STREET AND DRAINAGE PLANS FOR RECORD DRAWING

WEST MEADOWS

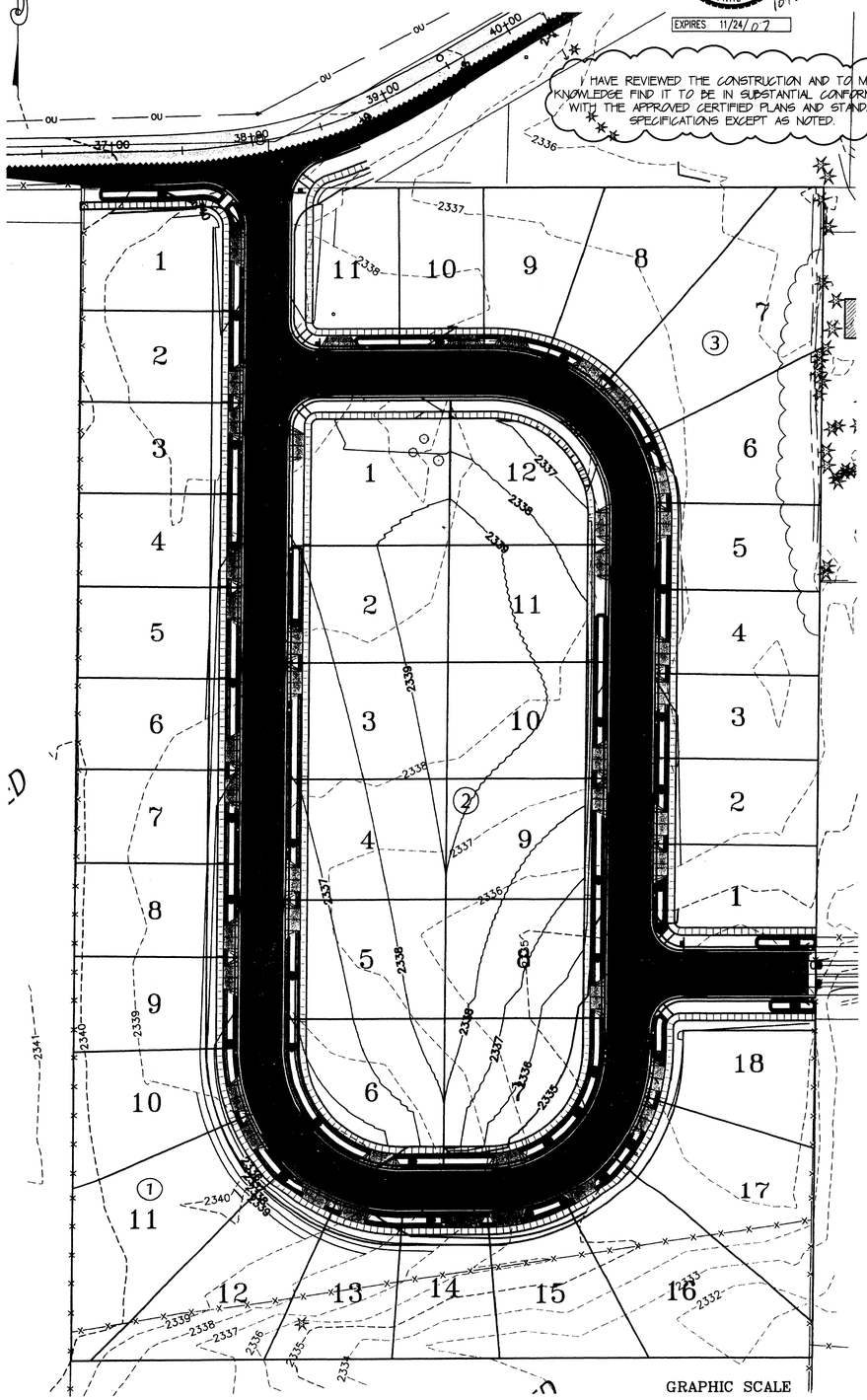
A PORTION OF THE N 1/2 OF SECTION 4, TOWNSHIP 24N, RANGE 42E W.M.

SPOKANE COUNTY, WASHINGTON

JANUARY, 2006

PAUL T. NELSON — STATE OF WASHINGTON — 37220 — REGISTERED PROFESSIONAL ENGINEER — EXPIRES 11/24/07 — 10/13/06

I HAVE REVIEWED THE CONSTRUCTION AND TO MY KNOWLEDGE FIND IT TO BE IN SUBSTANTIAL CONFORMANCE WITH THE APPROVED CERTIFIED PLANS AND STANDARD SPECIFICATIONS EXCEPT AS NOTED.



OVERALL SITE PLAN

DRAWING INDEX

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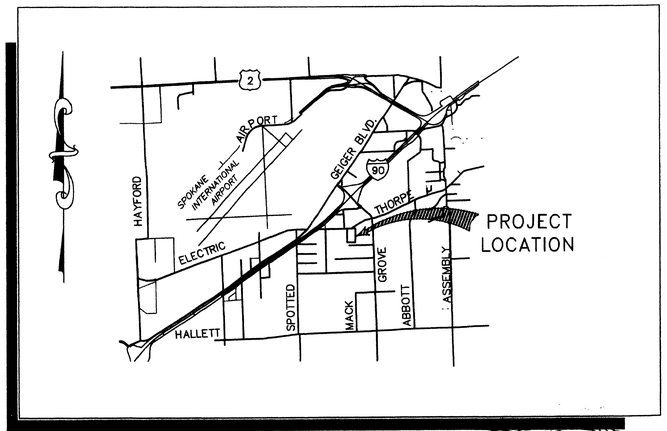


VICINITY MAP

SPOKANE COUNTY ENGINEERS OFFICE — OFFICIAL PUBLIC DOCUMENT ORIGINAL "AS-BUILTS" CERTIFIED RECORD DRAWINGS — PROJECT #: P 1943 — DATE ACCEPTED: 12/7/06

ABBREVIATIONS

ACP	ASPHALTIC CONCRETE PAVEMENT
C.S.T.C.	CRUSHED SURFACE BASE COURSE
CL	CENTERLINE
CONC.	CONCRETE
CONST.	CONSTRUCTION
D OR DIA.	DIAMETER
DR	DRIVE
DW	DRYWELL
E	EAST
E.O.P.	EDGE OF PAVEMENT
ELEV OR EL.	ELEVATION
EXIST.	EXISTING
F.M.	FORCE MAIN
FL	FLOW LINE (ELEVATION)
FT.	FEET
G	GRADE
GALV.	GALVANIZED
IE	INVERT ELEVATION
IN.	INCHES
L	LENGTH
L.F.	LINEAR FEET
LT.	LEFT
M.H.	MANHOLE
MPH	MILES PER HOUR
MAX.	MAXIMUM
MIN.	MINIMUM
MON.	MONUMENT
N	NORTH
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
P.T.	PRESSURE TREATED
PT.	POINT
PVI	POINT OF VERTICAL INTERSECTION
R	RADIUS
R/W	RIGHT-OF-WAY
RD.	ROAD
RT.	RIGHT
S	SOUTH
S.R.M.	SEWER FORCE MAIN
S.S.	SANITARY SEWER
SDMH	STORM DRAIN MANHOLE
SSMH	SANITARY SEWER MANHOLE
STA	STATION
STD.	STANDARD
T	TANGENT
TA	TOP OF ASPHALT
TC OR TOC	TOP OF CURB
TYP.	TYPICAL
W	WEST
W.M.	WATER MAIN

LEGEND

MH	STORM SEWER MANHOLE
	DRYWELL
	GAS METER
WM	WATER METER
	WATER VALVE
	FIRE HYDRANT
CB	CATCH BASIN
EBX	ELECTRICAL METER BOX
	ELECTRICAL TRANSFORMER
P	POWER VAULT
	UTILITY POLE
	GUY ANCHOR
TR	TELEPHONE RISER
TV	CABLE TELEVISION RISER
GP	GUARD POST
	SIGN
	ASPHALT
	CONCRETE
	BUILDING
	FENCE LINE
2000.0'	SPOT ELEVATION
2000.00' T.B.M.	TEMPORARY BENCHMARK
	EXISTING FENCE LINE
	PROPOSED GRAVEL SURFACE (PRIVATE ROAD)
	PROPOSED CULVERT
	PROPOSED RIP RAP
	PROPOSED WHITE DOUBLE-SIDED REFLECTOR FLEXIBLE QUIDE POST. SPACING IS 300' MAX. & 100' MIN.
	PROPOSED SILT FENCE
	PROPOSED ROCK CHECK DAM
	PROPOSED STRAW BALES

THE DESIGN IMPROVEMENTS SHOWN IN THIS SET OF PLANS AND CALCULATIONS CONFORM TO APPLICABLE EDITIONS OF THE SPOKANE COUNTY STANDARDS FOR ROAD AND SEWER CONSTRUCTION AND THE SPOKANE COUNTY GUIDELINES FOR STORMWATER MANAGEMENT. ALL DESIGN DEVIATIONS HAVE BEEN APPROVED BY THE SPOKANE COUNTY ENGINEER. I APPROVE THESE PLANS FOR CONSTRUCTION.

DEVELOPER'S APPROVAL

THE UNDERSIGNED DEVELOPER OR HIS ASSIGN AGREES TO CONSTRUCT IMPROVEMENTS IN ACCORDANCE WITH THIS PLAN, AND UPON COMPLETION, THE DEVELOPER IS RESPONSIBLE FOR SUBMITTING REPRODUCIBLE RECORD DRAWINGS TO BE COMPLETED BY A PROFESSIONAL ENGINEER AND/OR PROFESSIONAL LAND SURVEYOR FOR REVIEW AND APPROVAL BY SPOKANE COUNTY UTILITIES DEPARTMENT AT THE COMPLETION OF CONSTRUCTION.

Randy L. Schaff for John Raley — 1/23/06

DEVELOPER'S APPROVAL — DATE

THIS CONSTRUCTION PLAN EXPIRES ONE (1) YEAR FROM DATE OF APPROVAL.

RECORD DRAWING APPROVAL (ENGINEER/SURVEYOR) — DATE

NOTE:

ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH 2006 STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION AS PROMULGATED JOINTLY BY THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION (WSDOT), THE AMERICAN PUBLIC WORKS ASSOCIATION (APWA) AND AS AMENDED BY SPOKANE COUNTY UTILITIES.

10/11/06 RECORD DRAWING by ALLWEST TESTING AND ENGINEERING

BENCH MARK DATUM

ELEVATION: 2385.00' (NAVD 88)
LOCATION: USC&GS BENCHMARK "TANGENT 2" LOCATED AT THE INTERSECTION OF GEIGER BOULEVARD AND THORPE ROAD.

MATTHEW RAYMOND FOLEY — STATE OF WASHINGTON — 35331 — REGISTERED PROFESSIONAL ENGINEER — EXPIRES 7-05-06 — 1/23/06

CALL BEFORE YOU DIG: 456-8000

NW	NE
SW	SE
4-24-42	

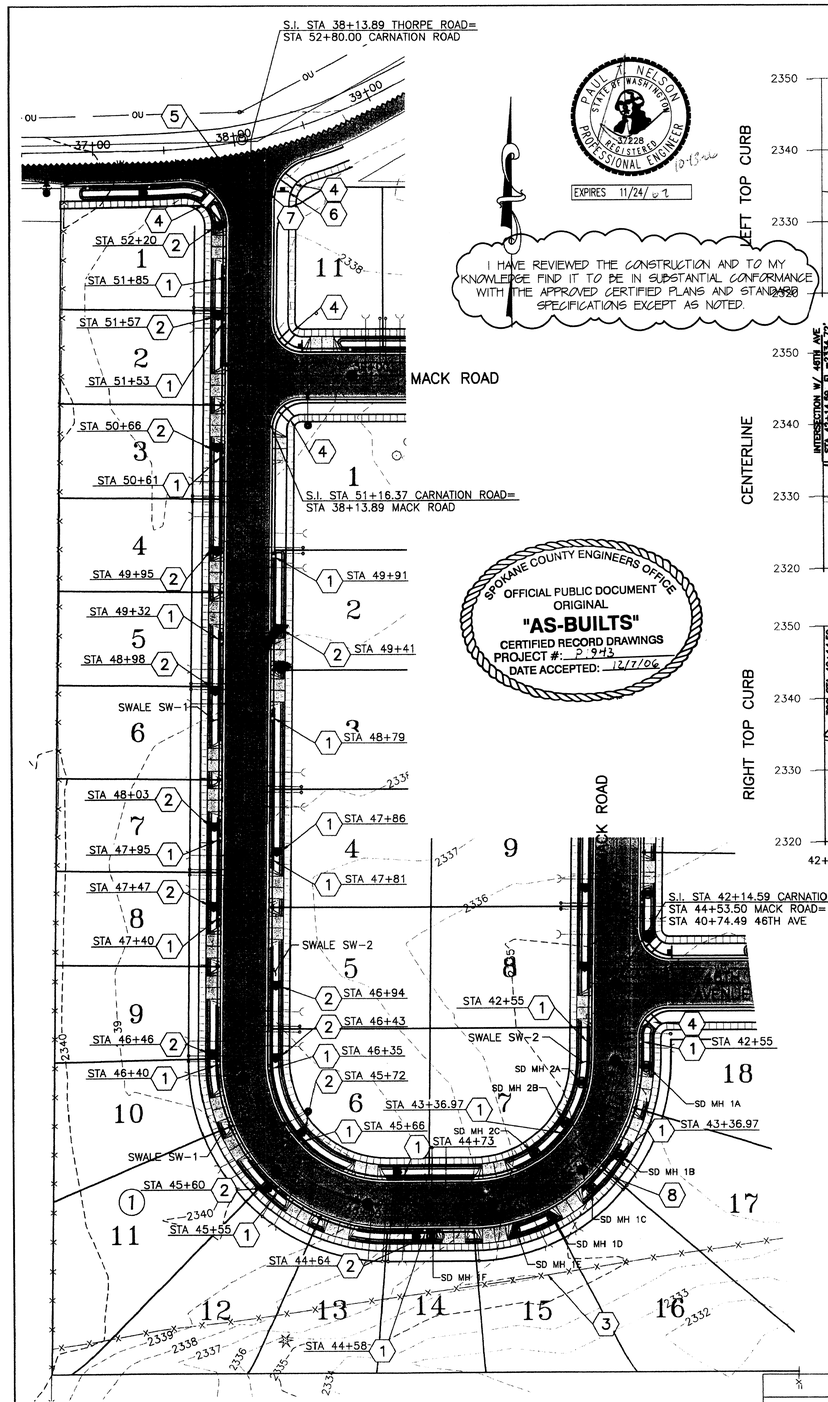
1 / 9

AC
ac@adamsandclark.com
Adams & Clark, Inc.
1720 W. Fourth Ave.
Spokane, WA 99204
(509) 747-4600 F(509) 747-8913
Project No. 2004-01-052

P-1943 Eng As Built

L:\206-022 West Meadows\asbuilt street 1.dwg, Layout1, 10/12/2006 11:27:39 AM, 1:1

