# BIG SKY - PHASE 1

LOCATED IN THE N.E. ¼, SEC. 7, T. 24 N., R 42 E., W.M.

NOTE:
ALL SIDEWALKS THAT BORDER LOTS ON INTERIOR STREETS HAVE NOT BEEN CONSTRUCTED. ALL CURB RETURNS WITH ADA RAMPS, SIDEWALK AND ADA RAMPS ABUTTING OPEN AREA TRACTS HAVE BEEN CONSTRUCTED. REFER TO LEGEND BELOW FOR IDENTIFICATION.

| SIDEWALK LEGEND | |
|---|---|
| SIDEWALK CONSTRUCTED | |
| FUTURE SIDEWALK (CONSTRUCTED WHEN HOMES ARE BUILT) | |

**GENERAL NOTES**

OWNER: ***Aho Construction***
***5512 NE 109th court, Suite 101***
***Vancouver, WA 98662***
***(360)254-0493 (Ph)***
***(360)254-6998 (Fax)***

DEVELOPER ***Same As Owner***

Boundary and topographic information prepared by **Minister & Glaeser Surveying, Inc.**, 2003.

Temporary benchmark is a WSDOT 3" brass disk in monument case located in the intersection of Geiger Road and Hayford Road. Elevation is 2412.29, NAVD 88 Datum.

Locations of existing utilities shown in plans are approximate. The contractor shall be responsible for locating all underground utilities prior to construction of road and drainage facilities.

A minimum of two full business days prior to beginning construction, the Contractor shall call 1-509-456-8000 (Utilities Underground Location Center) for location mark-up of existing utilities.

Any archaeological findings shall be reported to the County inspector and any state agency required by Washington State law.

Site grading, paving, and storm sewer construction, materials and workmanship shall conform to the "2004 Standard Specifications for Road, Bridge and Municipal Construction" prepared by WSDOT/APWA, and shall conform with the "SPOKANE COUNTY STANDARDS FOR ROAD AND SEWER CONSTRUCTION" 2001, and as amended.

Public sanitary sewer and water system construction, materials, and workmanship shall conform to the "2004 Standard Specifications for Road, Bridge & Municipal Construction" prepared by the WSDOT/APWA, and the standards and practices of the **City of Spokane Department of Engineering Services.**

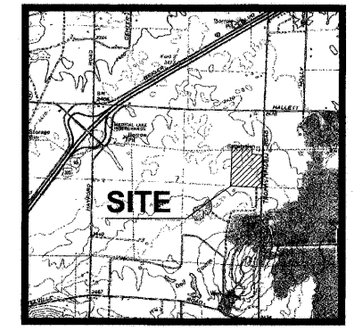
Erosion, sediment, and air quality control shall comply with Spokane County air quality control ordinances, and the notes and details on these plans.

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.

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.

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT
ORIGINAL
"AS-BUILTS"
CERTIFIED RECORD DRAWINGS
PROJECT #: P1918
DATE ACCEPTED: 12/12/07

The design improvements shown in this set of plans and calculations conform to the applicable editions of the Spokane County Standards for Road and Sewer Construction and the Spokane County Guidelines for Storm Water Management. The Spoken County Engineer has approved all design deviations. I approve these plans for construction.




**VICINITY MAP**
NOT TO SCALE

| PROJECT APPLICANT | |
|---|---|
| AHO CONSTRUCTION | 11/30/04 Date |

**SHEET INDEX**


1. COVER SHEET
2. GENERAL NOTES *(NOT INCLUDED)*
3. EROSION CONTROL PLAN *(NOT INCLUDED)*
4. EROSION CONTROL DETAILS *(NOT INCLUDED)*
5. GRADING PLAN *(NOT INCLUDED)*
6. MASTER UTILITY PLAN *(NOT INCLUDED)*
7. CAELEN AVENUE STORM DRAINAGE & STREET PLAN & PROFILE
8. MUDLEN ~~CAELEN~~ STREET STORM DRAINAGE & STREET PLAN & PROFILE
9. CLAIRE STREET STORM DRAINAGE & STREET PLAN & PROFILE
10. AERO ROAD STORM DRAINAGE & STREET PLAN & PROFILE
11. 72nd AVENUE + COURT ~~71st AVENUE~~ STORM DRAINAGE & STREET PLAN & PROFILE
12. WEST TERRACE DRIVE STORM DRAINAGE & STREET PLAN & PROFILE *ALLORA*
13. WEST TERRACE DRIVE, ~~AMY~~ COURT & AVERY STREET STORM DRAINAGE & STREET PLAN & PROFILE
14. THOMAS MALLEN ROAD STORM DRAINAGE & STREET PLAN & PROFILE
15. STORM ESMT 1 & 2 PLAN & PROFILES
16. ~~CAELEN AVENUE SANITARY SEWER PLAN & PROFILE~~
17. ~~CAELEN STREET SANITARY SEWER PLAN & PROFILE~~
18. ~~CLAIRE AVENUE SANITARY SEWER PLAN & PROFILE~~
19. ~~AERO ROAD SANITARY SEWER PLAN & PROFILE~~
20. ~~71st AVENUE SANITARY SEWER PLAN & PROFILE~~
21. ~~WEST TERRACE DRIVE SANITARY SEWER PLAN & PROFILE~~
22. ~~WEST TERRACE DRIVE SANITARY SEWER PLAN & PROFILE~~
23. ~~OFFSITE SANITARY SEWER PLAN & PROFILE~~
24. ~~AMY COURT SANITARY SEWER PLAN & PROFILE~~
25. ~~CAELEN AVENUE WATER PLAN & PROFILE~~
26. ~~CAELEN STREET WATER PLAN & PROFILE~~
27. ~~CLAIRE AVENUE WATER PLAN & PROFILE~~
28. ~~AERO ROAD WATER PLAN & PROFILE~~
29. ~~71st AVENUE WATER PLAN & PROFILE~~
30. ~~WEST TERRACE DRIVE WATER PLAN & PROFILE~~
31. ~~WEST TERRACE DRIVE WATER PLAN & PROFILE~~
32. ~~OFFSITE WATER PLAN & PROFILE~~
33. ~~AMY COURT WATER PLAN & PROFILE~~
34. STORM FACILITY PLAN & CROSS SECTIONS
35. STORM FACILITY DETAILS
36. MISCELLANEOUS DETAILS *(NOT INCLUDED)*
37. ~~CITY OF SPOKANE STANDARD DETAILS~~
38. SPOKANE COUNTY STANDARD DETAILS *(NOT INCLUDED)*
39. SIGNING, STRIPING & ILLUMINATION PLAN *(NOT INCLUDED)*


AS BUILT

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

11-30-04

THOMAS G. LONERGAN — STATE OF WASHINGTON — 22002 — REGISTERED PROFESSIONAL ENGINEER
EXPIRES: FEB 14, 2006

1/12/39


HOPPER DENNIS JELLISON PLLC
ENGINEERS & PLANNERS
314 W. 15th Street
Vancouver, WA 98660-2927
(360) 695-3488
(503) 924-4065
FAX (360) 695-6757
Internet: www.hdjcongtheers.com


| DATE | BY | PROJ | DESCRIPTION | DATE | BY | PROJ | E.F.N. | U.S.N. | FROM | TO | COUNCIL ACCEPT DATE | FROM | TO | ORD. NO. | DATE | FILE NO. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| REVISIONS | | | | RECORD | | | | | | | | GRADE ESTABLISHMENTS | | | | |

NAVD88 = (OLD CBM ELEV.) - (13.13) AS OF JANUARY, 2000 USE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)

BENCH MARK LOCATION: A WSDOT 3" BRASS DISK IN MONUMENT CASE LOCATED IN THE INTX OF GEIGER RD & HAYFORD RD. ELEV IS 2408.49' NAVD29 DATUM

NAVD88 ELEV. 2412.29
CBM NO.

NAVD88 DATUM

BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

HORIZONTAL PLAN/PROFILE 1"=200'
VERTICAL PROFILE ONLY N/A

SCALE

| CURRENT CITY/COUNTY DESIGN STANDARDS ADOPTED FEB,1995 | LAST PROJECT BY | DATES |
|---|---|---|
| DRAWN: | RAD | 6/04 |
| REVISED: | | |
| CHECKED: | TGJ | 6/04 |
| APPROVED: | TGL | 6/04 |

SPOKANE

CITY OF SPOKANE, WASHINGTON
DEPARTMENT OF ENGINEERING SERVICES
808 WEST SPOKANE FALLS BLVD.
SPOKANE, WASHINGTON 99201-3343
(509) 625-6300

PROJECT NAME: BIG SKY – PHASE 1
SHEET LIMITS: COVER SHEET
PROJECT LIMITS: HALLET ROAD & THOMAS MALLEN ROAD

TYPE OF IMPROVEMENT:
CITY PROJECT NUMBER | CITY PLAN NUMBER
EFN:

CALL BEFORE YOU DIG 456-8000

12-19-18 Eng H Sbmt

PROT02B02.DWG; REV 11/27/2002

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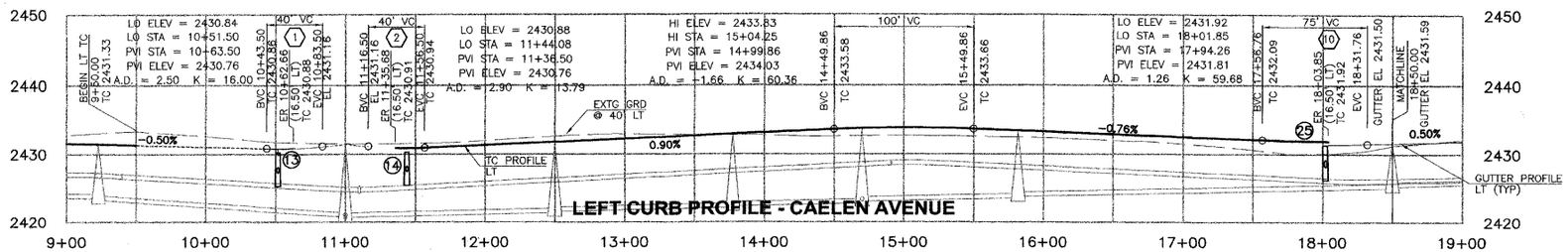
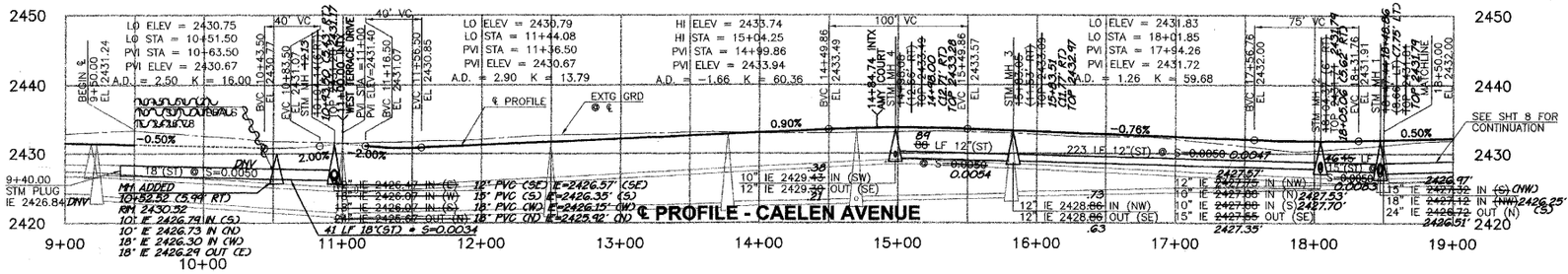
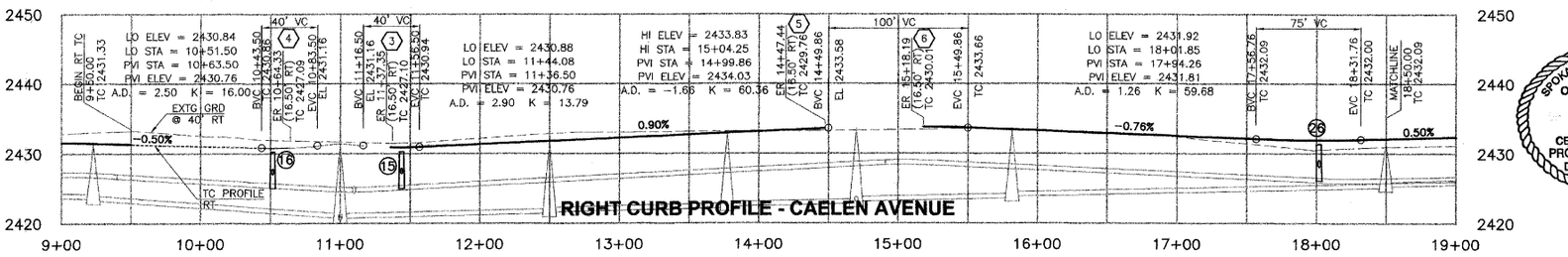



| STORMWATER INLET TABLE | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| No. | LOCATION | TYPE | RIM ELEV | OUTLET ELEV | INLET ELEV | OUTLET SIZE | LATERAL SLOPE | LATERAL LENGTH |
| 13 | 10+51.50 (16.5' LT) .68 | 2✓ | ~~2430.24~~ 2430.30 | ~~2427.23~~ 2427.56 | - | ✓10 in. | ~~2%~~ 3.63% | 22 ~~20~~ ft. |
| 14 | 11+44.00 (16.5' LT) 33 | 2✓ | ~~2430.38~~ 2430.37 | ~~2427.44~~ 2428.01 | - | ✓10 in. | ~~1%~~ 0.76% | 32 ~~20~~ ft. |
| 15 | 11+44.00 (16.5' RT) .84 | 2✓ | ~~2430.08~~ 2430.33 | ~~2428.95~~ 2427.57 | ~~2427.44~~ 2427.77 | ✓12 in. | ~~1%~~ 1.41% | 52 ~~54~~ ft. |
| 16 | 10+51.50 (16.5' RT) 52.36 | 2✓ | ~~2430.24~~ 2430.32 | ~~2427.91~~ 2427.42 | - | ✓10 in. | ~~2%~~ 11.31% | ✓10 ft. |
| 25 | 18+01.85 (16.5' LT) 02.81 | 2✓ | ~~2431.52~~ 2431.40 | ~~2428.34~~ 2428.56 | - | ✓10 in. | ~~2%~~ 4.77% | 22 ~~20~~ ft. |
| 26 | 18+01.85 (16.5' RT) .74 | 2✓ | ~~2431.52~~ 2431.36 | ~~2428.04~~ 2428.51 | - | ✓10 in. | ~~2%~~ 7.74% | 10 ~~44~~ ft. |

| CURB RETURN DATA | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| No. | Δ | R | L | TC ELEVATION* (CLOCKWISE) | | | | |
| | | | | ER | 1/4PT | 1/2PT | 3/4PT | ER |
| 1 | 91°18'38" | 20.00 | 31.87 | 2431.31 | 2431.23 | 2431.14 | 2430.98 | 2430.88 |
| 2 | 88°41'22" | 20.00 | 30.96 | 2430.91 | 2430.99 | 2431.14 | 2431.23 | 2431.31 |
| 3 | 91°18'38" | 20.00 | 31.87 | 2431.68 | 2431.56 | 2431.29 | 2431.02 | 2430.90 |
| 4 | 88°41'22" | 20.00 | 30.96 | 2430.89 | 2431.02 | 2431.29 | 2431.57 | 2431.67 |
| 5 | 86°17'57" | 20.00 | 30.12 | 2433.47 | 2433.41 | 2433.36 | 2433.21 | 2433.11 |
| 6 | 94°38'56" | 20.00 | 33.04 | 2433.04 | 2433.16 | 2433.48 | 2433.79 | 2433.72 |
| 10 | 46°22'09" | 30.00 | 24.28 | 2432.18 | 2432.08 | 2431.99 | 2431.95 | 2430.92 |
| 11 | CUL-DE-SAC | | | | | | | |

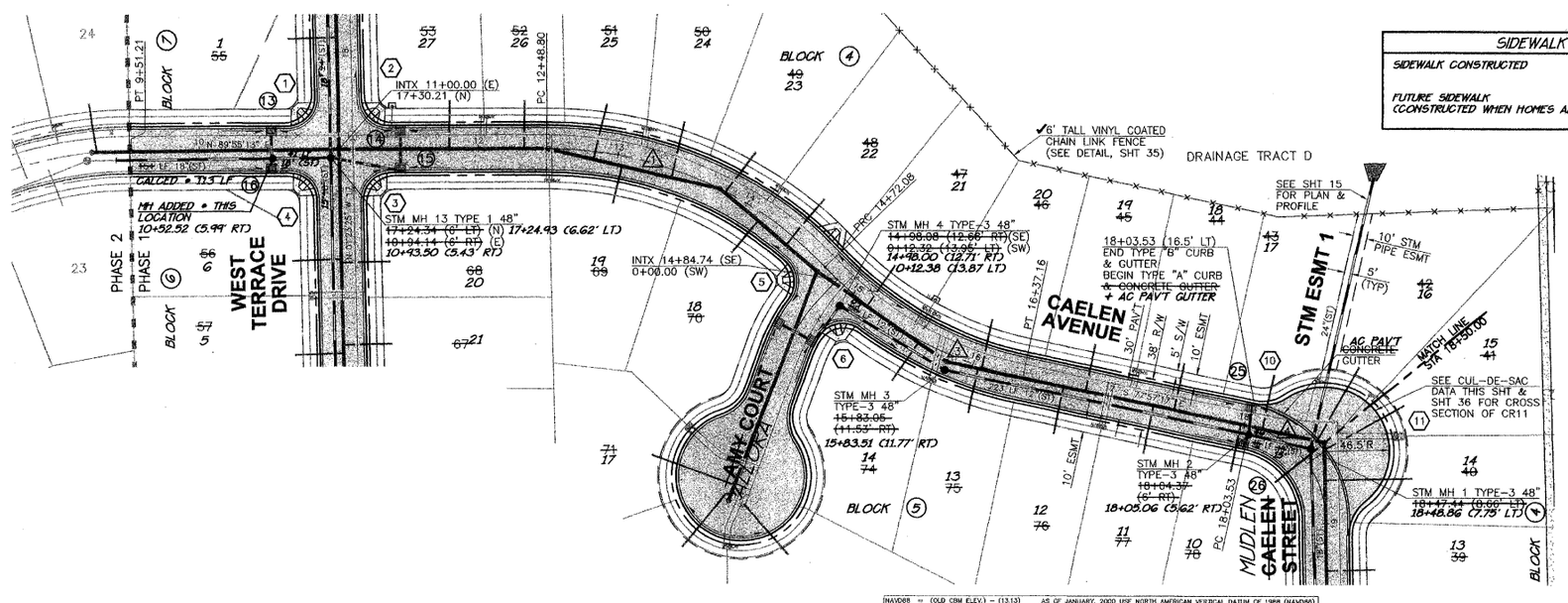
*ELEVATIONS DO NOT REFLECT DEPRESSIONS FOR CURB RAMPS

| CUL-DE-SAC DATA | | | | | |
|---|---|---|---|---|---|
| No. | SUMMARY | | STATION | ANGLE | T.C. ELEV* |
| 11 | | | 18+19.63 (28.44' LT) | PRC 91°46'35" | 2432.18 |
| | Δ | 175°45'07" | | 120° | 2432.57 |
| | R | 46.5 ft. | | 150° | 2432.87 |
| | L | 142.64 ft. | | 180° | 2433.34 |
| | | | | 210° | 2432.99 |
| | | | | 240° | 2432.81 |
| | | | 18+88.04 (28.92' LT) | PRV 267°31'24" | 2432.53 |

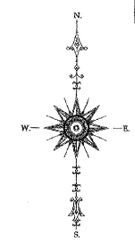
*ELEVATIONS DO NOT REFLECT DEPRESSIONS FOR CURB RAMPS

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT
ORIGINAL
"AS-BUILTS"
CERTIFIED RECORD DRAWINGS
PROJECT #: P1918
DATE ACCEPTED: 12/13/07

| CENTERLINE CURVE DATA | | | | | |
|---|---|---|---|---|---|
| No. | Δ | R | L | T |
| 1 | 46°31'11" | 275.00 | 223.28 | 118.21 |
| 2 | 34°23'31" | 275.00 | 165.08 | 85.11 |
| 4 | 76°48'49" | 69.00 | 92.51 | 54.70 |




| SIDEWALK LEGEND | |
|---|---|
| SIDEWALK CONSTRUCTED | |
| FUTURE SIDEWALK (CONSTRUCTED WHEN HOME'S ARE BUILT) | |




PROJECT APPLICANT
AHO CONSTRUCTION
11/30/04
Date

DNV = DID NOT VERIFY

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

AS BUILT

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THOMAS G. LONERGAN
STATE OF WASHINGTON
21668
REGISTERED PROFESSIONAL ENGINEER
EXPIRES: FEB 14, 2006
11-30-04
72/12/39

| DATE | BY | PROJ | DESCRIPTION | DATE | BY | PROJ. | E.F.N. | U.S.N. | FROM | TO | COUNCIL ACCEPT DATE | FROM | TO | ORD. NO. | DATE | FILE NO. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| REVISIONS | | | | RECORD | | | | | | | | GRADE ESTABLISHMENTS | | | | |

NAVD88 = (OLD CRM ELEV.) - (13.13) AS OF JANUARY, 2000 USE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)
BENCH MARK LOCATION: A WSDOT 3" BRASS DISK IN MONUMENT CASE LOCATED IN THE INTX OF GEIGER RD & HAYFORD RD ELEV = 2408.49' NAVD29 DATUM
NAVD88 ELEV. 2412.29
CBV NO.
NAVD88 DATUM
BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY
HORIZONTAL PLAN/PROFILE 1" = 50'
VERTICAL PROFILE ONLY 1" = 10'
SCALE
CURRENT CITY/COUNTY DESIGN STANDARDS ADOPTED FEB.1995

| | | DATES |
|---|---|---|
| LAST PROJECT BY | | |
| DRAWN: | LRC | 6/04 |
| REVISED: | | |
| CHECKED: | TGJ | 6/04 |
| APPROVED: | TGL | 6/04 |

SPOKANE
CITY OF SPOKANE, WASHINGTON
DEPARTMENT OF ENGINEERING SERVICES
808 WEST SPOKANE FALLS BLVD.
SPOKANE, WASHINGTON 99201-3343
(509) 625-6300

PROJECT NAME: BIG SKY – PHASE 1
SHEET LIMITS: CAELEN AVENUE 9+50.00 TO 18+50.00
PROJECT LIMITS: HALLET ROAD & THOMAS MALLEN ROAD
TYPE OF IMPROVEMENT: STREET & STORM
CITY PROJECT NUMBER
CITY PLAN NUMBER
EFN:
CALL BEFORE YOU DIG 456-8000

P-1918

PROT02002.DWG: REV 11/27/2002

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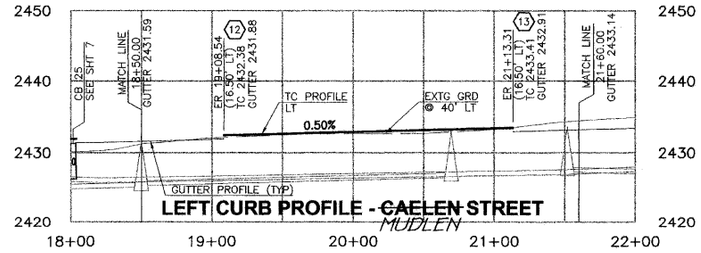


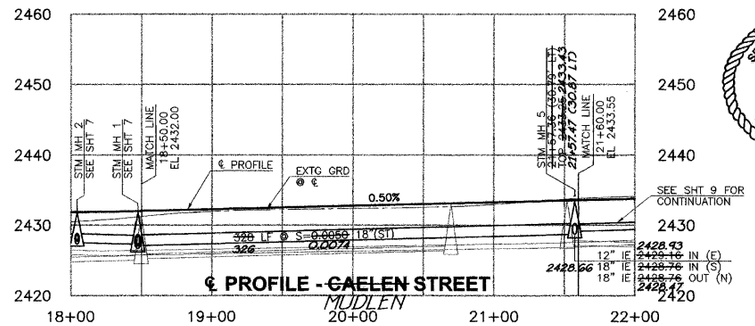


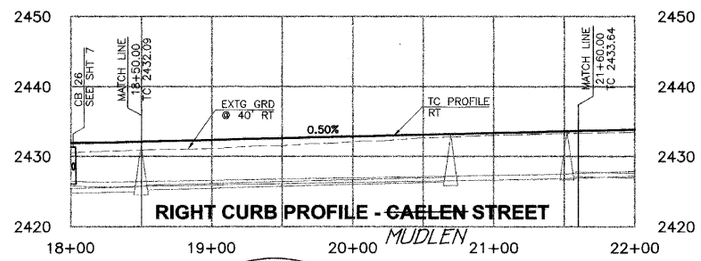


| CUL-DE-SAC DATA | | | | | |
|---|---|---|---|---|---|
| No. | SUMMARY | | STATION | ANGLE | T.C. ELEV* |
| 11 | | | 18+19.63 (28.44' LT) | PRC 91°46'35" | 2432.18 |
| | △ | 175°45'07" | | 120° | 2432.57 |
| | R | 46.5 ft. | | 150° | 2432.87 |
| | L | 142.64 ft. | | 180° | 2433.34 |
| | | | | 210° | 2432.99 |
| | | | | 240° | 2432.81 |
| | | | 18+88.04 (28.92' LT) | PRV 267°31'24" | 2432.53 |

*ELEVATIONS DO NOT REFLECT DEPRESSIONS FOR CURB RAMPS

| CUL-DE-SAC DATA | | | | | |
|---|---|---|---|---|---|
| No. | SUMMARY | | STATION | ANGLE | T.C. ELEV* |
| 14 | | | 21+29.10 (28.86' LT) | PRC 90°48'50" | 2433.74 |
| | △ | 177°53'54" | | 120° | 2434.15 |
| | R | 46.5 ft. | | 150° | 2434.45 |
| | L | 144.38 ft. | | 180° | 2434.59 |
| | | | | 210° | 2434.57 |
| | | | | 240° | 2434.39 |
| | | | 21+97.29 (29.20' LT) | PRV 268°42'44" | 2434.08 |

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SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT
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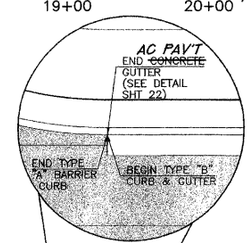
CERTIFIED RECORD DRAWINGS
PROJECT #: P1918
DATE ACCEPTED: 12/12/07

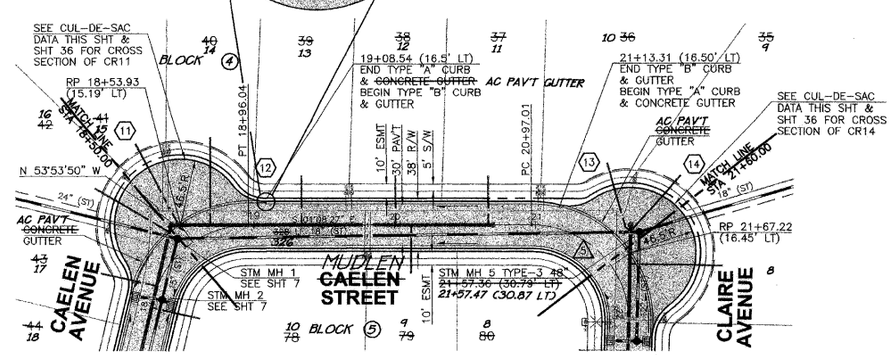
| CURB RETURN DATA | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| No. | △ | R | L | TC ELEVATION* (CLOCKWISE) | | | | |
| | | | | ER | 1/4PT | 1/2PT | 3/4PT | ER |
| 11 | CUL-DE-SAC | | | | | | | |
| 12 | 52°33'59" | 30.00 | 27.52 | 2432.38 | 2432.37 | 2432.38 | 2432.44 | 2432.53 |
| 13 | 47°42'46" | 30.00 | 24.96 | 2433.74 | 2433.62 | 2433.53 | 2433.45 | 2433.41 |
| 14 | CUL-DE-SAC | | | | | | | |

