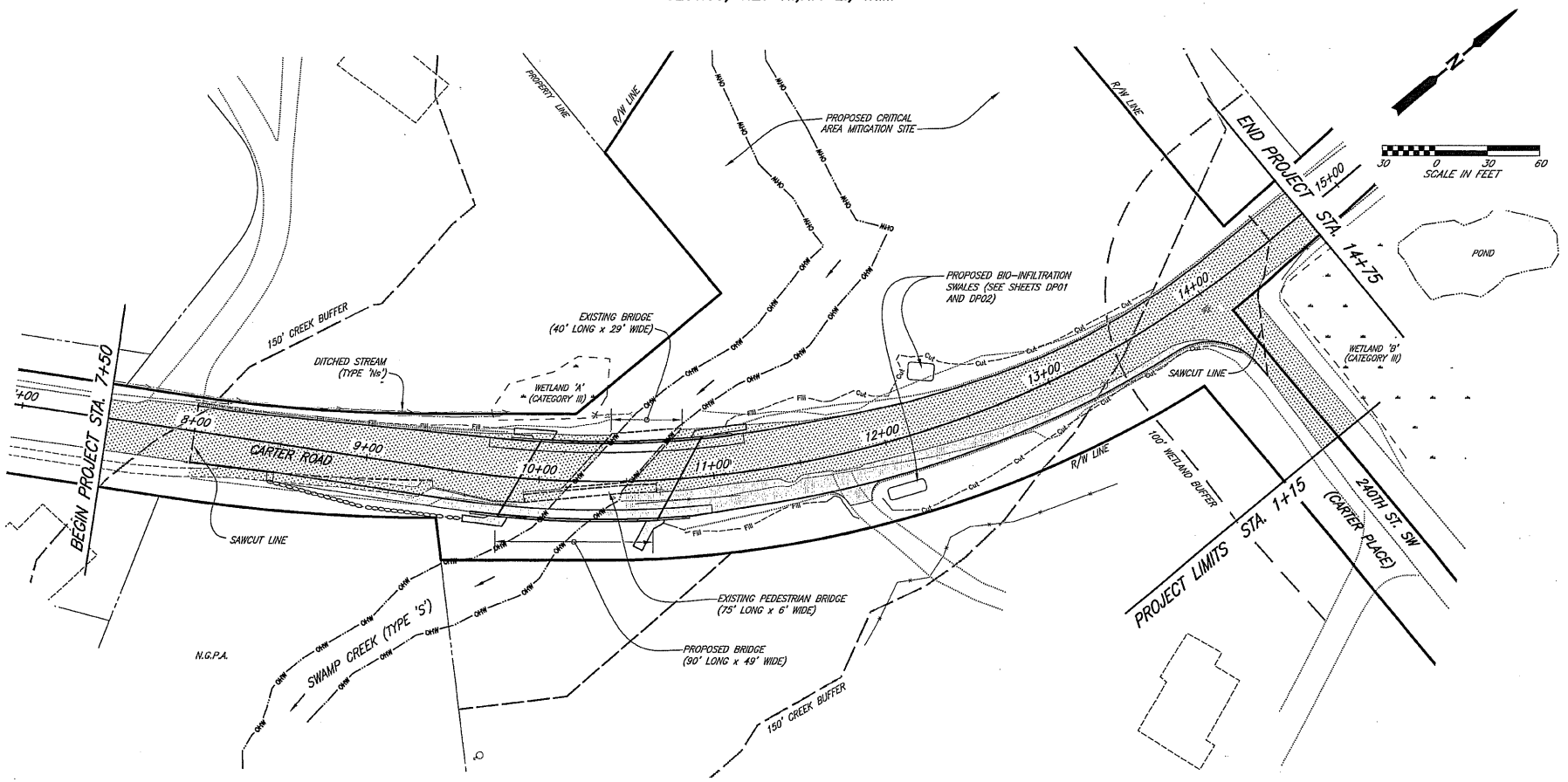
SECT.35, T.27 N.,R.4 E., W.M.