RECORD DRAWING

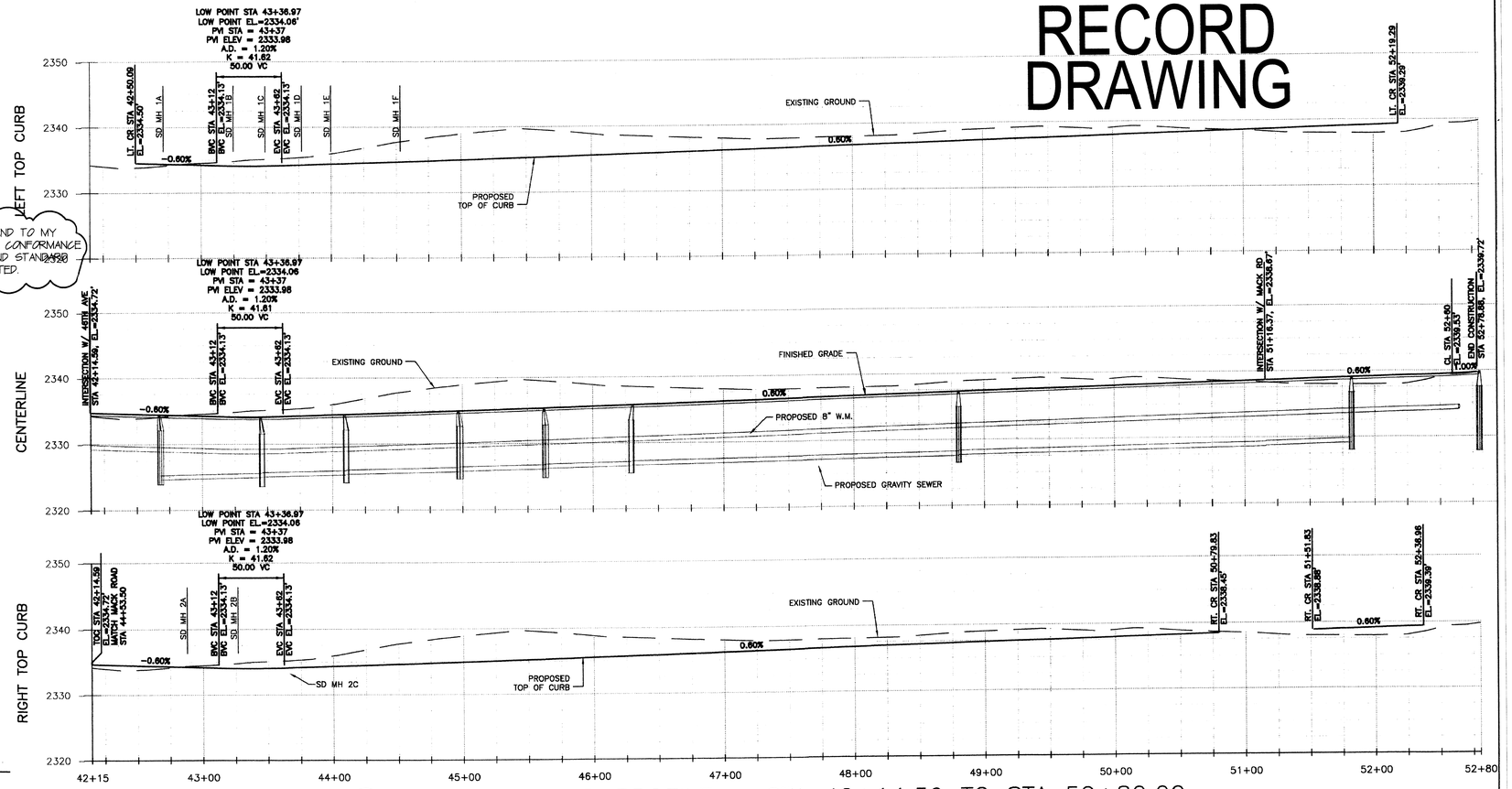


GRAPHIC SCALE

(IN FEET)
1 inch = 50 ft.

1/2 CARNATION RD PLAN–STA 42+14.59 TO 52+80

SCALE: 1"=50'



2/2 CARNATION ROAD PROFILE – STA 42+14.59 TO STA 52+80.00

SCALE: H: 1"=50'
V: 1"=10'

I HAVE REVIEWED THE CONSTRUCTION AND TO MY KNOWLEDGE FIND IT TO BE IN SUBSTANTIAL CONFORMANCE WITH THE APPROVED CERTIFIED PLANS AND STANDARD SPECIFICATIONS EXCEPT AS NOTED.

PAUL A. NELSON — STATE OF WASHINGTON — 37228 — REGISTERED PROFESSIONAL ENGINEER — EXPIRES 11/24/06 — 10-13-06

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT
ORIGINAL
"AS-BUILTS"
CERTIFIED RECORD DRAWINGS
PROJECT #: 2943
DATE ACCEPTED: 12/7/06

CONSTRUCTION KEYED NOTES

ITEM No.	DESCRIPTION
1	CURB INLET TYPE 1 PER SPOKANE COUNTY DETAIL B–8, DETAIL 4, SHEET 7.
2	SWALE BERM PER DETAIL 6, SHEET 7.
3	REMOVE EXISTING FENCE
4	STANDARD CURB RAMP PER SPOKANE COUNTY DETAIL A–5
5	EXISTING GUY ANCHOR TO BE RELOCATED. CONTRACTOR TO COORDINATE WITH UTILITY PROVIDER.
6	STOP/STREET SIGN PER SPOKANE COUNTY DETAIL A–16, INSTALLATION PER MUTCD
7	PROVIDE 8" WIDE WHITE STOP BAR PAVEMENT MARKING AT INTERSECTION.
8	INSTALL 6" D.I. CULVERT UNDER SIDEWALK. I.E. IN & OUT SHALL MATCH SWALE BOTTOM

SWALE DATA

SWALE ID	BOTTOM AREA REQ (S.F.)	BOTTOM ELEV	MIN. TOP OF BERM ELEV.	STA
SW–1	6390	TOC–1'	TOC	THORPE STA 36+90.70 TO CARNATION STA 42+42.85
SW–2	5770	TOC–1'	TOC	CARNATION STA 49+96.00 TO MACK STA 42+00.85

NOTE: SWALES SHALL BE CONSTRUCTED PER DETAILS 5 & 7, SHEET 7.

DRIVEWAY/6" THICKENED SIDEWALK SCHEDULE

STA–CENTER OF DRIVEWAY	WIDTH
42+31.03 RT*	16'
42+84.00 LT*	16'
43+08.03 LT*	16'
43+65.17 LT*	16'
44+04.60 RT*	16'
44+11.78 LT*	16'
44+37.77 LT*	16'
45+03.50 RT*	16'
45+13.15 LT*	16'
45+37.17 LT*	16'
45+90.02 LT*	16'
46+14.11 LT*	16'
46+92.00 LT*	16'
47+20.08 LT*	16'
47+37.40 RT*	16'
47+60.35 RT*	16'
48+22.06 LT*	16'
48+50.05 LT*	16'
48+98.44 RT	16'
49+26.48 RT	16'
49+52.04 LT*	16'
49+80.00 LT*	16'
50+65.73 RT	16'
50+82.00 LT*	16'
51+10.00 LT*	16'
52+05.19 LT*	16'

NOTES:
–SIDEWALK SHALL BE CONSTRUCTED WITH A 6" CONCRETE SECTION THROUGH DRIVEWAY LOCATIONS
–DRIVEWAYS SHALL BE CONSTRUCTED BY PROPERTY OWNERS
*DRIVEWAYS TO BE INSTALLED WITH 6" D.I. CULVERT, SEE DETAIL 8, SHEET 6 FOR SECTION

LINE TABLE

LINE	LENGTH	BEARING
L1	637.31'	N0° 42' 43"E
L2	60.54'	N89° 59' 32"W
L3	53.54'	S0° 47' 11"W

CURVE TABLE

CURVE	RADIUS	LENGTH	DELTA	TANGENT	PC	PT
C2	100.00'	158.31'	90°42'15"	101.24'	STA 44+84.38	STA 46+42.69
C3	100.00'	155.72'	89°13'17"	98.65'	STA 42+68.13	STA 44+23.85

DRAINAGE STRUCTURE TABLE

STRUCTURE	STATION	OFFSET		RIM EL.	STRUCTURE TYPE	FRAME	GRATE
SD MH 1A	42+71.13	22.00'	LT	2333.33'	FLAT TOPPED DRYWELL	TYPE 4	TYPE 4
SD MH 1B	43+24.67	22.00'	LT	2333.33'	FLAT TOPPED DRYWELL	TYPE 4	TYPE 4
SD MH 1C	43+49.27	22.00'	LT	2333.33'	FLAT TOPPED DRYWELL	TYPE 4	TYPE 4
SD MH 1D	43+77.14	22.00'	LT	2333.33'	FLAT TOPPED DRYWELL	TYPE 4	TYPE 4
SD MH 1E	43+99.89	22.00'	LT	2333.33'	FLAT TOPPED DRYWELL	TYPE 4	TYPE 4
SD MH 1F	44+53.14	22.00'	LT	2333.33'	FLAT TOPPED DRYWELL	TYPE 4	TYPE 4
SD MH 2A	42+88.01	22.00'	RT	2333.33'	FLAT TOPPED DRYWELL	TYPE 4	TYPE 4
SD MH 2B	43+26.71	22.00'	RT	2333.33'	FLAT TOPPED DRYWELL	TYPE 4	TYPE 4
SD MH 2C	43+65.41	22.00'	RT	2333.33'	FLAT TOPPED DRYWELL	TYPE 4	TYPE 4

NOTE: SEE DETAIL 3, SHEET 7

Randy L. Stahl for John Raby 12/6/06
DEVELOPER'S APPROVAL DATE

MATTHEW RAYMOND FORTE — STATE OF WASHINGTON — 38304 — REGISTERED PROFESSIONAL ENGINEER — 1/23/06 — EXPIRES 7-05-06

2/9

CALL BEFORE YOU DIG: 1–800–456–8000

BY	REVISIONS	DATE	PROJ.	FROM	AS BUILT	TO	ACCEPT
	10/11/06 RECORD DRAWING by ALLWEST TESTING AND ENGINEERING						

BENCH MARK DATUM	SCALE	DATE	STAFF
TBM	HORIZONTAL 50'	08/06	DRAWN KMH/ARP
ELEVATION 2385.00' (NAVD 88)	VERTICAL 10'		CHECKED RLL
LOCATION USC&GS BENCHMARK "TANGENT 2" LOCATED AT THE INTERSECTION OF GEIGER BOULEVARD AND THORPE ROAD			APPROVED

ADAMS & CLARK, Inc.
ac@adamsandclark.com
1720 W. Fourth Ave.
Spokane, WA 99204
(509) 747-4800 F(509) 747-8913

WEST MEADOWS
STREET PLAN & PROFILE
CARNATION ROAD – STA 42+14.59 TO 52+80.00
SPOKANE, WASHINGTON

TYPE OF IMPROVEMENT: STREET

PROJECT NUMBER	PLAN NUMBER
2004–01–052	

P-1943 Eng As Built

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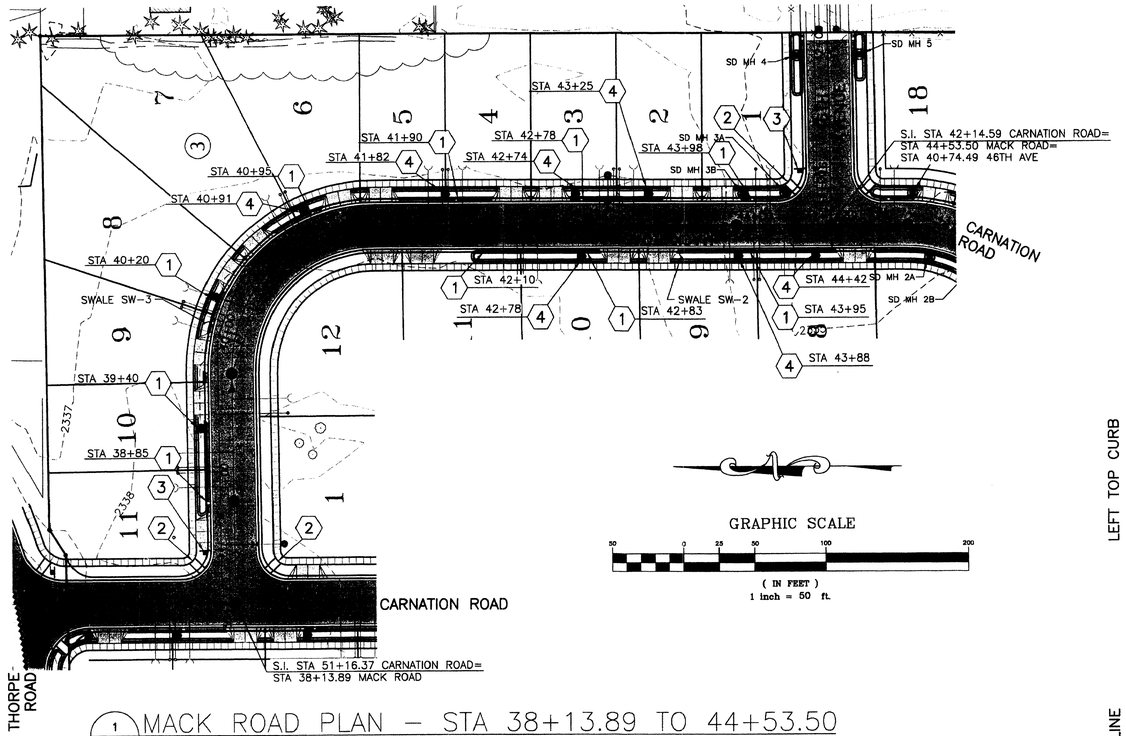
RECORD DRAWING



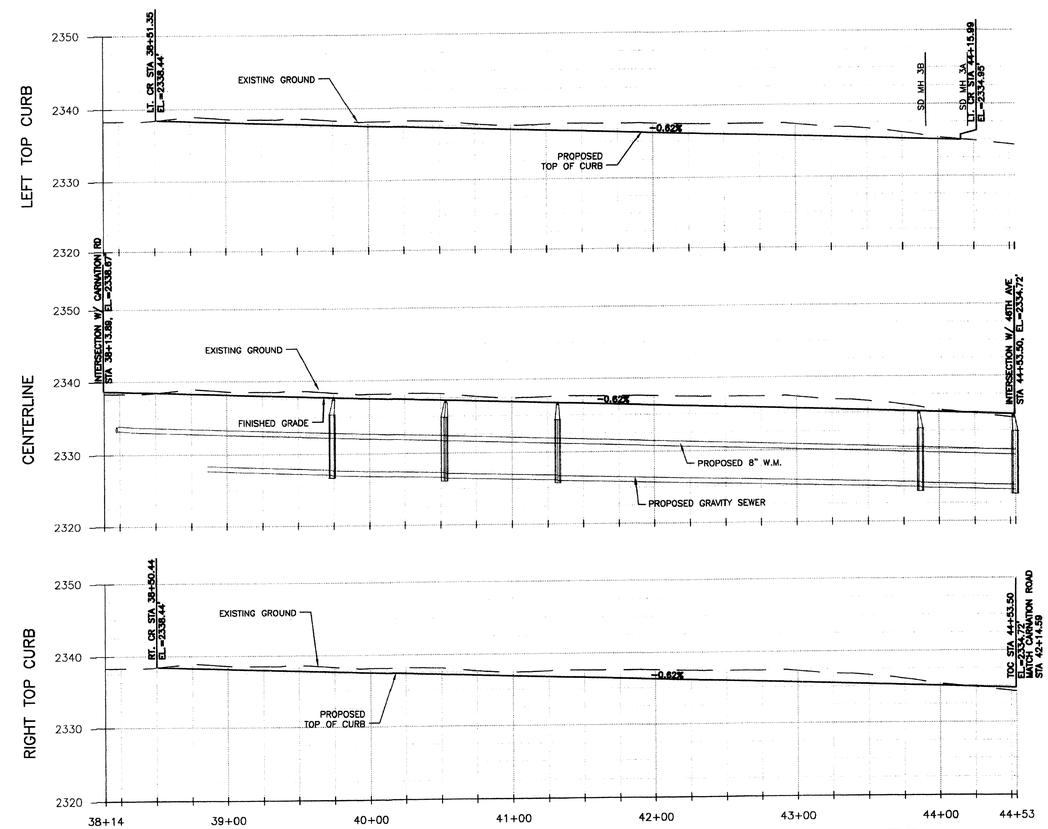
1/3 MACK ROAD PLAN – STA 38+13.89 TO 44+53.50

SCALE: 1"=50'

PAUL T. NELSON
STATE OF WASHINGTON
37228
REGISTERED
PROFESSIONAL ENGINEER
10-13-06

EXPIRES 11/24/07

I HAVE REVIEWED THE CONSTRUCTION AND TO MY KNOWLEDGE FIND IT TO BE IN SUBSTANTIAL CONFORMANCE WITH THE APPROVED CERTIFIED PLANS AND STANDARD SPECIFICATIONS EXCEPT AS NOTED.



2/3 MACK ROAD PROFILE – STA 38+13.89 TO STA 44+53.50

SCALE: H: 1"=50'
V: 1"=10'

CONSTRUCTION KEYED NOTES

ITEM No.	DESCRIPTION
1	CURB INLET TYPE 1 PER SPOKANE COUNTY DETAIL B-8, DETAIL 4, SHEET 7.
2	STANDARD CURB RAMP PER SPOKANE COUNTY DETAIL A-5
3	STREET SIGN PER SPOKANE COUNTY DETAIL A-16
4	SWALE BERM PER DETAIL 6, SHEET 7.

