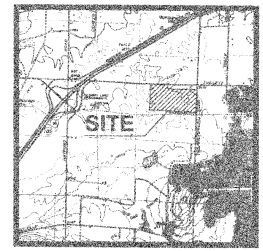
BIG SKY - PHASE 3

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



VICINITY MAP
NOT TO SCALE

GENERAL NOTES

OWNER: *Abo Construction*
5512 NE 109th court, Suite 101
Vancouver, WA 98662
(360)254-0493 (Ph)
(360)254-0998 (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.

PROJECT APPLICANT

Thomas Abo 9/6/05
ABO CONSTRUCTION

SHEET INDEX

1. COVER SHEET
2. GENERAL NOTES
3. EROSION CONTROL PLAN
4. EROSION CONTROL DETAILS
5. GRADING PLAN
6. MASTER UTILITY PLAN
7. LUCAS STREET STORM DRAINAGE & STREET PLAN & PROFILE
8. NICK AVENUE STORM DRAINAGE & STREET PLAN & PROFILE
9. SPENCER COURT STORM DRAINAGE & STREET PLAN & PROFILE
10. ASHER AVENUE STORM DRAINAGE & STREET PLAN & PROFILE
11. WEST TERRACE DRIVE STORM DRAINAGE & STREET PLAN & PROFILE
12. WEST TERRACE DRIVE STORM DRAINAGE & STREET PLAN & PROFILE
13. HALLET ROAD STORM DRAINAGE & STREET PLAN & PROFILE
14. THOMAS MALLEN ROAD STORM DRAINAGE & STREET PLAN & PROFILE
15. STORM ESMT 1, 2 & 2 PLAN & PROFILE
16. STORM ESMT 4, 5 & 6 PLAN & PROFILE
17. SPENCER COURT SANITARY SEWER PLAN & PROFILE
18. ASHER AVENUE SANITARY SEWER PLAN & PROFILE
19. LUCAS STREET WATER PLAN & PROFILE
20. NICK AVENUE WATER PLAN & PROFILE
21. SPENCER COURT WATER PLAN & PROFILE
22. ASHER AVENUE WATER PLAN & PROFILE
23. WEST TERRACE DRIVE WATER PLAN & PROFILE
24. STORM FACILITY PLAN
25. STORM FACILITY PLAN
26. STORM FACILITY DETAILS
27. MISCELLANEOUS DETAILS
28. CITY OF SPOKANE DETAILS
29. SIGNING, STRIPING & ILLUMINATION PLAN

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT CERTIFIED
CONSTRUCTION PLANS
PROJECT # 2-012.LG
DATE ADOPTED 6-9-05
ACCEPTANCE REQUIRED 6-9-07
PROJECT LINE AS PUBLIC 1.55
CUL-DE-SAC LINES AS PUBLIC 0
PERMIT REQUIRED BY SPOKANE COUNTY ENGINEERS OFFICE
TEMPORARY EASEMENTS AND DEDICATIONS OF THE ROADS AND DRAINAGE FACILITIES FOR MAINTENANCE.
PERMIT REQUIRED BY SPOKANE COUNTY ENGINEERS OFFICE
NOTIFY PERMIT ENGINEER 2 BUSINESS DAYS PRIOR TO COMMENCEMENT

This 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 Spokane County Engineer has approved all design deviations. I approve these plans for construction.

HOPPER DENNIS JELLISON PLLC
ENGINEERS & PLANNERS
PO Box 1616 (mail)
Vancouver, WA 98668-2677
(360) 693-3400
(360) 694-4030
FAX (360) 694-6721
Internet: www.hdjengineers.com

STATE OF WASHINGTON
DAVID A. HOPPER
REGISTERED PROFESSIONAL ENGINEER
4-21-05
EXPIRES FEB 14, 2006

1/29

PROJECT NAME	BIG SKY -- PHASE 3
SHEET LIMITS	COVER SHEET
PROJECT LIMITS	HALLET ROAD & THOMAS MALLEN ROAD

TYPE OF IMPROVEMENT	
CITY PROJECT NUMBER	CITY PLAN NUMBER
2005040	COVER
2005041	7-24-42

CALL BEFORE YOU DIG 456-8000

P-19188 Eng Road-Drainage

PROTOPOND.DWG, REV. 11/27/2002

DATE	BY	DRN	DESCRIPTION	DATE	BY	PRN	DATE	BY	PRN	DESCRIPTION	FROM	TO	ORIG. NO.	DATE	FILE NO.
REVISIONS				RECORD						GRADE ESTABLISHMENTS					

DESIGN ENGINEER ACCEPT DATE

NAVD88 DATUM

NAVD88 = OLD DM ELEV - 0.0700 AS OF JANUARY, 1990 USE NGS'S "ABERNATHY VERTICAL DATUM OF 1929 (DAVD29)"

REACH BACK LOCATION: A WSDOT 3" BRASS DISK IN MONUMENT CASE LOCATED IN THE INTX OF GEIGER RD & HAYFORD RD. ELEV. IS 2408.49' NAVD88 DATUM

REV. NO. | 2412.29

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

SCALE

HORIZONTAL: 1"=50'
VERTICAL: 1"=5'
VERTICAL ONLY: N/A

CURRENT CITY/COUNTY DESIGN STANDARDS ADOPTED FEB 1995

	LAST PROJECT BY	DATE
DRAWN	CTS	9/04
REVIEWED		
CHECKED	TGL	9/04
APPROVED	TGL	9/04

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 3 to the public open space in Drainage Tract B.

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 %).

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. All storm sewer shall be low pressure tested to meet the requirements of section 7-04.3(1) E.

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.

Deflections at pipe joints shall not exceed 75 % of maximum permissible deflection per listed deflection table on sheet 27 or manufacturer's recommended deflection, which ever is less.

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
CONSTRUCTION PLANS
PROJECT #: P-19188
DATE ACCEPTED: 6-4-05
ACCEPTANCE EXPIRES: 6-4-07
PROJECT LANE MILES PUBLIC: 1.44
PROJECT LANE MILES PRIVATE: 0
CONTRACTOR SHALL PROVIDE AS-BUILT 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

PROJECT APPLICANT

Thomas Brammeier 4/6/05
APC CONSTRUCTION Date

THOMAS G. LICHTENWALTER
STATE OF WASHINGTON
23013 STEVENS
PROFESSIONAL ENGINEER
4-21-05

2/29

HOPPER DENNIS JELLISON P.L.L.C.
ENGINEERS & PLANNERS
314 W. 15th Street
Vancouver, WA 98660-3027
(360) 695-3488
(503) 924-4007
FAX (360) 695-8787
Internet: www.hdjengineers.com

EXPIRES: FEB 14, 2006

PROJECT NAME:	BIG SKY – PHASE 3
SHEET LIMITS:	GENERAL NOTES
PROJECT LIMITS:	HALLET ROAD & THOMAS MALLEN ROAD

TYPE OF IMPROVEMENT	
CITY PROJECT NUMBER	CITY PLAN NUMBER
2005040 2005041	DETAIL 7-24-42

DN:

CALL BEFORE YOU DIG 456-8000

P-19188 Eng Road Drainage

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 IS 2408.49 NAVD88 DATUM

ELEV. 2412.28

CRM NO.

BAR IS ONE INCH ON ORIGINAL DRAWING. 0 1" IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

HORIZONTAL: 1" = 40' VERTICAL: N/A

SECTION: N/A PROFILE ONLY

SCALE

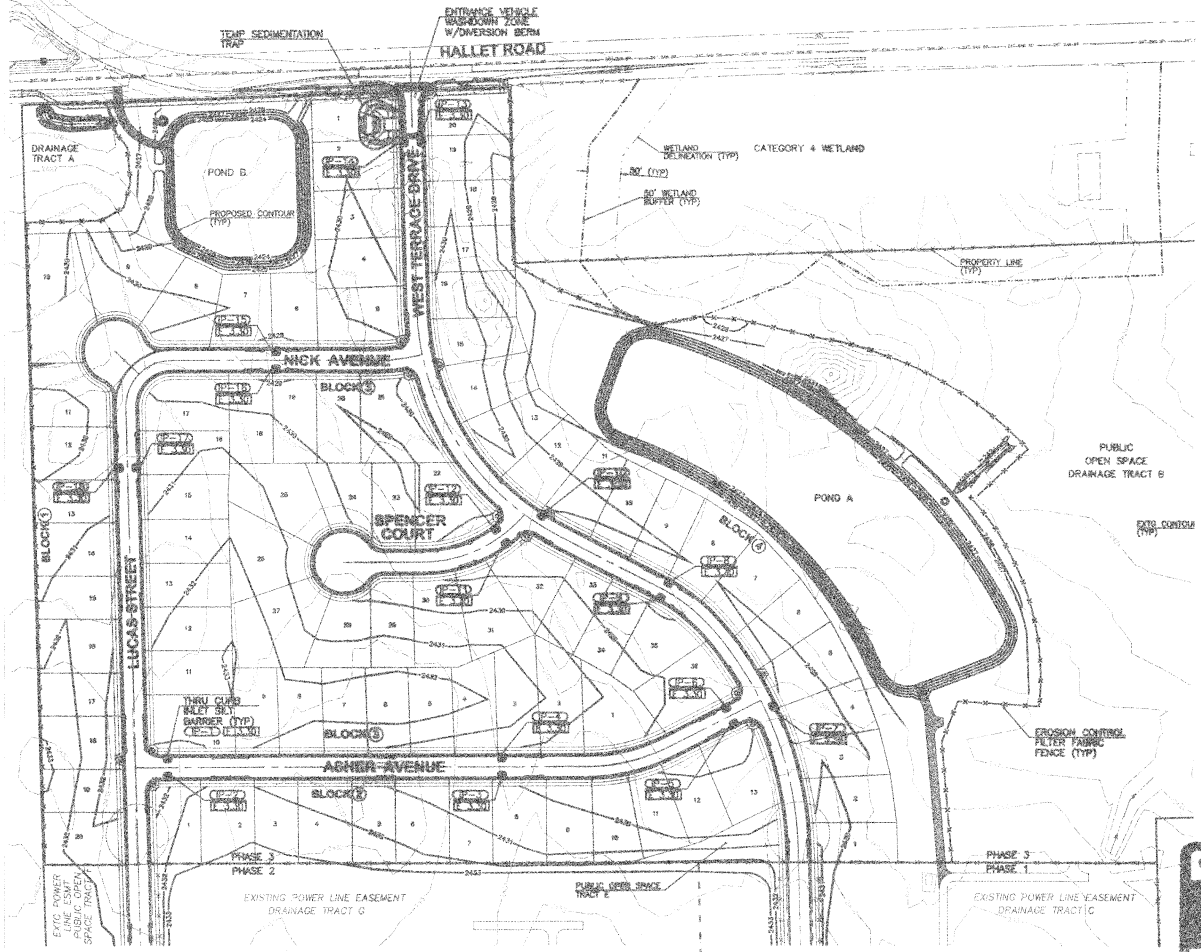
CURRENT CITY/COUNTY DESIGN STANDARDS ADOPTED FEB.1995

	LAST PROJECT BY	DATE
DRAWN:	RAD	9/04
REVISED:		
CHECKED:	TGL	9/04
APPROVED:	TGL	9/04

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

PR010200D.DWG REV 11/27/2002



PROJECT DESCRIPTION:
Development of 110 acre site into 297 single family residential lots with paved roads & designated open space. [illegible] Avista utility easement crosses through the site from southwest orientation, connecting to an Inland Power [illegible] located at the east side of the project site adjacent to Thomas Mallen Road. There is a category 4 wetland adjacent to the [illegible] portion of the site along Hallet Road.

EXISTING VEGETATION:
The majority of the site is covered in [illegible].

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

ON-SITE SOILS:
The top layer consists of a [illegible] with an average thickness of 15 inches. Over the [illegible] of the site, the (B2) zone is under lain by a layer of medium [illegible] silt to silty clay that ranged from 1 foot to over 12 feet. [illegible] 5 feet thick, medium dense to dense gravel layer is [illegible] approximately 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 other design elements shown on the ESC plan.

An Erosion/Sedimentation Control (ESC) plan is required for this project. Implementation of the ESC plan, construction, maintenance, and upgrading of the ESC facility 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 work is completed and approved, and vegetation is established.

The ESC facilities shown on this plan must be installed 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, roadway, or violate applicable water and air quality standards.

Care should be taken to not disturb more area than needed for construction requirements. All disturbed areas are to be stabilized. Stabilization of disturbed soil areas may consist of: hydroseeding or hand seeding, mulching, plastic or erosion control blankets or plastic in landscaping soil areas. It may 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 sides of inlets, catch basins and inlets until such time the vegetation on the site is established and the threat of sediment [illegible] 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 mulch. Perimeter areas around piles are to be surrounded with erosion control fiber fabric fence until soils sufficient to prevent soil erosion.

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

Verifying that all areas and gradients that feed all runoff is directed to a sedimentation trap facility before discharging to surface.

Removal of trapped silts at sediment traps, drainage, 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 [illegible] used to enter or exit the project site.

Stabilized construction entrance [illegible] at the beginning of construction and maintained for the duration of the project. Monitoring of vehicle tracking [illegible] to minimize transmission of loose soils to the public roadways.

If sediment is transported onto [illegible] surfaces, the surface is to be cleaned thoroughly at the end of each day.

The ESC facilities on inactive areas shall be inspected and maintained a minimum of once every [illegible] within the 24 hours following a storm event.

At no time shall more than one foot of sediment be allowed to accumulate within a trapping [illegible]. All catch basins and conveyance lines shall be [illegible] cleaning. The cleaning operation shall not flush sediments [illegible] into the downstream system.

The sedimentation and erosion control plan is intended to be utilized as a guide to control the [illegible] of loose soils from the property that cause water quality [illegible] problems outside of the construction [illegible].

Depending upon the Contractor's [illegible] practices, some portions of the proposed [illegible] may be varied according to the job site [illegible]. Changes to the plan must be reviewed and approved by the [illegible] prior to adjustment.

PROJECT ENGINEER

PROPERTY OWNER:
Alex Construction
5512 NE 98th Court, Suite 101
Vancouver, WA 98662
(360)254-0143 (Ph)
(360)254-0260 (Fax)

PERMIT APPLICANT:
Seattle Engineering
10402 W Westview Road
Spokane, WA 99224
(509)455-7888 (Ph)
(509)455-7873 (Fax)

PROJECT SITE CONTACT:
Cindy Owens
(509)456-7346 (Ph)
(509)456-7016 (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.

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

Travis G. Johnson

HOPPE & ASSOCIATES
ENGINEERS & PLANNERS
[illegible]

EXPIRES JUNE 30, 2005

3/29

PROJECT NAME: BIG SKY – PHASE 3

SHEET LISTED: EROSION CONTROL

PROJECT LOCATION: HALLET ROAD & THOMAS MALLEN ROAD

CALL BEFORE YOU DIG 456-8000

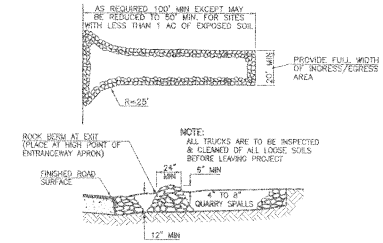
REVISIONS	RECORD	GRADE ESTABLISHMENTS	NAVD88 DATUM	SCALE

MONUMENT CASE, LOCATED IN THE WYE OF BIGGER RD & HATFORD RD, ELEV. 2412.29 NAVD88 DATUM

CURRENT CITY/COUNTY DESIGN STANDARDS ADOPTED 7/01/95

	LAST PROJECT BY:	DATE:
DESIGN	RAJ	2/04
REVISED		
DRAWN	TGJ	3/04
APPROVED	TGJ	3/04

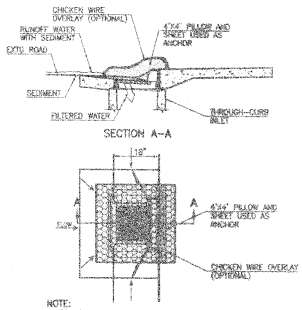
PROTO2002.DWG, REV 11/27/2002



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

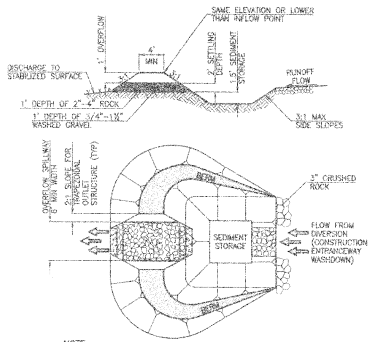
E-3.10 SP NTS



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

THRU CURB INLET SILT BARRIER

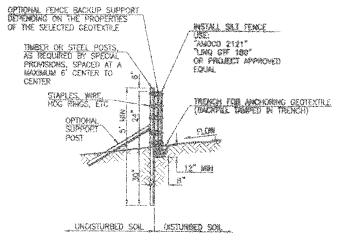
E-3.20 SP NTS



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

TEMPORARY SEDIMENTATION TRAP

E-3.30 SP NTS



EROSION CONTROL FILTER FABRIC FENCE

E-3.40 CF NTS

CONSTRUCTION PLANS
PROJECT # 21181A
DATE ACCEPTED: 4-2-05
PROJECT ENGINEER: [illegible]
PROJECT MANAGER: [illegible]
PERMIT NUMBER: 05-0-0100
PROJECT ENGINEER: [illegible]
FILED TO: [illegible]

