



TEXAS
Health and Human Services

Attachment H1

Project Drawings

PROJECT 20-102-CLC

REPAIRS TO BUILDINGS 542 & 543

BOND HOME REPAIRS

CORPUS CHRISTI STATE SUPPORTED CENTER
TEXAS DEPARTMENT OF STATE HEALTH SERVICES

BUILDING 542
CASTLE RIVER
4013 CASTLE RIDGE DRIVE
CORPUS CHRISTI, TEXAS

BUILDING 543
RIVER FOREST
5017/5021 CALLEN DRIVE
CORPUS CHRISTI, TEXAS

100% CONSTRUCTION DOCUMENTS



TX Firm Registration # F-13764
10637 Leopard Street
Corpus Christi, TX 78410
Phone: (361) 504-4074
Email: dlara@iecme.com



615 N. UPPER BROADWAY
SUITE 1250
CORPUS CHRISTI, TX 78401-0750
T: 361.884.3295
F: 361.884.3298
www.clkarch.com
TX Firm Registration #BR-719

Garza + McLain
STRUCTURAL ENGINEERS, INC.
13313 Southwest Freeway, Suite 163
Sugar Land, Texas 77478
(281) 494-1230 (voice)
(281) 494-1234 (fax)

DRAWING LEGEND:

COVER SHEET
G-1.0 ADA - TAS REQUIREMENTS

CIVIL
TOPOGRAPHIC SURVEY (RIVER FOREST)
TOPOGRAPHIC SURVEY (CASTLE RIVER)

ARCHITECTURAL
A-0.1 BUILDING 543 - DEMOLITION FLOOR PLAN (RIVER FOREST)
A-0.2 BUILDING 542 - DEMOLITION FLOOR PLAN (CASTLE RIVER)
A-1.1 BUILDING 543 - SITE PLAN (RIVER FOREST)
A-1.2 BUILDING 542 - SITE PLAN (CASTLE RIVER)
A-2.1 BUILDING 543 - FLOOR PLAN (RIVER FOREST)
A-2.2 BUILDING 542 - FLOOR PLAN (CASTLE RIVER)
A-3.1 BUILDING 543 - EXTERIOR ELEVATIONS (RIVER FOREST)
A-3.2 BUILDING 542 - EXTERIOR ELEVATIONS (CASTLE RIVER)
A-5.1 INTERIOR ELEVATIONS AND ENLARGED PLANS
A-5.2 INTERIOR ELEVATIONS

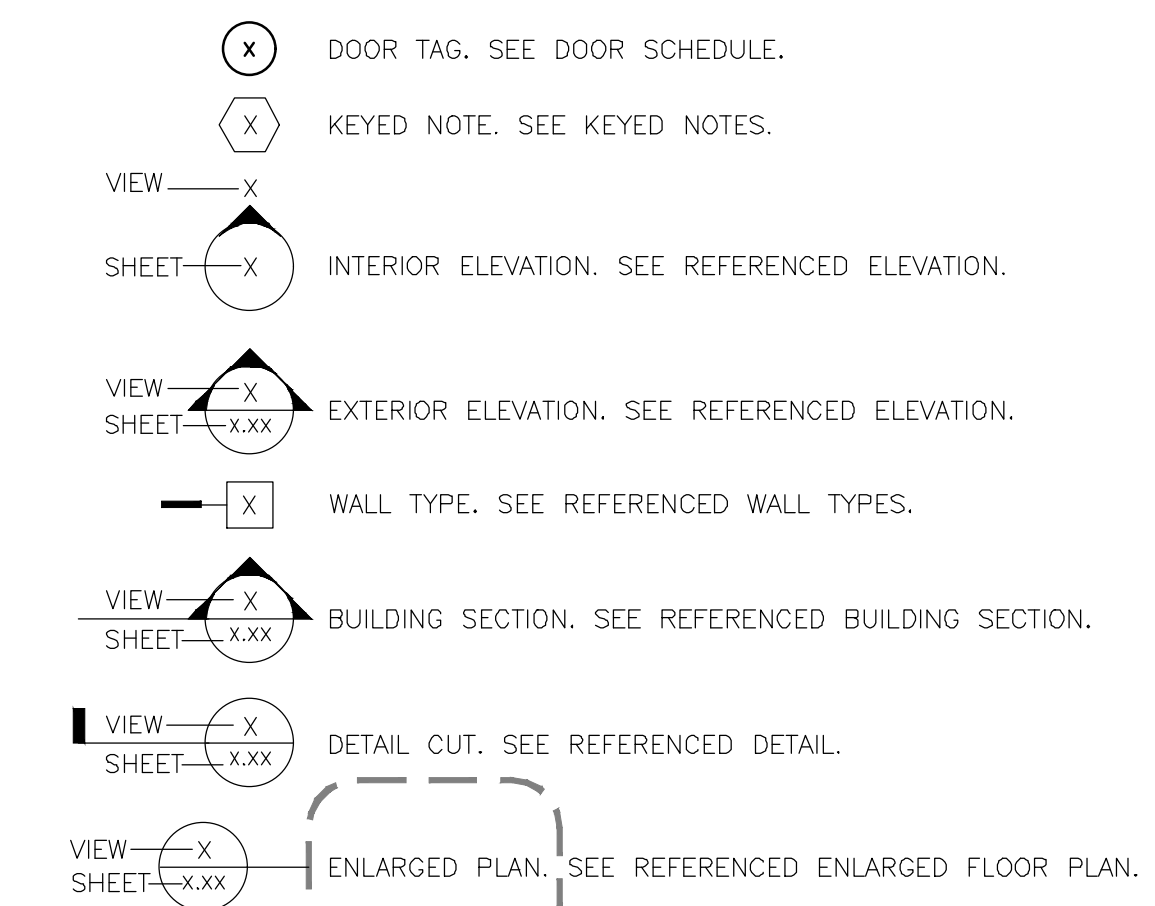
STRUCTURAL
S0.1 STRUCTURAL GENERAL NOTES
S1.0 STRUCTURAL FOUNDATION PLAN (RIVER FOREST)
S4.1 TYPICAL FOUNDATION DETAILS
S4.2 TYPICAL FOUNDATION DETAILS

MECHANICAL
M-1.0 BUILDING 543 - MECHANICAL DEMOLITION PLAN (RIVER FOREST)
M-1.1 BUILDING 542 - MECHANICAL DEMOLITION PLAN (CASTLE RIVER)
M-2.0 BUILDING 543 - MECHANICAL PLAN (RIVER FOREST)
M-2.1 BUILDING 542 - MECHANICAL PLAN (CASTLE RIVER)
M-3.0 MECHANICAL LEGEND AND GENERAL NOTES

ELECTRICAL
E-1.0 BUILDING 543 - ELECTRICAL DEMOLITION PLAN (RIVER FOREST)
E-1.1 BUILDING 542 - ELECTRICAL DEMOLITION PLAN (CASTLE RIVER)
E-2.0 BUILDING 543 - ELECTRICAL PLAN (RIVER FOREST)
E-2.1 BUILDING 542 - ELECTRICAL PLAN (CASTLE RIVER)
E-3.0 ELECTRICAL LEGEND AND GENERAL NOTES

PLUMBING
P-1.0 BUILDING 543 - PLUMBING DEMOLITION PLAN (RIVER FOREST)
P-1.1 BUILDING 542 - PLUMBING DEMOLITION PLAN (CASTLE RIVER)
P-2.0 BUILDING 543 - PLUMBING PLAN (RIVER FOREST)
P-2.1 BUILDING 542 - PLUMBING PLAN (CASTLE RIVER)
P-3.0 PLUMBING LEGEND, SCHEDULES AND SPECIFICATIONS

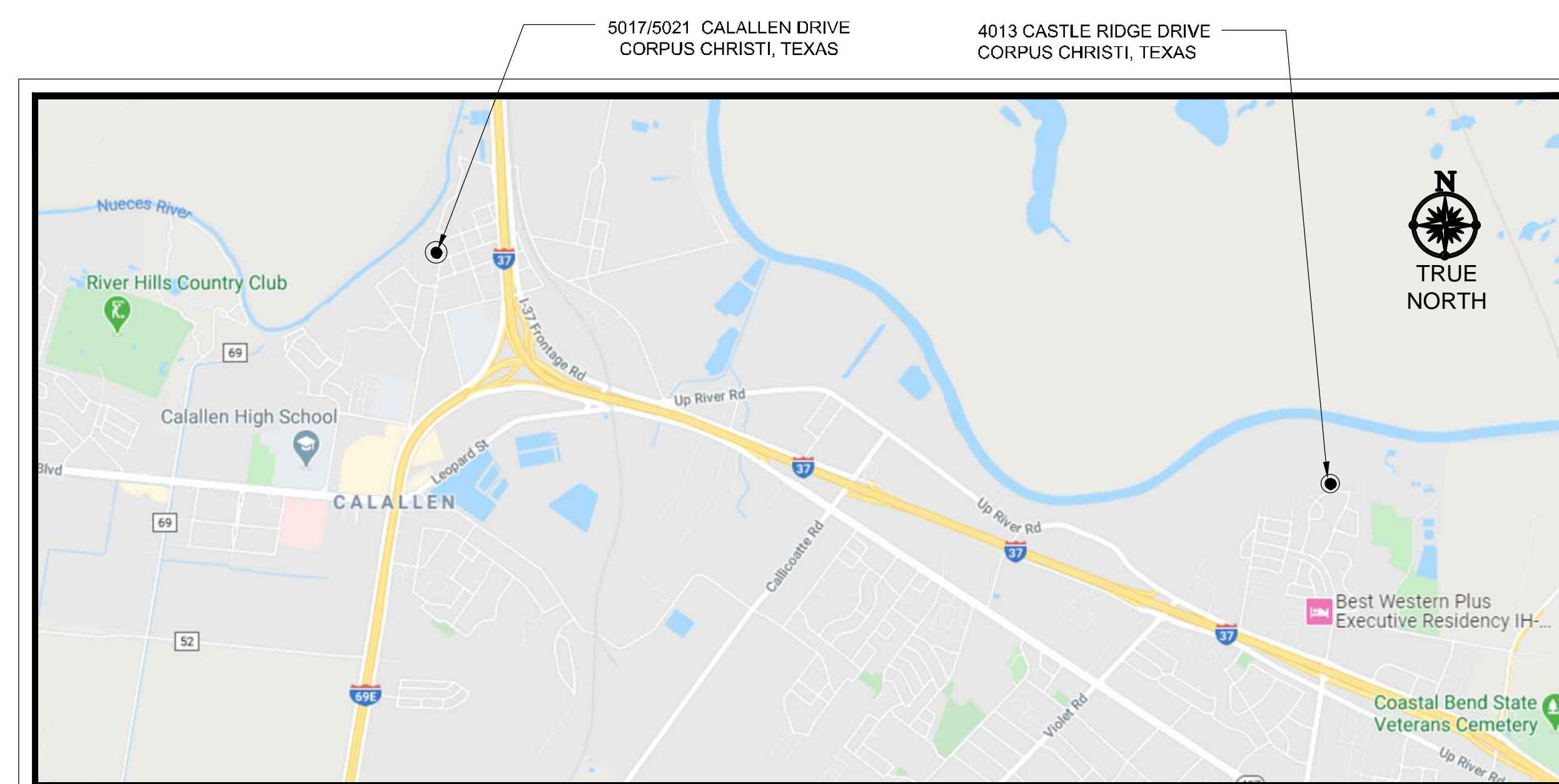
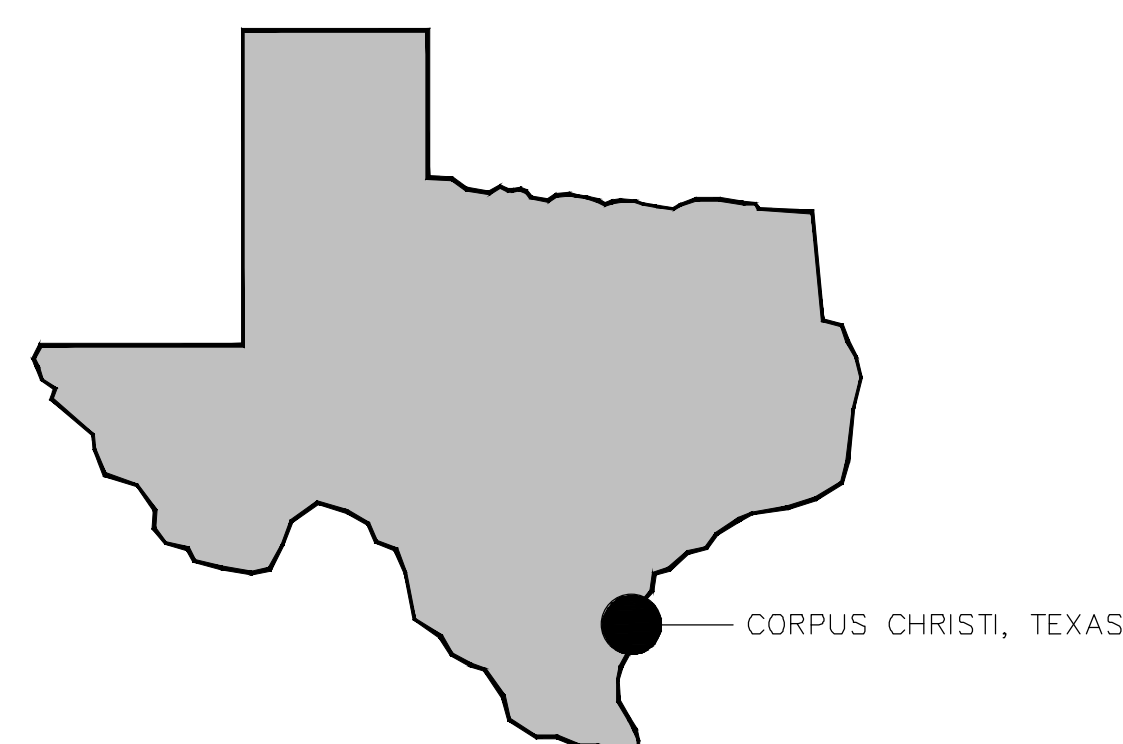
SYMBOL LEGEND



