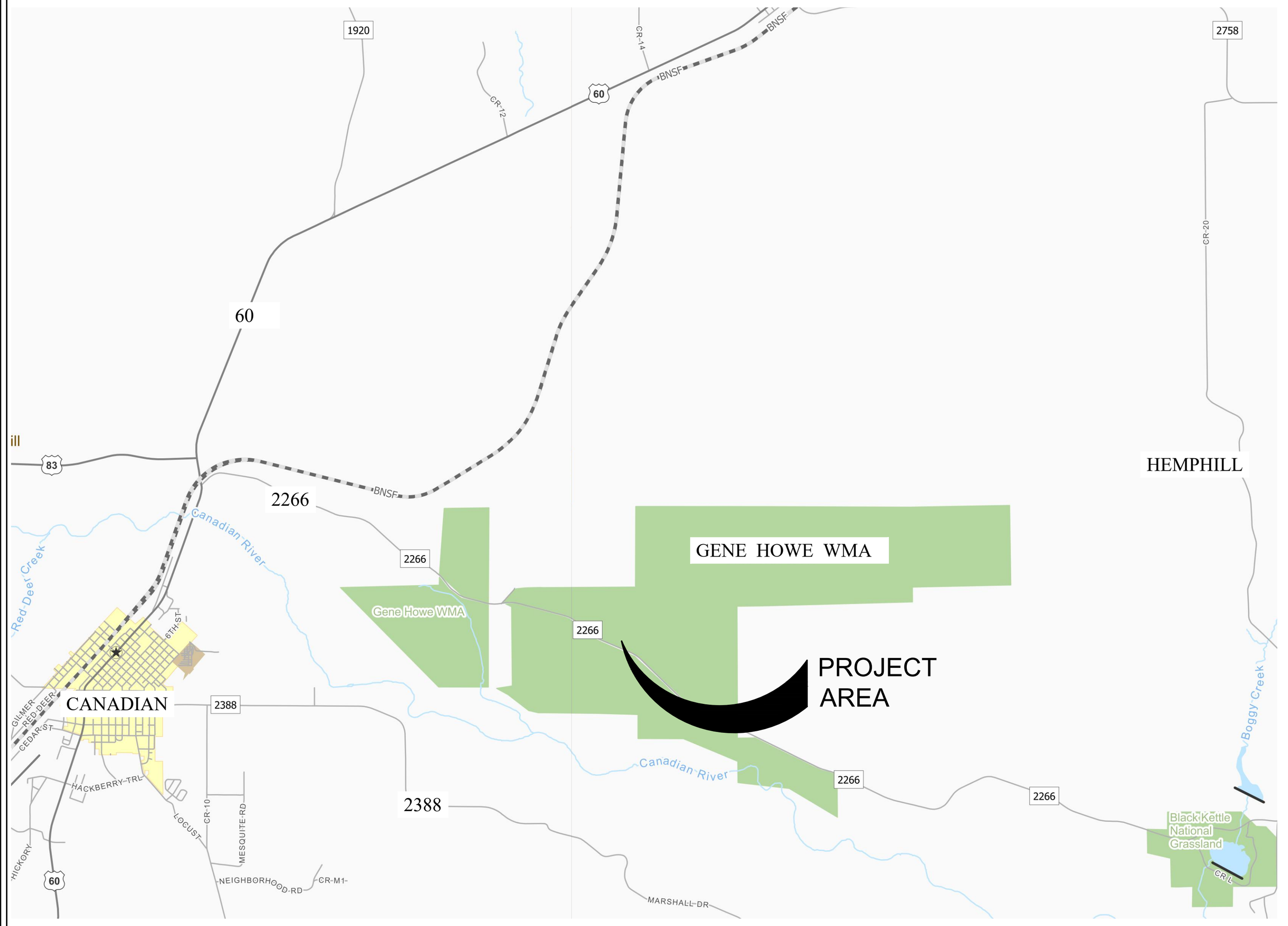
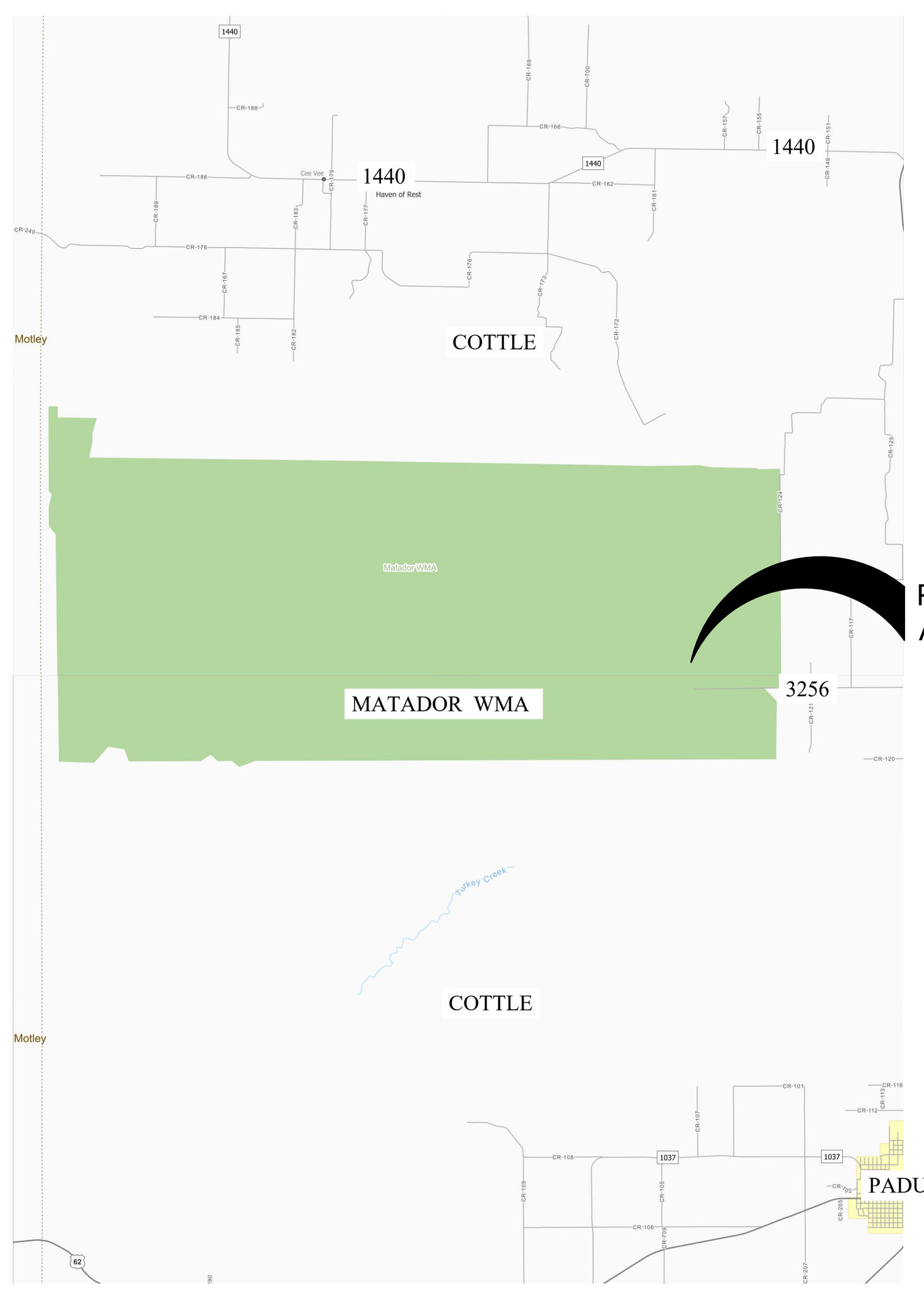