SWALE DATA

SWALE ID	BOTTOM AREA REQ (S.F.)	BOTTOM ELEV	MIN. TOP OF BERM ELEV.	STA
SW-2	5770	TOC-1'	TOC	CARNATION STA 49+96.00 TO MACK STA 42+00.85
SW-3	3480	TOC-1'	TOC	MACK STA 38+77.00 TO MACK STA 44+25.07

NOTE: SWALES SHALL BE CONSTRUCTED PER DETAILS 5 & 7, SHEET 7.

DRAINAGE STRUCTURE TABLE

STRUCTURE	STATION	OFFSET	RIM EL.	STRUCTURE TYPE	FRAME	GRATE
SD MH 3A	44+21.06	22.88' LT	2333.84	SPOKANE CNTY DRYWELL TYPE A	TYPE 4	TYPE 4
SD MH 3B	43+91.59	22.00' LT	2333.84	SPOKANE CNTY DRYWELL TYPE A	TYPE 4	TYPE 4

NOTE: SEE DETAIL 5, SHEET 7

LINE TABLE

LINE	LENGTH	BEARING
L4	159.80'	S89° 59' 32"E
L5	321.37'	S0° 47' 11"W

CURVE TABLE

CURVE	RADIUS	LENGTH	DELTA	TANGENT	PC	PT
C1	100.00'	158.44'	90°46'43"	101.37'	STA 39+73.69	STA 41+32.13

DRIVEWAY/6" THICKENED SIDEWALK SCHEDULE

STA-CENTER OF DRIVEWAY	WIDTH
38+65.34 LT	16'
39+05.14 LT	16'
39+85.71 LT	16'
40+33.91 LT*	16'
40+57.97 LT*	16'
41+12.17 LT*	16'
41+36.78 LT*	16'
41+38.01 RT	16'
41+66.06 RT	16'
42+28.65 LT*	16'
42+56.81 LT*	16'
43+04.04 RT*	16'
43+31.91 RT*	16'
43+48.73 LT*	16'
43+76.65 LT*	16'

NOTES:

-SIDEWALK SHALL BE CONSTRUCTED WITH A 6" CONCRETE SECTION THROUGH DRIVEWAY LOCATIONS

-DRIVEWAYS SHALL BE CONSTRUCTED BY PROPERTY OWNERS

*DRIVEWAYS TO BE INSTALLED WITH 6" D.I. CULVERT, SEE DETAIL 8, SHEET 6 FOR SECTION

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT
ORIGINAL
"AS-BUILTS"
CERTIFIED RECORD DRAWINGS
PROJECT #: P 1943
DATE ACCEPTED: 12/7/06

Randy L. Walkoff for John Roby 1/23/06
DEVELOPER'S APPROVAL DATE

MATTHEW RAYMOND POLTA
STATE OF WASHINGTON
REGISTERED
PROFESSIONAL ENGINEER
1/23/06
EXPIRES 7-05-06

3/9

CALL BEFORE YOU DIG: 1-800-456-8000

BY	REVISIONS	DATE	PROJ.	FROM	AS BUILT	TO	ACCEPT
	12/11/06 RECORD DRAWING by ALLWEST TESTING AND ENGINEERING						

BENCH MARK DATUM	SCALE	DATE	STAFF
IBM	HORIZONTAL 50'	08/06	DRAWN KMH/ARP
ELEVATION 2385.00' (NAVD 88)	VERTICAL 10'		CHECKED RLL
LOCATION USC&GS BENCHMARK "TANGENT 2" LOCATED AT THE INTERSECTION OF GEIGER BOULEVARD AND THORPE ROAD			APPROVED

ADAMS & CLARK, Inc.
ac@adamsandclark.com
1720 W. Fourth Ave.
Spokane, WA 99204
(509) 747-4600 F(509) 747-8913

WEST MEADOWS
STREET PLAN & PROFILE
MACK ROAD – STA 38+13.89 TO 44+53.50
SPOKANE, WASHINGTON

TYPE OF IMPROVEMENT: STREET	
PROJECT NUMBER	PLAN NUMBER
2004-01-052	

P-1943 Eng As Builts

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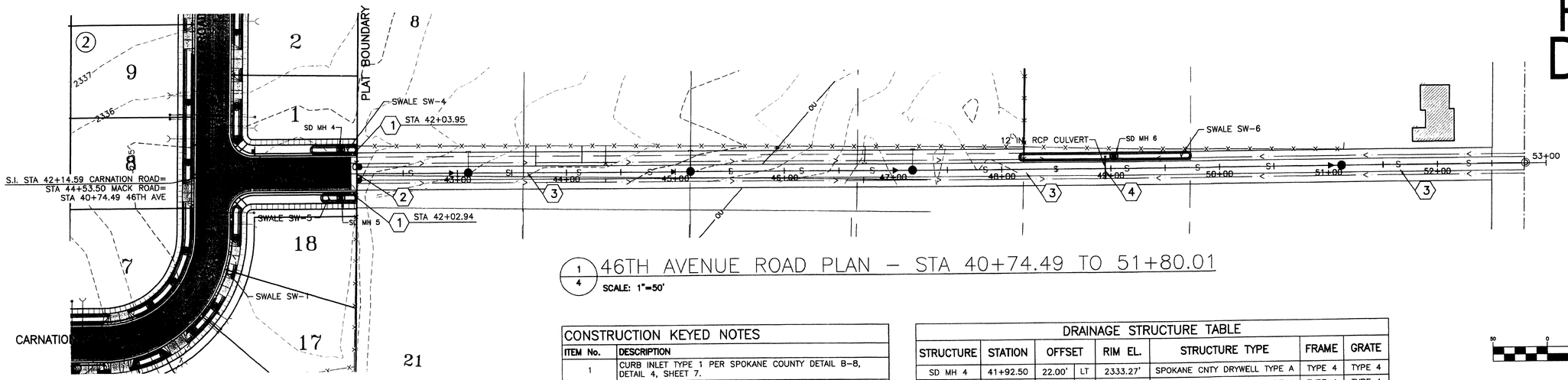
RECORD DRAWING



1/4 46TH AVENUE ROAD PLAN – STA 40+74.49 TO 51+80.01

SCALE: 1"=50'

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

CONSTRUCTION KEYED NOTES	
ITEM No.	DESCRIPTION
1	CURB INLET TYPE 1 PER SPOKANE COUNTY DETAIL B-8, DETAIL 4, SHEET 7.
2	INSTALL BARRICADE PER DETAIL 1 SHEET 7
3	CONSTRUCT 12' WIDE GRAVEL ACCESS ROAD. SEE DETAIL 7, SHEET 6.
4	12" RCP PIPE, I.E. TO MATCH CULVERT PROFILE SECTION, SEE DETAIL 4, THIS SHEET

LINE TABLE		
LINE	LENGTH	BEARING
L6	133.01'	S89° 59' 32"E

DRAINAGE STRUCTURE TABLE							
STRUCTURE	STATION	OFFSET		RIM EL.	STRUCTURE TYPE	FRAME	GRATE
SD MH 4	41+92.50	22.00'	LT	2333.27'	SPOKANE CNTY DRYWELL TYPE A	TYPE 4	TYPE 4
SD MH 5	41+92.50	22.00'	RT	2333.27'	SPOKANE CNTY DRYWELL TYPE A	TYPE 4	TYPE 4
SD MH 6	49+03.00	11.21'	LT	2323.90'	SPOKANE CNTY DRYWELL TYPE A	TYPE 4	TYPE 4

NOTE: SEE DETAIL 5, SHEET 7

SWALE DATA				
SWALE ID	BOTTOM AREA REQ (S.F.)	BOTTOM ELEV	MIN. TOP OF BERM ELEV.	STA
SW-4	240	TOC-1'	TOC	46th STA 41+64.81 TO 46th STA 42+07.50
SW-5	180	TOC-1'	TOC	46th STA 41+74.19 TO 46th STA 42+07.50
SW-6	480	EOP-1'	EOP	46th STA 48+15.98 TO 46th STA 49+73.94

NOTE: SWALES SHALL BE CONSTRUCTED PER DETAILS 5 & 7, SHEET 7. POND BOTTOM SHALL BE INTO FREE DRAINAING SOILS, OVEREXCAVATION SHALL BE DONE TO ACHEIVE THIS IF NECCESSARY.

PAUL T. NELSON
STATE OF WASHINGTON
37228
REGISTERED
PROFESSIONAL ENGINEER
10-13-06

EXPIRES 11/24/07

I HAVE REVIEWED THE CONSTRUCTION AND TO MY KNOWLEDGE FIND IT TO BE IN SUBSTANTIAL CONFORMANCE WITH THE APPROVED CERTIFIED PLANS AND STANDARD SPECIFICATIONS EXCEPT AS NOTED.

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT
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CERTIFIED RECORD DRAWINGS
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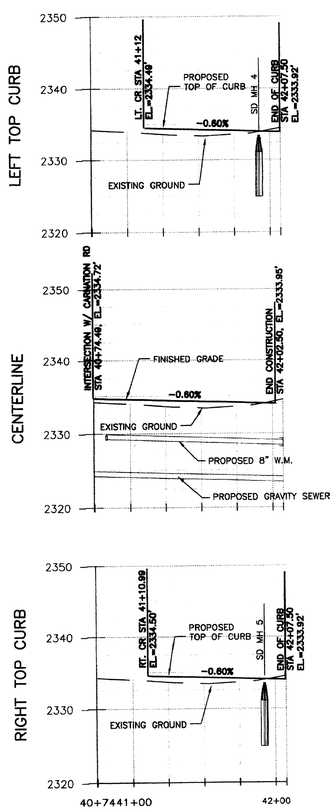
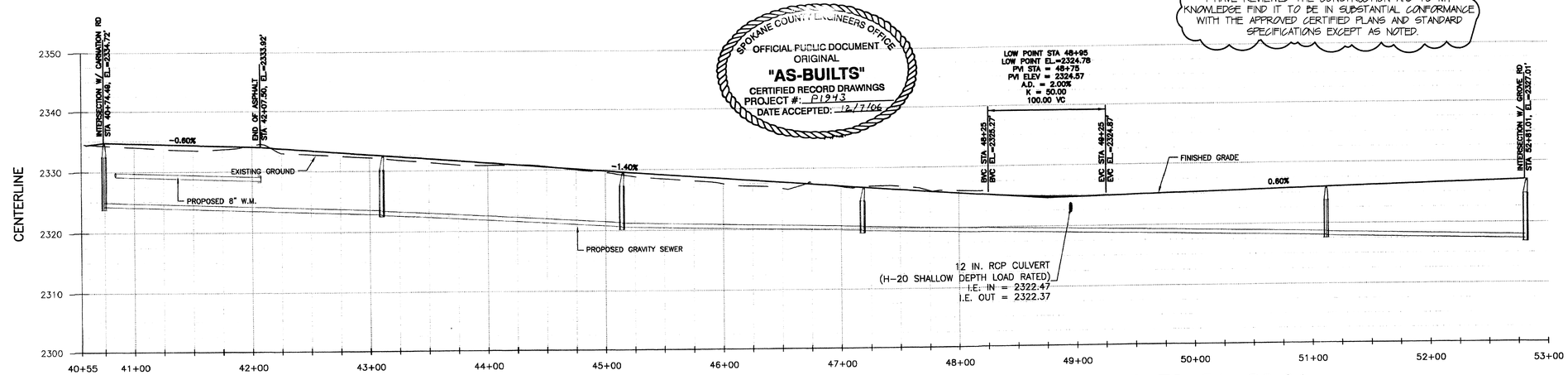
DATE ACCEPTED: 12/7/06



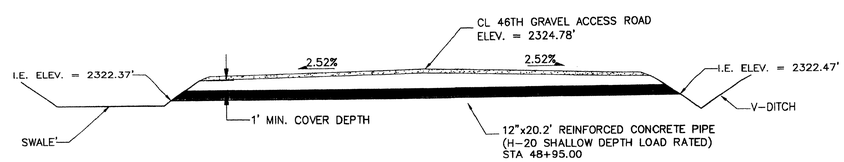
2/4 46TH AVENUE PROFILE – STA 40+74.49 TO STA 42+07.50

SCALE: H: 1"=50'
V: 1"=10'



3/4 46TH GRAVEL ACCESS ROAD PROFILE – STA 42+07.50 TO 51+80.01

SCALE: H: 1"=50'
V: 1"=10'



4/4 CULVERT PROFILE – 46TH AVE

SCALE: NOT TO SCALE

MATTHEW RAYMOND FOLTZ
STATE OF WASHINGTON
37228
REGISTERED
PROFESSIONAL ENGINEER
1/23/06

EXPIRES 7-05-06

4/9

Randy R Rabiaff for John Raby 1/23/06
DEVELOPER'S APPROVAL DATE

CALL BEFORE YOU DIG:1-800-456-8000

BY	REVISIONS	DATE	PROJ.	FROM	AS BUILT	TO	ACCEPT
					10/11/06 RECORD DRAWING by ALLWEST TESTING AND ENGINEERING		

BENCH MARK DATUM	SCALE	DATE	STAFF
TBM	HORIZONTAL 50'	08/06	DRAWN KMH/ARP
ELEVATION 2385.00' (NAVD 88)	VERTICAL 10'		CHECKED RLL
LOCATION USC&GS BENCHMARK "TANGENT 2" LOCATED AT THE INTERSECTION OF GEIGER BOULEVARD AND THORPE ROAD.			APPROVED

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ac@adamsandclark.com
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WEST MEADOWS
STREET PLAN & PROFILE
46TH AVENUE – STA 40+74.49 TO 51+80.01
SPOKANE, WASHINGTON

TYPE OF IMPROVEMENT: STREET	
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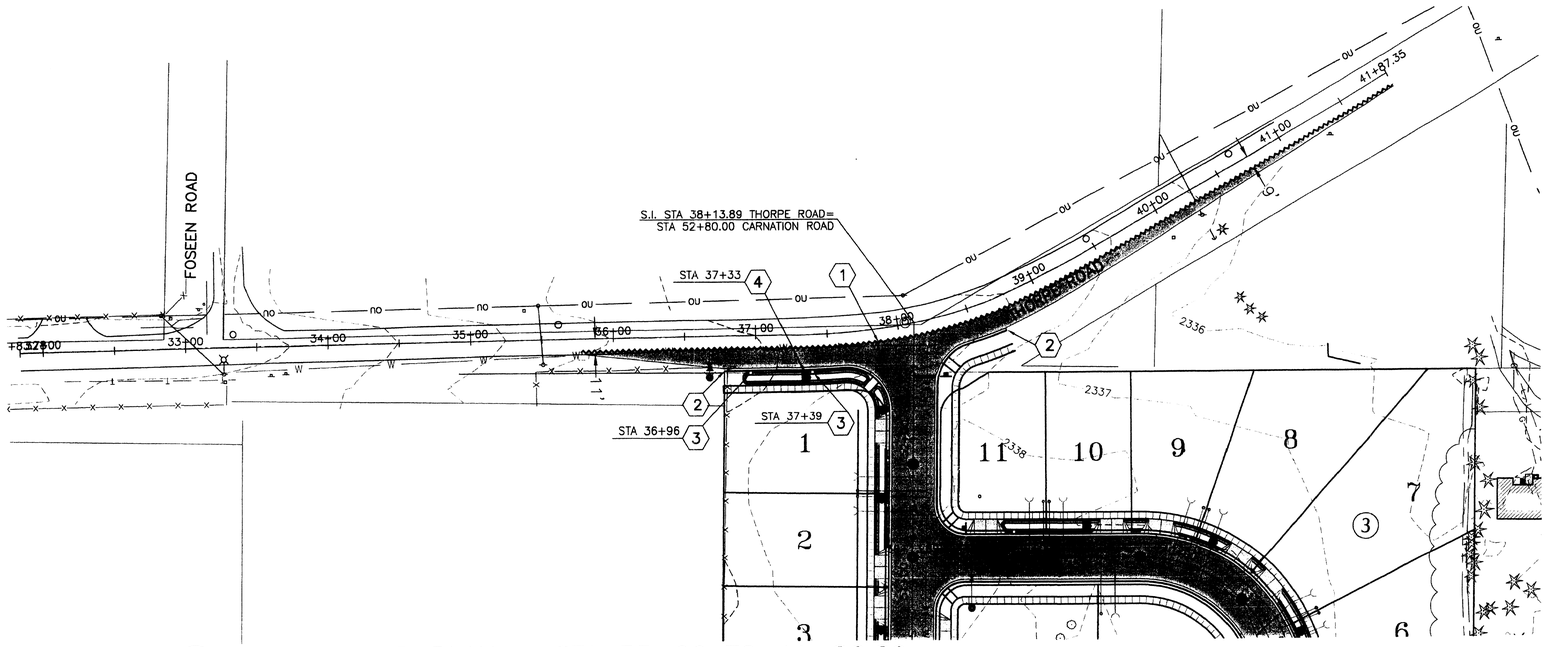
2004-01-052	

