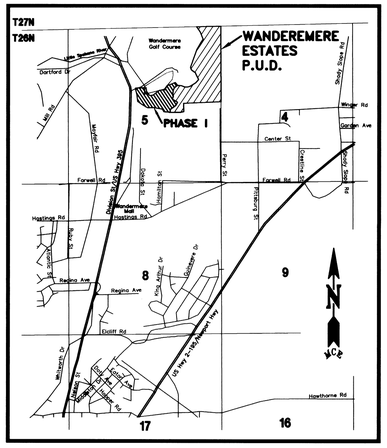
WANDERMERE ESTATES

PHASE I STREET PLANS

SECTION 5, T.26 N., R.43 E., W.M.
SPOKANE COUNTY, WASHINGTON

UNDERGROUND SERVICE ALERT
ONE-CALL NUMBER
456-8900
CALL TWO BUSINESS DAYS BEFORE YOU DIG



VICINITY MAP

GENERAL NOTES – STREET/DRAINAGE

GENERAL:

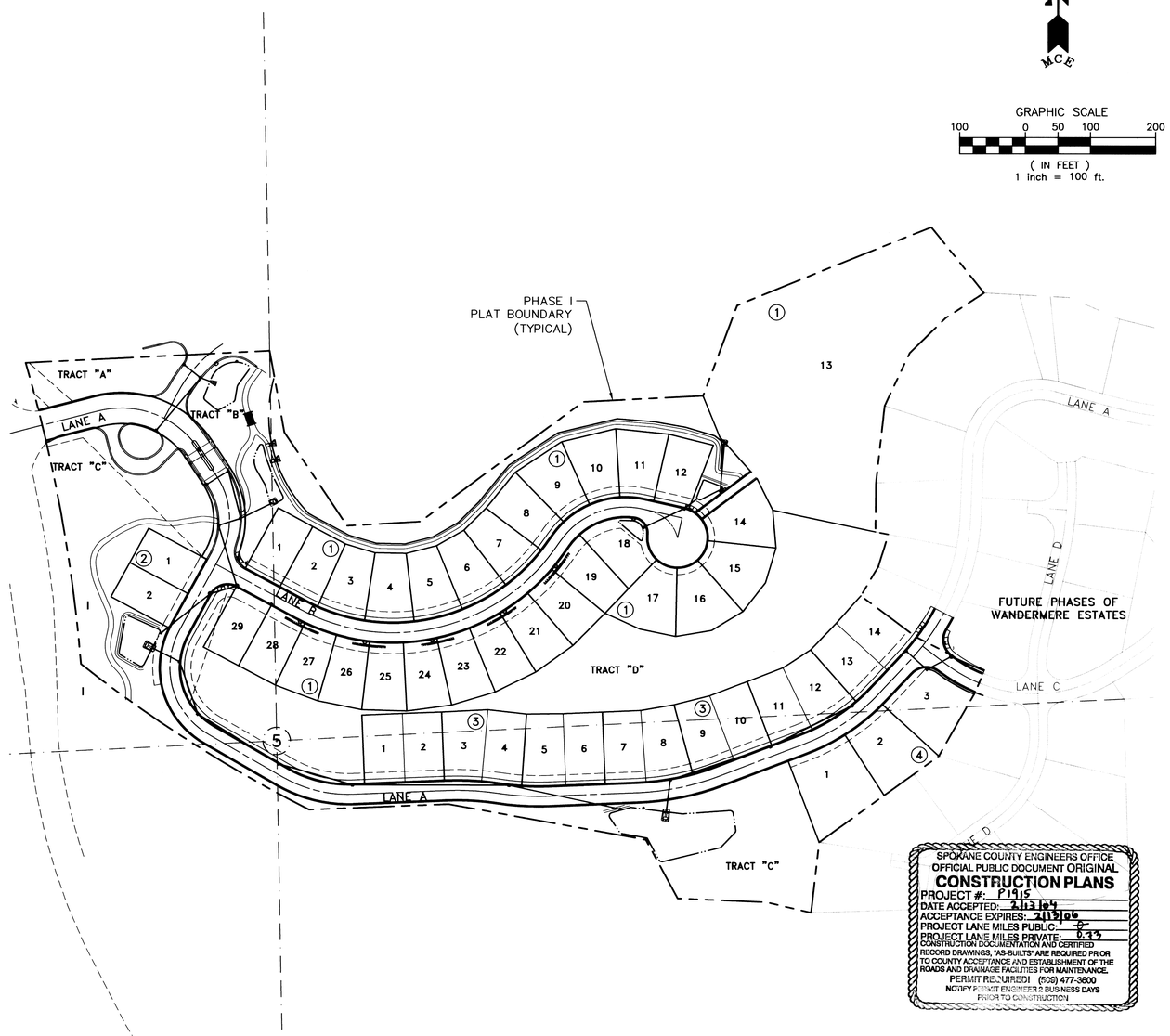
1. ALL WORK AND MATERIALS SHALL BE IN CONFORMANCE WITH THE "SPOKANE COUNTY STANDARDS FOR ROAD AND SEWER CONSTRUCTION" 2001, AND AS AMENDED.
2. LOCATIONS OF EXISTING UTILITIES SHOWN IN THESE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES. ANY CONFLICTING UTILITIES SHALL BE RELOCATED PRIOR TO CONSTRUCTION OF ROAD AND DRAINAGE FACILITIES.
3. THE CONTRACTOR IS REQUIRED TO HAVE A COMPLETE SET OF THE ACCEPTED 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 DRAIN ROCK AND THE NATIVE SOILS.
6. PRIOR TO SITE CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR LOCATING UNDERGROUND UTILITIES. CALL THE UNDERGROUND UTILITY LOCATION SERVICE AT 456-8000 BEFORE YOU DIG.
7. GEOTEXTILE FABRIC SHALL BE PLACED BETWEEN THE RIMS AND GRATES 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.

SUPPLEMENTAL – WHEN APPLICABLE:

8. 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.
9. THE CONTRACTOR SHALL EMPLOY A WASHINGTON STATE-LICENSED PROFESSIONAL LAND 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 THE CONCRETE GUTTER.

EROSION/SEDIMENTATION CONTROL (SEE SHEET 2 OF 11):

10. 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, WHICH EVER IS LATER.
11. 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.
12. THE EROSION/SEDIMENTATION CONTROL MEASURES SHOWN ARE THE MINIMUM REQUIREMENTS FOR THE ANTICIPATED SITE CONDITIONS THE CONTRACTOR SHALL INSPECT AND MAINTAIN THE ESC MEASURES DAILY, AND SHALL MAINTAIN AND UPGRADE THE MEASURES AS NECESSARY TO PREVENT SEDIMENT-LADEN RUNOFF FROM EITHER FLOWING OFF THE SITE OR INTO NEW AND/OR EXISTING STORM DRAINAGE FACILITIES, SUCH AS DRYWELLS, CULVERTS, INLETS, CATCH BASINS OR GRAVEL GALLERIES.
13. THE CONTRACTOR/DEVELOPER IS RESPONSIBLE FOR INSTALLING ROCK CONSTRUCTION ENTRIES AT ANY AND ALL LOCATIONS USED TO ENTER OR EXIT THE PROJECT SITE.



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

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: P1915
DATE ACCEPTED: 2/13/04
ACCEPTANCE EXPIRES: 2/13/06
PROJECT LANE MILES PUBLIC: 0
PROJECT LANE MILES PRIVATE: 0.33
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

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.

Daniel Grebe
DEVELOPER'S APPROVAL

2/3/2004
DATE

PROJECT CONTACTS

PROJECT ENGINEER	MOUNTAIN CREST ENTERPRISES, INC. NELSON W. OGREN, P.E. (509) 466-5794 FAX: 466-1514	GOVERNING AGENCY	SPOKANE COUNTY UTILITIES KEVIN R. COOKE, P.E. (509) 477-3604 FAX: 477-4715
CLIENT CONTACT	WANDERMERE ESTATES, LLC LOWELL MCKEE (509) 467-6654 FAX: 467-3534	WATER PURVEYOR	WATER DISTRICT NO. 3 TY WICK (509) 536-0121 FAX: 534-3760

LEGEND

EXISTING | PROPOSED

SURFACE FEATURES
PLAT BOUNDARY
CENTER LINE
RIGHT-OF-WAY LINE
PROPERTY LINE
EASEMENT LINE
CURB LINE
SIDEWALK
EDGE OF PAVEMENT
EDGE OF GRAVEL
DITCH LINE
FENCE LINE
BUILDINGS/STRUCTURES
CONTOUR (MAJOR) 2000 / 2005
CONTOUR (MINOR)

SANITARY SEWER
SEWER MAIN (w/ Flow)
MANHOLE
CLEAN-OUT
SIDE SERVICE

WATER
WATER MAIN
VALVE
HYDRANT
BLOW-OFF ASSEMBLY
AIR/VACUUM RELIEF
SERVICE

STORM DRAINAGE
STORM MAIN
CATCH BASIN
MANHOLE
DRYWELL

UTILITIES
GAS MAIN
POWER LINE
TELEPHONE
POWER VAULT
POWER/LIGHT POLE

SHEET INDEX

SHEET TITLE	SHEET No.
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LANE A STA 16+25.00 TO 26+50.00	5
LANE A STA 26+50.00 TO 30+62.13	6
LANE B STA 10+00.00 TO 18+02.94	7
LANE A DRAINAGE DETAILS	8
LANE A DRAINAGE DETAILS	9
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CHANNELIZATION PLAN	11

DATUM

NAVD '88
WSDOT GPS MON "GP32395-201" SR 395 MP 167.350
BRASS CAP SET IN CONCRETE IN CASE AND COVER
ELEVATION = 1748.385 FEET

Date	Activity	
10/29/03	ORIGINAL PREPARATION	NWO
11/24/03	COUNTY REVIEW COMMENTS	NWO

NELSON WAYNE OGREN
STATE OF WASHINGTON
REGISTERED PROFESSIONAL ENGINEER
EXPIRES 9/24/05

Mountain Crest Enterprises Inc.
4024 East First Street
P.O. Box 1800, Mead, WA 99021
(509) 466-5794 Fax: 466-1514

WANDERMERE ESTATES P.U.D.
PHASE I
COVER SHEET
SPOKANE COUNTY, WA

STREET PLANS
County Plat No.: P-1915
MCE Project No.: 02-207
Sheet: 1 of 11

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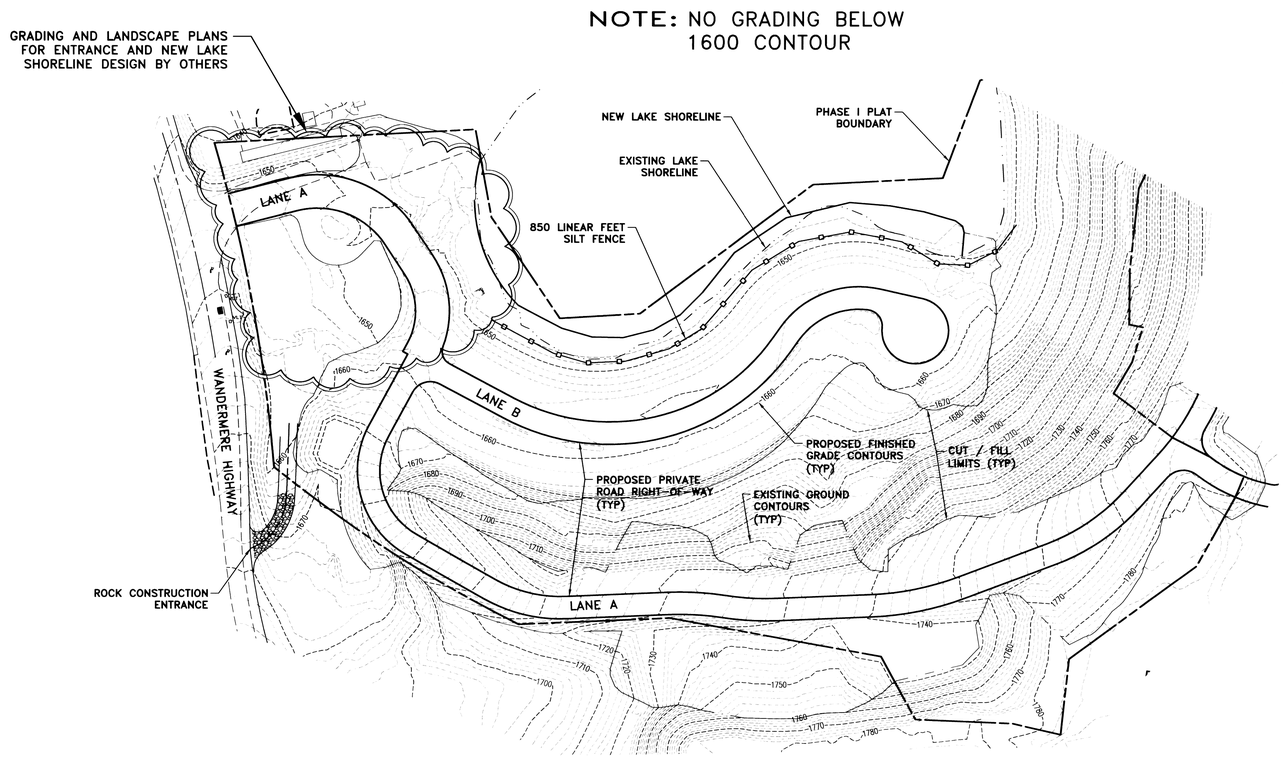
SEC. 5, T.26 N., R.43 E.,W.M.