NORTH

GENE HOWE VICINITY MAP

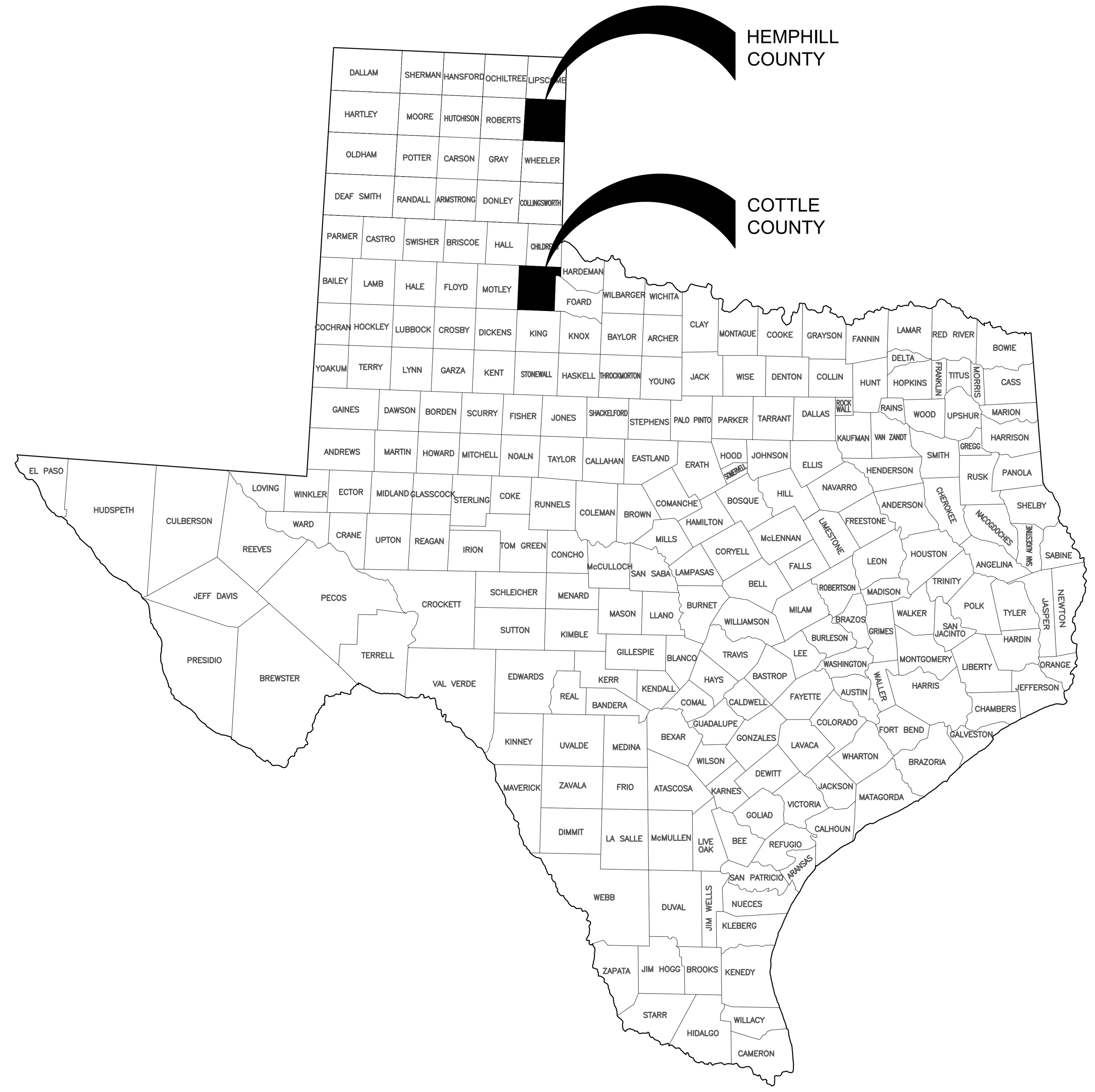
NOT TO SCALE



NORTH

MATADOR VICINITY MAP

NOT TO SCALE



NORTH

COUNTY LOCATION MAP

NOT TO SCALE

PROJECT

WATER WELL IMPROVEMENTS

MATADOR WILDLIFE MANAGEMENT AREA
GENE HOWE MANAGEMENT AREA

PROJECT NO: 1110162 DATE: MARCH 2021

INDEX OF DRAWINGS

BUILDING CODE SUMMARY

A. INTERNATIONAL CODE COUNCIL ADOPTIONS*
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2. STRUCTURAL CODE INTERNATIONAL BUILDING CODE 2015
3. PLUMBING CODE INTERNATIONAL PLUMBING CODE 2015
4. MECHANICAL CODE INTERNATIONAL MECHANICAL CODE 2015
5. GAS CODE INTERNATIONAL FUEL GAS CODE 2015
6. RESIDENTIAL CODE INTERNATIONAL RESIDENTIAL CODE 2015
7. EXISTING BUILDINGS INTERNATIONAL EXISTING BUILDINGS CODE 2015
* International Fire Code omitted in lieu of TPWD's implementation of National Fire Protection Association codes. International Energy Conservation Code 2015 omitted in lieu of Energy Standard for Buildings, ASHRAE/IESNA Standard 90.1 (2013).

B. NATIONAL FIRE PROTECTION ASSOCIATION
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   See SECO website for State Funded Buildings, New Construction and Major Renovation Requirements and SECO Compliance Certification Forms
2. WATER CONSERVATION STANDARDS FOR STATE BUILDINGS - Energy Conservation Design Standards: Texas Administrative Code, Title 34, Part 1, Ch.19, Subchapter C
   a. COMPLIANCE WITH THE WATER CONSERVATION DESIGN STANDARDS FOR STATE BUILDINGS AND INSTITUTIONS OF HIGHER EDUCATION FACILITIES, STATE ENERGY CONSERVATION OFFICE (SECO), 2016
   See SECO website for Texas Water Conservation Design Standards, Requirements and SECO Compliance Certification / Reporting Form

D. ACCESSIBILITY CODES
1. US DEPT. OF JUSTICE, 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN
2. ARCHITECTURAL BARRIERS ACT ACCESSIBILITY GUIDELINES; OUTDOOR DEVELOPED AREAS, NOVEMBER 25, 2013
3. 2012 TEXAS ACCESSIBILITY STANDARDS, ELIMINATION OF ARCHITECTURAL BARRIERS, TEXAS GOVERNMENT CODE, CHAPTER 469

E. PLAYGROUND SAFETY CODE
1. ASTM F1487-17, STANDARD CONSUMER SAFETY PERFORMANCE SPECIFICATIONS FOR PLAYGROUND EQUIPMENT FOR PUBLIC USE
2. ASTM F2223-15, STANDARD GUIDE FOR ASTM STANDARDS ON PLAYGROUND SURFACING

DESIGN TEAM

ENPROTEC/HIBBS & TODD, INC.
ENVIRONMENTAL AND CIVIL ENGINEERING
402 Cedar Street
325-698-5560
Abilene, Texas 79601
PE Firm Registration No. 1151
PG Firm Registration No. 50103
RPLS Firm Registration No. 10011900

CIVIL ENGINEER
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CLOIS W. VERSYP, PLLC
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cversyp@taylortel.net

SCOPE OF WORK

CONSTRUCTION OF NEW RESIDENTIAL POTABLE WATER SUPPLY WELLS INCLUDING PUMPS, PIPING, ELECTRICAL, AND PIPELINE.

2 PROPOSED WELLS ARE LOCATED AT THE MATADOR WILDLIFE MANAGEMENT AREA (WMA) AND 1 WELL IS LOCATED AT THE GENE HOWE WMA.

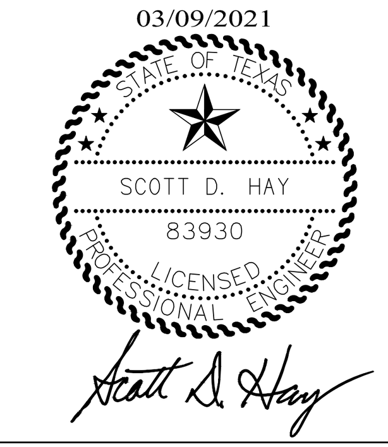
TEXAS PARKS & WILDLIFE

TEXAS PARKS AND WILDLIFE

INFRASTRUCTURE DIVISION

4200 SMITH SCHOOL ROAD - AUSTIN, TEXAS 78744-3292

03/09/2021



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TEXAS PARKS & WILDLIFE
RELEASED FOR SOLICITATION
INFRASTRUCTURE DIVISION

MILESTONE ISSUE

GENERAL CONSTRUCTION NOTES

1. CONTRACTOR TO CONTACT ALL UTILITY COMPANIES IN THE AREA FOR FIELD VERIFICATION OF EXISTING FACILITIES. UTILITY COMPANY'S SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING:
   TPWD

   TX. EXCAVATION SAFETY SYSTEM 1-800-344-8377

2. THE LOCATION OF TELEPHONE, GAS, FIBER OPTIC AND POWER COMPANY UTILITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL REQUEST THE EXACT LOCATION OF THESE FACILITIES BY CALLING TEXAS ONE-CALL AT 1-800-545-6005 AT LEAST 48 HOURS BEFORE COMMENCING WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH OCCUR DUE TO HIS FAILURE TO REQUEST THE LOCATION AND PRESERVATION OF THESE UNDERGROUND FACILITIES.

