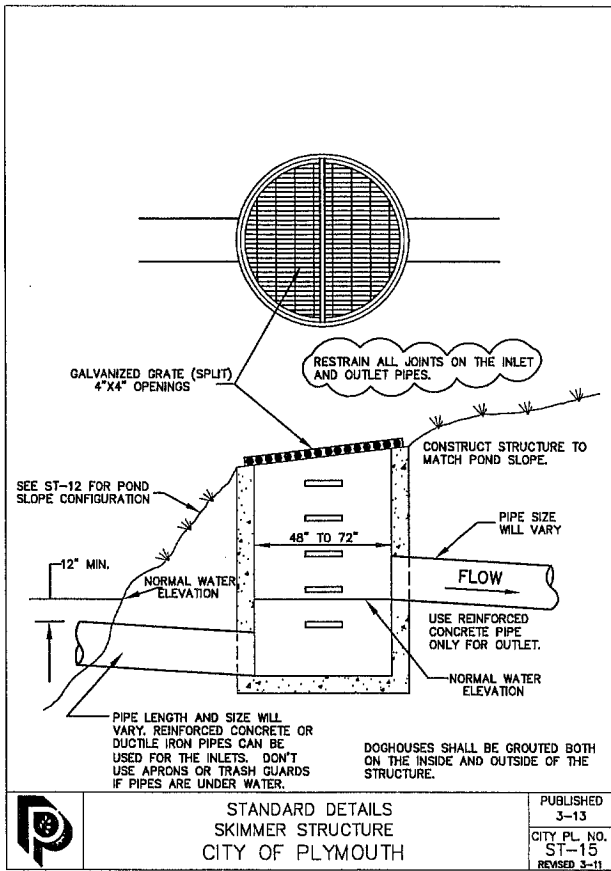
PLYMOUTH, MINNESOTA
FOUR SEASONS MALL
WATER QUALITY IMPROVEMENT
CITY PROJECT NO. 11022

DETAILS

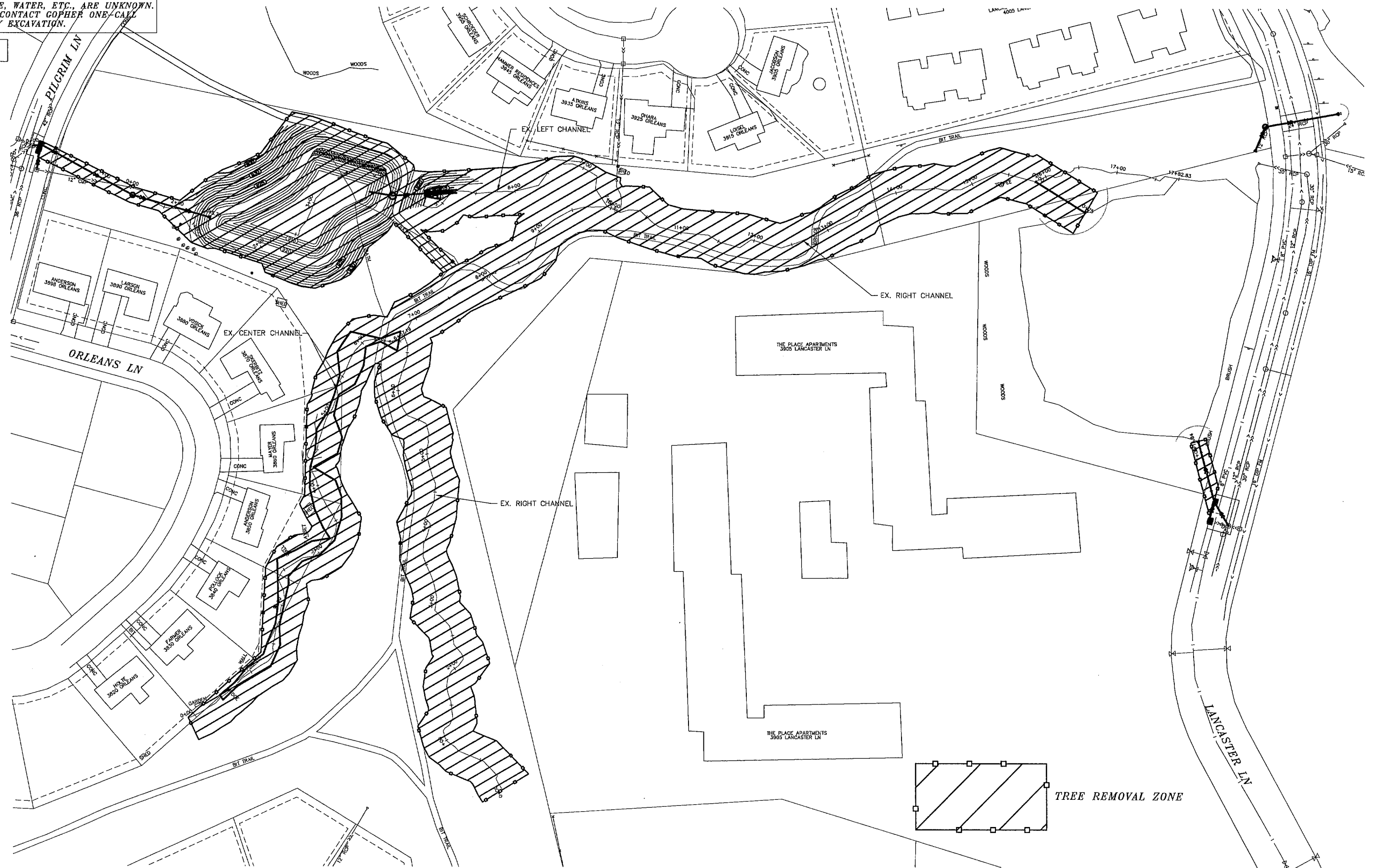
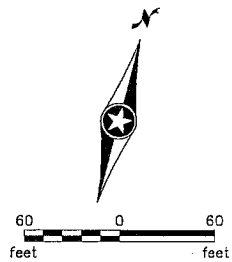
STATE AID
PROJ. NO.
DRAWN BY
M. PAYNE
DESIGNED BY
M. PAYNE
CHECKED BY
D. ASCHE
REVIEWED BY
J. RENNEBERG
DATE
7-13
7-13
7-13
7-13

6

27



MAINTAIN LOCAL ACCESS
AT ALL TIMES



NO	DATE	BY	CKD	APPR	REVISION

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PLYMOUTH, MINNESOTA
FOUR SEASONS MALL
WATER QUALITY IMPROVEMENT
CITY PROJECT NO. 11022

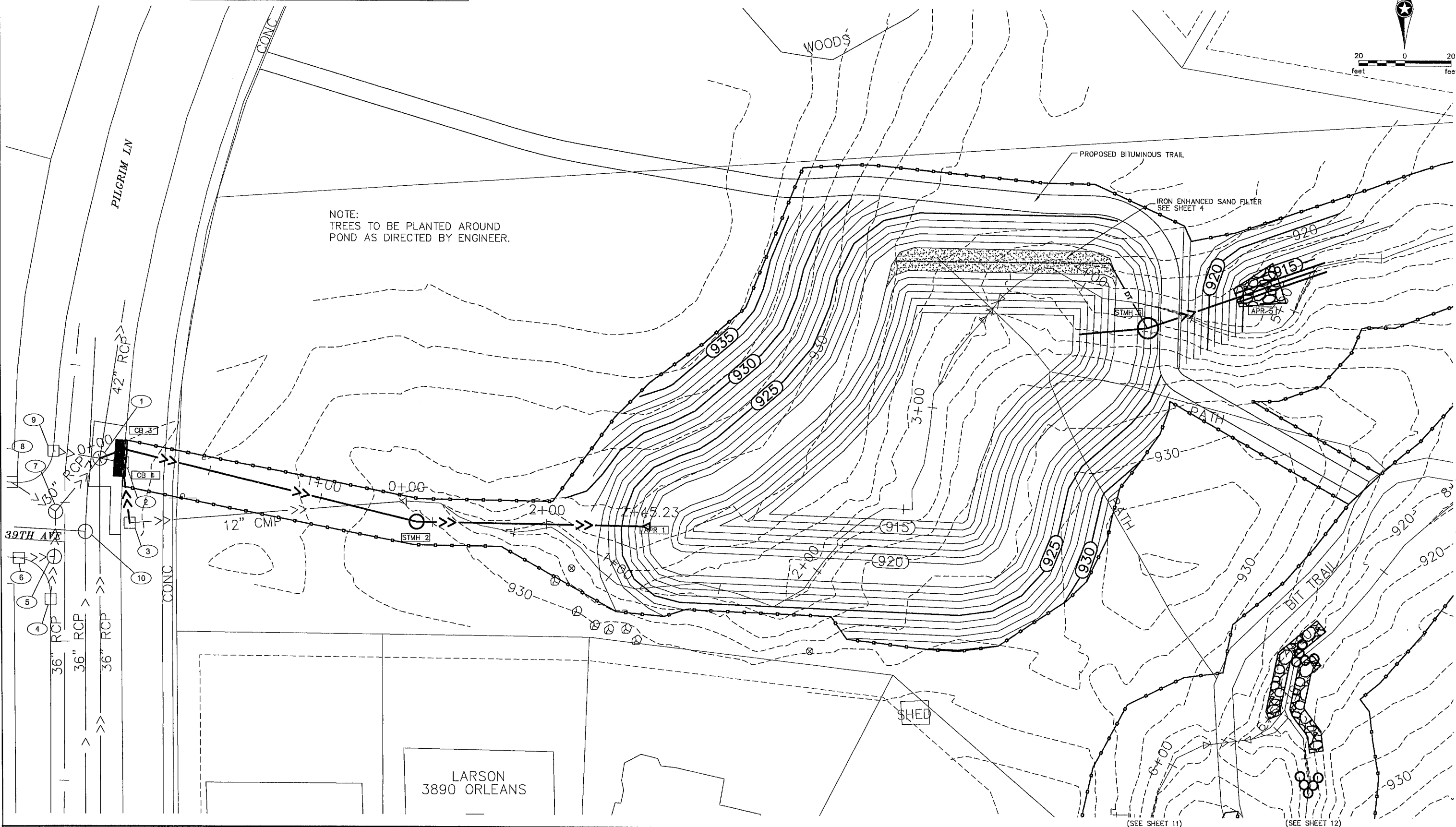
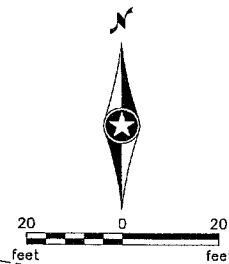
TREE REMOVALS

STATE AID PROJ. NO.	DRAWN BY M. PAYNE	DATE 7-13
	DESIGNED BY M. PAYNE	7-13
DWG NAME	CHECKED BY D. ASCHE	7-13
FOUR SEASONS	REVIEWED BY J. RENNEBERG	7-13

NOTE:
THE EXACT LOCATION OF UNDERGROUND UTILITIES SUCH AS GAS, TELEPHONE, WATER, ETC., ARE UNKNOWN. THE CONTRACTOR SHALL CONTACT GOPHER ONE-CALL BEFORE COMMENCING ANY EXCAVATION.

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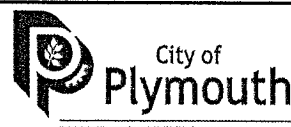
ALL GATE VALVES ARE TO BE OPERATIONAL AT ALL TIMES

[illegible]

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Date: 9-24-13 License#: 50484



PLYMOUTH, MINNESOTA
FOUR SEASONS MALL
WATER QUALITY IMPROVEMENT
CITY PROJECT NO. 11022

POND GRADING

STATE AID PROJ. NO.	DRAWN BY <u>M. PAYNE</u>	DATE <u>7-13</u>
	DESIGNED BY <u>M. PAYNE</u>	<u>7-13</u>
DWG NAME	CHECKED BY <u>D. ASCHE</u>	<u>7-13</u>
<u>FOUR SEASONS</u>	REVIEWED BY <u>J. RENNEBERG</u>	<u>7-13</u>

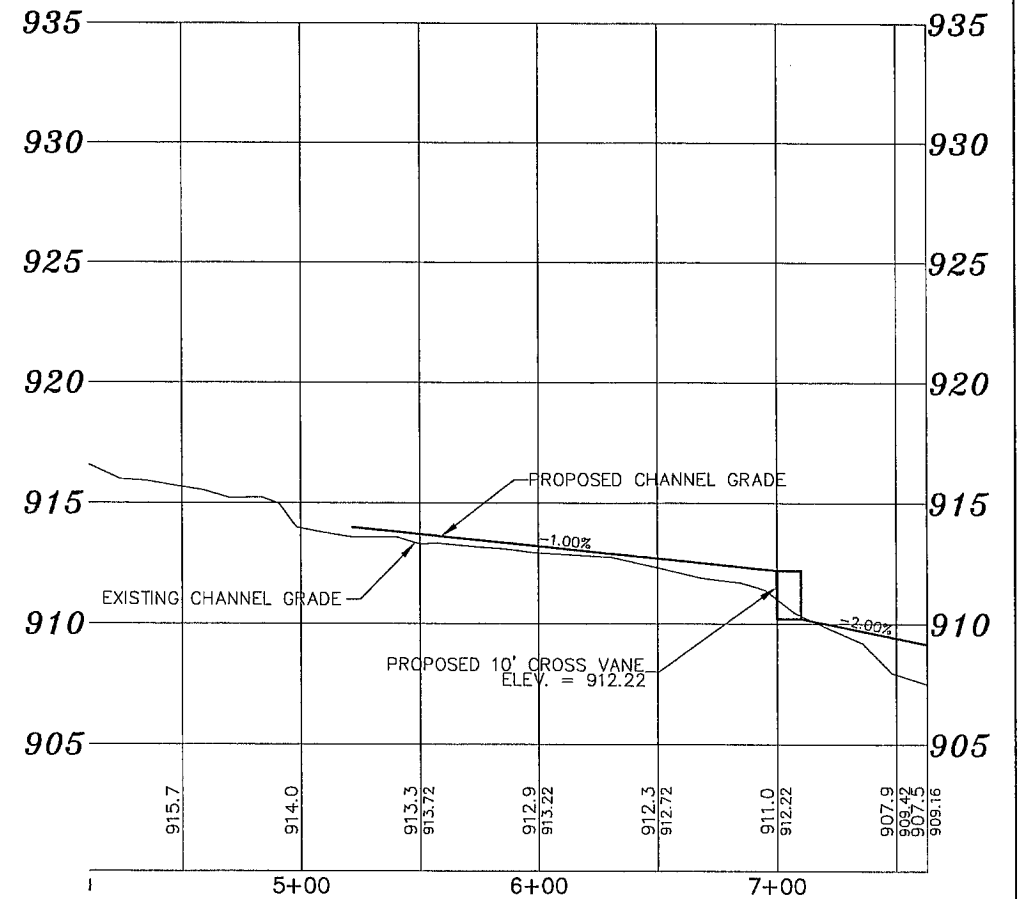
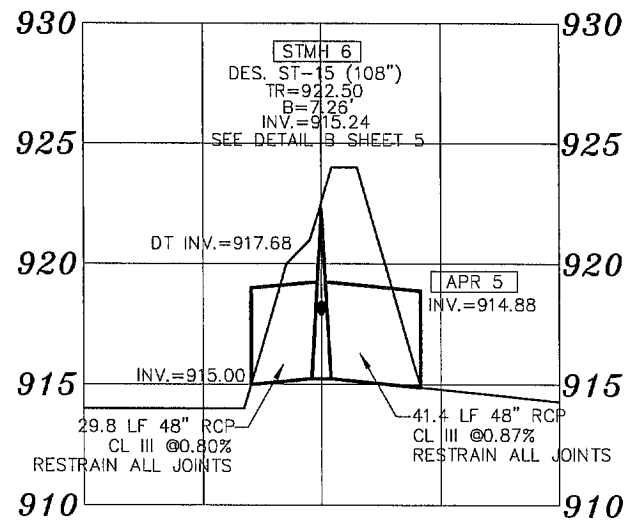
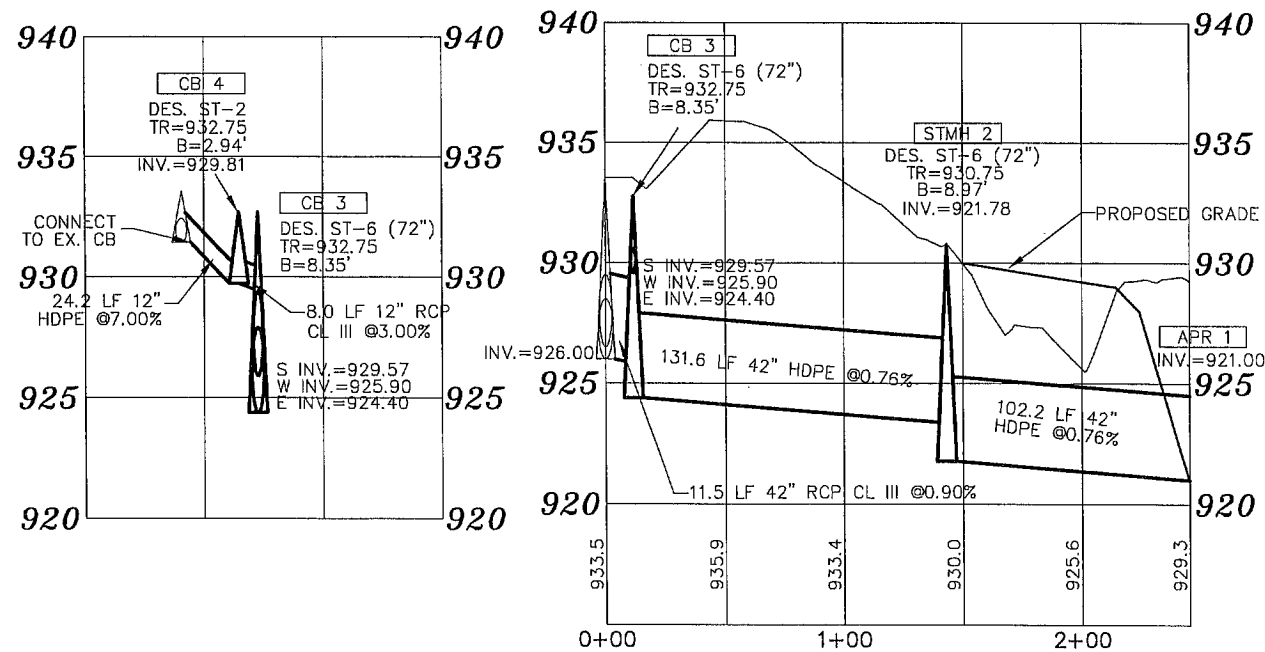
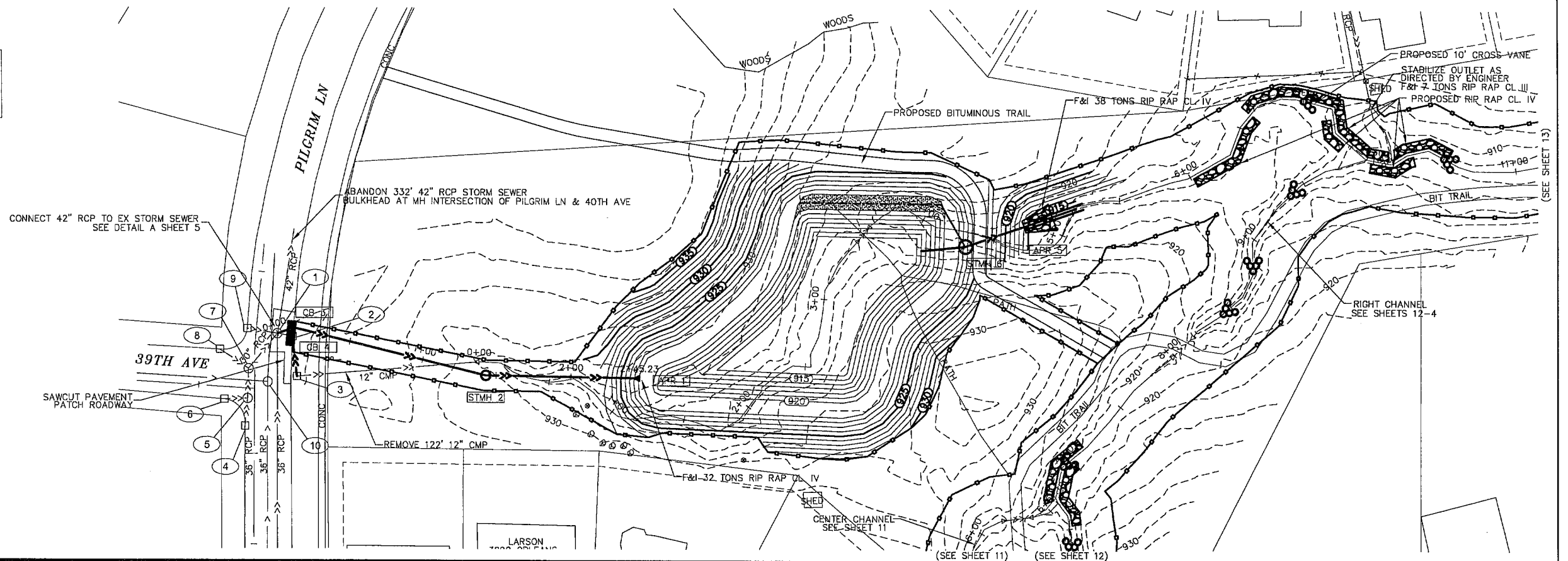
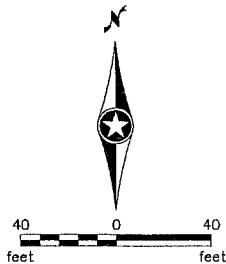
EX BM ELEVATION 900.12
TNH OF NORTH HYDRANT ACROSS
STREET FROM 3930 LANCASTER LANE

