STREET AND DRAINAGE PLANS
RIVER'S EDGE ESTATES
SPOKANE COUNTY, WASHINGTON
NW. 1/4 SECTION 12, T. 26 N., R. 42 E., W.M.

UNDERGROUND SERVICE ALERT
ONE-CALL NUMBER
811
CALL TWO BUSINESS DAYS BEFORE YOU DIG

GENERAL NOTES

1. ALL MATERIALS, WORKMANSHIP, AND CONSTRUCTION OF SITE IMPROVEMENTS SHALL MEET OR EXCEED SITE WORK STANDARDS AND THE STANDARDS AND SPECIFICATIONS SET FORTH IN THE **SPOKANE COUNTY** REGULATIONS AND APPLICABLE STATE AND FEDERAL REGULATIONS. WHERE THERE IS CONFLICT BETWEEN THESE PLANS AND THE SPECIFICATIONS, OR ANY APPLICABLE STANDARDS, THE HIGHER QUALITY STANDARD SHALL APPLY. ALL WORK WITHIN PUBLIC R.O.W. OR EASEMENTS SHALL BE INSPECTED AND APPROVED BY THE **SPOKANE COUNTY** INSPECTOR. INSPECTION SERVICES AND CONSTRUCTION CERTIFICATION TO BE PROVIDED BY DESIGNEE OF PROJECT SPONSOR/OWNER.

2. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES, AS SHOWN ON THESE PLANS, IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE LOCAL UTILITY LOCATION CENTER AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY PERTINENT LOCATIONS AND ELEVATIONS, ESPECIALLY AT THE CONNECTION POINTS AND AT POTENTIAL UTILITY CONFLICTS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES THAT CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THESE PLANS.

3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM ALL APPLICABLE AGENCIES. THE CONTRACTOR SHALL NOTIFY THE **SPOKANE COUNTY** INSPECTOR AT LEAST 48 HOURS PRIOR TO THE START OF ANY EARTH DISTURBING ACTIVITY OR CONSTRUCTION ON ANY AND ALL PUBLIC IMPROVEMENTS.

4. THE CONTRACTOR SHALL COORDINATE AND COOPERATE WITH **SPOKANE COUNTY** AND ALL UTILITY COMPANIES WITH REGARD TO RELOCATIONS OR ADJUSTMENTS OF EXISTING UTILITIES DURING CONSTRUCTION, TO ASSURE THAT THE WORK IS ACCOMPLISHED IN A TIMELY FASHION, AND WITH A MINIMUM DISRUPTION OF SERVICE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL PARTIES AFFECTED BY ANY DISRUPTION OF ANY UTILITY SERVICE.

5. THE CONTRACTOR SHALL HAVE ONE (1) SIGNED COPY OF THE APPROVED PLANS, ONE (1) COPY OF THE APPROPRIATE STANDARDS AND SPECIFICATIONS, AND ONE (1) COPY OF ANY PERMITS AND EXTENSION AGREEMENTS NEEDED FOR THE JOB ON-SITE AT ALL TIMES.

6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ASPECTS OF SAFETY INCLUDING, BUT NOT LIMITED TO: EXCAVATION, TRENCHING, SHORING, TRAFFIC CONTROL, AND SECURITY.

7. IF, DURING THE CONSTRUCTION PROCESS, CONDITIONS ARE ENCOUNTERED BY THE CONTRACTOR, HIS SUBCONTRACTORS, OR OTHER AFFECTED PARTIES WHICH COULD INDICATE A SITUATION THAT IS NOT IDENTIFIED IN THE PLANS OR SPECIFICATIONS, THE CONTRACTOR SHALL CONTACT THE ENGINEER IMMEDIATELY.

8. ALL REFERENCES TO ANY PUBLISHED STANDARDS SHALL REFER TO THE LATEST REVISION OF SAID STANDARD, UNLESS SPECIFICALLY STATED OTHERWISE.

9. FOR WORK AFFECTING PUBLIC ROADWAYS OR IF REQUIRED BY **SPOKANE COUNTY,** THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL AND PHASING PLAN IN ACCORDANCE WITH M.U.T.C.D. FOR APPROVAL. PRIOR TO ANY CONSTRUCTION ACTIVITIES WITHIN OR AFFECTING THE RIGHT-OF-WAY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ANY AND ALL TRAFFIC CONTROL DEVICES AS MAY BE REQUIRED BY SAID PLANS. PRIOR TO INSTALLATION A PRECONSTRUCTION CONFERENCE SHALL BE HELD WITH **SPOKANE COUNTY.**

10. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL LABOR AND MATERIALS NECESSARY FOR THE COMPLETION OF THE INTENDED IMPROVEMENTS SHOWN ON THESE DRAWINGS OR DESIGNATED TO BE PROVIDED, INSTALLED, CONSTRUCTED, REMOVED OR RELOCATED UNLESS SPECIFICALLY NOTED OTHERWISE.

11. PER AGENCY STANDARDS THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING ROADWAYS FREE AND CLEAR OF ALL CONSTRUCTION DEBRIS AND DIRT TRACKED FROM THE SITE.

12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RECORDING RECORD INFORMATION ON A SET OF RECORD DRAWINGS KEPT AT THE CONSTRUCTION SITE AND AVAILABLE TO THE **SPOKANE COUNTY** INSPECTOR AT ALL TIMES.

13. DIMENSIONS FOR LAYOUT AND CONSTRUCTION ARE NOT TO BE SCALED FROM ANY DRAWING. FOR ADDITIONAL INFORMATION CONTACT THE ENGINEER FOR CLARIFICATION AND NOTE ON THE RECORD DRAWINGS.

14. ALL EROSION AND SEDIMENT CONTROL (E.S.C.) MEASURES SHALL BE INSTALLED AT THE LIMITS OF CONSTRUCTION PRIOR TO GROUND DISTURBING ACTIVITY. ALL E.S.C. MEASURES SHALL BE MAINTAINED IN GOOD REPAIR BY THE CONTRACTOR UNTIL SUCH TIME AS THE ENTIRE DISTURBED AREAS ARE STABILIZED WITH HARD SURFACE OR LANDSCAPING.

15. THE CONTRACTOR SHALL SEQUENCE INSTALLATION OF UTILITIES IN SUCH A MANNER AS TO MINIMIZE POTENTIAL UTILITY CONFLICTS. IN GENERAL, STORM SEWER AND SANITARY SEWER SHOULD BE CONSTRUCTED PRIOR TO INSTALLATION OF WATER LINES AND DRY UTILITIES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE ALL UTILITY RELOCATIONS CONSISTENT WITH THE CONTRACTORS SCHEDULE FOR THIS PROJECT, WHETHER SHOWN OR NOT SHOWN, AS IT RELATES TO THE CONSTRUCTION ACTIVITIES CONTEMPLATED IN THESE PLANS.

16. ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY IS SUBJECT TO THE JURISDICTION OF THE **SPOKANE COUNTY** ENGINEERING DEPARTMENT STANDARD DETAILS AND SPECIFICATIONS.

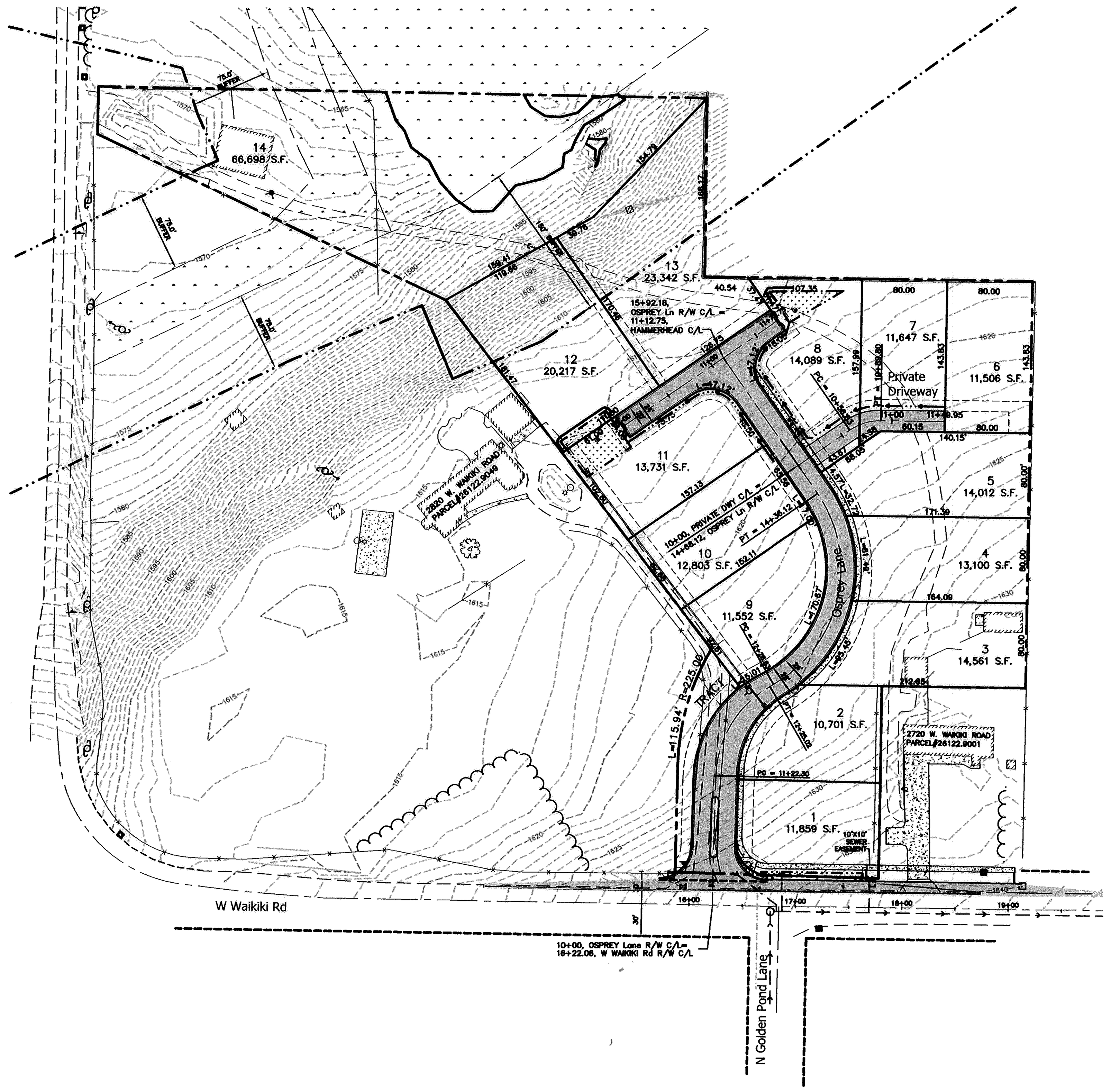
17. ALL CONSTRUCTION OPERATIONS, INCLUDING THE WARMING UP, REPAIR, ARRIVAL, DEPARTURE OR RUNNING OF TRUCKS, EARTH MOVING EQUIPMENT, CONSTRUCTION EQUIPMENT AND ANY OTHER ASSOCIATED EQUIPMENT SHALL GENERALLY BE LIMITED TO THE TIME PERIOD APPROVED BY **SPOKANE COUNTY.**

18. BASED ON REQUIREMENTS FROM **SPOKANE COUNTY,** THE ENGINEER OR HIS DESIGNEE SHALL PERFORM MATERIALS TESTING AND QUALITY CONTROL ON THE PROJECT AND SHALL SUBMIT COPIES OF DAILY REPORTS, TEST REPORTS, PROJECT CERTIFICATION AND RECORD DRAWINGS TO THE **SPOKANE COUNTY** ENGINEER.

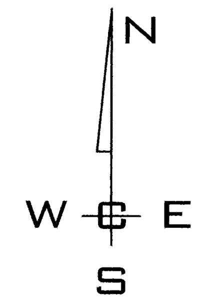
19. NO REVISIONS SHALL BE MADE TO THESE PLANS WITHOUT APPROVAL OF THE **SPOKANE COUNTY** ENGINEER AND NOTIFICATION OF THE ENGINEER OF RECORD.

20. ONSITE GRADING SHALL BE IN ACCORDANCE WITH THE APPROVED GRADING PLAN AND ESC PLAN. ANY IMPORT OR EXPORT OF MATERIAL SHALL BE FROM A PRE-APPROVED SOURCE/DESTINATION AND COORDINATED WITH THE SPOKANE COUNTY DEPARTMENT OF BUILDING AND PLANNING AT 477-3675. GRADING ON THIS SITE OR ANY OTHER SITE MUST COMPLY WITH ALL DEVELOPMENT REGULATIONS INCLUDING, BUT NOT LIMITED TO, GRADING PERMITS, SEPA REVIEW, TIMBER HARVEST PERMITS, CRITICAL AREAS, FLOODPLAINS, DESIGNATED DRAINAGEWAYS, ETC.

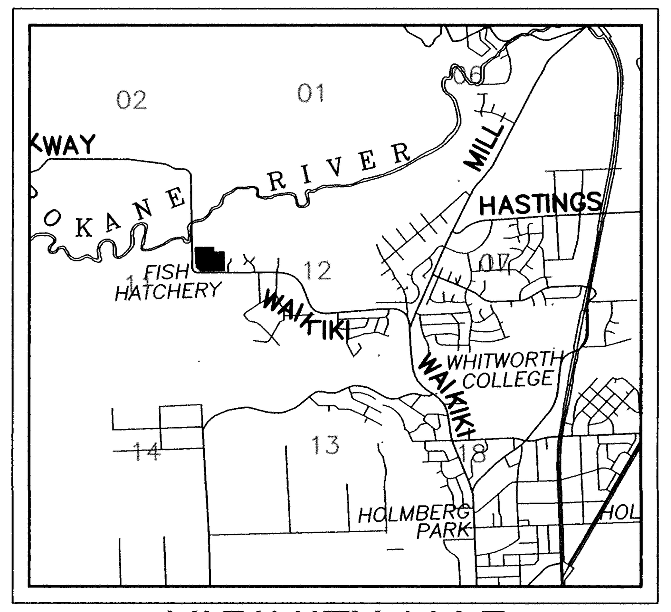
THE DESIGN IMPROVEMENTS SHOWN IN THIS SET OF PLANS AND CALCULATIONS CONFORM TO APPLICABLE EDITIONS OF THE SPOKANE COUNTY STANDARDS FOR ROAD AND SEWER CONSTRUCTION AND THE SPOKANE COUNTY GUIDELINES FOR STORMWATER MANAGEMENT. ALL DESIGN DEVIATIONS HAVE BEEN APPROVED BY THE SPOKANE COUNTY ENGINEER. I APPROVE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



SITE PLAN
SCALE: 1" = 100'



GRAPHIC SCALE
100 0 50 100 200
(IN FEET)
1 inch = 100 ft.



