

FEB 2006

Mr. Scott H. Cornwell
BHP Billiton Petroleum (GOM) Inc.
1360 Post Oak Boulevard
Suite 150
Houston, Texas 77056-3020

Dear Mr. Cornwell:

Reference is made to the following application that has been reviewed by the Minerals Management Service:

Application Type: New Right-of-Way Pipeline
Application Date: August 3, 2005
Supplemental Data Date(s): August 18, 2005, November 1, 2005, November 18, 2005, January 18, 2006

Work Description: Create 200-foot wide right-of-way and install, operate, and maintain the following:

One 6.625-inch O.D. pipeline, 1.32 miles long, to transport gas and condensate from West Cameron Area Block 96 "A" to a 36-inch O.D. subsea tie-in West Cameron Block Area 95.

Assigned Right-of-Way Number: OCS-G26924
Assigned Segment Number: 15284

Pursuant to 43 U.S.C. 1334(e) and 30 CFR 250.1000(d), your application is hereby approved.

Your request to use navigational positioning equipment to comply with Notice to Lessees and Operators No. 98-20, Section IV.B, is hereby approved.

Assigned MAOP (psi): 1349
MAOP Determination : Subsea Segment

Please be reminded that, in accordance with 30 CFR 250.1008(a), you must notify the Regional Supervisor at least 48 hours prior to commencing the installation or relocation of a pipeline or conducting a pressure test on the pipeline. Commencement notification(s) should be faxed to (504) 736-2408.

In accordance with 30 CFR 250.1008 (b), you are reminded to submit a report to the Regional Supervisor within 90 days after completion of any pipeline construction. Also in accordance with a Letter to Lessees dated April 18, 1991, a copy of the as-built plat(s) must be submitted to the National Ocean Service, N/CS26 Room 7317, 1315 E-W Highway, Silver Spring, MD 20910-3282

Sincerely,

a. a.

Donald C. Howard
Regional Supervisor
Field Operations

bcc: 1502-01 Segment No. 15284, ROW OCS-G26924 (MS 5232)
1502-01 ROW OCS-G26924 (Microfilm) (MS 5033)
MS 5271 Lake Charles District w/flow schematic
MS 5232 Cartography

Komiskey, Elizabeth

From: Valerie Land [Valerie.Land@jccteam.com]
Sent: Monday, February 13, 2006 2:11 PM
To: Komiskey, Elizabeth
Subject: ROW OCS-G 26924, Segment No. 15284, BHP Billiton Petroleum
Importance: High
Attachments: BHP.pdf

Please find attached to this e-mail a scanned copy of the signed letter of no-objection from Stingray Pipeline for our tie-in to their pipeline.

-----Original Message-----

From: Steve.Merritt@enbridge.com [mailto:Steve.Merritt@enbridge.com]
Sent: Monday, February 13, 2006 2:05 PM
To: Valerie Land
Subject: Fw: BHP

Valerie,

Pls acknowledge if you receive this email.

I believe this was never sent and that is why you have never seen this before.

Steve Merritt
Director
Commercial Development - Western GOM
Enbridge Offshore Pipelines, L.L.C.
1100 Louisiana, Suite 3300
Houston, TX 77002
Tel: 832.214.5740
Fax: 713.821.3313
Cell: 713.823.3704
Steve.Merritt@Enbridge.com



----- Forwarded by Steve Merritt/US/Enbridge on 02/13/2006 02:06 PM -----

Rebecca E Ratkiewicz/US/Enbridge

To Steve Merritt/US/Enbridge@LPL

cc

02/13/2006 02:02 PM

Subject BHP

Rebecca Ratkiewicz

Enbridge Energy Company, Inc.

1100 Louisiana, Suite 3300

2/17/2006

Houston, Texas 77002

Phone: 713/821-2082

Fax: 713/821-3313 * * * * * IMPORTANT NOTICE * * * * *
* * * * * Unless otherwise indicated or obvious from the nature of the transmittal, the information contained in this email message is CONFIDENTIAL information intended for the use of the individual or entity named herein. If the reader of this message is not the intended recipient, or the employee or agent responsible to deliver it to the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you have received this communication in error, please immediately notify the sender using the above contact information or by return email and delete this message and any copies from your computer system. Thank you.

Visit our new website at www.jccteam.com

2/17/2006



BHP Billiton Petroleum (GOM) Inc.
1360 Post Oak Boulevard Suite 150
Houston Texas 77056 3070 USA
Tel 662 902 8274 Fax 661 8400
www.bhpbilliton.com

August 9, 2005

Fedex Tracking No. 662902827478

Stingray Pipeline Company, L.L.C.
1100 Louisiana ; Suite 3300
Houston, Texas 77002

Gentlemen:

This letter serves as notification that BHP Billiton Petroleum (Americas) Inc. is in the process of submitting an application to Minerals Management Service for the installation of a 6" gas and condensate pipeline to be installed from Platform "A" in West Cameron Block 96 to a subsea tie-in point on your existing 36" pipeline (Segment No. 3507) in West Cameron Block 95.

In accordance with MMS requirements, we are enclosing a complete copy of the subject application for your review.

Please indicate your consent to this proposed crossing by signing this letter in the space provided below and returning a signed copy to the attention of our regulatory representative, Valerie Land, J. Connor Consulting, Inc., 16225 Park Ten Place, Suite 700, Houston, Texas 77084.

Your cooperation in this matter would be greatly appreciated.

Sincerely,

Ron D. Campbell / vdl

Ron D. Campbell
Regulatory & Administrative Manager

RDC:VDL

CONSENT GRANTED THIS 16th DAY OF August, 2005.

By: Allen M. Schneider

Title: Vice Chairman - Operations
Stingray Pipeline Company, L.L.C.

Komiskey, Elizabeth

From: Valerie Land [Valerie.Land@jccteam.com]
Sent: Wednesday, January 18, 2006 3:26 PM
To: Komiskey, Elizabeth
Subject: Segment No. 15284, ROW OCS-G 26924
Importance: High
Attachments: DOC060118-018.pdf

Elizabeth,

As discussed earlier today, please find attached the Fed-x proof of delivery for the letter going to Newfield Exploration Company. Additionally, in this same attachment, please find the detail of the subsea tie-in. In the upper left hand corner it shows the new 6" line crossing over Newfield's 6" existing pipeline (Segment No. 15105).

I talked to Ron Campbell at BHP regarding how soon he needed the approval for this pipeline. He told me that it can wait until Friday, no problem.

If you need anything further, please contact me at (281) 578-3388 or by my e-mail address valerie.land@jccteam.com.

Sincerely,

Valerie Land

Regulatory Consultant
J. Connor Consulting, Inc.
16225 Park Ten Boulevard
Houston, Texas 77084
(281) 578-3388 Office
(281) 578-8895 Fax
(281) 731-2584 Cell

Visit our new website at www.jccteam.com

BEST AVAILABLE COPY

United States Home

Information Center | Customer Support | Site
Map

Search

Go!

Package / Envelope Services

Office / Point Services

Freight services

Express services

Ship

Track

Manage My Account

International Tools

Track Shipments
Detailed Results

Printable Version Quick Help

Tracking number 662902827456
Signed for by D.OLIVER
Ship date Aug 9, 2005
Delivery date Aug 10, 2005 9:01 AM
Status Delivered

Reference 02100/WC96/APPL.ROW
P/L
Destination HOUSTON, TX
Service type FedEx 2Day Service

Wrong Address?
Reduce future mistakes by using
FedEx Address Checker.

Shipping Freight?
FedEx has LTL, air freight,
surface and air expedited freight,
multi piece package deliveries,
and ocean freight.

Date/Time	Activity	Location	Details
Aug 10, 2005	9:01 AM Delivered	HOUSTON, TX	

Signature proof

Track more shipments

Need to track a
FedEx SmartPost
shipment?



Email your detailed tracking results (optional)

Enter your email, submit up to three email addresses (separated by commas), add your
message (optional), and click **Send email**.

Add a message to this email.

From

To

Send email

[Global Home](#) | [Service Info](#) | [About FedEx](#) | [Investor Relations](#) | [Careers](#) | [fedex.com](#) [Terms of Use](#) | [Privacy Policy](#)

This site is protected by copyright and trademark laws under US and International law. All rights reserved. © 1995-2005 FedEx



FedEx Express
Customer Support Trace
3875 Airways Boulevard
Module H, 4th Floor
Memphis, TN 38116

U.S. Mail: PO Box 727
Memphis, TN 38194-4643
Telephone: 901-369-3600

01/18/2006

Dear Customer:

The following is the proof of delivery you requested with the tracking number 662902827456.