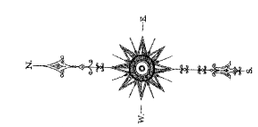
*ELEVATIONS DO NOT REFLECT DEPRESSIONS FOR CURB RAMPS




| SIDEWALK LEGEND | |
|---|---|
| SIDEWALK CONSTRUCTED | |
| FUTURE SIDEWALK (CONSTRUCTED WHEN HOMES ARE BUILT) | |

| CENTERLINE CURVE DATA | | | | |
|---|---|---|---|---|
| No. | △ | R | L | T |
| 5 | 91°07'43" | 69.00 | 109.74 | 70.37 |



PROJECT APPLICANT
Thomas Arrowsmith 11/30/04
AHO CONSTRUCTION Date

AS BUILT

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

THOMAS G. LONERGAN
STATE OF WASHINGTON
31655
REGISTERED PROFESSIONAL ENGINEER
11-30-04
EXPIRES: FEB 14, 2006

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| | |
|---|---|
| PROJECT NAME: | BIG SKY – PHASE 1 |
| SHEET LIMITS: | ~~MUDLEN~~ ~~CAELEN~~ STREET 18+50.00 TO 21+60.00 |
| PROJECT LIMITS: | HALLET ROAD & THOMAS MALLEN ROAD |
| TYPE OF IMPROVEMENT: | STREET & STORM |
| CITY PROJECT NUMBER | |
| CITY PLAN NUMBER | |
| ETAC | |

CALL BEFORE YOU DIG 456-8000

P1918 Eng As Built

| DATE | BY | PROJ | DESCRIPTION | DATE | BY | PROJ | E.F.N. , U.S.N. | FROM | TO |
|---|---|---|---|---|---|---|---|---|---|
| REVISIONS | | | | RECORD | | | | | |

| COUNCIL ACCEPT DATE | FROM | TO | ORD. NO. | DATE | FILE NO. |
|---|---|---|---|---|---|
| GRADE ESTABLISHMENTS | | | | | |

NAVD88 = (OLD CBM ELEV.) – (13.13) AS OF JANUARY, 2000 USE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)

BENCH MARK LOCATION: A WSDOT 3" BRASS DISK IN MONUMENT CASE LOCATED IN THE INTX OF GEIGER RD & HAYFORD RD ELEV = 2408.49 NAVD29 DATUM
NAVD88 ELEV. 2412.29
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BAR IS ONE INCH ON ORIGINAL DRAWING. 0 1" IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

HORIZONTAL PLAN/PROFILE 1"=50'
VERTICAL PROFILE ONLY 1"=10'
SCALE

CURRENT CITY/COUNTY DESIGN STANDARDS ADOPTED FEB.1995

| | LAST PROJECT BY | DATES |
|---|---|---|
| DRAWN: | RAD | 6/04 |
| REVISED: | | |
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SPOKANE

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PROJ02002.DWG; REV 11/27/2002

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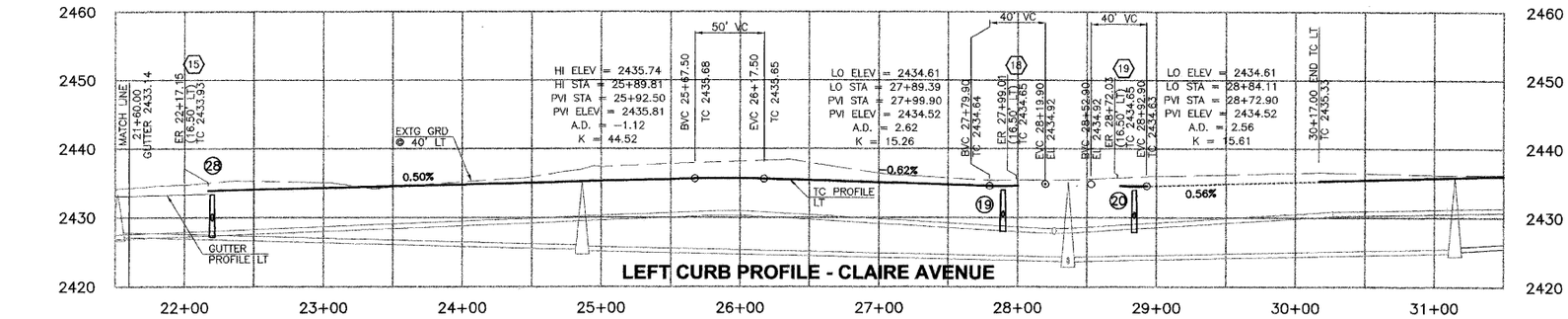
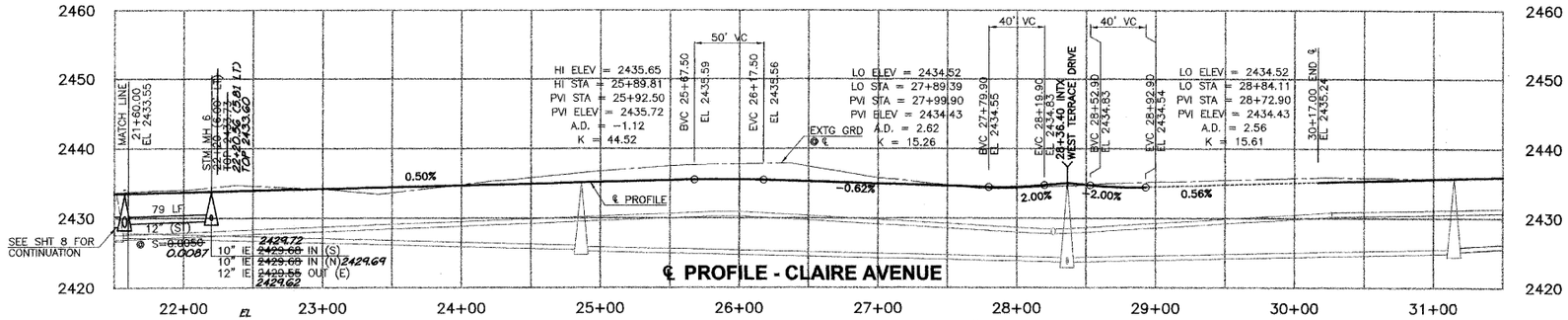
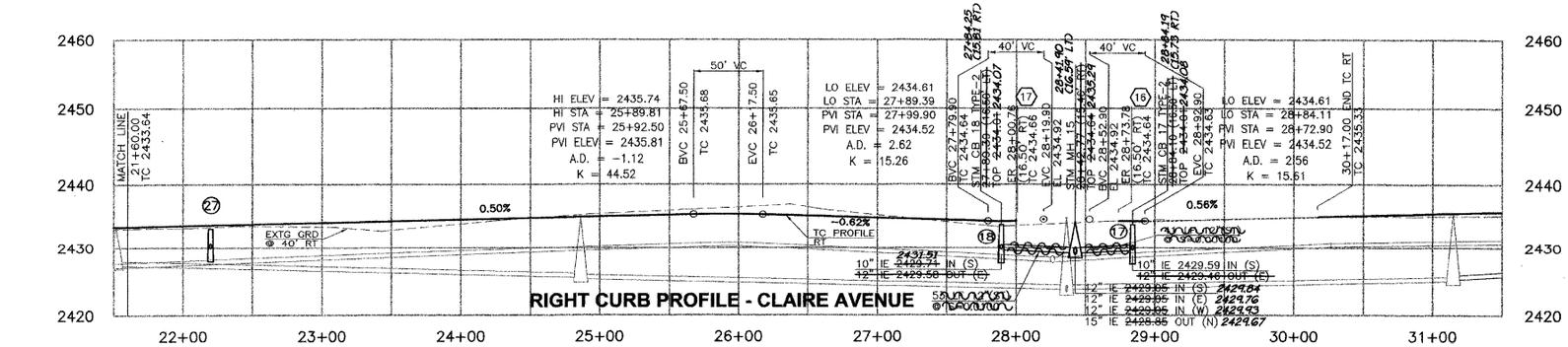



| CURB RETURN DATA | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| No. | Δ | R | L | TC ELEVATION* (CLOCKWISE) | | | | |
| | | | | ER | 1/4PT | 1/2PT | 3/4PT | ER |
| 14 | CUL-DE-SAC | | | | | | | |
| 15 | 52°35'42" | 30.00 | 27.54 | 2433.93 | 2433.91 | 2433.93 | 2433.98 | 2434.08 |
| 16 | 91°22'40" | 20.00 | 31.90 | 2434.40 | 2434.54 | 2434.63 | 2434.70 | 2434.64 |
| 17 | 86°37'20" | 20.00 | 30.93 | 2434.66 | 2434.70 | 2434.66 | 2434.57 | 2434.43 |
| 18 | 91°22'40" | 20.00 | 31.90 | 2436.28 | 2435.94 | 2435.37 | 2434.85 | 2434.64 |
| 19 | 88°37'20" | 30.00 | 30.93 | 2434.65 | 2434.86 | 2435.37 | 2435.91 | 2436.24 |

*ELEVATIONS DO NOT REFLECT DEPRESSIONS FOR CURB RAMPS

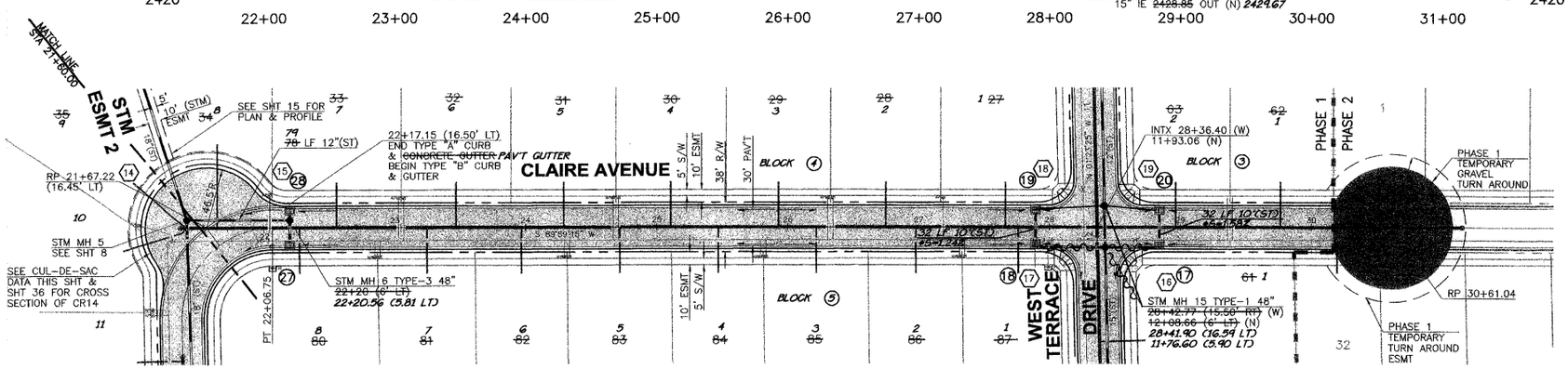
| CUL-DE-SAC DATA | | | | |
|---|---|---|---|---|
| No. | SUMMARY | | STATION | ANGLE | T.C. ELEV* |
| 14 | | | 21+29.10 (28.86' LT) | PRC 90°48'50" | 2433.74 |
| | Δ | 177°53'54" | | 120° | 2434.15 |
| | R | 46.5 ft. | | 150° | 2434.45 |
| | L | 144.38 ft. | | 180° | 2434.59 |
| | | | | 210° | 2434.57 |
| | | | | 240° | 2434.39 |
| | | | 21+97.29 (29.20' LT) | PRV 266°42'44" | 2434.08 |

*ELEVATIONS DO NOT REFLECT DEPRESSIONS FOR CURB RAMPS

| STORMWATER INLET TABLE | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| No. | LOCATION | TYPE | RIM ELEV | OUTLET ELEV | INLET ELEV | OUTLET SIZE | LATERAL SLOPE | LATERAL LENGTH |
| 19 | ~~27+08.39~~ (16.5' LT) 27+84.14 | ✓2 | ~~2434.01~~ 2434.06 | ~~2430.64~~ 2431.51 | 2431.60 | 12 ~~10~~ in. | ~~1%~~ 4.92% | 58 ~~33~~ ft. |
| 20 | ~~28+34.19~~ (16.5' LT) 28+83.78 | ✓2 | ~~2433.04~~ 2434.06 | ~~2430.95~~ 2431.43 | 2431.34 | 12 ~~10~~ in. | ~~1%~~ 3.58% | 42 ~~33~~ ft. |
| 27 | ~~22+26.00~~ (16.5' RT) 22+20.10 | ✓1 | ~~2433.04~~ 2433.18 | ~~2429.25~~ 2430.42 | - | ✓10 in. | ~~2%~~ 3.29% | 21 ~~22~~ ft. |
| 28 | ~~22+26.00~~ (16.5' LT) 22+20.56 | ✓1 | ✓2433.34 | ~~2430.95~~ 2430.03 | - | ✓10 in. | ~~1%~~ 4.67% | ✓10 ft. |

| CENTERLINE CURVE DATA | | | | |
|---|---|---|---|---|
| No. | Δ | R | L | T |
| 5 | 91°07'43" | 69.00 | 109.74 | 70.37 |

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT
ORIGINAL
"AS-BUILTS"
CERTIFIED RECORD DRAWINGS
PROJECT #: P1918
DATE ACCEPTED: 12/17/07




| SIDEWALK LEGEND | |
|---|---|
| SIDEWALK CONSTRUCTED | |
| FUTURE SIDEWALK (CONSTRUCTED WHEN HOMES ARE BUILT) | |

| PROJECT APPLICANT | |
|---|---|
| Thomas Arrowsmith AHO CONSTRUCTION | 11/30/04 Date |

AS BUILT

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

THOMAS G. LONERGAN STATE OF WASHINGTON 36255 REGISTERED PROFESSIONAL ENGINEER 11-30-04
EXPIRES: FEB 14, 2006

HOPPER DENNIS JELLISON P.L.L.C.
ENGINEERS & PLANNERS
314 W. 15th Street
Vancouver, WA 98660-2927
(360) 695-3488
(503) 924-4005
FAX (360) 695-8767
Internet: www.hdjengineers.com

9 4/12 39

PROJECT NAME: BIG SKY – PHASE 1

SHEET LIMITS: CLAIRE AVENUE 18+50.00 TO 30+74.00

PROJECT LIMITS: HALLET ROAD & THOMAS MALLEN ROAD

TYPE OF IMPROVEMENT: STREET & STORM

CITY PROJECT NUMBER | CITY PLAN NUMBER | EFN:

CITY OF SPOKANE, WASHINGTON
DEPARTMENT OF ENGINEERING SERVICES
808 WEST SPOKANE FALLS BLVD.
SPOKANE, WASHINGTON 99201-3343
(509) 625-6300

SPOKANE

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DATE | BY | PROJ. | DESCRIPTION | DATE | BY | PROJ. | E.F.N. | U.S.N. | FROM | TO | COUNCIL ACCEPT DATE | FROM | TO | ORD. NO. | DATE | FILE NO. |
| REVISIONS | | | | RECORD | | | | | | | | GRADE ESTABLISHMENTS | | | | |

NAVD88 = (OLD CSM ELEV.) - (1.13) AS OF JANUARY, 2000 USE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)

BENCH MARK LOCATION: A WSDOT 3" BRASS DISK IN MONUMENT CASE LOCATED IN THE INTX OF GEIGER RD & HAYFORD RD ELEV = 2408.49' NAVD29 DATUM

NAVD88 ELEV. 2412.29
CSM NO.

NAVD88 DATUM

BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

HORIZONTAL PLAN&PROFILE 1"=50'
VERTICAL PROFILE ONLY 1"=10'

SCALE

CURRENT CITY/COUNTY DESIGN STANDARDS ADOPTED FEB.1995

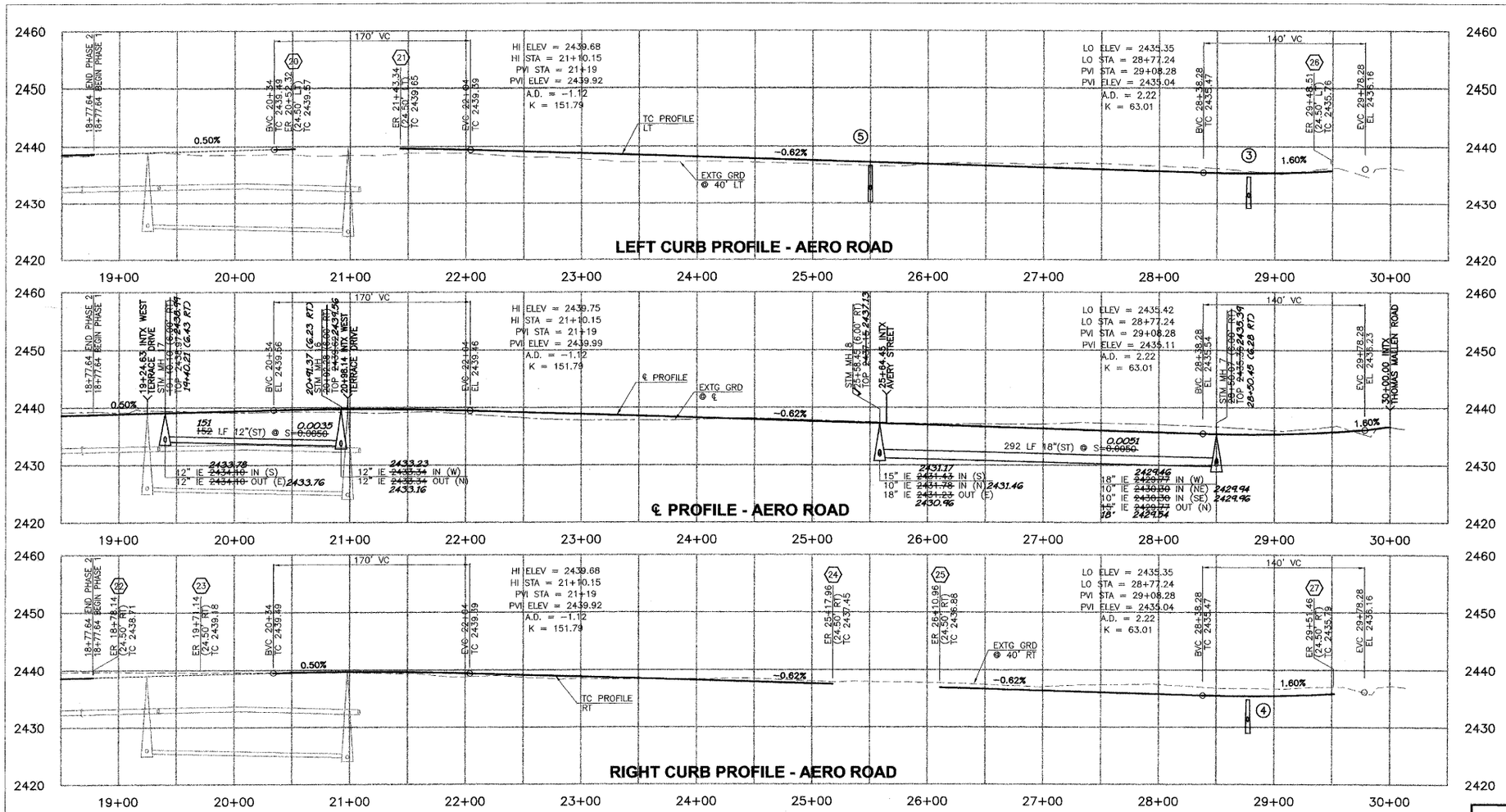
| LAST PROJECT BY: | | DATES |
|---|---|---|
| DRAWN: | RAD | 6/04 |
| REVISED: | | |
| CHECKED: | TGJ | 6/04 |
| APPROVED: | TGL | 6/04 |

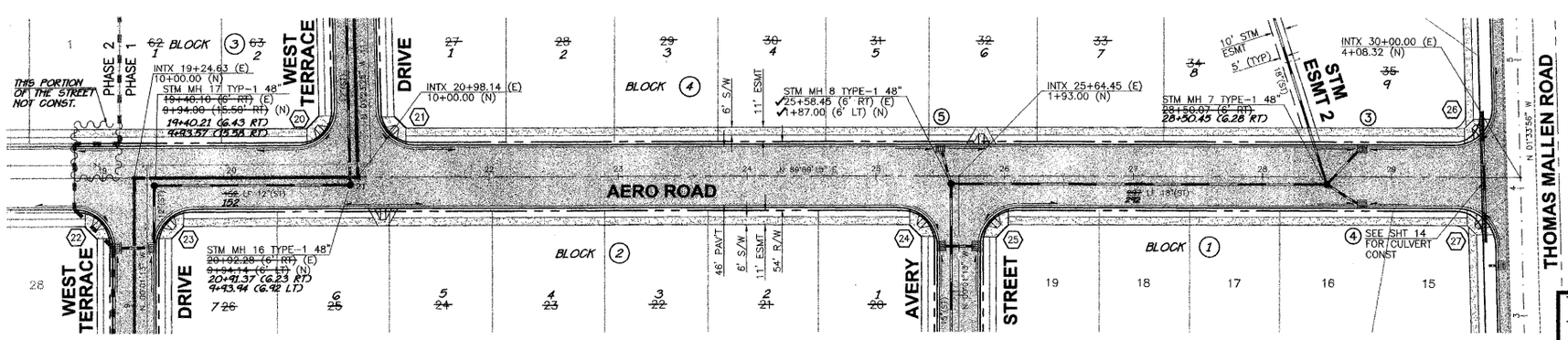
CALL BEFORE YOU DIG 456-8000

P-1918 Eng As Built

PROT02002.DWG; REV 11/27/2002

E:\projects\2183\Cad\Asbuilt\dwg\Round 2\ASBT2183c09.dwg, 11/30/2004 3:01:47 PM, rad




| SIDEWALK LEGEND | |
|---|---|
| SIDEWALK CONSTRUCTED | |
| FUTURE SIDEWALK (CONSTRUCTED WHEN HOMES ARE BUILT) | |

**CURB RETURN DATA**

| No. | Δ | R | L | TC ELEVATION* (CLOCKWISE) ER | 1/4PT | 1/2PT | 3/4PT | ER |
|---|---|---|---|---|---|---|---|---|
| 20 | 91°22'40" | 30.00 | 47.85 | 2438.72 | 2438.96 | 2439.20 | 2439.44 | 2439.57 |
| 21 | 88°37'20" | 30.00 | 46.40 | 2439.65 | 2439.52 | 2439.26 | 2439.01 | 2438.76 |
| 22 | 89°59'31" | 30.00 | 47.12 | 2438.71 | 2438.63 | 2438.49 | 2438.28 | 2438.22 |
| 23 | 90°00'29" | 30.00 | 47.13 | 2438.22 | 2438.32 | 2438.66 | 2439.02 | 2439.18 |
| 24 | 89°59'32" | 30.00 | 47.12 | 2437.45 | 2437.28 | 2436.93 | 2436.61 | 2436.53 |
| 25 | 90°00'28" | 30.00 | 47.13 | 2436.53 | 2436.58 | 2436.71 | 2436.80 | 2436.88 |
| 26 | 91°33'11" | 30.00 | 47.94 | 2436.24 | 2436.17 | 2436.09 | 2435.93 | 2435.76 |
| 27 | 88°26'49" | 30.00 | 46.31 | 2435.79 | 2436.06 | 2436.54 | 2437.01 | 2437.28 |

*ELEVATIONS DO NOT REFLECT DEPRESSIONS FOR CURB RAMPS

**STORMWATER INLET TABLE**

| No. | LOCATION | TYPE | RIM ELEV | OUTLET ELEV | OUTLET SIZE | LATERAL SLOPE | LATERAL LENGTH |
|---|---|---|---|---|---|---|---|
| 3 | ~~28+72.24~~ (24.5' LT) 28+77.56 | ✓2 | ~~2434.75~~ 2434.88 | ~~2431.42~~ 2431.35 | ✓10 in. | ~~2%~~ 3.47% | ✓41 ft. |
| 4 | ~~28+77.24~~ (24.5' RT) 28+77.14 | ✓2 | ~~2434.75~~ 2434.63 | ~~2430.98~~ 2431.33 | ✓10 in. | ~~2%~~ 4.29% | 32 ~~39~~ ft. |
| 5 | ~~29+50.08~~ (24.5' LT) 29+50.27 | ✓1 | ~~2432.44~~ 2433.59 | ~~2436.88~~ 2432.64 | ✓10 in. | ~~2%~~ 3.85% | 31 ~~32~~ ft. |

**PROJECT APPLICANT**

Thomas Arrowsmith 11/30/04
AHO CONSTRUCTION Date

AS BUILT

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

THOMAS G. LONERGAN — STATE OF WASHINGTON — 38956 — REGISTERED PROFESSIONAL ENGINEER — 11-30-04

EXPIRES: FEB 14, 2006

~~10~~ 5/~~12~~ ~~39~~

HOPPER DENNIS JELLISON P.L.L.C.
ENGINEERS & PLANNERS
314 W. 15th Street
Vancouver, WA 98660-2927
(360) 695-3488
(503) 924-4005
FAX (360) 695-8767
Internet: www.hdjengineers.com

PROJECT NAME: BIG SKY — PHASE 1

SHEET LIMITS: AERO ROAD 18+77.64 TO 30+00.00

PROJECT LIMITS: HALLET ROAD & THOMAS MALLEN ROAD

TYPE OF IMPROVEMENT: STREET & STORM

CITY PROJECT NUMBER | CITY PLAN NUMBER | EN:

CITY OF SPOKANE, WASHINGTON
DEPARTMENT OF ENGINEERING SERVICES
808 WEST SPOKANE FALLS BLVD.
SPOKANE, WASHINGTON 99201-3343
(509) 625-6300

CALL BEFORE YOU DIG 456-8000

NAVD88 = (OLD CSM ELEV.) - (13.13) AS OF JANUARY, 2000 USE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)
BENCH MARK LOCATION A WSDOT 3" BRASS DISC IN MONUMENT CASE LOCATED IN THE INTX OF GEIGER RD & HAYFORD RD ELEV = 2408.49' NAVD29 DATUM
NAVD88 ELEV. 2412.29
CSM NO.
BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY
HORIZONTAL PLAN&PROFILE 1" = 50'
VERTICAL PROFILE ONLY 1" = 10'
SCALE

CURRENT CITY/COUNTY DESIGN STANDARDS ADOPTED FEB,1995

| | LAST PROJECT BY | DATES |
|---|---|---|
| DRAWN: | CDS | 6/04 |
| REVISED: | | |
| CHECKED: | TGJ | 6/04 |
| APPROVED: | TGL | 6/04 |

| DATE | BY | PROJ | DESCRIPTION | DATE | BY | PROJ. | E.F.N. - U.S.N. | FROM | TO | COUNCIL ACCEPT DATE | FROM | TO | ORD. NO. | DATE | FILE NO. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| REVISIONS | | | | RECORD | | | | | | | GRADE ESTABLISHMENTS | | | | |