UNDERGROUND SERVICE ALERT
ONE-CALL NUMBER
456-8000
CALL TWO BUSINESS DAYS BEFORE YOU DIG

Date	Activity	By
10/29/03	ORIGINAL PREPARATION	NWO
11/24/03	COUNTY REVIEW COMMENTS	NWO

NOTE: NO GRADING BELOW 1600 CONTOUR



N
MCE

GRAPHIC SCALE
100 0 50 100 200
(IN FEET)
1 inch = 100 ft.
Contour Interval: 2 Feet

EROSION & SEDIMENT CONTROL

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3. THE ESC MEASURES SHOWN ARE THE MINIMUM REQUIREMENTS FOR THE ANTICIPATED SITE CONDITIONS. THE CONTRACTOR SHALL INSPECT AND MAINTAIN THESE MEASURES DAILY, AND SHALL MAINTAIN AND UPGRADE AS NECESSARY TO PREVENT SEDIMENT-LADEN WATER FROM EITHER FLOWING OFF SITE, OR INTO NEW/EXISTING STORM DRAINAGE FACILITIES, SUCH AS DRYWELLS, INLETS, STORM PIPES OR CULVERTS.
4. SILT FENCE (SEE DETAIL, SHEET 3) SHALL BE INSTALLED BY THE CONTRACTOR PRIOR TO ANY SITE WORK, AND MAINTAINED THROUGH THE DURATION OF CONSTRUCTION. THE LENGTH OF SILT FENCE SPECIFIED IS THE MINIMUM REQUIRED. ADDITIONAL SILT FENCE MAY BE NECESSARY TO PREVENT SEDIMENT-LADEN WATER FROM EITHER FLOWING OFF SITE, OR INTO NEW/EXISTING STORM DRAINAGE FACILITIES.
5. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING ROCK CONSTRUCTION ENTRIES AT ANY AND ALL LOCATIONS USED TO ENTER OR EXIT THE PROJECT SITE.
6. PROPERTY DEVELOPER: WANDERMERE ESTATES, L.L.C.
7. PROJECT LOCATION: NORTH OF THE CITY OF SPOKANE, EAST OF US HIGHWAY 395, ADJACENT TO THE SOUTH AND EAST OF THE WANDERMERE GOLF COURSE, IN SPOKANE COUNTY, WASHINGTON.
8. PROJECT DESCRIPTION: 200 LOT PRIVATE RESIDENTIAL DEVELOPMENT ON APPROXIMATELY 88.6 ACRES.
9. DESCRIPTION OF ESC MEASURES: SILT FENCES AND ROCK CONSTRUCTION ENTRANCES.
10. EXISTING VEGETATION: NATIVE PONDEROSA PINE AND FIR TREES, NATIVE GRASSES AND UNDERBRUSH.
11. PLAN PREPARATION DATE: OCTOBER, 2003.
12. SOILS: SPOKANE LOAM (SpD) AND SPRINGDALE GRAVELY SANDY LOAM (SWB), BASED ON THE SCS MAPS OF THE SOILS SURVEY OF SPOKANE COUNTY, WASHINGTON.
13. 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 DRYLAND GRASS SEED MIX, AS SPECIFIED BELOW.
14. ALL DRAINAGE CHANNELS SHALL BE EVALUATED FOR EROSION POTENTIAL. THOSE DRAINAGE COURSES WHICH ARE TO RECEIVE CONCENTRATED STORM WATER RUNOFF AND ARE FOUND TO BE SUBJECT TO EROSION FROM THE ANTICIPATED POST DEVELOPMENT RUNOFF SHALL BE EITHER LINED OR RIP-RAPPED TO MINIMIZE THE POTENTIAL FOR EXCESSIVE EROSION.

MAINTENANCE

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION AND MAINTENANCE OF ALL TEMPORARY ESC 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 DEPOSIT REMAINING IN PLACE AFTER THE ESC STRUCTURE IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.
6. ALL TEMPORARY AND PERMANENT ESC PRACTICES SHALL BE MAINTAINED AND REPAIRED AS NEEDED TO ASSURE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION.
7. ALL TEMPORARY ESC MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY BPM'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 WATER UNDER PRESSURE. SWEEPING AND WATER SHALL BE USED WHEN WATER PRESSURE ALONE WILL NOT WASH THE CONSTRUCTION DEBRIS FROM THE STREET.
9. DUST CONTROL: AN APPROVED METHOD OF DUST CONTROL, MEETING THE REQUIREMENTS OF LOCAL REGULATIONS SHALL BE UTILIZED DURING THIS PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY MATERIALS WHICH SPILL ONTO LOCAL STREETS DURING THE TRANSPORTATION OF THE EQUIPMENT. SHOULD A SPILL OCCUR, THE CONTRACTOR SHALL REMOVE THE MATERIAL, BY THE END OF THE DAY. NO MATERIAL SHALL BE ALLOWED TO SET, DRY OR BE WASHED INTO ADJACENT STORMWATER FACILITIES.

DRYLAND GRASS SEED MIX

PER APPENDIX E, SPOKANE COUNTY GUIDELINES FOR STORMWATER MANAGEMENT

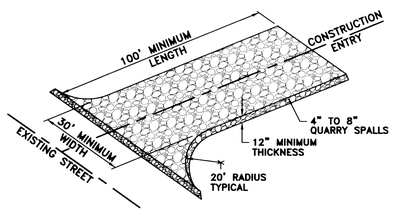
GRASS SEED: PROVIDE FRESH, CLEAN, NEW-CROP SEED COMPLYING WITH TOLERANCE OF PURITY AND GERMINATION ESTABLISHED BY THE OFFICIAL SEED ANALYSIS OF NORTH AMERICA. PROVIDE SEED MIXTURE COMPOSED OF GRASS SPECIES AND PERCENTAGES AS FOLLOWS:

- 10% - ELKA PERENNIAL RYE
- 20% - DURAR HARD FESCUE
- 45% - COVAR SHEEP/FESCUE
- 15% - REUBENS CANADIAN BLUEGRASS
- 10% - OTHER

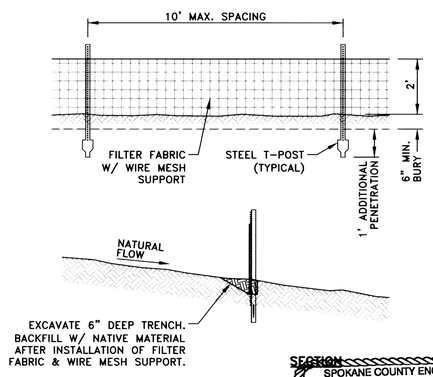
PROVIDE MIXTURE COMPOSED OF GRASS SEED AND FERTILIZER IN PERCENTAGES AS FOLLOWS:

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

ALL SEEDING OF SLOPES SHALL BE DONE IN ACCORDANCE WITH THE WSDOT STANDARD SPECIFICATION, SECTION 8-01.



CONSTRUCTION ENTRY DETAIL



SILT FENCE DETAIL

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: P1915
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PERMIT REQUIRED! (509) 477-3600
NOTIFY PERMIT SERVICES 2 BUSINESS DAYS PRIOR TO CONSTRUCTION

DEVELOPER'S APPROVAL — DATE 2/3/2004

DATUM
NAVD '88
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NELSON WINN OGREN — STATE OF WASHINGTON — REGISTERED PROFESSIONAL ENGINEER
EXPIRES 9/24/05

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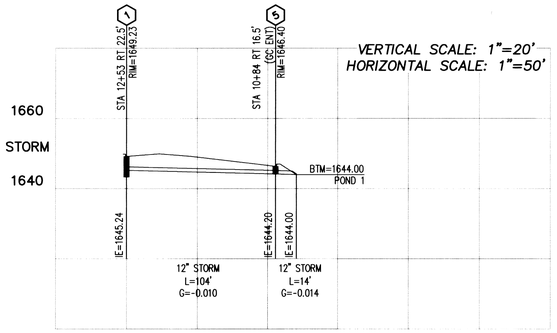
WANDERMERE ESTATES P.U.D.
PHASE I
EROSION CONTROL PLAN
SPOKANE COUNTY, WASHINGTON

STREET PLANS
County Plat No.: P-1915
MCE Project No.: 02-207
Sheet: 2 of 11

SEC. 5, T.26 N., R.43 E.,W.M.



POND 1

DISTANCE AND BEARING FROM POINT "A"			
POINT	DISTANCE	BEARING	NOTES
B	31.93	N74°48'37"W	5' RADIUS
C	52.06	S64°04'59"W	40' RADIUS
D	97.35	S67°27'17"W	5' RADIUS
E	89.14	S55°11'25"W	5' RADIUS
F	65.61	S53°12'14"W	5' RADIUS
G	44.72	S61°57'56"W	5' RADIUS
DW	48.67	N67°46'34"W	RIM=1644.33

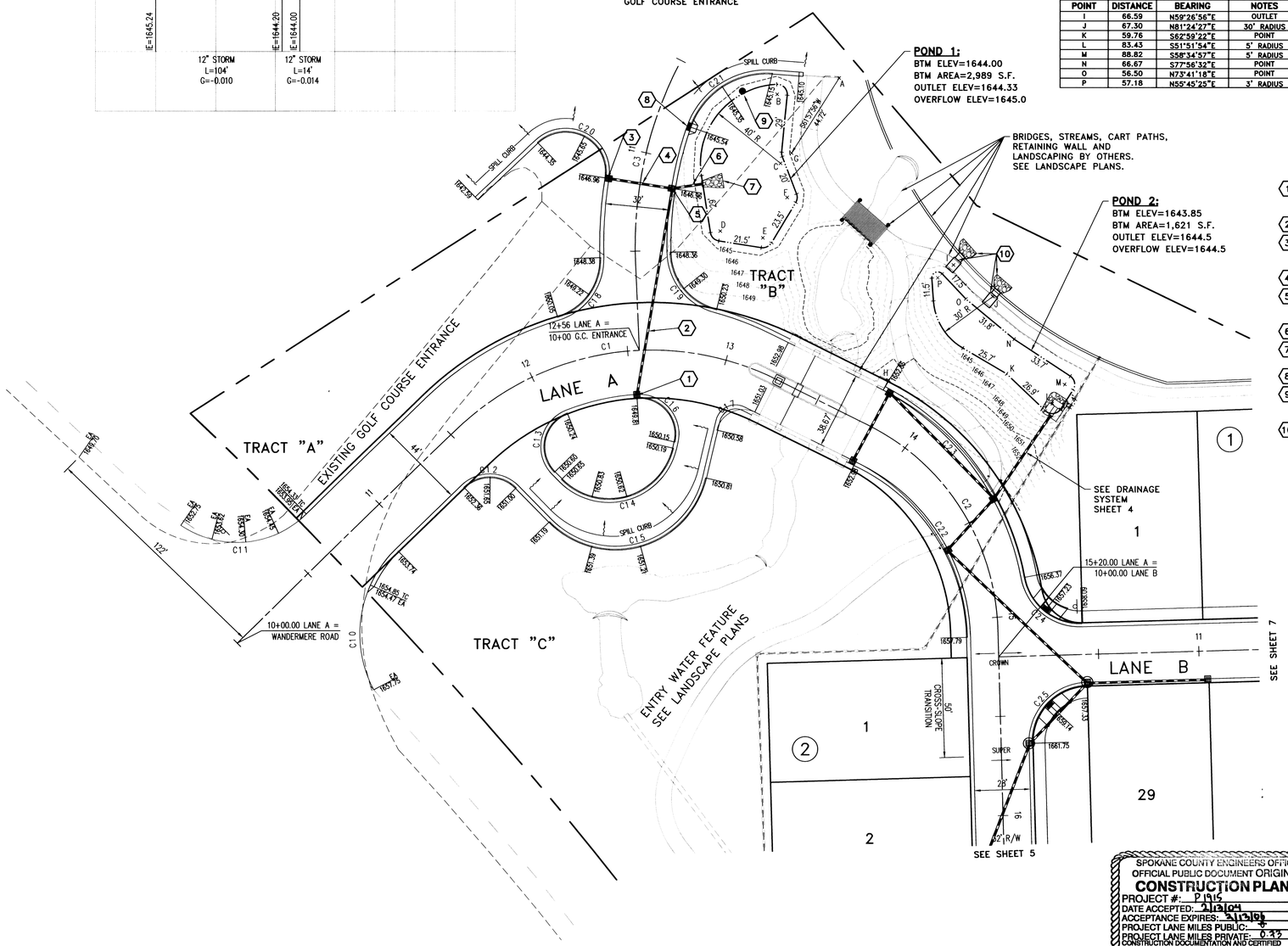
POND 2

DISTANCE AND BEARING FROM POINT "H"			
POINT	DISTANCE	BEARING	NOTES
I	66.59	N59°26'56"E	OUTLET
J	67.30	N81°24'27"E	30' RADIUS
K	59.76	S62°59'22"E	POINT
L	83.43	S51°51'54"E	5' RADIUS
M	88.82	S58°34'57"E	5' RADIUS
N	66.67	S77°56'32"E	POINT
O	56.50	N73°41'18"E	POINT
P	57.18	N55°45'25"E	3' RADIUS

UNDERGROUND SERVICE ALERT
ONE-CALL NUMBER
456-8000
CALL TWO BUSINESS DAYS
BEFORE YOU DIG

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

Date	Activity	
10/29/03	ORIGINAL PREPARATION	NWO
12/30/03	COUNTY REVIEW COMMENTS	NWO



CONSTRUCTION NOTES

– ALL CATCH BASIN INLETS SHALL BE INSTALLED WITH 1" DEEP GUTTER DEPRESSION PER SPOKANE COUNTY STANDARD PLAN B-18. RIM ELEVATIONS NOTED INCLUDE 1" DEPRESSION.