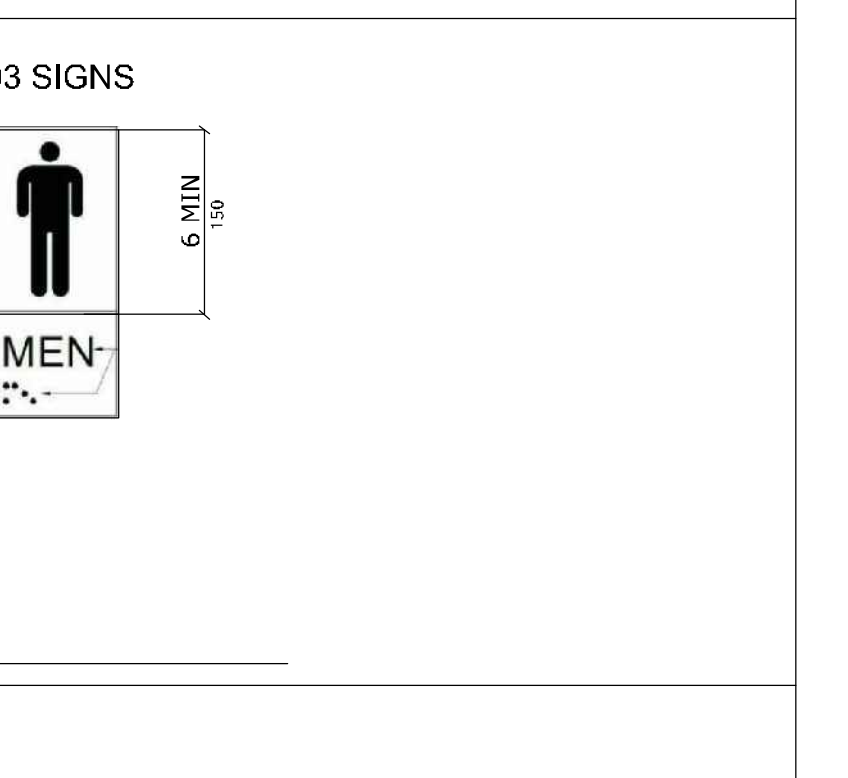
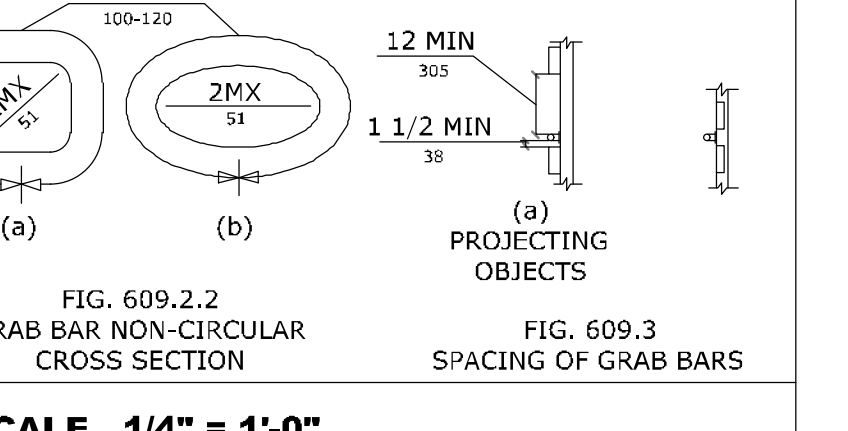
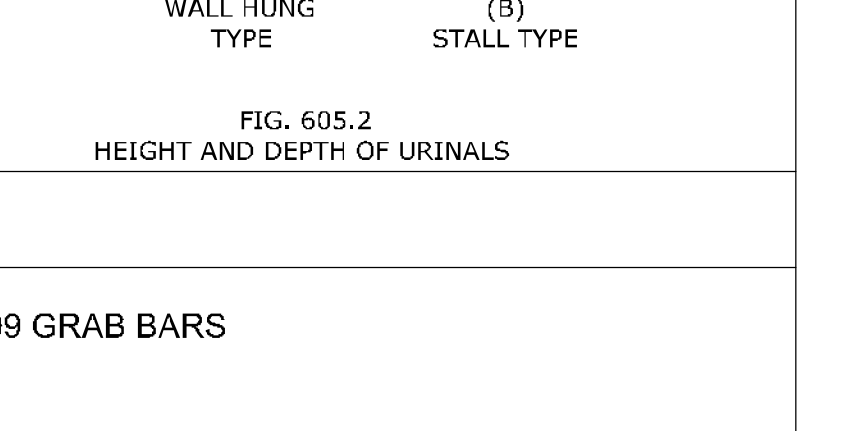
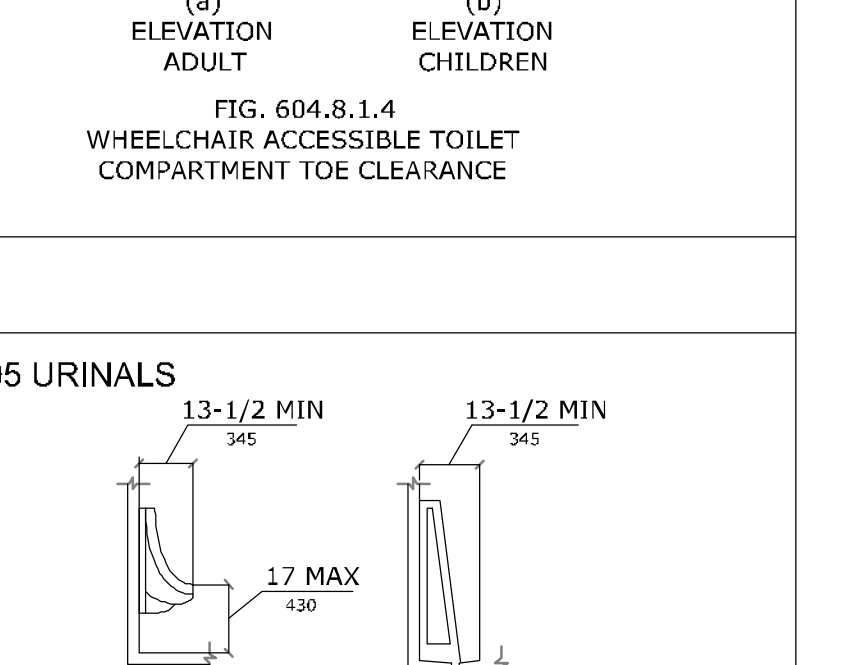
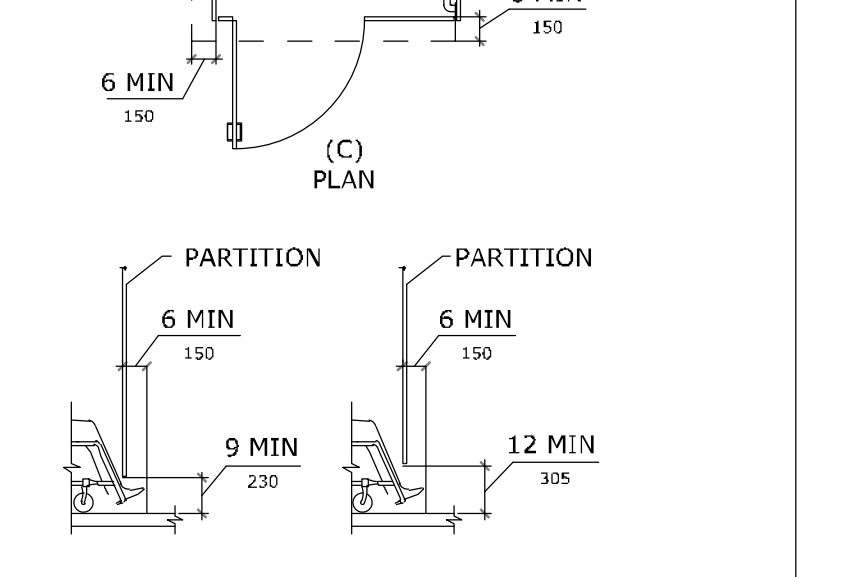
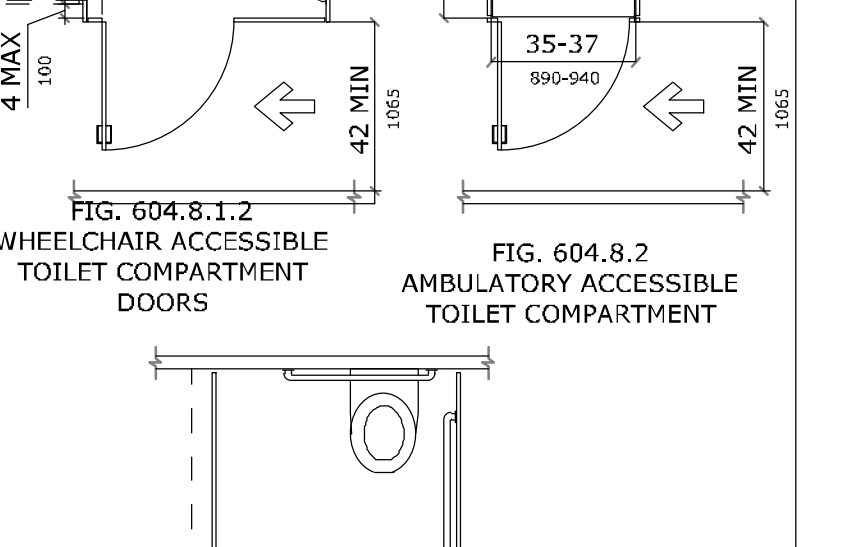
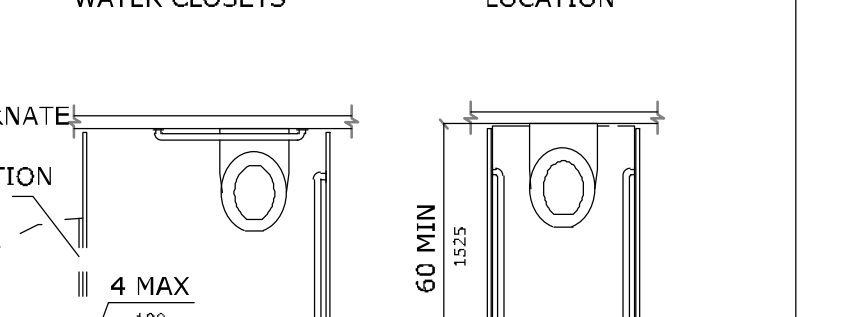
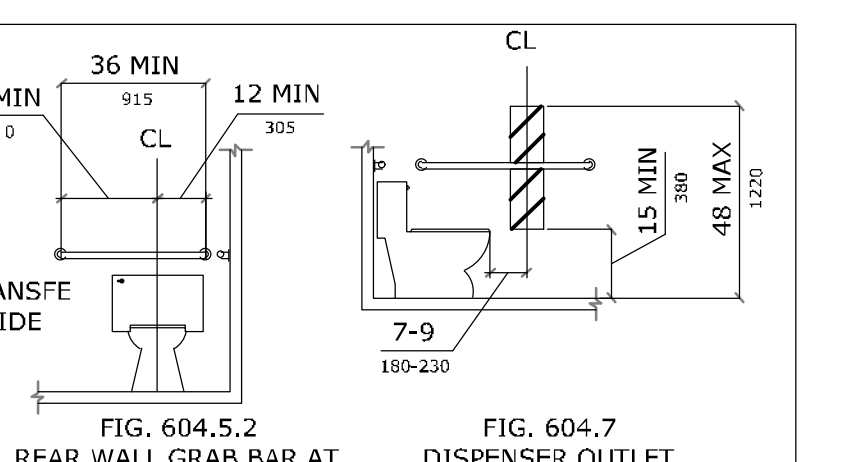
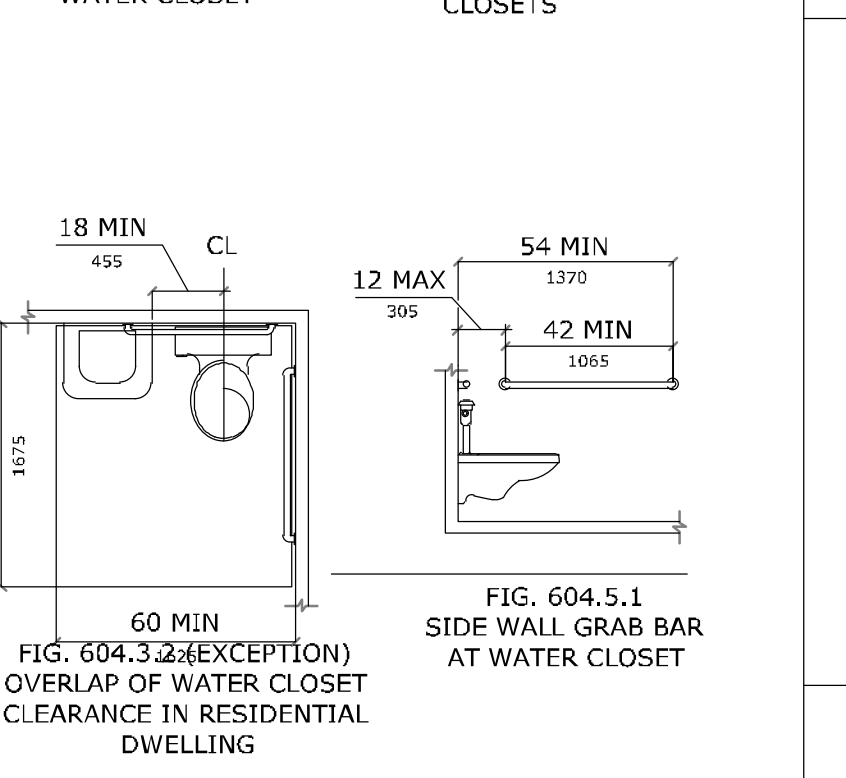
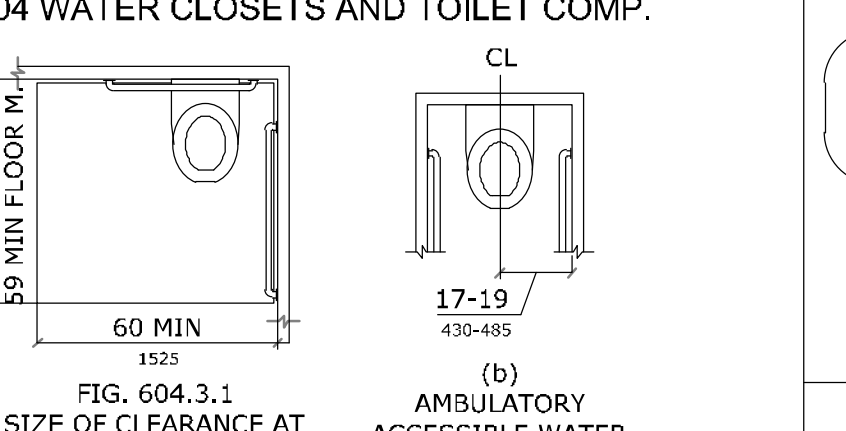
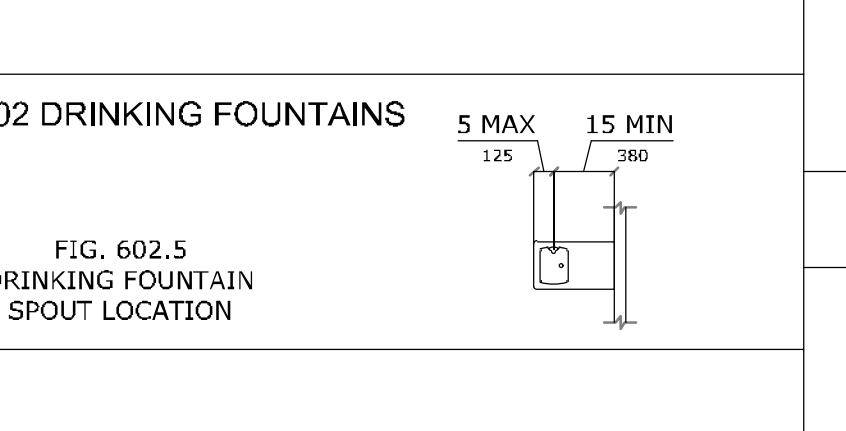
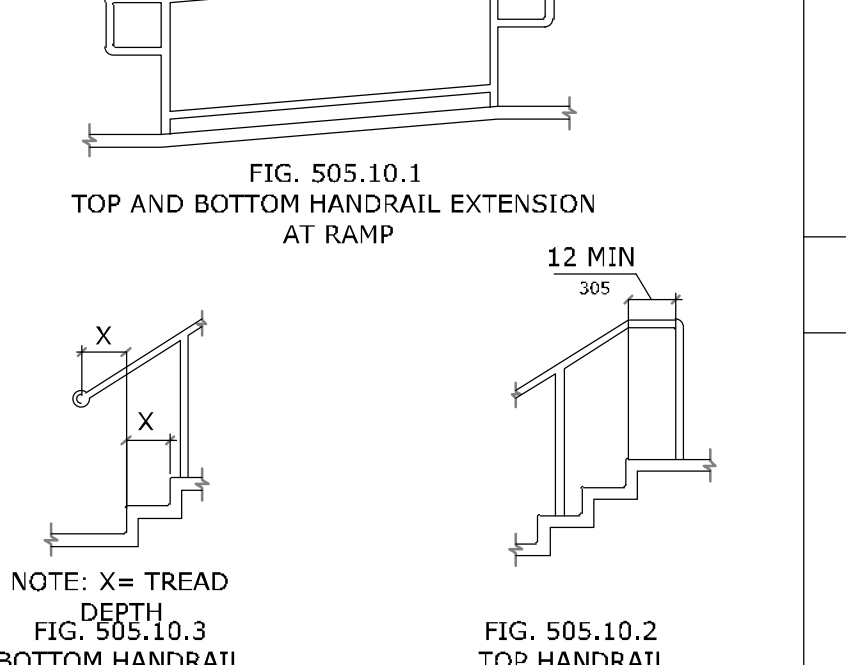
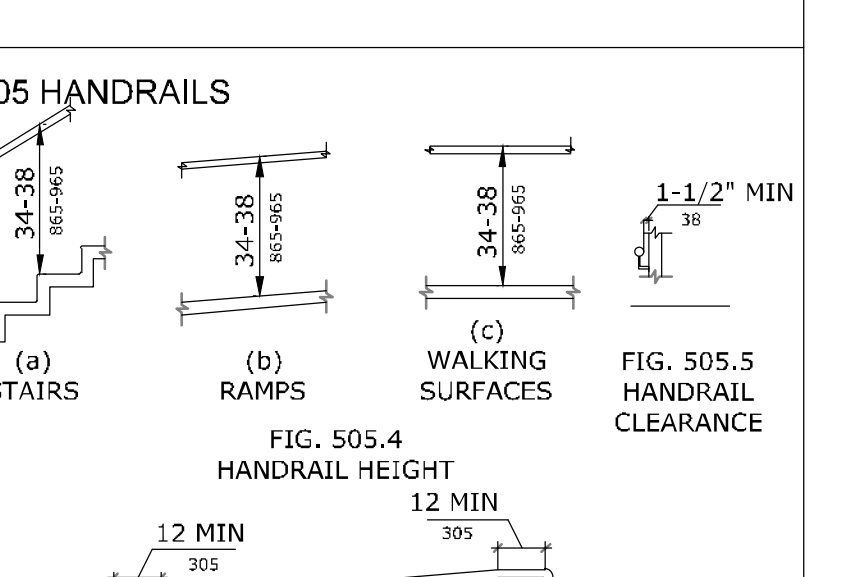
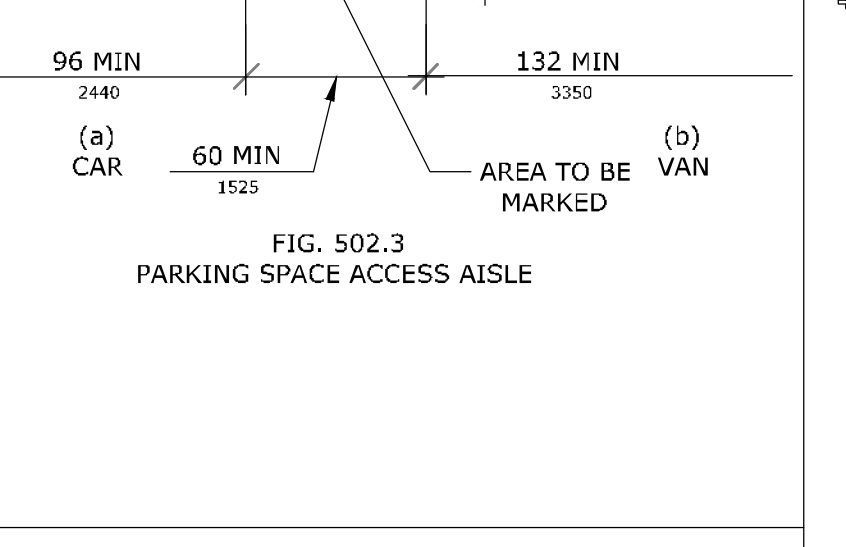
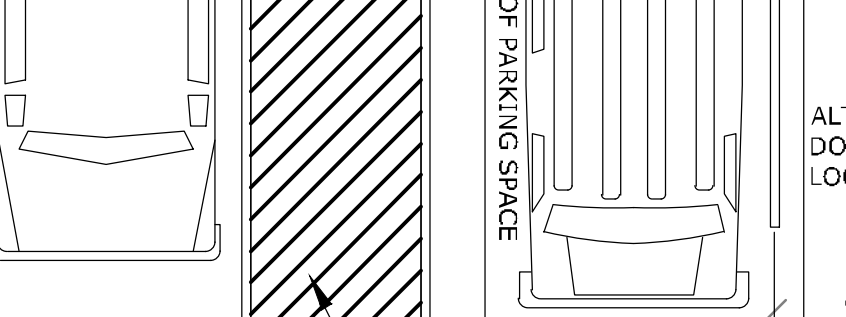
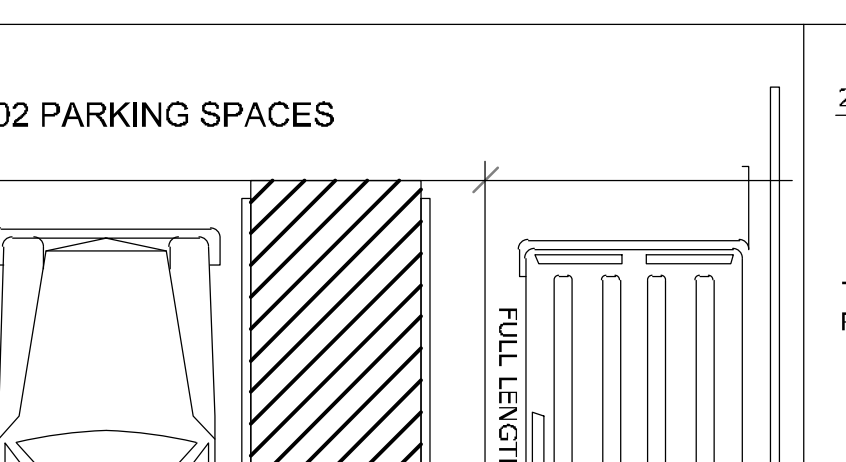
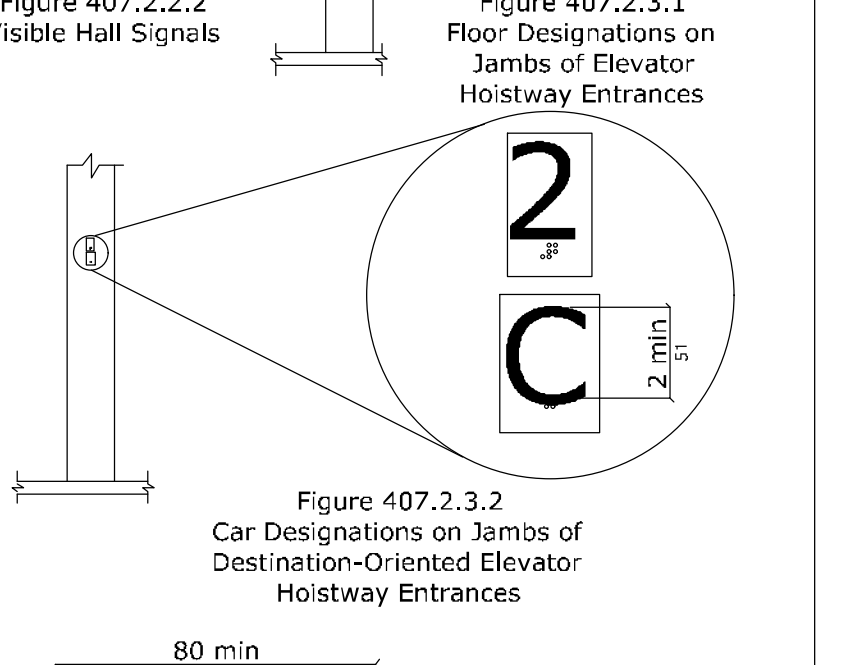
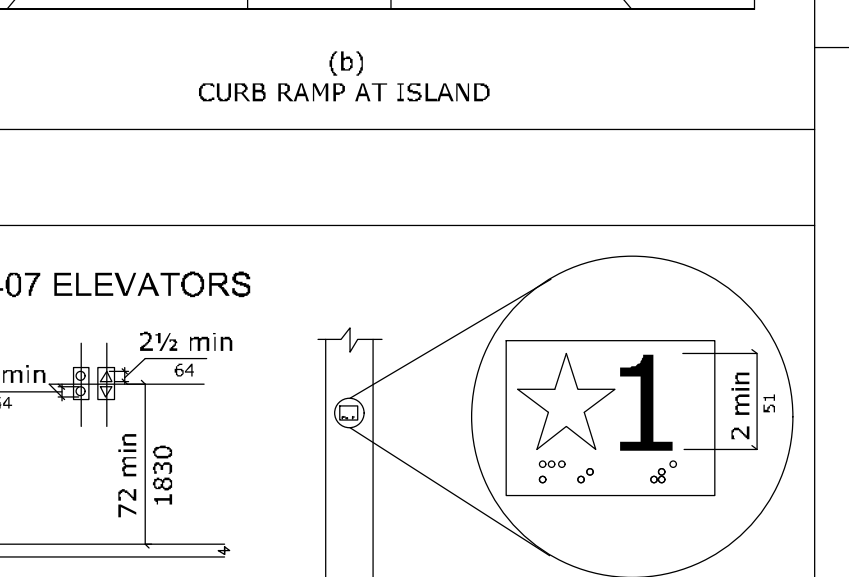
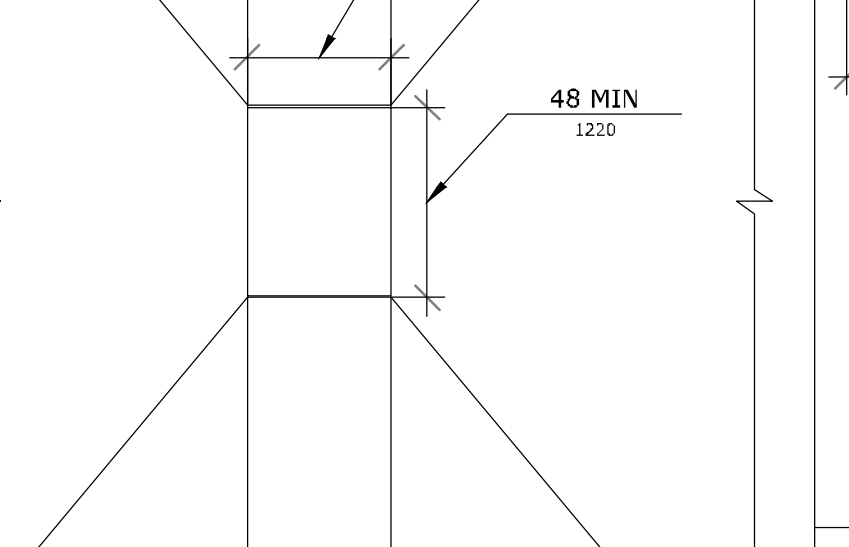
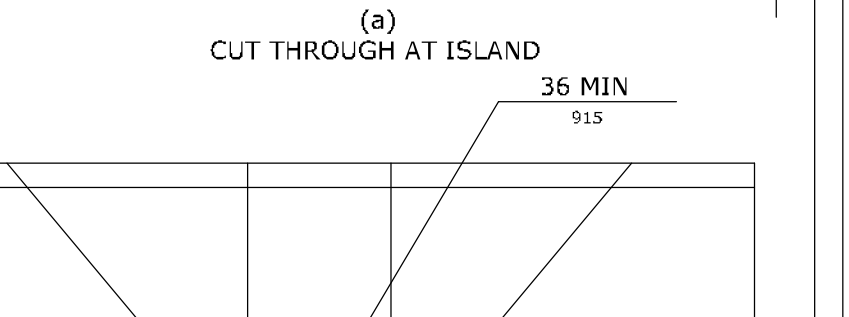
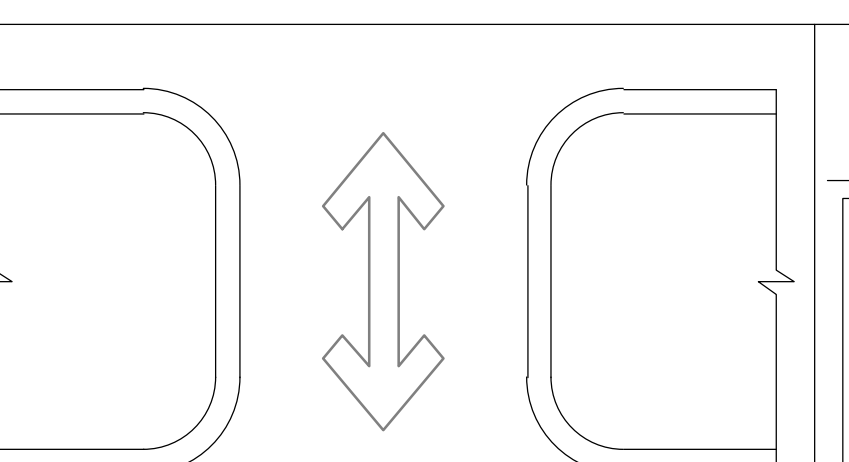
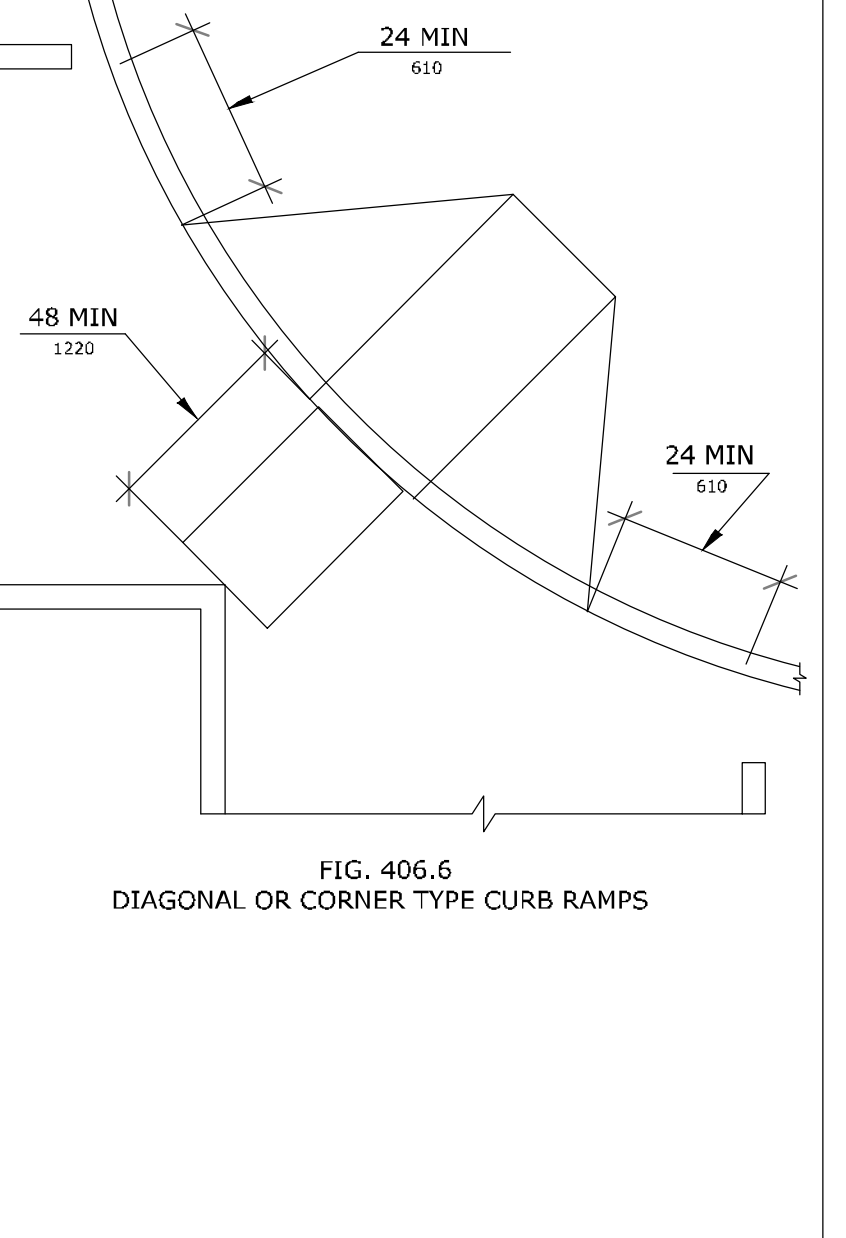
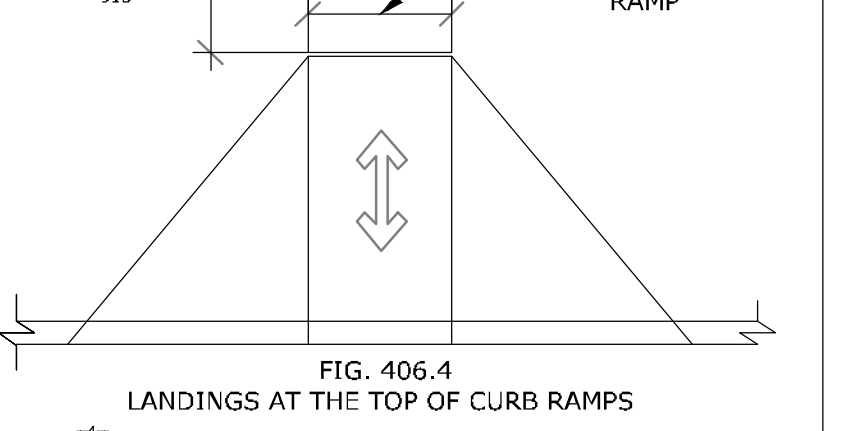
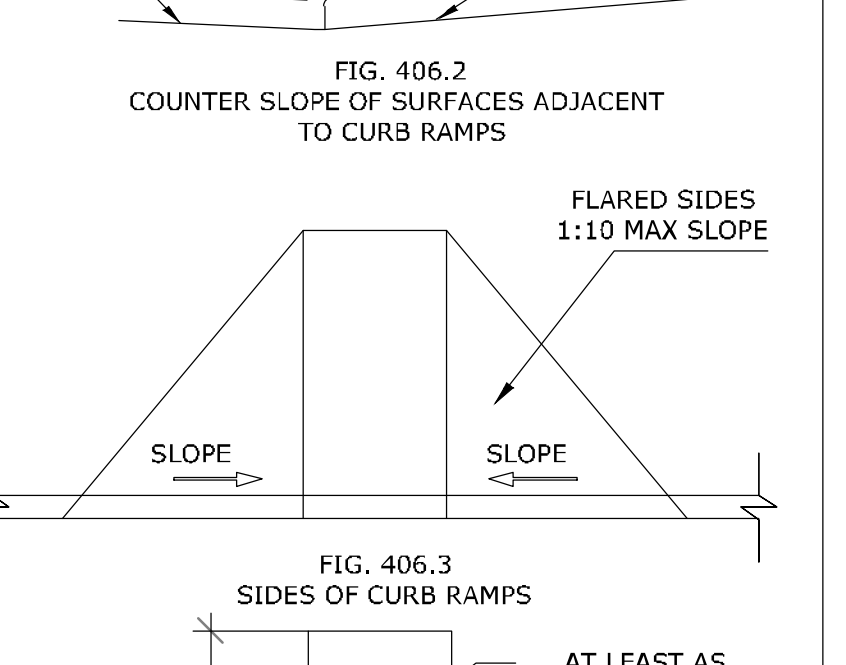
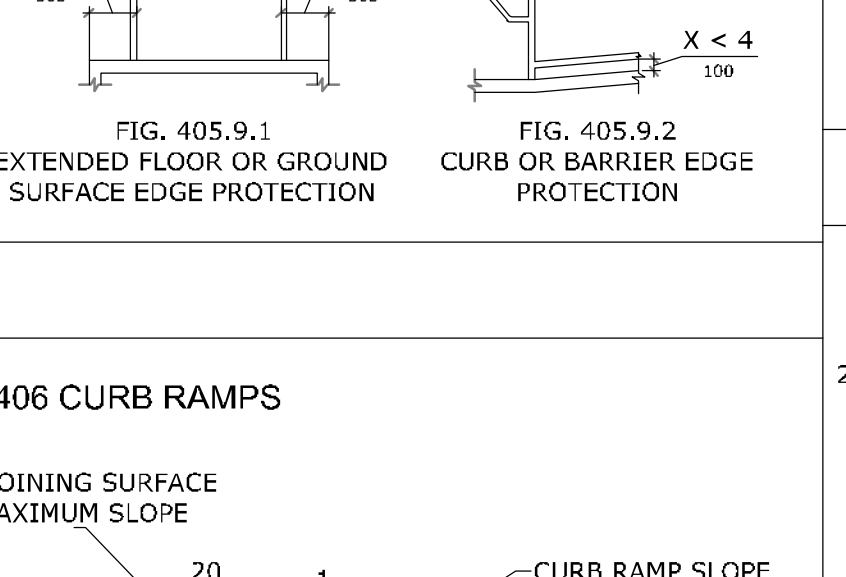
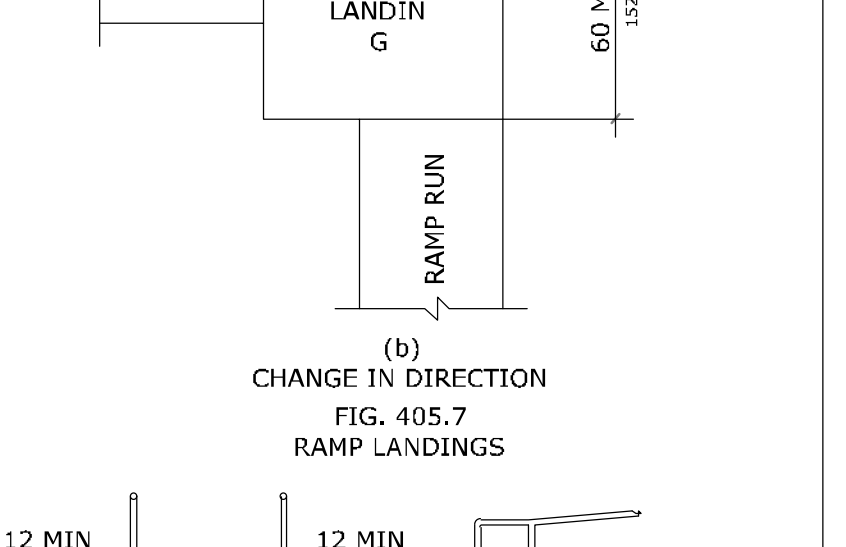
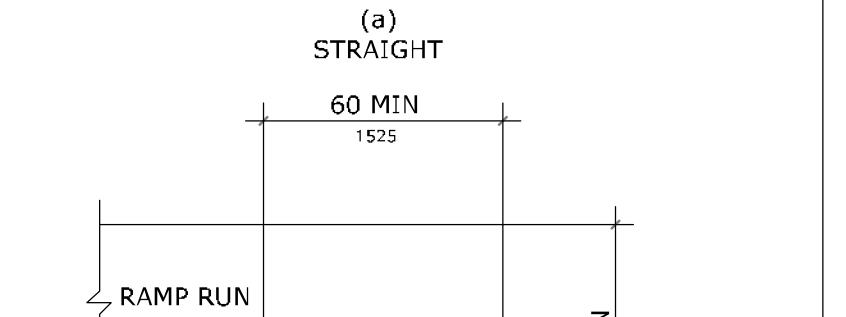
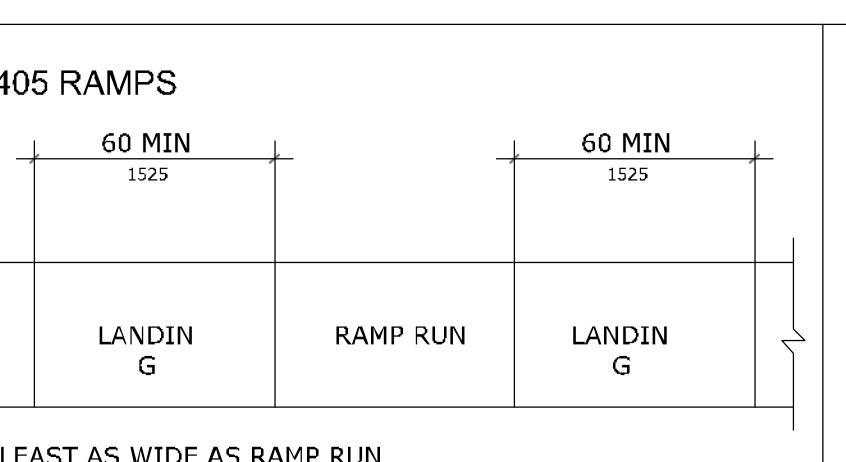
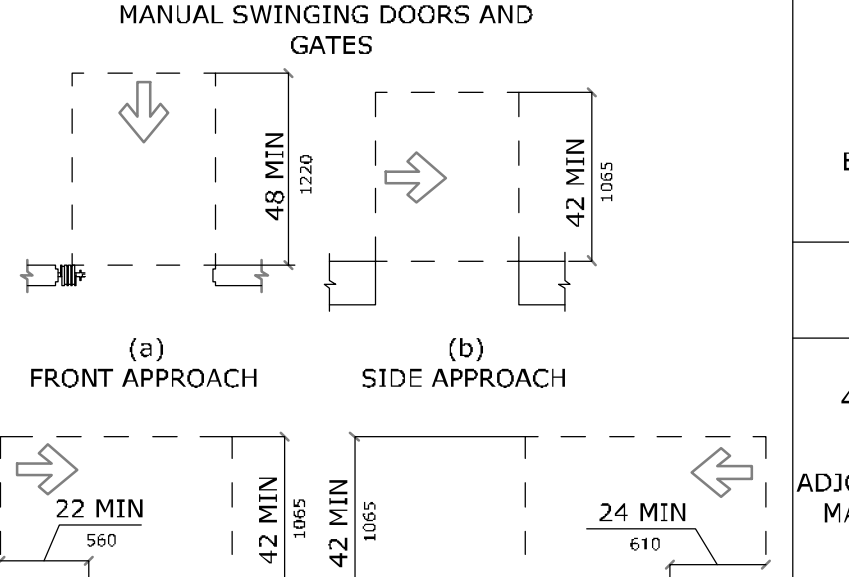
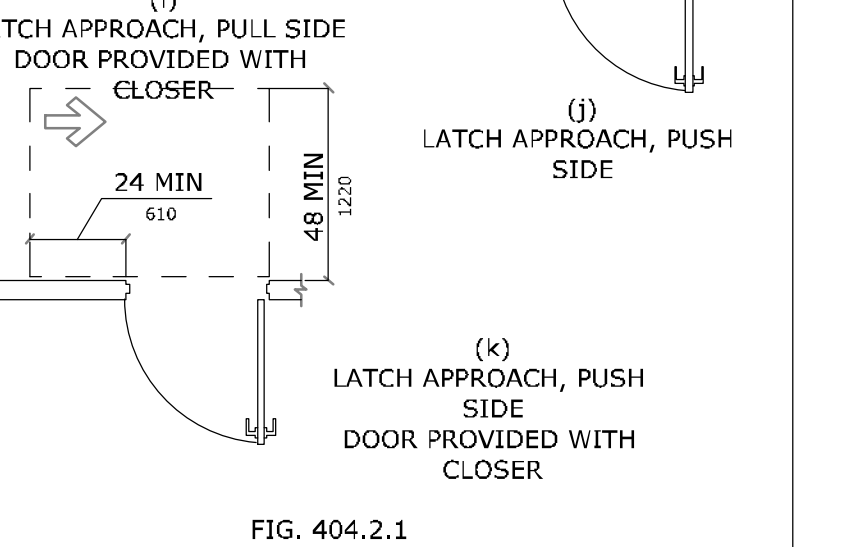
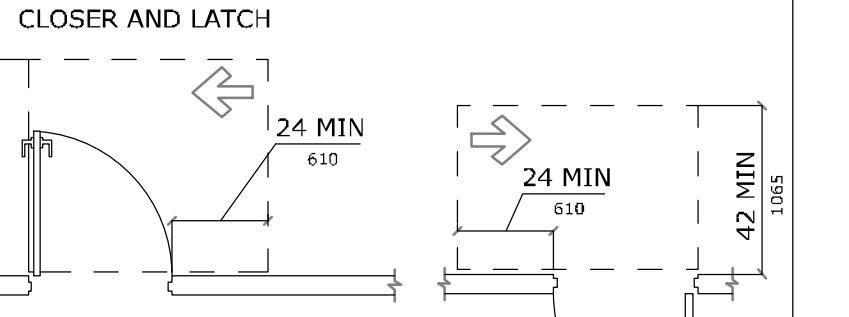
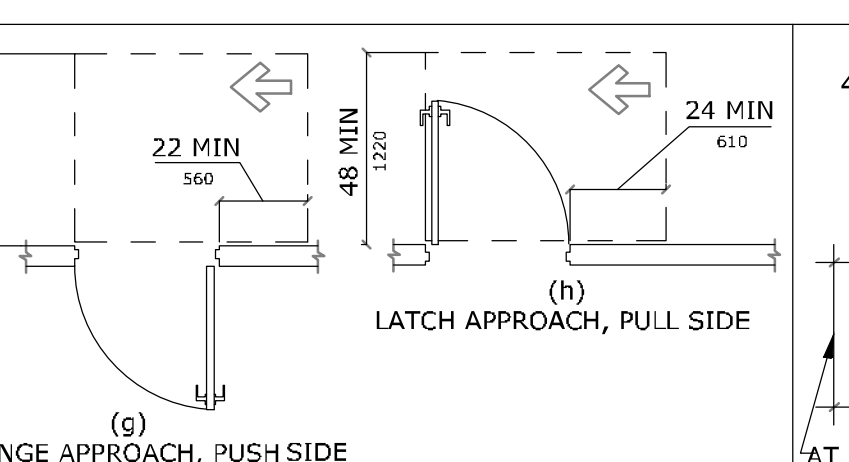
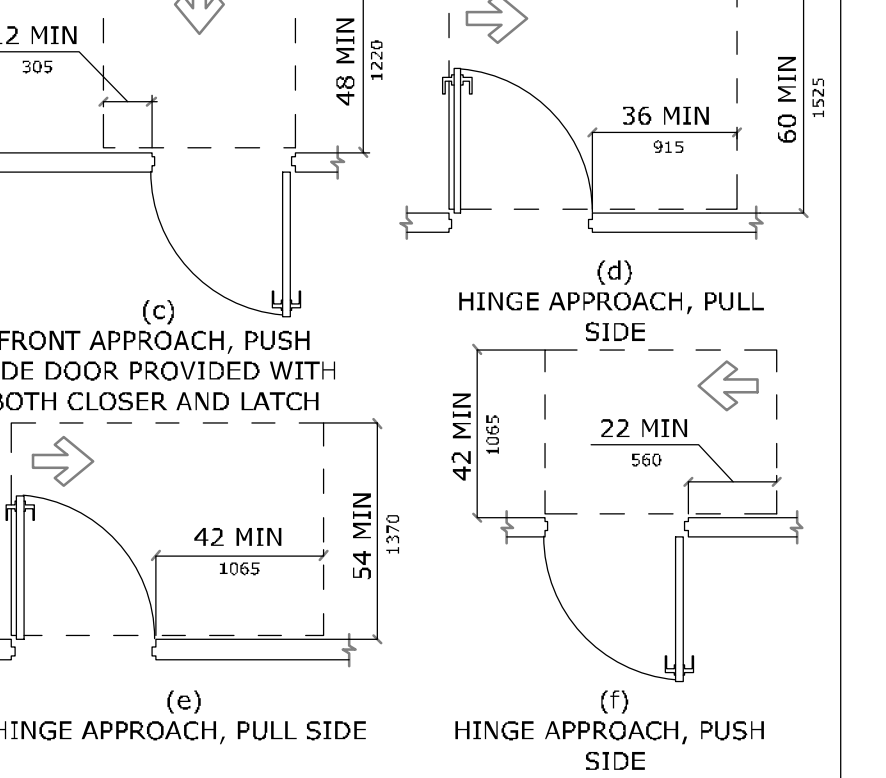
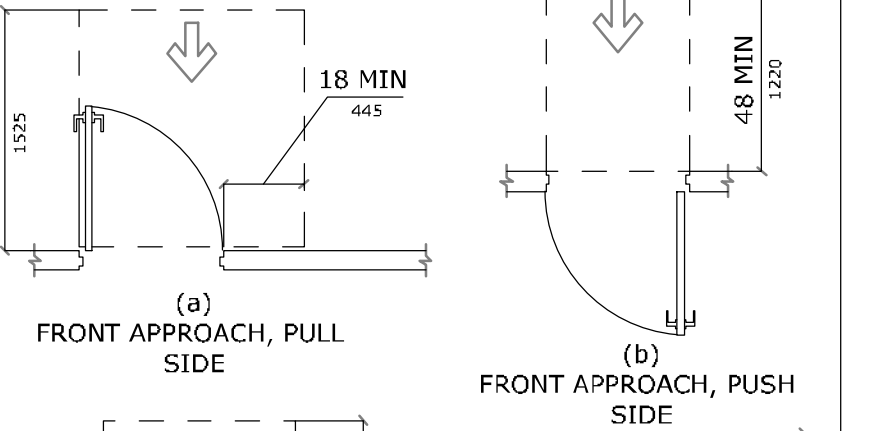
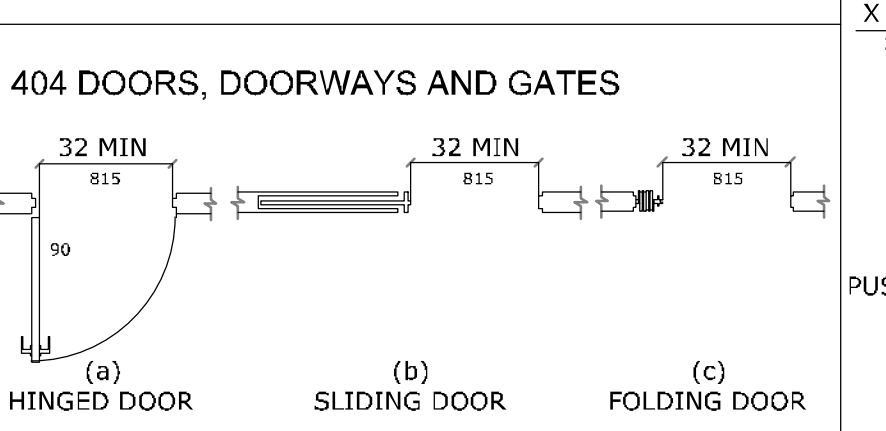
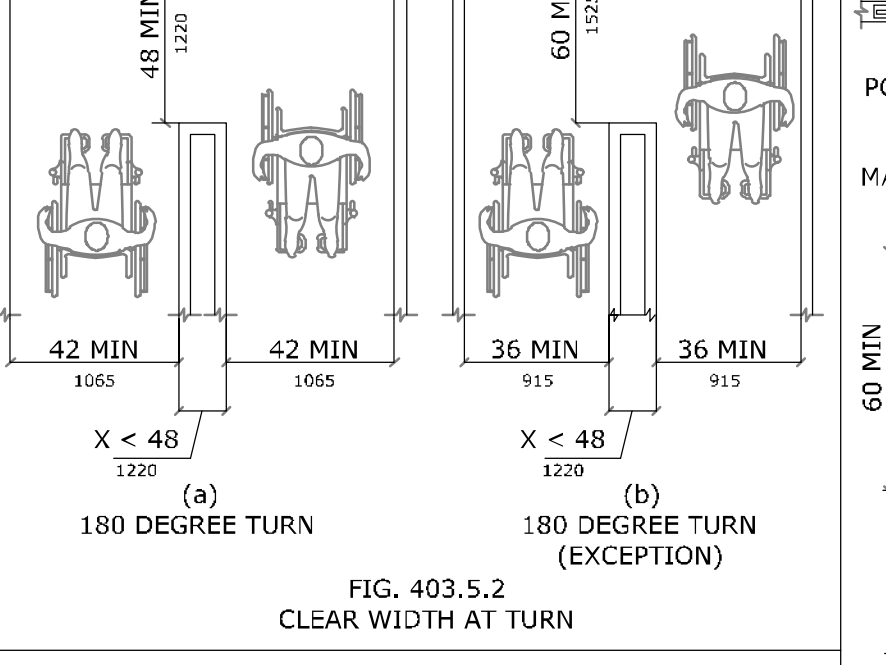
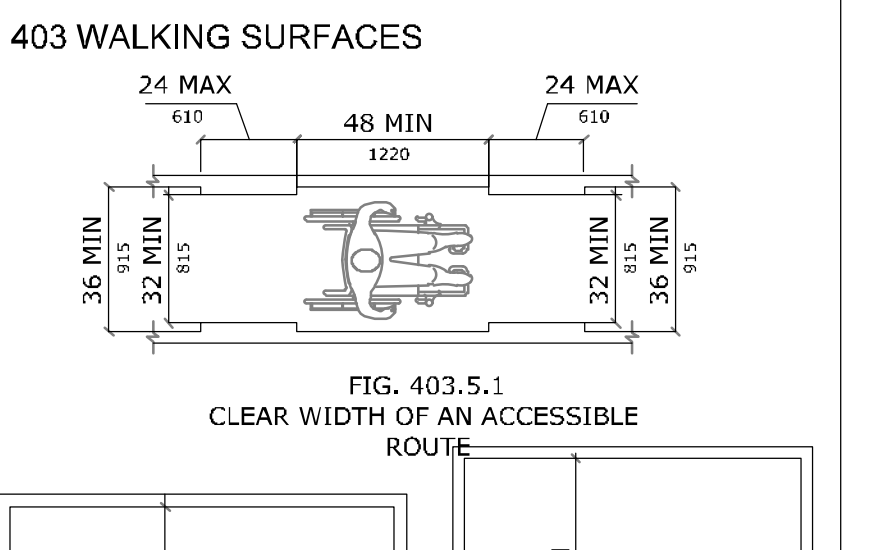
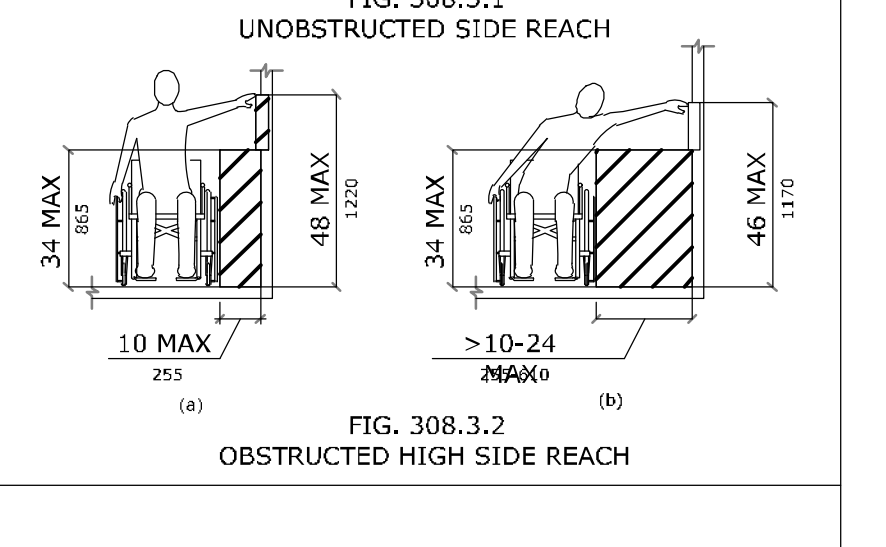
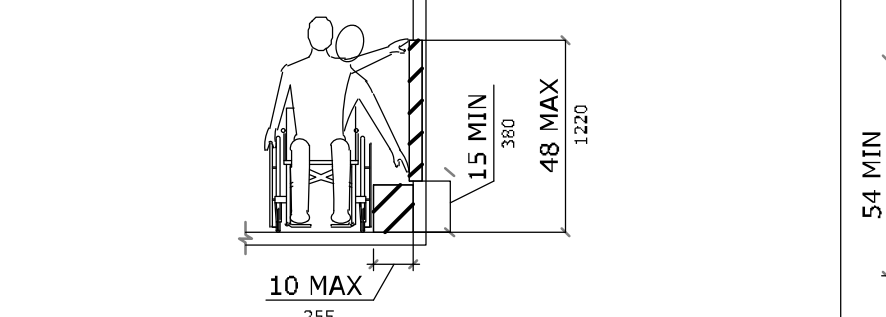
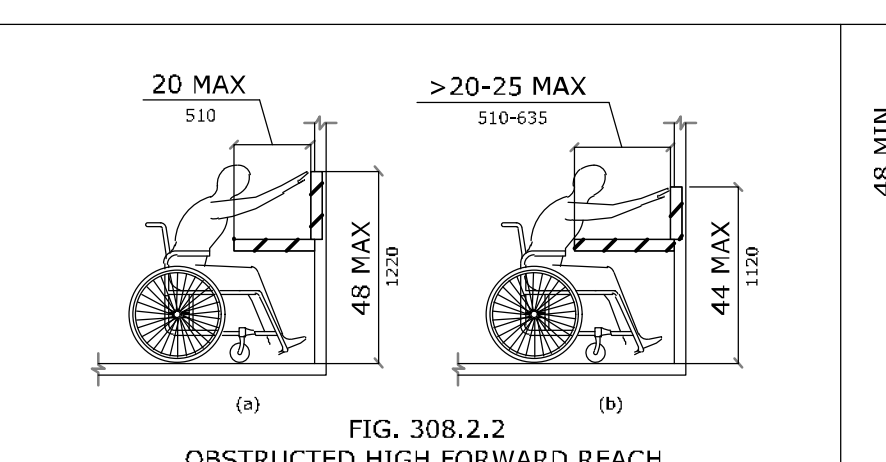
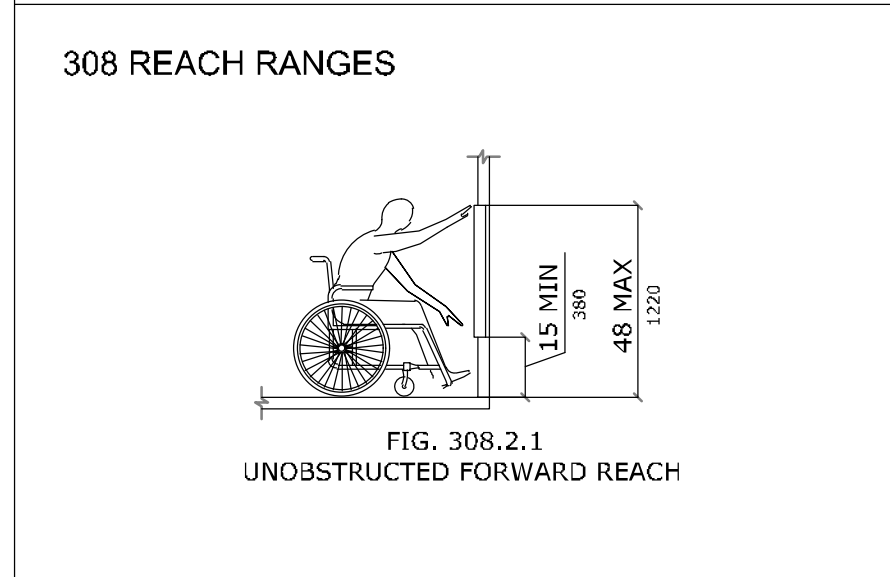
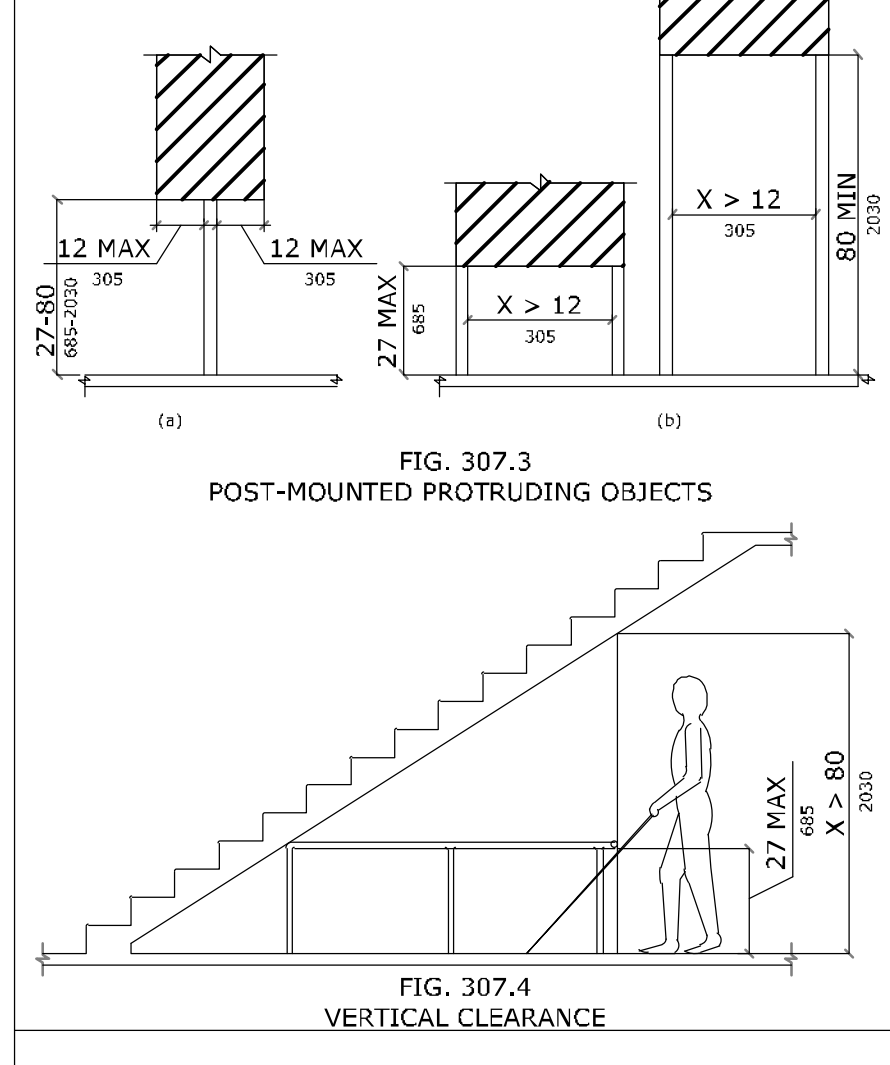
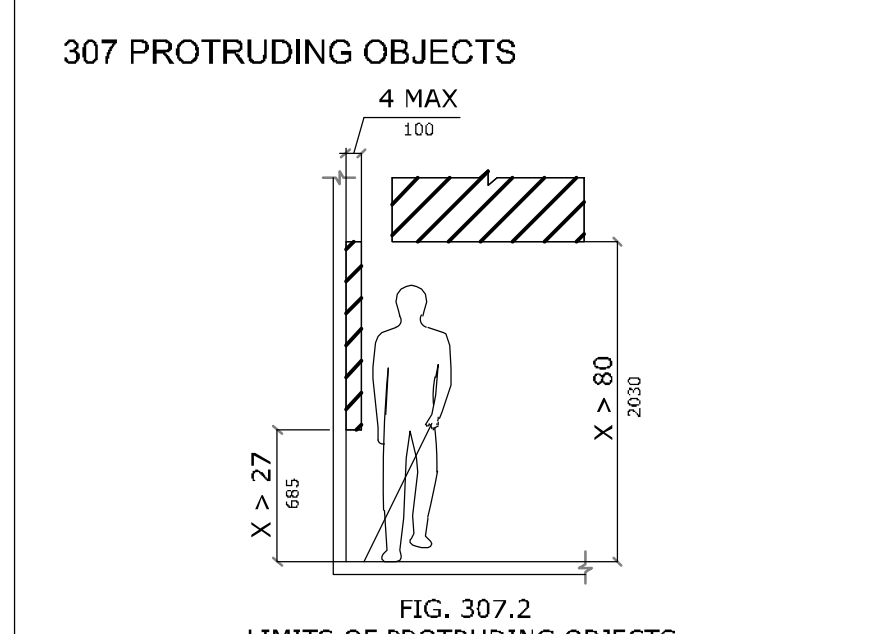
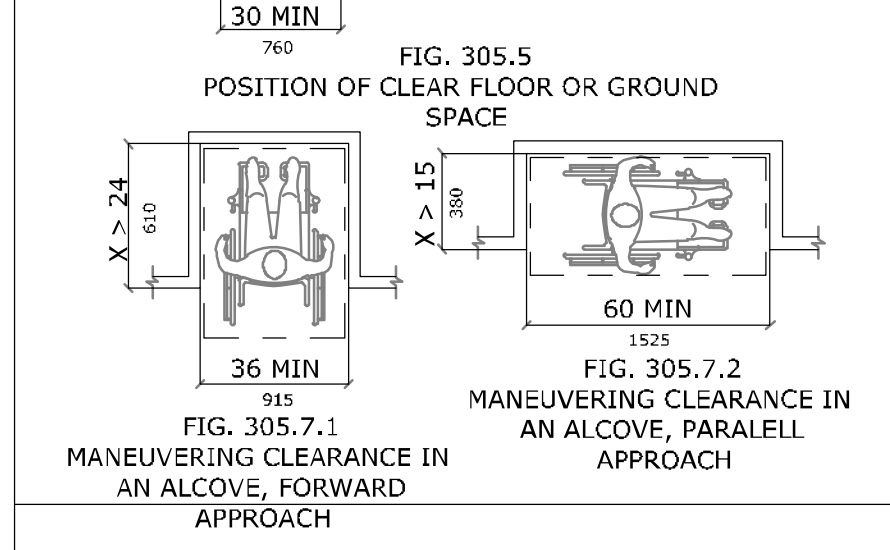
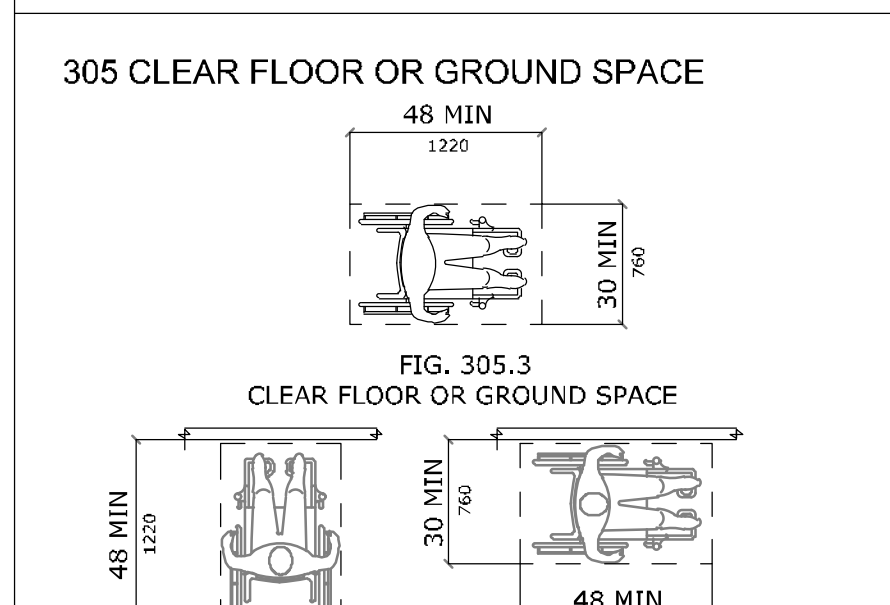
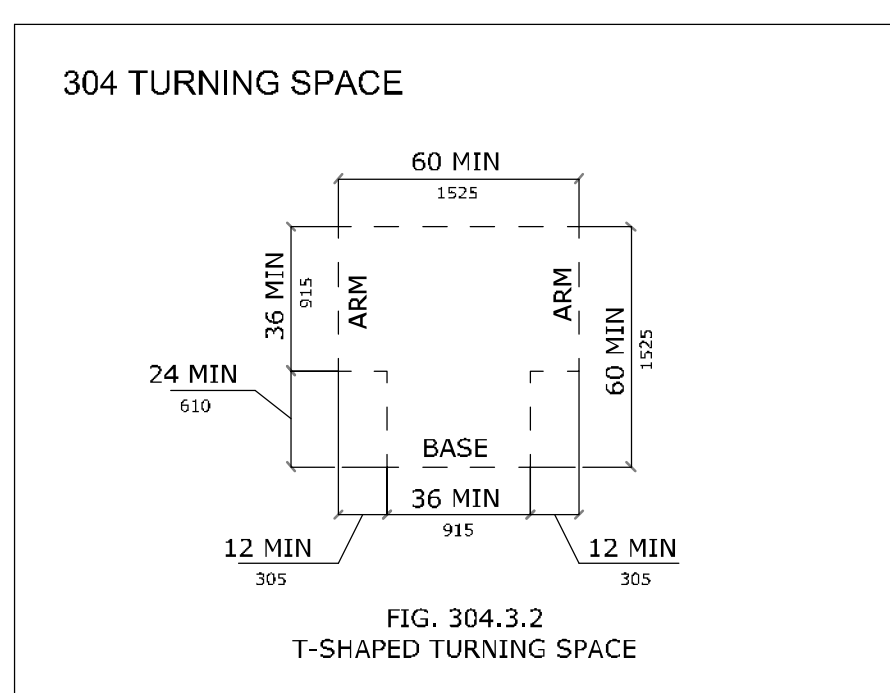
PROJECT INFORMATION

PROJECT NUMBER: 201939
CONSTRUCTION TYPE: TYPE I B, SPRINKLED
BUILDING CODE: 2015 INTERNATIONAL BUILDING CODE
LIFE SAFETY CODE: 2015 NFPA 101 LIFE SAFETY CODE
PLUMBING: 2015 INTERNATIONAL PLUMBING CODE
MECHANICAL: 2015 INTERNATIONAL MECHANICAL CODE
ELECTRICAL: 2017 NATIONAL ELECTRIC CODE
ENERGY: 2015 IECC

LOCATION MAP AND CAMPUS PLAN



LOCATION MAP



General Notes:

- 1.) 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. (Record Bearing/Distance)
- 2.) Elevations shown hereon are referenced to the North American Vertical Datum of 1988 (NAVD88), Geoid 12A.
- 3.) Some features shown on this Survey may be out of scale for clarity.
- 4.) This Survey was prepared from field data obtained on May 6, 2020.
- 5.) This survey may not show all pipelines, utilities, obstructions, encumbrances, ownership or other pertinent information that may be disclosed in a title search or utility locate.

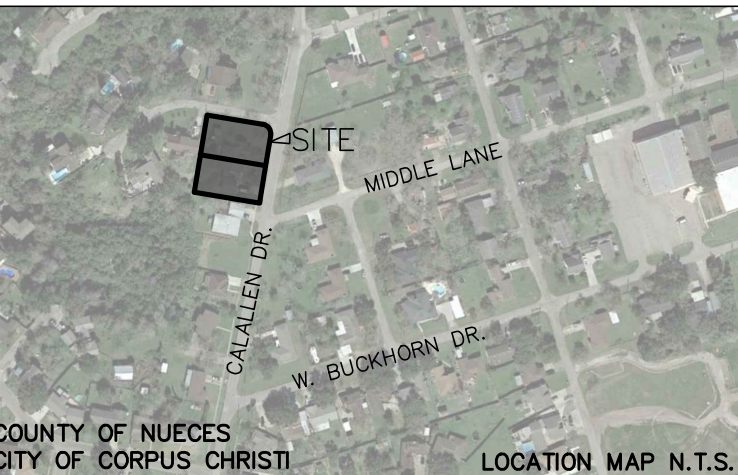
Utility Note:

The location of underground utilities shown hereon are based on visible above ground structures and the City of Corpus Christi GIS Utility Map. Locations of underground utilities/structures may vary from locations hereon. Additional buried utilities/structures may be encountered. No excavations were made during the progress of this survey to locate buried utilities/structures. Before excavation, please contact the appropriate agencies for verification of utility type and for field location.

Note:

THIS TOPOGRAPHIC MAP WAS PREPARED FOR DESIGN PURPOSES ONLY.

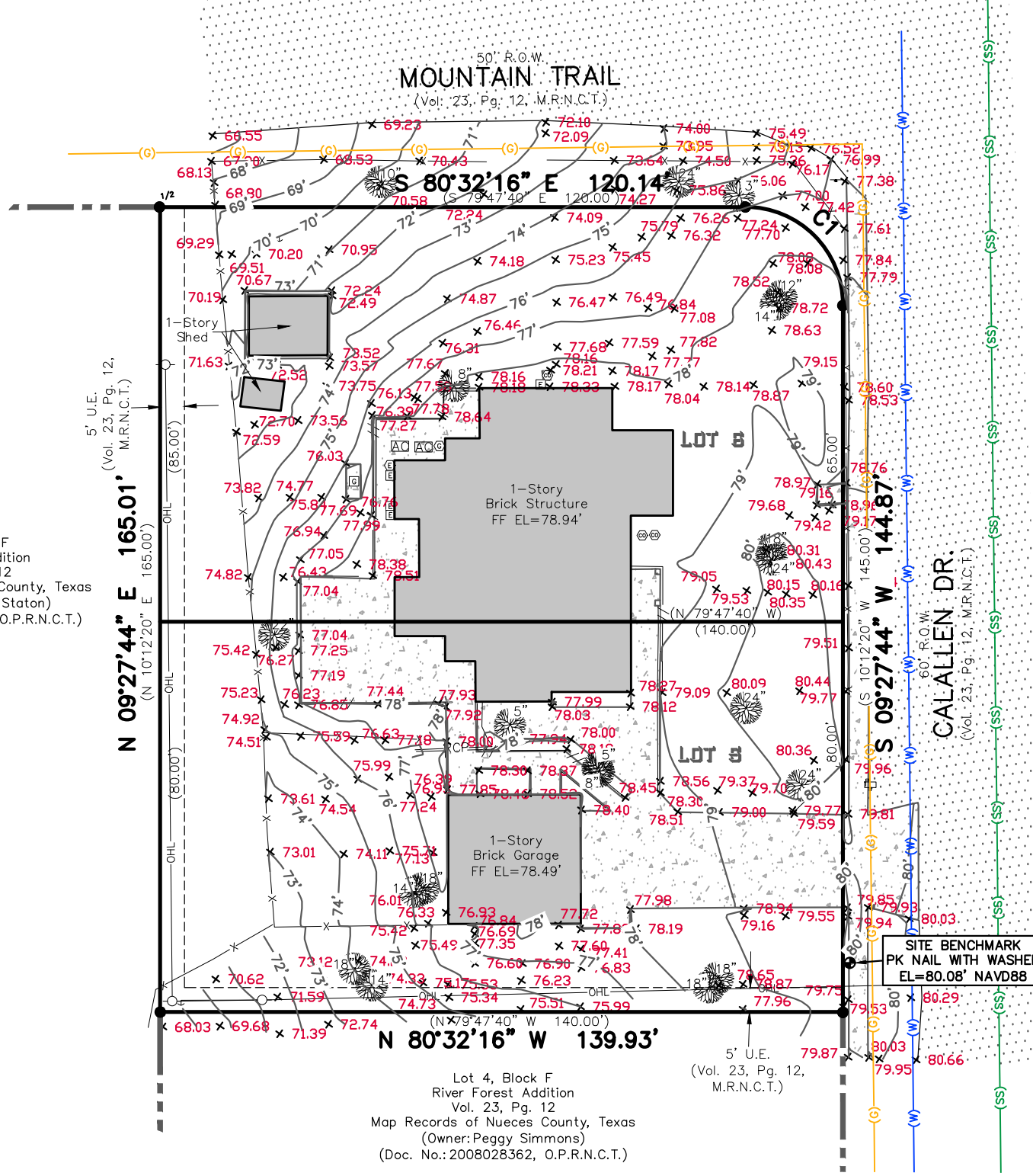
This map was prepared without the benefit of a current title commitment. The surveyor has made no investigation or independent search for easements of record, encumbrances, restrictive covenants, ownership of title evidence or any other facts that an accurate title search may disclose.



COUNTY OF NUECES
CITY OF CORPUS CHRISTI
LOCATION MAP N.T.S.

Lot 7, Block F
River Forest Addition
Vol. 23, Pg. 12
Map Records of Nueces County, Texas
(Owner: Cecil Ralph Staton)
(Doc. No.: 2013014580, O.P.R.N.C.T.)

Lot 4, Block F
River Forest Addition
Vol. 23, Pg. 12
Map Records of Nueces County, Texas
(Owner: Peggy Simmons)
(Doc. No.: 2008028362, O.P.R.N.C.T.)



Curve Table:

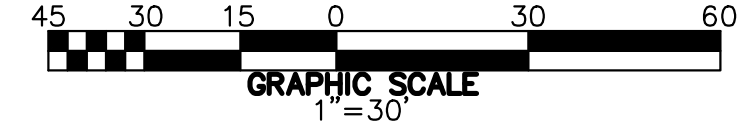
CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	20.00'	31.42'	28.29'	S 35°31'55" E	90°00'42"

Record Curve Table:

RADIUS	ARC LENGTH	DELTA ANGLE
20.00'	31.42'	90°00'00"

Topographic Survey

Lots 5-6, Block F, River Forest Addition, a map of which is recorded in Volume 23, Page 12, of the Map Records of Nueces County, Texas, as described in a Special Warranty Deed from Federal Deposit Insurance Corporation, to State of Texas Mental Health Mental Retardation, recorded in Document Number 764191, of the Official Public Records of Nueces County, Texas.

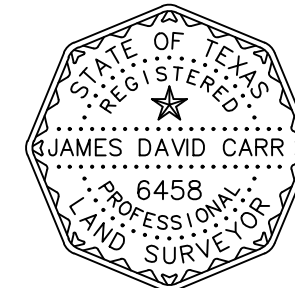


Legend:

- ⊠ Air Conditioner
- ⊠ Electrical Box
- ⊠ Electrical Meter
- ⊠ Gas Meter
- ⊠ Generator
- + Guy Wire
- ⊠ Mailbox
- ⊠ Power Pole
- ⊠ Sanitary Sewer Clean-out
- + Sign
- x x x Natural Ground Elevation (Ft)
- x—x— Chainlink Fence
- (G)—(G)— Gas Line (Per City GIS)
- OHL— Overhead Utility Line
- (SS)—(SS)— Sanitary Sewer Line (Per City GIS)
- RCP— Reinforced Concrete Pipe
- (W)—(W)— Water Line (Per City GIS)
- //—//— Wood Fence
- Site Benchmark
- 5/8 Inch Iron Rod Found
- 1/2 Inch Iron Rod Found
- Asphalt
- Concrete
- Tree

Surveyor's Certificate:

We, Urban Engineering, have made an on the ground field survey, under my direction and supervision, of the property legally described hereon; observable, aboveground evidence of buildings, structures and other improvements situated on the premises have been shown; said property has access to and from a dedicated roadway. This Survey substantially complies with the current Texas Society of Professional Surveyors Standards and Specifications for a Category 6, Condition I Topographic Survey.