NOTE:
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BEFORE COMMENCING ANY EXCAVATION.

(21) DENOTES EXISTING STRUCTURE NUMBER
(SEE EXISTING STRUCTURE SCHEDULE)

MAINTAIN LOCAL ACCESS
AT ALL TIMES

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NO	DATE	BY	CKD	APPR	REVISION

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PLYMOUTH, MINNESOTA
FOUR SEASONS MALL
WATER QUALITY IMPROVEMENT
CITY PROJECT NO. 11022

LEFT CHANNEL
PLAN & PROFILE

STATE AID
PROJ. NO. _____

DWG NAME
FOUR SEASONS

DRAWN BY
M. PAYNE
DESIGNED BY
M. PAYNE
CHECKED BY
D. ASCHE
REVIEWED BY
J. RENNEBERG

DATE
7-13
7-13
7-13
7-13

10

27

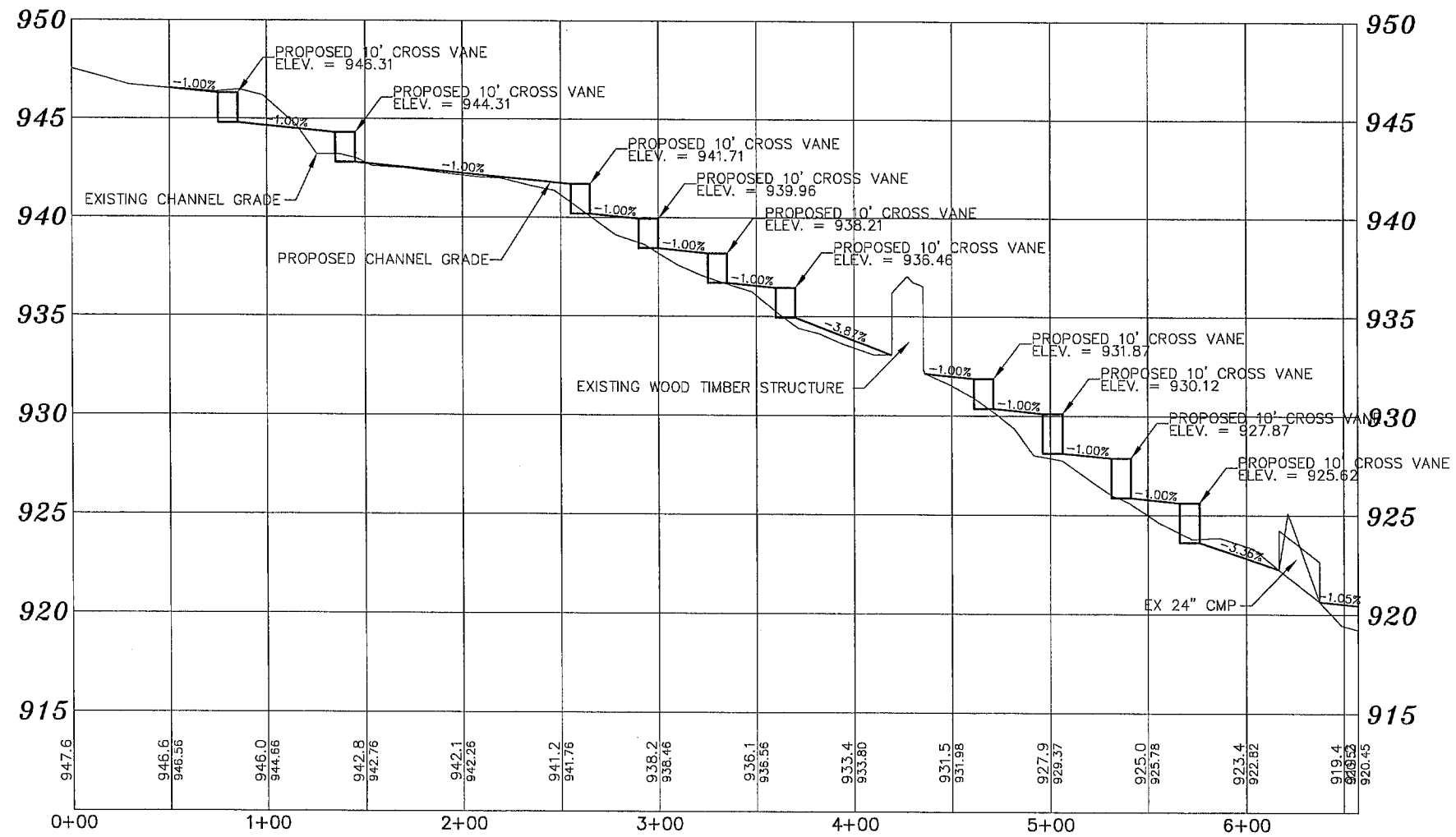
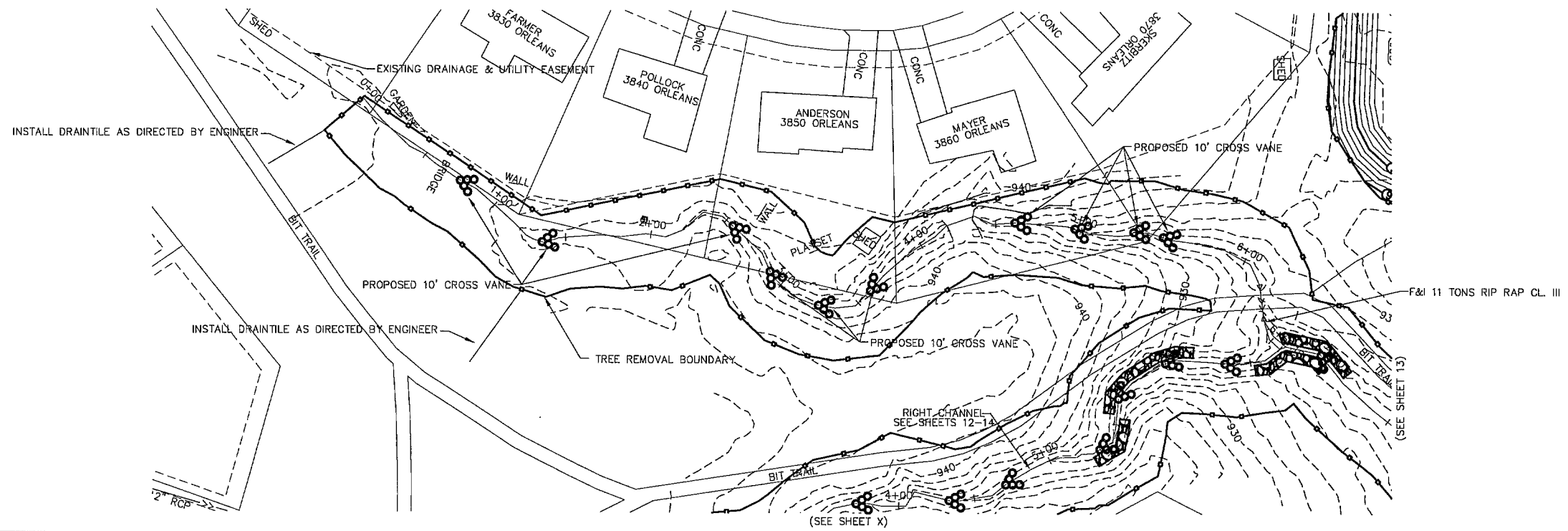
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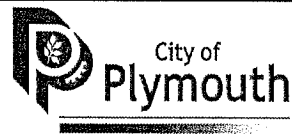


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PLYMOUTH, MINNESOTA
FOUR SEASONS MALL
WATER QUALITY IMPROVEMENT
CITY PROJECT NO. 11022

CENTER CHANNEL
PLAN & PROFILE

STATE AID PROJ. NO.	DRAWN BY M. PAYNE	DATE 7-13
DWG NAME	DESIGNED BY M. PAYNE	7-13
FOUR SEASONS	CHECKED BY D. ASCHE	7-13
	REVIEWED BY J. RENNEBERG	7-13

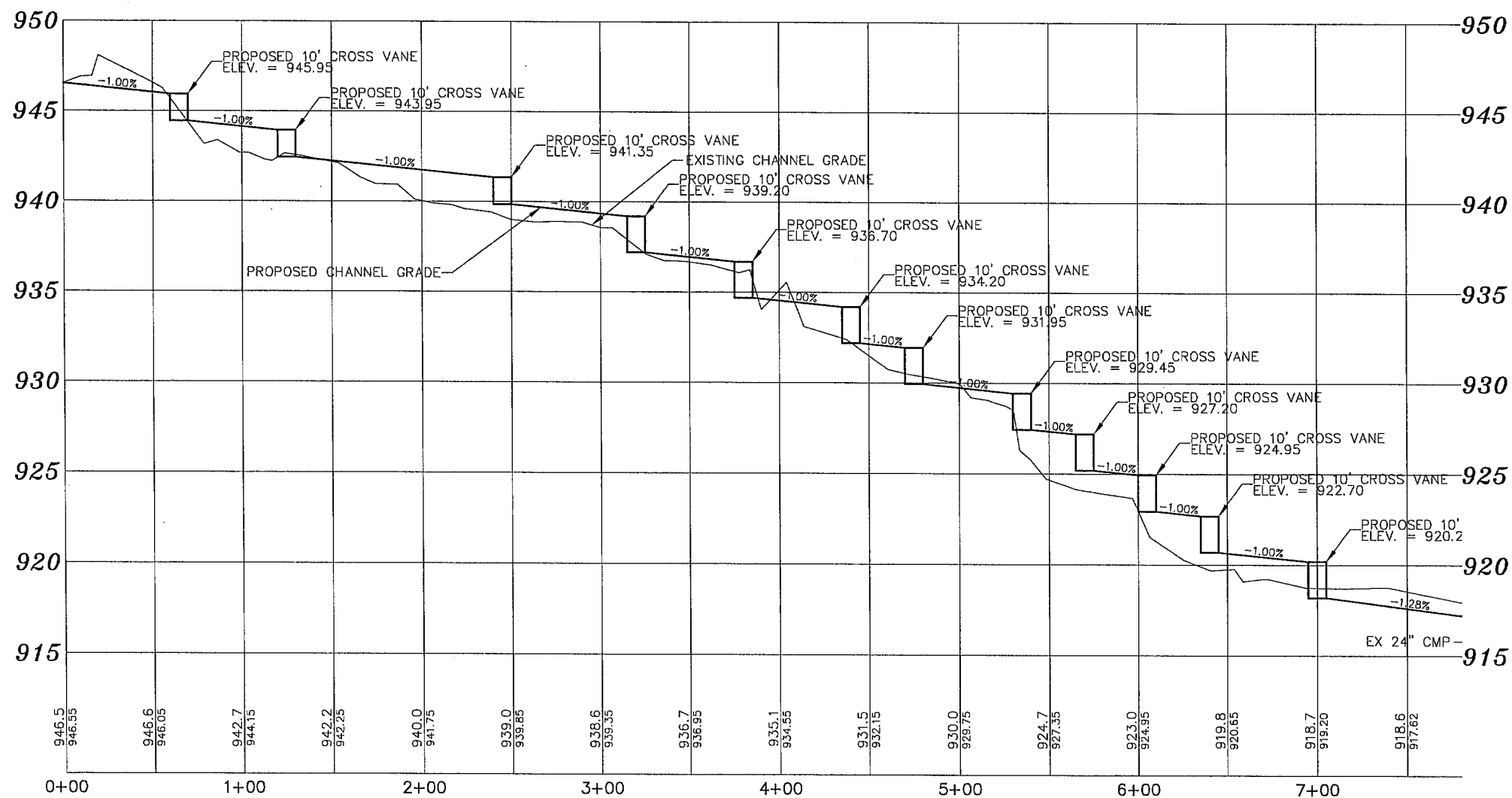
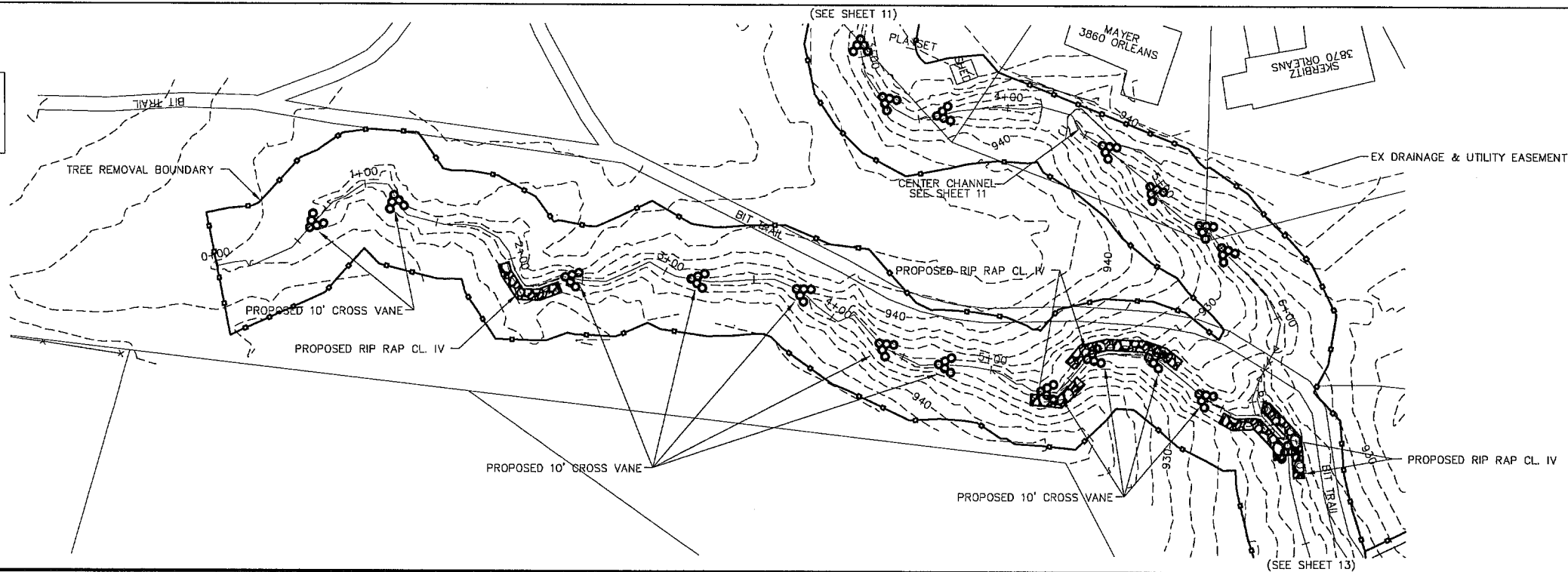
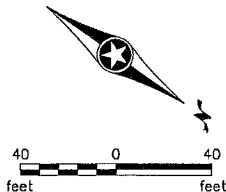
EX BM ELEVATION 900.12
TNH OF NORTH HYDRANT ACROSS
STREET FROM 3930 LANCASTER LANE

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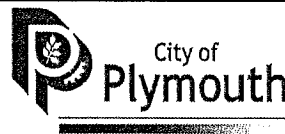


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PLYMOUTH, MINNESOTA
FOUR SEASONS MALL
WATER QUALITY IMPROVEMENT
CITY PROJECT NO. 11022