1. STA 12+53, 22.5' RT. TYPE 1 CATCH BASIN WITH TYPE 1 METAL FRAME AND GRATE, AND GRATE GUARD, PER SPOKANE COUNTY STANDARD PLANS B-4, B-7, B-10, B-12 AND B-17. RIM ELEV=1649.23.
2. 104 L.F. OF 12" ADS STORM PIPE. G=0.010. IE(NE)=1644.20, IE(SW)=1645.24.
3. STA 10+84, 16.5' LT (GC ENTRANCE). TYPE 1 CONCRETE INLET WITH TYPE 1 METAL FRAME AND GRATE, AND GRATE GUARD, PER SPOKANE COUNTY STANDARD PLANS B-5, B-10, B-12 AND B-17. RIM ELEV=1646.40.
4. 31 L.F. OF 12" ADS STORM PIPE. G=0.0065. IE(NW)=1644.40, IE(SE)=1644.20.
5. STA 10+84, 16.5' RT (GC ENTRANCE). TYPE 1 CONCRETE INLET WITH TYPE 1 METAL FRAME AND GRATE, AND GRATE GUARD, PER SPOKANE COUNTY STANDARD PLANS B-5, B-10, B-12 AND B-17. RIM ELEV=1646.40.
6. 14 L.F. OF 12" ADS STORM PIPE. G=0.014. IE(E)=1644.00, IE(W)=1644.20.
7. RIP-RAP PAD. 3' x 7.5' x 10.5' LONG x 12" THICK. 2" MIN. STONE SIXE, 12" MAX, 6" MEAN.
8. TYPE 1 CURB INLET PER SPOKANE COUNTY STANDARD PLAN B-8.
9. STA 11+50, 34.5' RT (GC ENTRANCE). TYPE 8 DRYWELL WITH TYPE 4 FRAME AND GRATE PER SPOKANE COUNTY STANDARD PLANS B-1a AND B-15. RIM ELEV=1644.33.
10. TYPE 2 CURB INLET PER SPOKANE COUNTY STANDARD PLAN B-9, WITH OVERFLOW TO GC POND AND 50 S.F. OF 12" TO 18" RIP-RAP BOULDERS AT POND OUTLET. OVERFLOW WEIR ELEV=1644.5. EXACT LOCATION TO BE DETERMINED BY LANDSCAPE COMPANY.

DETENTION POND NOTES

– ALL DETENTION PONDS SHALL BE SEEDED WITH DRYLAND GRASS SEED MIX (AT A MINIMUM), PER SPECIFICATIONS ON SHEET 2, OR SODDED AND IRRIGATED.

– THE SPOKANE COUNTY GUIDELINES FOR STORMWATER MANAGEMENT REQUIRES SOIL TESTING WHERE THE AVERAGE GPA POND DEPTH IS GREATER THAN SIX (6) INCHES. ONE (1) TEST EACH FOR CATION EXCHANGE CAPACITY AND ORGANIC CONTENT PER 1,500 S.F. OR LESS. TESTS SHALL BE PERFORMED ON A WELL-MIXED COMPOSITE SAMPLE, CONSISTING OF THE TOP SIX (6) INCHES OF SOIL FROM AT LEAST FOUR (4) CORES UNIFORMLY DISTRIBUTED OVER THE PERCOLATION AREA. IF THE AVERAGE CATION EXCHANGE CAPACITY IS 15 MILLIEQUIVALENTS OR MORE PER 100 GRAMS, OR THE SOIL CONTAINS 2% OR MORE ORGANIC CARBON, THE SOIL WILL BE CONSIDERED SUITABLE FOR STORMWATER TREATMENT. SOIL TESTING SHALL BE COMPLETED PRIOR TO FINAL CERTIFICATION.

CURVE TABLE

CURVE	LENGTH	RADIUS	TANGENT	CHORD	DELTA
C1	173.74	140.00	100.05	162.80	71°06'10"
C2	129.23	120.00	71.68	123.08	61°42'12"
C3	102.55	200.00	52.43	101.43	29°22'44"
C10	54.63	60.00	29.37	52.76	52°09'57"
C11	64.61	50.00	37.70	60.20	74°02'00"
C12	29.06	18.50	18.50	26.16	90°00'00"
C13	36.48	18.50	27.94	30.85	112°58'46"
C14	71.61	33.50	61.02	58.73	122°28'07"
C15	99.39	46.50	84.70	81.52	122°28'08"
C16	34.47	18.50	24.88	29.69	106°44'33"
C17	24.14	13.50	16.81	21.05	102°27'16"
C18	39.82	30.50	23.32	37.05	74°48'22"
C19	40.17	30.50	23.60	37.33	75°27'11"
C20	51.03	20.50	60.60	38.84	142°37'18"
C21	53.11	40.50	31.16	49.39	75°08'29"
C22	109.85	102.00	60.93	104.61	61°42'12"
C23	122.56	133.00	66.02	118.27	52°47'51"
C24	40.34	28.50	24.38	37.05	81°05'39"
C25	44.77	28.50	28.50	40.31	90°00'00"

SPOKANE COUNTY ENGINEERS OFFICE
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BRASS CAP SET IN CONCRETE IN CASE AND COVER
ELEVATION = 1748.385 FEET

Lowell McKee
DEVELOPER'S APPROVAL

2/3/2004
DATE

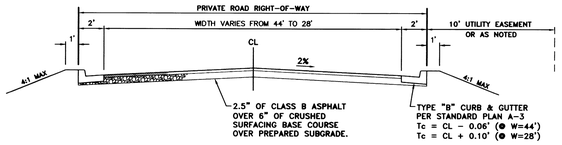
NELSON WINN OGREN
STATE OF WASHINGTON
37461
REGISTERED PROFESSIONAL ENGINEER
EXPIRES 9/24/05

Mountain Crest Enterprises Inc.
4024 East First Street
P.O. Box 1800, Mead, WA 99021
(509) 466-5794 Fax: 466-1514

WANDERMERE ESTATES P.U.D.
LANE A
G.C. ENTRANCE DETAIL
SPOKANE COUNTY, WASHINGTON

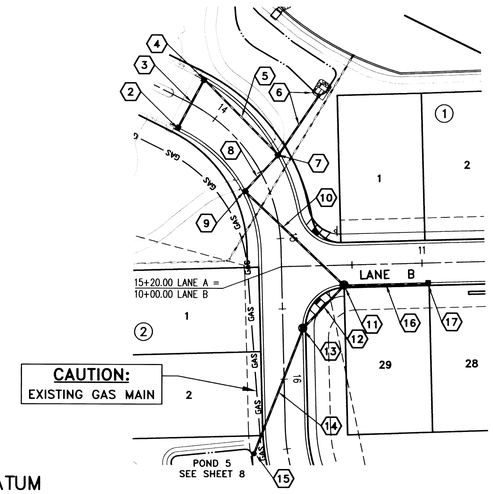
STREET PLANS
County Plat No.: P-1915
MCE Project No.: 02-207
Sheet: 3 of 11

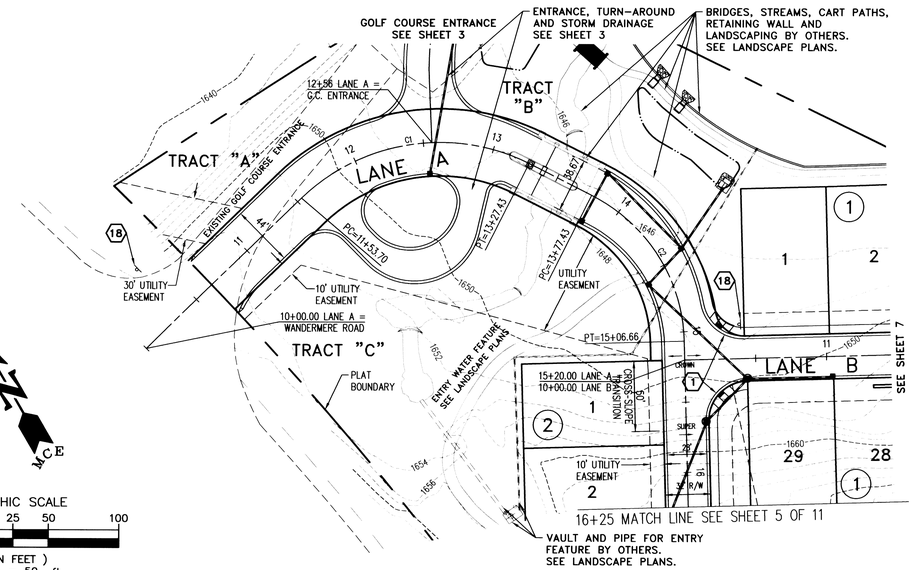
SEC. 5, T.26 N., R.43 E.,W.M.



LANE A – PRIVATE ROAD SECTION

STA 10+50 TO 15+20





GRAPHIC SCALE

50 0 25 50 100

(IN FEET)
1 inch = 50 ft.

DATUM

NAVD '88
WSDOT GPS MON "GP32395-201" SR 395 MP 167.350
BRASS CAP SET IN CONCRETE IN CASE AND COVER
ELEVATION = 1748.385 FEET

CAUTION: EXISTING GAS MAIN

UNDERGROUND SERVICE ALERT
ONE-CALL NUMBER
456-8000
CALL TWO BUSINESS DAYS BEFORE YOU DIG

CONSTRUCTION NOTES

– ALL CATCH BASIN INLETS SHALL BE INSTALLED WITH 1" DEEP GUTTER DEPRESSION PER SPOKANE COUNTY STANDARD PLAN B-18. RIM ELEVATIONS NOTED INCLUDE 1" DEPRESSION.

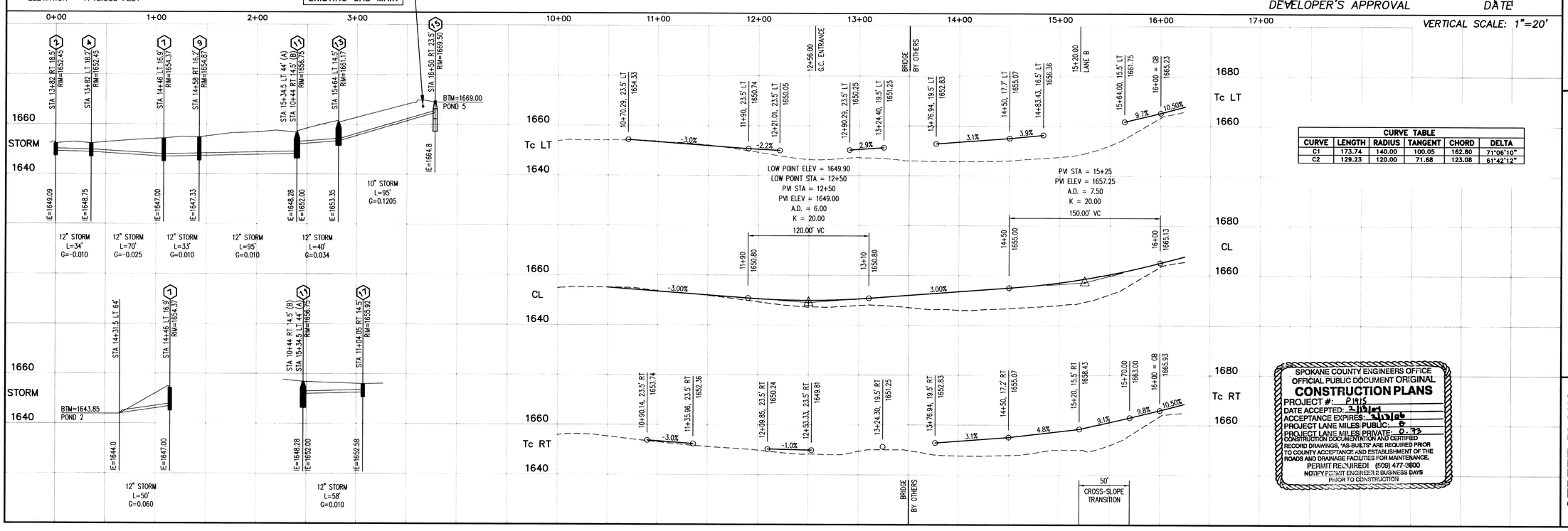
1. CURB RAMP PER SPOKANE COUNTY STANDARD PLAN A-5, DESIGN "A".
2. STA 13+82, 18.5' RT. TYPE 1 CATCH BASIN WITH TYPE 1 METAL FRAME AND GRATE, AND GRATE GUARD, PER SPOKANE COUNTY STANDARD PLANS B-4, B-7, B-10, B-12 AND B-17. RIM ELEV=1652.45.
3. 34 L.F. OF 12" ADS STORM PIPE. G=-0.010. IE(E)=1648.75, IE(W)=1649.09.
4. STA 13+82, 18.2' LT. TYPE 1 CATCH BASIN WITH TYPE 1 METAL FRAME AND GRATE, AND GRATE GUARD, PER SPOKANE COUNTY STANDARD PLANS B-4, B-7, B-10, B-12 AND B-17. RIM ELEV=1652.45.
5. 70 L.F. OF 12" ADS STORM PIPE. G=-0.025. IE(N)=1648.75, IE(S)=1647.00.
6. 50 L.F. OF 12" ADS STORM PIPE. G=0.060. IE(E)=1644.00, IE(W)=1647.00. WITH GABION ENERGY DISSIPATER PER DETAIL SHEET 8.
7. STA 14+46, 16.9' LT. TYPE 1 CATCH BASIN WITH TYPE 1 METAL FRAME AND GRATE, AND GRATE GUARD, PER SPOKANE COUNTY STANDARD PLANS B-4, B-7, B-10, B-12 AND B-17. RIM ELEV=1654.37.
8. 33 L.F. OF 12" ADS STORM PIPE. G=0.010. IE(E)=1647.00, IE(W)=1647.33.
9. STA 14+58, 16.2' RT. TYPE 1 CATCH BASIN WITH TYPE 1 METAL FRAME AND GRATE, AND GRATE GUARD, PER SPOKANE COUNTY STANDARD PLANS B-4, B-7, B-10, B-12 AND B-17. RIM ELEV=1654.87.
10. 95 L.F. OF 12" ADS STORM PIPE. G=0.010. IE(N)=1647.33, IE(S)=1648.28.
11. STA 10+44, 14.5' RT (LANE B). WSDOT TYPE 2 (48" DIA) CATCH BASIN WITH RECTANGULAR ADJUSTMNET SECTIONS, CATCH BASIN FRAME AND VANED GRATE PER STANDARD PLANS B-1e AND B-2b. RIM ELEV=1656.75.
12. 40 L.F. OF 12" ADS STORM PIPE. G=0.034. IE(E)=1652.00, IE(W)=1653.35.
13. STA 15+64, 14.5' LT. WSDOT TYPE 2 (48" DIA) CATCH BASIN WITH RECTANGULAR ADJUSTMNET SECTIONS, CATCH BASIN FRAME AND VANED GRATE PER STANDARD PLANS B-1e AND B-2b. RIM ELEV=1661.17.
14. 95 L.F. OF 10" ADS STORM PIPE. G=0.1205. IE(N)=1653.35, IE(S)=1664.8.
15. STA 16+50.0, 23.5' RT. TYPE B DRYWELL WITH TYPE 4 METAL FRAME AND GRATE, PER SPOKANE COUNTY STANDARD PLANS B-1a AND B-15. RIM ELEV=1669.50.
16. 58 L.F. OF 12" ADS STORM PIPE. G=0.010. IE(E)=1652.58, IE(W)=1652.00.
17. STA 11+04.05, 14.5' RT (LANE B). TYPE 1 CATCH BASIN WITH TYPE 1 METAL FRAME AND GRATE, AND GRATE GUARD, PER SPOKANE COUNTY STANDARD PLANS B-4, B-7, B-10, B-12 AND B-17. RIM ELEV=1655.92.
18. INSTALL STOP SIGN AND STREET NAME SIGN PER M.U.T.C.D. AND SPOKANE COUNTY STANDARDS.