VICINITY MAP

LEGEND

EXISTING	GENERAL	PROPOSED
	ROADWAY CENTER LINE	
	RIGHT OF WAY LINE	
	PROPERTY LINE	
	EASEMENT LINE	
	FENCE	
	CURB	
	PAVEMENT	
	GRAVEL	
	CONCRETE	
	BUILDINGS & STRUCTURES	
	SANITARY SEWER	
	SANITARY SEWER	
	MANHOLE	
	CLEANOUT	
	SEWER SERVICE	
	WATER	
	WATER LINE	
V	VALVE	V
FH	FIRE HYDRANT	FH
WS	SERVICE	WS
WM	METER	WM
BLOWOFF	BLOWOFF	BLOWOFF
AVRS	AIR VACUUM RELIEF STATION	AVRS
	STORM DRAINAGE	
	DRAINAGE LINE	
MH	MANHOLE	MH
DW	DRYWELL	DW
CB	CATCH BASIN	CB
	DITCH	
	NATURAL GAS	
G	GAS LINE	G
V	VALVE	V
GM	METER	GM
	TELEPHONE-POWER	
BT	BURIED TELEPHONE	BT
PP	POWER OR TELEPHONE POLE	
BP	BURIED POWER	BP
TP	TRANSFORMER PAD	TP
TR	TELEPHONE RISER	TR
TV	TELEPHONE VAULT	TV
OP	OVERHEAD POWER	OP
GA	GUY ANCHOR	GA
PV	POWER VAULT	PV
LP	LIGHT POLE	LP

STREETS
SPOKANE COUNTY ENGINEERS
1026 WEST BROADWAY
SPOKANE, WASHINGTON 99260
PHONE: 509-477-3600
FAX: 509-477-7478
CONTACT: MATT ZARECOR, P.E.

DISTRICT ENGINEER
E & H ENGINEERING
3707 S. GODFREY BLVD.
AIRPORT BUSINESS PARK
SPOKANE, WASHINGTON
PHONE: 509-744-0245
CONTACT: TOM HAGGARTY, P.E.

WATER PURVEYOR
WHITWORTH WATER DISTRICT #2
10828 WAIKIKI ROAD
SPOKANE, WA 99218
PHONE: 509-466-0550
FAX: 509-467-1830
CONTACT: DOUG BABIN

FIRE DEPARTMENT
FIRE DISTRICT NO. 9
3801 EAST FARWELL ROAD
MEAD, WA 99021
PHONE: 509-466-4602
FAX: 509-466-4698
CONTACT: DAN WALSH

GAS / POWER
AVISTA UTILITIES
1411 E. MISSION AVENUE
SPOKANE, WA 99220
PHONE: 509-495-8536
FAX: 509-477-8734
CONTACT: SHERRY MILLER

TELEPHONE
QWEST
904 NORTH COLUMBUS
SPOKANE, WA 99202
PHONE: 509-455-2580
FAX: 509-455-2104
CONTACT: DAVE CLARK

CABLE
COMCAST BROADBAND
1717 EAST BUCKEYE
SPOKANE, WA 99207
PHONE: 509-755-4717
FAX: 509-483-9261
CONTACT: BRYAN RICHARDSON

SOLID WASTE
WASTE MANAGEMENT
SPOKANE, WASHINGTON
PHONE: 509-466-3400

SEWER
SPOKANE COUNTY UTILITIES
1026 WEST BROADWAY AVENUE
SPOKANE, WASHINGTON 99260
PHONE: 509-477-3604
FAX: 509-477-4715
CONTACT: BILLY URHAUSEN

HEALTH DEPT.
SPOKANE REGIONAL HEALTH
1101 WEST COLLEGE AVENUE
SPOKANE, WA 99260
PHONE: 509-324-1560 EXT. 1
FAX: 509-324-3603
CONTACT: DON COPLEY

INSPECTION
ALLWEST
12928 E. INDIANA AVENUE
SPOKANE VALLEY, WA 99216
PHONE: 509-534-4411
FAX: 509-534-9326
CONTACT: PAUL T. NELSON P.E.

SURVEYOR
WHIPPLE CONSULTING ENGINEERS
2528 N. SULLIVAN ROAD
SPOKANE VALLEY, WA 99216
PHONE: 509-893-2617
FAX: 509-926-0227
CONTACT: TERRY IRWIN, P.L.S.

ENGINEER
WHIPPLE CONSULTING ENGINEERS
2528 N. SULLIVAN ROAD
SPOKANE VALLEY, WA 99216
PHONE: 509-893-2617
FAX: 509-926-0227
CONTACT: SANDRA R.F. RASKELL, P.E.

OWNER
ROBERT TOWNSEND CONSTRUCTION INC
CANYON CONSTRUCTION NW INC
9323 S. STEVENS CREEK ROAD
SPOKANE, WASHINGTON 99223
CONTACT: BOB TOWNSEND
PHONE: 509-448-6882

INDEX TO PLAN SHEETS

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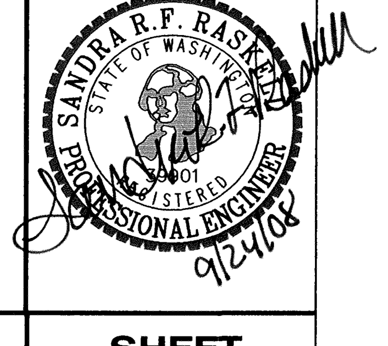
ABBREVIATIONS

ACT. LEN. .... ACTUAL LENGTH
BCR .... BEGINNING OF CURVE RADIUS
BDRY. .... BOUNDARY
CO. .... SEWER CLEANOUT
CSTC .... CRUSHED SURFACE TOP COURSE
CT. ....COURT
DIA. ....DIAMETER
ECR .... END OF CURVE RADIUS
EXIST. ....EXISTING
G ....GRADE
GB .... GRADE BREAK
FT./FT. .... FEET PER FOOT
HYD. .... HYDRANT
I.E. ....INVERT ELEVATION
LN. ....LANE
LT. ....LEFT
MH ....MANHOLE
MCR .... MIDDLE OF CURVE RADIUS
PC ....POINT OF CURVATURE
PET. ....PETROLEUM
PI ....POINT OF INTERSECTION
PRC .... POINT OF REVERSE CURVE
PT ....POINT OF TANGENCY
RIM EL. ....RIM ELEVATION
RD ....ROAD
RT. ....RIGHT
SI ....STREET INTERSECTION
SS ....SANITARY SEWER
STA. ....STATION
STA. LEN........STATION LENGTH
TG ....TOP OF GRATE
TC ....TOP OF CURB

SPOKANE COUNTY PUBLIC WORKS
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: P-2004
DATE ACCEPTED: 10/8/08
ACCEPTANCE EXPIRES: 10/8/10
PROJECTS LANE MILES: PUBLIC: –
PROJECT LANE MILES PRIVATE: 0.15
CONSTRUCTION DOCUMENTATION AND CERTIFIED RECORD DRAWINGS, "AS-BUILTS" ARE REQUIRED PRIOR TO COUNTY ACCEPTANCE AND ESTABLISHMENT OF THE ROADS AND DRAINAGE FACILITIES FOR MAINTENANCE
PERMIT REQUIRED! (509) 477-3600
NOTIFY PERMIT ENGINEER 2 BUSINESS DAYS PRIOR TO CONSTRUCTION



NAVD-88 DATUM
1. BENCHMARK=TBM F-7 FROM WAIKIKI SEWER PROJECT DATED JUNE 2002.
2. SPIKE IN UTILITY POLE AT W. 1720 FOREST HILLS ROAD.
3. ELEV. = 1906.93 (SUPPLIED BY SPOKANE COUNTY ENGINEERS).

DEVELOPER'S APPROVAL (signed) — DATE 9/25/08

NO.	DATE	BY	REVISIONS
	9/24/08	SRR	MYLAR SUBMITTAL TO SPOKANE COUNTY
	9/3/08	JJK	REVISED PER COUNTY COMMENTS & SUBMITTAL TO SPOKANE COUNTY
	---	SRR	SUBMITTAL TO SPOKANE COUNTY
	05/30	MRW	ORIGINAL PLAN PREPARATION

SCALE:
HORIZONTAL: AS NOTED
VERTICAL: N/A

PROJ #: 07-294
DATE: 09/24/08
DRAWN: MRW
APPROVED: SRR

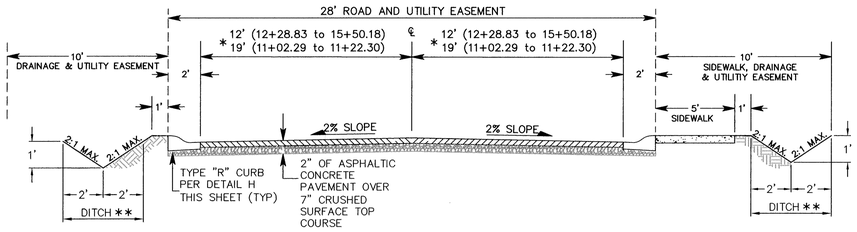
WCE
WHIPPLE CONSULTING ENGINEERS
CIVIL AND TRANSPORTATION ENGINEERING
2528 NORTH SULLIVAN ROAD
SPOKANE VALLEY, WA 99216
PH: 509-893-2617 FAX: 509-926-0227

STREET AND DRIANAGE PLANS
RIVER'S EDGE ESTATES
2720 WEST WAIKIKI ROAD
SPOKANE COUNTY, WA

JOB NUMBER 2007-294

P.2004 Eng Road. Drainage

NW. 1/4 SECTION 12, T. 26 N., R. 42 E., W.M.

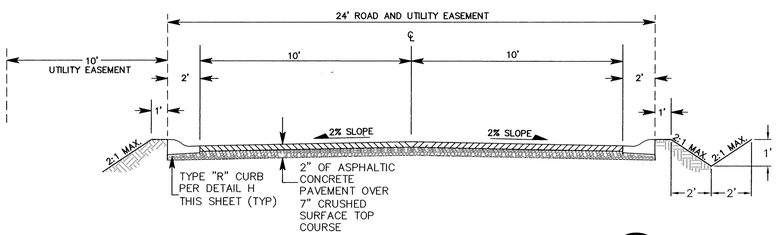


* TRANSITION FROM 19' TO 12' LANE WIDTH BETWEEN 11+22.30 & 12+28.83
** BEGIN EACH DITCH AT STATION 14+84

PRIVATE ROAD TYPICAL SECTION (B)

NOT TO SCALE

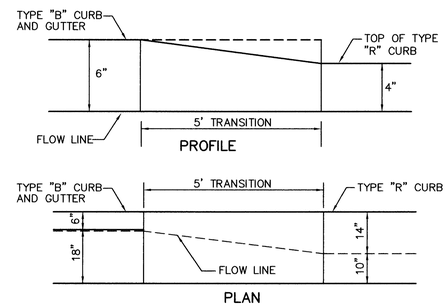
OSPREY LN STA 11+02.29 TO 15+50.18



PRIVATE ROAD TYPICAL SECTION (C)

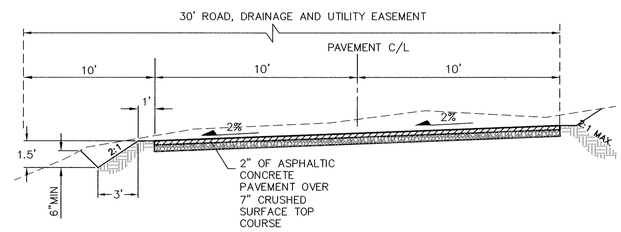
NOT TO SCALE

OSPREY HAMMERHEAD STA 10+00 TO 11+72.75



"B" TO "R" CURB TRANSITION DETAIL (D)

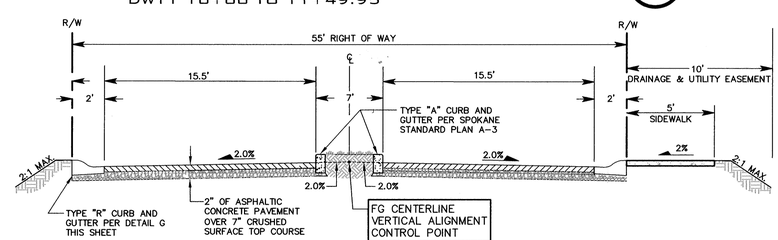
NOT TO SCALE



PRIVATE DRIVEWAY TYPICAL SECTION (E)

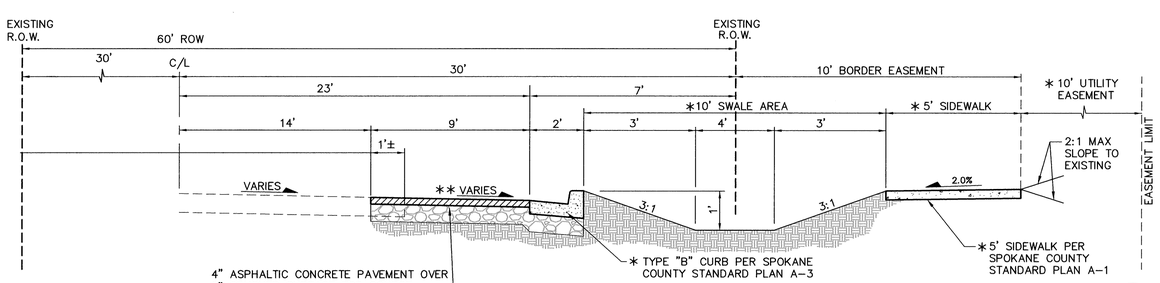
NOT TO SCALE

DWY1 10+00 TO 11+49.95



TYPICAL ROAD SECTION: OSPREY LANE STA 10+44.65 TO 11+02.29 (F)

NOT TO SCALE



SECTION - WAIKIKI RD - STA. 14+57.59 TO 18+72.85 (G)

NOT TO SCALE

* SEE PLAN FOR BEGINNING AND ENDING STATIONS OF CURB & GUTTER, SIDEWALK, SWALE, & UTILITY EASEMENT.

** PROPOSED CROSS SLOPE SHALL VARY FROM 2.0% MIN to 4.5% MAX VERIFY PRIOR TO ANY CONSTRUCTION

STREET GENERAL NOTES

THE CONTRACTOR SHALL PROVIDE ALL MATERIALS, LABOR, AND EQUIPMENT TO CONSTRUCT AND INSTALL TO PROPER WORKING ORDER. ALL IMPROVEMENTS AS DETAILED OR CALLED OUT ON THESE PLANS.

1. ALL WORK AND MATERIALS SHALL BE IN CONFORMANCE WITH THE **"SPOKANE COUNTY** STANDARDS FOR ROAD AND SEWER CONSTRUCTION, CURRENT EDITION", AND AS AMENDED.

2. THE CONTRACTOR IS REQUIRED TO HAVE A VALID CONSTRUCTION PERMIT ON SITE AT ALL TIMES. THE ABSENCE OF THE PERMIT WILL RESULT IN AN IMMEDIATE SHUTDOWN OF WORK AND THE POSSIBLE REMOVAL OF THOSE ITEMS CONSTRUCTED WITHOUT THE PERMIT.

3. LOCATIONS OF EXISTING UTILITIES SHOWN IN THE 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.

4. 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.

5. IF THE CONTRACTOR DISCOVERS ANY DISCREPANCIES BETWEEN THE PLANS AND EXISTING CONDITIONS ENCOUNTERED, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE DESIGN ENGINEER, **SANDRA R. RASKELL, P.E., @** 893-2617, THE SITE/PROJECT INSPECTING ENGINEER OR HIS REPRESENTATIVE, **ALLWEST, PAUL T. NELSON, P.E., @** 534-4411 AND THE **SPOKANE COUNTY ENGINEER'S** OFFICE, CONSTRUCTION ENGINEER, **@** 477-3600.

6. FOR CONSTRUCTION OF DRYWELLS, INSTALL FILTER FABRIC, "AMOCO" 4545 OR APPROVED EQUAL, BETWEEN THE WASHED DRAINROCK AND NATIVE SOILS PER SPOKANE COUNTY STANDARD DETAIL B-1a.

7. PRIOR TO SITE CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES. CALL THE UNDERGROUND UTILITY LOCATION SERVICE AT 456-8000 BEFORE YOU DIG.