RIGHT CHANNEL
PLAN & PROFILE

STATE AID PROJ. NO.	DRAWN BY M. PAYNE	DATE 7-13
DWG NAME FOUR SEASONS	DESIGNED BY M. PAYNE	7-13
	CHECKED BY D. ASCHE	7-13
	REVIEWED BY J. RENNEBERG	7-13

12

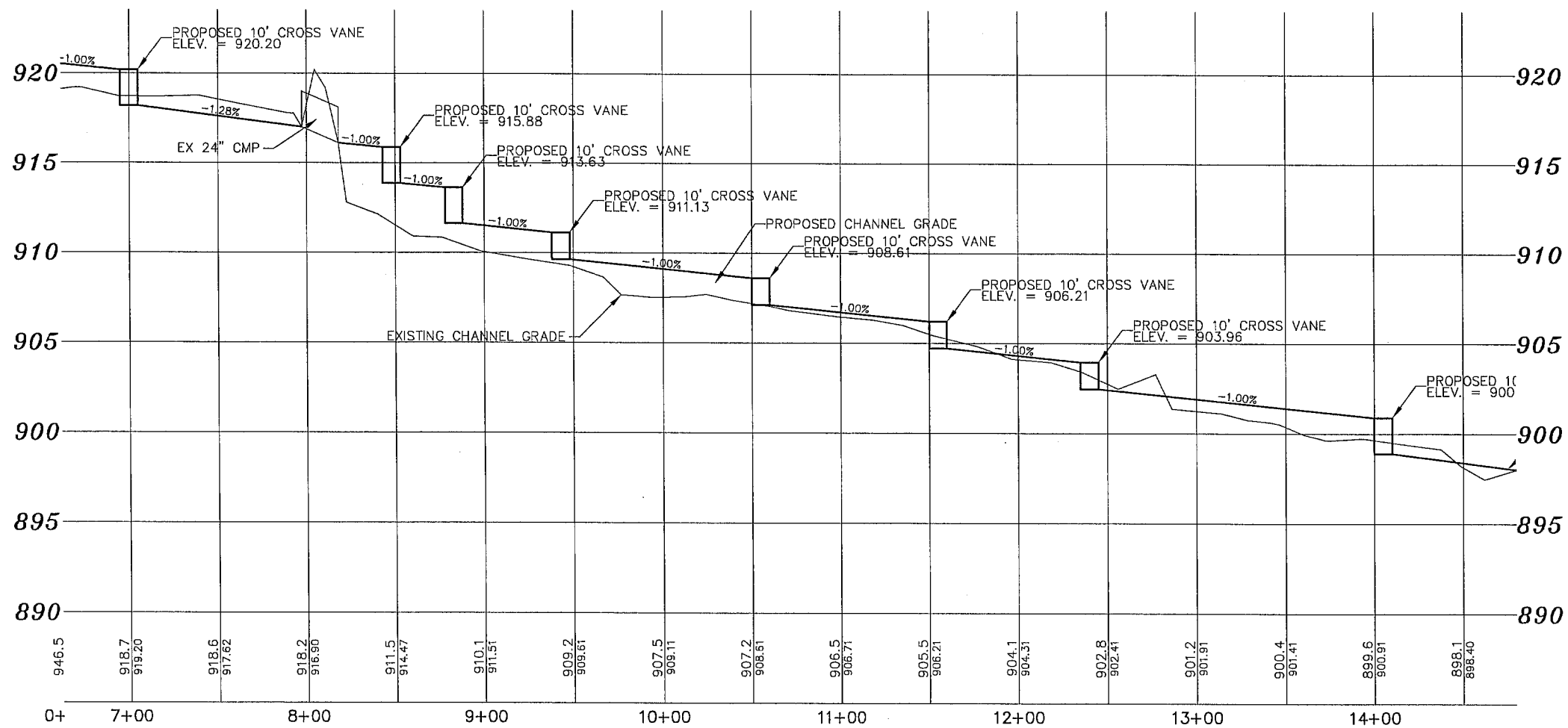
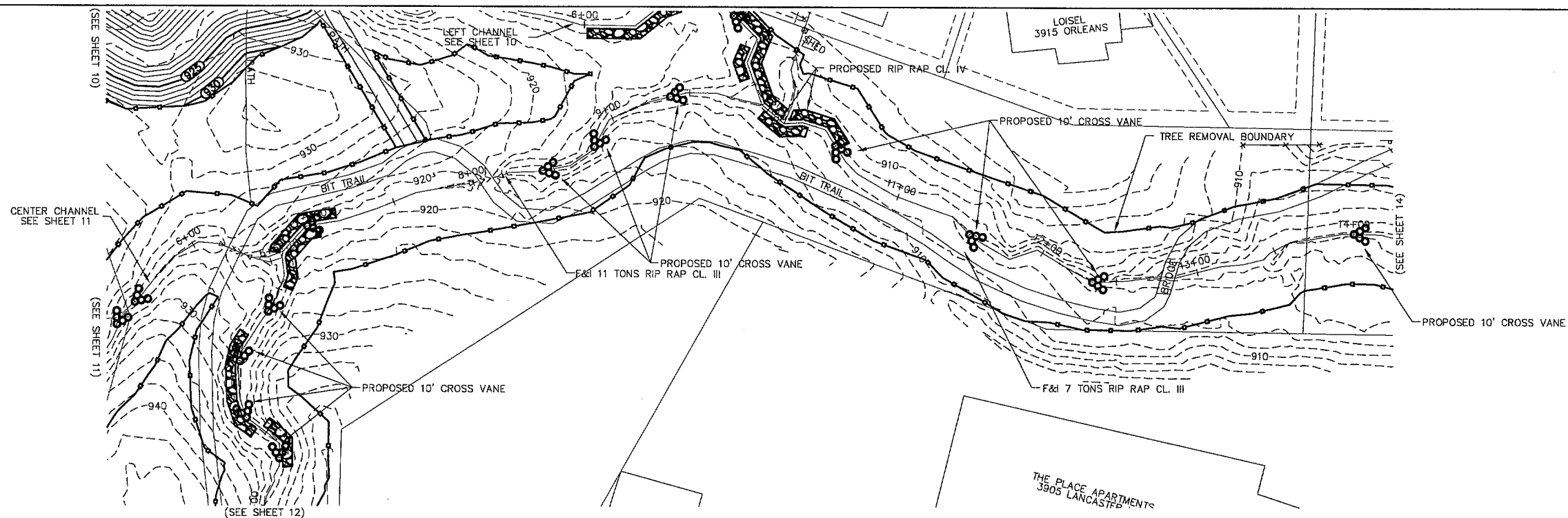
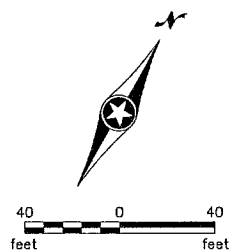
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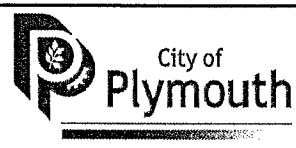
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PLYMOUTH, MINNESOTA
FOUR SEASONS MALL
WATER QUALITY IMPROVEMENT
CITY PROJECT NO. 11022

RIGHT CHANNEL
PLAN & PROFILE

STATE AID	DRAWN BY	DATE
PROJ. NO.	M. PAYNE	7-13
	DESIGNED BY	
	M. PAYNE	7-13
DWG NAME	CHECKED BY	
	D. ASCHE	7-13
	REVIEWED BY	
FOUR SEASONS	J. RENNEBERG	7-13

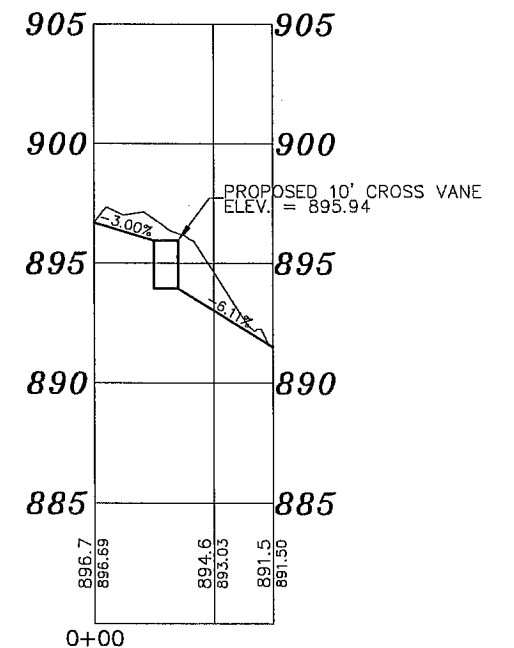
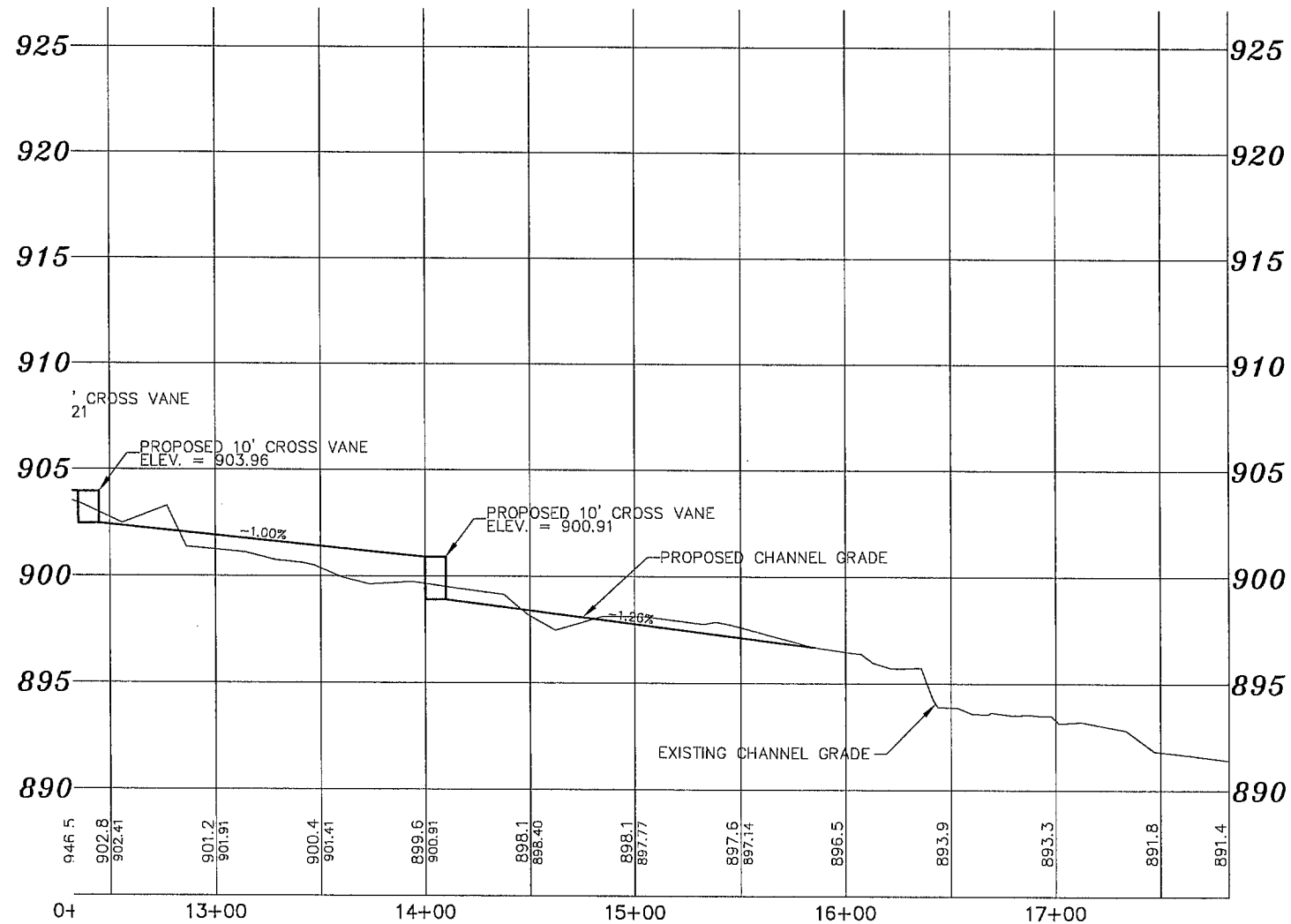
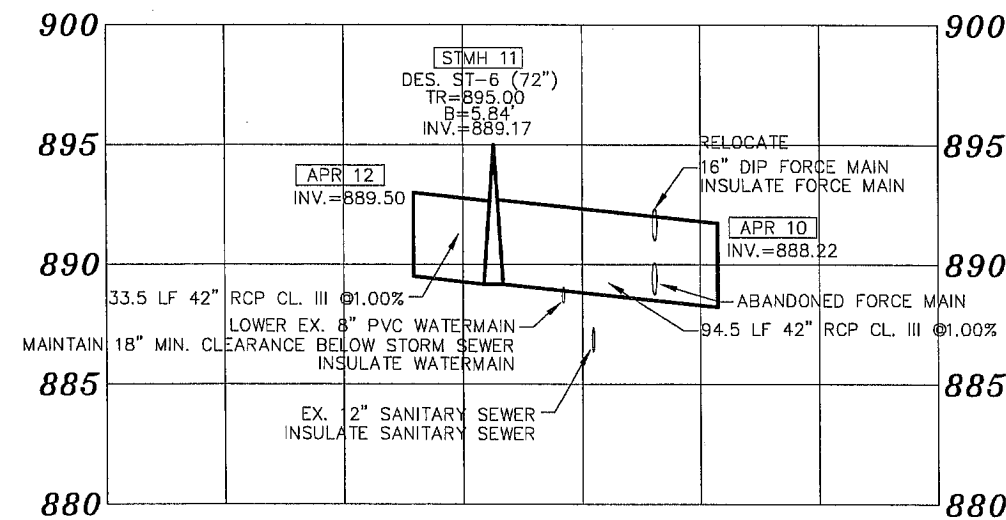
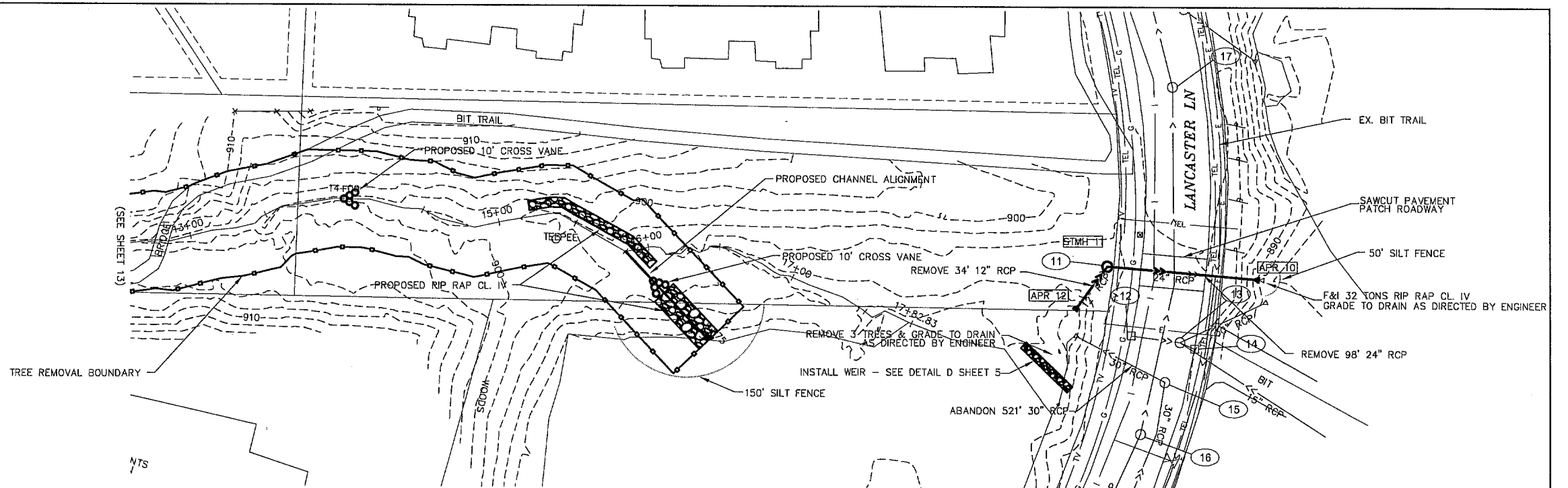
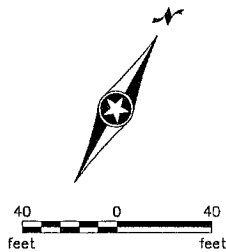
EX BM ELEVATION 900.12
TNH OF NORTH HYDRANT ACROSS
STREET FROM 3930 LANCASTER LANE

NOTE:
THE EXACT LOCATION OF UNDERGROUND UTILITIES
SUCH AS GAS, TELEPHONE, WATER, ETC., ARE UNKNOWN.
THE CONTRACTOR SHALL CONTACT GOPHER ONE-CALL
BEFORE COMMENCING ANY EXCAVATION.

(21) DENOTES EXISTING STRUCTURE NUMBER
(SEE EXISTING STRUCTURE SCHEDULE)

MAINTAIN LOCAL ACCESS
AT ALL TIMES

ALL GATE VALVES ARE TO BE
OPERATIONAL AT ALL TIMES



NO	DATE	BY	CKD	APPR	REVISION

I hereby certify that this plan, specification or
report was prepared by me or under my direct
supervision and that I am a duly Licensed
Professional Engineer under the laws of the
State of Minnesota.

