

# MODIFICATION AND DESIGN DRAWINGS FOR AN EXISTING 141' EEI MONOPOLE

PROPOSED CARRIER: T-MOBILE

SITE: CT16504-A-SBA / MANCHESTER 12, CT  
COORDINATES (LATITUDE: 41.794100°, LONGITUDE: -72.555300°)

### CONSTRUCTION CLASS

TES HAS DETERMINED THIS AS A  
CLASS III CONSTRUCTION PROJECT  
PER ANSI/ASSE A10.48

COMPLETE FABRICATION DRAWINGS FOR ALL MATERIALS REQUIRED FOR THIS PROJECT ARE AVAILABLE FROM TOWER ENGINEERING SOLUTIONS (TES). PLEASE CONTACT TES FOR MORE INFORMATION.

**NOTE:**

- THE MODIFICATION DRAWINGS ARE BASED ON THE TES PROJECT NO. 36588, DATED 08/01/17.

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A-LP-AB	SPLICE CONNECTION PLATE INSTALLATION DETAILS (TYPE AB)	0
A-LP-BC	SPLICE CONNECTION PLATE INSTALLATION DETAILS (TYPE BC)	0
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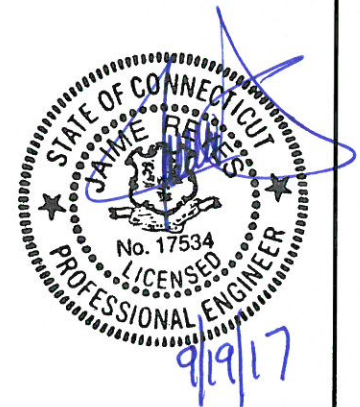
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TES JOB NO:  
36710

CUSTOMER SITE NO:  
CT16504-A-SBA  
CUSTOMER SITE NAME:  
MANCHESTER 12, CT  
60 ADAMS STREET  
MANCHESTER, CT 06042



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REV.	DESCRIPTION	BY	DATE
1	FIRST ISSUE	CB	09/19/17

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TITLE SHEET

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SHEET NUMBER: <span style="font-size: 2em;">T-1</span>	REV #: <span style="font-size: 2em;">0</span>
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**BILL OF MATERIALS**

QUANTITY COUNTED	QUANTITY PROVIDED	PART NUMBER	DESCRIPTIONS	LENGTH	SHEET LIST (INSTALLATION)	SHEET LIST (FABRICATE)	PIECE WEIGHT (LBS)	WEIGHT (LB)	NOTES
MATERIAL & HARDWARE									
3	3	LP7X125-BW-20A	7" x 1.25" Flat Bar, Base Section with 5" Offset, 20 ft. Long, welded in field. Connection Type A	20'-0"	A-3	LP7X125-BW-20A	667.6	2002.8	Galvanized
1	1	LP7X125-BSW-20A	7" x 1.25" Flat Bar, Base Section with Step Bolt Brackets, 5" Offset, 20 ft. Long, welded in field. Connection Type A	20'-0"	A-3	LP7X125-BSW-20A	672.6	672.6	Galvanized
3	3	LP6X125-G-20AB	6" x 1.25" Flat Bar, 20 ft. Long, Standard, Connection Type AB	20'-0"	A-4	LP6X125-G-20AB	709.2	2127.6	Galvanized
1	1	LP6X125-S-20AB	6" x 1.25" Flat Bar, 20 ft. Long with Step Bolt Brackets, Connection Type AB	20'-0"	A-4	LP6X125-S-20AB	718.8	718.8	Galvanized
3	3	LP6X100-G-20BC	6" x 1.00" Flat Bar, 20 ft. Long, Standard, Connection Type BC	20'-0"	A-5	LP6X100-G-20BC	531.1	1593.3	Galvanized
1	1	LP6X100-S-20BC	6" x 1.00" Flat Bar, 20 ft. Long with Step Bolt Brackets, Connection Type BC	20'-0"	A-5	LP6X100-S-20BC	540.7	540.7	Galvanized
3	3	LP6X100-G-10CT	6" x 1.00" Flat Bar, 10 ft. Long, Standard, Connection Type C with Termination at top	10'-0"	A-6	LP6X100-G-10CT	299.1	897.3	Galvanized
1	1	LP6X100-S-10CT	6" x 1.00" Flat Bar, 10 ft. Long with Step Bolt Brackets, Connection Type C with Termination at top	10'-0"	A-6	LP6X100-S-10CT	304.5	304.5	Galvanized
3	3	LP6X100-G-20TT	6" x 1.00" Flat Bar, 20 ft. Long, Standard, Termination at both ends	20'-0"	A-7	LP6X100-G-20TT	408.3	1224.9	Galvanized
4	4	CPL-A	Link Plate Cover, PL 3/8" x 4 1/4" x 2'-1", A572, Grade 50	---	A-4	F-C	11.5	46.0	Galvanized
4	4	CPL-B	Link Plate Cover, PL 3/8" x 3 3/4" x 1'- 8 1/2", A572, Grade 50	---	A-5	F-C	8.3	33.2	Galvanized
4	4	CPL-C	Link Plate Cover, PL 3/8" x 3 1/4" x 1'- 6 13/16", A572, Grade 50	---	A-6	F-C	6.6	26.4	Galvanized
4	4	PP-45	Pipe 4 1/2 O. D. x 0.674 Wall, A53, Grade B	2'-10"	A-2	---	82.0	328.0	Galvanized
4	4	R71-18	Williams 2 1/4" Dia. All-thread Rod (150 ksi) X 12.5 Ft. Long	12.50	A-2	---	176.3	705.0	Galvanized
8	8	R73-18	Williams 2 1/4" Dia. R73 Hex Nuts	---	A-2	---	---	---	Galvanized
8	8	PLW-1	PL 1 1/4" X 4 1/2" FLAT WASHER, A527 Grade 65	---	A-2	F-A	3.7	29.6	Galvanized
48	51	STEP BOLT	Step Bolt 5/8" Dia x 8 1/4" Long	---	A-3,A-4,A-5,A-6	F-A	0.75	38.3	Galvanized
269	283	HB16-2	Lindapter 5/8" Type HB Hollo-Bolt (HCF)	---	A-3 - A-7	---	---	---	Galvanized
24	26	HB20-3	Lindapter 3/4" Type HB Hollo-Bolt (HCF)	---	A-4,A-5,A-6	---	---	---	Galvanized
4	4	SHIM-M16-1	1/4" Thick Shim For HB16-2 Hollo-Bolt	---	A-1	SH2	0.3	1.1	Galvanized
4	4	SHIM-M16-2	3/16" Thick Shim For HB16-2 Hollo-Bolt	---	A-1	SH2	0.2	0.8	Galvanized
8	10	SHIM-M20-1	1/4" Thick Shim For HB20-3 Hollo-Bolt	---	A-LP-BC	SH2	0.6	6.4	Galvanized
Following Items are Non-standard Parts									
2	2	---	LANCO /HENRY 287 WHITE ACRYLIC ELASTOMERIC COATING AND SEALER (OR EQUIV) (GALLON)	---	---	---	---	---	PROVIDED BY CONTRACTOR
<p><b>ALL LPXXXX and RLPXXXX PARTS ARE AVAILABLE FROM METROSITE, LLC.</b>  <b>180 IND PARK BLVD COMMERCE, GA 30529</b>  <b>OFFICE: (706) 335-7045</b>  <b>FAX: (706) 335-7056</b></p>									
NOTE: ALL MATERIALS, WHICH WEREN'T LISTED IN THIS SHEET, ARE ASSUMED TO BE PROVIDED BY THE CONTRACTOR.									
							<b>TOTAL WEIGHT (LBS) =</b>	<b>11297.3</b>	



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**BILL OF MATERIALS**

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**GENERAL NOTES**

1. ALL WORK SHALL COMPLY WITH THE ANSI/TIA-222-G/2016 CONNECTICUT STATE BUILDING CODE, ANSI/ASSE A10.48, AND ANY OTHER GOVERNING BUILDING CODES AND OSHA SAFETY REGULATIONS.
2. ALL WORK INDICATED ON THE DRAWINGS SHALL BE PERFORMED BY QUALIFIED CONTRACTORS EXPERIENCED IN TELECOMMUNICATIONS TOWER, POLE AND FOUNDATION CONSTRUCTION.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND FABRICATION OF ALL MISCELLANEOUS PARTS (SUCH AS SHIMS), TEMPORARY SUPPORTS, AND GUYINGS, ETC., PER TIA-1019-A, TO COMPLETE THE ASSEMBLY AS SHOWN IN THE DRAWINGS.
4. CONTRACTOR SHALL PROCEED WITH THE INSTALLATION WORK CAREFULLY SO THE WORK WILL NOT DAMAGE ANY EXISTING CABLE, EQUIPMENT OR THE STRUCTURE.
5. THE USE OF GAS TORCH OR WELDER, ARE NOT ALLOWED ON ANY TOWER STRUCTURE WITHOUT THE CONSENT OF THE TOWER OWNER.
6. GENERALLY THE CONTRACTOR IS RESPONSIBLE TO CONDUCT AN ONSITE VISIT SURVEY OF THE JOB SITE AFTER AWARD, AND REPORT ANY ISSUES WITH THE SITE TO **TES** BEFORE PROCEEDING CONSTRUCTION.

**FABRICATION**

1. ALL STEEL SHALL MEET OR EXCEED THE MINIMUM STRENGTH AS SPECIFIED IN THE DRAWINGS. IF YIELD STRENGTH WAS NOT NOTED IN THE DRAWINGS, CONTRACTORS SHALL CONTACT TES FOR DIRECTION.
2. ALL FIELD CUT EDGES SHALL BE GROUND SMOOTH. ALL FIELD CUT AND DRILLED SURFACES SHALL BE REPAIRED WITH A MINIMUM OF TWO COATS OF ZRC GALVILITE COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURER'S RECOMMENDATIONS.

**WELDING**

1. ALL WELDING SHALL BE PERFORMED BY AWS CERTIFIED WELDERS AND IN ACCORDANCE WITH THE LATEST EDITION OF THE AWS WELDING CODE D1.1. ALL ELECTRODES TO BE LOW HYDROGEN, MATCHING FILLER METAL, PER AWS D1.1, UNO. (E70XX UNLESS NOTED OTHERWISE).
2. PRIOR TO FIELD WELDING GALVANIZED MATERIAL, CONTRACTOR SHALL GRIND OFF GALVANIZING APPROX. 0.5" BEYOND THE PROPOSED FIELD WELD SURFACES.
3. ALL WELDS SHALL BE INSPECTED VISUALLY. A MINIMUM OF 25% OF WELDS SHALL BE INSPECTED WITH DYE PENETRANT OR MAGNETIC PARTICLE TO MEET THE ACCEPTANCE CRITERIA OF AWS D1.1. 100% OF WELDS SHALL BE INSPECTED IF DEFECTS ARE FOUND.
4. WELD INSPECTIONS SHALL BE PERFORMED BY AN AWS CERTIFIED WELD INSPECTOR.
5. AFTER INSPECTION, ALL FIELD WELDED SURFACES SHALL BE REPAIRED WITH A MINIMUM OF TWO COATS OF ZRC GALVILITE COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURER'S RECOMMENDATIONS.

**BOLTED ASSEMBLIES AND TIGHTENING OF CONNECTIONS**

1. ALL HIGH STRENGTH BOLTS SHALL CONFORM TO THE PROVISIONS OF THE SPECIFICATIONS FOR STRUCTURAL JOINTS USING A325 OR A490 BOLTS AS APPROVED BY THE RCSC.
2. FLANGE BOLTS SHALL BE TIGHTENED BY THE AISC "TURN-OF-THE-NUT" METHOD. THE FOLLOWING TABLE SHOULD BE USED FOR THE "TURN-OF-THE-NUT" TIGHTENING.
3. SPLICE BOLTS AND ALL OTHER BOLTS IN BEARING TYPE CONNECTIONS SHALL BE TIGHTENED TO A SNUG-TIGHT CONDITION.
4. THE SNUG-TIGHT CONDITION IS DEFINED AS THE TIGHTNESS ATTAINED BY EITHER A FEW IMPACTS OF AN IMPACT WRENCH OR THE FULL EFFORT OF AN IRONWORKER WITH AN ORDINARY SPUD WRENCH TO BRING THE CONNECTED PLIES INTO FIRM CONTACT.
5. HB HOLLO-BOLT SHALL BE INSTALLED PER ICC ESR-3330 INSTRUCTIONS.

**VERIFICATION AND INSPECTION**

1. IF APPLICABLE, VERIFICATION INSPECTION TO BE PERFORMED SHALL BE IN ACCORDANCE TO IBC-2012 SECTION 1705 - TABLE 1705.2.2 FOR STEEL CONSTRUCTION AND TABLE 1705.3 FOR CONCRETE CONSTRUCTION.