3. CONTRACTOR SHALL "POTHOLE" ALL UTILITY LINES AHEAD OF THE CONSTRUCTION CREWS TO LOCATED AND VERIFY EXISTING VERTICAL ELEVATIONS PRIOR TO START OF CONSTRUCTION. ALL COSTS ASSOCIATED WITH POTHOLING SHALL BE PAID FOR BY THE CONTRACTOR. ONE-CALL SHALL MARK LINE PRIOR TO POTHOLING.

4. CONTRACTOR SHALL BE RESPONSIBLE FOR AND ADEQUATELY PROTECT PRIVATE PROPERTY, EXISTING STRUCTURES, UTILITIES, TREES, SHRUBS, AND OTHER ADJOINING FACILITIES, AND REPAIR OR REPLACE DUE TO DAMAGE CAUSED BY CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

5. RESTORE AND/OR REPLACE TO NEW CONDITION ANY FENCES DAMAGED DURING CONSTRUCTION. ASSOCIATED COST SHALL BE SUBSIDIARY TO THE VARIOUS BID PRICES OF THE CONTRACT.

6. IN AREAS OF GRAVEL ROADWAY REPLACEMENT (TRENCH), THE WIDTH FOR PAYMENT IS SHOWN ON THE DETAIL SHEET. ADDITIONAL REPLACEMENT OUTSIDE OF THESE LIMITS WILL BE REPLACED AT THE CONTRACTORS EXPENSE.

7. WHEN REQUIRED, THE CONTRACTOR SHALL PROVIDE A TRENCH SAFETY SYSTEM TO MEET, AS A MINIMUM, THE REQUIREMENTS OF OSHA SAFETY AND HEALTH REGULATION, PART 1926, SUBPART P AS PUBLISHED IN THE FEDERAL REGISTER, VOLUME 54, NO. 209, DATED OCTOBER 31, 1989. INCLUDING MOST CURRENT REVISION.

8. WHEN APPLICABLE, CONTRACTOR SHALL COVER OPEN EXCAVATIONS WITH ANCHORED ½" STEEL PLATES DURING NON-WORKING HOURS. OPEN EXCAVATIONS LEFT UNCOVERED REQUIRE WRITTEN AUTHORIZATION BY THE CITY OF MERTZON.

9. TEST MATERIALS TO BE USED FOR BACKFILL AND ADJUST MOISTURE CONTENT TO SPECIFIED LEVELS BY ADDING WATER OR DRYING SOILS AS NECESSARY AND AS SPECIFIED.

10. WHEN REQUIRED BY THE ENGINEER, THE CONTRACTOR IS RESPONSIBLE FOR SCHEDULING CONSTRUCTION MATERIALS TESTING THROUGH THE TPWD'S DESIGNATED FIELD REPRESENTATIVE 24 HOURS PRIOR TO TESTING.

LIMITS OF CONSTRUCTION

1. LIMIT OPERATIONS TO WITHIN THE CONFINES OF THE CONSTRUCTION WORK LIMITS SHOWN ON THE DRAWINGS.

2. LIMIT THE STORAGE OF EQUIPMENT, MATERIALS, STOCK PILES, ETC. TO ONE (1) CONSTRUCTION WEEK ALONG CONSTRUCTION ROUTE, OR AS DIRECTED BY THE ENGINEER.

TRAFFIC NOTES (WHERE APPLICABLE)

1. CONTRACTOR SHALL PROVIDE ACCESS TO ALL EXISTING DRIVEWAYS AT ALL TIMES.

2. WHEN REQUIRED, A NOTICE PREPARED BY THE CONTRACTOR AND APPROVED BY THE OWNER SHALL BE HAND DELIVERED BY THE CONTRACTOR TO ALL RESIDENTS WITHIN THE VICINITY OF CONSTRUCTION NOTIFYING THEM OF THE PROPOSED CONSTRUCTION AND POSSIBLE DISRUPTIONS IN SERVICE TO WATER, SEWER, ROADS, ACCESS, ETC. NOTICE SHALL INCLUDE DATES AND NUMBERS TO CONTACT IN CASE OF ANY QUESTIONS.

3. MAINTAIN ACCESS TO ALL PROPERTIES AFFECTED BY CONSTRUCTION IN ONE OR MORE OF THE FOLLOWING METHODS: (1) ANCHORED ½" STEEL PLATES (2) BACK FILLING IMMEDIATELY AFTER CONSTRUCTION
   (3) PLACING CALICHE SURFACE FOR TEMPORARY DRIVEWAY PURPOSES. COST FOR MAINTAINING ACCESS SHALL BE CONSIDERED INCIDENTAL TO THE PRICE BID PER LINEAR FOOT OF WATER LINE CONSTRUCTION.

4. IF CONSTRUCTION WILL EFFECT ROADWAYS, CONTRACTOR SHALL PROVIDE AND INSTALL TRAFFIC CONTROL DEVICES IN CONFORMANCE WITH THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (TEXAS MUTCD, LATEST EDITION) DURING CONSTRUCTION.

5. CONSTRUCTION WARNING SIGNS AND END OF CONSTRUCTION SIGNS SHALL BE PLACED AT PROJECT LIMITS AND SHALL REMAIN IN PLACE THROUGHOUT THE DURATION OF THE CONSTRUCTION.

6. WHEN REQUIRED, CONTRACTOR SHALL MAINTAIN TRAFFIC IN EACH DIRECTION BY MEANS OF FLAGMEN OR DETOUR DURING WORKING HOURS.

7. CONTRACTOR SHALL CONDUCT HIS OPERATIONS IN A MANNER SUCH THAT TRUCKS AND OTHER VEHICLES DO NOT CREATE A DIRT/DUST NUISANCE OR SAFETY HAZARD ON ANY ROADWAY, PUBLIC OR PRIVATE.

DRAINAGE STRUCTURES (WHERE APPLICABLE)

1. ADEQUATE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION AND ANY DRAINAGE DITCH OR STRUCTURE DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO THE SATISFACTION OF THE OWNER.

STREET AND SITE NOTES (WHERE APPLICABLE)

1. CONDITION OF THE ROAD, RIGHT-OF-WAY, AND PROJECT SITE UPON COMPLETION OF THE JOB, SHALL BE AS GOOD AS OR BETTER THAN PRIOR TO STARTING WORK. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REMOVE ALL EXCAVATED MATERIAL AND DEBRIS FROM THE SITE AT NO ADDITIONAL EXPENSE TO THE OWNER.

ELECTRICAL NOTES (WHERE APPLICABLE)

1. WARNING: OVERHEAD LINES MAY EXIST ON THE PROPERTY. SINCE THEY ARE CLEARLY VISIBLE THEY HAVE NOT BEEN MARKED ON THE PLANS. THE CONTRACTOR SHOULD LOCATE ALL OVERHEAD UTILITIES PRIOR TO BEGINNING ANY CONSTRUCTION. TEXAS LAW, FORBIDS ALL ACTIVITIES IN WHICH PERSONS OR THINGS MAY COME WITHIN SIX (6) FEET OF LIVE OVERHEAD HIGH VOLTAGE LINES. CONTRACTORS ARE LEGALLY RESPONSIBLE FOR SAFETY AND CONSTRUCTION WORKERS UNDER THIS LAW. THIS LAW CARRIES BOTH CRIMINAL AND CIVIL LIABILITY. TO ARRANGE FOR LINES TO BE TURNED OFF OR MOVED CALL VICTOR RIOS OR JIM PARKS OF CP&L AT (956) 971-3221 (OFFICE). LOCATION OF CP&L FACILITIES ARE APPROXIMATE AND HAVE NOT BEEN VERIFIED BY AN ACTUAL FIELD CHECK.

2. HAND DIG WITHIN ONE (1) FOOT OF UNDERGROUND CONDUIT OR CABLE.

GAS NOTES (WHERE APPLICABLE)

1. CAUTION: UNDERGROUND GAS FACILITIES: GAS LINES (TO INCLUDE UNIT GAS TRANSMISSION, AND/OR INDUSTRIAL GAS SUPPLY CORPORATION WHERE APPLICABLE) MAY BE PRESENT AT THE PROJECT SITE. THE CONTRACTOR SHALL CONTACT TEXAS ONE-CALL AT 1-800-645-6005 A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION TO HAVE MAIN AND SERVICE LINES FIELD LOCATED. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION BEFORE COMMENCING WORK AND AGREE TO BE FULLY RESPONSIBLE FOR ANY DAMAGES CAUSED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE THESE UNDERGROUND FACILITIES. HAND DIG WITHIN ONE (1) FOOT OF UNDERGROUND GAS LINES.