Signature: _____
MICHAEL J. PAYNE

Date: 9-24-13 License#: 50484



PLYMOUTH, MINNESOTA
FOUR SEASONS MALL
WATER QUALITY IMPROVEMENT
CITY PROJECT NO. 11022

RIGHT CHANNEL
PLAN & PROFILE

STATE AID PROJ. NO.	DRAWN BY M. PAYNE	DATE 7-13
DWG NAME	DESIGNED BY M. PAYNE	7-13
FOUR SEASONS	CHECKED BY D. ASCHE	7-13
	REVIEWED BY J. RENNEBERG	7-13

14

27

EX BM ELEVATION 900.12
TIN OF NORTH HYDRANT ACROSS
STREET FROM 3930 LANCASTER LANE

NOTE:
THE EXACT LOCATION OF UNDERGROUND UTILITIES
SUCH AS GAS, TELEPHONE, WATER, ETC., ARE UNKNOWN.
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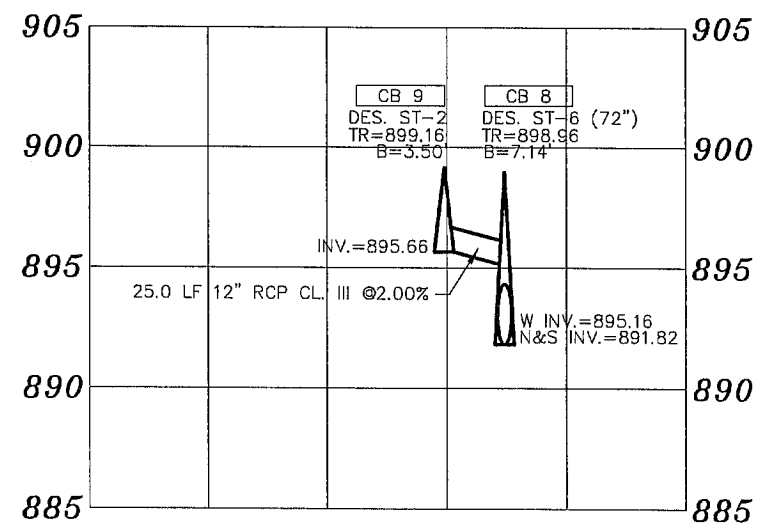
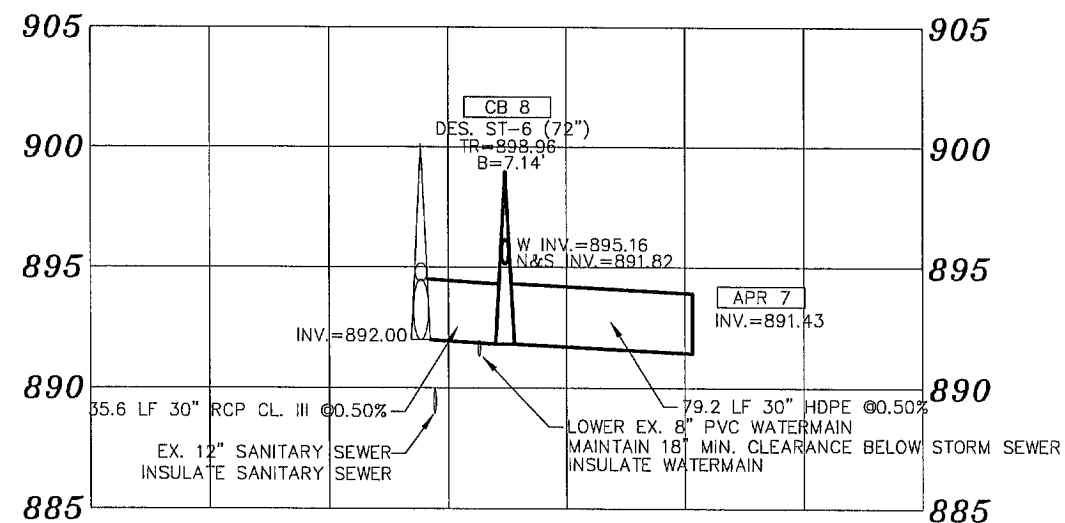
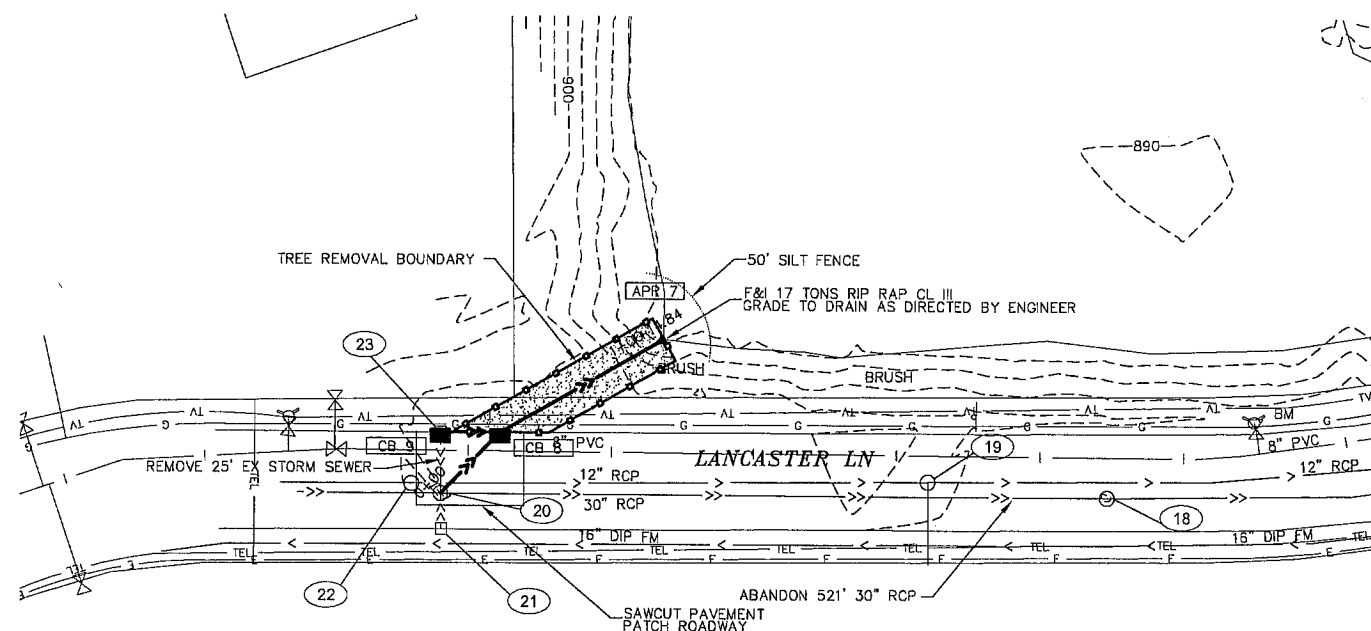
(21) DENOTES EXISTING STRUCTURE NUMBER
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AT ALL TIMES

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40 0 40
feet feet

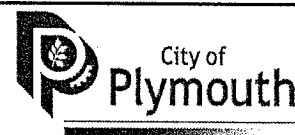


NO	DATE	BY	CKD	APPR	REVISION

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Date: 9-24-13 License #: 50484



PLYMOUTH, MINNESOTA
FOUR SEASONS MALL
WATER QUALITY IMPROVEMENT
CITY PROJECT NO. 11022

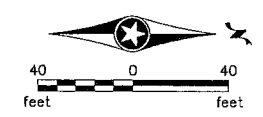
WETLAND STORM SEWER
PLAN & PROFILE

STATE AID PROJ. NO.	DRAWN BY M. PAYNE	DATE 7-13
DWG NAME	DESIGNED BY M. PAYNE	7-13
FOUR SEASONS	CHECKED BY D. ASCHE	7-13
	REVIEWED BY J. RENNEBERG	7-13

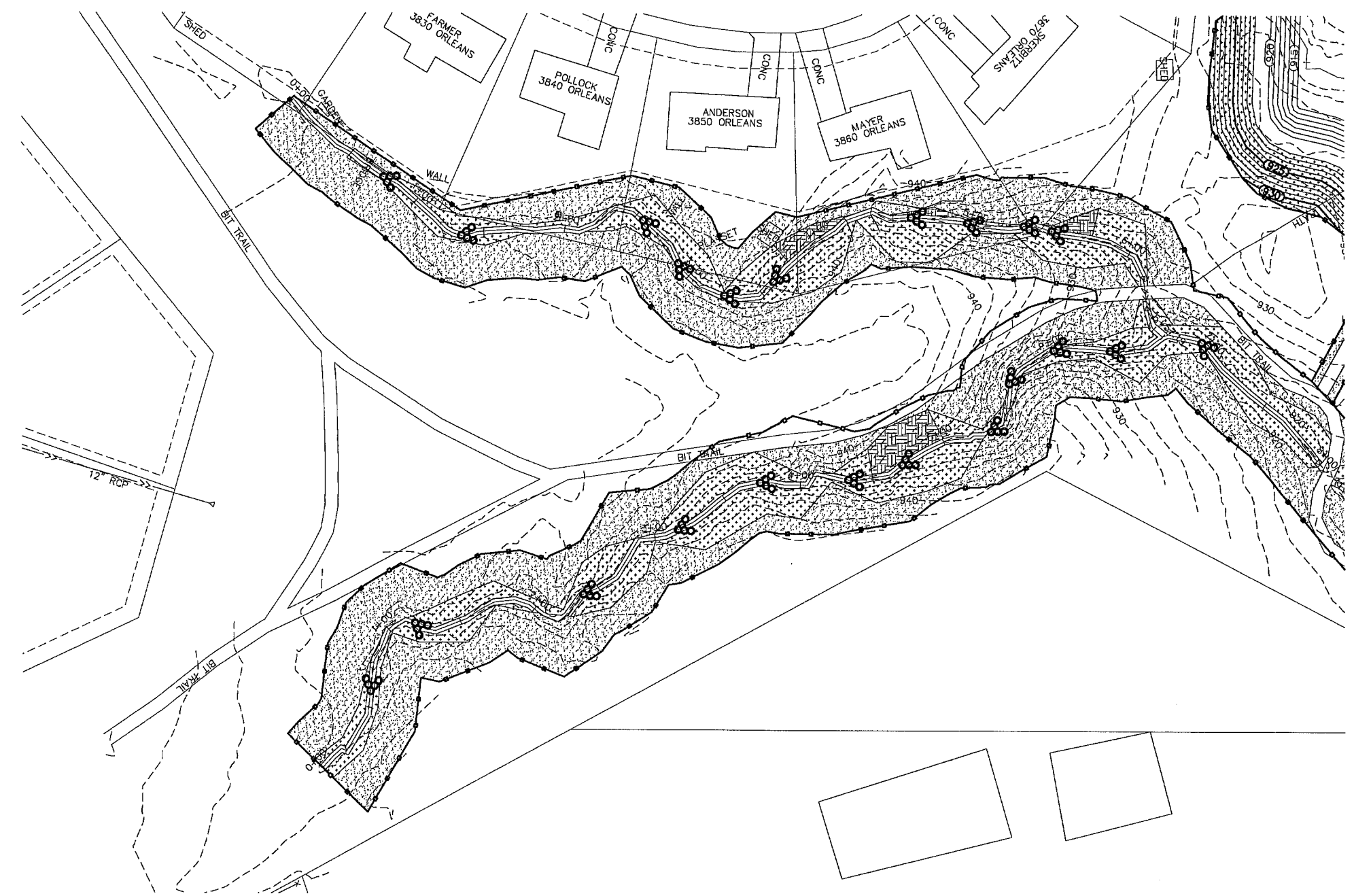
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27

MAINTAIN LOCAL ACCESS
AT ALL TIMES



-
-
-

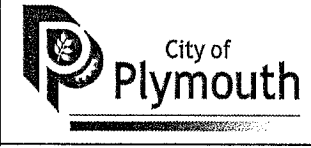


NO	DATE	BY	CKD	APPR	REVISION

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Date: 9-24-13 License#: 50484

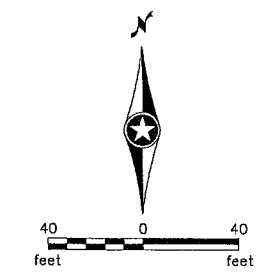


PLYMOUTH, MINNESOTA
FOUR SEASONS MALL
WATER QUALITY IMPROVEMENT
CITY PROJECT NO. 11022

RESTORATION

STATE AID PROJ. NO.	DRAWN BY M. PAYNE	DATE 7-13
	DESIGNED BY M. PAYNE	7-13
DWG NAME	CHECKED BY D. ASCHE	7-13
FOUR SEASONS	REVIEWED BY J. RENNEBERG	7-13

MAINTAIN LOCAL ACCESS
AT ALL TIMES



- MnDOT TYPE II COMPOST (3" THICKNESS) WITH SEED
- MnDOT TYPE II COMPOST (3" THICKNESS) WITH SEED & EROSION CONTROL BLANKET
- LIVE STAKES 3' OC
MnDOT TYPE II COMPOST (3" THICKNESS) WITH SEED & EROSION CONTROL BLANKET

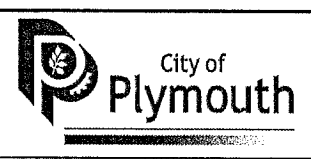


NO	DATE	BY	CHKD	APPR	REVISION

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Signature: MICHAEL J. PAYNE

Date: 9-24-13 License #: 50484

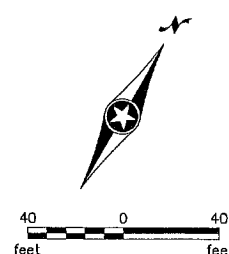


PLYMOUTH, MINNESOTA
FOUR SEASONS MALL
WATER QUALITY IMPROVEMENT
CITY PROJECT NO. 11022

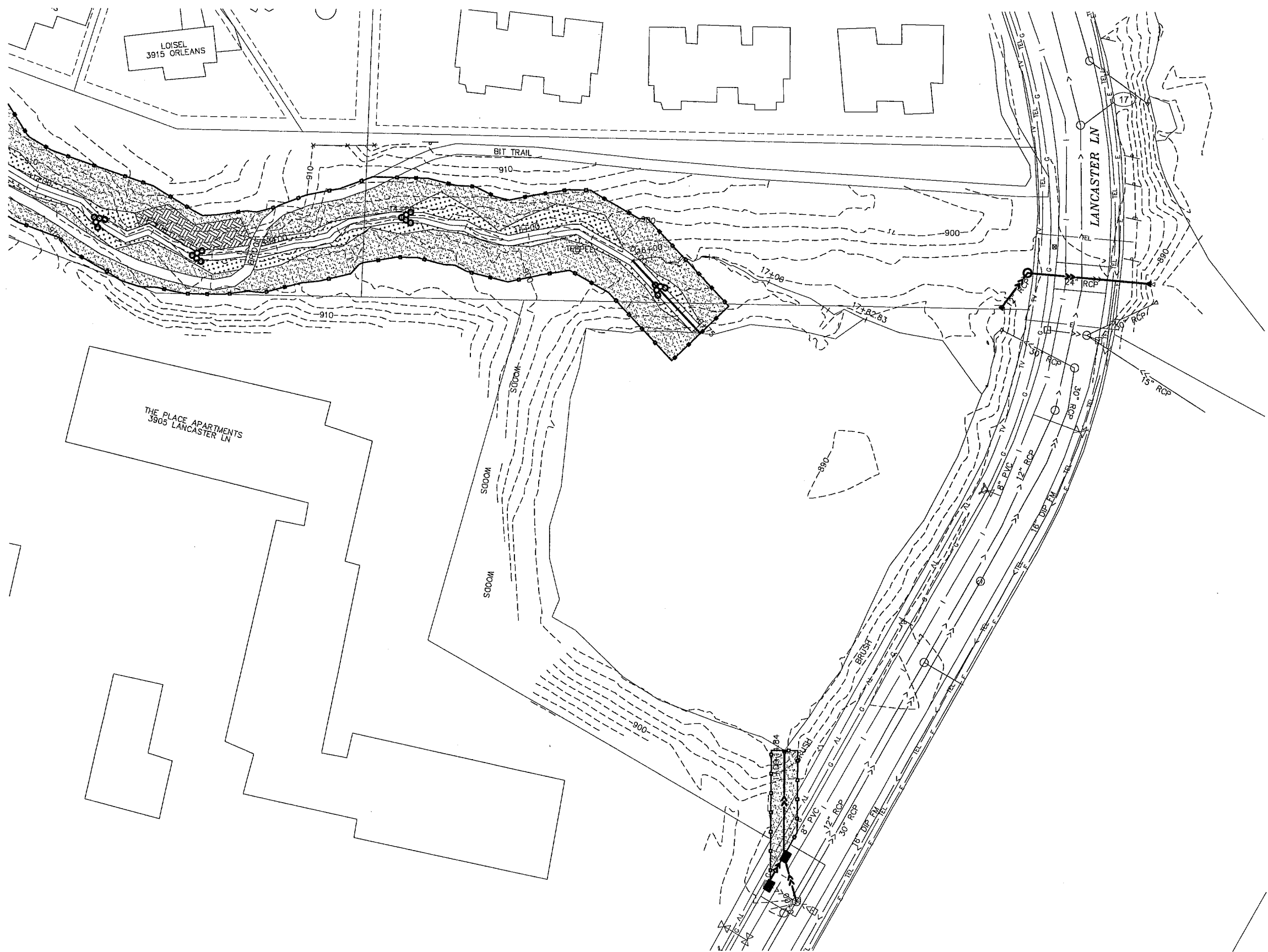
RESTORATION

STATE AID PROJ. NO.	DRAWN BY M. PAYNE	DATE 7-13
DWG NAME FOUR SEASONS	DESIGNED BY M. PAYNE	7-13
	CHECKED BY D. ASCHE	7-13
	REVIEWED BY J. RENNEBERG	7-13

MAINTAIN LOCAL ACCESS
AT ALL TIMES



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- MnDOT TYPE II COMPOST (3" THICKNESS) WITH SEED & EROSION CONTROL BLANKET
- LIVE STAKES 3' OC
MnDOT TYPE II COMPOST (3" THICKNESS) WITH SEED & EROSION CONTROL BLANKET

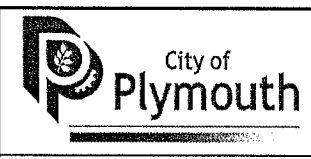


NO	DATE	BY	CKD	APPR	REVISION

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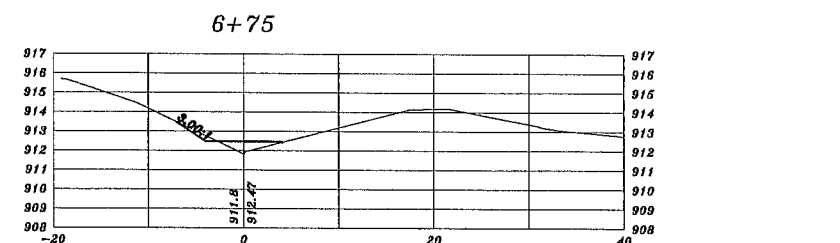
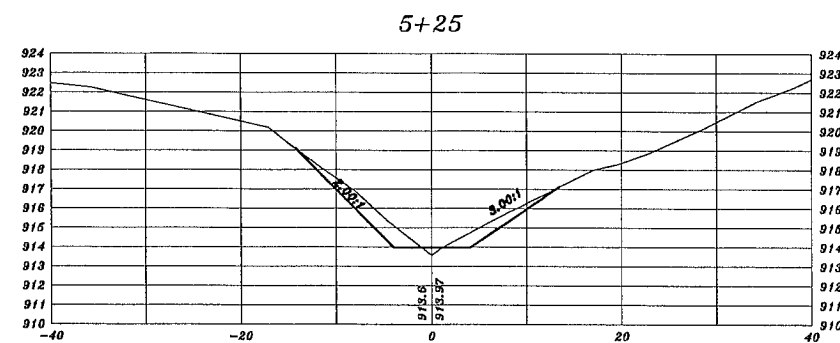
Date: 9-24-13 License#: 50484