**POST INSTALLED EPOXY INJECTED ANCHOR BOLTS:**

1. CONCRETE MUST BE A MINIMUM OF 28 DAYS OLD.
2. FOLLOW MANUFACTURER'S REQUIREMENTS FOR CURE TIME VS. AMBIENT TEMPERATURE.
3. DRILL HOLE TO REQUIRED DIAMETER AND DEPTH. ALL WATER, DIRT, OIL, DEBRIS, GREASE OR DUST MUST BE REMOVED FROM EACH CORE HOLE. FOLLOW MANUFACTURER'S RECOMMENDATION FOR CORRECT TYPE OF CORE BIT. AVOID DAMAGING EXISTING REINFORCING STEEL OR OTHER EMBEDDED ITEMS. NOTIFY TES ENGINEERING IF VOIDS IN THE CONCRETE, REINFORCING STEEL OR OTHER EMBEDDED ITEMS ARE ENCOUNTERED. STOP CORING IMMEDIATELY IF THIS OCCURS.
4. A HOLE ROUGHENING DEVICE FROM EITHER HILTI OR ALLFASTENERS SHALL BE USED WITH ALL HOLES. FOLLOW ALL MANUFACTURER'S RECOMMENDED CORING AND INSTALLATION INSTRUCTIONS.
5. AFTER CORING AND ROUGHENING, FLUSH EACH HOLE WITH RUNNING WATER TO REMOVE ANY SLURRY OR DEBRIS. REMOVE ALL WATER FROM THE HOLE BY MECHANICAL PUMPING.
6. BRUSH EACH HOLE WITH AN APPROPRIATE SIZED NYLON BRUSH AND FLUSH WITH RUNNING WATER A SECOND TIME. REMOVE ALL WATER FROM THE HOLE.
7. AFTER THE SECOND WATER FLUSH BRUSH THE HOLE AGAIN WITH THE APPROPRIATE SIZED NYLON BRUSH.
8. BLOW EACH HOLE WITH COMPRESSED AIR TWO TIMES MINIMUM.
9. CONFIRM THAT EACH HOLE IS PROPERLY ROUGHED AND DRY.
10. NO EPOXY INJECTION SHALL TAKE PLACE IN RAINY CONDITIONS.
11. EPOXY SHOULD BE VISIBLE AT THE TOP OF THE CORE HOLE AFTER INSTALLATION.
12. CONTRACTOR TO SUPPLY ONE PHOTO OF EACH ROUGHED AND CLEANED HOLE IN CLOSEOUT PHOTO PACKAGE.

TABLE 8.2 NUT ROTATION FROM SNUG-TIGHT CONDITION FOR TURN-OF-NUT PRETENSIONING<sup>a,b</sup>

BOLT LENGTH <sup>f</sup>	DISPOSITION OF OUTER FACE OF BOLTED PARTS		
	BOTH FACES NORMAL TO BOLT AXIS	ONE FACE NORMAL TO BOLT AXIS, OTHER SLOPED NOT MORE THAN 1:20 <sup>d</sup>	BOTH FACES SLOPED NOT MORE THAN 1:20 FROM NORMAL TO BOLT AXIS <sup>d</sup>
NOT MORE THAN 4d <sub>b</sub>	1/3 TURN	1/2 TURN	2/3 TURN
MORE THAN 4d <sub>b</sub> BUT NOT MORE THAN 8d <sub>b</sub>	1/2 TURN	2/3 TURN	5/6 TURN
MORE THAN 8d <sub>b</sub> BUT NOT MORE THAN 12d <sub>b</sub>	2/3 TURN	5/6 TURN	1 TURN

<sup>a</sup> NUT ROTATION IS RELATIVE TO BOLT REGARDLESS OF THE ELEMENT (NUT OR BOLT) BEING TURNED. FOR REQUIRED NUT ROTATIONS OF 1/2 TURN AND LESS, THE TOLERANCE IS PLUS OR MINUS 30 DEGREES; FOR REQUIRED NUT ROTATIONS OF 2/3 TURN AND MORE, THE TOLERANCE IS PLUS OR MINUS 45 DEGREES.

<sup>b</sup> APPLICABLE ONLY TO JOINTS IN WHICH ALL MATERIAL WITHIN THE GRIP IS STEEL.

<sup>c</sup> WHEN THE BOLT LENGTH EXCEEDS 12d<sub>b</sub>, THE REQUIRED NUT ROTATION SHALL BE DETERMINED BY ACTUAL TESTING IN A SUITABLE TENSION CALIBRATOR THAT SIMULATES THE CONDITIONS OF SOLIDLY FITTING STEEL.

<sup>d</sup> BEVELED WASHER NOT USED.

SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS, JUNE 30, 2004 RESEARCH COUNCIL ON STRUCTURAL CONNECTIONS

**INSTALLATION TORQUE REQUIRED FOR HOLLO BOLTS AND AJAX BOLTS:**

1. HB12 HOLLO BOLT: 59 FT-LBS
2. HB16 HOLLO BOLT: 140 FT-LBS
3. HB20 HOLLO BOLT: 221 FT-LBS
4. M20 AJAX BOLT: 280 FT-LBS.

**FIELD HOT WORK PLAN NOTES:**

FOLLOWING GUIDELINES SHALL BE COMPLIED WITH:

1. CONTRACTOR'S RESPONSIBILITY TO COMPLETE A HOT WORK PLAN IF AWARDED PER CUSTOMER SPECIFICATIONS GUIDELINES FOR WELDING, CUTTING & SPARK PRODUCING WORK.
2. HAVE A FIRE PLAN APPROVED BY THE CUSTOMER AND THEIR SAFETY MANAGEMENT DEPT.
3. CONTRACTOR MUST OBTAIN THE CONTACT INFO OF THE LOCAL FIRE DEPARTMENT AND THE 911 ADDRESS OF THE TOWER SITE BEFORE CONSTRUCTION.
4. CONTRACTOR SHALL MAKE SURE THAT CELL PHONE COVERAGE IS AVAILABLE IN THE TOWER SITE. IF CELL COVERAGE IS NOT AVAILABLE, AN IMMEDIATE AVAILABLE MEANS OF DIRECT COMMUNICATION WITH THE FIRE DEPARTMENT SHALL BE DETERMINED PRIOR TO CONSTRUCTION START.
5. ALL CONSTRUCTION SHALL BE PERFORMED UNDER WIND SPEED LESS THAN 10 MPH ON THE GROUND LEVEL. IF WIND SPEED INCREASE, CONTRACTOR MUST DETERMINE IF CONSTRUCTION SHALL BE DISCONTINUED.
6. FIRE SUPPRESSION EQUIPMENT MUST BE MADE AVAILABLE ON SITE AND READY TO USE.
7. CONTRACTOR SHALL ASSIGN A FIRE WATCHER TO PERFORM FIRE-FIGHTING DUTIES.
8. ALL WELDERS SHALL BE AWS OR STATE CERTIFIED. THEY MUST ALSO BE EXPERIENCED IN WELDING ON GALVANIZED MATERIALS.
9. IF IT IS POSSIBLE, ALL EXISTING COAX NEAR WELDING AREA SHALL BE TEMPORARILY MOVED AWAY FROM THE WELDING AREA BEFORE WELDING THE PLATES.
10. PLEASE REPORT ANY FIELD ISSUE TO TES @ 972-483-0607.



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GENERAL NOTES

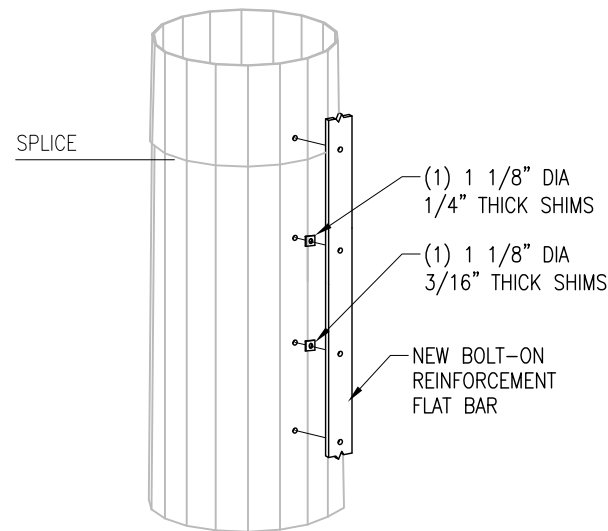
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GN-1 0

**NOTES:**

1. TEMPORARILY RELOCATE ANY EXISTING COAX ATTACHED TO THE MONOPOLE AND ANY OTHER MEMBERS WHERE OBSTRUCTION WITH THE PROPOSED MODIFICATION MAY OCCUR.
2. TEMPORARILY RELOCATE EXISTING EQUIPMENT AROUND THE FOUNDATION MAY BE REQUIRED DURING CONSTRUCTION.

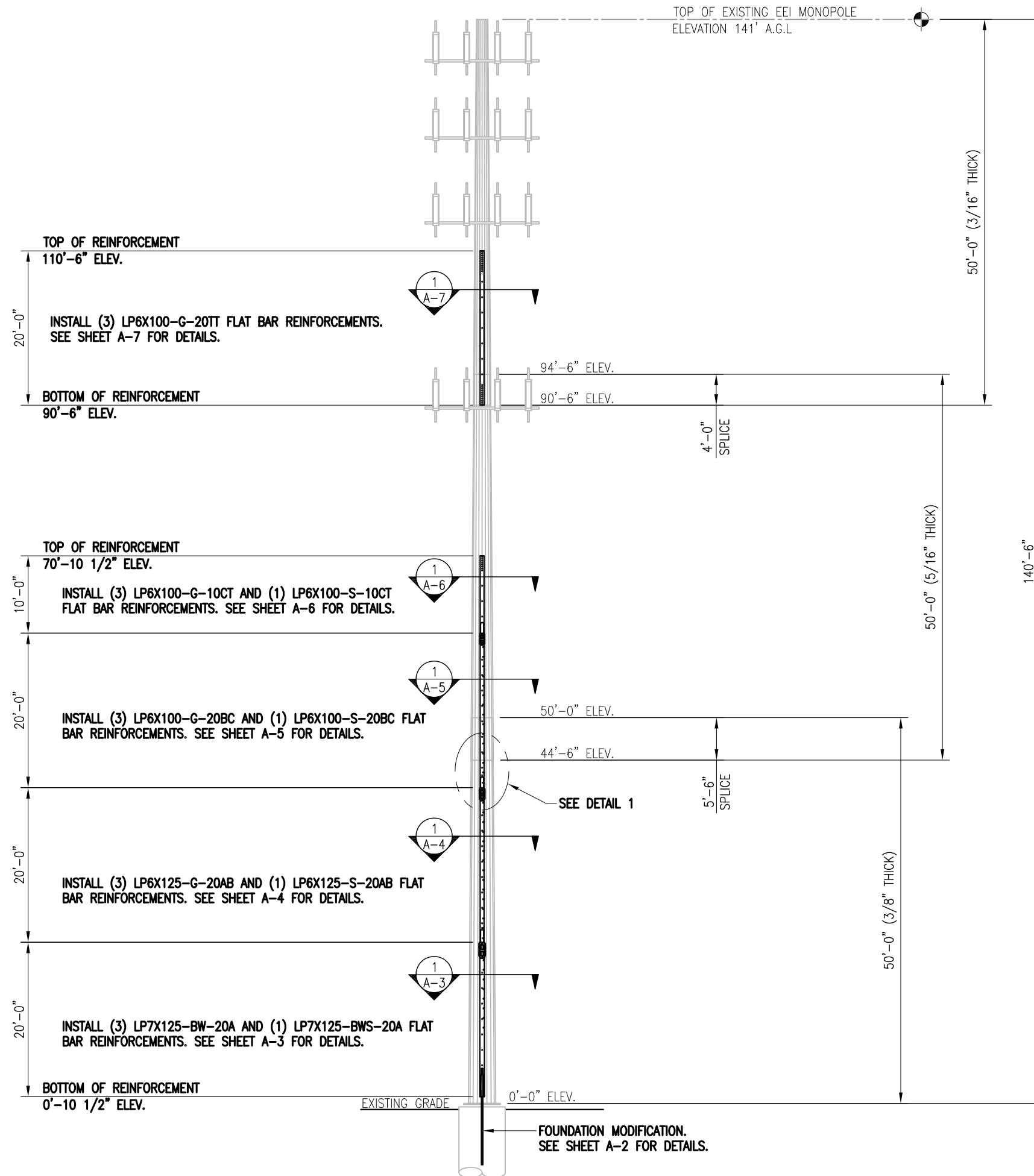


**DETAIL 1**  
SHIMS INSTALLATION DETAIL



**FOUNDATION COATING NOTES:**

1. THE COATING MATERIALS SHALL BE LANCO WHITE ACRYLIC ELASTOMERIC COATING AND SEALER, OR HYDRO ARMOR COATING.
2. THE COATING CAN BE PLACED AT LEAST (2) DAYS AFTER THE PLACEMENT OF THE CONCRETE FOR FOUNDATION REINFORCEMENT, AND MINIMUM (4) DAYS FOR NEW FOUNDATION CONSTRUCTION.
3. THE CONCRETE SURFACE SHALL BE CLEAN AND DRY PRIOR TO THE APPLICATION OF THE COATING.
4. THE COATING SHALL BE APPLIED TO ALL THE SURFACES OF THE CONCRETE ABOVE THE GROUND AND 6" BELOW THE GRADE SURFACE IF APPLICABLE.
5. MINIMUM 30 MILS COATING IS REQUIRED.
6. APPLY COLD GALVANIZE AT LEAST 2'-3' ABOVE FOUNDATION.