8. THE CONTRACTOR SHALL MAKE AN EFFORT TO PROTECT ALL CATCH BASINS AND DRYWELLS FROM BEING CONTAMINATED WITH SILT BY INSTALLING FILTER FABRIC UNDER THE LID FOR AT LEAST 6 WEEKS, OR UNTIL THE ESTABLISHMENT OF GRASS AND/OR OTHER SITE CONSTRUCTION WORK HAS ENDED.

IN THE EVENT THAT SILT OR OTHER DELETERIOUS MATERIAL IS ALLOWED TO ENTER THE DRYWELLS OR CATCH BASINS THE CONTRACTOR WILL BE REQUIRED TO CLEAN OUT THE DRYWELL OR CATCH BASIN TO THE SATISFACTION OF THE CERTIFYING ENGINEER.

9. THE CONTRACTOR SHALL EMPLOY A LICENSED SURVEYOR TO VERIFY THAT THE CROSS- GUTTER FORMS ARE 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.

10. ALL DRYWELL CONNECTION PIPES SHALL BE PLACED BELOW THE DRYWELL CONE AND SHALL FLOW AS DIRECTED IN THE PLANS.

11. FOR ANY CURB GRADES LESS THAN 0.8 % (0.008 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.

STORM DRAINAGE NOTES

1. SEE STREET PLAN AND PROFILE SHEETS FOR DRYWELL AND CATCH BASIN TYPES AND LOCATIONS.

2. SWALES SHALL BE CONSTRUCTED PER THE REQUIREMENTS OF THESE DRAWINGS INCLUDING GRADING, SOD, AND DRYWELL INSTALLATION. ALL SWALES WITHIN TRACTS SHALL INCLUDE AN IRRIGATION SYSTEM. ALL IRRIGATION SHALL CONFORM TO THE CITY OF SPOKANE VALLEY SWALE IRRIGATION SYSTEM GUIDELINES.

3. ALL "208" SWALES SHOWN SHALL BE ROUGH GRADED PRIOR TO PAVING OF ADJACENT ROADWAY.

4. CONTRACTOR SHALL PROVIDE **SPOKANE COUNTY** WITH RECORD IRRIGATION PLANS UPON COMPLETION OF ALL SWALE CONSTRUCTION.

5. INSTALL "AMOCO" #4545 FILTER FABRIC (OR APPROVED EQUAL) IN ALL DRYWELLS, BETWEEN DRAINROCK AND NATIVE SOIL. SEE **SPOKANE COUNTY** STANDARDS (2001 EDITION) SHEET B-1a FOR INSTALLATION LOCATIONS.

6. ALL SWALES WITHIN THE **COUNTY** RIGHT-OF-WAY, IN THE AREA ASSOCIATED WITH THIS PROJECT, SHALL BE COMPLETED DURING THE CONSTRUCTION OF THE ROADWAY. THE CONTRACTOR SHALL PERFORM THE SWALE GRADE WORK, INSTALL THE IRRIGATION SYSTEM, AND PLACE THE SOD WITHIN THE SWALES FOLLOWING THE ROAD PAVING WORK.

7. THE CONTRACTOR SHALL MAKE AN EFFORT TO PROTECT ALL DRAINAGE STRUCTURES FROM BEING CONTAMINATED WITH SILT BY INSTALLING FILTER FABRIC UNDER THE LID FOR AT LEAST 6 WEEKS, OR UNTIL THE ESTABLISHMENT OF GRASS AND/OR OTHER SITE CONSTRUCTION WORK HAS ENDED. IN THE EVENT THAT SILT OR OTHER DELETERIOUS MATERIAL IS ALLOWED TO ENTER THE DRYWELLS OR CATCH BASINS, THE CONTRACTOR WILL BE REQUIRED TO CLEAN THE DRYWELL OR CATCH BASIN OUT TO THE SATISFACTION OF THE CERTIFYING ENGINEER.

8. ALL LANDSCAPE AREAS ('208' SWALES) ARE TO BE IRRIGATED BY AN AUTOMATIC IRRIGATION SYSTEM INSTALLED BY OR UNDER THE DIRECTION OF THE LANDSCAPE CONTRACTOR. THE IRRIGATION SYSTEM SHALL COMPLY WITH ALL LOCAL CODES AND ORDINANCES (90 DAY GUARANTEE). AN APPROVED BACKFLOW DEVICE SHALL BE INSTALLED TO PREVENT WATER FROM GOING BACK INTO THE WATER SUPPLY.

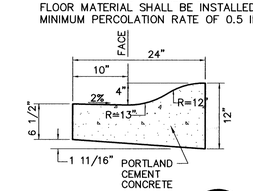
PROVIDE SLEEVING AS REQUIRED UNDER SIDEWALKS, PATHS, CURBING, PAVING, ETC. AS NEEDED FOR IRRIGATION ACCESS. ALL SLEEVING TO BE 4" PVC. WITH AT LEAST 12" OF COVER (1) FOOT BELOW FINISH GRADE. THE OWNER/GENERAL CONTRACTOR IS RESPONSIBLE FOR INSTALLING SLEEVING BEFORE CURBING, SIDEWALKS, PAVING, ETC. IS INSTALLED. PATCH ASPHALT AS NEEDED.

LAWN AREAS ARE TO BE IRRIGATED WITH TORO POP-UP HEADS OR EQUIVALENT. (TEST SYSTEM BEFORE BACKFILLING).

AFTER INSTALLATION, ADJUST VALVES, HEADS, EMITTERS, ETC., TO PROVIDE UNIFORM COVERAGE AND TO MINIMIZE OVER SPRAY ON WALLS, FENCES, WALKS, DRIVES, ETC.

THE OWNER/ GENERAL CONTRACTOR IS TO SUPPLY WATER TAPS FOR HOOK-UP AND SUPPLY POWER FOR CONTROLLER.

9. THE FLOOR OF A GRASSED PERCOLATION AREA (G.P.A.) SWALE INCLUDES THE LEVEL PORTION OF THE FLOOR OF THE SWALE, AND THE SIDE SLOPES OF THE SWALE UP TO THE G.P.A. OVERFLOW ELEVATION OR TOP OF DRYWELL. THE SOIL LOCATED IN THE FLOOR OF THE G.P.A. 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 G.P.A. 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.



TYPE R CURB (H)

NOT TO SCALE

SPOKANE COUNTY PUBLIC WORKS
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: P-2004
DATE ACCEPTED: 10/8/08
ACCEPTANCE EXPIRES: 10/8/10
PROJECTS LANE MILES: PUBLIC: -
PROJECT LANE MILES PRIVATE: 0.15
CONSTRUCTION DOCUMENTATION AND CERTIFIED RECORD DRAWINGS, "AS-BUILTS" ARE REQUIRED PRIOR TO COUNTY ACCEPTANCE AND ESTABLISHMENT OF THE ROADS AND DRAINAGE FACILITIES FOR MAINTENANCE.
PERMIT REQUIRED! (509) 477-3600
NOTIFY PERMIT ENGINEER 2 BUSINESS DAYS PRIOR TO CONSTRUCTION

SANDRA R.F. RASKELL — STATE OF WASHINGTON — 39901 — REGISTERED PROFESSIONAL ENGINEER — 9/24/08

UNDERGROUND SERVICE ALERT
ONE-CALL NUMBER
1-800 424-5555
CALL TWO BUSINESS DAYS BEFORE YOU DIG

NAVD-88 DATUM

BENCHMARK=TBM F-7 FROM WAIKIKI SEWER PROJECT DATED JUNE 2002.
SPIKE IN UTILITY POLE AT W. 1720 FOREST HILLS ROAD.
ELEV. = 1906.93
(SUPPLIED BY SPOKANE COUNTY ENGINEERS).

NO.	DATE	BY	REVISIONS
	9/24/08	SRR	MYLAR SUBMITTAL TO SPOKANE COUNTY
	9/3/08	JJK	REVISED PER COUNTY COMMENTS & SUBMITTAL TO SPOKANE COUNTY
	---	SRR	SUBMITTAL TO SPOKANE COUNTY
	06/12	MRW	ORIGINAL PLAN PREPARATION

SCALE:
HORIZONTAL: N/A
VERTICAL: N/A

PROJ #: 07-294
DATE: 09/24/08
DRAWN: MRW
APPROVED: SRR

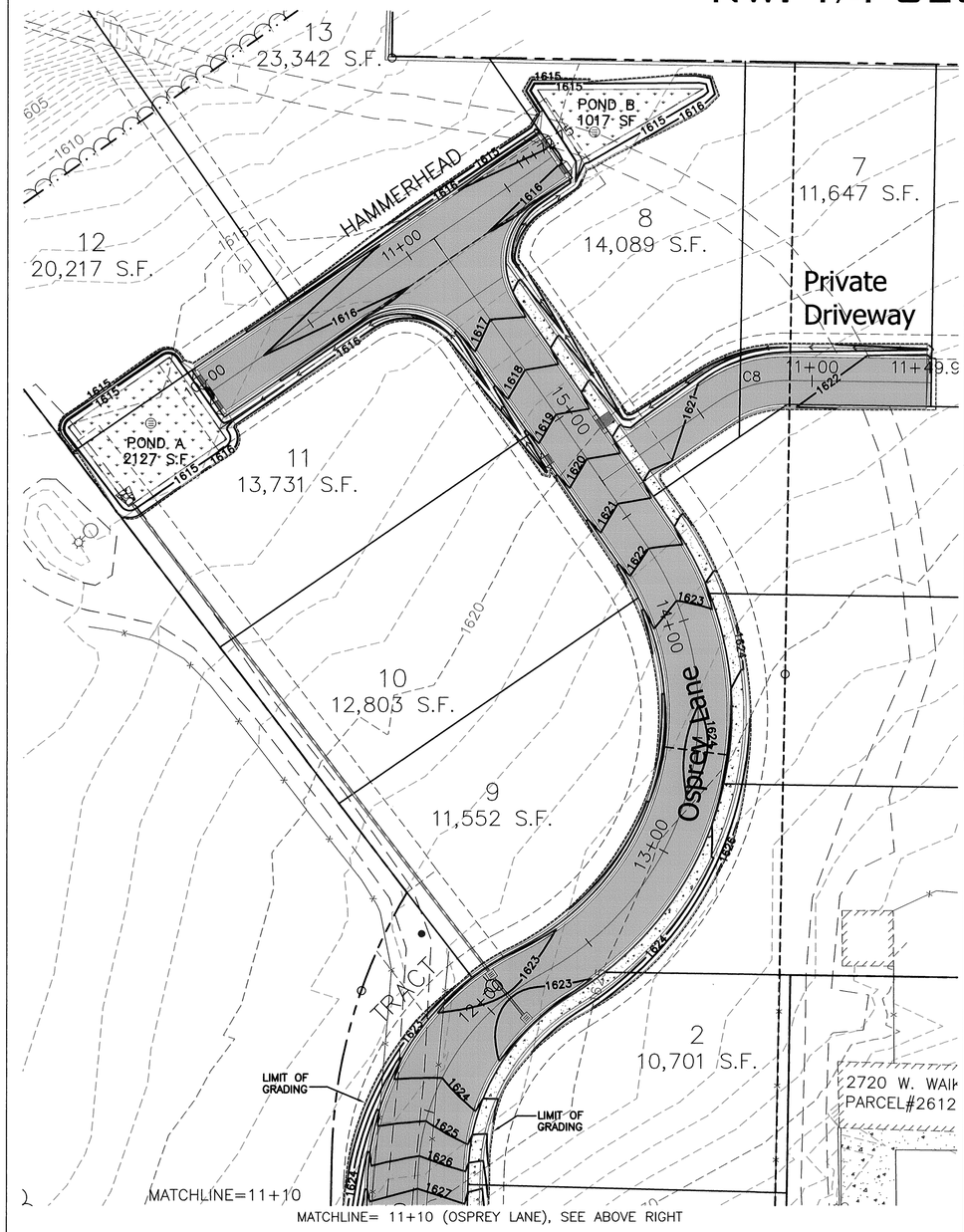
WCE
WHIPPLE CONSULTING ENGINEERS
CIVIL AND TRANSPORTATION ENGINEERING
2528 NORTH SULLIVAN ROAD
SPOKANE VALLEY, WA 99216
PH: 509-893-2617 FAX: 509-926-0227

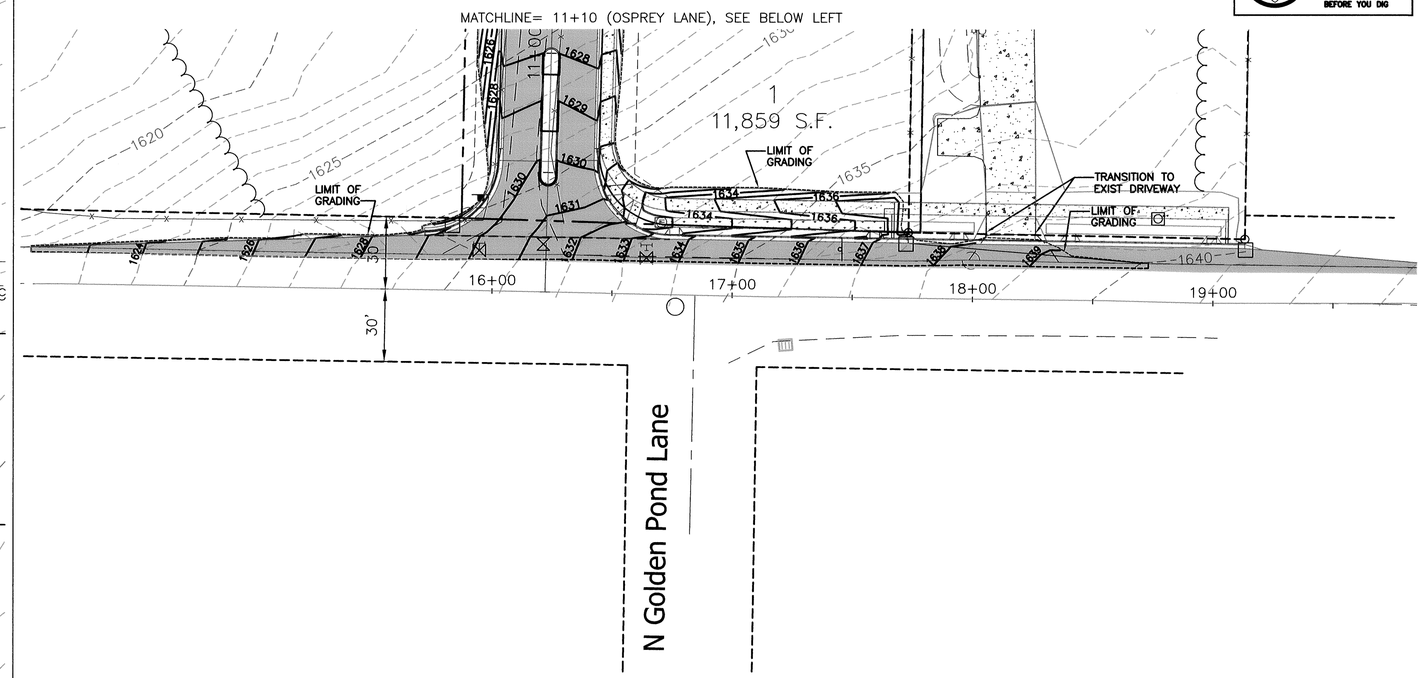
STREET AND DRAINAGE DETAILS
RIVER'S EDGE ESTATES
2720 WEST WAIKIKI ROAD
SPOKANE COUNTY, WA

JOB NUMBER 2007-294

P-2004 Eng Road Drainage

NW. 1/4 SECTION 12, T. 26 N., R. 42 E., W.M.