PLYMOUTH, MINNESOTA
FOUR SEASONS MALL
WATER QUALITY IMPROVEMENT
CITY PROJECT NO. 11022

RESTORATION

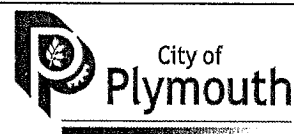
STATE AID PROJ. NO.	DRAWN BY M. PAYNE	DATE 7-13
DWG NAME FOUR SEASONS	DESIGNED BY M. PAYNE	7-13
	CHECKED BY D. ASCHE	7-13
	REVIEWED BY J. RENNEBERG	7-13

[illegible]

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MICHAEL J. PAYNE

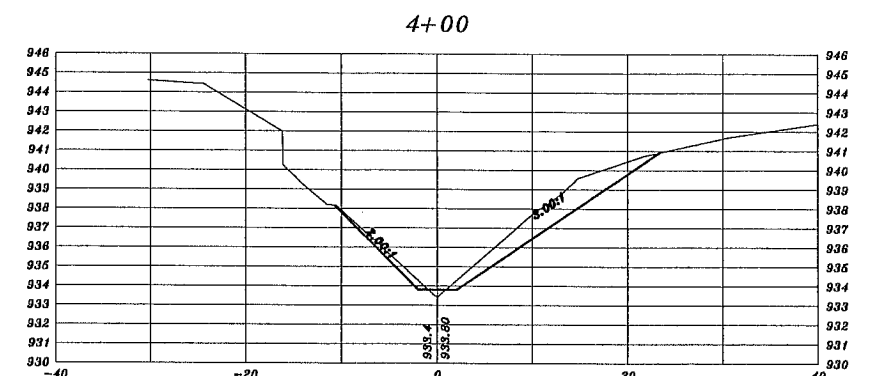
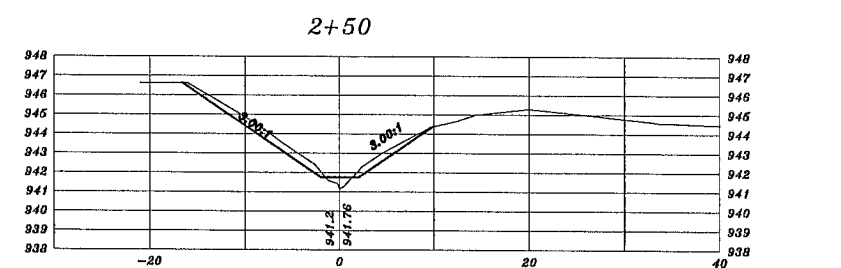
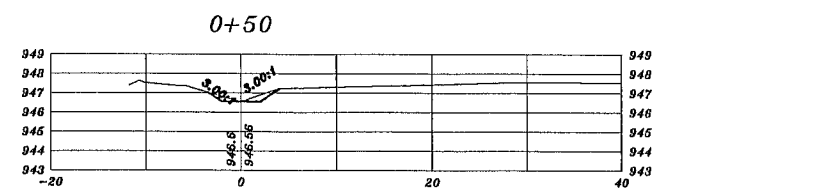
Date: 9-24-13 License #: 50484



PLYMOUTH, MINNESOTA
FOUR SEASONS MALL
WATER QUALITY IMPROVEMENT
CITY PROJECT NO. 11022

CROSS SECTIONS
LEFT CHANNEL
STA. 0+00 TO STA. 7+62.98

STATE AID	DRAWN BY	DATE
PROJ. NO.	M. PAYNE	7-13
NA	DESIGNED BY	
	M. PAYNE	7-13
DWG NAME	CHECKED BY	
	D. ASCHE	7-13
XSECTIONS	REVIEWED BY	
	J. RENNEBERG	7-13



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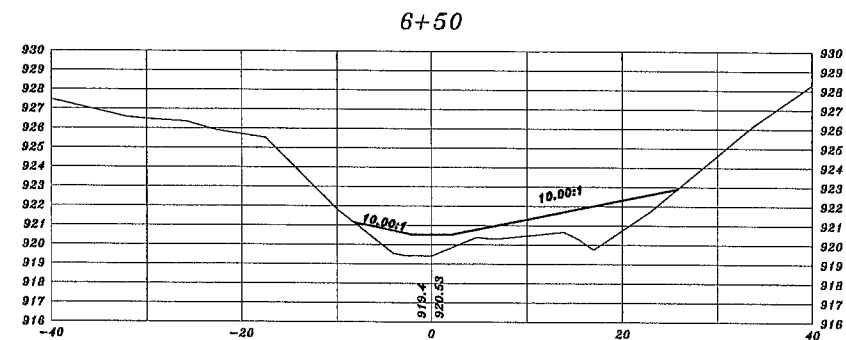
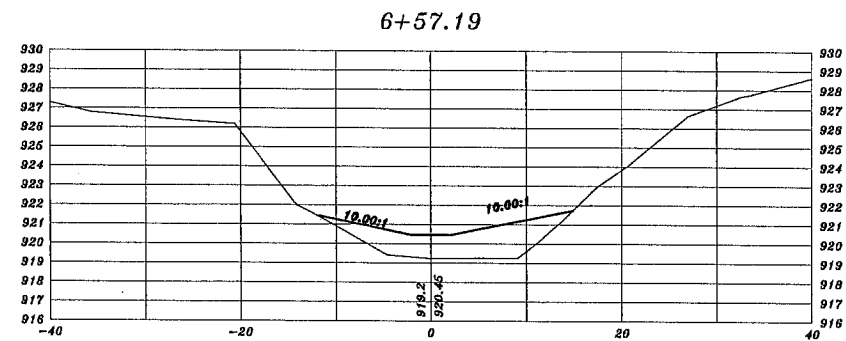
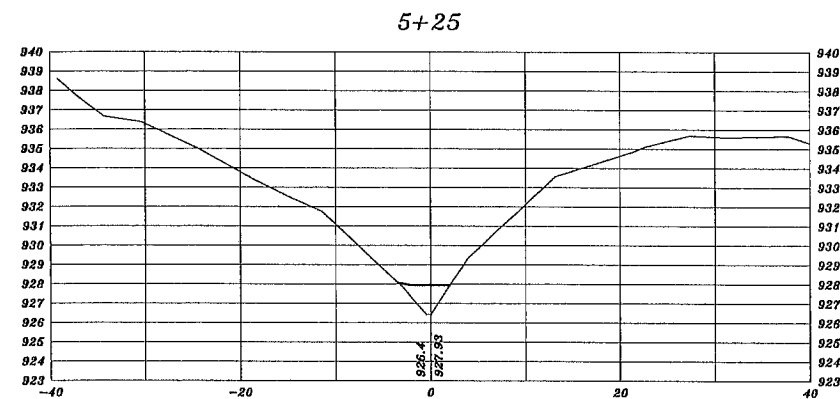
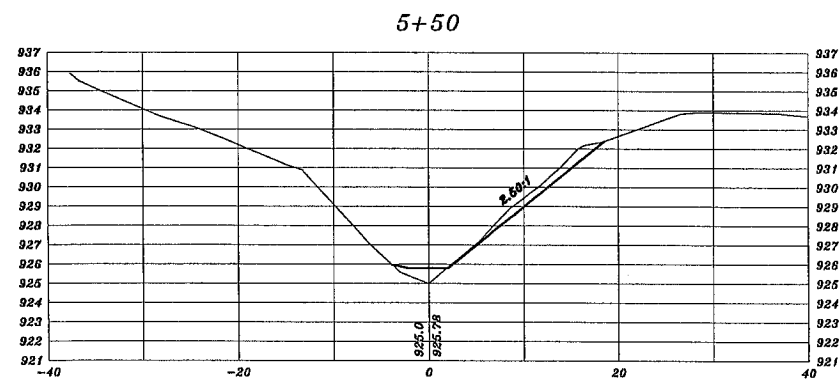
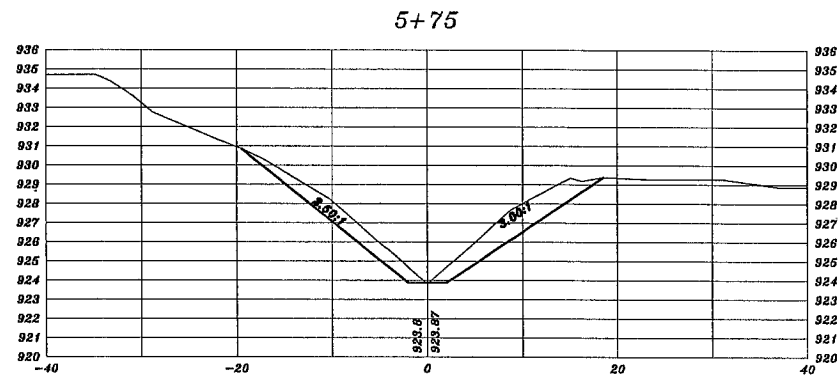
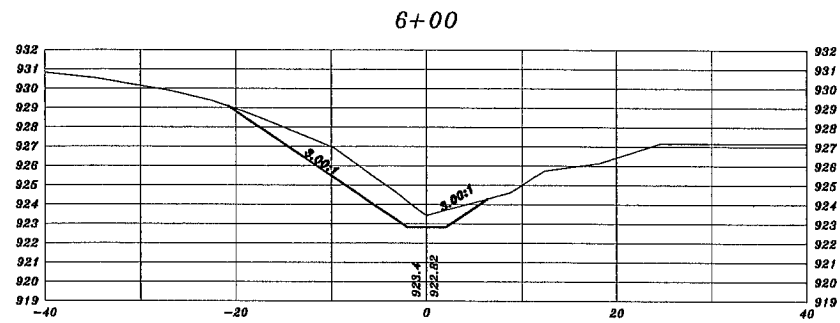
Signature: _____
MICHAEL J. PAYNE

Date: 9-24-13 License #: 50484



CROSS SECTIONS
CENTER CHANNEL
STA. 0+50 TO STA. 5+00

STATE AID	DRAWN BY	DATE
PROJ. NO.	M. PAYNE	7-13
NA	DESIGNED BY	
	M. PAYNE	7-13
DWG NAME	CHECKED BY	
	D. ASCHE	7-13
XSECTIONS	REVIEWED BY	
	J. RENNEBERG	7-13

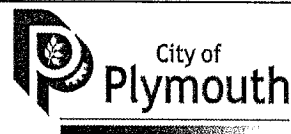


NO	DATE	BY	CKD	APPR	REVISION

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Signature: MICHAEL J. PAYNE

Date: 9-24-13 License#: 50484



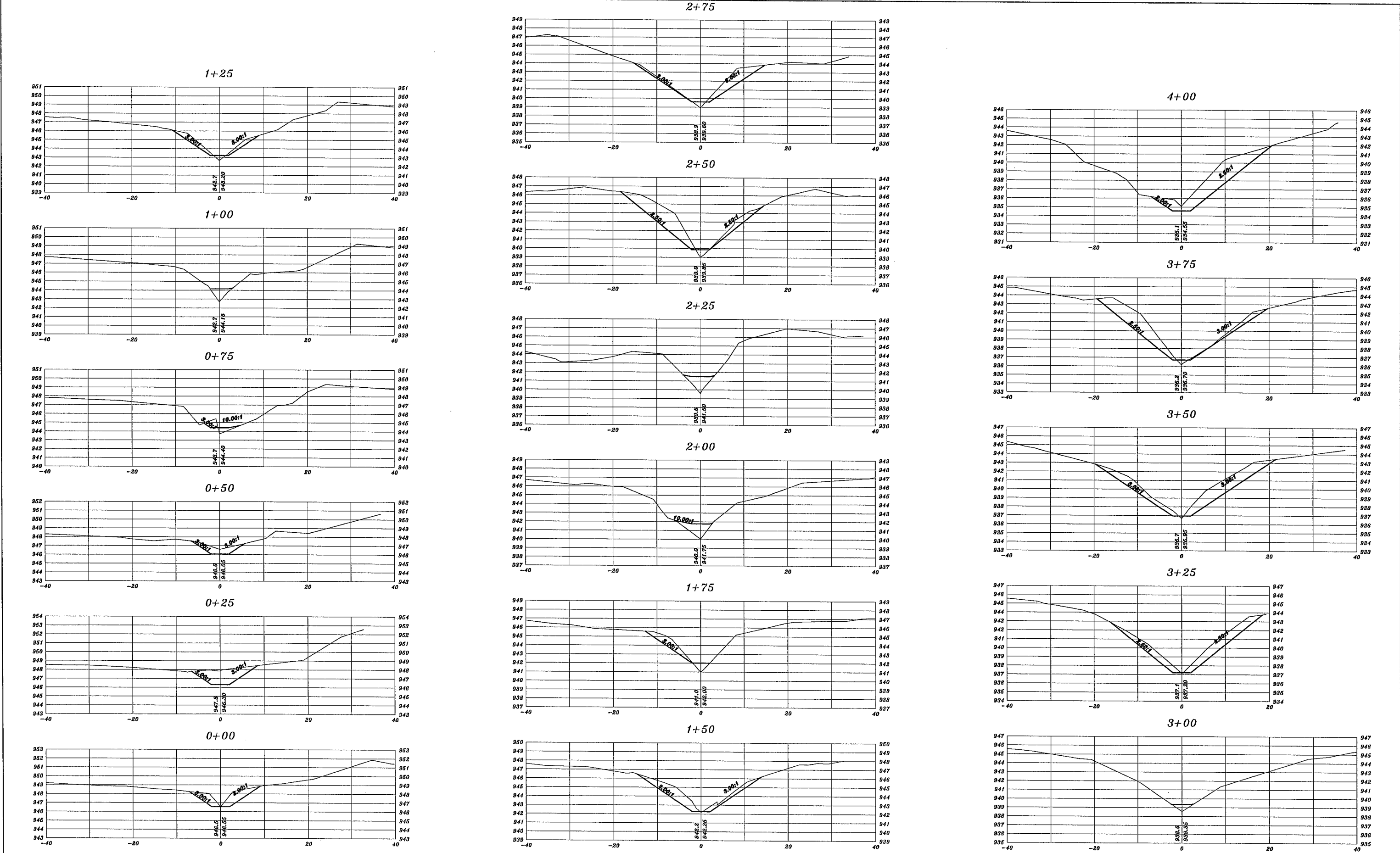
PLYMOUTH, MINNESOTA
FOUR SEASONS MALL
WATER QUALITY IMPROVEMENT
CITY PROJECT NO. 11022