Delivery Information:

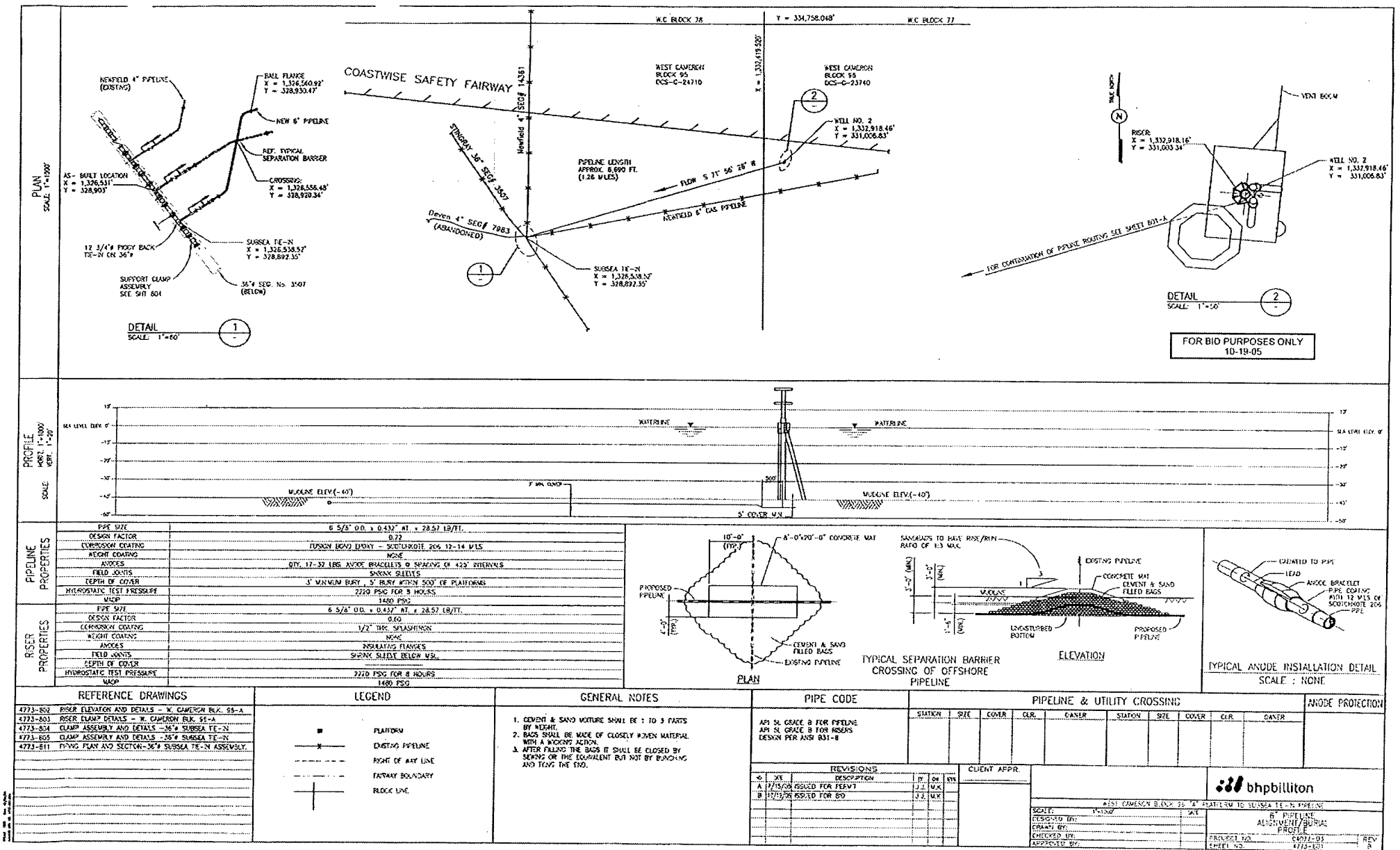
Status:	Delivered	Delivery date:	Aug 10, 2005 09:01
Signed for by:	D.OLIVER		
Service type:	FedEx 2Day Service		

Shipping Information:

Tracking number:	662902827456	Ship date:	Aug 9, 2005
Recipient:		Shipper:	
HOUSTON, TX US		HOUSTON, TX US	
Reference		02100/WC96/APPL.ROW P/L	

Thank you for choosing FedEx Express.

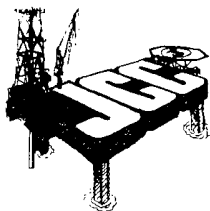
FedEx Worldwide Customer Service
1.800.GoFedEx 1.800.463.3339



BEST AVAILABLE COPY

TL

J. Connor Consulting, Inc.



DOCUMENT TRANSMITTAL

TO: Minerals Management Service.
1201 Elmwood Park Boulevard
New Orleans, Louisiana 70123

DATE: November 18, 2005

ATTENTION: Ms. Elizabeth Komiskey
Pipeline Section

REGARDING: Application for 6" Gas and Condensate ROW Pipeline
Originating at WC96, "A" and Terminating at a SSTI in WC95
BHP Billiton Petroleum (Americas), Inc.

(✓) We are sending you the following document(s)

NO. OF COPIES	DESCRIPTION
1	Application for 6" Gas and Condensate ROW Pipeline

THESE ARE FOR THE PURPOSE INDICATED BELOW:

- | | |
|----------------------------|----------------------------|
| () For Approval | () For Revision as Needed |
| (X) For Further Handling | () For Execution |
| () For Your Files and Use | () Return to Sender |

REMARKS: Per your request, please find the original application to install a 6" gas/condensate line in the West Cameron Area. If you need anything further, please contact me at (281) 578-3388 or by e-mail at valerie.land@jccteam.com.

Valerie D. Land
Valerie Land

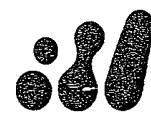
Minerals Management Service

RECEIVED

JAN 09 2006

Office of Field Operations
Pipeline Section

TL



15284
626924

bhpbilliton

August 3, 2005

BHP Billiton Petroleum (Americas) Inc.
1360 Post Oak Boulevard Suite 150
Houston Texas 77056 3020 USA
Tel 713 961 8500 Fax 713 961 8400
www.bhpbilliton.com

Mr. Donald C. Howard
Regional Supervisor
U. S. Department of the Interior
Minerals Management Service
1201 Elmwood Park Boulevard
New Orleans, Louisiana 70123-2394

Attention: Mr. Alex Alvarado
Pipeline Unit Supervisor

RE: Application for 6" Gas and Condensate Right-of-Way Pipeline To Be
Installed In and/or Through Blocks 96 and 95, West Cameron Area, OCS
Federal Waters, Gulf of Mexico, Offshore, Louisiana

Gentlemen:

Pursuant to the authority granted in Section 5 (e) of the Outer Continental Shelf Lands Act (43 U.S.C. 1331 et seq, P.L. 212, 67 Stat. 462), as amended (P.L. 95-372, 92 Stat. 629), and in compliance with the regulations contained in Title 30 CFR, Part 250, Subpart J, BHP Billiton Petroleum (Americas) Inc. (BHPB) is filing this application in quadruplicate (original and three copies) for a right-of-way easement two hundred feet (200') in width for the construction, maintenance and operation of a 6" gas and condensate right-of-way pipeline to be installed in and/or through Blocks 96 and 95, West Cameron Area, Offshore, Louisiana. BHPB agrees that said right-of-way, if approved, will be subject to the terms and conditions of said regulations.

The proposed 6" pipeline will originate at Platform "A" in West Cameron Block 96 (RUE No. OCS-G 23664) and proceed in a southwesterly direction approximately 6,984 feet (1.32 miles) to a subsea tie-in point on Stingray's existing 36" gas pipeline (Segment No. 3507).

The subject pipeline has a calculated worst case discharge of less than 1000 barrels, therefore, Oil Spill Financial Responsibility coverage is not required.

BHPB will review our Regional Oil Spill Response Plan to determine if installation of the subject right-of-way pipeline affects the current worst case discharge, and, if applicable, will modify the plan to include the pipeline at the next scheduled update.

Installation of the proposed pipeline will be accomplished by utilizing a typical lay/bury barge. The pipeline will be jetted to a minimum of 3 feet below the mudline. There are no pipeline crossings along the proposed route.

Minerals Management Service
6" Gas/Condensate ROW Pipeline
Blocks 96 and 95, West Cameron Area
August 3, 2005
Page Two

BHPB hereby requests a waiver from NTL 98-20, Section IV.B, which requires the buoying of all existing pipeline(s) and other potential hazards located within 150 meters (490) feet of the proposed operations. Utilizing the on-board graphic system during construction operations, BHPB will comply with the recommended avoidance criteria of the magnetic anomalies identified in the Fugro Geoservices, Inc. Pipeline Pre-Lay Survey Report along the proposed pipeline route.

BHPB anticipates commencing installation on approximately September 15, 2005, with an overall completion of project time being estimated at eight (8) days. The proposed construction operations will be supported by a crewboat and tug, each making approximately four (4) trips per week, respectively, from an onshore facility located in Cameron, Louisiana.

BHP Billiton Petroleum (Americas) Inc. will be the operator of the subject right-of-way pipeline.

This application (and any amendments made hereto) is made with our full knowledge and concurrence with the OCS Lands Act (43 U.S.C. 1331 et. seq.), as amended (P.L. 95-372), including the following: Sec. 5(e) addressing pipeline rights-of-way, requirements of the Federal Energy Regulatory Commission relating to notice of hearing, transportation and purchase of oil and gas without discrimination; Sec. 5(f)(1) addressing operation of pipelines in accordance with competitive principles, including open and nondiscriminatory access to both owner and non-owner shippers; Sec. 5(f)(2) which may allow exemption of the requirements in Sec. 5(f)(1); Sec. 5(e) addressing the assuring of maximum environmental protection, including the safest practices for pipeline installation; and Sec. 5(f)(1)(B) which may require expansion of throughput capacity of any pipeline except for the Gulf of Mexico or the Santa Barbara Channel.

Additionally, we expressly agree that if any site, structure, or object of historical or archaeological significance should be discovered during the conduct of any operations within the permitted right-of-way, we shall report immediately such findings to the Director, Gulf of Mexico OCS Region, and make every reasonable effort to preserve and protect the cultural resource from damage until said Director has given directions as to its preservation.

In accordance with applicable regulations, we have forwarded information regarding the proposed project by certified mail, return receipt requested, to each designated oil and gas lease operator, right-of-way or easement holder whose lease, right-of-way or easement is so affected. A list of such designated operators, right-of-way or easement holders is included as Attachment A and copies of the return receipts showing date and signature as evidence of service upon such operators, right-of-way or easement holders will be forwarded to your office when received.

Minerals Management Service
6" Gas/Condensate ROW Pipeline
Blocks 96 and 95, West Cameron Area
August 3, 2005
Page Three

In order to expedite the permit process, we have requested a letter from the operator, right-of-way or easement holder expressing no objection to the proposed project. When obtained, these letters will be forwarded to your office. The proposed right-of-way does not adjoin or subsequently cross state submerged lands.