P-1943 Eng As Built

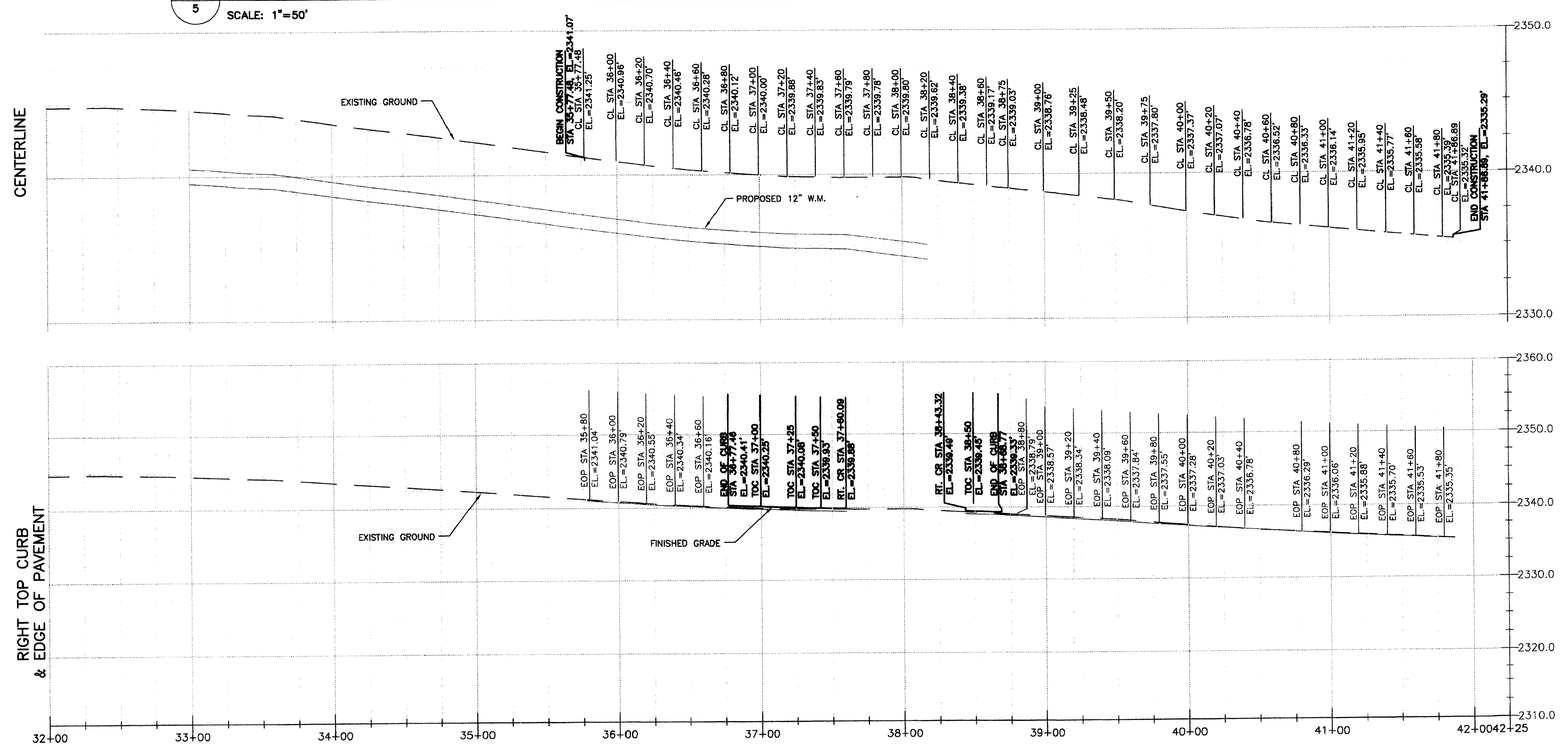
L:\2004-1052\dwg\CEO\1052a_ROAD.dwg\Dwg 09/05/05

RECORD DRAWING



1/5 THORPE ROAD PLAN – STA 33+00 TO 41+86.89

SCALE: 1"=50'



2/5 THORPE ROAD PROFILE – STA 33+00 TO 41+86.89

SCALE: H: 1"=50'
V: 1"=5'

GRAPHIC SCALE

(IN FEET)
1 inch = 50 ft.

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT
ORIGINAL
"AS-BUILTS"
CERTIFIED RECORD DRAWINGS
PROJECT #: P1943
DATE ACCEPTED: 12/7/06

CONSTRUCTION KEYED NOTES

ITEM No.	DESCRIPTION
1	SAWCUT EXISTING ASPHALT
2	NOSE CURB DOWN. SEE DETAIL 2, SHEET 7.
3	CURB INLET TYPE 1 PER SPOKANE COUNTY DETAIL B-8, DETAIL 4, SHEET 7.
4	SWALE BERM PER DETAIL 5, SHEET 7.

PAUL T. NELSON
STATE OF WASHINGTON
37228
REGISTERED PROFESSIONAL ENGINEER
10-13-06
EXPIRES 11/24/07

I HAVE REVIEWED THE CONSTRUCTION AND TO MY KNOWLEDGE FIND IT TO BE IN SUBSTANTIAL CONFORMANCE WITH THE APPROVED CERTIFIED PLANS AND STANDARD SPECIFICATIONS EXCEPT AS NOTED.

Randy L. LeBeff for John Roley 1/23/06
DEVELOPER'S APPROVAL DATE

MATTHEW RAYMOND FOLKWARD
STATE OF WASHINGTON
37671
REGISTERED PROFESSIONAL ENGINEER
1/23/06
EXPIRES 7-05-06

5/9

CALL BEFORE YOU DIG:1-800-456-8000

BY	REVISIONS	DATE	PROJ.	FROM	AS BUILT	TO	ACCEPT

10/11/06 RECORD DRAWING by ALLWEST TESTING AND ENGINEERING

BENCH MARK DATUM	SCALE	DATE	STAFF
TBM	HORIZONTAL 50'	01/06	DRAWN KMH/ARP
ELEVATION 2385.00' (NAVD 88)	VERTICAL 10'		CHECKED RLL
LOCATION USC&GS BENCHMARK "TANGENT 2" LOCATED AT THE INTERSECTION OF GEIGER BOULEVARD AND THORPE ROAD.			APPROVED

ADAMS & CLARK, Inc.
ac@adamsandclark.com
1720 W. Fourth Ave.
Spokane, WA 99204
(509) 747-4600 F(509) 747-8913

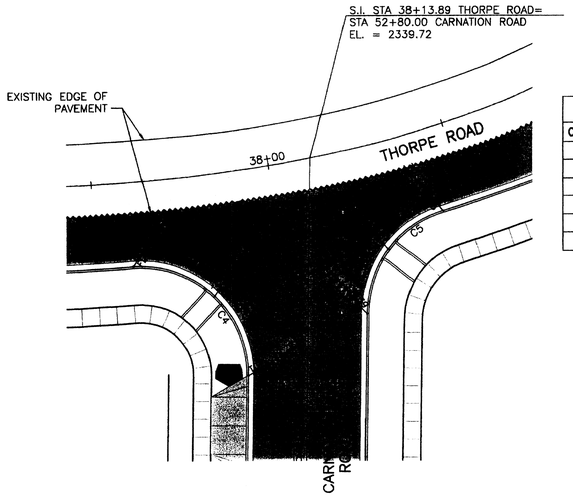
WEST MEADOWS
STREET WIDENING PLAN & PROFILE
THORPE ROAD – STA 33+00 TO 41+86.89
SPOKANE, WASHINGTON

TYPE OF IMPROVEMENT: STREET	
PROJECT NUMBER	PLAN NUMBER
2004-01-052	

P1943 Eng As Built

L:\206-022 West Meadows\asbuilt street 5.dwg, Layout1, 10/12/2006 11:28:29 AM, 1:1

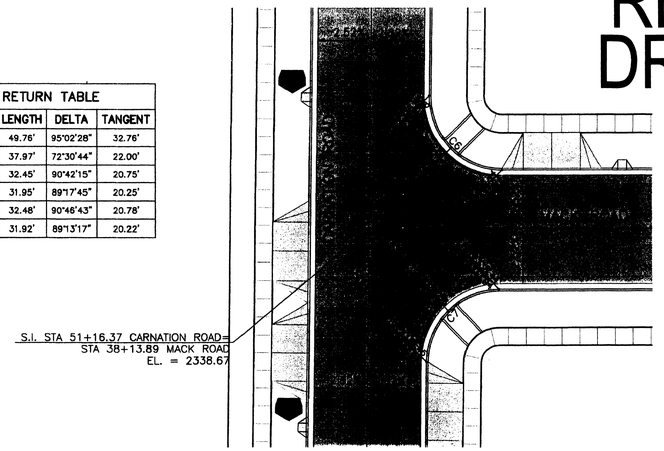
RECORD DRAWING



CURB RETURN TABLE				
CURVE	RADIUS	LENGTH	DELTA	TANGENT
C4	30.00'	49.76'	95°02'28"	32.76'
C5	30.00'	37.97'	72°30'44"	22.00'
C6	20.50'	32.45'	90°42'15"	20.75'
C7	20.50'	31.95'	89°17'45"	20.25'
C8	20.50'	32.48'	90°46'43"	20.78'
C9	20.50'	31.92'	89°13'17"	20.22'

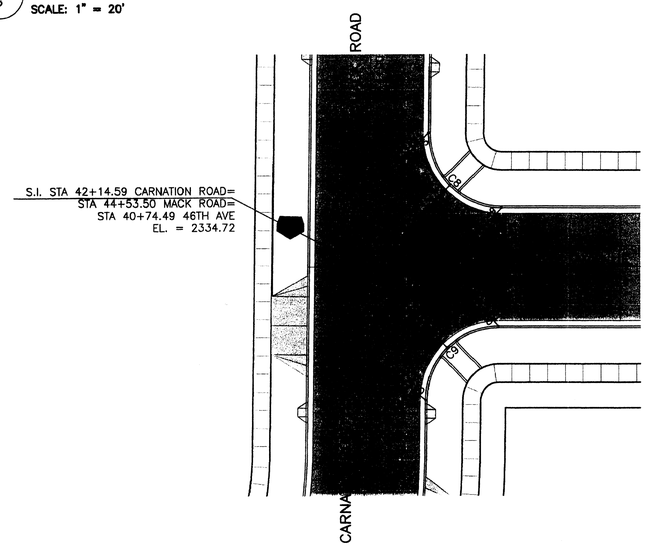
1/6 THORPE ROAD & CARNATION ROAD

SCALE: 1" = 20'



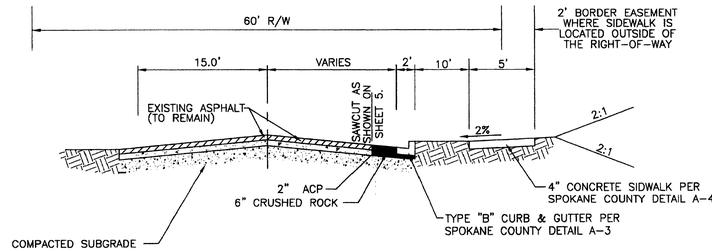
2/6 CARNATION ROAD & MACK ROAD

SCALE: 1' = 20'



3/6 CARNATION ROAD, MACK ROAD & 46TH AVENUE

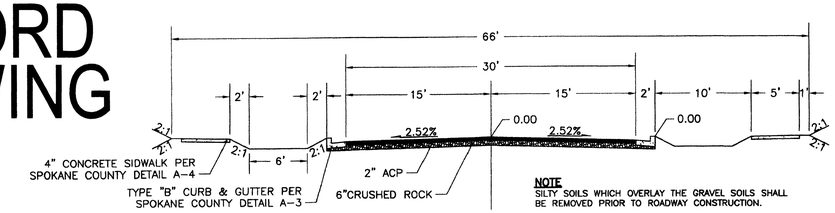
SCALE: 1" = 20'



6/6 THORPE ROAD-TYPICAL STREET SECTION

SCALE: NOT TO SCALE

NOTE
SILTY SOILS WHICH OVERLAY THE GRAVEL SOILS SHALL BE REMOVED PRIOR TO ROADWAY CONSTRUCTION.



NOTE
SILTY SOILS WHICH OVERLAY THE GRAVEL SOILS SHALL BE REMOVED PRIOR TO ROADWAY CONSTRUCTION.

4/6 ROADWAY SECTION WITH SWALE

SCALE: N.T.S.

LEFT:
CARNATION ROAD
STA 42+42.85 TO 52+80.00

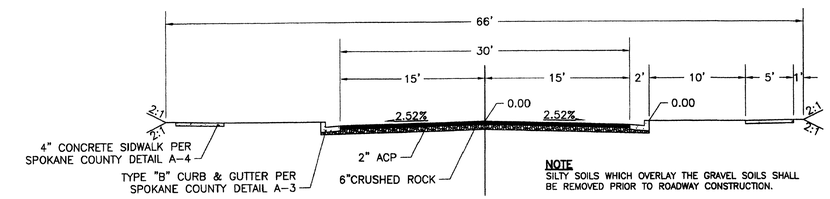
MACK ROAD
STA 38+76.42 TO 44+25.07

46TH AVE
STA 41+64.81 TO 42+07.50

RIGHT:
CARNATION ROAD
STA 42+14.59 TO 45+95.58

MACK ROAD
STA 42+00.73 TO 44+53.50

46TH AVE
STA 41+74.19 TO 42+07.50



NOTE
SILTY SOILS WHICH OVERLAY THE GRAVEL SOILS SHALL BE REMOVED PRIOR TO ROADWAY CONSTRUCTION.

5/6 ROADWAY SECTION WITH LANSCAPE STRIP

SCALE: N.T.S.

LEFT:
CARNATION ROAD
STA 42+14.59 TO 42+42.85

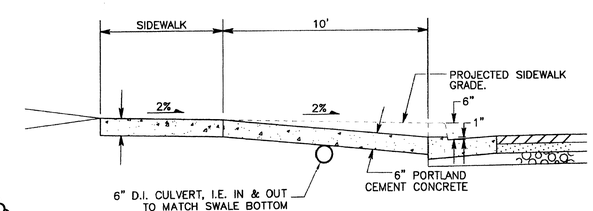
MACK ROAD
STA 38+13.89 TO 38+76.42
STA 44+25.07 TO 44+53.50

46TH AVE
STA 40+74.49 TO 41+64.81

RIGHT:
CARNATION ROAD
STA 45+95.58 TO 52+80.00

MACK ROAD
STA 38+13.89 TO 42+00.73

46TH AVE
STA 40+74.49 TO 41+74.19

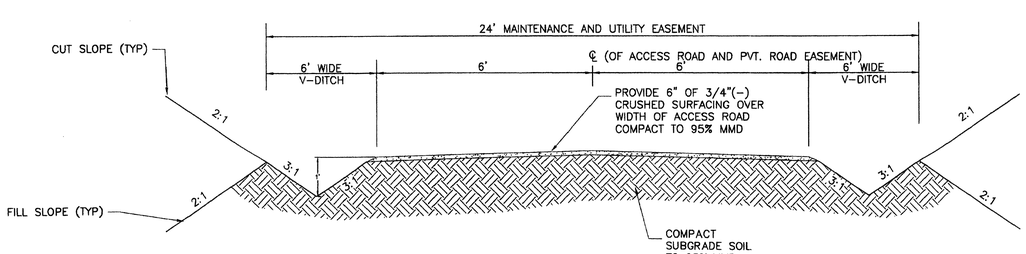


8/6 DRIVEWAY APPROACH SECTION

SCALE: N.T.S.