PROJECT APPLICANT
Transmountain Mtg
AND CONSTRUCTION

4-2-05
EXPIRES: FEB 14, 2006

4/29

HOPPER DENNIS JELLISON
ENGINEERS & PLANNERS
[illegible]

PROJECT NAME: BIG SKY – PHASE 3

SHEET LIMITS: EROSION CONTROL DETAILS

TYPE OF IMPROVEMENT: DETAILS

CITY PROJECT NUMBER | CITY PLAN NUMBER

PROJECT LIMITS: HALLET ROAD & THOMAS MALLEN ROAD

CALL BEFORE YOU DIG 456-8000

	DATE	BY
DRAWN	9/03	
REVISED		
CHECKED	10/03	1/04
APPROVED	7/04	9/04

SCALE

NAVD88 DATUM

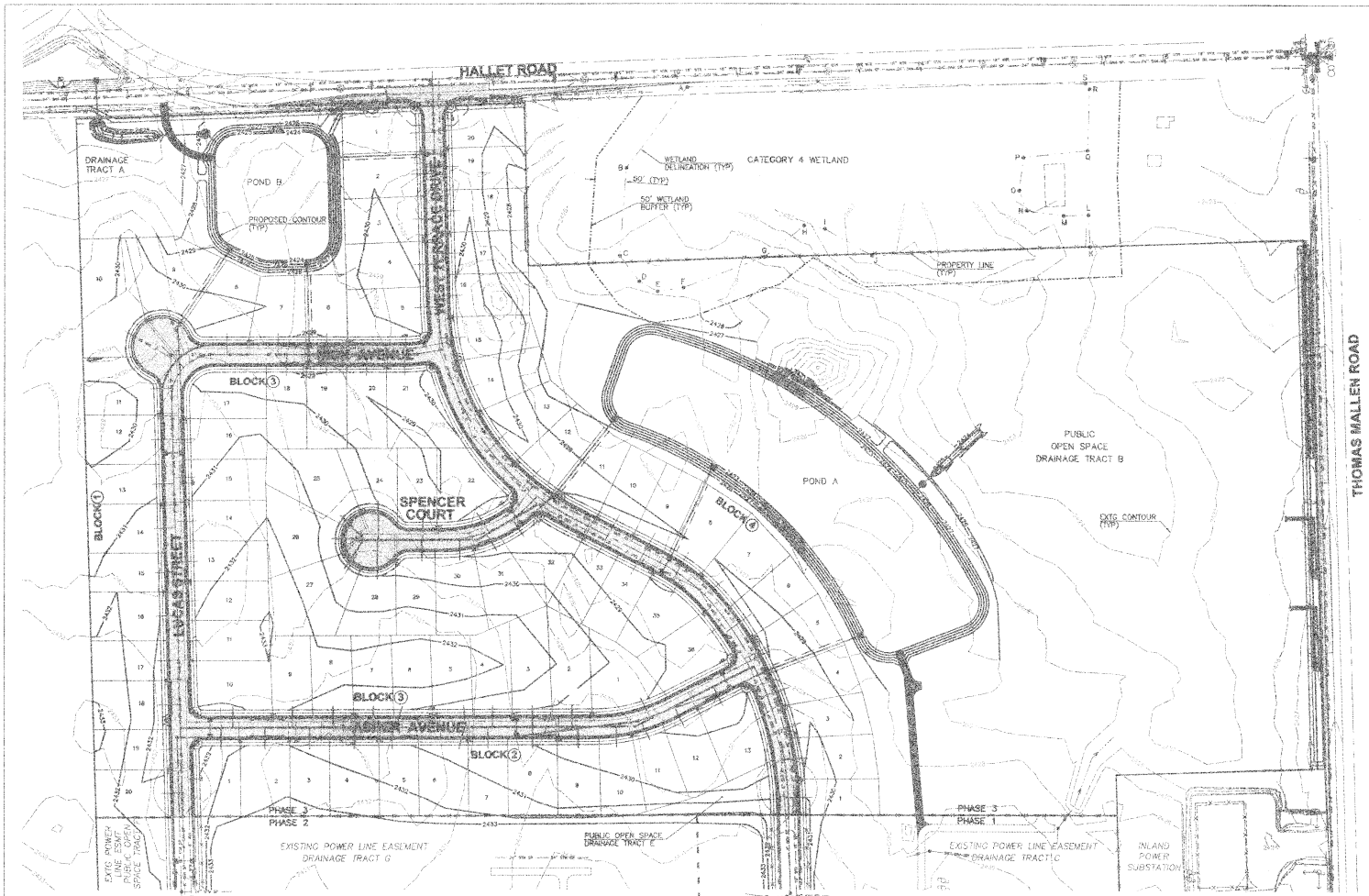
NAVD88 = GSD DNR 8000 - 7000 AS OF JANUARY, 2000 USE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)
BENCH MARK LOCATION A WSDOT 3" BRASS DISK IN MONUMENT CASE LOCATED IN THE INTX OF OCIDER RD & HATCHING RD. ELEV IS 2408.59' NAVD88 DATUM
DESIGNED 2412.25
DATE
CHECKED
DATE
ORIGINAL DRAWING IS 22" X 34" SHEET
IF NOT ONE INCH ON THIS SHEET, ADJUST IN SCALE ACCORDINGLY
HORIZONTAL N/A
VERTICAL N/A
STATE PLANE N/A

CURRENT CITY/COUNTY DESIGN STANDARDS ADOPTED FEB/1995
LAST PROJECT BY | DATE

REVISIONS | RECORD | GRADE ESTABLISHMENTS

PROTO2002.DWG, REV 11/27/2002

P-19788 Eng Bond Drawings



WETLAND LOCATION INFORMATION		
LABEL	STATION	OFFSET
A	10+18.41	17.40' RT
B	9+15.30	145.32' RT
C	9+26.18	289.26' RT
D	9+27.01	291.02' RT
E	9+28.47	293.74' RT
F	9+29.21	295.07' RT
G	11+23.39	298.61' RT
H	12+03.29	299.87' RT
I	12+39.24	297.05' RT
J	13+08.75	293.23' RT
K	16+02.75	290.17' RT
L	16+50.91	293.70' RT
M	16+25.95	293.94' RT
N	16+05.73	293.92' RT
O	16+03.69	293.27' RT
P	13+62.45	290.87' RT
Q	13+06.20	145.44' RT
R	10+74.76	42.27' RT
S	16+00.34	32.67' RT

LINEWORK FROM ADAMS & CLARK INC.
PRELIMINARY PLAN STAMPED FROM HALLET ROAD

EXTG LINETYPE LEGEND	
EXTG 8" SANITARY SEWER PIPE	8" SAN SP
EXTG 8" SANITARY SEWER PIPE	8" SAN SP
EXTG 24" SANITARY SEWER PIPE	24" SAN SP
EXTG 12" STORM SEWER PIPE	12" STM SP
EXTG 12" STORM SEWER PIPE	12" STM SP
EXTG 24" STORM SEWER PIPE	24" STM SP
EXTG 8" WATER PIPE	8" WTR
EXTG 10" WATER PIPE	10" WTR
EXTG 12" WATER PIPE	12" WTR
EXTG 24" WATER PIPE	24" WTR
EXTG ELECTRIC LINE	E E
EXTG FIBER OPTIC LINE	FO FO

PROJECT APPLICANT

Thomas Mallen Homes
A DIVISION OF MALLEN CONSTRUCTION

MONROE COUNTY ENGINEER'S OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT # 2003.3
DATE ACCEPTED: 8-5-04
ACCEPTANCE EXPIRES: 8-5-07
PROJECT LAND MUST BE PUBLIC: YES
PROJECT LAND MUST BE PRIVATE: NO
CONSTRUCTION PLANS MUST BE ACCEPTED WITHIN 24 MONTHS, THIS SHEET AND REVISIONS PRIOR TO ACCEPTANCE AND OBTAIN APPROVAL OF DCE PUBLIC IMPROVEMENT PLAN FOR MAINTENANCE.
CONTACT ENGINEERING (812) 349-2600 DEPARTMENT ENGINEER & SURVEYOR: DAVE
THIS CONSTRUCTION PLAN EXPIRES 2 YEARS FROM DATE ACCEPTED

HOPPER DENNIS JELLISON LLC
ENGINEERS & PLANNERS
3619 13th Street
Bloomington, IN 47403-2217
(812) 824-9401
(812) 824-9551
FAX (812) 824-9767
Internet: hdj@hdjinc.com

INDIANA
DAVID R. JELLISON
10800
STATE OF INDIANA
REGISTERED PROFESSIONAL ENGINEER
EXPIRES FEB 14, 2005

5/29

DATE	BY	PROJ	DESCRIPTION	PLAN	BY	PROJ	DATE	DESIGN	FROM	TO	DATE	FILE NO.
REVISIONS				RECORD					GRADE ESTABLISHMENTS			

COUNCIL ACCEPT DATE

NAVD88 DATUM

BENCH MARK LOCATION: A WSDOT 3" BRASS DISK IN MONUMENT CASE LOCATED IN THE INTX OF GEIGER RD & HAYFORD RD, ELEV IS 2406.42' NAVD88 DATUM

SCALE

CURRENT CITY/COUNTY DESIGN STANDARDS ADOPTED FEB.1995

LAST PROJECT #?		04.55
DRAWN:	RAD	9/04
REVISED:		
CHECKED:	TGJ	9/04
APPROVED:	TGL	9/04

PROJECT NAME: BIG SKY – PHASE 3

SHEET TITLE: GRADING PLAN

PROJECT LOCATE: HALLET ROAD & THOMAS MALLEN ROAD

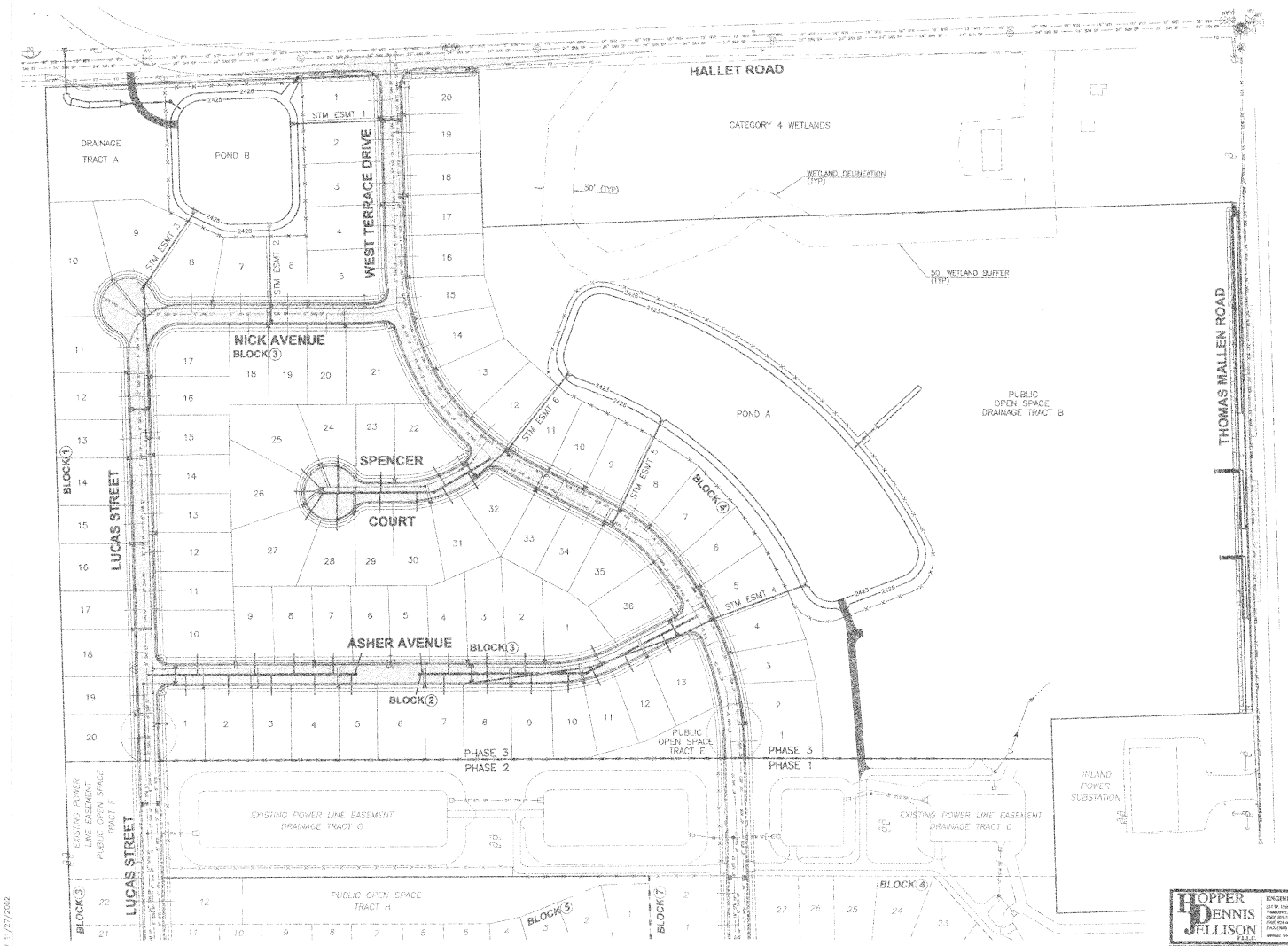
CITY PROJECT NUMBER

CITY PLAN NUMBER

CALL BEFORE YOU DIG 456-8000

P-1 W/S Eng Bond Drainage

PR0102002.DWG REV 11/27/2002



SYMBOL LEGEND	
PROPOSED CATCH BASIN	
PROPOSED STORM MANHOLE	
PROPOSED SANITARY MANHOLE	
PROPOSED WATER METER	
PROPOSED VALVE	
PROPOSED FIRE HYDRANT	

LINETYPE LEGEND	
EXTG 8" SANITARY SEWER PIPE	
EXTG 6" SANITARY SEWER PIPE	
EXTG 10" STORM SEWER PIPE	
EXTG 12" STORM SEWER PIPE	
EXTG 18" STORM SEWER PIPE	
EXTG 24" STORM SEWER PIPE	
EXTG 8" WATER PIPE	
EXTG 10" WATER PIPE	
EXTG 18" WATER PIPE	
EXTG 24" WATER PIPE	
EXTG FIBER OPTIC LINE	
PROPOSED SANITARY SEWER PIPE	
PROPOSED SANITARY LATERAL	
PROPOSED STORM PIPE	
PROPOSED WATER PIPE	
PROPOSED WATER LATERAL	

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: 2-1-1-8
DATE ACCEPTED: 1-5-05
ACCEPTANCE EXPIRES: 6-15-07
PRO-RUT LAKE MILES PUBLIC: 1.43
PRO-RUT LAKE MILES PRIVATE: 0
REFERENCE CONTROL "MONUMENT" ARE REQUIRED PRIOR TO COUNTY ACCEPTANCE FOR REPLACEMENT OF THE MONUMENTS AND MONUMENTS INSTALLED FOR MAINTENANCE
PERMIT REQUIRED (509) 477-3600
NOTIFY PERMIT ENGINEER 5 BUSINESS DAYS PRIOR TO CONSTRUCTION

PROJECT APPLICANT
DATE
DATE OF CONSTRUCTION

STATE OF WASHINGTON
JAMES D. HOPPER
REGISTERED PROFESSIONAL ENGINEER
4-21-05
EXPIRES: FEB 14, 2006

HOPPER DENNIS JELLISON
ENGINEERS & PLANNERS
207 W. Mission Avenue
Spokane, WA 99201-2707
(509) 326-4500
(509) 456-4500
FAX (509) 326-5767
WEBPAGE: WWW.HOPPERDENNIS.COM

6/29

PROJECT NAME: BIG SKY - PHASE 3

SHEET LIMITS: MASTER UTILITY PLAN

TYPE OF IMPROVEMENT

CITY PROJECT NUMBER	CITY PLAN NUMBER
2005040 2005041	DETAIL 7-24-42

PROJECT LIMITS: HALLET ROAD & THOMAS MALLEN ROAD

CALL BEFORE YOU DIG 456-8000

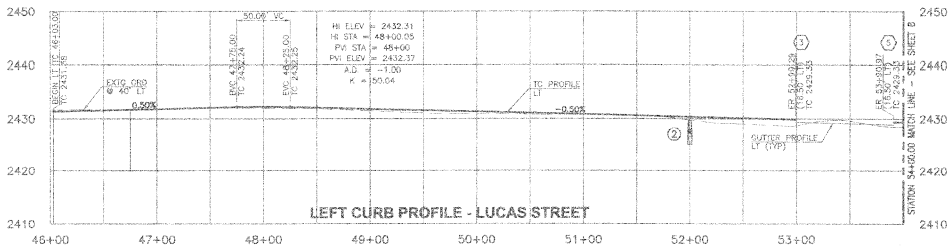
DRAWN		DATE	9/04
CHECKED	TCJ	DATE	9/04
APPROVED	TCJ	DATE	9/04

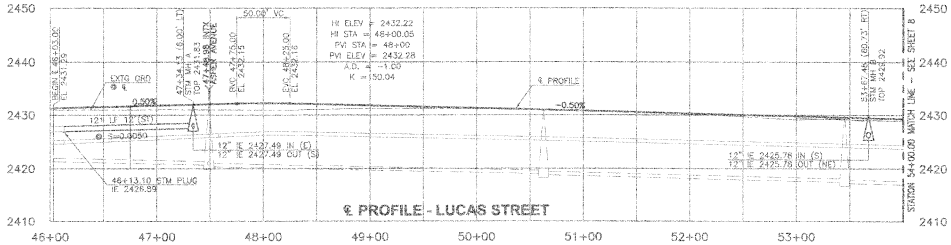
SCALE: HORIZONTAL 1" = 50'; VERTICAL N/A; STRUCTURE ONLY

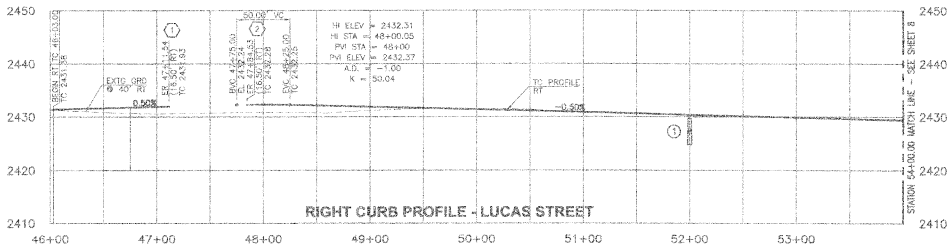
NAVD88 DATUM: BASIS OF BEARINGS: A WSDOT 3" BRASS DISK IN MONUMENT CASE LOCATED IN THE INTX OF CEIGER RD & WAYFORD RD, ELEV. = 2408.45' NAVD88 DATUM

REVISIONS			RECORD			GRADE ESTABLISHMENTS			NAVD88 DATUM
DATE	BY	DESCRIPTION	DATE	BY	DRAWING	FROM	TO	DRAWING	FROM	TO	BY	ORIG. MP	DATE	CST. NO.