Applicant agrees to be bound by the foregoing regulations, and further agrees to comply with the applicable stipulations as set forth in Title 30 CFR 250 (Subpart J) and that certain Letter to Lessees dated April 18, 1991.

The risers at the respective platforms will be protected by riser guards or inside the jacket framing.

In support of our application and for your review and use, the following maps, drawings and documents have been enclosed herewith and made a part hereof:

1. Originally signed copy of Non-Discrimination in Employment Stipulation
2. Designated Oil & Gas Lease Operators and Right-of-Way Holders (Attachment A)
3. General Information and Calculations for Design and Construction of 6" Gas and Condensate Pipeline
4. Coastal Zone Management Consistency Certification and copy of pipeline application submittal letter to Louisiana DNR, CZM Division
5. Certified Pipeline Route Alignment/Burial Profile (Sheet No. 4773-801) with associated Digital Diskette
6. Riser Elevation and Details (Sheet No. 4773-802)
7. Riser Clamp Details (Sheet No. 4773-803)
8. Subsea Tie-In Assembly and Details (Sheet No. 4773-804, 805)
9. Pipeline Safety Flow Schematic (Sheet No. 4773-810)
10. Subsea Tie-in Assembly, Piping Plan and Section (Sheet No. 4773-811)

Minerals Management Service
6" Gas/Condensate ROW Pipeline
Blocks 96 and 95, West Cameron Area
August 3, 2005
Page Four

11. Shallow Hazard Assessment of Proposed Pipeline Route
12. Check in the amount of \$2380.00 covers the application fee of \$2350 plus \$30 for the first year rental on 1.32 miles of right-of-way

Contact on technical points or other information:

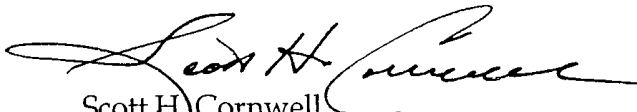
Valerie Land
J. Connor Consulting, Inc.
16225 Park Ten Place, Suite 700
Houston, Texas 77084
(281) 578-3388
email address: valerie.land@jccteam.com

BHPB hereby agrees to keep open at all reasonable times for inspection by the Minerals Management Service, the area covered by this right-of-way and all improvements, structures, and fixtures thereon and all records relative to the design, construction, operation, maintenance, and repairs, or investigations on or with regard to such area."

Please refer to your New Orleans Miscellaneous File No. 00362 for a copy of a resolution approved by the Board of Directors authorizing the undersigned to sign for and on behalf of BHP Billiton Petroleum (Americas) Inc. Additionally, the BHP Billiton Petroleum (Americas) Inc. has an approved \$300,000 Right-of-Way Grant Bond on file with MMS, covering installation of right-of-way pipelines in Federal Waters, Gulf of Mexico.

Sincerely,

BHP Billiton Petroleum (Americas) Inc.


Scott H. Cornwell
Attorney-in-Fact

RDC:VDL
Attachments and Enclosures

Minerals Management Service
6" Gas/Condensate ROW Pipeline
Blocks 96 and 95, West Cameron Area
August 3, 2005
Page Five

cc: Newfield Exploration Company
363 N. Sam Houston Parkway East; Suite 2020
Houston, Texas 77060

El Paso Production Company
1001 Louisiana Street
Houston, Texas 77252-2511

Stingray Pipeline Company, L.L.C.
1100 Louisiana ; Suite 3300
Houston, Texas 77002

1360 POST OAK BLVD., SUITE 150
HOUSTON, TX 77056-3020
(713) 961-8500



Minerals Management Service
Gulf of Mexico OCS Region
1201 Elmwood Park Boulevard
NEW ORLEANS LA 70123-2394
USA

COMPANY NO	VENDOR NO.	DATE OF CHECK	CHECK NUMBER	PAYMENT DOC NUMBER
3370	4010612	08/02/2005	103546	3030016966

INVOICE NO.	INVOICE DATE	DOCUMENT NO.	REMARKS	NET AMOUNT
3130011419	07/27/2005	072705	PERMITFEES	2,380.00

TOTAL	\$	2,380.00
-------	----	----------

DETACH AND RETAIN FOR YOUR RECORDS
ATTACHED BELOW

CHECK # 103546



1360 POST OAK BLVD., SUITE 150
HOUSTON, TX 77056-3020
(713) 961-8500

62-20 CHECK NO. : 103546
----- DATE : 08/02/2005
311

VENDOR NO. : 4010612

PAY TO THE ORDER OF Minerals Management Service
Gulf of Mexico OCS Region
1201 Elmwood Park Boulevard
NEW ORLEANS LA 70123-2394
USA

\$ \$ \$ \$ \$ \$ \$ \$ 2,380.00

NOT VALID AFTER 90 DAYS

PAY THE SUM OF TWO THOUSAND THREE HUNDRED EIGHTY DOLLARS AND ZERO CENTS ONLY

Bank of America, 6000 Feldwood rd
Atlanta, GA 30349 U.S.A

BY

Ed K. Mone
[Signature]

⑈ 103546 ⑈ ⑆061112788⑆ 3299788903⑈

ATTACHMENT A

The following Designated Oil & Gas Lease Operators and Right-of-Way Holders have been furnished information regarding the proposed pipeline installation by Certified Mail, Return Receipt Requested. (Note: The status of blocks listed below is current, per research of MMS records by J. Connor Consulting, Inc.).

WEST CAMERON AREA

BLOCK 96

Newfield Exploration Company	OCS-G 23740	Oil & Gas Lease
------------------------------	-------------	-----------------

BLOCK 95

El Paso Production Company	OCS-G 24710	Oil & Gas Lease
----------------------------	-------------	-----------------

Stingray Pipeline Company, L.L.C.	OCS-G 2122	Right-of-Way
-----------------------------------	------------	--------------

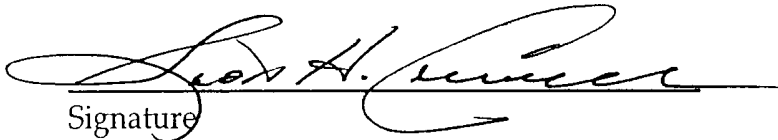
Newfield Exploration Company	OCS-G 25312	Right-o-Way
------------------------------	-------------	-------------

NONDISCRIMINATION IN EMPLOYMENT

As a condition precedent to the approval of the granting of the subject pipeline right-of-way, the grantee, BHP Billiton Petroleum (Americas) Inc. hereby agrees and consents to the following stipulation, which is to be incorporated into the application for said right-of-way.

During the performance of this grant, the grantee agrees as follows:

During the performance under this grant, the grantee shall fully comply with paragraphs (1) through (7) of section 202 of Executive Order 11246, as amended (reprinted in 41 CFR 60-1.4(a)), which are for the purpose of preventing discrimination against persons on the basis of race, color, religion, sex or national origin. Paragraphs (1) through (7) of section 202 of Executive Order 11246, as amended, are incorporated in this grant by reference.


Signature

8/8/05
Date

BHP BILLITON

PIPELINE FROM WEST CAMERON BLOCK 96 TO STINGRAY PIPELINE SUBSEA TIE-IN

Page 1 of 4
7/25/05
04077-03
Rev. 1
By: VK

PIPELINE CALCULATIONS

Pipeline Description

- . Length 6,984 feet
 - . Size (O.D) 6.625-inch
 - . Wall Thickness 0.432-inch (Sch. 80) for pipeline
0.432-inch (Sch. 80) for Riser
 - . Grade API 5L Gr. B
 - . Bare Weight 28.57 lb/ft
 - . Protection Coating Type and Thickness Fusion Bond Epoxy,
0.012 to 0.014 inch thick
 - . Riser Coating: 1/2" thick Splashton
 - . Weight coating concrete density and thickness Not Required
 - . Specific Gravity of Pipe 1.83
 - . Estimated density of fluids based on flow rate of 30 MMSCFD gas and 300 bpd condensate at flowing pressure of 1150 psig 3.72 lb/cft
 - . Design Capacity 30 MMSCFD gas; 300 BCPD
 - . Design Codes ASME B31.8 and 30 CFR Part 250
- . The proposed pipeline will transport production fluids from Block 96A platform to a subsea tie-in in West Cameron Block 95.

2. Cathodic Protection System

The pipeline will be protected by a sacrificial anode system, as described below. The riser clamps below the insulating flanges in the pipeline riser will be insulated from the riser by a neoprene coating installed on the inside of the clamps. Above the insulating flanges, the riser is protected by the platform cathodic protection system.

Pipeline Sacrificial Anodes System

- . Type of Anode Galvalum III
- . Spacing Interval 425 feet
- . Standard Net weight of Unit Anode 32 lbs
- . Consumption Rate 12 lbs/amp-year

BASED ON THE FORMULA: $L_{(p/1)} = 3.82 \times 10^4 \times w^0 / \text{DIR}$

PIPELINE FROM WEST CAMERON BLOCK 96 TO
STINGRAY PIPELINE SUBSEA TIE-IN

PIPELINE CALCULATIONS

Where:

 $Le_{(p/1)}$ = Life expectancy (years) w^0 = Weight of anode unit (lb) D = Diameter of pipe (inches) I = Separation between anodes (ft) R = Rate of consumption (lbs/amp-year)

The factor 3.82×10^4 in the formula assumes 2% bare area of pipe is exposed due to damage to coating and the current requirement is 5 mA/sq.ft.

$$Le_{(p/1)} = (3.82 \times 10^4) (32) / \{(6.625)(425)(12)\} = 36.18 \text{ years}$$

The calculated life expectancy is equal to 36.18 years. Length of pipeline = 7,050-ft (including construction allowance). Install 18 anodes with an anode at each end of pipeline and the remaining anodes spaced at approx. 425 ft. intervals.