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT
ORIGINAL
"AS-BUILTS"
CERTIFIED RECORD DRAWINGS
PROJECT #: P1943
DATE ACCEPTED: 12/7/06

PAUL T. NELSON
STATE OF WASHINGTON
37228
REGISTERED PROFESSIONAL ENGINEER
10-13-06
EXPIRES 11/24/07



7/6 46TH GRAVEL ACCESS ROAD-TYPICAL STREET SECTION

SCALE: NOT TO SCALE
STA 42+07.50 TO 51+80.01

I HAVE REVIEWED THE CONSTRUCTION AND TO MY KNOWLEDGE FIND IT TO BE IN SUBSTANTIAL CONFORMANCE WITH THE APPROVED CERTIFIED PLANS AND STANDARD SPECIFICATIONS EXCEPT AS NOTED.

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

Randy R Galloway for John Raley 1/23/06
DEVELOPER'S APPROVAL DATE

MATTHEW RAYMOND POTTER
STATE OF WASHINGTON
REGISTERED PROFESSIONAL ENGINEER
1/23/06
EXPIRES 7-05-06

6/9

CALL BEFORE YOU DIG: 1-800-456-8000

BY	REVISIONS	DATE	PROJ.	FROM	AS BUILT	TO	ACCEPT
					10/11/06 RECORD DRAWING by ALLWEST TESTING AND ENGINEERING		

BENCH MARK DATUM	SCALE	DATE	STAFF
TBM	HORIZONTAL 20'	01/06	DRAWN KMH/ARP
ELEVATION 2385.00' (NAVD 88)	VERTICAL 10'		CHECKED RLL
LOCATION USC&GS BENCHMARK "TANGENT 2" LOCATED AT THE INTERSECTION OF GEIGER BOULEVARD AND THORPE ROAD.			APPROVED

ADAMS & CLARK, Inc.
ac@adamsandclark.com
1720 W. Fourth Ave.
Spokane, WA 99204
(509) 747-4600 F(509) 747-8913

WEST MEADOWS
INTERSECTION DETAILS
STREET SECTIONS
SPOKANE, WASHINGTON

TYPE OF IMPROVEMENT: STREET	
PROJECT NUMBER	PLAN NUMBER
2004-01-052	

P-1943 Eng As Built

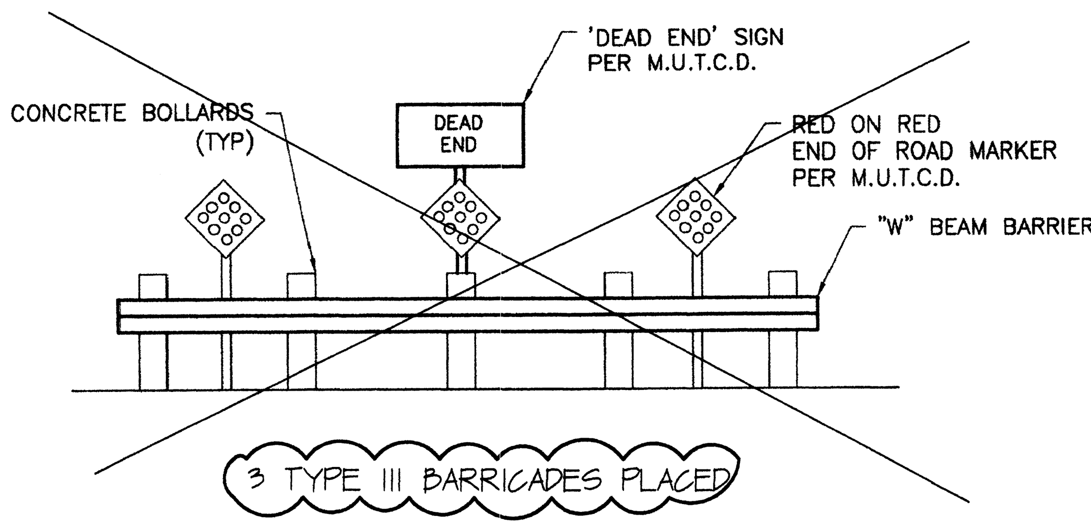
L:\206-022 West Meadows\asbuilt street 6.dwg, Layout1, 10/12/2006 11:28:39 AM, 1:1

A:\206-022\206-022.dwg, LC20, LC22, LC23, SEWER.DWG 06/20/05

RECORD DRAWING

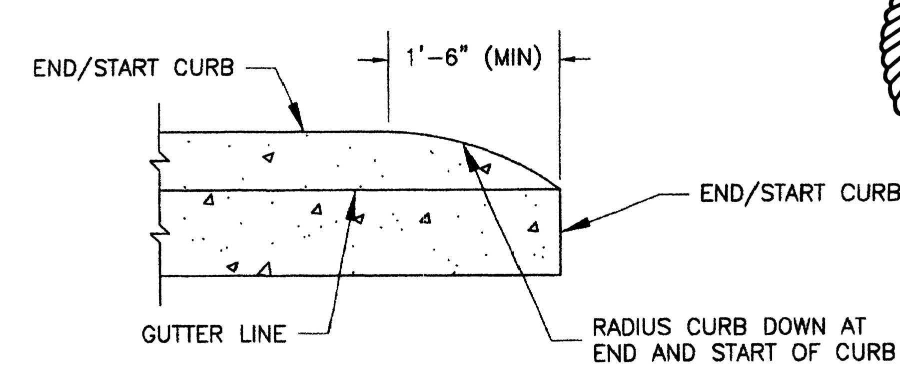
GENERAL CONSTRUCTION NOTES:

1. ALL WORK AND MATERIALS SHALL BE IN CONFORMANCE WITH THE CURRENT EDITION OF THE "SPOKANE COUNTY STANDARDS FOR ROAD AND SEWER CONSTRUCTION", AND AS AMENDED.
2. LOCATIONS OF EXISTING UTILITIES SHOWN IN PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES. ANY CONFLICTING UTILITIES SHALL BE RELOCATED PRIOR TO CONSTRUCTION OF ROAD AND DRAINAGE FACILITIES.
3. THE CONTRACTOR IS REQUIRED TO HAVE A COMPLETE SET OF THE APPROVED ROAD AND DRAINAGE PLANS ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS.
4. IF THE CONTRACTOR DISCOVERS ANY DISCREPANCIES BETWEEN THE PLANS AND EXISTING CONDITIONS ENCOUNTERED, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE DESIGN ENGINEER AND THE SPOKANE COUNTY ENGINEER'S OFFICE.
5. FOR CONSTRUCTION OF DRYWELLS, INSTALL FILTER FABRIC (AMOCO 4545 OR APPROVED EQUIVALENT) BETWEEN THE WASHED DRAINROCK AND THE NATIVE SOILS.
6. PRIOR TO SITE CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR LOCATING UNDERGROUND UTILITIES. CALL THE UNDERGROUND UTILITY LOCATION SERVICE AT (509) 456-8000 BEFORE YOU DIG.
7. FOR ANY CURB GRADES LESS THAN 0.8% (0.0080 FT/FT), A WASHINGTON STATE-LICENSED PROFESSIONAL LAND SURVEYOR SHALL VERIFY THAT THE CURB FORMS ARE AT THE GRADES NOTED ON THE APPROVED PLANS, PRIOR TO PLACEMENT OF CURB MATERIAL. THE CONTRACTOR IS RESPONSIBLE FOR ARRANGING AND COORDINATING WORK WITH THE PROFESSIONAL LAND SURVEYOR.
8. THE CONTRACTOR SHALL EMPLOY A LICENSED SURVEYOR TO VERIFY THAT THE CROSS-GUTTER FORMS ARE AT THE CORRECT PLANE GRADE PRIOR TO CONCRETE PLACEMENT. THE CROSS-GUTTERS SHALL BE CONSTRUCTED PRIOR TO PAVING, AND THE PAVEMENT SHALL THEN MATCH THE EDGE OF CONCRETE GUTTER.
9. THE FLOOR OF A GRASSED PERCOLATION AREA (GPA) SWALE INCLUDES THE LEVEL PORTION OF THE FLOOR OF THE SWALE, AND THE SIDESLOPES OF THE SWALE UP TO THE GPA OVERFLOW ELEVATION OR TOP OF DRYWELL. THE SOIL LOCATED IN THE FLOOR OF THE GPA SWALE SHALL BE A MEDIUM TO WELL-DRAINING MATERIAL, WITH A MINIMUM INFILTRATION RATE OF 0.5 INCHES PER HOUR. THE ENGINEER SHALL PROVIDE A WRITTEN STATEMENT WHICH VERIFIES THAT ALL GPA SWALES CONFORM TO THIS REQUIREMENT. THIS WRITTEN STATEMENT SHALL BE SUBMITTED TO THE SPOKANE COUNTY ENGINEER'S OFFICE PRIOR TO INSTALLING FINISHED LANDSCAPING/SOD AND PRIOR TO FINAL ACCEPTANCE. THE SWALE FLOOR MATERIAL SHALL BE INSTALLED TO A NATIVE SOIL STRATUM WHICH ALSO MEETS OR EXCEEDS THIS MINIMUM PERCOLATION RATE OF 0.5 INCHES PER HOUR.
10. ALL CURB DATA IS TO BACK OF CURB, UNLESS SHOWN OTHERWISE.
11. REFER TO THE STREET & DRAINAGE PLANS FOR ALL DRAINAGE FEATURES.
12. SIGN/POST LOCATIONS SHALL BE FIELD LOCATED BY THE SPOKANE COUNTY PRIOR TO INSTALLATION. PRIOR TO INSTALLATION, THE CONTRACTOR SHALL CONTACT SPOKANE COUNTY SIGN AND MARKETING SUPERVISOR, AT LEAST TWO COUNTY WEEKDAY WORKING DAYS, TO ARRANGE FOR A CITY REPRESENTATIVE TO FIELD LOCATE SAID SIGN/POSTS.
13. THE CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS UNLESS OTHERWISE STATED ON THESE PLANS.



1/7 "W" BEAM BARRIER DETAIL

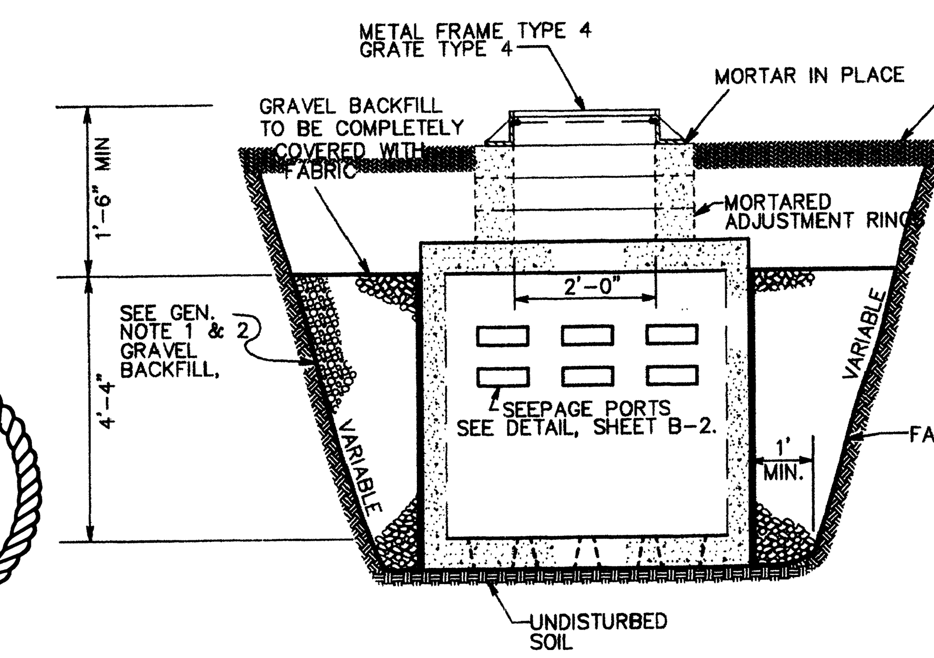
SCALE: N.T.S.



2/7 CURB NOSE PROFILE DETAIL

SCALE: N.T.S.

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT
ORIGINAL
"AS-BUILTS"
CERTIFIED RECORD DRAWINGS
PROJECT #: P 1943
DATE ACCEPTED: 12/7/06