DEVELOPER'S APPROVAL — DATE 2/3/2004

Date	Activity	
10/29/03	ORIGINAL PREPARATION	NWO
12/30/03	COUNTY REVIEW COMMENTS	NWO

NELSON WINN OGREN — STATE OF WASHINGTON — REGISTERED PROFESSIONAL ENGINEER — 23164 — EXPIRES 9/24/05

Mountain Crest Enterprises Inc.
4024 East First Street
P.O. Box 1800, Mead, WA 99021
(509) 466-5794 Fax: 466-1514



CURVE TABLE					
CURVE	LENGTH	RADIUS	TANGENT	CHORD	DELTA
C1	173.74	140.00	100.05	162.80	71°06'10"
C2	129.23	120.00	71.68	123.08	61°42'12"

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: P1915
DATE ACCEPTED: 2/13/04
ACCEPTANCE EXPIRES: 2/13/06
PROJECT LANE MILES PUBLIC: 0
PROJECT LANE MILES PRIVATE: 0.73
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

WANDERMERE ESTATES P.U.D.

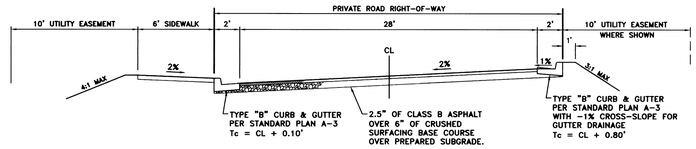
LANE A
10+00 TO 16+25
SPOKANE COUNTY, WASHINGTON

STREET PLANS

County Plat No.: P-1915
MCE Project No.: 02-207

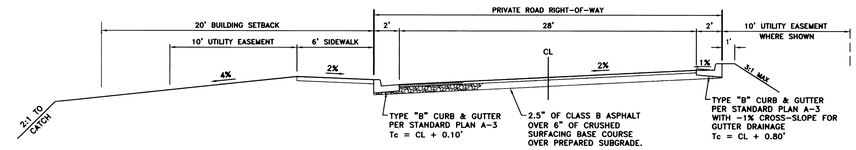
Sheet: 4 of 11

SEC. 5, T.26 N., R.43 E.,W.M.



LANE A – PRIVATE ROAD SECTION

STA 16+25 TO 20+00

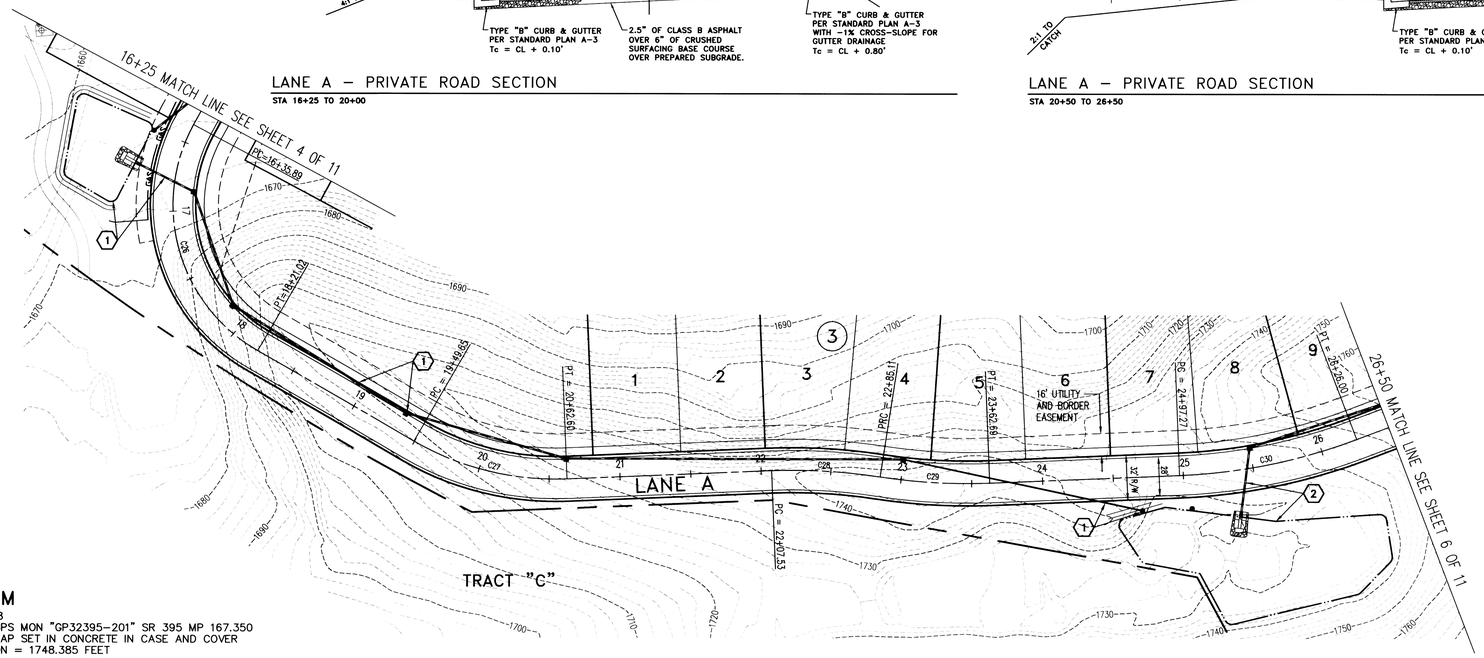


LANE A – PRIVATE ROAD SECTION

STA 20+50 TO 26+50

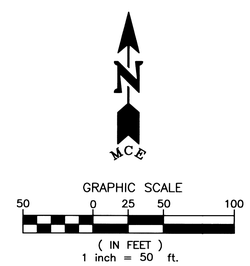
UNDERGROUND SERVICE ALERT
ONE-CALL NUMBER
456-8000
CALL TWO BUSINESS DAYS BEFORE YOU DIG

Date	Activity	
10/29/03	ORIGINAL PREPARATION	NWO
11/24/03	COUNTY REVIEW COMMENTS	NWO



CONSTRUCTION NOTES

1. SEE DRAINAGE DETAILS SHEET 8.
2. SEE DRAINAGE DETAILS SHEET 9.

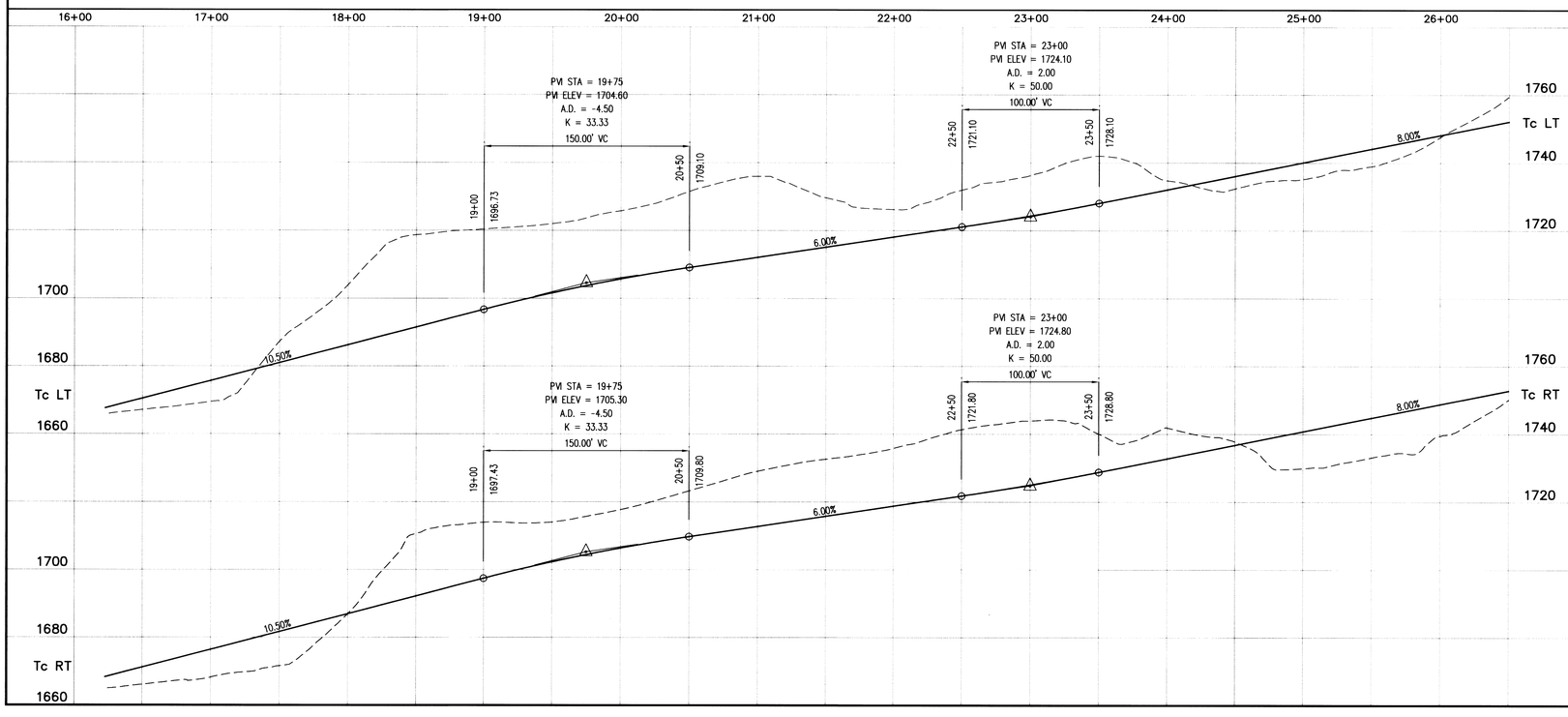


DATUM
NAVD '88
WSDOT GPS MON "GP32395-201" SR 395 MP 167.350
BRASS CAP SET IN CONCRETE IN CASE AND COVER
ELEVATION = 1748.385 FEET

Howell Mercer
DEVELOPER'S APPROVAL

2/3/2004
DATE

VERTICAL SCALE: 1"=20'



CURVE TABLE					
CURVE	LENGTH	RADIUS	TANGENT	CHORD	DELTA
C26	185.13	120.00	116.68	167.31	88°23'36"
C27	112.95	200.00	58.02	111.45	32°21'25"
C28	77.58	400.00	38.91	77.46	11°06'46"
C29	77.58	400.00	38.91	77.46	11°06'46"
C30	128.72	400.00	64.92	128.17	18°26'18"

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: P1915
DATE ACCEPTED: 2/18/04
ACCEPTANCE EXPIRES: 2/18/06
PROJECT LANE MILES PUBLIC: 0
PROJECT LANE MILES PRIVATE: 0.33
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

NELSON WINN OGREN
STATE OF WASHINGTON
REGISTERED PROFESSIONAL ENGINEER
EXPIRES 9/24/05

Mountain Crest Enterprises Inc.
4024 East First Street
P.O. Box 1800, Mead, WA 99021
(509) 466-5794 Fax: 466-1514

WANDERMERE ESTATES P.U.D.

