

DEFERMENT AGREEMENT

STATE OF TEXAS §
 §
COUNTY OF NUECES §

This deferment agreement ("Agreement") is entered into between the City of Corpus Christi ("City"), a Texas home-rule municipality, and Puerto Los Caballeros (the "Owner") in order to defer the completion of certain required public improvements prior to recording the final plat of Puerto Los Caballeros Tract, Block 1, Lot 1, Corpus Christi, Nueces County, Texas (the "Plat"). A copy of the Plat is attached and incorporated by reference into this Agreement as Exhibit 1.

WHEREAS, the Owner is obligated under Section 8.1 of the Unified Development Code ("UDC") to construct the required public improvements before the final Plat is endorsed by the City's City Engineer or Development Services Engineer, as applicable ("City Engineer");

WHEREAS, the Owner is seeking to delay the construction of the required public improvements ("Deferred Improvements") shown in Exhibit 2, which exhibit is attached and incorporated by reference into this Agreement, and to have the Plat filed immediately with the County Clerk of Nueces County, Texas;

WHEREAS, in order to have the Plat filed prior to completion of the Deferred Improvements, the Owner agrees to construct the improvements in Exhibit 2;

WHEREAS, by signing this Agreement, the Owner represent that they have completed all other subdivision and platting requirements under the UDC including required park dedications;

WHEREAS, by signing this Agreement, the Owner represent that they have executed all park deferment agreements, maintenance agreements, and all special covenants required under the UDC, in accordance with the UDC;

WHEREAS, the Owner is entering into this Agreement pursuant to Section 8.1.10 of the UDC in order to defer construction and record the final Plat.

NOW, THEREFORE, for the consideration set forth in this Agreement, the City and Owner agree as follows:

1. The preamble to this Agreement is substantive content in this Agreement and upon which all parties to this Agreement have relied and will continue to rely during the term of this Agreement.
2. Pursuant to the Owner's representations in the preamble to this Agreement and In consideration of the Owner's covenants in this Agreement, the City agrees to waive the requirement that construction of the Deferred Improvements be

completed before the final Plat is endorsed by the City Engineer and filed for record with the County Clerk of Nueces County, and City further agrees to allow the Owner to delay construction of the Deferred Improvements.

3. Detailed construction drawings must be provided by the Owner and accepted by the City's Development Services Engineer prior to the start of construction of the Deferred Improvements.
4. The Owner shall construct the Deferred Improvements in accordance with the River Acres Water System engineering standards in effect at the time of construction and in accordance with the construction drawings accepted pursuant to the paragraph above.
5. No building permit for vertical structures shall be issued for all or any portion of the real property that is subject of the Plat until the Deferred Improvements are constructed, installed in working order, and accepted by the River Acres Water System in accordance with the provisions of this Agreement.
6. Upon completion of the Deferred Improvements by the Owner as verified by the Assistant City Manager and Director of Development Services and acceptance of the Deferred Improvements by the River Acres Water System, this agreement is terminated.
7. The City and Owner agree that if the Owner formally vacates the current Plat with approval of the Planning Commission, this agreement is terminated.
8. If Owner defaults in any of their covenants or obligations under this Agreement, the City shall not issue any building permits for vertical structure or certificate of occupancy for projects subject of the Plat.
9. The City reserves the right not to issue certificates of occupancy for all or any portion of the real property that is subject of the Plat until the Deferred Improvements are constructed, installed in working order, and accepted by the City Engineer in accordance with the provisions of this Agreement.
10. No party may assign this Agreement or any rights under this Agreement without the prior written approval of the other party and by amendment to this Agreement.
11. By execution of this Agreement, the Owner covenants to construct the Deferred Improvements required by this Agreement, and this covenant shall be a covenant running with the land and authorized by the Owner. The City, at the Owner's expense, shall file for record this Agreement in the official public records of Nueces County.
12. The following Plat note will be added to the Final Plat prior to recordation: No certificate of occupancy or building permit will be issued unless water is available

to serve the property and public improvements are constructed pursuant to deferment agreement.

13. No changes or modifications to this Agreement may be made, nor any provisions waived, unless the change or modification is made in writing and signed by persons authorized to sign agreements on behalf of each party.
14. If, for any reason, any section, paragraph, subdivision, clause, provision, phrase, or word of this Agreement or the application thereof to any person or circumstance is, to any extent, held illegal, invalid, or unenforceable under present or future law or by a final judgment of a court of competent jurisdiction, then the remainder of this Agreement, or the application of said term or provision to persons or circumstances other than those as to which it is held illegal, invalid, or unenforceable, will not be affected thereby, for it is the definite intent of the parties to this Agreement that every section, paragraph, subdivision, clause, provision, phrase, or word of this Agreement be given full force and effect for its purpose.
15. The Owner shall, in compliance with Section 2-349 of the City's Code of Ordinances, complete the City's *Disclosure of Interests* form, which is attached to this Agreement as **Exhibit 3**, the contents of which, as a completed form, are incorporated in this Agreement by reference as if fully set out here in its entirety.
16. The Owner shall comply with all federal, state, and local laws, regulations, and rules applicable to performance of this Agreement.
17. This Agreement shall be construed under and in accordance with the laws of the State of Texas, and all obligations of the parties created pursuant to this Agreement are performable in Nueces County, Texas. Venue for all actions arising from or pursuant to this Agreement shall be brought in Nueces County, Texas.
18. Strict performance of the provisions of this Agreement by the Owner is required by the City as a condition of this Agreement. The Owner specifically acknowledge and agree that failure by the Owner to adhere or comply with any term, condition, or requirement of this Agreement constitutes a default of this Agreement.
19. All signatories to this Agreement warrant and guarantee that they have the authority to act on behalf of the person or entity represented and make this Agreement binding and enforceable by their signature.
20. This Agreement is to be executed in **One Original**, of which constitutes an original document. This Agreement becomes effective and is binding upon and inures to the benefit of the City and Owner and their successors and assigns from and after the date the Agreement has been executed by all signatories.

(EXECUTION PAGES FOLLOW)

EXECUTED IN ONE ORIGINAL and made effective this _____ day of
_____, 20____.

CITY OF CORPUS CHRISTI
P. O. Box 9277
Corpus Christi, TX 78469-9277
(361) 826-3240 Office
(361) 826-4428 Fax

Signature
Printed Name: _____
Title: Assistant City Manager, or Designee

THE STATE OF TEXAS §
§
COUNTY OF NUECES §

This instrument was acknowledged before me on _____, 20____, by
_____, _____, _____
(title)
for the City of Corpus Christi, Texas.

Notary Public's Signature

APPROVED AS A STANDARD FORM LEGAL DOCUMENT: _____, 20____.

CITY ATTORNEY

Signature
Printed Name: _____
Title: Assistant City Attorney

OWNER:

PUERTO LOS CABALLEROS, LLC
P.O. BOX 9605
CORPUS CHRISTI, TEXAS 78469
OFFICE: (361)882-8870
FAX: (361)767-1911

Signature

Printed Name: DAN MORPHY

Title: MEMBER

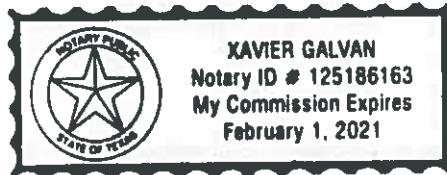
Date: 10-19-18

STATE OF Texas §

COUNTY OF Nueces §

This instrument was acknowledged before me on October 19, 2018, by
Daniel J. Murphy, Member (title) of
PUERTO LOS CABALLEROS, LLC, A TEXAS, LIMITED LIABILITY COMPANY, on
behalf of said corporation.

Notary Public's Signature



Attached and incorporated by reference into this Agreement:

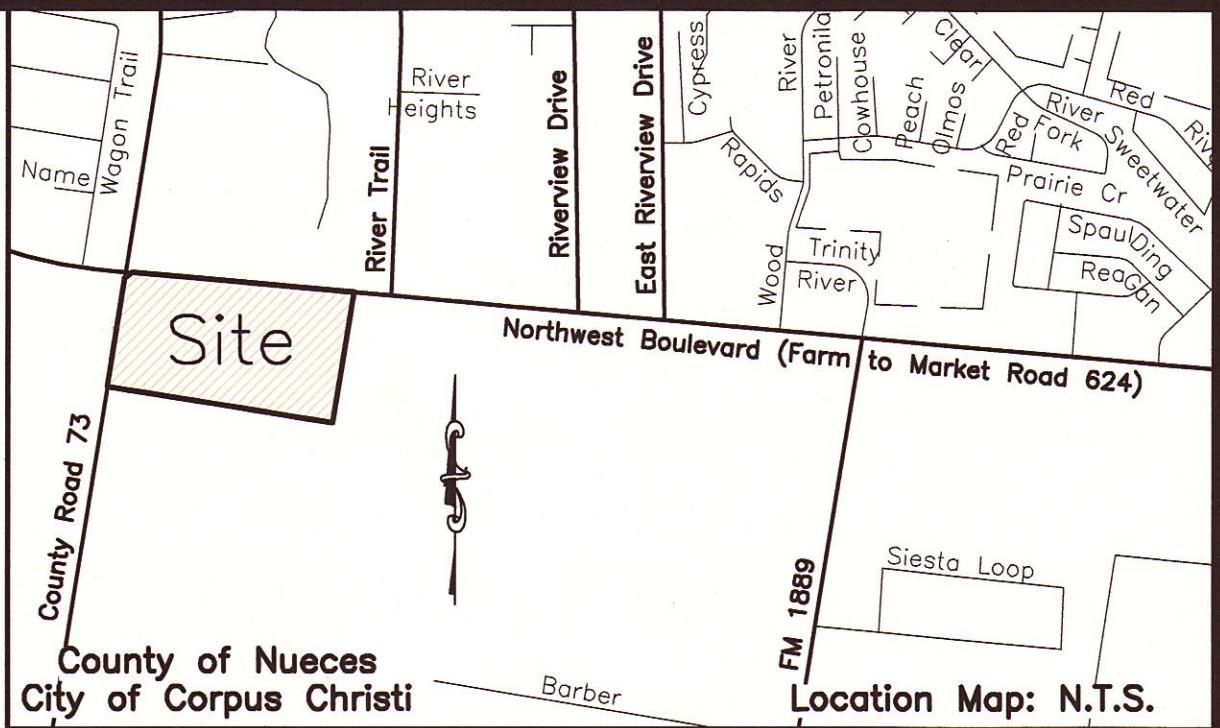
Exhibit 1 – Plat

Exhibit 2 – Required Public Improvements

Exhibit 3 – Disclosure of Interests

Notes:

- 1.) Total platted area contains 39.75 Acres of Land. (Includes Street Dedication)
- 2.) The receiving water for the storm water runoff from this property is the Nueces River upstream of the Calallen Salt Water Intrusion Dam located 1.1 miles from Nueces Bay and the Oso Creek. The TCEQ has classified the aquatic life use for this segment of the Nueces River as "high". TCEQ also categorized the Nueces River as "contact recreation" use. Additional water quality protection measures must be observed for this receiving water due to the TCEQ designation as a "public water supply". The TCEQ has not classified the aquatic life use for the Oso Creek, but it is recognized as an environmentally sensitive area. The Oso Creek flows directly into the Nueces Bay. The TCEQ has classified the aquatic life use for the Nueces Bay as "exceptional" and "oyster waters" and categorized the receiving water as "contact recreation" use.
- 3.) Grid Bearings and Distances shown hereon are referenced to the Texas Coordinate System of 1983, Texas South Zone 4205, and are based on the North American Datum of 1983(2011) Epoch 2010.00.
- 4.) By graphic plotting only, this property is in Zone "C" on Flood Insurance Rate Map, Community Panel No. 485494 0256 C, City of Corpus Christi, Texas, which bears an effective date of March 18, 1985 and is not in a Special Flood Hazard Area.
- 5.) The yard requirement, as depicted is a requirement of the Unified Development Code and is subject to change as the zoning may change.
- 6.) If any lot is developed with residential uses, compliance with open space regulation will be required during the building permit phase.



State of Texas
County of Nueces

This final plat of the herein described property was approved by the Department of Development Services of the City of Corpus Christi, Texas.

This the _____ day of _____, 20_____

William J. Green, P.E.
Development Services Engineer

State of Texas
County of Nueces

This final plat of the herein described property was approved on behalf of the City of Corpus Christi, Texas by the Planning Commission.

This the _____ day of _____, 20_____

Nina Nixon-Mendez, FAICP
Secretary

Eric Villareal, P.E.
Chairman

State of Texas
County of Nueces

I, Kara Sands, Clerk of the County Court in and for said County, do hereby certify that the foregoing instrument dated the _____ day of _____, 20_____, with its certificate of authentication was filed for record in my office the _____ day of _____, 20_____. At _____ O'clock _____ M., and duly recorded the _____ day of _____, 20_____, at _____ O'clock _____ M., in said County in Volume _____ Page _____, Map Records.

Witness my hand and seal of the County Court, in and for said County, at office in Corpus Christi, Texas, the day and year last written.

No. _____
Filed for Record
at _____ O'clock _____ M.
_____, 20_____

Kara Sands, County Clerk
Nueces County, Texas
By: _____ Deputy

State of Texas
County of Nueces

I, James D. Carr, a Registered Professional Land Surveyor for Urban Engineering, have prepared the foregoing map from a survey made on the ground under my direction and is true and correct to the best of my knowledge, information and belief; I have been engaged under contract to set all Lot and Block corners as shown herein and to complete such operations with due and reasonable diligence consistent with sound professional practice.

This the _____ day of _____, 20_____

Preliminary, this document shall not be recorded
for any purpose and shall not be used or viewed
or relied upon as a final survey document.

James D. Carr, R.P.L.S.
Texas License No. 6458

State of Texas
County of Nueces

Puerto Los Caballeros, LLC, a Texas limited liability company, hereby certifies that it is the owner of the lands embraced within the boundaries of the foregoing plat; that it has had said lands surveyed and subdivided as shown; that streets shown are dedicated to the public use forever; that easements as shown are dedicated to the public use for the installation, operation and use of public utilities; and that this map was made for the purpose of description and dedication.

This the _____ day of _____, 20_____

By: Puerto Los Caballeros, LLC, a Texas limited liability company

By: _____
Daniel J. Murphy, member

State of Texas
County of Nueces

This instrument was acknowledged before me by Daniel J. Murphy, member of Puerto Los Caballeros, LLC, a Texas limited liability company, on behalf of said entity in said capacity.

This the _____ day of _____, 20_____

Notary Public in and for the State of Texas



Lauren Rabe, MPA
Nueces County, Health Department

This final plat approved by the Corpus Christi - Nueces County Health Department. This the _____ day of _____, 2018. Any private sewage system shall be approved by the Corpus Christi - Nueces County health Department prior to installation.

Submitted: 1/24/18
SCALE: 1"=100'
JOB NO.: 43212.00.00
SHEET: 1 of 2
DRAWN BY: XG
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urbansurvey1@urbaneng.com

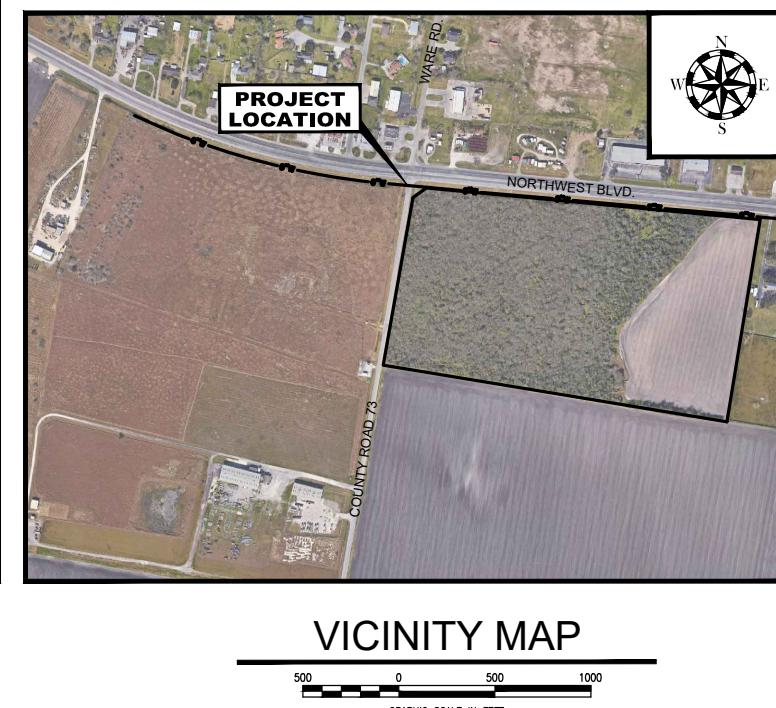
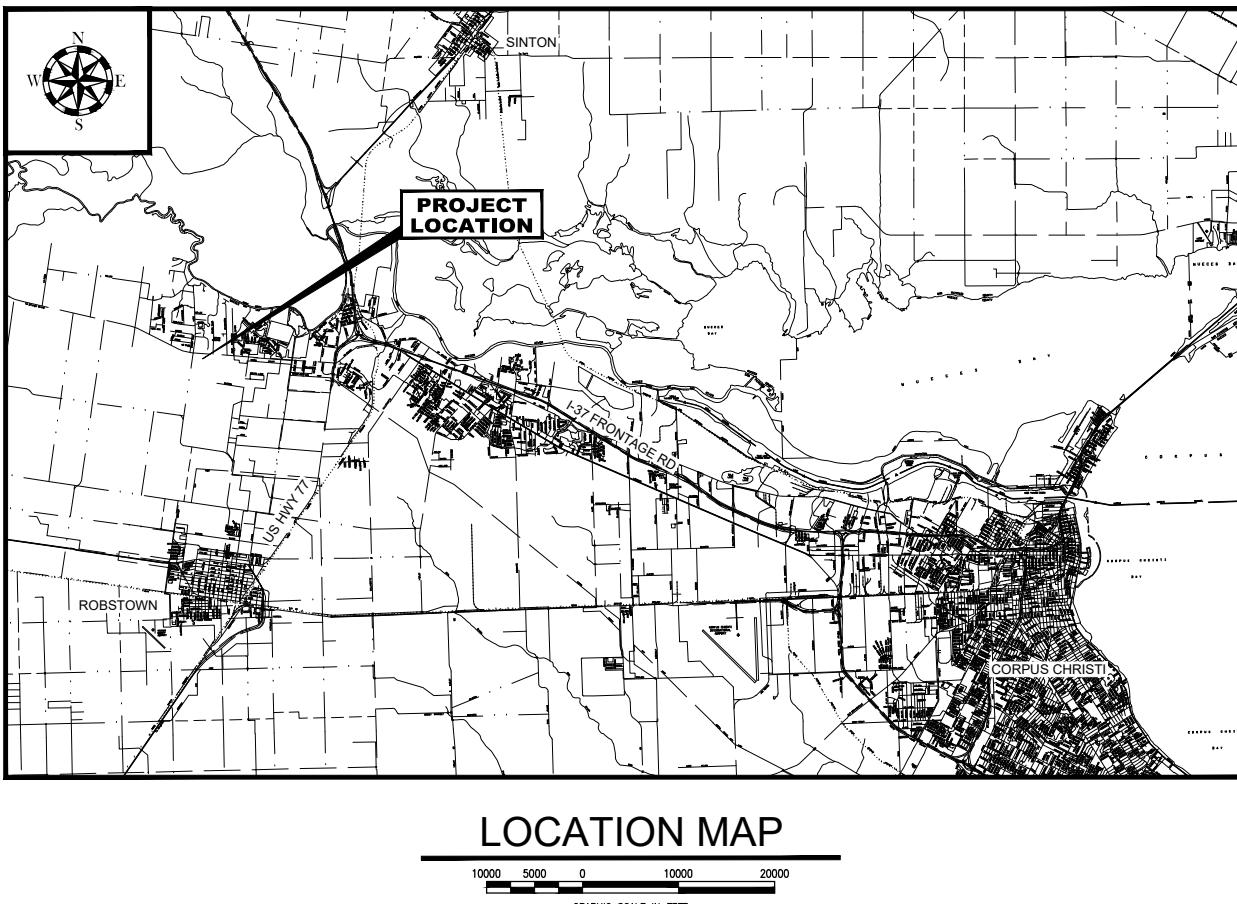