UNDERGROUND SERVICE ALERT
ONE-CALL NUMBER
1-800
424-5555
CALL TWO BUSINESS DAYS BEFORE YOU DIG

CIVIL SITE GRADING NOTES

1. GRADING PLAN SHOWS FINAL GRADING FOR INFORMATION ONLY.
2. POND AND ROAD GRADING MAY VARY.
3. OTHER GRADING WILL BE BY PRE-APPROVED CONTRACT MODIFICATION ONLY, BASED ON CUBIC YARD UNIT PRICE ON BID FORM.

GRADING QUANTITIES

CUT= 1,012 C.Y.
FILL= 165 C.Y.

1. QUANTITIES ARE APPROXIMATE. CONTRACTOR SHALL PERFORM WORK AS REQUIRED TO BRING SITE TO FINISHED GRADES AS SHOWN.
2. QUANTITIES ARE TO FINISHED GRADE OF SITE AND SUBGRADE OF PAVEMENT AREAS.
3. QUANTITIES OBTAINED USING 3D SURFACE MODELING THROUGH USE OF LAND DEVELOPMENT DESKTOP.

N
W E
S

GRAPHIC SCALE
30 0 15 30 60
(IN FEET)
1 inch = 30 ft.

SPOKANE COUNTY PUBLIC WORKS
OFFICIAL PUBLIC DOCUMENT ORIGINAL
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PROJECT #: P-2004
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ACCEPTANCE EXPIRES: 10/8/10
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PROJECT LANE MILES PRIVATE: 0.15
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SANDRA R.F. RASKEIN
STATE OF WASHINGTON
35901
REGISTERED
PROFESSIONAL ENGINEER
9/24/08

NAVD-88 DATUM
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SPIKE IN UTILITY POLE AT W. 1720 FOREST HILLS ROAD.
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	---	SRR	SUBMITTAL TO SPOKANE COUNTY
	06/12	MRW	ORIGINAL PLAN PREPARATION

SCALE:
HORIZONTAL: 1" = 30'
VERTICAL: N/A

PROJ #: 07-294
DATE: 9/24/08
DRAWN: MRW
APPROVED: SRR

WCE
WHIPPLE CONSULTING ENGINEERS
CIVIL AND TRANSPORTATION ENGINEERING
2528 NORTH SULLIVAN ROAD
SPOKANE VALLEY, WA 99216
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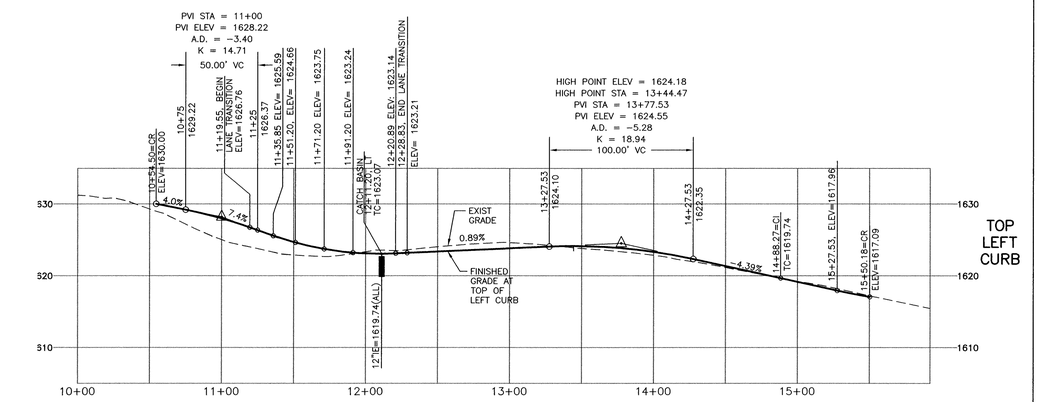
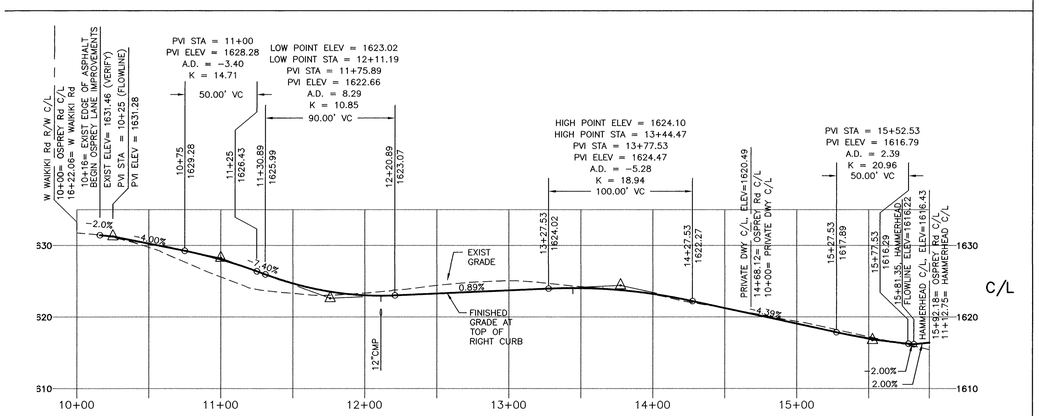
GRADING PLAN
RIVER'S EDGE ESTATES
2720 WEST WAIKIKI ROAD
SPOKANE COUNTY, WA

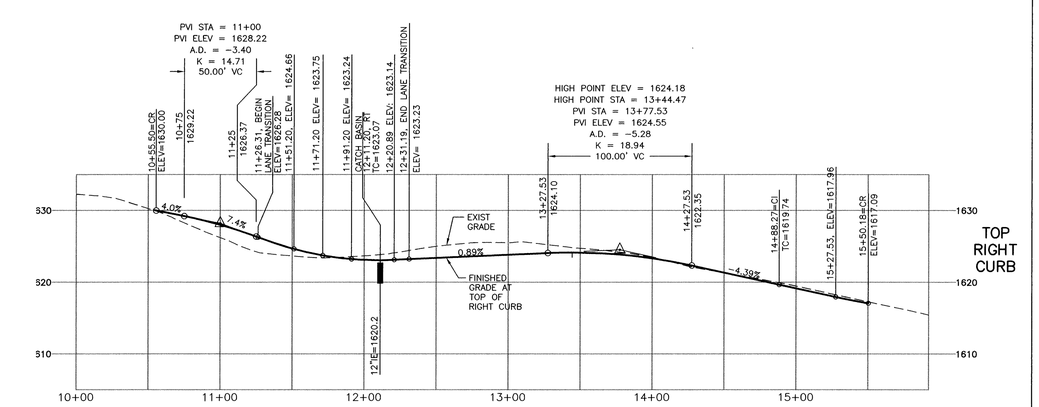
SHEET 3 OF 10
JOB NUMBER 2007-294

P.2004 Eng Road-Drainage

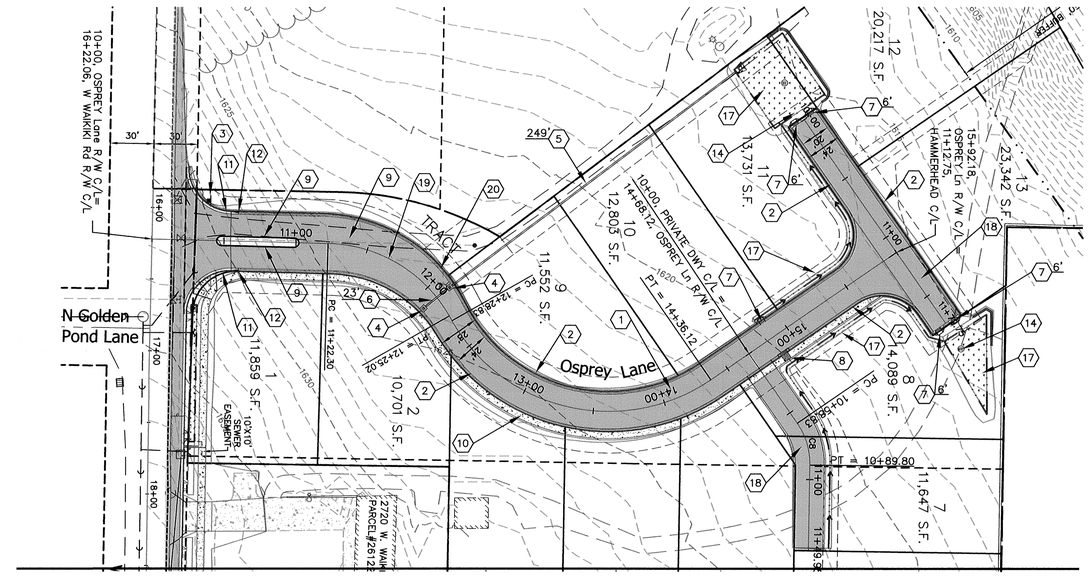
NW. 1/4 SECTION 12, T. 26 N., R. 42 E., W.M.



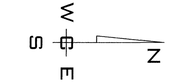




OSPREY LANE PROFILE



UNDERGROUND SERVICE ALERT
ONE-CALL NUMBER
1-800
424-5555
CALL TWO BUSINESS DAYS
BEFORE YOU DIG



GRAPHIC SCALE
50 0 25 50 100
(IN FEET)
1 inch = 50 ft.

CONSTRUCTION NOTES

1. PROVIDE AND INSTALL PAVEMENT SECTION PER SPOKANE COUNTY STANDARDS, SEE DETAIL A, B, & F SHEET 2 FOR OSPREY LANE, DETAIL G SHEET 2 FOR WAIKIKI ROAD.
2. PROVIDE AND INSTALL TYPE "R" CURB PER SPOKANE COUNTY STANDARDS, SEE DETAIL H, SHEET 2.
3. PROVIDE AND INSTALL STOP SIGN PER SPOKANE COUNTY STANDARD PLAN A-16.
4. PROVIDE AND INSTALL TYPE 1 CATCH BASIN, TYPE 1 FRAME AND TYPE 3 GRATE PER SPOKANE COUNTY STANDARD PLAN B-4, B-10, AND B-14 SEE PROFILE FOR STATION, OFFSET AND ELEVATION INFORMATION.
5. PROVIDE AND INSTALL 12" CMP STORM DRAIN PIPE PER SPOKANE COUNTY STANDARDS. SEE PROFILE THIS SHEET AND SHEET 7 FOR STATION AND INLET ELEVATION INFORMATION.
6. PROVIDE AND INSTALL 12" CMP STORM DRAIN PIPE PER SPOKANE COUNTY STANDARDS. SEE PROFILE THIS SHEET.
7. PROVIDE AND INSTALL CURB INLET TYPE "1" PER SPOKANE COUNTY STANDARD PLAN B-8. SEE PROFILE THIS SHEET.
8. PROVIDE AND INSTALL CURB INLET TYPE "2" PER SPOKANE COUNTY STANDARD PLAN B-9. SEE PROFILE THIS SHEET.
9. PROVIDE AND INSTALL TYPE "A" CURB PER SPOKANE COUNTY STANDARD PLAN A-3.
10. PROVIDE AND INSTALL 5' CONCRETE SIDEWALK PER SPOKANE COUNTY STANDARDS (TYP).
11. PROVIDE AND INSTALL TYPE "B" CURB AND GUTTER PER SPOKANE COUNTY STANDARD PLAN A-3.
12. PROVIDE TRANSITION FROM TYPE "B" CURB TO TYPE "R" CURB PER DETAIL E, SHEET 2.
13. NOT USED
14. PROVIDE AND INSTALL TYPE 'A' DRYWELL PER SPOKANE COUNTY STANDARD PLAN B-1. SEE SHEET 7 FOR INFORMATION.
15. NOT USED
16. NOT USED
17. PROVIDE AND INSTALL SWALE PER SECTIONS ON SHEET 2. SEE SHEET 7 FOR SWALE AND POND INFORMATION.
18. SEE SHEET 5 FOR HAMMERHEAD AND DRIVEWAY PLAN AND PROFILE.
19. TRANSITION FROM STA 11+02.36 TO 12+28.83. SEE DETAIL B, SHEET 2 FOR TRANSITION WIDTH.
20. FUTURE DRIVEWAY LOCATION

LEGEND

LIMITS OF NEW ASPHALT

POND BOTTOM

LINE TABLE

LINE	LENGTH	BEARING
L3	102.96	N01°30'16"E
L4	156.06	N34°39'13"W
L5	50.65	N01°30'16"E
L7	58.83	N55°20'47"E
L8	60.15	S89°09'30"E
L9	172.75	N55°20'47"E

CURVE TABLE

CURVE	LENGTH	RADIUS	TANGENT	CHORD	DELTA
C2	128.41	125.00	70.52	122.83	58°51'25"
C3	207.29	125.00	136.45	184.34	95°00'54"
C4	49.41	32.00	31.16	44.65	88°28'19"
C5	50.33	32.00	32.07	45.30	90°07'20"
C6	11.00	3.50	INFINITE	7.00	180°00'00"
C7	11.00	3.50	INFINITE	7.00	180°00'00"
C8	30.98	50.00	16.00	30.48	35°29'43"
C9	50.27	32.00	32.00	45.25	90°00'00"
C10	50.27	32.00	32.00	45.25	90°00'00"

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NOTIFY PERMIT ENGINEER 2 BUSINESS DAYS PRIOR TO CONSTRUCTION

SANDRA R.F. RASMUSSEN, STATE OF WASHINGTON, 38961, REGISTERED PROFESSIONAL ENGINEER
9/24/08

NAVD-88 DATUM
BENCHMARK=TBM F-7 FROM WAIKIKI SEWER PROJECT DATED JUNE 2002.
SPIKE IN UTILITY POLE AT W. 1720 FOREST HILLS ROAD.
ELEV. = 1906.93
(SUPPLIED BY SPOKANE COUNTY ENGINEERS).

NO.	DATE	BY	REVISIONS
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	9/3/08	JJK	REVISED PER COUNTY COMMENTS & SUBMITTAL TO SPOKANE COUNTY
	---	SRR	SUBMITTAL TO SPOKANE COUNTY
	06/12	MRW	ORIGINAL PLAN PREPARATION

SCALE:
HORIZONTAL: 50
VERTICAL: 10

PROJ #: 07-294
DATE: 09/24/08
DRAWN: MRW
APPROVED: SRR

WCE
WHIPPLE CONSULTING ENGINEERS
CIVIL AND TRANSPORTATION ENGINEERING
2528 NORTH SULLIVAN ROAD
SPOKANE VALLEY, WA 99216
PH: 509-893-2617 FAX: 509-926-0227

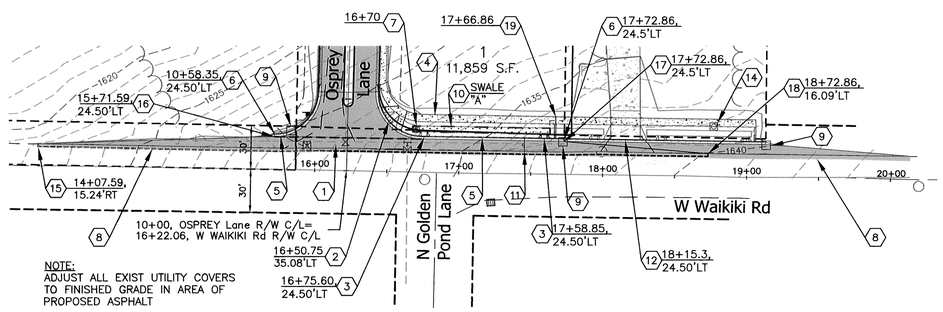
OSPREY LANE: PLAN AND PROFILE
RIVER'S EDGE ESTATES
2720 WEST WAIKIKI ROAD
SPOKANE COUNTY, WA

SHEET 4 OF 10
JOB NUMBER 2007-294

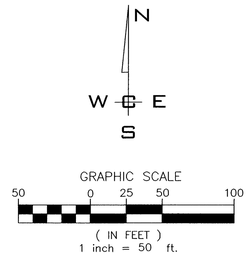
P 2004 Eng Road Drainage

NW. 1/4 SECTION 12, T. 26 N., R. 42 E., W.M.