EXISTING IMPERVIOUS FOOTPRINT (WITHIN PROJECT LIMITS) = 26,543 SF

PROPOSED NEW IMPERVIOUS FOOTPRINT = 4,935

REPLACED IMPERVIOUS SURFACE = 21,101 SF
(EXISTING IMPERVIOUS WITHIN SAWCUTS)

NEW IMPERVIOUS + REPLACED IMPERVIOUS = 26,036 SF

DATE	NO.	REVISION	BY	DES.	SURV.	R/W	CONST.

Last Saved By: spwrtr Apr 27, 2011 – 1:34pm

REGION NO.	STATE	FED. AID PROJ. NO.	SURVEY NO.
10	WASH.		4009

DESIGNED BY: S.MILLER, P.E., L.WIRT | DRAWN BY: RTR

FIELD BOOK(S): | UPI # 06-0011

APPROVED FOR CONSTRUCTION

OWEN B. CARTER, P.E.
SNOHOMISH COUNTY ENGINEER

DATE APPROVED:

SNOHOMISH COUNTY
DEPARTMENT OF
PUBLIC WORKS

PROJECT NO. RC1488

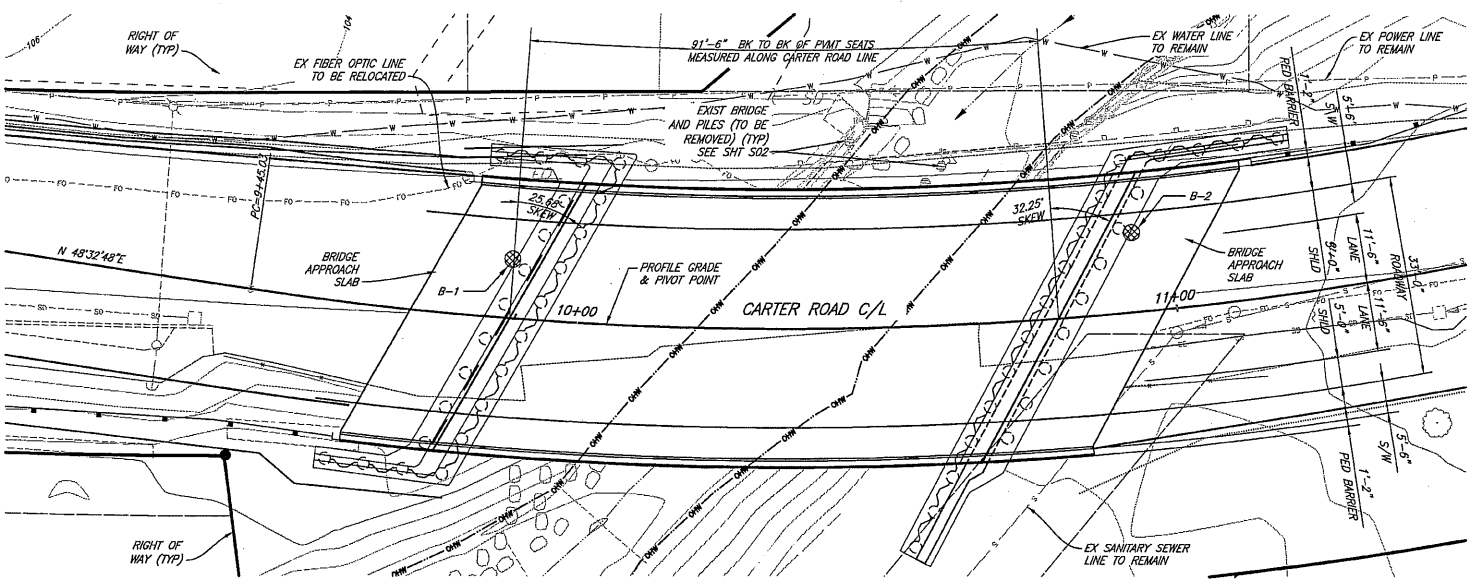
SWAMP CREEK BRIDGE #546
REPLACEMENT
SHORELINE PERMIT APPLICATION
IMPERVIOUS SURFACES