3. Specific Gravity of the Empty Pipe Based on Seawater

The formula used to calculate the specific gravity is as follows:

$$S.G. = \frac{W_p + W_{cor} + W_{conc}}{W_{H2O}}$$

Where:

 W_p = Weight of the pipe (lbs/ft) = 28.57 W_{cor} = Weight of corrosion coating (lbs/ft) = 0.182 W_{conc} = Weight of concrete (lbs/ft) = 0.0 W_{H2O} = Weight of displaced seawater (lbs/ft) = 15.70

The above weights are based on the pipe outside diameter, corrosion coating thickness and on the densities of the various materials, which are listed below:

. Density of Pipe	488 lbs/ft ³
. Density of Fusion Bond Epoxy	90 lbs/ft ³
. Density of Concrete	Not Required
. Density of Seawater	65.6 lbs/ft ³
Specific Gravity of Pipeline =	1.83

4. Maximum Allowable Operating Pressure (MAOP) of Riser Pipe

a. Calculations based on Title 30 CFR, Part 250

$$P = \frac{2St FET}{D} = 2738 \text{ psig}$$

BHP BILLITON

PIPELINE FROM WEST CAMERON BLOCK 96 TO STINGRAY PIPELINE SUBSEA TIE-IN

Page 3 of 4
7/25/05
04077-03
Rev. 1
By: VK

PIPELINE CALCULATIONS

Where:

- P = Design Pressure (psig)
S = Specified Minimum Yield Strength (SMYS), 35,000 psi
t = Nominal Wall Thickness, 0.432"
D = Nominal Outside Diameter, 6.625"
F = Design Factor: 0.60
E = Joint Factor: 1.00 for Seamless and ERW Pipe
T = Temp. Derating Factor: 1.00 for Operating Temp. Below 250°F

- b. MAOP based on fittings and valves
Fittings and valves to be rated for ANSI 600 # class
Rated working pressure = 1480 psig

- c. MAOP based on 80% of hydrostatic test pressure

Hydrostatic test pressure = $1.50 \times 1480 = 2220$ psig

$$\begin{aligned}\text{MAOP} &= 2220 \times 0.80 \\ &= 1,776 \text{ psig}\end{aligned}$$

MAOP of riser is the least of pressures calculated under a, b, and c above.

MAOP of riser = 1480 psig

- d. Hydrostatic Test Pressure

$$\begin{aligned}\text{Hydrotest pressure} &= 1.50 \times 1480 \\ &= 2220 \text{ psig}\end{aligned}$$

$$\begin{aligned}\text{Stress during hydrotest} &= PD/2tE \\ &= 2220 \times 6.625 / (2 \times 0.432 \times 1) \\ &= 17,022 \text{ psig}\end{aligned}$$

$$95\% \text{ of yield stress} = 33,250 \text{ psig} > 17,022 \text{ psig}$$

Hydrotest riser at 2220 psig for 8 hours minimum.

5. Maximum Allowable Operating Pressure (MAOP) of Pipeline

- a. Calculations based on Title 30 CFR, Part 250

$$P = \frac{2St FET}{D} = 3286 \text{ psi}$$

BHP BILLITON

PIPELINE FROM WEST CAMERON BLOCK 96 TO STINGRAY PIPELINE SUBSEA TIE-IN

Page 4 of 4
7/25/05
04077-03
Rev. 1
By: VK

PIPELINE CALCULATIONS

Where:

- P = Design Pressure (psig)
S = Specified Minimum Yield Strength (SMYS), 35,000 psi
t = Nominal Wall Thickness, 0.432"
D = Nominal Outside Diameter, 6.625"
F = Design Factor: 0.72
E = Joint Factor: 1.00 for Seamless and ERW Pipe
T = Temp. Derating Factor: 1.00 for Operating Temp. Below 250°F

b. MAOP based on fittings and valves

Fittings & valves to be ANSI 600# class
Rated working pressure = 1480 psig

c. MAOP based on 80% of hydrostatic test pressure

Hydrostatic test pressure = $1.50 \times 1480 = 2220$ psig

MAOP = 2220×0.80
= 1,776 psig

MAOP of submerged portion of pipeline is the least of pressures calculated under a, b and c above.

MAOP of pipeline = 1480 psig.

d. Hydrostatic Test Pressure

Hydrotest pressure = $1.50 \times \text{MAOP}$
= $1.50 \times 1480 = 2220$ psig

Stress during hydrotest = $PD / 2tE$
= $2220 \times 6.625 / (2 \times 0.432 \times 1)$
= 17,022 psig

95% of yield stress = 33,250 psig > 17,022 psig

Hydrotest pipeline at 2220 psig for 8 hours minimum

6. Safety Devices

PSH's and PSL's on the departing pipeline at West Cameron 96A platform are set to protect the pipeline from over-pressure and under-pressure. The PSH's will also be set to protect Stingray pipeline to which the 6" pipeline is connecting. Subsea check valves will be installed at both ends of the pipeline to minimize back flow.



BHP Billiton Petroleum (Americas) Inc.
1360 Post Oak Boulevard Suite 150
Houston Texas 77056 3020 USA
Tel 713 961 8500 Fax 713 961 8400
www.bhpbilliton.com

August 3, 2005

Louisiana Department of Natural Resources
Coastal Zone Management Division
617 North 3rd Street, Suite 1048
Baton Rouge, Louisiana 70802

Attention: Mr. Greg DuCote

RE: Application for 6" Gas and Condensate Right-of-Way Pipeline To Be
Installed In and/or Through Blocks 96 and 95, West Cameron Area, OCS
Federal Waters, Gulf of Mexico, Offshore, Louisiana

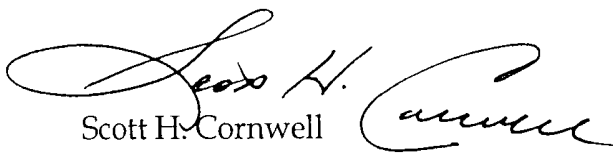
Gentlemen:

On this date BHP Billiton Petroleum (Americas) Inc. (BHPB) submitted to the Minerals Management Service an application to install a 6" gas and condensate right-of-way pipeline through Blocks 96 and 95, West Cameron Area, Offshore, Louisiana.

In accordance with Title 15 CFR 930.53 and further clarified in Notice to Lessees (NTL) 2002 G15, a copy of this application is hereby submitted along with a check in the amount of \$300.00 to cover the cost of the processing fee for the proposed application.

Should you have any questions concerning this matter, please contact our regulatory consultant, Valerie Land, J. Connor Consulting, Inc. at (281) 578-3388.

Sincerely,


Scott H. Cornwell
Attorney-in-Fact

SHC:VDL
Enclosure

COASTAL ZONE MANAGEMENT PROGRAM
CONSISTENCY CERTIFICATION

West Cameron Block 96

From (Area/Block)

West Cameron Block 95

To (Area/Block)

1.32

Length (Miles)

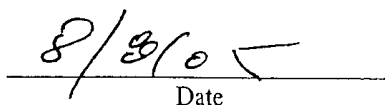
The proposed activities described in detail in this right-of-way pipeline application comply with the enforceable policies of Louisiana's approved Coastal Management Program(s) and will be conducted in a manner consistent with such Program(s).

BHP Billiton Petroleum (Americas) Inc.

Right-of-Way Applicant



Certifying Official



Date

1360 POST OAK BLVD., SUITE 150
HOUSTON, TX 77056-3020
(713) 961-8500



Louisiana Dept.of Natural Resources
Coastal Zone Management Division
625 N. 4th Street, Room 1001
BATON ROUGE LA 70804
USA

COMPANY NO	VENDOR NO.	DATE OF CHECK	CHECK NUMBER	PAYMENT DOC NUMBER
3370	4008312	08/01/2005	103529	3030016887

INVOICE NO.	INVOICE DATE	DOCUMENT NO.	REMARKS	NET AMOUNT
3130011400	07/27/2005	072705 ROW		300.00

TOTAL	\$	300.00
-------	----	--------

DETACH AND RETAIN FOR YOUR RECORDS
ATTACHED BELOW

CHECK # 103529



1360 POST OAK BLVD., SUITE 150
HOUSTON, TX 77056-3020
(713) 961-8500

62-20 CHECK NO. : 103529
----- DATE : 08/01/2005
311

VENDOR NO. : 4008312

PAY TO THE ORDER OF Louisiana Dept.of Natural Resources
Coastal Zone Management Division
625 N. 4th Street, Room 1001
BATON ROUGE LA 70804
USA

\$ \$\$\$\$\$\$\$\$\$\$300.00

NOT VALID AFTER 90 DAYS

PAY THE SUM OF THREE HUNDRED DOLLARS AND ZERO CENTS ONLY

Bank of America, 6000 Feldwood rd
Atlanta, GA 30349 U.S.A

BY

103529 061112788 3299788903



BHP Billiton Petroleum (GOM) Inc.
1360 Post Oak Boulevard Suite 150
Houston Texas 77056 3020 USA
Tel 713 961 8500 Fax 713 961 8400
www.bhpbilliton.com

August 9, 2005

Fedex Tracking No. 662902827467

El Paso Production Company
1001 Louisiana Street; Room 2240
Houston, Texas 77252-2511

Attention: Ms. Beth Atwood

Gentlemen:

This letter serves as notification that BHP Billiton Petroleum (Americas) Inc. is in the process of submitting an application to Minerals Management Service for the installation of a 6" gas and condensate pipeline to be installed from Platform "A" in West Cameron Block 96 to a subsea tie-in point on Stingray's existing 36" pipeline (Segment No. 3507) in West Cameron Block 95, a portion of which crosses your lease in West Cameron Block 95 (Lease OCS-G 24710).

In accordance with MMS requirements, we are enclosing a complete copy of the subject application for your review.