P19188 Corp Bond Drawings







CENTERLINE CURVE DATA				
No.	Δ	R	L	T
1	91°35'43"	69	110.31	70.96

CURB RETURN DATA									
No.	Δ	R	L	ELEVATION* (CLOCKWISE)					
				ER	1/4PT	1/2PT	3/4PT	ER	
1	91°27'16"	20	31.92	2431.93	2431.84	2431.73	2431.66	2431.60	
2	93°32'42"	20	30.91	2431.51	2431.64	2431.91	2432.18	2432.28	
3	73°21'49"	30	38.41	2430.29		2429.86		2429.75	
5	73°21'49"	30	38.41	2429.53		2429.59		2429.62	

*ELEVATIONS DO NOT REFLECT DEPRESSIONS FOR CURB RAMPS

CUL-DE-SAC DATA					
No.	SUMMARY		STATION	ANGLE	T.C. ELEV*
4			53+17.41 (41.71' LT)	PRC 88°48'04"	2430.29
	Δ	222°51'28"		90°	2430.53
	R	46.5 ft.		120°	2430.90
	L	180.87 ft.		150°	2431.12
				180°	2431.18
				210°	2431.02
				240°	2430.72
				270°	2430.29
			53+72.84 (41.71' LT)	PRC 291°37'28"	2429.92

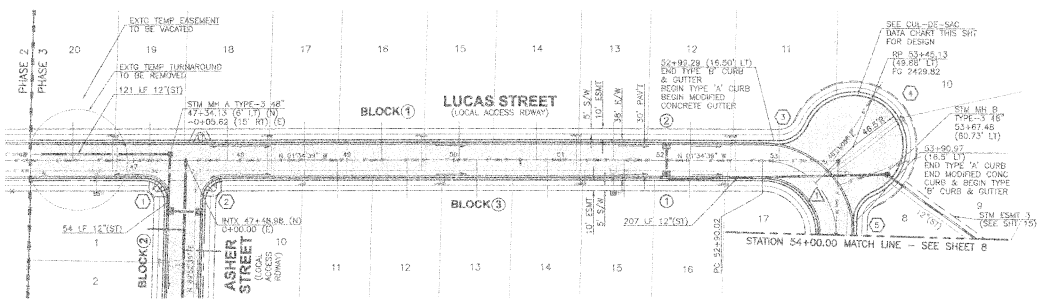
*ELEVATIONS DO NOT REFLECT DEPRESSIONS FOR CURB RAMPS

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT # : BH19.5
DATE ACCEPTED: 3-4-04
ACCEPTANCE EXPIRES: N/A
PROJECT LANE MILES PUBLIC: 0.4
PROJECT LANE MILES PRIVATE: 0
CONSTRUCTION DOCUMENTATION NOT CERTIFIED
RECORD DRAWINGS, "AS-BUILT" AND RELEASED PRIOR TO COUNTY ACCEPTANCE AND ESTABLISHMENT OF THE ROADS AND DRAINAGE FACILITIES FOR MAINTENANCE.
PERMIT REQUIRED! (509) 477-6500
NORTH PERMIT ENGINEER & SURVEYOR TURN PRIOR TO CONSTRUCTION

STORMWATER CATCH BASIN TABLE								
No.	LOCATION	TYPE	RIM ELEV	OUTLET ELEV	INLET ELEV	OUTLET SIZE	LATERAL SLOPE	LATERAL LENGTH
1	52+00.00 (16.5'RT)	**1	2429.65	2426.81	2426.64	12 in.	0.5%	207 ft.
2	52+00.00 (16.5'LT)	**1	2429.63	2427.11	-	10in.	0.5%	33 ft.

**SEE SPOKANE COUNTY STANDARD DETAIL B--7

EXTG LINETYPE LEGEND	
EXTG 6" SANITARY SEWER PIPE	
EXTG 8" SANITARY SEWER PIPE	
EXTG 12" STORM SEWER PIPE	
EXTG 8" WATER PIPE	



PROJECT APPLICANT

CONSTRUCTION

HOPPER DENNIS JELLISON PLLC
ENGINEERS & PLANNERS
Civil W. 13th Street
Kennewick, WA 99336-3627
(509) 582-0282
(509) 735-4028
FAX (509) 582-8711
Internet: www.hdjengineers.com

4-21-05
EXPIRES: FEB 14, 2006

7/29

REVISIONS					RECORD					GRADE ESTABLISHMENTS					NAVD88 DATUM	SCALE
DATE	BY	PRO.	DESCRIPTION	DATE	BY	PRO.	E.C.N.	D.B.K.	FROM	TO	ORD. NO.	DATE	REF. NO.	COUNCIL ACCEPT. DATE	FROM	TO

NAVD88 = ORD. DIM ELEV + (0.13) US DEPARTMENT OF COMMERCE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)
BENCH MARK LOCATION: A WSDOT 3" BRASS DISK IN MONUMENT CASE LOCATED IN THE INTY OF COOPER RD & HAYSFORD RD. ELEV IS 2408.42 NAVD88 DATUM
NAVD88 2412.28
ORD. NO.
CORE NO.
MAP IS ONE INCH OR DEGREE DIAGONAL
MAP IS NOT TO SCALE UNLESS ACCURATELY

PROFILE	
HORIZONTAL	1"=40'
VERTICAL	1"=4'
HORIZONTAL PROFILE (INS.)	1"=40'
VERTICAL PROFILE (INS.)	1"=4'

DRAWN	GPZ	3/04
REVISED		
CHECKED	TCU	3/04
APPROVED	TCU	3/04

PROJECT NAME: BIG SKY -- PHASE 3

SHEET LIMITS: LUCAS STREET 46+03.10 TO 54+00.00

PROJECT LIMITS: HALLET ROAD & THOMAS MALLEN ROAD

CALL BEFORE YOU DIG 456-8000

TYPE OF IMPROVEMENT: STREET & STORM

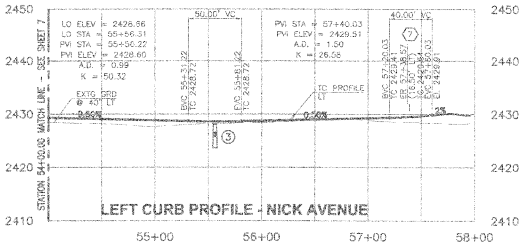
CITY PROJECT NUMBER

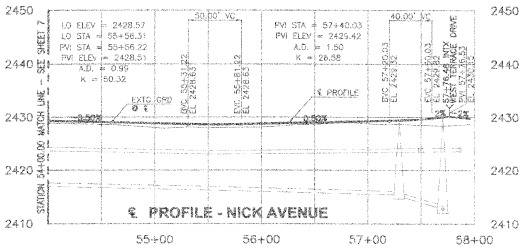
CITY PLAN NUMBER

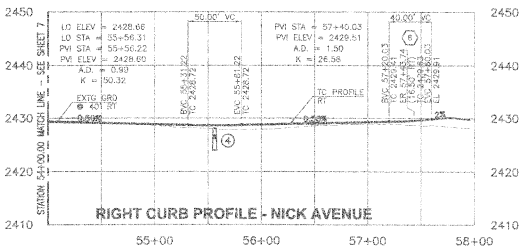
TFR

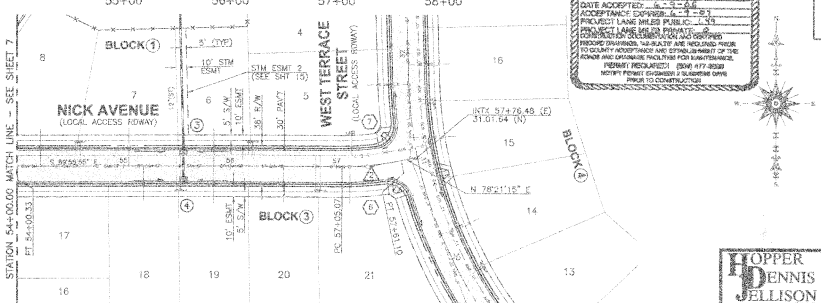
P-19188 Cty Bd Drainage

PHOTO2002.DWG REV 1/21/2002









CENTERLINE CURVE DATA				
No.	Δ	R	L	T
1	11°39'46"	275	55.98	28.06

CURB RETURN DATA								
No.	Δ	R	L	ELEVATION* (CLOCKWISE)				
				ER	1/4PT	1/2PT	3/4PT	ER
6	81°40'43"	20	28.51	2429.63	2429.78	2429.91	2430.18	2430.27
7	89°46'54"	20	31.34	2430.12	2430.02	2429.91	2429.71	2429.57

*ELEVATIONS DO NOT REFLECT DEPRESSIONS FOR CURB RAMPS

STORMWATER CATCH BASIN TABLE								
No.	LOCATION	TYPE	RIM ELEV	OUTLET ELEV	INLET ELEV	OUTLET SIZE	LATERAL SLOPE	LATERAL LENGTH
3	55+56.22 (16.01'LT)	*1	2428.06	2425.68	2425.81	12 in.	0.5%	130 ft.
4	55+56.22 (16.07'RT)	*1	2428.06	2425.97		10 in.	0.5%	35 ft.

*CB TO HAVE THROUGH-CURB INLET FRAME (SEE DETAIL, SHT 27)

BROOME COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: 21-15 B
DATE ACCEPTED: 6-23-06
ACCEPTANCE EXPIRES: 6-23-07
PROJECT LANE MILES PUBLIC: 1.33
PROJECT LANE MILES PRIVATE: 0
CONTRACTOR TO NOTIFY THE COUNTY ENGINEER AND OBTAIN PRIOR TO COUNTY ACCEPTANCE AND ESTABLISHMENT OF THE ROADWAY AND DRAINAGE FACILITIES FOR MAINTENANCE
PERMIT REQUIRED! (607) 778-6030
NOTIFY PERMIT ENGINEER 2 BUSINESS DAYS PRIOR TO CONSTRUCTION

EXTG LINETYPE LEGEND	
EXTG 6" SANITARY SEWER PIPE	
EXTG 8" SANITARY SEWER PIPE	
EXTG 8" WATER PIPE	
EXTG 10" WATER PIPE	

PROJECT APPLICANT

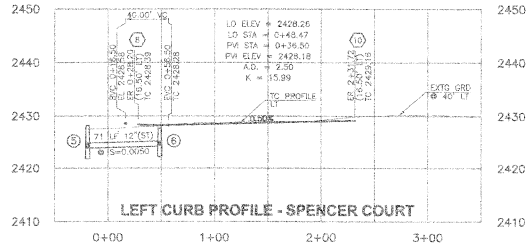
HOPPER DENNIS JELLISON PLLC
ENGINEERS & PLANNERS
114 N. 25th Street
Vestal, NY 13850-2621
(607) 754-9193
(607) 797-4168
FAX: (607) 797-0261
Website: www.hdjengineers.com

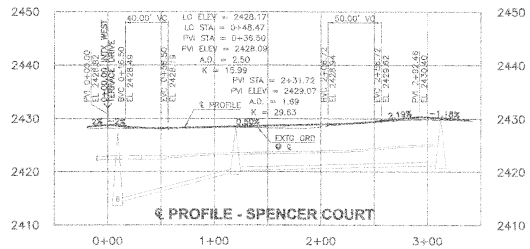
EXPIRES: FEB 14, 2006

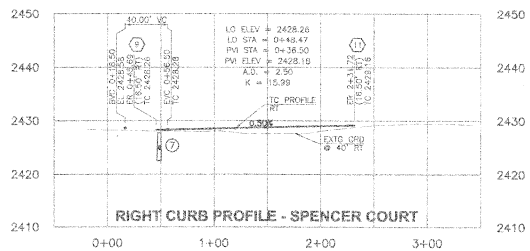
04-21-05

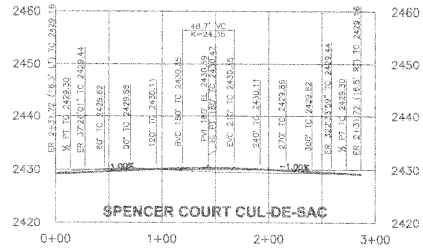
8/29

| REVISIONS | | | | | | | |









CENTERLINE CURVE DATA				
No.	Δ	R	L	T
1	47°52'17"	200	167.10	88.78

CURB RETURN DATA								
No.	Δ	R	L	ELEVATION* (CLOCKWISE)				
				ER	1/4PT	1/2PT	3/4PT	ER
5	74°09'46"	20	25.86	2428.39	2428.54	2428.81	2429.03	2429.12
6	101°09'37"	20	35.28	2429.12	2428.99	2428.68	2428.37	2428.26
10	53°33'59"	30	27.52	2428.44		2429.30		2429.16
11	53°33'59"	30	27.52	2429.16		2429.30		2429.44

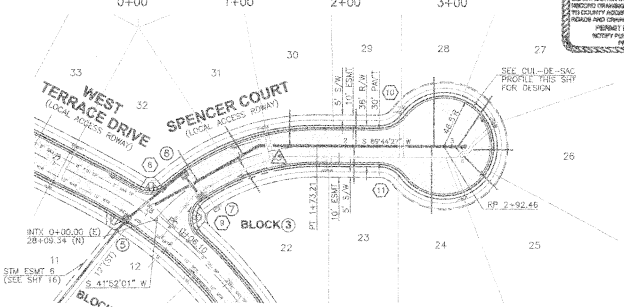
*ELEVATIONS DO NOT REFLECT DEPRESSIONS FOR CURB RAMPS

STORMWATER CATCH BASIN TABLE								
No.	LOCATION	TYPE	RIM ELEV	OUTLET ELEV	INLET ELEV	OUTLET SIZE	LATERAL SLOPE	LATERAL LENGTH
5	-0+19.08 (20'LT)	1	2428.19	2423.82	2423.82	12 in.	0.5%	164 ft.
6	0+48.47 (16.8'LT)	*1	2427.96	2424.18	2424.31	12 in.	0.8%	71 ft.
7	0+48.47 (16.8'RT)	*1	2427.96	2424.47		10 in.	0.5%	33 ft.