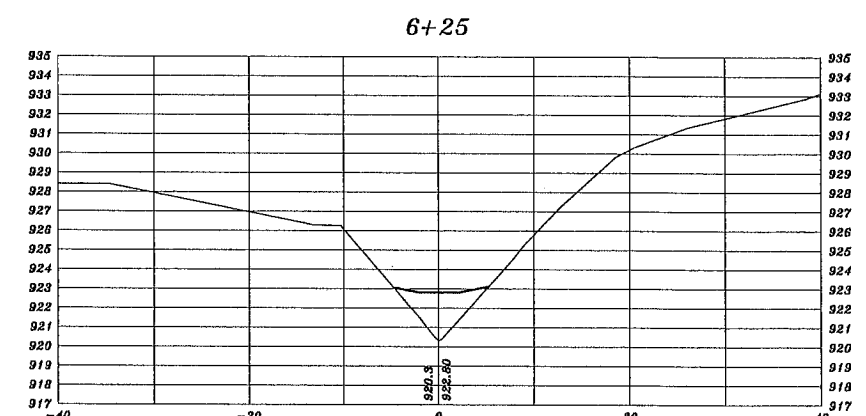
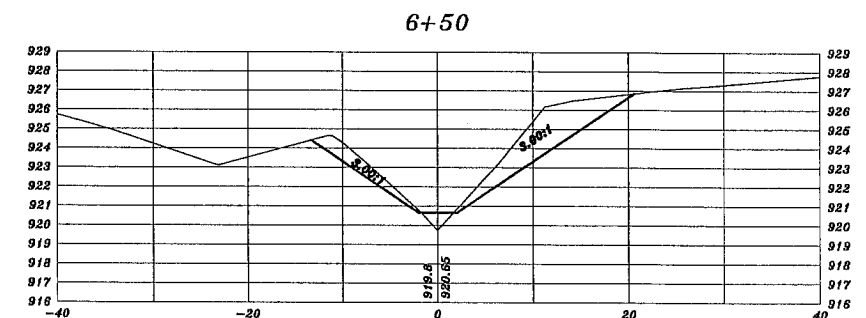
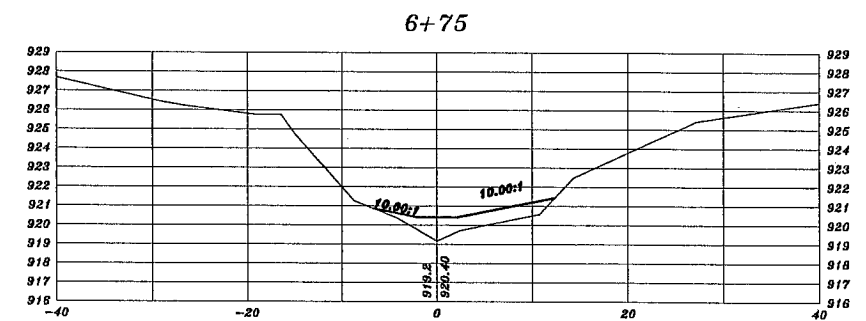
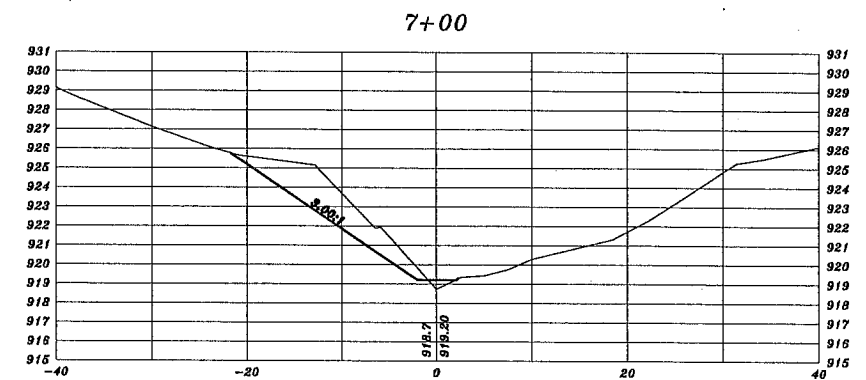
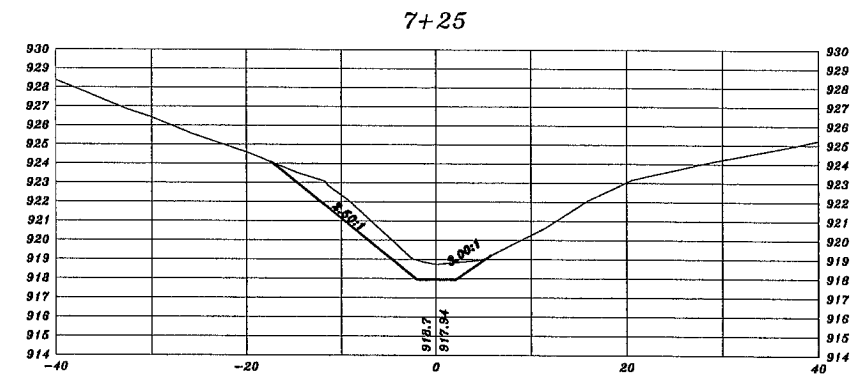
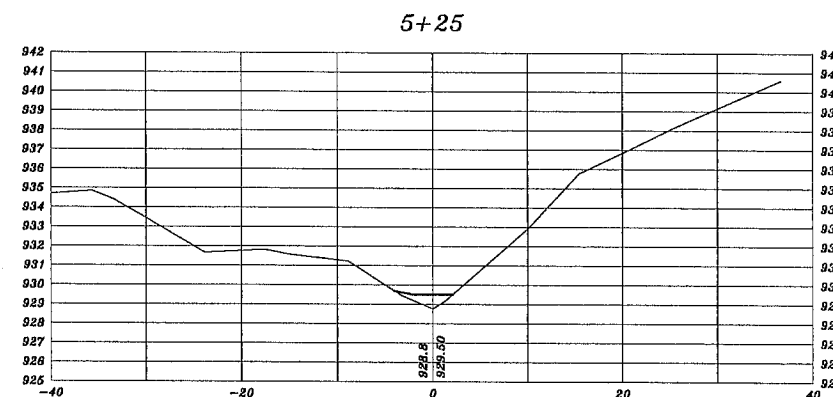
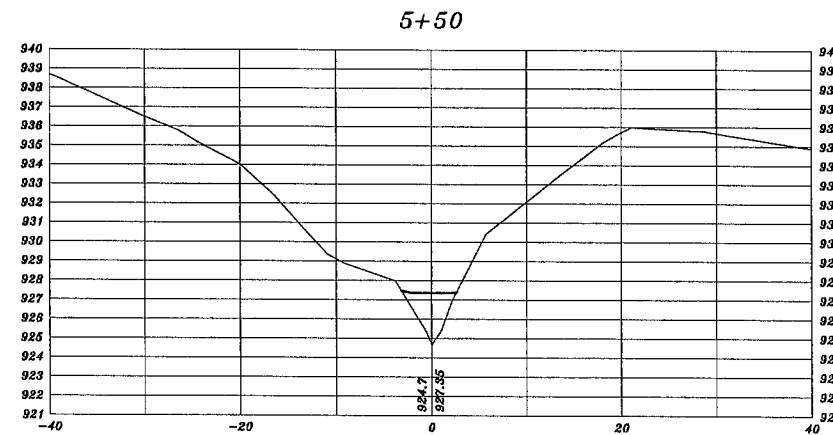
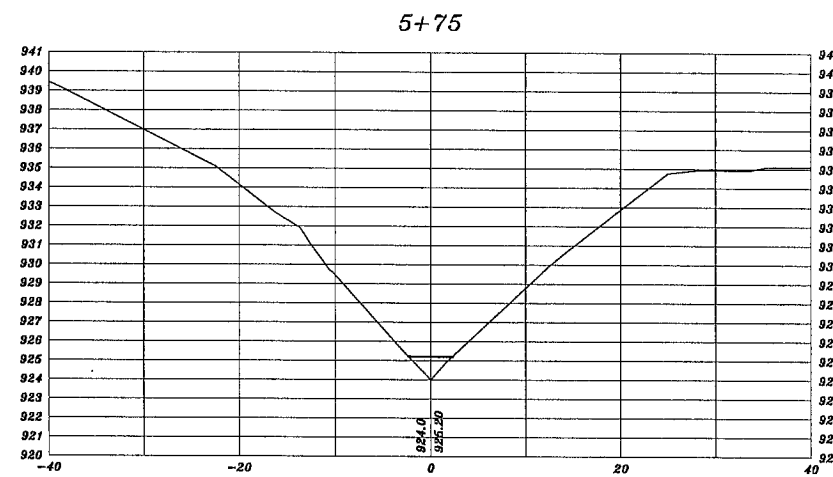
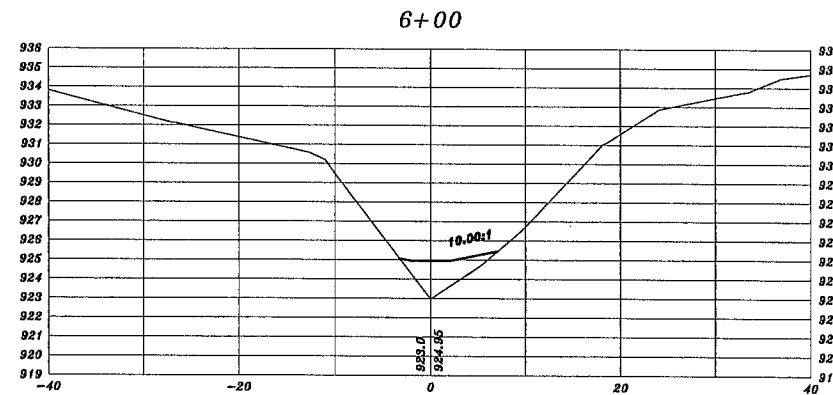
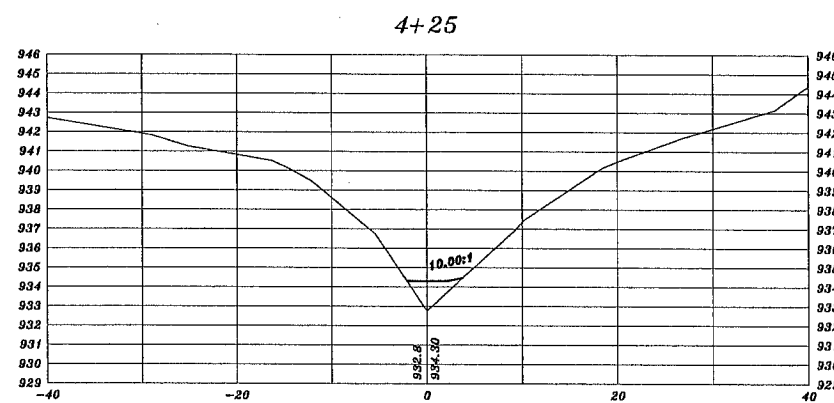
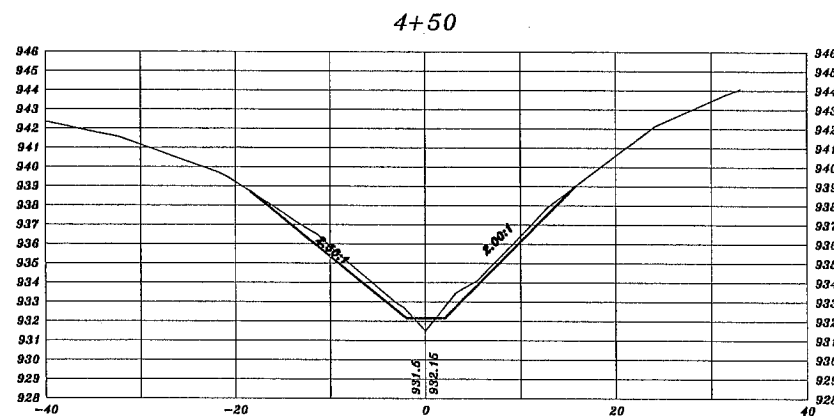
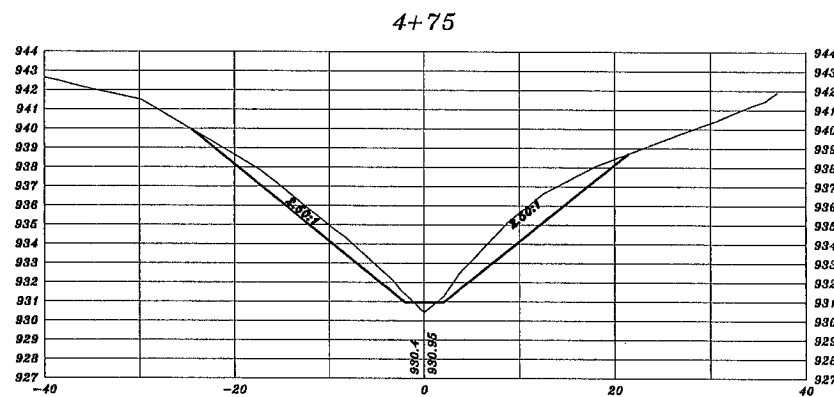
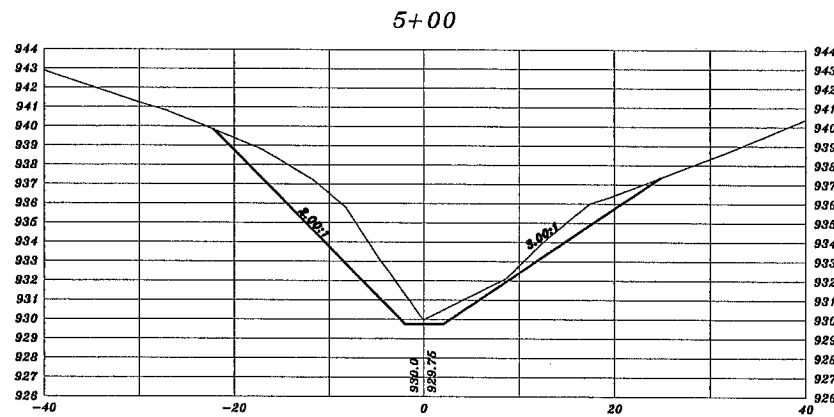
CROSS SECTIONS
RIGHT CHANNEL
STA. 5+25 TO STA. 6+57.19

STATE AID PROJ. NO.	DRAWN BY M. PAYNE	DATE 7-13
NA	DESIGNED BY M. PAYNE	7-13
DWG NAME	CHECKED BY D. ASCH	7-13
XSECTIONS	REVIEWED BY J. RENNEBERG	7-13

21

27





NO	DATE	BY	CKD	APPR	REVISION

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Signature: MICHAEL J. PAYNE

Date: 9-24-13 License #: 50484



PLYMOUTH, MINNESOTA
FOUR SEASONS MALL
WATER QUALITY IMPROVEMENT
CITY PROJECT NO. 11022

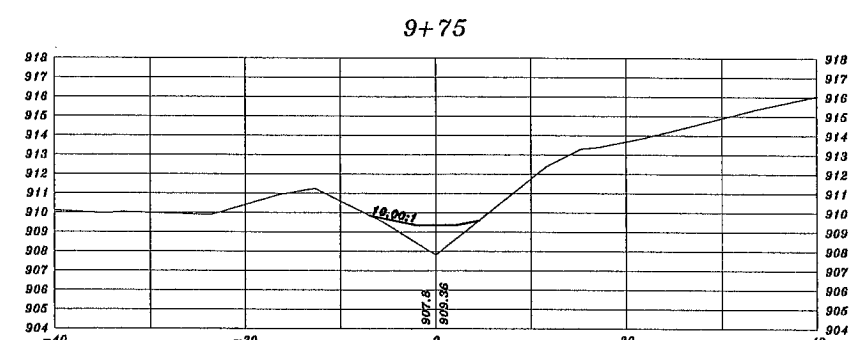
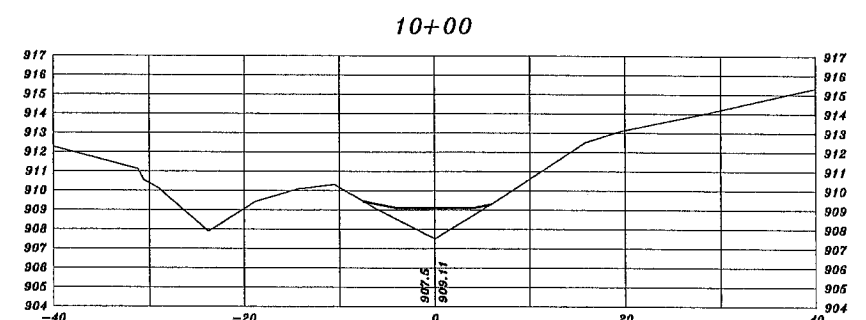
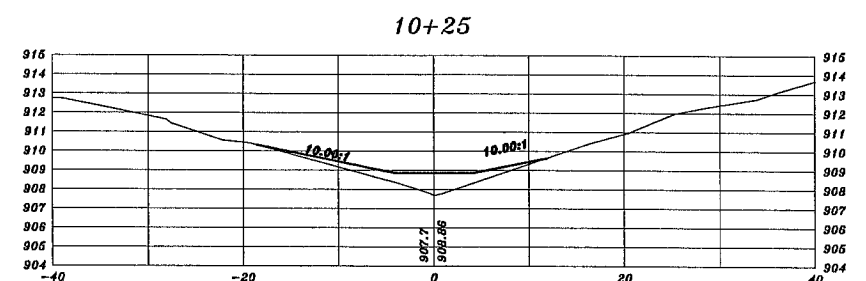
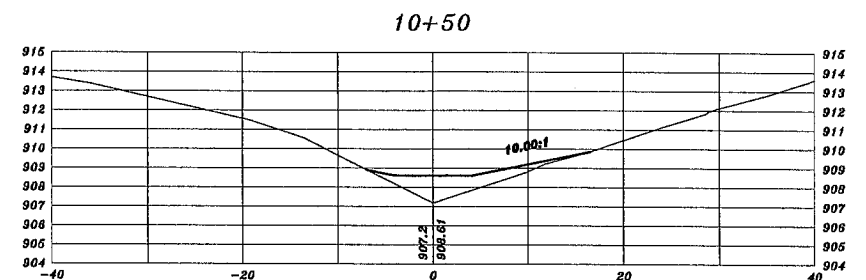
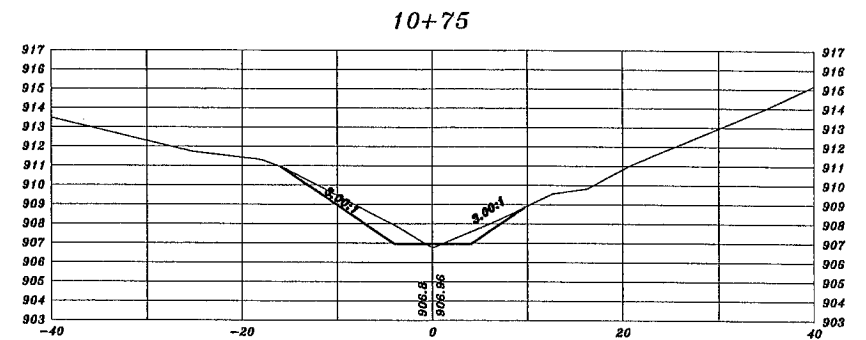
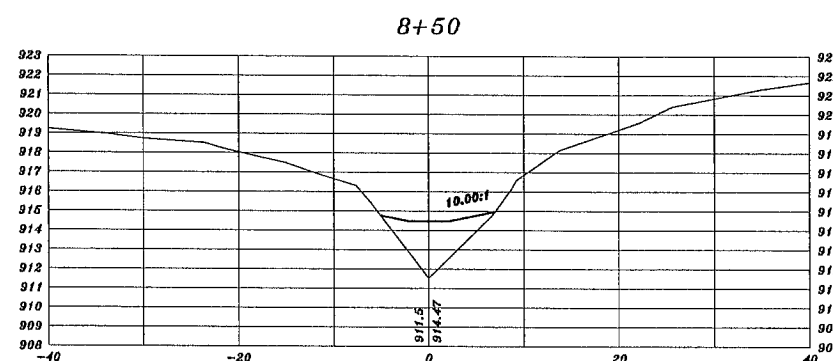
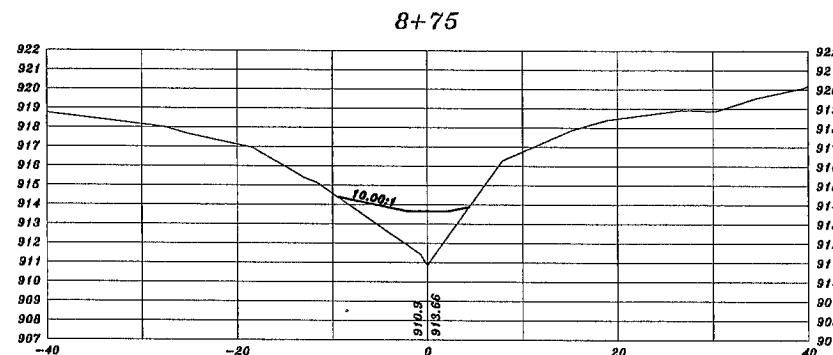
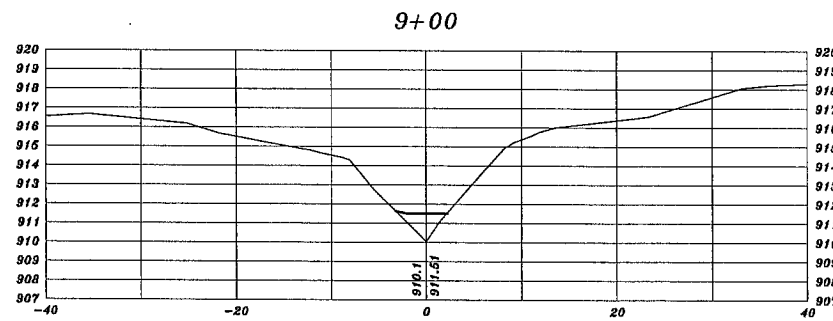
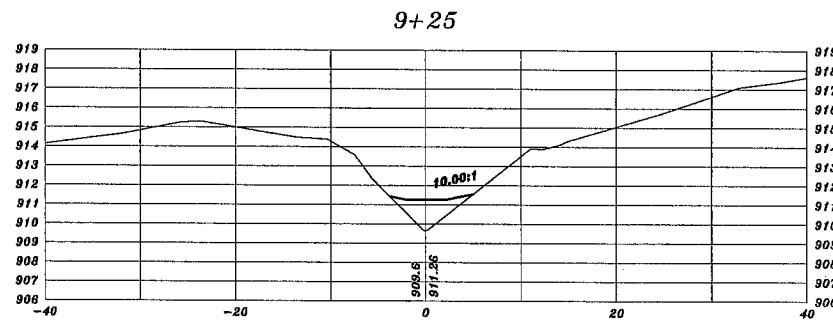
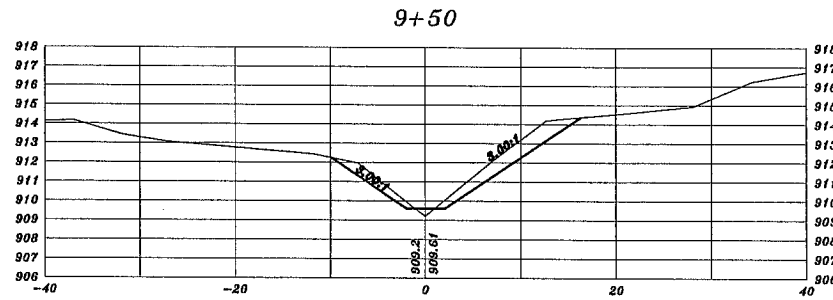
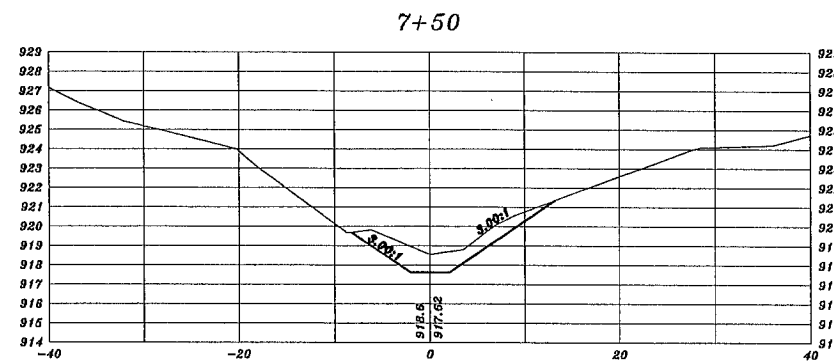
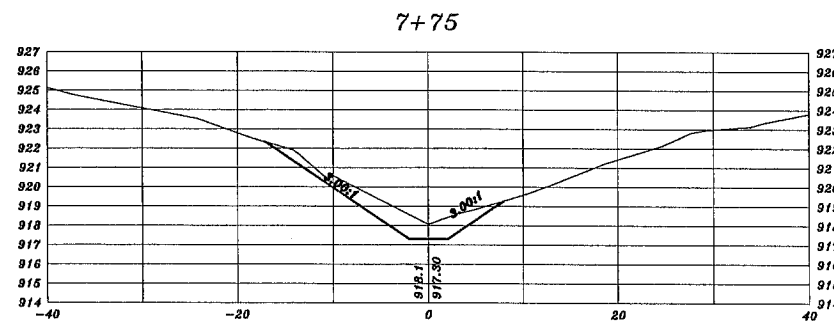
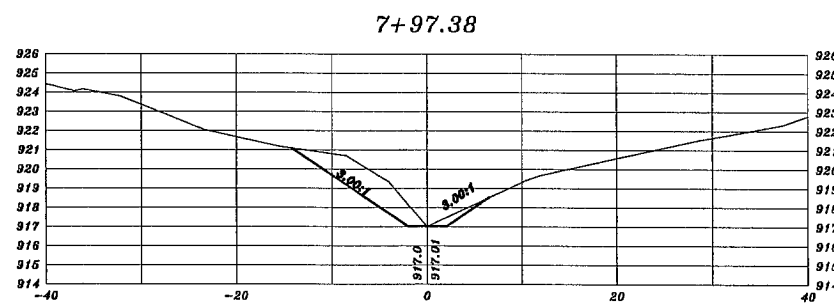
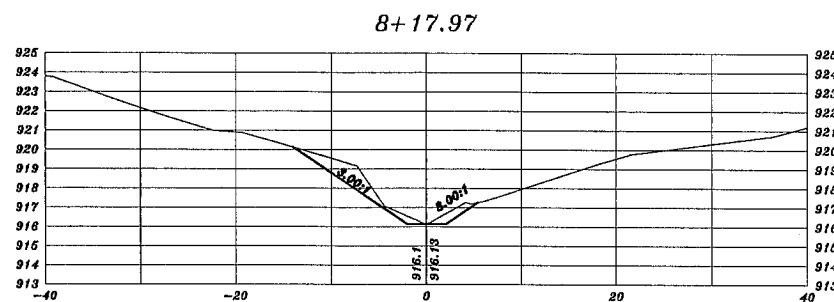
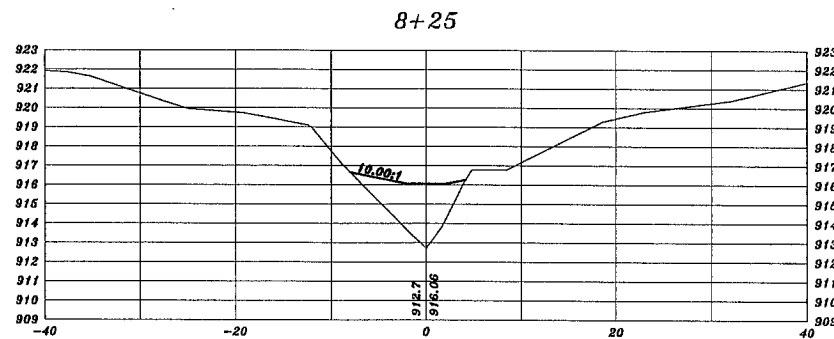
CROSS SECTIONS
RIGHT CHANNEL
STA. 4+25 TO STA. 7+25