Please indicate your consent to this proposed crossing by signing this letter in the space provided below and returning a signed copy to the attention of our regulatory representative, Valerie Land, J. Connor Consulting, Inc., 16225 Park Ten Place, Suite 700, Houston, Texas 77084.

Your cooperation in this matter would be greatly appreciated.

Sincerely,

A handwritten signature in cursive script that reads "Ron D. Campbell / vdl".

Ron D. Campbell
Regulatory & Administrative Manager

RDC:VDL

CONSENT GRANTED THIS ____ DAY OF _____, 2005.

By: _____

Title: _____



BHP Billiton Petroleum (GOM) Inc.
1360 Post Oak Boulevard Suite 150
Houston Texas 77056 3020 USA
Tel-713-961-8500 Fax 713-961-8400
www.bhpbilliton.com

August 9, 2005

Fedex Tracking No: 662902827456

Newfield Exploration Company
363 N. Sam Houston Parkway East; Suite 2020
Houston, Texas 77060

Attention: Mr. Jim Zernell

Gentlemen:

This letter serves as notification that BHP Billiton Petroleum (Americas) Inc. is in the process of submitting an application to Minerals Management Service for the installation of a 6" gas and condensate pipeline to be installed from Platform "A" in West Cameron Block 96 to a subsea tie-in point on Stingray's existing 36" pipeline (Segment No. 3507) in West Cameron Block 95, a portion of which crosses your Lease OCS-G 23740, West Cameron Block 96.

In accordance with MMS requirements, we are enclosing a complete copy of the subject application for your review.

Please indicate your consent to this proposed crossing by signing this letter in the space provided below and returning a signed copy to the attention of our regulatory representative, Valerie Land, J. Connor Consulting, Inc., 16225 Park Ten Place, Suite 700, Houston, Texas 77084.

Your cooperation in this matter would be greatly appreciated.

Sincerely,

A handwritten signature in black ink that reads "Ron D. Campbell/VDL".

Ron D. Campbell
Regulatory & Administrative Manager

RDC:VDL

CONSENT GRANTED THIS _____ DAY OF _____, 2005.

By: _____

Title: _____



BHP Billiton Petroleum (GOM) Inc.
1360 Post Oak Boulevard Suite 150
Houston Texas 77056 3020 USA
Tel 662 902 8274 Fax 662 961 8400
www.bhpbilliton.com

August 9, 2005

Fedex Tracking No. 662902827478

Stingray Pipeline Company, L.L.C.
1100 Louisiana ; Suite 3300
Houston, Texas 77002

Gentlemen:

This letter serves as notification that BHP Billiton Petroleum (Americas) Inc. is in the process of submitting an application to Minerals Management Service for the installation of a 6" gas and condensate pipeline to be installed from Platform "A" in West Cameron Block 96 to a subsea tie-in point on your existing 36" pipeline (Segment No. 3507) in West Cameron Block 95.

In accordance with MMS requirements, we are enclosing a complete copy of the subject application for your review.

Please indicate your consent to this proposed crossing by signing this letter in the space provided below and returning a signed copy to the attention of our regulatory representative, Valerie Land, J. Connor Consulting, Inc., 16225 Park Ten Place, Suite 700, Houston, Texas 77084.

Your cooperation in this matter would be greatly appreciated.

Sincerely,

Ron D. Campbell / edl

Ron D. Campbell
Regulatory & Administrative Manager

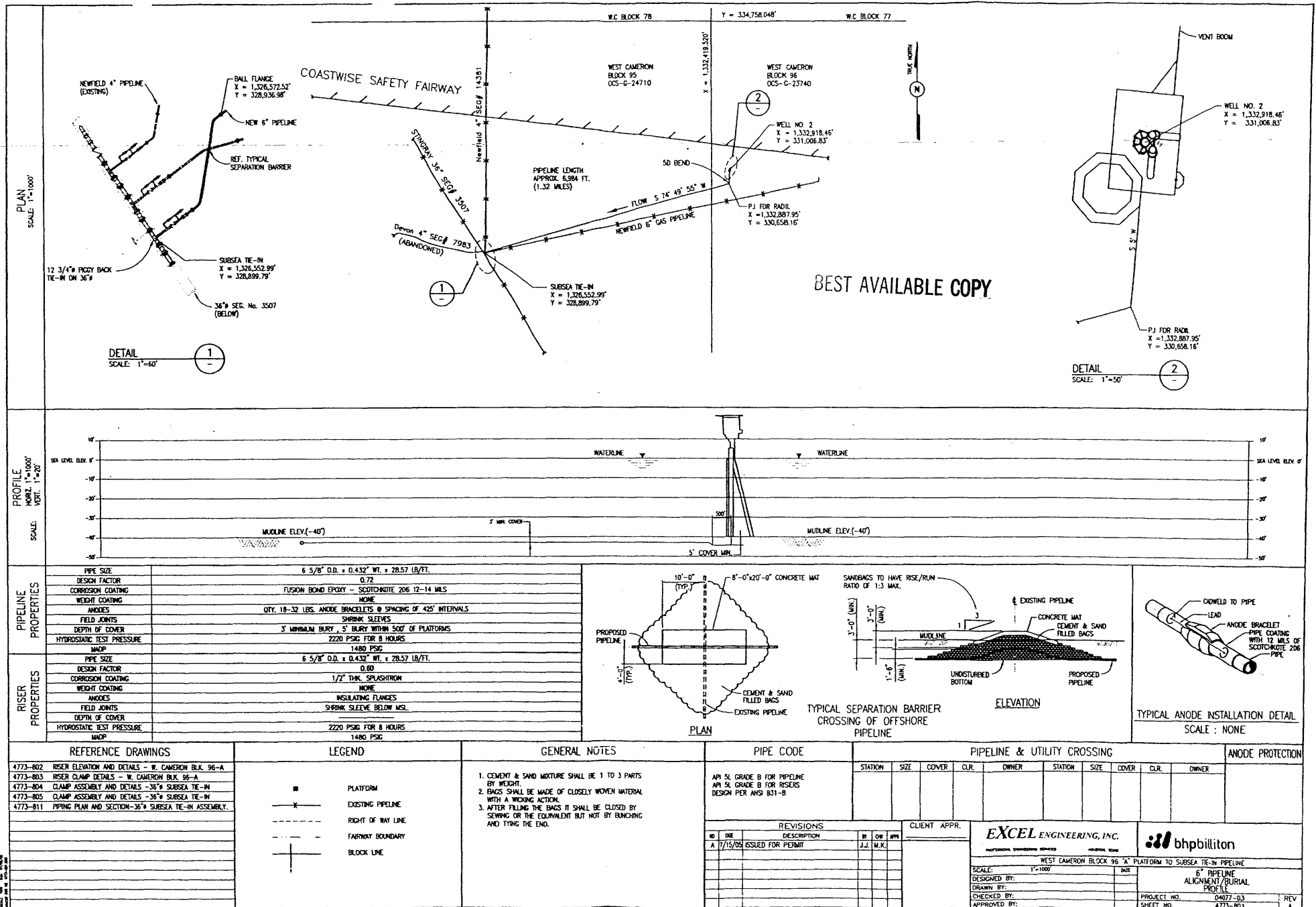
RDC:VDL

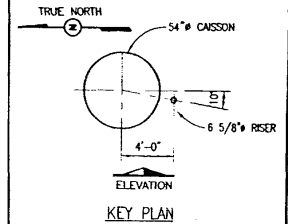
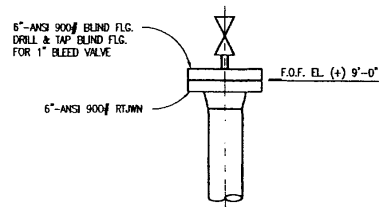
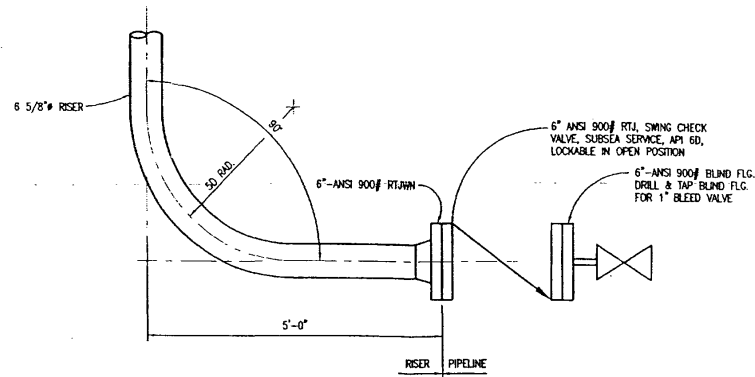
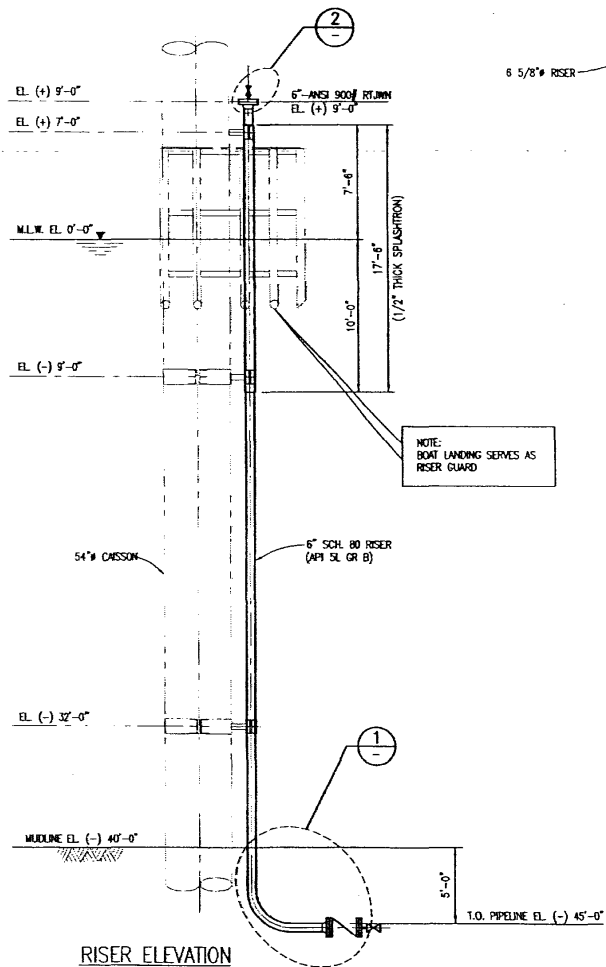
CONSENT GRANTED THIS _____ DAY OF _____, 2005.