TELEPHONE (WHERE APPLICABLE)

1. THE LOCATIONS OF TELEPHONE CO. UTILITIES ARE NOT SHOWN. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION BEFORE COMMENCING WORK. CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE THESE UNDERGROUND UTILITIES.

2. HAND DIG WITHIN ONE (1) FOOT OF UNDERGROUND CONDUIT CABLE SYSTEMS OR MANHOLES.

3. TAKE EXTRA PRECAUTION WHEN EXCAVATING NEAR TELEPHONE POLES TO PREVENT LOSS OF SOIL SUPPORT FOR POLE STRUCTURE.

4. COORDINATE ANY CONFLICT WITH TELEPHONE COMPANY REPRESENTATIVES AND PROVIDE NECESSARY SUPPORT FOR TELEPHONE CABLE AS INSTRUCTED BY TELEPHONE COMPANY. NO SEPARATE PAYMENT WILL BE MADE FOR SUCH WORK.

RE-SEEDING

1. ALL DISTURBED AREAS SHALL BE RE-SEEDED AFTER CONSTRUCTION PER SPECIFICATIONS.

TEXAS PARKS & WILDLIFE

03/09/2021

SCOTT D. HAY
83930
LICENSED
STATE OF TEXAS
PROFESSIONAL ENGINEER

Scott D. Hay

MATADOR WILDLIFE MANAGEMENT AREA
GENE HOWE WILDLIFE MANAGEMENT AREA
RESIDENTIAL POTABLE WATER WELL IMPROVEMENTS
PROJECT No. 111016

DATE: 03/09/2021
DESIGNED BY: S.D.H.
DRAWN BY: J.C.
REVIEWED BY: S.D.H.
REVISED:

REVISED:

REVISED:

eHT PROJECT NO. 20-7704

SHEET TITLE

GENERAL NOTES

SHEET NUMBER

2

OF 11

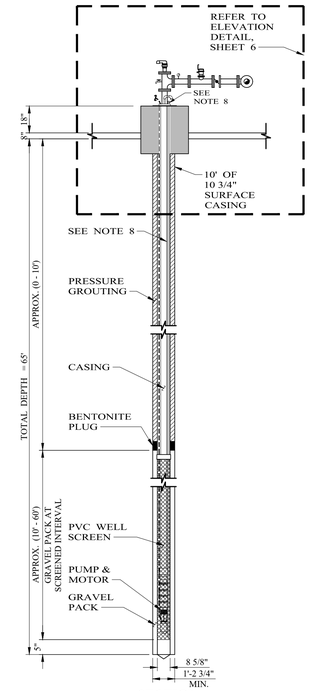
20-7704

RESIDENCE GENE HOWE
WELL SITE PLAN
SCALE: 1" = 20'-0"

10 0 20
SCALE IN FEET

LEGEND

PROPOSED WATER LINE



SECTION

GENERAL NOTES

1. CASING AND SCREEN DEPTHS SHOWN ARE APPROXIMATE ONLY. CONTRACTOR SHALL REFER TO WELL LOGS FOR MATERIAL SETTING DEPTHS FOR INDIVIDUAL WELLS.
2. THE CASING SHALL BE 5" SDR-17 PVC AND SHALL EXTEND A MINIMUM OF 18" ABOVE THE FINISH FLOOR OF THE BUILDING AND A MINIMUM OF 1" ABOVE THE WELL SEALING BLOCK.
3. THE DRILL HOLE SHALL HAVE A MINIMUM DIAMETER OF 8-3/4".
4. THE CONTRACTOR SHALL GROUT THE AREA BETWEEN THE WALL OF THE DRILL HOLE AND THE CASING FROM THE SURFACE TO THE TOP OF THE GRAVEL PACK PER SPECS, WITH MINIMUM RADIAL THICKNESS OF 1.5" FOR THE GROUT.
5. THE GRAIN SIZE OF THE GRAVEL WILL BE DETERMINED BASED UPON SAMPLES TAKEN DURING CONSTRUCTION OF THE TEST HOLE. REFER TO SPECIFICATIONS FOR GRAIN SIZE AND TYPE OF GRAVEL.
6. THE WELL SCREEN SLOT SIZE SHALL BE CONFIRMED BY THE SCREEN MANUFACTURER.
7. CONTRACTOR SHALL FURNISH AND INSTALL SUBMERSIBLE PUMP UNIT PER SPECS.
8. 1/2" HDPE AIR LINE TO MEASURE WATER LEVELS AFTER WELL COMPLETION (PIPE TO EXTEND TO A POINT 3' BELOW PUMP.)
9. CONCRETE TO BE 3000 PSI. REBAR TO BE GRADE 60.
10. CONCRETE SLAB SHALL SLOPE AWAY FROM THE WELL HEAD IN ALL DIRECTIONS AT 1/4" PER FOOT.
11. WELL HEAD SHALL BE SEALED BY A GASKET TO PREVENT POSSIBILITY OF CONTAMINATING THE WELL WATER.
12. PUMP AND MOTOR SHALL BE NOMINAL 4" DIAMETER. MOTOR SHALL BE CONFIGURED WITH COOLING SHROUD.
13. INSTALL WELL HEAD J-BOX ON 1-5/8" UNISTRUT WITH STAINLESS STEEL POST BASES. ATTACH POST BASES TO NEW CONCRETE WITH STAINLESS STEEL ANCHORS.

RESIDENCE GENE HOWE
WELL DETAIL
NO SCALE

TEXAS PARKS & WILDLIFE

03/09/2021

TEXAS
SCOTT D. HAY
83930
LICENSED
STATE OF
PROFESSIONAL ENGINEER

MATADOR WILDLIFE MANAGEMENT AREA
GENE HOWE WILDLIFE MANAGEMENT AREA
RESIDENTIAL POTABLE WATER WELL IMPROVEMENTS
PROJECT No. 111010162

DATE: 03/09/2021
DESIGNED BY: S.D.H.
DRAWN BY: J.C.
REVIEWED BY: S.D.H.
REVISED:
REVISED:
REVISED:

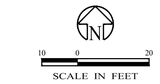
eHT PROJECT NO. 20-7704

SHEET TITLE
RESIDENCE GENE HOWE WELL SITE PLAN

SHEET NUMBER
3
OF 11

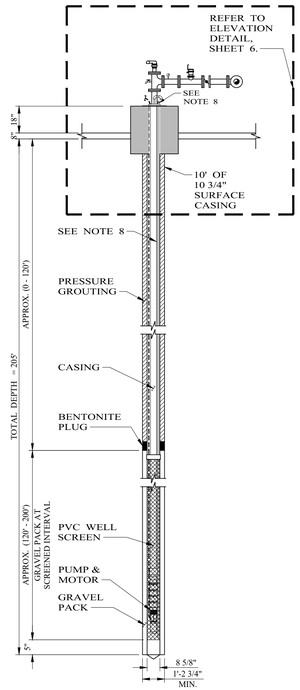
20-7704

RESIDENCE #1 MATADOR
WELL SITE PLAN
SCALE: 1" = 20'-0"



LEGEND

PROPOSED WATER LINE



SECTION

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RESIDENCE MATADOR #1
WELL DETAIL
NO SCALE

TEXAS PARKS & WILDLIFE

03/09/2021

SCOTT D. HAY
83930
LICENSED
STATE OF TEXAS
ENGINEERING

MATADOR WILDLIFE MANAGEMENT AREA
GENE HOWE WILDLIFE MANAGEMENT AREA
RESIDENTIAL POTABLE WATER WELL IMPROVEMENTS
PROJECT No. 1110162

DATE: 03/09/2021
DESIGNED BY: S.D.H.
DRAWN BY: J.C.
REVIEWED BY: S.D.H.
REVISED:
REVISED:
REVISED:

eHT PROJECT NO. 20-7704

SHEET TITLE

RESIDENCE #1 MATADOR WELL SITE PLAN

SHEET NUMBER

4

OF 11

20-7704

10 0 20

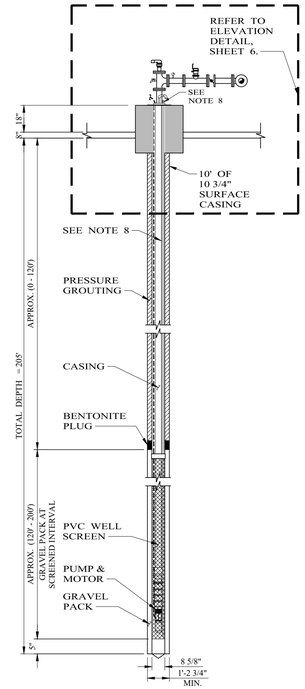
SCALE IN FEET

LEGEND

PROPOSED WATER LINE

RESIDENCE #2 MATADOR WELL SITE PLAN

SCALE: 1" = 20'-0"