UNDERGROUND SERVICE ALERT
ONE-CALL NUMBER
1-800
424-5555
CALL TWO BUSINESS DAYS
BEFORE YOU DIG

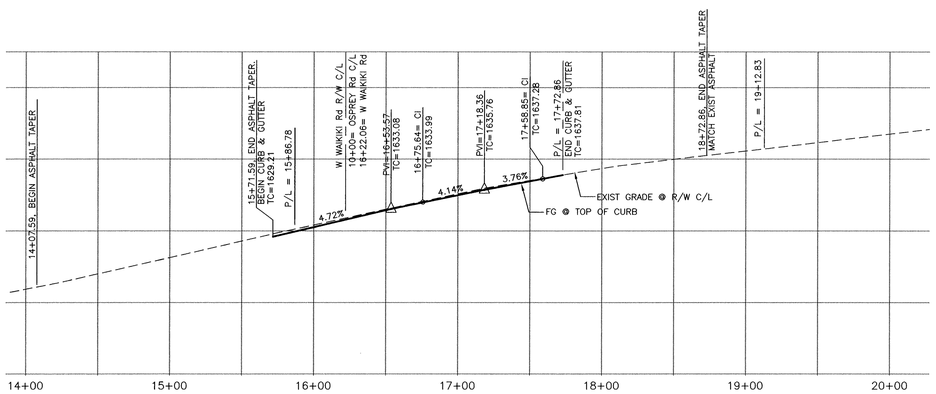


NOTE:
ADJUST ALL EXIST UTILITY COVERS TO FINISHED GRADE IN AREA OF PROPOSED ASPHALT



CONSTRUCTION NOTES

1. PROVIDE AND INSTALL PAVEMENT SECTION PER SPOKANE COUNTY STANDARDS, SEE SHEET 2, DETAIL G
2. PROVIDE AND INSTALL CURB RAMP PER SPOKANE COUNTY STANDARD PLAN A-5.
3. PROVIDE AND INSTALL CURB INLET TYPE "1" PER SPOKANE COUNTY STANDARD PLAN B-8. SEE PROFILE THIS SHEET.
4. PROVIDE AND INSTALL 5' CONCRETE SIDEWALK PER SPOKANE COUNTY STANDARDS (TYP).
5. PROVIDE AND INSTALL TYPE "B" CURB AND GUTTER PER SPOKANE COUNTY STANDARD PLAN A-3.
6. PROVIDE 1' CURB NOSE DOWN.
7. PROVIDE AND INSTALL TYPE 'A' DRYWELL PER SPOKANE COUNTY STANDARD PLAN B-1. SEE SHEET 7 FOR INFORMATION.
8. SAWCUT (1' MIN WIDTH) AND TACK EXISTING ASPHALT TO LIMITS SHOWN.
9. RELOCATE EXIST TELEPHONE RISER AS REQUIRED
10. PROVIDE AND INSTALL SWALE PER DETAIL B, SHEET 2. SEE SHEET 7 FOR SWALE AND POND INFORMATION.
11. RELOCATE EXIST SIGN AS REQUIRED
12. TRANSITION TO MATCH EXISTING CONCRETE DRIVEWAY
13. NOT USED
14. EXIST WATER METER TO REMAIN
15. BEGIN ASPHALT TAPER & SAWCUT
16. END ASPHALT TAPER, BEGIN TYPE "B" CURB & GUTTER
17. END TYPE "B" CURB & GUTTER, BEGIN ASPHALT TAPER
18. END ASPHALT TAPER, END SAWCUT
19. END SIDEWALK



LEGEND

LIMITS OF NEW ASPHALT

POND BOTTOM

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C8	30.98	50.00	16.00	30.48	35°29'43"
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C10	50.27	32.00	32.00	45.25	90°00'00"

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SANDRA R.F. RASMUSSEN
STATE OF WASHINGTON
REGISTERED PROFESSIONAL ENGINEER
9/24/08

NAVD-88 DATUM
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ELEV. = 1906.93
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NO.	DATE	BY	REVISIONS
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	---	SRR	SUBMITTAL TO SPOKANE COUNTY
	06/12	MRW	ORIGINAL PLAN PREPARATION

SCALE:
HORIZONTAL: 50
VERTICAL: 10

PROJ #: 07-294
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APPROVED: SRR

WCE
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2528 NORTH SULLIVAN ROAD
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WEST WAIKIKI ROAD: PLAN AND PROFILE
RIVER'S EDGE ESTATES
2720 WEST WAIKIKI ROAD
SPOKANE COUNTY, WA

SHEET 5 OF 10
JOB NUMBER 2007-294

P2004 Eng Road Drainage

NW. 1/4 SECTION 12, T. 26 N., R. 42 E., W.M.

UNDERGROUND SERVICE ALERT
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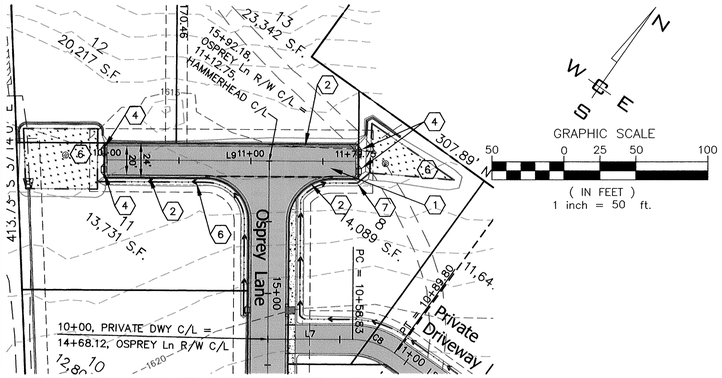
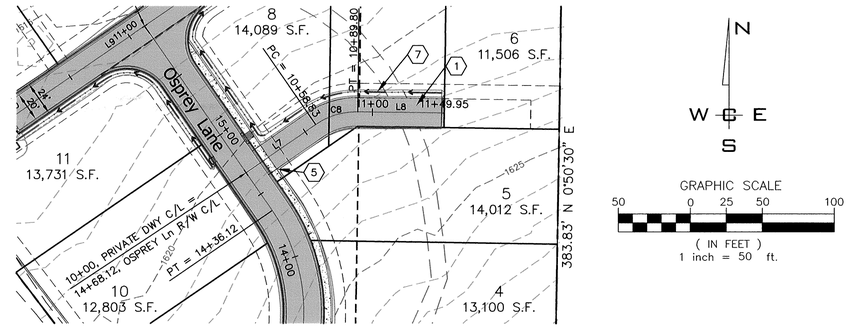


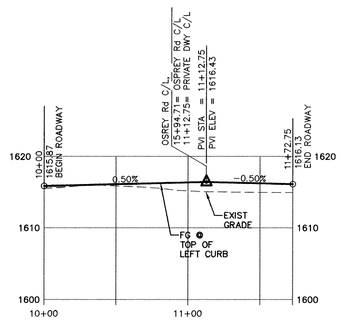
OSPREY LANE HAMMERHEAD



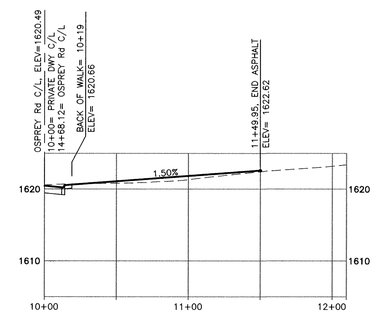
PRIVATE DRIVEWAY

CONSTRUCTION NOTES

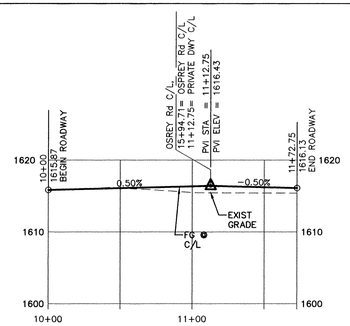
1. PROVIDE AND INSTALL PAVEMENT PER SPOKANE COUNTY STANDARDS, SEE SECTION C FOR HAMMERHEAD AND SECTION E FOR DRIVEWAY, SHEET 2.
2. PROVIDE AND INSTALL TYPE "R" CURB PER SPOKANE COUNTY STANDARDS, SEE SECTION H, SHEET 2.
3. NOT USED.
4. PROVIDE AND INSTALL CURB INLET TYPE "1" PER SPOKANE COUNTY STANDARD PLAN B-8.
5. PROVIDE AND INSTALL 6"THICK CONC WALK FOR THE 20' WIDTH OF THE PRIVATE DRIVEWAY.
6. PROVIDE AND INSTALL DRAINAGE SWALE PER SPOKANE COUNTY STANDARDS. SEE SHEET 7 FOR DETAILS.
7. PROVIDE AND INSTALL DITCH PER SPOKANE COUNTY STANDARDS. SEE SHEET 2 FOR DIMENSIONS.



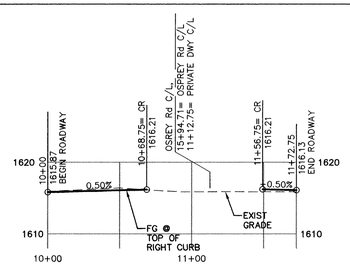
TOP LEFT CURB



C/L



C/L



TOP RIGHT CURB

LEGEND

- LIMITS OF NEW ASPHALT
- POND BOTTOM

LINE TABLE		
LINE	LENGTH	BEARING
L3	102.96	N01°30'16"E
L4	156.06	N34°39'13"W
L5	50.65	N01°30'16"E
L7	58.83	N55°20'47"E
L8	60.15	S89°09'30"E
L9	172.75	N55°20'47"E

CURVE TABLE					
CURVE	LENGTH	RADIUS	TANGENT	CHORD	DELTA
C2	128.41	125.00	70.52	122.83	58°51'25"
C3	207.29	125.00	136.45	184.34	95°00'54"
C4	49.41	32.00	31.16	44.65	88°28'19"
C5	50.33	32.00	32.07	45.30	90°07'20"
C6	11.00	3.50	INFINITE	7.00	80°00'00"
C7	11.00	3.50	INFINITE	7.00	80°00'00"
C8	30.98	50.00	16.00	30.48	35°29'43"
C9	50.27	32.00	32.00	45.25	90°00'00"
C10	50.27	32.00	32.00	45.25	90°00'00"

SPOKANE COUNTY PUBLIC WORKS
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: P-2004
DATE ACCEPTED: 10/8/08
ACCEPTANCE EXPIRES: 10/8/10
PROJECTS LANE MILES: PUBLIC: -
PROJECT LANE MILES PRIVATE: 0.15
CONSTRUCTION DOCUMENTATION AND CERTIFIED RECORD DRAWINGS, "AS-BUILTS" ARE REQUIRED PRIOR TO COUNTY ACCEPTANCE AND ESTABLISHMENT OF THE ROADS AND DRAINAGE FACILITIES FOR MAINTENANCE PERMIT REQUIRED! (509) 477-3600
NOTIFY PERMIT ENGINEER 2 BUSINESS DAYS PRIOR TO CONSTRUCTION

SANDRA R.F. RASK
STATE OF WASHINGTON
22301
REGISTERED
PROFESSIONAL ENGINEER
9/24/08

NAVD-88 DATUM
BENCHMARK=TBM F-7 FROM WAIKIKI SEWER PROJECT DATED JUNE 2002.
SPIKE IN UTILITY POLE AT W. 1720 FOREST HILLS ROAD.
ELEV. = 1906.93
(SUPPLIED BY SPOKANE COUNTY ENGINEERS).

NO.	DATE	BY	REVISIONS
	9/24/08	SRR	MYLAR SUBMITTAL FOR APPROVAL TO SPOKANE COUNTY
	9/3/08	JJK	SUBMITTAL TO SPOKANE COUNTY
	07/10	SRR	SUBMITTAL TO SPOKANE COUNTY
	06/12	MRW	ORIGINAL PLAN PREPARATION

SCALE:
HORIZONTAL: 1"=50'
VERTICAL: 1"=10'

PROJ #: 07-294
DATE: 09/24/08
DRAWN: MRW
APPROVED: SRR

WCE
WHIPPLE CONSULTING ENGINEERS
CIVIL AND TRANSPORTATION ENGINEERING
2528 NORTH SULLIVAN ROAD
SPOKANE VALLEY, WA 99216
PH: 509-893-2617 FAX: 509-926-0227

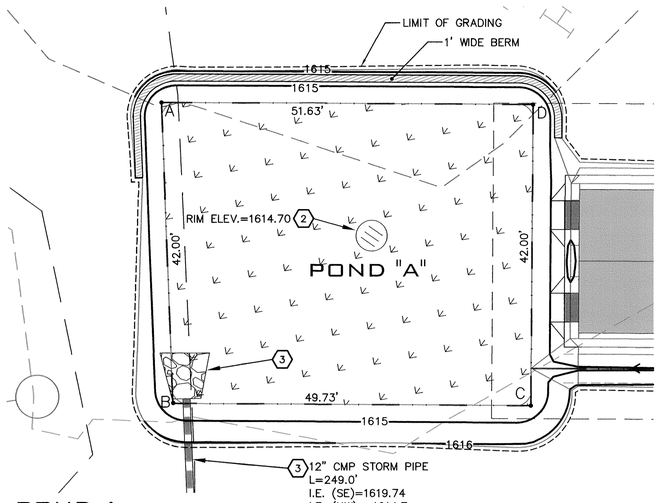
HAMMERHEAD & DRIVEWAY PLAN AND PROFILE
RIVER'S EDGE ESTATES
2720 WEST WAIKIKI ROAD
SPOKANE COUNTY, WA

SHEET 6 OF 10
JOB NUMBER 2007-294

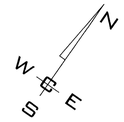
P-2004 Eng Road-Drainage

NW. 1/4 SECTION 12, T. 26 N., R. 42 E., W.M.

UNDERGROUND SERVICE ALERT
ONE-CALL NUMBER
1-800
424-5555
CALL TWO BUSINESS DAYS
BEFORE YOU DIG



POND A



GRAPHIC SCALE
10 0 5 10 20
(IN FEET)
1 inch = 10 ft.