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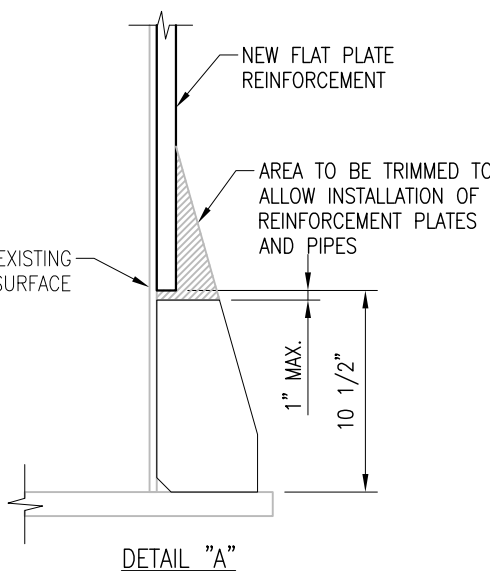
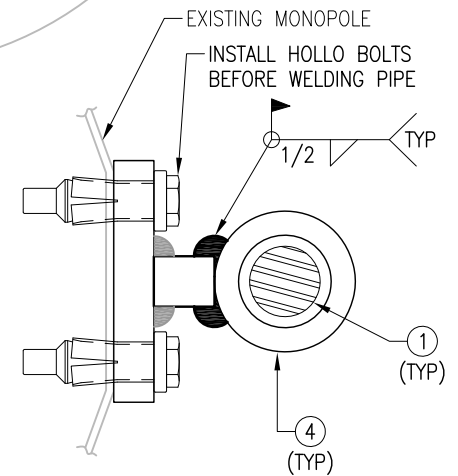
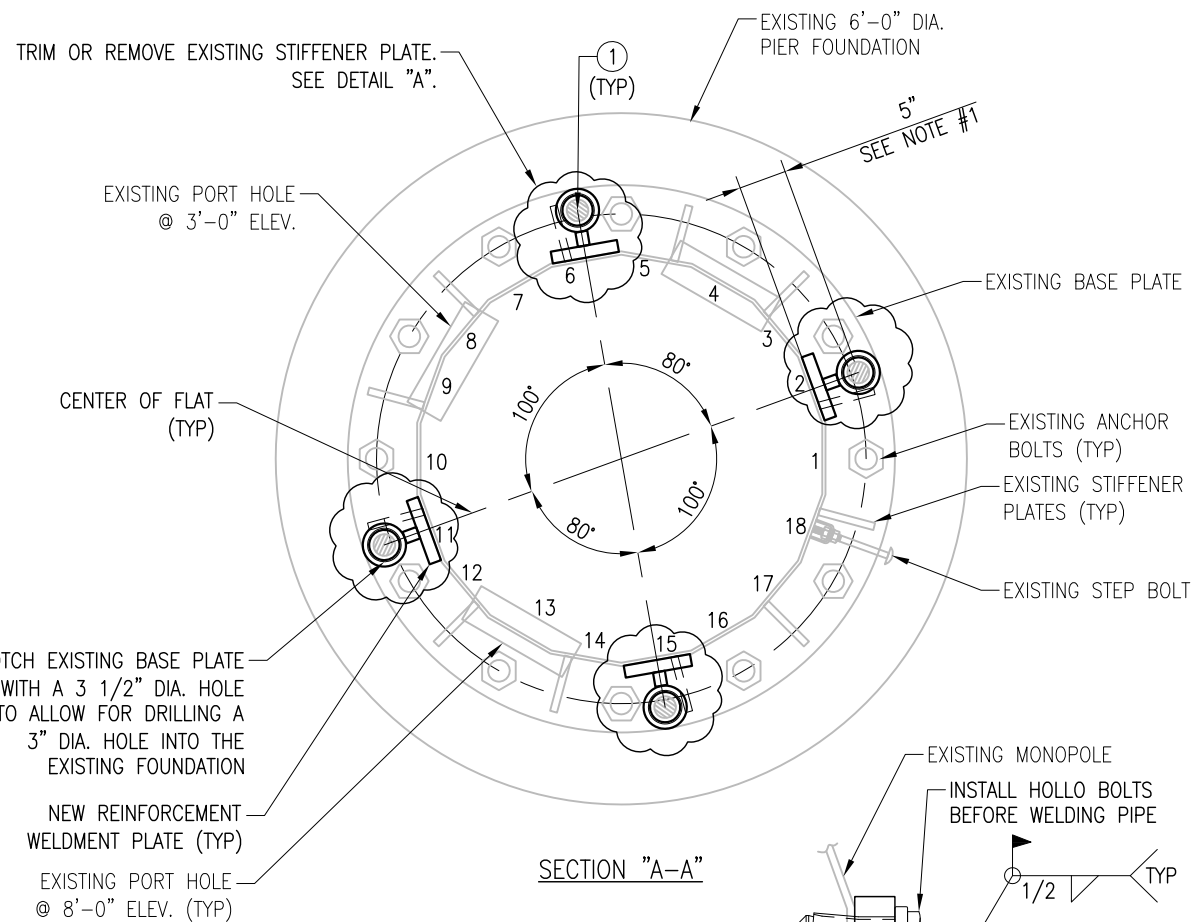
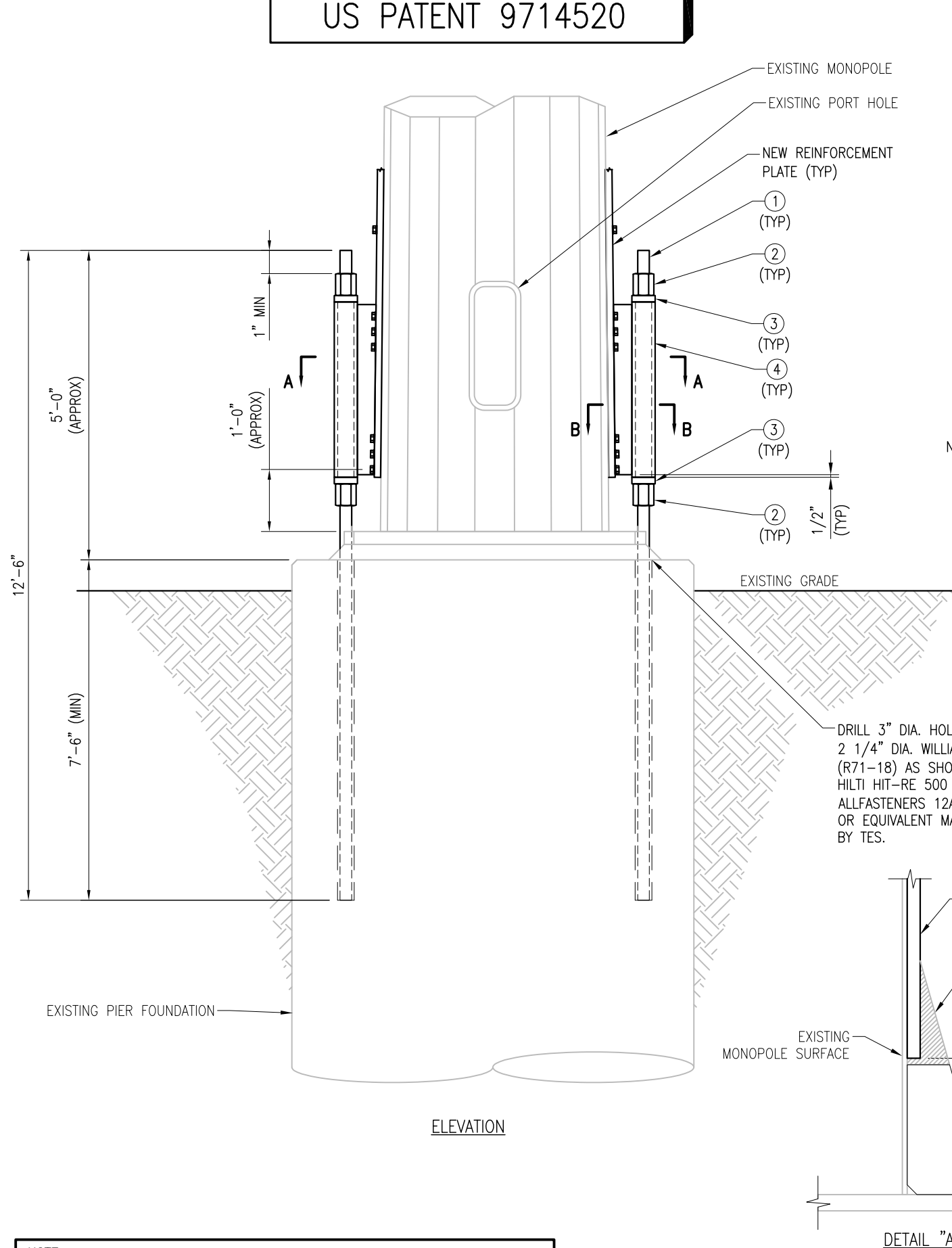
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US PATENT 9714520



DRILL 3" DIA. HOLE TO ACCOMMODATE 2 1/4" DIA. WILLIAMS ALL-THREAD ROD (R71-18) AS SHOWN. GROUT USING HILTI HIT-RE 500 V3 EPOXY OR ALLFASTENERS 12AF35LVE EPOXY (TYP) OR EQUIVALENT MATERIAL APPROVED BY TES.

**INSTALLATION NOTES:**

1. USE WELDED REINFORCEMENT PLATE TO SET THE POSITION OF THE ALL-THREAD ROD.
2. DRILL NEW 3" DIA. HOLES INTO EXISTING FOUNDATION FOR ALL-THREAD ROD.
3. INSTALL REINFORCEMENT BRACKET AND CONFIRM FIT WITH MONOPOLE REINFORCEMENT PLATES.
4. TIGHTEN NUTS ON THE ALL-THREAD ROD LOCKING IT INTO POSITION.
5. APPLY (2) COATS OF ZINC RICH GALVANIZING COMPOUND PER MANUFACTURER'S SPECIFICATIONS TO ALL FIELD CUT AND EXPOSED AREAS.
6. DRILLING CONTRACTOR TO EXERCISE EXTREME CARE TO AVOID DAMAGING THE EXISTING REINFORCING TIES IN THE CONCRETE PIER. IF REBAR IS ENCOUNTERED IN THE CONCRETE WHILE DRILLING, CONTRACTOR TO STOP DRILLING AND INFORM TES FOR SOLUTION.
7. CONTRACTOR PLEASE NOTE--WHILE DRILLING PREPARE TO DRILL THROUGH ANCHOR BOLT TEMPLATE.

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	4	R71-18	12'-6" WILLIAMS 2 1/4" DIA. ALL-THREAD ROD (150 KSI)
2	8	R73-18	2 1/4" NUT (WILLIAMS R73-18) (TYP)
3	8	PLW-1	PL 1 1/4" X 4 1/2" FLAT WASHER, A572-65
4	4	PP-45	PIPE 4 1/2" O.D X 0.674 WALL X 2'-10" A53, GR-B