NAVD88 DATUM

PROTO2002.DWG: REV 11/27/2002

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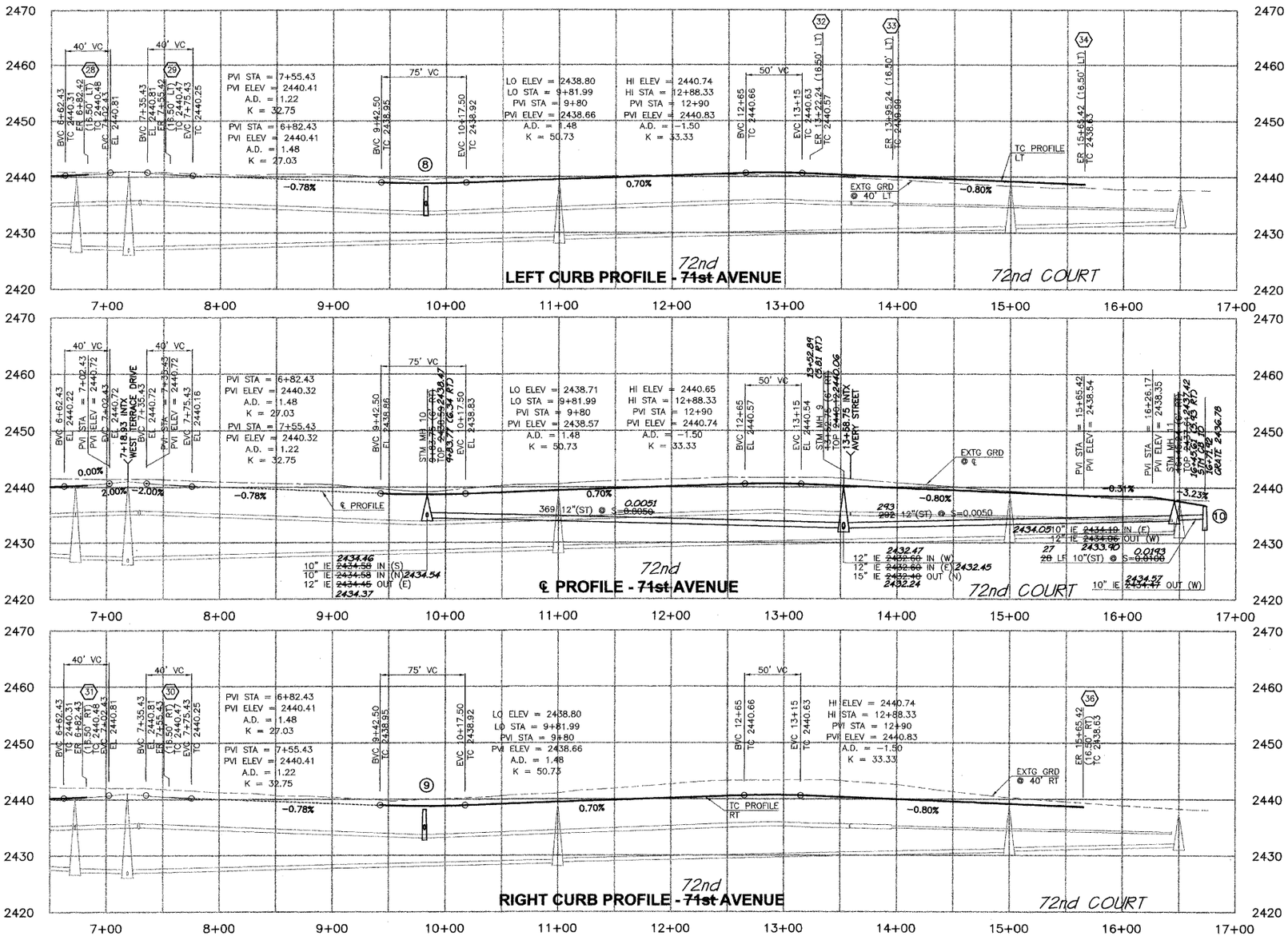
SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT
ORIGINAL
"AS-BUILTS"
CERTIFIED RECORD DRAWINGS
PROJECT #: P1918
DATE ACCEPTED: 12/17/07

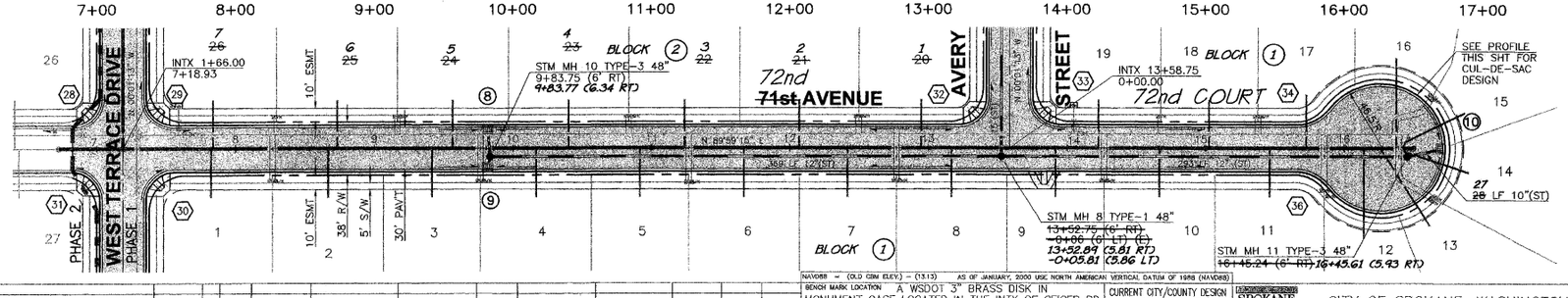
P-1918 Eng As Built









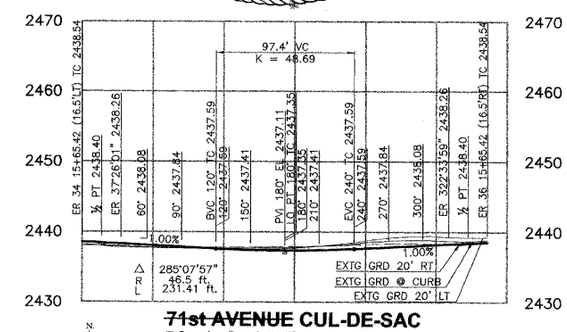




| CURB RETURN DATA | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| No. | Δ | R | L | TC ELEVATION* (CLOCKWISE) | | | | |
| | | | | ER | 1/4PT | 1/2PT | 3/4PT | ER |
| 28 | 90°00'29" | 20.00 | 31.42 | 2440.31 | 2440.45 | 2440.52 | 2440.59 | 2440.48 |
| 29 | 89°59'31" | 20.00 | 31.41 | 2440.47 | 2440.52 | 2440.59 | 2440.47 | 2440.32 |
| 30 | 90°00'29" | 20.00 | 31.42 | 2442.02 | 2441.72 | 2441.41 | 2440.71 | 2440.47 |
| 31 | 89°59'31" | 20.00 | 31.41 | 2440.47 | 2440.70 | 2441.20 | 2441.71 | 2442.01 |
| 32 | 90°00'29" | 20.00 | 31.42 | 2439.49 | 2439.74 | 2440.10 | 2440.42 | 2440.57 |
| 33 | 89°59'31" | 20.00 | 31.41 | 2439.99 | 2440.05 | 2439.88 | 2439.68 | 2439.49 |

*ELEVATIONS DO NOT REFLECT DEPRESSIONS FOR CURB RAMPS

| STORMWATER INLET TABLE | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. | LOCATION | TYPE | RIM ELEV | OUTLET ELEV | OUTLET SIZE | LATERAL SLOPE | LATERAL LENGTH |
| 8 | ~~9+81.80~~ (16.5' LT) ~~7+82.82~~ | ✓2 | ~~2438.20~~ 2438.32 | ~~2435.80~~ 2435.74 | ✓10 in. | ~~2%~~ 5.42% | ~~22.29~~ 22 ft. |
| 9 | ~~9+82.80~~ (16.5' RT) ~~9+81.97~~ | ✓2 | ~~2438.20~~ 2438.27 | ~~2435.70~~ 2435.31 | ✓10 in. | ~~2%~~ 8.74% | ~~10.44~~ 10 ft. |

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT
ORIGINAL
"AS-BUILTS"
CERTIFIED RECORD DRAWINGS
PROJECT #: P1918
DATE ACCEPTED: 11/17/07




| SIDEWALK LEGEND | |
|---|---|
| SIDEWALK CONSTRUCTED | |
| FUTURE SIDEWALK (CONSTRUCTED WHEN HOMES ARE BUILT) | |

**PROJECT APPLICANT**

AHO CONSTRUCTION — Date 11/30/04

AS BUILT

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

THOMAS G. LONERGAN — STATE OF WASHINGTON — 26055 — REGISTERED PROFESSIONAL ENGINEER — 11-30-04 — EXPIRES: FEB 14, 2006

HOPPER DENNIS JELLISON P.L.L.C. — ENGINEERS & PLANNERS — 314 W. 15th Street, Vancouver, WA 98660-2927, (360) 695-3488, (503) 924-4005, FAX (360) 695-8767, Internet: www.hdjengineers.com

| | |
|---|---|
| PROJECT NAME: | BIG SKY – PHASE 1 |
| SHEET LIMITS: | 72nd AVENUE + COURT ~~71st AVENUE~~ 6+50.00 TO 17+00.00 |
| TYPE OF IMPROVEMENT: | STREET & STORM |
| CITY PROJECT NUMBER | |
| CITY PLAN NUMBER | |
| PROJECT LIMITS: | HALLET ROAD & THOMAS MALLEN ROAD |
| EFN: | |

CALL BEFORE YOU DIG 456-8000

P-1918 Eng As Built

| DATE | BY | PROJ | DESCRIPTION | DATE | BY | PROJ | E.F.N. | U.S.N. | FROM | TO | COUNCIL ACCEPT DATE | FROM | TO | ORD. NO. | DATE | FILE NO. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| REVISIONS | | | | RECORD | | | | | | | | GRADE ESTABLISHMENTS | | | | |

NAVD88 = (OLD CITY ELEV.) – (13.13) AS OF JANUARY, 2000 USC NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)

BENCH MARK LOCATION: A WSDOT 3" BRASS DISK IN MONUMENT CASE LOCATED IN THE INTX OF GEIGER RD & HAYFORD RD ELEV = 2498.49' NAVD29 DATUM
NAVD88 ELEV: 2412.29
CBM NO.:
BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY
HORIZONTAL PLAN&PROFILE: 1" = 50'
VERTICAL PROFILE ONLY: 1" = 10'

NAVD88 DATUM | SCALE

CURRENT CITY/COUNTY DESIGN STANDARDS ADOPTED FEB,1995

| LAST PROJECT BY | DATES |
|---|---|
| DRAWN: LRC | 6/04 |
| REVISED: | |
| CHECKED: TGJ | 6/04 |
| APPROVED: TGL | 6/04 |

CITY OF SPOKANE, WASHINGTON
DEPARTMENT OF ENGINEERING SERVICES
808 WEST SPOKANE FALLS BLVD.
SPOKANE, WASHINGTON 99201-3343
(509) 625-6300

PROTO2002.DWG REV 11/27/2002

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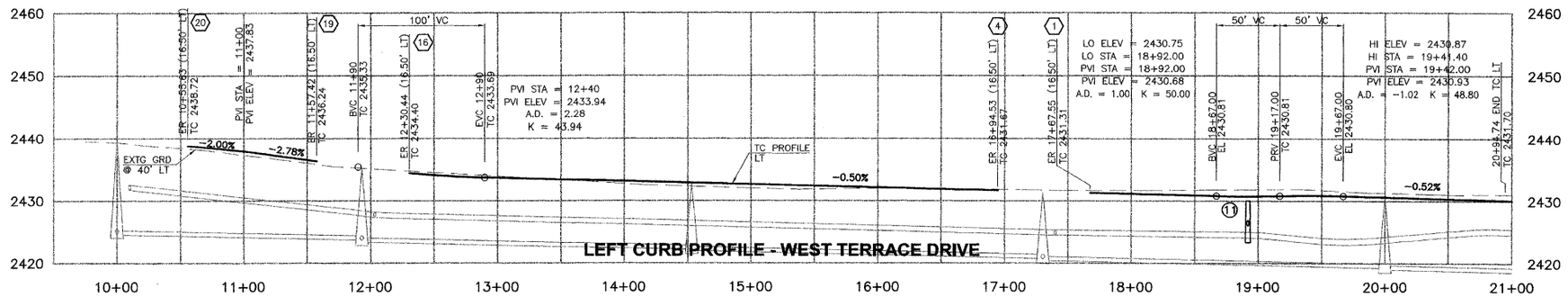


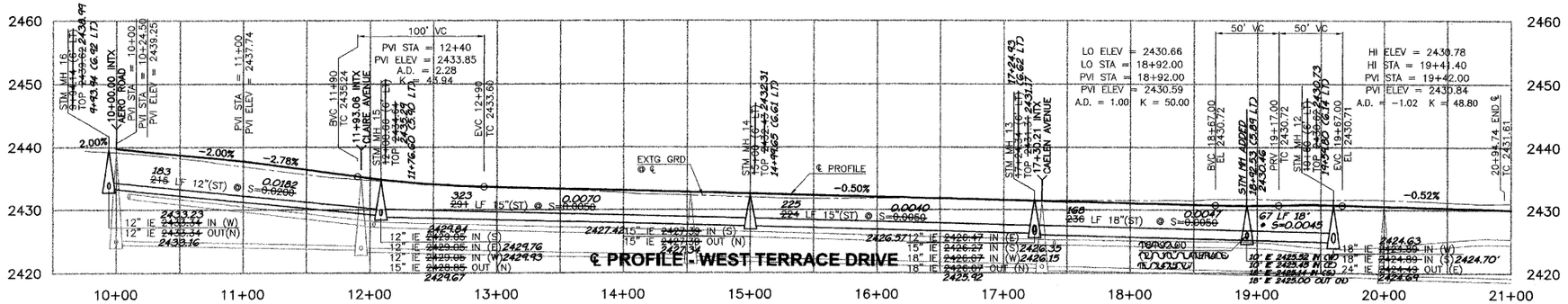


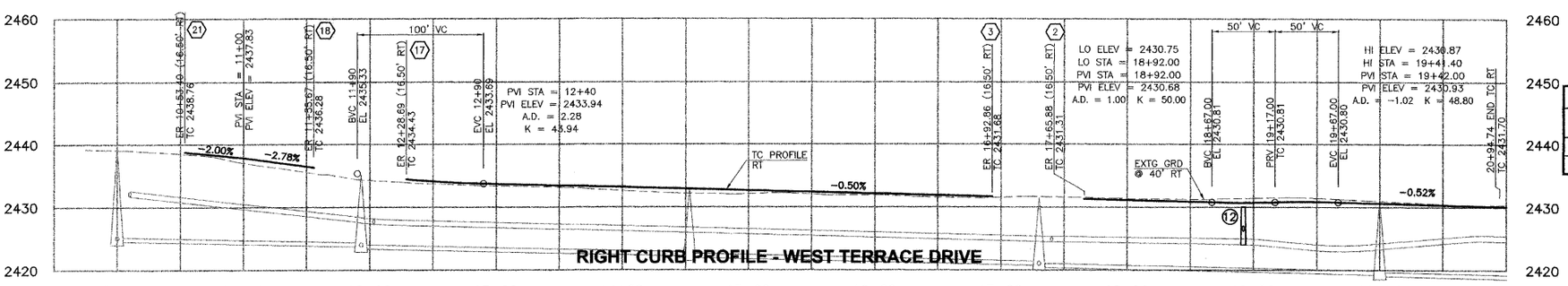


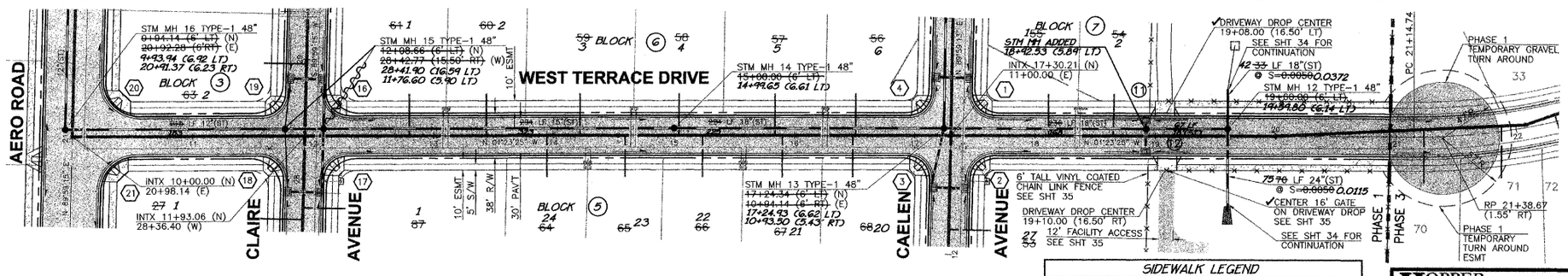


SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT
ORIGINAL
"AS-BUILTS"
CERTIFIED RECORD DRAWINGS
PROJECT #: 2183
DATE ACCEPTED: 12/13/07

**CURB RETURN DATA**

| No. | Δ | R | L | TC ELEVATION* (CLOCKWISE) ER | 1/4PT | 1/2PT | 3/4PT | ER |
|---|---|---|---|---|---|---|---|---|
| 1 | 91°18'38" | 20.00 | 31.87 | 2431.31 | 2431.23 | 2431.14 | 2430.98 | 2430.88 |
| 2 | 88°41'22" | 20.00 | 30.96 | 2430.91 | 2430.99 | 2431.14 | 2431.23 | 2431.31 |
| 3 | 91°18'38" | 20.00 | 31.87 | 2431.68 | 2431.56 | 2431.29 | 2431.02 | 2430.90 |
| 4 | 88°41'22" | 20.00 | 30.96 | 2430.89 | 2431.02 | 2431.29 | 2431.57 | 2431.67 |
| 16 | 91°22'40" | 20.00 | 31.90 | 2434.40 | 2434.54 | 2434.63 | 2434.70 | 2434.64 |
| 17 | 86°37'20" | 20.00 | 30.93 | 2434.66 | 2434.70 | 2434.66 | 2434.57 | 2434.43 |
| 18 | 91°22'40" | 20.00 | 31.90 | 2436.28 | 2432.14 | 2435.37 | 2434.85 | 2434.64 |
| 19 | 88°37'20" | 20.00 | 30.93 | 2434.65 | 2434.86 | 2435.37 | 2435.91 | 2436.24 |
| 20 | 91°22'40" | 30.00 | 47.85 | 2438.72 | 2438.96 | 2439.20 | 2439.44 | 2439.57 |
| 21 | 88°37'20" | 30.00 | 46.40 | 2439.65 | 2439.52 | 2439.26 | 2439.01 | 2438.76 |

*ELEVATIONS DO NOT REFLECT DEPRESSIONS FOR CURB RAMPS

**STORMWATER INLET TABLE**

| No. | LOCATION | TYPE | RIM ELEV | OUTLET ELEV | OUTLET SIZE | LATERAL SLOPE | LATERAL LENGTH |
|---|---|---|---|---|---|---|---|
| 11 | 19+92.00 (16.5' LT) 18+91.79 | ✓2 | ~~2430.45~~ 2430.23 | ~~2428.55~~ 2427.05 | ✓10 in. | ~~2%~~ 17.67% | ✓10 ft. |
| 12 | 18+92.00 (16.5' RT) 18+92.66 | ✓2 | ~~2430.16~~ 2430.19 | ~~2428.32~~ 2427.58 | ✓10 in. | ~~2%~~ 9.84% | 22 ~~29~~ ft. |

**PROJECT APPLICANT**

Thomas Lorenzetti 11/30/04
AHO CONSTRUCTION Date

# AS BUILT

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

THOMAS C. LYONSCRAN — STATE OF WASHINGTON — 34035 — REGISTERED PROFESSIONAL ENGINEER — 11-30-04
EXPIRES: FEB 14, 2006

~~12~~ 7/~~15~~ 39

**SIDEWALK LEGEND**

| | |
|---|---|
| SIDEWALK CONSTRUCTED | |
| FUTURE SIDEWALK (CONSTRUCTED WHEN HOMES ARE BUILT) | |

HOPPER DENNIS JELLISON P.L.L.C.
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FAX (360) 695-8767
Internet: www.hdjengineers.com

| DATE | BY | PROJ | DESCRIPTION | DATE | BY | PROJ. | E.F.N. | U.S.N. | FROM | TO | COUNCIL ACCEPT DATE | FROM | TO | ORD. NO. | DATE | FILE NO. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| REVISIONS | | | | RECORD | | | | | | | | GRADE ESTABLISHMENTS | | | | |

NAVD88 = (OLD CRM ELEV.) – (3.13) AS OF JANUARY, 2000 USE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)

BENCH MARK LOCATION: A WSDOT 3" BRASS DISK IN MONUMENT CASE LOCATED IN THE INTX OF GEIGER RD & HAYFORD RD ELEV = 2408.49' NAVD29 DATUM
NAVD88 ELEV. 2412.29
CBM NO.
NAVD88 DATUM

BAR IS ONE INCH ON ORIGINAL DRAWINGS. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY
HORIZONTAL PLAN&PROFILE 1" = 50'
VERTICAL PROFILE ONLY 1" = 10'
SCALE

CURRENT CITY/COUNTY DESIGN STANDARDS ADOPTED FEB.1995

| | LAST PROJECT BY | DATES |
|---|---|---|
| DRAWN: | LRC | 6/04 |
| REVISED: | | |
| CHECKED: | TGJ | 6/04 |
| APPROVED: | TGL | 6/04 |

SPOKANE

CITY OF SPOKANE, WASHINGTON
DEPARTMENT OF ENGINEERING SERVICES
808 WEST SPOKANE FALLS BLVD.
SPOKANE, WASHINGTON 99201-3343
(509) 625-6300

PROJECT NAME: BIG SKY – PHASE 1
SHEET LIMITS: WEST TERRACE DRIVE 10+00.00 TO 21+51.74
TYPE OF IMPROVEMENT: STREET & STORM
CITY PROJECT NUMBER
CITY PLAN NUMBER
PROJECT LIMITS: HALLET ROAD & THOMAS MALLEN ROAD
EFN:

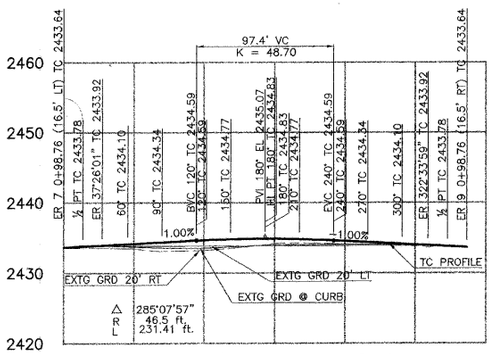
CALL BEFORE YOU DIG 456-8000

P/918 Eng AS Built

PROT02002.DWG: REV 11/27/2002

E:\projects\2183\Cad\Asbuilt\dwg\Round 2\ASBT2183c12.dwg, 11/30/2004 3:08:07 PM, rad

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT
ORIGINAL
"AS-BUILTS"
CERTIFIED RECORD DRAWINGS
PROJECT #: P1918
DATE ACCEPTED: 12/11/07




~~AMY~~ COURT CUL-DE-SAC
ALLORA

| CENTERLINE CURVE DATA | | | | |
|---|---|---|---|---|
| No. | Δ | R | L | T |
| 2 | 24°16'50" | 100.00 | 42.38 | 21.51 |

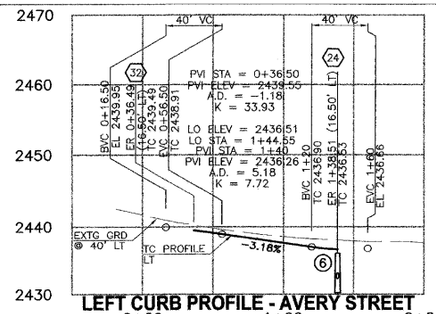
| CURB RETURN DATA | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| No. | Δ | R | L | TC ELEVATION* (CLOCKWISE) | | | | | |
| | | | | ER | 1/4PT | 1/2PT | 3/4PT | ER | |
| 5 | 86°17'57" | 20.00 | 30.12 | 2433.47 | 2433.41 | 2433.37 | 2433.21 | 2433.11 | |
| 6 | 94°38'56" | 20.00 | 33.04 | 2433.04 | 2433.16 | 2433.48 | 2433.79 | 2433.72 | |
| 22 | 89°59'32" | 30.00 | 47.12 | 2438.71 | 2438.63 | 2438.49 | 2438.28 | 2438.22 | |
| 23 | 90°00'28" | 30.00 | 47.13 | 2438.22 | 2438.32 | 2438.66 | 2439.02 | 2439.18 | |
| 24 | 89°59'32" | 30.00 | 42.12 | 2437.45 | 2437.28 | 2436.93 | 2436.61 | 2436.53 | |
| 25 | 90°00'28" | 30.00 | 47.13 | 2436.53 | 2436.58 | 2436.71 | 2436.80 | 2436.88 | |
| 28 | 90°00'28" | 20.00 | 31.42 | 2440.31 | 2440.45 | 2440.52 | 2440.59 | 2440.48 | |
| 29 | 89°59'32" | 20.00 | 31.41 | 2440.47 | 2440.52 | 2440.59 | 2440.47 | 2440.32 | |
| 30 | 90°00'28" | 20.00 | 31.42 | 2442.02 | 2441.72 | 2441.21 | 2440.71 | 2440.47 | |
| 31 | 89°59'32" | 20.00 | 31.41 | 2440.47 | 2440.70 | 2441.20 | 2441.71 | 2443.01 | |
| 32 | 90°00'28" | 20.00 | 31.42 | 2439.49 | 2439.74 | 2440.10 | 2440.42 | 2440.57 | |
| 33 | 89°59'32" | 20.00 | 31.41 | 2439.99 | 2440.05 | 2439.88 | 2439.68 | 2439.49 | |

*ELEVATIONS DO NOT REFLECT DEPRESSIONS FOR CURB RAMPS

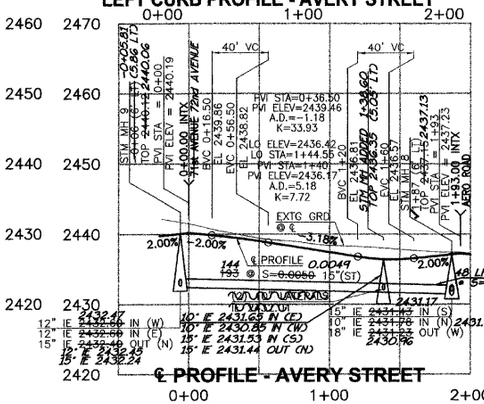
| STORMWATER INLET TABLE | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| No. | LOCATION | TYPE | RIM ELEV | INLET ELEV | OUTLET ELEV | OUTLET SIZE | LATERAL SLOPE | LATERAL LENGTH |
| 6 | 1+38.51 (16.5' LT) | ✓2 | ~~2435.94~~ 2436.07 | - | ~~2432.22~~ 2433.45 | ✓10 in. | ~~2%~~ 24.9% | ✓ 11 ft. |
| 7 | 1+38.49 (16.5' RT) | ✓2 | ~~2435.91~~ 2436.03 | - | ~~2432.16~~ 2433.57 | ✓10 in. | ~~2%~~ 9.1% | 21 ~~20~~ ft. |
| 21 | ~~9+46.72~~ (16.5' LT) 9+45.43 | ✓2 | ~~2437.62~~ 2437.72 | - | ~~2435.05~~ 2433.45 | ✓10 in. | ~~1%~~ 1.6% | 32 ~~33~~ ft. |
| 23 | ~~9+45.87~~ (16.5' RT) 0+48.51 | ✓2 | ~~2432.55~~ 2432.57 | - | ~~2430.88~~ 2430.31 | ✓10 in. | ~~1%~~ 1.7% | ✓ 32 ft. |