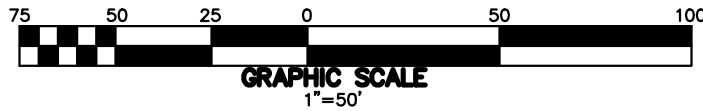
URBAN ENGINEERING

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



DATE: May 11, 2020
SCALE: 1"=30'
JOB NO.: 43399.C0.00
SHEET: 1 OF 1
DRAWN BY: BDL
urbansurvey1@urbaneng.com
©2020 by Urban Engineering

URBAN



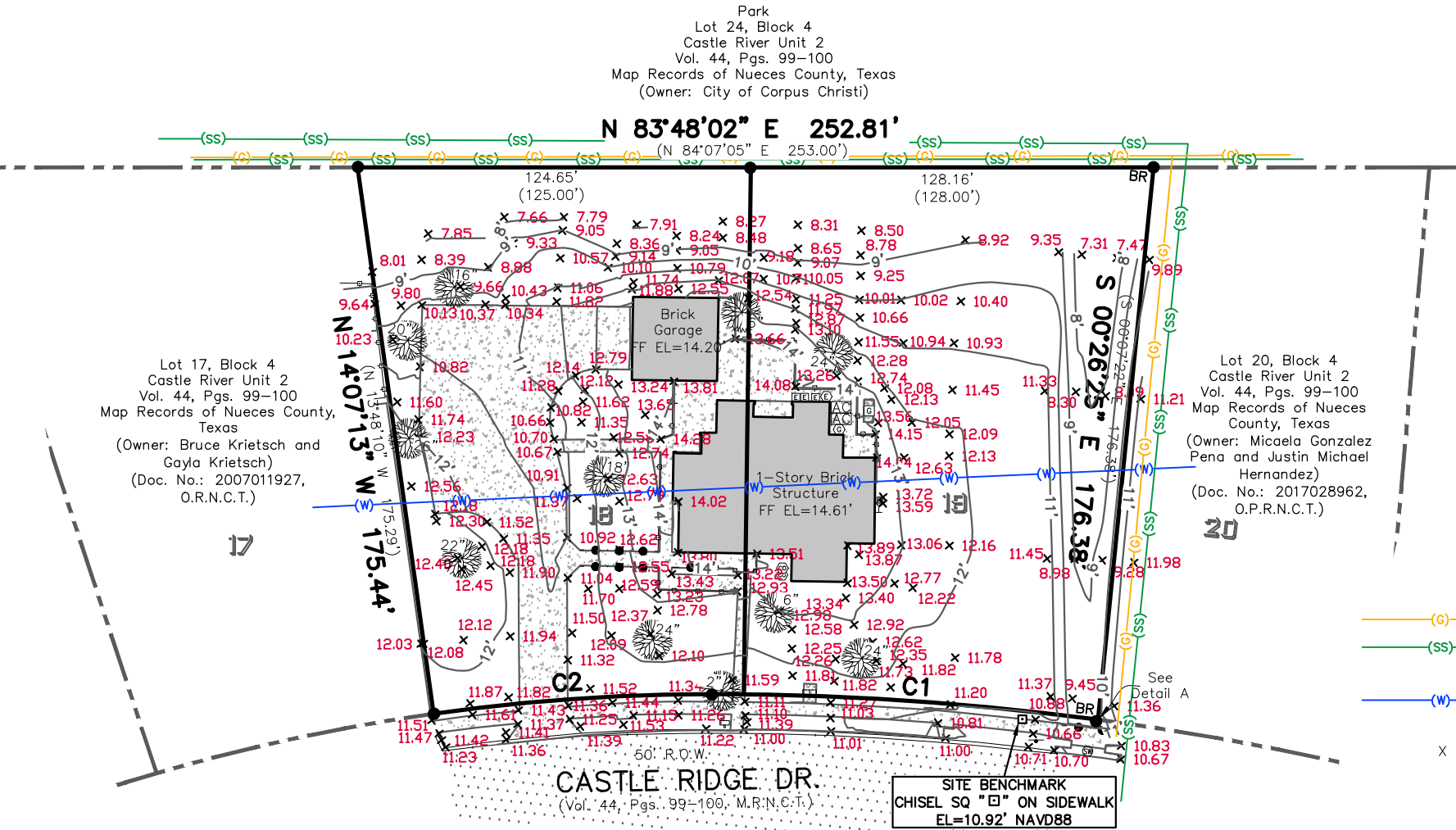
General Notes:

- 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. (Record Bearing/Distance)
- Elevations shown hereon are referenced to the North American Vertical Datum of 1988 (NAVD88), Geoid 12A.
- Some features shown on this Survey may be out of scale for clarity.
- This Survey was prepared from field data obtained on May 7, 2020.
- This survey may not show all pipelines, utilities, obstructions, encumbrances, ownership or other pertinent information that may be disclosed in a title search or utility locate.

Note:

THIS TOPOGRAPHIC MAP WAS PREPARED FOR DESIGN PURPOSES ONLY.

This map was prepared without the benefit of a current title commitment. The surveyor has made no investigation or independent search for easements of record, encumbrances, restrictive covenants, ownership of title evidence or any other facts that an accurate title search may disclose.



Legend:

- Site Benchmark
- 5/8 Inch Iron Rod Found
- 5/8 Inch Iron Rod with a plastic cap stamped "BRISTER" Found
- Antenna
- Electrical Box
- Electrical Meter
- Gas Meter
- Generator
- Mailbox
- Sanitary Sewer Cleanout
- Sign
- Storm Water Manhole
- Water Vault
- Tree
- X *** Natural Ground Elevation (Ft)
- (G) Gas Line (Per City GIS)
- (SS) Sanitary Sewer Line (Per City GIS)
- (W) Water Line (Per City GIS)

Utility Note:

The location of underground utilities shown hereon are based on visible above ground structures and the City of Corpus Christi GIS Utility Map. Locations of underground utilities/structures may vary from locations hereon. Additional buried utilities/structures may be encountered. No excavations were made during the progress of this survey to locate buried utilities/structures. Before excavation, please contact the appropriate agencies for verification of utility type and for field location.

Record Curve Table:

CURVE	RADIUS	ARC LENGTH	DELTA ANGLE
C1	929.02'	122.89'	7°34'33"
C2	632.93'	88.93'	8°02'59"

Curve Table:

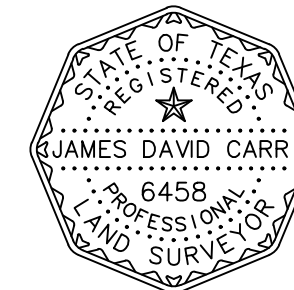
CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	929.03'	123.03'	122.94'	S 87°35'02" W	7°35'15"
C2	632.93'	88.77'	88.70'	S 79°46'16" W	8°02'09"

Topographic Survey

Lots 18-19, Block 4, Castle River Unit 2, a map of which is recorded in Volume 44, Pages 99-100, of the Map Records of Nueces County, Texas, as described in a Special Warranty Deed from Collecting Bank National Association, to The State of Texas Department of Mental Health and Retardation, recorded in Document Number 761272, of the Official Public Records of Nueces County, Texas.

Surveyor's Certificate:

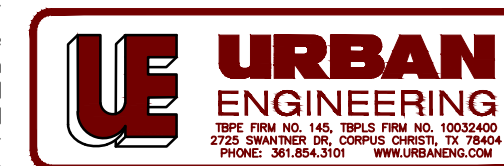
We, Urban Engineering, have made an on the ground field survey, under my direction and supervision, of the property legally described hereon; observable, aboveground evidence of buildings, structures and other improvements situated on the premises have been shown; said property has access to and from a dedicated roadway. This Survey substantially complies with the current Texas Society of Professional Surveyors Standards and Specifications for a Category 6, Condition I Topographic Survey.



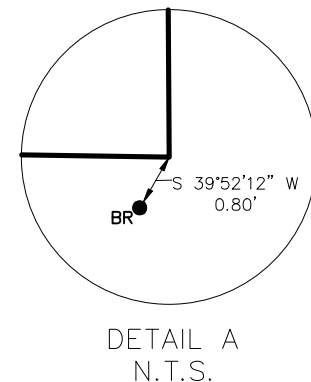
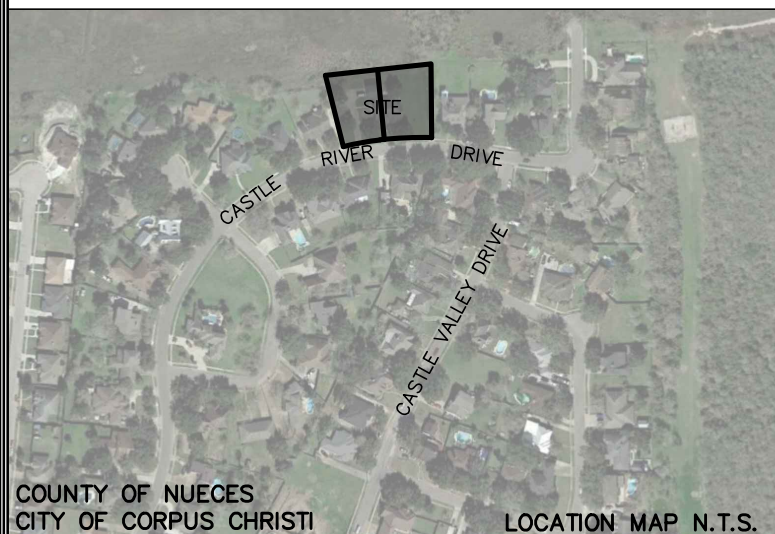
URBAN ENGINEERING

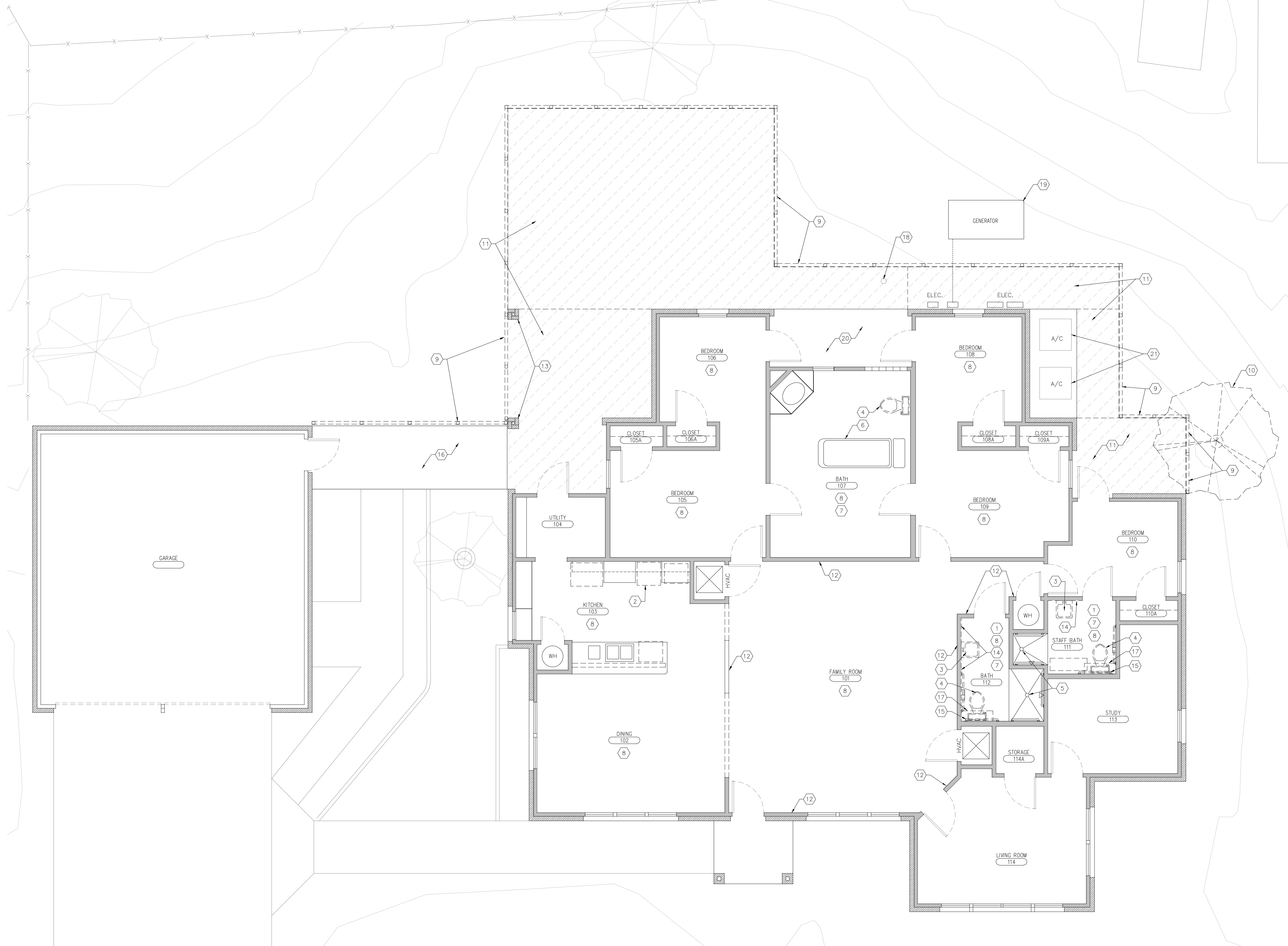
James D. Carr

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



DATE: May 13, 2020
SCALE: 1"=50'
JOB NO.: 43399.C0.01
SHEET: 1 OF 1
DRAWN BY: BDL
urbansurvey1@urbaneng.com
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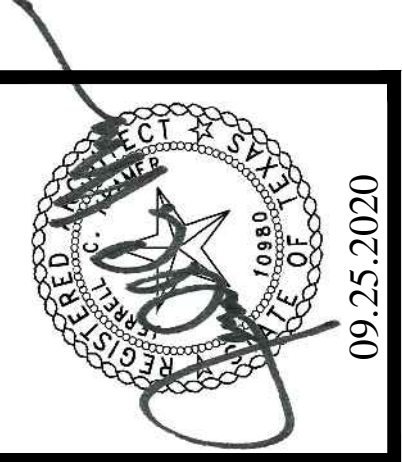




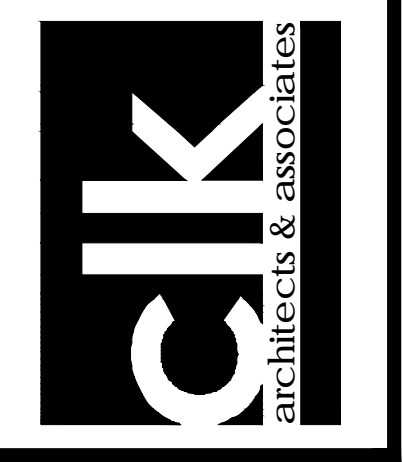
DEMOLITION KEYED NOTES

1. REMOVE EXISTING FLOORING COMPLETE
2. REMOVE EXISTING RANGE; REFER TO MEP DRAWINGS
3. REMOVE EXISTING SINK AND FAUCET COMPLETE; REFER TO PLUMBING DRAWINGS
4. REMOVE EXISTING WATER CLOSET COMPLETE; REFER TO PLUMBING DRAWINGS
5. EXISTING TILE, PLUMBING FIXTURES AND SHOWER ACCESSORIES TO REMAIN
6. EXISTING TUB TO BE REMAIN
7. REMOVE EXISTING GYPSUM BOARD CEILING; REFER TO MEP DRAWINGS
8. CUT OPEN EXISTING GYPSUM BOARD AT WALL FOR LIGHT SWITCH/DUPLEX OUTLET RECEPTORS; REFER TO MEP DRAWINGS
9. REMOVE EXISTING WOOD RAILING SYSTEM COMPLETE
10. REMOVE EXISTING TREE COMPLETE
11. REMOVE EXISTING CONCRETE FLATWORK COMPLETE
12. PREPARE EXISTING WALL SURFACES FOR NEW WAINSCOT; REFER TO NEW CONSTRUCTION
13. EXISTING COLUMNS TO REMAIN
14. REMOVE EXISTING GYPSUM BOARD COMPLETE; REMOVE DAMAGED WOOD STUD FRAMING
15. REMOVE EXISTING TOILET ACCESSORIES
16. EXISTING CONCRETE SIDEWALK TO REMAIN
17. REMOVE EXISTING UPPER CABINETS
18. EXISTING PLUMBING CLEAN-OUT TO REMAIN
19. EXISTING GENERATOR AND ASSOCIATED OVERHEAD PIPING TO REMAIN
20. EXISTING CONCRETE TO REMAIN
21. EXISTING A/C CONDENSING UNITS AND ASSOCIATED CONCRETE TO REMAIN

1 BUILDING 543 - DEMOLITION FLOOR PLAN (RIVER FOREST)
R-5.1/7/25-1-Q



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20-102-CLC - REPAIRS TO BUILDINGS 542 & 543

CORPUS CHRISTI, TEXAS
BUILDING 543 - DEMOLITION FLOOR PLAN (RIVER FOREST)

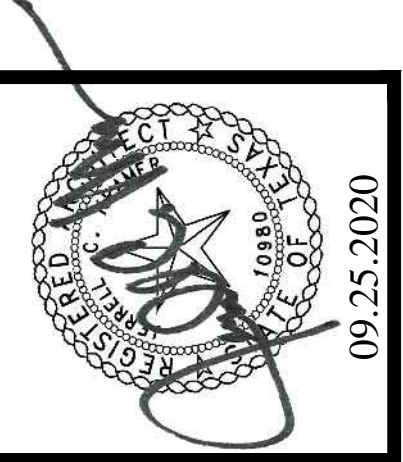
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DATE 09/25/2020

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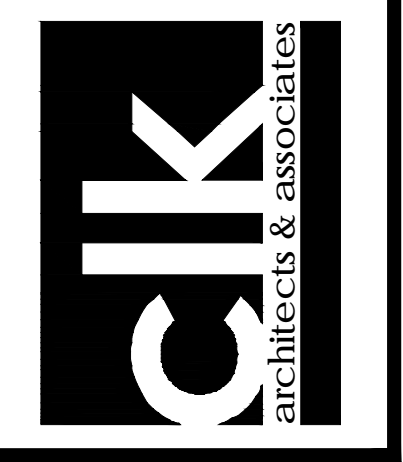


DEMOLITION KEYED NOTES

1. REMOVE EXISTING FLOORING COMPLETE
2. REMOVE EXISTING RANGE AND VENT HOOD; REFER TO MEP DRAWINGS
3. REMOVE EXISTING SINK AND FAUCET COMPLETE; REFER TO PLUMBING DRAWINGS
4. REMOVE EXISTING WATER CLOSET COMPLETE; REFER TO PLUMBING DRAWINGS
5. EXISTING TILE, PLUMBING FIXTURES AND SHOWER ACCESSORIES TO REMAIN
6. EXISTING TUB TO BE REMAIN
7. REMOVE EXISTING GYPSUM BOARD CEILING; REFER TO MEP DRAWINGS
8. CUT OPEN EXISTING GYPSUM BOARD AT WALL FOR LIGHT SWITCH/DUPLEX OUTLET RECEPTORS; REFER TO MEP DRAWINGS
9. NOT USED
10. EXISTING ALUMINUM RAILING SYSTEM TO REMAIN
11. EXISTING A/C CONDENSING UNITS AND ASSOCIATED CONCRETE TO REMAIN
12. PREPARE EXISTING WALL SURFACES FOR NEW WAINSCOT; REFER TO NEW CONSTRUCTION
13. EXISTING CONCRETE TO REMAIN
14. REMOVE EXISTING GYPSUM BOARD COMPLETE; REMOVE DAMAGED WOOD STUD FRAMING
15. REMOVE EXISTING TOILET ACCESSORIES
16. EXISTING CONCRETE SIDEWALK TO REMAIN
17. REMOVE EXISTING UPPER CABINETS
18. EXISTING PLUMBING CLEAN-OUT TO REMAIN
19. EXISTING GENERATOR TO REMAIN



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20-102-CLC - REPAIRS TO BUILDINGS 542 & 543

CORPUS CHRISTI, TEXAS

BUILDING 542 - DEMOLITION FLOOR PLAN (CASTLE RIVER)

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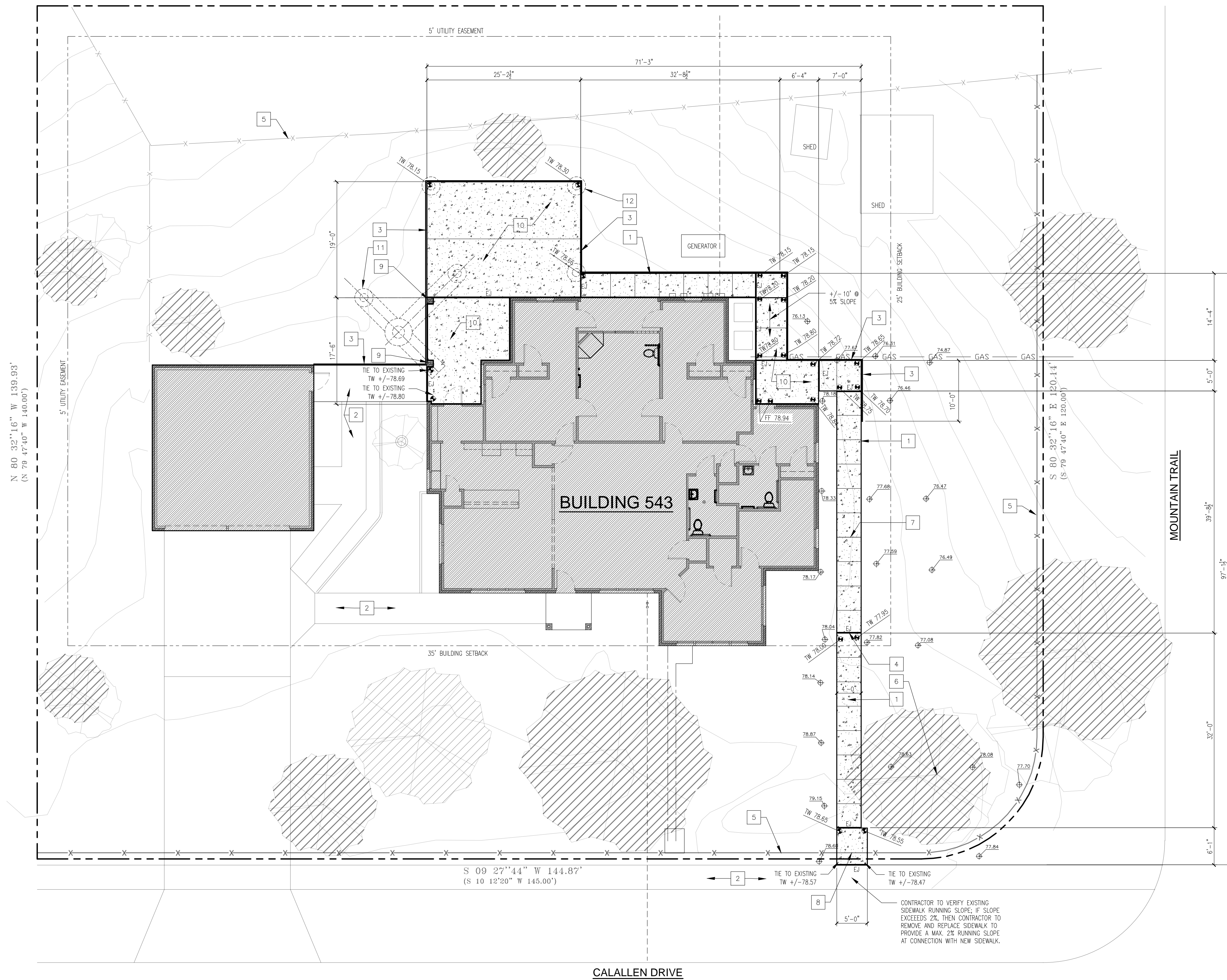
JOB NO.	201939
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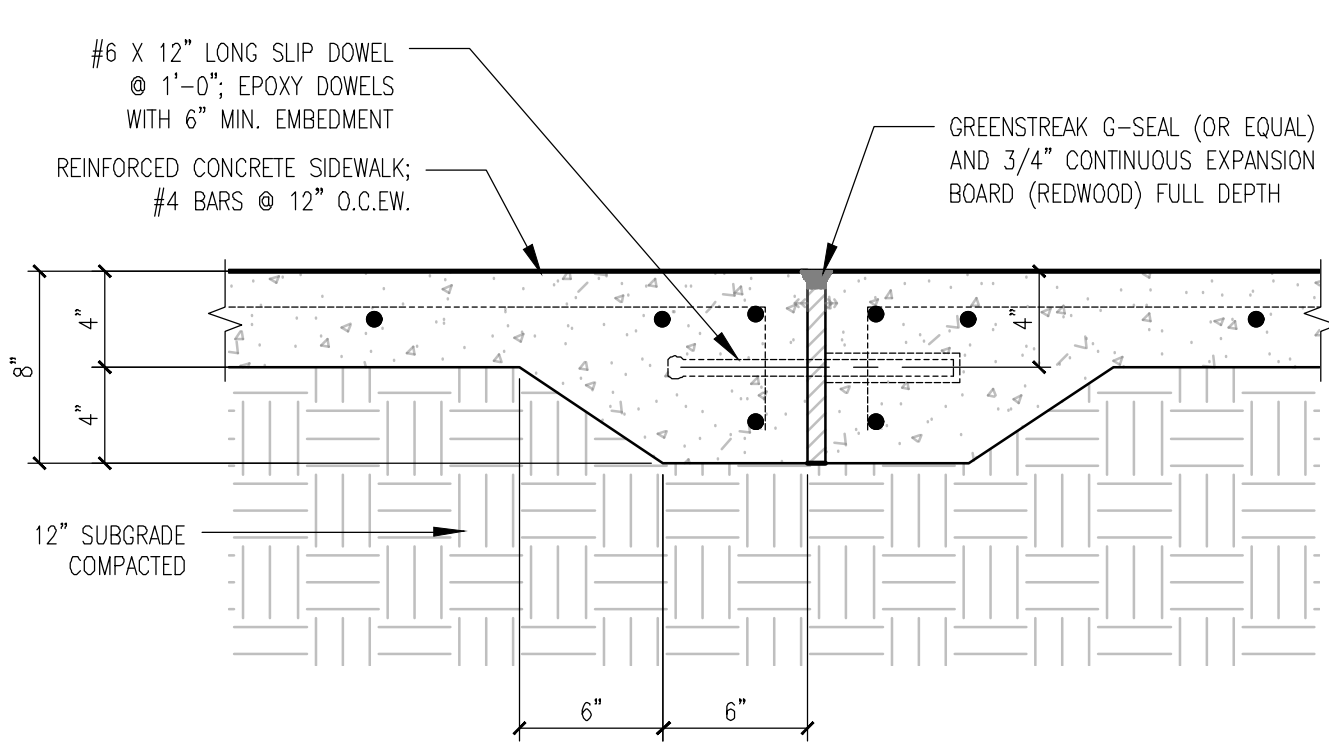
N 09 27'44" E 165.01'
(N 10 12'20" E 165.00')



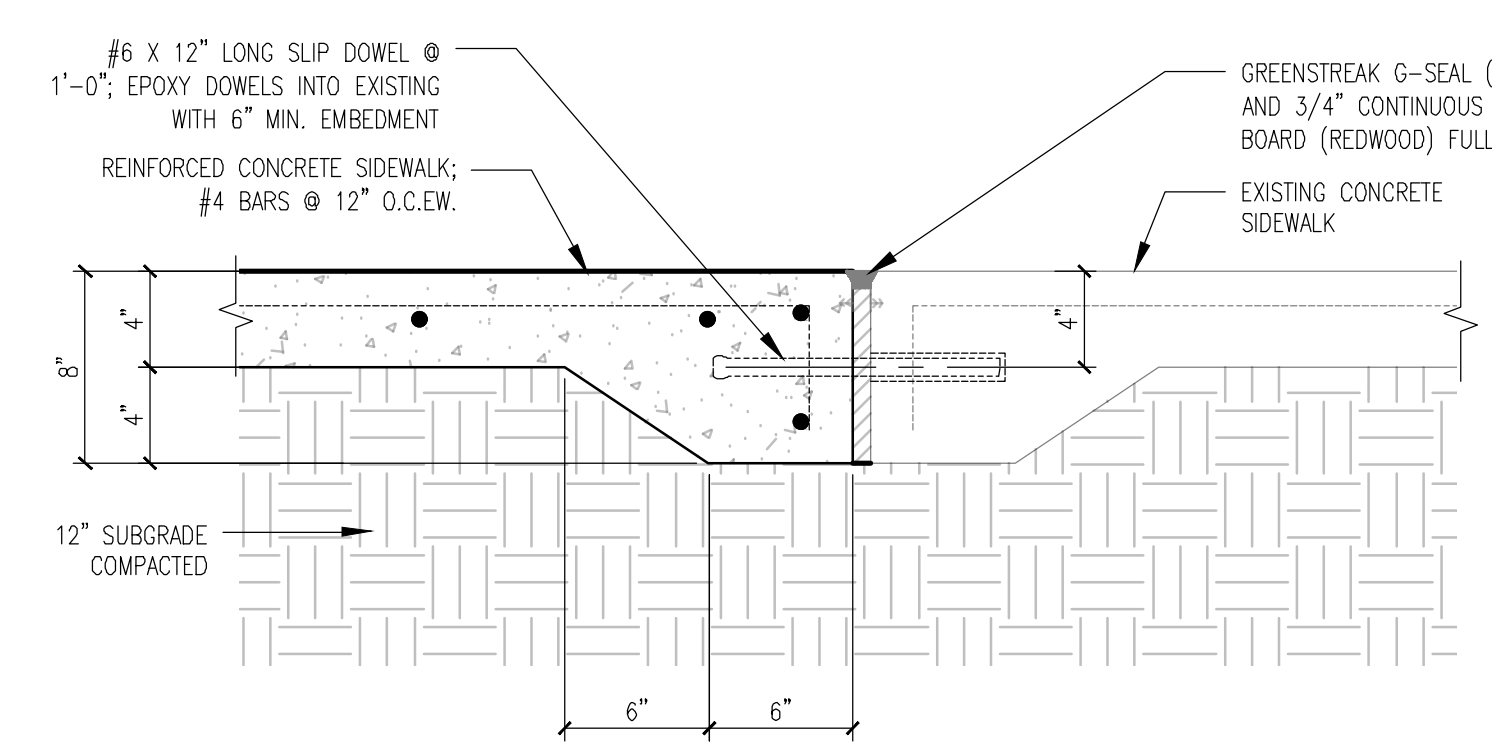
SITE PLAN KEYED NOTES

1. NEW REINFORCED CONCRETE SIDEWALK; REFER TO DETAIL 2/A-1.1
2. EXISTING CONCRETE SIDEWALK TO REMAIN
3. NEW ALUMINUM RAILING SYSTEM
4. NEW EXPANSION JOINT; REFER TO DETAIL 4/A-1.1; TYPICAL
5. EXISTING CHAIN LINK FENCING SYSTEM TO REMAIN
6. EXISTING TREE TO REMAIN
7. CONTROL JOINTS @ 4'-0" O.C. TYPICAL
8. PROVIDE 3' WIDE X 4' HIGH CHAIN LINK GATE AT EXISTING FENCE; PROVIDE NEW POSTS AT EACH SIDE AND LOCKABLE LATCH
9. PROVIDE NEW CONCRETE PIERS AT EXISTING COLUMNS AND LEVEL ROOF FRAMING
10. PROVIDE NEW REINFORCED CONCRETE FLATWORK SLOPED TO DRAIN; REFER TO STRUCTURAL DRAWINGS
11. NEW REINFORCED CONCRETE GRADE BEAMS AND PIERS; REFER TO STRUCTURAL DRAWINGS
12. NEW REINFORCED CONCRETE PIERS; REFER TO STRUCTURAL DRAWINGS

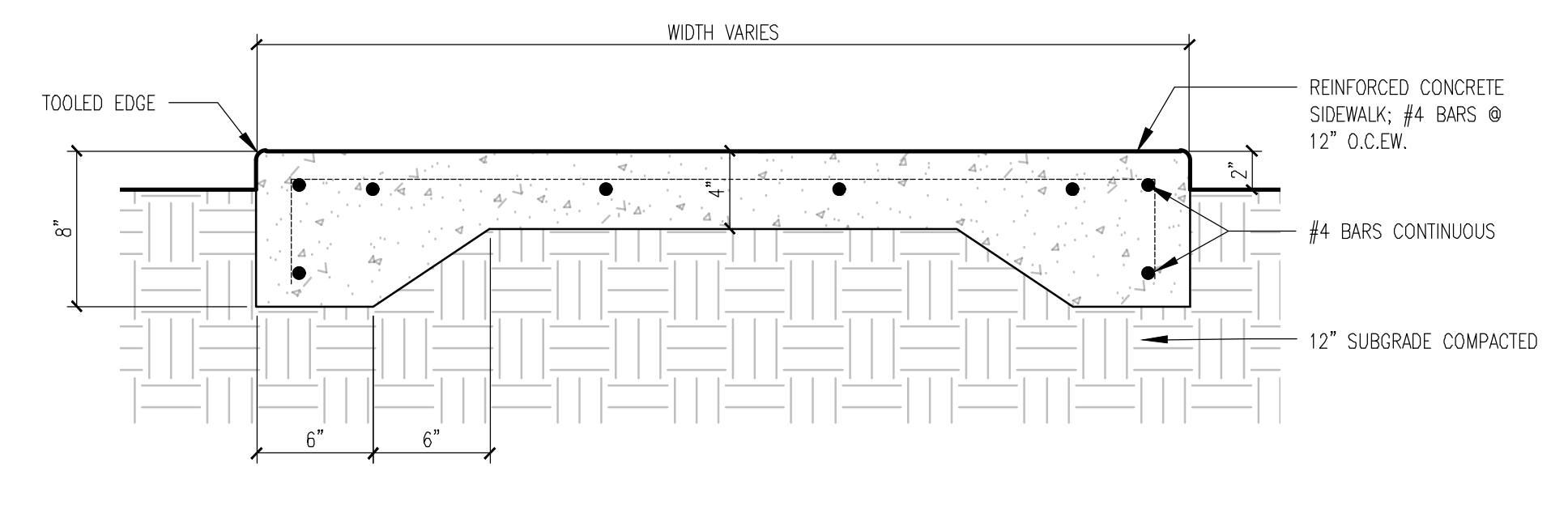
1 BUILDING 543 - SITE PLAN (RIVER FOREST)
A-1.1 1/2"=1'-0"



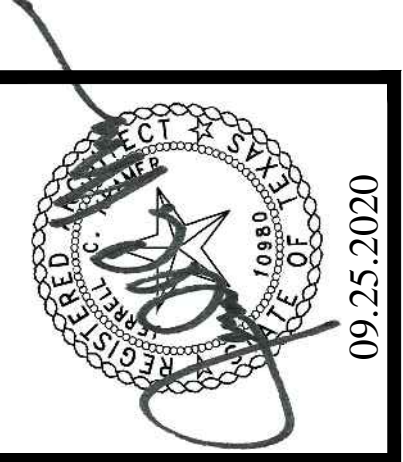
4 TYPICAL SIDEWALK EXPANSION JOINT
A-1.1 1/2"=1'-0"



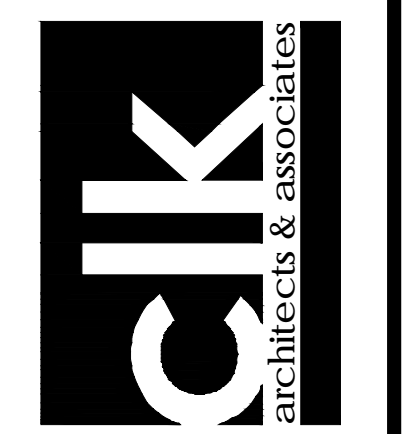
3 SIDEWALK EXPANSION JOINT @ EXISTING
A-1.1 1/2"=1'-0"



2 TYPICAL SIDEWALK DETAIL
A-1.1 1/2"=1'-0"



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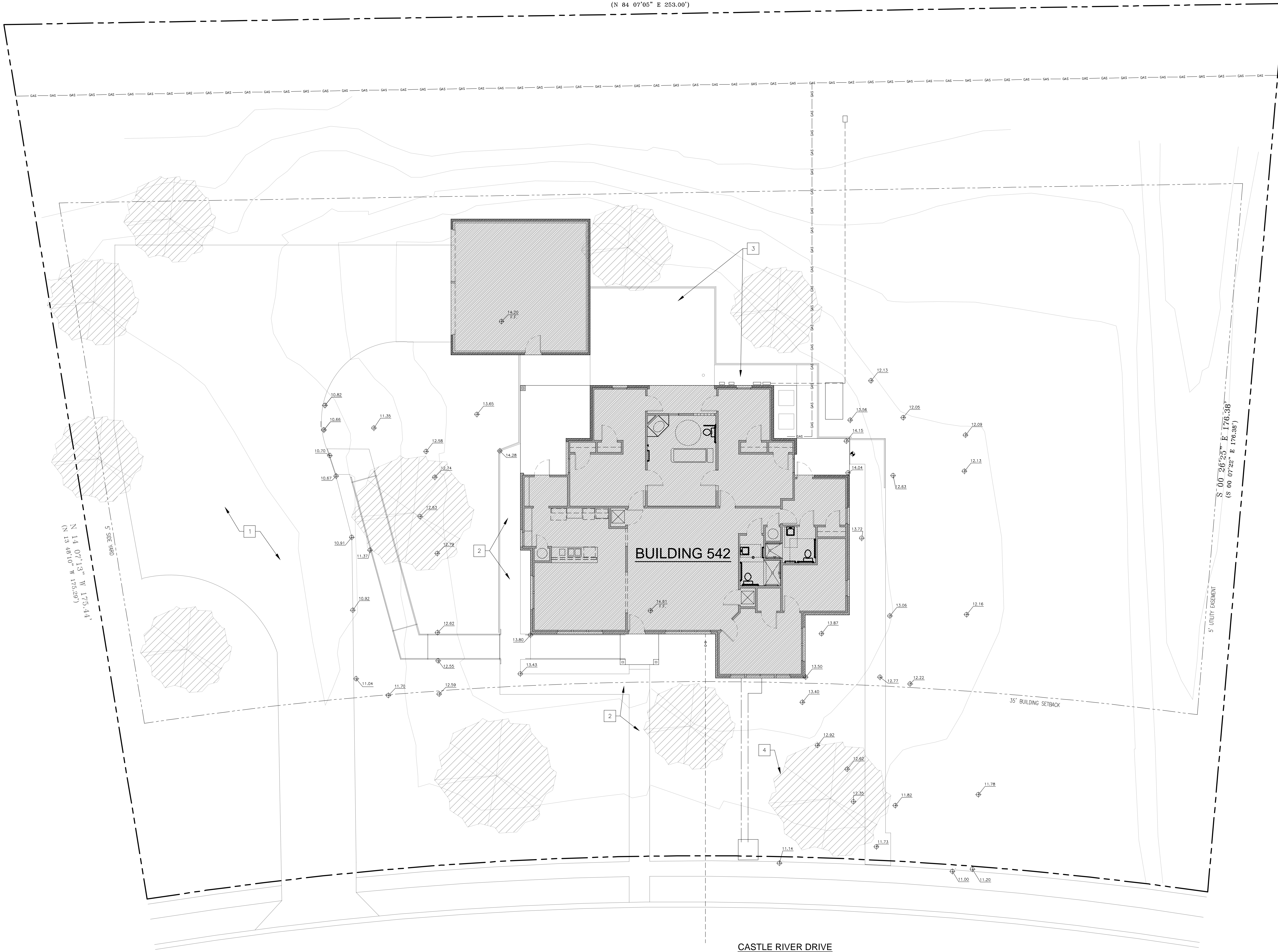
CORPUS CHRISTI, TEXAS
BUILDING 543 - SITE PLAN (RIVER FOREST)

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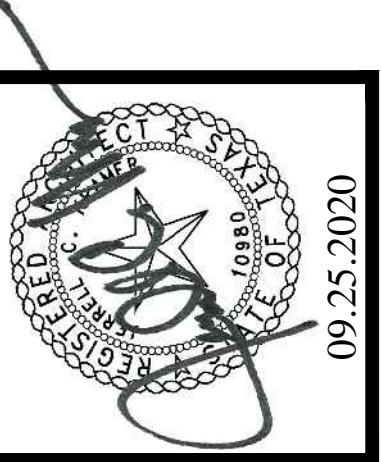
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A-1.1
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N 83 48'02" E 252.81'
(N 84 07'05" E 253.00')

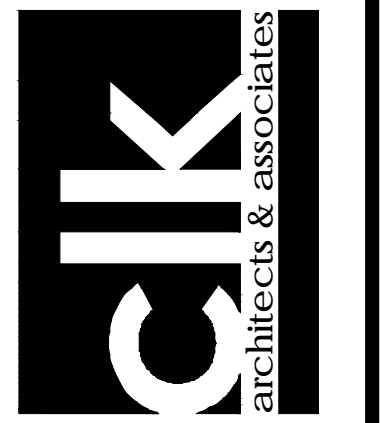


SITE PLAN KEYED NOTES

1. EXISTING CONCRETE DRIVE TO REMAIN
2. EXISTING CONCRETE SIDEWALK TO REMAIN
3. EXISTING RAILING SYSTEM TO REMAIN; 4' HIGH ALUMINUM
4. EXISTING TREE TO REMAIN



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20-102-CLC - REPAIRS TO BUILDINGS 542 & 543

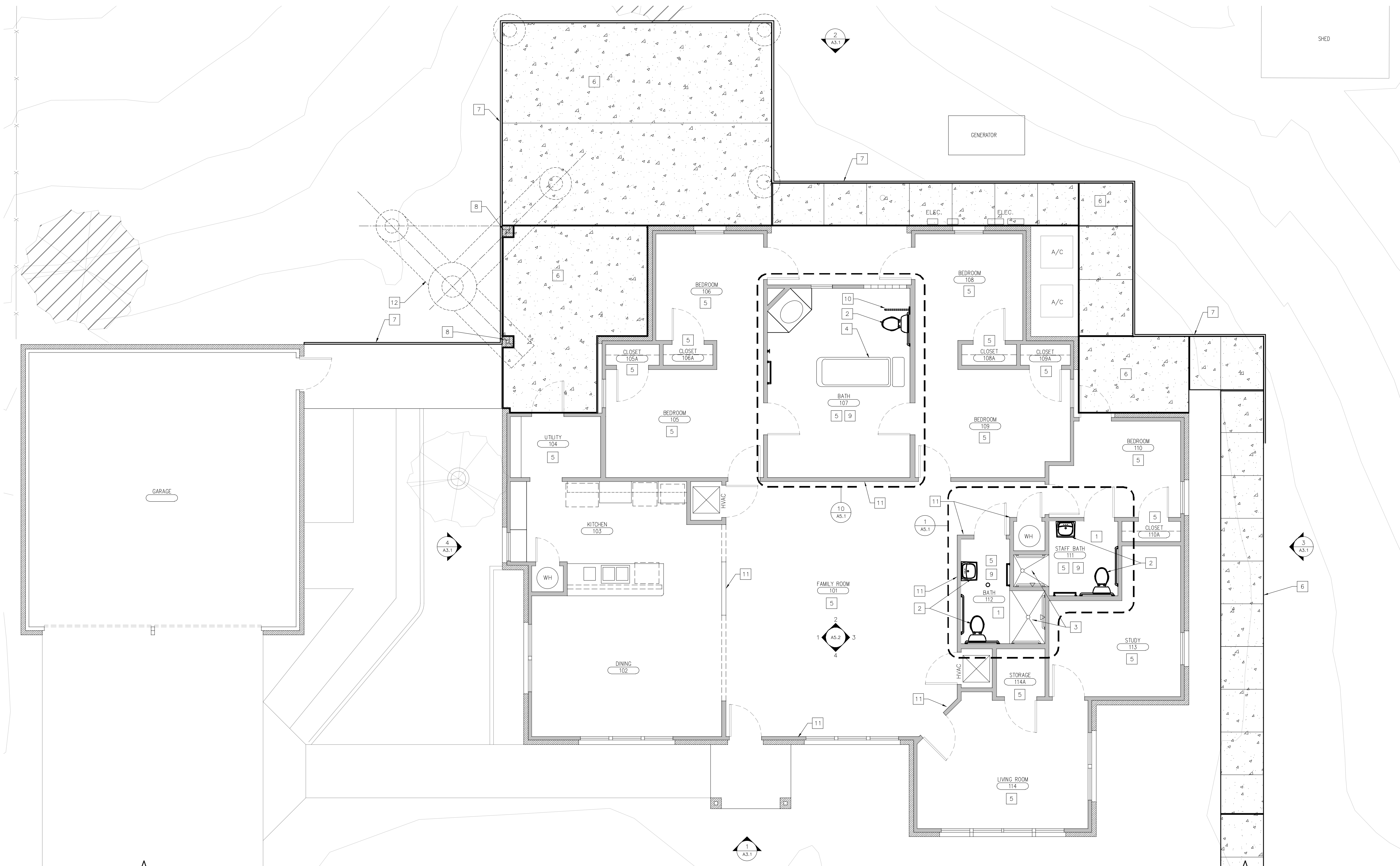
CORPUS CHRISTI, TEXAS
BUILDING 542 - SITE PLAN (CASTLE RIVER)

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of 33 sheets

1. BUILDING 542 - SITE PLAN (CASTLE RIVER)
A-1.2 1/8" = 1'-0"

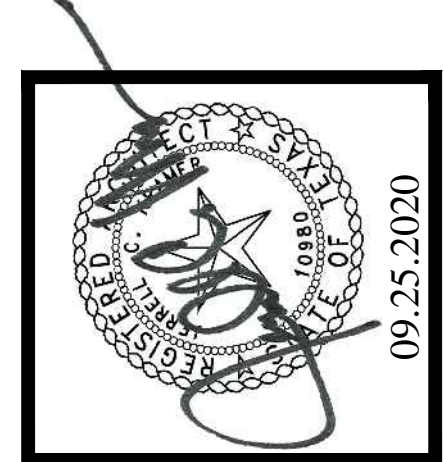


- ### RENOVATION KEYED NOTES
1. NEW FLOORING AND BASE; REFER TO ROOM FINISH SCHEDULE
 2. NEW PLUMBING FIXTURE; REFER TO PLUMBING DRAWINGS
 3. EXISTING SHOWER ENCLOSURE TO REMAIN
 4. EXISTING ARJO TUB TO REMAIN
 5. PAINT ALL INTERIOR SPACES PREVIOUSLY PAINTED OR NEW GYPSUM BOARD INSTALLED ON WALLS
 6. NEW CONCRETE FLATWORK; REFER TO SITE PLAN
 7. NEW ALUMINUM RAILING SYSTEM; REFER TO SITE PLAN
 8. PROVIDE NEW CONCRETE PIERS AT EXISTING COLUMNS AND LEVEL EXISTING WOOD ROOF FRAMING; REFER TO STRUCTURAL DRAWINGS
 9. NEW PAINTED GYPSUM BOARD CEILING SYSTEM
 10. NEW GRAB BARS; REFER TO ENLARGED PLANS AND INTERIOR ELEVATIONS
 11. NEW WOOD WAINSCOT AT FAMILY ROOM TO MATCH EXISTING CONSTRUCTION AND HEIGHT AT DINING AREA
 12. NEW REINFORCED CONCRETE GRADE BEAMS AND PIERS; REFER TO STRUCTURAL DRAWINGS