CONSTRUCTION PLANS FOR WATERLINE EXTENSION SEPTEMBER 2018

PREPARED FOR
MURPHY LLC - RAWS CORP.
NUECES COUNTY, TEXAS

SHEET INDEX

1	COVER SHEET
2	GENERAL NOTES
3	SITE LAYOUT
4	WATERLINE ALIGNMENT
4A	MURPHY DEVELOPMENT LOOP
5	STORM WATER POLLUTION
6	PREVENTION PLAN
7	DETAILS 1 OF 2
7	DETAILS 2 OF 2



BOARD MEMBERS

PRESIDENT.....	KYLE CLARK
VICE PRESIDENT.....	DARRELL DUSEK
SEC./TREASURER.....	CLAUDE BRADSHAW, JR.
DIRECTOR.....	CHARLES TENPENNEY
DIRECTOR	RONNIE LIGHTFOOT
DIRECTOR.....	BRENT BURKHART
FIELD MANAGER.....	





SEP 10, 2018 1:59 PM MURIL01902
I:\160\085\160148B\CD SITE SHEET 4-BJ.DWG

NUMBER	REVISION	DATE	DRAWN	DESIGNED	REVIEWED
FOR INTERIM REVIEW					

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF REVIEW UNDER THE AUTHORITY OF:
Name: PAUL M. PILARCYK, P.E.
Serial No.: 82060
Date: 9/10/2018
AND IT IS NOT TO BE USED FOR ANY OTHER PURPOSE.

MURPHY LLC
15641 Northwest Blvd.
Robstown, TX 78380

Hanson No. 16L0148B
Filename NEI-8857
Scale AS SHOWN
Date 9/10/2018

LAYOUT	VM	9/10/2018
DRAWN	VM	9/10/2018
REVIEWED	PMP	9/10/2018

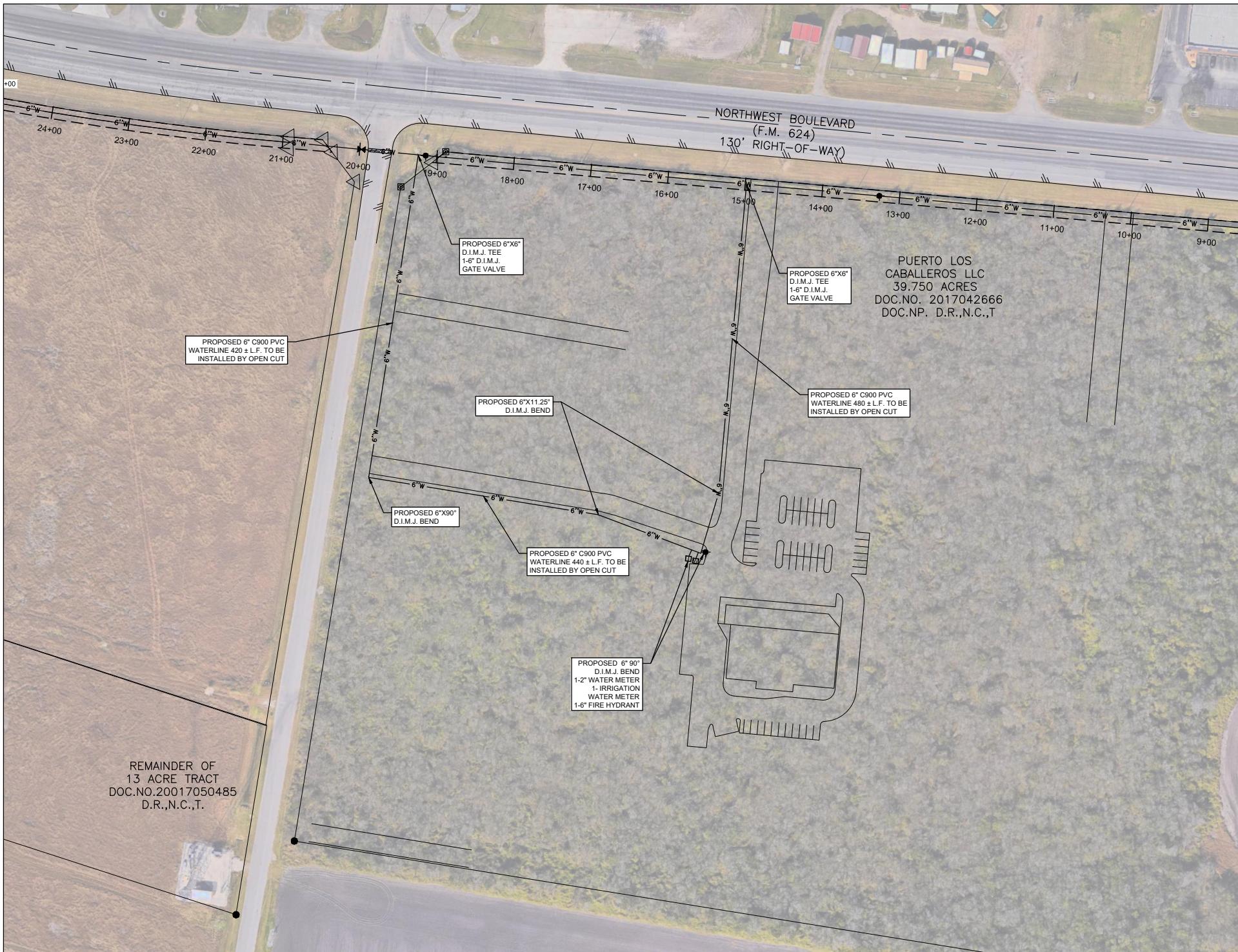


TBPE F-417
TBPLS F-10039500
TBPGL F-50556
TBAE F-BR 2458
Phone: (361) 814-9900
(800) 677-2831
www.hanson-inc.com
Offices Nationwide

SITE LAYOUT
WATERLIEN ALIGNMENT
WATERLINE EXTENSION
MURPHY LLC - RAWS WATERLINE EXTENSION
NUCEES COUNTY, TEXAS



A horizontal graphic scale bar consisting of a black line with white tick marks. The numbers 40, 80, and 160 are placed above the scale at regular intervals. Below the scale, the text "GRAPHIC SCALE IN FEET" is printed.