By: _____

Title: _____

*Greg
Bischoff
832-214-
5713*





BEST AVAILABLE COPY

NOTES:

1. ALL STRUCTURAL SHAPES AND PLATES SHALL CONFORM TO ASTM A-36 EXCEPT WHERE SHOWN OTHERWISE. ALL MILL MANUFACTURED PIPES SHALL CONFORM TO API-5L GRADE B OR ASTM-53 EXCEPT WHERE SHOWN OTHERWISE.
2. ALL WELDING SHALL BE IN ACCORDANCE WITH AWS D1.1 LATEST REVISION. FULL PENETRATION UNLESS OTHERWISE NOTED.
3. ALL TUBULAR CONNECTIONS SHALL BE IN ACCORDANCE WITH API RP-2A.
4. ALL FABRICATION SHALL BE IN ACCORDANCE WITH COMPANY SPECIFICATIONS.
5. ALL PAINTING AND GALVANIZING SHALL BE IN ACCORDANCE WITH COMPANY SPECIFICATIONS.

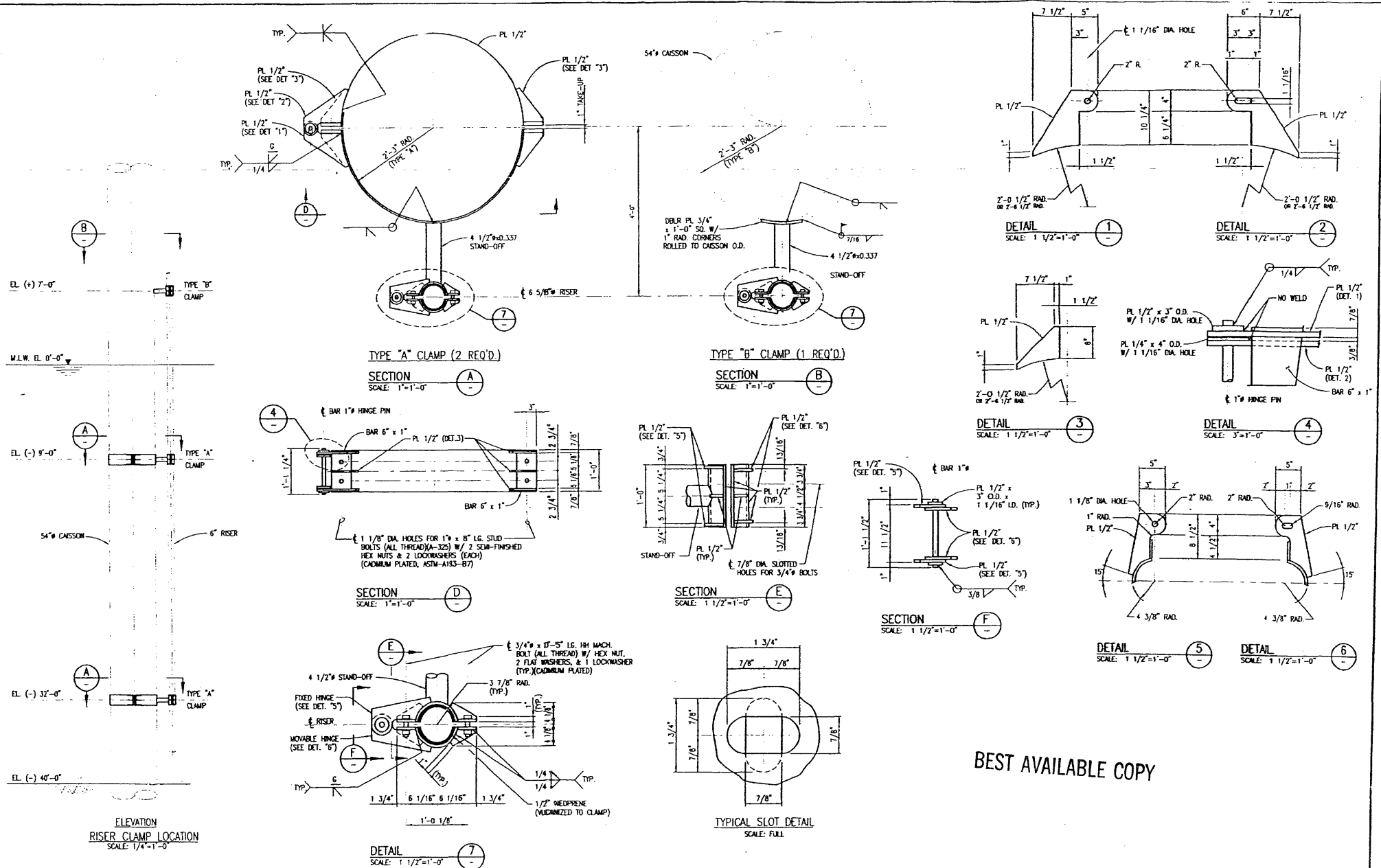
REVISIONS				CLIENT APPR.	
NO	DATE	DESCRIPTION	BY	CHK	APP
A	7/15/06	ISSUED FOR PERMIT	J.J.	M.K.	
B	7/22/06	RE-ISSUED FOR PERMIT	J.J.	M.K.	

EXCEL ENGINEERING, INC.
PROFESSIONAL ENGINEERING SERVICES

bhpbilliton

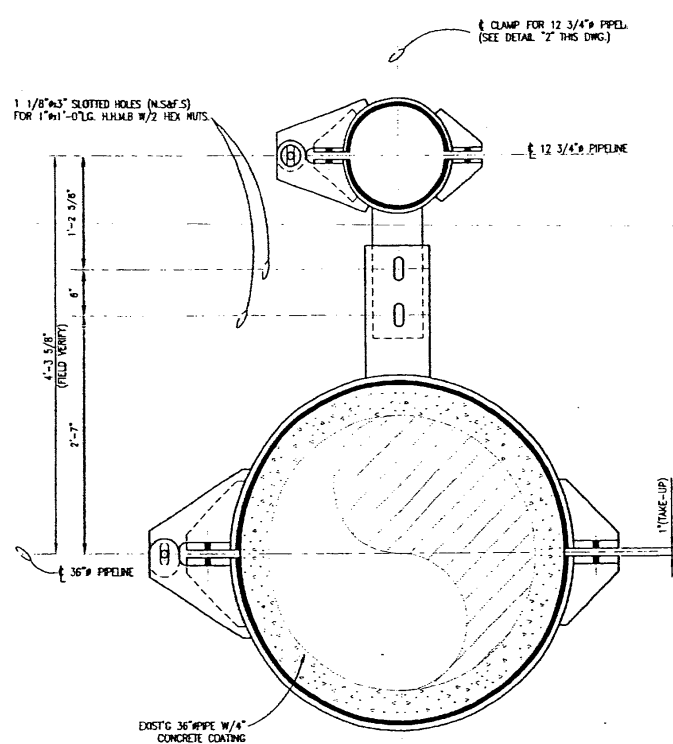
WEST CAMERON BLOCK 96		"A" WELL PROTECTOR PLATFORM 40 FT W.D.	
SCALE:	1/4"=1'-0" UNLESS NOTED	DATE:	7/06
DESIGNED BY:	J.J.	PROJECT NO.:	04077-03
CHECKED BY:		SHEET NO.:	4773-802
APPROVED BY:		REV:	B

RISER ELEVATION AND DETAILS

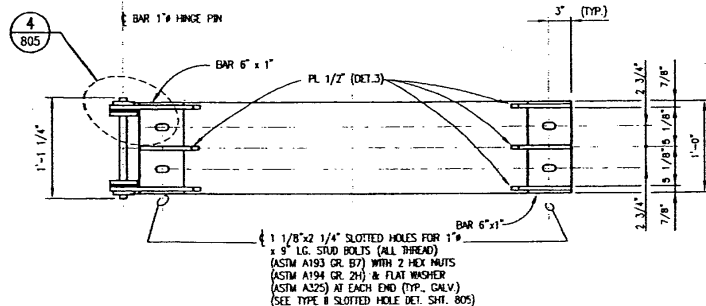


BEST AVAILABLE COPY

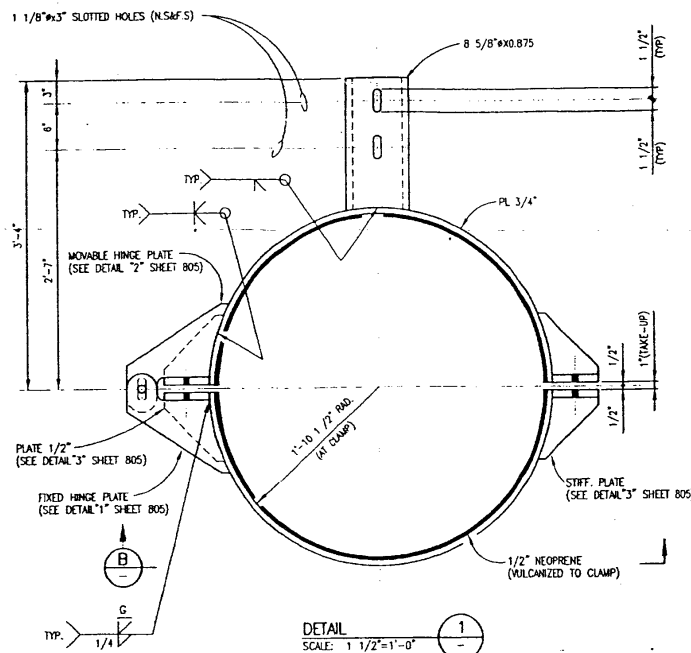
REVISIONS					CLIENT APPR.		EXCEL ENGINEERING, INC.		bhptilliton	
NO	DATE	DESCRIPTION	BY	CHK	DATE		PROFESSIONAL ENGINEERING SERVICES	HORIZONTAL, TONGUE		
A	7/15/00	ISSUED FOR PERMIT	J.J.	M.K.						
							WEST CAMBERG CLOCK 96		"A" WELL PROTECTOR PLATFORM 40FT W.D.	
							SCALE: 1"=1'-0" UNLESS NOTED		DATE	
							DESIGNED BY: J.A.		7/05	
							CHECKED BY: WEE		PROJECT NO. 04077-03	
							APPROVED BY: WEE		SHEET NO. 4775-B03	
									RISER CLAMP DETAILS	
									REV. A	