*CB TO HAVE THROUGH-CURB INLET FRAME (SEE DETAIL, SHT 27)

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: 0/13/5
DATE ACCEPTED: 6 - 9 - 05
ACCEPTANCE EXPIRES: 6 - 9 - 07
PROJECT LANE MILES PUBLIC: 1.4
PROJECT LANE MILES PRIVATE: 0
CONSTRUCTION COMMENCEMENT NOTIFICATION
RECORD DRAWINGS, "AS-BUILTS" ARE REQUIRED PRIOR TO COUNTY ACCEPTANCE AND SUBMITTED WITHIN 90 DAYS OF THE ROADWAY AND DRAINAGE FACILITIES FOR MAINTENANCE.
PERMIT REQUIRED! (509) 477-3600
NOTIFY PERMIT ENGINEER 2 BUSINESS DAYS PRIOR TO CONSTRUCTION

EXTG LINETYPE LEGEND	
EXTG 8" SANITARY SEWER PIPE	
EXTG 8" SANITARY SEWER PIPE	
EXTG 8" WATER PIPE	
EXTG 10" WATER PIPE	



PROJECT APPLICANT
AVID CONSTRUCTION

HOPPER DENNIS JELLISON PLLC
ENGINEERS & PLANNERS
704 W. 8th AVENUE
SPOKANE, WA. 99204-2607
(509) 624-1475
FAX (509) 623-1697
EXPIRES FEB 14, 2006

4-21-05

9/29

PROJECT NAME: BIG SKY – PHASE 3

SHEET LIMITS: SPENCER COURT 0+00.00 TO 3+42.46

PROJECT LIMITS: HALLET ROAD & THOMAS MALLEN ROAD

TYPE OF IMPROVEMENT: STREET & STORM

CITY PROJECT NUMBER | CITY PLAN NUMBER

CALL BEFORE YOU DIG 456-8000

REVISIONS	RECORD	GRADE ESTABLISHMENTS	NAVD88 DATUM	SCALE

NAVD88 = (OLD DWR ELEV) - 17.10 AS OF JANUARY 2000 USE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)

BENCH MARK LOCATION: A W3107 3" BRASS DISK IN MONUMENT CASE LOCATED IN THE INTX OF GEIGER RD & HALLETT RD. ELEV. IS 2428.42 NAVD88 DATUM

ELEVATION: 2412.28

SPK PCL

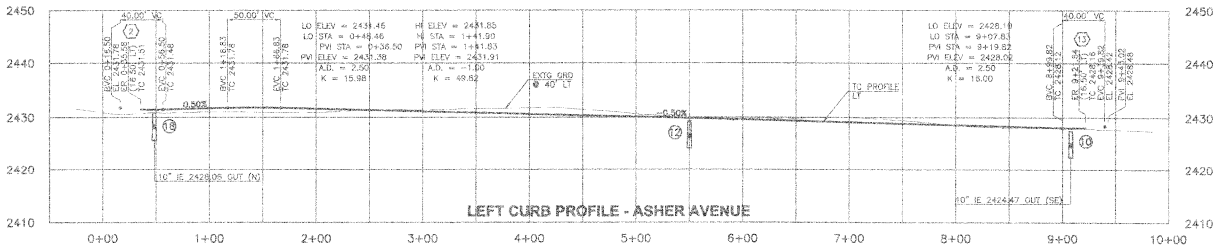
BAR IS ONE INCH ON ORIGINAL DRAWING IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

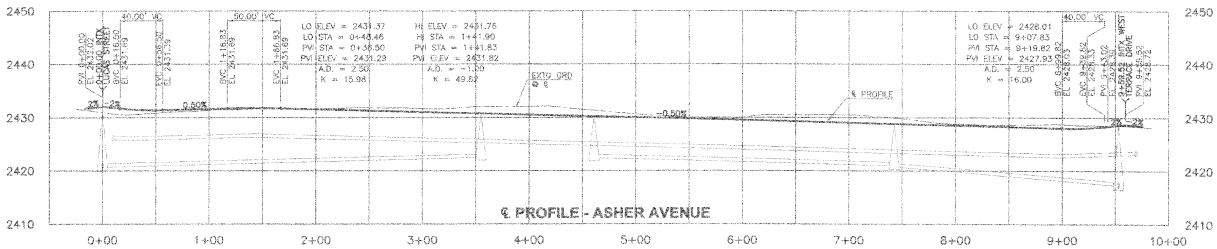
HORIZONTAL 1"=50'
VERTICAL 1"=10'
HORIZ. ONLY
VERTICAL ONLY

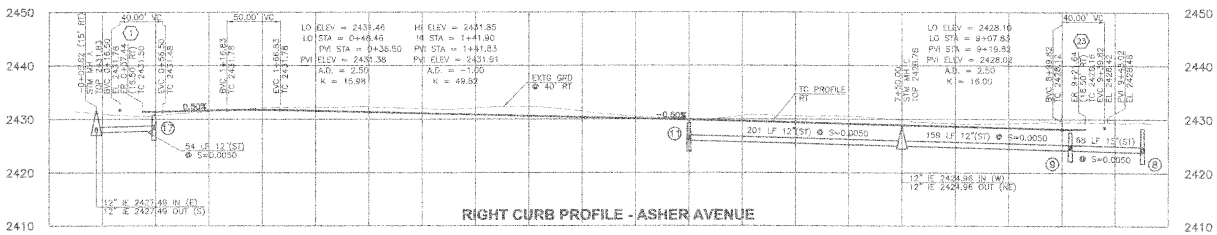
CURRENT CITY/COUNTY DESIGN STANDARDS ADOPTED 1/13/2005

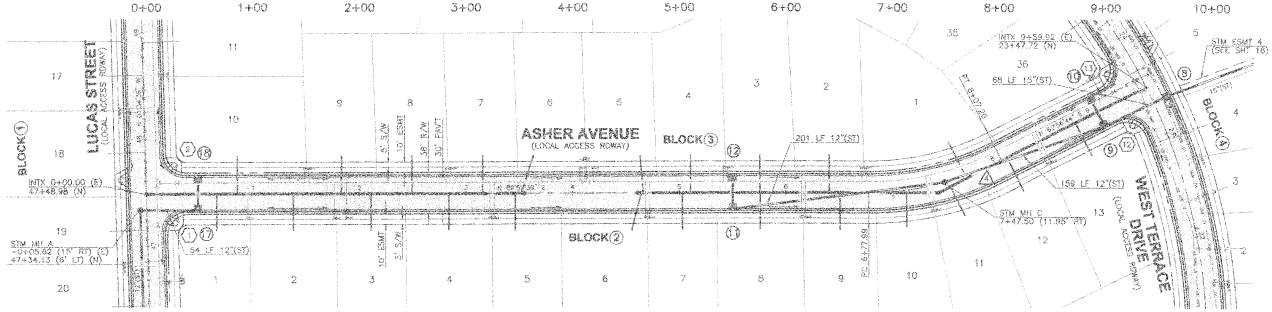
LAST PROJECT BY	DATE
DRAWN	8/04
REVIEWED	
CHECKED	3/04
APPROVED	9/04

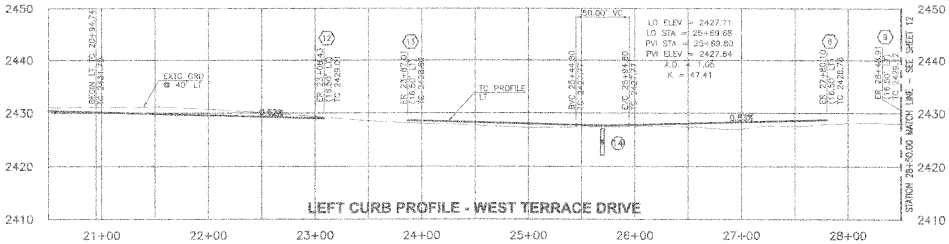
PWCTD2001D.DWG REV. 12/27/2002

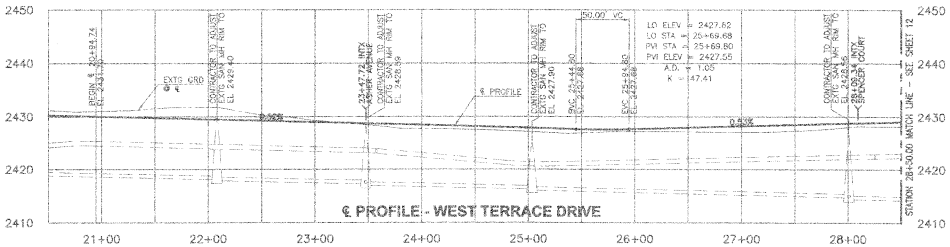


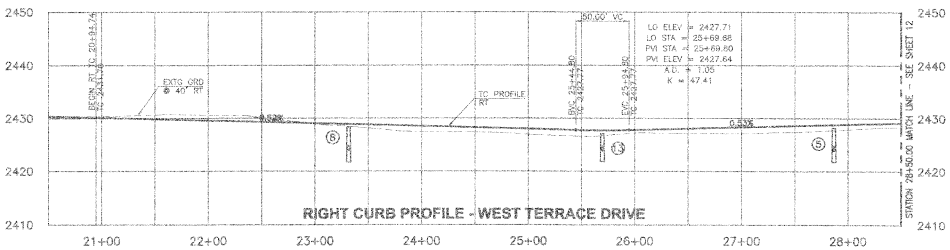


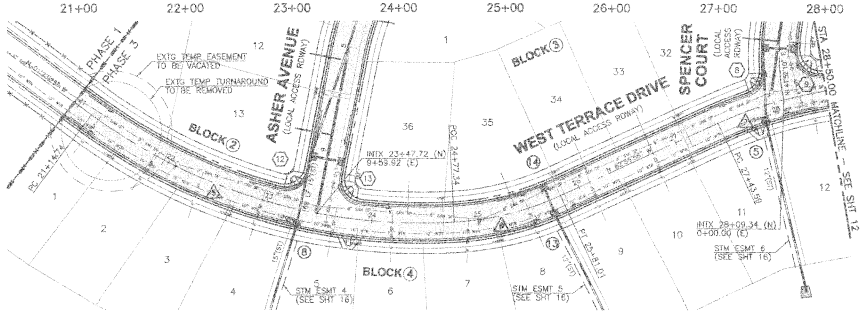



LUCAS STREET
(LOCAL ACCESS ROWAY)
ASHER AVENUE
(LOCAL ACCESS ROWAY)
WEST TERRACE DRIVE
(LOCAL ACCESS ROWAY)
BLOCK 1
BLOCK 2
BLOCK 3
BLOCK 4
INTX 0+00.00 (E)
27+48.98 (N)
INTX 9+59.92 (E)
23+47.72 (N)
STM MH A
+0+05.62 (13' RT) (E)
47+34.12 (8' LT) (N)
STM MH C
7+47.50 (11.98' RT)
STM ESMT A
(SEE SHT 16)
54 LF 12"(ST)
201 LF 12"(ST)
159 LF 12"(ST)
68 LF 15"(ST)
15" (ST)
15" (ST)
15" (









SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC SCHEME ORIGINAL
CONSTRUCTION PLANS
PROJECT # 2-21-6
DATE ACCEPTED: 4-21-05
ACCEPTANCE EXPIRES: 4-21-07
PROJECT LOSS BEGIN PUBLIC: 4-21-07
STORM LOSS BEGIN PUBLIC: 0
CONTRACTOR SHALL NOTIFY THE COUNTY ENGINEER 48 HOURS PRIOR TO COUNTY INSPECTIONS AND DOCUMENTATION OF THE WORK AND SUBMIT RECORDS FOR VERIFICATION.
PERMIT INSPECTION: (509) 477-3600
SPOKE PERMIT INSPECTIONS REQUIRED ONLY FROM 10:00 TO 11:00 A.M.

CENTERLINE CURVE DATA				
No.	Δ	R	L	T
1	35°58'37"	525.11	382.59	198.91
2	21°35'59"	275	103.67	52.46
3	61°21'35"	400	428.38	237.32

CURB RETURN DATA									
No.	Δ	R	L	ELEVATION* (CLOCKWISE)					
				ER	1/4PT	1/2PT	3/4PT	ER	
8	74°05'40"	20	25.86	2428.36	2428.54	2428.51	2428.03	2429.12	
9	101°03'27"	20	35.28	2429.12	2428.99	2428.66	2428.37	2428.26	
12	94°19'43"	20	32.93	2428.16	2428.31	2428.50	2428.59	2429.01	
13	94°19'42"	20	32.93	2428.86	2428.51	2428.39	2428.25	2428.16	

*ELEVATIONS DO NOT REFLECT DEPRESSIONS FOR CURB RAMPS

STORMWATER CATCH BASIN TABLE								
No.	LOCATION	TYPE	RIM ELEV	OUTLET ELEV	INLET ELEV	OUTLET SIZE	LATERAL SLOPE	LATERAL LENGTH
5	27+98.70 (18.5RT)	**1	2428.19	2425.82	2423.82	12 in.	0.5%	164 ft.
6	23+31.82 (15.5RT)	**1	2428.59	2423.83	2423.83	15 in.	0.5%	186 ft.
7	25+69.67 (16.5RT)	*1	2427.11	2423.83	2423.96	12 in.	0.5%	165 ft.
8	25+69.67 (18.5LT)	*1	2427.11	2424.12		10 in.	0.5%	33 ft.

*C8 TO HAVE THROUGH-CURB INLET FRAME (SEE DETAIL, SHT 27)
**SEE SPOKANE COUNTY STANDARD DETAIL B-7

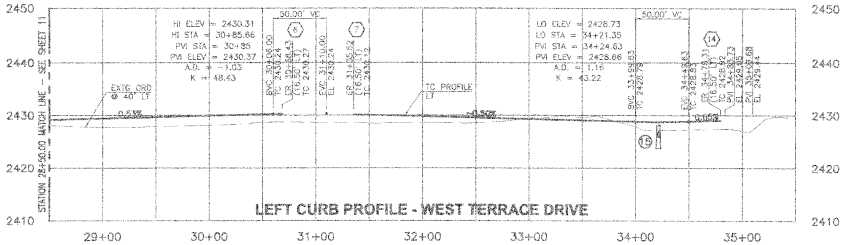
EXTG 6" SANITARY SEWER PIPE	
EXTG 8" SANITARY SEWER PIPE	
EXTG 8" WATER PIPE	
EXTG 10" WATER PIPE	

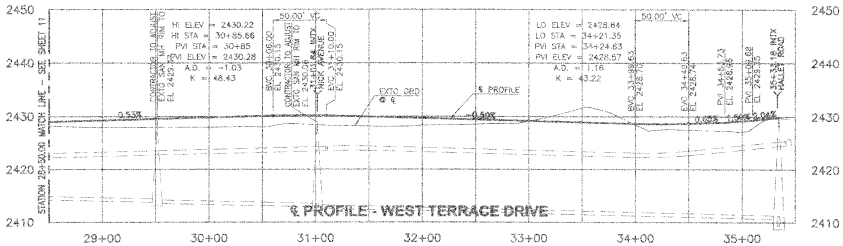
PROJECT APPLICANT
Thomas Construction 4/4/05
AND CONSTRUCTION

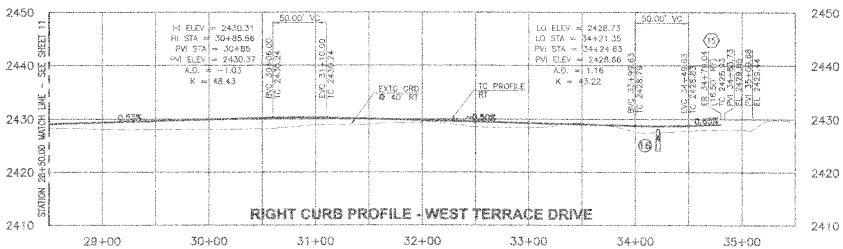
HOPPER DENNIS JELLISON PLLC
ENGINEERS & PLANNERS
114 N. 13th Street
Ysakemah, WA 98902-2907
(509) 457-4400
(509) 457-4407
FAX (509) 457-3387
Internet: www.hdjengineers.com

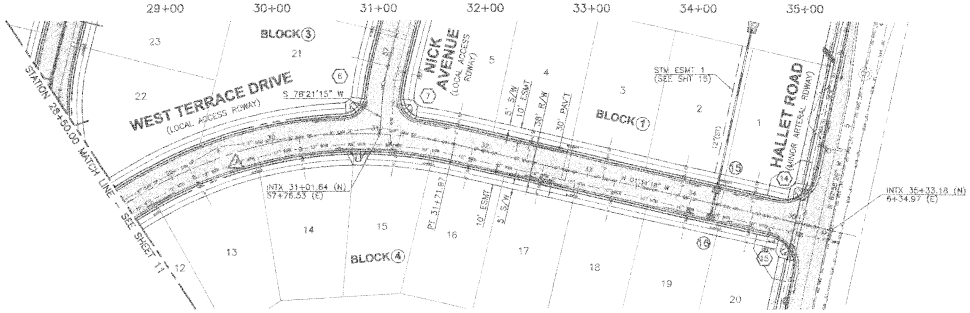
4-21-05
EXPIRES: FEB. 14, 2006
11/29

REVISIONS				RECORD				GRADE ESTABLISHMENTS				NAVD88 DATUM		SCALE	
DATE	BY	PROJ.	DESCRIPTION	DATE	BY	PROJ.	S.P.N.	S.B.N.	FROM	TO	DATE	ELEV.	NAVD88 = OLD (1974 DUTY) - (3.11') 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 GENDER RD. & HALFORD RD. ELEV. EL. 2409.94 NAVD 88 DATUM			









CENTERLINE CURVE DATA				
No.	Δ	R	L	T
1	61°21'03"	400	428.38	237.32

CURB RETURN DATA									
No.	Δ	R	L	ELEVATION* (CLOCKWISE)					
				ER	1/4PT	1/2PT	3/4PT	ER	
5	82°21'06"	20	28.75	2429.53	2429.78	2429.91	2430.19	2430.27	
7	89°18'04"	20	31.17	2430.12	2430.02	2429.91	2429.71	2429.63	
14	90°27'17"	30	47.36	2429.67	2429.56	2429.41	2429.16	2428.93	
15	89°32'43"	30	46.89	2428.93	2429.16	2429.38	2429.53	2429.52	

*ELEVATIONS DO NOT REFLECT DEPRESSIONS FOR CURB RAMPS

STORMWATER CATCH BASIN TABLE								
No.	LOCATION	TYPE	RIM ELEV	OUTLET ELEV	INLET ELEV	OUTLET SIZE	LATERAL SLOPE	LATERAL LENGTH
15	27+80.70 (18.5RT)	*1	2428.13	2425.79	2425.61	12 in.	0.5%	164 ft.
16	34+21.35 (18.5RT)	*1	2428.13	2428.07		10 in.	0.5%	33 ft.