NEED TO VERIFY IF ON-SITE WORK IS TO BE COMPLETED UNDER THIS CONTRACT

**FOR INTERIM
REVIEW**

THIS DOCUMENT IS RELEASED
FOR THE PURPOSE OF REVIEW
UNDER THE AUTHORITY OF [REDACTED]

Name: PAUL M. PILARCZYK
Serial No.: 82060
Date: 9/10/2018

AND IT IS NOT TO BE USED
FOR ANY OTHER PURPOSE.

MURPHY LLC

**15641 Northwest Blvd
Robstown, TX 78380**

Hanson No.	16L0148B
Filename	NEI-8857
Scale	AS SHOWN
Date	9/10/2018

LAYOUT	VM	9/10/2018
DRAWN	VM	9/10/2018
REVIEWED	RMP	9/10/2018



Hanson Professional Services Inc.
4501 Gollihar Rd.
Corpus Christi, Texas 78411

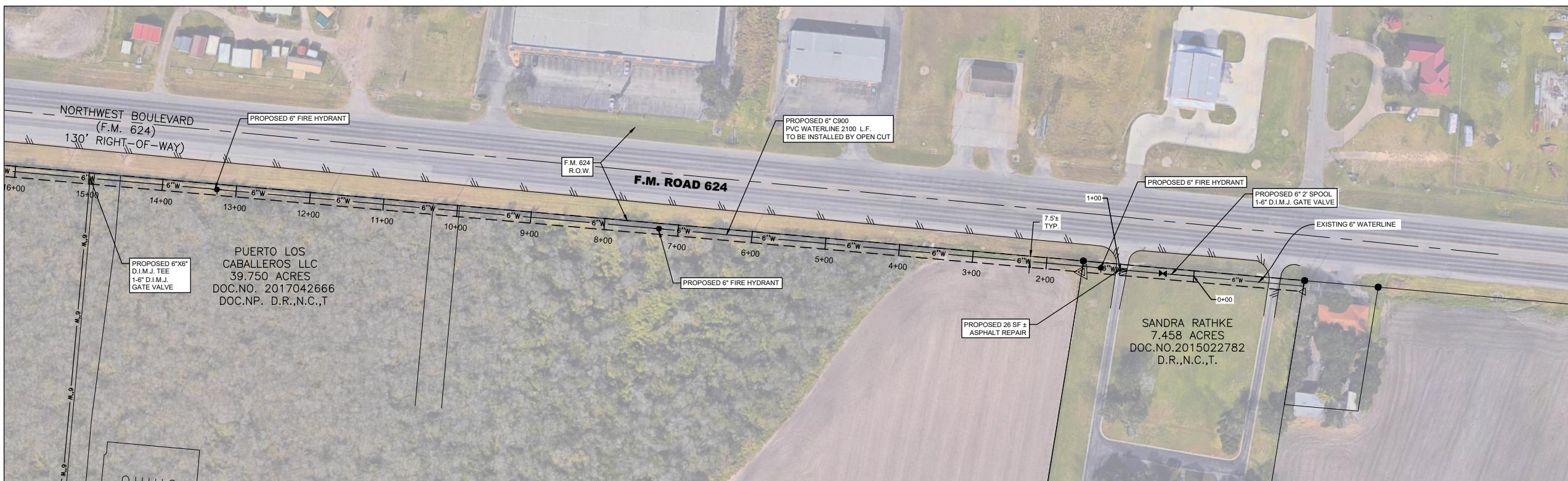
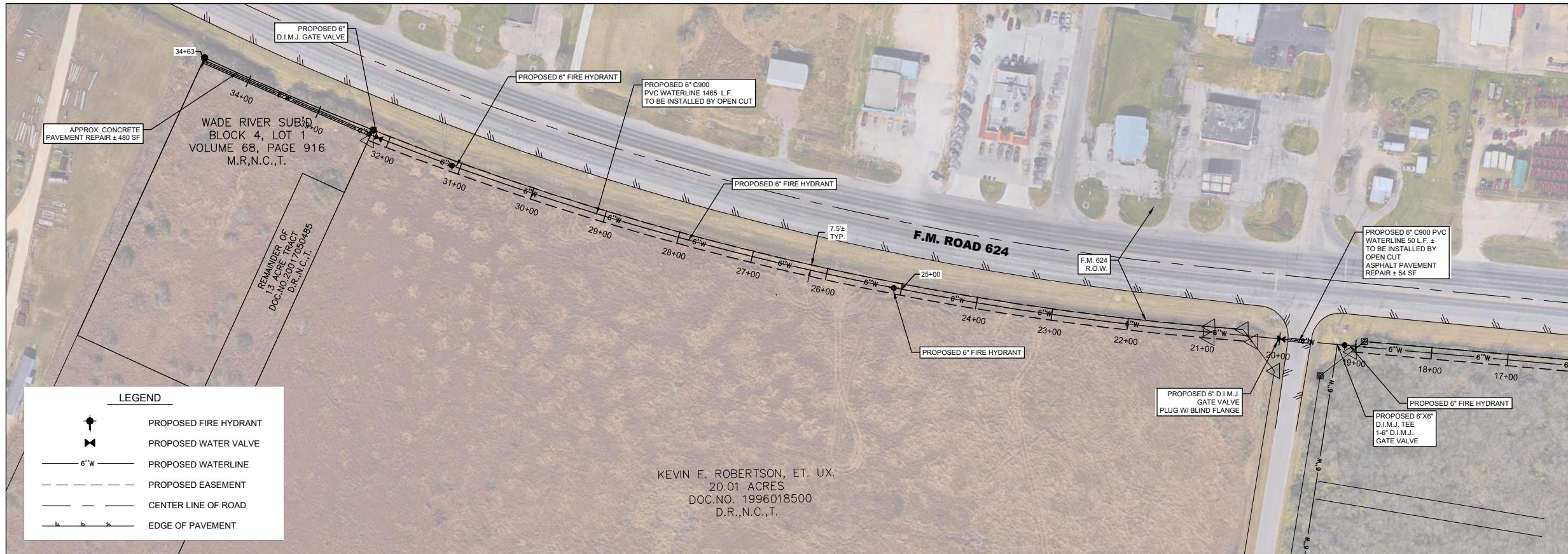
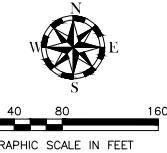
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MURPHY DEVELOPMENT LOOP

WATERLINE EXTENSION
MURPHY LLC - RAWS WATERLINE EXTENSION
NUFCES COUNTY, TEXAS

4A



NUMBER	REVISION	DATE	DRAWN	DESIGNED	REVIEWED

FOR INTERIM REVIEW
THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF REVIEW UNDER THE AUTHORITY OF:
Name: PAUL M. PILARCYK, P.E.
Serial No.: 82060
Date: 9/10/2018
AND IT IS NOT TO BE USED FOR ANY OTHER PURPOSE.

MURPHY LLC
15641 Northwest Blvd.
Robstown, TX 78380

Hanson No. 16L0148B
Filename NEI-8857
Scale AS SHOWN
Date 9/10/2018

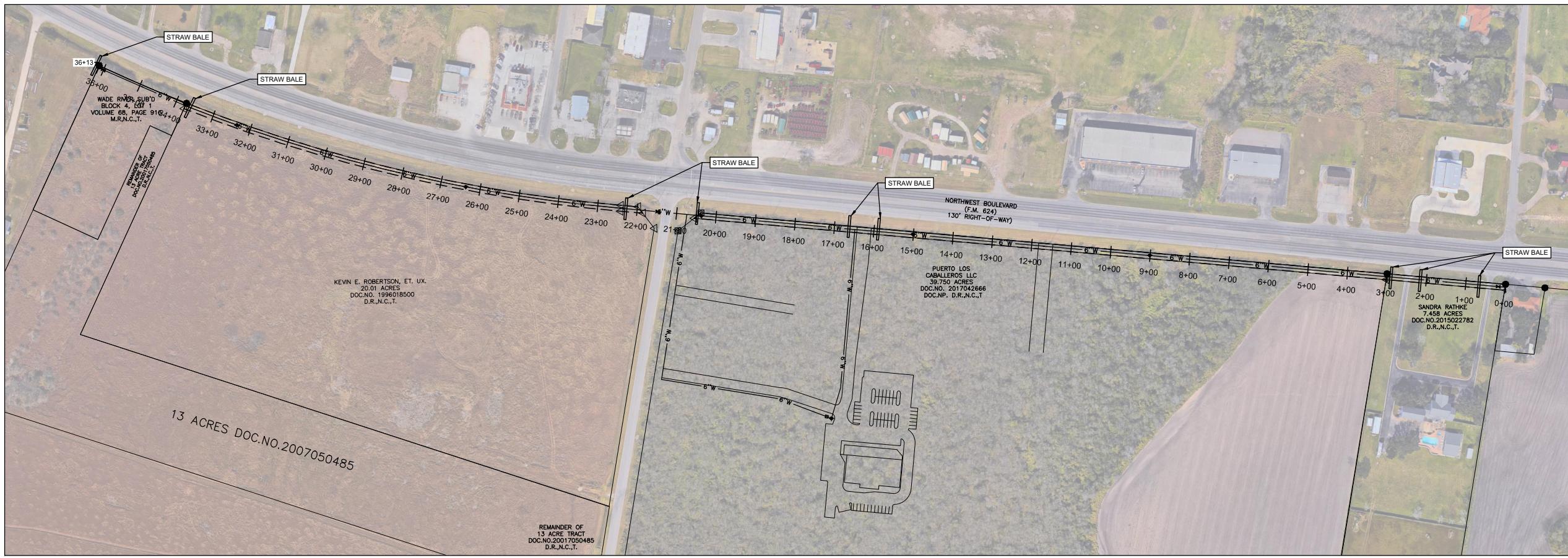
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DRAWN	VM	9/10/2018
REVIEWED	PMP	9/10/2018