ROOM FINISH SCHEDULE

ROOM NUMBER & NAME	FLOOR	BASE	WALLS				CEILING	CEILING HEIGHT	REMARKS
			NORTH	EAST	SOUTH	WEST			
101 FAMILY ROOM	12" x 12" VCT EPOXY FLOORING MONOLITHIC FLOORING L. VINYL TILE CERAMIC TILE EXISTING TO REMAIN	INTEGRAL BASE 4" RUBBER CERAMIC TILE EXISTING TO REMAIN	WOOD WAINSCOT EPOXY PAINT WOOD WAINSCOT EXISTING	WOOD WAINSCOT EPOXY PAINT WOOD WAINSCOT EXISTING	WOOD WAINSCOT EPOXY BR. PAINTED WOOD WAINSCOT EXISTING	WOOD WAINSCOT EPOXY BR. PAINTED WOOD WAINSCOT EXISTING	2" x 2" INDUSTRIAL LAM-PL 2" x 2" SCHEDULE 40 LAM-PL GYPSUM BR. EPOXY PAINTED EXISTING MATCH/PAINT W/EXISTING	9'-0" 9'-6" EXISTING	1. TEXTURE AND PREPARE NEW WALLS FOR NEW PAINT FINISH AS SCHEDULED. 2. PAINT EXISTING GYP. BD. WALLS IN AREA OF WORK 3. VERIFY COMPATABILITY OF NEW PAINT TO EXISTING PAINT. MATCH TYPE OF PAINT AT EXISTING WALLS REMAINING.
102 DINING									
103 KITCHEN									
104 UTILITY									
105 BEDROOM									
105A CLOSET									
106 BEDROOM									
106A CLOSET									
107 BATH									
108 BEDROOM									
108A CLOSET									
109 BEDROOM									
109A CLOSET									
110 BEDROOM									
110A CLOSET									
111 STAFF BATH									
112 BATH									
113 STUDY									
114 LIVING ROOM									
114A STORAGE									

1 BUILDING 543 -- FLOOR PLAN (RIVER FOREST)
A-21 / R-1 - 0'



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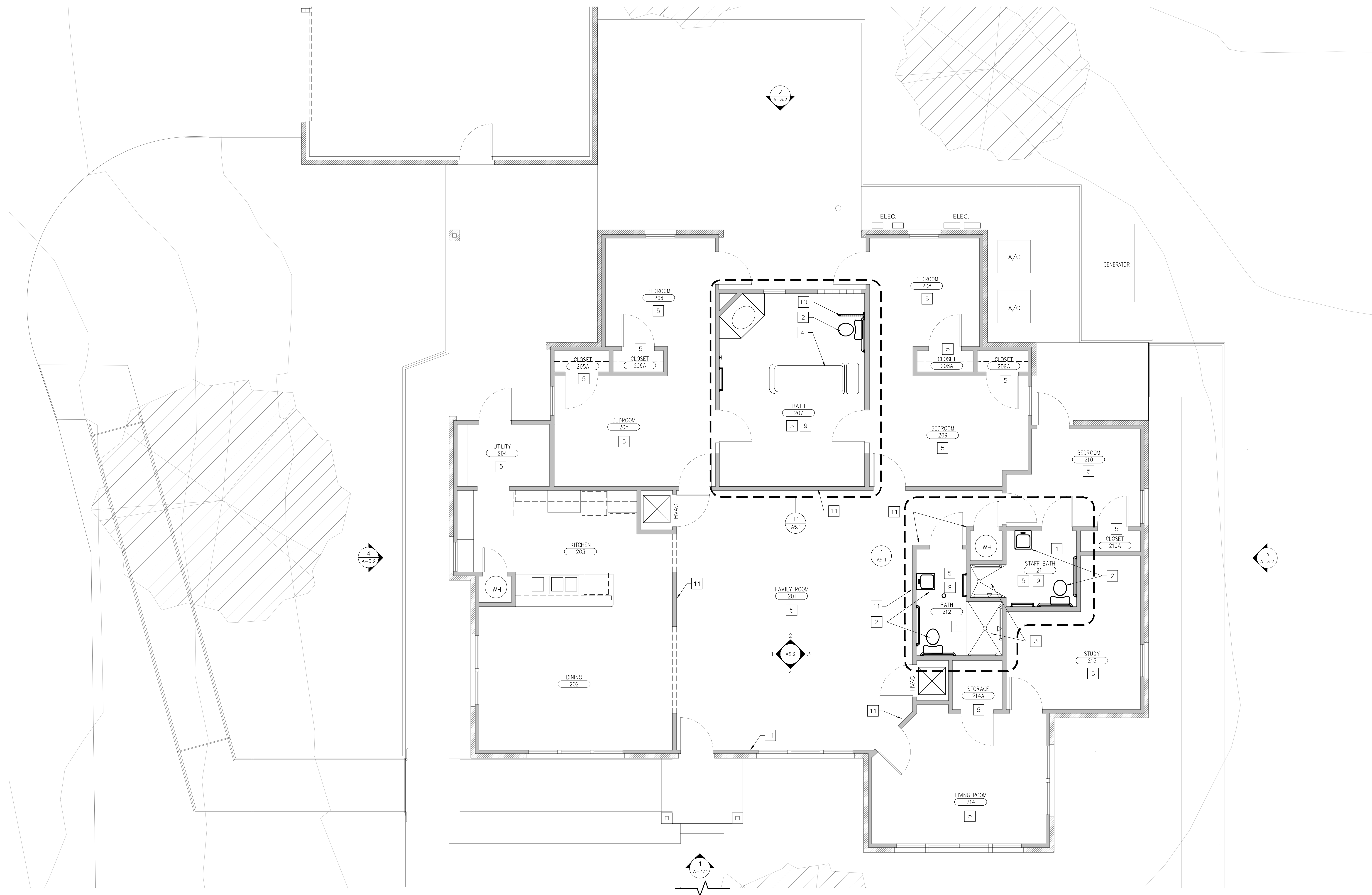
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CORPUS CHRISTI, TEXAS

BUILDING 543- FLOOR PLAN (RIVER FOREST)

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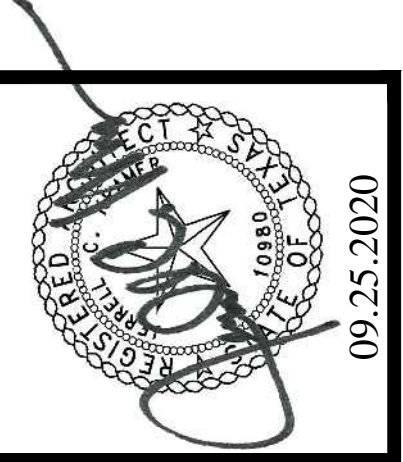
RENOVATION KEYED NOTES

1. NEW FLOORING AND BASE; REFER TO ROOM FINISH SCHEDULE
2. NEW PLUMBING FIXTURE; REFER TO PLUMBING DRAWINGS
3. EXISTING SHOWER ENCLOSURE TO REMAIN
4. EXISTING ARJO TUB TO REMAIN
5. PAINT ALL INTERIOR SPACES PREVIOUSLY PAINTED OR NEW GYPSUM BOARD INSTALLED ON WALLS
6. NOT USED
7. NOT USED
8. NOT USED
9. NEW PAINTED GYPSUM BOARD CEILING SYSTEM
10. NEW GRAB BARS; REFER TO ENLARGED PLANS AND INTERIOR ELEVATIONS
11. NEW WOOD WAINSCOT AT FAMILY ROOM TO MATCH EXISTING CONSTRUCTION AND HEIGHT AT DINING AREA

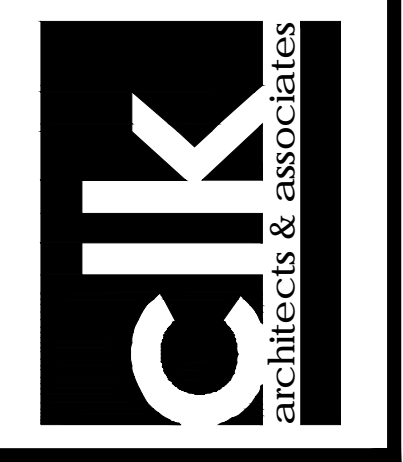
ROOM FINISH SCHEDULE

ROOM NUMBER & NAME	FLOOR	BASE	WALLS				CEILING	CEILING HEIGHT	REMARKS
			NORTH	EAST	SOUTH	WEST			
201 FAMILY ROOM	1	3/4" x 12" VOT					2 x 2 ACoustICAL LAY-IN	8'-0"	1. TEXTURE AND PREPARE NEW WALLS FOR NEW PAINT FINISH AS SCHEDULED. 2. PAINT EXISTING GYP. BD. WALLS IN AREA OF WORK 3. VERIFY COMPATABILITY OF NEW PAINT TO EXISTING PAINT. MATCH TYPE OF PAINT AT EXISTING WALLS REMAINING.
202 DINING	1	EPoxy FLOORING					2 x 2 ACoustICAL LAY-IN	8'-0"	
203 KITCHEN	1	MONOCITIC FLOORING					2 x 2 ACoustICAL LAY-IN	8'-0"	
204 UTILITY	1	L. VINYL TILE					2 x 2 ACoustICAL LAY-IN	8'-0"	
205 BEDROOM	1	CERAMIC TILE					2 x 2 ACoustICAL LAY-IN	8'-0"	
205A CLOSET	1	CERAMIC TILE					2 x 2 ACoustICAL LAY-IN	8'-0"	
206 BEDROOM	1	CERAMIC TILE					2 x 2 ACoustICAL LAY-IN	8'-0"	
206A CLOSET	1	CERAMIC TILE					2 x 2 ACoustICAL LAY-IN	8'-0"	
207 BATH	1	CERAMIC TILE					2 x 2 ACoustICAL LAY-IN	8'-0"	
208 BEDROOM	1	CERAMIC TILE					2 x 2 ACoustICAL LAY-IN	8'-0"	
208A CLOSET	1	CERAMIC TILE					2 x 2 ACoustICAL LAY-IN	8'-0"	
209 BEDROOM	1	CERAMIC TILE					2 x 2 ACoustICAL LAY-IN	8'-0"	
209A CLOSET	1	CERAMIC TILE					2 x 2 ACoustICAL LAY-IN	8'-0"	
210 BEDROOM	1	CERAMIC TILE					2 x 2 ACoustICAL LAY-IN	8'-0"	
210A CLOSET	1	CERAMIC TILE					2 x 2 ACoustICAL LAY-IN	8'-0"	
211 STAFF BATH	1	CERAMIC TILE					2 x 2 ACoustICAL LAY-IN	8'-0"	
212 BATH	1	CERAMIC TILE					2 x 2 ACoustICAL LAY-IN	8'-0"	
213 STUDY	1	CERAMIC TILE					2 x 2 ACoustICAL LAY-IN	8'-0"	
214 LIVING ROOM	1	CERAMIC TILE					2 x 2 ACoustICAL LAY-IN	8'-0"	
214A STORAGE	1	CERAMIC TILE					2 x 2 ACoustICAL LAY-IN	8'-0"	

1 BUILDING 542 - FLOOR PLAN (CASTLE RIVER)
A-2.2/1/8"=1'-0"



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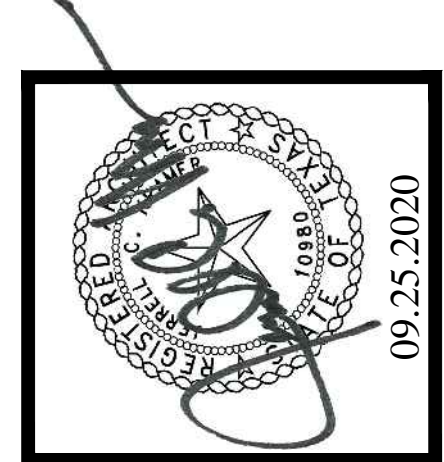
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BUILDING 542 - FLOOR PLAN (CASTLE RIVER)

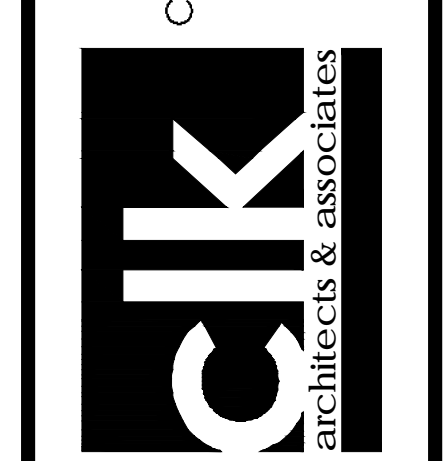
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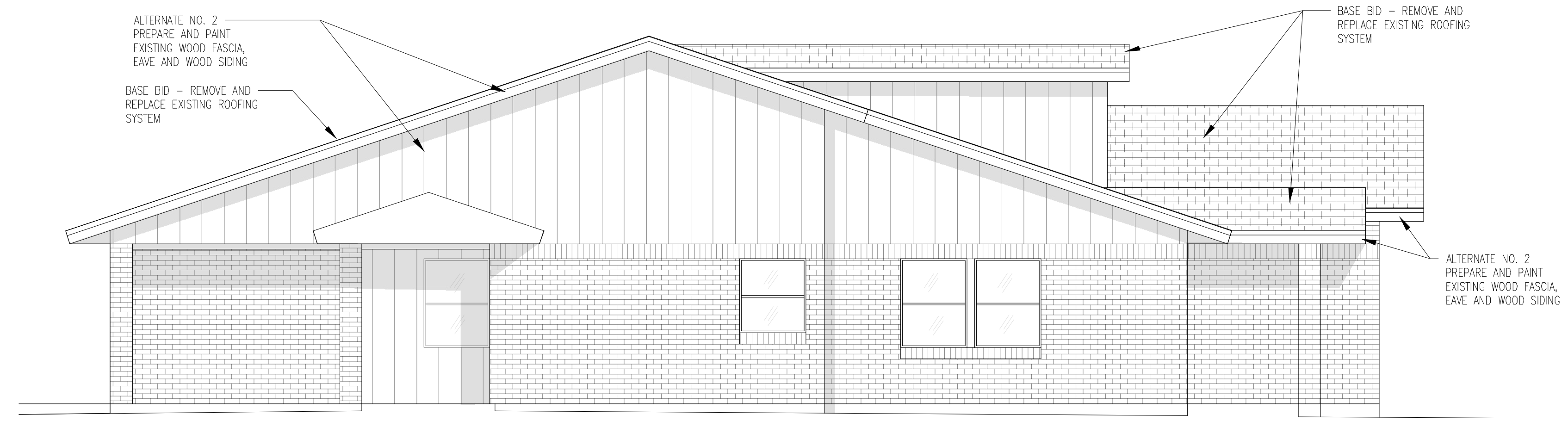


20-102-CLC - REPAIRS TO BUILDINGS 542 & 543
CORPUS CHRISTI, TEXAS
EXTERIOR ELEVATIONS (RIVER FOREST)

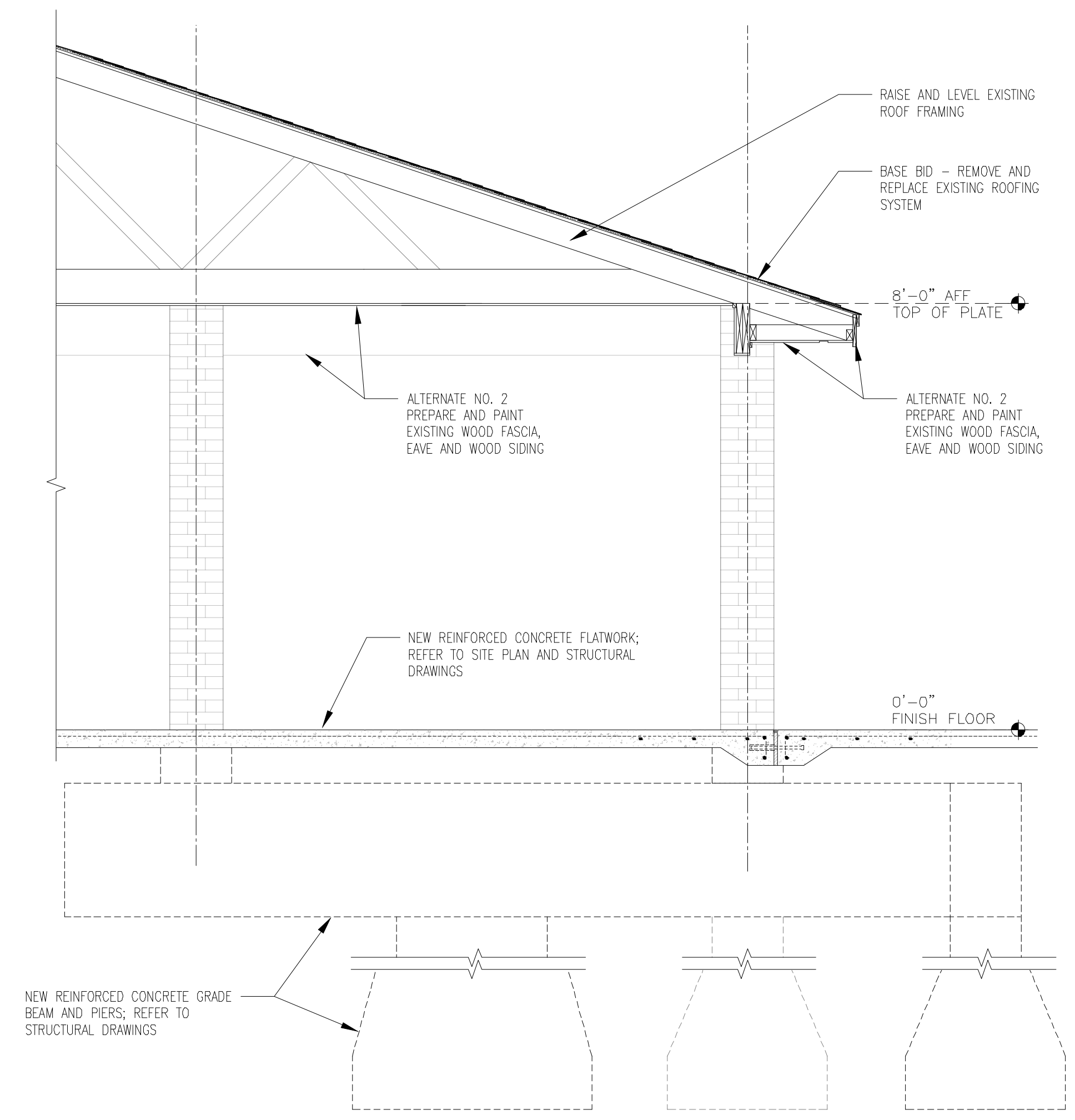
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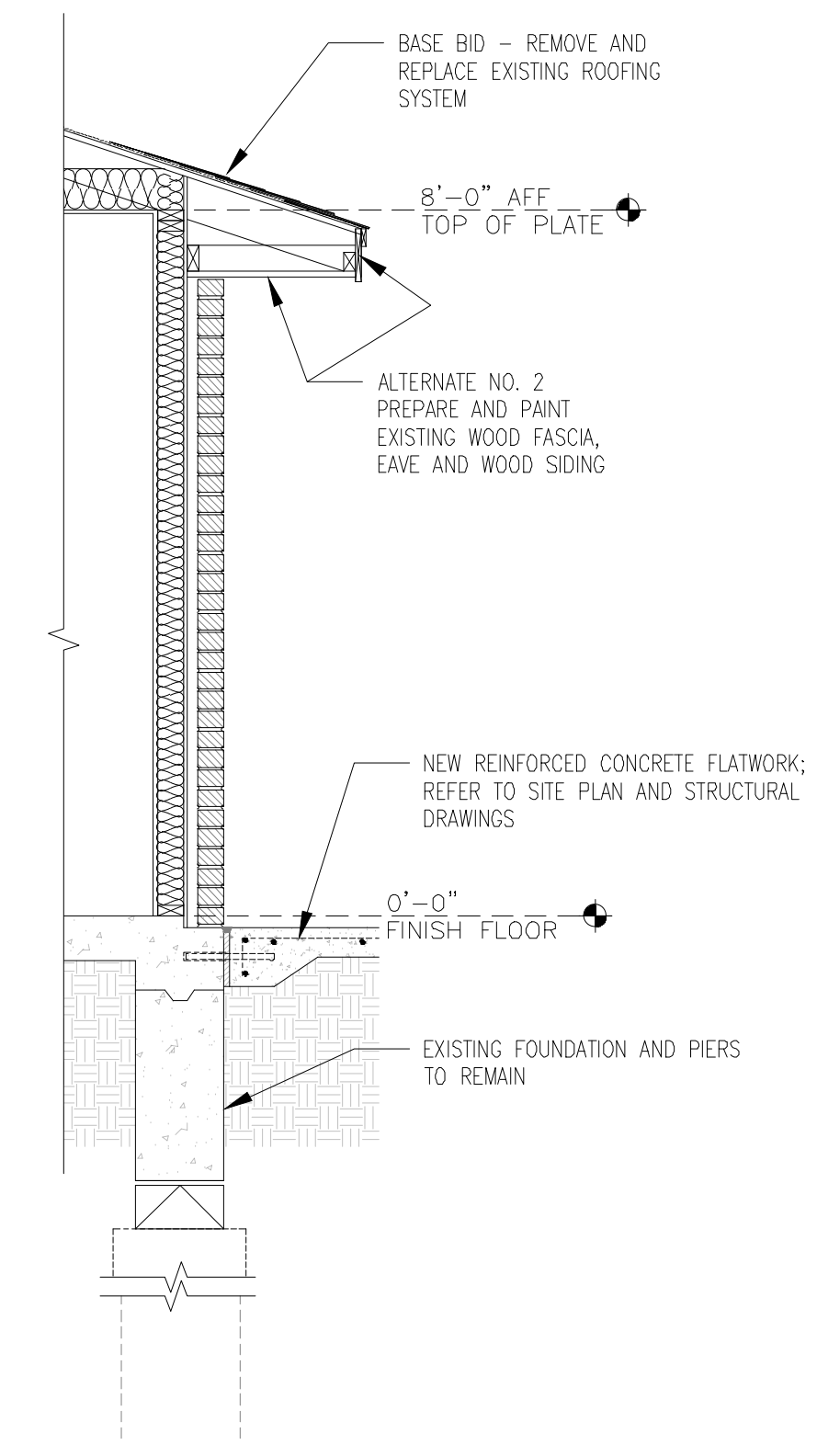
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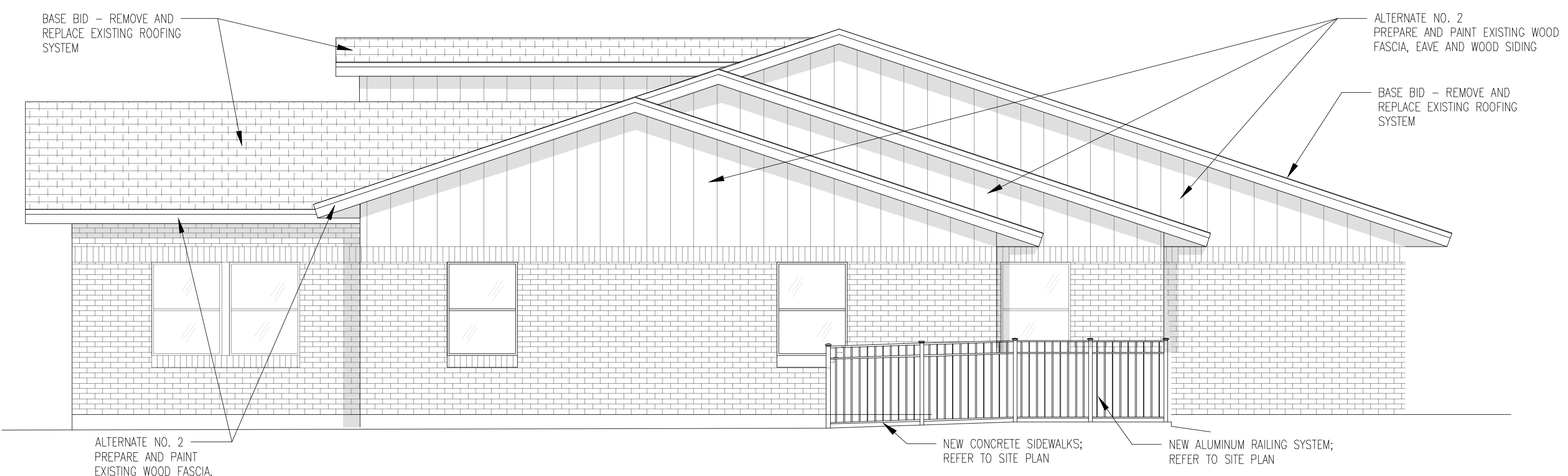
4 SOUTH ELEVATION (RIVER FOREST)
A-3.1 1/8"=1'-0"



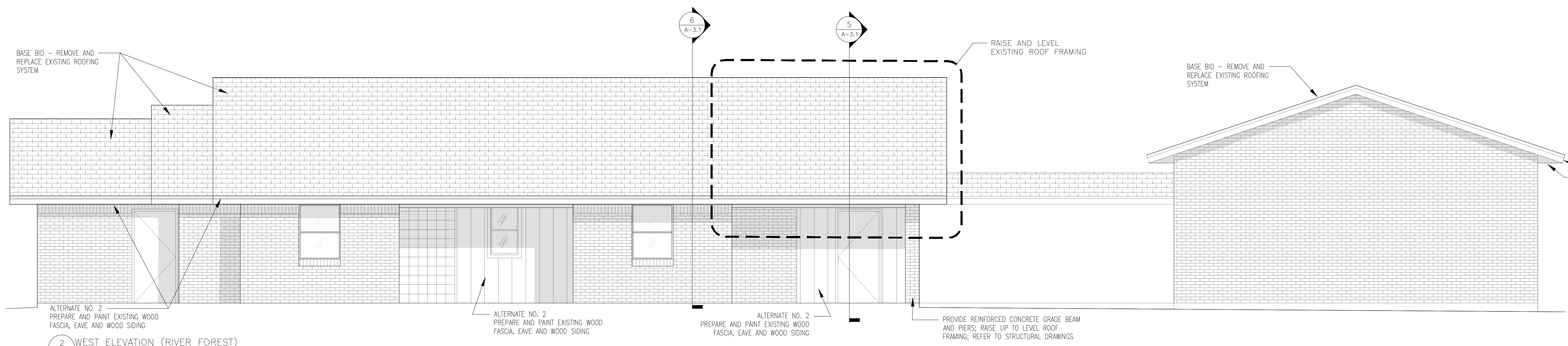
5 WALL SECTION
A-3.1 1/2"=1'-0"



6 WALL SECTION
A-3.1 1/2"=1'-0"



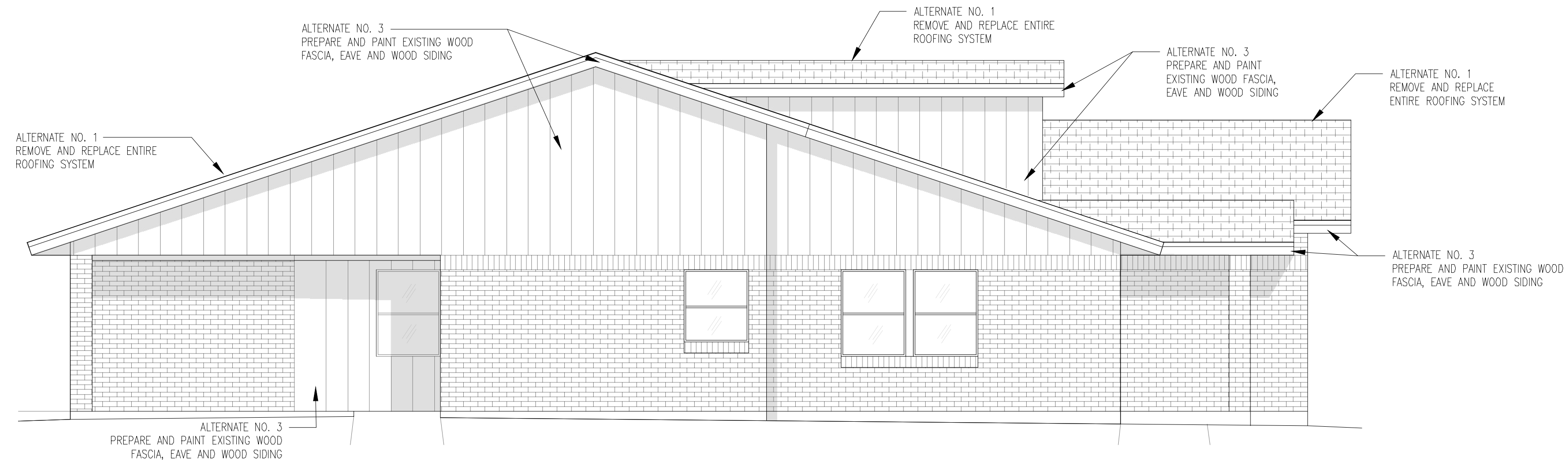
3 NORTH ELEVATION (RIVER FOREST)
A-3.1 1/8"=1'-0"



2 WEST ELEVATION (RIVER FOREST)
A-3.1 1/8"=1'-0"



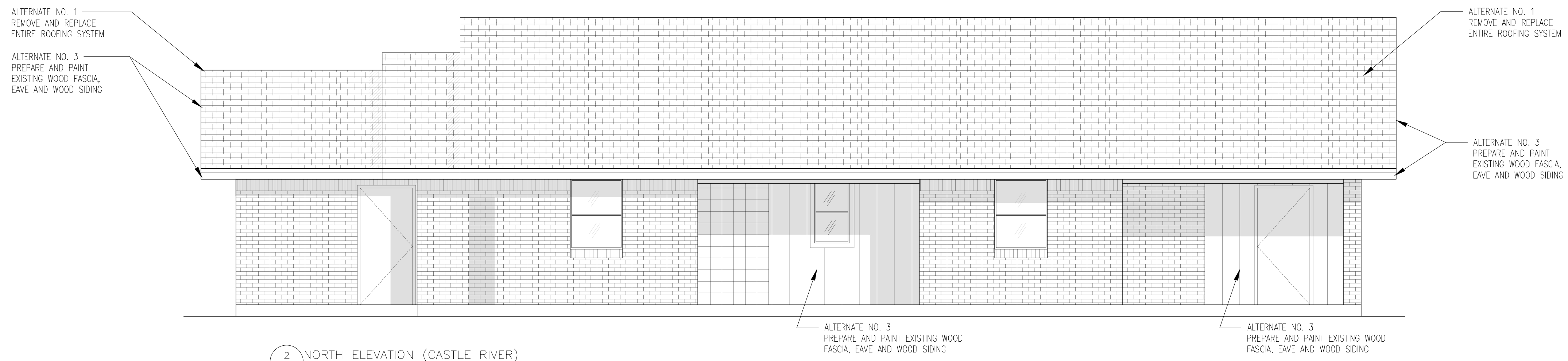
1 EAST ELEVATION (RIVER FOREST)
A-3.1 1/8"=1'-0"



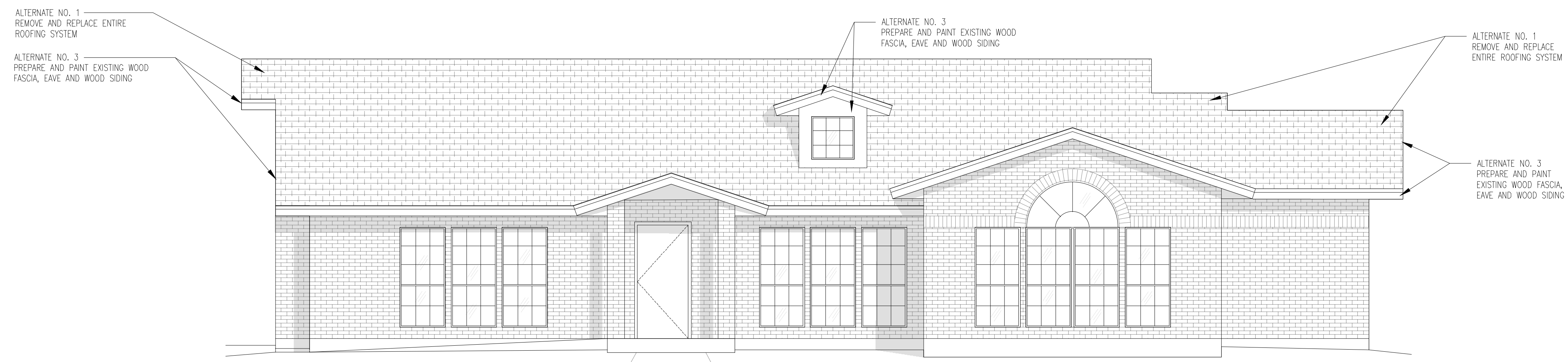
4 WEST ELEVATION (CASTLE RIVER)
A-3.2 1/8"=1'-0"



3 EAST ELEVATION (CASTLE RIVER)
A-3.2 1/8"=1'-0"



2 NORTH ELEVATION (CASTLE RIVER)
A-3.2 1/8"=1'-0"



1 SOUTH ELEVATION (CASTLE RIVER)
A-3.2 1/8"=1'-0"

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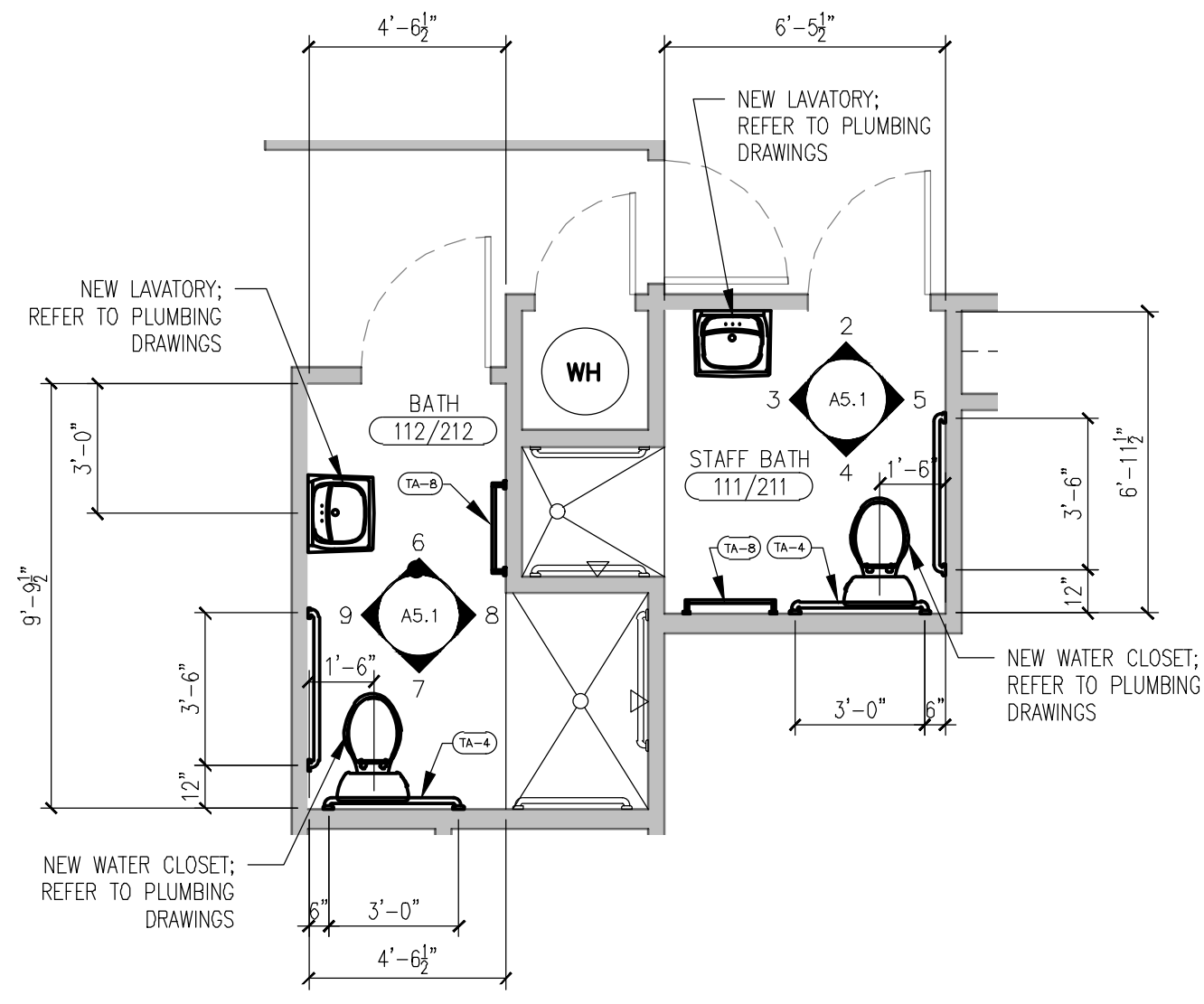
20-102-CLC - REPAIRS TO BUILDINGS 542 & 543

CORPUS CHRISTI, TEXAS
EXTERIOR ELEVATIONS (CASTLE RIVER)

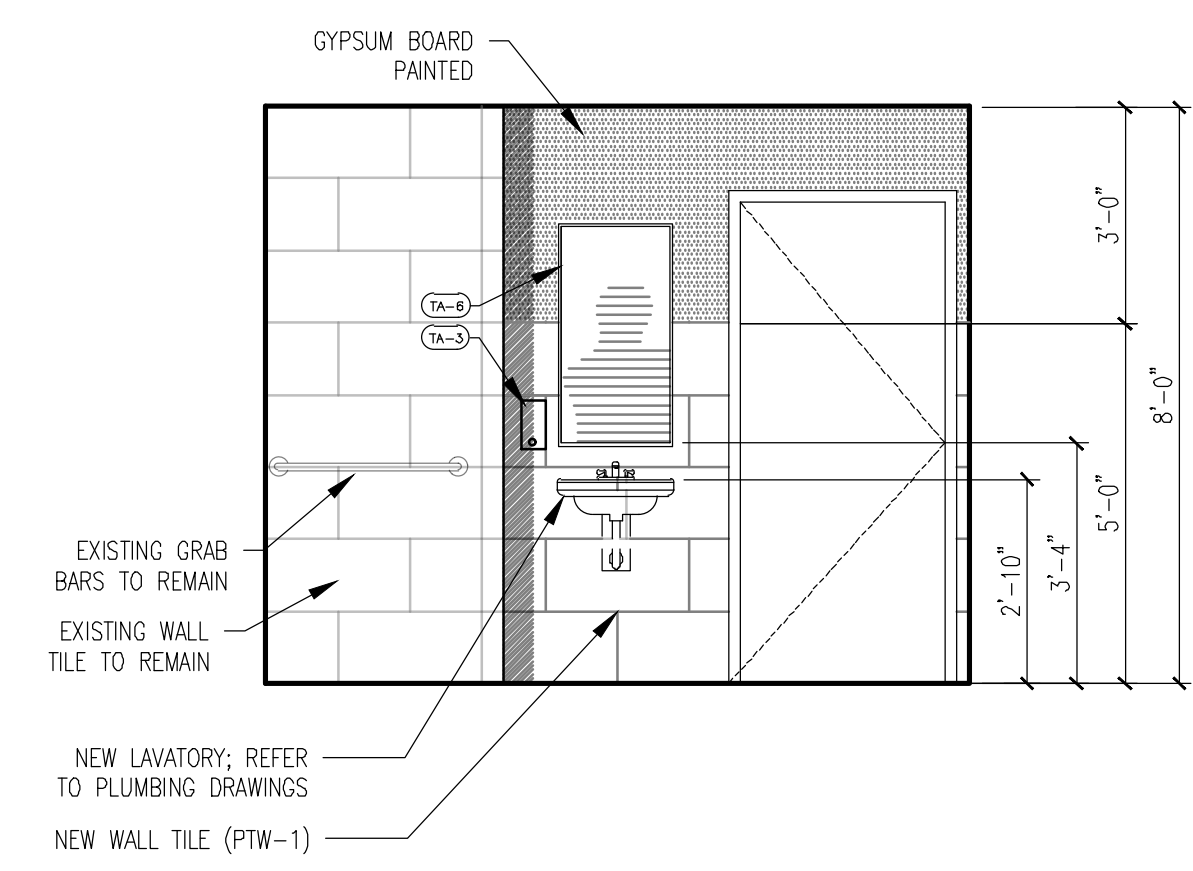
JOB NO. 201939
DRN. BY CF
CKD. BY JCK
DATE 09.25.2020

REVISIONS

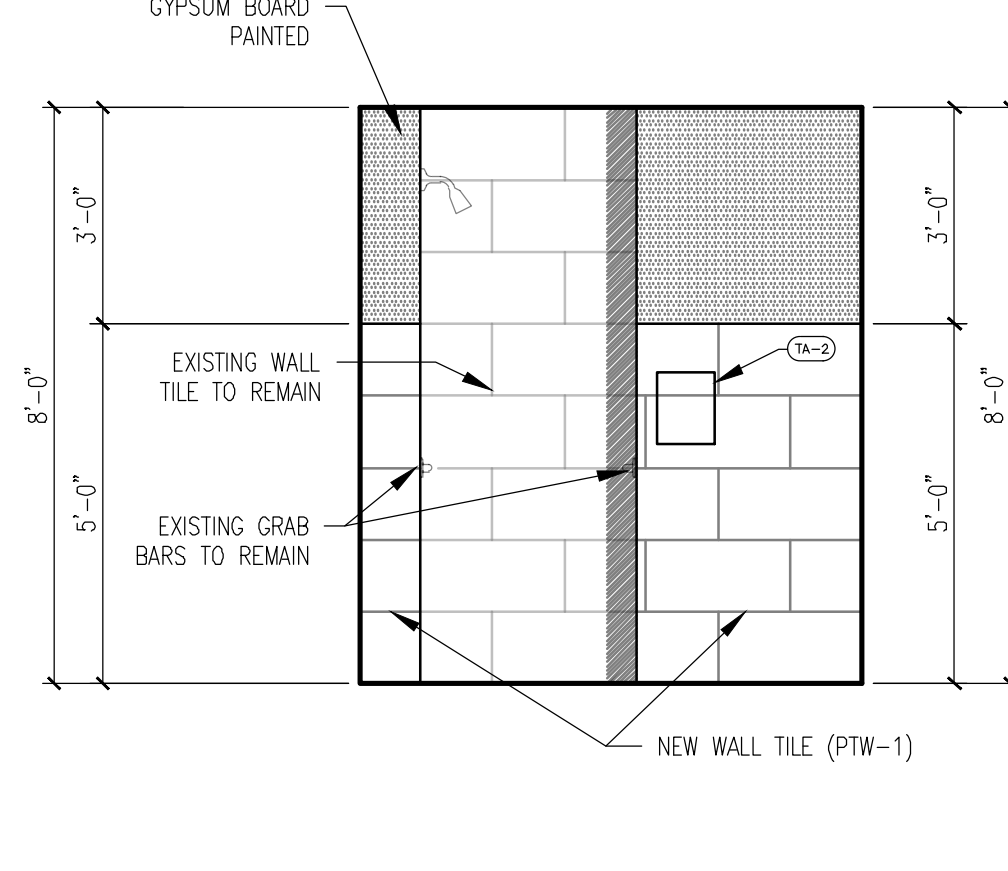
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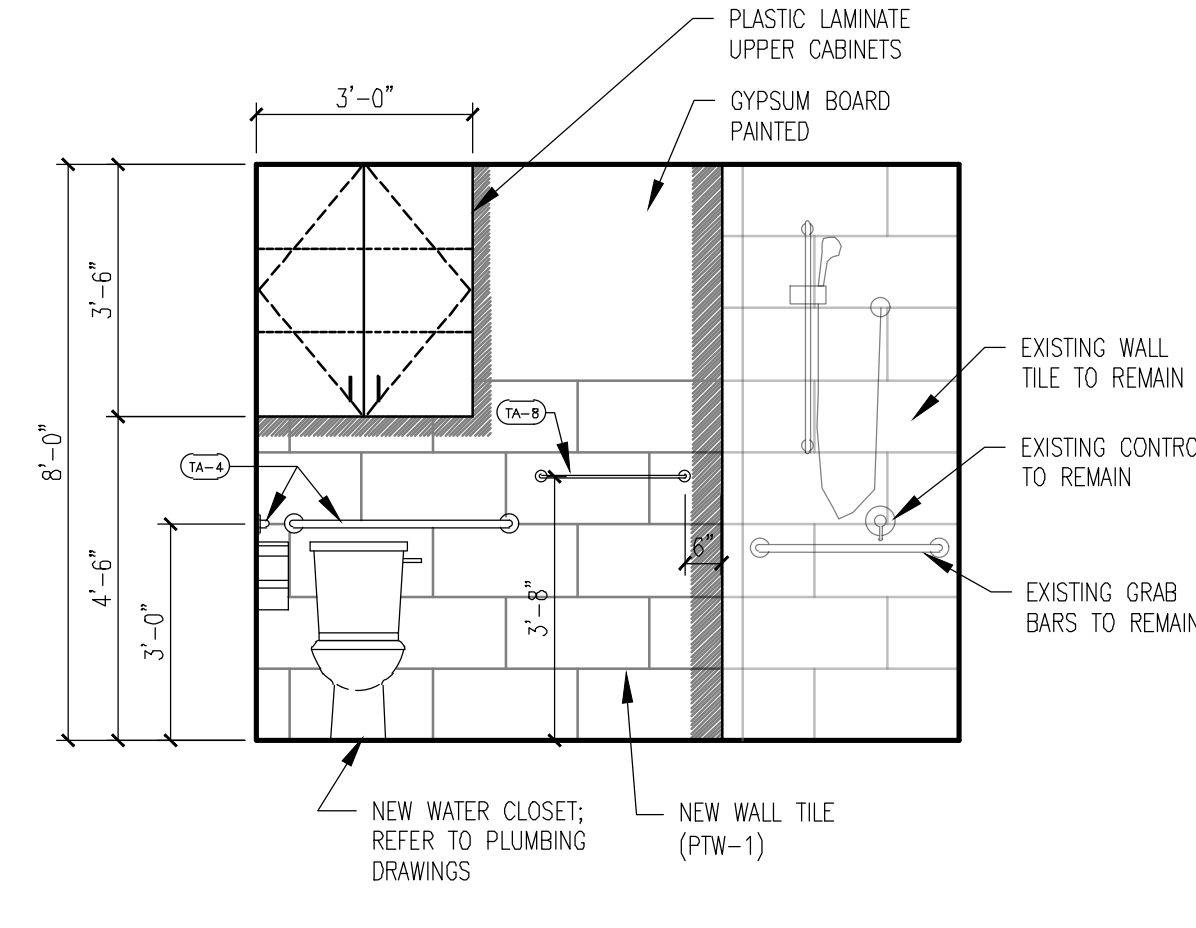
1 ENLARGED PLAN - BATH / STAFF BATH
A-5.1/3/8'-1'-0"