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RESIDENCE MATADOR #2 WELL DETAIL

NO SCALE

26-7704

TEXAS PARKS & WILDLIFE

03/09/2021

SCOTT D. HAY
83930
LICENSED
STATE OF TEXAS
PROFESSIONAL ENGINEER

MATADOR WILDLIFE MANAGEMENT AREA
GENE HOWE WILDLIFE MANAGEMENT AREA
RESIDENTIAL POTABLE WELL IMPROVEMENTS
PROJECT No. 1110162

DATE: 03/09/2021
DESIGNED BY: S.D.H.
DRAWN BY: J.C.
REVIEWED BY: S.D.H.
REVISED:
REVISED:
REVISED:

eHT PROJECT NO. 20-7704

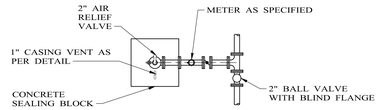
SHEET TITLE

RESIDENCE #2 MATADOR WELL SITE PLAN

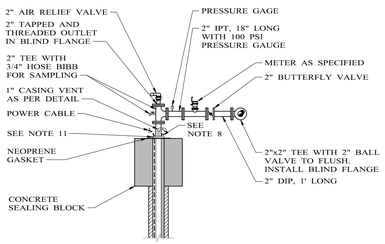
SHEET NUMBER

5

OF 11



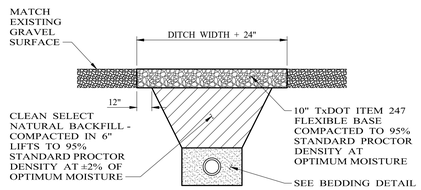
PLAN VIEW



ELEVATION

TYPICAL WELL DETAIL

NO SCALE



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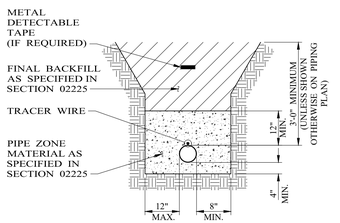

PIPE BEDDING DETAILS

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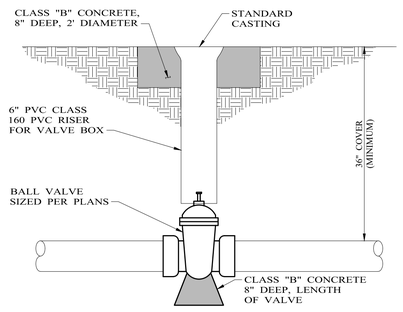
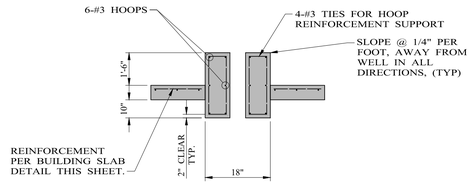


TYPICAL VALVE INSTALLATION

NO SCALE

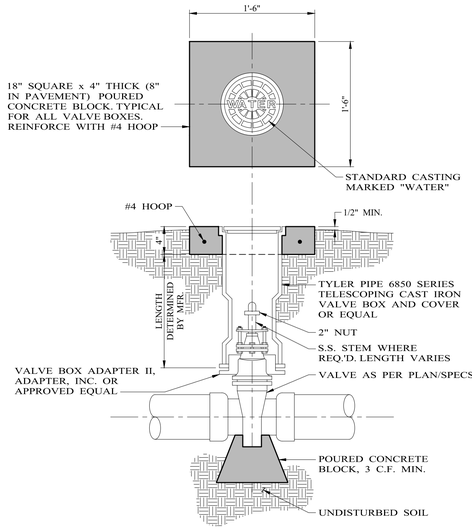


GENERAL NOTES

1. 3000 PSI CONCRETE.
2. REINFORCEMENT BARS SHALL HAVE A MINIMUM OF 2" COVER.
3. CONCRETE SLAB AND CONCRETE SEALING BLOCK SHALL BE SLOPE AWAY FROM THE WELL HEAD IN ALL DIRECTIONS AT 1/4" PER FOOT.
4. WELL SITE TO BE GRADED TO DRAIN AWAY FROM WELL IN ALL DIRECTIONS.
5. CONCRETE SEALING BLOCK SHALL EXTEND AT LEAST 3' FROM THE WALL CASING IN ALL DIRECTIONS.

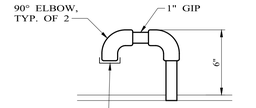
CONCRETE SEALING BLOCK REINFORCEMENT DETAIL

NO SCALE



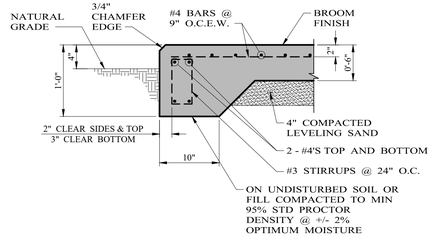
TYPICAL VALVE BOX AND BLOCKING DETAIL

NO SCALE



VENT CASING DETAIL

NO SCALE

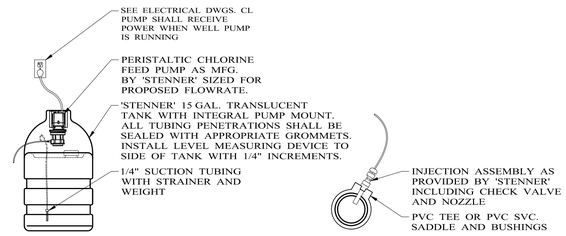


TYPICAL EXTERIOR PERIMETER BEAM AND BUILDING SLAB

NO SCALE

NOTES

1. PROVIDE PUMP HEAD SERVICE KIT AND 5 PACK OF REPLACEMENT TUBES FOR CHLORINE FEED PUMP.
2. CONTRACTOR SHALL PROVIDE A POCKET CALORIMETER (CHLORINE RESIDUAL ANALYZER) AS MFG. BY HACH AND 1-YEARS WORTH OF PACKETS. CHLORINE FEED PUMP SHALL BE SET TO PROVIDE 0.2 MG/L FREE RESIDUAL AT MOST DISTANT USAGE POINT IN DISTRIBUTION SYSTEM. CONTRACTOR SHALL TRAIN SITE STAFF IN PROPER USE OF RESIDUAL ANALYZER.



CHLORINE FEED PUMP **INJECTION POINT**

CHLORINATION SYSTEM DETAILS

NO SCALE

TEXAS PARKS & WILDLIFE

03/09/2021

SCOTT D. HAY 83930 LICENSED PROFESSIONAL ENGINEER

Scott D. Hay

MATADOR WILDLIFE MANAGEMENT AREA
GENE HOWE WILDLIFE MANAGEMENT AREA
RESIDENTIAL POTABLE WATER WELL IMPROVEMENTS
PROJECT No. 1110162

DATE: 03/09/2021
DESIGNED BY: S.D.H.
DRAWN BY: J.C.
REVIEWED BY: S.D.H.
REVISED:
REVISED:
REVISED:

eHT PROJECT NO. 20-7704

SHEET TITLE

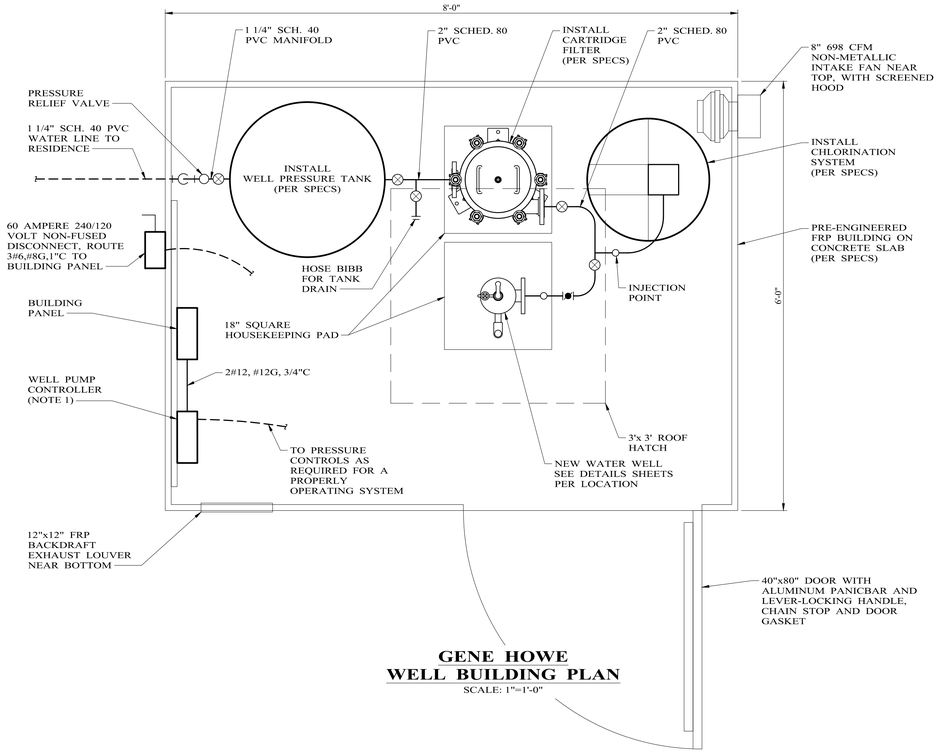
WELL SITE DETAILS

SHEET NUMBER

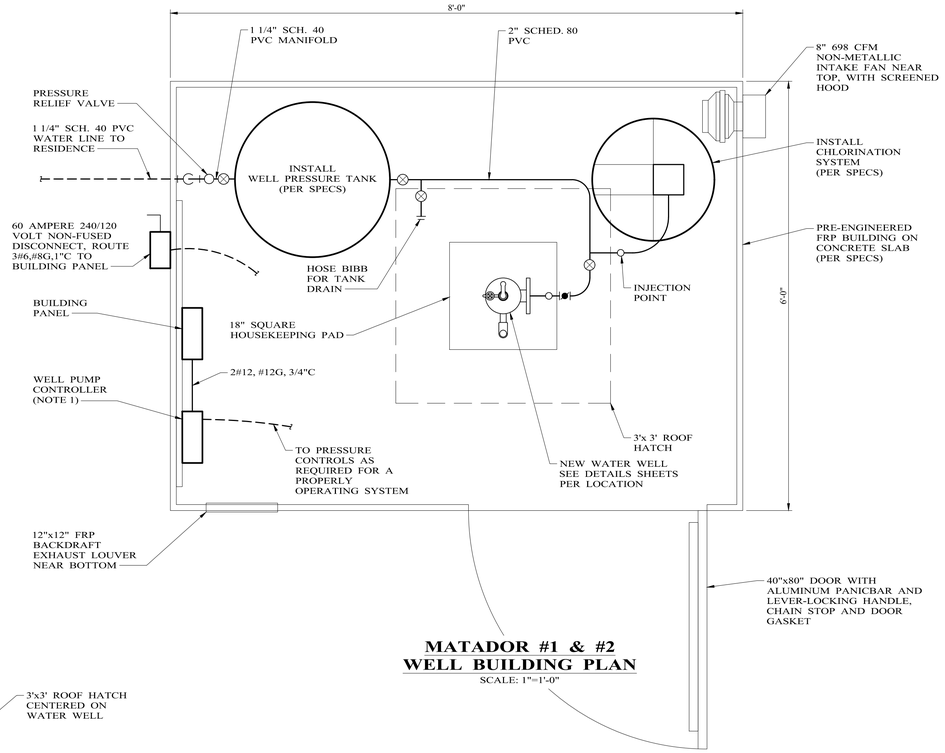
6

OF 11

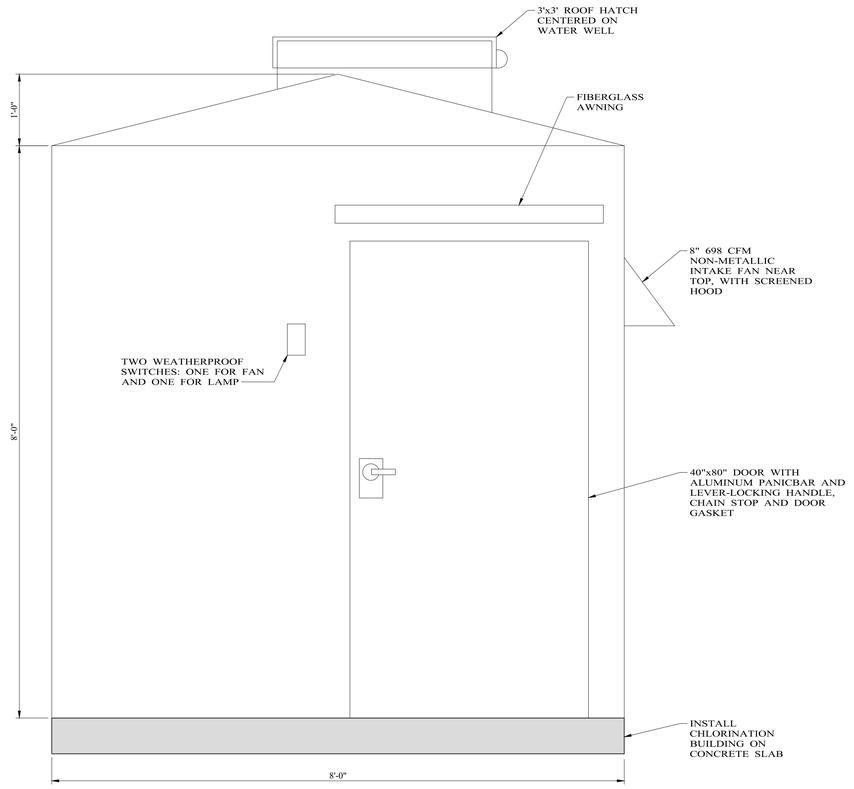
20-7704



GENE HOWE
WELL BUILDING PLAN
SCALE: 1"=1'-0"



MATADOR #1 & #2
WELL BUILDING PLAN
SCALE: 1"=1'-0"



GENE HOWE AND MATADOR
WELL BUILDING ELEVATION
SCALE: 1"=1'-0"

LEGEND

⊗ PROPOSED GATE VALVE

PROPOSED BUTTERFLY VALVE

GENERAL NOTE :

1. INSTALL WELL PUMP CONTROLLER ADJACENT TO CHLORINATION BUILDING PANEL. CONNECT POWER SUPPLY TO 2-POLE, 20 AMPERE CIRCUIT BREAKER IN PANEL.

TEXAS PARKS & WILDLIFE

03/09/2021

SCOTT D. HAY
83930
LICENSED
STATE OF TEXAS

MATADOR WILDLIFE MANAGEMENT AREA
GENE HOWE WILDLIFE MANAGEMENT AREA
RESIDENTIAL POTABLE WATER WELL IMPROVEMENTS
PROJECT No. 1110162

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REVISED:
REVISED:
REVISED:

eHT PROJECT NO. 20-7704

SHEET TITLE

TYPICAL WELL BUILDING PLAN

SHEET NUMBER

7

OF 11

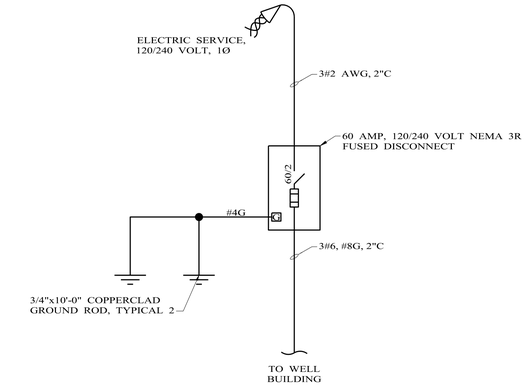
20-7704

RESIDENCE GENE HOWE
ELECTRICAL SITE PLAN
SCALE: 1" = 20'-0"

10 0 20
SCALE IN FEET

LEGEND

SYMBOL	DESCRIPTION
J	JUNCTION BOX
OE	EXISTING OVERHEAD ELECTRICAL
OE	NEW OVERHEAD ELECTRICAL
	CONDUIT OR CABLE - EXPOSED
	CONDUIT - UNDERGROUND
C	CONDUIT
EC	EMPTY CONDUIT
WP	WEATHERPROOF
GFI	GROUND FAULT INTERRUPTER
	RECEPTACLE, NEMA 5-20R UNLESS OTHERWISE INDICATED
	HOME RUN TO PANEL INDICATED. UNLESS OTHERWISE INDICATED, PROVIDE 2#12 AWG, #12G, 3/4"C. SHORT DASH INDICATES HOT CONDUCTOR, LONG DASH INDICATES NEUTRAL AND CURVED DASH INDICATES GROUND
30	NON-FUSED DISCONNECT AMPERE RATING AS INDICATED
	REFER NOTE INDICATED



ELECTRICAL ONE-LINE DIAGRAM
NO SCALE

GENERAL NOTES

1. THE EXISTING UTILITIES SHOWN HAVE BEEN LOCATED FROM CASUAL OBSERVATIONS. NO GUARANTEE IS MADE TO THE ACCURACY OF THE UTILITIES SHOWN. CONTRACTOR SHALL FIELD VERIFY ALL UTILITIES, BOTH UNDERGROUND AND OVERHEAD, PRIOR TO BEGINNING ANY EXCAVATION OR OTHER CONSTRUCTION ACTIVITIES.
2. CONTRACTOR SHALL PROVIDE CONNECTORS, CONNECTIONS, AND ALL COMPONENTS REQUIRED FOR A FULLY FUNCTIONAL AND OPERATIONAL SYSTEM.