SIDEWALK LEGEND
SIDEWALK CONSTRUCTED
FUTURE SIDEWALK (CONSTRUCTED WHEN HOMES ARE BUILT)

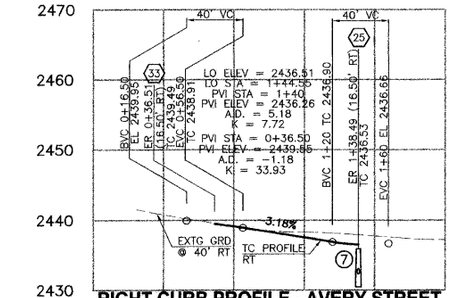
PROJECT APPLICANT
AHO CONSTRUCTION
11/30/04
Date



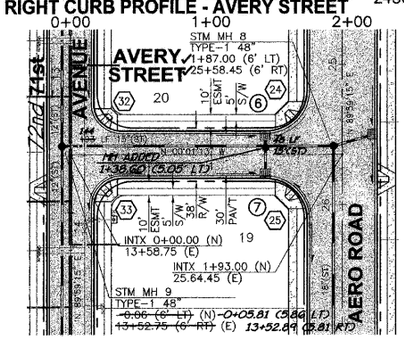

LEFT CURB PROFILE - AVERY STREET

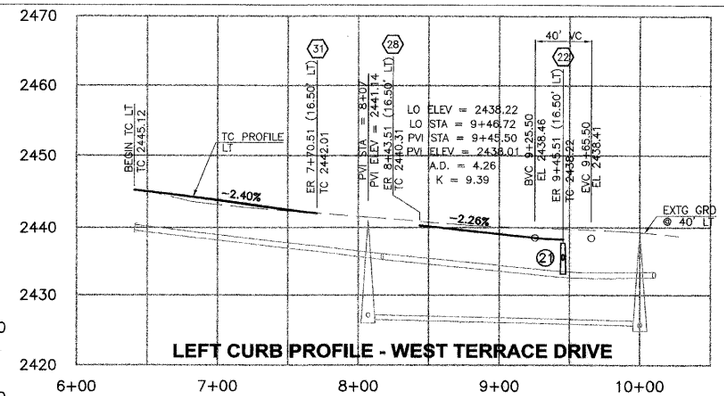



℄ PROFILE - AVERY STREET

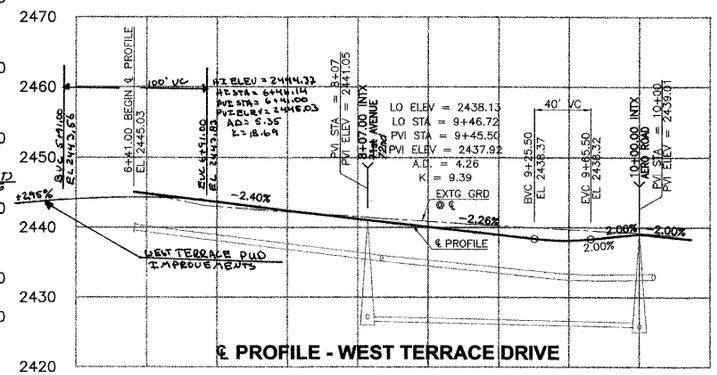



RIGHT CURB PROFILE - AVERY STREET

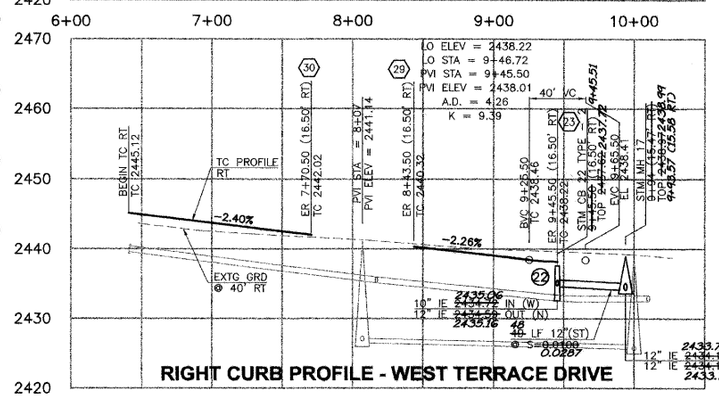


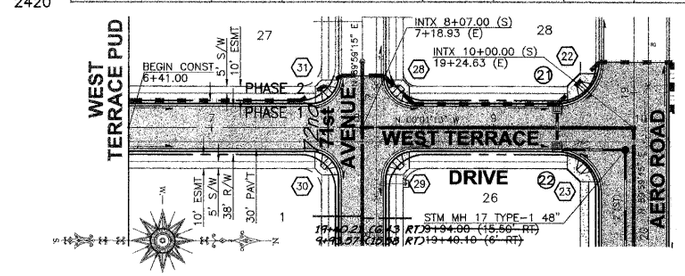

LEFT CURB PROFILE - WEST TERRACE DRIVE

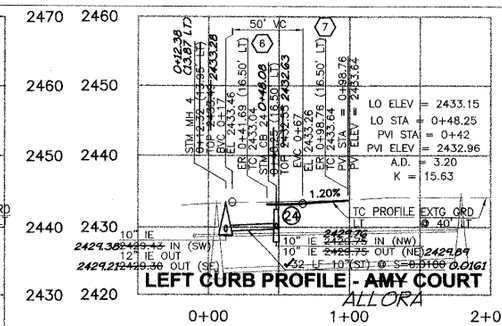



℄ PROFILE - WEST TERRACE DRIVE

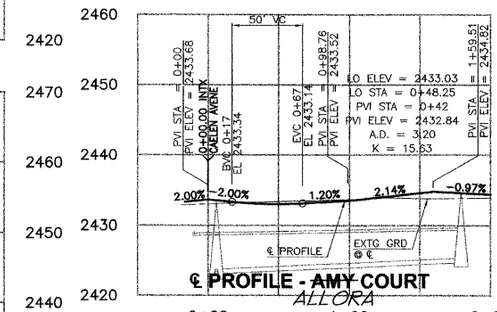



RIGHT CURB PROFILE - WEST TERRACE DRIVE

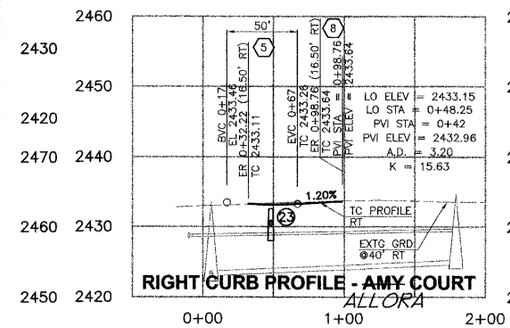


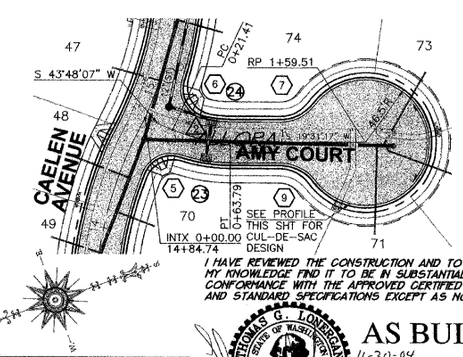

LEFT CURB PROFILE - ~~AMY~~ COURT
ALLORA




℄ PROFILE - ~~AMY~~ COURT
ALLORA




RIGHT CURB PROFILE - ~~AMY~~ COURT
ALLORA




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

THOMAS G. LONGRAN STATE OF WASHINGTON 18800 REGISTERED PROFESSIONAL ENGINEER
EXPIRES: FEB 14, 2006

AS BUILT
11-30-04

HOPPER DENNIS JELLISON P.L.L.C.
ENGINEERS & PLANNERS
314 W. 15th Street
Vancouver, WA 98660-2927
(360) 695-3848
(503) 924-4005
FAX: (360) 695-8767
Internet: www.hdjengineers.com

NAME: PROJECT BIG SKY – PHASE 1

| SHEET LIMITS: | | | TYPE OF IMPROVEMENT: STREET & STORM |
|---|---|---|---|
| AVERY STREET | WEST TERRACE DRIVE | ~~AMY~~ ALLORA COURT | CITY PROJECT NUMBER / CITY PLAN NUMBER |
| -50.00 TO 2+00 | 6+00 TO 10+50.00 | -50+00 TO 2+00 | |

PROJECT LIMITS: HALLET ROAD & THOMAS MALLEN ROAD
CALL BEFORE YOU DIG 456-8000

P-1918 Engr's Built

| DATE | BY | PROJ | DESCRIPTION | DATE | BY | PROJ. | E.F.N. | U.S.N. | FROM | TO |
|---|---|---|---|---|---|---|---|---|---|---|
| REVISIONS | | | | RECORD | | | | | | |

| COUNCIL ADOPT DATE | FROM | TO | ORD. NO. | DATE | FILE NO. |
|---|---|---|---|---|---|
| GRADE ESTABLISHMENTS | | | | | |

NAVD88 = (OLD CBM ELEV.) – (13.13) AS OF JANUARY, 2000 USE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)
BENCH MARK LOCATION: A WSDOT 3" BRASS DISK IN MONUMENT CASE LOCATED IN THE INTX OF GEIGER RD & HAYFORD RD ELEV = 2408.49' NAVD29 DATUM
NAVD88 ELEV. 2412.29
CBM NO.
NAVD88 DATUM
BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY
HORIZONTAL PLAN&PROFILE 1" = 50'
VERTICAL PROFILE ONLY 1" = 10'
SCALE

| CURRENT CITY/COUNTY DESIGN STANDARDS ADOPTED FEB,1995 | | |
|---|---|---|
| LAST PROJECT BY | | DATES |
| DRAWN: | LRC | 6/04 |
| REVISED: | | |
| CHECKED: | TGJ | 6/04 |
| APPROVED: | TGL | 6/04 |

SPOKANE
CITY OF SPOKANE, WASHINGTON
DEPARTMENT OF ENGINEERING SERVICES
808 WEST SPOKANE FALLS BLVD.
SPOKANE, WASHINGTON 99201-3343
(509) 625-6300

PROTO2002.DWG: REV 11/27/2002
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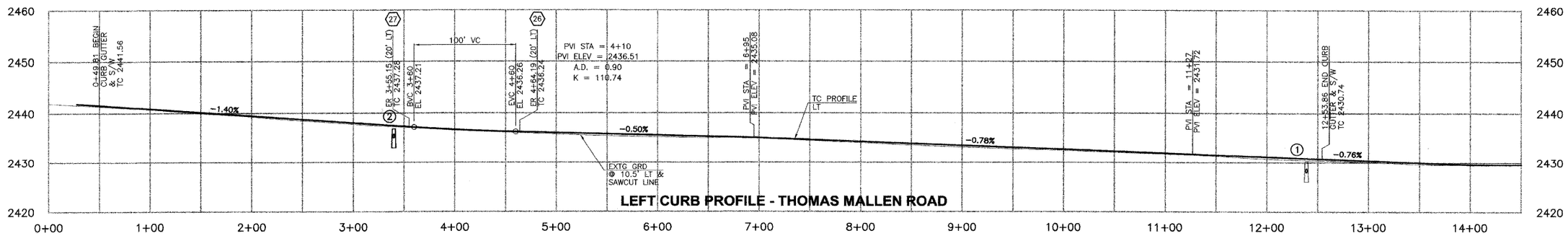
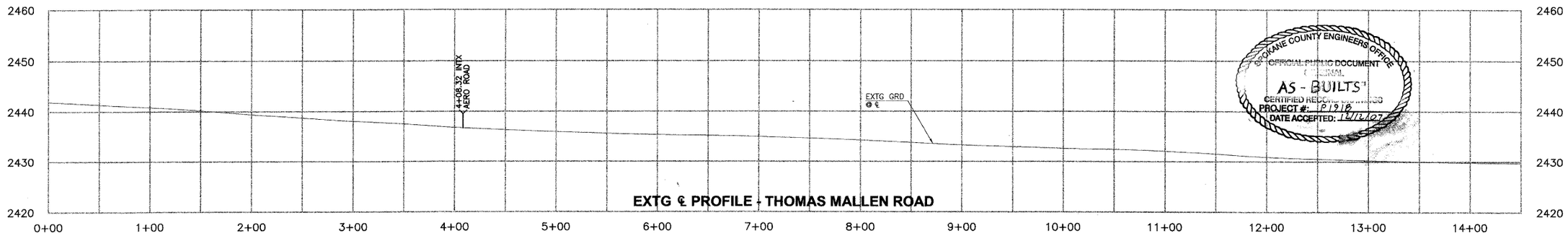
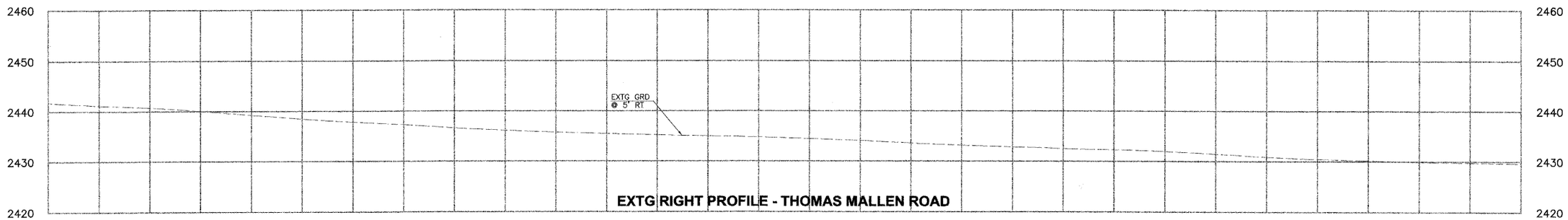
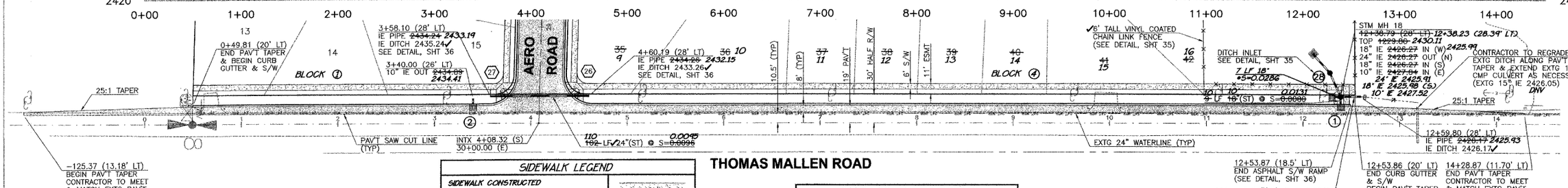



SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT
AS - BUILTS
CERTIFIED RECORD DRAWINGS
PROJECT #: P1918
DATE ACCEPTED: 12/12/07




DNV = DID NOT VERIFY

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

AS BUILT

THOMAS G. LONERGAN — STATE OF WASHINGTON — 19825 — REGISTERED PROFESSIONAL ENGINEER
11-30-04
EXPIRES: FEB 14, 2006

HOPPER DENNIS JELLISON P.L.L.C.
ENGINEERS & PLANNERS
314 W. 15th Street
Vancouver, WA 98660-2927
(360) 695-3488
(503) 924-4900
FAX (360) 695-8767
Internet: www.hdjengineers.com

## SIDEWALK LEGEND

| | |
|---|---|
| SIDEWALK CONSTRUCTED | |
| FUTURE SIDEWALK (CONSTRUCTED WHEN HOME'S ARE BUILT) | |

## EXTG LINETYPE LEGEND

| | |
|---|---|
| EXTG SANITARY SEWER PIPE | SA |
| EXTG 18" WATER PIPE | 18" WTR |
| EXTG 24" WATER PIPE | 24" WTR |
| EXTG ELECTRIC LINE | E |
| EXTG TELEPHONE LINE | T |

## CURB RETURN DATA

| No. | Δ | R | L | TC ELEVATION* (CLOCKWISE) ER | 1/4PT | 1/2PT | 3/4PT | ER |
|---|---|---|---|---|---|---|---|---|
| 26 | 91°33'11" | 30.00 | 47.94 | 2436.24 | 2436.17 | 2436.09 | 2435.93 | 2435.76 |
| 27 | 88°26'49" | 30.00 | 46.31 | 2435.79 | 2436.06 | 2436.54 | 2437.01 | 2437.28 |

*ELEVATIONS DO NOT REFLECT DEPRESSIONS FOR CURB RAMPS

## STORMWATER INLET TABLE

| No. | LOCATION | TYPE | RIM ELEV | OUTLET ELEV | OUTLET SIZE | LATERAL SLOPE | LATERAL LENGTH |
|---|---|---|---|---|---|---|---|
| 1 | ~~12+38.86~~ (20' LT) 12+38.08 | ✓1 | ~~2430.26~~ 2430.18 | ~~2428.86~~ 2427.64 | ✓10 in. | ~~2%~~ 1.31% | 10 ft. |
| 2 | ~~3+40.00~~ (20' LT) 3+39.65 | ✓1 | ~~2436.89~~ 2436.87 | ~~2435.01~~ 2434.18 | ✓10 in. | ~~2%~~ -2.92% | 8 ft. |
| 28 | ~~12+38.86~~ (28' LT) 12+29.57 | - | ~~2429.00~~ 2428.21 | ~~2426.33~~ 2426.18 | ✓18 in. | ~~6.5%~~ 2.86% | 7 ft. |

*SEE SHEET 35 FOR DETAIL

| DATE | BY | PROJ. | DESCRIPTION | DATE | BY | PROJ. | E.F.N. | U.S.N. | FROM | TO |
|---|---|---|---|---|---|---|---|---|---|---|
| REVISIONS | | | | RECORD | | | | | | |

| COUNCIL ACCEPT DATE | FROM | TO | ORD. NO. | DATE | FILE NO. |
|---|---|---|---|---|---|
| GRADE ESTABLISHMENTS | | | | | |

NAVD88 = (OLD CBM ELEV.) - (1.313) AS OF JANUARY, 2000 USE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)

BENCH MARK LOCATION: A WSDOT 3" BRASS DISK IN MONUMENT CASE LOCATED IN THE INTX OF GEIGER RD & HAYFORD RD ELEV = 2408.49' NAVD29 DATUM

NAVD88 ELEV. 2412.29
CBM NO.

BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

HORIZONTAL PLAN&PROFILE 1" = 50'
VERTICAL PROFILE ONLY 1" = 10'

NAVD88 DATUM

SCALE

| CURRENT CITY/COUNTY DESIGN STANDARDS ADOPTED FEB.1995 | | |
|---|---|---|
| LAST PROJECT BY | | DATES |
| DRAWN: | CDS | 6/04 |
| REVISED: | | |
| CHECKED: | TGJ | 6/04 |
| APPROVED: | TGL | 6/04 |

SPOKANE

CITY OF SPOKANE, WASHINGTON
DEPARTMENT OF ENGINEERING SERVICES
808 WEST SPOKANE FALLS BLVD.
SPOKANE, WASHINGTON 99201-3343
(509) 625-6300

PROJECT NAME: BIG SKY – PHASE 1

SHEET LIMITS: THOMAS MALLEN ROAD -125.37 TO 14+28.87

PROJECT LIMITS: HALLET ROAD & THOMAS MALLEN ROAD

TYPE OF IMPROVEMENT: STREET & STORM

CITY PROJECT NUMBER | CITY PLAN NUMBER

EFN:

CALL BEFORE YOU DIG 456-8000

P1918 Eng As Built

PROT02DOC2.DWG: REV 11/27/2002

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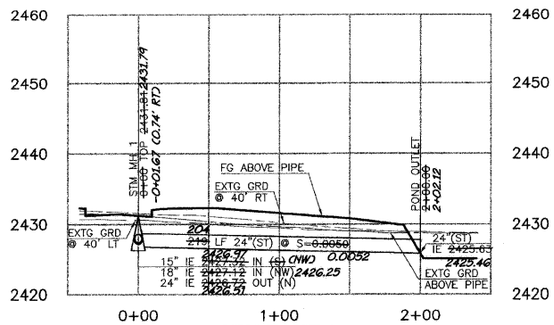
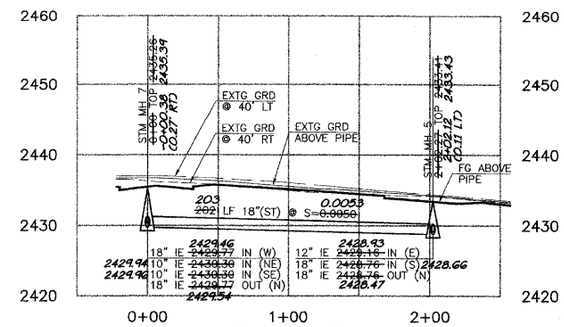
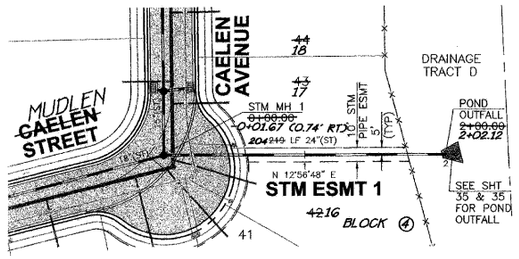
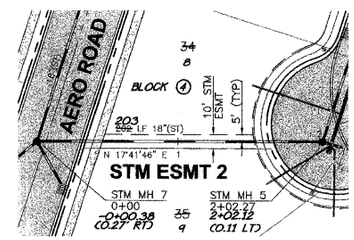



STM ESMT 1




STM ESMT 2




| SIDEWALK LEGEND | |
|---|---|
| SIDEWALK CONSTRUCTED | |
| FUTURE SIDEWALK (CONSTRUCTED WHEN HOMES ARE BUILT) | |

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT
ORIGINAL
"AS-BUILTS"
CERTIFIED RECORD DRAWINGS
PROJECT #: P1918
DATE ACCEPTED: 12/12/07

**PROJECT APPLICANT**

Thomas Acquavarina 11/30/04
AHO CONSTRUCTION Date

AS BUILT

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

THOMAS G. LONERGAN — STATE OF WASHINGTON — 36685 — REGISTERED PROFESSIONAL ENGINEER
11-30-04
EXPIRES: FEB 14, 2006

HOPPER DENNIS JELLISON P.L.L.C.
ENGINEERS & PLANNERS
314 W. 15th Street
Vancouver, WA 98660-2927
(360) 695-3488
(503) 924-4005
FAX (360) 695-8707
Internet: www.hdjengineers.com

| DATE | BY | PROJ | DESCRIPTION | DATE | BY | PROJ. | F.F.N. - U.S.N. | FROM | TO | COUNCIL ACCEPT DATE | FROM | TO | ORD. NO. | DATE | FILE NO. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| REVISIONS | | | | RECORD | | | | | | | GRADE ESTABLISHMENTS | | | | |

NAVD88 = (OLD CRM ELEV.) - (13.13) AS OF JANUARY, 2000 USE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)

BENCH MARK LOCATION: A WSDOT 3" BRASS DISK IN MONUMENT CASE LOCATED IN THE INTX OF GEIGER RD & HAYFORD RD ELEV = 2408.49' NAVD29 DATUM
NAVD88 ELEV. 2412.29
CBM NO.