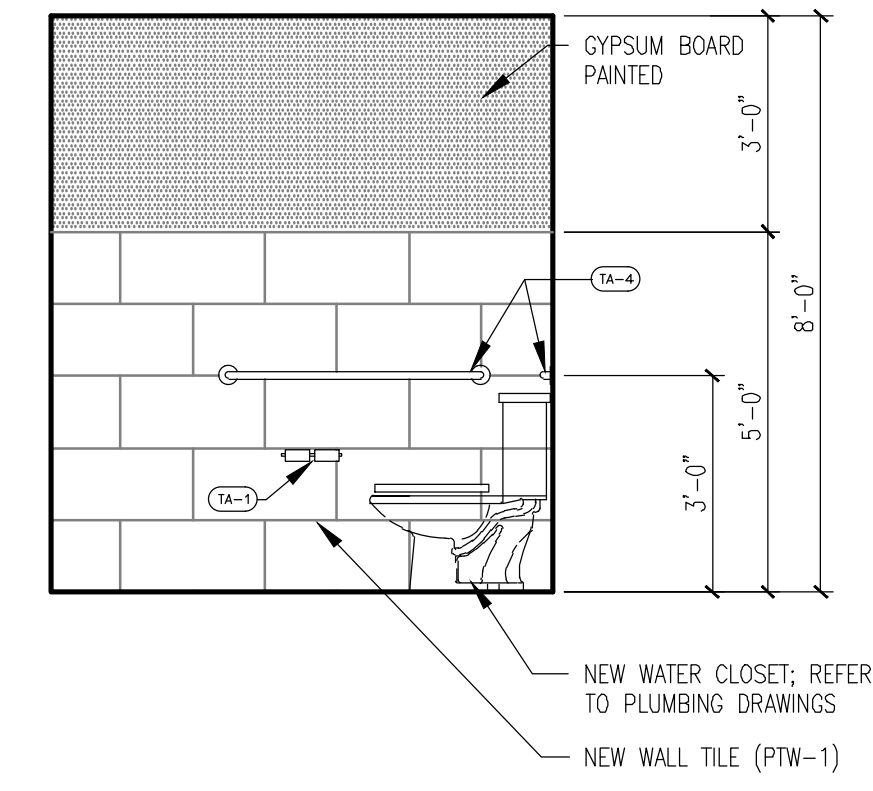
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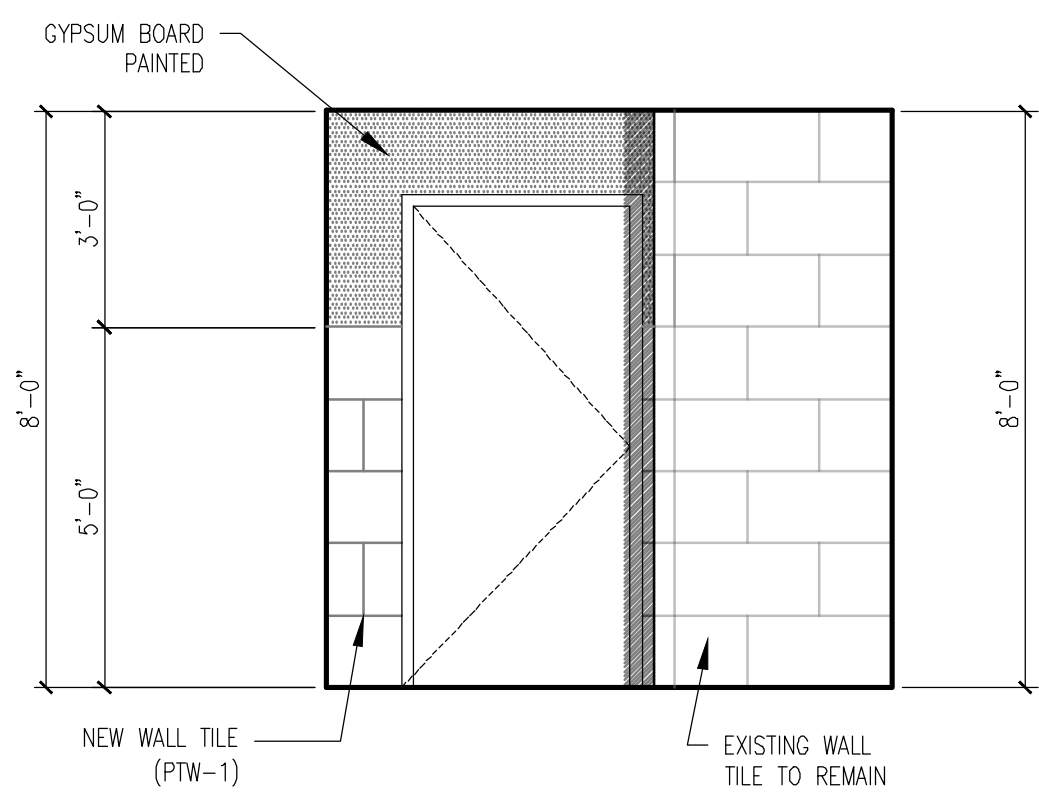
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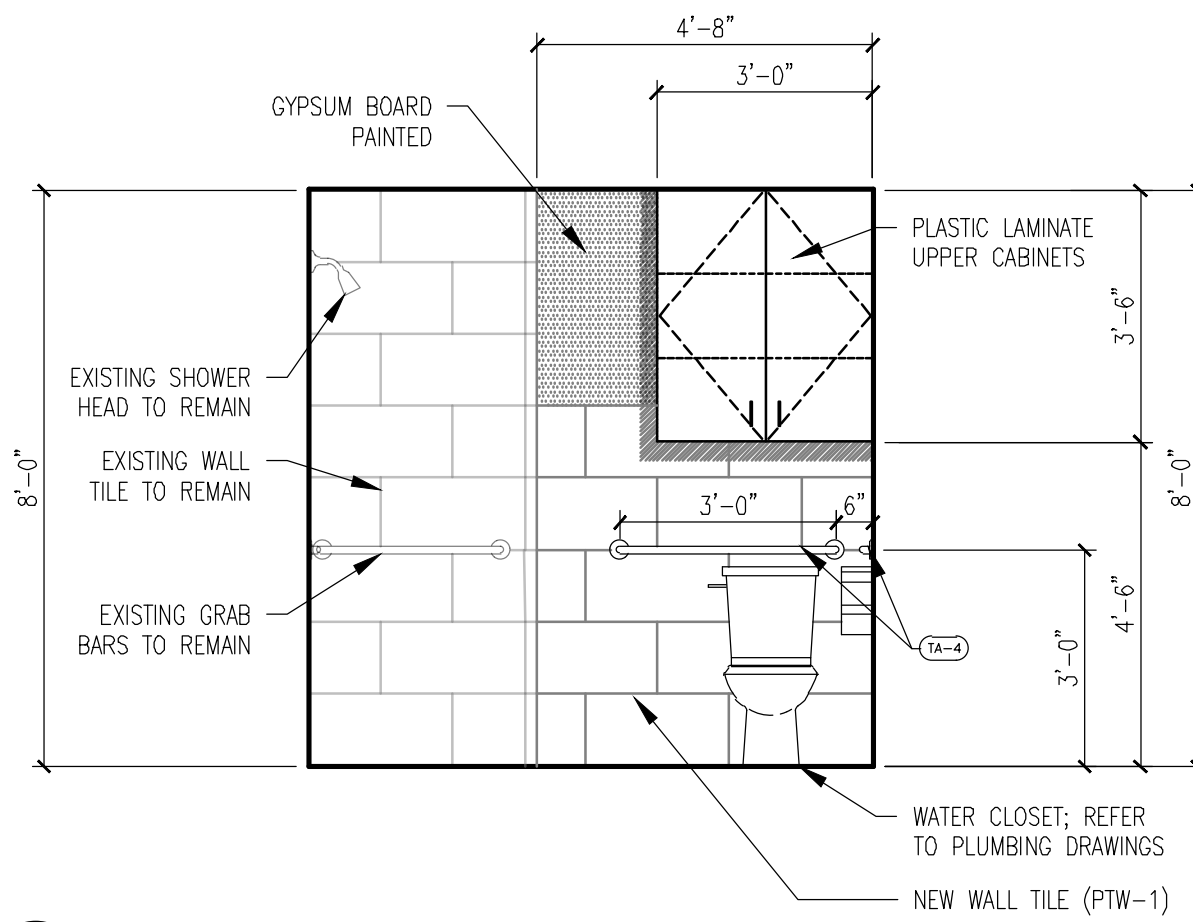
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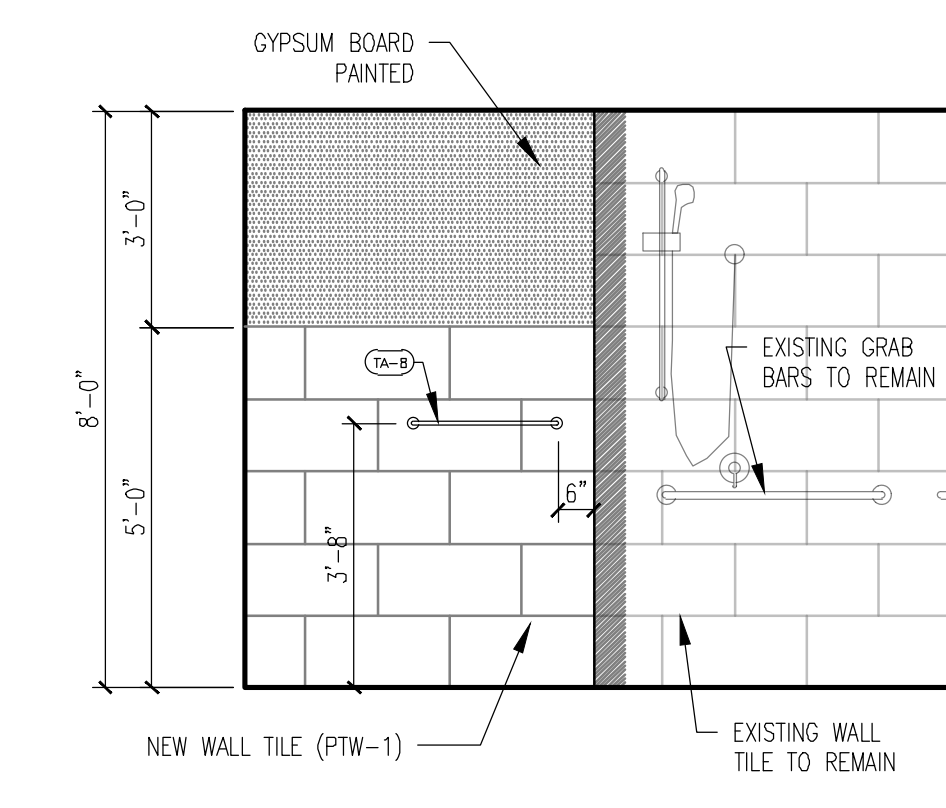
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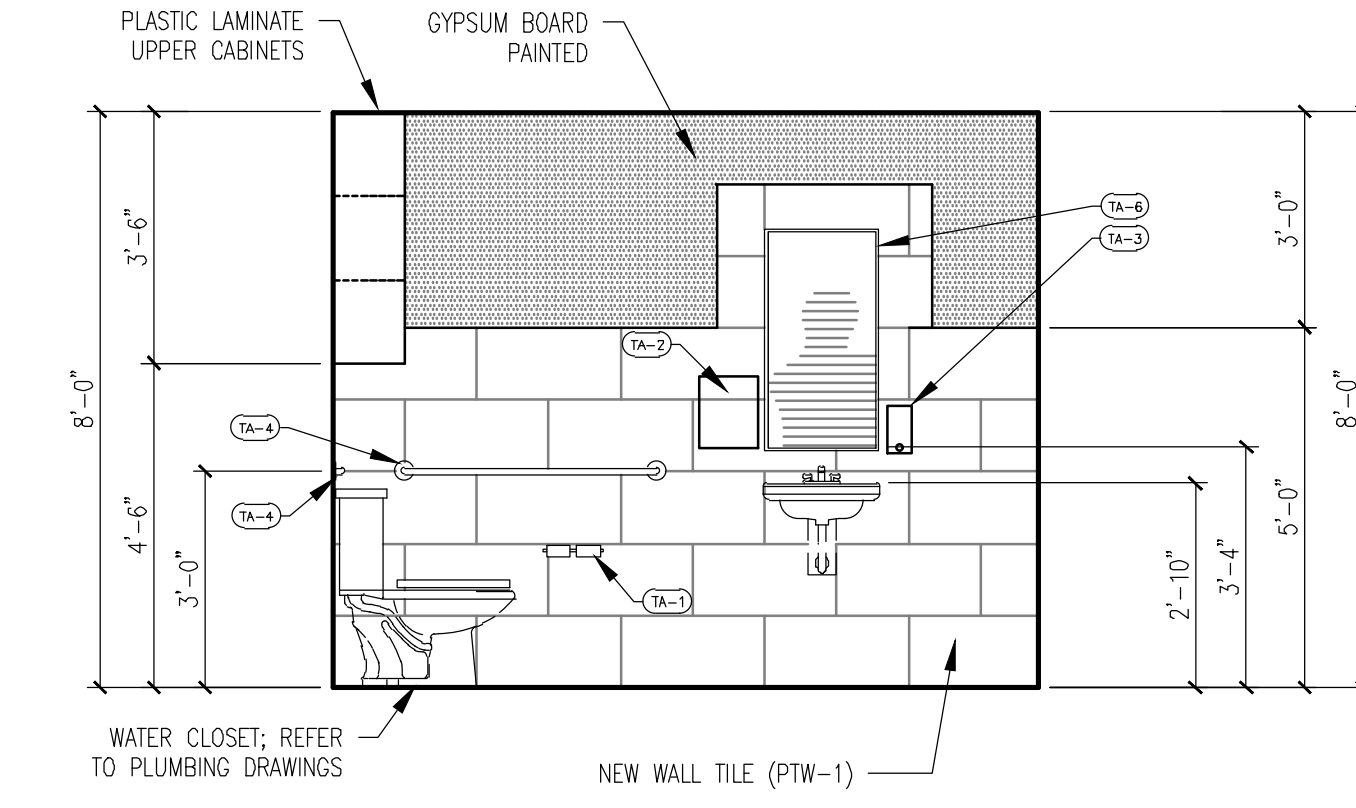
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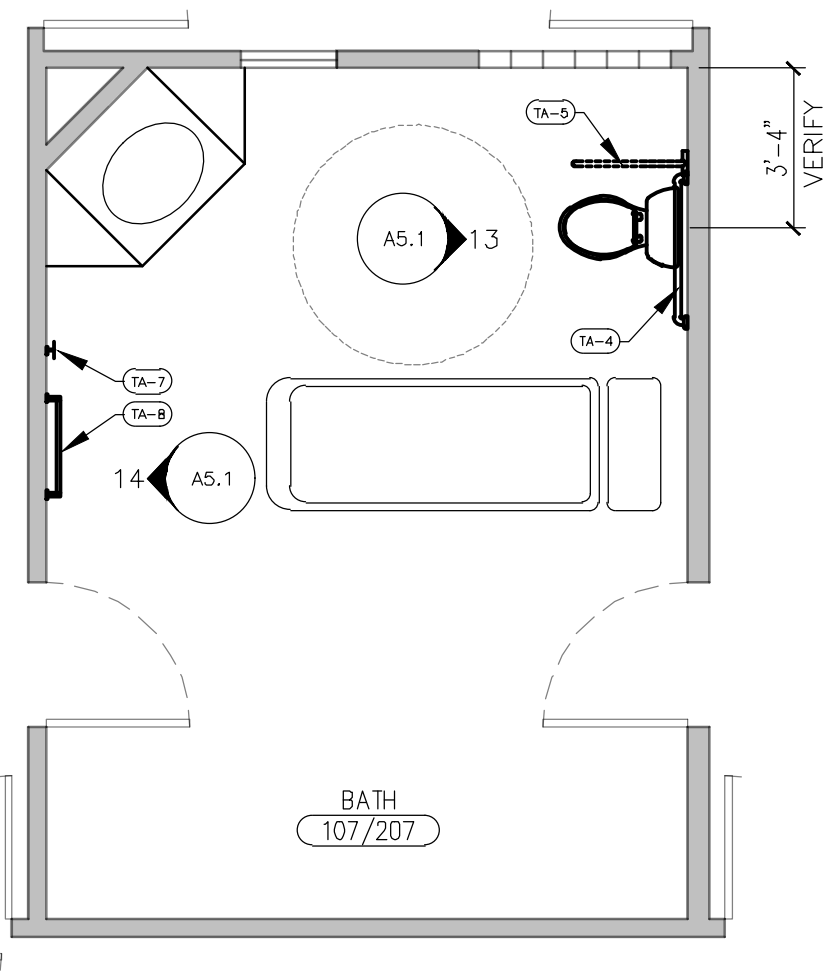
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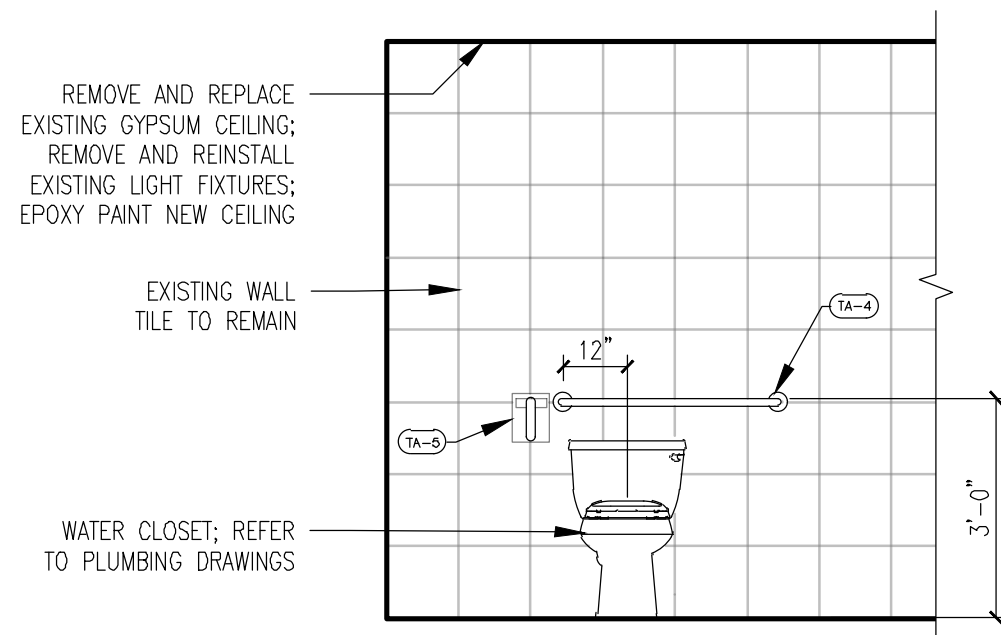
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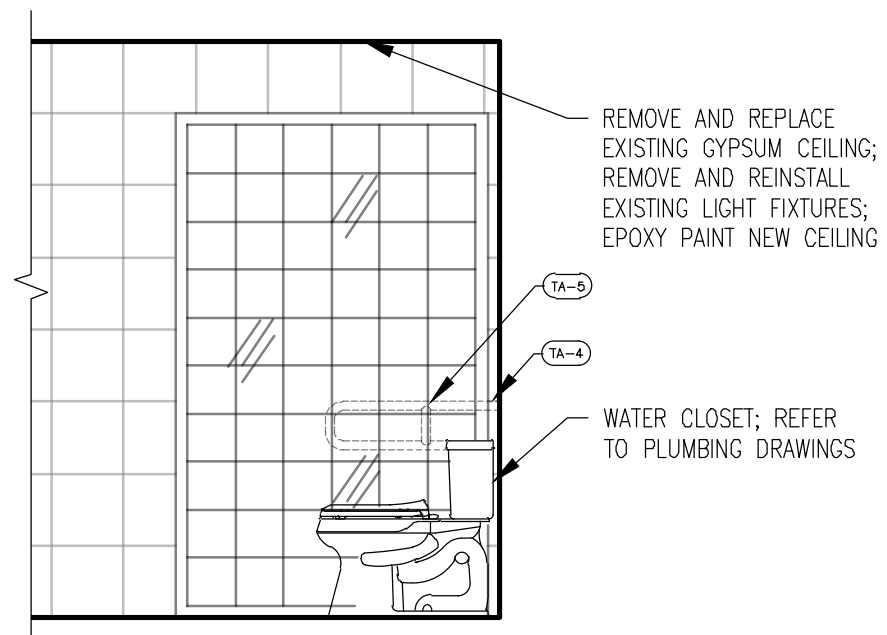
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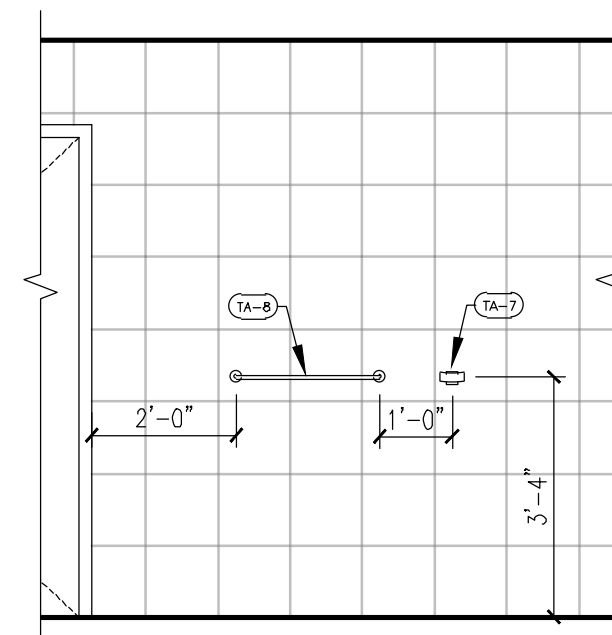
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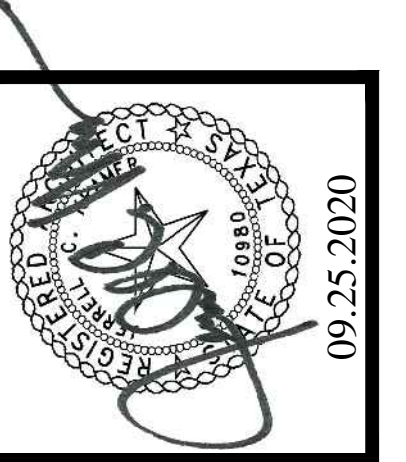
11 BATH 107/207
A-5.1/3/8'-1'-0"



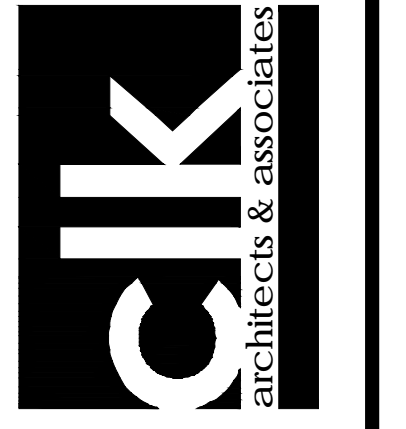
12 BATH 107/207
A-5.1/3/8'-1'-0"



13 BATH 107/207
A-5.1/3/8'-1'-0"



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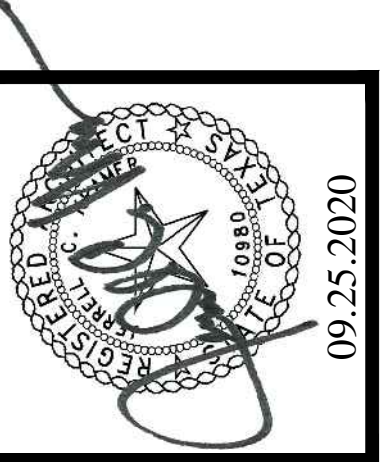
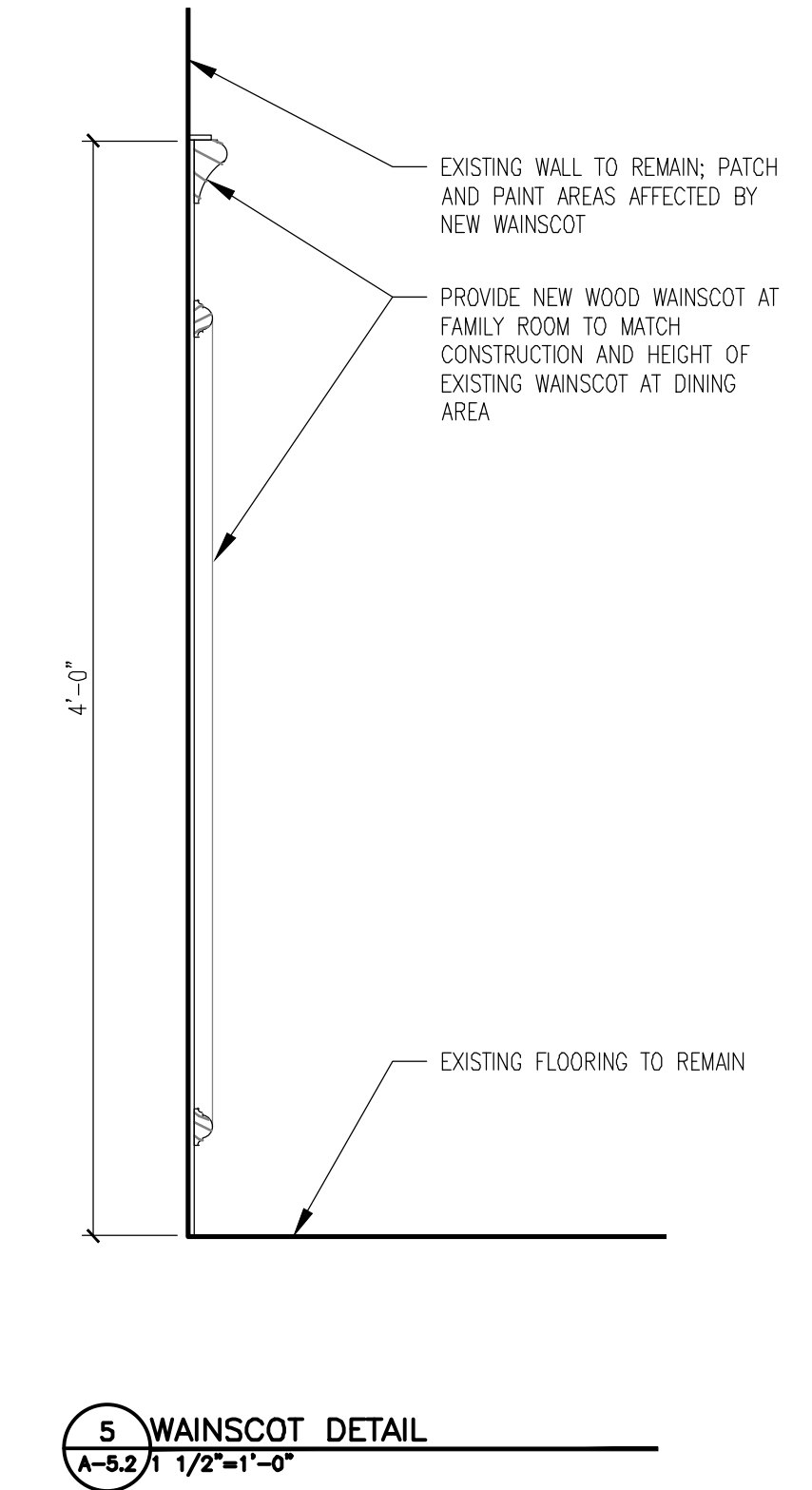
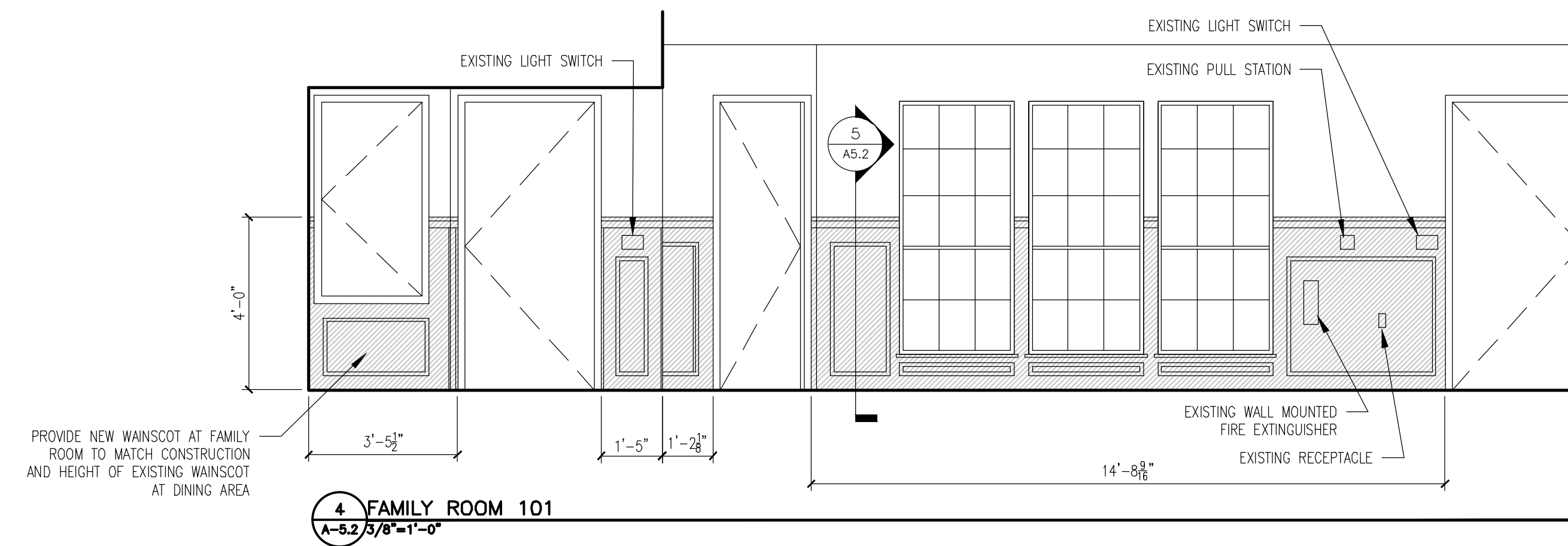
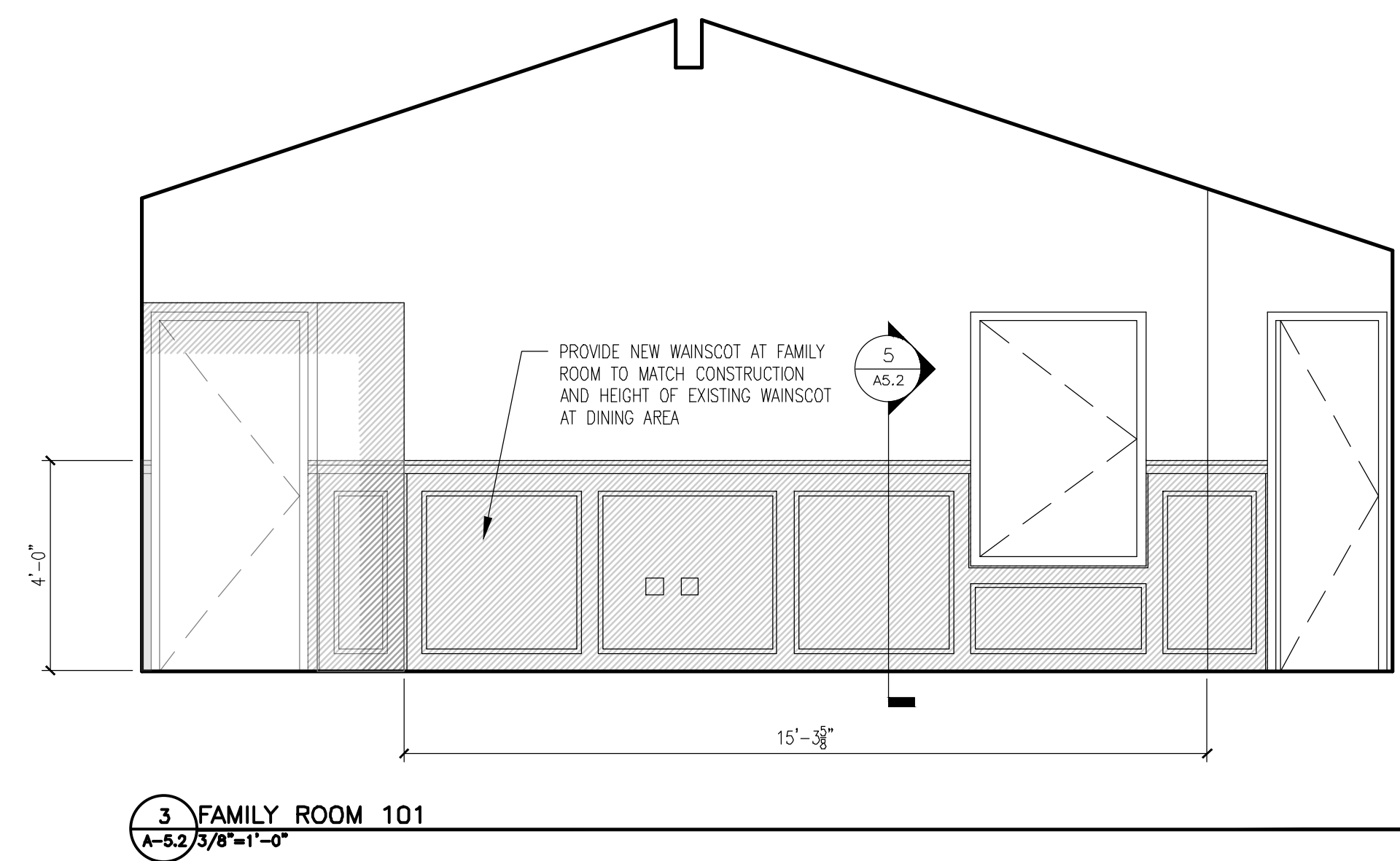
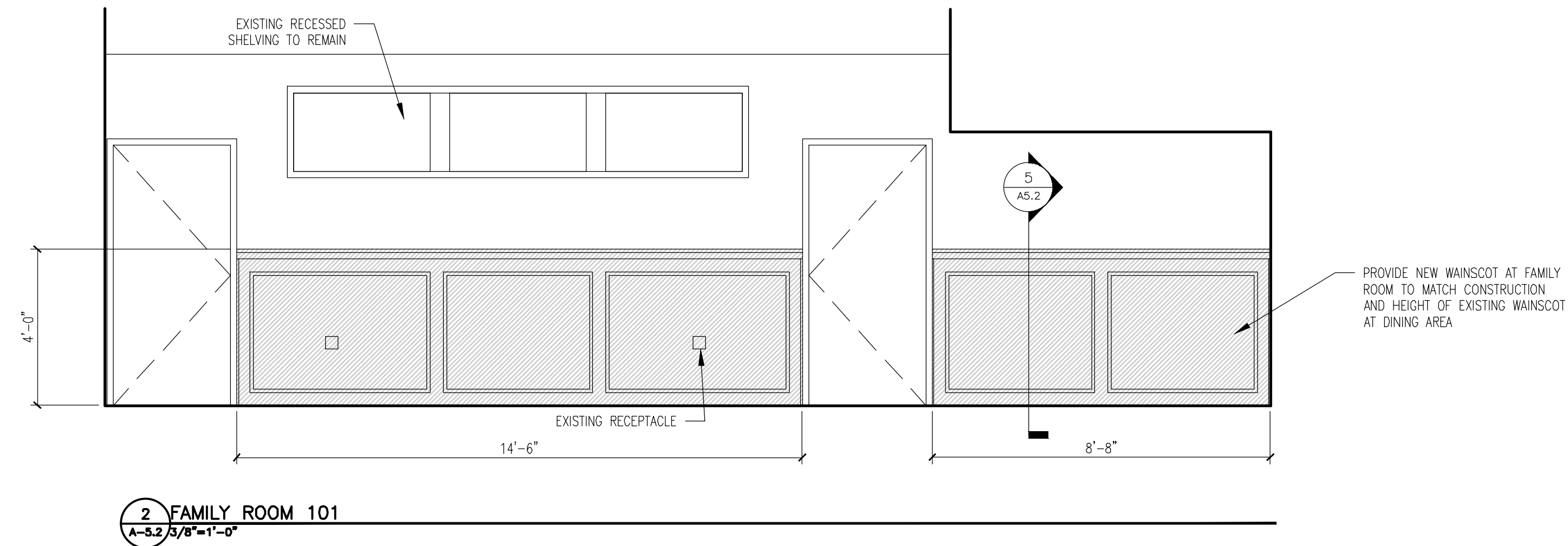
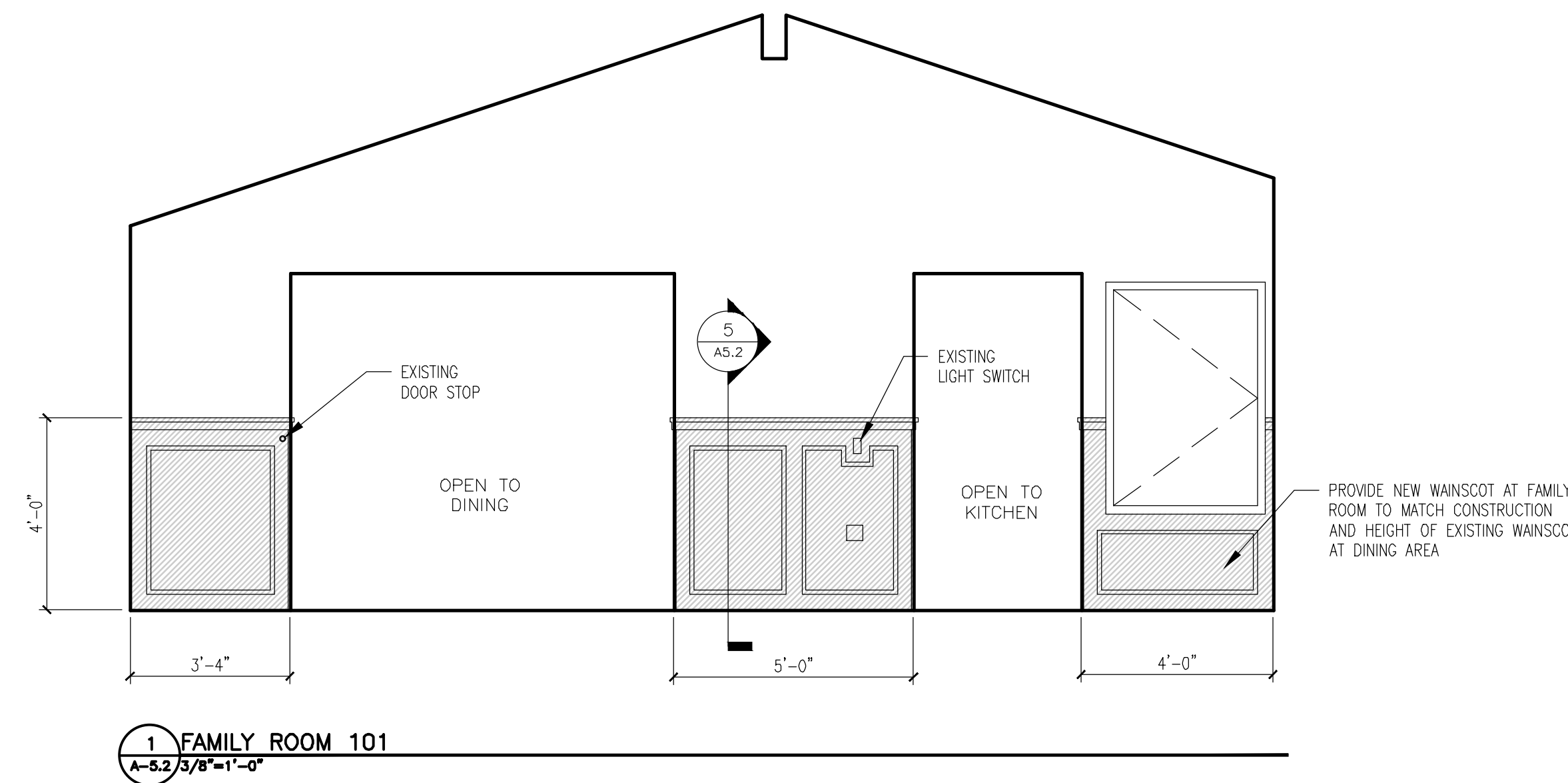
CORPUS CHRISTI, TEXAS
INTERIOR ELEVATIONS

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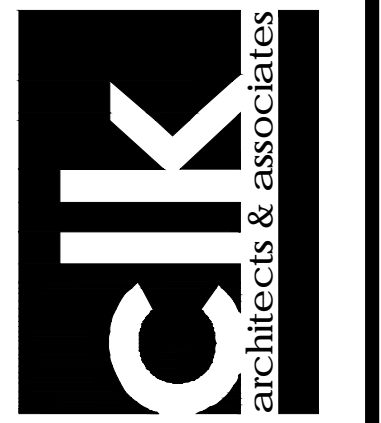
TOILET ACCESSORY TABLE			
ACCESSORY TAG	DESCRIPTION	PROVIDED BY	INSTALLED BY
TA-1	TOILET TISSUE DISPENSER	CONTRACTOR	CONTRACTOR
TA-2	PAPER TOWEL DISPENSER	HHSC-CLC	CONTRACTOR
TA-3	LIQUID-SOAP DISPENSER	HHSC-CLC	CONTRACTOR
TA-4	GRAB BARS	CONTRACTOR	CONTRACTOR
TA-5	GRAB BARS (SWING-UP)	CONTRACTOR	CONTRACTOR
TA-6	MIRROR	CONTRACTOR	CONTRACTOR
TA-7	DOUBLE ROBE HOOK	CONTRACTOR	CONTRACTOR
TA-8	TOWEL BAR	CONTRACTOR	CONTRACTOR
TA-9	FOLDING SHOWER SEAT	CONTRACTOR	CONTRACTOR

JOB NO.	201939
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20-102-CLC - REPAIRS TO BUILDINGS 542 & 543

CORPUS CHRISTI, TEXAS
INTERIOR ELEVATIONS

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DRN. BY CF
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DATE 09.25.2020

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of 33 sheets

STRUCTURAL GENERAL NOTES



I. COORDINATION

- A. It is the responsibility of the General Contractor to obtain all Contract Documents and Addenda and to submit such documents to all subcontractors and material suppliers prior to the submittal of shop drawings, fabrication of any structural members, and construction.
- B. The General Contractor shall compare the Architectural, Structural Mechanical, Electrical, Plumbing, and other series drawings and report any discrepancies between each set of drawings and within each set of drawings prior to fabrication and installation of any structural members.
- C. Compatibility of the structure and provisions for building equipment supported on or from structural components shall be verified as to size, dimensions, clearances, accessibility, weights and reaction with the equipment for which the structure has been designed prior to submission of shop drawings and data for each piece of equipment and for structural components. Differences shall be noted on the submittals.
- D. The details designated as "Typical Details" apply generally to the Drawings in all areas where conditions are similar to those described in the details.
- E. All structural elements of the project have been designed by the Structural Engineer to resist the required code vertical and lateral forces that could occur in the final completed structure only. It is the responsibility of the Contractor to provide all required bracing during construction to maintain the stability and safety of all structural elements during the construction process until the lateral-load resisting or stability-providing system is completely installed and the structure is completely tied together.
- F. The Contract Structural Drawings and Specifications represent the finished structure, and except where specifically shown, do not indicate the means or methods of construction. The Contractor and their Sub-Contractors shall supervise and direct the Work and shall be solely responsible for all construction means, methods, procedures, techniques, sequences and safety measures including, but not limited to, adherence to all OSHA guidelines. The Engineer shall not have control of, and shall not be responsible for, construction means, methods, techniques, sequences or procedures, for safety precautions and programs in connection with the Work, for the acts or omissions of the Contractor, Subcontractors, or any other person performing any of the Work, or for the failure of any of these persons to carry out the Work in accordance with the Contract Documents.
- G. Where conflict exists among the various parts of the structural contract documents, structural drawings, general notes, and specifications, the strictest requirements, as indicated by the Engineer, shall govern.
- H. Shop drawings shall be prepared for all structural items shown in the drawings. Structural Engineers drawings shall not be used as shop drawings unless approved by the Structural Engineer.
- I. Periodic site observation by field representatives of Garza + McLain Structural Engineers, Inc. is solely for the purpose of determining if the Work is proceeding in accordance with the Structural Contract Documents. This limited site observation is not intended to be a check of the quality or quantity of the Work, but rather a periodic check in an effort to inform the Owner against defects and deficiencies in the work of the Contractor.
- J. Garza + McLain is the Structural Engineer of Record for the Foundation Repair and new roof. The existing residential structures were investigated for TDI compliance.

II. SUBSTITUTIONS

All requests for substitutions of materials or details shown in the contract documents shall be submitted for approval during the bidding period. Once bids are accepted, proposed substitutions will be considered only when they are officially submitted with an identified savings to be deducted from the contract and/or schedule impact and the material or product has been approved by the International Code Council Evaluation Service (ICCES) and the ICCES report are included in the request. Submittals not satisfying the above criteria will not be considered.

III. MAINTENANCE STATEMENT

- A. All structures require periodic maintenance to extend lifespan and to insure structural integrity from exposure to the environment. A planned program of maintenance shall be established by the building owner. This program shall include such items as but not limited to painting of structural steel, protective coating for concrete, sealants, caulked joints, expansion joints, control joints, spalls and cracks in concrete, pressure washing of exposed structural elements exposed to a salt environment or other harsh chemicals and maintaining positive drainage away from the edge of the building.
- B. Site Drainage: it is recommended that the site drainage be well developed surface water should be directed away from the foundation soils and any exterior paving. (Use a minimum slope of 5% within 10 feet of the foundation), no ponding of surface water shall be allowed near the structure during or after completion of the construction & the landscaping, the Contractor shall advise the owner of the site drainage requirements. The Engineer is not liable for foundation or paving issues if the site is not maintained.

IV. SUBMITTALS

- A. Shop drawings shall be prepared for all structural items and submitted for review by the Engineer. Contract Drawings shall not be reproduced and used as shop drawings. All items deviating from the Contract Drawings or from previously submitted shop drawings shall be closed.
- B. The contractor shall review shop drawings for compliance with the contract documents and shall certify that he has done so by a stamp noting that the drawings have been "Approved" and which bears the signature (or initials) of an authorized representative of the contractor and the date. Submittals which do not reflect the contractor's approval, signature and date will be returned without review.
- C. The contractor shall be responsible for delays caused by rejection of inadequate shop drawings.
- D. Where review and return of shop drawings is required or requested, the engineer will review each submittal and, where possible, return within two weeks of receipt.
- E. Corrections or comments on shop drawings or manufacturer's data sheets do not relieve the contractor from compliance with requirements of the plans and specifications. The engineer's review is for general conformance with the requirements of the contract documents. The contractor is responsible for confirming and correcting all quantities and dimensions, selecting fabrication processes and techniques of construction, and coordinating his work with that of all other contractors.
- F. General Contractor shall submit an electronic PDF of shop drawings by email.
- G. The omission from the shop drawings of any material required by the Contract Documents to be furnished shall not relieve the Contractor of the responsibility of furnishing and installing such materials, regardless of whether the shop drawings have been reviewed and approved.
- H. Reproduction - The use of reproductions of these contract documents by an contractor, subcontractor, erector, fabricator, or material supplier in lieu of preparation of shop drawings signifies his acceptance of all information shown hereon as correct, and obligates himself to any job expense, real or implied, arising due to any errors that may occur hereon.

V. BUILDING PAD PREPARATION

1. The area for new pavement should be striped to a suitable depth to remove any top soil and miscellaneous fill material minimum of 1'-0", the exposed subgrade surface then should be proof-rolled or compacted to determine loose/soft spots. All soft or loose soils should be removed and replaced with select fill materials.
2. The natural subgrade should be scarified to a minimum depth of six (6) inches. The scarified soils should then be recompacted to a minimum of 95 percent of the maximum dry density as determined by the Standard Proctor Density Test (ASTM-D 698). The moisture content should range -1% to +3% of optimum moisture.
3. Structural select fill used to elevate the grade should consist of a clean sandy clay with Liquid Limit less than 35 and a Plasticity index (P.I.) between 10 and 20.
4. The structural select fill material should be placed in maximum of eight (8) inch loose lift and compacted to a minimum of 95 percent of the maximum dry density as per ASTM D-698. The moisture content should be within -1% to +3% of optimum moisture.