REFERENCE SHEET NO. SP04

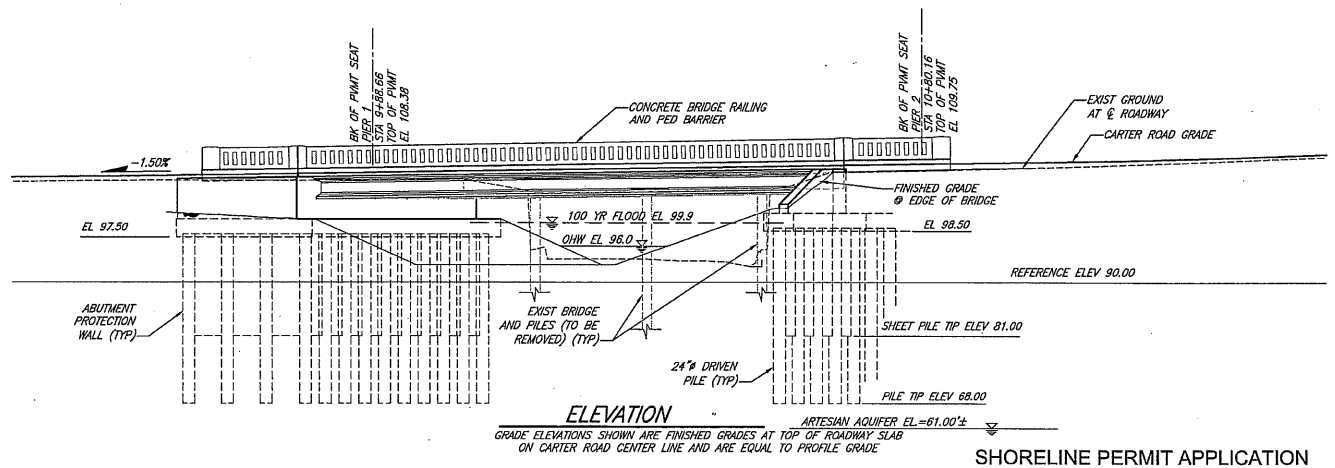
SHEET 4 OF 19 SHEETS

Plotted: Apr 27, 2011 – 1:59pm spwrtr S:\Pw_Project_Data_Management\6-PROJECTS_UPI Year_2006\06-0011\2 CADD\2.1 production data\drawings\Design\Exhibits\Shoreline Permit\639 B-546 Shoreline App.dwg Layout Name: Imp Srf

SECT.35, T.27 N.,R.4 E., W.M.



PLAN
SCALE: 1"=10'



ELEVATION
GRADE ELEVATIONS SHOWN ARE FINISHED GRADES AT TOP OF ROADWAY SLAB ON CARTER ROAD CENTER LINE AND ARE EQUAL TO PROFILE GRADE