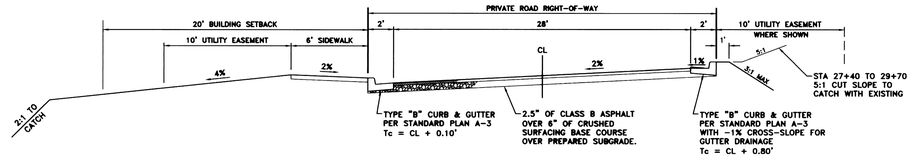
LANE A
16+25 TO 26+50
SPOKANE COUNTY, WASHINGTON

STREET PLANS

County Plat No.: P-1915
MCE Project No.: 02-207

Sheet: 5 of 11

SEC. 5, T.26 N., R.43 E.,W.M.



LANE A – PRIVATE ROAD SECTION

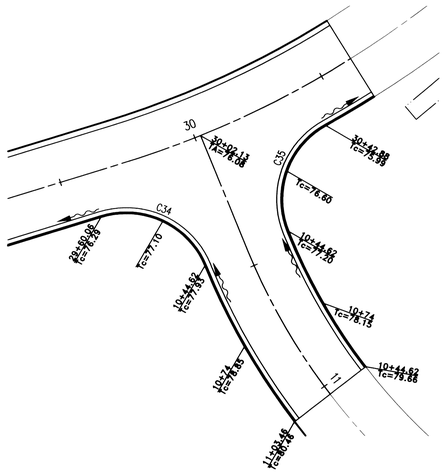
STA 26+50 TO 30+62.13

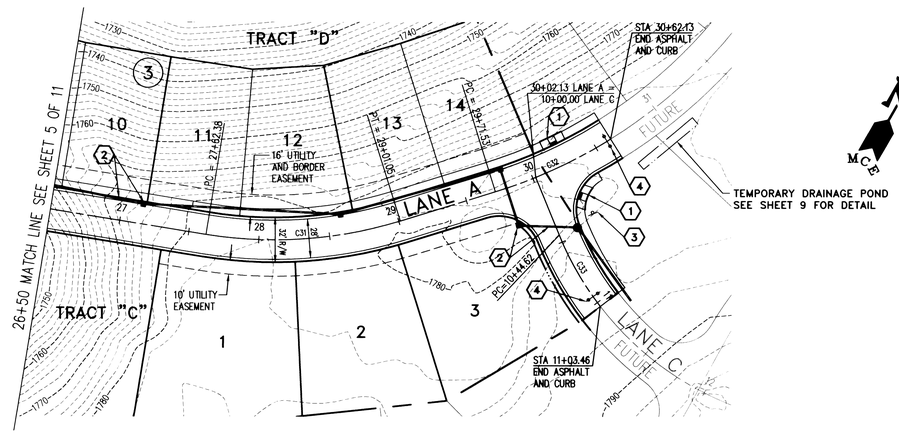
UNDERGROUND SERVICE ALERT
ONE-CALL NUMBER
456-8000
CALL TWO BUSINESS DAYS BEFORE YOU DIG

Date	Activity	
10/29/03	ORIGINAL PREPARATION	NWO
11/24/03	COUNTY REVIEW COMMENTS	NWO

CONSTRUCTION NOTES

1. CURB RAMP PER SPOKANE COUNTY STANDARD PLAN A-4, DESIGN "A".
2. SEE DRAINAGE DETAILS SHEET 9.
3. INSTALL STOP SIGN AND STREET NAME SIGN PER M.U.T.C.D. AND SPOKANE COUNTY STANDARDS.
4. WSDOT TYPE III BARRICADE WITH "END OF ROADWAY" SIGN.





GRAPHIC SCALE

50 0 25 50 100

(IN FEET)
1 inch = 50 ft.

NELSON WINN OGREN
WASHINGTON
STATE REGISTERED PROFESSIONAL ENGINEER
2/3/04
EXPIRES 9/24/05

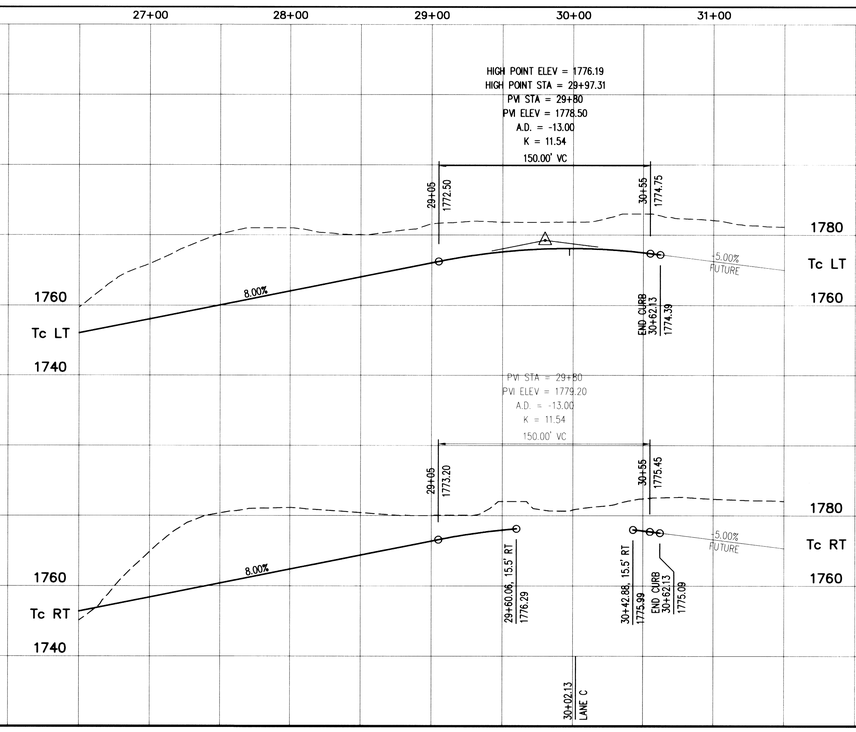
DATUM

NAVD '88
WSDOT GPS MON "GP32395-201" SR 395 MP 167.350
BRASS CAP SET IN CONCRETE IN CASE AND COVER
ELEVATION = 1748.385 FEET

DEVELOPER'S APPROVAL

2/3/2004
DATE

VERTICAL SCALE: 1"=20'



CURVE TABLE

CURVE	LENGTH	RADIUS	TANGENT	CHORD	DELTA
C31	138.68	300.00	70.60	137.45	26°29'08"
C32	90.60	350.00	45.55	90.35	14°49'52"
C33	58.85	220.00	29.60	58.67	15°19'34"
C34	45.24	30.50	27.94	41.21	84°59'28"
C35	44.36	30.50	27.14	40.55	83°19'46"

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: P 815
DATE ACCEPTED: 2/13/04
ACCEPTANCE EXPIRES: 2/13/06
PROJECT LANE MILES PUBLIC: 0
PROJECT LANE MILES PRIVATE: 0.73
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

Mountain Crest Enterprises Inc.
4024 East First Street
P.O. Box 1800, Mead, WA 99021
(509) 466-5794 Fax: 466-1514

WANDERMERE ESTATES P.U.D.

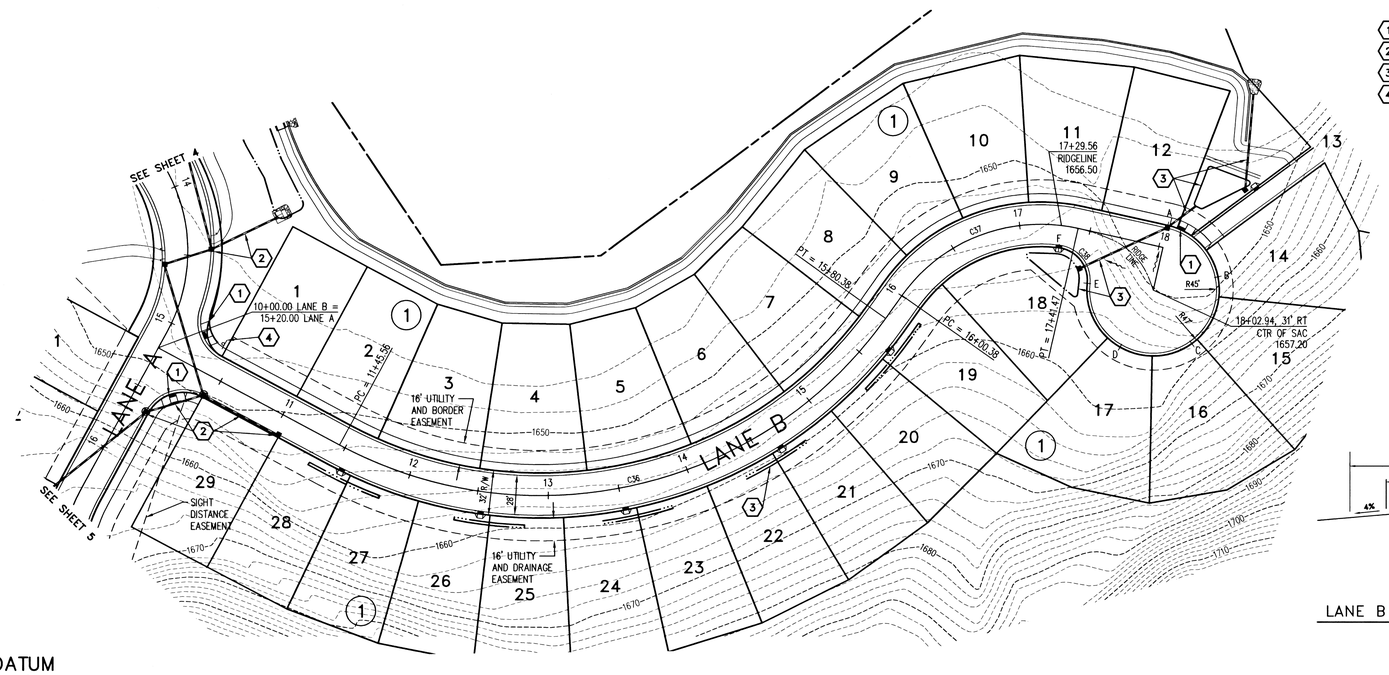
LANE A
26+50 TO 30+62.13
SPOKANE COUNTY, WASHINGTON

STREET PLANS

County Plat No.: P-1915
MCE Project No.: 02-207

Sheet: 6 of 11

SEC. 5, T.26 N., R.43 E.,W.M.



CONSTRUCTION NOTES

1. CURB RAMP PER SPOKANE COUNTY STANDARD PLAN A-4, DESIGN "A".
2. SEE DRAINAGE DETAILS SHEET 4.
3. SEE DRAINAGE DETAILS SHEET 10.
4. INSTALL STOP SIGN AND STREET NAME SIGN PER M.U.T.C.D. AND SPOKANE COUNTY STANDARDS.

UNDERGROUND SERVICE ALERT
ONE-CALL NUMBER
456-8000
CALL TWO BUSINESS DAYS BEFORE YOU DIG

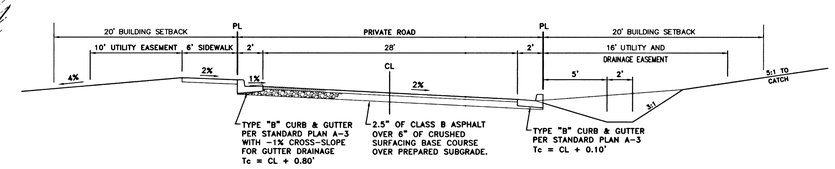
GRAPHIC SCALE
50 0 25 50 100
(IN FEET)
1 inch = 50 ft.