*CB TO HAVE THROUGH-CURB INLET FRAME (SEE DETAIL, SHT 27)

EXTG LINETYPE LEGEND	
EXTG 6" SANITARY SEWER PIPE	
EXTG 8" SANITARY SEWER PIPE	
EXTG 24" SANITARY SEWER PIPE	
EXTG 8" WATER PIPE	
EXTG 12" WATER PIPE	
EXTG 18" WATER PIPE	
EXTG FIBER OPTIC LINE	

PROJECT APPLICANT

AVID CONSTRUCTION

HOPPER DENNIS JELLISON PLLC

ENGINEERS & PLANNERS

214 W. 10th Street
Vancouver, WA 98660-3021
(360) 693-3616
(360) 694-1563
FAX (360) 696-8317
Internet: www.hopperjellison.com

EXPIRES: FEB 14, 2006

4-21-05

12/29

PROJECT NAME: BIG SKY - PHASE 3

SHEET LIMITS: WEST TERRACE DRIVE 28+50.00 TO 35+58.18

PROJECT LIMITS: HALLET ROAD & THOMAS MALLEN ROAD

TYPE OF IMPROVEMENT: STREET & STORM

CITY PROJECT NUMBER | CITY PLAN NUMBER

P-1723

Eng Bad Drawings

CALL BEFORE YOU DIG 456-8000

REVISIONS			RECORD			GRADE ESTABLISHMENTS			NAVD88 DATUM
DATE	BY	TRAN.	DESCRIPTION	DATE	BY	TRAN.	EFFIC. WORK	FROM	TO

BENCH MARK LOCATION: A "BSCDOT 3" BRASS DISK IN MONUMENT CASE LOCATED IN THE INTX OF GEISFIC RD & HAYFORD RD, ELEV IS 2428.49 NAVD28 DATUM

AS OF JANUARY, 2003 USE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)

BUILDER: 2412.28

ESM NO:

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

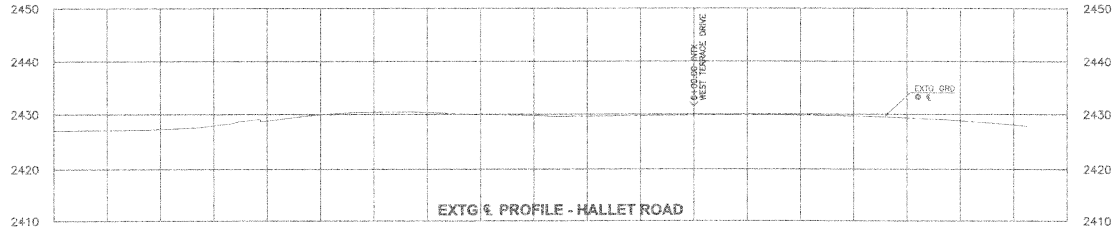
HORIZONTAL 1"=50'
VERTICAL 1"=10'
PROFILE 1"=50'

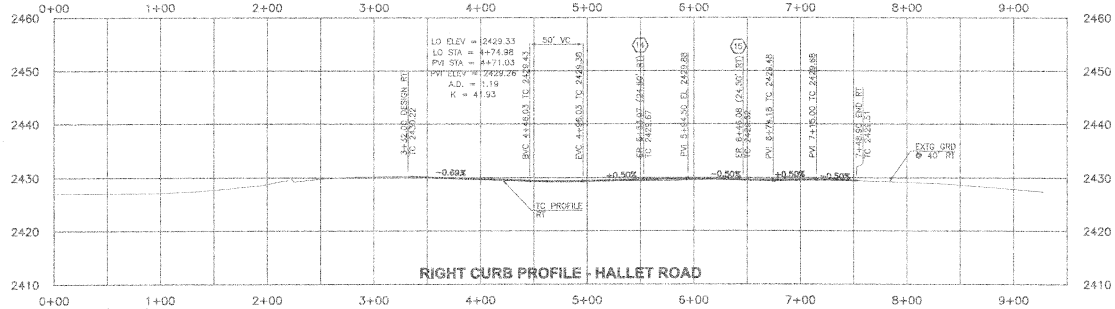
SCALE

CURRENT CITY/COUNTY DESIGN STANDARDS ADOPTED FEB.1995

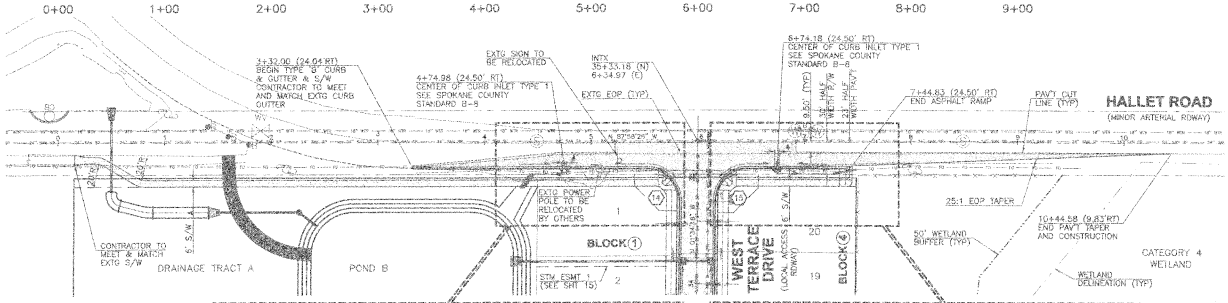
	LAST PROJECT NO.	DATES
DRAWN	CDS	6/04
REVISED		
ENGINEER	RJ	3/04
APPROVED	RG	3/04

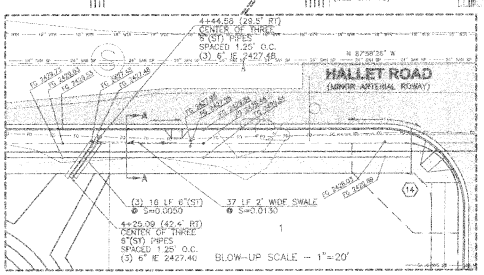
P:\0702\02\02.DWG REV 11/27/2002

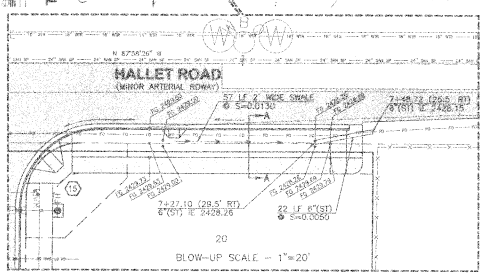




CROSS SECTION A–A
NTS







CURB RETURN DATA								
No.	Δ	R	L	ELEVATION* (CLOCKWISE)				
				ER	1/4PT	1/2PT	3/4PT	ER
14	90°27'17"	30	47.36	2429.67	2429.58	2429.41	2429.16	2428.82
15	89°32'43"	30	46.80	2428.83	2429.16	2429.38	2429.53	2429.62

*ELEVATIONS DO NOT REFLECT DEPRESSIONS FOR CURB RAMPS

EXTG LINETYPE LEGEND	
EXTG 6" SANITARY SEWER PIPE	
EXTG 8" SANITARY SEWER PIPE	
EXTG 24" SANITARY SEWER PIPE	
EXTG 10" WATER PIPE	
EXTG 12" WATER PIPE	
EXTG FIBER OPTIC LINE	

PROJECT APPLICANT
Thomas Mallen Hallet
MBK CONSTRUCTION

HOPPER DENNIS JELLISON PLLC
ENGINEERS & PLANNERS
214 S. Cliff Avenue
Kennewick, WA 99336-2027
(509) 585-3480
(509) 735-4090
FAX (509) 582-8767
email: hdj@hopperdennis.com

STATE OF WASHINGTON
JOHN D. HOPPER
REGISTERED PROFESSIONAL ENGINEER
EXPIRES: FEB 14, 2006
04-21-05

13/29

DATE	BY	PROJ	DESCRIPTION	USE	BY	PROJ	FROM	USE	FROM	TO
REVISIONS				RECORD						

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

BENCH MARK LOCATION: A WSDOT 3" BRASS DISK IN MONUMENT CASE LOCATED IN THE INTX OF GINGER RD & HALFORD RD ELEV. IS 2409.44 NAVD28 DATUM
NUMBER: 2412.28
DATE:
DESC: (NW 1/4)
NAVD88 DATUM

NAVD88 = (2412.28 ELEV) - (3.13) AS OF JANUARY, 2000 USE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)

BASIS OF LINE BEARING ORIGINAL BEARING
HORIZONTAL ROTATION ANGLE
VERTICAL ROTATION ANGLE
PROJECT ANGLE
SCALE
SCALE ADJUSTMENT

CURRENT CITY/COUNTY DESIGN STANDARDS ADOPTED FEB.1995

	LAST PROJECT BY	DATE
DRAWN:	RAD	5/04
RE-VISED:		
CHECKED:	TGL	5/04
APPROVED:	TGL	5/04

PROJECT NAME: BIG SKY – PHASE 3

SHEET CAPTION: HALLET ROAD 0+00.00 TO 10+50.00

TYPE OF IMPROVEMENT: STREET & STORM

CITY PROJECT NUMBER | CITY PLAN NUMBER

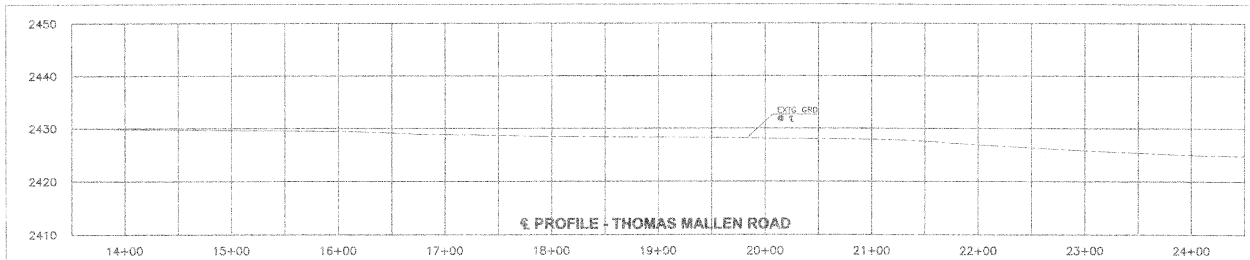
PROJECT CAPTION: HALLET ROAD & THOMAS MALLEN ROAD

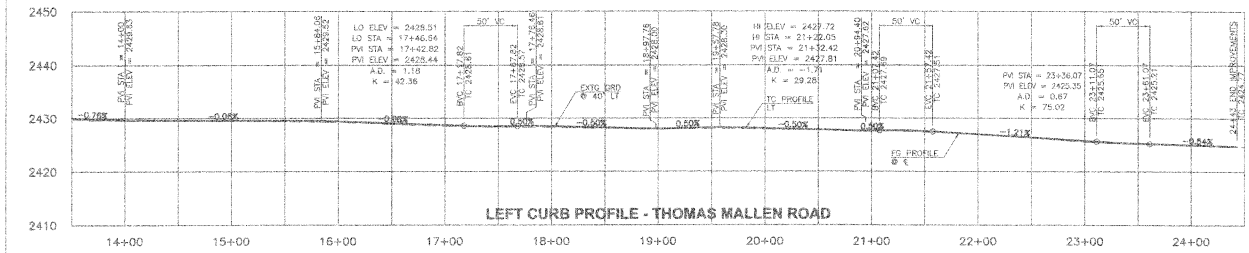
BFP

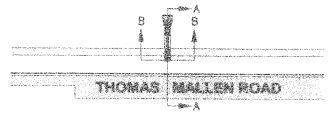
CALL BEFORE YOU DIG 456-8000

P.19/88

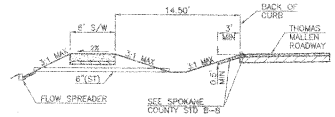
PROTOCOL.DWG REV 11/27/2002



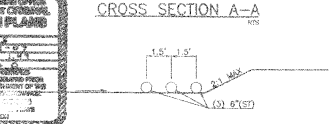




PLAN
NTS

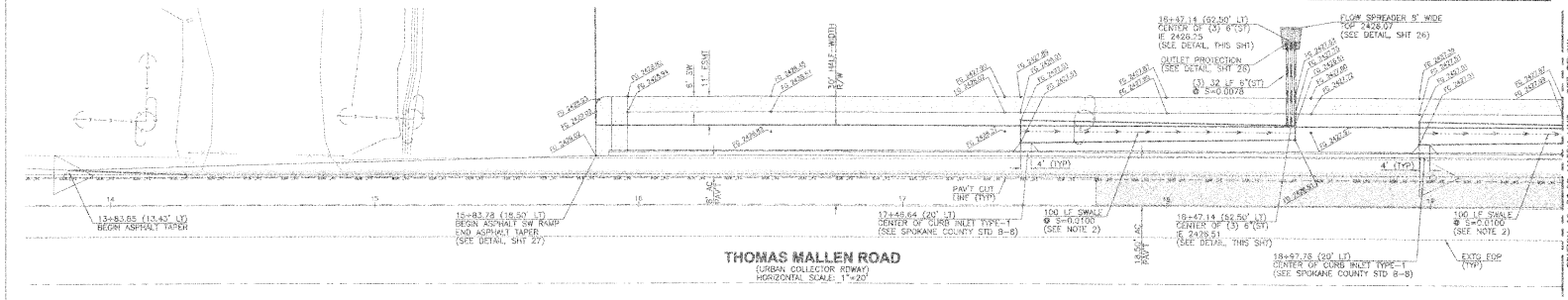


CROSS SECTION A-A
NTS



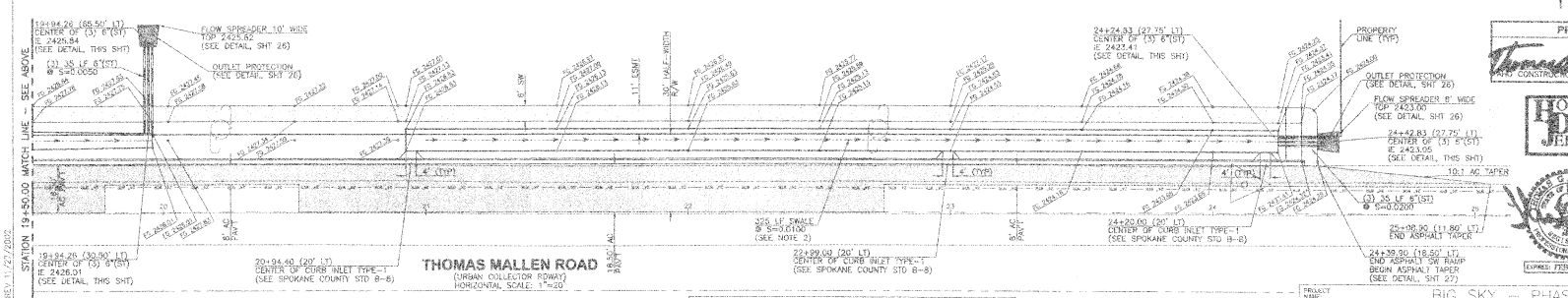
CROSS SECTION B-B
NTS

EXTG LINETYPE LEGEND	
EXTG 24" WATER PIPE	
EXTG ELECTRICAL LINE	



THOMAS MALLEN ROAD
(URBAN COLLECTOR RDWAY)
HORIZONTAL SCALE: 1"=20'

NOTES:
1. SEE SHT 27 FOR THOMAS MALLEN ROAD TYPICAL CROSS SECTION.
2. AT LEAST 2 INCHES OF COMPOST SHALL BE TILLED INTO THE ENTIRE BIOFILTRATION SWALE TO A DEPTH OF 6 INCHES, UNLESS THE NATIVE SOIL HAS AS ORGANIC CONTENT OF 1% OR GREATER.