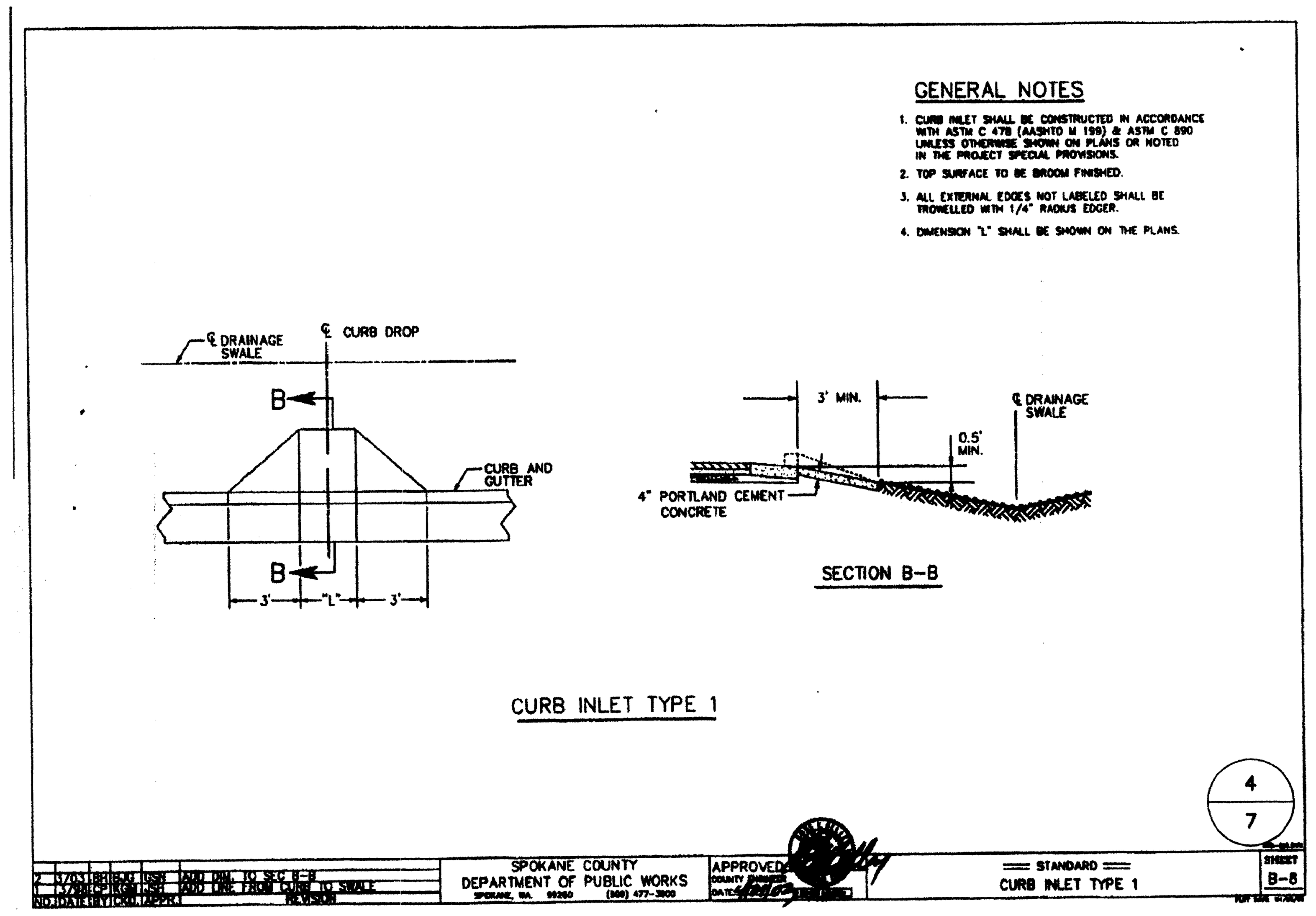
3/7 FLAT TOPPED DRYWELL

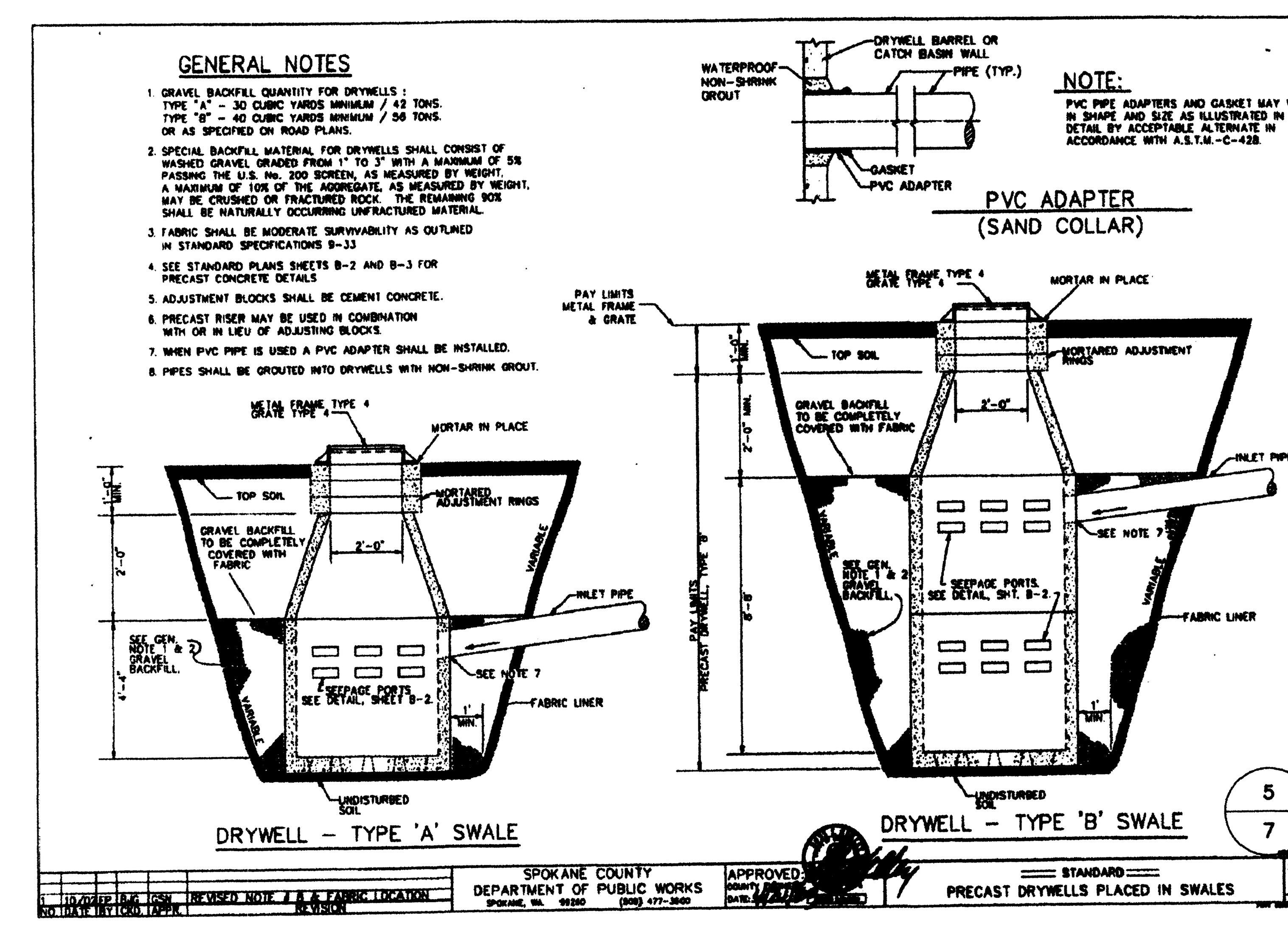
SCALE: N.T.S.

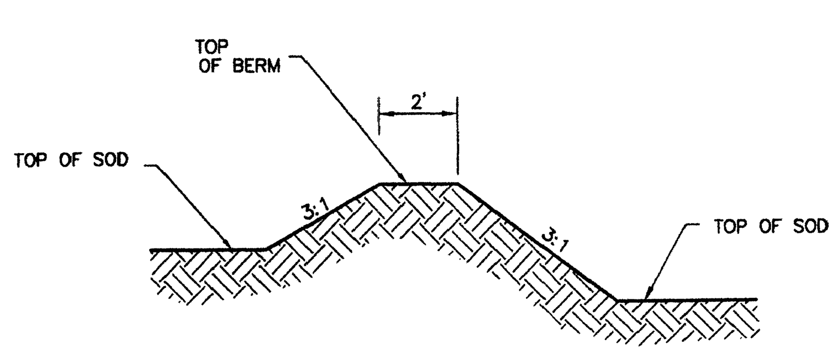
GENERAL NOTES

1. GRAVEL BACKFILL QUANTITY FOR DRYWELLS : TYPE "A" – 30 CUBIC YARDS MINIMUM / 42 TONS.
2. SPECIAL BACKFILL MATERIAL FOR DRYWELLS SHALL CONSIST OF WASHED GRAVEL GRADED FROM 1" TO 3" WITH A MAXIMUM OF 5% PASSING THE U.S. No. 200 SCREEN, AS MEASURED BY WEIGHT. A MAXIMUM OF 10% OF THE AGGREGATE, AS MEASURED BY WEIGHT, MAY BE CRUSHED OR FRACTURED ROCK. THE REMAINING 90% SHALL BE NATURALLY OCCURRING UNFRACTURED MATERIAL.
3. FABRIC SHALL BE MODERATE SURVIVABILITY AS OUTLINED IN STANDARD SPECIFICATIONS 9-33
4. SEE STANDARD PLANS SHEETS B-2 AND B-3 FOR PRECAST CONCRETE DETAILS.
5. ADJUSTMENT BLOCKS SHALL BE CEMENT CONCRETE.
6. PRECAST RISER MAY BE USED IN COMBINATION WITH OR IN LIEU OF ADJUSTING BLOCKS.

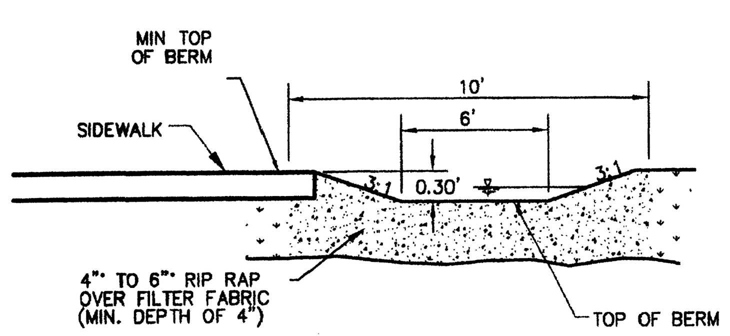
CURB INLET SCHEDULE	
STA	L
CARNATION	
42+55.00 RT	2'
42+55.00 LT	2'
43+36.97 RT	2'
43+36.97 LT	2'
44+58.00 LT	2'
44+73.00 RT	2'
45+66.00 RT	2'
45+55.00 LT	2'
46+35.00 RT	2'
46+40.00 LT	2'
47+81.00 RT	2'
47+40.00 LT	2'
47+95.00 LT	2'
48+78.79 RT	2'
49+91.44 RT	2'
49+32.00 LT	2'
50+61.00 LT	2'
51+53.00 LT	2'
51+85.00 LT	2'
MACK	
38+85.15 LT	2'
40+03.00 LT	2'
40+95.00 LT	2'
41+90.00 LT	2'
42+10.00 RT	2'
42+78.00 LT	2'
42+83.00 RT	2'
43+98.00 LT	2'
43+95.00 RT	2'
46TH	
42+02.94 RT	2'
42+03.59 LT	2'
THORPE	
36+96.00 RT	2'
37+39.00 RT	2'







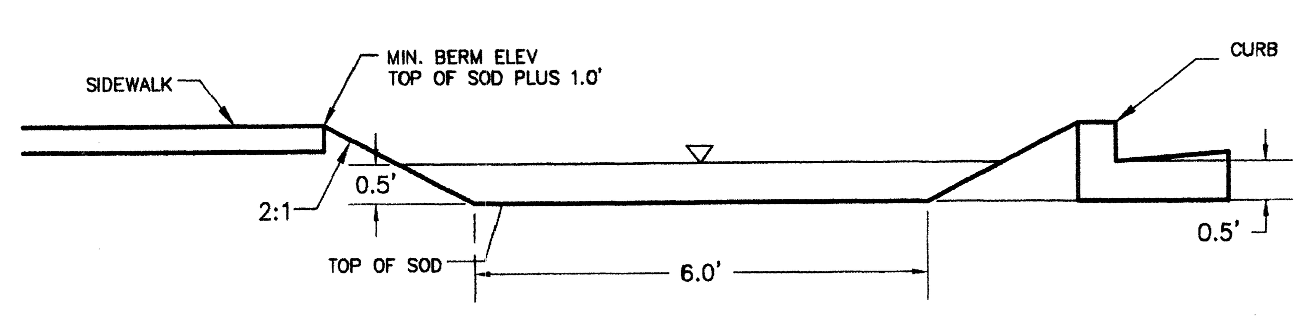
SWALE BERM SECTION



SWALE BERM ELEVATION

6/7 SWALE BERM DETAIL

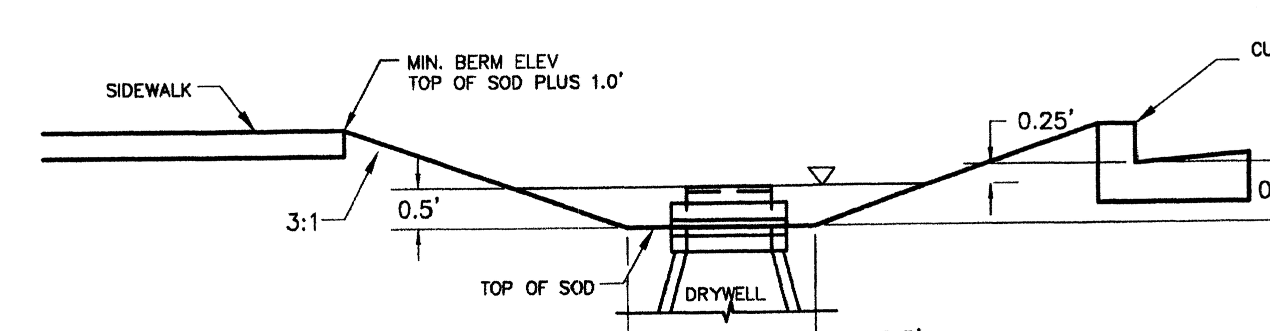
SCALE: N.T.S.



SWALE DETAIL #1

7/7 SWALE DETAIL

SCALE: N.T.S.



8/7 GRASSED PERCOLATION AREA DETAIL

SCALE: N.T.S.

PAUL T. NELSON STATE OF WASHINGTON 37228 REGISTERED PROFESSIONAL ENGINEER 10-13-06

EXPIRES 11/24/07

I HAVE REVIEWED THE CONSTRUCTION AND TO MY KNOWLEDGE FIND IT TO BE IN SUBSTANTIAL CONFORMANCE WITH THE APPROVED CERTIFIED PLANS AND STANDARD SPECIFICATIONS EXCEPT AS NOTED.

Randy L LaBuff for John Roley 1/23/06

DEVELOPER'S APPROVAL DATE

MATTHEW RAYMOND FOLEY STATE OF WASHINGTON 37871 REGISTERED PROFESSIONAL ENGINEER 1/23/06

EXPIRES 7-05-06

7/9

CALL BEFORE YOU DIG: 1-800-456-8000

BY	REVISIONS	DATE	PROJ.	FROM	AS BUILT	TO	ACCEPT

10/11/06 RECORD DRAWING by ALLWEST TESTING AND ENGINEERING

BENCH MARK DATUM	SCALE	DATE	STAFF
TBM	HORIZONTAL 50'	01/06	DRAWN KMH/ARP
ELEVATION 2385.00' (NAVD 88)	VERTICAL 10'		CHECKED RLL
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ADAMS & CLARK, Inc.
ac@adamsandclark.com
1720 W. Fourth Ave.
Spokane, WA 99204
(509) 747-4600 F(509) 747-8913

WEST MEADOWS
STREET & DRAINAGE
CONSTRUCTION DETAILS
SPOKANE, WASHINGTON

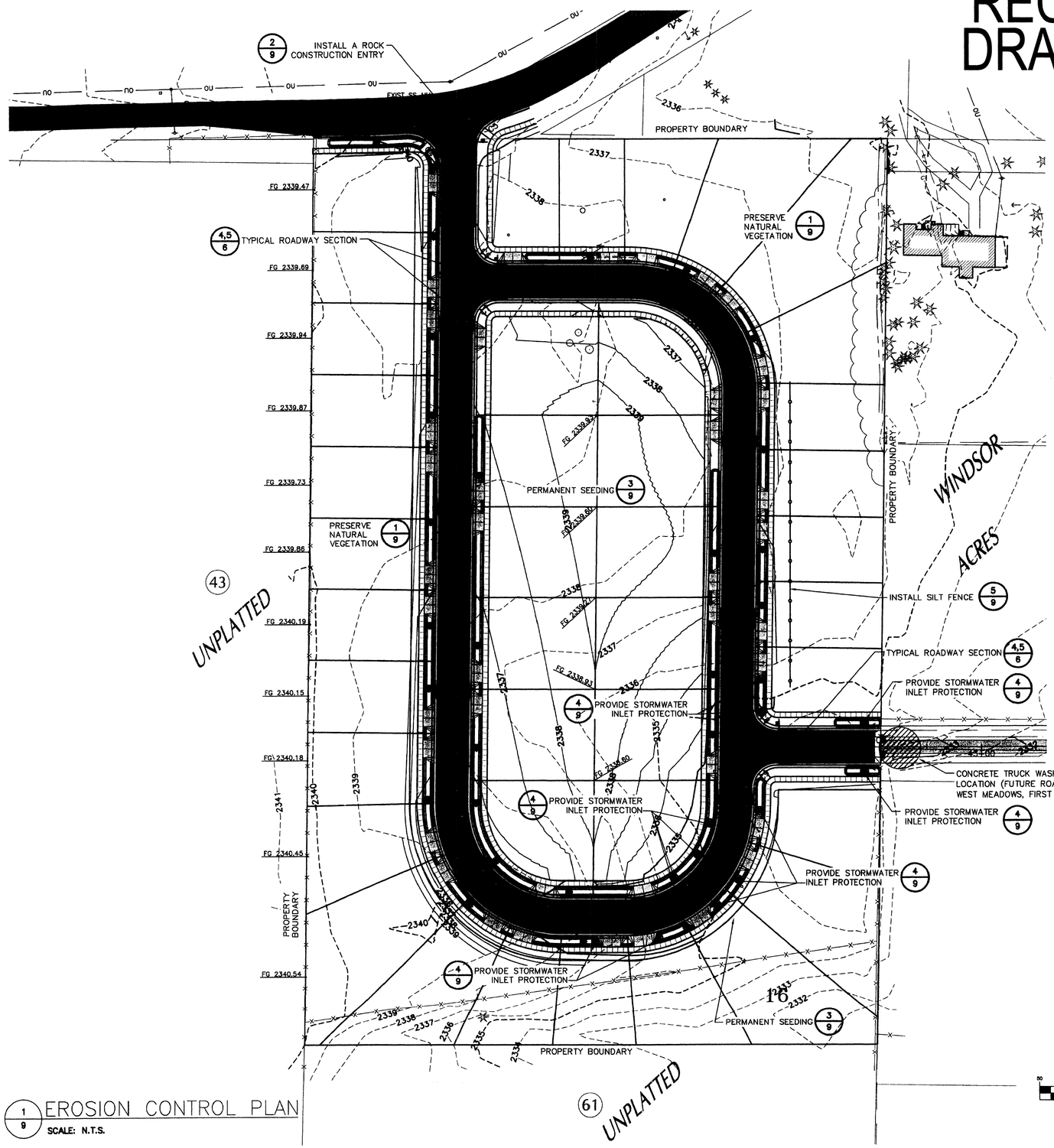
TYPE OF IMPROVEMENT: STREET	
PROJECT NUMBER	PLAN NUMBER
2004-01-052	

P-1943 Eng As Built

L:\206-022 West Meadows\asbuilt street 7.dwg, Layout1, 10/12/2006 11:28:49 AM, 1:1

\20041052\dwg\C3D\1052_ROAD.dwg.DWG 08/05/05

RECORD DRAWING

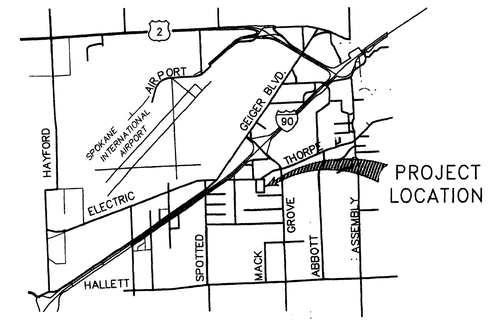


1/9 EROSION CONTROL PLAN
SCALE: N.T.S.