- A. Provide a Vapor Retarder that conforms to ASTM E1745, Class A, with a maximum water vapor permeance of 0.01 perms per ASTM E96. Moisture Retarder shall be no less than 10 mils thick.

VI. DRILLED AND UNDERREAMED FOOTINGS

- A. Underream footing design is based on the following design criteria:
a. Allowable end bearing: 2000 psf sustained, 3000 psf total.
b. Minimum penetration into bearing stratum 13'-0" below existing grade taken as 77'-0".
- B. Footing not specifically located on the plan shall be located on centerline of column above. Where no column occurs, locate on centerline of wall or beam.
- C. Provide dowels from footing into concrete above using same bar size and number as shown for pilaster above. Where no pilaster occurs, use dowels of same size and number as drilled shaft reinforcing steel. Extend dowels 30 bar diameters into pier and beam, wall, pilaster or column u.n.o.
- D. Elevation of top of drilled shaft, unless noted otherwise on the drawings is at the bottom of the deepest intersecting beam or wall supported by the under-reamed footing, allowing for grout.

- E. Maintain 3" side cover and 3" bottom cover using reproducible means and methods.
- F. Drilled shaft reinforcing and concrete shall be placed immediately after drilling operations are complete; in no case shall a pier be drilled that cannot be poured by the end of the workday.
- G. See plans for drilled and underreamed footing sizes, reinforcing and depth.
- H. Reinforcing steel shop drawings shall include placing drawings for templates to set dowels in piers.
- I. Top of drilled shaft shall be of the specified diameter. Form top of pier if required to maintain the specified diameter. Any concrete extending beyond the specified diameter shall be removed.
- J. Contractor shall include in bid documents, unit-costs for casing if required and unit cost for greater and lesser depth of drilling for each drilled shaft size.
- K. All drilled and underreamed footings shall be inspected by a geotechnical representative in order to ensure that the proposed bearing material has been reached.
- L. The Testing Laboratory shall make and maintain accurate records of the drilled and underreamed depths, bearing stratum, depth of penetration into bearing stratum diameter and location (including off centered eccentricities), and shall submit this information to the Engineer.

VII. CAST IN PLACE CONCRETE

A. CLASSES OF CONCRETE

All concrete shall conform to the requirements as specified in the table below unless noted otherwise on the drawings:

Concrete Mix Schedule:						
Conc. Class	Strength psi	Agg. Type	Agg. Size	Slump inches	Max. w/c	Notes
A	3000	NWT	1 1/2"	4	----	

- a) "NWT" refers to normal concrete having air dry unit weight of approximately 145 PCF (ASTM S3 aggregate).
- b) Where w/c ratio is not indicated in the Concrete Mix Schedule, it shall be as necessary to meet strength requirements.
- c) Where the w/c ratio is shown, it shall be adhered to regardless of strength requirements.
- d) "Strength" is required compressive cylinder strength at an age of 28 days.

Mix Usage Schedule:

Description of Use	Concrete Class	Air Content
Drilled and Underreamed Footings	A	-----
Grade Beams	A	-----
Slab-on-FILL	A	-----

- B. Maximum shrinkage of the concrete shall be 0.03% at 28 days as determined by ASTM C157.
- C. Foundation can have up to 25% fly ash replacement.
- D. Provide 5 percent plus or minus 1 1/2 percent of entrained air in concrete permanently exposed to the weather and elsewhere at the contractors option.

VIII. CONCRETE REINFORCING

- A. Concrete reinforcement for the project shall conform to the following:
- All Reinforcing Steel shall be ASTM A615, Grade 60 unless noted otherwise in the drawings or these notes.
 - Welded Reinforcing Steel. Provide reinforcing steel conforming to ASTM A706.
 - Deformed Bar Anchors. ASTM A496 minimum yield strength 70,000 PSI as noted on the drawings. Reinforcing bars shall not be substituted for deformed bar anchors.
 - Welded wire reinforcement. Welded smooth wire reinforcement, ASTM A 185, yield strength 65,000 PSI where noted on the drawings. Welded deformed wire reinforcement, ASTM A 497, yield strength 70,000 PSI where noted on the drawings. Welded wire reinforcement to be provided in flat sheets.
- B. Detailing of reinforcing steel shall conform to the American Concrete Institute 315 Detailing Manual and all hooks and bends in reinforcing bars shall conform to ACI detailing standards unless shown otherwise.
- C. Placement of Welded Wire Reinforcement Wherever welded wire reinforcement is specified as reinforcement, it shall be continuous across the entire concrete surface and not interrupted by beams or girders and properly lapped one cross wire spacing plus 2".
- D. In unscheduled grade beams, walls, and slabs, detail reinforcing as follows:
- Class B Lap beam top reinforcing bars at mid span.
 - Class B Lap beam bottom reinforcing bars at the supports.
 - Provide Class B top at other location pending Engineer's approval.
 - Provide standard hooks in top bars at cantilever and discontinuous ends of beams, walls and slabs.
 - Provide corner bars for all horizontal bars at the inside and outside faces of intersecting beams or walls. Corner bars not required if top and bottom bars are hooked.
 - Provide 2-#4 diagonal bars at all slab re-entrant corners placed under the top mat of steel.
 - Top and bottom longitudinal bars to be hooked.
- E. Welding of reinforcing steel will not be permitted unless specifically shown on drawings.
- F. Heat shall not be used in the fabrication or installation of reinforcement.
- G. Reinforcing steel clear cover shall be as follows:
- | | |
|---------------------------|---------------------------------|
| 1. Drilled Shafts | 3" Sides, Bottom |
| 2. Earth-formed Grade Bms | 1-1/2" top, 3" sides, 3" bottom |
| 4. Slab-on Fill | Centered |
- "Exterior Exposure" refer to concrete exposed to earth or weather.

IX. CODES

- A. The General Code used as the basis for structural design is as follows:
- International Building Code 2015 with City of Corpus Christi Amendments.
 - IBC 2018 with Texas Amendments.

X. DESIGN LOADS

- A. Wind Loads:
Wind lateral load on structural frame is based on ASCE 7-10 using the following:
- Basic Wind Speed Ultimate 139 mph
 - Exposure C
 - Risk Category "0" = See ASCE 7-10 for definition.
 - Roof Uti. Net uplift Pressures (EL = 16'-0"; 5'-5")

Zone	
-1	-39.0 psf
1	-68.0 psf
2	-89.7 psf
3	-122.2 psf

Overhang Zone	
-1.1	-68.0 psf
2	-89.7 psf
3	-122.2 psf

XI. TEXAS DEPARTMENT OF WINDSTORM CERTIFICATION

- A. Texas Department of Windstorm Certification
The project is located in Nueces County. All exterior windows, doors, Overhead Roll up Doors, wall coverings, roof coverings and mechanical equipment and their attachment to the main structure must be designed for a component and cladding wind pressure corresponding to a 3-sec gust of 139 mph wind speed Exposure C. I = 1 according to the International Building Code 2018 edition with Texas Windstorm or Wind pressure determine by ASCE 7-16 for a 139 mph 3-sec gust wind speed, Exposure C. Requirements. All products will be required certification stating that the products have been designed and installed for the components and cladding uniform static wind pressure for the aforementioned codes. The sub-contractor shall submit the wind storm product certification, the component and cladding wind pressure product was designed for any manufacture certification in regards to Texas Wind Storm, and the connection requirements for the product to the Engineer or Record. The TDI documentation and shall have details showing fasteners and spacing.

- B. Glazed Exterior openings and doors shall be designed and attached to meet the following wind speed 139 mph, exposure C, and Kd = 1.0 TDI submittals shall include elevations for attachment that specifically show type and spacing of connectors.

C. Texas Windstorm Submittals

The Contractor and Subcontractors must submit products approved by the Texas Department of Insurance of Equal. When submitting an equal Test Reports, Engineered Calculations and Elevations with Attachment Anchorage must be submitted. Any submittal without proper certifications and data proving that the product meets TDI will be rejected.

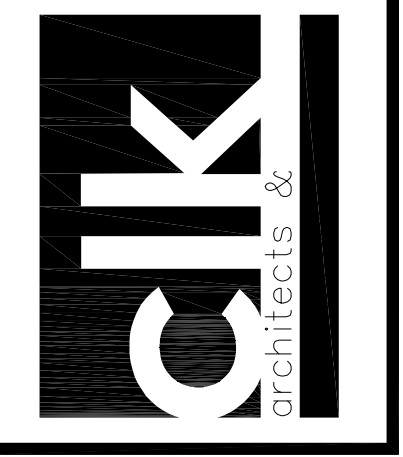
a. OWEN CORNING BERKSHIRE SHINGLES (122.22 psf)
NOA No.: 15-1102.02

D. Texas Windstorm Inspections

1. OWEN CORNING BERKSHIRE SHINGLES
NOA No.: 15-1102.02

NO.	DATE	DESCRIPTION

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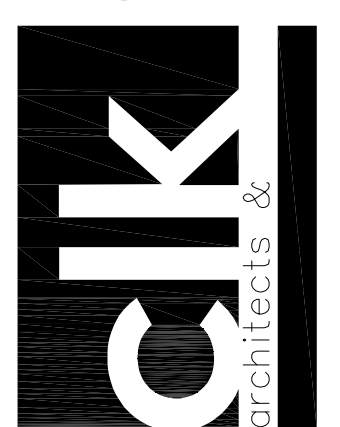
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CORPUS CHRISTI, TEXAS
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DRN. BY KP
CKD. BY GG
DATE 09.08.2020
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of 33 sheets



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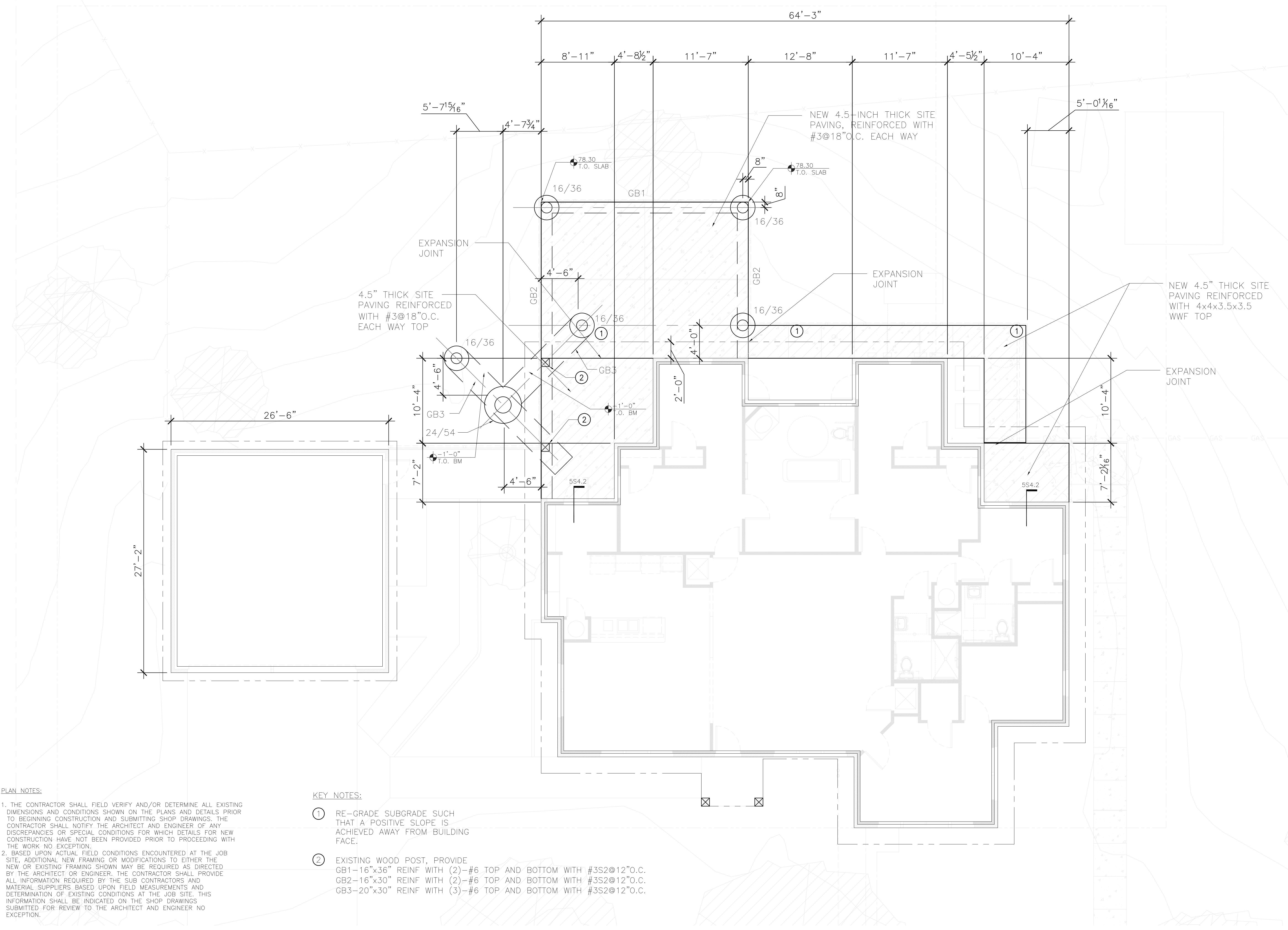


20-102-CLC - REPAIRS TO BUILDINGS 542 & 543

CORPUS CHRISTI, TEXAS
 ROOF PLAN 543 RIVER FOREST

JOB NO.	201939
DRN. BY	KP
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PLAN NOTES:

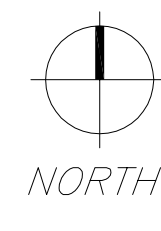
1. THE CONTRACTOR SHALL FIELD VERIFY AND/OR DETERMINE ALL EXISTING DIMENSIONS AND CONDITIONS SHOWN ON THE PLANS AND DETAILS PRIOR TO BEGINNING CONSTRUCTION AND SUBMITTING SHOP DRAWINGS. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT AND ENGINEER OF ANY DISCREPANCIES OR SPECIAL CONDITIONS FOR WHICH DETAILS FOR NEW CONSTRUCTION HAVE NOT BEEN PROVIDED PRIOR TO PROCEEDING WITH THE WORK NO EXCEPTION.
2. BASED UPON ACTUAL FIELD CONDITIONS ENCOUNTERED AT THE JOB SITE, ADDITIONAL NEW FRAMING OR MODIFICATIONS TO EITHER THE NEW OR EXISTING FRAMING SHOWN MAY BE REQUIRED AS DIRECTED BY THE ARCHITECT OR ENGINEER. THE CONTRACTOR SHALL PROVIDE ALL INFORMATION REQUIRED BY THE SUB CONTRACTORS AND MATERIAL SUPPLIERS BASED UPON FIELD MEASUREMENTS AND DETERMINATION OF EXISTING CONDITIONS AT THE JOB SITE. THIS INFORMATION SHALL BE INDICATED ON THE SHOP DRAWINGS SUBMITTED FOR REVIEW TO THE ARCHITECT AND ENGINEER NO EXCEPTION.

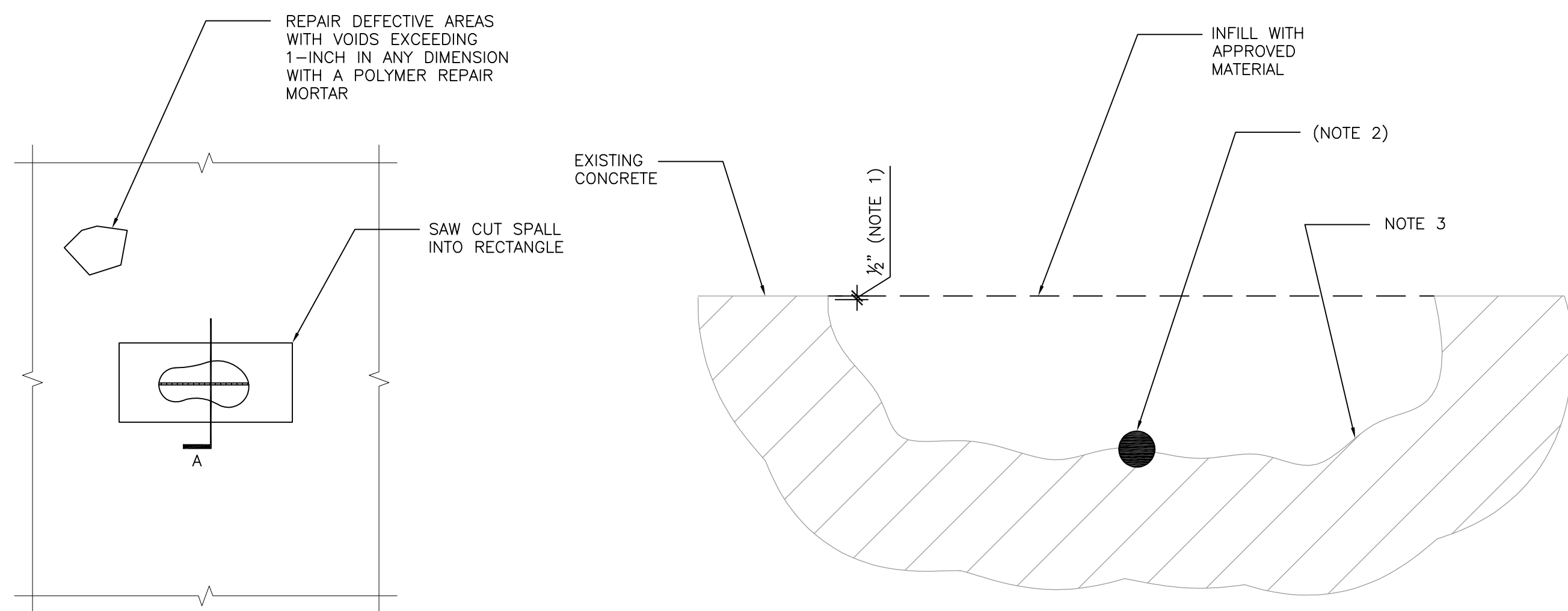
KEY NOTES:

1. RE-GRADE SUBGRADE SUCH THAT A POSITIVE SLOPE IS ACHIEVED AWAY FROM BUILDING FACE.
2. EXISTING WOOD POST, PROVIDE GB1-16"x36" REINF WITH (2)-#6 TOP AND BOTTOM WITH #3S2@12"O.C. GB2-16"x30" REINF WITH (2)-#6 TOP AND BOTTOM WITH #3S2@12"O.C. GB3-20"x30" REINF WITH (3)-#6 TOP AND BOTTOM WITH #3S2@12"O.C.

1 ROOF PLAN 543 RIVER FORREST

SCALE: 3/16" = 1'-0"



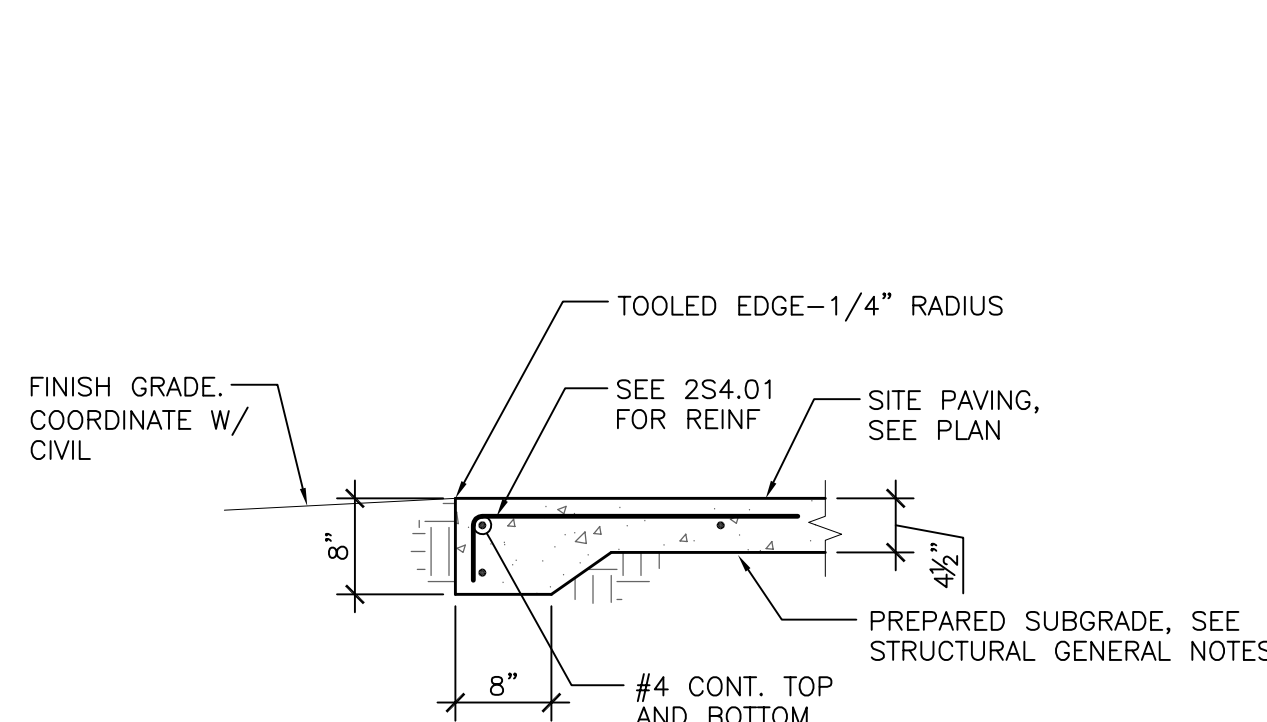


SECTION "A"

- NOTES:**
- REMOVE EXISTING CONCRETE OF AN INCH PAST THE LIMIT OF THE SPALLED CONCRETE AT EACH END, CUT THE SPALLED SURFACE INTO A RECTANGULAR CONFIGURATION. TAKE CARE NOT TO DAMAGE THE EXISTING CONCRETE PAST THE DEFINED LIMITS.
 - REMOVE EXISTING PAINT AND CLEAN EXISTING REINFORCING STEEL IN ACCORDANCE TO ICRI TECHNICAL GUIDELINE No. 03732. THEN MECHANICALLY ABRASE THE REINFORCING USING ONE OF THE INDUSTRY STANDARD METHODS.
 - REMOVE ANY PAINT AND ANY LOOSE CONCRETE, ROUGHEN THE CONCRETE SURFACE TO A 1/4" AMPLITUDE.
 - MEASURE EXISTING DIAMETER OF CLEANED REBAR AND NOTIFY ENGINEER IF FINAL DIAMETER IS LESS THAN 90% OF THE ORIGINAL DIAMETER. IF FINAL DIAMETER IS LESS THAN 90% OF THE ORIGINAL DIAMETER, STRENGTHENING MAY BE REQUIRED.
 - BRUSH ON SIKA ARAMATED-110 EPOCEM OR APPROVED EQUAL PRIOR TO PLACING PATCH MATERIAL.
 - PATCH SPALLED AREA WITH SIKA REPAIR 223 OR APPROVED EQUAL.
 - FOLLOW ALL MANUFACTURERS' RECOMMENDATIONS AND INSTRUCTIONS WITH PATCHING MATERIALS.

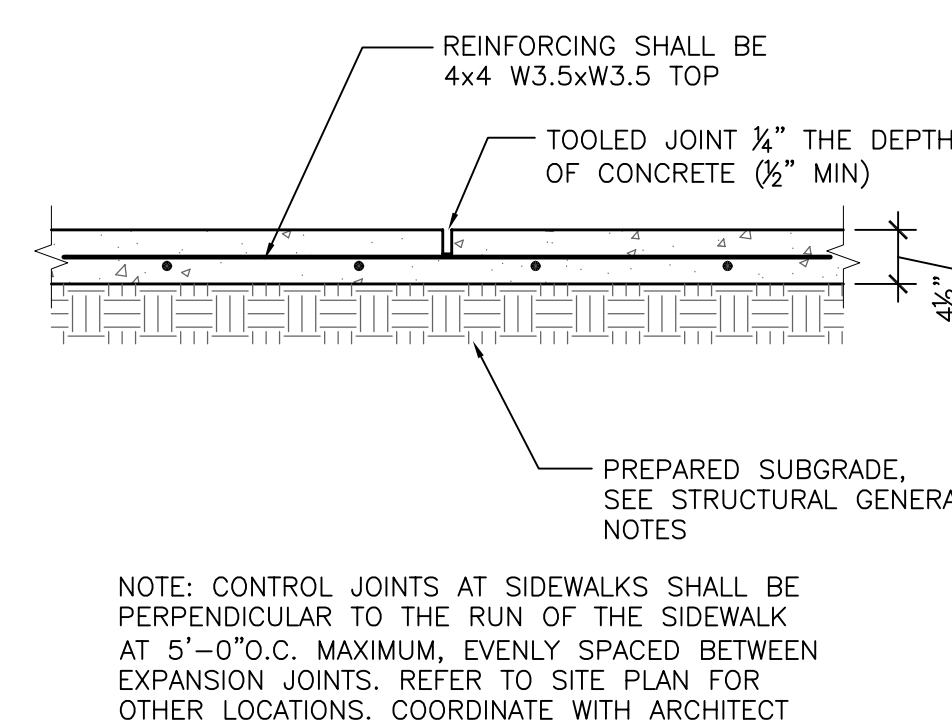
1 FULL CIRCUMFERENCE CONCRETE SURFACE CORROSION REPAIR (SPALLED CONCRETE)

SCALE: 3/4" = 1'-0"



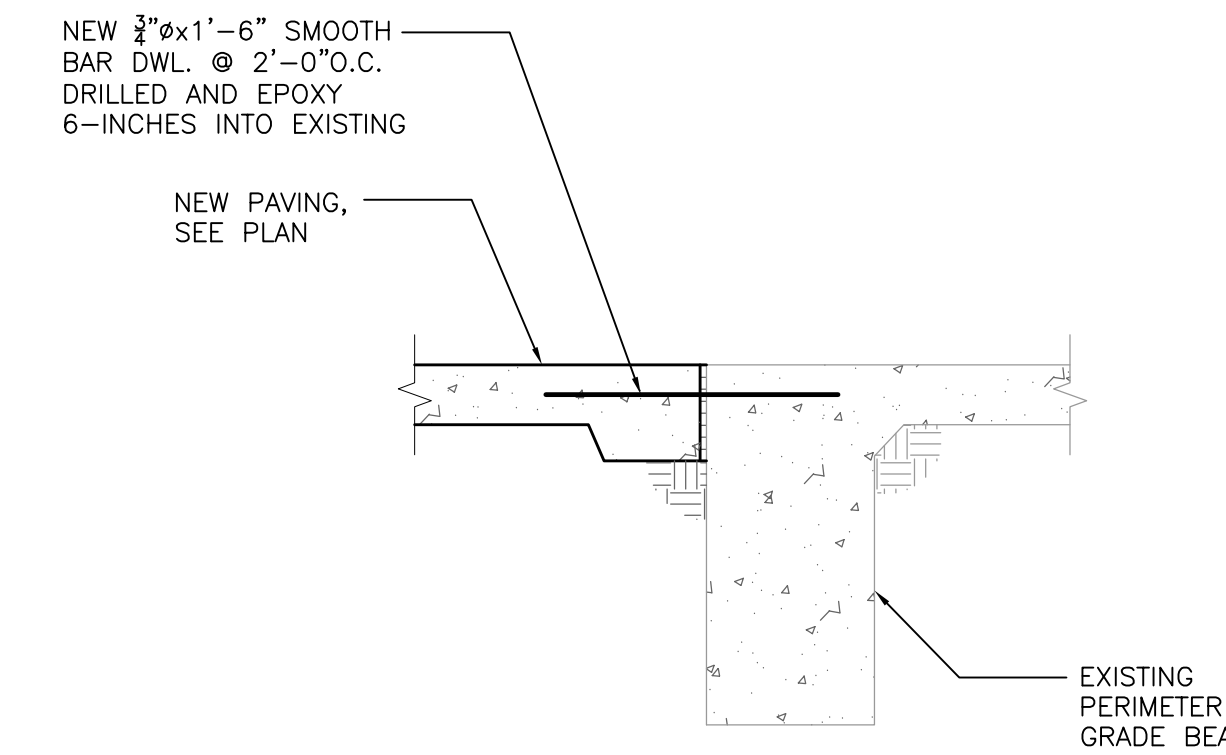
2 SIDEWALK EDGE DETAIL

SCALE: 3/4" = 1'-0"



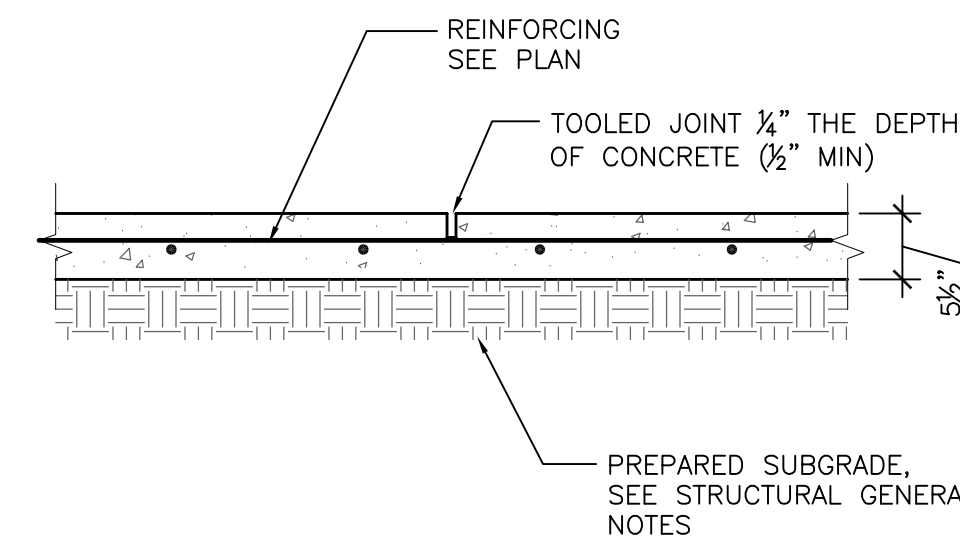
3 SIDEWALK CONTROL JT.

SCALE: 3/4" = 1'-0"



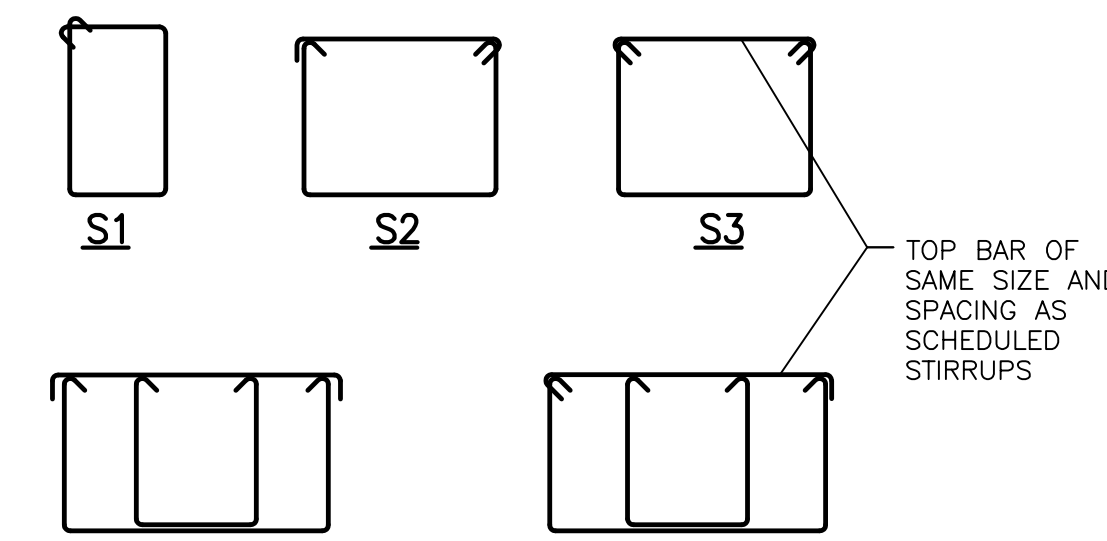
4 DETAIL

SCALE: 3/4" = 1'-0"



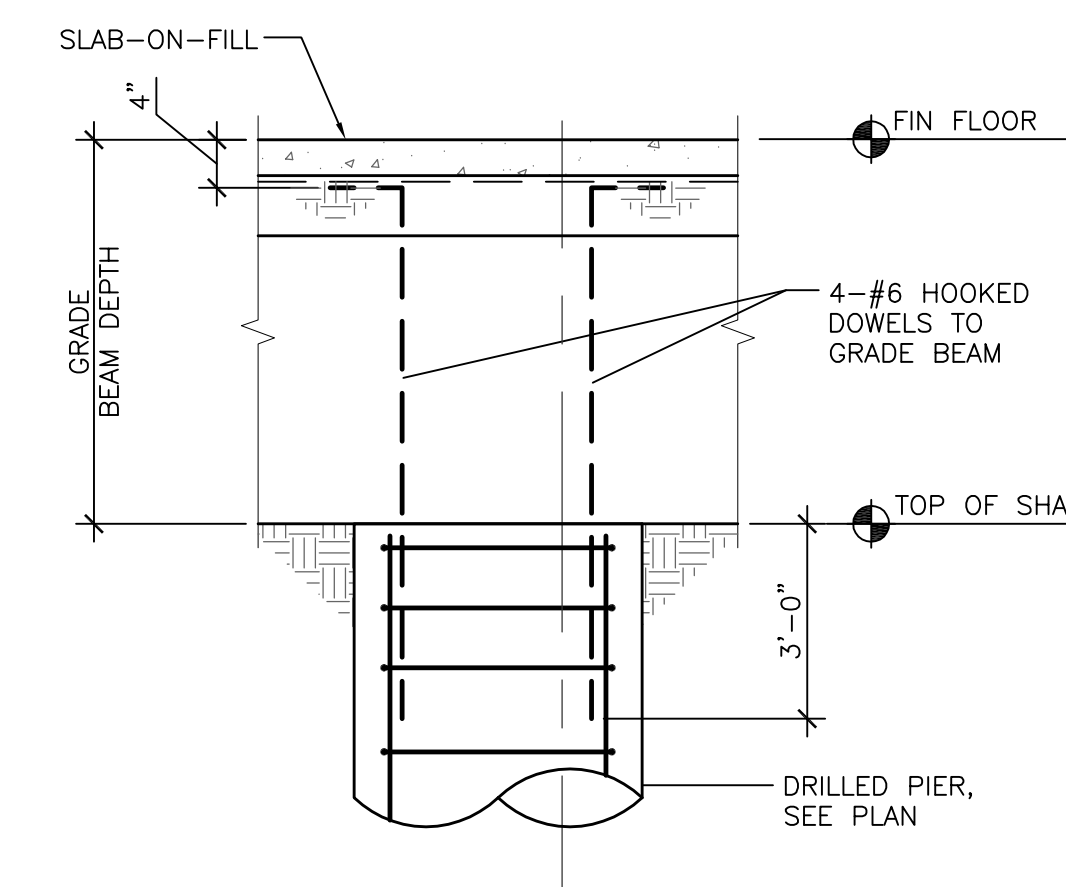
5 SITE DRIVE PAVING

SCALE: 3/4" = 1'-0"



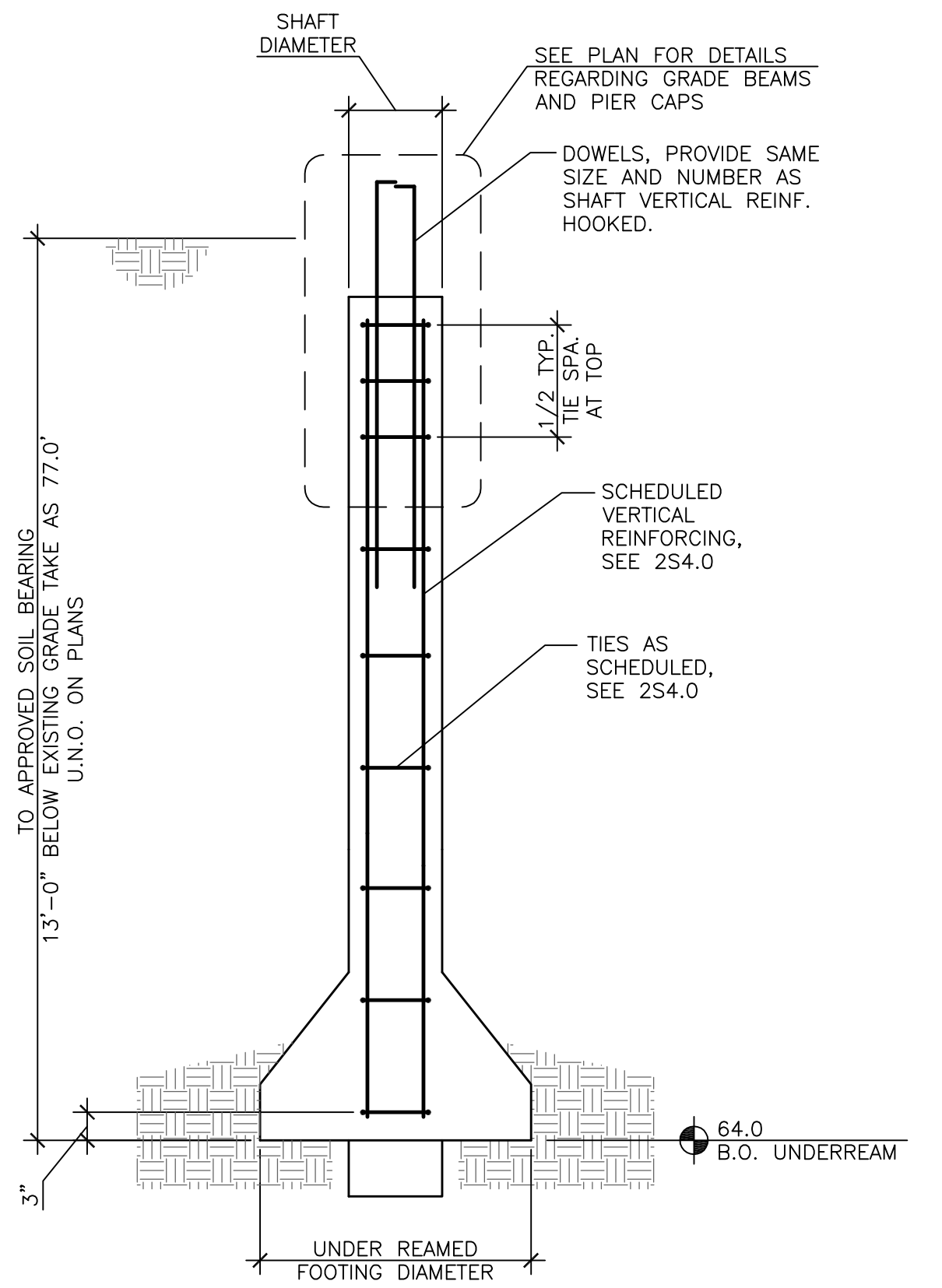
6 TYPICAL STIRRUP TYPES

SCALE: NTS



7 TYPICAL GRADE BEAM TO DRILLED SHAFT DETAIL

SCALE: NTS



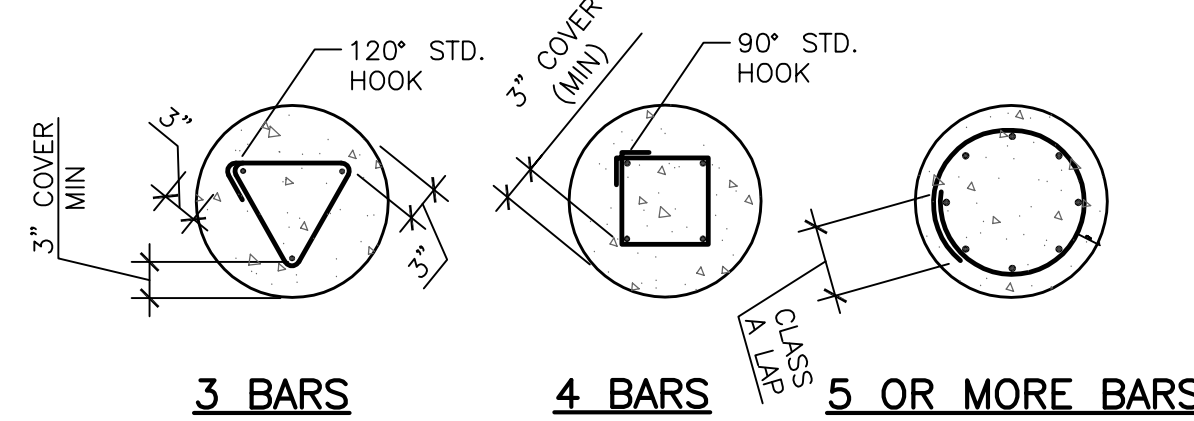
- NOTES:**
- SEE TYPICAL DETAIL "DRILLED SHAFT BAR PLACEMENT PLANS" FOR SHAFT REINFORCING AND BAR PLACEMENT.
 - MINIMUM DEPTH IS BASED ON EXISTING NATURAL GRADE AS SPECIFIED IN SOILS REPORT. TAKEN AS 64 GEOTECHNICAL TECHNICIAN TO CONFIRM BEARING STRATUM DEPTH IN FIELD.

8 TYPICAL DRILLED SHAFT WITH UNDERREAMED FOOTING DETAIL

SCALE: NTS

DRILLED SHAFT UNDERREAM VERTICAL REINFORCEMENT SCHEDULE

SHAFT DIAMETER	VERTICAL BARS	TIES (USE #3@12" U.N.O.)
12	3-#5	#3@12
14,16	4-#6	#3@12
18	5-#6	#3@12
20	6-#6	#3@12
24	8-#6	#3@12
30	12-#6	#3@12
36	10-#7	#3@12



- NOTES:**
- SEE TYPICAL DRILLED PIER WITH UNDERREAMED SHAFT DETAIL.
 - EQUALLY SPACE ALL VERTICAL BARS.

9 DRILLED SHAFT BAR PLACEMENT PLANS

SCALE: NTS

"ld" TENSION DEVELOPMENT LENGTH FOR BEAM, SLAB & WALL REBARS (GRADE 60 UNCOATED BARS-NORMAL WEIGHT CONCRETE)

BAR SIZE	f'c=3000 psi		f'c=4000 psi		f'c=5000 psi	
	ld TOP	ld BOT	ld TOP	ld BOT	ld TOP	ld BOT
#3	1'-9"	1'-4"	1'-6"	1'-2"	1'-5"	1'-1"
#4	2'-4"	1'-10"	2'-1"	1'-7"	1'-10"	1'-5"
#5	3'-0"	2'-3"	2'-7"	2'-0"	2'-4"	1'-9"
#6	3'-7"	2'-9"	3'-1"	2'-4"	2'-9"	2'-1"
#7	5'-2"	4'-0"	4'-6"	3'-6"	4'-0"	3'-1"
#8	5'-11"	4'-7"	5'-2"	3'-11"	4'-7"	3'-6"
#9	6'-8"	5'-2"	5'-9"	4'-5"	5'-2"	4'-0"
#10	7'-6"	5'-10"	6'-6"	5'-0"	5'-10"	4'-6"
#11	8'-4"	6'-5"	7'-3"	5'-7"	6'-6"	5'-0"

- NOTES:**
- "TOP" BARS ARE HORIZONTAL REBARS WITH MORE THAN 12 IN. OF FRESH CONCRETE CAST BELOW THE BARS AT THE DEVELOPMENT LENGTH.
 - "ld" FOR #3 & #4 BARS IN SLAB OR WALL ARE CONSERVATIVE & MAY BE REDUCED TO 0.75 TIMES (FOR #3 BARS) AND 0.94 TIMES (FOR #4 BARS) FROM THE TABULATED VALUES.
 - FOR LIGHT-WEIGHT CONCRETE MULTIPLY THE TABULATED VALUES BY 1.3.

10 TENSION DEVELOPMENT LENGTH FOR BEAM, SLAB AND WALL REBARS

SCALE: NTS

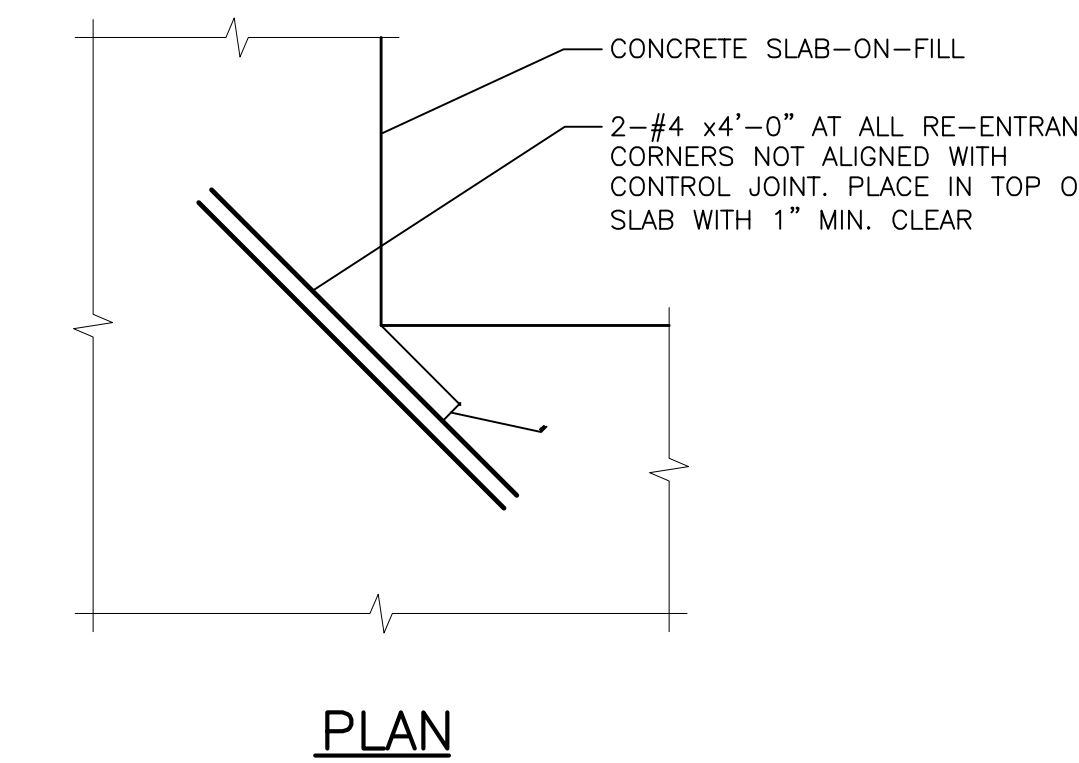
TENSION LAP SPLICES - CLASS B FOR TOP & BOTTOM BARS (GRADE 60 UNCOATED BARS-NORMAL WEIGHT CONCRETE)

BAR SIZE	f'c=3000 psi		f'c=4000 psi		f'c=5000 psi	
	ld TOP	ld BOT	ld TOP	ld BOT	ld TOP	ld BOT
#3	2'-4"	1'-9"	2'-0"	1'-6"	1'-10"	1'-5"
#4	3'-1"	2'-4"	2'-8"	2'-1"	2'-5"	1'-10"
#5	3'-10"	3'-0"	3'-4"	2'-7"	3'-0"	2'-4"
#6	4'-8"	3'-7"	4'-0"	3'-1"	3'-7"	2'-9"
#7	6'-9"	5'-2"	5'-10"	4'-6"	5'-3"	4'-0"
#8	7'-9"	5'-11"	6'-8"	5'-2"	6'-0"	4'-7"
#9	8'-8"	6'-8"	7'-6"	5'-9"	6'-9"	5'-2"
#10	9'-10"	7'-6"	8'-6"	6'-6"	7'-7"	5'-10"
#11	10'-11"	8'-4"	9'-5"	7'-3"	8'-5"	6'-6"

- NOTE:**
- FOR CLASS "A" SPLICE (PERMITTED ONLY WHEN NOT MORE THAN HALF THE BARS SPLICED & SPLICES STAGGERED BY THE DISTANCE OF SPLICE LENGTH), USE SAME AS "ld" = TENSION DEVELOPMENT LENGTH TABLE.