THOMAS MALLEN ROAD
(URBAN COLLECTOR RDWAY)
HORIZONTAL SCALE: 1"=20'

PROJECT APPLICANT
Timothy Connell Hallet
HALLET CONSTRUCTION

HOPPER DENNIS JELLISON
ENGINEERS & PLANNERS

STATE OF WASHINGTON
TIMOTHY CONNELL HALLET
EXPIRES: FEB 14, 2006

14/29

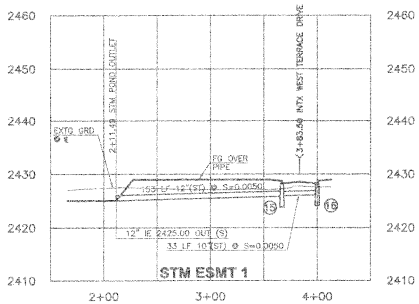
REVISIONS				RECORD				GRADE ESTABLISHMENTS				NAVD88 DATUM	SCALE
DATE	DIV. / PROJ.	DESCRIPTION	DATE	DIV. / PROJ.	STA.	OFFS.	BY	CONTROL POINT DATA	FROM	TO	(MB) NO.	DATE	(PG NO.)

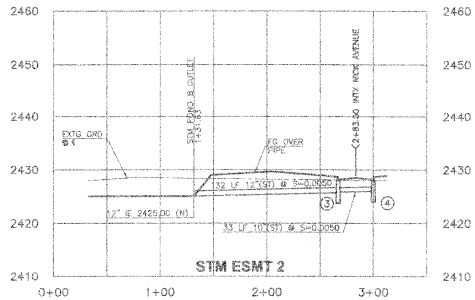
NAVD88 = (OLD DTM DATA) - (0.13) AS OF JANUARY, 2000 USE WORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)
BENCH MARK LOCATION: A WSDOT 3" BRASS DISK IN MONUMENT CASE LOCATED IN THE INTX OF GEIGER RD & HAYFORD RD ELEV IS 2408.49 NAVD88 DATUM
BENCHMARK 2412.28
CONT NO.
PLAN IS ONE INCH ON ORIGINAL DRAWING
HORIZONTAL 1"=20'
VERTICAL 1"=50'
PROFILE ONLY 1"=10'
CURRENT CITY/COUNTY DESIGN STANDARDS ADOPTED PER LINK
LAST PHASE BY | DATE
DRAWN CDC 9/04
REVISED
CHECKED TCI 5/04
APPROVED TCL 2/04

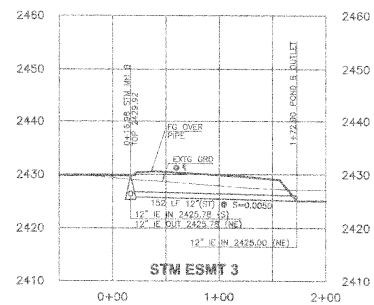
PROJECT NAME: BIG SKY - PHASE 3
SHEET LIMITS: THOMAS MALLEN ROAD 13+83.85 TO 24+48.95
PROJECT LIMITS: HALLET ROAD & THOMAS MALLEN ROAD
TYPE OF IMPROVEMENT: STREET & STORM
CITY PROJECT NUMBER | CITY PLAN NUMBER
BY:
CALL BEFORE YOU DIG 456-8000

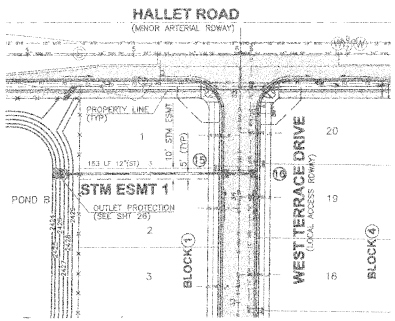
P-19188 Eng and Drainage

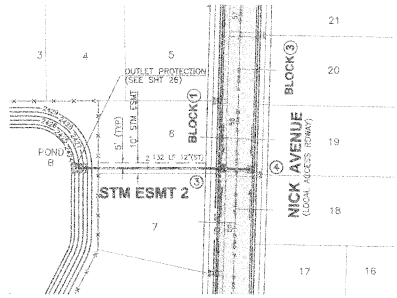
PROTOSSCLE.DWG REV 1/27/2012

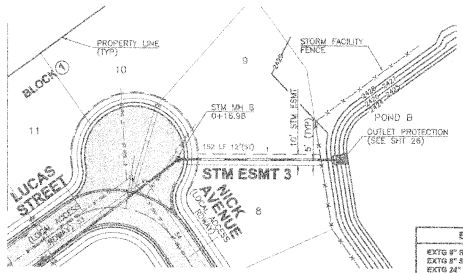












BOONE COUNTY RECORDING OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: B1718
DATE ACCEPTED: 4-2-05
ACCEPTANCE EXPIRES: 4-2-07
PROJECT LEAD PLAN REVIEWER: [illegible]
PROJECT LEAD INSPECTOR: [illegible]
PRIOR TO CONSTRUCTION THE CONTRACTOR MUST OBTAIN PROPER PERMITS FROM THE COUNTY AND OWNERS BUILDING THE IMPROVEMENTS.
PERMIT REQUIRED (573) 474-9882
NOTIFY PERMIT OFFICE 2 BUSINESS DAYS PRIOR TO CONSTRUCTION

EXTG LINETYPE LEGEND

EXTG 8" SANITARY SEWER PIPE	8" SAN SEWER — 8" SAN SEWER
EXTG 8" SANITARY SEWER PIPE	8" SAN SEWER — 8" SAN SEWER
EXTG 24" SANITARY SEWER PIPE	24" SAN SEW — 24" SAN SEW
EXTG 6" WATER PIPE	6" WTR — 6" WTR
EXTG 10" WATER PIPE	10" WTR — 10" WTR
EXTG 16" WATER PIPE	16" WTR — 16" WTR
EXTG FIBER OPTIC LINE	FO — FO

PROJECT APPLICANT

MHO CONSTRUCTION

STORMWATER CATCH BASIN TABLE

No.	LOCATION	TYPE	RIM ELEV	OUTLET ELEV	INLET ELEV	OUTLET SIZE	LATERAL SLOPE	LATERAL LENGTH
3	2+67.00	*1	2428.06	2425.66	2425.61	12 in.	0.5%	132 ft.
4	3+00.00	*1	2428.06	2425.97	-	18 in.	0.5%	33 ft.
15	3+67.00	*1	2428.13	2425.78	2425.91	12 in.	0.5%	153 ft.
16	4+00.00	*1	2428.13	2426.07	-	18 in.	0.5%	33 ft.

*CB TO HAVE THROUGH-CURB INLET FRAME (SEE DETAIL, SHT 27)

HOPPER DENNIS JELLISON PLLC
ENGINEERS & PLANNERS
214 N. Tyler Street
Columbia, MO 65203-2917
(573) 874-7345
(573) 874-8811
FAX (573) 875-5147
Internet: www.hopperdennis.com

MISSOURI STATE OF MISSOURI 2001 STEVEN D. HOPPER NATIONAL
4-2-2005
EXPIRES: FEB 14, 2006

15/29

PROJECT NAME: BIG SKY -- PHASE 3

SHEET LIMITS:

STM ESMT 1	STM ESMT 2	STM ESMT 3
2+11.00 TO 4+00.00	1+31.00 TO 3+00.00	0+00.00 TO 1+73.00

TYPE OF IMPROVEMENTS: STREET & STORM

DATE PROJECT MANAGER | CITY PLAN ACCEPT

PROJECT LIMITS: HALLET ROAD & THOMAS MALLEN ROAD

CALL BEFORE YOU DIG 456-8000

P-17188 Eng Prel Drawing

DATE	BY	REV	DESCRIPTION	DATE	BY	REV	DESCRIPTION	DATE	BY	REV	DESCRIPTION	DATE	BY	REV	DESCRIPTION
REVISIONS				RECORD				GRADE ESTABLISHMENTS							

GROUND ACCEPT. DATE

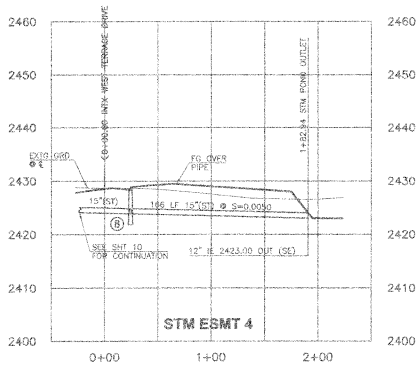
NAVD88 DATUM

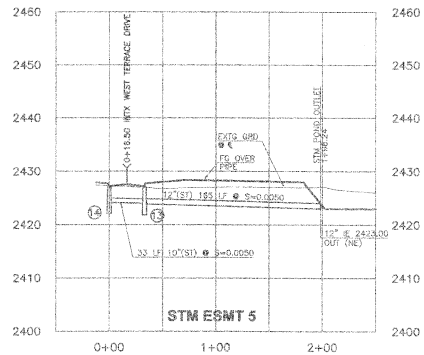
NAVD88 = (ELEV ON V.E.N.D. - 1.03132) / 0.01 (JANUARY, 2002 USE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88))
BENCH MARK LOCATION: A WSDOT 2" BRASS DISK IN MONUMENT CASE LOCATED IN THE INTX OF GEIGER RD & HATTCORD RD. ELEV IS 2,626.42 NAVD88 DATUM.
BENCH MARK ELEV: 2412.28
FIELD BK. NO.
PGS.
RUN IS CIVIL GRID ON ORIGINAL DRAWING
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY
SCALE: HORIZONTAL 1"=50'; VERTICAL 1"=10'; VERTICAL ONLY

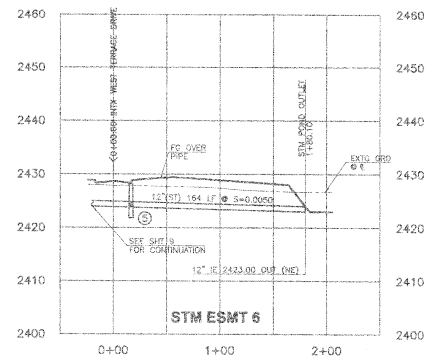
CURRENT CITY/COUNTY DESIGN STANDARDS ADOPTED 7/31/1995

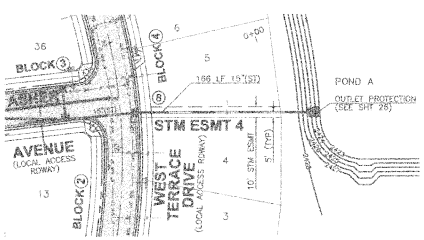
	LAST PROJECT REV	DATE
DRAWN	CTS	5/04
REVIEWED		
CHECKED	TGJ	9/04
APPROVED	TGJ	9/04

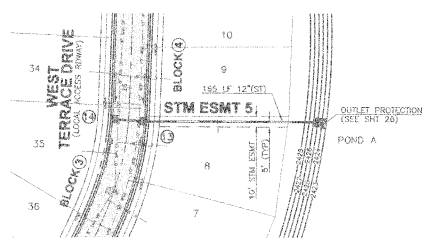
PROJECT DWG. REV 11/21/2002

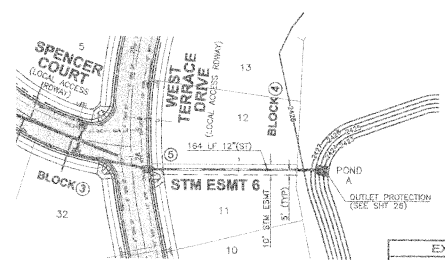












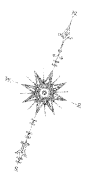
SPOKANE COUNTY ENGINEERING OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: P-1188
DATE ACCEPTED: 4-7-05
ACCEPTANCE EXPIRES: 4-7-07
PROJECT LAND SALES PLAN: N/A
CONSTRUCTION PERMIT: N/A
RECORD DRAWINGS, AS-BUILT AND REQUIRED WORK TO COUNTY ACCEPTANCE ARE SUBSEQUENT OF THE REVIEW AND DRAWING REQUIRED FOR CONSTRUCTION PERMIT REQUESTED (509) 477-6860
NOTIFY PERMIT ENGINEER 2 BUSINESS DAYS PRIOR TO CONSTRUCTION

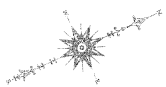
EXTG LINETYPE LEGEND	
EXTG 8" SANITARY SEWER PIPE	8" SAN SEWER
EXTG 8" SANITARY SEWER PIPE	8" SAN SEWER
EXTG 8" WATER PIPE	8" WTR
EXTG 10" WATER PIPE	10" WTR

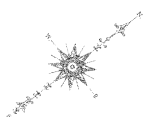
PROJECT APPLICANT

Thomas Bennett 4/5/05

PROJECT MANAGER AND CONSTRUCTION







STORMWATER CATCH BASIN TABLE

No.	LOCATION	TYPE	RIM ELEV	OUTLET ELEV	INLET ELEV	OUTLET SIZE	LATERAL SLOPE	LATERAL LENGTH
5	0+16.96	*1	2426.19	2423.92	2423.62	12 in.	0.5%	164 ft.
6	0+18.50	*1	2426.29	2423.83	2423.83	10 in.	0.5%	166 ft.
15	0+33.38	*1	2427.11	2423.63	2423.96	12 in.	0.5%	165 ft.
14	0+00.00	*1	2427.11	2424.12		10 in.	0.5%	33 ft.

*CB TO HAVE THROUGH-CURB INLET FRAME (SEE DETAIL, SHT 27)
**SEE SPOKANE COUNTY STANDARD DETAIL B-7

HOPPER DENNIS JELLISON
ENGINEERS & PLANNERS
824 W. 14th Street
Vancouver, WA 98660-2921
(360) 695-3636
(503) 694-4267
FAX (360) 695-2367
Internet: www.hopperdennisjellison.com

4-21-05
16/29
EXPIRES: FEB 14, 2006

PROJECT NAME: BIG SKY - PHASE 3

SHEET LIMITS: STM ESMT 4 0+16.00 TO 1+83.00 | STM ESMT 5 0+00.00 TO 1+66.00 | STM ESMT 6 0+16.00 TO 1+80.00

TYPE OF IMPROVEMENT: STREET & STORM

CITY PROJECT NUMBER | CITY PLAN NUMBER

PROJECT LIMITS: HALLET ROAD & THOMAS MALLEN ROAD

CALL BEFORE YOU DIG 456-8000

P-1188 Eng Bond Drawing

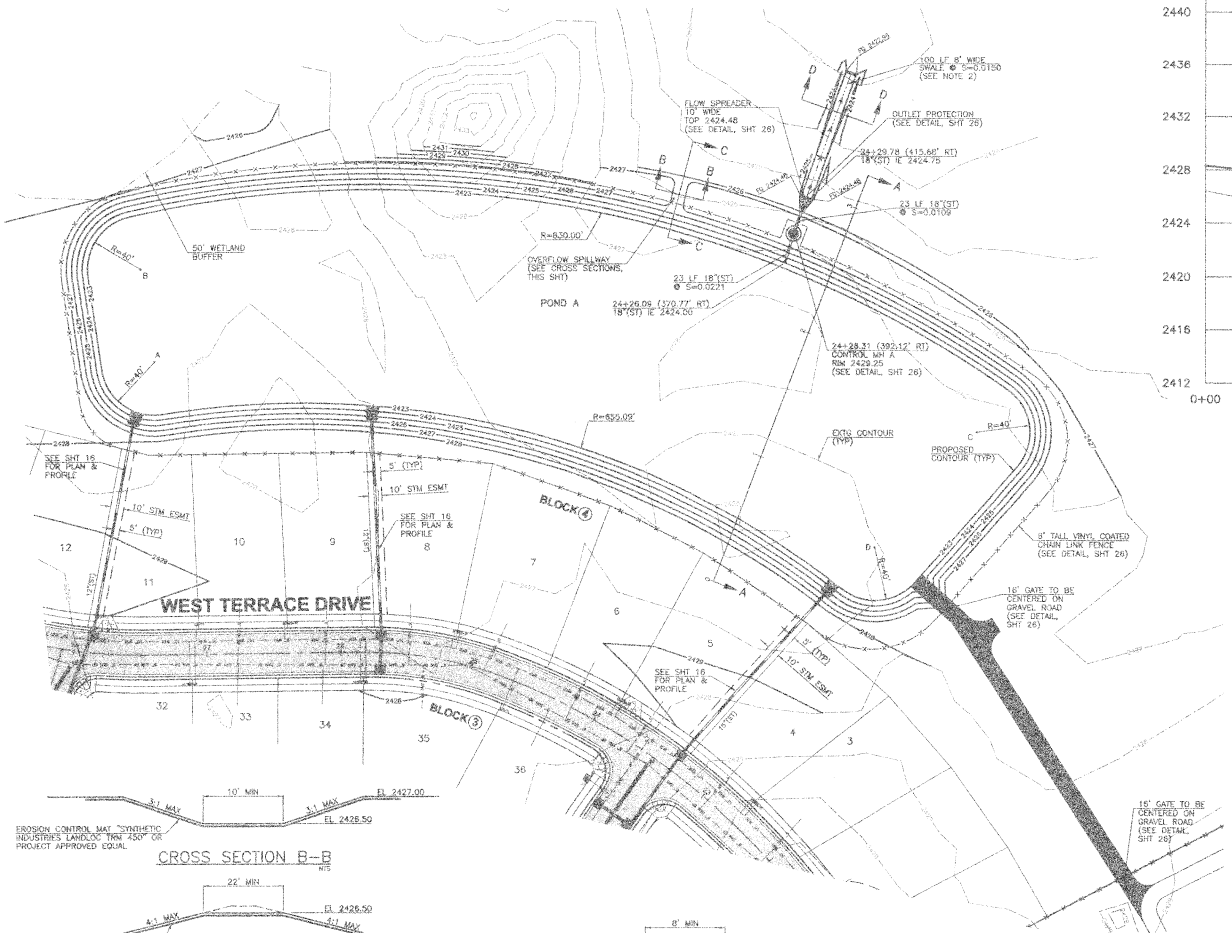
REVISIONS				RECORD				GRADE ESTABLISHMENTS			
DATE	BY	PRV	REFERENCE	DATE	BY	PRV	C.F.M.	U.D.A.	FROM	TO	CHKD ACCEPT DATE