**NOTE:**  
SEE SHEET GN-1 FOR POST-INSTALLED EPOXY INJECTED ANCHOR BOLTS NOTES



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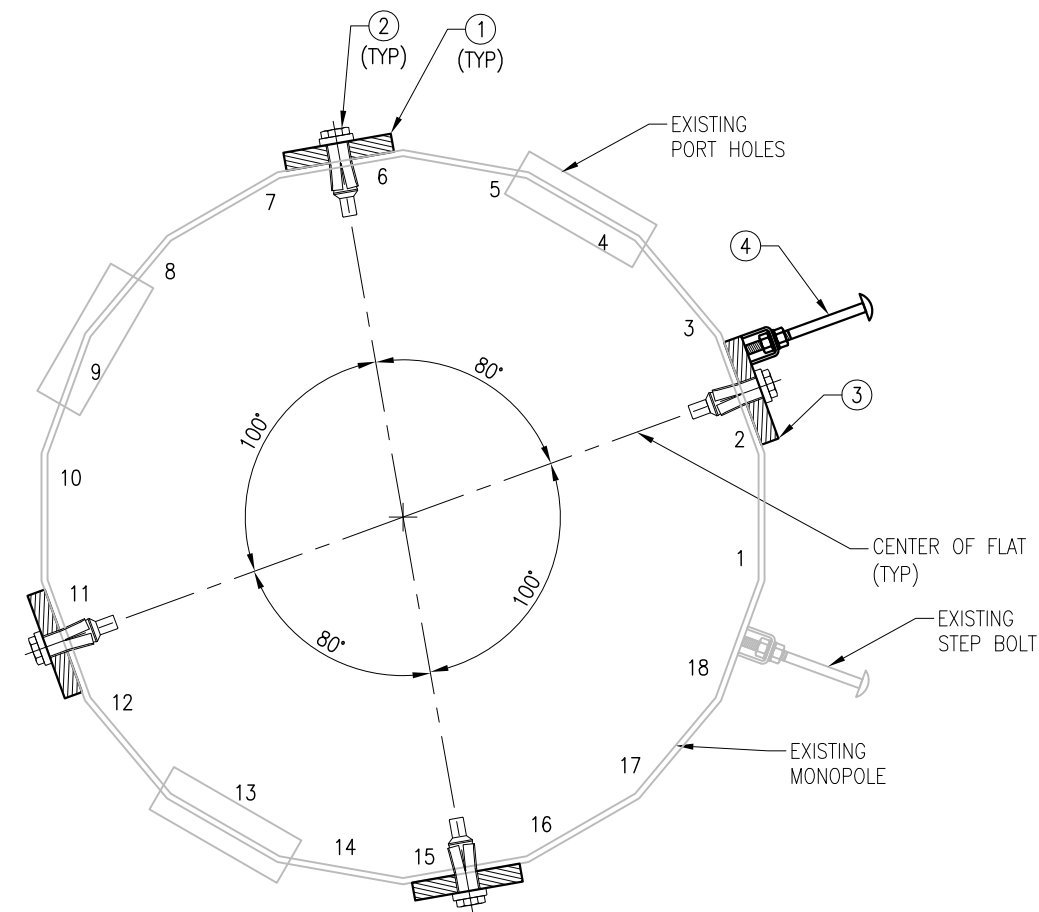
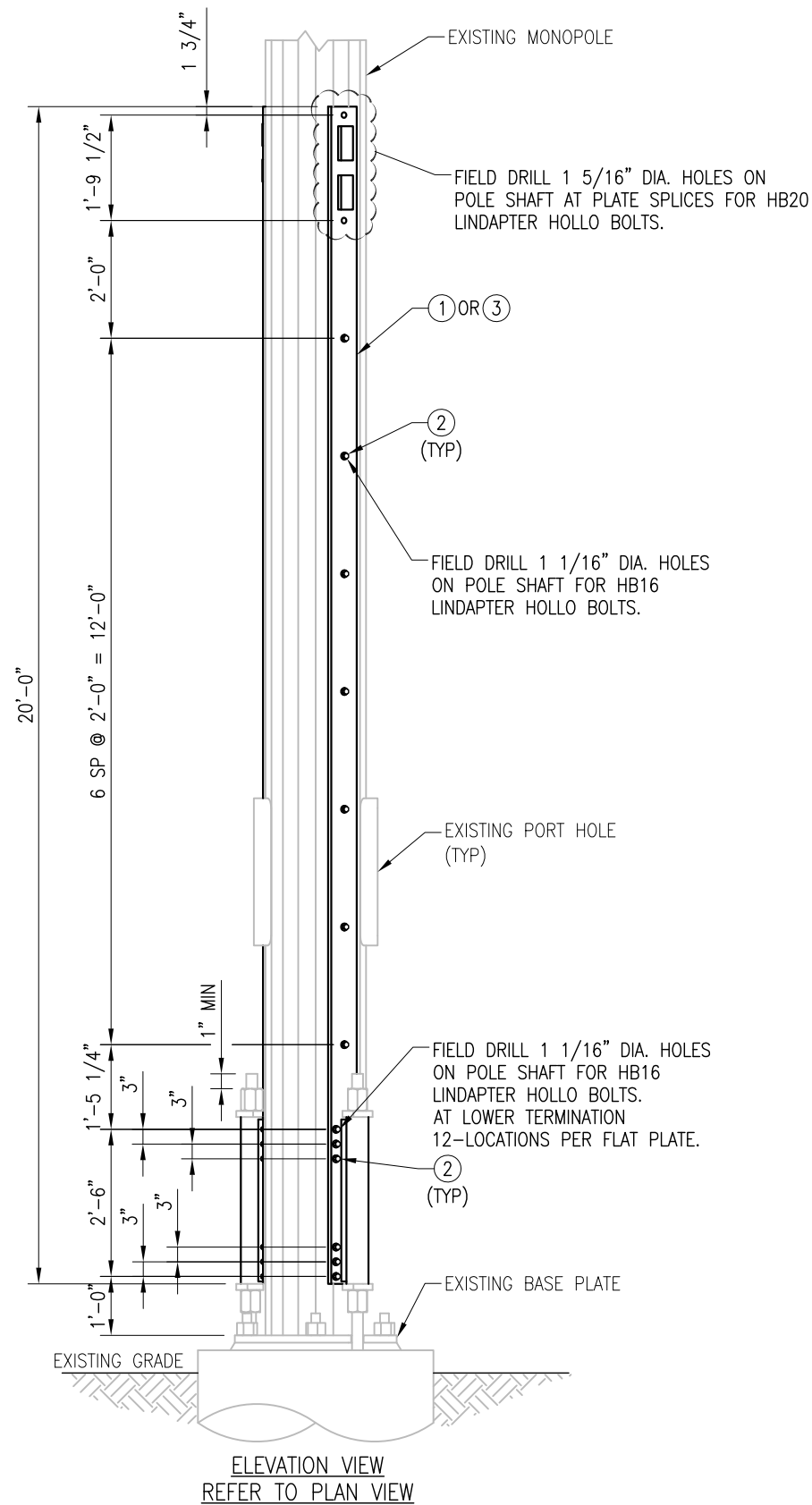
REV.	DESCRIPTION	BY	DATE
1	FIRST ISSUE	CB	09/19/17

SHEET TITLE:  
**REINFORCEMENT  
INTERFACE TYPE BW TO  
FOUNDATION DETAILS**

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SHEET NUMBER:  
**A-2**  
REV #:  
**0**

US PATENT 9,546,497 B2



NOTES:

1. REFER TO SHEET A-2 FOR FLAT BAR ORIENTATION.
2. INSTALLATION TORQUE FOR HOLLO/AJAX-BOLTS: SEE SHEET GN-1.
3. REMOVE EXISTING STEP BOLTS THAT INTERFERE WITH NEW REINFORCEMENT PLATES PRIOR TO INSTALLATION.

ITEM NO.	QTY.	PART NO.	DESCRIPTION (PER SECTION)
1	3	LP7X125-BW-20A	PL 1 1/4" X 7" X 20'-0" A572-65 WELDMENT
2	76	HB16-2	LINDAPTER 5/8" TYPE HB HOLLO-BOLT (HCF)
3	1	LP7X125-BSW-20A	PL 1 1/4" X 7" X 20'-0" A572-65 WELDMENT WITH STEP BOLT
4	8	STEP BOLTS	STEP BOLT 5/8" X 8 1/4" W/ (2) NUT-LKW EA.



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PH: (972) 483-0607



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(800)-487-SITE

TES JOB NO:  
36710

CUSTOMER SITE NO:  
CT16504-A-SBA  
CUSTOMER SITE NAME:  
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60 ADAMS STREET  
MANCHESTER, CT 06042

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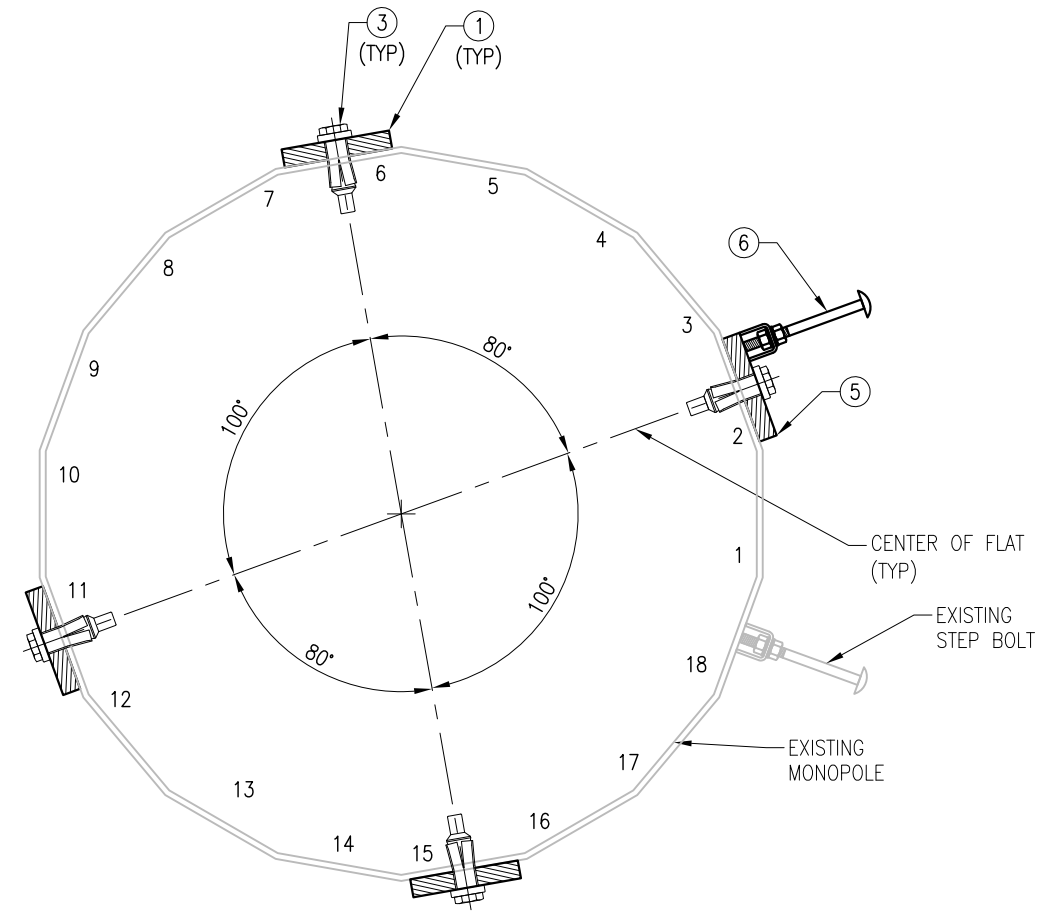
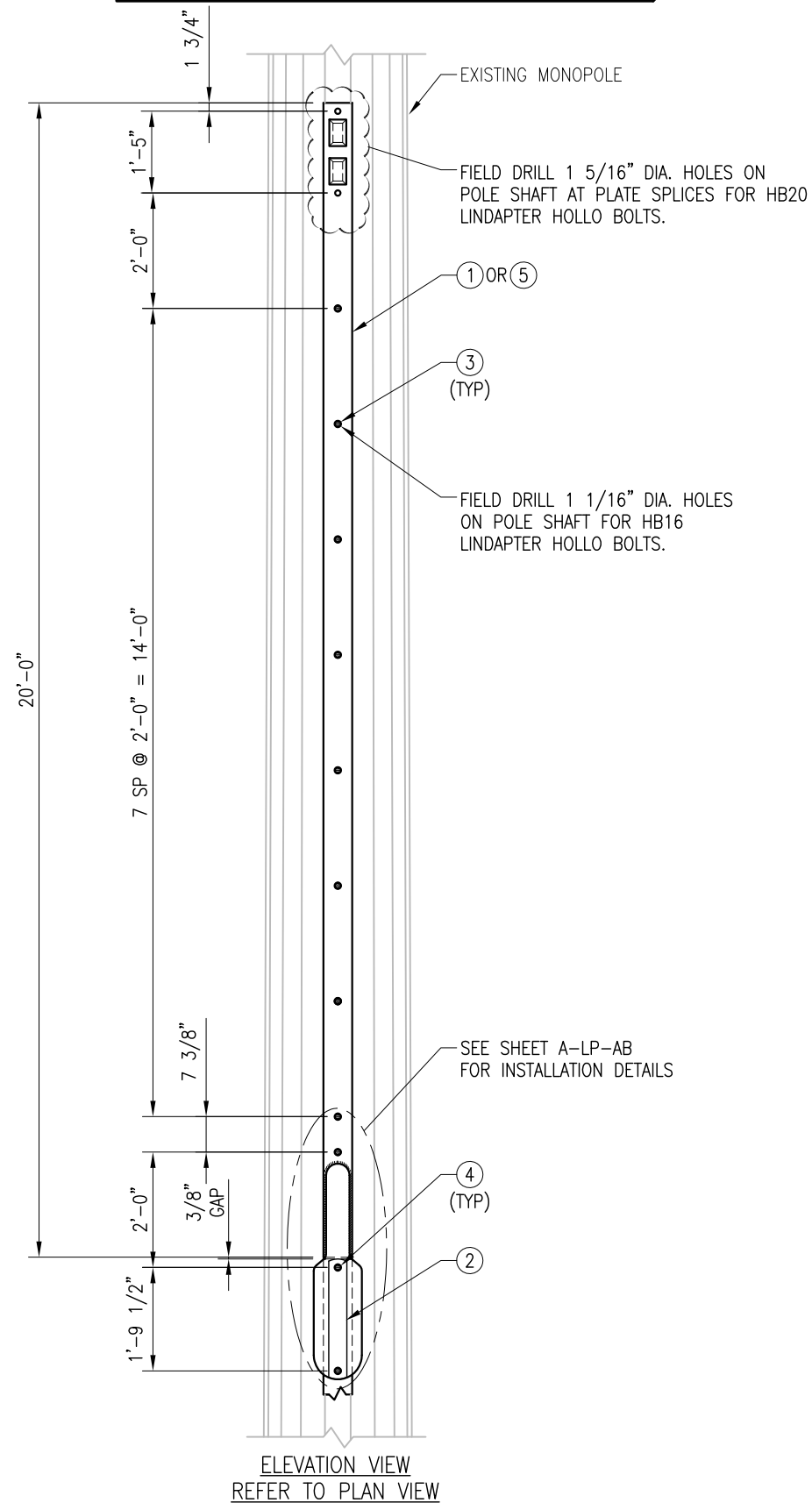
SHEET NUMBER:

A-3

REV #:

0

**US PATENT 9,546,497 B2**



**NOTES:**

1. REFER TO SHEET A-2 FOR FLAT BAR ORIENTATION.
2. INSTALLATION TORQUE FOR HOLLO/AJAX-BOLTS: SEE SHEET GN-1.
3. REMOVE EXISTING STEP BOLTS THAT INTERFERE WITH NEW REINFORCEMENT PLATES PRIOR TO INSTALLATION.