LEGEND

LIMITS OF NEW ASPHALT

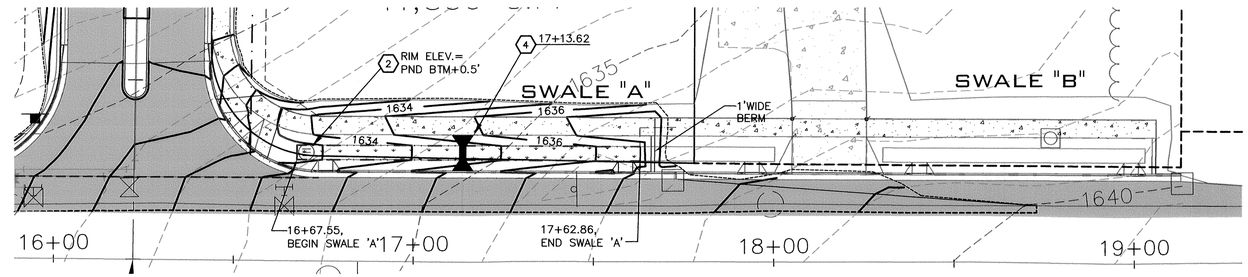
CONSTRUCTION NOTES

1. NOT USED.
2. PROVIDE AND INSTALL TYPE A DRYWELL WITH TYPE 4 METAL FRAME AND GRATE PER SPOKANE COUNTY STANDARD PLANS B-1a AND B-15.
3. PROVIDE AND INSTALL RIPRAP OUTFALL STRUCTURE PER DETAIL 6, SHEET 10. SEE POND DETAIL THIS SHEET FOR DIMENSIONS.
4. PROVIDE AND INSTALL CHECK DAM PER SPOKANE COUNTY STANDARDS. SEE DETAIL B, THIS SHEET.
5. PROVIDE AND INSTALL 12" CMP TO INLET ELEVATIONS AND LENGTH AS SHOWN ON THIS SHEET.

POND BOTTOM LOCATION TABLE CUSTER STATION & OFFSET			
POINT	STATION	OFFSET	DISTANCE
A	12+10.68	302.31'LT.	42.00'
B	15+72.04	169.03'LT.	49.73'
C	15+72.00	119.30'LT.	42.00'
D	12+23.52	302.75'LT.	D-A= 51.63'
A	12+10.68	302.31'LT.	

POND "A"

POND BOTTOM AREA PROVIDED = 2,124 SF
POND BOTTOM EL. = 1614.20
MINIMUM BERM EL. = 1615.20

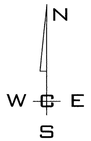


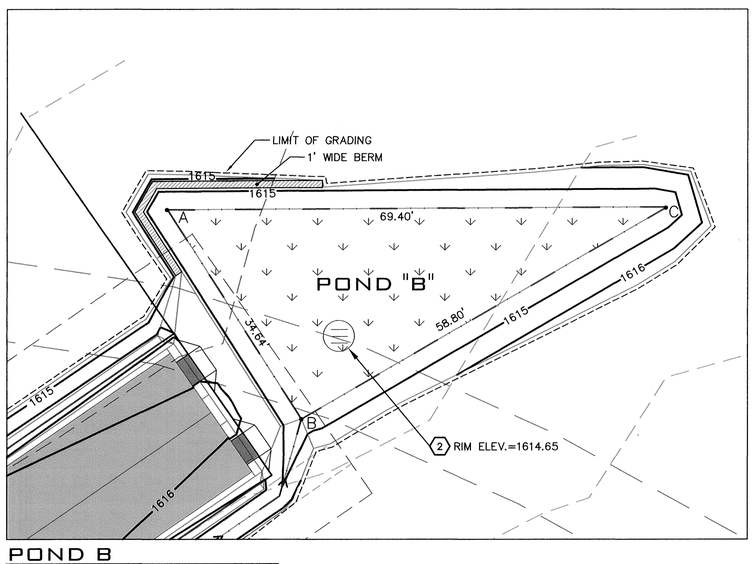
WAIKIKI SWALE

SWALE "A"

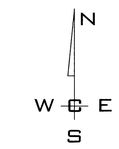
POND BOTTOM AREA PROVIDED = 382 SF
POND BOTTOM EL. = VARIES

GRAPHIC SCALE
10 0 5 10 20
(IN FEET)
1 inch = 10 ft.





POND B

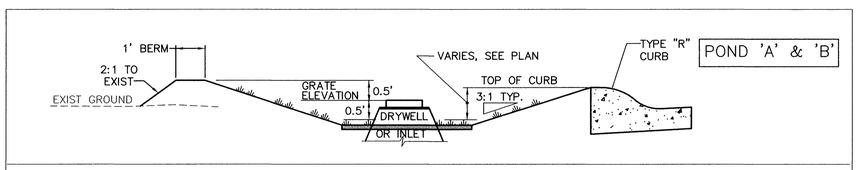


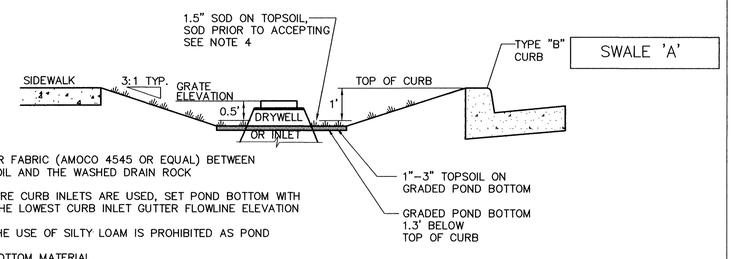
GRAPHIC SCALE
10 0 5 10 20
(IN FEET)
1 inch = 10 ft.

POND BOTTOM LOCATION TABLE CUSTER STATION & OFFSET			
POINT	STATION	OFFSET	DISTANCE
A	16+18.92	71.11'RT.	34.64'
B	15+84.30	69.80'RT.	58.8'
C	15+79.79	128.42'RT.	C-A 69.4'
A	16+18.92	71.11'RT.	

POND "B"

POND BOTTOM AREA PROVIDED = 1,017 SF
POND BOTTOM EL. = 1614.15
MINIMUM BERM EL. = 1615.15





NOTES:

1. PROVIDE FILTER FABRIC (AMOCO 4545 OR EQUAL) BETWEEN THE NATIVE SOIL AND THE WASHED DRAIN ROCK
2. IF TWO OR MORE CURB INLETS ARE USED, SET POND BOTTOM WITH RESPECT TO THE LOWEST CURB INLET GUTTER FLOWLINE ELEVATION
3. WARNING – THE USE OF SILTY LOAM IS PROHIBITED AS POND BOTTOM MATERIAL.
4. IRRIGATION IS REQUIRED FOR SOD INSTALLATION
5. HYDRO-SEED NON-SODDED AREAS WITH TURF GRASS MIX.

SWALE WITH DRYWELL

N.T.S.

B

NOTE:

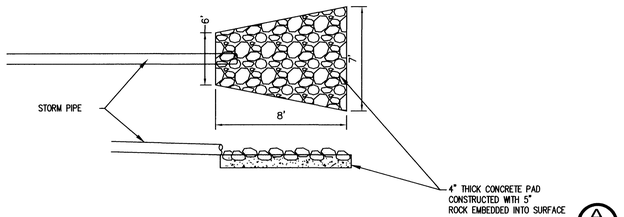
GRASS SEED: PROVIDE FRESH, CLEAN, NEW-CROP SEED COMPLYING WITH TOLERANCE OF PURITY AND GERMINATION ESTABLISHED BY THE OFFICIAL SEED ANALYSIS OF NORTH AMERICAN. PROVIDE SEED MIXTURE COMPOSED OF GRASS SPECIES AND PERCENTAGES AS FOLLOWS:

10 PER CENT	ELKA PERRENIAL RYE
20 PERCENT	DURAR HARD FESCUE
45 PERCENT	COVAR SHEEP/FESCUE
15 PERCENT	REUBENS CANADIAN BLUEGRASS

PROVIDE MIXTURE COMPOSED OF GRASS SEED AND FERTILIZER IN PERCENTAGES AS FOLLOWS:

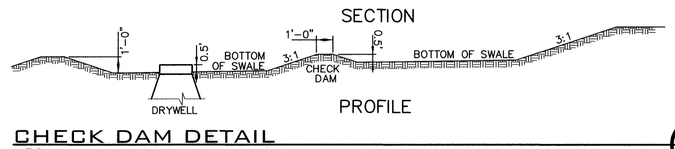
GRASS SEED:	90 LBS. PER ACRE
FERTILIZER:	16-16-16 TIMED RELEASE COMPOSITION, 300 LBS. PER ACRE

ALL SEEDING OF SLOPES SHALL SHALL BE DONE IN ACCORDANCE WITH THE W.S.D.O.T. STANDARD SPECIFICATIONS, SECTION 8-01.



N.T.S.

A



CHECK DAM DETAIL

N.T.S.

C

SPOKANE COUNTY PUBLIC WORKS
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: P-2004
DATE ACCEPTED: 10/8/08
ACCEPTANCE EXPIRES: 10/8/10
PROJECTS LANE MILES: PUBLIC: -
PROJECT LANE MILES PRIVATE: 0.15
CONSTRUCTION DOCUMENTATION AND CERTIFIED RECORD DRAWINGS, "AS-BUILTS" ARE REQUIRED PRIOR TO COUNTY ACCEPTANCE AND ESTABLISHMENT OF THE ROADS AND DRAINAGE FACILITIES FOR MAINTENANCE
PERMIT REQUIRED! (509) 477-3600
NOTIFY PERMIT ENGINEER 2 BUSINESS DAYS PRIOR TO CONSTRUCTION

SANDRA R.F. RASK
STATE OF WASHINGTON
40390
REGISTERED
PROFESSIONAL ENGINEER
9/24/08

NAVD-88 DATUM
BENCHMARK=TBM F-7 FROM WAIKIKI SEWER PROJECT DATED JUNE 2002.
SPIKE IN UTILITY POLE AT W. 1720 FOREST HILLS ROAD.
ELEV. = 1906.93
(SUPPLIED BY SPOKANE COUNTY ENGINEERS).

NO.	DATE	BY	REVISIONS
	9/24/08	SRR	MYLAR SUBMITTAL FOR APPROVAL TO SPOKANE COUNTY
	9/3/08	JJK	SUBMITTAL TO SPOKANE COUNTY
	---	SRR	SUBMITTAL TO SPOKANE COUNTY
	06/12	MRW	ORIGINAL PLAN PREPARATION

SCALE:
HORIZONTAL: AS NOTED
VERTICAL: N/A

PROJ #: 07-294
DATE: 09/24/08
DRAWN: MRW
APPROVED: SRR

WCE
WHIPPLE CONSULTING ENGINEERS
CIVIL AND TRANSPORTATION ENGINEERING
2528 NORTH SULLIVAN ROAD
SPOKANE VALLEY, WA 99216
PH: 509-893-2617 FAX: 509-926-0227

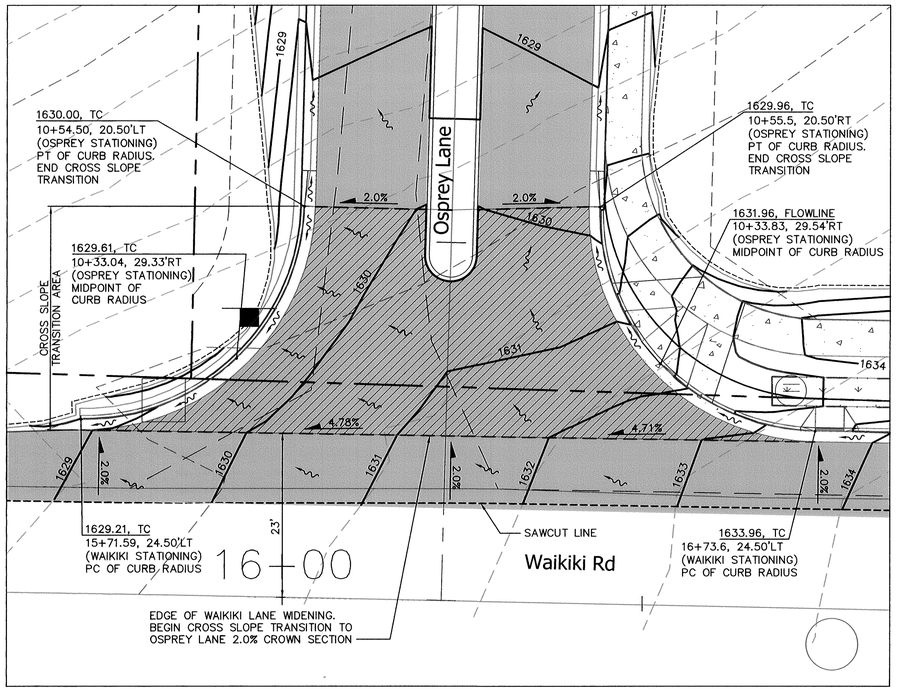
DRAINAGE DETAILS
RIVER'S EDGE ESTATES
2720 WEST WAIKIKI ROAD
SPOKANE COUNTY, WA

SHEET 7 OF 10
JOB NUMBER 2007-294

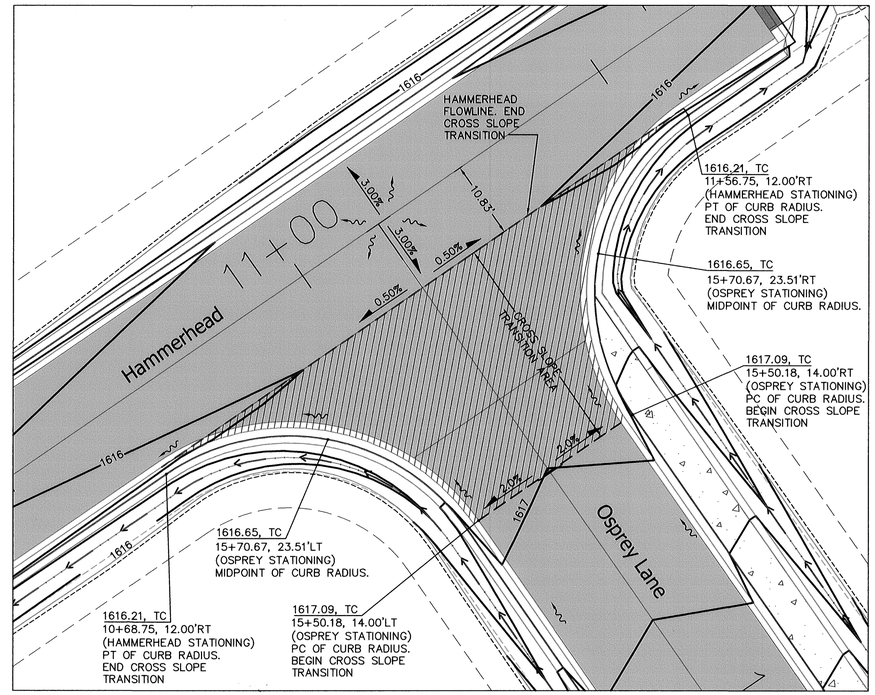
P-2004 Eng Road Drainage

NW. 1/4 SECTION 12, T. 26 N., R. 42 E., W.M.

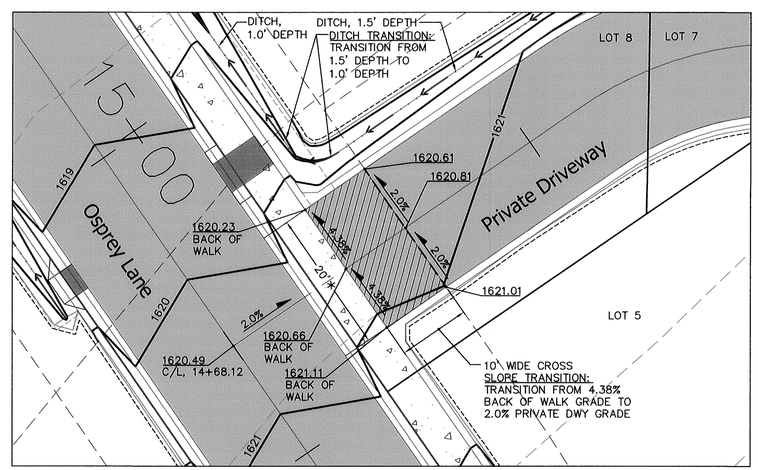
UNDERGROUND SERVICE ALERT
ONE-CALL NUMBER
811
CALL TWO BUSINESS DAYS BEFORE YOU DIG



OSPREY LANE/WAIKIKI ROAD
INTERSECTION DETAIL
1"=10'
1
-



OSPREY LANE/HAMMERHEAD
INTERSECTION DETAIL
1"=10'
2
-



* 20' DRIVEWAY LOCATION SHALL BE 6"THICK CEMENT CONC

OSPREY LANE/PRIVATE DRIVEWAY
INTERSECTION DETAIL
1"=10'
3
-

N
W E
S

GRAPHIC SCALE
10 0 5 10 20
(IN FEET)
1 inch = 10 ft.