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TBPG F-5056
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WATERLINE ALIGNMENT

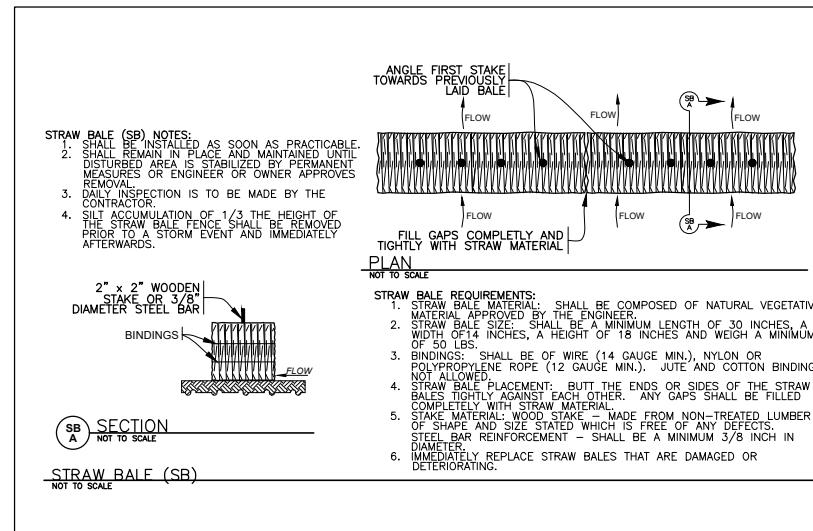
WATERLINE EXTENSION
MURPHY LLC - RAWS WATERLINE EXTENSION
NUCEES COUNTY, TEXAS



A horizontal graphic scale bar consisting of a black line with white tick marks. The numbers 75, 150, and 300 are placed above the scale, indicating distance in feet.

LEGEND

BF ————— STRAW BALE FENCE
————— STRAW BALE



NOTE:

- STRAW BALE, OR ENGINEER APPROVED EQUAL SHALL BE PLACED ACROSS EXISTING DITCHES WITHIN THE R.O.W. (STRAW BALES ARE NOT DRAWN TO SCALE AND SHALL BE PLACED WITHIN THE ROADWAY).

**FOR INTER
REVIEW**

THIS DOCUMENT IS RETAINED
FOR THE PURPOSE OF
UNDER THE AUTHORITY

Name: PAUL M. PILATE
Serial No.: 82060
Date: 9/10/2018

AND IT IS NOT TO BE
USED FOR ANY OTHER PURPOSE.

MURPHY LLC

**15641 Northwest Blvd
Robstown, TX 78383**

Hanson No.	16L0148B
Filename	NEI-8857
Scale	AS SHOWN
Date	9/10/2018

LAYOUT	VM	9/10
DRAWN	VM	9/10
REVIEWED	PMP	9/10



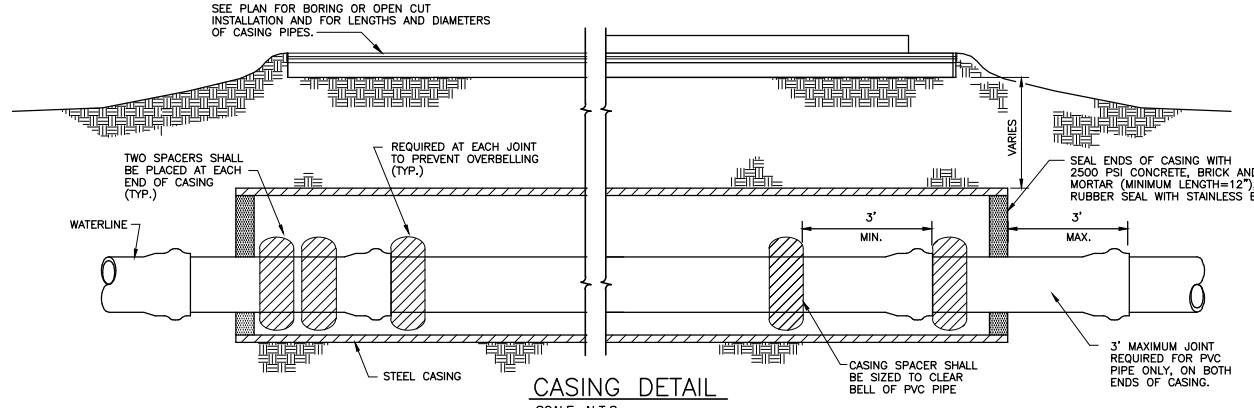
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TBAE F-BR 2458

c. Phone: (361) 814-
(800) 677-
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STORM WATER POLLUTION PREVENTION PLAN

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31
n
WATERLINE EXTENSION
MURPHY LLC - RAWS WATERLINE EXTENSION
NUICES COUNTY, TEXAS



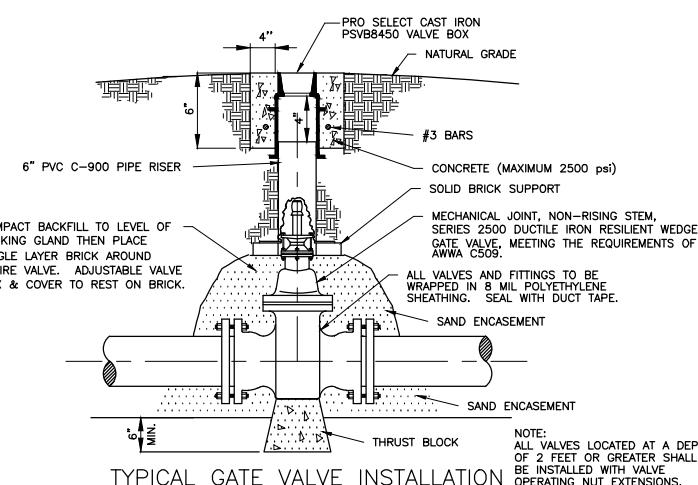
STEEL CASING PIPE WALL THICKNESS CHART

MINIMUM THICKNESS	DIAMETER CASING P.
1/4" (0.250")	12" OR LESS
5/16" (0.3125")	OVER 12"
3/8" (0.375")	OVER 18"
7/16" (0.4375")	OVER 22"
1/2" (0.50")	OVER 28"
9/16" (0.5625")	OVER 34"
5/8" (0.625")	OVER 42"

THIS CHART IS ONLY FOR SMOOTH STEEL CASING
PIPES WITH MINIMUM YIELD STRENGTH OF 35,000 psi

CASING NOTES:

1. CASING SPACERS SHALL BE PROJECTION TYPE, TOTALLY NON-METALLIC SPACERS CONSTRUCTED OF PREFORMED SECTIONS OF HIGH DENSITY POLYETHYLENE. SPACERS SHALL BE ISO 9002 CERTIFIED FOR STRENGTH AND QUALITY. SPACERS SHALL BE MANUFACTURED BY RACI OR APPROVED EQUAL.
2. CASING SPACERS SHALL BE INSTALLED PER MANUFACTURER SPECIFICATION.
3. CASING SPACER SPACING SHALL BE DETERMINED BY MANUFACTURER.
4. A MINIMUM OF THREE SPACERS PER JOINT OF PVC PIPE SHALL BE USED.
5. BORINGS MAY BE INSTALLED EITHER "WET" OR "DRY" UNLESS ROADWAY OWNER REQUIRES OTHERWISE.
6. CASING SHALL EXTEND FROM CENTERLINE OF DITCH TO CENTER LINE OF DITCH



TYPICAL GATE VALVE INSTALLATION

SCALE: N.T.