DATUM
NAVD 88

N

10' 0 10' 20'
SCALE IN FEET

GENERAL NOTES

1. ALL MATERIAL AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION, ENGLISH, DATED 2010 AND AMENDMENTS.
2. THE STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATION FIFTH EDITION–2010 AND INTERIMS, STRUCTURAL ELEMENTS ARE DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS FOR LRFD. SEISMIC DESIGN HAS BEEN DONE USING THE FOLLOWING:
   PGA = 0.30g
   Ss = 0.75g
   S = 0.25g
   SCD = C
   S1 = 0.387
   Fpga = 1.1
   Fa1 = 1.1
   Fv = 1.55
   SEISMIC ZONE 3
3. THE CONCRETE IN THE ROADWAY DECK SHALL BE CLASS 4000D. THE CONCRETE IN THE PILES SHALL BE CLASS 4000P. ALL OTHER CAST–IN–PLACE CONCRETE SHALL BE CLASS 4000.
4. THE MAXIMUM DESIGN LOAD FOR 24"ø PILES AT PIERS 1 & 2 IS AS FOLLOWS:
   – ULTIMATE DESIGN LOAD 170 TONS/PILE
   – ALLOWABLE DESIGN LOAD 55 TONS/PILE
   _ ASSUMED SCOUR DEPTH IS EL 83.00
5. UNLESS OTHERWISE SHOWN ON THE PLANS, THE CONCRETE COVER MEASURED FROM THE FACE OF THE CONCRETE TO THE FACE OF ANY REINFORCING BAR SHALL BE AS FOLLOWS:

TOP OF ROADWAY SLAB	2"
BOTTOM OF ROADWAY SLAB	1 1/2"
CONCRETE CAST AGAINST EARTH	3"
CONCRETE EXPOSED TO EARTH OR WEATHER PRIMARY REINFORCEMENT	2"
SECONDARY (TIES OR STIRRUPS)	1 1/2"

6. ALL DIMENSIONS AND ELEVATIONS SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR.
7. THE UTILITY LOCATIONS ARE SHOWN FOR REFERENCE ONLY. THE CONTRACTOR SHALL COORDINATE THESE PLANS WITH THE RELEVANT UTILITY PLANS.
8. DESIGN DEAD LOAD:

BRIDGE RAIL	0.37 KLF ENTIRE BRIDGE
SIDEWALK	0.91 KLF ENTIRE BRIDE
UTILITIES	0.21 KLF ENTIRE BRIDGE
FUTURE 2" ASPHALT OVERLAY	0.025 KSF

9. SUBSTRUCTURE QUANTITIES INCLUDE PIER 1 ABUTMENT, PIER 2 ABUTMENT, WING WALLS, GIRDER STOPS AND CHEEK WALLS.
10. SUPERSTRUCTURE QUANTITIES INCLUDE CONCRETE ROADWAY DECK AND BEARINGS.

LEGEND:

- A / 20 — IDENTIFIES SECTION, VIEW OR DETAIL; TAKEN OR SHOWN ON BRIDGE SHEET NO.
- A / – — TAKEN OR SHOWN ON THE SAME SHEET
- ⊗ — LOCATION OF SOIL BORINGS

PRECAST PRESTRESSED GIRDER BRIDGE
LIVE LOADING: HL–93

SHORELINE PERMIT APPLICATION

PLAN CHECK	BY	DATE	DATE	NO.	REVISION	BY

Last Saved By: spwrtr Apr 28, 2011 – 11:56am

REGION NO.	STATE	FED. AID PROJ. NO.	SURVEY NO.
10	WASH.		4009

DESIGNED BY: – | DRAWN BY: L. KELLER
FIELD BOOK(S): – | UPI# 06–0011

HDR Engineering, Inc.

APPROVED FOR CONSTRUCTION

OWEN B. CARTER, P.E.
SNOHOMISH COUNTY ENGINEER

DATE APPROVED:

SNOHOMISH COUNTY DEPARTMENT OF PUBLIC WORKS

FUNDING NO. RC1488

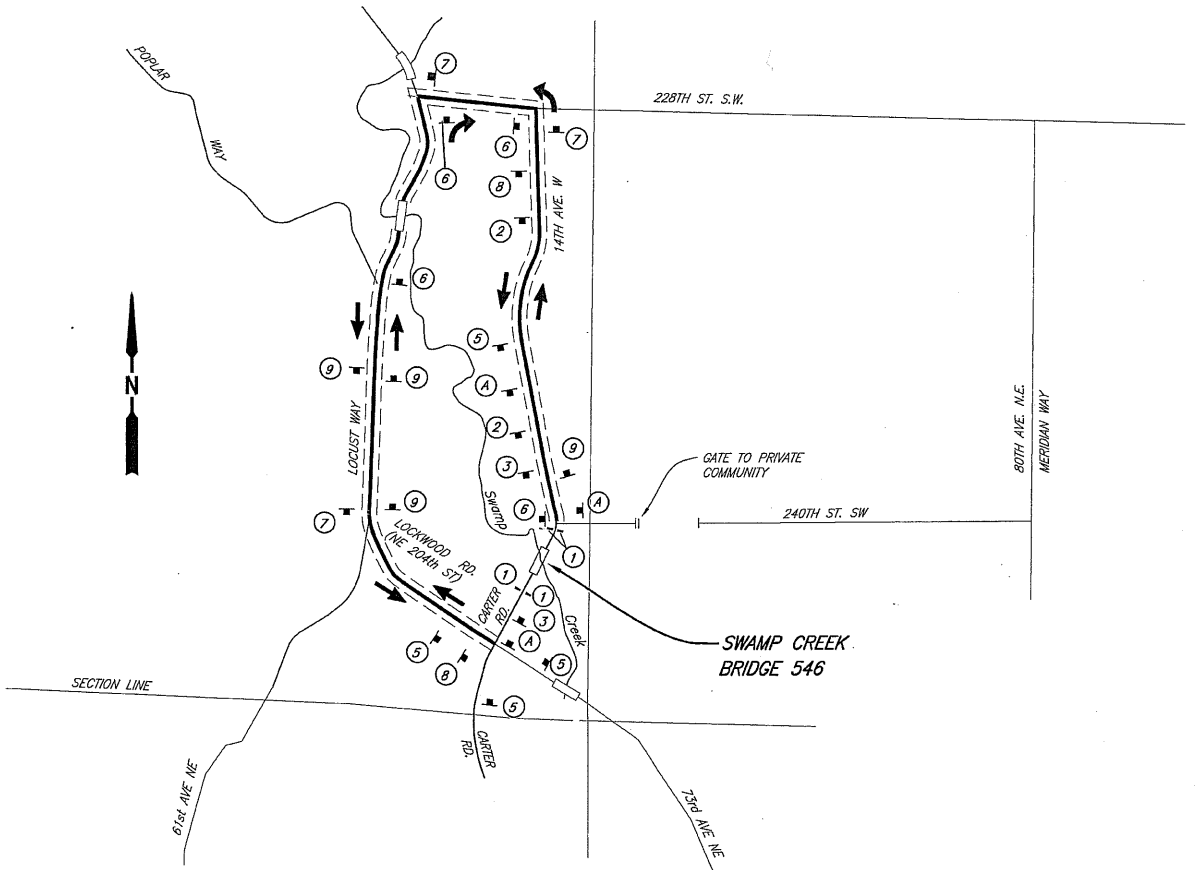
SWAMP CREEK BRIDGE #546
BRIDGE REPLACEMENT
BRIDGE PLAN & PROFILE

REFERENCE SHEET NO. BP01

SHEET S01 OF 6 SHEETS

Apr 28, 2011 - 11:57am spwtr S:\PW_Project_Data_Management\6-PROJECTS_UPI Year_2006\06-001112 CADD\2.4 consultant data\HDR\10-18-10 w Shoreline\S01 546_BP01 + S.dwg Layout Name: BP01-Shor

SECT. 35, T.27 N., R.4 E., W.M.