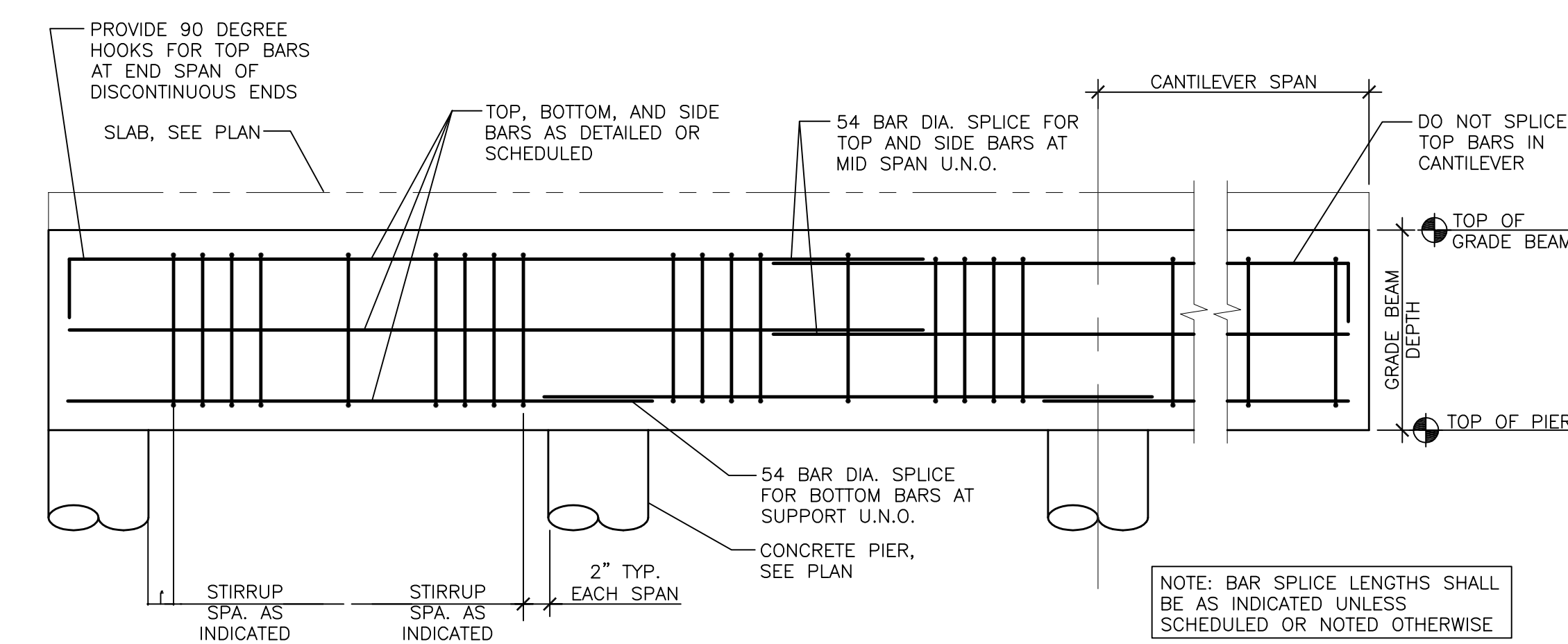
11 TENSION LAP SPLICES - CLASS B FOR TOP AND BOTTOM BARS

SCALE: NTS



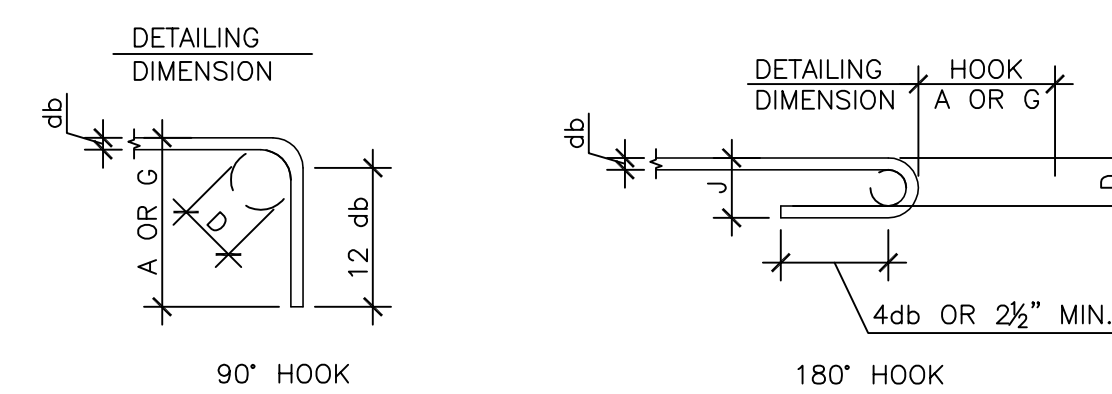
12 TYPICAL SLAB-ON-FILL RE-ENTRANT CORNER REINFORCING DETAIL

SCALE: NTS



13 GRADE BEAM PLACEMENT REINFORCING TYPICAL DETAIL

SCALE: NTS



14 TYPICAL DETAIL END HOOK TYPES

SCALE: NTS

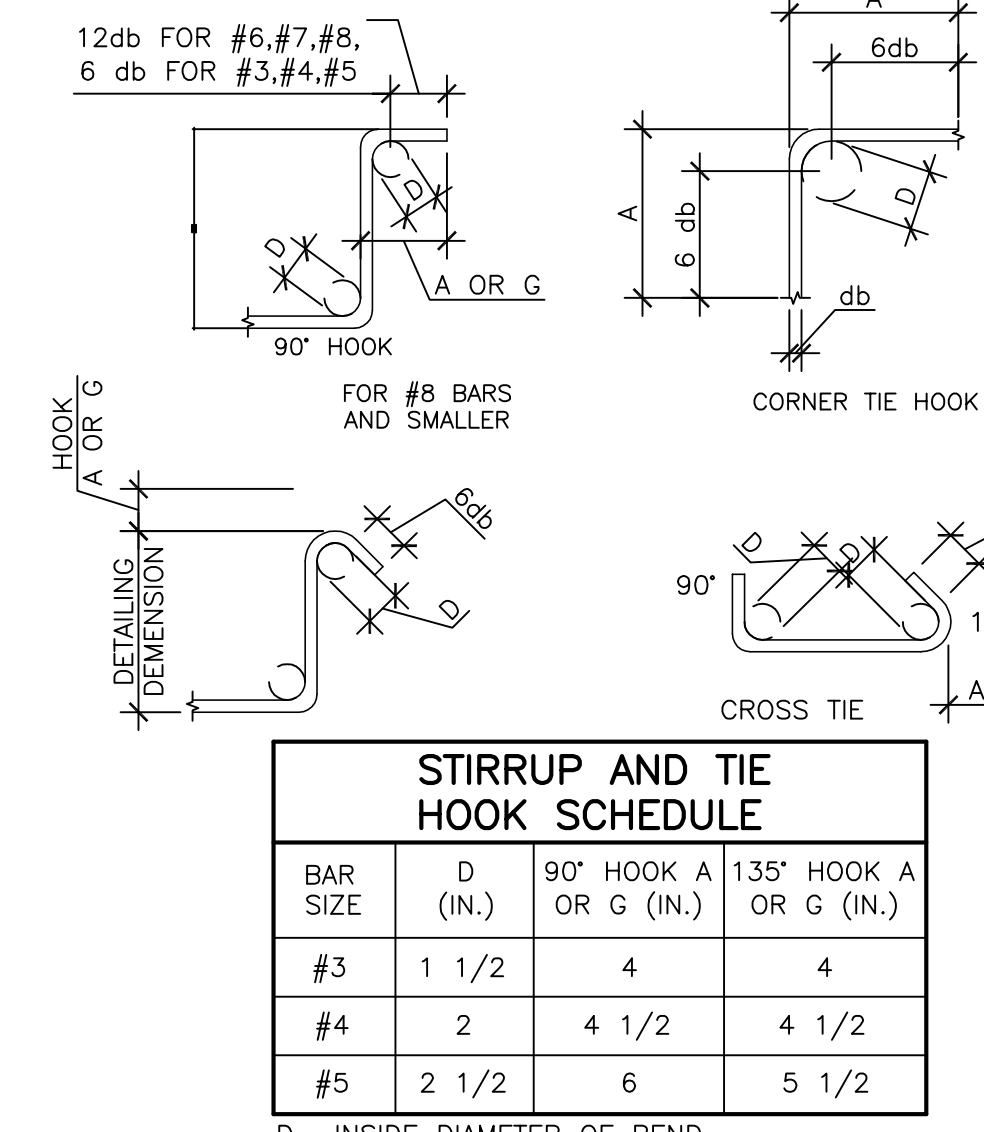
RECOMMENDED END HOOKS, ALL GRADES

BAR SIZE	FINISHED BEND DIAMETER D (IN.)	180° HOOK		90° HOOK	
		A OR G (IN.)	J (IN.)	A OR G (IN.)	A OR G (IN.)
#3	2 1/2	5	3	6	6
#4	3	6	4	8	8
#5	3 3/4	7	5	10	10
#6	4 1/2	8	6	12	12
#7	5 1/2	10	7	14	14
#8	6	11	8	16	16
#9	9 1/2	15	11 3/4	19	19
#10	10 1/2	17	13 1/4	22	22
#11	12	19	14 3/4	24	24
#14	18 1/2	27	21 3/4	31	31
#18	24	36	28 1/2	41	41

D= INSIDE DIAMETER OF BEND

15 TYPICAL DETAIL STIRRUP AND TIE HOOK TYPES

SCALE: NTS



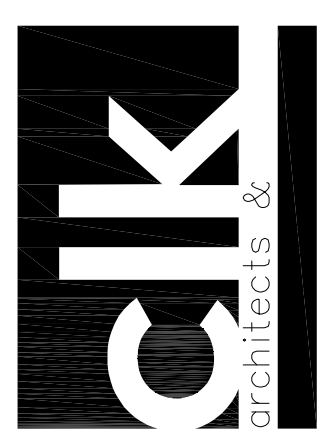
STIRRUP AND TIE HOOK SCHEDULE

BAR SIZE	D (IN.)	90° HOOK A OR G (IN.)	135° HOOK A OR G (IN.)
#3	1 1/2	4	4
#4	2	4 1/2	4 1/2
#5	2 1/2	6	5 1/2

D= INSIDE DIAMETER OF BEND



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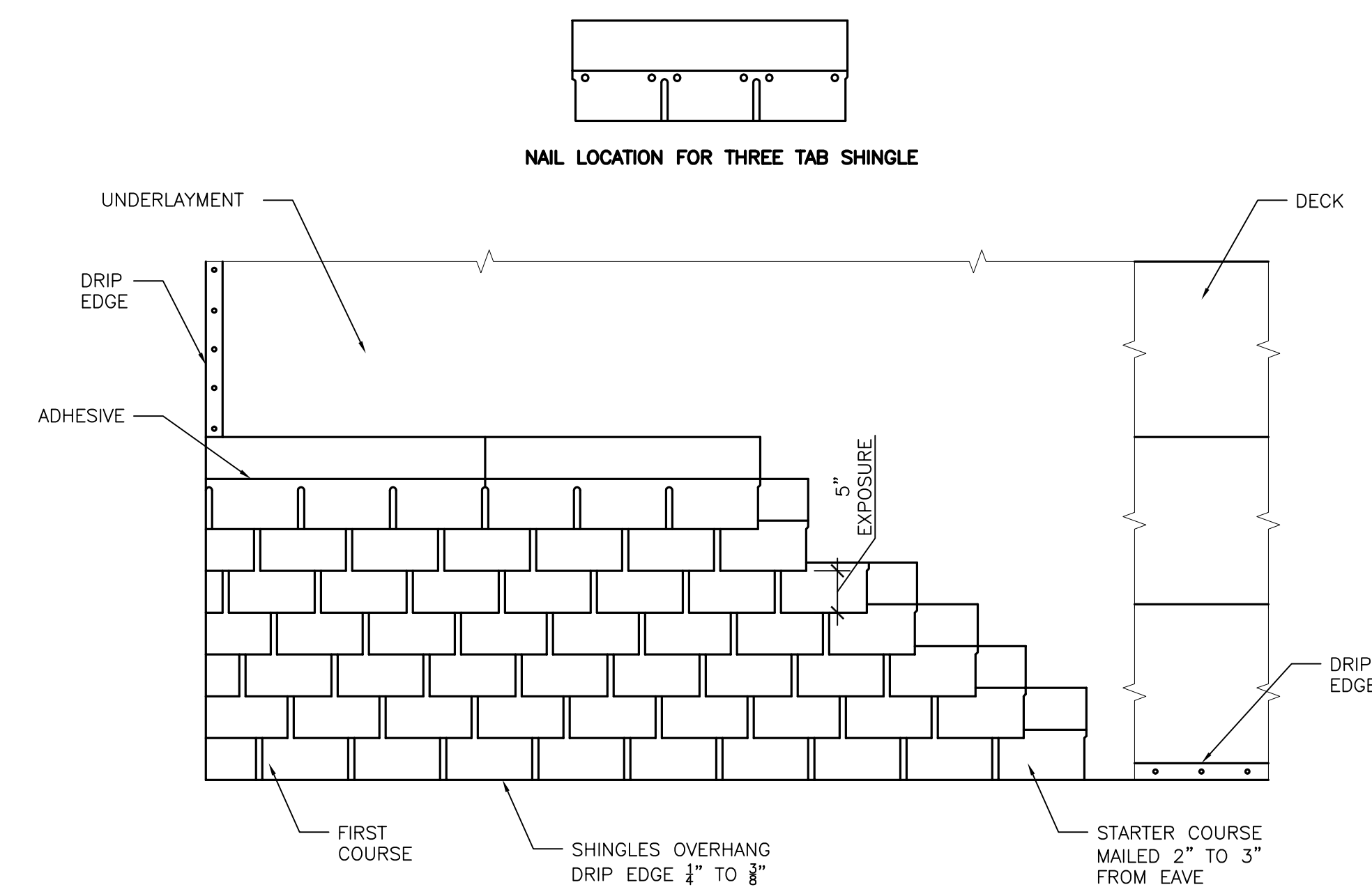


20-102-CLC - REPAIRS TO BUILDINGS 542 & 543

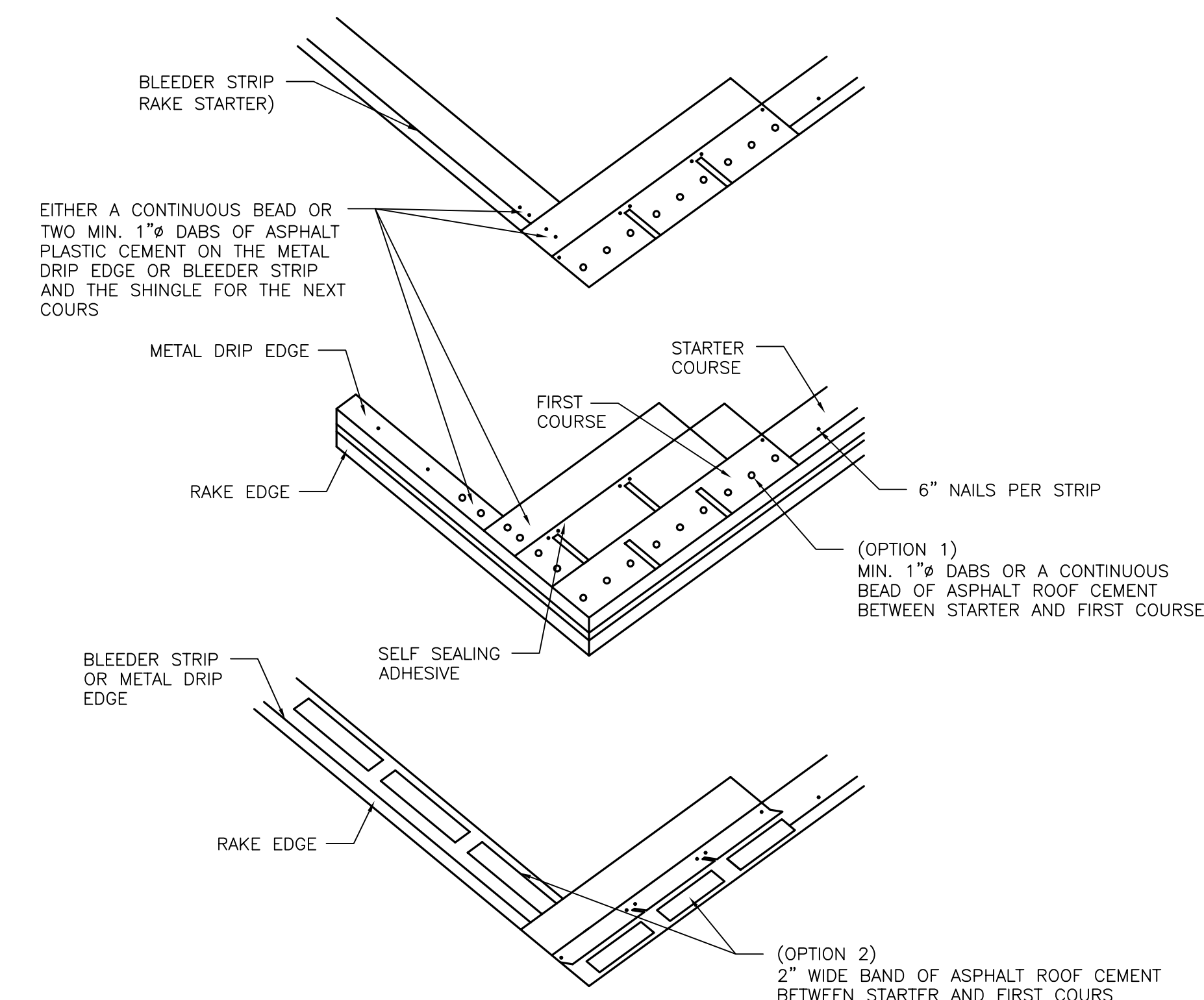
CORPUS CHRISTI, TEXAS
 TYPICAL FOUNDATION DETAILS

JOB NO.	201939
DRN. BY	KP
CKD. BY	GG
DATE	09.08.2020
REVISIONS	
mark	date
▲	
▲	
▲	
▲	

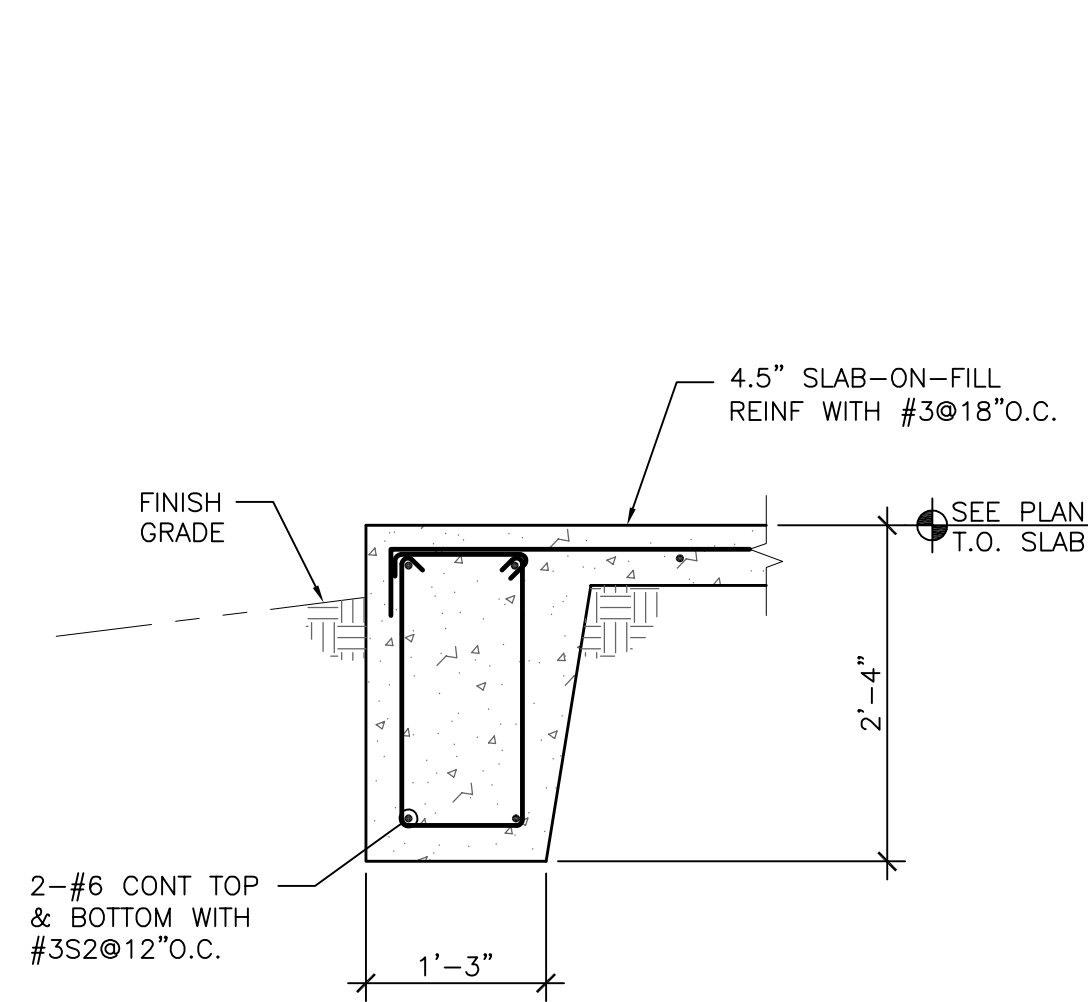
SHEET NUMBER
S4.2
 of 33 sheets



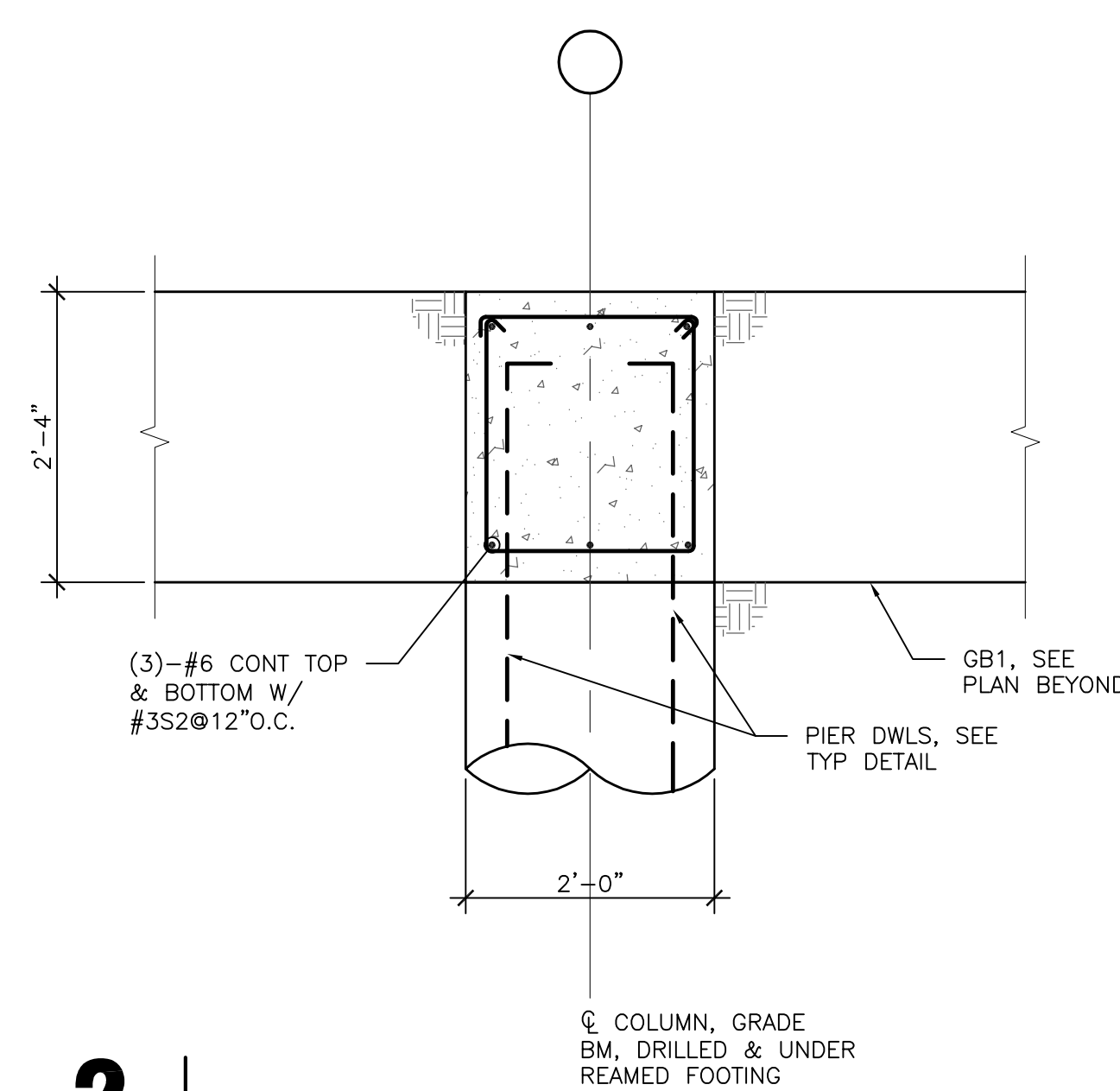
COMPOSITION SHINGLE APPLICATION



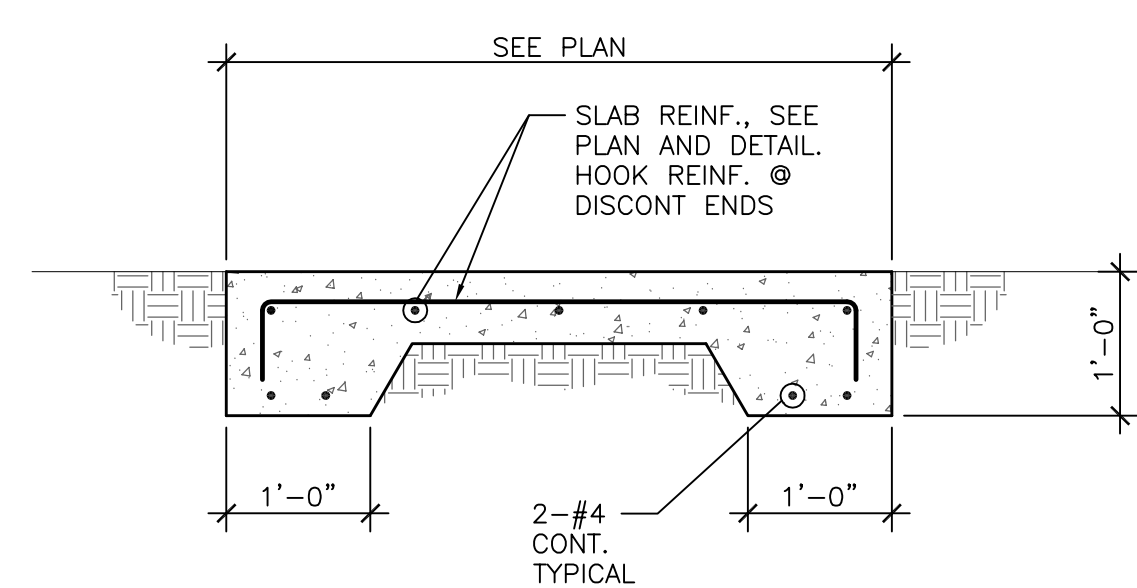
COMPOSITION SHINGLE APPLICATION
 UNLESS NOTED OTHERWISE BY MANUFACTURER



1 **DETAIL**
 SCALE: 3/4" = 1'-0"

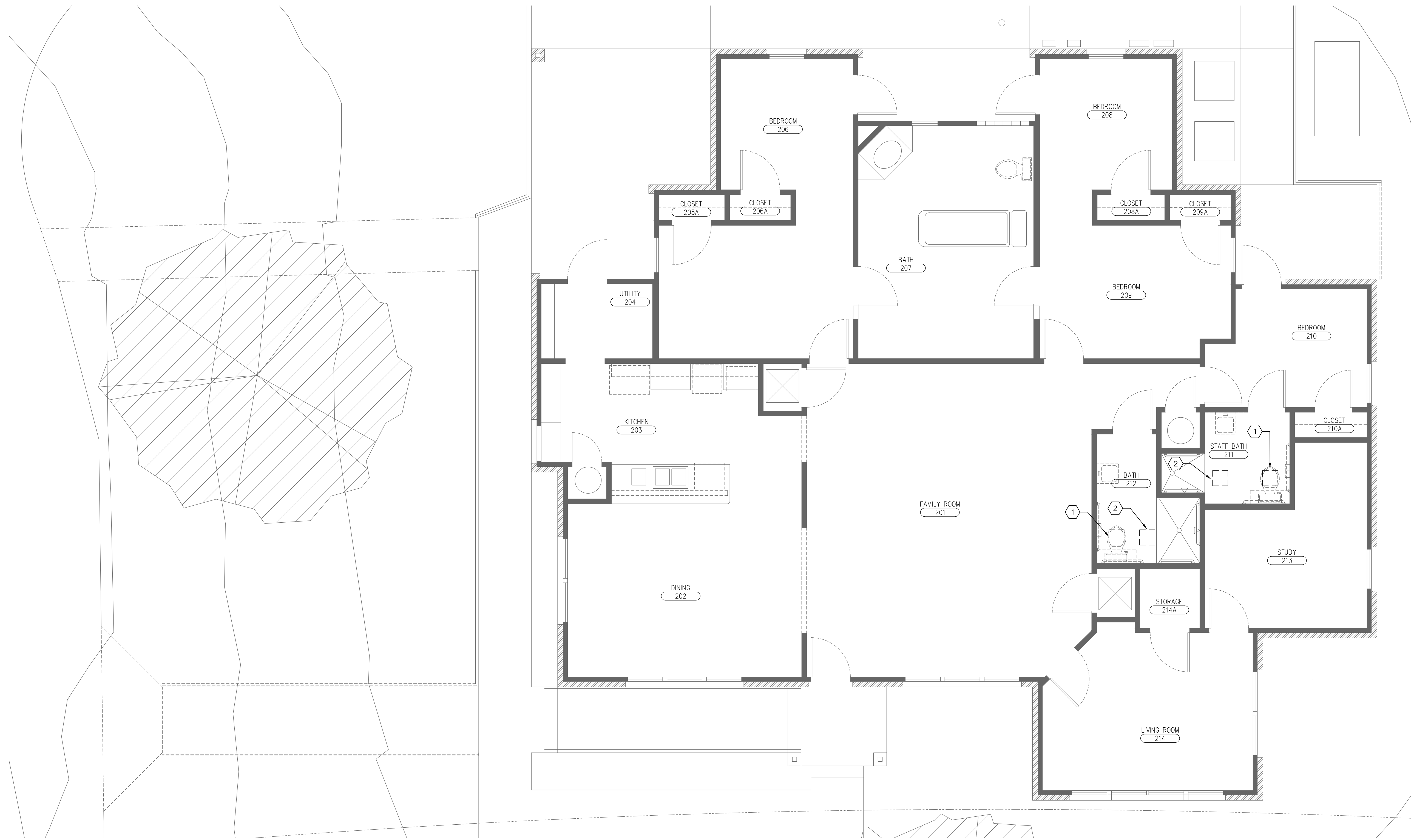


2 **DETAIL**
 SCALE: 3/4" = 1'-0"



3 **DETAIL**
 SCALE: 3/4" = 1'-0"

4 **DETAIL**
 SCALE: 3/4" = 1'-0"



1 CASTLE RIVER - HVAC DEMOLITION PLAN
 M-1.1 SCALE: 1/4"=1'-0"

HVAC DEMOLITION KEYED NOTES:

- ① REMOVE EXISTING EXHAUST FAN.
- ② REMOVE AND REPLACE EXISTING FAN/HEATER/LIGHT WITH NEW.



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20-102-CLC - REPAIRS TO BUILDINGS 542 & 543

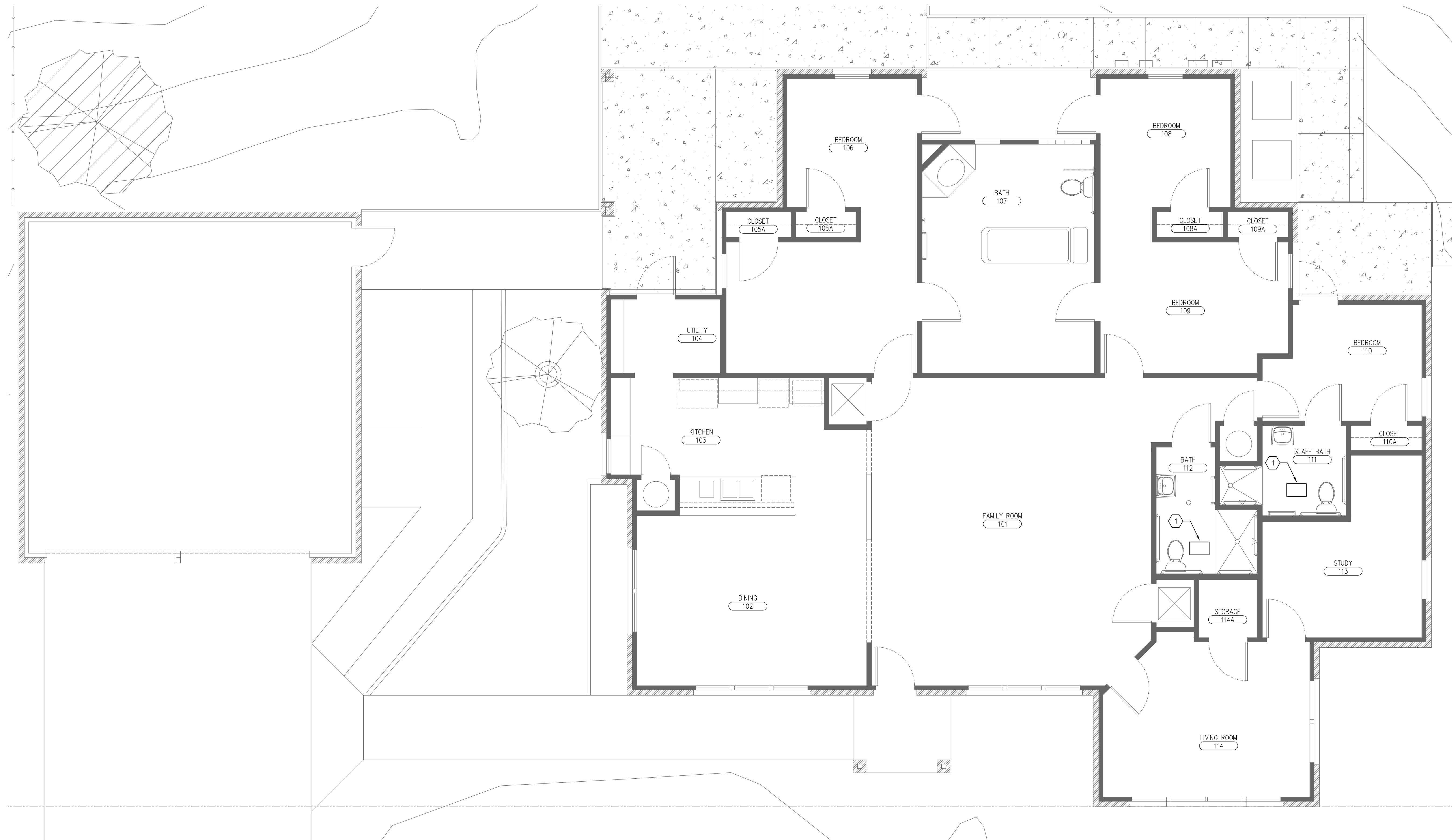
CORPUS CHRISTI, TEXAS
CASTLE RIVER - HVAC DEMOLITION PLAN

JOB NO.	201939
DRN. BY	DJ
CKD. BY	DJ
DATE	09 25 2020
REVISIONS	
mark	date
▲	
▲	
▲	
▲	



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 10637 Leopard Street
 Corpus Christi, TX 78410
 Phone: (361) 504-4074
 Email: dlara@iecme.com

SHEET NUMBER
M-1.1
 of 33 sheets



1 RIVER FOREST - HVAC PLAN
 M-2.0 SCALE: 1/4"=1'-0"

HVAC KEYED NOTES:

- ① PROVIDE NEW FAN/HEATER/LIGHT, NUTONE 765H110L OR EQUIVALENT. CONNECT EXHAUST FAN TO EXISTING EXHAUST DUCT.



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20-102-CLC - REPAIRS TO BUILDINGS 542 & 543

CORPUS CHRISTI, TEXAS
 RIVER FOREST - HVAC PLAN

JOB NO.	201939
DRN. BY	DL
CKD. BY	DL
DATE	09 25 2020
REVISIONS	
mark	date
▲	
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▲	
▲	



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SHEET NUMBER
M-2.0
 of 33 sheets

MECHANICAL SYMBOL LEGEND

	ELEVATION/SECTION VIEW NUMBER
	SHEET NUMBER
	DRAWING/DETAIL NUMBER
	AIR DEVICE ANNOTATION
	KEYED NOTE ANNOTATION
	MECHANICAL EQUIPMENT
	CEILING SUPPLY DIFFUSER
	CEILING RETURN AIR GRILLE
	CEILING EXHAUST AIR REGISTER
	SIDEWALL GRILLE/REGISTER
	RECTANGULAR DUCTWORK
	ROUND DUCTWORK
	SLOPED/VERTICALLY OFFSET DUCTWORK
	EXISTING DUCTWORK
	SUPPLY DUCTWORK RISE OR DROP
	RETURN DUCTWORK RISE OR DROP
	EXHAUST DUCTWORK RISE OR DROP
	OPPOSED BLADE DAMPER
	PARALLEL BLADE DAMPER
	BACKDRAFT DAMPER
	BUTTERFLY DAMPER - RECTANGULAR
	BUTTERFLY DAMPER - RECTANGULAR
	MOTORIZED DAMPER
	FIRE DAMPER
	SMOKE DAMPER
	COMBINATION FIRE/SMOKE DAMPER
	DUCT ACCESS DOOR
	FLEXIBLE INSULATED DUCTWORK
	CONDENSATE DRAIN PIPING
	REFRIGERANT PIPING
	CHILLED WATER SUPPLY PIPING
	CHILLED WATER RETURN PIPING
	CONDENSER WATER SUPPLY PIPING
	CONDENSER WATER RETURN PIPING
	HOT WATER SUPPLY PIPING
	HOT WATER RETURN PIPING
	LOW PRESSURE STEAM PIPING
	MEDIUM PRESSURE STEAM PIPING
	STEAM CONDENSATE RETURN PIPING
	PIPE RISE OR DROP
	PIPE BRANCH ON TOP OR BOTTOM
	SHUTOFF VALVE
	THERMOSTAT
	TEMPERATURE SENSOR
	HUMIDISTAT
	RELATIVE HUMIDITY SENSOR
	SMOKE DETECTOR
	STATIC PRESSURE SENSOR
	ROOM PRESSURE MONITOR
	PRESSURE SENSOR

MECHANICAL ABBREVIATION

Ø	ROUND
A/E	ARCHITECT/ENGINEER
A/C	AIR CONDITIONING
ACCU	AIR COOLED CONDENSING UNIT
AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
AMP	AMPERAGE
APD	AIR PRESSURE DROP
ARI	AIR CONDITIONING AND REFRIGERATION INSTITUTE
ASHRAE	AMERICAN SOCIETY OF HEATING, REFRIGERATION, AND AIR CONDITIONING ENGINEERS
ASME	AMERICAN SOCIETY OF MECHANICAL ENGINEERS
BDD	BACKDRAFT DAMPER
BHP	BRAKE HORSEPOWER
BTU	BRITISH THERMAL UNIT
BTUH	BTU PER HOUR
CC	COOLING COIL
CFM	CUBIC FEET PER MINUTE
COMP	COMPRESSOR
COND	CONDENSER
DB	DRY BULB
DDC	DIRECT DIGITAL CONTROLS
DEG	DEGREE
DIS	DISCHARGE
DP	DEW POINT TEMPERATURE
DX	DIRECT EXPANSION
EAT	ENTERING AIR TEMPERATURE
E/A	EXHAUST AIR
EAT	EXHAUST AIR TEMPERATURE
EER	ENERGY EFFICIENCY RATIO
ESP	EXTERNAL STATIC PRESSURE
EVAP	EVAPORATOR
EWT	ENTERING WATER TEMPERATURE
FC	FULL LOAD CAPACITY
FLA	FULL LOAD AMPS
FFI	FINS PER INCH
FFM	FEET PER MINUTE
FFS	FEET PER SECOND
FT	FEET
GA	GAUGE
GAL	GALLONS
GPM	GALLONS PER MINUTE
HC	HEATING COIL
HP	HORSEPOWER
HVAC	HEATING, VENTILATION, & AIR CONDITIONING
HX	HEAT EXCHANGER
HZ	HERTZ
IO	INPUT/OUTPUT
IAQ	INDOOR AIR QUALITY
IBC	INTERNATIONAL BUILDING CODE
IECC	INTERNATIONAL ENERGY CONSERVATION CODE
IEER	INTEGRATED ENERGY EFFICIENCY RATIO
IFC	INTERNATIONAL FIRE CODE
IFGC	INTERNATIONAL FUEL GAS CODE
IMEC	INTERNATIONAL MECHANICAL CODE
IPC	INTERNATIONAL PLUMBING CODE
IRC	INTERNATIONAL RESIDENTIAL CODE
IN	INCH
IPLV	INTEGRATED PART LOAD VALUE
KW	KILOWATT
LAT	LEAVING AIR TEMPERATURE
LBS	POUNDS
LC	LATENT COOLING
LWT	LEAVING WATER TEMPERATURE
M/A	MIXED AIR
MAT	MIXED AIR TEMPERATURE
MAX	MAXIMUM
MBD	MANUAL BALANCING DAMPER
MBH	THOUSAND BTU PER HOUR
MCA	MINIMUM CIRCUIT AMPACITY
MERV	MINIMUM EFFICIENCY REPORTING VALUE
MIN	MINIMUM
MOPP	MAXIMUM OVER CURRENT PROTECTION
NC	NOISE CRITERIA
NEC	NATIONAL ELECTRIC CODE
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NPLV	NON-STANDARD PART LOAD VALUE
NPSH	NET POSITIVE SUCTION HEAD
NTS	NOT TO SCALE
O/A	OUTSIDE AIR
OAT	OUTSIDE AIR TEMPERATURE
OPD	OPPOSED BLADE DAMPER
PBD	PARALLEL BLADE DAMPER
PCF	POUND PER CUBIC FEET
PD	PRESSURE DROP
PPM	PARTS PER MILLION
PSI	POUND PER SQUARE INCH
PSIA	POUND PER SQUARE INCH - ABSOLUTE
PSIG	POUND PER SQUARE INCH - GAUGE
PSF	POUND PER SQUARE FOOT
PTAC	PACKAGED TERMINAL AIR CONDITIONER
R/A	RETURN AIR
RAD	RADIATED
RH	RELATIVE HUMIDITY
RAT	RETURN AIR TEMPERATURE
RLA	RUNNING LOAD AMPS
RPM	REVOLUTIONS PER MINUTE
RTU	ROOF TOP UNIT
S/A	SUPPLY AIR
SAT	SUPPLY AIR TEMPERATURE
SC	SENSIBLE COOLING
SCFM	STANDARD CUBIC FEET PER MINUTE
SEER	SEASONAL ENERGY EFFICIENCY RATIO
SMACNA	SHEET METAL AND AIR CONDITIONING CONTRACTOR'S NATIONAL ASSOCIATION
SP	SQUARE
SQ	SQUARE
SS	STAINLESS STEEL
SST	SATURATED SUCTION TEMPERATURE
TAB	TESTING, ADJUSTING, AND BALANCING
TC	TOTAL COOLING
TDH	TOTAL DYNAMIC HEAD
TDI	TEXAS DEPARTMENT OF INSURANCE
TEMP	TEMPERATURE
TSP	TOTAL STATIC PRESSURE
TSTAT	THERMOSTAT
VAV	VARIABLE AIR VOLUME
VFD	VARIABLE FREQUENCY DRIVE
VOLT	VOLTAGE
VRF	VARIABLE REFRIGERANT FLOW
W	WATTS
WB	WET BULB
WC	WATER COLUMN
WG	WATER GAUGE
WPD	WATER PRESSURE DROP

GENERAL HVAC SPECIFICATIONS

GENERAL: THESE DRAWINGS ARE DIAGRAMMATIC AND ARE INTENDED TO REPRESENT THE GENERAL EXTENT OF THE WORK REQUIRED FOR THIS PROJECT. IT IS THE INTENT OF THESE DRAWINGS TO PROVIDE COMPLETE AND FUNCTIONAL MECHANICAL, ELECTRICAL, AND PLUMBING SYSTEMS. PROVIDE ALL NECESSARY SUPERVISION, TESTING, COORDINATION, LABOR, MATERIALS, EQUIPMENT, FIXTURES, DRYAGE, HOISTING, TOOLS, S. MACHINERY AND CONNECTIONS TO UTILITIES FOR THE INSTALLATION OF COMPLETE AND OPERATIONAL MEP SYSTEMS. IF DETAILS OR SPECIAL CONDITIONS ARE REQUIRED IN ADDITION TO THOSE SHOWN ON DRAWINGS, PROVIDE ALL MATERIAL, LABOR, ACCESSORIES AND EQUIPMENT USUALLY FURNISHED WITH SUCH SYSTEMS OR REQUIRED TO COMPLETE THEIR INSTALLATION, WHETHER NOTED ON PLANS OR NOT.

CODES AND STANDARDS: COMPLY WITH ALL LOCAL AND NATIONAL CODES STANDARDS THAT ARE APPLICABLE FOR THE PROJECT LOCATION, INCLUDING BUT NOT LIMITED TO: IRC, IMC, IPC, IFGC, NEC, NFPA, AND ANY APPLICABLE FEDERAL, STATE, COUNTY, CITY AND MUNICIPAL, CODES, ORDINANCES AND REGULATIONS. IN CASE OF A CONFLICT BETWEEN CODES, THE MOST STRINGENT REQUIREMENT SHALL TAKE PRECEDENCE.

LICENSES: ALL CONTRACTORS SHALL HAVE A CURRENT STATE (AND CITY, IF APPLICABLE) LICENSE SUITABLE FOR PERFORMANCE OF THE SCOPE OF WORK UNDER THEIR CONTRACT.