ITEM NO.	QTY.	PART NO.	DESCRIPTION (PER SECTION)
1	3	LP6X125-G-20AB	PL 1 1/4" X 6" X 20'-0" A572-65 WELDMENT
2	4	CPL-A	SPLICE CONNECTION COVER PLATE
3	36	HB16-2	LINDAPTER 5/8" TYPE HB HOLLO-BOLT (HCF)
4	8	HB20-3	LINDAPTER 3/4" TYPE HB HOLLO-BOLT (HCF)
5	1	LP6X125-S-20AB	PL 1 1/4" X 6" X 20'-0" A572-65 WELDMENT WITH STEP BOLT
6	16	STEP BOLTS	STEP BOLT 5/8" X 8 1/4" W/ (2) NUT-LKW EA.



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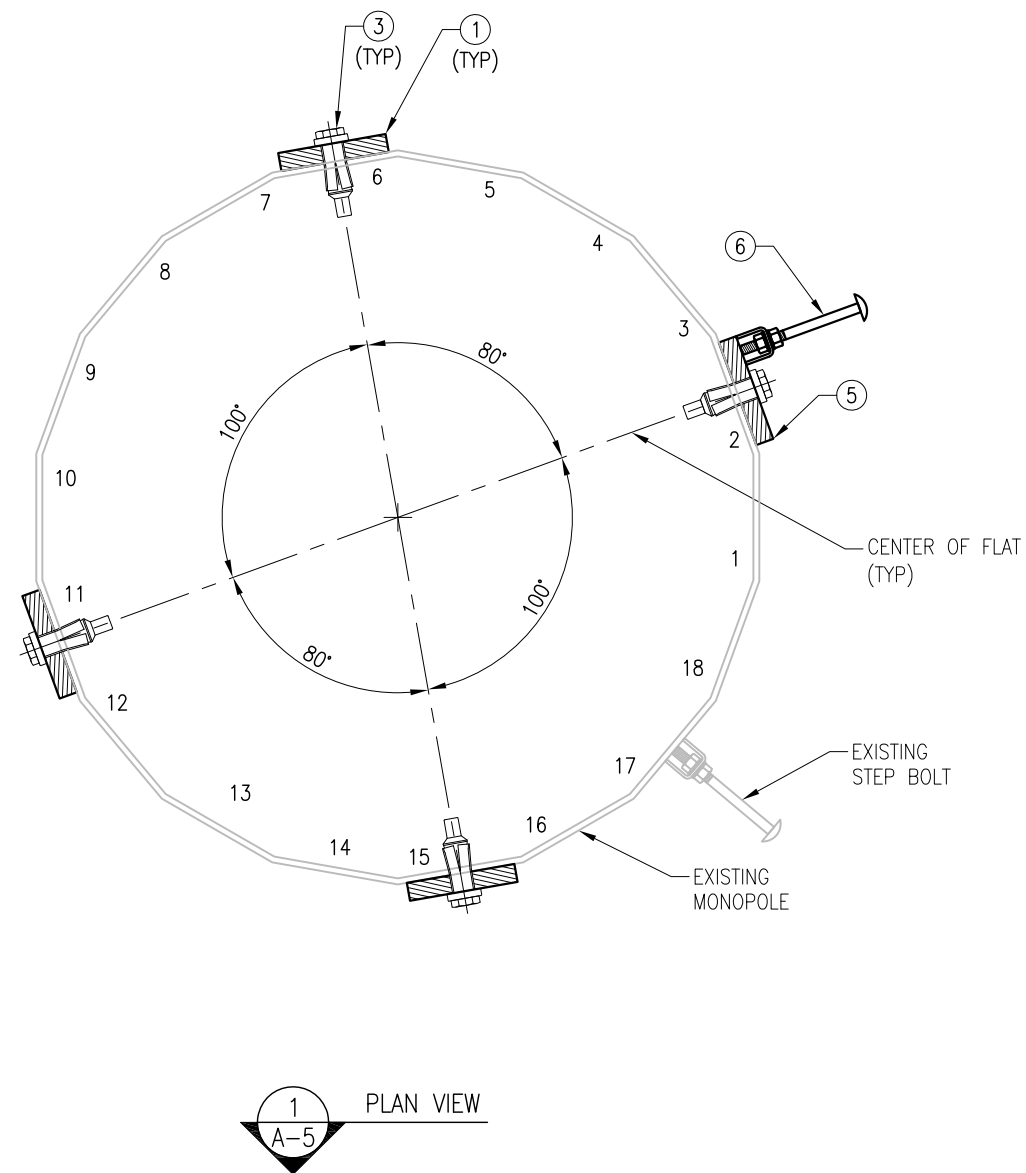
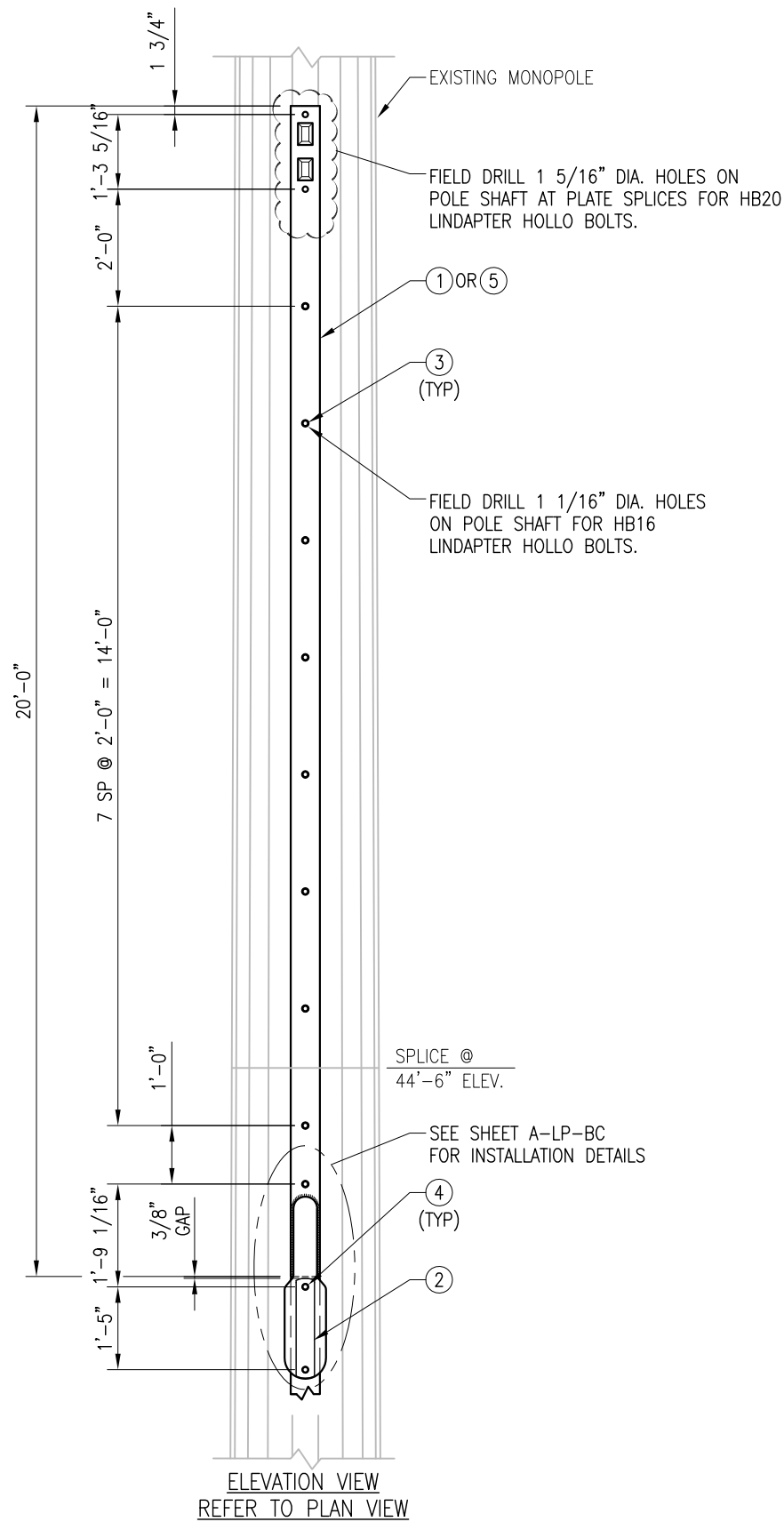
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SHEET NUMBER: **A-4** | REV #: **0**

**US PATENT 9,546,497 B2**



**NOTES:**

1. REFER TO SHEET A-2 FOR FLAT BAR ORIENTATION.
2. REFER TO SHEET A-1 FOR SHIM IF REQUIRED.
3. INSTALLATION TORQUE FOR HOLLO/AJAX-BOLTS: SEE SHEET GN-1.
4. REMOVE EXISTING STEP BOLTS THAT INTERFERE WITH NEW REINFORCEMENT PLATES PRIOR TO INSTALLATION.

ITEM NO.	QTY.	PART NO.	DESCRIPTION (PER SECTION)
1	3	LP6X100-G-20BC	PL 1" X 6" X 20'-0" A572-65 WELDMENT
2	4	CPL-B	SPLICE CONNECTION COVER PLATE
3	36	HB16-2	LINDAPTER 5/8" TYPE HB HOLLO-BOLT (HCF)
4	8	HB20-3	LINDAPTER 3/4" TYPE HB HOLLO-BOLT (HCF)
5	1	LP6X100-S-20BC	PL 1" X 6" X 20'-0" A572-65 WELDMENT WITH STEP BOLT
6	16	STEP BOLTS	STEP BOLT 5/8" X 8 1/4" W/ (2) NUT-LKW EA.