NOTES INDICATED ON DRAWING (6):

1. EXISTING WELL. REMOVE ALL CONDUCTORS BACK TO FUSED SWITCH. REMOVE ALL ABOVE GRADE CONDUIT AND ABANDON BELOW GRADE CONDUIT.
2. REMOVE FUSED SWITCH AND CONDUIT RISER IN THEIR ENTIRETY INCLUDING ALL SUPPORTS. CUT CONDUCTORS AT EXISTING TRIPLEX CONDUCTOR.
3. POSITION NEW POLE SUCH THAT THE SPAN BETWEEN THE TWO EXISTING POLES HAS NO ANGLE AND IS IN A STRAIGHT LINE.
4. DISCONNECT EXISTING CONDUCTORS FROM EXISTING POLE AT WELL. REUSE EXISTING CONDUCTORS FOR CONNECTION TO NEW POLE. DO NOT SPLICE CONDUCTORS MID SPAN BUT MAKE ALL CONNECTIONS AT POLES.
5. INSTALL NEW CONDUCTORS FROM NEW POLE TO EXISTING POLE NEAR ABANDONED WELL.
6. INSTALL NEW FUSED SWITCH FOR NEW BUILDING.
7. INSTALL SEPARATE SECONDARY CONNECTION FOR EACH SPAN.
8. DEAD END NEW TRIPLEX WITH EXISTING SECONDARY CONNECTION. CONNECT CONDUCTORS TO SHOP SERVICE CONDUCTORS.

TEXAS PARKS & WILDLIFE

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MATADOR WILDLIFE MANAGEMENT AREA
GENE HOWE WILDLIFE MANAGEMENT AREA
RESIDENTIAL POTABLE WATER WELL IMPROVEMENTS
PROJECT No. 1110162

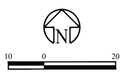
DATE: 03/09/2021
DESIGNED BY: C.W.V.
DRAWN BY: A.S.
REVIEWED BY: C.W.V.
REVISED:
REVISED:
REVISED:
eHT PROJECT NO. 20-7704

SHEET TITLE
RESIDENCE GENE HOWE WELL ELECTRICAL PLAN

SHEET NUMBER
8
OF 11

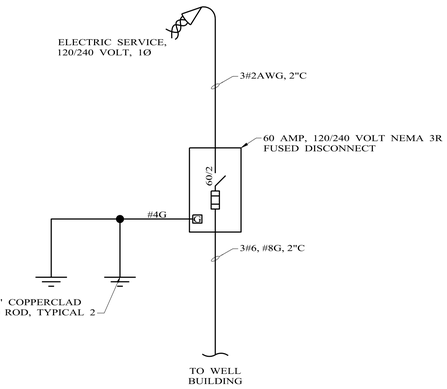
20-7704

RESIDENCE #1 MATADOR
ELECTRICAL SITE PLAN
SCALE: 1" = 20'-0"



LEGEND

SYMBOL	DESCRIPTION
J	JUNCTION BOX
OE	EXISTING OVERHEAD ELECTRICAL
OE	NEW OVERHEAD ELECTRICAL
	CONDUIT OR CABLE - EXPOSED
	CONDUIT - UNDERGROUND
C	CONDUIT
EC	EMPTY CONDUIT
WP	WEATHERPROOF
GFI	GROUND FAULT INTERRUPTER
	RECEPTACLE, NEMA 5-20R UNLESS OTHERWISE INDICATED
	HOME RUN TO PANEL INDICATED. UNLESS OTHERWISE INDICATED, PROVIDE 2#12 AWG, #12G, 3/4"C. SHORT DASH INDICATES HOT CONDUCTOR, LONG DASH INDICATES NEUTRAL AND CURVED DASH INDICATES GROUND
J 30	NON-FUSED DISCONNECT AMPERE RATING AS INDICATED
	REFER NOTE INDICATED



ELECTRICAL ONE-LINE DIAGRAM
NO SCALE

GENERAL NOTES

1. THE EXISTING UTILITIES SHOWN HAVE BEEN LOCATED FROM CASUAL OBSERVATIONS. NO GUARANTEE IS MADE TO THE ACCURACY OF THE UTILITIES SHOWN. CONTRACTOR SHALL FIELD VERIFY ALL UTILITIES, BOTH UNDERGROUND AND OVERHEAD, PRIOR TO BEGINNING ANY EXCAVATION OR OTHER CONSTRUCTION ACTIVITIES.
2. CONTRACTOR SHALL PROVIDE CONNECTORS, CONNECTIONS, AND ALL COMPONENTS REQUIRED FOR A FULLY FUNCTIONAL AND OPERATIONAL SYSTEM.

NOTES INDICATED ON DRAWING (V):

1. REMOVE AND DISCONNECT EXISTING UNDERGROUND CONDUCTORS TO WELL ENCLOSED BREAKER. REMOVE ALL ABOVE GRADE CONDUIT TO WELL INCLUDING ALL SUPPORTS. REMOVE 40 AMP, 2-POLE CIRCUIT BREAKER IN BREAKER ENCLOSURE, AND INSTALL 20 AMP, 1-POLE CIRCUIT IN BREAKER ENCLOSURE FOR RECEPTACLE. RECONNECT RECEPTACLE TO NEW CIRCUIT BREAKER. INSTALL BLANK COVER OVER RESULTING OPENING IN BREAKER ENCLOSURE INTERIOR COVER. INSTALL BLANK PLUG IN ENCLOSURE AFTER REMOVAL OF CONDUIT.
2. REMOVE ALL ABOVE GRADE CONDUITS AND ALL CONDUCTORS. ABANDON BELOW GRADE CONDUIT.
3. REMOVE POLE AND ALL CONDUITS AND CONDUCTORS TO EXISTING WELL.
4. CONNECT NEW OVERHEAD SERVICE TO WELL TO EXISTING OVERHEAD SERVICE CONDUCTORS TO RESIDENCE.
5. INSTALL SEPARATE SECONDARY CONNECTION FOR EACH SPAN.
6. INSTALL GUY AND ANCHOR ON EXISTING POLE.

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MATADOR WILDLIFE MANAGEMENT AREA
GENE HOWE WILDLIFE MANAGEMENT AREA
RESIDENTIAL POTABLE WATER WELL IMPROVEMENTS
PROJECT No. 1110162

DATE: 03/09/2021
DESIGNED BY: C.W.V.
DRAWN BY: A.S.
REVIEWED BY: C.W.V.
REVISED:
REVISED:
REVISED:
eHT PROJECT NO. 20-7704

SHEET TITLE
RESIDENCE #1 MATADOR WELL ELECTRICAL PLAN

SHEET NUMBER
9
OF 11

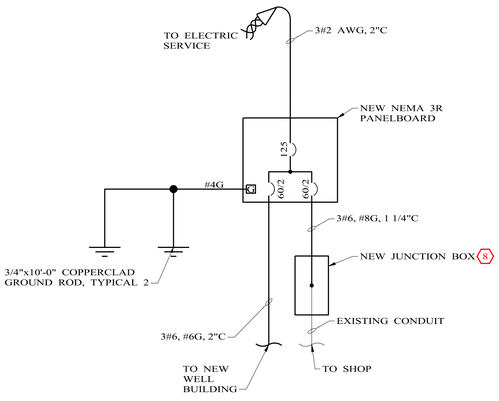
20-7704

RESIDENCE #2 MATADOR
ELECTRICAL SITE PLAN
SCALE: 1" = 20'-0"

10 0 20
SCALE IN FEET

LEGEND

SYMBOL	DESCRIPTION
J	JUNCTION BOX
OE	EXISTING OVERHEAD ELECTRICAL
OE	NEW OVERHEAD ELECTRICAL
	CONDUIT OR CABLE - EXPOSED
	CONDUIT - UNDERGROUND
C	CONDUIT
EC	EMPTY CONDUIT
WP	WEATHERPROOF
GFI	GROUND FAULT INTERRUPTER
	RECEPTACLE, NEMA 5-20R UNLESS OTHERWISE INDICATED
	HOME RUN TO PANEL INDICATED. UNLESS OTHERWISE INDICATED, PROVIDE 2#12 AWG, #12G, 3/4"C. SHORT DASH INDICATES HOT CONDUCTOR, LONG DASH INDICATES NEUTRAL AND CURVED DASH INDICATES GROUND
J 30	NON-FUSED DISCONNECT AMPERE RATING AS INDICATED
	REFER NOTE INDICATED



ELECTRICAL ONE-LINE DIAGRAM
NO SCALE

GENERAL NOTES

1. THE EXISTING UTILITIES SHOWN HAVE BEEN LOCATED FROM CASUAL OBSERVATIONS. NO GUARANTEE IS MADE TO THE ACCURACY OF THE UTILITIES SHOWN. CONTRACTOR SHALL FIELD VERIFY ALL UTILITIES, BOTH UNDERGROUND AND OVERHEAD, PRIOR TO BEGINNING ANY EXCAVATION OR OTHER CONSTRUCTION ACTIVITIES.
2. CONTRACTOR SHALL PROVIDE CONNECTORS, CONNECTIONS, AND ALL COMPONENTS REQUIRED FOR A FULLY FUNCTIONAL AND OPERATIONAL SYSTEM.