NAVD88 DATUM

BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALED ACCORDINGLY

HORIZONTAL PLAN&PROFILE 1" = 50'
VERTICAL PROFILE ONLY 1" = 10'

SCALE

CURRENT CITY/COUNTY DESIGN STANDARDS ADOPTED FEB.1995

| | LAST PROJECT BY | DATES |
|---|---|---|
| DRAWN: | CDS | 6/04 |
| REVISED: | | |
| CHECKED: | TCJ | 6/04 |
| APPROVED: | TCL | 6/04 |

SPOKANE

CITY OF SPOKANE, WASHINGTON
DEPARTMENT OF ENGINEERING SERVICES
808 WEST SPOKANE FALLS BLVD.
SPOKANE, WASHINGTON 99201-3343
(509) 625-6300

PROJECT NAME: BIG SKY - PHASE 1
SHEET LIMITS: STM ESMT 1 & 2
TYPE OF IMPROVEMENT: STORM
CITY PROJECT NUMBER
CITY PLAN NUMBER
EFN:
PROJECT LIMITS: HALLET ROAD & THOMAS MALLEN ROAD
CALL BEFORE YOU DIG 456-8000

P-1918 Eng As Built

PRO102002.DWG: REV 11/27/2002

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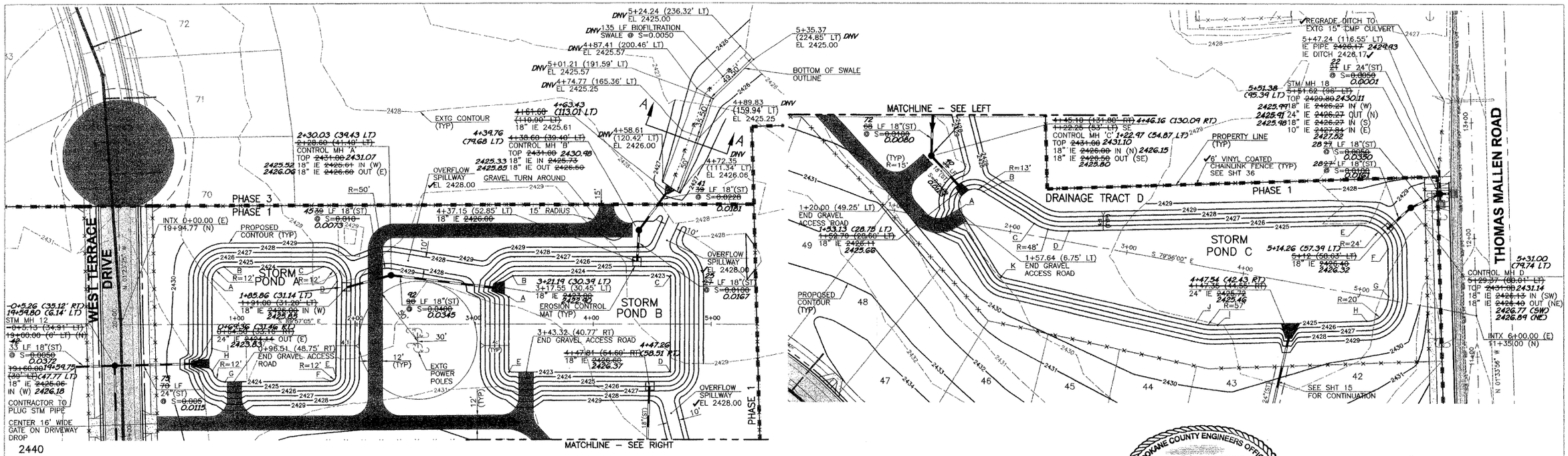


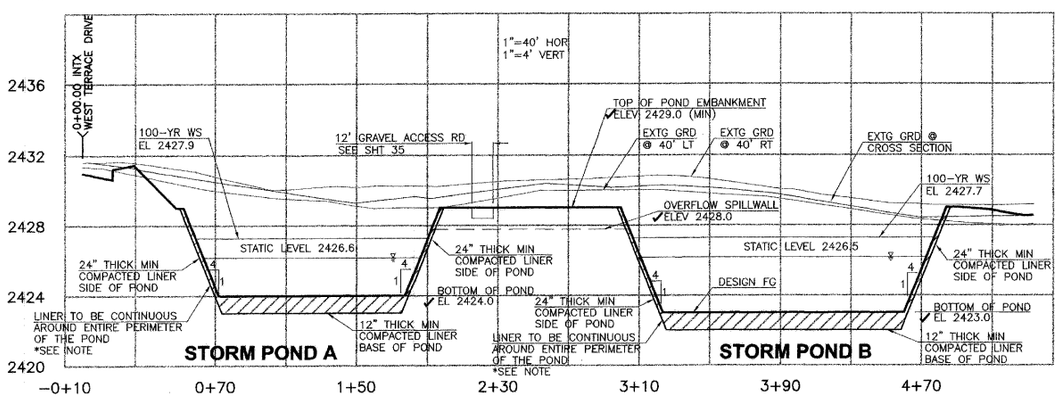


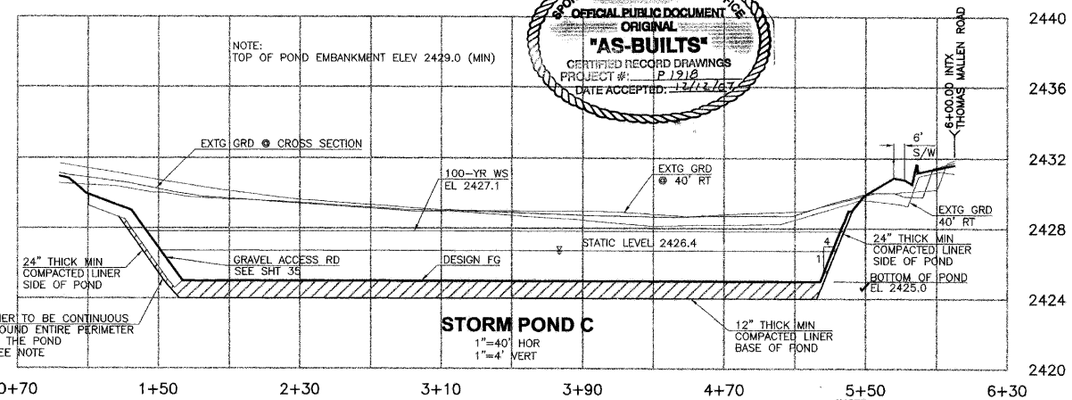


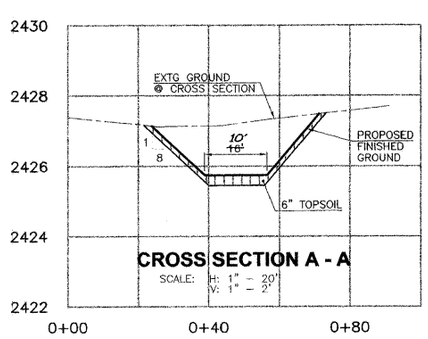


| STORM POND A | | |
|---|---|---|
| LABEL | STATION | ELEV |
| A | 0+77.23 (38.36' LT) | 2424 |
| B | 0+87.28 (48.61' LT) | 2424 |
| C | 1+71.14 (48.68' LT) | 2424 |
| D | 1+82.95 (36.53' LT) | 2424 |
| E | 1+82.21 (36.60' RT) | 2424 |
| F | 1+70.26 (48.48' RT) | 2424 |
| G | 0+89.62 (48.78' RT) | 2424 |
| H | 0+78.35 (41.00' RT) | 2424 |
| I | 0+77.24 (20.14' RT) | 2424 |

| STORM POND B | | |
|---|---|---|
| LABEL | STATION | ELEV |
| A | 3+28.64 (22.98' LT) | 2423 |
| B | 3+31.69 (40.76' LT) | 2423 |
| C | 4+65.34 (40.83' LT) | 2423 |
| D | 4+65.40 (40.59' RT) | 2423 |
| E | 3+28.68 (40.77' RT) | 2423 |

| STORM POND C | | |
|---|---|---|
| LABEL | STATION | ELEV |
| A | 1+53.90 (10.91' LT) | 2425 |
| B | 1+71.35 (29.22' LT) | 2425 |
| C | 2+18.41 (10.49' LT) | 2425 |
| D | 2+44.00 (8.30' LT) | 2425 |
| E | 4+88.68 (57.76' LT) | 2425 |
| F | 5+16.43 (41.87' LT) | 2425 |
| G | 5+23.88 (2.70' LT) | 2425 |
| H | 5+09.51 (21.03' RT) | 2425 |
| I | 3+86.24 (46.67' RT) | 2425 |
| J | 3+67.60 (47.81' RT) | 2425 |
| K | 1+98.58 (39.45' RT) | 2425 |

## STORMWATER FACILITY PLANTING

PLANTING MIXTURE SPECIFICATIONS: FOR BOTTOM & SIDE SLOPES

| BOTTOM OF POND | % BY WEIGHT |
|---|---|
| BLUE WILDRYE | 46 |
| NATIVE RED FESCUE | 38 |
| TUFTED HAIRGRASS | 12 |
| WESTERN MANNAGRASS | 2 |
| AMERICAN SLOUGHGRASS | 2 |

APPLICATION RATE: HYDROSEED @ 1 LB/1000 SQUARE FEET

| SIDE SLOPES | % BY WEIGHT |
|---|---|
| NATIVE RED FESCUE | 50 |
| CALIFORNIA BROME | 20 |
| BLUE WILDRYE | 20 |
| LARGE LEAF LUPINE | 10 |

APPLICATION RATE: HYDROSEED @ 2 LBS/1000 SQUARE FEET

| SWALE SEED MIX | % BY WEIGHT |
|---|---|
| ELKA PERRENIAL RYE | 10 |
| DURAR HARD FESCUE | 20 |
| COUAR SHEEP/FESCUE | 45 |
| REUBENS CANADIAN BLUEGRASS | 15 |

APPLICATION RATE: GRASS SEED 90 LBS/ACRE

FERTILIZER 16-16-16 TIMED RELEASE COMPOSITION, 300 LSB/ACRE

| SIDEWALK LEGEND | |
|---|---|
| SIDEWALK CONSTRUCTED | |
| FUTURE SIDEWALK (CONSTRUCTED WHEN HOMES ARE BUILT) | |

***NOTE:**
**MATERIAL SELECTED FOR THE LINERS SHALL HAVE 50% MINIMUM PASSING THE 200 SIEVE AND HAVE NO GRANULAR MATERIAL. LINER SHALL BE COMPACTED TO HAVE A PERMEABILITY RATE EQUAL TO OR LESS THAN $1x10^{-6}$ CM/S.**

**PROJECT APPLICANT**
AHO CONSTRUCTION — Date 11/30/04

DNV = DID NOT VERIFY

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

THOMAS G. LONDERGAN — STATE OF WASHINGTON — 34055 — REGISTERED PROFESSIONAL ENGINEER — 11-30-04 — EXPIRES: FEB 14, 2006

AS BUILT

| EXTG LINETYPE LEGEND | |
|---|---|
| EXTG SANITARY SEWER PIPE | SA |
| EXTG 18" WATER PIPE | 18" WTR |
| EXTG 24" WATER PIPE | 24" WTR |
| EXTG ELECTRIC LINE | E |
| EXTG TELEPHONE LINE | T |

HOPPER DENNIS ELLISON P.L.L.C.
ENGINEERS & PLANNERS
314 W. 19th Street, Vancouver, WA 98660-2927, (360) 695-3488, (503) 914-4005, FAX (360) 695-8707, Internet: www.hdjengineers.com

OFFICIAL PUBLIC DOCUMENT ORIGINAL "AS-BUILTS" CERTIFIED RECORD DRAWINGS PROJECT #: P1918 DATE ACCEPTED: 12/13/07 — SPOKANE COUNTY ENGINEERS OFFICE

PROJECT NAME: BIG SKY – PHASE 1
SHEET LIMITS: STORM FACILITY
PROJECT LIMITS: HALLET ROAD & THOMAS MALLEN ROAD
TYPE OF IMPROVEMENT: STORM
CITY PROJECT NUMBER / CITY PLAN NUMBER / EFN:

CITY OF SPOKANE, WASHINGTON
DEPARTMENT OF ENGINEERING SERVICES
808 WEST SPOKANE FALLS BLVD. SPOKANE, WASHINGTON 99201-3343 (509) 625-6300

CALL BEFORE YOU DIG 456-8000

P1918 Eng As Built

NAVD88 = (OLD CBM ELEV.) – (13.13) AS OF JANUARY, 2000 USE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)
BENCH MARK LOCATION: A WSDOT 3" BRASS DISK IN MONUMENT CASE LOCATED IN THE INTX OF GEIGER RD & HAYFORD RD ELEV = 2408.49' NAVD29 DATUM
NAVD88 ELEV. 2412.29 — CBM NO.
BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY
HORIZONTAL PLAN&PROFILE 1" = 40' — VERTICAL PROFILE ONLY 1" = 4'
CURRENT CITY/COUNTY DESIGN STANDARDS ADOPTED FEB,1995

| | LAST PROJECT BY | DATES |
|---|---|---|
| DRAWN: | CDS | 6/04 |
| REVISED: | | |
| CHECKED: | TGJ | 6/04 |
| APPROVED: | TGL | 8/04 |

| DATE | BY | PROJ | DESCRIPTION | DATE | BY | PROJ. | E.F.N. | U.S.N. | FROM | TO | COUNCIL ACCEPT DATE | FROM | TO | ORD. NO. | DATE | FILE NO. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| REVISIONS | | | | RECORD | | | | | | | | GRADE ESTABLISHMENTS | | | | |

NAVD88 DATUM — SCALE

PROT02002.DWG; REV 11/27/2002

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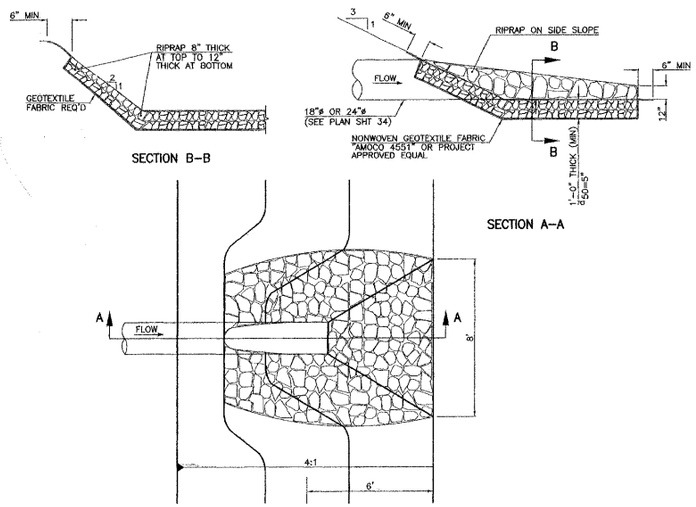
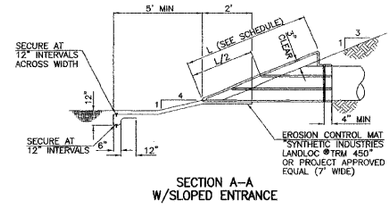
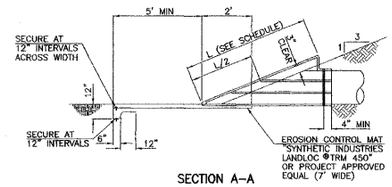



OUTLET PROTECTION DETAIL
NTS

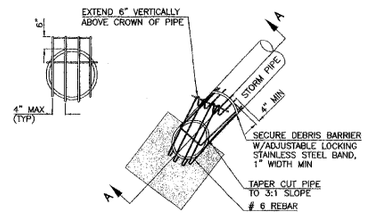



SECTION A-A
W/SLOPED ENTRANCE

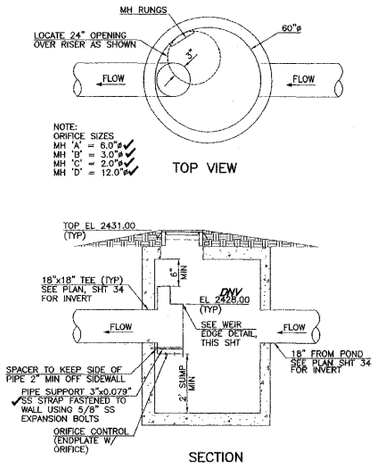



SECTION A-A

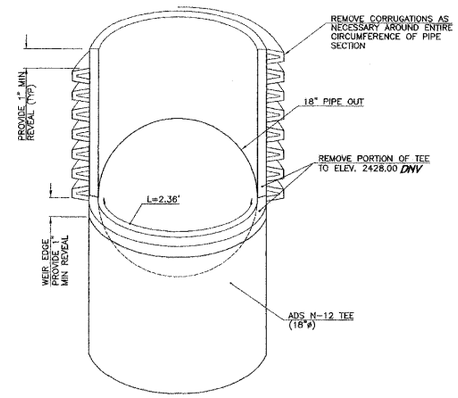
| DEBRIS BARRIER SCHEDULE | | |
|---|---|---|
| PIPE DIA | L | NO. OF BARS REQUIRED |
| 15" | 6.0' | 4 |
| 18" | 6.5' | 5 |
| 24" | 8.0' | 7 |
| 48" | 15' | 15 |



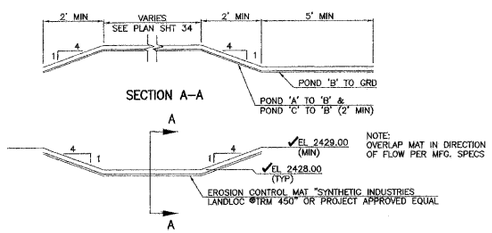

INLET/OUTLET PROTECTION W/DEBRIS BARRIER
NTS



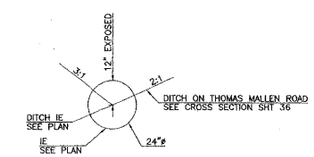

STORM CONTROL MANHOLE 'A', 'B', 'C' & 'D'
PHASE 1
NTS



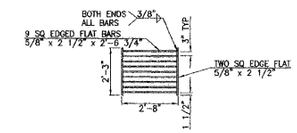

WEIR EDGE DETAIL
NTS



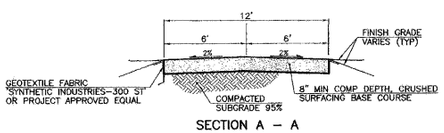

OVERFLOW SPILLWAY DETAIL (TYP)
NTS

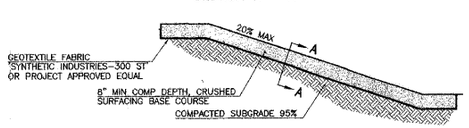



CULVERTS FOR THOMAS MALLEN ROAD
NTS

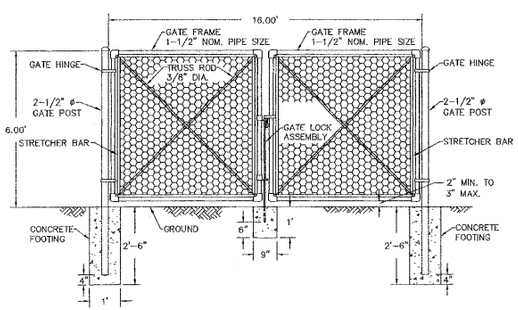


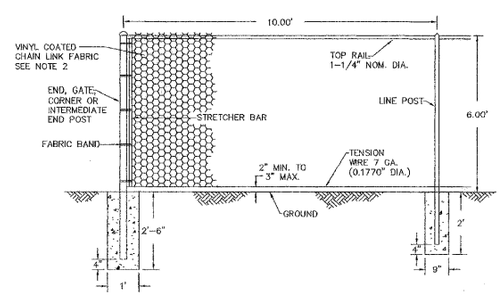

DITCH INLET GRATE (TYP)
NTS




GRAVEL ACCESS ROAD
NTS

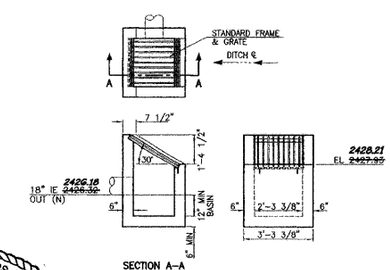



NOTES:

1. ALL MATERIAL AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE CURRENT STATE OF WASHINGTON STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION
2. VINYL COATED CHAIN LINK FENCE FABRIC TO MEET OR EXCEED REQUIREMENTS OF WSDOT SPECIFICATION 9.16.1(7) FOR TYPE 1 FENCE (9 GA) 2" DIAMOND.

STORM FACILITY CHAIN LINK FENCE
NTS




28 DITCH INLET
NTS

AS BUILT

DNV = DID NOT VERIFY

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

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT
ORIGINAL
"AS-BUILTS"
CERTIFIED RECORD DRAWINGS
PROJECT #: P-1918
DATE ACCEPTED: 12/12/07

THOMAS G. LONERGAN
STATE OF WASHINGTON
36093
REGISTERED PROFESSIONAL ENGINEER
11-30-04
EXPIRES: FEB 14, 2006

35 12
12 39

**PROJECT APPLICANT**

AHO CONSTRUCTION — Date 11/30/04

HOPPER DENNIS JELLISON PLLC
ENGINEERS & PLANNERS
314 W. 15th Street
Vancouver, WA 98660-2927
(360) 695-3488
(503) 924-4005
FAX (360) 695-8767
Internet: www.hdjengineers.com

| DATE | BY | PROJ | DESCRIPTION | DATE | BY | PROJ. | E.F.N. | U.S.N. | FROM | TO |
|---|---|---|---|---|---|---|---|---|---|---|
| REVISIONS | | | | RECORD | | | | | | |

| COUNCIL ACCEPT DATE | FROM | TO | ORD. NO. | DATE | FILE NO. |
|---|---|---|---|---|---|
| GRADE ESTABLISHMENTS | | | | | |

NAVD88 = (OLD CBM ELEV.) - (13.13) AS OF JANUARY, 2000 USE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)

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NAVD88 ELEV. 2412.29
CBM NO.

NAVD88 DATUM

BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

HORIZONTAL PLAN&PROFILE
VERTICAL PROFILE ONLY

SCALE

CURRENT CITY/COUNTY DESIGN STANDARDS ADOPTED FEB,1995

| LAST PROJECT BY | | DATES |
|---|---|---|
| DRAWN: | CDS | 6/04 |
| REVISED: | | |
| CHECKED: | GME | 6/04 |
| APPROVED: | TGL | 6/04 |

PROCESSED BY SPOKANE

CITY OF SPOKANE, WASHINGTON
DEPARTMENT OF ENGINEERING SERVICES
808 WEST SPOKANE FALLS BLVD.
SPOKANE, WASHINGTON 99201-3343
(509) 625-6300

PROJECT NAME: BIG SKY - PHASE 1

SHEET LIMITS: STORM FACILITY DETAILS

TYPE OF IMPROVEMENT:

| CITY PROJECT NUMBER | CITY PLAN NUMBER |
|---|---|
| | |

EFN:

PROJECT LIMITS: HALLET ROAD & THOMAS MALLEN ROAD

CALL BEFORE YOU DIG 456-8000

P-1918 Eng As Built

PROT02002.DWG: REV 11/27/2002

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## SITE GRADING

The portion of the site slated for construction under these construction documents is to be mowed and stripped to remove all grass, roots, organic soil, and construction fill debris prior to the beginning of any grading operations. Strippings shall be stockpiled for later use as final lift ground cover.

Following stripping and grubbing, the exposed soils shall be proof rolled to reveal weak, organic, or other unsuitable soils. Unsuitable soils shall be excavated to firm ground.

Exposed subgrade soils on areas to receive structural fill should be scarified to a depth of 12" and be recompacted with structural fill.

Fill areas shall be structurally filled with surplus suitable materials from cut areas or suitable imported materials. Select materials shall be placed in fill areas in lifts not to exceed 8". Each lift shall be compacted to 95 % of the maximum dry density. Fill materials should be free of organics, and rock fragments in excess of 6" in dimension.

Compaction testing shall be done in accordance with the AASHTO T-99.

At the end of the grading operation, the stockpiled strippings shall be distributed on the landscape areas in a compacted depth not to exceed 12".

All deleterious materials generated during site grading and strippings not utilized in the final ground cover operation shall be hauled from Phase 1 to certain locations in Phase 2 & 3.

All surfaces shall be graded smooth and free of irregularities that might accumulate surface water.

Maximum slopes on site at the completion of grading shall not exceed 2 horizontal: 1 vertical (50 %).

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.

The contractor shall employ a licensed surveyor to verify that the cross-gutter forms are at the correct plane grade prior to concrete placement. The cross-gutters shall be constructed prior to paving, and the pavement shall then match the edge of concrete gutter.

## STORM SEWERS

Materials for storm sewer inlet laterals and pipe shall be Corrugated Polyethylene Storm Sewer Pipe or approved equal.

Trench excavation shall meet the requirements of Section 7-08.3(1).

Storm sewer pipe bedding and backfill shall meet the requirements of Section 7-08.3(3). Backfill material shall be compacted to 95% of the maximum relative density.

Trench backfill shall meet the requirements of Section 7-08.3(3).

All roof water shall be routed and splash blocked to landscape areas.

## SANITARY SEWER CONSTRUCTION NOTES

Sanitary sewer laterals shall be 4" in size, installed at a minimum slope of 0.02 ft/ft unless otherwise specified on the plan.

Materials for sanitary sewer pipe shall be Solid Wall PVC Sanitary Sewer Pipe unless otherwise specified.

Prior to backfilling sewer service lateral ends, the Contractor shall notify the project land surveyor in a timely manner so that construction "As-Built" information may be gathered. If the Contractor backfills prior to the gathering of required information, the Contractor shall be required to expose the ends of service laterals and sewer main cleanouts.

Backfill for sanitary sewer pipe shall be as required by the City of Spokane utility permit.

Service laterals shall be extended to 16' behind the R/W line and the contractor shall mark lateral ends with a 10' - 2" x 4" board, tracing wire and mark the depth of the lateral on the 2x4 board.

## WATER SYSTEM CONSTRUCTION NOTES

Pipe backfill for water pipe shall be as required by the City of Spokane Standards.

Contractor to maintain a minimum 10' horizontal and 18" vertical separation between all existing and proposed water and sewer lines.

City forces shall make all connections to existing mains. Contractor to pay all costs.

All utility trench bedding shall be in conformance with City of Spokane Standard Plan B-18C.

All valves, fittings, etc., shall be ductile iron. Water pipe shall be ductile iron, Class 50.

Defections at pipe joints shall not exceed 75 % of maximum permissible deflection per listed deflection table on sheet 36 or manufacturers recommended deflection, which ever is less.

Water lines shall be restrained per table on Sheet 37.

Contractor to coordinate with City of Spokane Water and Hydroelectric Services to shut off necessary water lines for construction and maintenance service as necessary.
Install 2-inch blowoff assembly at end of each waterline per WSDOT Plan B-21 for flushing and testing.

Backfill to be installed per WSDOT Standard Specifications. Lifts to be 8 inches maximum and compacted in accordance with City of Spokane Standard Plan B-18D. Provide marking tape at mid-depth of backfill.

## MONUMENTATION

The contractor shall coordinate with the surveyor so that centerline monuments are set as required by Spokane County. Monuments shall be set at curvature points and street intersections and shall conform to Spokane County Standard Plan A-14.