Date	Activity	
10/29/03	ORIGINAL PREPARATION	KWO
11/24/03	COUNTY REVIEW COMMENTS	KWO

CURVE TABLE					
CURVE	LENGTH	RADIUS	TANGENT	CHORD	DELTA
C36	434.82	300.00	265.63	397.75	83°02'42"
C37	141.08	120.00	79.97	133.10	67°21'41"
C38	36.42	23.50	23.01	32.88	88°47'41"

N
MCE

NELSON WINN DOREN STATE OF WASHINGTON REGISTERED PROFESSIONAL ENGINEER
EXPIRES 9/24/05



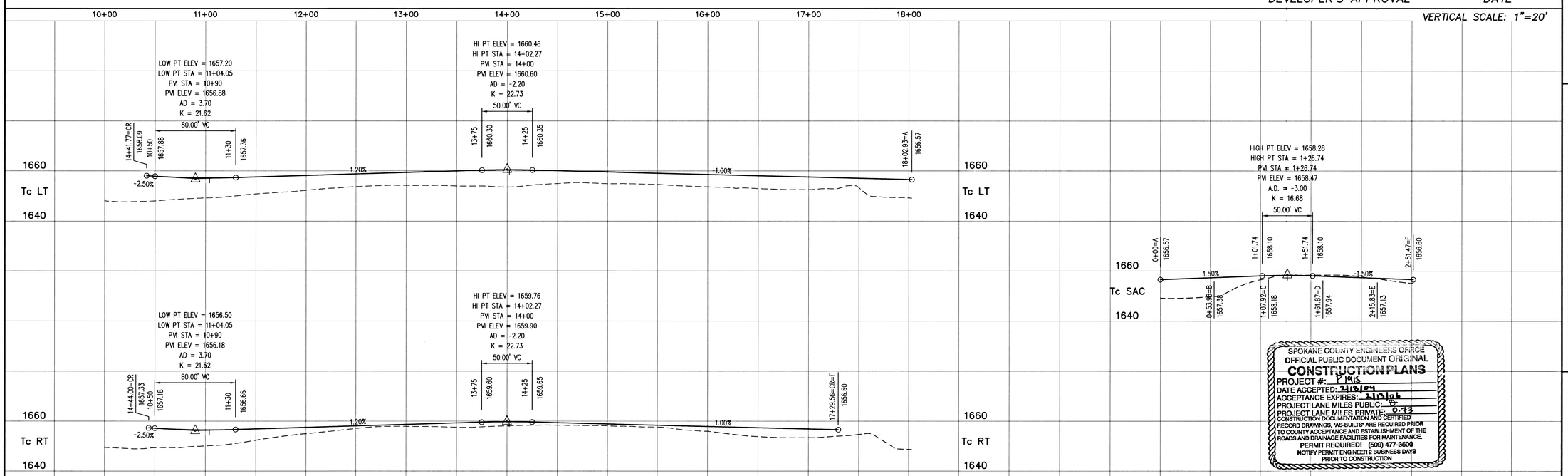
LANE B – PRIVATE ROAD SECTION

DATUM
NAVD '88
WSDOT GPS MON "GP32395-201" SR 395 MP 167.350
BRASS CAP SET IN CONCRETE IN CASE AND COVER
ELEVATION = 1748.385 FEET

DEVELOPER'S APPROVAL

DATE 3/3/2004

VERTICAL SCALE: 1"=20'



SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: P-1915
DATE ACCEPTED: 2/13/04
ACCEPTANCE EXPIRES: 2/13/06
PROJECT LANE MILES PUBLIC: 0.73
PROJECT LANE MILES PRIVATE: 0.73
CONSTRUCTION DOCUMENTATION AND CERTIFIED RECORD DRAWINGS, "AS-BUILTS" ARE REQUIRED PRIOR TO COUNTY ACCEPTANCE AND ESTABLISHMENT OF THE ROADS AND DRAINAGE FACILITIES FOR MAINTENANCE.
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(509) 466-5794 Fax: 466-1514

WANDERMERE ESTATES P.U.D.

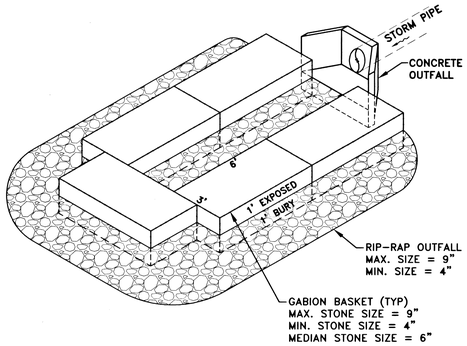
LANE B
10+00 TO 18+02.94
SPOKANE COUNTY, WASHINGTON

STREET PLANS

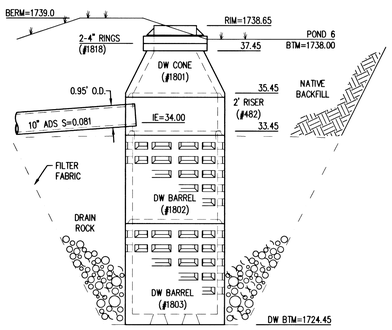
County Plat No.: P-1915
MCE Project No.: 02-207

Sheet: 7 of 11

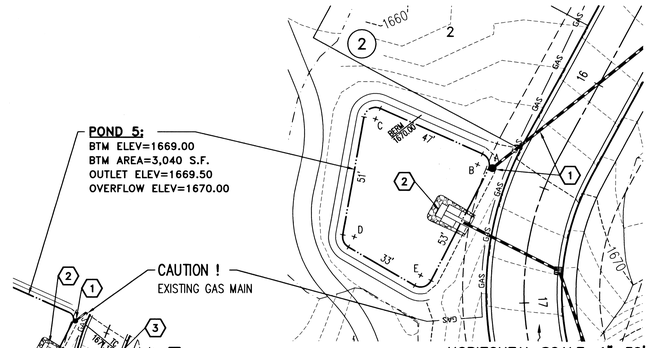
SEC. 5, T.26 N., R.43 E.,W.M.



GABION DISSIPATER DETAIL

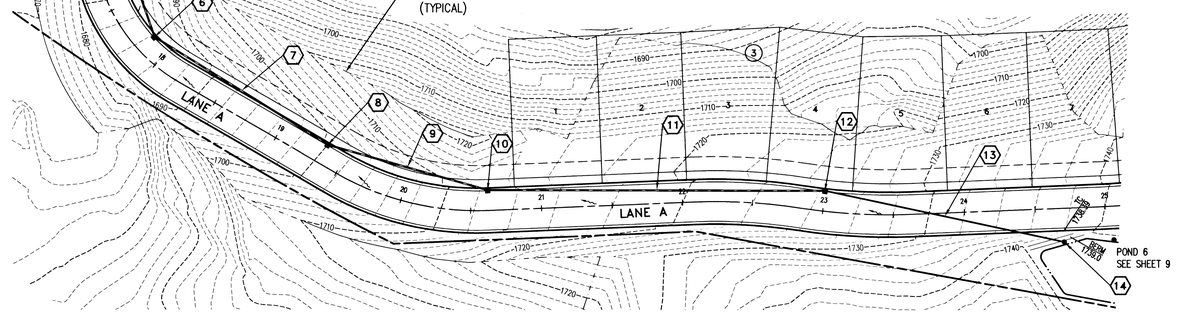


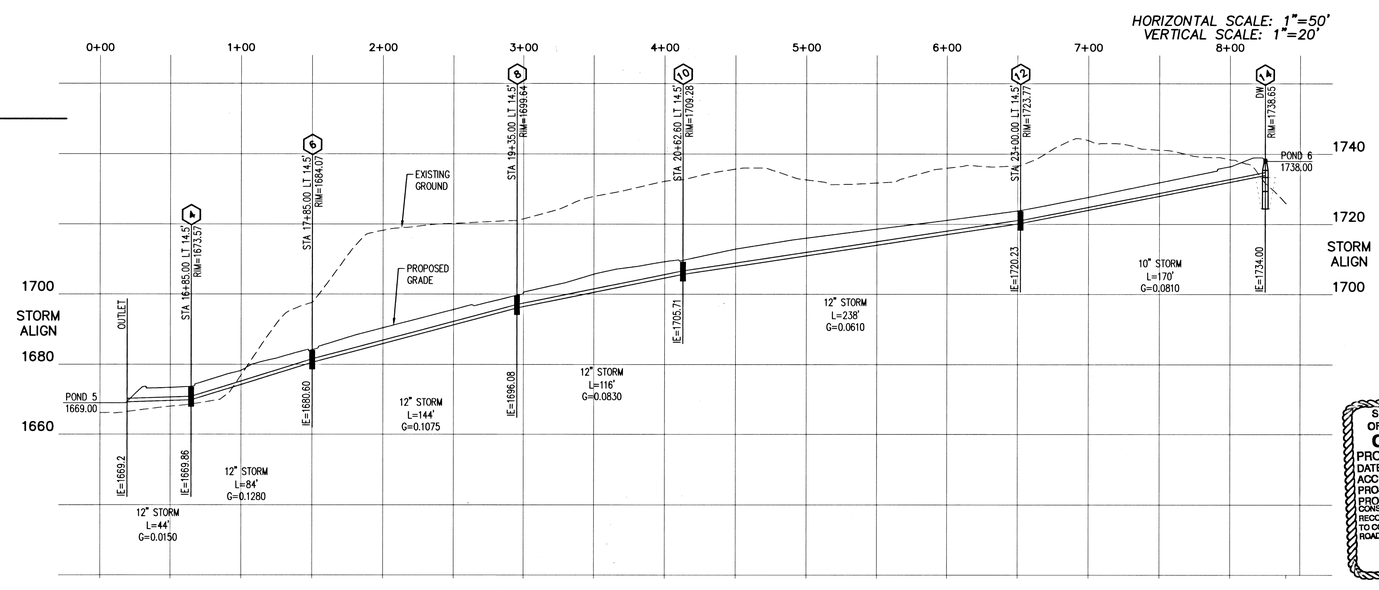
DRYWELL DETAIL – POND 6



POND 5

DISTANCE AND BEARING FROM POINT "A"			
POINT	DISTANCE	BEARING	NOTES
B	6.51	N76°36'56"W	5' RADIUS
C	53.84	N67°06'38"W	5' RADIUS
D	65.56	S63°20'31"W	5' RADIUS
E	54.97	S33°33'17"W	5' RADIUS





UNDERGROUND SERVICE ALERT
ONE-CALL NUMBER
456-8000
CALL TWO BUSINESS DAYS BEFORE YOU DIG

Date	Activity	By
10/29/03	ORIGINAL PREPARATION	NWO
11/24/03	COUNTY REVIEW COMMENTS	NWO

MCE

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

NELSON WAYNE OGREN STATE OF WASHINGTON 18456 REGISTERED PROFESSIONAL ENGINEER 9/24/03
EXPIRES 9/24/05

CONSTRUCTION NOTES

– ALL CATCH BASIN INLETS SHALL BE INSTALLED WITH 1" DEEP GUTTER DEPRESSION PER SPOKANE COUNTY STANDARD PLAN B-18. RIM ELEVATIONS NOTED INCLUDE 1" DEPRESSION.

1. SEE DRAINAGE DETAIL, SHEET 4.
2. GABION ENERGY DISSIPATER WITH CONCRETE OUTFALL (WILBERT PRECAST PRODUCT No. 4016), PER DETAIL THIS SHEET.
3. 44 L.F. OF 12" ADS STORM PIPE. G=0.0150. IE(E)=1669.86, IE(W)=1669.20.
4. STA 16+85.00, 14.5' LT. TYPE 1 CATCH BASIN WITH TYPE 1 METAL FRAME AND GRATE, AND GRATE GUARD, PER SPOKANE COUNTY STANDARD PLANS B-4, B-7, B-10, B-12 AND B-17. RIM ELEV=1673.57.
5. 84 L.F. OF 12" ADS STORM PIPE. G=0.1280. IE(SE)=1680.60, IE(NW)=1669.86.
6. STA 17+85.00, 14.5' LT. TYPE 1 CATCH BASIN WITH TYPE 1 METAL FRAME AND GRATE, AND GRATE GUARD, PER SPOKANE COUNTY STANDARD PLANS B-4, B-7, B-10, B-12 AND B-17. RIM ELEV=1684.07.
7. 144 L.F. OF 12" ADS STORM PIPE. G=0.1075. IE(SE)=1696.08, IE(NW)=1680.60.
8. STA 19+35.00, 14.5' LT. TYPE 1 CATCH BASIN WITH TYPE 1 METAL FRAME AND GRATE, AND GRATE GUARD, PER SPOKANE COUNTY STANDARD PLANS B-4, B-7, B-10, B-12 AND B-17. RIM ELEV=1699.64.
9. 116 L.F. OF 12" ADS STORM PIPE. G=0.0830. IE(E)=1705.71, IE(W)=1696.08.
10. STA 20+62.60, 14.5' LT. TYPE 1 CATCH BASIN WITH TYPE 1 METAL FRAME AND GRATE, AND GRATE GUARD, PER SPOKANE COUNTY STANDARD PLANS B-4, B-7, B-10, B-12 AND B-17. RIM ELEV=1709.28.
11. 238 L.F. OF 12" ADS STORM PIPE. G=0.0610. IE(E)=1720.23, IE(W)=1705.71.
12. STA 23+00.00, 14.5' LT. TYPE 1 CATCH BASIN WITH TYPE 1 METAL FRAME AND GRATE, AND GRATE GUARD, PER SPOKANE COUNTY STANDARD PLANS B-4, B-7, B-10, B-12 AND B-17. RIM ELEV=1723.77.
13. 170 L.F. OF 10" ADS STORM PIPE. G=0.0810. IE(E)=1734.00, IE(W)=1720.23.
14. STA 24+70.0, 24' RT. TYPE B DRYWELL WITH TYPE 4 FRAME AND GRATE, PER SPOKANE COUNTY STANDARD PLANS B-1a AND B-15, MODIFIED PER DETAIL ON THIS SHEET. RIM ELEV=1738.65.

DETENTION POND NOTES

– ALL DETENTION PONDS SHALL BE SEEDED WITH DRYLAND GRASS SEED MIX (AT A MINIMUM), PER SPECIFICATIONS ON SHEET 2, OR SODDED AND IRRIGATED.

SPOKANE COUNTY ENGINEERING SERVICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: P1915
DATE ACCEPTED: 2/13/04
ACCEPTANCE EXPIRES: 2/13/06
PROJECT LANE MILES PUBLIC: 0.27
PROJECT LANE MILES PRIVATE: 0.73
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

DEVELOPER'S APPROVAL

2/3/2004
DATE

DATUM
NAVD '88
WSDOT GPS MON "GP32395-201" SR 395 MP 167.350
BRASS CAP SET IN CONCRETE IN CASE AND COVER
ELEVATION = 1748.385 FEET

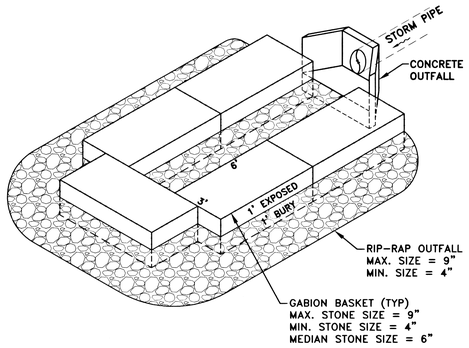
Mountain Crest Enterprises Inc.
4024 East First Street
P.O. Box 1800, Mead, WA 99021
(509) 466-5794 Fax: 466-1514

WANDERMERE ESTATES P.U.D.