LEGEND

- LIMITS OF NEW ASPHALT
- ASPHALT CROSS SLOPE TRANSITION AREA

SPOKANE COUNTY PUBLIC WORKS
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: R-2004
DATE ACCEPTED: 10/8/08
ACCEPTANCE EXPIRES: 10/8/10
PROJECTS LANE MILES: PUBLIC: -
PROJECT LANE MILES PRIVATE: .015
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PERMIT REQUIRED! (509) 477-3600
NOTIFY PERMIT ENGINEER 2 BUSINESS DAYS PRIOR TO CONSTRUCTION

SANDRA R.F. RASK
STATE OF WASHINGTON
PROFESSIONAL ENGINEER
10/8/08
SIGNED
9/24/08

NAVD-88 DATUM
BENCHMARK=TBM F-7 FROM WAIKIKI SEWER PROJECT DATED JUNE 2002.
SPIKE IN UTILITY POLE AT W. 1720 FOREST HILLS ROAD.
ELEV. = 1906.93
(SUPPLIED BY SPOKANE COUNTY ENGINEERS).

NO.	DATE	BY	REVISIONS
	9/24/08	SRR	MYLAR SUBMITTAL FOR APPROVAL TO SPOKANE COUNTY
	9/3/08	JJK	SUBMITTAL TO SPOKANE COUNTY
	---	SRR	SUBMITTAL TO SPOKANE COUNTY
	06/12	MRW	ORIGINAL PLAN PREPARATION

SCALE:
HORIZONTAL: 1"=10'
VERTICAL: N/A

PROJ #: 07-294
DATE: 09/24/08
DRAWN: MRW
APPROVED: SRR

WCE
WHIPPLE CONSULTING ENGINEERS
CIVIL AND TRANSPORTATION ENGINEERING
2528 NORTH SULLIVAN ROAD
SPOKANE VALLEY, WA 99216
PH: 509-893-2617 FAX: 509-926-0227

INTERSECTION DETAILS
RIVER'S EDGE ESTATES
2720 WEST WAIKIKI ROAD
SPOKANE COUNTY, WA

SHEET 8 OF 10
JOB NUMBER 2007-294

R-2004 Eng Const. Drainage

EROSION CONTROL PLAN
RIVER'S EDGE ESTATES
SPOKANE COUNTY, WASHINGTON
NW. 1/4 SECTION 12, T. 26 N., R. 42 E., W.M.

UNDERGROUND SERVICE ALERT
ONE-CALL NUMBER
811
CALL TWO BUSINESS DAYS BEFORE YOU DIG

GENERAL NOTES

1. ALL MATERIALS, WORKMANSHIP, AND CONSTRUCTION OF SITE IMPROVEMENTS SHALL MEET OR EXCEED SITE WORK STANDARDS AND THE STANDARDS AND SPECIFICATIONS SET FORTH IN **SPOKANE COUNTY** REGULATIONS AND APPLICABLE STATE AND FEDERAL REGULATIONS. WHERE THERE IS CONFLICT BETWEEN THESE PLANS AND THE SPECIFICATIONS, OR ANY APPLICABLE STANDARDS, THE HIGHER QUALITY STANDARD SHALL APPLY. ALL WORK WITHIN PUBLIC R.O.W. OR EASEMENTS SHALL BE INSPECTED AND APPROVED BY THE **SPOKANE COUNTY** INSPECTOR. INSPECTION SERVICES AND CONSTRUCTION CERTIFICATION TO BE PROVIDED BY DESIGNEE OF PROJECT SPONSOR/OWNER.

2. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES, AS SHOWN ON THESE PLANS, IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE LOCAL UTILITY LOCATION CENTER AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY PERTINENT LOCATIONS AND ELEVATIONS, ESPECIALLY AT THE CONNECTION POINTS AND AT POTENTIAL UTILITY CONFLICTS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES THAT CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THESE PLANS.

3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM ALL APPLICABLE AGENCIES. THE CONTRACTOR SHALL NOTIFY THE **SPOKANE COUNTY** INSPECTOR AT LEAST 48 HOURS PRIOR TO THE START OF ANY EARTH DISTURBING ACTIVITY OR CONSTRUCTION ON ANY AND ALL PUBLIC IMPROVEMENTS.

4. THE CONTRACTOR SHALL COORDINATE AND COOPERATE WITH THE **SPOKANE COUNTY** AND ALL UTILITY COMPANIES WITH REGARD TO RELOCATIONS OR ADJUSTMENTS OF EXISTING UTILITIES DURING CONSTRUCTION AND TO ASSURE THAT THE WORK IS ACCOMPLISHED IN A TIMELY FASHION AND WITH A MINIMUM DISRUPTION OF SERVICE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL PARTIES AFFECTED BY ANY DISRUPTION OF ANY UTILITY SERVICE.

5. THE CONTRACTOR SHALL HAVE ONE (1) SIGNED COPY OF THE APPROVED PLANS, ONE (1) COPY OF THE APPROPRIATE STANDARDS AND SPECIFICATIONS, AND A COPY OF ANY PERMITS AND EXTENSION AGREEMENTS NEEDED FOR THE JOB ON-SITE AT ALL TIMES.

6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ASPECTS OF SAFETY INCLUDING, BUT NOT LIMITED TO, EXCAVATION, TRENCHING, SHORING, TRAFFIC CONTROL, AND SECURITY.

7. IF, DURING THE CONSTRUCTION PROCESS, CONDITIONS ARE ENCOUNTERED BY THE CONTRACTOR, HIS SUBCONTRACTORS, OR OTHER AFFECTED PARTIES, WHICH COULD INDICATE A SITUATION THAT IS NOT IDENTIFIED IN THE PLANS OR SPECIFICATIONS, THE CONTRACTOR SHALL CONTACT THE ENGINEER IMMEDIATELY.

8. ALL REFERENCES TO ANY PUBLISHED STANDARDS SHALL REFER TO THE LATEST REVISION OF SAID STANDARD, UNLESS SPECIFICALLY STATED OTHERWISE.

9. FOR WORK AFFECTING PUBLIC ROADWAYS OR IF REQUIRED BY **SPOKANE COUNTY** THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL AND PHASING PLAN, IN ACCORDANCE WITH M.U.T.C.D. FOR APPROVAL PRIOR TO ANY CONSTRUCTION ACTIVITIES WITHIN OR AFFECTING THE RIGHT-OF-WAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ANY AND ALL TRAFFIC CONTROL DEVICES AS MAY BE REQUIRED BY SAID PLANS. PRIOR TO INSTALLATION AND PRECONSTRUCTION CONFERENCE SHALL BE HELD WITH **SPOKANE COUNTY**.

10. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL LABOR AND MATERIALS NECESSARY FOR THE COMPLETION OF THE INTENDED IMPROVEMENTS SHOWN ON THESE DRAWINGS OR DESIGNATED TO BE PROVIDED, INSTALLED, CONSTRUCTED, REMOVED OR RELOCATED UNLESS SPECIFICALLY NOTED OTHERWISE.

11. PER AGENCY STANDARDS THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING ROADWAYS FREE AND CLEAR OF ALL CONSTRUCTION DEBRIS AND DIRT TRACKED FROM THE SITE.

12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RECORDING RECORD INFORMATION ON A SET OF RECORD DRAWINGS KEPT AT THE CONSTRUCTION SITE AND AVAILABLE TO THE **SPOKANE COUNTY** INSPECTOR AT ALL TIMES.

13. DIMENSIONS FOR LAYOUT AND CONSTRUCTION ARE NOT TO BE SCALED FROM ANY DRAWING. FOR ADDITIONAL INFORMATION CONTACT THE ENGINEER FOR CLARIFICATION AND NOTE ON THE RECORD DRAWINGS.

14. ALL EROSION AND SEDIMENT CONTROL (E.S.C.) MEASURES SHALL BE INSTALLED AT THE LIMITS OF CONSTRUCTION PRIOR TO GROUND-DISTURBING ACTIVITY. ALL E.S.C. MEASURES SHALL BE MAINTAINED IN GOOD REPAIR BY THE CONTRACTOR UNTIL SUCH TIME AS THE ENTIRE DISTURBED AREAS ARE STABILIZED WITH HARD SURFACE OR LANDSCAPING.

15. THE CONTRACTOR SHALL SEQUENCE INSTALLATION OF UTILITIES IN SUCH A MANNER AS TO MINIMIZE POTENTIAL UTILITY CONFLICTS. IN GENERAL, STORM SEWER AND SANITARY SEWER SHOULD BE CONSTRUCTED PRIOR TO INSTALLATION OF WATER LINES AND DRY UTILITIES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE ALL UTILITY RELOCATIONS CONSISTENT WITH THE CONTRACTORS SCHEDULE FOR THIS PROJECT, WHETHER SHOWN OR NOT SHOWN, AS IT RELATES TO THE CONSTRUCTION ACTIVITIES CONTEMPLATED IN THESE PLANS.

16. ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY IS SUBJECT TO THE JURISDICTION OF THE **SPOKANE COUNTY** ENGINEERING DEPARTMENT STANDARD DETAILS AND SPECIFICATIONS.

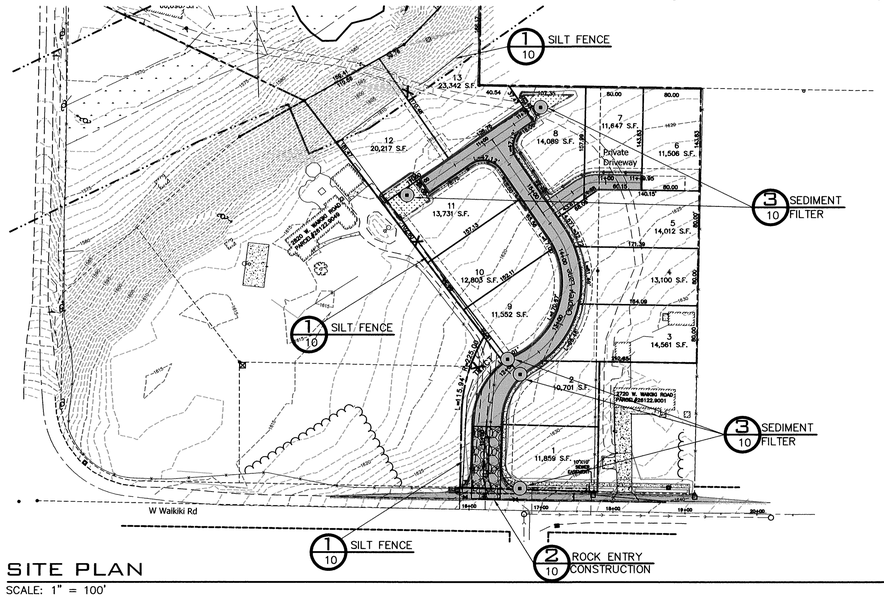
17. ALL CONSTRUCTION OPERATIONS , INCLUDING THE WARMING UP, REPAIR, ARRIVAL, DEPARTURE OR RUNNING OF TRUCKS, EARTH MOVING EQUIPMENT, CONSTRUCTION EQUIPMENT AND ANY OTHER ASSOCIATED EQUIPMENT SHALL GENERALLY BE LIMITED TO THE TIME PERIOD APPROVED BY **SPOKANE COUNTY**.

18. BASED ON A REQUIREMENT FROM THE **SPOKANE COUNTY** THE ENGINEER OR HIS DESIGNEE SHALL PERFORM MATERIALS TESTING AND QUALITY CONTROL ON THE PROJECT AND SHALL SUBMIT COPIES OF DAILY REPORTS, TEST REPORTS, PROJECT CERTIFICATION AND RECORD DRAWINGS TO THE **SPOKANE COUNTY** ENGINEER.

19. NO REVISIONS SHALL BE MADE TO THESE PLANS WITHOUT THE APPROVAL BY THE **SPOKANE COUNTY** ENGINEER AND NOTIFICATION OF THE ENGINEER OF RECORD.

20. ONSITE GRADING SHALL BE IN ACCORDANCE WITH THE APPROVED GRADING PLAN AND E.S.C. PLAN. ANY IMPORT OR EXPORT OF MATERIAL SHALL BE FROM A PREAPPROVED SOURCE/DESTINATION AND COORDINATED WITH THE **SPOKANE COUNTY** DEPARTMENT OF BUILDING AND PLANNING AT 509-477-3675. GRADING ON THIS SITE OR ANY OTHER SITE MUST COMPLY WITH ALL DEVELOPMENT REGULATIONS INCLUDING, BUT NOT LIMITED TO , GRADING PERMITS, S.E.P.A. REVIEW, TIMBER HARVEST PERMITS, CRITICAL AREAS, FLOODPLAINS, DESIGNATED DRAINAGEWAYS, ETC.

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.



SITE PLAN
SCALE: 1" = 100'

STREETS
SPOKANE COUNTY ENGINEERS
1026 WEST BROADWAY
SPOKANE, WASHINGTON 99260
PHONE: 509-477-3600
FAX: 509-477-7478
CONTACT: MATT ZARECOR, P.E.

DISTRICT ENGINEER
E & H ENGINEERING
3707 S. GODFREY BLVD.
AIRPORT BUSINESS PARK
SPOKANE, WASHINGTON
PHONE: 509-744-0245
CONTACT: TOM HAGGARTY, P.E.

WATER PURVEYOR
WHITWORTH WATER DISTRICT #2
10828 WAIKIKI ROAD
SPOKANE, WA 99218
PHONE: 509-466-0550
FAX: 509-467-1830
CONTACT: DOUG BABIN

FIRE DEPARTMENT
FIRE DISTRICT NO. 9
3801 EAST FARWELL ROAD
MEAD, WA 99021
PHONE: 509-466-4602
FAX: 509-466-4698
CONTACT: DAN WALSH

GAS / POWER
AVISTA UTILITIES
1411 E. MISSION AVENUE
SPOKANE, WA 99220
PHONE: 509-495-8536
FAX: 509-477-8734
CONTACT: SHERRY MILLER

TELEPHONE
QWEST
904 NORTH COLUMBUS
SPOKANE, WA 99202
PHONE: 509-455-2580
FAX: 509-455-2104
CONTACT: DAVE CLARK

CABLE
COMCAST BROADBAND
1717 EAST BUCKEYE
SPOKANE, WA 99207
PHONE: 509-755-4717
FAX: 509-483-9261
CONTACT: BRYAN RICHARDSON

SOLID WASTE
WASTE MANAGEMENT
SPOKANE, WASHINGTON
PHONE: 509-466-3400

SEWER
SPOKANE COUNTY UTILITIES
1026 WEST BROADWAY AVENUE
SPOKANE, WASHINGTON 99260
PHONE: 509-477-3604
FAX: 509-477-4715
CONTACT: BILLY URHAUSEN

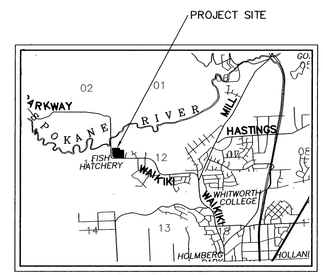
HEALTH DEPT.
SPOKANE REGIONAL HEALTH
1101 WEST COLLEGE AVENUE
SPOKANE, WA 99260
PHONE: 509-324-1560 EXT. 1
FAX: 509-324-3603
CONTACT: DON COPLEY

INSPECTION
ALLWEST
12928 E. INDIANA AVENUE
SPOKANE VALLEY, WA 99216
PHONE: 509-534-4411
FAX: 509-534-9326
CONTACT: PAUL T. NELSON P.E.