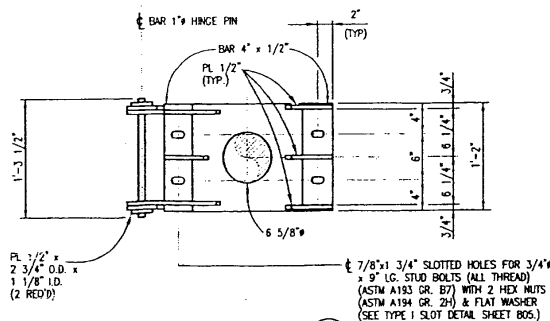
SECTION A
SCALE: 1 1/2\"=1'-0\"
(ONE - REQUIRED)



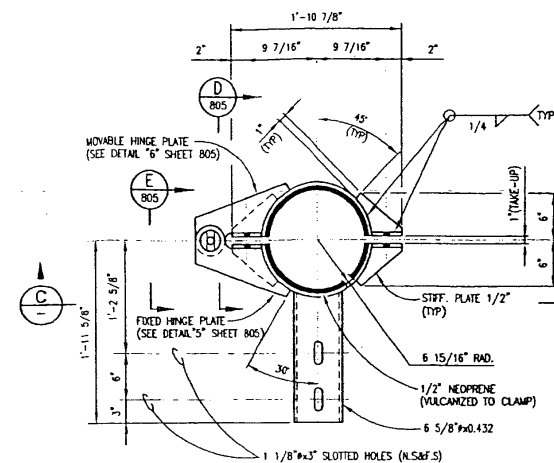
SECTION B
SCALE: 1 1/2\"=1'-0\"



DETAIL 1
SCALE: 1 1/2\"=1'-0\"



SECTION C
SCALE: 1 1/2\"=1'-0\"



DETAIL 2
SCALE: 1 1/2\"=1'-0\"

- NOTES:
- ALL STRUCTURAL SHAPES AND PLATES SHALL CONFORM TO ASTM A-36 EXCEPT WHERE SHOWN OTHERWISE. ALL MANUFACTURED PIPES SHALL CONFORM TO API-5L GRADE B OR ASTM-53 EXCEPT WHERE SHOWN OTHERWISE.
 - ALL WELDING SHALL BE IN ACCORDANCE WITH AWS D1.1 LATEST EDITION. FULL PENETRATION UNLESS OTHERWISE NOTED.
 - ALL TUBULAR CONNECTIONS SHALL BE IN ACCORDANCE WITH API RP-2A.
 - ALL FABRICATION SHALL BE IN ACCORDANCE WITH COMPANY SPECIFICATIONS.

- ALL PAINTING AND GALVANIZING SHALL BE IN ACCORDANCE WITH COMPANY SPECIFICATIONS.

REVISIONS				
NO	DATE	DESCRIPTION	BY	CHK
A	7/15/05	ISSUED FOR PERMIT	J.J.	M.K.

CLIENT APPR.

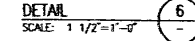
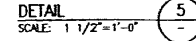
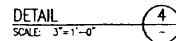
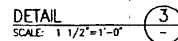
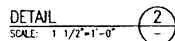
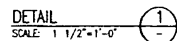
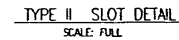
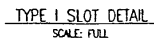
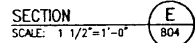
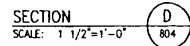
EXCEL ENGINEERING, INC.

bhpbilliton

WEST CAMERON BLOCK 96 \"A\" PLATFORM TO SUBSEA TIE-IN PIPELINE	
SCALE: 1 1/2\"=1'-0\"	DATE: 7/7/05
DESIGNED BY: EXCL	36\" SUBSEA TIE-IN CLAMP ASSEMBLY AND DETAILS
DRAWN BY: JB	PROJECT NO: 04077-03
CHECKED BY: JJ	SHEET NO: 4773-B04
APPROVED BY: MEE	REV A

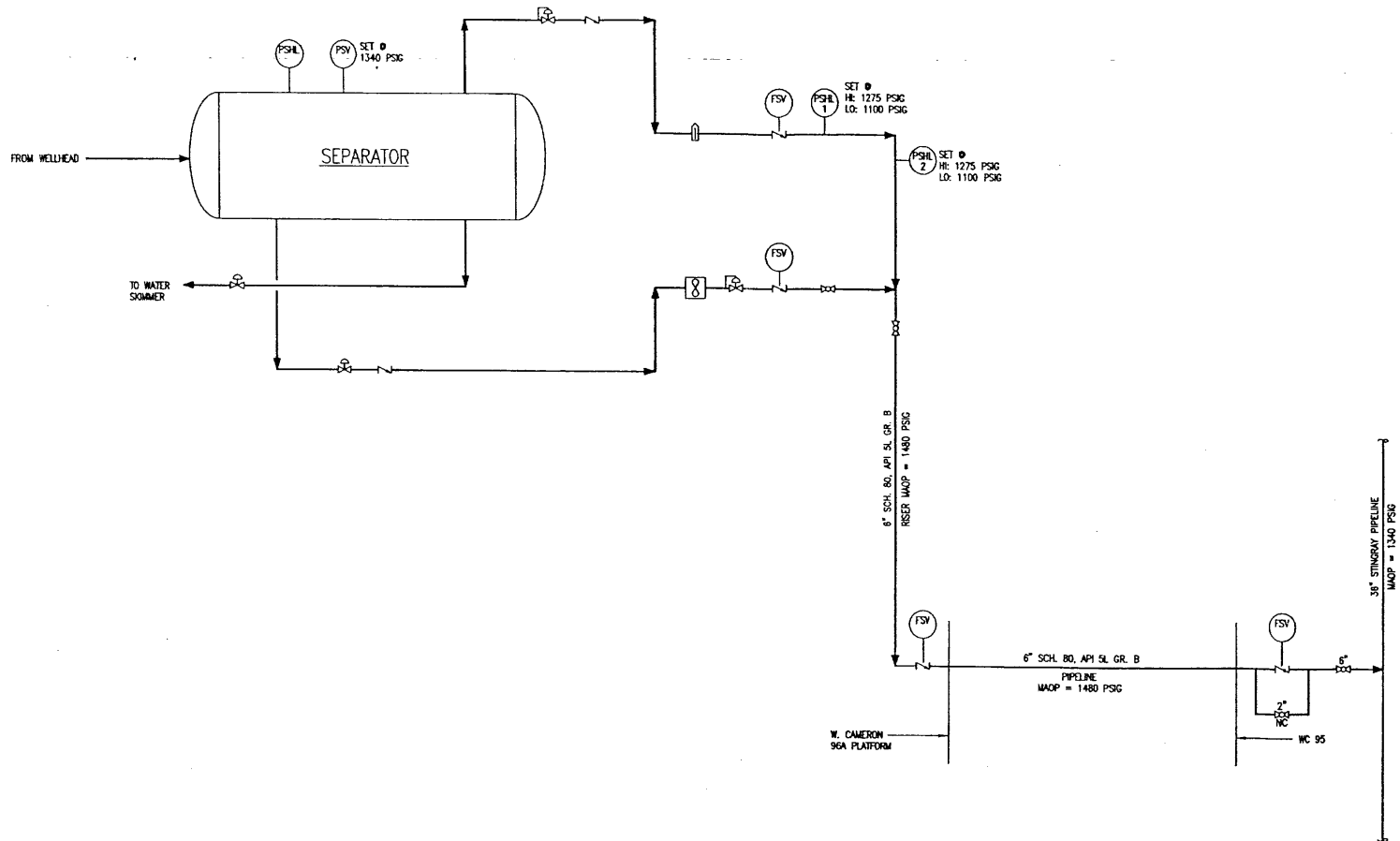
FOR APPROVAL
7/15/05

BEST AVAILABLE COPY



NOTE:
1. FOR GENERAL NOTES SEE SHEET 804.