STATE AID
PROJ. NO. NA
DRAWN BY M. PAYNE
DESIGNED BY M. PAYNE
CHECKED BY D. ASCHE
REVIEWED BY J. RENNEBERG

DATE 7-13
7-13
7-13
7-13

23

27

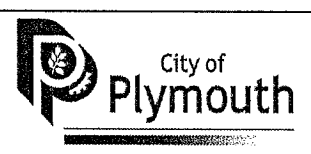


NO	DATE	BY	CKD	APPR	REVISION

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Signature: MICHAEL J. PAYNE

Date: 9-24-13 License#: 50484

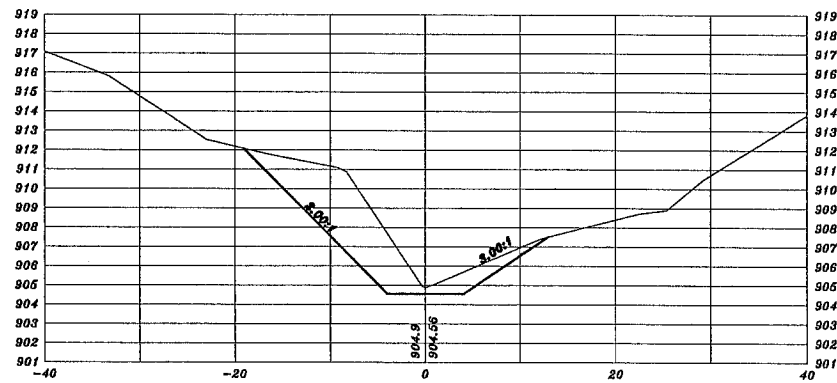


PLYMOUTH, MINNESOTA
FOUR SEASONS MALL
WATER QUALITY IMPROVEMENT
CITY PROJECT NO. 11022

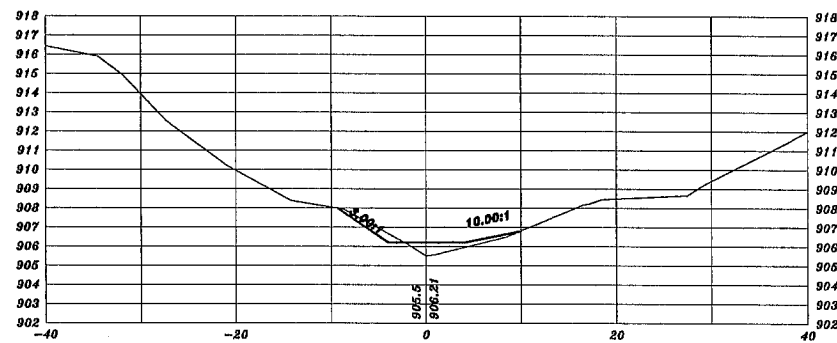
CROSS SECTIONS
RIGHT CHANNEL
STA. 7+50 TO STA. 10+75

STATE AID PROJ. NO. NA	DRAWN BY M. PAYNE DESIGNED BY M. PAYNE CHECKED BY D. ASCHÉ REVIEWED BY J. RENNEBERG	DATE 7-13 7-13 7-13 7-13
DWG NAME XSECTIONS		

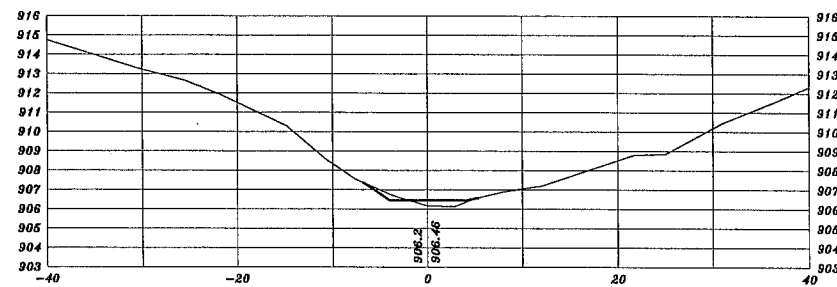
11+75



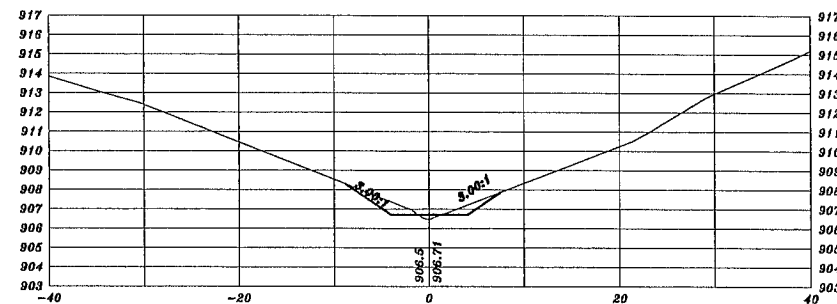
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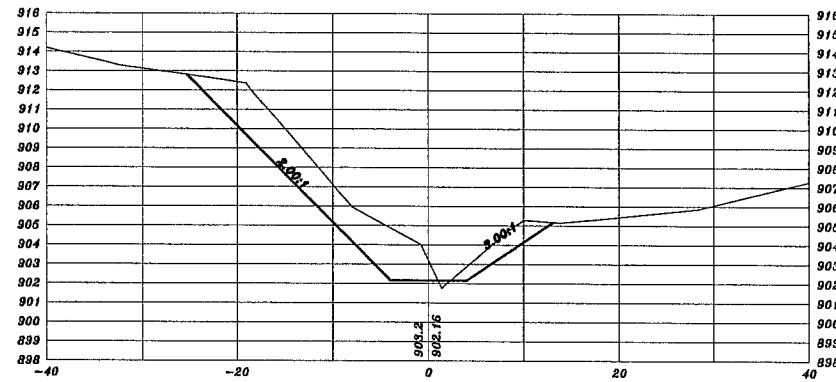
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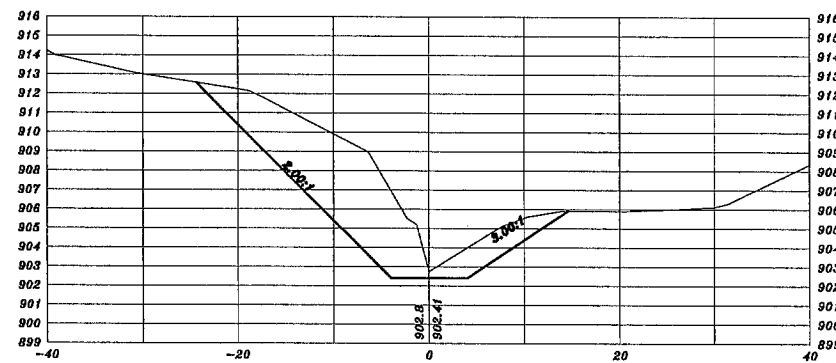
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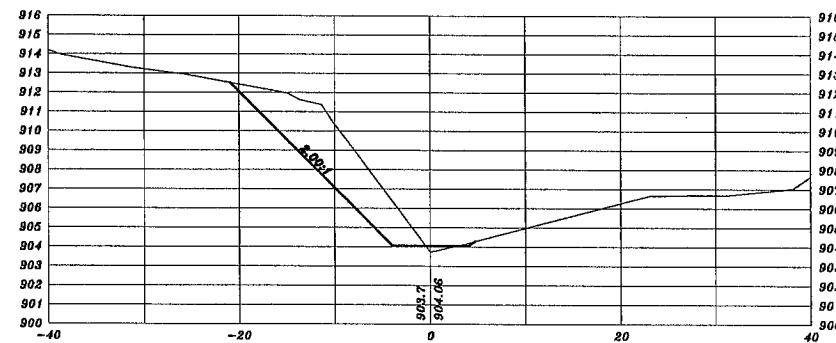
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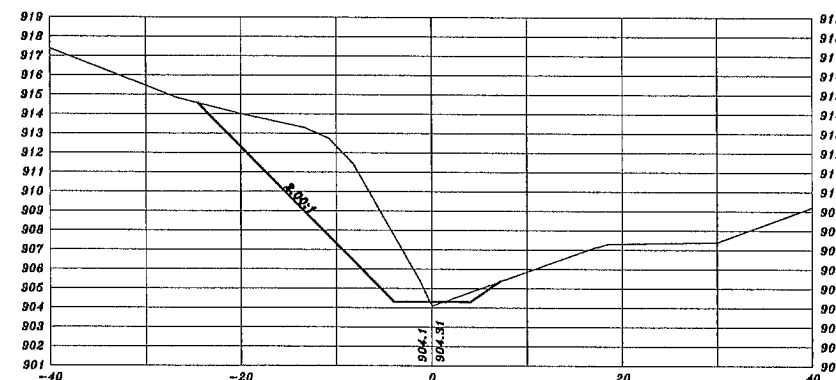
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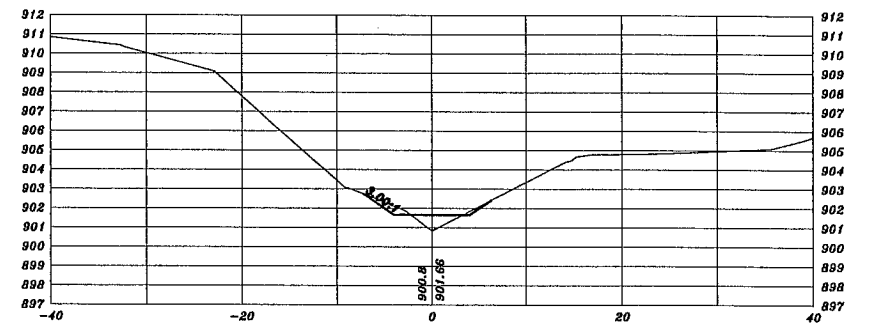
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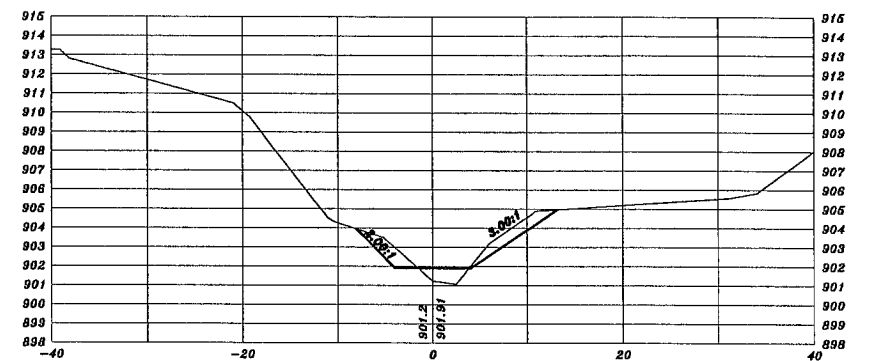
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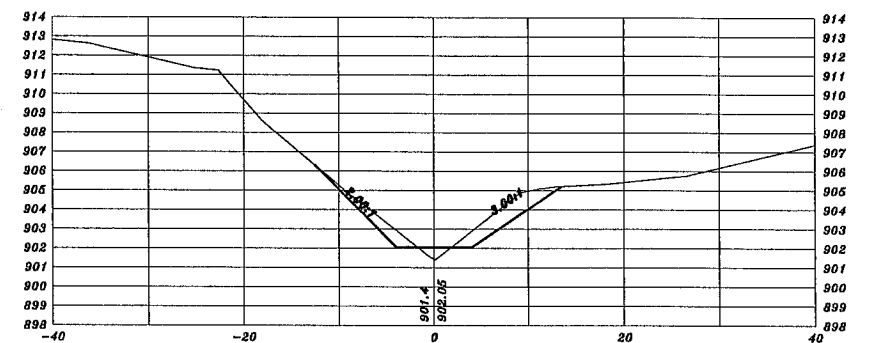
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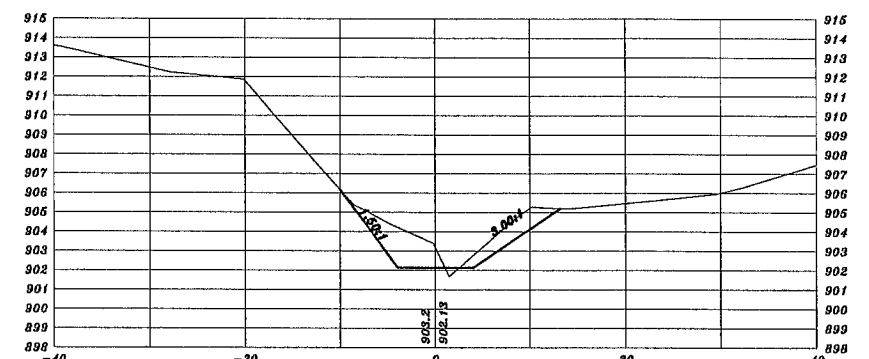
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12+85.88