SURVEYOR
WHIPPLE CONSULTING ENGINEERS
2528 N. SULLIVAN ROAD
SPOKANE VALLEY, WA 99216
PHONE: 509-893-2617
FAX: 509-926-0227
CONTACT: TERRY IRWIN, P.L.S.

ENGINEER
WHIPPLE CONSULTING ENGINEERS
2528 N. SULLIVAN ROAD
SPOKANE VALLEY, WA 99216
PHONE: 509-893-2617
FAX: 509-926-0227
CONTACT: SANDRA R.F. RASKELL, P.E.

OWNER
ROBERT TOWNSEND CONSTRUCTION INC
CANYON CONSTRUCTION NW INC
9323 S. STEVENS CREEK ROAD
SPOKANE, WASHINGTON 99223
CONTACT: BOB TOWNSEND
PHONE: 509-448-6882



VICINITY MAP
NOT TO SCALE

LEGAL DESCRIPTION (PER ASSESSOR'S OFFICE)

PARCEL #26122.9133:
BEG AT W1/4 COR TH S8 8DEG 51MIN E ALG C/L OF SEC 12 773.42FT TH N01DEG 05MIN E30.95F T TO N LN OF WAIKIKI RD AND TRUE POB TH N88DEG 51MIN W ALG R /W 186.32FT TH N1DEG 05MIN E100.68FT TH NELY ALG CUR 115.94 FT TH N37DEG 14MIN W413.75FT TH N64DEG 31MIN W362.25FT TH N45FT ALG E R/W OF WAIKIKI RD TH E572.09FT TH S168.17FT TH E311.4 9FT TH S253FT TH W140FT TH S310.36FT TO TRUE POB

LEGEND

GRAVEL AND WIRE MESH INLET SEDIMENT FILTER

SILT FENCE. SEE DETAIL AND GENERAL NOTE 5.

ROCK CONSTRUCTION ENTRY. SEE DETAIL AND GENERAL NOTE 6.

EROSION & SEDIMENT CONTROL GENERAL NOTES AND INFORMATION

1. AN EROSION/SEDIMENT CONTROL (**E.S.C.**) PLAN IS REQUIRED FOR THIS PROJECT. IMPLEMENTATION OF THE **E.S.C. PLAN,** AND CONSTRUCTION, MAINTENANCE, AND UPGRADING OF THE **E.S.C.** 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 **E.S.C. PLAN** DOES NOT CONSTITUTE APPROVAL OF ANY OF THE PROPOSED ROAD, STORM DRAINAGE, GRADING OR UTILITY DESIGN ELEMENTS SHOWN ON THE **E.S.C. PLAN.**

3. THE EROSION/SEDIMENT CONTROL MEASURES SHOWN ARE THE MINIMUM REQUIREMENTS FOR THE ANTICIPATED SITE CONDITIONS. THE CONTRACTOR SHALL INSPECT AND MAINTAIN THESE **E.S.C.** MEASURES DAILY AND SHALL MAINTAIN AND UPGRADE THESE MEASURES AS NECESSARY TO PREVENT SEDIMENT-LADEN WATER FROM EITHER FLOWING OFF SITE OR INTO NEW/EXISTING STORM DRAINAGE FACILITIES SUCH AS DRYWELLS, CULVERTS, OR GRAVEL GALLERIES.

4. GEOTEXTILE FABRIC IS TO BE PLACED ON THE RIMS OF CATCH BASINS AND INLETS UNTIL SUCH TIME THAT THE VEGETATION ON THE SITE IS ESTABLISHED AND THE THREAT OF SEDIMENT DEPOSITION INTO THE DRAINAGE SYSTEM IS MITIGATED.

5. THE SILT FENCES SHALL BE INSTALLED BY THE CONTRACTOR PRIOR TO OTHER SITE WORK AND MAINTAINED THROUGHOUT THE DURATION OF CONSTRUCTION.

6. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING ROCK CONSTRUCTION ENTRIES AT ANY AND ALL LOCATIONS USED TO ENTER OR EXIT THE PROJECT SITE.

7. THE CONTRACTOR IS RESPONSIBLE FOR DESIGNATING A LOCATION WHERE CONCRETE TRUCKS AND EQUIPMENT CAN BE WASHED OUT AND NOT LOCATED NEAR OR DRAINING INTO A STORM DRAINAGE AREA.

8. PROPERTY OWNER: ROBERT TOWNSEND, 9323 S. STEVENS CREEK RD, SPOKANE, WA 99223

9. PERMIT APPLICANT: WHIPPLE CONSULTING ENGINEERS

10. CONTACT PERSON ON SITE: SANDRA RASKELL, P.E.

11. PROJECT LOCATION: SPOKANE COUNTY, IN THE N.W. 1/4 SECTION 12, TOWNSHIP 26 NORTH, RANGE 42 EAST, W.M.

12. PROJECT DESCRIPTION: RIVER'S EDGE IS A RESIDENTIAL LONG PLAT SUBDIVISION CONSISTING OF 14 LOTS AND WILL REQUIRE CONSTRUCTION OF SEWER, WATER, ROADS, AND STORM DRAINAGE. THE IMPROVEMENTS CONSIST OF APPROXIMATELY 360 LINEAR FEET OF DRAINAGE AND ELECTRICAL FACILITIES, AND 917 LINEAR FEET OF NEW STREETS AND CURBS WITH ASSOCIATED STORM DRAINAGE.

13. **DESCRIPTION OF E.S.C.**
MEASURES: USE OF SILT FENCES AND ROCK CONSTRUCTION ENTRANCES.

ALL **E.S.C.** MEASURES MENTIONED ABOVE ARE TEMPORARY AND WILL BE REMOVED AFTER YARDS ARE LANDSCAPED.

14. EXISTING VEGETATION: 1 EXISTING BARN, SCRUB BRUSH, TREES AND TALL GRASSES.

15. PLAN PREPARATION DATE: JUNE, 2008

16. SOILS: ON SITE SOILS, MARBLE SANDY LOAM (McB), PEONE SILT LOAD (PeA), AND SPRINGDALE GRAVELLY SANDY LOAMS (SwB, SxB, AND SyB).

17. **STABILIZATION OF DENUDED AREAS:**
ANY DISTURBED AREAS, WHICH WOULD BE LEFT BARE FOR MORE THAN 7 DAYS AND ARE NOT INTENDED TO BE REWORKED WITHIN 30-45 DAYS SHALL BE SEEDED WITH A FAST STARTING NATIVE DRYLAND GRASS SUCH AS ANNUAL RYE, OR APPROVED EQUAL AT A RATE OF 60 lbs/ACRE.

18. **CONTROL OF POLLUTANTS:**
ANY SPILLS WILL BE HANDLED ACCORDING TO THE **DEPARTMENT OF ECOLOGY** AND **DEPARTMENT OF HEALTH** GUIDELINES.

19. **LIMITS OF GRADING:**
DURING THE COURSE OF CONSTRUCTION THE AMOUNT OF DISTURBED AREA SHALL BE KEPT TO A MINIMUM AND SHALL BE LIMITED TO THE AREA SHOWN AS "LIMITS OF GRADING" ON THIS SHEET OF THE **EROSION CONTROL PLANS.**

MAINTENANCE

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION AND MAINTENANCE OF THE TEMPORARY **E.S.C.** MEASURES.

2. SEDIMENT BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RUNOFF-PRODUCING RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL.

3. NECESSARY REPAIRS TO BARRIERS OR REPLACEMENT OF FILTER FABRIC SHALL BE ACCOMPLISHED PROMPTLY.

4. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH RUNOFF-PRODUCING RAINFALL. DEPOSITS MUST BE REMOVED WHEN THE LEVEL OF DEPOSITION REACHES APPROXIMATELY 1/2 THE HEIGHT OF THE BARRIER.

5. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE **E.S.C.** STRUCTURE IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.

6. ALL TEMPORARY AND PERMANENT **E.S.C.** PRACTICES SHALL BE MAINTAINED AND REPAIRED AS NEEDED TO ASSURE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION.

7. ALL TEMPORARY **E.S.C.** MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY BMP'S ARE NO LONGER NEEDED. TRAPPED SEDIMENT SHALL BE REMOVED OR STABILIZED ON SITE. DISTURBED SOIL AREAS RESULTING FROM REMOVAL SHALL BE PERMANENTLY STABILIZED.

8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING DIRT, MUD AND OTHER CONSTRUCTION DEBRIS WHICH MAY ACCUMULATE ON PAVED STREETS ADJACENT TO THE SITE AS A RESULT OF CONSTRUCTION ACTIVITY. CLEANING SHALL BE ON AN "AS NEEDED" BASIS USING SWEEPING AND WATER TO WASH THE CONSTRUCTION DEBRIS FROM THE STREET.

9. ON-SITE DUST CONTROL SHALL BE ACCOMPLISHED BY USING WATER. APPLICATIONS OF WATER MAY BE REQUIRED SEVERAL TIMES PER DAY DURING CONSTRUCTION ACTIVITY.

CERTIFICATION STATEMENT: I CERTIFY THAT THIS EROSION AND SEDIMENT CONTROL PLAN MEETS THE **E.S.C.** REQUIREMENTS AS LISTED IN CHAPTER 4.5 OF **THE SPOKANE COUNTY** GUIDELINES FOR STORMWATER MANAGEMENT.

Sandra R.F. Raskell, P.E.
ENGINEER

N
W E
S

SPOKANE COUNTY PUBLIC WORKS
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: P-2004
DATE ACCEPTED: 10/8/08
ACCEPTANCE EXPIRES: 10/8/10
PROJECTS LANE MILES: PUBLIC: -
PROJECT LANE MILES PRIVATE: 0.15
CONSTRUCTION DOCUMENTATION AND CERTIFIED RECORD DRAWINGS, "AS-BUILTS" ARE REQUIRED PRIOR TO COUNTY ACCEPTANCE AND ESTABLISHMENT OF THE ROADS AND DRAINAGE FACILITIES FOR MAINTENANCE
PERMIT REQUIRED! (509) 477-3600
NOTIFY PERMIT ENGINEER 2 BUSINESS DAYS PRIOR TO CONSTRUCTION

SANDRA R. F. RASKELL
STATE OF WASHINGTON
PROFESSIONAL ENGINEER
9/24/08

NAVD-88
BENCHMARK=TBM F-7 FROM WAIKIKI SEWER PROJECT DATED JUNE 2002.
SPIKE IN UTILITY POLE AT W. 1720 FOREST HILLS ROAD.
ELEV. = 1906.93
(SUPPLIED BY SPOKANE COUNTY ENGINEERS).

NO.	DATE	BY	REVISIONS
	9/24/08	SRR	MYLAR SUBMITTAL FOR APPROVAL TO SPOKANE COUNTY
	9/3/08	JJK	SUBMITTAL TO SPOKANE COUNTY
	---	SRR	SUBMITTAL TO SPOKANE COUNTY
	06/08	MAT	ORIGINAL PLAN PREPARATION

SCALE:
HORIZONTAL: AS SHOWN
VERTICAL: N.A.

PROJ #: 2007-294
DATE: 09/24/08
DRAWN: MAT
APPROVED: SRR

WCE
WHIPPLE CONSULTING ENGINEERS
CIVIL AND TRANSPORTATION ENGINEERING
2528 NORTH SULLIVAN ROAD
SPOKANE VALLEY, WASHINGTON 99216
PH: 509-893-2617 FAX: 509-926-0227

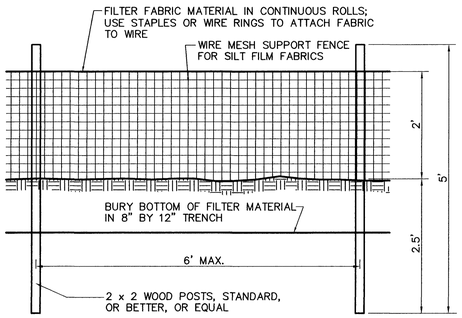
EROSION CONTROL PLAN
RIVER'S EDGE ESTATES
SPOKANE COUNTY, WASHINGTON

SHEET 9 OF 10
JOB NUMBER 2007-294

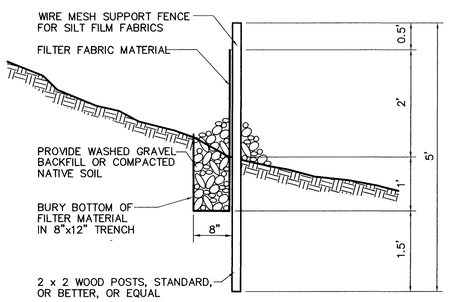
P-2004 Eng Road Drainage

N.W. 1/4 S. 12, T. 26 N., R. 42 E., W.M.

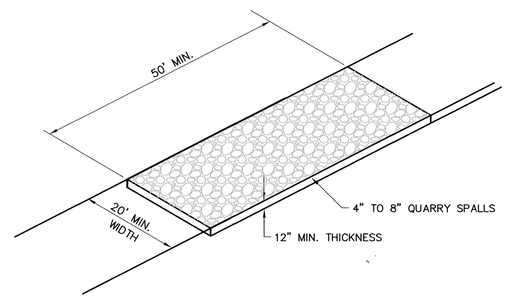
UNDERGROUND SERVICE ALERT
ONE-CALL NUMBER
811
CALL TWO BUSINESS DAYS BEFORE YOU DIG



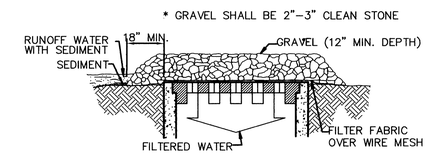
ELEVATION



SILT FENCE DETAIL (1 / -)
NOT TO SCALE



ROCK CONSTRUCTION ENTRY (2 / -)
NOT TO SCALE



GRAVEL AND WIRE MESH INLET SEDIMENT FILTER (3 / -)
NOT TO SCALE

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OFFICIAL PUBLIC DOCUMENT ORIGINAL
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SANDRA R.F. RASKEN, STATE OF WASHINGTON, 39901, REGISTERED PROFESSIONAL ENGINEER
9/24/08

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	---	SRR	SUBMITTAL TO SPOKANE COUNTY
	06/08	MAT	ORIGINAL PLAN PREPARATION

SCALE:
HORIZONTAL: N.T.S.
VERTICAL: N.A.

PROJ #: 2007-294
DATE: 09/24/08
DRAWN: MAT
APPROVED: SRR

WCE
WHIPPLE CONSULTING ENGINEERS
CIVIL AND TRANSPORTATION ENGINEERING
2528 NORTH SULLIVAN ROAD
SPOKANE VALLEY, WASHINGTON 99216
PH: 509-893-2617 FAX: 509-926-0227

EROSION CONTROL DETAILS
RIVER'S EDGE ESTATES
SPOKANE COUNTY, WASHINGTON

SHEET 10 OF 10
JOB NUMBER 2007-294

P-2004 Eng Road, Drainage