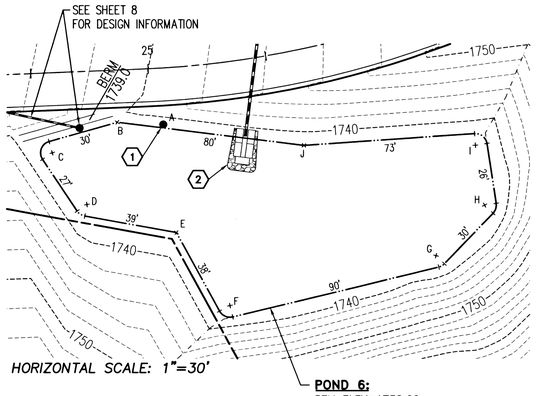
LANE A
DRAINAGE DETAILS
SPOKANE COUNTY, WASHINGTON

STREET PLANS
County Plat No.: P-1915
MCE Project No.: 02-207
Sheet: 8 of 11

SEC. 5, T.26 N., R.43 E.,W.M.



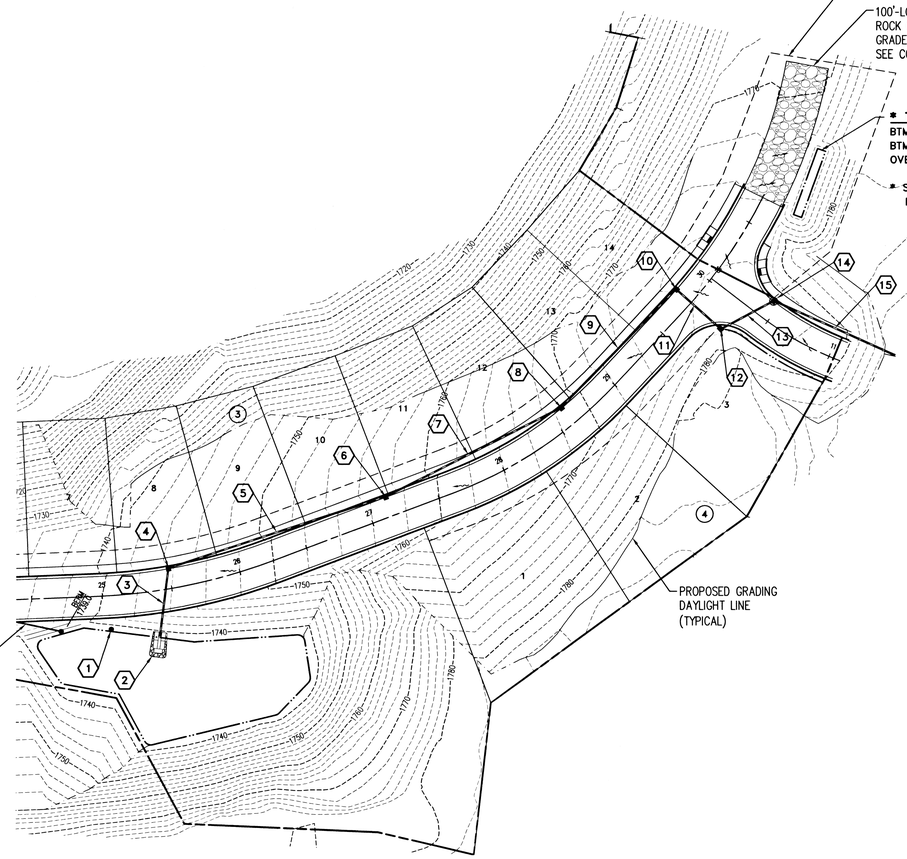
GABION DISSIPATER DETAIL



POND 6:
BTM ELEV=1738.00
BTM AREA=10,250 S.F.
OUTLET ELEV=1738.50
OVERFLOW ELEV=1738.65

POND 6

DISTANCE AND BEARING FROM POINT "A"			
POINT	DISTANCE	BEARING	NOTES
B	19.47	N87°17'22"W	ANGLE POINT
C	48.69	S75°33'14"W	5' RADIUS
D	47.06	S43°25'35"W	5' RADIUS
E	46.50	S06°56'24"E	ANGLE POINT
F	82.43	S20°03'31"E	5' RADIUS
G	128.82	S64°11'07"E	5' RADIUS
H	140.94	S75°52'00"E	5' RADIUS
I	133.01	S86°09'50"E	5' RADIUS
J	60.18	S81°27'28"E	ANGLE POINT



UNDERGROUND SERVICE ALERT
ONE-CALL NUMBER
456-8000
CALL TWO BUSINESS DAYS
BEFORE YOU DIG

Date	Activity	By
10/29/03	ORIGINAL PREPARATION	NWO
11/24/03	COUNTY REVIEW COMMENTS	NWO

N
MCE

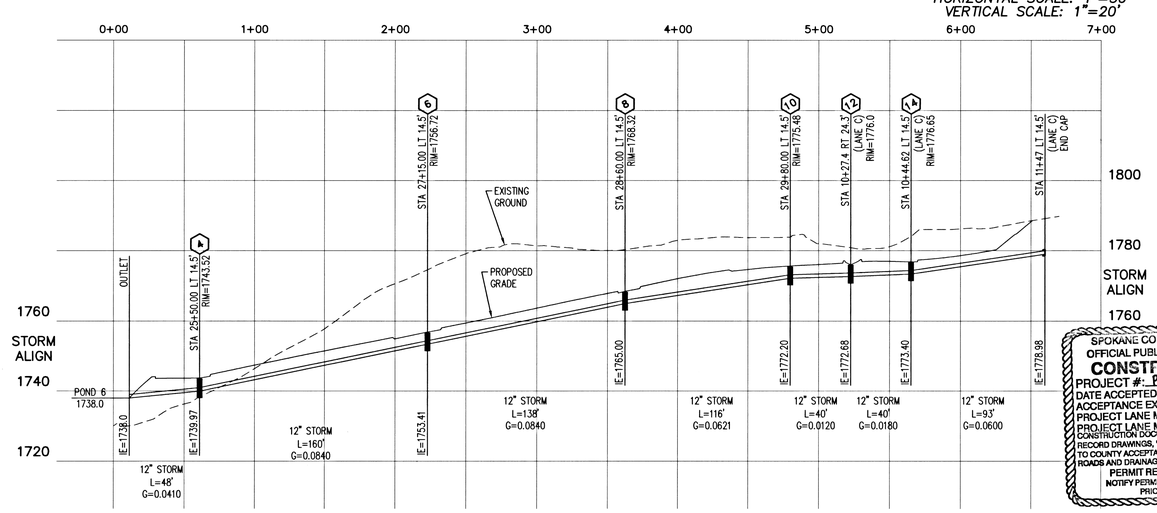
GRAPHIC SCALE
50 0 25 50 100
(IN FEET)
1 inch = 50 ft.

CONSTRUCTION NOTES

– ALL CATCH BASIN INLETS SHALL BE INSTALLED WITH 1" DEEP GUTTER DEPRESSION PER SPOKANE COUNTY STANDARD PLAN B-18. RIM ELEVATIONS NOTED INCLUDE 1" DEPRESSION.

1. STA 25+05.0, 24' RT. TYPE B DRYWELL WITH TYPE 4 FRAME AND GRATE, PER SPOKANE COUNTY STANDARD PLANS B-1a AND B-15. RIM ELEV=1738.50.
2. GABION ENERGY DISSIPATER WITH CONCRETE OUTFALL (WILBERT PRECAST PRODUCT No. 4016), PER DETAIL THIS SHEET.
3. 48 L.F. OF 12" ADS STORM PIPE. G=0.0410. IE(N)=1739.97, IE(S)=1738.00.
4. STA 25+50.00, 14.5' LT. TYPE 1 CATCH BASIN WITH TYPE 1 METAL FRAME AND GRATE, AND GRATE GUARD, PER SPOKANE COUNTY STANDARD PLANS B-4, B-7, B-10, B-12 AND B-17. RIM ELEV=1743.52.
5. 160 L.F. OF 12" ADS STORM PIPE. G=0.0840. IE(E)=1753.41, IE(W)=1739.97.
6. STA 27+15.00, 14.5' LT. TYPE 1 CATCH BASIN WITH TYPE 1 METAL FRAME AND GRATE, AND GRATE GUARD, PER SPOKANE COUNTY STANDARD PLANS B-4, B-7, B-10, B-12 AND B-17. RIM ELEV=1756.72.
7. 138 L.F. OF 12" ADS STORM PIPE. G=0.0840. IE(NE)=1765.00, IE(SW)=1753.41.
8. STA 28+60.00, 14.5' LT. TYPE 1 CATCH BASIN WITH TYPE 1 METAL FRAME AND GRATE, AND GRATE GUARD, PER SPOKANE COUNTY STANDARD PLANS B-4, B-7, B-10, B-12 AND B-17. RIM ELEV=1768.32.
9. 116 L.F. OF 12" ADS STORM PIPE. G=0.0621. IE(NE)=1772.20, IE(SW)=1765.00.
10. STA 29+80.00, 14.5' LT. TYPE 1 CATCH BASIN WITH TYPE 1 METAL FRAME AND GRATE, AND GRATE GUARD, PER SPOKANE COUNTY STANDARD PLANS B-4, B-7, B-10, B-12 AND B-17. RIM ELEV=1775.48.
11. 40 L.F. OF 12" ADS STORM PIPE. G=0.0120. IE(NW)=1772.20, IE(SE)=1772.68.
12. STA 10+27.4, 24.3' RT (LANE C). TYPE 1 CATCH BASIN WITH TYPE 1 METAL FRAME AND GRATE, AND GRATE GUARD, PER SPOKANE COUNTY STANDARD PLANS B-4, B-7, B-10, B-12 AND B-17. RIM ELEV=1776.0.
13. 40 L.F. OF 12" ADS STORM PIPE. G=0.0180. IE(E)=1773.40, IE(W)=1772.68.
14. STA 10+44.62, 14.5' LT (LANE C). TYPE 1 CATCH BASIN WITH TYPE 1 METAL FRAME AND GRATE, AND GRATE GUARD, PER SPOKANE COUNTY STANDARD PLANS B-4, B-7, B-10, B-12 AND B-17. RIM ELEV=1776.65.
15. 93 L.F. OF 12" ADS STORM PIPE WITH END CAP (EAST END). G=0.0600. IE(E)=1778.98, IE(W)=1773.40.

HORIZONTAL SCALE: 1"=50'
VERTICAL SCALE: 1"=20'



DETENTION POND NOTES

– ALL DETENTION PONDS SHALL BE SEEDED WITH DRYLAND GRASS SEED MIX (AT A MINIMUM), PER SPECIFICATIONS ON SHEET 2, OR SODDED AND IRRIGATED.

SPOKANE COUNTY
OFFICIAL PUBLIC DOCUMENT
CONSTRUCTION PLANS
PROJECT #: P1915
DATE ACCEPTED: 2/13/04
ACCEPTANCE EXPIRES: 2/13/06
PROJECT LANE MILES PUBLIC: 0
PROJECT LANE MILES PRIVATE: 0.73
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

Lowell Krueger
DEVELOPER'S APPROVAL

2/3/2004
DATE

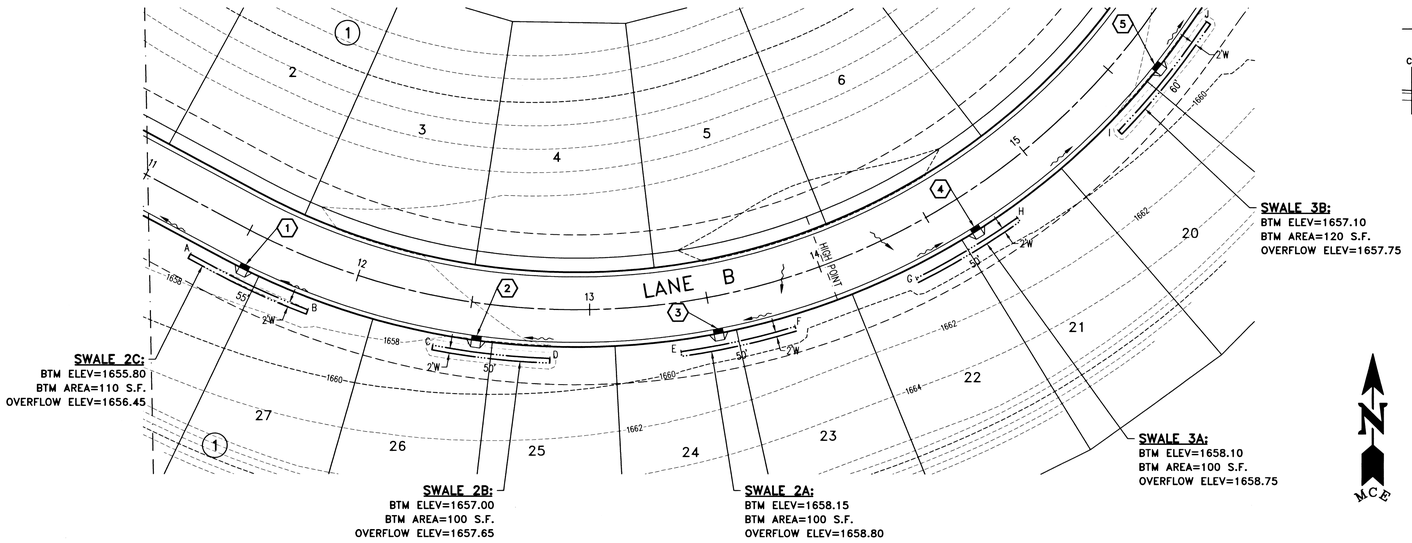
DATUM
NAVD '88
WSDOT GPS MON "GP32395-201" SR 395 MP 167.350
BRASS CAP SET IN CONCRETE IN CASE AND COVER
ELEVATION = 1748.385 FEET

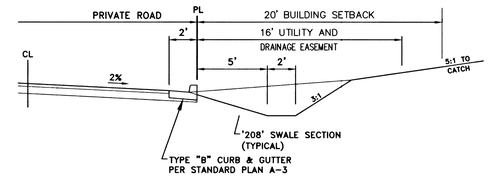
Mountain Crest Enterprises Inc.
4024 East First Street
P.O. Box 1800, Mead, WA 99021
(509) 466-5794 Fax: 466-1514

WANDERMERE ESTATES P.U.D.
LANE A
DRAINAGE DETAILS
SPOKANE COUNTY, WASHINGTON

STREET PLANS
County Plat No.: P-1915
MCE Project No.: 02-207
Sheet: 9 of 11

SEC. 5, T.26 N., R.43 E.,W.M.