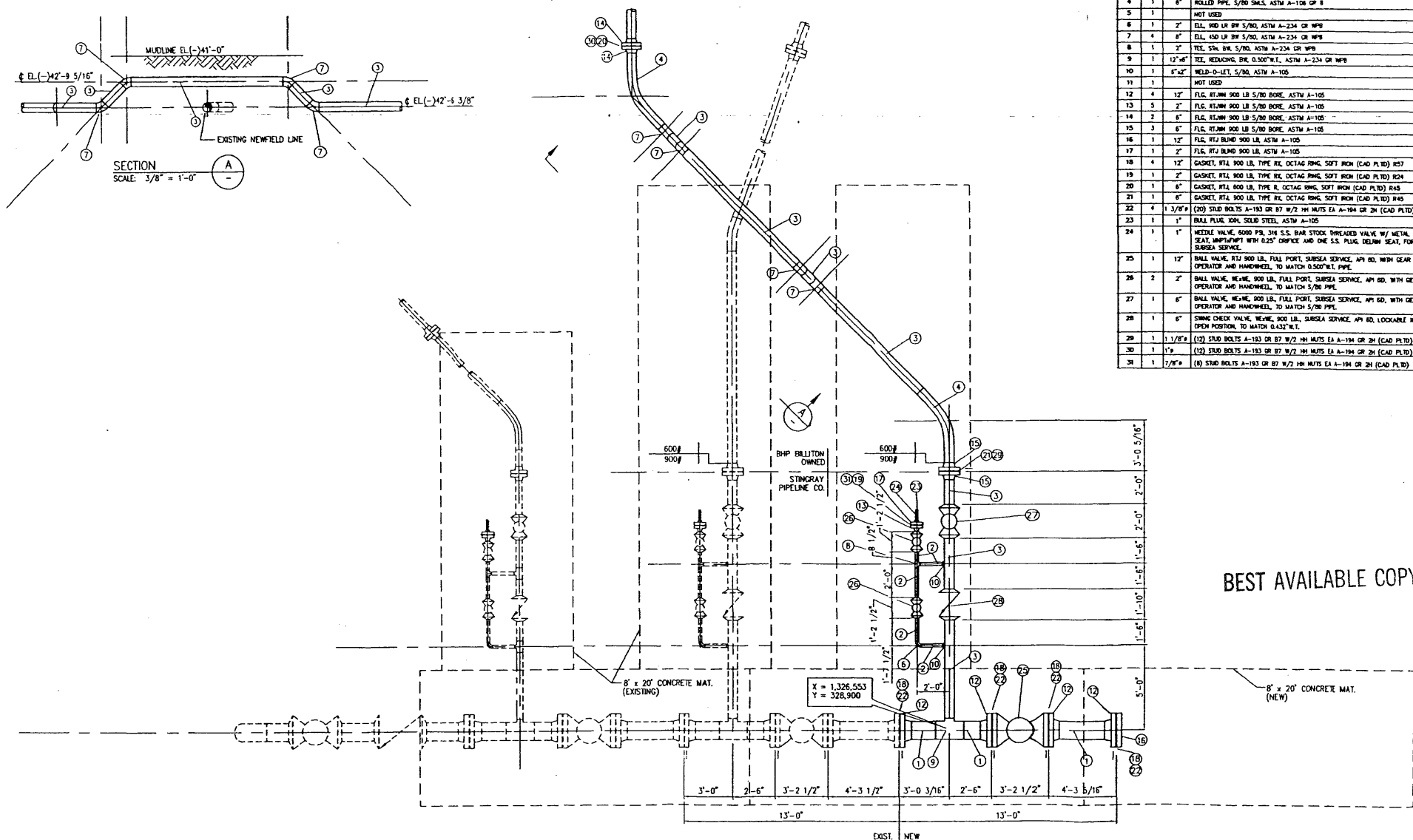
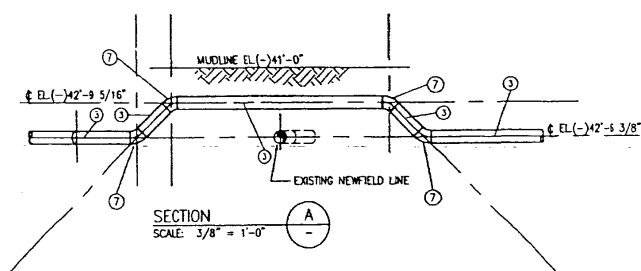
REVISIONS					CLIENT APPR.		EXCEL ENGINEERING, INC.		bnpbilliton	
NO	DATE	DESCRIPTION	BY	CHK	APPR	PROFESSIONAL ENGINEERING FIRM		MEMBER: ASCE		
A	7/15/10	ISSUED FOR PERMIT	J.J	M.K						
						WEST CAMERON BLOCK 96 3" PLATFORM TO SUSPEND TE-IN PIPELINE		36" SUSPENSION TE-IN CLAMP ASSEMBLY AND DETAILS		
SCALE: 1 1/2"=1'-0"						DATE: 7/17/10				
DESIGNED BY: EXCEL						7/17/10				
DRAWN BY: JJ						7/17/10				
CHECKED BY: JJ						7/17/10				
APPROVED BY: WEL						7/17/10				
						PROJECT NO. 04877-B3		REV. NO. 0173		



BEST AVAILABLE COPY

NOTES:
1. PSH AND PSL ARE SET TO PROTECT STINGRAY PIPELINE.

REVISIONS						CLIENT APPR.		EXCEL ENGINEERING, INC.		bhpbilliton	
NO	DATE	DESCRIPTION	BY	CHK	APP			HOLLYWOOD, TEXAS			
A	7/13/05	ISSUED FOR PERMIT	KG	VK							
B	7/25/05	ADDED PSHL-2 & FSV	KG	VK							



BILL OF MATERIAL					LENGTH
MARK	QTY	SIZE	DESCRIPTION		
1	1	12"	PIPE, 0.500"W.T. SMLS, ASTM A-106 GR B		
2	1	2"	PIPE, 5/80 SMLS, ASTM A-106 GR B		
3	1	6"	PIPE, 5/80 SMLS, ASTM A-106 GR B		
4	1	6"	ROLLED PIPE, 5/80 SMLS, ASTM A-106 GR B		
5	1		NOT USED		
6	1	2"	ELL, 900 LB W/ 5/80, ASTM A-234 GR WPB		
7	1	6"	ELL, 900 LB W/ 5/80, ASTM A-234 GR WPB		
8	1	2"	TEE, 5/80, 5/80, 5/80, ASTM A-234 GR WPB		
9	1	12"-4"	TEE, REDUCING, 0.500"W.T., ASTM A-234 GR WPB		
10	1	6"-4"	WELD-O-LET, 5/80, ASTM A-106		
11	1		NOT USED		
12	4	12"	FLG, RTJ, 900 LB 5/80 BORE, ASTM A-106		
13	5	2"	FLG, RTJ, 900 LB 5/80 BORE, ASTM A-106		
14	2	6"	FLG, RTJ, 900 LB 5/80 BORE, ASTM A-106		
15	3	6"	FLG, RTJ, 900 LB 5/80 BORE, ASTM A-106		
16	1	12"	FLG, RTJ, 900 LB, ASTM A-106		
17	1	2"	FLG, RTJ, 900 LB, ASTM A-106		
18	4	12"	GASKET, RTJ, 900 LB, TYPE RX, OCTAG RING, SOFT IRON (CAD PLTD) R57		
19	1	2"	GASKET, RTJ, 900 LB, TYPE RX, OCTAG RING, SOFT IRON (CAD PLTD) R24		
20	1	6"	GASKET, RTJ, 900 LB, TYPE RX, OCTAG RING, SOFT IRON (CAD PLTD) R45		
21	1	6"	GASKET, RTJ, 900 LB, TYPE RX, OCTAG RING, SOFT IRON (CAD PLTD) R45		
22	4	1 3/8"	(20) STUD BOLTS A-193 GR B7 9/2 HH NUTS EA A-194 GR 2H (CAD PLTD)		W/LG
23	1	1"	BALL PLUG, 300#, SOLID STEEL, ASTM A-106		
24	1	1"	NEEDLE VALVE, 6000 PSI, 3/16 S.S. BAR STOCK THREADED VALVE W/ METAL SEAT, UNF/UNPT W/ 0.25" ORIFICE AND ONE S.S. PLUG DELPHI SEAT, FOR SUBSEA SERVICE.		
25	1	12"	BALL VALVE, RTJ, 900 LB, FULL PORT, SUBSEA SERVICE, API 6D, WITH GEAR OPERATOR AND HANDWHEEL, TO MATCH 0.500"W.T. PIPE.		
26	2	2"	BALL VALVE, WEIR, 900 LB, FULL PORT, SUBSEA SERVICE, API 6D, WITH GEAR OPERATOR AND HANDWHEEL, TO MATCH 5/80 PIPE.		
27	1	6"	BALL VALVE, WEIR, 900 LB, FULL PORT, SUBSEA SERVICE, API 6D, WITH GEAR OPERATOR AND HANDWHEEL, TO MATCH 5/80 PIPE.		
28	1	6"	SWING CHECK VALVE, WEIR, 900 LB, SUBSEA SERVICE, API 6D, LOCKABLE IN OPEN POSITION, TO MATCH 0.500"W.T. PIPE.		
29	1	1 1/8"	(12) STUD BOLTS A-193 GR B7 9/2 HH NUTS EA A-194 GR 2H (CAD PLTD)		7.5'/4'L
30	1	1 1/8"	(12) STUD BOLTS A-193 GR B7 9/2 HH NUTS EA A-194 GR 2H (CAD PLTD)		8.3'/4'L
31	1	1 7/8"	(8) STUD BOLTS A-193 GR B7 9/2 HH NUTS EA A-194 GR 2H (CAD PLTD)		5.5'/4'L

REVISIONS NO. DATE DESCRIPTION BY CHK APPR A 7/15/05 ISSUED FOR PERMIT GR MK				CLIENT APPR. 	
EXCEL ENGINEERING, INC. PROFESSIONAL ENGINEERING SERVICES HOUSTON, TEXAS				bhpbilliton WEST CAMERON 96 A	
SCALE: 3/8" = 1'-0" DESIGNED BY: C. WICKER DRAWN BY: C. WICKER CHECKED BY: C. WICKER APPROVED BY:				DATE: 7/16/05 PROJECT NO.: 04077-03 SHEET NO.: 4773-B11 36" SUBSEA TIE-IN ASSEMBLY PIPING PLAN AND SECTION REV A	

FOR PERMIT
JULY 15, 2005