NOTES INDICATED ON DRAWING (N):

1. REMOVE TWO EXISTING POLE MOUNTED PANELS IN THEIR ENTIRETY. REMOVE THE CONDUIT RISER AND EXISTING CONDUCTORS FROM PANELS TO OVERHEAD CONDUCTORS.
2. REMOVE ALL CONDUCTORS TO THE EXISTING WELL AND PIT IN THEIR ENTIRETY. REMOVE ALL ABOVE GRADE CONDUIT AND PIPE IN THEIR ENTIRETY. ABANDON BELOW GRADE PIPE OR CONDUIT.
3. REMOVE THE EXISTING POLE IN ITS ENTIRETY AND REPLACE WITH A NEW 35', CLASS 5 WOOD POLE.
4. REMOVE ABOVE GRADE PIPE FOR SERVICE TO SHOP. EXTEND SPECIFIED GALVANIZED RIGID CONDUIT FROM THE EXISTING BELOW GRADE CONDUIT OR PIPE UP TO NEW PANELBOARD.
5. INSTALL NEW PANELBOARD ON NEW POLE. RECONNECT EXISTING CIRCUIT TO SHOP AT NEW CIRCUIT BREAKER. IF NECESSARY, INSTALL J-BOX BELOW PANEL FOR CONNECTION TO EXISTING CONDUCTORS. ALL CONDUIT CONNECTIONS TO PANELS OR ENCLOSURES SHALL BE MADE USING WATERPROOF HUBS.
6. DEADEND NEW TRIPLEX WITH EXISTING SECONDARY CONNECTION. CONNECT NEW CONDUCTORS TO EXISTING SERVICE.
7. INSTALL SEPARATE SECONDARY CONNECTION FOR EACH SPAN.
8. INSTALL NEW NEMA 3R JUNCTION BOX AS NECESSARY TO CONNECT NEW CONDUCTORS TO THE EXISTING CONDUCTORS. MINIMUM 8"x8"x6".

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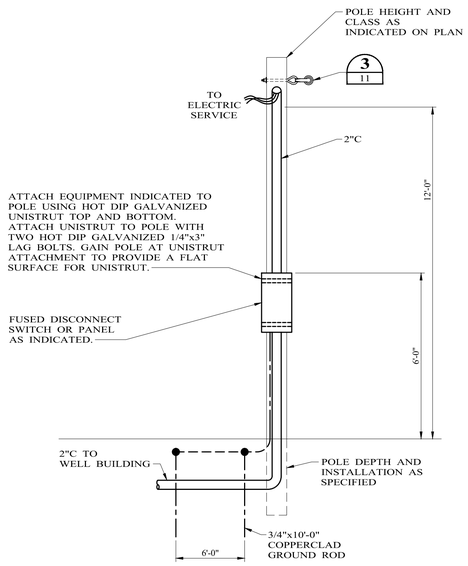
MATADOR WILDLIFE MANAGEMENT AREA
GENE HOWE WILDLIFE MANAGEMENT AREA
RESIDENTIAL POTABLE WATER WELL IMPROVEMENTS
PROJECT No. 1110162

DATE: 03/09/2021
DESIGNED BY: C.W.V.
DRAWN BY: A.S.
REVIEWED BY: C.W.V.
REVISED:
REVISED:
REVISED:
eHT PROJECT NO. 20-7704

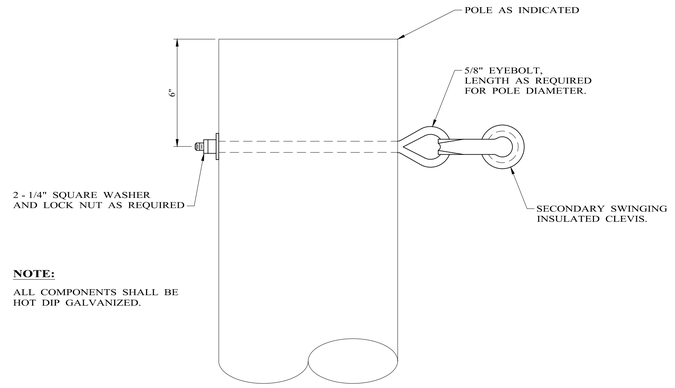
SHEET TITLE
RESIDENCE #2 MATADOR WELL ELECTRICAL PLAN

SHEET NUMBER
10
OF 11

20-7704



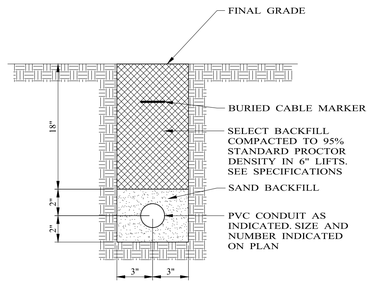
1 / 11 ELECTRICAL RISER DETAIL
NO SCALE



NOTE:

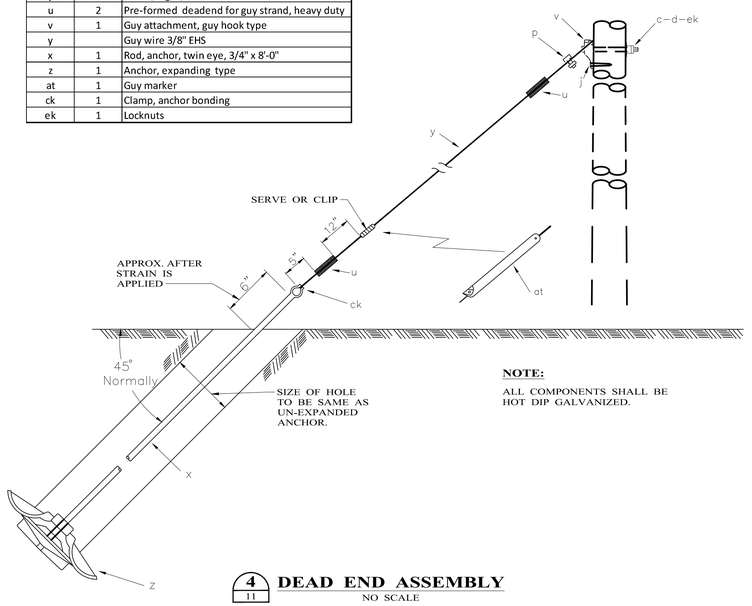
ALL COMPONENTS SHALL BE HOT DIP GALVANIZED.

3 / 11 SECONDARY CONNECTION
NO SCALE



2 / 11 DIRECT BURIED CONDUIT
NO SCALE

ITEM	QTY	MATERIAL
c	1	Bolt, machine, 3/4" x req'd length
d	1	Washer, square, 4", curved
p		Connectors, guy bond and as req'd
j	1	Screw, lag, 1/2" x 4"
u	2	Pre-formed deadend for guy strand, heavy duty
v	1	Guy attachment, guy hook type
y		Guy wire 3/8" EHS
x	1	Rod, anchor, twin eye, 3/4" x 8'-0"
z	1	Anchor, expanding type
at	1	Guy marker
ck	1	Clamp, anchor bonding
ek	1	Locknuts



NOTE:

ALL COMPONENTS SHALL BE HOT DIP GALVANIZED.

4 / 11 DEAD END ASSEMBLY
NO SCALE

20-7704

TEXAS PARKS & WILDLIFE

03/09/2021
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MATADOR WILDLIFE MANAGEMENT AREA
GENE HOWE WILDLIFE MANAGEMENT AREA
RESIDENTIAL POTABLE WATER WELL IMPROVEMENTS
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SHEET TITLE
MISCELLANEOUS ELECTRICAL DETAILS

SHEET NUMBER
11
OF 11