LANE B – SWALE SECTION

UNDERGROUND SERVICE ALERT
ONE-CALL NUMBER
456-8000
CALL TWO BUSINESS DAYS BEFORE YOU DIG

Date	Activity	By
10/29/03	ORIGINAL PREPARATION	NWO
11/24/03	COUNTY REVIEW COMMENTS	NWO

NELSON WINN OGREN WASHINGTON STATE REGISTERED PROFESSIONAL ENGINEER 36161 EXPIRES 9/24/05

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

LANE B SWALES

POINT	STATION	OFFSET
A	11+32.7	21.0'
B	11+85.2	21.0'
C	12+37.2	21.0'
D	12+84.0	21.0'
E	13+36.0	21.0'
F	13+82.7	21.0'
G	14+34.7	21.0'
H	14+81.4	21.0'
I	15+34.3	21.0'
J	15+91.1	21.0'

POND 3C

DISTANCE AND BEARING FROM POINT "K"			
POINT	DISTANCE	BEARING	NOTES
L	22.23	S70°15'35"W	2' RADIUS
M	23.86	S08°14'19"W	17.5' RADIUS
N	36.37	S17°48'20"E	2' RADIUS

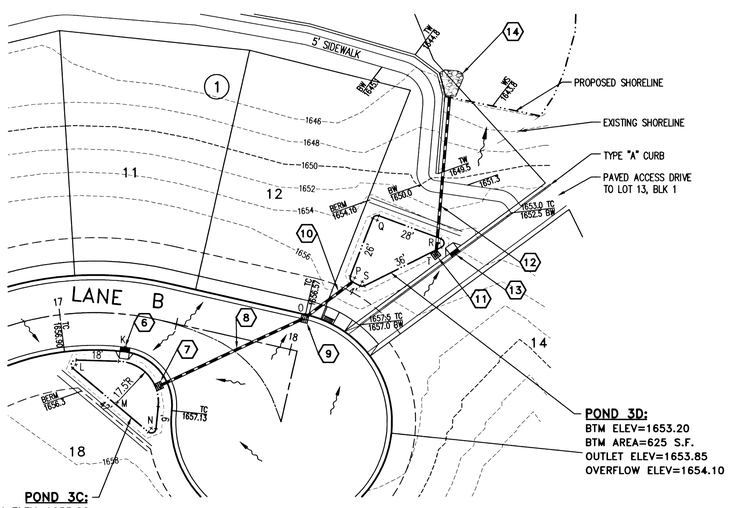
POND 3D

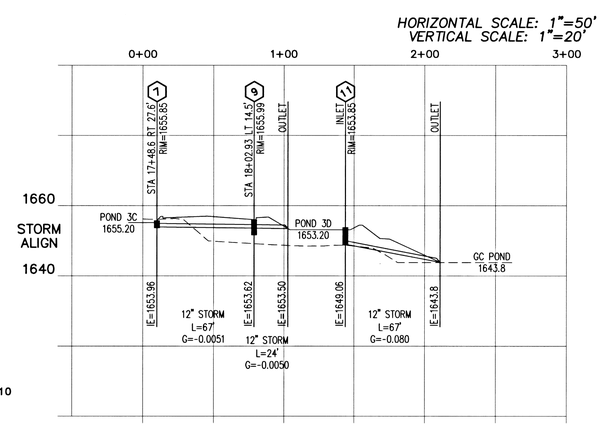
DISTANCE AND BEARING FROM POINT "O"			
POINT	DISTANCE	BEARING	NOTES
P	26.08	N53°07'01"E	2' RADIUS
Q	50.44	N36°59'21"E	2' RADIUS
R	64.27	N61°40'28"E	2' RADIUS
S	27.82	N59°47'59"E	2' RADIUS
T	60.76	N65°08'42"E	RIM=1653.85

CONSTRUCTION NOTES

– ALL CATCH BASIN INLETS SHALL BE INSTALLED WITH 1" DEEP GUTTER DEPRESSION PER SPOKANE COUNTY STANDARD PLAN B-18. RIM ELEVATIONS NOTED INCLUDE 1" DEPRESSION.

1. STA 11+55.00, RT. TYPE 1 CURB INLET PER SPOKANE COUNTY STANDARD PLAN B-8. Tc ELEV=1656.95, DROP ELEV=1656.45.
2. STA 12+54.00, RT. TYPE 1 CURB INLET PER SPOKANE COUNTY STANDARD PLAN B-8. Tc ELEV=1658.15, DROP ELEV=1657.65.
3. STA 13+52.00, RT. TYPE 1 CURB INLET PER SPOKANE COUNTY STANDARD PLAN B-8. Tc ELEV=1659.30, DROP ELEV=1658.80.
4. STA 14+65.00, RT. TYPE 1 CURB INLET PER SPOKANE COUNTY STANDARD PLAN B-8. Tc ELEV=1659.25, DROP ELEV=1658.75.
5. STA 15+64.00, RT. TYPE 1 CURB INLET PER SPOKANE COUNTY STANDARD PLAN B-8. Tc ELEV=1658.25, DROP ELEV=1657.55.
6. STA 17+29.56, RT. TYPE 1 CURB INLET PER SPOKANE COUNTY STANDARD PLAN B-8. Tc ELEV=1656.60, DROP ELEV=1656.10.
7. STA 12+48.6, 27.6' RT. TYPE 1 CONCRETE INLET WITH TYPE 1 METAL FRAME AND GRATE, AND GRATE GUARD, PER SPOKANE COUNTY STANDARD PLANS B-5, B-10, B-12 AND B-17. RIM ELEV=1655.85.
8. 67 L.F. OF 12" ADS STORM PIPE. G=0.0051. IE(E)=1653.62, IE(W)=1653.96.
9. STA 18+02.93, 14.5' LT. TYPE 1 CATCH BASIN WITH TYPE 1 METAL FRAME AND GRATE, AND GRATE GUARD, PER SPOKANE COUNTY STANDARD PLANS B-4, B-7, B-10, B-12 AND B-17. RIM ELEV=1655.99.
10. 24 L.F. OF 12" ADS STORM PIPE. G=0.0050. IE(E)=1653.50, IE(W)=1653.62.
11. TYPE 1 CONCRETE INLET WITH TYPE 1 METAL FRAME AND GRATE, AND GRATE GUARD, PER SPOKANE COUNTY STANDARD PLANS B-5, B-10, B-12 AND B-17. RIM ELEV=1653.85.
12. 67 L.F. OF 12" ADS STORM PIPE. G=0.080. IE(N)=1643.8, IE(S)=1649.06.
13. TYPE 1 CURB INLET PER SPOKANE COUNTY STANDARD PLAN B-8. LOCATED 56' EAST OF CURB ON CUL-DE-SAC. Tc ELEV=1654.65, DROP ELEV=1654.15.
14. 80 S.F. OF 12" TO 18" RIP-RAP BOULDERS AT POND 3D OUTLET.





DETENTION POND NOTES

– ALL DETENTION PONDS SHALL BE SEEDED WITH DRYLAND GRASS SEED MIX (AT A MINIMUM), PER SPECIFICATIONS ON SHEET 2, OR SODDED AND IRRIGATED.

– THE SPOKANE COUNTY GUIDELINES FOR STORMWATER MANAGEMENT REQUIRES SOIL TESTING WHERE THE AVERAGE GPA POND DEPTH IS GREATER THAN SIX (6) INCHES. ONE (1) TEST EACH FOR CATION EXCHANGE CAPACITY AND ORGANIC CONTENT PER 1,500 S.F. OR LESS. TESTS SHALL BE PERFORMED ON A WELL-MIXED COMPOSITE SAMPLE, CONSISTING OF THE TOP SIX (6) INCHES OF SOIL FROM AT LEAST FOUR (4) CORES UNIFORMLY DISTRIBUTED OVER THE PERCOLATION AREA. IF THE AVERAGE CATION EXCHANGE CAPACITY IS 15 MILLIEQUIVALENTS OR MORE PER 100 GRAMS, OR THE SOIL CONTAINS 2% OR MORE ORGANIC CARBON, THE SOIL WILL BE CONSIDERED SUITABLE FOR STORMWATER TREATMENT. SOIL TESTING SHALL BE COMPLETED PRIOR TO FINAL CERTIFICATION.

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: P1915
DATE ACCEPTED: 2/13/04
ACCEPTANCE EXPIRES: 2/13/06
PROJECT LANE MILES PUBLIC: 0
PROJECT LANE MILES PRIVATE: 0.93
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

Lowell Lockee
DEVELOPER'S APPROVAL

2/3/2004
DATE

DATUM
NAVD '88
WSDOT GPS MON "GP32395-201" SR 395 MP 167.350
BRASS CAP SET IN CONCRETE IN CASE AND COVER
ELEVATION = 1748.385 FEET

Mountain Crest Enterprises Inc.
4024 East First Street
P.O. Box 1800, Mead, WA 99021
(509) 466-5794 Fax: 466-1514

WANDERMERE ESTATES P.U.D.
LANE B
DRAINAGE DETAILS
SPOKANE COUNTY, WASHINGTON

STREET PLANS
County Plat No.: P-1915
MCE Project No.: 02-207
Sheet: 10 of 11

SEC. 5, T.26 N., R.43 E.,W.M.

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

NORTH

WANDERMERE HIGHWAY

EXISTING CHANNELIZATION

EXISTING EDGE OF ASPHALT
EXISTING FOG LINE
EXISTING FOG LINE
EXISTING EDGE OF ASPHALT
EXISTING GUARD RAIL
EXISTING ENTRANCE TO WANDERMERE GOLF COURSE
EXISTING EDGE OF ASPHALT
R55'
18'
12'
135'
50'
138' STORAGE
148'
287'
STREET NAME AND STOP SIGN
LANE A
PHASE I PLAT BOUNDARY (TYPICAL)
PROPOSED ENTRANCE TO WANDERMERE GOLF COURSE

PROPOSED CHANNELIZATION

CONSTRUCTION NOTES

PAVEMENT MARKINGS PER WSDOT STANDARD PLANS H-3a, H-5 THRU H-5c.
RAISED PAVEMENT MARKERS SHALL NOT BE INSTALLED.

RE-STRIPE ALL EXISTING LANE LINES THAT REMAIN WITHIN THE RE-CHANNELIZATION AREA.

1. REMOVE DOUBLE YELLOW CENTER LINE.
2. REMOVE SKIP LANE MARKER.
3. REMOVE FOG LINE.
4. REMOVE STOP BAR.
5. REMOVE SIGN (MERGE SYMBOL).
6. EXISTING SIGN ("RIGHT LANE MUST TURN RIGHT") TO REMAIN.
7. DOUBLE YELLOW CENTER LINE.
8. WHITE FOG LINE.
9. 8" GORE STRIPE.
10. STOP BAR.
11. TRAFFIC ARROW.
12. INSTALL SIGN "WANDERMERE GOLF COURSE NEXT LEFT" PER M.U.T.C.D. AND WSDOT STD PLANS G-1, G-4a.

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: P1915
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PROJECT LANE MILES PUBLIC: 0
PROJECT LANE MILES PRIVATE: 0.33
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PERMIT RECORDING (509) 477-3600
NOTIFY PROJECT ENGINEER 7 BUSINESS DAYS PRIOR TO CONSTRUCTION

DEVELOPER'S APPROVAL

2/3/2004
DATE

Date	Activity	By
10/29/03	ORIGINAL PREPARATION	NWO
11/25/03	REVIEW COMMENTS	DNW
12/30/03	REVIEW COMMENTS	DNW

NELSON WINN OGREN
STATE OF WASHINGTON
PROFESSIONAL ENGINEER
EXPIRES 9/24/05

Mountain Crest Enterprises Inc.
4024 East First Street
P.O. Box 1800, Mead, WA 99021
(509) 466-5794 Fax: 466-1514

WANDERMERE ESTATES P.U.D.
WANDERMERE ROAD
CHANNELIZATION PLAN
SPOKANE COUNTY, WASHINGTON

STREET PLANS
County Plat No.: P-1915
MCE Project No.: 02-207
Sheet: 11 of 11