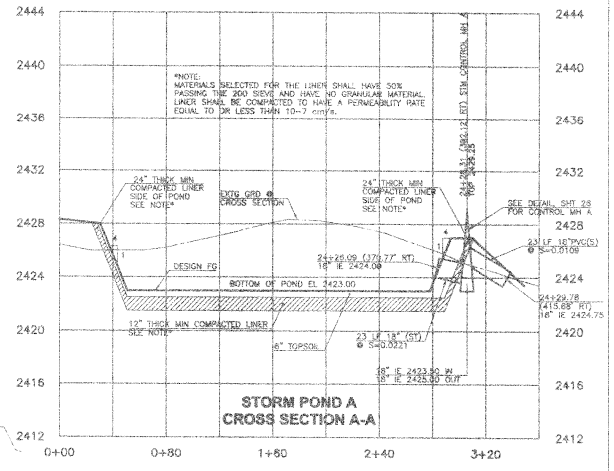
NAVD88	OLD DRM DATUM	DATUM	AS OF JANUARY 2000 THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)
BENCH MARK LOCATION	A WSDOT 3" BRASS DISK IN MONUMENT CAST LOCATED IN THE INTX OF GEIGER RD & HAYS ROD RD, ELEV IS. 2408.49 NAVD88 DATUM		
SCALE 1"=20'	24127.28		
DRN BY			

NAVD88 DATUM	SCALE
BASE IS ORI. ARCH. ON MYLAR SHEETS	HORIZONTAL 1"=40'
ORIGINAL DRAWING	PLAN & PROFILE
RED LINE REVISIONS	VERTICAL 1"=10'
RED SHEET REVISIONS	PROFILE ONLY
SCALE ACCORDINGLY	

CURRENT CITY/COUNTY DESIGN STANDARDS ADOPTED FEB.1992		
LAST PROJECT BY		JAJES
DRAWN	CTS	9/04
REVISED		
CHECKED	TDJ	9/04
APPROVED	TDJ	9/04

PROTOTOOCOLDWG REV 11/27/2002





STORM POND A		
LABEL	*STATION	ELEV
A	27+30.00 (220.32' RT)	2423
B	27+64.83 (250.18' RT)	2423
C	22+13.07 (941.72' RT)	2423
D	23+16.43 (226.57' RT)	2423

*POND A IS STATIONED FROM WEST TERRACE DRIVE CENTERLINE

OFFICIAL PUBLIC ENGINEERING OFFICIAL CONSTRUCTION PLANS
PROJECT # L-8104
DATE APPROVED
PROJECT LABEL
PERMIT EXPIRATION
PERMIT NUMBER (253) 407-6250

EXTG LINETYPE LEGEND	
EXTG 8" SANITARY SEWER PIPE	8" SAN SEW
EXTG 8" SANITARY SEWER PIPE	8" SAN SEW
EXTG 24" SANITARY SEWER PIPE	24" SAN SEW
EXTG 8" WATER PIPE	8" WAT
EXTG 10" WATER PIPE	10" WAT
EXTG 18" WATER PIPE	18" WAT
EXTG FIBER OPTIC LINE	FO

CROSS SECTION B–B
NTS

CROSS SECTION C–C
NTS

NOTE:
OVERLAP MAT IN DIRECTION OF FLOW PER MANUFACTURER'S SPECIFICATIONS.

CROSS SECTION D–D
NTS

NOTES:
1. SEE SHT 25 FOR SEED MIX AND APPLICATION FOR BOTTOM OF POND, SIDE SLOPES OF POND AND SWALE
2. AT LEAST 2 INCHES OF COMPOST SHALL BE TILLED INTO THE ENTIRE BIOFILTRATION SWALE TO A DEPTH OF 6 INCHES, UNLESS THE NATIVE SOIL HAS AN ORGANIC CONTENT OF 1% OR GREATER.

PROJECT APPLICANT
BIG SKY CONSTRUCTION

HOPPER DENNIS JELLISON PLLC
ENGINEERS & PLANNERS
124 W. 13th Street
Vancouver, WA 98660-3921
(360) 693-1103
(360) 694-1968
FAX (360) 695-8767
Internet: www.hopperdennis.com

EXPIRES: FEB 14, 2006
9-2-05

24/29

PROJECT NAME	BIG SKY – PHASE 3
SHEET LABEL	STORM FACILITY
TYPE OF IMPROVEMENT	STORM
CITY PROJECT NUMBER	CITY PLAN NUMBER
PROJECT LIMITS	HALLET ROAD & THOMAS MALLEN ROAD
DRC	P-9188

CALL BEFORE YOU DIG 456-8000

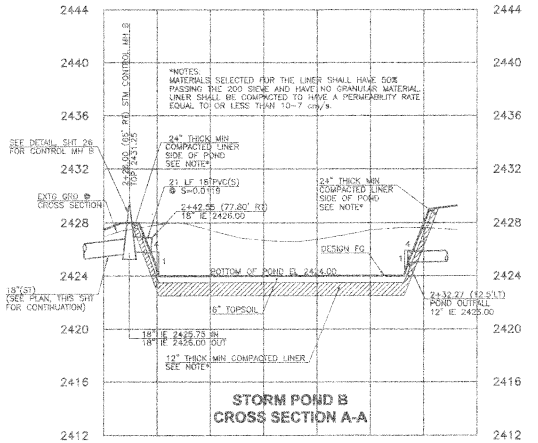
DATE	BY	REV	DESCRIPTION	DATE	BY	REV	EXTG	USR	TRIM	TO	COUNCIL AUDIT DATE	FROM	TO	ORD. NO.	DATE	FILE NO.
REVISIONS				RECORD								GRADE ESTABLISHMENTS				

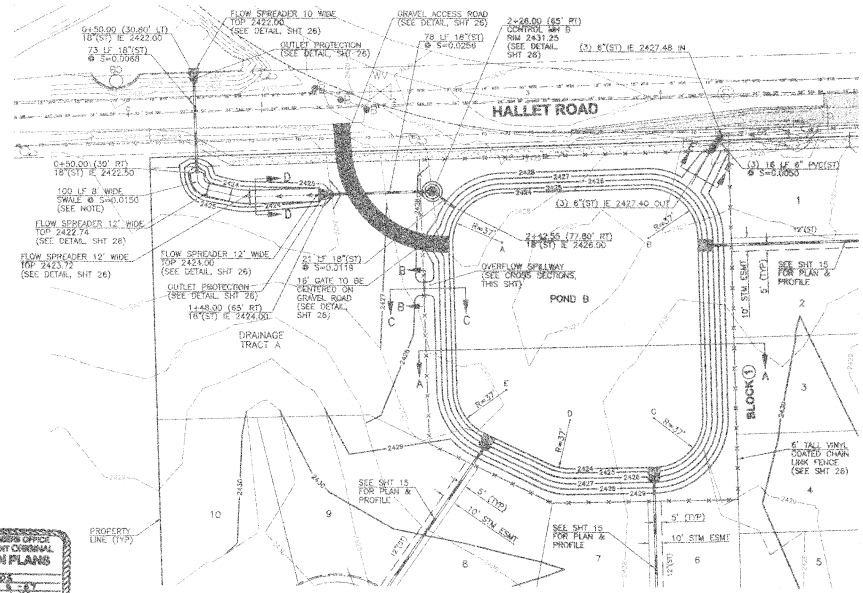
NAVD88 = (OLD DRM ELEV) + (0.013) AS OF JANUARY, 2005 USE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)
BENCH MARK LOCATION: A WSDOT 3" BRASS DISK IN MONUMENT CASE LOCATED IN THE INTX OF GEIGER RD & HARFORD RD ELEV. = 2409.49 NAVD88 DATUM
BENCH MARK ELEV: 2412.29
DWG NO.
NAVD88 DATUM

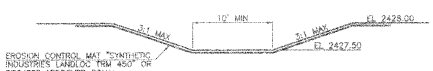
SCALE: HORIZONTAL 1" = 40' VERTICAL 1" = 4'
THIS DRAWING WAS CREATED IN THE SCALE SHOWN. ALWAYS REVIEW ACCORDINGLY

CURRENT CITY/COUNTY DESIGN STANDARDS ADOPTED FEB.1995		
LAST PROJECT BY		DATE
DRAWN	CTS	8/04
REVIEWED		
CHECKED	RDJ	8/04
APPROVED	TGK	8/04

F:\9188\2002\DWG, REV 11/27/2002

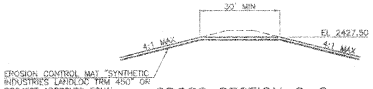






CROSS SECTION B-B
NTS

CROSS SECTION D-D
NTS



CROSS SECTION C-C
NTS

NOTE:
OVERLAP MAT IN DIRECTION OF FLOW PER MANUFACTURER'S SPECIFICATIONS.

CROSS SECTION E-E
NTS

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT CORRIGAN
CONSTRUCTION PLANS
PROJECT #: P-17182
DATE ACCEPTED: 6-23-05
ACCEPTANCE EXPIRES: 6-23-07
PROJECT LARGE MAILER PUBLIC: NO
PROJECT LARGE MAILER PRIVATE: NO
CONSTRUCTION PLANS MUST BE ON SITE AND CURRENT WITH REVISIONS, RE-SUBMITTAL AND REVISIONS PRIOR TO DATE ACCEPTANCE AND ESTABLISHMENT OF THE BOND AND DRAINAGE FACILITIES FOR MAINTENANCE.
PERMIT REQUIRED: (509) 477-3699
ACTIVE PERMIT ENGINEER'S SIGNATURE SHOW PRIOR TO CONSTRUCTION

STORMWATER FACILITY PLANTING

PLANTING MIXTURE SPECIFICATIONS:
FOR BOTTOM & SIDE SLOPES

BOTTOM OF POND	% BY WEIGHT
BLUE WILDRYE	46
NATIVE RED FESCUE	36
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

STORM POND B		
LABEL	*STATION	ELEV
A	2+77.16 (105' RT)	2424
B	3+57.16 (105' RT)	2424
C	3+68.09 (240.33' RT)	2424
D	3+23.31 (239.60' RT)	2424
E	2+76.26 (215.13' RT)	2424

*POND B IS STATIONED FROM HALLET ROAD CENTERLINE

SWALE SEED MIX	% BY WEIGHT
ELKA PERENNAL RYE	10
DURAR HARD FESCUE	20
COVAR SHEEP FESCUE	45
REDBONS CANADIAN BLUEGRASS	15

APPLICATION RATE:
GRASS SEED 80 LBS/ACRE

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

NOTE:
AT LEAST 2 INCHES OF COMPOST SHALL BE TILLED INTO THE ENTIRE BIOFILTRATION SWALE TO A DEPTH OF 6 INCHES, UNLESS THE NATIVE SOIL HAS AN ORGANIC CONTENT OF 1% OR GREATER.

PROJECT APPLICANT
AHO CONSTRUCTION

EXTG LINETYPE LEGEND	
EXTG 6" SANITARY SEWER PIPE	6" SAN SEW
EXTG 8" SANITARY SEWER PIPE	8" SAN SEW
EXTG 24" SANITARY SEWER PIPE	24" SAN SEW
EXTG 8" WATER PIPE	8" WTR
EXTG 10" WATER PIPE	10" WTR
EXTG 18" WATER PIPE	18" WTR
EXTG FIBER OPTIC LINE	FO

HOPPER DENNIS JELLISON PLLC
ENGINEERS & PLANNERS
N.V. Hopper
Dennis R. Jellison
Spokane, WA 99201-2027
(509) 455-4700
(509) 456-4700
FAX (509) 455-4701
Internet: mail@hdjengineers.com

STATE OF WASHINGTON
DENNIS R. JELLISON
EXPIRES: FEB 14, 2006
6-21-05

25/29

REVISIONS			RECORD			GRADE ESTABLISHMENTS			
DATE	BY	PROJ	DESCRIPTION	DATE	BY	PROJ	E/F/S	H-SA	FROM	TO	GRADE ACCEPT DATE	FROM	TO	ORIG. NO.	DATE	PER NO.

NAVD88 DATUM

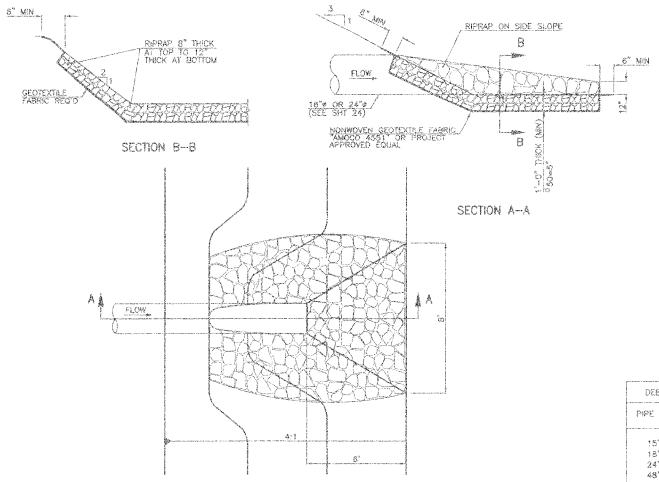
NAVD88 = (SQU ORIG ELEV) - (0.13) (IS OF JANUARY, 2004 USE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88))
BENCH MARK LOCATION: A WSDOT 3" BRASS DISK IN MONUMENT CASE LOCATED IN THE INTX OF GEIGER RD & HAYFORD RD. ELEV = 2408.48' NAVD29 DATUM
ELEVATION: 2412.29
DATE: 1/1/1900
CODE NO.:
PLAN OF ORIG. REPT. ON ORIGINAL DRAWING
DATE: 1/1/1900
SCALE: 1" = 40'
PROFILE: 1" = 4'
PROFILE ONLY
CURRENT CITY/COUNTY DESIGN STANDARDS ADOPTED FEB.1995

	LAST PROJECT BY:	DATE:
DRAWN	KTG	8/04
REVISED		
CHECKED	TDT	8/04
APPROVED	TDT	8/04

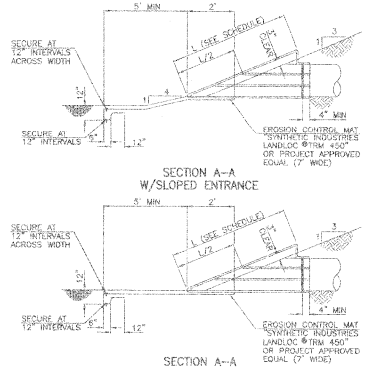
PROJECT NAME: BIG SKY – PHASE 3
SHEET LIMITS: STORM FACILITY
PROJECT LIMITS: HALLET ROAD & THOMAS MALLEN ROAD
TYPE OF IMPROVEMENT: STORM
CITY PROJECT NUMBER
CITY PLAN NUMBER
ERC
P-17182
Corp Bond Drawings

CALL BEFORE YOU DIG 456-8000

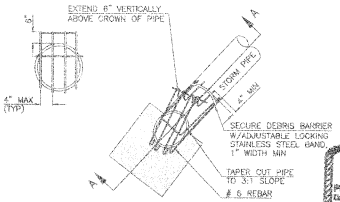
PROTOZOIC.DWG REV 11/27/2002



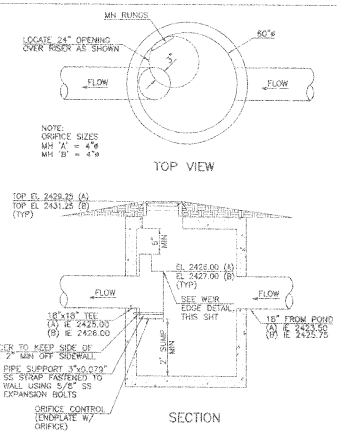
OUTLET PROTECTION DETAIL
NTS



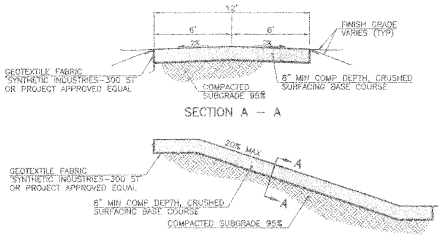
DEBRIS BARRIER SCHEDULE		
PIPE DIA	L	NO. OF BARS REQUIRED
15"	6.0'	4
18"	6.5'	5
24"	8.0'	7
48"	15'	15