GRAPHIC SCALE
(IN FEET)
1 inch = 50 ft.

ESTIMATED EXCAVATION / EMBANKMENT QUANTITIES		
ROADWAY	EXCAVATION (CY)	EMBANKMENT (CY)
CARNATION ROAD	5,262	179
MACK ROAD	2,015	3
46TH AVENUE	58	89
THORPE WIDENING	164	46
BLOCK 2	1,293	2,456
TOTAL	8,792	2,773

NOTE: THE VOLUMES LISTED ABOVE ARE BASED UPON VOLUMETRIC CALCULATIONS AND HAVE NOT BEEN ADJUSTED FOR SHRINK OR SWELL.



VICINITY MAP
NOT TO SCALE

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT
ORIGINAL
"AS-BUILTS"
CERTIFIED RECORD DRAWINGS
PROJECT #: P1943
DATE ACCEPTED: 12/7/06

PAUL T. NELSON
STATE OF WASHINGTON
37928
REGISTERED PROFESSIONAL ENGINEER
EXPIRES 11/24/07

I HAVE REVIEWED THE CONSTRUCTION AND TO MY KNOWLEDGE FIND IT TO BE IN SUBSTANTIAL CONFORMANCE WITH THE APPROVED CERTIFIED PLANS AND STANDARD SPECIFICATIONS EXCEPT AS NOTED.

UNPLATTED PORTIONS OF THE GOVERNMENT LOTS 1, 2, 7 AND 8 IN THE NORTHEAST QUARTER OF SECTION 4, TOWNSHIP 24 NORTH, RANGE 42 EAST, W.M., SPOKANE COUNTY, WASHINGTON

SITE LOCATION
4600 THORPE ROAD

PLAN PREPARATION
MATTHEW R. FOLWELL, P.E.
ADAMS & CLARK, INC.
1720 W. FOURTH AVE.
SPOKANE, WA 99204

ON-SITE CONTACT, PROPERTY OWNER & APPLICANT
JOHN C. RABY
13306 W. WIGWAM RD.
SPOKANE, WA 99224
(509) 844-2668

NOTES:

1. THE PROJECT IS CURRENTLY VEGETATED WITH ALFALFA & GRASSES.
2. THIS PROJECT CONSISTS OF THE CONSTRUCTION OF RESIDENTIAL STREETS AND INFILTRATIVE SWALES WITH ASSOCIATED DRYWELLS.
3. EROSION AND SEDIMENT CONTROL MEASURES WILL CONSIST OF THE INSTALLATION OF FILTER FENCE ALONG FILL SECTIONS, AS SHOWN ON THIS DRAWING AND INLET PROTECTION.
4. SOILS AT THIS SITE ARE CLASSIFIED BY THE SCS HESSELTINE SILT LOAM & CHENEY SILT SOILS

I CERTIFY THAT THIS PLAN MEETS THE REQUIREMENTS FOR E.S.C AS LISTED IN CHAPTER 4.5 OF THE GUIDELINE FOR STORMWATER MANAGEMENT.

MATTHEW R. FOLWELL, P.E. — DATE 1/23/06

DEVELOPER'S APPROVAL — DATE 1/23/06

MATTHEW RAYMOND FOLWELL
STATE OF WASHINGTON
PROFESSIONAL ENGINEER
1/23/06
EXPIRES 7-06-06

8/9

CALL BEFORE YOU DIG: 1-800-456-8000

BY	REVISIONS	DATE	PROJ.	FROM	AS BUILT	TO	ACCEPT
					10/11/06 RECORD DRAWING by ALLWEST TESTING AND ENGINEERING		

BENCH MARK DATUM	SCALE	DATE	STAFF
TBM	HORIZONTAL 50'	01/06	DRAWN KMH/ARP
ELEVATION 2385.00' (NAVD 88)	VERTICAL 10'		CHECKED RLL
LOCATION USC&GS BENCHMARK "TANGENT 2" LOCATED AT THE INTERSECTION OF GEIGER BOULEVARD AND THORPE ROAD			APPROVED

ADAMS & CLARK, Inc.
ac@adamsandclark.com
1720 W. Fourth Ave.
Spokane, WA 99204
(509) 747-4600 F(509) 747-8913

WEST MEADOWS
MASS GRADING AND EROSION CONTROL
GRADING AND SITE PLAN
SPOKANE, WASHINGTON

TYPE OF IMPROVEMENT: STREET	
PROJECT NUMBER	PLAN NUMBER
2004-01-052	

P-1943 Eng As Built

L:\206-022 West Meadows\asbuilt street 8.dwg, Layout1, 10/12/2006 11:28:59 AM, 1:1

GENERAL SPECIFICATIONS:

1. AN EROSION/SEDIMENTATION CONTROL (ESC) PLAN IS REQUIRED FOR THIS PROJECT. IMPLEMENTATION OF THE ESC PLAN, AND CONSTRUCTION, MAINTENANCE, AND UPGRADING OF THE ESC FACILITIES ARE THE RESPONSIBILITY OF THE DEVELOPER UNTIL ALL CONSTRUCTION IS COMPLETED AND ACCEPTED BY SPOKANE COUNTY, OR UNTIL VEGETATION IS ESTABLISHED THROUGHOUT THE SITE, AND ACCEPTED BY SPOKANE COUNTY, WHICHEVER IS LATER.
2. APPROVAL OF THE ESC PLAN DOES NOT CONSTITUTE APPROVAL OF ANY OF THE PROPOSED ROAD, STORM DRAINAGE, GRADING OR UTILITY DESIGN ELEMENTS SHOWN ON THE ESC PLAN.
3. THE EROSION/SEDIMENTATION CONTROL MEASURES SHOWN ARE THE MINIMUM REQUIREMENTS FOR THE ANTICIPATED SITE CONDITIONS. THE CONTRACTOR SHALL INSPECT AND MAINTAIN THESE ESC MEASURES DAILY, AND SHALL MAINTAIN AND UPGRADE THESE MEASURES AS NECESSARY TO PREVENT SEDIMENT-LADEN WATER FROM EITHER FLOWING OFF THE SITE, OR INTO NEW/EXISTING STORM DRAINAGE FACILITIES, SUCH AS DRYWELLS, CULVERTS, OR GRAVEL GALLERIES.
4. THE CONTRACTOR/DEVELOPER IS RESPONSIBLE FOR INSTALLING ROCK CONSTRUCTION ENTRIES AT ANY AND ALL LOCATIONS USED TO ENTER OR EXIT THE PROJECT SITE.
5. GEOTEXTILE FABRIC IS TO BE PLACED ON THE RIMS OF DRYWELLS, CATCH BASINS AND INLETS UNTIL SUCH TIME THE VEGETATION ON THE SITE IS ESTABLISHED AND THE THREAT OF SEDIMENT DEPOSITION INTO THE DRAINAGE SYSTEM IS MITIGATED.
6. TEMPORARY EROSION CONTROL MEASURES ARE TO BE IMPLEMENTED PRIOR TO ANY OTHER SITE WORK, AND TO REMAIN IN PLACE UNTIL ROAD CONSTRUCTION IS COMPLETE, AND ALL PERMANENT EROSION CONTROL AND DRAINAGE FACILITIES ARE IN PLACE.
7. DURING CONSTRUCTION THE CONTRACTOR/DEVELOPER SHALL BE RESPONSIBLE FOR PROVIDING CONTINUOUS DUST CONTROL THROUGH THE USE OF WATER TRUCKS, SPRINKLING OR OTHER APPROVED METHODS.

DEFINITION:

MINIMIZING EXPOSED SOILS AND CONSEQUENT EROSION BY CLEARING ONLY WHERE CONSTRUCTION WILL OCCUR.

PURPOSE:

TO REDUCE EROSION BY PRESERVING NATURAL VEGETATION WHEREVER PRACTICABLE.

CONDITIONS WHERE PRACTICE APPLIES:

NATURAL VEGETATION SHOULD BE PRESERVED ON ALL AREAS OUTSIDE THE CLEARING AND GRUBBING LIMITS.

PRESERVE NATURAL VEGETATION (1/9)

DEFINITION:

A TEMPORARY STONE-STABILIZED PAD LOCATED AT POINTS OF VEHICULAR INGRESS AND EGRESS ON A CONSTRUCTION SITE.

PURPOSE:

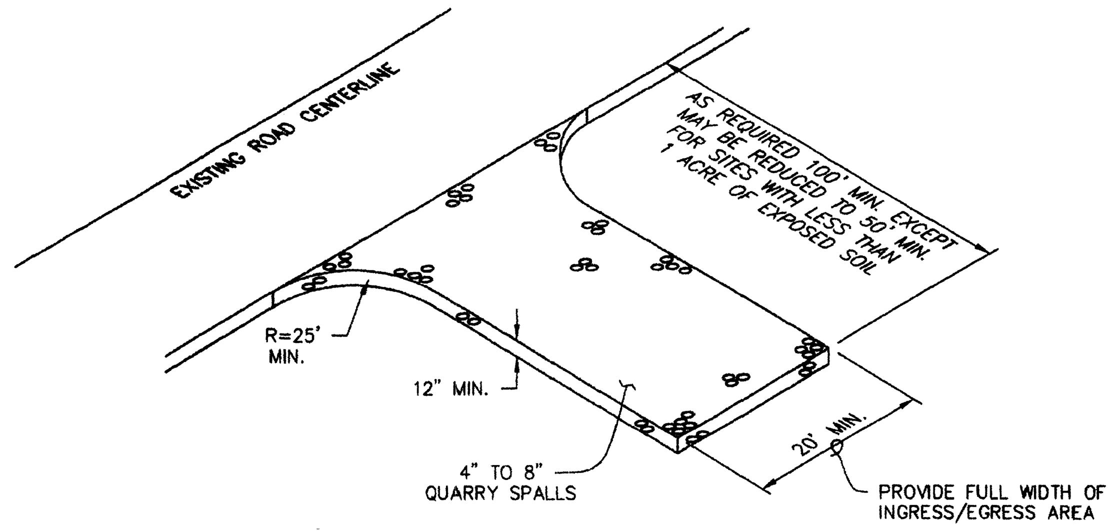
TO REDUCE THE AMOUNT OF MUD, DIRT, ROCKS, ETC. TRANSPORTED ONTO PUBLIC ROADS BY MOTOR VEHICLES OR RUNOFF BY CONSTRUCTING A STABILIZED PAD OF ROCK SPALLS AT ENTRANCES TO CONSTRUCTION SITES AND WASHING OF TIRES DURING EGRESS.

CONDITIONS WHERE PRACTICE APPLIES:

- WHENEVER TRAFFIC WILL BE LEAVING A CONSTRUCTION SITE AND MOVING DIRECTLY ONTO A PUBLIC ROAD OR OTHER PAVED AREAS.

MAINTENANCE:

- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OF FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH 2-INCH STONE, AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEANOUT OF ANY STRUCTURES USED TO TRAP SEDIMENT. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.



ROCK CONSTRUCTION ENTRY (2/9)

GRADING AND EROSION CONTROL NOTES:

1. ACCESS TO THE SITE BY CONSTRUCTION TRAFFIC SHALL BE FROM THORPE ROAD ONLY. NO ACCESS WILL BE ALLOWED THROUGH ADJACENT RESIDENTIAL STREETS OR PROPERTIES.
2. THE CONTRACTOR SHALL FOLLOW THE REQUIREMENTS FOR GRADING AND EROSION CONTROL AS SPECIFIED IN THE GEOTECHNICAL REPORT PREPARED BY GEOENGINEERS, INC. DATED SPETEMBER 13, 2004. THE CONTRACTOR SHALL CONTACT THE DESIGN ENGINEER FOR A COPY.
3. THE BORROW AREA AND ALL OF THE DESTROYED AREAS SHALL HAVE PERMANENT SEEDING APPLIED.
4. VERTICAL CONTROL FOR ROADWAYS CAN BE PROVIDED TO THE CONTRACTOR PRIOR TO STAKING.

RECORD DRAWING

DEFINITION:

THE ESTABLISHMENT OF PERENNIAL VEGETATIVE COVER ON DISTURBED AREAS.

PURPOSE:

TO ESTABLISH PERMANENT VEGETATION (SUCH AS GRASSES, LEGUMES AND TREES AND SHRUBS) AS RAPIDLY AS POSSIBLE TO PREVENT SOIL EROSION BY WIND OR WATER, AND TO IMPROVE WILDLIFE HABITAT AND SITE AESTHETICS.

CONDITIONS WHERE PRACTICE APPLIES:

- GRADED, FINAL GRADED OR CLEARED AREAS WHERE PERMANENT VEGETATIVE COVER IS NEEDED TO ESTABLISH THE SOIL.
- AREAS WHICH WILL NOT BE BROUGHT TO FINAL GRADE FOR A YEAR OR MORE.
- VEGETATION-LINED CHANNELS.

PROVIDE FRESH, CLEAN NEW CROP SEED COMPLYING WITH TOLERANCE FOR PURITY AND GERMINATION ESTABLISHED BY OFFICIAL SEED ANALYSTS OF NORTH AMERICA. PROVIDE SEED MIXTURE COMPOSED OF GRASS SPECIES AND AND NATIVE SPECIES AT PERCENTAGES AS FOLLOWS:

GRASS SEED: FRESH, CLEAN, DRY, NEW CROP SEED COMPLYING WITH THE ASSOCIATION OF OFFICIAL ANALYSTS' "RULES FOR TESTING SEEDS" FOR PURITY AND GERMINATION TOLERANCE. PROVIDE THE FOLLOWING EROSION SEED MIX FOR THE HYDROSEEDING: SHEEP FESCUE, 33 %; HARD FESCUE, 33%; CANADA BLUEGRASS, 20%; ANNUAL RYE GRASS, 10%. ACHILLEA MILLEFOLIUM, 1%; LUPINUS PERENNIS, 1%; AMELANCHIER ALNIFOLIA, 1%; ROSA WOODSII, 1%; ANNUAL RYE GRASS, 10%, AND CONTAIN LESS THAN 1% WEED CONTENT. SEED SHALL BE APPLIED AT A MINIMUM RATE OF 80 POUNDS PER ACRE.

PROVIDE HYDROSEEDING AS FOLLOWS:

HYDROSEEDING: MIX SPECIFIED SEED AT THE RATE OF 80 LBS./ACRE, FERTILIZER AT THE RATE OF 400 LBS./ACRE OF 16-16-16 AND FIBER MULCH IN WATER, USING EQUIPMENT SPECIFICALLY DESIGNED FOR HYDROSEED APPLICATION. CONTINUE MIXING UNTIL UNIFORMLY BLENDED INTO HOMOGENOUS SLURRY SUITABLE FOR HYDRAULIC APPLICATION.