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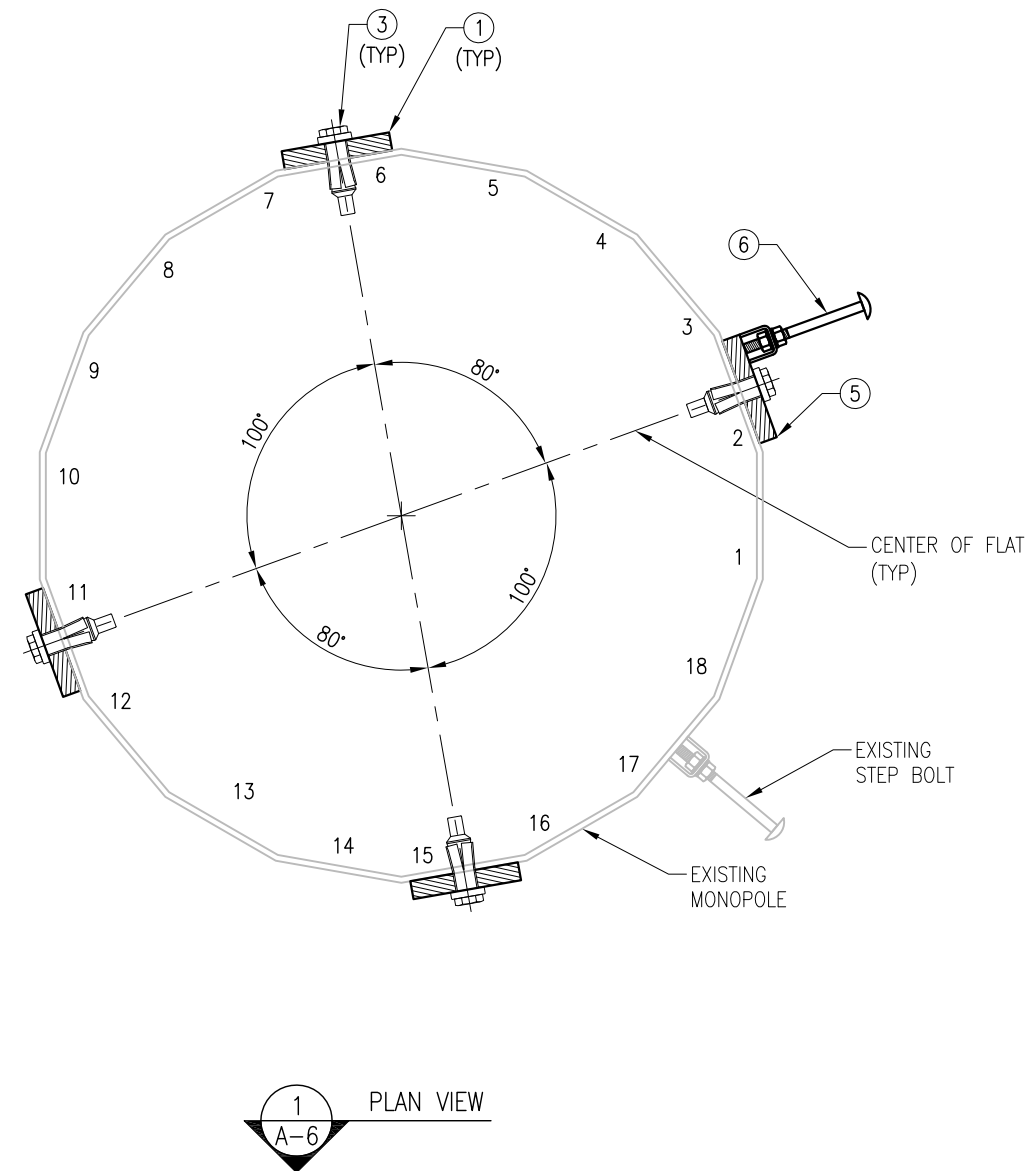
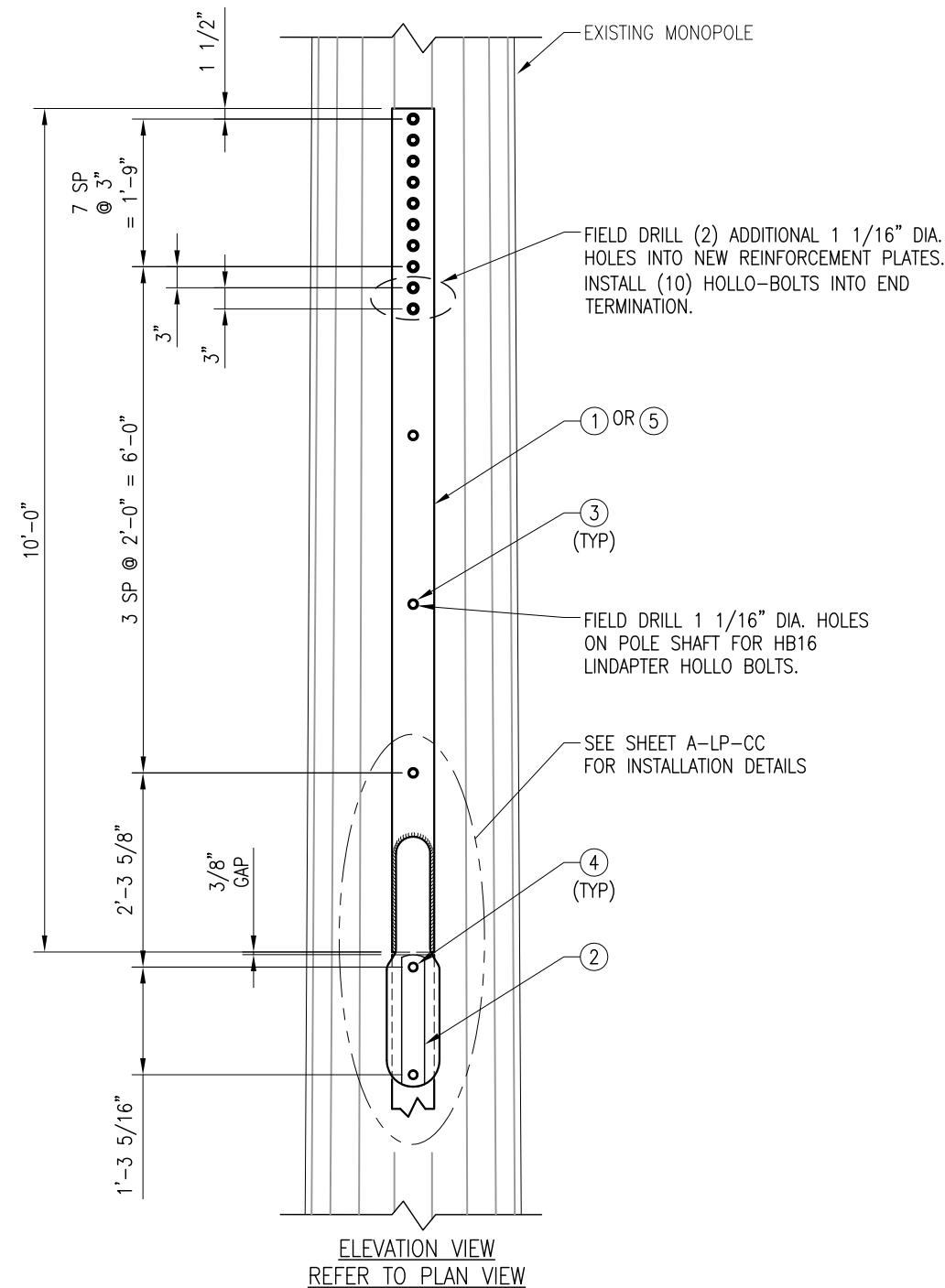
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SHEET NUMBER: **A-5** REV #: **0**





**NOTES:**

1. REFER TO SHEET A-2 FOR FLAT BAR ORIENTATION.
2. INSTALLATION TORQUE FOR HOLLO/AJAX-BOLTS: SEE SHEET GN-1.
3. REMOVE EXISTING STEP BOLTS THAT INTERFERE WITH NEW REINFORCEMENT PLATES PRIOR TO INSTALLATION.

ITEM NO.	QTY.	PART NO.	DESCRIPTION (PER SECTION)
1	3	LP6X100-G-10CT	PL 1" X 6" X 10'-0" A572-65 WELDMENT
2	4	CPL-C	SPLICE CONNECTION COVER PLATE
3	52	HB16-2	LINDAPTER 5/8" TYPE HB HOLLO-BOLT (HCF)
4	8	HB20-3	LINDAPTER 3/4" TYPE HB HOLLO-BOLT (HCF)
5	1	LP6X100-S-10CT	PL 1" X 6" X 10'-0" A572-65 WELDMENT WITH STEP BOLT
6	8	STEP BOLTS	STEP BOLT 5/8" X 8 1/4" W/ (2) NUT-LKW EA.



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SHEET TITLE:

**REINFORCEMENT ASSEMBLY**

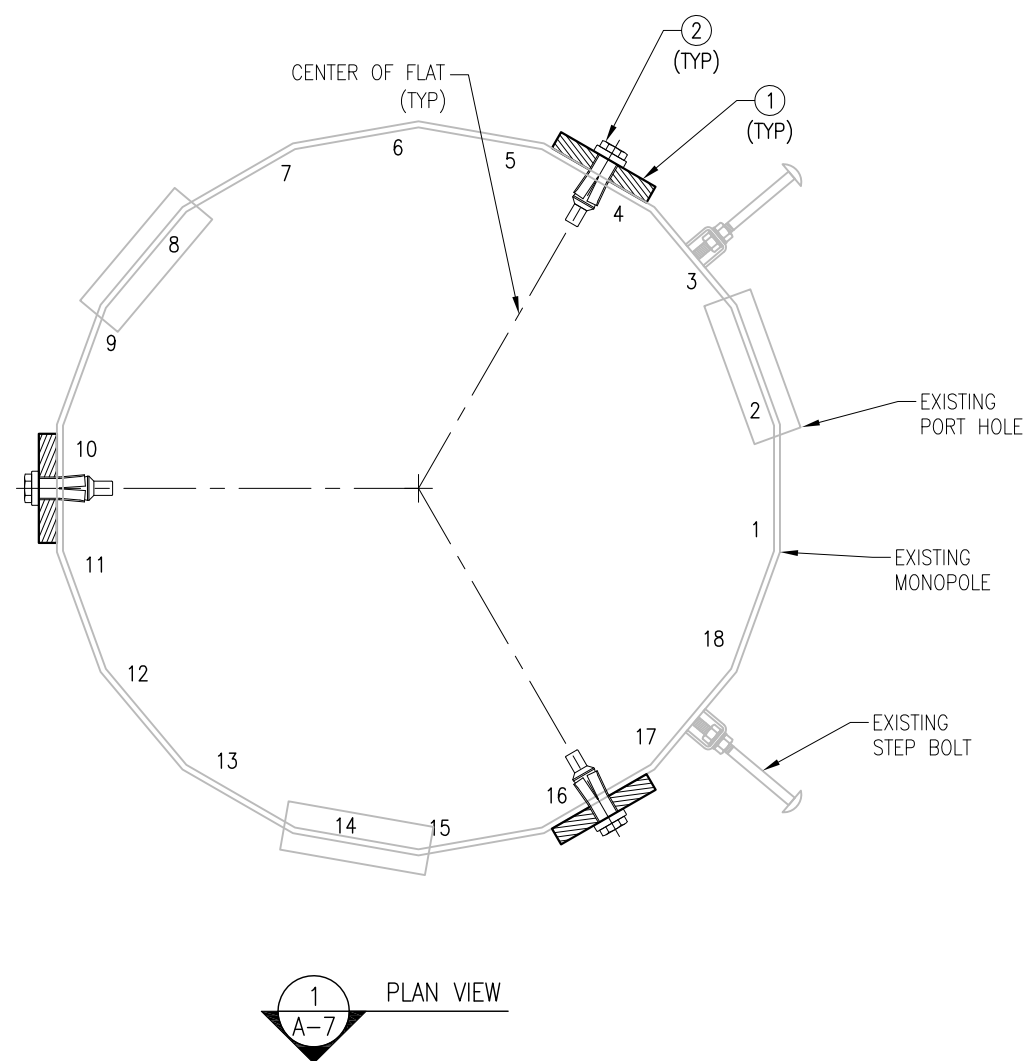
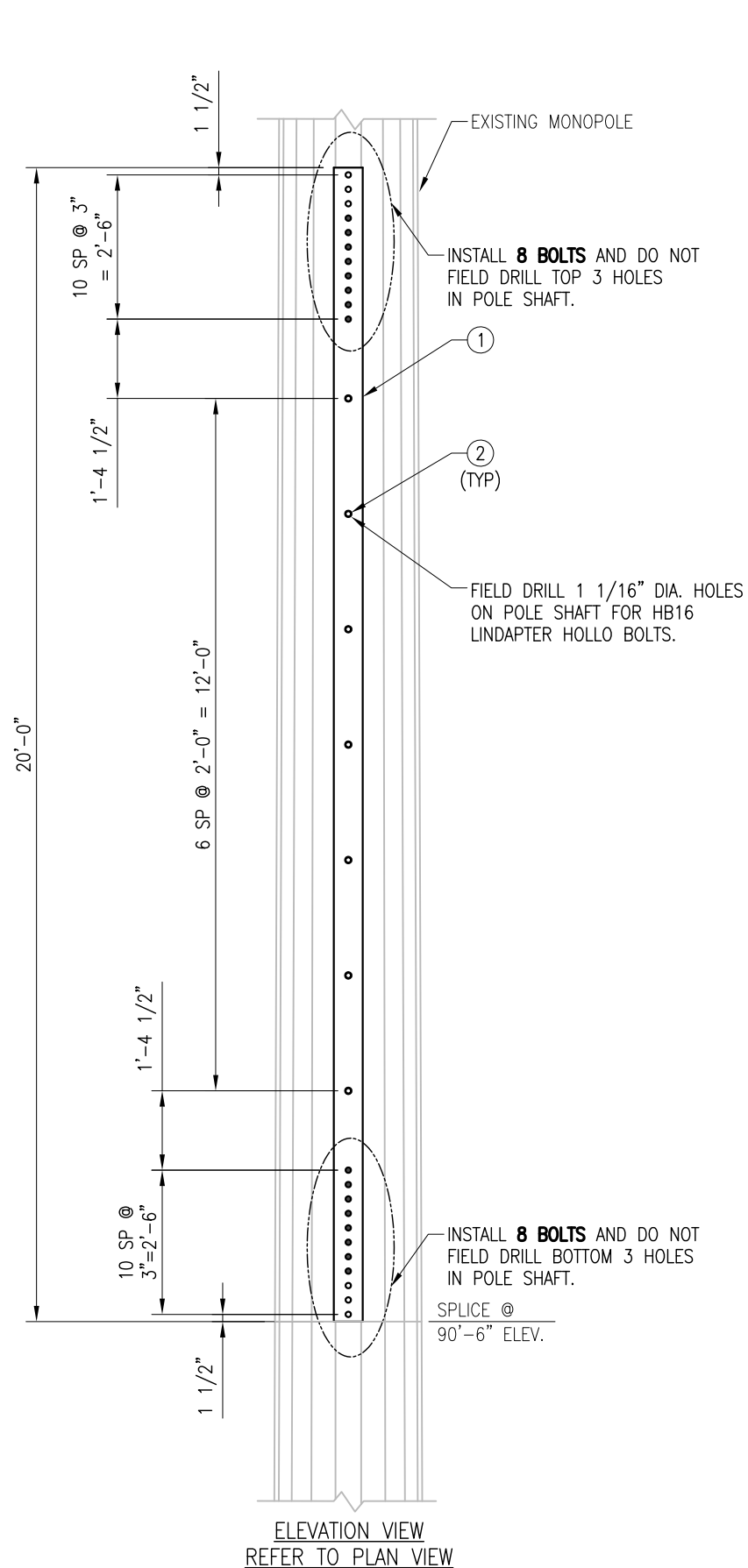
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SHEET NUMBER:

A-6

REV #:

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**NOTES:**

1. REFER TO SHEET A-2 FOR FLAT BAR ORIENTATION.
2. INSTALLATION TORQUE FOR HOLLO/AJAX-BOLTS: SEE SHEET GN-1

ITEM NO.	QTY.	PART NO.	DESCRIPTION (PER SECTION)
1	3	LP6X100-G-20TT	PL 1" X 6" X 20'-0" A572-65
2	69	HB16-2	LINDAPTER TYPE HB HOLLO-BOLT (HDG)



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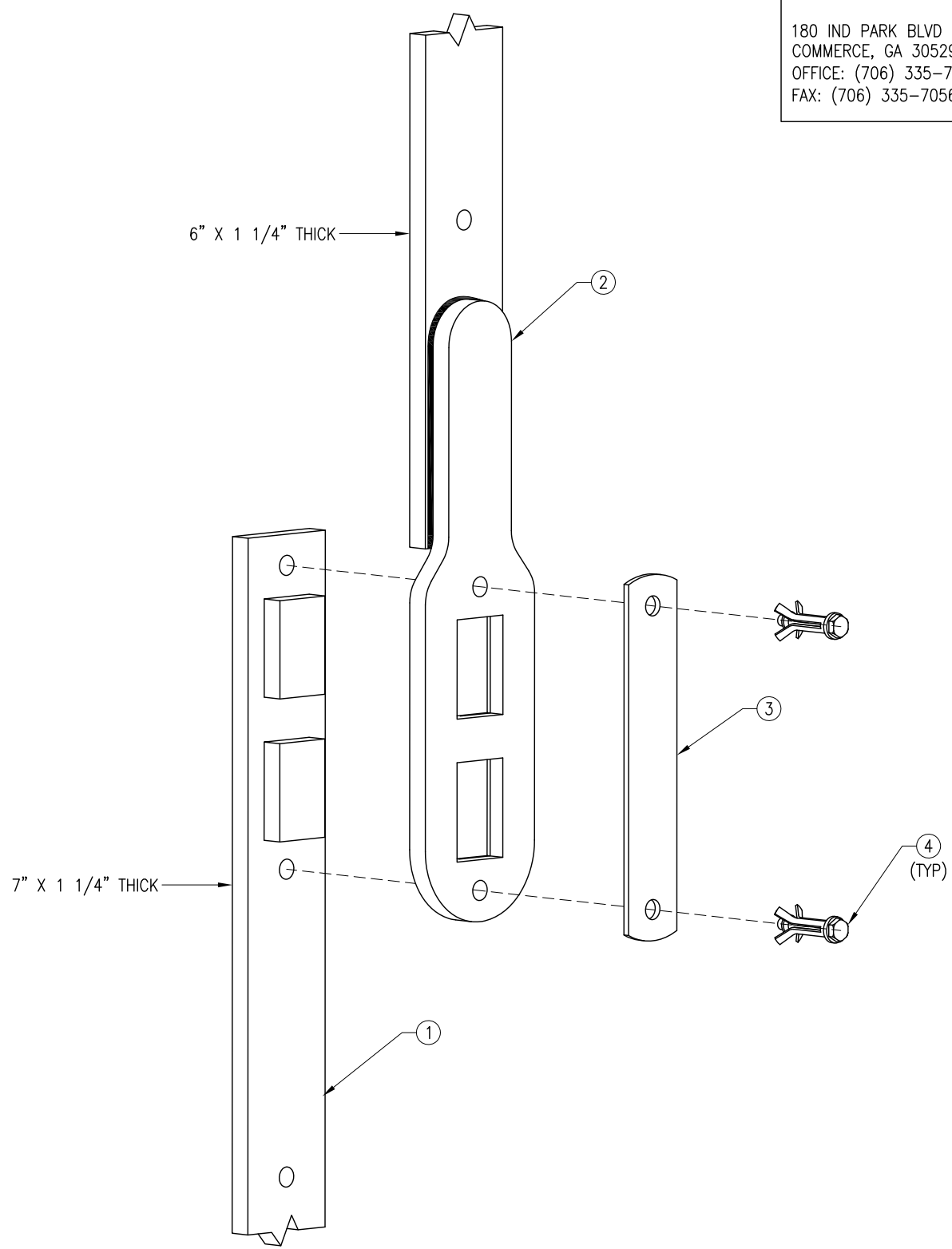
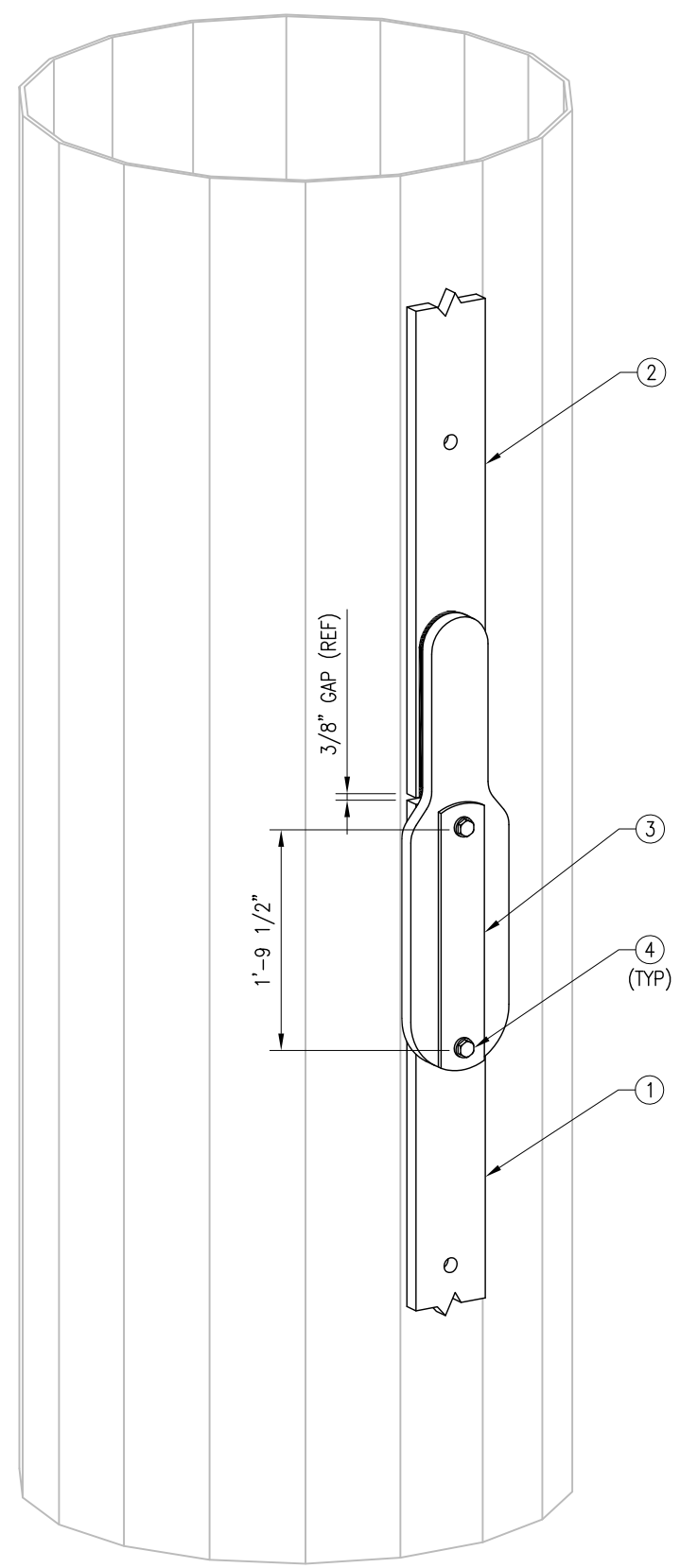
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SHEET NUMBER:  
A-7

REV #:  
0

US PATENT 9,546,497 B2



ALL LPXXXX PARTS ARE PATENTED AND ARE AVAILABLE FROM METROSITE, LLC  
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 COMMERCE, GA 30529  
 OFFICE: (706) 335-7045  
 FAX: (706) 335-7056



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SHEET TITLE:  
 SPLICE CONNECTION  
 PLATE INSTALLATION  
 DETAILS (TYPE AB)

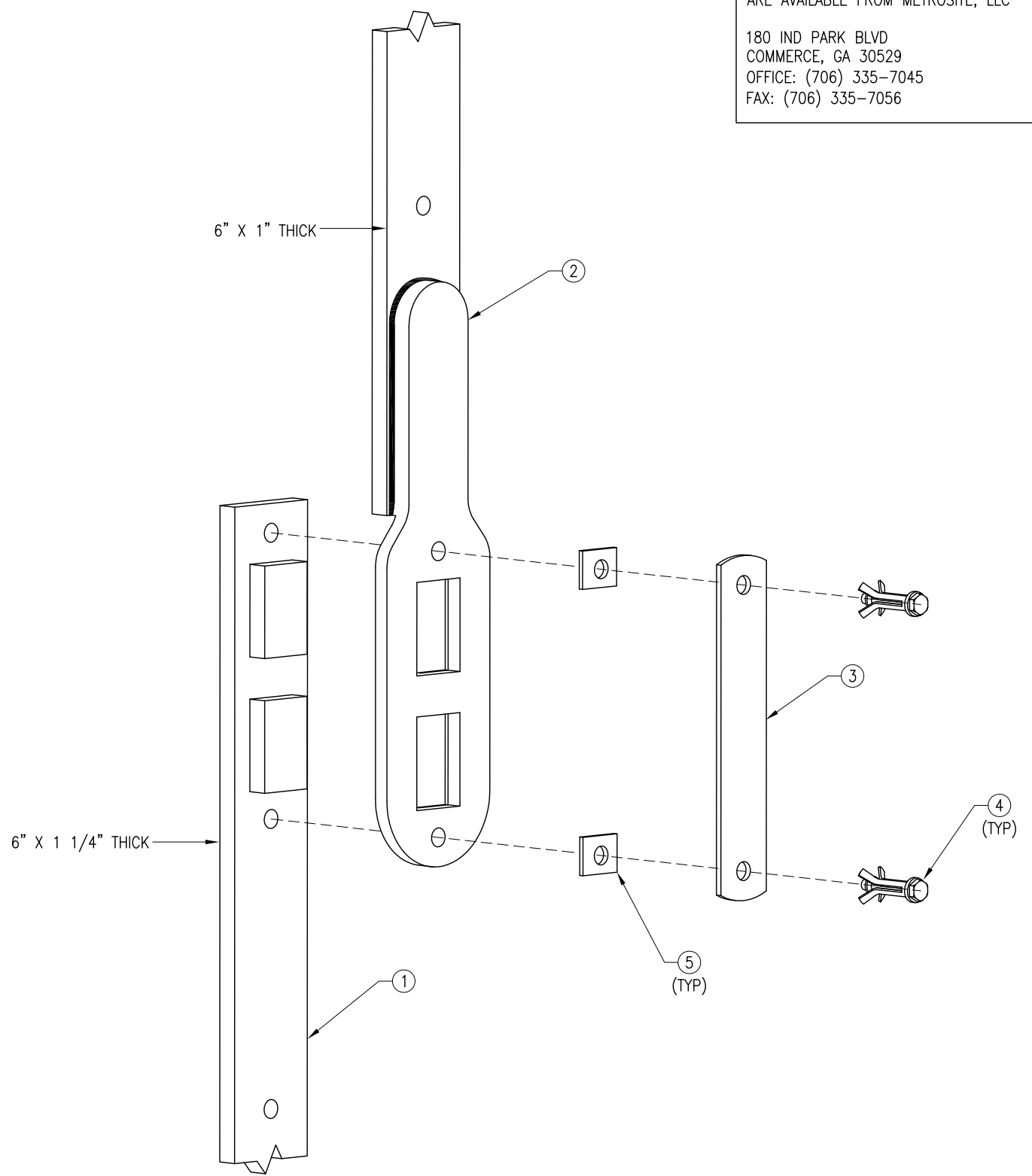
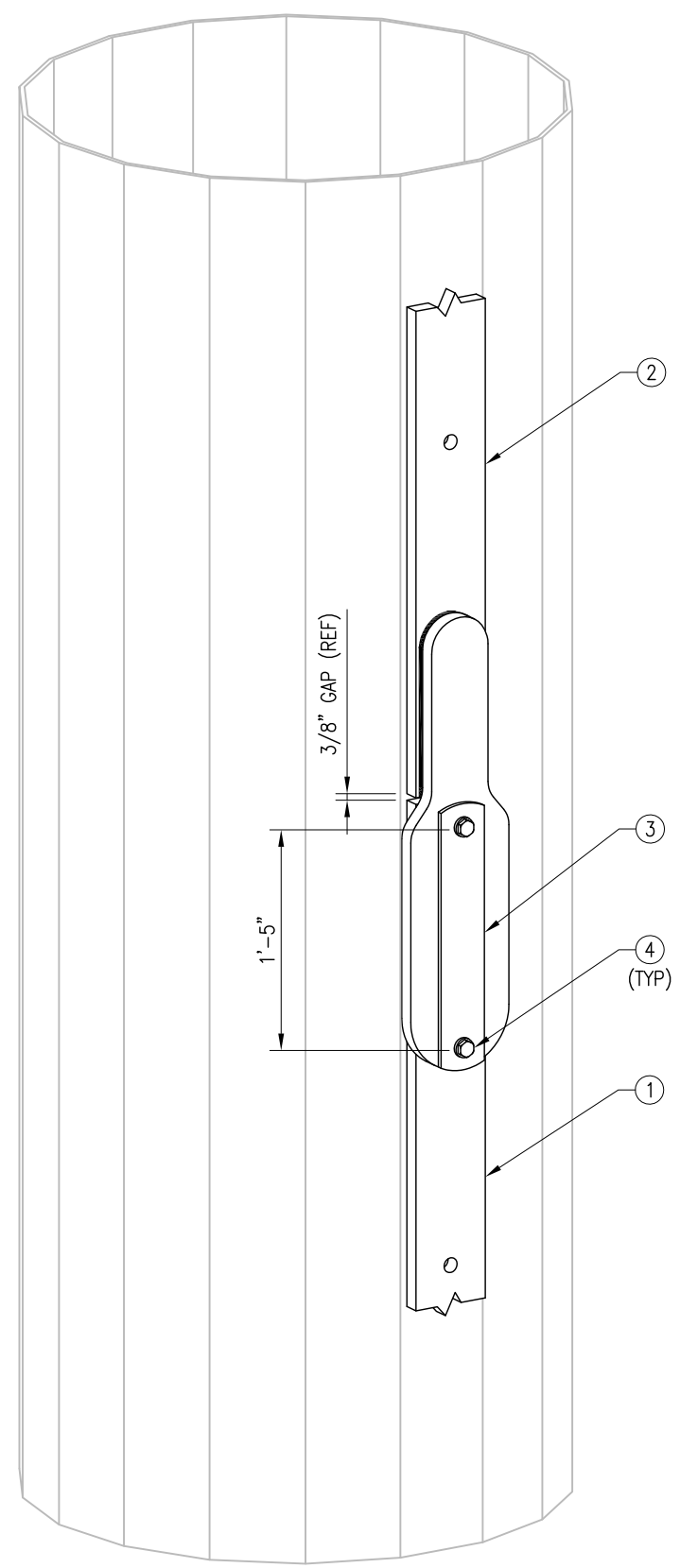
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SHEET NUMBER: A-LP-AB REV #: 0