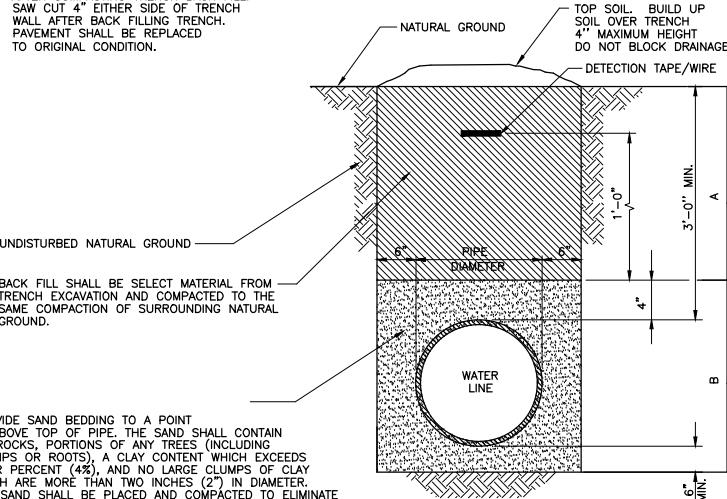
CONSTRUCTION NOTES:

1. ALL BENDS, FITTINGS, VALVES, AND REDUCERS ARE TO BE RESTRAINED.
 2. CONTRACTOR SHALL MEASURE THE O.D. OF ALL EXISTING PIPE AT EACH CONNECTION TO DETERMINE THE CORRECT GASKET DIAMETER PRIOR TO STARTING THE CONNECTION. IF SPECIAL GASKETS ARE REQUIRED, THEY SHALL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL COSTS.
 3. DEFLECT PIPE AND FITTINGS AS NECESSARY TO MAKE CONNECTIONS TO EXISTING PIPE AND FITTINGS.
 4. IF A SLEEVE OR FITTING IS REQUIRED TO COMPLETE THE CONNECTION, ITS COST SHOULD BE INCLUDED IN THE CONNECTION COST.
 5. CONTRACTOR SHALL PROVIDE D.I. ADAPTER COUPLINGS WHEN AC PIPE IS PRESENT. CONTRACTOR SHALL LOCATE THE EXISTING AC PIPE BELLS WHERE REQUIRED AND FOLLOW THE INSTRUCTIONS IN THE CONTRACT DOCUMENTS FOR CONNECTING, REMOVING, AND DISPOSING OF THE AC PIPE. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE O.D. OF ALL AC PIPE CONNECTIONS TO CORRECTLY SIZE ADAPTER COUPLING.
 6. 4" MAINS AND LARGER SHALL BE DR 18, CLASS 150, MEETING THE REQUIREMENTS OF A.W.W.A. C-900 PIPE. JOINTS FOR PIPE 4" AND LARGER SHALL BE THE ELASTEMERIC GASKET TYPE MEETING THE REQUIREMENTS OF A.S.T.M. F-477.
 7. ALL FITTINGS 6" AND LARGER WILL BE CLASS 250 DUCTILE IRON MECHANICAL JOINT TYPE (MORTAR LINED) AND WRAPPED WITH 8 MIL. POLYETHYLENE.
 8. CONCRETE THRUST BLOCKING SHALL BE PROVIDED AT ALL FITTINGS AND FIRE HYDRANTS UNLESS SHOWN OTHERWISE AND PROVIDE BEARING AREA SUFFICIENT THAT THE FITTINGS WILL NOT MOVE DURING TESTING PRESSURES.
 9. CONTRACTOR SHALL NOTIFY THE CORPORATION (361-387-2614) AT LEAST 24 HOURS PRIOR TO EXCAVATION WITHIN 20 FEET OF ANY EXISTING WATER LINE. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO KEEP THE OFFICE INFORMED AT LEAST ONCE EACH DAY OF HIS ACTIVITIES WHILE WORKING IN SAID 20 FEET. THE ACTUAL CONNECTION MUST BE MADE IN PRESENCE OF A RIVER ACRES WATER SUPPLY CORPORATION REPRESENTATIVE.
 10. CONTRACTOR SHALL INSTALL #12 COPPER W.P. DETECTOR WIRE WITH ALL MAIN LINES. THE WIRE SHALL BE BROUGHT UP AT EACH FIRE HYDRANT AND WRAPPED AROUND TWICE. ALL JOINTS SHALL BE SOLDERED AND WRAPPED IN PVC COATING.

I:\16\OBS\160148B\CAD\ SITE\SHEET\29-8857-DETAIL SDWG

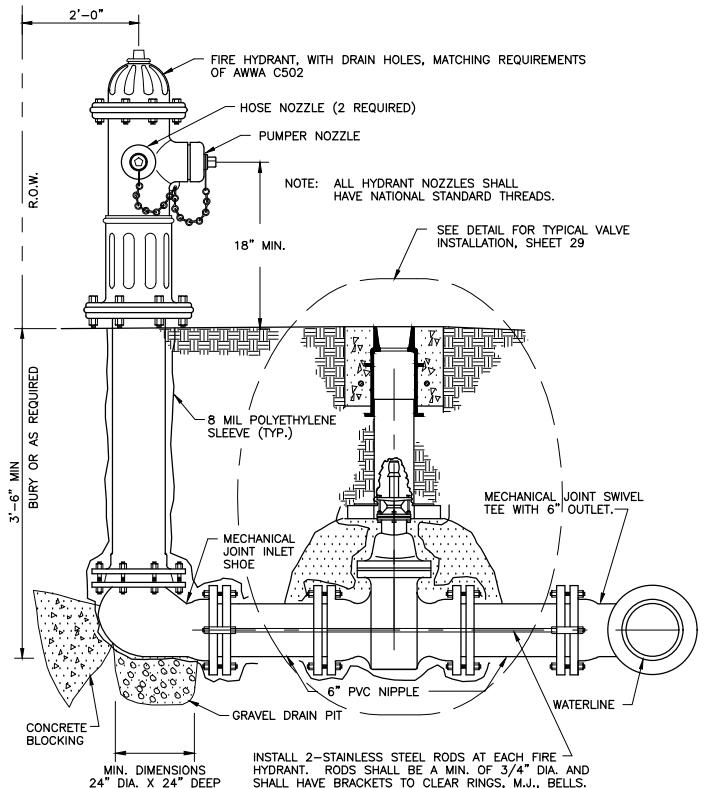
SEE PLAN FOR BORING OR OPEN CUT
INSTALLATION AND FOR LENGTHS AND DIAMETER
OF CASING PIPES

NOTE: SAW-CUT ASPHALT & BASE FULL DEPTH PRIOR TO TRENCHING. SAW-CUT ASPHALT SURFACE AGAIN AFTER COMPACTING TRENCH BACK FILL.
SAW CUT 4" EITHER SIDE OF TRENCH WALL AFTER BACK FILLING TRENCH.
PAVEMENT SHALL BE REPLACED TO ORIGINAL CONDITION.



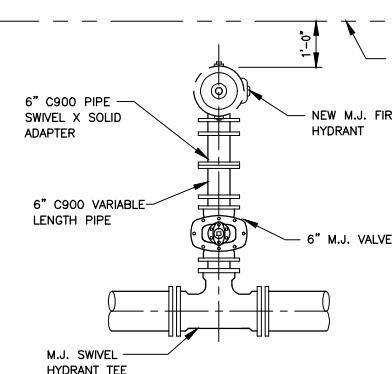
TRENCH STANDARD BACK FILL

TRENO
SCALENT'S

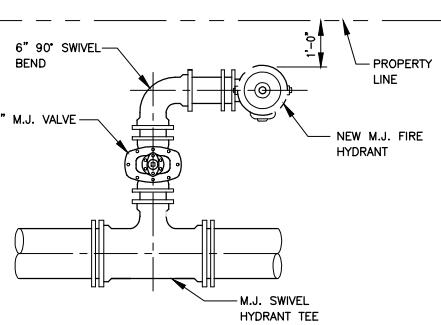


FIRE HYDRANT ASSEMBLY

NOTE: HYDRANT ADJUSTMENT OTHER THAN STANDARD LENGTHS; SHALL BE CONSIDERED SUBSIDIARY TO THE TO THE FIRE HYDRANT ASSEMBLY BID ITEM



TYPE 1



TYPE 2

FIRE HYDRANT ASSEMBLY DETAIL

NOTE:
TYPE 2 FIRE HYDRANT ASSEMBLY WILL ONLY BE ALLOWED
WITH SPECIFIC APPROVAL BY THE RIVER ACRES WATER SUPPLY CORPORATION



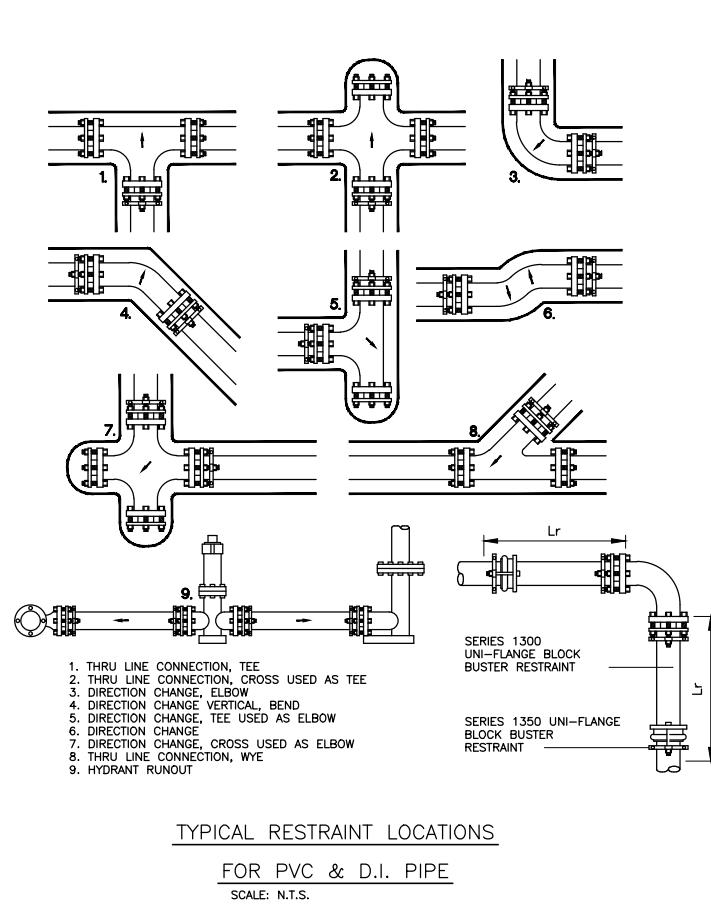
Hanson Professional Services Inc.
4501 Gollihar Rd.
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TBPLS F-10039500
TBPG F-50556
TBAE F-BR 2458