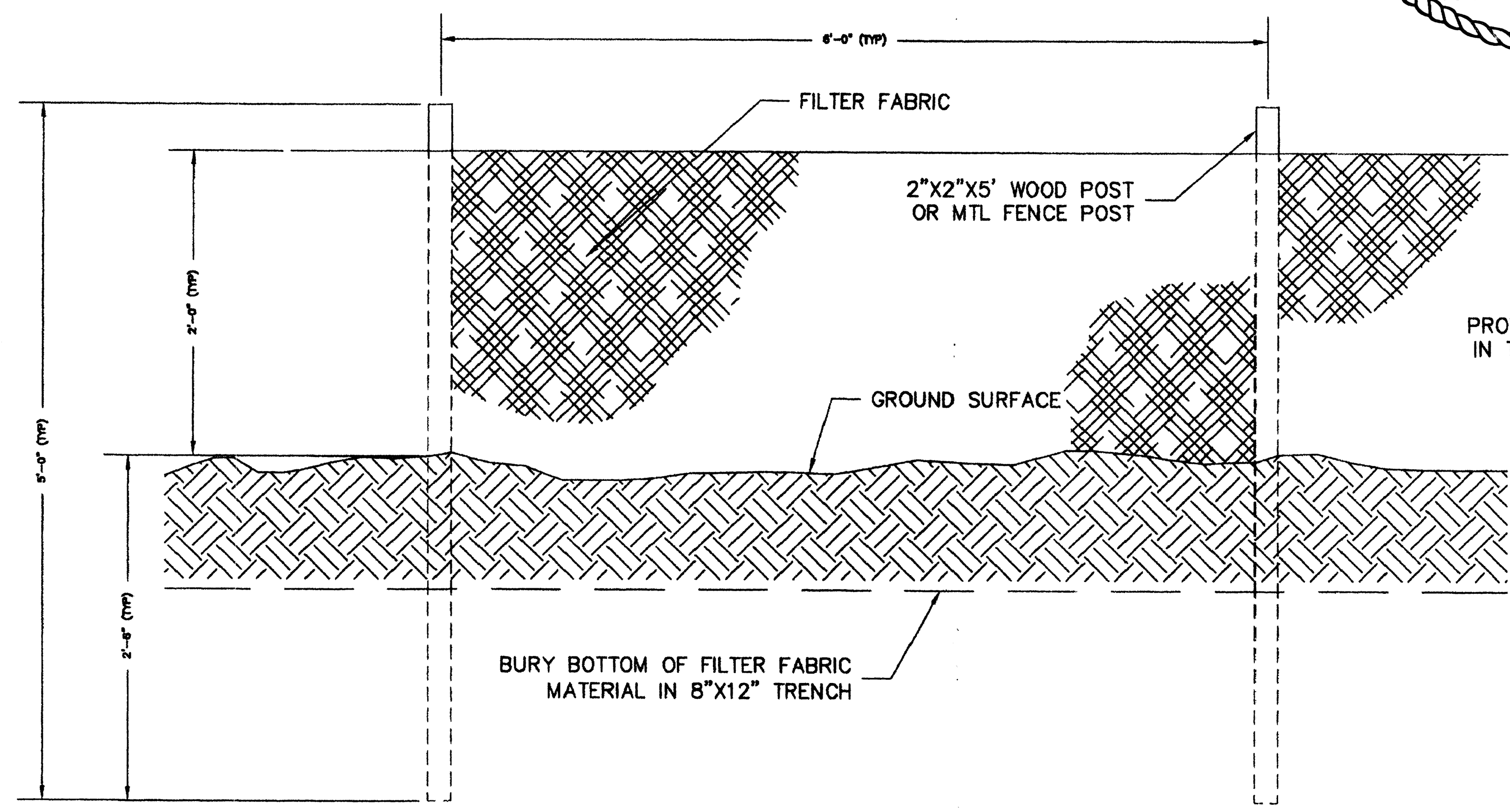
1. MIX SLURRY WITH NONASPHALTIC TACKIFIER, PER MANUFACTURER'S RECOMMENDATION.
2. APPLY SLURRY UNIFORMLY TO ALL AREAS TO BE SEEDED IN A 1-STEP PROCESS. APPLY MULCH AT THE MINIMUM RATE OF 2000 LBS./ACRE (16.5 KG PER 100 SQ.M) DRY WEIGHT BUT NOT LESS THAN THE RATE REQUIRED TO OBTAIN SPECIFIED SEED-SOWING RATE.

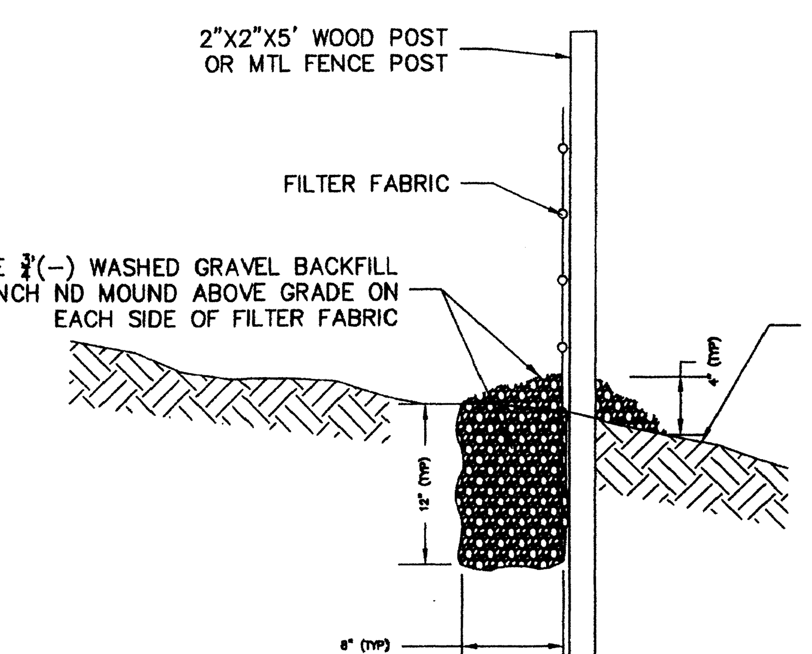
ALL SEEDING OF SLOPES SHALL BE DONE IN ACCORDANCE WITH W.S.D.O.T. STANDARD SPECIFICATIONS.

PERMANENT SEEDING SHALL OCCUR BETWEEN THE DATES OF AUGUST 15 TO OCTOBER 15. ANY AREAS THAT ARE NOT SEEDED AND ARE EXPOSED FOR MORE THAN 30 DAYS SHALL HAVE A TEMPORARY CONTROL BLANKET, OR A STRAW MULCH (1.2 TONS PER ACRE APPLIED). MULCH SHALL BE ANCHORED INTO THE SOIL BY DISKING OR OTHER APPROVED METHODS.
MULCHING OPERATIONS SHALL BE PER W.S.D.O.T. SPECIFICATIONS SECTION 8-01.3(5).

PERMANENT SEEDING (3/9)

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT
ORIGINAL
"AS-BUILTS"
CERTIFIED RECORD DRAWINGS
PROJECT #: P1943
DATE ACCEPTED: 12/7/06





DEFINITION:
A TEMPORARY SEDIMENT BARRIER CONSISTING OF A FILTER FABRIC STRETCHED ACROSS AND ATTACHED TO SUPPORTING POSTS AND ENTRENCHED. THE FILTER FENCE IS CONSTRUCTED OF STAKES AND SYNTHETIC FILTER FABRIC WITH A RIGID WIRE FENCE BACKING WHERE NECESSARY FOR SUPPORT.

PURPOSE:
1. TO INTERCEPT AND DETAIN SMALL AMOUNTS OF SEDIMENT UNDER SHEET FLOW CONDITIONS FROM DISTURBED AREAS DURING CONSTRUCTION OPERATIONS IN ORDER TO PREVENT SEDIMENT FROM LEAVING THE SITE.
2. TO DECREASE THE VELOCITY OF SHEET FLOWS.

THE FILTER FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL CUT TO THE LENGTH OF THE BARRIER TO AVOID USE OF JOINTS. WHEN JOINTS AR NECESSARY, FILTER CLOTH SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST, WITH A MINIMUM 6 INCH OVERLAP, AND BOTH ENDS SECURELY FASTENED TO THE POST.

POSTS SHALL BE SPACED A MAXIMUM OF 6 FEET APART AND DRIVEN SECURELY INTO THE GROUND A MINIMUM OF 30 INCHES (WHERE PHYSICALLY POSSIBLE).

A TRENCH SHALL BE EXCAVATED APPROXIMATELY 8 INCHES WIDE AND 12 INCHES DEEP ALONG THE LINE OF POST AND UP SLOPE FROM THE BARRIER. THE TRENCH SHALL BE CONSTRUCTED TO FOLLOW THE CONTOUR.

WHEN SLIT FILM FILTER FABRIC IS USED, WIRE MESH SUPPORT FENCE SHALL BE FASTENED SECURELY TO THE UP SLOPE SIDE OF THE POSTS USING HEAVY-DUTY WIRE STAPLES AT LEAST 1 INCH LONG, TIE WIRES OR HOG RIGS. THE WIRE SHALL EXTEND INTO THE TRENCH A MINIMUM OF 4 INCHES AND SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE.

SLIT FILM FILTER FABRIC SHALL BE WIRED TO THE FENCE, AND 20 INCHES OF THE FABRIC SHALL EXTEND INTO THE TRENCH. THE FABRIC SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE. FILTER FABRIC SHALL NOT BE STAPLED TO EXISTING TREES. OTHER TYPES OF FABRIC MAY BE STAPLED TO THE FENCE.

WHEN EXTRA-STRENGTH OR MONOFILAMENT FABRIC AND CLOSER POST SPACING ARE USED, THE WIRE MESH SUPPORT FENCE MAY BE ELIMINATED. IN SUCH A CASE, THE FILTER FABRIC IS STAPLED OR WIRED DIRECTLY TO THE POST. EXTRA CARE SHOULD BE USED WHEN JOINING OR OVERLAPPING THESE STIFFER FABRICS. APPARENT OPENING SIZE OF FILTER FABRIC SHALL BE 70.

MAINTENANCE:
* INSPECT IMMEDIATELY AFTER EACH RAINFALL, AND AT LEAST DAILY DURING PROLONGED RAINFALL. REPAIR AS NECESSARY.
* SEDIMENT MUST BE REMOVED WHEN IT REACHES APPROXIMATELY ONE THIRD THE HEIGHT OF THE FENCE, ESPECIALLY IF HEAVY RAINS ARE EXPECTED.

SILT FENCE (5/9)

DEFINITION:
A SEDIMENT FILTER OR AN EXCAVATED IMPOUNDING AREA AROUND A STORM DRAIN, DROP INLET, OR CURB INLET.

PURPOSE:
TO PREVENT SEDIMENT FROM ENTERING STORM DRAINAGE SYSTEMS PRIOR TO PERMANENT STABILIZATION OF THE DISTURBED AREA.

* INSTALLATION PROCEDURE FOR FILTER FABRIC FENCE:

A. PLACE 2 INCH BY 2 INCH WOODEN POSTS AROUND THE PERIMETER OF THE INLET A MAXIMUM OF 3 FEET APART AND DRIVE THEM AT LEAST 8 INCHES INTO THE GROUND. THE STAKES MUST BE AT LEAST 3 FEET LONG.

B. EXCAVATE A TRENCH APPROXIMATELY 8 INCHES WIDE AND 12 INCHES DEEP AROUND THE OUTSIDE PERIMETER OF THE STAKES.

C. STAPLE THE FILTER FABRIC TO WOODEN STAKES SO THAT 32 INCHES OF THE FABRIC EXTENDS OUT AND CAN BE FORMED INTO THE TRENCH. USE HEAVY-DUTY WIRE STAPLES AT LEAST 1/2 INCH IN LENGTH.

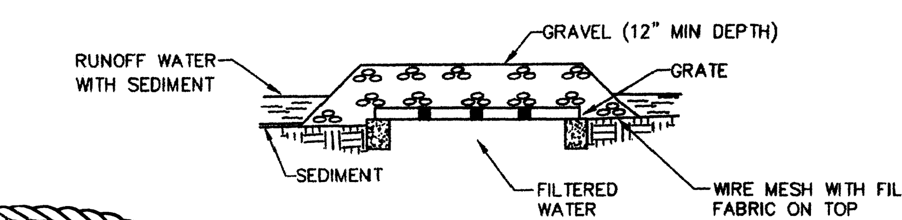
D. BACKFILL THE TRENCH WITH 3/4 INCH OR LESS WASHED GRAVEL ALL THE WAY AROUND.

E. SILT FENCE INLET BARRIER SHALL BE CONSTRUCTED ON ALL INLETS AT THE TIME OF THEIR CONSTRUCTION. APPARENT OPENING SIZE OF FILTER FABRIC SHALL BE 70.

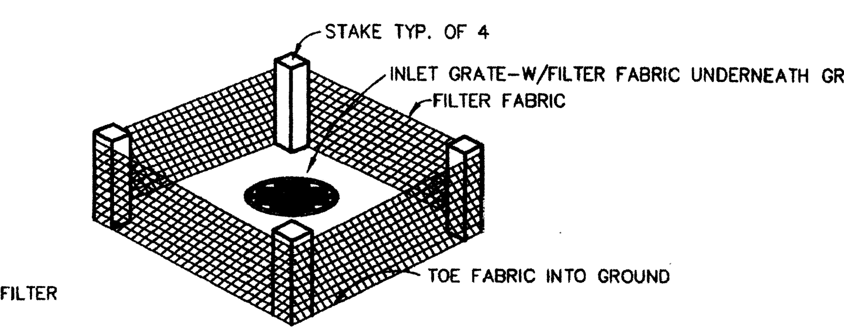
* INSTALLATION PROCEDURE FOR GRAVEL AND WIRE MESH FILTER:

A. PLACE WIRE MESH OVER THE INLET SO THAT THE WIRE EXTENDS A MINIMUM OF 1 FOOT BEYOND EACH SIDE OF THE INLET STRUCTURE. USE HARDWARE CLOTH OR COMPARABLE WIRE MESH WITH 1/2 INCH OPENINGS. IF MORE THAN ONE STRIP OF MESH IS NECESSARY, OVERLAP THE STRIPS. PLACE FILTER FABRIC OVER WIRE MESH.

B. EXTEND THE FILTER FENCE/WIRE MESH BEYOND THE INLET OPENING AT LEAST 18 INCHES ON ALL SIDES. PLACE 3/4 INCH TO 3-INCH GRAVEL OVER THE FILTER FABRIC/WIRE MESH. THE DEPTH OF THE GRAVEL SHOULD BE AT LEAST 12 INCHES.



GRAVEL AND WIRE MESH FILTER



FILTER FABRIC FENCE

STORM DRAIN INLET PROTECTION (4/9)

UNPLATTED PORTIONS OF THE GOVERNMENT LOTS 1, 2, 7 AND 8 IN THE NORTHEAST QUARTER OF SECTION 4, TOWNSHIP 24 NORTH, RANGE 42 EAST, W.M., SPOKANE COUNTY, WASHINGTON

SITE LOCATION
4600 THORPE ROAD

PLAN PREPARATION
MATTHEW R. FOLWELL, P.E.
ADAMS & CLARK, INC.
1720 W. FOURTH AVE.
SPOKANE, WA 99204

ON-SITE CONTACT, PROPERTY OWNER & APPLICANT
JOHN C. RABY
13306 W. WIGWAM RD.
SPOKANE, WA 99224
(509) 844-2668

NOTES:

1. THE PROJECT IS CURRENTLY VEGETATED WITH ALFALFA & GRASSES.
2. THIS PROJECT CONSISTS OF THE CONSTRUCTION OF RESIDENTIAL STREETS AND INFILTRATIVE SWALES WITH ASSOCIATED DRYWELLS.
3. EROSION AND SEDIMENT CONTROL MEASURES WILL CONSIST OF THE INSTALLATION OF FILTER FENCE ALONG FILL SECTIONS, AS SHOWN ON THIS DRAWING AND INLET PROTECTION.
4. SOILS AT THIS SITE ARE CLASSIFIED BY THE SCS HESSELTINE SILT LOAM & CHENEY SILT SOILS

PAUL T. NELSON — STATE OF WASHINGTON — 37228 — REGISTERED PROFESSIONAL ENGINEER — 10-13-06
EXPIRES 11/24/07

I HAVE REVIEWED THE CONSTRUCTION AND TO MY KNOWLEDGE FIND IT TO BE IN SUBSTANTIAL CONFORMANCE WITH THE APPROVED CERTIFIED PLANS AND STANDARD SPECIFICATIONS EXCEPT AS NOTED.

I CERTIFY THAT THIS PLAN MEETS THE REQUIREMENTS FOR E.S.C AS LISTED IN CHAPTER 4.5 OF THE GUIDELINE FOR STORMWATER MANAGEMENT.

MATTHEW R. FOLWELL, P.E. DATE

Randy [signature] for John Raby 1/23/06
DEVELOPER'S APPROVAL DATE

MATTHEW RAYMOND FOLWELL — STATE OF WASHINGTON — REGISTERED PROFESSIONAL ENGINEER — 1/23/06
EXPIRES 7-05-06

9/9

CALL BEFORE YOU DIG: 1-800-456-8000

BY	REVISIONS	DATE	PROJ.	FROM	AS BUILT	TO	ACCEPT
	10/11/06 RECORD DRAWING by ALLWEST TESTING AND ENGINEERING						

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WEST MEADOWS
EROSION CONTROL
DETAILS
SPOKANE, WASHINGTON

TYPE OF IMPROVEMENT:	STREET
PROJECT NUMBER	PLAN NUMBER
2004-01-052	

P-1943 Eng As Builts

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