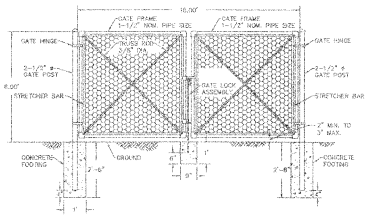
INLET/OUTLET PROTECTION W/DEBRIS BARRIER
NTS

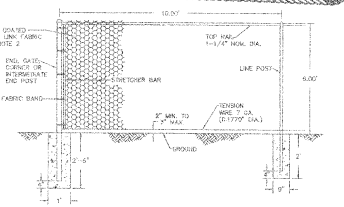


STORM CONTROL MANHOLE 'A' & 'B'
PHASE 3
NTS



GRAVEL ACCESS ROAD
NTS

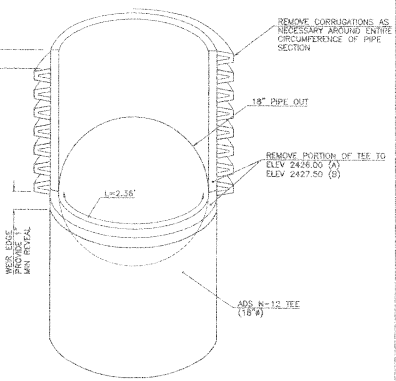




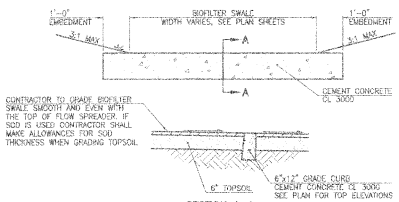
NOTES:

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



WEIR EDGE DETAIL
NTS



FLOW SPREADER DETAIL
NTS

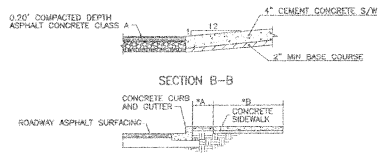
SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: 91-18-A
DATE ACCEPTED: 4-5-95
ACCEPTANCE EXPIRES: 4-5-97
PROJECT LANE MILES PUBLIC: 1.75
PRIVATE: 0
ROADWAY DRAINAGE IMPROVEMENTS AND CERTIFIED MEETING DIMENSIONS WILL BE AS-BUILT AND RECORDED PRIOR TO COUNTY 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

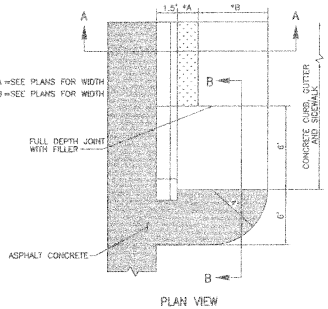
PROJECT APPLICANT
AND CONSTRUCTION
Date 4/7/95

HOPPER DENNIS JELLISON PLLC
ENGINEERS & PLANNERS
301 W. 12th Street
Vancouver, WA 98660-2307
(360) 696-8191
(360) 696-8197
FAX (360) 696-8797
Internet: www.hdjengineers.com

4-21-95
26/29

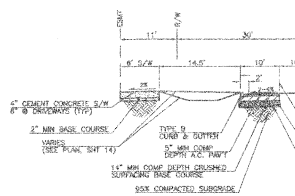
| | | |





ASPHALT SIDEWALK RAMP DETAIL FOR THOMAS MALLEN ROAD & HALLET ROAD

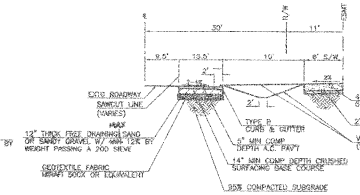
NTS



THOMAS MALLEN ROAD SECTION

NTS

(STATION 15+83.79 TO STATION 17+73.11)
(STATION 19+77.72 TO STATION 20+51.80)
(STATION 22+74.70 TO STATION 24+48.83)

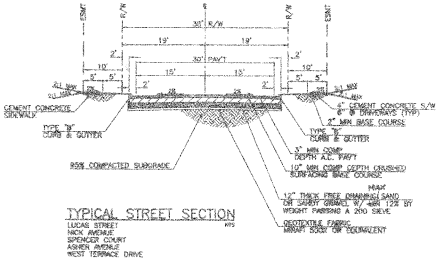


NOTE:
SAWCUT LINE TAPERS FROM STATION 3+31.89 TO STATION 4+71.03 (9.2' RT)
SEE DETAIL ABOVE FOR STATIONING BELOW

HALLET ROAD SECTION

NTS

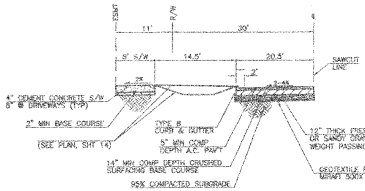
(STATION 4+71.03 TO STATION 5+22.28)
(STATION 6+92.21 TO STATION 7+44.88)



TYPICAL STREET SECTION

NTS

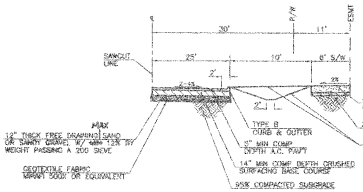
LUCAS STREET
NICK AVENUE
SPENCER COURT
ASHEN AVENUE
WEST TERRACE DRIVE



THOMAS MALLEN ROAD SECTION

NTS

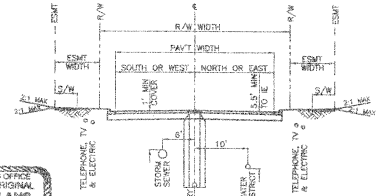
(STATION 17+73.11 TO STATION 19+77.72)
(STATION 20+51.80 TO STATION 22+74.70)



HALLET ROAD SECTION

NTS

(STATION 5+22.28 TO STATION 6+92.21)



TYPICAL UTILITY LOCATIONS

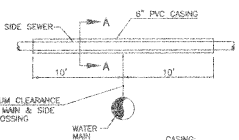
NTS

SPOKANE COUNTY ENGINEERS OFFICE
OFFICIAL PUBLIC DOCUMENT ORIGINAL
CONSTRUCTION PLANS
PROJECT #: P9906
DATE ACCEPTED: 6-7-05
ACCEPTANCE EXPIRES: 6-7-07
PROJECT LANE MILES PUBLIC: 1.1 M
PROJECT LANE MILES PRIVATE: 0
CONTRACTOR MUST NOTIFY ENGINEERS OFFICE WITH DRAWINGS, IN PLACE AND REQUIRED PRIOR TO COUNTY ACCEPTANCE AND ESTABLISHMENT OF THE ROADWAY AND DRAINAGE FACILITIES FOR MAINTENANCE.
PERMIT REQUIRED (509) 477-3600
NOTIFY PERMIT INSPECTOR 2 BUSINESS DAYS PRIOR TO CONSTRUCTION

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)	(DEGS)	(IN)	(IN)	(FT)	(FT)
4	5°	19	21	206	230
8	5°	19	21	206	240
10	5°	19	21	206	240

* ALLOWABLE DEFLECTION SHALL BE 75% OF LISTED MAXIMUM. PER CITY OF SPOKANE

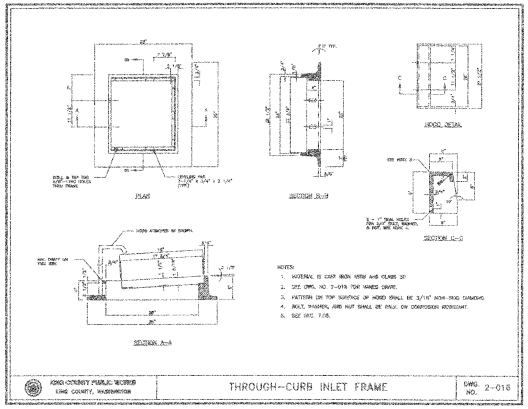
SECTION A-A



CASING:
P.V.C. C-900 20' LENGTH
BOTH ENDS PLUGGED.

TYPICAL SIDE SEWER CROSSING OVER WATERLINE

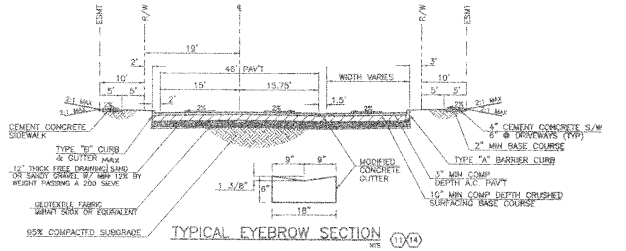
NTS



KING COUNTY PUBLIC WORKS
KING COUNTY, WASHINGTON

THROUGH-CURB INLET FRAME

DWG. NO. 2-018



TYPICAL EYEBROW SECTION (11)(14)

NTS

PROJECT APPLICANT
KTO CONSTRUCTION
6/10/05

HOPPER DENNIS JELLISON P.L.L.C.
ENGINEERS & PLANNERS
EXPIRES NOV 18, 2005
6/9/05

27/29

PROJECT NAME: BIG SKY - PHASE 3
SHEET LIMITS: MISCELLANEOUS DETAILS
TYPE OF IMPROVEMENT: DETAILS
CITY PROJECT NUMBER: 2005040 2005041
CITY PLAN NUMBER: DETAIL 7-24-42
PROJECT LIMITS: HALLET ROAD & THOMAS MALLEN ROAD
CALL BEFORE YOU DIG 456-8000

DATE	BY	PROJ	DESCRIPTION	DATE	BY	PROJ	FILE	SHEET	FROM	TO	CHANGE REQUEST DATE	PAGE	TO	DWG. NO.	DATE	FILE NO.

REVISIONS — RECORD — GRADE ESTABLISHMENTS

BENCH MARK LOCATION: A WEIGHT 3" BRASS DISK IN MONUMENT CASE LOCATED IN THE INTX OF GEIGER RD & HAYFORD RD ELEV = 2408.49' NAVD88 DATUM
NAVD88 DATUM

SCALE

CURRENT CITY/COUNTY DESIGN STANDARDS ADOPTED FEB.1995

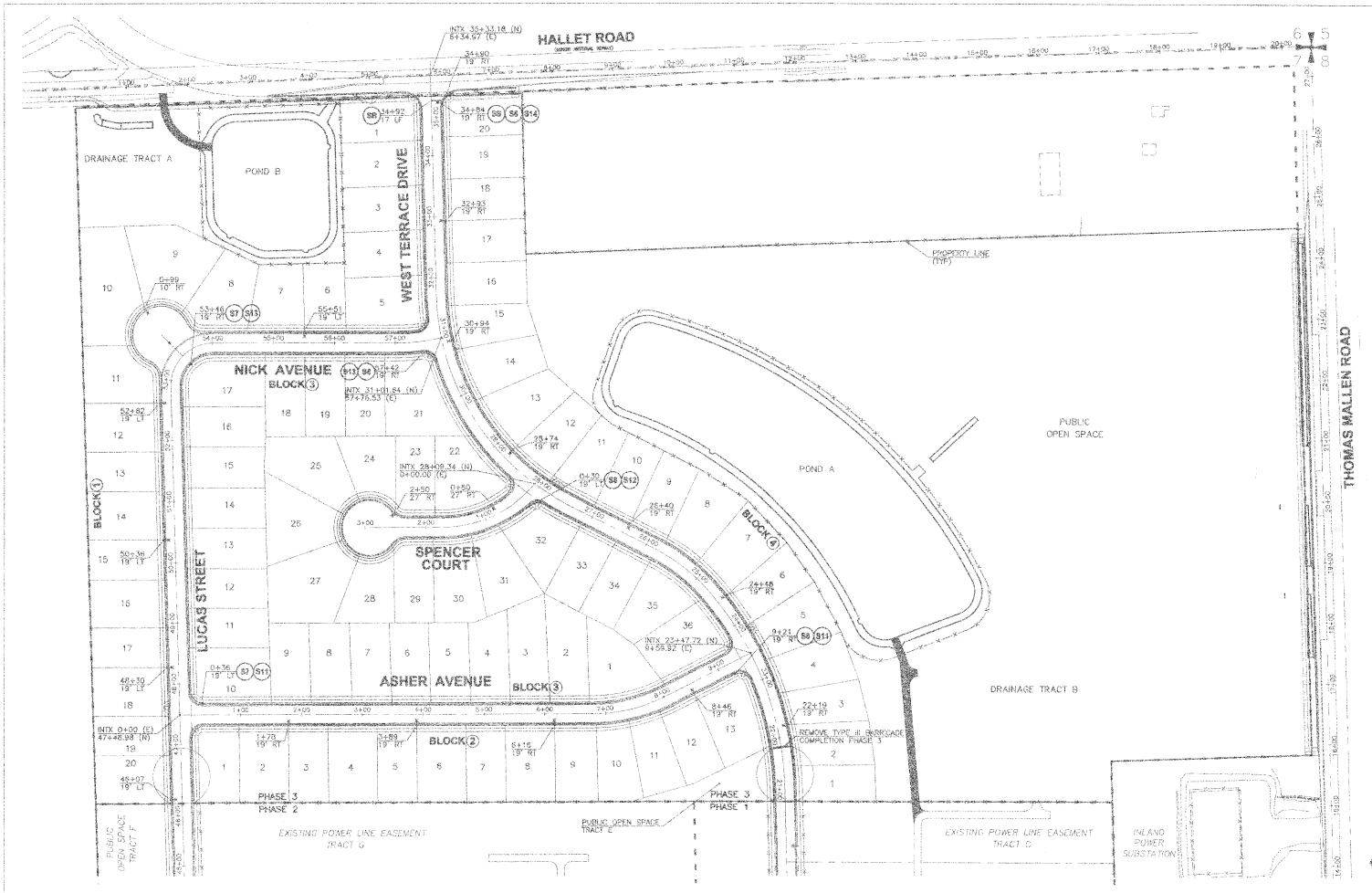
		DATE
DRAWN	GDS	9/04
REVISED		
DESIGNED	TDJ	5/04
APPROVED	TDJ	5/04

SPOKANE

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

P-17188 Eng Dev/Drainage

PRO102002.DWG REV 11/22/2002



LEGEND

S8	PAINTED STOP LINE, 18" WIDE
S6	STOP, MUTCD R1-1
S5	STREET NAME (WEST TERRACE DRIVE) MUTCD D-3
S7	STREET NAME (LUCAS STREET) MUTCD D-3
S11	STREET NAME (ASHER AVENUE) MUTCD D-3
S12	STREET NAME (SPENCER COURT) MUTCD D-3
S13	STREET NAME (NICK AVENUE) MUTCD D-3
S14	STREET NAME (HALLET ROAD) MUTCD D-3
	MUTCD TYPE III BARRICADE
	LUMINAIRE
	STREET SIGN
	PAINT LINE, PER SECTION 8-23 WSDOT 2004 STANDARD SPECIFICATIONS

NOTE:
ALL EXISTING SIGNS WITHIN THE ROAD CONSTRUCTION LIMITS SHALL BE REMOVED AND RELOCATED AS DIRECTED BY THE ENGINEER.

PROJECT APPLICANT
AND CONSTRUCTION

HOPPER DENNIS JELLISON PLLC
ENGINEERS & PLANNERS
(360) 695-3960
(360) 695-6801
FAX: (360) 695-6801
EXPIRES: SEPT. 27, 2006

29/29

REVISIONS				RECORD						GRADE ESTABLISHMENTS			NAVD88 DATUM
DATE	BY	PROJ.	DESCRIPTION	DATE	BY	PROJ.	FLDBK.	FLDBK.	PAGE	COUNTY ADOPT. DATE	FROM	TO	DESIG. NO.	DATE	PAGE NO.

VERTICAL DATUM: (DESIGN FLOW) - 73.73 (IN 9" BRASS DISK IN MONUMENT CASE LOCATED IN THE INTX OF GEIGER RD & HALLORE RD, ELEV IS 240.84' NAVD29 DATUM)
DERIVED WATER DATUM: A WSDOT 3" BRASS DISK IN MONUMENT CASE LOCATED IN THE INTX OF GEIGER RD & HALLORE RD, ELEV IS 240.84' NAVD29 DATUM
NORTHING: 2412.05
EASTING:
GRID NO.
NAD 83 (1991 SOLN) ON VERTICAL DATUM IS ELLIPSOID
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY
SCALE
HORIZONTAL PLANNING NOTES:
VERTICAL PLANNING NOTES: N/A
CHECKED: LDC 9/04
APPROVED: JEW 9/04
LAST PROJECT BY: DATE
DRAWN: CTS 9/04
REVISED:
CHECKED:
APPROVED:

PROJECT NAME: BIG SKY - PHASE 3
SHEET LIMITS: SIGNING, STRIPING & ILLUMINATION
TYPE OF IMPROVEMENT:
CITY PROJECT NUMBER:
CITY PLAN NUMBER:
PROJECT LIMITS: HALLET ROAD & THOMAS MALLEN ROAD
CALL BEFORE YOU DIG 456-8000

PROJ:02002.065 REV 11/27/2012