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DETAILS 1 OF 2

WATERLINE EXTENSION
MURPHY LLC - RAWS WATERLINE EXTENSION
NUECES COUNTY, TEXAS



1. THRU LINE CONNECTION, TEE
2. THRU LINE CONNECTION, CROSS USED AS TEE
3. DIRECTION CHANGE, ELBOW
4. DIRECTION CHANGE, VERTICAL, BEND
5. DIRECTION CHANGE, TEE USED AS ELBOW
6. DIRECTION CHANGE
7. DIRECTION CHANGE, CROSS USED AS ELBOW
8. THRU LINE CONNECTION, WYE
9. HYDRANT RUNOUT

TYPICAL RESTRAINT LOCATIONS
FOR PVC & D.I. PIPE
SCALE: N.T.S.

RECOMMENDED RESTRAINT LENGTHS FOR HORIZONTAL OFFSETS OF PVC PIPE, (L_r)

NOM. PIPE SIZE (IN.)	90° BEND	45° BEND	22.5° BEND	11.25° BEND	SIZE ON TEE*	VALVE/DEAD-END
4	17 FT.	7 FT.	4 FT.	2 FT.	18 FT.	28 FT.
6	24 FT.	10 FT.	5 FT.	3 FT.	29 FT.	39 FT.
8	32 FT.	13 FT.	7 FT.	4 FT.	42 FT.	51 FT.
10	38 FT.	16 FT.	8 FT.	4 FT.	52 FT.	62 FT.
12	45 FT.	19 FT.	9 FT.	5 FT.	64 FT.	73 FT.

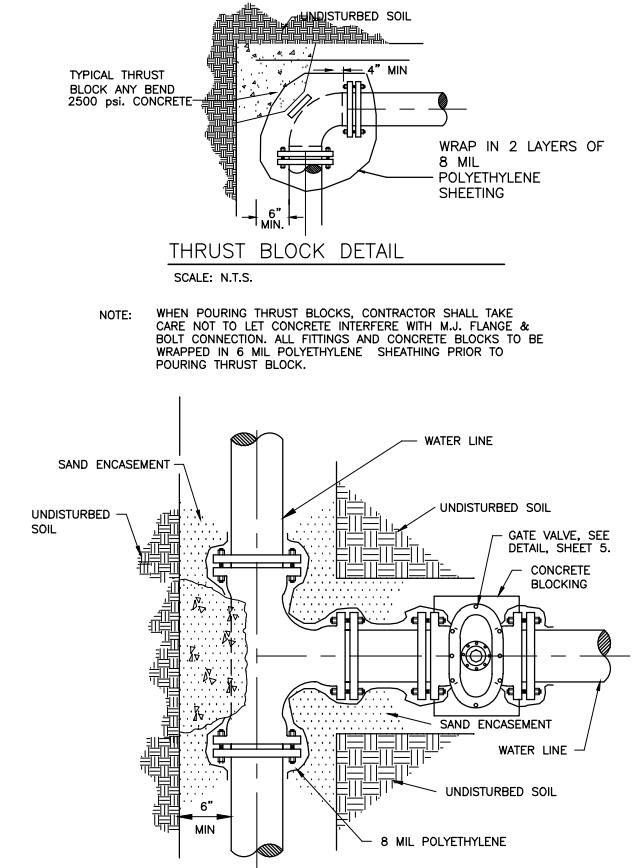
* RECOMMENDED RESTRAINT LENGTHS FOR TEES ARE FOR THE BRANCH OUTLET AND ASSUME A MINIMUM 2 FT. SECTION OF PIPE ATTACHED TO EACH SIDE OF THE RUN. RESTRAINT DEVICES SHOULD ALSO BE INSTALLED ON BOTH RUN JOINTS OF THE TEE ITSELF.

NOTE: ANY JOINTS THAT FALL WITHIN THESE RECOMMENDED LENGTHS SHOULD BE RESTRAINED (ON EACH SIDE OF BENDS, ON THE BRANCH OUTLET OF TEES, AND BEFORE DEAD-ENDS).

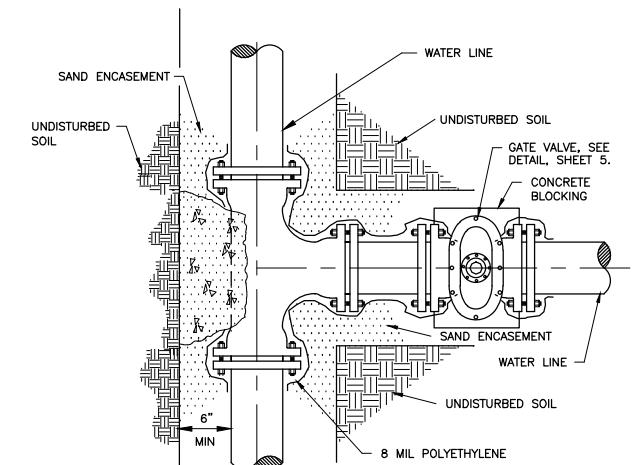
* CONTRACTOR TO VERIFY RESTRAINT SYSTEM W/MANUFACTURER OF PIPE AND RESTRAINTS. PVC RESTRAINT LENGTHS BASED ON USING 80% OF THE REQUIRED RESTRAINTS FOR D.I./POLY.

* THE FOLLOWING PARAMETERS ARE FOR THE ABOVE TABLE

PIPE MATERIAL	- D.I.
SOIL TYPE	- CLAY
SAFETY FACTOR	- 2.5
TRENCH TYPE	- 4
DEPTH OF BURY	- 3 FT.
TEST PRESSURE	- 150 PSI
LENGTH ALONG RUN	- 2 FT.



THRUST BLOCK DETAIL
SCALE: N.T.S.



THRUST BLOCK DETAIL SHOWING
TYPICAL VALVE LOCATION
SCALE: N.T.S.

MINIMUM THRUST BLOCK AREA REQUIRED

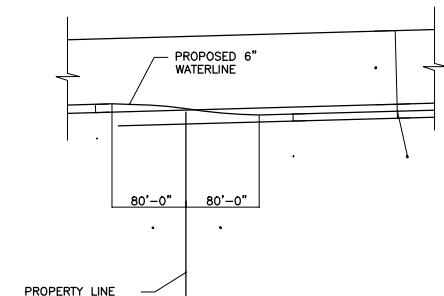
PIPE SIZE	TEES & VALVES	90° BEND	45° BEND	22 1/2° BEND	11 1/4° BEND
4"	4 SQ FT	3 SQ FT	2 SQ FT	1 SQ FT	1 SQ FT
6"	9 SQ FT	7 SQ FT	4 SQ FT	2 SQ FT	1 SQ FT
8"	16 SQ FT	11 SQ FT	6 SQ FT	3 SQ FT	2 SQ FT
10"	24 SQ FT	17 SQ FT	10 SQ FT	5 SQ FT	4 SQ FT
12"	35 SQ FT	25 SQ FT	14 SQ FT	7 SQ FT	4 SQ FT

THRUST BLOCK NOTES :

1. THRUST BLOCKS SHALL BE POURED AGAINST UNDISTURBED SOIL.
2. WHERE TRENCH WALL HAS BEEN DISTURBED, EXCAVATE ALL LOOSE MATERIAL AND EXTEND THRUST BLOCK TO UNDISTURBED SOIL.
3. ON TEES AND BENDS, EXTEND THRUST BLOCK FULL LENGTH.
4. NO CONCRETE SHALL BE POURED OVER BOLTS OR ON TOP OF FITTINGS.
5. BACKFILL SHALL CONSIST ENTIRELY OF CLEAN SOIL FREE OF ROCK FRAGMENTS. ANY MUCK ENCOUNTERED SHALL BE REPLACED WITH ACCEPTABLE BACKFILL.
6. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2500 PSI AT 28 DAYS.
7. NO SEPARATE PAYMENT.
8. NO CONCRETE IS ALLOWED AROUND NUTS OR BOLTS. A MINIMUM OF 4" CLEARANCE SHALL BE MAINTAINED BETWEEN CONCRETE AND BOLTS.
9. 150 PSI WAS USED FOR THE HEAD AND 1,000 LB WAS USED FOR BEARING CAPACITY FOR THE ABOVE TABLE.