**FIELD NOTE:**  
 INSTALLATION TORQUE FOR THE (2) HB20-3 BOLTS AT SPLICE: 221 FT-LBS.

ITEM NO.	QTY.	MATERIAL PART NO.	DESCRIPTION
1	-	LP7X125-X-XXX	PL 1 1/4" X 7" PLATE WELDMENT
2	-	LP6X125-X-XXX	PL 1 1/4" X 6" PLATE WELDMENT
3	1	CPL-A	KEY PLATE COVER PLATE
4	2	HB20-3	LINDAPTER 3/4" TYPE HB HOLLO-BOLT (HCF)

US PATENT 9,546,497 B2



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SHEET TITLE:  
 SPLICE CONNECTION  
 PLATE INSTALLATION  
 DETAILS (TYPE BC)

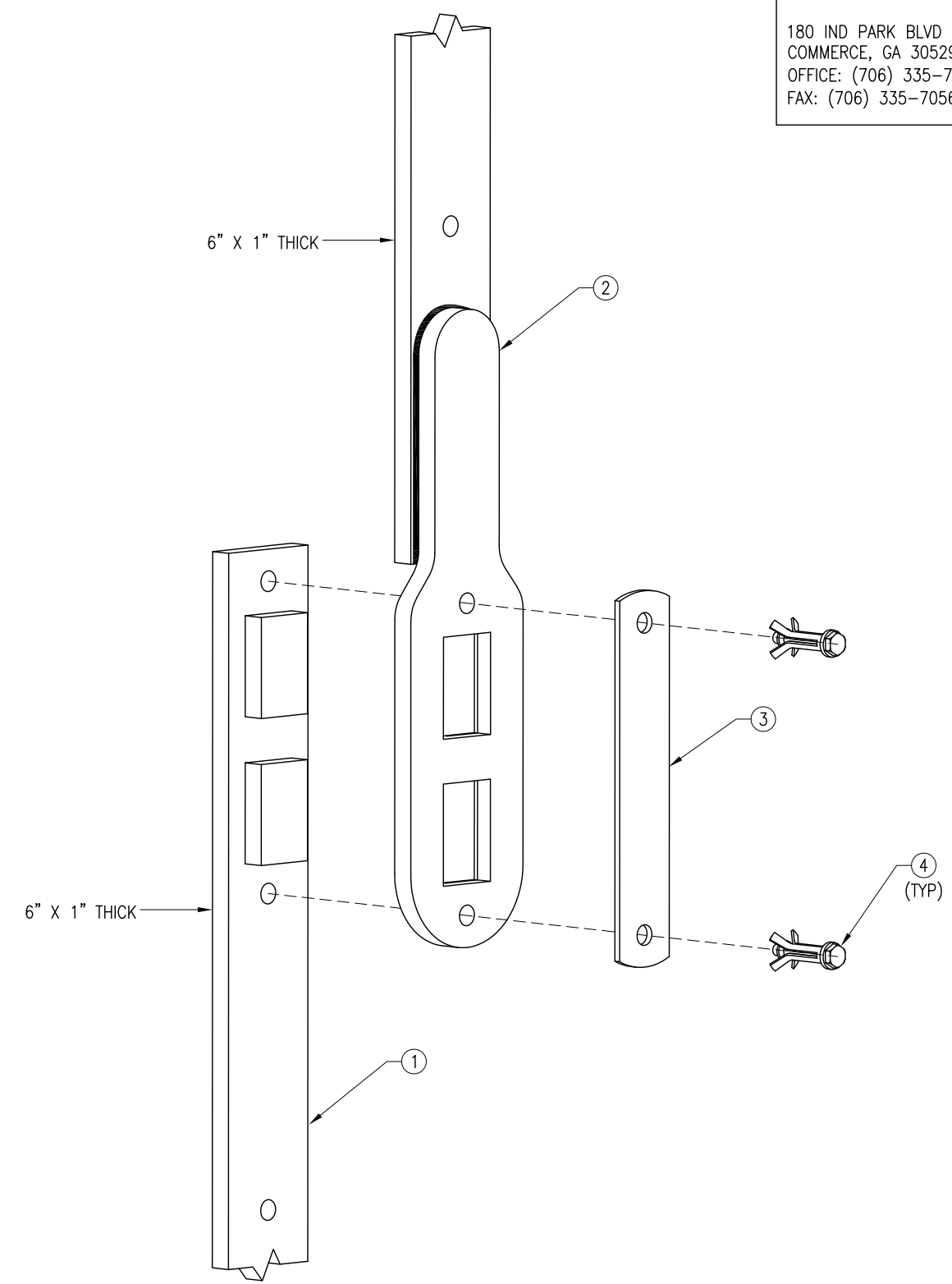
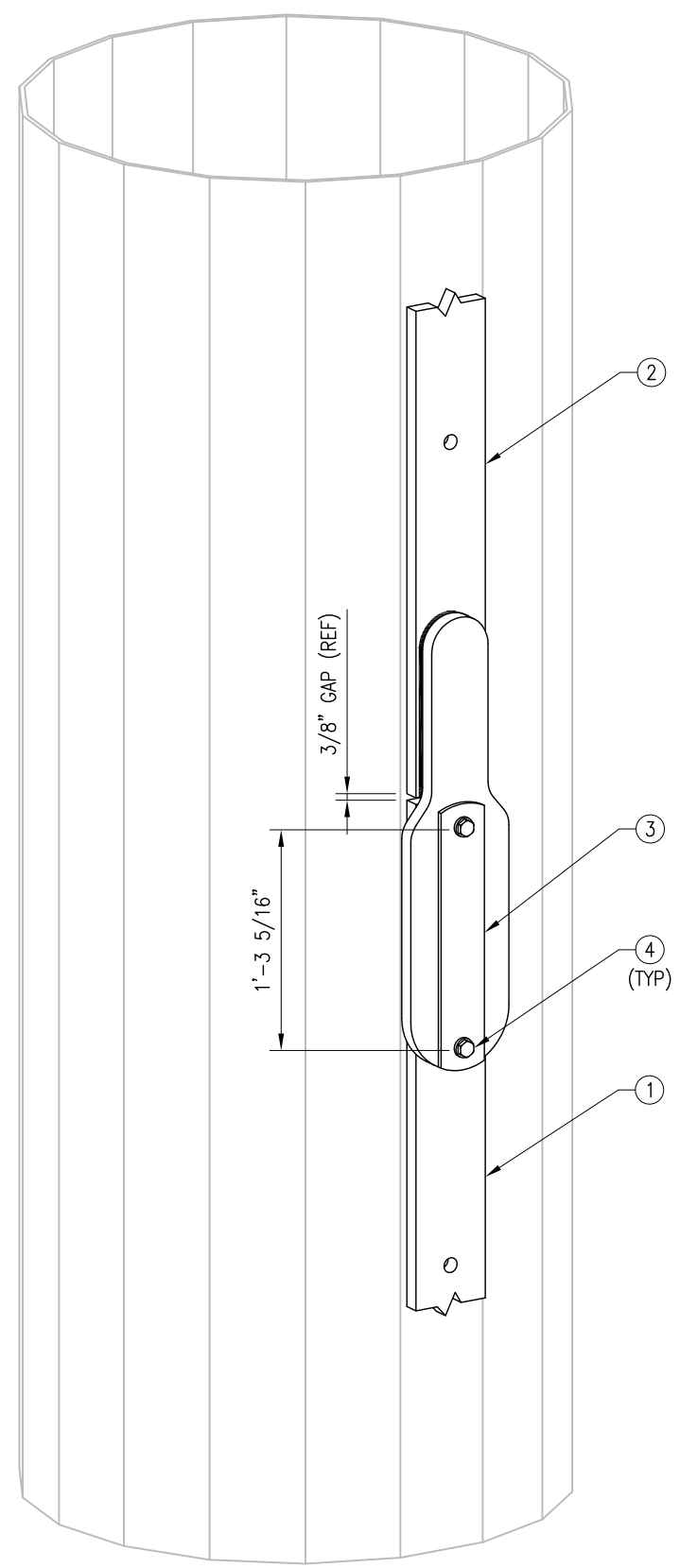
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FIELD NOTE:  
 INSTALLATION TORQUE FOR THE (2) HB20-3 BOLTS AT SPLICE: 221 FT-LBS.

ITEM NO.	QTY.	MATERIAL PART NO.	DESCRIPTION
1	-	LP6X125-X-XXX	PL 1 1/4" X 6" PLATE WELDMENT
2	-	LP6X100-X-XXX	PL 1" X 6" PLATE WELDMENT
3	1	CPL-B	KEY PLATE COVER PLATE
4	2	HB20-3	LINDAPTER 3/4" TYPE HB HOLLO-BOLT (HCF)
5	2	SHIM-M20-1	PL 1/4" X 3" X 3" A36

SHEET NUMBER: A-LP-BC REV #: 0

US PATENT 9,546,497 B2



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REV.	DESCRIPTION	BY	DATE
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SHEET TITLE:  
 SPLICE CONNECTION  
 PLATE INSTALLATION  
 DETAILS (TYPE CC)

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SHEET NUMBER: A-LP-CC REV #: 0

FIELD NOTE:  
 INSTALLATION TORQUE FOR THE (2) HB20-3 BOLTS AT SPLICE: 221 FT-LBS.

ITEM NO.	QTY.	MATERIAL PART NO.	DESCRIPTION
1	-	LP6X100-X-XXX	PL 1" X 6" PLATE WELDMENT
2	-	LP6X100-X-XXX	PL 1" X 6" PLATE WELDMENT
3	1	CPL-C	KEY PLATE COVER PLATE
4	2	HB20-3	LINDAPTER 3/4" TYPE HB HOLLO-BOLT (HCF)