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT
ORIGINAL
"AS-BUILTS"
CERTIFIED RECORD DRAWINGS
PROJECT #: P1918
DATE ACCEPTED: 12/12/07

**PROJECT APPLICANT**

AHO CONSTRUCTION — Date

RECORD DRAWING

CITY OF SPOKANE ENGINEERING SERVICES DEPARTMENT
-CONSTRUCTION PLANS-
DATE PLANS ACCEPTED: JUL 1 6 2004
AS-BUILT OF THIS PLAN AND CONSTRUCTION INFORMATION ARE REQUIRED PRIOR TO CITY ACCEPTANCE OF IMPROVEMENTS OR PROJECT COMPLETION

HOPPER DENNIS JELLISON P.L.L.C.
ENGINEERS & PLANNERS
314 W. 15th Street
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THOMAS G. LONERGAN, STATE OF WASHINGTON, 36055 REGISTERED PROFESSIONAL ENGINEER
EXPIRES: FEB 14, 2006

2/39

PROTO2002.DWG: REV 11/27/2002

| DATE | BY | PROJ | DESCRIPTION | DATE | BY | PROJ. | E.F.N. | U.S.N. | FROM | TO | COUNCIL ACCEPT DATE | FROM | TO | ORD. NO. | DATE | FILE NO. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| REVISIONS | | | | RECORD | | | | | | | | GRADE ESTABLISHMENTS | | | | |

NAVD88 = (OLD CBM ELEV.) − (13.13) AS OF JANUARY, 2000 USE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)
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NAVD88 ELEV. 2412.29
CBM NO.
NAVD88 DATUM

BAR IS ONE INCH ON ORIGINAL DRAWING. 0 — 1" IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY
HORIZONTAL PLAN&PROFILE N/A
VERTICAL PROFILE ONLY N/A
SCALE

CURRENT CITY/COUNTY DESIGN STANDARDS ADOPTED FEB,1995

| LAST PROJECT BY | | DATES |
|---|---|---|
| DRAWN: | RAD | 6/04 |
| REVISED: | | |
| CHECKED: | TGJ | 6/04 |
| APPROVED: | TGL | 6/04 |

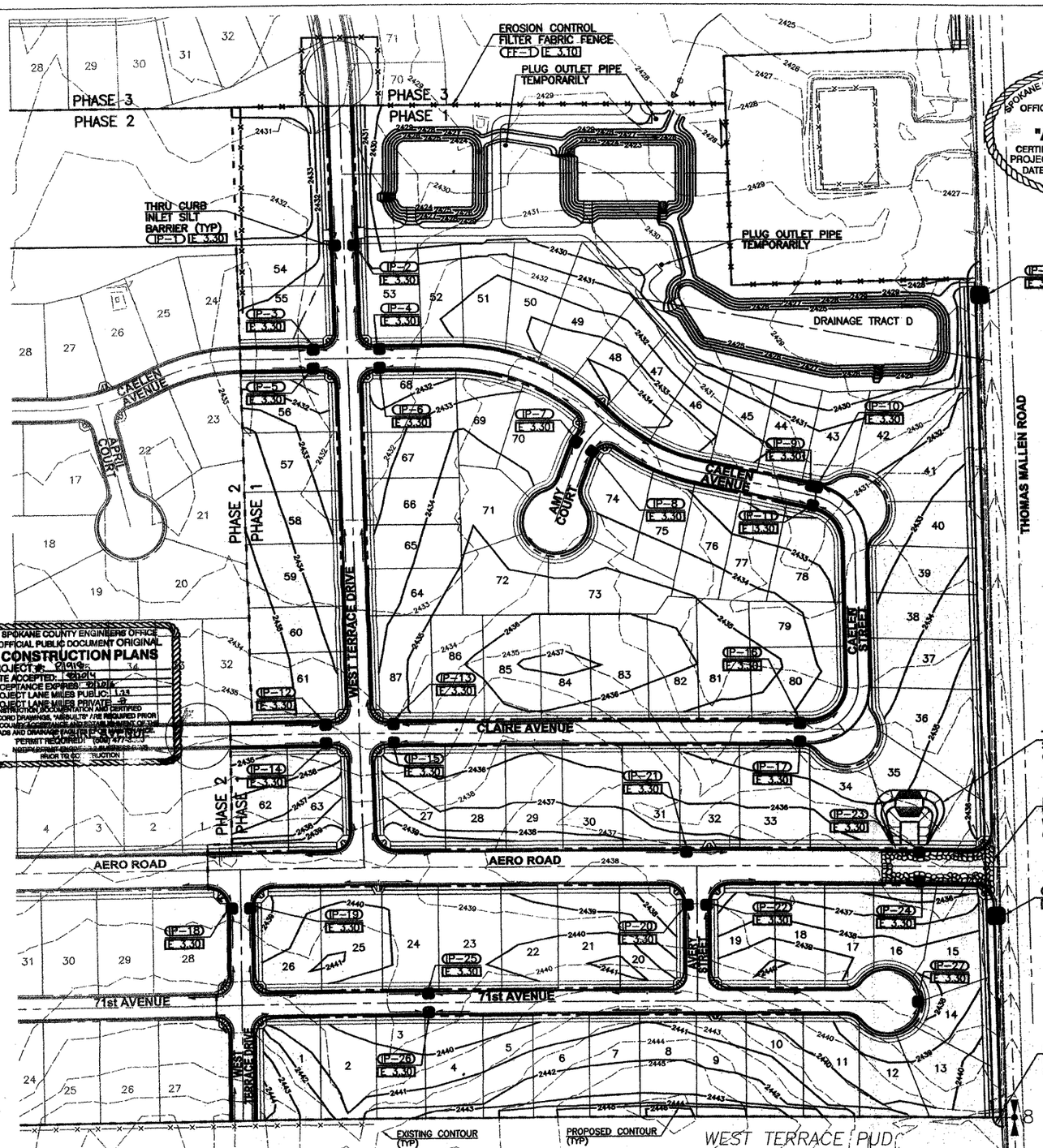
SPOKANE
CITY OF SPOKANE, WASHINGTON
DEPARTMENT OF ENGINEERING SERVICES
808 WEST SPOKANE FALLS BLVD.
SPOKANE, WASHINGTON 99201-3343
(509) 625-6300

PROJECT NAME: BIG SKY – PHASE 1
SHEET LIMITS: GENERAL NOTES
PROJECT LIMITS: HALLET ROAD & THOMAS MALLEN ROAD

| TYPE OF IMPROVEMENT: | |
|---|---|
| CITY PROJECT NUMBER | CITY PLAN NUMBER |
| 2004080 | 2004080 |
| EFN: | DETAIL |

CALL BEFORE YOU DIG 456-8000

P-1918 Eng As Built




SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
**CONSTRUCTION PLANS**
PROJECT #: P-1918
DATE ACCEPTED: 2/2/04
ACCEPTANCE EXPIRES: 2/2/06
PROJECT LANE MILES PUBLIC: 1.23
PROJECT LANE MILES PRIVATE: 0
CONSTRUCTION, DOCUMENTATION AND CERTIFIED RECORD DRAWINGS, "AS-BUILTS" ARE REQUIRED PRIOR TO COUNTY ACCEPTANCE AND ESTABLISHMENT OF THE ROADS AND DRAINAGE FACILITIES [illegible]
PERMIT REQUIRED! (509) 477-3600
NOTIFICATION [illegible] PRIOR TO CONSTRUCTION

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT
ORIGINAL
**"AS-BUILTS"**
CERTIFIED RECORD DRAWINGS
PROJECT #: P-1918
DATE ACCEPTED: 12/12/07

**PROPERTY OWNER:**
*Aho Construction*
*5512 NE 109th Court, Suite 101*
*Vancouver, WA 98662*
*(360)254-0493 (Ph)*
*(360)254-6998 (Fax)*

**PERMIT APPLICANT:**
Scott's Excavating
*10403 W Westbow Road*
*Spokane, WA 99224*
*(509)458-7548 (Ph)*
*(509)458-7616 (Fax)*

**PROJECT SITE CONTACT:**
*Craig Owens*
*(509)458-7548 (Ph)*
*(509)458-7616 (Fax)*

**PROJECT ADDRESS:**
Southwest Quadrant of the intersection of Hallet Road & Thomas Mallen Road.

**LEGAL DESCRIPTION:**
NE 1/4 Section 7, Township 24 North, Range 42 East, W.M.

**PLANS PREPARED BY:**
Travis G. Johnson, E.I.T.

**PROJECT DESCRIPTION:**
Development of 110 acre site into 257 single family residential lots, with paved roads & designated open spaces. A 100 foot wide Avista utility easement crosses through the site in an east/west orientation, connecting to an Inland Power substation located at the east side of the project site adjacent to Thomas Mallen Road. There is a category 4 wetland adjacent to the NE portion of the site along Hallet Road.

**EXISTING VEGETAION:**
The majority of the site is covered in oats.

**EXISTING WATER BODIES:**
There are currently no existing water bodies on the site.

**ON-SITE SOILS:**
The top layer consists of a till (soil) zone of organic silt with an average thickness of 15 inches. Over the majority of the site, the (till) zone is under lain by a layer of medium stiff to hard silt to silty clay that ranged from 1 foot to over 10 feet. A 1 to 3 foot thick, medium dense to dense gravel layer is commonly present above 5 feet below ground surface over most of the site.

**DESCRIPTION OF ESC MEASURES:**

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.

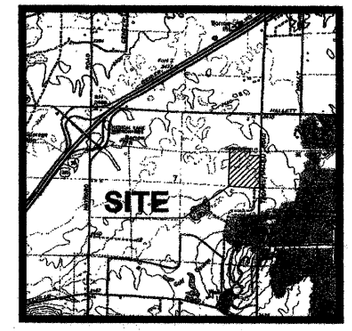
An Erosion/Sedimentation Control (ESC) plan is required for this project. Implementation of the ESC plan, and construction, maintenance, and upgrading of the ESC facilities are the responsibility of the Developer until all construction is completed and accepted by Spokane County, or until vegetation is established throughout the site, and accepted by Spokane County, whichever is later.

The erosion/sedimentation control measures shown are the minimum requirements for the anticipated site conditions. The implementation of these ESC plans and the construction, maintenance, replacement, and upgrading of these ESC facilities is the responsibility of the contractor until all construction is completed and approved, and vegetation is established.

The ESC facilities show on this plan must be constructed in conjunction with all clearing and grading activities, and in such a manner as to ensure that sediment and sediment laden water do not enter the drainage system, roadways, or violate applicable water and air quality standards.

Care should be taken to not disturb more area than needed for construction requirements. All disturbed soils surfaces are to be stabilized. Stabilization of disturbed soil areas will consist of: hydroseeding or handseeding, mulching, placing of erosion control blankets or plastic in landscaping soil areas. It will also consist of paving and concrete work in driving, parking and sidewalk areas. All seeded areas are to be fertilized, watered and maintained to enhance the immediate regrowth of vegetation.

Geotextile fabric is to be placed on the rims of drywells, catch basins and inlets until such time the vegetation on the site is established and the threat of sediment deposition into the drainage system is mitigated.




**VICINITY MAP**
NOT TO SCALE

Material stockpiles are to be protected from precipitation by the following means:

Temporary - cover piles with tarps or plastic sheeting weighted with tires, lumber or concrete blocks.

Permanent - cover piles with tarps or plastic, or reseed. Perimeter areas around piles are to be surrounded with erosion control filter fabric fences until soils surface is stabilized with reseeding.

The ESC facilities shall be inspected daily by the contractor and maintained as necessary to ensure continuous functioning. Inspection and maintenance shall include, but not be limited to:

Verifying that all areas are graded such that all runoff is directed to a sedimentation trap facility before discharging to surface.

Removal of trapped silts at silt barriers, silt traps, or points of accumulation.

Additional protective measures, as required, due to job site conditions.

The contractor/developer is responsible for installing Rock Construction Entries at any and all locations used to enter or exit the project site.

Stabilized construction entrances installed at the beginning of construction and maintained for the duration of the project. Monitoring of vehicles leaving the site to minimize transmission of loose soils to the public roadways.

If sediment is transported onto a road surface, the surface is to be cleaned thoroughly at the end of each day.

The ESC facilities on inactive sites shall be inspected and maintained a minimum of once a month or within the 24 hours following a storm event.

At no time shall more than one foot of sediment be allowed to accumulate within a trapped catch basin. All catch basins and conveyance lines shall be cleaned prior to paving. The cleaning operation shall not flush sediment laden water into the downstream system.

This sedimentation and erosion control plan is intended to be utilized as a guide to control the transportation of loose soils from the property that cause water quality and nuisance problems outside of the construction area.

Depending upon the Contractor's construction practices, some portions of the proposed erosion control plan may be varied according to the job site condition. All changes to the plan must be reviewed and approved by the Engineer prior to adjustment.

**PROJECT APPLICANT**
AHO CONSTRUCTION — Date 7/8/04

REC'D PRINT

I, Travis G. Johnson E.I.T. certify that this Erosion Control Plan meets the ESC requirements as listed in Chapter 4.5 of the Guidelines for Storm Water Management of Spokane County Public Works.

Travis G. Johnson

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

THOMAS G. LONGSTRETH — STATE OF WASHINGTON — REGISTERED PROFESSIONAL ENGINEER — 7-08-04
EXPIRES: FEB 14, 2006

HOPPER DENNIS JELLISON PLLC
ENGINEERS & PLANNERS
314 W. 15th Street
Vancouver, WA 98660-2927
(360) 695-3448
(503) 924-4085
FAX (360) 695-6767
Internet: www.hdjengineers.com

3/39

PROJECT NAME: BIG SKY – PHASE 1
SHEET LIMITS: EROSION CONTROL
TYPE OF IMPROVEMENT: EROSION
CITY PROJECT NUMBER | CITY PLAN NUMBER
PROJECT LIMITS: HALLET ROAD & THOMAS MALLEN ROAD
EPR:

CITY OF SPOKANE, WASHINGTON
DEPARTMENT OF ENGINEERING SERVICES
808 WEST SPOKANE FALLS BLVD.
SPOKANE, WASHINGTON 99201-3343
(509) 625-6300

| REVISIONS | | | | RECORD | | | | GRADE ESTABLISHMENTS | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DATE | BY | PROJ | DESCRIPTION | DATE | BY | PROJ. | E.F.N. - U.S.N. | FROM | TO | COUNCIL ACCEPT DATE | FROM | TO | ORD. NO. | DATE | FILE NO. |

NAVD88 = (OLD DIM ELEV.) - (13.13) AS OF JANUARY, 2005 USE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)
BENCH MARK LOCATION: A WSDOT 3" BRASS DISK IN MONUMENT CASE LOCATED IN THE INTX OF GEIGER RD & HAYFORD RD ELEV = 2408.49 NAVD29 DATUM
BENCH MARK ELEV. 2412.29
CBM NO.
NAVD88 DATUM
BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY
SCALE: PLAN/PROFILE 1" = 20'; VERTICAL N/A; PROFILE ONLY

CURRENT CITY/COUNTY DESIGN STANDARDS ADOPTED FEB.1995

| | LAST PROJECT BY | DATES |
|---|---|---|
| DRAWN: | RAD | 6/04 |
| REVISED: | | |
| CHECKED: | TGJ | 6/04 |
| APPROVED: | TGL | 6/04 |

CALL BEFORE YOU DIG 456-8000

P-1918 Eng. Rad Drawings

PROT02002.DWG: REV 11/27/2002

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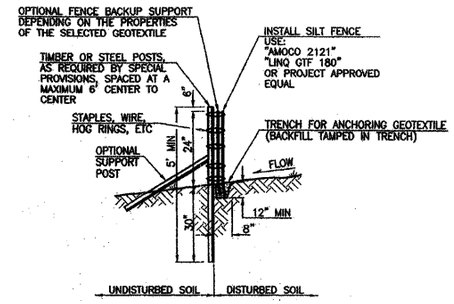
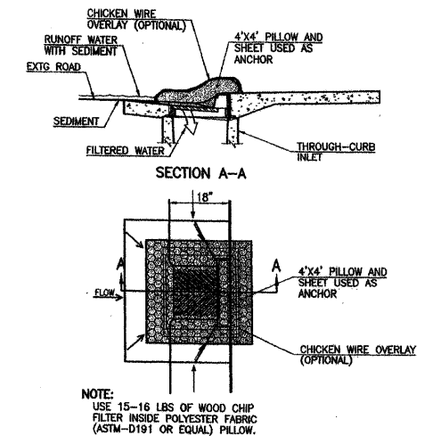
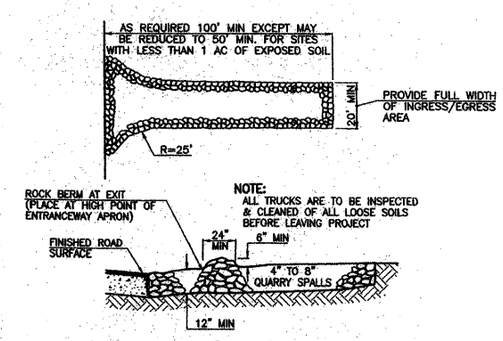



EROSION CONTROL
FILTER FABRIC FENCE
E 3.10 FF NTS




NOTE:
USE 15-16 LBS OF WOOD CHIP FILTER INSIDE POLYESTER FABRIC (ASTM-D191 OR EQUAL) PILLOW.

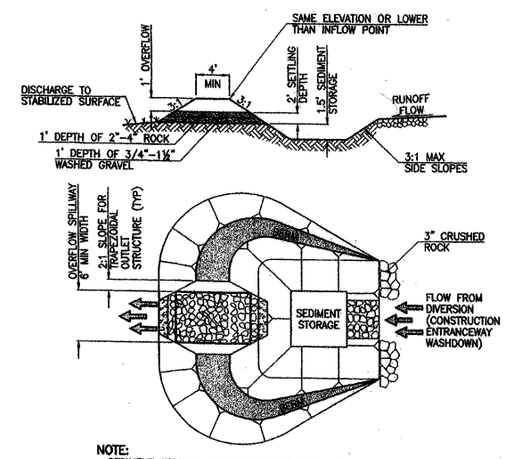
THRU CURB INLET
SILT BARRIER
E 3.30 IP NTS




NOTE:
ALL TRUCKS ARE TO BE INSPECTED & CLEANED OF ALL LOOSE SOILS BEFORE LEAVING PROJECT

1. EXCAVATE MINIMUM OF 12" OF EXISTING SOILS.
2. PLACE MINIMUM OF 12" OF 3" MINUS CRUSHED ROCK.
3. CONSTRUCT ROCK BERM ALONG TRANSITION POINT TO FINISH ROAD SURFACES, DIVERT RUNOFF TO ONSITE AREA.

ENTRANCEWAY VEHICLE WASHDOWN ZONE
W/DIVERSION BERM
E 2.10 CE NTS




NOTE:
SEDIMENT STORAGE MINIMUM VOLUME SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION, UNTIL PAVING & SOIL STABILIZATION HAVE BEEN ACCOMPLISHED

TEMPORARY SEDIMENTATION TRAP
E 3.35 ST NTS

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT
ORIGINAL
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CERTIFIED RECORD DRAWINGS
PROJECT #: P1918
DATE ACCEPTED: 12/12/07

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: P1918
DATE ACCEPTED: 8/26/04
ACCEPTANCE EXPIRES: 8/26/06
PROJECT LANE MILES PUBLIC: 1.3
PROJECT LANE MILES PRIVATE: 0
CONSTRUCTION DOCUMENTS 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) 477-5600
NOTIFY PERMIT ENGINEER 2 BUSINESS DAYS PRIOR TO CONSTRUCTION

RECORD PRINT

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

PROJECT APPLICANT
AHO CONSTRUCTION — Date 7/8/04

HOPPER DENNIS JELLISON PLLC
ENGINEERS & PLANNERS
314 W. 15th Street
Vancouver, WA 98660-2927
(360) 695-3488
(503) 224-4860
FAX (360) 695-8767
Internet: www.hdjengineers.com

THOMAS G. LONG — STATE OF WASHINGTON — REGISTERED PROFESSIONAL ENGINEER — 7-8-04
EXPIRES: FEB 14, 2006

4/39

| DATE | BY | PROJ | DESCRIPTION | DATE | BY | PROJ | E.F.N. - U.B.N. | FROM | TO | COUNCIL ACCEPT DATE | FROM | TO | ORD. NO. | DATE | FILE NO. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| REVISIONS | | | | RECORD | | | | | | | GRADE ESTABLISHMENTS | | | | |

NAVD88 = (OLD CBM ELEV.) - (13.13) AS OF JANUARY, 2000 USE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)
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NAVD88 ELEV. 2412.29
CBM NO.
NAVD88 DATUM
BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY
SCALE: HORIZONTAL PLAN/PROFILE N/A; VERTICAL PROFILE ONLY N/A

CURRENT CITY/COUNTY DESIGN STANDARDS ADOPTED FEB,1995

| | LAST PROJECT BY | DATED |
|---|---|---|
| DRAWN: | RAD | 6/04 |
| REVISED: | | |
| CHECKED: | TGJ | 6/04 |
| APPROVED: | TGL | 6/04 |

SPOKANE

CITY OF SPOKANE, WASHINGTON
DEPARTMENT OF ENGINEERING SERVICES
808 WEST SPOKANE FALLS BLVD.
SPOKANE, WASHINGTON 99201-3343
(509) 625-6300

PROJECT NAME: BIG SKY - PHASE 1
SHEET LIMITS: EROSION CONTROL DETAILS
TYPE OF IMPROVEMENT: EROSION
CITY PROJECT NUMBER
CITY PLAN NUMBER
ERN:
PROJECT LIMITS: HALLET ROAD & THOMAS MALLEN ROAD
CALL BEFORE YOU DIG 456-8000

P-1918 Eng Road Drainage
P-1918 Eng As Built

PROT02002.DWG: REV 11/27/2002

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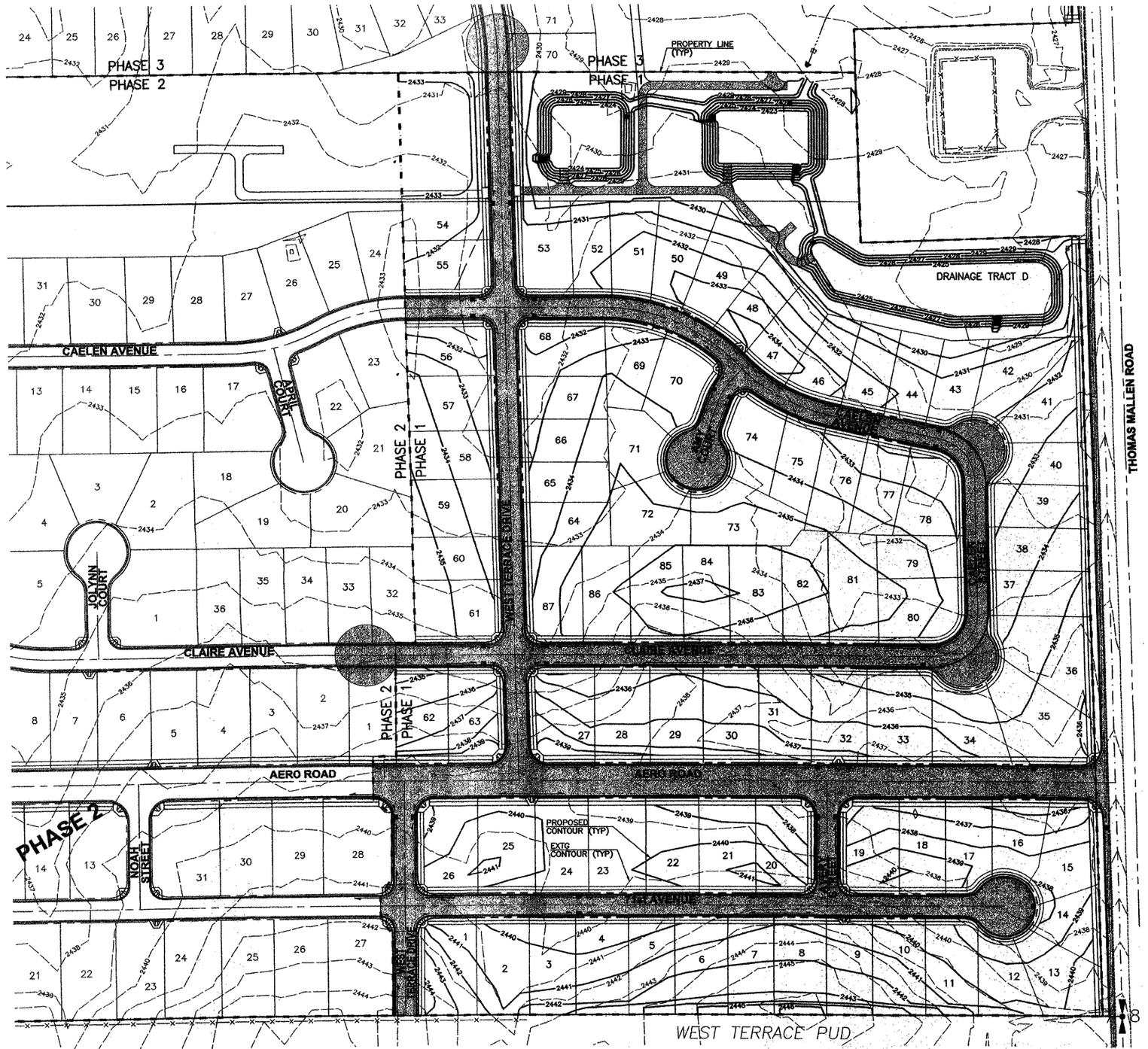


SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
"AS-BUILTS"
CERTIFIED RECORD DRAWINGS
PROJECT #: P1918
DATE ACCEPTED: 12/12/07

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: P1918
DATE ACCEPTED: 8/2/04
ACCEPTANCE EXPIRES: 8/2/06
PROJECT LANE MILES PUBLIC: 1.27
PROJECT LANE MILES PRIVATE: 0
CONSTRUCTION DOCUMENTS AND CERTIFIED RECORD DRAWINGS, AS-BUILT AND REQUIRED PRIOR TO COUNTY ACCEPTANCE AND ESTABLISHMENT OF THE ROADS AND DRAINAGE FACILITIES FOR MAINTENANCE.
PERMIT REQUIRED (509) 477-5600
NOTIFY PERMIT ENGINEER 2 BUSINESS DAYS PRIOR TO CONSTRUCTION

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

**PROJECT APPLICANT**

Thomas Arronamith 7/8/04
AHO CONSTRUCTION Date

RECORD PRINT

THOMAS G. BONERGA
STATE OF WASHINGTON
34665
REGISTERED PROFESSIONAL ENGINEER
7-8-04
EXPIRES: FEB 14, 2006

HOPPER DENNIS JELLISON P.L.L.C.
ENGINEERS & PLANNERS
314 W. 13th Street
Vancouver, WA 98660-2927
(360) 695-3488
(503) 924-4005
FAX (360) 695-8767
Internet: www.hdjengineers.com

5/39

| | |
|---|---|
| PROJECT NAME: | BIG SKY – PHASE 1 |
| SHEET LIMITS: | GRADING PLAN |
| TYPE OF IMPROVEMENT: | GRADING |
| CITY PROJECT NUMBER | |
| CITY PLAN NUMBER | |
| PROJECT LIMITS: | HALLET ROAD & THOMAS MALLEN ROAD |
| EFN: | |

CALL BEFORE YOU DIG 456-8000

P-1918 Eng Road Drainage
P-1918 Eng As Builts

| REVISIONS | | | | RECORD | | | | | | GRADE ESTABLISHMENTS | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DATE | BY | PROJ | DESCRIPTION | DATE | BY | PROJ. | E.F.N. | U.S.N. | FROM | TO | COUNCIL ACCEPT DATE | FROM | TO | ORD. NO. | DATE | FILE NO. |

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NAVD88 ELEV. 2412.29
CBM NO.
NAVD88 DATUM

BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

HORIZONTAL PLANAPROFILE 1"=60'
VERTICAL PROFILE ONLY N/A
SCALE

CURRENT CITY/COUNTY DESIGN STANDARDS ADOPTED FEB,1995

| | LAST PROJECT BY | DATES |
|---|---|---|
| DRAWN: | RAD | 6/04 |
| REVISED: | | |
| CHECKED: | TGJ | 6/04 |
| APPROVED: | TGL | 6/04 |

SPOKANE

CITY OF SPOKANE, WASHINGTON
DEPARTMENT OF ENGINEERING SERVICES
808 WEST SPOKANE FALLS BLVD.
SPOKANE, WASHINGTON 99201-3343
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PROT02002.DWG: REV 11/27/2002

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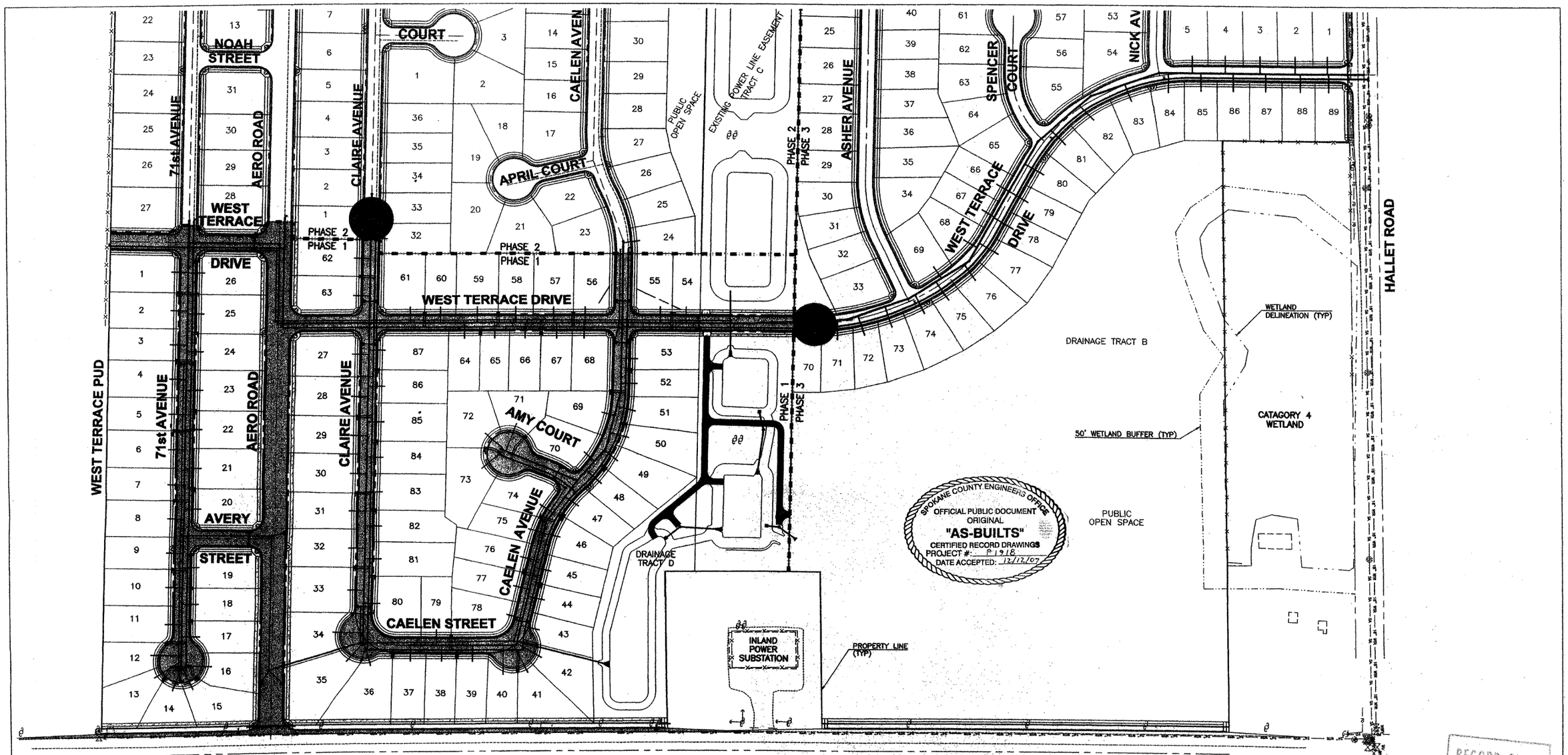


SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT
ORIGINAL
"AS-BUILTS"
CERTIFIED RECORD DRAWINGS
PROJECT #: P1918
DATE ACCEPTED: 12/12/07

RECORD PRINT

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: P1918
DATE ACCEPTED: 3/2/04
ACCEPTANCE EXPIRES: 3/2/06
PROJECT LANE MILES PUBLIC: 1.33
PROJECT LANE MILES PRIVATE: .6
CONSTRUCTION DOCUMENTS ARE NOT 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 5 BUSINESS DAYS PRIOR TO CONSTRUCTION

| LINETYPE LEGEND | | SYMBOL LEGEND | |
|---|---|---|---|
| EXTG SANITARY SEWER PIPE | SA | PROPOSED CATCH BASIN | |
| EXTG 18" WATER PIPE | 18" WTR | PROPOSED STORM MANHOLE | |
| EXTG 24" WATER PIPE | 24" WTR | PROPOSED SANITARY MANHOLE | |
| EXTG ELECTRIC LINE | E | PROPOSED WATER METER | |
| EXTG TELEPHONE LINE | T | PROPOSED VALVE | |
| PROPOSED CENTERLINE | | PROPOSED FIRE HYDRANT | |
| PROPOSED RIGHT-OF-WAY | | | |
| PROPOSED SANITARY SEWER PIPE | | | |
| PROPOSED SANITARY LATERAL | | | |
| PROPOSED STORM PIPE | | | |
| PROPOSED WATER PIPE | | | |
| PROPOSED WATER LATERAL | | | |
| FUTURE WATER PIPE | | | |
| FUTURE SANITARY SEWER PIPE | | | |

**PROJECT APPLICANT**

Thomas Arrowsmith 7/8/04
AHO CONSTRUCTION Date

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

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STATE OF WASHINGTON REGISTERED PROFESSIONAL ENGINEER 7-8-04
EXPIRES: FEB 14, 2006

6/39

PROJECT NAME: BIG SKY – PHASE 1

SHEET LIMITS: MASTER UTILITY PLAN

TYPE OF IMPROVEMENT:

CITY PROJECT NUMBER | CITY PLAN NUMBER

PROJECT LIMITS: HALLET ROAD & THOMAS MALLEN ROAD

CALL BEFORE YOU DIG 456-8000

P1918 Eng Road Drainage
P1918 Eng As Built

| DATE | BY | PROJ | DESCRIPTION |
|---|---|---|---|
| | | | REVISIONS |

| DATE | BY | PROJ | E.F.N. | U.S.N. | FROM | TO |
|---|---|---|---|---|---|---|
| | | | | | | |

RECORD

| COUNCIL ACCEPT DATE | FROM | TO | GRID. NO. | DATE | FILE NO. |
|---|---|---|---|---|---|
| | | | | | |

GRADE ESTABLISHMENTS

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HORIZONTAL 1"=100'
VERTICAL
PROFILE ONLY N/A

SCALE

CURRENT CITY/COUNTY DESIGN STANDARDS ADOPTED FEB.1995

| | | DATES |
|---|---|---|
| LAST PROJECT BY | | |
| DRAWN: | CTS | 6/04 |
| REVISED: | | |
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SPOKANE

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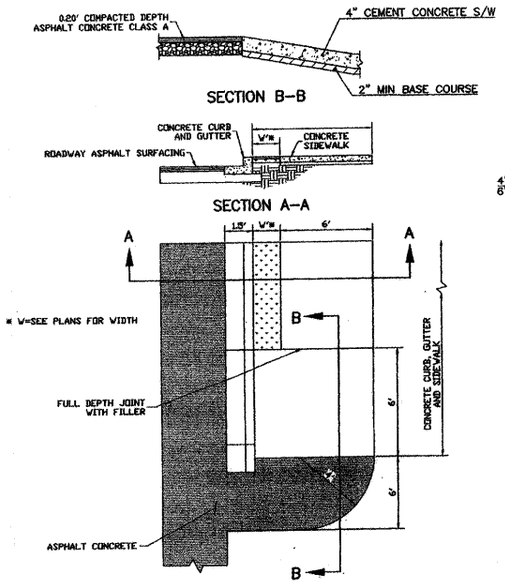
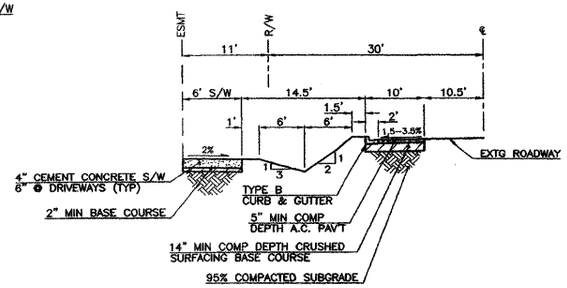
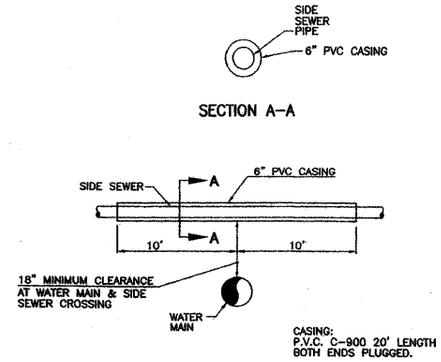



ASPHALT SIDEWALK RAMP DETAIL
NTS



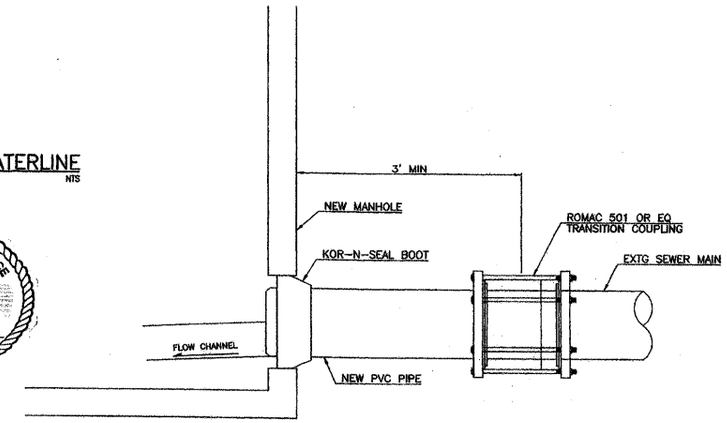

THOMAS MALLEN
TYPICAL ROAD SECTION
NTS




TYPICAL SIDE SEWER CROSSING OVER WATERLINE
NTS

**MAXIMUM DEFLECTION FOR DUCTILE IRON PIPE**

| SIZE OF PIPE | DEFLECTION ANGLE | MAXIMUM DEFLECTION 18' LENGTH | MAXIMUM DEFLECTION 20' LENGTH | APPROXIMATE RADIUS OF CURVE PRODUCED BY SUCCESSION OF JOINTS 18' LENGTH | APPROXIMATE RADIUS OF CURVE PRODUCED BY SUCCESSION OF JOINTS 20' LENGTH |
|---|---|---|---|---|---|
| (IN) | (DEG) | (IN) | (IN) | (FT) | (FT) |
| 4 | 8° 18" | 31 | 35 | 125 | 140 |
| 8 | 5° 21" | 20 | 22 | 195 | 220 |
| 10 | 5° 21" | 20 | 22 | 195 | 220 |




NOTE:
THE METHOD OF CONNECTING NEW PVC MAIN SEWER PIPE TO EXTG MAIN SEWER PIPE SHOWN ON THIS DETAIL APPLIES TO ALL SUCH CONNECTIONS REQUIRED FOR MAIN SEWER, SIDE SEWER, & MANHOLE REPLACEMENT WORK.

CONNECTION BETWEEN NEW & EXTG SEWER MAIN
NTS

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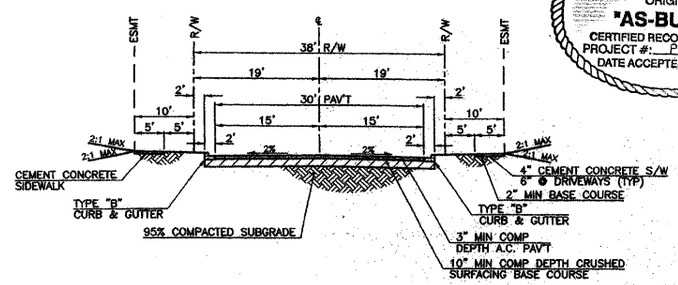
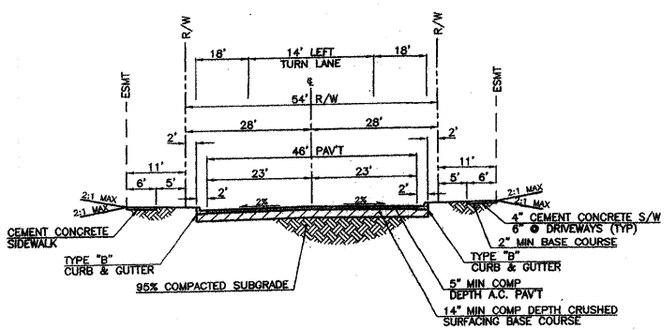
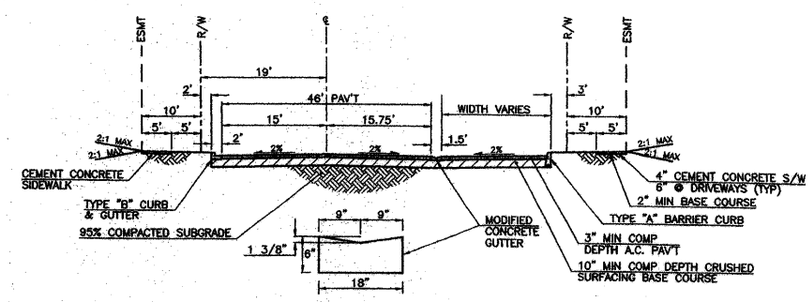
PROJECT #: P-1918
DATE ACCEPTED: 12/12/07



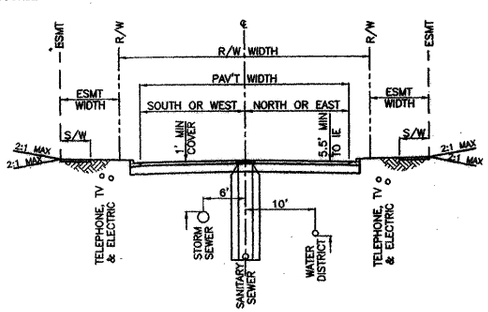

TYPICAL STREET SECTION
NTS
AVERY STREET
71st AVENUE
WEST TERRACE DRIVE
CAELEN AVENUE
CAELEN STREET
CLAIRE AVENUE




AERO ROAD
TYPICAL SECTION
NTS




TYPICAL EYEBROW SECTION
NTS
11 X 14




TYPICAL UTILITY LOCATIONS
NTS

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: P1918
DATE ACCEPTED: 5-7-04
ACCEPTANCE EXPIRES: 5-7-06
PROJECT LANE MILES PUBLIC: 1.13
PROJECT LANE MILES PRIVATE: 2
CONSTRUCTION DOCUMENTS 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

**PROJECT APPLICANT**
AHO CONSTRUCTION
7/8/04
Date

RECORD PRINT

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

THOMAS G. ELLISON — STATE OF WASHINGTON — REGISTERED PROFESSIONAL ENGINEER
7-8-04
EXPIRES: FEB 14, 2006

HOPPER DENNIS ELLISON P.L.L.C.
ENGINEERS & PLANNERS
314 W. 15th Street
Vancouver, WA 98660-3927
(360) 695-3488
(503) 994-4005
FAX (360) 695-8767
Internet: www.hdjengineers.com

36/39

| | |
|---|---|
| PROJECT NAME: | BIG SKY – PHASE 1 |
| SHEET LIMITS: | MISCELLANEOUS DETAILS |
| PROJECT LIMITS: | HALLET ROAD & THOMAS MALLEN ROAD |
| TYPE OF IMPROVEMENT: | CITY PROJECT NUMBER / CITY PLAN NUMBER / EFN: |

CALL BEFORE YOU DIG 456-8000

P-1918
P-1918
Eng Road-Drainage
Final As Built

| DATE | BY | PROJ | DESCRIPTION | DATE | BY | PROJ. | E.F.N. | U.S.N. | FROM | TO |
|---|---|---|---|---|---|---|---|---|---|---|
| REVISIONS | | | | RECORD | | | | | | |

| COUNCIL ACCEPT DATE | FROM | TO | ORD. NO. | DATE | FILE NO. |
|---|---|---|---|---|---|
| GRADE ESTABLISHMENTS | | | | | |

NAVD88 = (OLD CBM ELEV.) – (3.13) AS OF JANUARY, 2000 USE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)
BENCH MARK LOCATION: A WSDOT 3" BRASS DISK IN MONUMENT CASE LOCATED IN THE INTX OF GEIGER RD & HAYFORD RD ELEV = 2408.49' NAVD29 DATUM
ELEVATION: 2412.29 (NAVD88)
CBM NO.
NAVD88 DATUM

BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY
SCALE: HORIZONTAL 1"=50' PROFILE VERTICAL 1"=5' PROFILE ONLY

CURRENT CITY/COUNTY DESIGN STANDARDS ADOPTED FEB.1995

| | LAST PROJECT BY | DATE |
|---|---|---|
| DRAWN: | CDS | 6/04 |
| REVISED: | | |
| CHECKED: | TGJ | 6/04 |
| APPROVED: | TGL | 6/04 |

SPOKANE
CITY OF SPOKANE, WASHINGTON
DEPARTMENT OF ENGINEERING SERVICES
808 WEST SPOKANE FALLS BLVD.
SPOKANE, WASHINGTON 99201-3343
(509) 625-6300

PROT02002.DWG: REV 11/27/2002

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**Table 8-A Pipe Restraint Table**

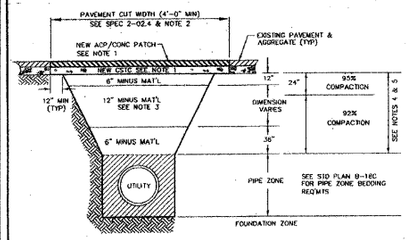
| FITTING TYPE / SIZE | PIPE SIZE | | | |
|---|---|---|---|---|
| | 12" & 10" | 8" | 6" | 4" |
| | Number of 18' Pipe Lengths Required with Restrained Joints in Each Direction: | | | |
| 90° bends, tees, crosses, valves and dead-ends | 6 | 5 | 4 | 3 |
| 11-1/4° bends | 2 | 2 | 1 | 1 |
| 22-1/2° bends | 3 | 3 | 2 | 2 |
| 45° bends | 5 | 4 | 3 | 3 |

NOTE: For static system pressures greater than 85 psi, adjust as follows:

- For 12" & 10" pipe, add one full 18' pipe length per each 10 psi in excess of 85 psi.
- For 8" pipe, add one full 18' pipe length per each 15 psi in excess of 85 psi.
- For 4" and 6" pipe, add one full 18' pipe length per each 20 psi in excess of 85 psi.



## BACKFILL FOR UTILITY TRENCHES

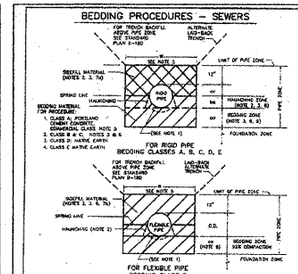



NOTES:

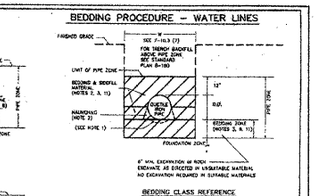
1. REPLACE ACP/CONC PAVEMENT & CSTC PER STD PLANS W-108 & W-109.
2. SEE CITY OF SPOKANE PAVEMENT CUT POLICY FOR ADD'NL REQ'MTS.
3. WATER LINES REQUIRE 6" MINUS MAT'L FOR THE ENTIRE BACKFILL.
4. COMPACT BACKFILL TO THE SPECIFIED MAX DENSITY PER SEC 2-03.3(14)D USING AASHTO T-180-90.
5. COMPACT BACKFILL IN NON-TRAVELED AREAS TO 85% MAX DENSITY PER SEC 2-03.3(14)D USING AASHTO T-180-90.
6. SEE STD PLAN 8-18C FOR UTILITY TRENCH BACKFILL REQ'MTS USING CDF.

| APPROVED BY | | | |
|---|---|---|---|
| DIRECTOR, ENGINEERING SERVICES — DON L. ARNOLD, P.E. | ADOPTED: 2/90<br>REVISED: 4/2004<br>SUPERSEDES: 9/93 | UTILITY TRENCH BACKFILL REQUIREMENTS | |
| PRINCIPAL ENGINEER, DESIGN — RICK W. BROWN, P.E. | SCALE: NTS<br>DWG/REV BY: TJS | ENGINEERING SERVICES<br>CITY OF SPOKANE, WASHINGTON | STANDARD PLAN No. 8-18D |

## BEDDING PROCEDURES – SEWERS




## BEDDING PROCEDURE – WATER LINES




BEDDING CLASS REFERENCE

| DIMENSION | CLASS A | CLASS B | CLASS C | CLASS F | CLASS D | CLASS E |
|---|---|---|---|---|---|---|
| cc | 3/4 O.D. | 1/2 O.D. | 1/8 O.D. | N/A | O.D. | 15/16 O.D. |
| bs | 1/4 O.D. | 1/2 O.D. | 1/8 O.D. | N/A | ZERO | 7/16 O.D. SEE NOTE 3 |
| cr | (4" MIN.) 1/4 I.D. (22" MAX.) | 1/4 I.D. * MIN. FOR PIPE 27" & UNDER<br>4" MIN. FOR PIPE OVER 27" | | | ZERO | ZERO |

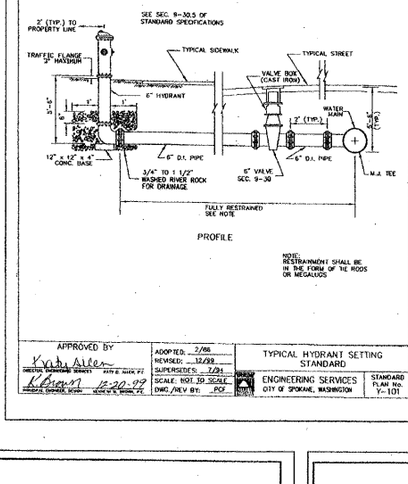
DRAWING NOTES:

1. Provide uniform support under barrel. Hand excavate for bell.
2. Hand tamp haunching and sidefill to spring line.
3. Compact pipe zone materials to 92% density per AASHTO T-180 / T-224 density at optimum moisture content, except directly over pipe, hand tamp only (flexible pipe see note 10).
4. Make the upper surface of the pipe zone backfill level, or slope so away from pipe.
5. See Sec. 2-09.4 for trench width "W" limitations and trenching options. The pipe zone will be the trench width, except in rock, that exceeds a horizontal distance of 1 foot beyond the pipe width shall be $\frac{1}{2}$" + 1.5 I.D. in 18ins.
6. See Sec.8-03.12(3) for bedding procedures. For purposes herein, "BEDDING" shall refer to all materials within the bedding and haunching zones.
7. a) Sidefill material for rigid pipe sewers shall conform to the gradation requirements of Sec. 9-03.12, type gravel borrow, except retain a maximum of 10% passing No. 200 sieve.
   b) Sidefill material for flexible pipe sewers shall conform to Sec. 7-08.3(1)B.
8. Hand excavate to shape of pipe.
9. 6" minimum depth, for excavation in rock, (Cases B, C, and F procedures, only).
10. Compact pipe zone materials for flexible pipe as shown on detail.
11. Bedding and sidefill material for ductile iron water lines shall conform to the gradation requirements of Sec.9-03.15 for ductile iron pipe.

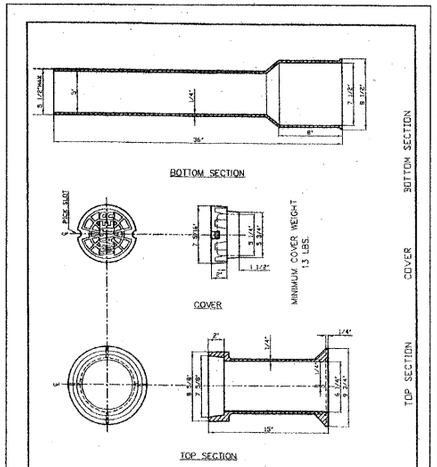
| APPROVED BY | | | |
|---|---|---|---|
| DIRECTOR, ENGINEERING SERVICES — DON L. ARNOLD, P.E. | ADOPTED: 2/96<br>REVISED: 9/97<br>SUPERSEDES: 3/93 | TRENCH BEDDING PROCEDURES | |
| PRINCIPAL ENGINEER, DESIGN — RICK W. BROWN, P.E. | SCALE: NOT TO SCALE<br>DWG. BY: ---<br>REV. BY: --- | CONSTRUCTION SERVICES<br>PUBLIC WORKS DIVISION<br>CITY OF SPOKANE, WASHINGTON | STANDARD PLAN No. 8-01BC |

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT
ORIGINAL
"AS-BUILTS"
CERTIFIED RECORD DRAWINGS
PROJECT #: P1918
DATE ACCEPTED: 12/12/07

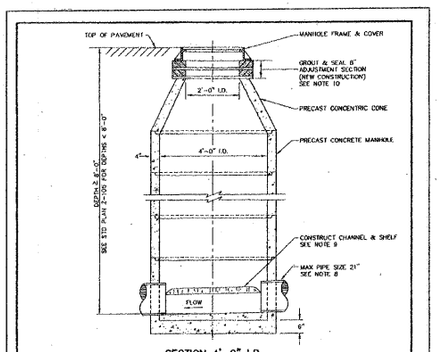
**SIGNIFICANT CHANGES HAVE BEEN MADE TO THE HYDRANT REQUIREMENTS UNDER SECTION 9-30.5. SPECIFICALLY, THE REFERENCE TO 'CITY STANDARD' FIRE HYDRANT HAS BEEN DELETED.**




| APPROVED BY | | | |
|---|---|---|---|
| DIRECTOR, ENGINEERING SERVICES — DON L. ARNOLD, P.E. | ADOPTED: 2/86<br>REVISED: 12/99<br>SUPERSEDES: 7/91 | TYPICAL HYDRANT SETTING STANDARD | |
| PRINCIPAL ENGINEER, DESIGN — RICK W. BROWN, P.E. | SCALE: NOT TO SCALE<br>DWG./REV BY: PCF | ENGINEERING SERVICES<br>CITY OF SPOKANE, WASHINGTON | STANDARD PLAN No. 7-101 |




| APPROVED BY | | | |
|---|---|---|---|
| DIRECTOR, ENGINEERING SERVICES — DON L. ARNOLD, P.E. | ADOPTED: 4/88<br>REVISED: CAD 10/98 | CAST IRON VALVE BOX<br>SPOKANE MCH MODEL 930 | |
| PRINCIPAL ENGINEER, DESIGN — RICK W. BROWN, P.E. | SCALE: NOT TO SCALE<br>DWG./REV BY: DGH | ENGINEERING SERVICES<br>CITY OF SPOKANE, WASHINGTON | STANDARD PLAN No. 7-108 |

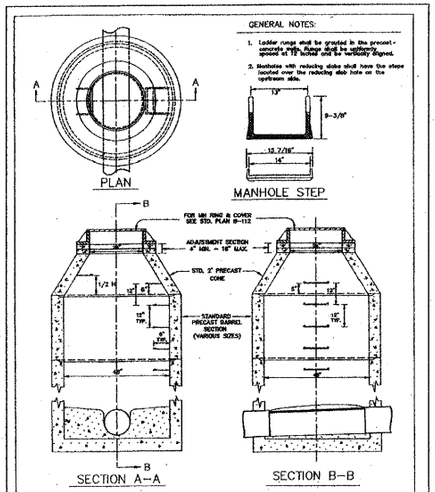



SECTION 4'-0" I.D.

NOTES:

1. SEE SEC 7-09 FOR PRECAST CONCRETE MANHOLES.
2. SEE STD PLANS 8-112 & 8-112A FOR MANHOLE FRAME & COVER.
3. SEE STD PLAN 2-109 FOR MANHOLE STEP DETAILS.
4. SEE STD PLAN 8-122 FOR BASE & FOUNDATION DETAILS.
5. CONE & BARREL JOINTS MAY BE EITHER TONGUE & GROOVE OR REVERSE TONGUE & GROOVE.
6. ADJUSTMENT SECTION, CONE, & BARREL JOINTS TO BE SEALED PER SEC 7-03.
7. ACCESS HOLE TO BE CENTERED OVER CHANNEL.
8. MAX PIPE SIZE MAY BE LIMITED BY CONFIGURATION OF PIPES WITHIN MANHOLE.
9. SLOPE SHELF AT 1/2" PER FT.
10. ADJUSTMENT SECTION HEIGHT FOR EXISTING STRUCTURES TO MATCH FIELD CONDITIONS AS REQ'D. (4" MIN-12" MAX)

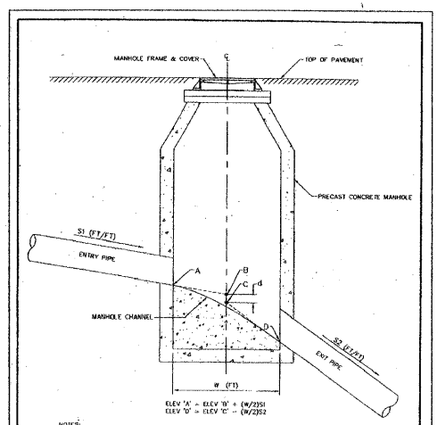
| APPROVED BY | | | |
|---|---|---|---|
| DIRECTOR, ENGINEERING SERVICES — DON L. ARNOLD, P.E. | ADOPTED: 2/86<br>REVISED: 4/2004<br>SUPERSEDES: 9/91 | MANHOLE – TYPE I 48 DEEP | |
| PRINCIPAL ENGINEER, DESIGN — RICK W. BROWN, P.E. | SCALE: ---<br>DWG/REV. BY: MGH | ENGINEERING SERVICES<br>CITY OF SPOKANE, WASHINGTON | STANDARD PLAN No. 2-101 |




GENERAL NOTES:

1. Ladder rungs shall be grouted in the precast-concrete walls. Rungs shall be uniformly spaced at 12 inches and be vertically aligned.
2. Manholes with reducing slabs shall have the steps located over the reducing slab hole on the upstream side.