DETOUR ROUTES

SCALE: 5"= 1/2-MILE ±

LEGEND:

(2) – TRAFFIC SIGN PLACEMENT/DESIGNATOR (SEE SIGN SCHEDULE)

– – – – – DETOUR ROUTE

SIGN SCHEDULE

SYM. (X)	SIGN CODE NUMBER	COLOR	EACH	SIGN SIZE X	SIGN SIZE Y	REMARKS
1	R11-2	BW	4	60"	30"	ROAD CLOSED ON TYPE III BARRICADE
	TYPE III	OW	4	96"	60"	PORTABLE TYPE III BARRICADE
2	R11-4	BW	1	60"	30"	ROAD CLOSED TO THRU TRAFFIC
3	W20-3	BO	2	48"	48"	ROAD CLOSED
5	W20-1A	BO	4	48"	48"	ROAD WORK AHEAD
6	M4-9R	BO	4	30"	24"	DETOUR ARROW WITH SNS (CARTER ROAD)
7	M4-9L	BO	3	30"	24"	DETOUR ARROW WITH SNS (CARTER ROAD)
8	M4-8A	BO	2	30"	24"	END DETOUR
9	M4-9U	BO	4			DETOUR ARROW WITH SNS (CARTER ROAD) ARROW UP
A	SPECIAL	BW	3	48"	48"	CARTER ROAD CLOSED AT SWAMP CREEK BRIDGE 546 – DATE TO DATE

ABBREVIATIONS:

BW = BLACK ON WHITE
BO = BLACK ON ORANGE
OW = ORANGE ON WHITE
SNS = STREET NAME SIGN

SIGN PLACEMENT AND IDENTIFICATION

CHANNELIZATION STRIPE IDENTIFICATION

SIGNING NOTES:

1. POSTS SHALL BE RED CEDAR, 4"x4"x16'. FINAL LENGTHS SHALL BE DETERMINED IN THE FIELD PRIOR TO FABRICATION.
2. FOR STRUCTURE AND MOUNTING DETAIL REQUIREMENTS, SEE STANDARD PLAN SERIES 'G.'
3. SPECIAL SIGN 'A' MUST BE INSTALLED 10 WORKING DAYS BEFORE ROAD IS CLOSED.
4. EACH DAY BEFORE LEAVING THE WORK SITE, THE TYPE III BARRICADES MUST BE SECURELY ANCHORED IN PLACE. AT ANYTIME THE BARRICADES ARE NOT SECURELY ANCHORED IN PLACE, A FLAGGER MUST BE STATIONED AT THE CLOSURE.
5. ALL SIGNS MUST MEET THE STANDARD REQUIREMENTS OF M.U.T.C.D. AND THE W.S.D.O.T. TRAFFIC MANUAL.
6. TYPE III BARRICADES ARE PER W.S.D.O.T. STANDARD PLAN H-2.
7. SIGNS SHALL BE SPACED APART BY A MIN. OF 350'.

SNOHOMISH COUNTY
TRAFFIC ENGINEER
APPROVED FOR CONSTRUCTION
BY _____
JIM BLODGOOD, P.E.

DATE	NO.	REVISION	BY	DES.	SURV.	R/W	CONST.

Last Saved By: spwrtr Apr 13, 2011 – 11:19am

REGION NO.	STATE	FED. AID PROJ. NO.	SURVEY NO.
10	WASH.	BROS-2031(106)	4009

DESIGNED BY: S.MILLER, P.E., L.WIRT
DRAWN BY: RTR
FIELD BOOK(S):
UPI # 06-0011

APPROVED FOR CONSTRUCTION

OWEN B. CARTER, P.E.
SNOHOMISH COUNTY ENGINEER

DATE APPROVED:

SNOHOMISH COUNTY
DEPARTMENT OF
PUBLIC WORKS

PROJECT NO. RC1488

SWAMP CREEK BRIDGE #546
REPLACEMENT
SHORELINE PERMIT APPLICATION
TRAFFIC CONTROL & DETOUR PLAN

REFERENCE SHEET NO. TC01
SHEET 19 OF 19 SHEETS

Plotted: Apr 13, 2011 – 11:22am spwrtr S:\PW_Project_Data_Management\6-PROJECTS_UPI Year_2006\06-0011\2 production data\drawings\Design\Exhibits\Shoreline Permit\1009 Br546 Shoreline App.dwg Layout Name: Det Plan 1