PVC DEFLECTION GUIDE

1. IT IS THE INTENT OF THIS PROJECT TO MAINTAIN A MINIMUM COVER OF 3'-0" WHENEVER POSSIBLE.
2. THE MAXIMUM ALLOWABLE DEFLECTION ON A JOINT OF PVC PIPE AND DUCTILE IRON PIPE IS APPROXIMATELY 2° PER JOINT. THIS UTILITY DEFLECTION GUIDE IS BASED ON THE ASSUMPTION THAT THE BEGINNING AND ENDING ELEVATIONS ON THE PIPE ARE LEVEL.
3. THE CONTRACTOR IS RESPONSIBLE FOR CALCULATING THE MIN. DEFLECTION STANCES REQUIRED TO CLEAR THE UTILITY. IT IS RECOMMENDED THAT HE EXCAVATE WELL AHEAD OF THE PIPE LAVING CREW IN ORDER TO MAINTAIN MAXIMUM ALLOWABLE DEFLECTION REQUIREMENTS.
4. THE CONTRACTOR MAY CHOOSE TO USE M.J.D.I. FITTINGS FOR THE ADJUSTMENTS. HOWEVER, THE FITTINGS MUST BE RESTRAINED IN ACCORDANCE WITH THE VERTICAL THRUST RESTRAINT SYSTEM DETAIL. NO ADDITIONAL COST WILL BE PAID BY THE OWNER.
5. SECTIONS OF LINE WHICH EXCEED THE MAXIMUM ALLOWABLE DEFLECTION REQUIREMENTS WILL HAVE TO BE CORRECTED AT THE CONTRACTORS EXPENSE.



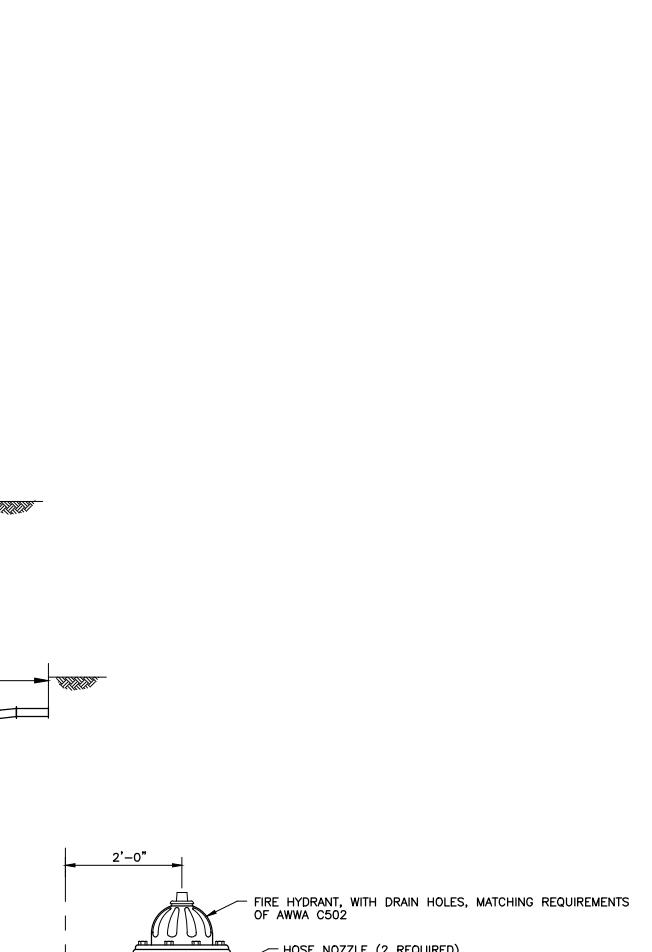
WATERLINE DEFLECTION INTO EASEMENT DETAIL
SCALE: N.T.S.

Hanson No. 16L0148B
Filename NEI-8857
Scale AS SHOWN
Date 9/10/2018

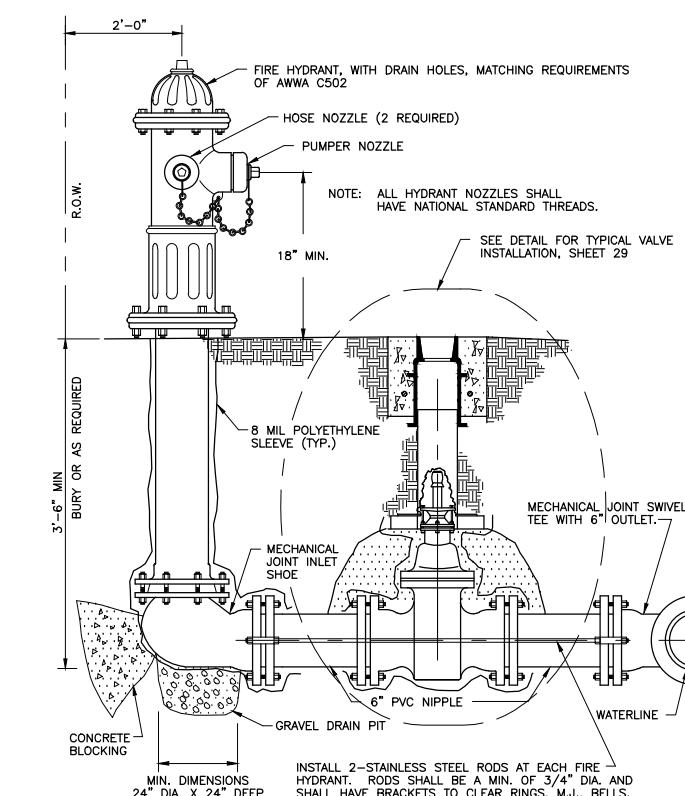


Hanson Professional Services Inc.
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Offices Nationwide

LAYOUT VM 9/10/2018
DRAWN VM 9/10/2018
REVIEWED PMP 9/10/2018



PVC DEFLECTION GUIDE
FOR UTILITY CROSSINGS
SCALE: N.T.S.



FIRE HYDRANT ASSEMBLY
SCALE: N.T.S.

NOTE: HYDRANT ADJUSTMENT OTHER THAN STANDARD LENGTHS SHALL BE CONSIDERED SUBORDINARY TO THE TO THE FIRE HYDRANT ASSEMBLY BID ITEM.

NUMBER	REVISION	DATE	DRAWN	DESIGNED	REVIEWED

FOR INTERIM REVIEW
THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF REVIEW UNDER THE AUTHORITY OF:
Name: PAUL M. PIARCZYK, P.E.
Serial No.: 92060
Date: 9/10/2018
AND IT IS NOT TO BE USED FOR ANY OTHER PURPOSE.

MURPHY LLC
15641 Northwest Blvd.
Robstown, TX 78380

Hanson No. 16L0148B
Filename NEI-8857
Scale AS SHOWN
Date 9/10/2018



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LAYOUT VM 9/10/2018
DRAWN VM 9/10/2018
REVIEWED PMP 9/10/2018

TBPE F-417
TBPLS F-10039500
TBPG F-50556
TBAE F-2458

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DETAILS 2 OF 2

WATERLINE EXTENSION
MURPHY LLC - RAWS WATERLINE EXTENSION
NUCLES COUNTY, TEXAS



DISCLOSURE OF INTERESTS

City of Corpus Christi Ordinance 17112, as amended, requires all persons or firms seeking to do business with the City to provide the following information. Every question must be answered. If the question is not applicable, answer with "NA".

NAME: Puerto Los Caballeros, LLC

STREET: P.O. Box 9605 CITY: Corpus Christi, Texas ZIP: 78469

FIRM is: Corporation Partnership Sole Owner Association Other _____

DISCLOSURE QUESTIONS

If additional space is necessary, please use the reverse side of this page or attach separate sheet.

1. State the names of each "employee" of the City of Corpus Christi having an "ownership interest" constituting 3% or more of the ownership in the above named "firm".

Name

Job Title and City Department (if known)

N/A

2. State the names of each "official" of the City of Corpus Christi having an "ownership interest" constituting 3% or more of the ownership in the above named "firm".

Name

Title

N/A

3. State the names of each "board member" of the City of Corpus Christi having an "ownership interest" constituting 3% or more of the ownership in the above named "firm".

Name

Board, Commission, or Committee

N/A

4. State the names of each employee or officer of a "consultant" for the City of Corpus Christi who worked on any matter related to the subject of this contract and has an "ownership interest" constituting 3% or more of the ownership in the above named "firm".

Name

Consultant

N/A

CERTIFICATE

I certify that all information provided is true and correct as of the date of this statement, that I have not knowingly withheld disclosure of any information requested; and that supplemental statements will be promptly submitted to the City of Corpus Christi, Texas as changes occur.

Certifying Person:

JAN MURPHY
(Print Name)

Title: MEMBER

Signature of Certifying Person:

Date: 10-19-18