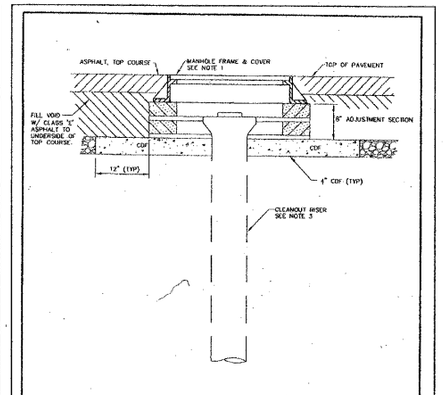
| APPROVED BY | | | |
|---|---|---|---|
| CITY ENGR. | SCALE: --- NONE ---<br>ADOPTED: 2/86 | MANHOLE STEP DETAILS | |
| SUPVR. ENGR. DES. | REVISED: 3/02<br>SUPERSEDES: | DEPT. OF PUBLIC WORKS<br>ENGR. DIVISION SPOKANE, WA | STANDARD PLAN No. 2-109 |




NOTES:

1. ELEV 'A' IS THE INVERT ELEVATION OF THE ENTRY PIPE @ THE MANHOLE WALL ON GRADE S1.
2. ELEV'S 'B' & 'C' ARE THE DESIGN INVERT ELEVATIONS OF THE ENTRY/EXIT PIPES @ THE MANHOLE C/L.
3. ELEV 'D' IS THE INVERT ELEVATION OF THE EXIT PIPE @ THE MANHOLE WALL ON GRADE S2.
4. DIMENSION 'W' IS THE REQ'D MIN CHANNEL DROP PER DESIGN STD 4.2-6.
5. SEE STD PLANS Z-110, Z-111, & Z-112 FOR CHANNEL DROPS IN EXCESS OF THE MIN DROP.

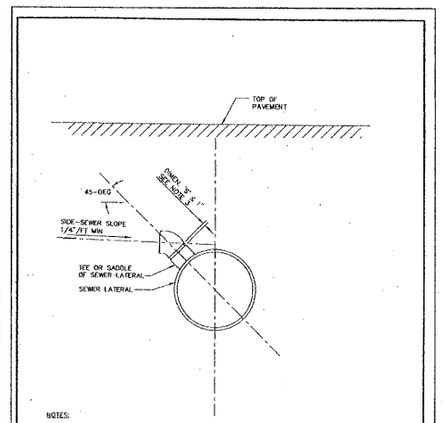
| APPROVED BY | | | |
|---|---|---|---|
| DIRECTOR, ENGINEERING SERVICES — DON L. ARNOLD, P.E. | ADOPTED: 4/2004<br>REVISED: | MANHOLE – PIPE INVERT ELEVATIONS | |
| PRINCIPAL ENGINEER, DESIGN — RICK W. BROWN, P.E. | SUPERSEDES: Z-111 12/98<br>SCALE: NTS<br>DWG/REV. BY: MGH/TJS | ENGINEERING SERVICES<br>CITY OF SPOKANE, WASHINGTON | STANDARD PLAN No. Z-113 |




NOTES:

1. SEE STD PLANS 8-112 & 8-112A FOR MANHOLE FRAME & COVER.
2. ACCESS HOLE TO BE CENTERED OVER CLEANOUT.
3. TOP OF CLEANOUT SHALL EXTEND TO A POINT NOT LESS THAT 6" NOR MORE THAN 12" BELOW TOP OF MANHOLE COVER. CLEANOUTS SHALL BE PLUGGED W/ A REMOVABLE STOPPER WHICH SHALL PREVENT PASSAGE OF DIRT OR WATER.

| APPROVED BY | | | |
|---|---|---|---|
| DIRECTOR, ENGINEERING SERVICES — DON L. ARNOLD, P.E. | ADOPTED: 4/2004<br>REVISED: | SEWER CLEANOUT | |
| PRINCIPAL ENGINEER, DESIGN — RICK W. BROWN, P.E. | SUPERSEDES: B-1218 2/96<br>SCALE: NTS<br>DWG/REV. BY: TJS | ENGINEERING SERVICES<br>CITY OF SPOKANE, WASHINGTON | STANDARD PLAN No. Z-114 |




NOTES:

1. SEE DESIGN STD 4.3 FOR SIDE-SEWERS.
2. RESIDENTIAL AREAS REQUIRE A 4" MIN SIDE-SEWER STUB. COMMERCIAL AREAS REQUIRE A 6" MIN SIDE-SEWER STUB.
3. DIMEN 'S' MAY BE INCREASED TO PROVIDE A DESIRED SIDE-SEWER DEPTH @ PROPERTY LINE, IF APPROVED BY THE CITY ENGINEER.

| APPROVED BY | | | |
|---|---|---|---|
| DIRECTOR, ENGINEERING SERVICES — DON L. ARNOLD, P.E. | ADOPTED: 4/2004<br>REVISED: | SIDE-SEWER TYPICAL CONNECTION | |
| PRINCIPAL ENGINEER, DESIGN — RICK W. BROWN, P.E. | SUPERSEDES: B-1218 12/99<br>SCALE: NTS<br>DWG/REV. BY: PSE/MGH | ENGINEERING SERVICES<br>CITY OF SPOKANE, WASHINGTON | STANDARD PLAN No. Z-116 |

CITY OF SPOKANE ENGINEERING SERVICES DEPARTMENT
-CONSTRUCTION PLANS-
DATE PLANS ACCEPTED: JUL 16 2004
AS-BUILT OF THIS PLAN AND CONSTRUCTION INFORMATION ARE REQUIRED PRIOR TO CITY ACCEPTANCE OF IMPROVEMENTS OR PROJECT COMPLETION

**PROJECT APPLICANT**

AHO CONSTRUCTION — Date

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

RECORD PRINT

37/39

HOPPER DENNIS JELLISON P.L.L.C.
ENGINEERS & PLANNERS
314 W. 15th Street
Vancouver, WA 98660-2927
(360) 695-3488
(503) 934-4004
FAX (360) 695-8767
Internet: www.hdjengineers.com

PROJECT NAME: BIG SKY – PHASE 1

SHEET LIMITS: CITY OF SPOKANE DETAILS

TYPE OF IMPROVEMENT: DETAILS

CITY PROJECT NUMBER: 2004080 — CITY PLAN NUMBER: 2004080 DETAIL

PROJECT LIMITS: HALLET ROAD & THOMAS MALLEN ROAD — EFN:

CALL BEFORE YOU DIG 456-8000 — D-1910

| DATE | BY | PROJ | DESCRIPTION | DATE | BY | PROJ. | E.F.N. | U.S.N. | FROM | TO | COUNCIL ACCEPT DATE | FROM | TO | ORD. NO. | DATE | FILE NO. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| REVISIONS | | | | RECORD | | | | | | | | GRADE ESTABLISHMENTS | | | | |

NAVD88 = (OLD CBM ELEV.) – (1.313) AS OF JANUARY, 2000 USE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)

BENCH MARK LOCATION: A WSDOT 3" BRASS DISK IN MONUMENT CASE LOCATED IN THE INTX OF GEIGER RD & HAYFORD RD ELEV. = 2408.49' NAVD29 DATUM

NAVD88 ELEV. 2412.29 — CBM NO.

BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

NAVD88 DATUM

HORIZONTAL PLAN&PROFILE: N/A — VERTICAL PROFILE ONLY: N/A

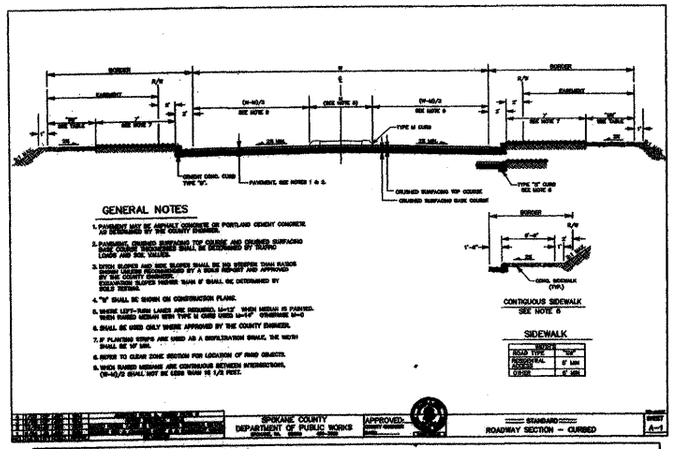
SCALE

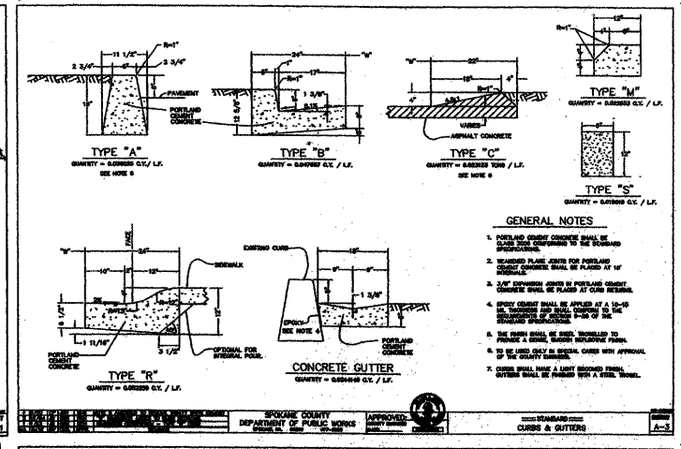
CURRENT CITY/COUNTY DESIGN STANDARDS ADOPTED FEB.1995

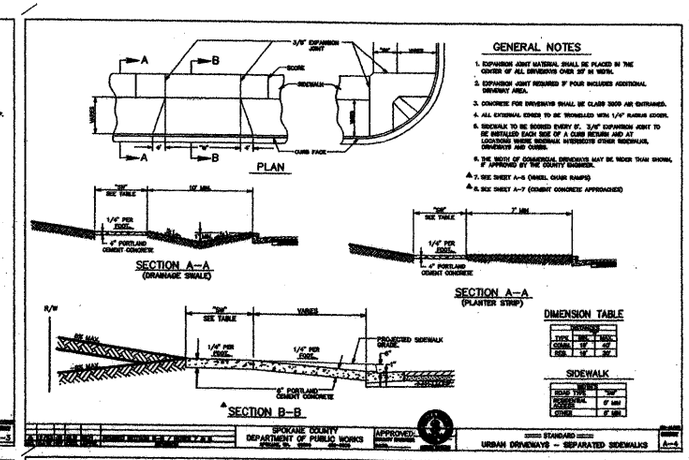
| | LAST PROJECT BY: | DATES |
|---|---|---|
| DRAWN: | CDS | 6/04 |
| REVISED: | | |
| CHECKED: | TGJ | 6/04 |
| APPROVED: | TGL | 6/04 |

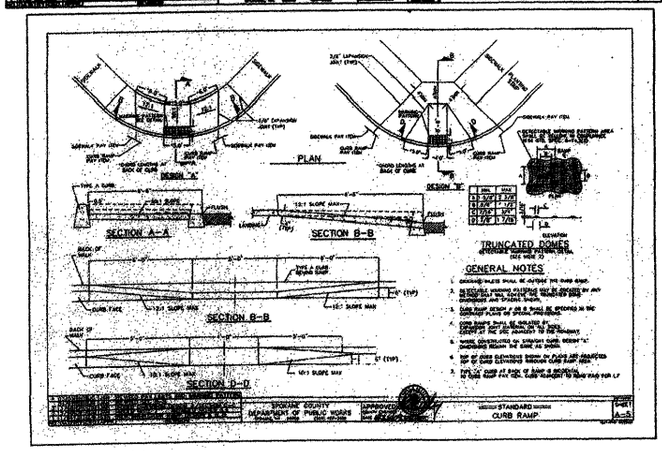
CITY OF SPOKANE, WASHINGTON
DEPARTMENT OF ENGINEERING SERVICES
808 WEST SPOKANE FALLS BLVD.
SPOKANE, WASHINGTON 99201-3343
(509) 625-6300

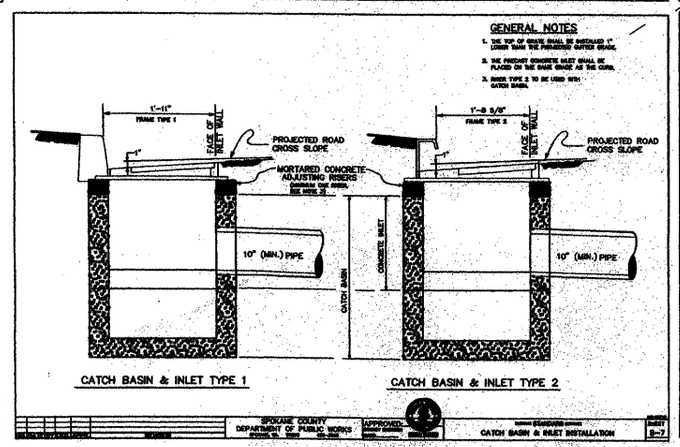

PROTO102002.DWG: REV 11/27/2002
projects/21183/Cad/Final/dwg/ProdRound 2/21183c37.dwg, 07/13/04 04:58:03 PM, cds

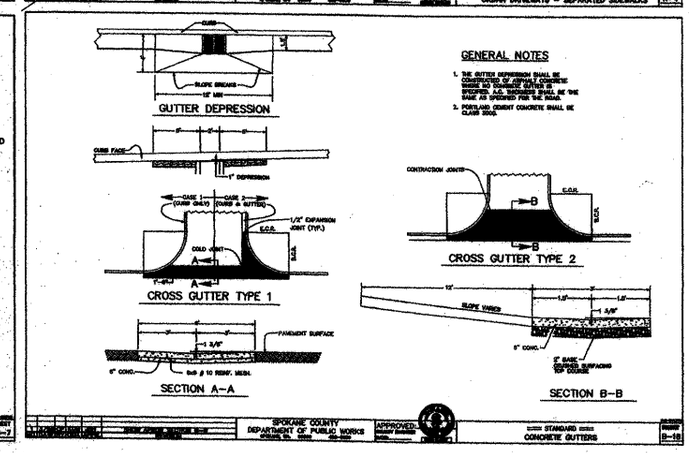


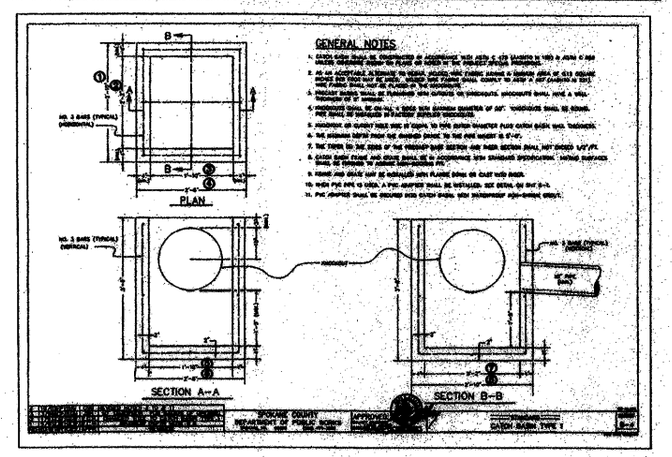




SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
**"AS-BUILTS"**
CERTIFIED RECORD DRAWINGS
PROJECT #: P 1918
DATE ACCEPTED: 12/12/07

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
**CONSTRUCTION PLANS**
PROJECT #: 1918
DATE ACCEPTED: 8/12/04
ACCEPTANCE EXPIRES: 8/12/06
PROJECT LANE MILES PUBLIC: 0.114
PROJECT LANE MILES PRIVATE: 0
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 & BUSINESS DAYS PRIOR TO CONSTRUCTION

FOR CB TYPE-2 DIMENSIONS

| | | | |
|---|---|---|---|
| 1 | 3' 1½" | 5 | 2' 2" |
| 2 | 2' 5½" | 6 | 2' 10" |
| 3 | 2' 2" | 7 | 2' 5½" |
| 4 | 2' 10" | 8 | 3' 1½" |

**PROJECT APPLICANT**
AHO CONSTRUCTION — Date 7/8/04

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

RECORD PRINT

HOPPER DENNIS JELLISON PLLC
ENGINEERS & PLANNERS
314 W. 15th Street
Vancouver, WA 98660-2927
(360) 695-3411
(503) 224-4895
FAX (360) 695-8767
Internet: www.hdjengineers.com

38/39

PROJECT NAME: BIG SKY – PHASE 1
SHEET LIMITS: SPOKANE COUNTY DETAILS
TYPE OF IMPROVEMENT: DETAILS
CITY PROJECT NUMBER | CITY PLAN NUMBER
PROJECT LIMITS: HALLET ROAD & THOMAS MALLEN ROAD
BY:
CALL BEFORE YOU DIG 456-8000

P-1918 BIG SKY — Eng Road & Drainage

| DATE | BY | PROJ | DESCRIPTION |
|---|---|---|---|
| REVISIONS | | | |

| DATE | BY | PROJ. | E.F.N. | U.S.N. | FROM | TO |
|---|---|---|---|---|---|---|
| RECORD | | | | | | |

COUNCIL ACCEPT DATE

| FROM | TO | ORD. NO. | DATE | FILE NO. |
|---|---|---|---|---|
| GRADE ESTABLISHMENTS | | | | |

NAVD88 = (OLD CSM ELEV.) – (13.13) AS OF JANUARY, 2000 USE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)
BENCH MARK LOCATION: A WSDOT 3" BRASS DISK IN MONUMENT CASE LOCATED IN THE INTX OF GEIGER RD & HAYFORD RD ELEV = 2408.49 NAVD29 DATUM
BENCH MARK ELEV. 2412.29
CSM NO.
NAVD88 DATUM
BAR IS ONE INCH ON ORIGINAL DRAWING. CAUTION: IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY
SCALE: HORIZONTAL N/A; VERTICAL N/A; PROFILE ONLY

| CURRENT CITY/COUNTY DESIGN STANDARDS ADOPTED FEB.1995 | | |
|---|---|---|
| | LAST PROJECT BY: | DATES |
| DRAWN: | CDS | 6/04 |
| REVIEWED: | | |
| CHECKED: | TCJ | 6/04 |
| APPROVED: | TCL | 6/04 |

SPOKANE

CITY OF SPOKANE, WASHINGTON
DEPARTMENT OF ENGINEERING SERVICES
808 WEST SPOKANE FALLS BLVD.
SPOKANE, WASHINGTON 99201-3343
(509) 625-6300

PROTO2002.DWG: REV 11/27/2002

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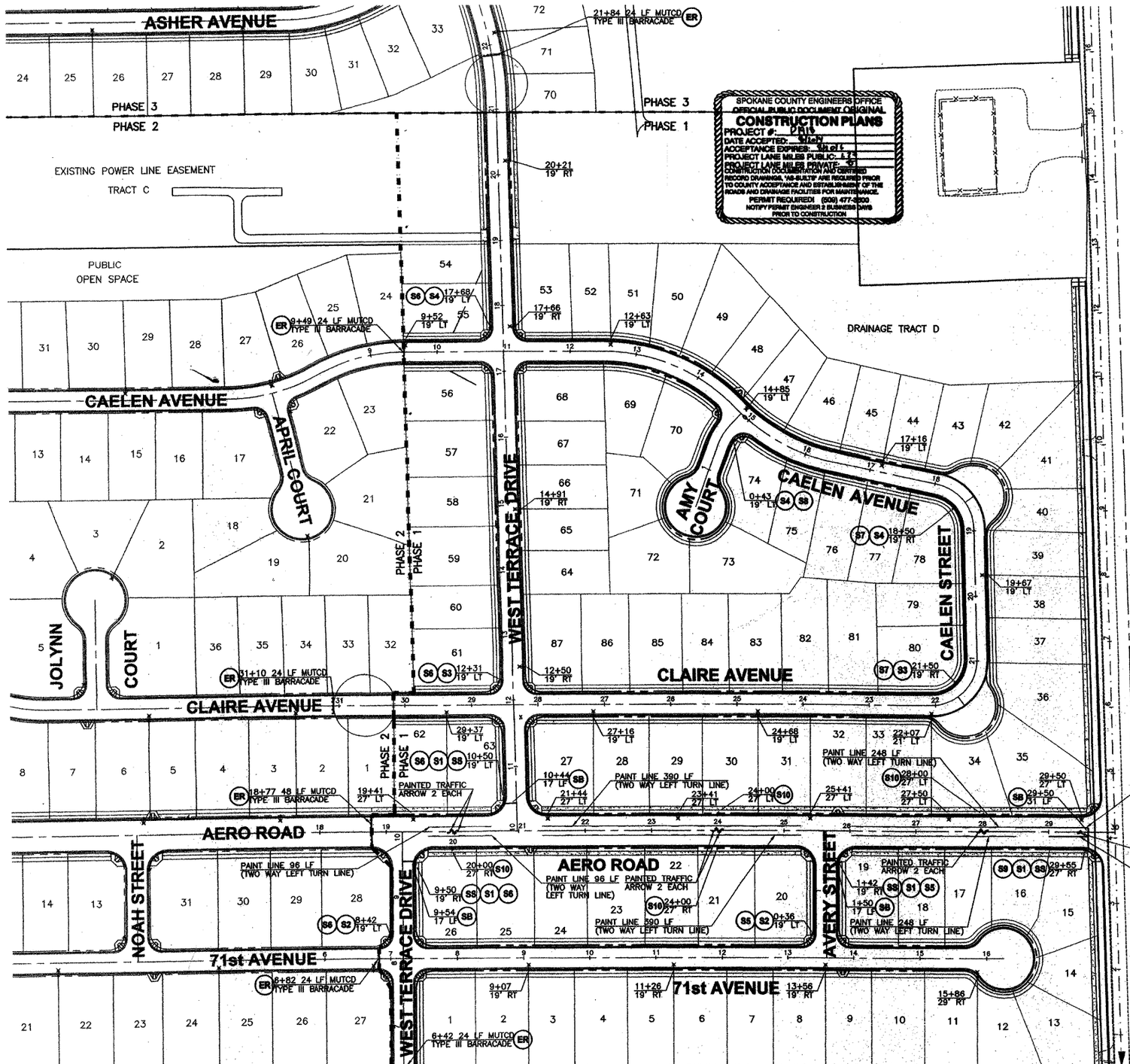
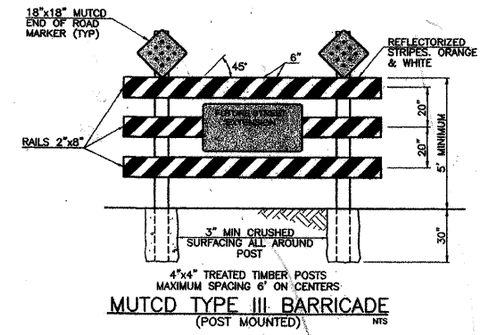



SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: P1918
DATE ACCEPTED: 4/16/04
ACCEPTANCE EXPIRES: 4/16/05
PROJECT LANE MILES PUBLIC: 1.7
PROJECT LANE MILES PRIVATE: 0
CONSTRUCTION DOCUMENTATION AND CERTIFIED RECORD DRAWINGS, "AS-BUILTS" ARE REQUIRED PRIOR 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




MUTCD TYPE III BARRICADE
(POST MOUNTED)
NTS

## LEGEND

| | |
|---|---|
| S8 | STOP, MUTCD R1-1 |
| S8 | PAINTED STOP LINE, 18" WIDE |
| S1 | STREET NAME (AERO ROAD) MUTCD D-3 |
| S2 | STREET NAME (71st AVENUE) MUTCD D-3 |
| S3 | STREET NAME (CLAIRE AVENUE) MUTCD D-3 |
| S4 | STREET NAME (CAELEN AVENUE) MUTCD D-3 |
| S5 | STREET NAME (AVERY STREET) MUTCD D-3 |
| S6 | STREET NAME (WEST TERRACE DRIVE) MUTCD D-3 |
| S7 | STREET NAME (CAELEN STREET) MUTCD D-3 |
| S8 | STREET NAME (AMY COURT) MUTCD D-3 |
| S9 | STREET NAME (THOMAS MALLEN ROAD) MUTCD D-3 |
| S10 | TWO WAY LEFT TURN ONLY MUTCD R3-9b (24"x36") |
| ER | END OF ROAD MARKERS - MOUNT ON TOP OF EACH TYPE III BARRICADE POST (SEE DETAIL) |
| | MUTCD TYPE III BARRICADE |
| | LUMINAIRE |
| | STREET SIGN |
| | PAINT LINE, PER SECTION 6-22 WSDOT 2004 STANDARD SPECIFICATIONS |
| | PAINTED TRAFFIC ARROW, PER WSDOT STANDARD PLAN H-3B |

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
"AS-BUILTS"
CERTIFIED RECORD DRAWINGS
PROJECT #: P1918
DATE ACCEPTED: 12/12/07

RED LINE PRINT

**PROJECT APPLICANT**

Thomas Arrowsmith 7/8/04
AHO CONSTRUCTION Date

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

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FAX (360) 695-8707
Internet: www.hdjengineers.com

STATE OF WASHINGTON REGISTERED PROFESSIONAL ENGINEER
7-8-04
EXPIRES: SEPT 27, 2005

39/39

| | |
|---|---|
| PROJECT NAME: | BIG SKY – PHASE 1 |
| SHEET LIMITS: | SIGNING, STRIPING, & ILLUMINATION PLAN |
| PROJECT LIMITS: | HALLET ROAD & THOMAS MALLEN ROAD |

TYPE OF IMPROVEMENT: SIGNING, STRIPING, & ILLUMINATION
CITY PROJECT NUMBER | CITY PLAN NUMBER
ENG

CALL BEFORE YOU DIG 456-8000

P-1918 Eng Road-Drainage
P 1918 Eng As Built

| DATE | BY | PROJ | DESCRIPTION | DATE | BY | PROJ | E.F.N. - U.S.N. | FROM | TO | COUNCIL ACCEPT DATE | FROM | TO | ORD. NO. | DATE | FILE NO. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| REVISIONS | | | | RECORD | | | | | | GRADE ESTABLISHMENTS | | | | | |

NAVD88 – (OLD CBM ELEV.) – (3.13) AS OF JANUARY, 2000 USE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)
BENCH MARK LOCATION: A WSDOT 3" BRASS DISK IN MONUMENT CASE LOCATED IN THE INTX OF GEIGER RD & HAYFORD RD. ELEV IS 2408.49' NAVD29 DATUM
NAVD88 ELEV. 2412.29
CBM NO.
NAVD88 DATUM
BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY
HORIZONTAL PLAN/PROFILE 1"=40'
VERTICAL PROFILE ONLY N/A
SCALE

| CURRENT CITY/COUNTY DESIGN STANDARDS ADOPTED FEB,1995 | | |
|---|---|---|
| LAST PROJECT BY | | DATES |
| DRAWN: | RAD | 6/04 |
| REVISED: | | |
| CHECKED: | LDG | 6/04 |
| APPROVED: | JRW | 6/04 |

SPOKANE

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DEPARTMENT OF ENGINEERING SERVICES
808 WEST SPOKANE FALLS BLVD.
SPOKANE, WASHINGTON 99201-3343
(509) 625-6300

PROT02002.DWG: REV 11/27/2002

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