12+77.53

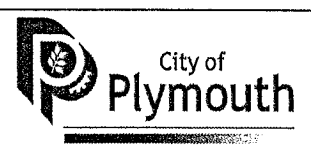


NO	DATE	BY	CKD	APPR	REVISION

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Signature: MICHAEL J. PAYNE

Date: 9-24-13 License #: 50484

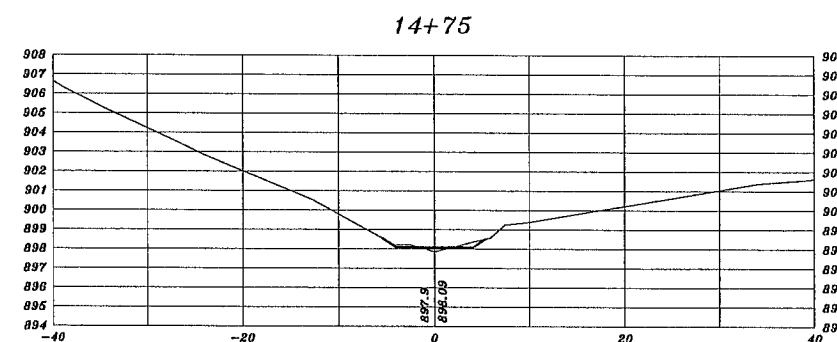
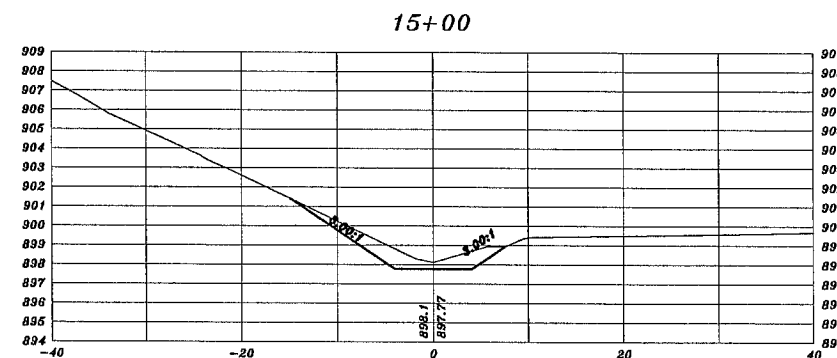
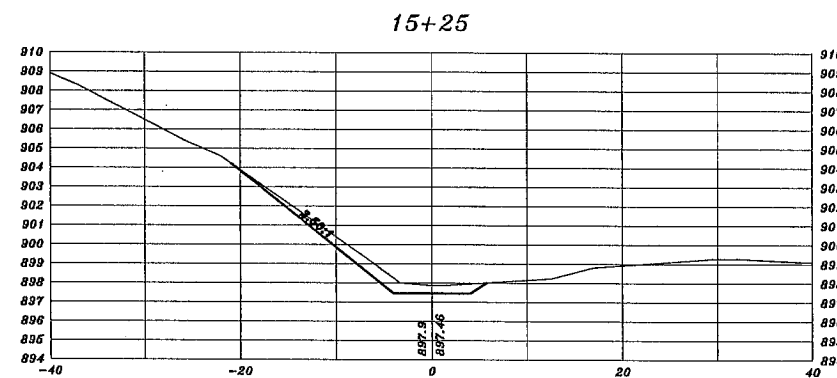
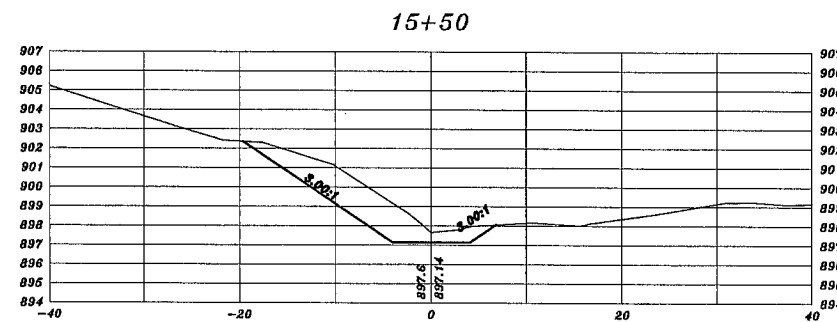
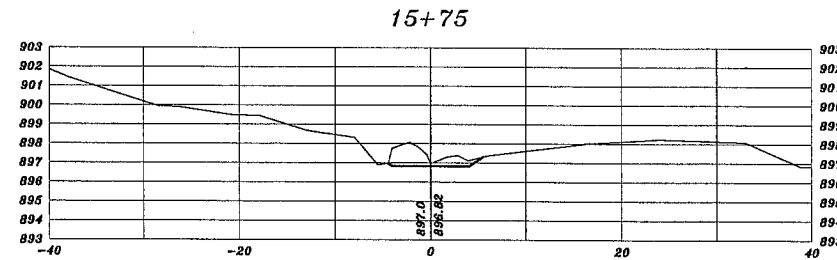
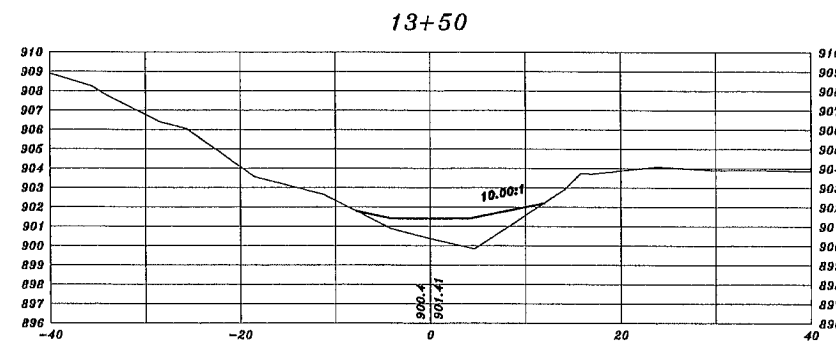
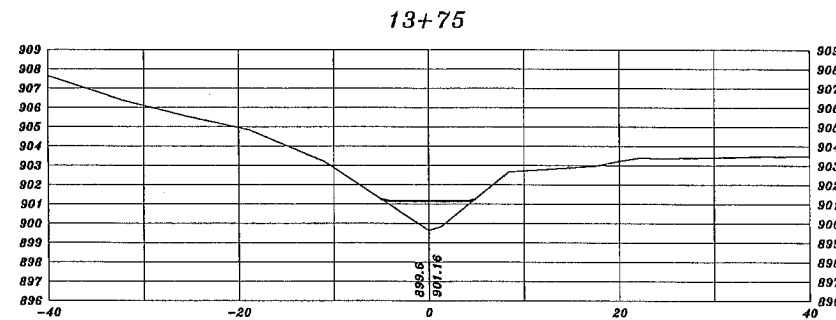
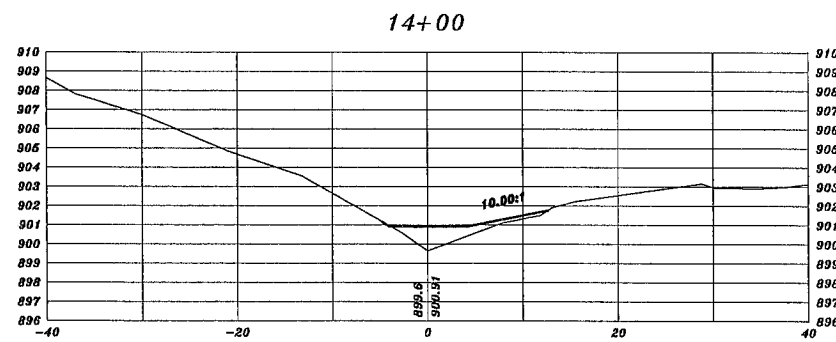
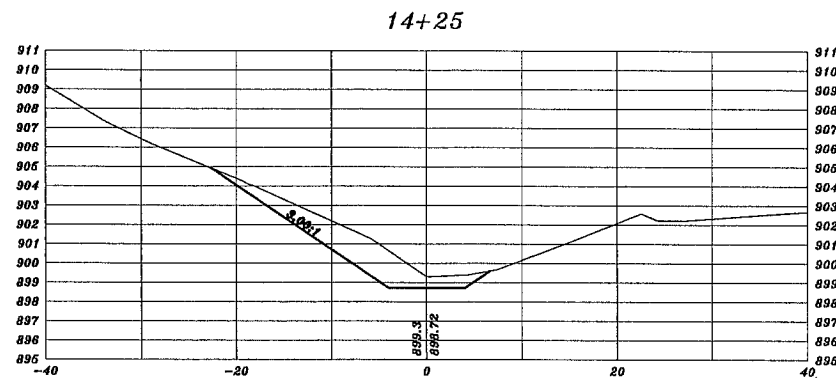
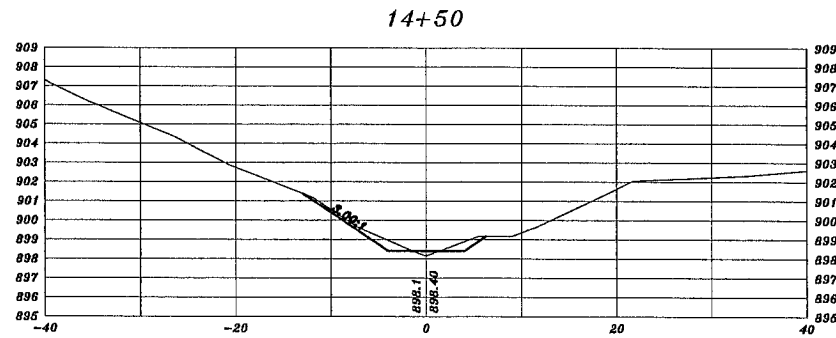


PLYMOUTH, MINNESOTA
FOUR SEASONS MALL
WATER QUALITY IMPROVEMENT
CITY PROJECT NO. 11022

CROSS SECTIONS
RIGHT CHANNEL
STA. 11+00 TO STA. 13+25

STATE AID PROJ. NO. NA	DRAWN BY M. PAYNE DESIGNED BY M. PAYNE CHECKED BY D. ASCHÉ REVIEWED BY J. RENNEBERG	DATE 7-13 7-13 7-13 7-13
DWG NAME XSECTIONS		

25
27

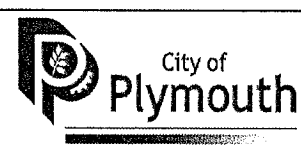


NO	DATE	BY	CKD	APPR	REVISION

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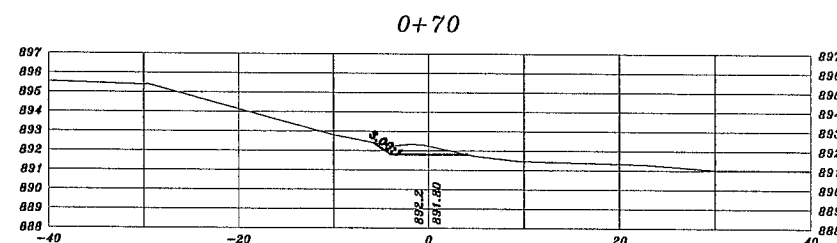
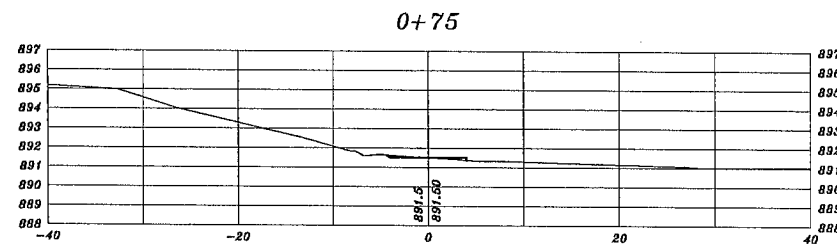
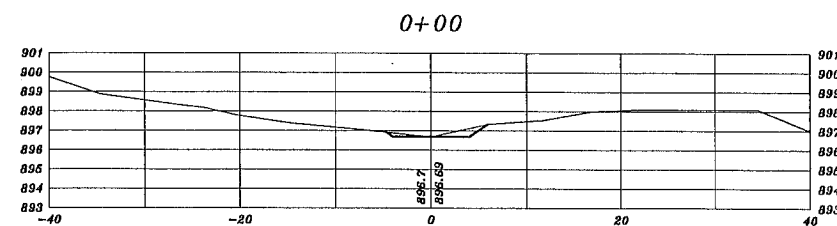
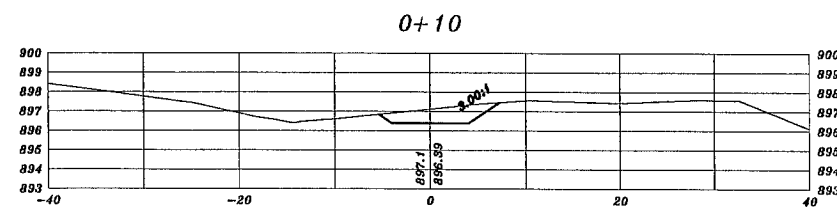
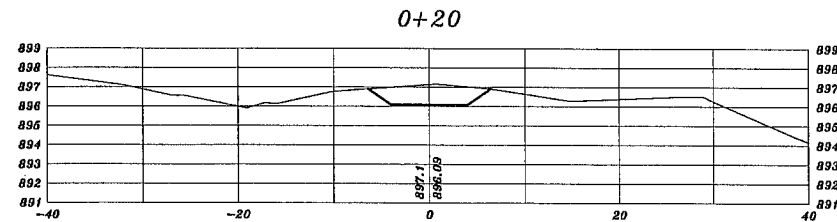
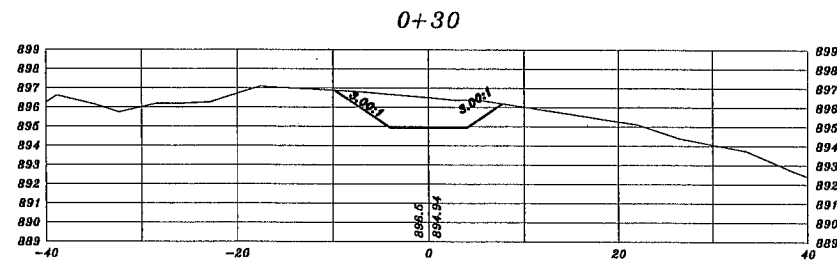
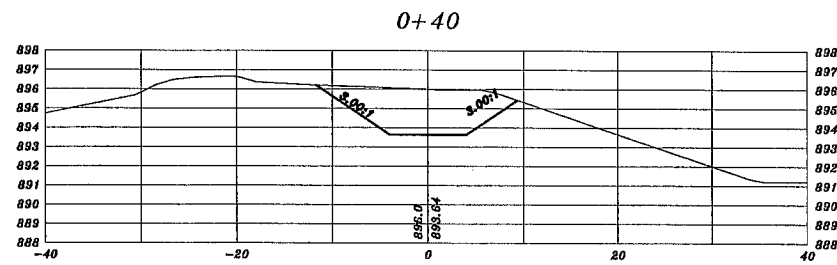
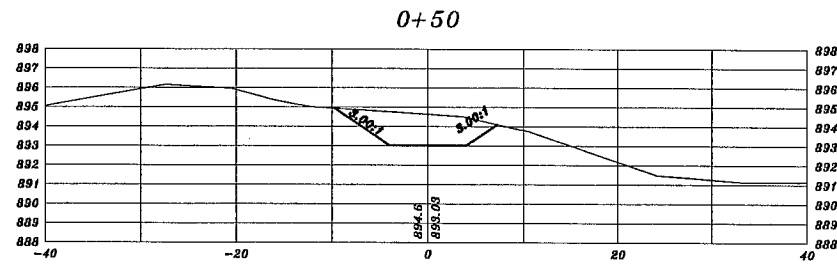
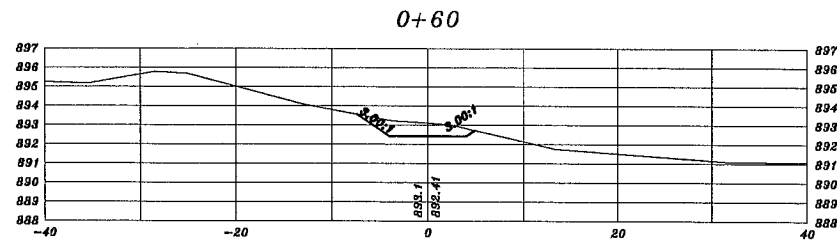
Date: 9-24-13 License #: 50484



PLYMOUTH, MINNESOTA
FOUR SEASONS MALL
WATER QUALITY IMPROVEMENT
CITY PROJECT NO. 11022

CROSS SECTIONS
RIGHT CHANNEL
STA. 13+50 TO STA. 15+75

STATE AID PROJ. NO. NA	DRAWN BY M. PAYNE	DATE 7-13
DWG NAME XSECTIONS	DESIGNED BY M. PAYNE	7-13
	CHECKED BY D. ASCHIE	7-13
	REVIEWED BY J. RENNEBERG	7-13

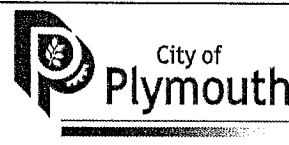


NO	DATE	BY	CKD	APPR	REVISION

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Signature: MICHAEL J. PAYNE

Date: 9-24-13 License #: 50484



PLYMOUTH, MINNESOTA
FOUR SEASONS MALL
WATER QUALITY IMPROVEMENT
CITY PROJECT NO. 11022

PROPOSED CHANNEL
STA. 0+00 TO STA. 0+75

STATE AID PROJ. NO.	DRAWN BY M. PAYNE	DATE 7-13
NA	DESIGNED BY M. PAYNE	7-13
DWG NAME	CHECKED BY D. ASCHÉ	7-13
XSECTIONS	REVIEWED BY J. RENNEBERG	7-13