CONTRACT DOCUMENTS: IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CAREFULLY EXAMINE ALL OF THE CONTRACT DOCUMENTS AND TO COMPLY WITH THEM IN EVERY RESPECT. SHOULD THERE BE OMISSIONS OR DISCREPANCIES IN THE DOCUMENTS NOTIFY THE ARCHITECT OR ENGINEER PRIOR TO THE BID DATE SO A WRITTEN CLARIFICATION CAN BE ISSUED. FAILURE TO EXAM ALL THE CONTRACT DOCUMENTS SHALL NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR THE WORK REQUIRED OR BE USED AS THE BASIS FOR ADDITIONAL COMPENSATION.

EXISTING CONDITIONS: IT SHALL BE RESPONSIBILITY OF THE CONTRACTOR TO CAREFULLY EXAMINE THE EXISTING CONDITIONS AT THE PROJECT SITE. CONTRACTOR SHALL ACCOUNT FOR ALL EXISTING CONDITIONS IN THIS BID/PROPOSAL. FAILURE TO FIELD VERIFY THE EXISTING CONDITIONS SHALL NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR THE WORK REQUIRED OR BE USED AS THE BASIS FOR ADDITIONAL COMPENSATION.

MEASUREMENTS: ALL MEASUREMENTS SHALL BE MADE IN THE FIELD OR DERIVED FROM DRAWINGS SHOWING SPECIFIC DIMENSIONS. DO NOT USED "SCALED" DIMENSIONS AS THE BASIS FOR INSTALLATION OF WORK.

COORDINATION: IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE THEIR WORK WITH THE WORK PERFORMED BY OTHER CONTRACTORS SO AS NOT TO DELAY OR DAMAGE ANY PART OF THE OVERALL CONSTRUCTION.

CHANGE ORDERS: ADDITIONAL COMPENSATION WILL NOT BE AWARDED TO THE CONTRACTOR FOR MINOR RELOCATIONS OR DEVIATIONS FROM THE PLANS. A CHANGE IN THE CONTRACT PRICE WILL ONLY BE ALLOWED FOR ADDITIONS TO OR CHANGES TO THE ORIGINAL DESIGN INTENT WHEN ONLY WITH WRITTEN APPROVAL FROM THE ARCHITECT OR OWNER. OMISSION OF PERTINENT OR SPECIFIC DETAILS FROM THE CONTRACT DOCUMENTS SHALL NOT BE USED AS A BASIS FOR ADDITIONAL COMPENSATION.

PRODUCT AND MATERIALS: ALL MATERIAL AND EQUIPMENT SHALL BE NEW, UNLESS SPECIFICALLY NOTED OTHERWISE, AND SHALL BE OF THE MANUFACTURER'S CURRENT PRODUCTION.

SUBMITTALS: SUBMIT IN TIMELY MANNER FOR ENGINEER'S REVIEW, CUTSHEETS OR SHOP DRAWINGS DESCRIBING ALL MATERIALS, EQUIPMENT, ACCESSORIES, APPURTENANCES, FIXTURES AND SPECIALLY FABRICATED STRUCTURES PROPOSED FOR USE IN THE PERFORMANCE OF THE WORK ON THIS PROJECT. SUBMITTALS SHALL INCLUDE LITERATURE, DRAWINGS, RATINGS TABLES, PERFORMANCE CURVES, AND ANY DETAILS NECESSARY TO PERFORM A THROUGH EVALUATION OF THE PRODUCT SUBMITTED. SUBMITTALS FOR EACH CONTRACTOR WILL BE REVIEWED ONCE. ANY PRODUCT NOT SUBMITTED ON THE FIRST SUBMITTAL WILL NOT BE REVIEWED AND THE CONTRACTOR WILL BE REQUIRED TO PROVIDE THE SPECIFIED PRODUCT. DEVIATIONS FROM CONTRACT DOCUMENTS SHALL BE ENUMERATED ON SEPARATE SHEET AND SO ENTITLED. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR QUANTITY TAKEOFFS.

SUBSTITUTIONS: THE EQUIPMENT AND MATERIALS SPECIFIED REPRESENT A MINIMUM GRADE AND DESIGN. ANY FEATURE INCLUDED AS STANDARD WITH THE MATERIALS SPECIFIED SHALL BE INCLUDED IN ANY SUBSTITUTION. SUBSTITUTIONS OF EQUAL GRADE AND DESIGN MAY BE PERMITTED AND MUST BE SUBMITTED FOR APPROVAL BY THE ENGINEER. THE ENGINEER RESERVES THE RIGHT TO ACCEPT OR REJECT ANY PROPOSED SUBSTITUTION AND HIS JUDGEMENT SHALL BE FINAL. IF A SUBSTITUTION IS DEEMED UNACCEPTABLE, THE CONTRACTOR SHALL FURNISH THE SPECIFIED PRODUCT. IF A SUBSTITUTION IS DEEMED ACCEPTABLE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY COST TO OTHER TRADES ASSOCIATED WITH THE USED OF THE SUBSTITUTED PRODUCT. ALL MATERIALS AND EQUIPMENT SHALL BE SUBJECT TO FINAL ACCEPTANCE BY THE ARCHITECT, OWNER, AND ENGINEER AT THE COMPLETION OF THE PROJECT.

WORKMANSHIP: LABOR SHALL BE PERFORMED BY SKILLED CRAFTSMEN, EXPERIENCED IN THEIR PARTICULAR TRADE. ALL WORK SHALL BE INSTALLED SQUARE AND PLUMB, PARALLEL OR PERPENDICULAR TO BUILDING LINES, WITH ACCESSIBILITY ALLOWED FOR PROPER OPERATION AND MAINTENANCE OF THE BUILDING SYSTEMS. ANY WORK THAT DOES NOT REPRESENT A NEAT AND WORKMANLIKE APPEARANCE SHALL BE REPLACED OR CORRECTED AT THE DIRECTION OF THE ARCHITECT OR ENGINEER AND WITHOUT ANY ADDITIONAL COST TO THE OWNER.

PRODUCT HANDLING: EQUIPMENT AND MATERIAL SHALL BE STORED IN SUCH A MANNER THAT IS IT PROTECTED FROM DAMAGE OR DETERIORATION, DAMAGED EQUIPMENT AND MATERIAL SHALL BE REPAIRED OR REPLACED AT NO ADDITIONAL COST TO THE OWNER PRIOR TO SUBSTANTIAL COMPLETION. TOUCH-UP OR REFINISH DAMAGED SURFACES OF FIXTURES AND EQUIPMENT TO PRESENT A NEW APPEARANCE.

PROTECTION OF ROUGH WORK: ALL OPENINGS OF EVERY DESCRIPTION SHALL BE SECURELY CAPPED OR OTHERWISE PROTECTED AGAINST DEBRIS OR OTHER FOREIGN MATERIAL ENTERING THE SYSTEM UNTIL THE EQUIPMENT OR FIXTURE IS PERMANENTLY ATTACHED.

PAINTING: ALL PIPING, CONDUIT, JUNCTION BOXES, DUCTWORK, AND EQUIPMENT LOCATED WITHIN AN EXPOSED STRUCTURAL SYSTEM SHALL BE PAINTED TO MATCH THE COLOR OF THE STRUCTURE (COLOR TO BE SELECTED BY ARCHITECT).

DEFECTIVE WORK: IF INSPECTION OR TESTING SHOW DEFECTS, SUCH DEFECTIVE WORK OR MATERIALS SHALL BE REPLACED AND REPAIRS MADE AND TEST REPEATED. ALL REPAIRS TO PIPING SHALL BE MADE WITH NEW MATERIAL.

SYSTEM START-UP: UPON COMPLETION OF THE INSTALLATION OF THE WORK, START-UP ALL SYSTEMS AND TEST, BALANCE AND ADJUST ALL SYSTEMS UNTIL THEY ARE FULLY OPERATIONAL AND FUNCTIONING AS INTENDED BY ENGINEER.

CLEANING: AT THE COMPLETION OF THE WORK ALL PARTS OF THE INSTALLATION SHALL BE THOROUGHLY CLEANED. REMOVE ALL RUBBISH OR DEBRIS THAT HAS ACCUMULATED AT THE PROJECT SITE ON A DAILY BASIS.

ROOF PENETRATIONS: ROOF PENETRATIONS SHALL WEATHERPROOFED TO PREVENT LEAKS AND SHALL BE INSTALLED IN ACCORDANCE WITH THE MEANS, METHODS, AND MATERIALS REQUIRED BY THE ROOF WARRANTY (IF APPLICABLE), THE CONTRACTOR SHALL SUBCONTRACT ALL ROOF WORK TO AN ENTITY APPROVED BY THE OWNER OR WARRANTY PROVIDER.

SITE OBSERVATIONS AND PUNCHLIST: THE ENGINEER MAY VISIT PROJECT SITE ON OCCASION FOR THE PURPOSE OF REVIEWING THE WORK FOR GENERAL COMPLIANCE WITH PLANS AND SPECIFICATIONS. THESE REVIEWS SHALL NOT EXTEND ENGINEER'S RESPONSIBILITY INTO THE AREA OF GENERAL CONTRACTOR'S OR MECHANICAL CONTRACTORS' SUPERVISION OR RESPONSIBILITY, NOR SHALL THEY RELIEVE CONTRACTORS' RESPONSIBILITY TO COMPLY WITH THE CONTRACT DOCUMENTS. AFTER SUCH A VISIT, ENGINEER WILL PROVIDE A LISTING OF ITEMS THAT HE HAS OBSERVED THAT REQUIRE MODIFICATION OR CORRECTION. SUCH A LISTING SHALL BE CALLED A "PUNCHLIST". TAKE APPROPRIATE ACTION TO CORRECT ALL PUNCHLIST ITEMS. INFORM ARCHITECT AND ENGINEER IN WRITING OF THE TYPE OF CORRECTIVE ACTION TAKEN.

INSPECTIONS AND CERTIFICATE OF OCCUPANCY: CONTRACTOR SHALL ARRANGE FOR ALL INSPECTIONS OR TESTING REQUIRED BY LOCAL BUILDING OFFICIALS AND STATE AGENCIES. CORRECT DEFICIENCIES REQUIRED TO COMPLY WITH CODES AND STANDARDS TO RECEIVE CERTIFICATE OF OCCUPANCY. UPON SUBSTANTIAL COMPLETION OF THIS PROJECT, SUBMIT WRITTEN EVIDENCE OF COMPLIANCE WITH THE ABOVE TO ARCHITECT. FINAL ACCEPTANCE WILL NOT BE ISSUED AND THE WARRANTY DATE WILL NOT BE ESTABLISHED UNTIL SUCH COMPLIANCE IS DEMONSTRATED.

RECORD DRAWINGS: DURING THE COURSE OF CONSTRUCTION, CONTRACTOR SHALL KEEP AS-BUILT DRAWINGS, CALLED "RECORD DRAWINGS", CONTINUALLY UPDATED ON THE PROJECT SITE. DRAWINGS SHALL INDICATE EXACT LOCATIONS AND DEPTHS OF UNDERGROUND PIPING AND CHANGES IN PIPE ROUTING OR FIXTURE AND EQUIPMENT LOCATIONS. UPON COMPLETION OF PROJECT, TURN RECORD DRAWINGS OVER TO OWNER. SUBMIT WRITTEN EVIDENCE OF COMPLIANCE TO ENGINEER. FINAL ACCEPTANCE WILL NOT BE ISSUED AND THE WARRANTY DATE WILL NOT BE ESTABLISHED UNTIL SUCH COMPLIANCE IS DEMONSTRATED.

OWNER INSTRUCTION AND O&M MANUALS: UPON SUBSTANTIAL COMPLETION OF THIS PROJECT, THOROUGHLY INSTRUCT OWNER'S REPRESENTATIVE IN THE OPERATION AND CARE OF ALL SYSTEMS, FIXTURES, AND EQUIPMENT. INSTRUCTION MAY BE PROVIDED ON MORE THAN ONE DAY, BUT SHALL NOT BE LESS THAN TWO HOURS FOR HVAC SYSTEMS, TWO HOURS FOR ELECTRICAL SYSTEMS, AND TWO HOURS FOR PLUMBING SYSTEMS. TRAVEL TIME TO AND FROM PROJECT SHALL NOT BE CREDITED TO INSTRUCTION TIME.

WARRANTY: CONTRACTOR SHALL WARRANT ALL MATERIAL, EQUIPMENT, AND THE INSTALLATION FOR A MINIMUM OF ONE YEAR, ANY DEFECTS IN EQUIPMENT OR WORKMANSHIP WITHIN ONE YEAR FROM THE DATE OF ACCEPTANCE SHALL BE CORRECTED AT NO COST TO THE OWNER. THIS WARRANTY SHALL INCLUDE LABOR AND MATERIAL. PROVIDE ANY ADDITIONAL WARRANTY THAT IS FURNISHED BY THE EQUIPMENT MANUFACTURERS.

EXISTING CONDITIONS GENERAL NOTE

THESE DRAWINGS WERE PREPARED BASED UPON LIMITED, NON-DESTRUCTIVE, SITE INSPECTIONS OF THE FACILITY; THE DRAWINGS DO REFLECT A GOOD REPRESENTATION OF THE EXISTING CONDITIONS AND THE INTENDED SCOPE OF WORK, HOWEVER, THEY MAY NOT SHOW ALL EXISTING CONDITIONS. IT IS INTENDED FOR THE WORK INDICATED ON THESE DRAWINGS TO REPRESENT COMPLETE, FUNCTIONAL BUILDING SYSTEMS. THE CONTRACTOR IS ADVISED TO VISIT PROJECT SITE PRIOR TO BID, FIELD VERIFY THE EXISTING CONDITIONS, AND ACCOUNT FOR THOSE CONDITIONS IN THEIR PROPOSAL. FAILURE TO FIELD VERIFY THE EXISTING CONDITIONS PRIOR TO BID WILL NOT RELIEVE THE CONTRACTOR FROM COMPLETING THE INTENT OF THE DESIGN AS REFLECTED ON THE DRAWINGS. THE CONTRACTOR SHALL PROVIDE ALL MATERIAL AND LABOR REQUIRED, WHETHER SPECIFICALLY INDICATED OR NOT ON THE DRAWINGS, REQUIRED FOR THE PROPER INSTALLATION AND FUNCTION OF THE SYSTEMS. NOTIFY THE ARCHITECT/ENGINEER OF ANY DISCREPANCIES OR QUESTIONS PRIOR TO BID.

DEMOLITION GENERAL NOTE

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER DISPOSAL OF ALL EQUIPMENT AND MATERIAL REMOVED DURING DEMOLITION. THE OWNER RETAINS THE RIGHT OF FIRST REFUSAL TO ANY AND ALL EQUIPMENT AND MATERIAL REMOVED PRIOR TO DISPOSAL.

HVAC SPECIFICATIONS

PIPING:

- A. CONDENSATE DRAIN PIPING SHALL BE TYPE 'M' HARD DRAWN COPPER WITH SOLDERED JOINTS.
- B. REFRIGERANT PIPING SHALL BY TYPE 'L' ACR HARD DRAWN COPPER TUBING WITH BRAZED JOINTS. ALL ELBOWS SHALL BE LONG RADIUS TYPE, ALL FITTINGS SHALL BE WROUGHT COPPER STRAIGHTLINE TYPE.
- C. HYDRONIC PIPING SHALL BE SCHEDULE 40 BLACK STEEL PIPE WITH WELDED JOINTS. HYDRONIC PIPING 1-1/2" AND SMALL MAY HAVE THREADED JOINTS.

DUCTWORK:

DUCTWORK SHALL BE G-90 GALVANIZED SHEETMETAL, FABRICATED AND INSTALLED PER LATEST EDITION OF SMACNA DUCT CONSTRUCTION STANDARD. DUCT SIZES SHALL BE AS INDICATED ON DRAWINGS. DUCT SIZES INDICATED ARE CLEAR INSIDE DIMENSIONS. ALL DUCTWORK SHALL BE SEALED AT EVERY JOINT WITH DUCT SEALANT.

PRIMARY SUPPLY DUCTWORK SHALL BE CONSTRUCTED AT 4" W.G. PRESSURE CLASS. SECONDARY SUPPLY DUCTWORK, OUTSIDE AIR DUCTWORK, RETURN AIR DUCTWORK, AND EXHAUST AIR DUCTWORK SHALL BE CONSTRUCTED AT 2" W.G. PRESSURE CLASS.

ALL DUCTWORK SHALL BE LEAKAGE TESTED: DUCTWORK SHALL HAVE A MAXIMUM LEAKAGE OF 1/2% OF DESIGN AIRFLOW AT RATED PRESSURE.

FLEXIBLE INSULATED DUCT:

FLEXIBLE INSULATED DUCT SHALL HAVE A SEAMLESS INTERIOR ACOUSTICALLY RATED CPE LINER ENCAPSULATING A SPRING STEEL HELIX. THE INNER AIR CORE SHALL BE COVERED WITH R-6.0 FIBERGLASS INSULATION WRAPPED WITH A METALLIZED, SPIRALLY REINFORCED VAPOR BARRIER. THE DUCT SHALL BE ATTACHED TO BELL-MOUTH STARTING COLLARS HAVING INTEGRAL BUTTERFLY BALANCING DAMPERS. INSULATION SHIELD AND DIE-FORMED MOUNTING GROOVE. ALL OF GALVANIZED STEEL CONSTRUCTION. THE FLEXIBLE DUCT SHALL BE ATTACHED TO THE STARTING COLLAR AND DIFFUSER NECK WITH 1/2" STAINLESS STEEL LOCKING BANDS OR MACHINE TIGHTENED PLASTIC BANDS AND FOIL FACE DUCT TAPE. MANUALLY TIGHTENED PLASTIC BANDS WILL NOT BE ACCEPTED.

INSULATION:

- A. DUCTWORK CONCEALED ABOVE CEILINGS SHALL BE INSULATED WITH 2" THICK, 1 PCF DENSITY, FIBERGLASS DUCTWRAP INSULATION, MINIMUM R-8.0. DUCTWORK THAT IS EXPOSED TO VIEW SHALL BE INSULATED WITH 2" THICK DUCTLINER, MINIMUM R-6.0.
- B. REFRIGERANT PIPING SHALL BE INSULATED WITH 1.5" THICK ELASTOMERIC CLOSED CELL FOAM PIPE INSULATION.
- C. CONDENSATE DRAIN LINES SHALL BE INSULATED WITH 1/2" THICK ELASTOMERIC CLOSED CELL FOAM PIPE INSULATION.
- D. PIPE INSULATION EXPOSED OUTDOORS SHALL BE PROVIDED WITH AN ALUMINUM JACKET.
- E. PIPE INSULATION EXPOSED INDOORS OR IN MECHANICAL ROOMS SHALL BE PROVIDED WITH A PVC JACKET.

AIR DEVICES:

AIR DEVICES SHALL BE ALUMINUM CONSTRUCTION WITH A WHITE FINISH, UNLESS SPECIFICALLY NOTED OTHERWISE. REFER TO AIR DEVICES SCHEDULE FOR SIZE, TYPE, AND MOUNTING REQUIREMENTS.

FLEXIBLE DUCT CONNECTIONS:

FLEXIBLE DUCT CONNECTIONS SHALL BE FABRICATED FROM 20 OUNCE CANVAS TREATED TO RETARD MILDEW AND BURNING.

FLEXIBLE PIPE CONNECTIONS:

FLEXIBLE PIPE CONNECTIONS SHALL STAINLESS STEEL BRAIDED HOSES; CONNECTOR SHALL BE AS REQUIRED TO CONNECT TO PIPING OR EQUIPMENT.

FIRE DAMPERS:

FIRE DAMPERS SHALL BE CURTAIN TYPE DYNAMIC RATED, WITH GALVANIZED STEEL BLADES AND FRAME, MINIMUM 12" LONG SLEEVE, 30T SS CLOSING SPRING, AND 160°F FUSIBLE LINK. PROVIDE 1.5HR RATED FIRE DAMPER FOR WALLS RATED AT 2 HRS OR LESS AND 3HR RATED FIRE DAMPER FOR WALLS RATED GREATER THAN 2 HRS. PROVIDE TYPE A STYLE FIRE DAMPERS FOR INDIVIDUAL DUCT RUNOUTS TO DIFFUSERS; PROVIDE TYPE B STYLE FIRE DAMPER IN LOW PRESSURE MAIN DUCTS; PROVIDE TYPE C STYLE FIRE DAMPER IN MEDIUM PRESSURE DUCTS, WHERE APPLICABLE. PROVIDE HIGH VELOCITY RATED, GRILLE STYLE, OUT OF WALL/FLOOR STYLE, OR TRUE ROUND STYLE FIRE DAMPERS. WHERE FIRE DAMPERS ARE SUBJECTED TO HIGH-MOISTURE LAIDEN OR CORROSIVE AIR ENVIRONMENTS, PROVIDE STAINLESS STEEL FIRE DAMPERS.

TEST AND BALANCE:

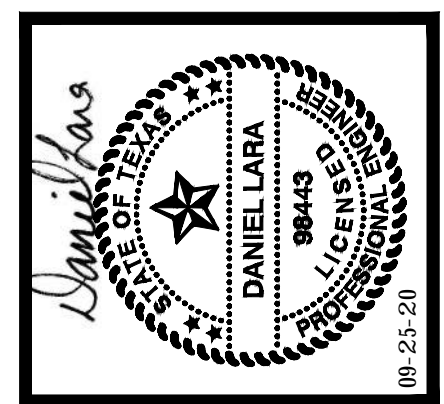
ALL HVAC EQUIPMENT SHALL BE RUN TESTED AND BALANCED BY AN INDEPENDENT, NEBB OR AABC CERTIFIED TEST AND BALANCE CONTRACTOR PRIOR TO SUBSTANTIAL COMPLETION. FURNISH TEST DATA ON NEBB OR AABC APPROVED FORMS FOR ALL EQUIPMENT TO ENGINEER FOR REVIEW.

EQUIPMENT IDENTIFICATION:

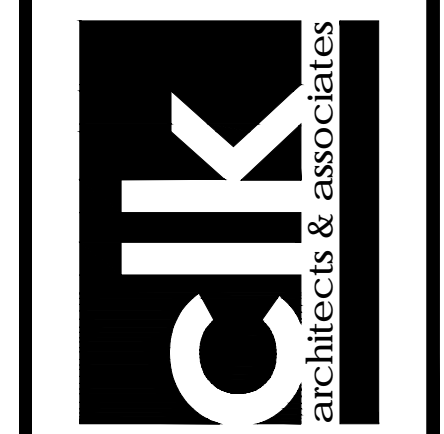
- A. NAMEPLATES: PROVIDE ENGRAVED NYLON NAMEPLATES FOR ALL ELECTRICAL EQUIPMENT. NAMEPLATES SHALL BE MINIMUM 1/16" THICK, 1-1/2" HIGH WITH 1/2" HIGH LETTERS. NAMEPLATES FOR EQUIPMENT ON EMERGENCY POWER SHALL BE RED WITH WHITE LETTERING. NAMEPLATES FOR ALL OTHER EQUIPMENT SHALL BE WHITE WITH BLACK LETTERING.
- B. PIPE MARKERS: PROVIDE PLASTIC LINE MARKERS TO ALL PIPING IDENTIFYING THE SERVICE OF THE PIPE.
- C. VALVE TAGS: PROVIDE ALL VALVES WITH TAGS.

HVAC GENERAL NOTES:

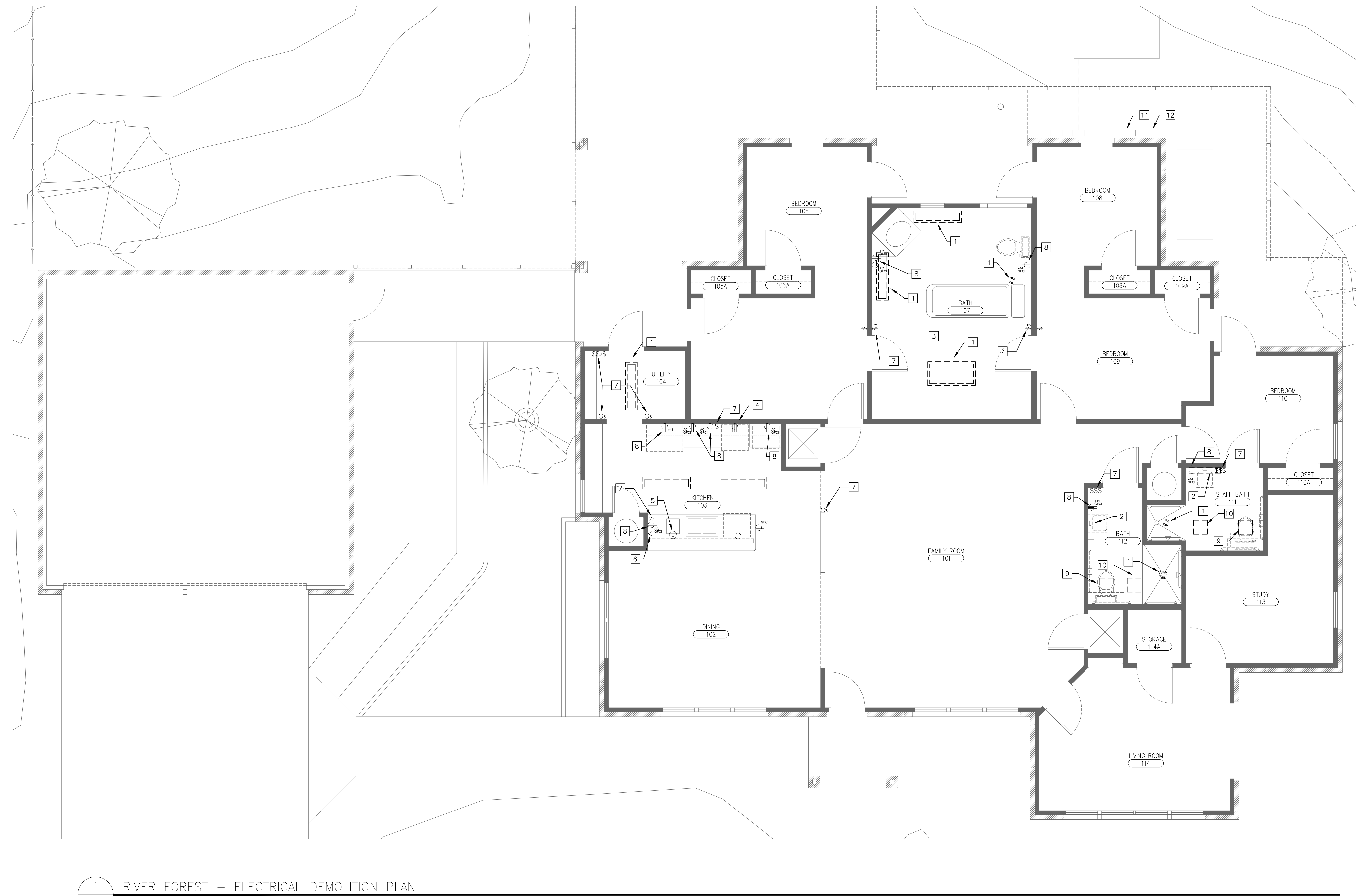
- A. THE MECHANICAL SYSTEM HAS BEEN DESIGNED IN ACCORDANCE WITH THE 2015 INTERNATIONAL BUILDING CODES (INCLUDING THE IMC, IFC, AND IECC) AND LOCAL AMENDMENTS. THE INSTALLATION SHALL CONFORM TO THESE BUILDING CODES AND ALL PERTINENT STATE AND NATIONAL CODES.
- B. CONTRACTOR IS ADVISED TO VISIT THE JOB SITE PRIOR TO BID AND PRODUCTION OF SHOP DRAWINGS, AND FAMILIARIZE HIMSELF WITH THE SITE CONDITIONS AND FACILITIES, TO ACCOMMODATE ANY DIMENSIONAL DIFFERENCES BETWEEN OR AMONG THE DRAWINGS, SPECIFICATIONS, EXISTING CONDITIONS AND THE ACTUALLY PURCHASED EQUIPMENT CONNECTED FOR PIPING, DUCT, CABLE AND CONDUITS. ALL MODIFICATIONS MUST BE PRE-APPROVED BY THE DESIGN ENGINEER OR OWNER'S REPRESENTATIVE. FAILURE TO DO SO WILL NOT RELEASE THE CONTRACTOR FROM THE RESPONSIBILITY OF FURNISHING AND INSTALLING COMPLETE AND WORKING SYSTEMS COVERED BY THIS CONTRACT.
- C. IN CASE CONFLICT OCCURS BETWEEN OR AMONG DRAWINGS SPECIFICATION, CODES, STANDARDS AND LOCAL GOVERNMENT REGULATIONS, THE MOST STRINGENT REQUIREMENT SHALL TAKE PRECEDENCE; ANY MODIFICATIONS NECESSARY MUST BE PRE-APPROVED BY THE ENGINEER.
- D. DUCT SIZES ARE INSIDE CLEAR DIMENSIONS FOR ALL DUCTWORK. INSULATE DUCTWORK PER THE SPECIFICATIONS. IF SPECIFICATIONS ARE NOT PROVIDED, DUCTWORK SHALL BE CONSTRUCTED OF GALVANIZED SHEETMETAL AND SHALL BE INSULATED WITH 2" THICK, 1.0 PCF FIBERGLASS DUCTWRAP INSULATION WITH FSK VAPOR BARRIER (MINIMUM R-6.0).
- E. MOUNT THERMOSTATS, HUMIDISTATS, SENSORS, AND ALL CONTROL DEVICES INTENDED TO BE ACCESSED BY BUILDING OCCUPANTS AT 48" AFF TO THE TOP OF THE DEVICE EXCEPT WHERE SPECIFICALLY NOTED OTHERWISE. CONFIRM THERMOSTAT LOCATIONS WITH ARCHITECT PRIOR TO INSTALLATION.
- F. SUBMIT DIMENSIONED SHOP DRAWINGS FOR DUCTWORK, PIPING, AND EQUIPMENT PRIOR TO FABRICATION. SHOP DRAWINGS SHALL BE AT A MINIMUM SCALE OF 1/8" = 1'-0" OR THE SCALE OF THE DRAWING, WHICHEVER IS GREATER. FOR AREAS REQUIRING MORE DETAIL, SUCH AS MECHANICAL ROOMS, THE MINIMUM SCALE OF THE SHOP DRAWINGS SHALL BE 1/4" = 1'-0". REFER TO ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR DIMENSIONS, CLEARANCES, AND LOCATIONS OF AIR DEVICES IN CEILINGS. SHOP DRAWINGS SHALL SHOW THE EXACT SIZES AND LOCATIONS OF ALL ROOF AND WALL OPENINGS REQUIRED PRIOR TO CONSTRUCTION. STRUCTURAL REINFORCEMENT FRAMING AROUND ALL OPENINGS SHALL BE PROVIDED AS REQUIRED. MECHANICAL SYSTEMS SHALL NOT BE INSTALLED UNTIL SHOP DRAWINGS ARE APPROVED BY THE ENGINEER.
- G. HVAC EQUIPMENT SUBMITTED OTHER THAN SCHEDULED MANUFACTURER & MODEL SHALL MEET THE REQUIRED PERFORMANCE, BE PROVIDED WITH THE SAME OPTIONS & ACCESSORIES, AND SHALL NOT EXCEED THE PHYSICAL DIMENSIONS DUE TO SPACE LIMITATIONS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONFIRM THAT THESE REQUIREMENTS ARE MET.
- H. ALL PIPING PENETRATIONS OF FIRE-RATED BARRIERS SHALL BE PROTECTED WITH UL LISTED FIRE BLOCKING MATERIAL AND/OR SEALANT.
- I. MANUAL VOLUME DAMPERS INSTALLED IN RECTANGULAR DUCTWORK SHALL BE OPPOSED BLADE TYPE. MANUAL VOLUME DAMPERS INSTALLED IN ROUND DUCTWORK SHALL BE BUTTERFLY TYPE. BALANCING DAMPERS IN EXTERNALLY INSULATED DUCTWORK SHALL BE PROVIDED WITH A STAND-OFF BRACKET ON THE DAMPER OPERATOR TO EXTEND OPERATOR HANDLE TO THE OUTSIDE OF THE INSULATION.
- J. PROVIDE ACCESS TO ALL CONTROL, MOTORIZED, BALANCING AND FIRE DAMPERS. PROVIDE ACCESS DOORS IN DUCTS AND CEILINGS WHERE NECESSARY.
- K. PROVIDE SLEEVES AND FLASHINGS REQUIRED FOR PIPING AND DUCTWORK PENETRATIONS; PROVIDE ESCUTCHEON PLATES FOR ALL PIPING PENETRATING FINISHED WALLS & CEILINGS.



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20-102-CLC - REPAIRS TO BUILDINGS 542 & 543
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1 RIVER FOREST - ELECTRICAL DEMOLITION PLAN
 E-1.0 SCALE: 1/4"=1'-0"

ELECTRICAL DEMOLITION KEYED NOTES:

- 1 REMOVE AND REPLACE EXISTING LIGHT FIXTURE WITH NEW. REFER TO 1/E-2.0 FOR NEW LIGHT FIXTURE TYPE AND LOCATION. REMOVE CONDUIT & WIRING BACK TO NEAREST JUNCTION BOX WHERE LIGHT FIXTURES ARE RELOCATED.
- 2 REMOVE AND REINSTALL EXISTING VANITY LIGHT TO ALLOW FOR PAINTING OF RESTROOM WALL.
- 3 RECONFIGURE LIGHT SWITCHING ARRANGEMENT. REFER TO 1/E-2.0.
- 4 REMOVE AND REPLACE EXISTING RANGE/OVEN RECEPTACLE. NEW RECEPTACLE SHALL BE PROPERLY SECURED TO WALL.
- 5 REMOVE DIRECT ELECTRICAL CONNECTION TO GARBAGE DISPOSAL. PROVIDE NEW RECEPTACLE IN LIEU OF HARD WIRED CONNECTION. PROVIDE CORD AND PLUG FOR GARBAGE DISPOSAL IF NECESSARY.
- 6 REMOVE AND REPLACE EXISTING TELEPHONE OUTLET AND FACEPLATE.
- 7 REPLACE EXISTING LIGHT SWITCHES WITH NEW.
- 8 REMOVE AND REPLACE EXISTING RECEPTACLE AND ASSOCIATED FACEPLATE.
- 9 REMOVE POWER CONNECTION TO EXHAUST FAN THAT IS TO BE REPLACED.
- 10 REMOVE POWER CONNECTION TO FAN/HEATER/LIGHT THAT IS TO BE REPLACED.
- 11 REPAIR EXISTING CONDUIT ROUTED FROM UNDERGROUND TO MAIN DISCONNECT SWITCH. PROVIDE EXPANSION FITTING IN CONDUIT RISER. COORDINATE WORK WITH SITE WORK BEING PERFORMED IN THIS AREA.
- 12 REPAIR EXISTING CONDUIT ROUTED FROM UNDERGROUND TO ELECTRICAL METER ENCLOSURE. PROVIDE EXPANSION FITTING IN CONDUIT RISER. COORDINATE WORK WITH SITE WORK BEING PERFORMED IN THIS AREA. CONTACT POWER COMPANY FOR SHUTDOWN AND RESTORATION OF POWER TO PERFORM THIS WORK.



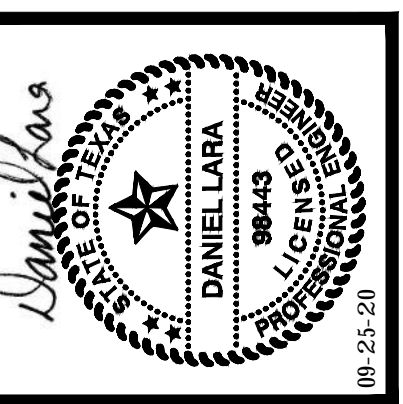
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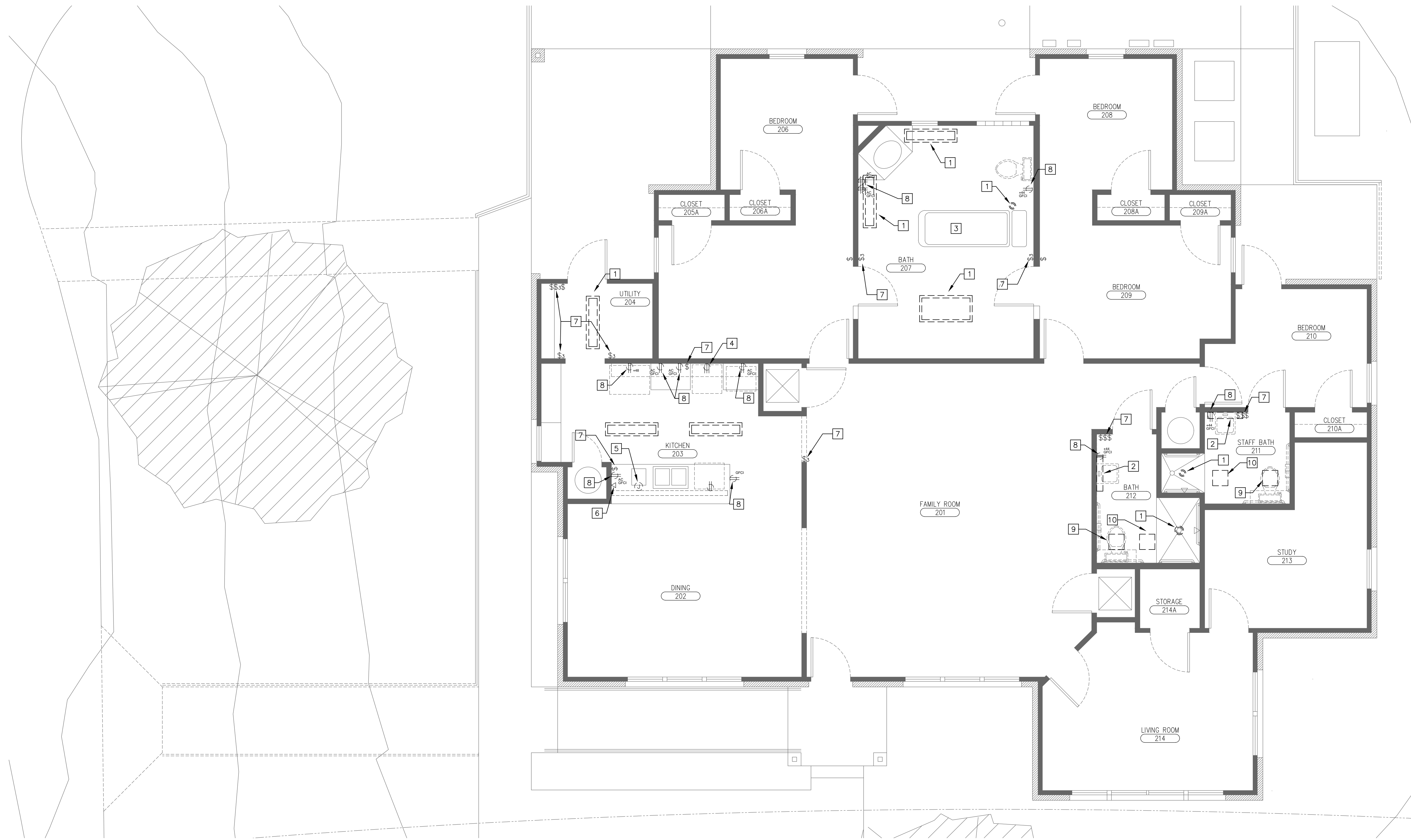
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CORPUS CHRISTI, TEXAS
 RIVER FOREST - ELECTRICAL DEMOLITION PLAN

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JOB NO.	201939
DRN. BY	DL
CKD. BY	DL
DATE	09 25 2020
REVISIONS	
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1 CASTLE RIVER - ELECTRICAL DEMOLITION PLAN
 E-1.1 SCALE: 1/4"=1'-0"

ELECTRICAL DEMOLITION KEYED NOTES:

- 1] REMOVE AND REPLACE EXISTING LIGHT FIXTURE WITH NEW. REFER TO 1/E-2.1 FOR NEW LIGHT FIXTURE TYPE AND LOCATION. REMOVE CONDUIT & WIRING BACK TO NEAREST JUNCTION BOX WHERE LIGHT FIXTURES ARE RELOCATED.
- 2] REMOVE AND REINSTALL EXISTING VANITY LIGHT TO ALLOW FOR PAINTING OF RESTROOM WALL.
- 3] RECONFIGURE LIGHT SWITCHING ARRANGEMENT. REFER TO 1/E-2.1.
- 4] REMOVE AND REPLACE EXISTING RANGE/OVEN RECEPTACLE. NEW RECEPTACLE SHALL BE PROPERLY SECURED TO WALL.
- 5] REMOVE DIRECT ELECTRICAL CONNECTION TO GARBAGE DISPOSAL. PROVIDE NEW RECEPTACLE IN LIEU OF HARD WIRED CONNECTION. PROVIDE CORD AND PLUG FOR GARBAGE DISPOSAL IF NECESSARY.
- 6] REMOVE AND REPLACE EXISTING TELEPHONE OUTLET AND FACEPLATE.
- 7] REPLACE EXISTING LIGHT SWITCHES WITH NEW.
- 8] REMOVE AND REPLACE EXISTING RECEPTACLE AND ASSOCIATED FACEPLATE.
- 9] REMOVE POWER CONNECTION TO EXHAUST FAN THAT IS TO BE REPLACED.
- 10] REMOVE POWER CONNECTION TO FAN/HEATER/LIGHT THAT IS TO BE REPLACED.



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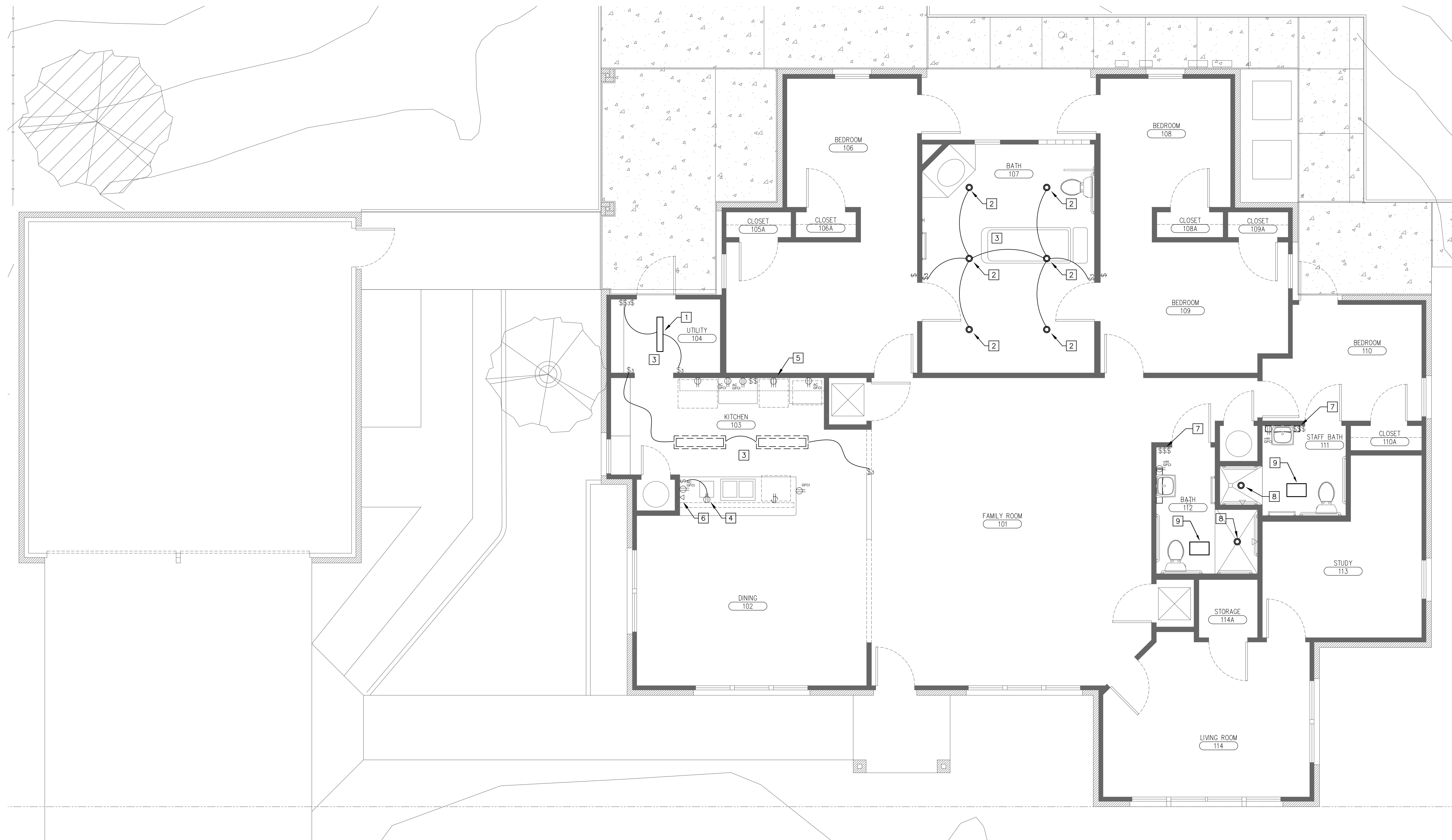
CASTLE RIVER - ELECTRICAL DEMOLITION PLAN

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 of 33 sheets



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1 RIVER FOREST - ELECTRICAL PLAN
 E-2.0 SCALE: 1/4"=1'-0"

ELECTRICAL KEYED NOTES:

- 1 PROVIDE NEW 4FT DECORATIVE LED STRIP LIGHT; LITHONIA MODEL # FMLBML 48IN 30K 80CRI BN OR EQUIVALENT.
- 2 PROVIDE NEW 6" LED DOWNLIGHT; LITHONIA MODEL # LDN6-30/15-L06-AR-LSS-120-G210 OR EQUIVALENT. CONNECT TO EXISTING LIGHTING CIRCUIT SERVING THIS SPACE.
- 3 RECONFIGURE LIGHT SWITCHING ARRANGEMENT AS SHOWN.
- 4 PROVIDE NEW RECEPTACLE FOR GARBAGE DISPOSAL IN LIEU OF HARD WIRED CONNECTION. RECEPTACLE SHALL BE CONTROLLED BY SWITCH ABOVE THE COUNTER. PROVIDE CORD AND PLUG FOR GARBAGE DISPOSAL IF NECESSARY.
- 5 PROVIDE NEW RANGE/OVEN RECEPTACLE. NEW RECEPTACLE SHALL BE PROPERLY SECURED TO WALL.
- 6 PROVIDE NEW TELEPHONE OUTLET AND FACEPLATE.
- 7 PROVIDE THREE SWITCHES; ONE SWITCH SHALL CONTROL ALL LIGHTING, ONE SWITCH SHALL CONTROL EXHAUST FAN, AND ONE TIMER SWITCH SHALL CONTROL THE HEATER.
- 8 PROVIDE NEW 6" LED SHOWER LIGHT; GOTHAM MODEL # EVO6SH-35/10-DF-SOL-120-G210 OR EQUIVALENT.
- 9 PROVIDE POWER CONNECTION TO FAN/HEATER/LIGHT UNIT. EACH OF THE THREE COMPONENTS SHALL BE CONTROLLED SEPARATELY FROM WALL MOUNTED SWITCHES.



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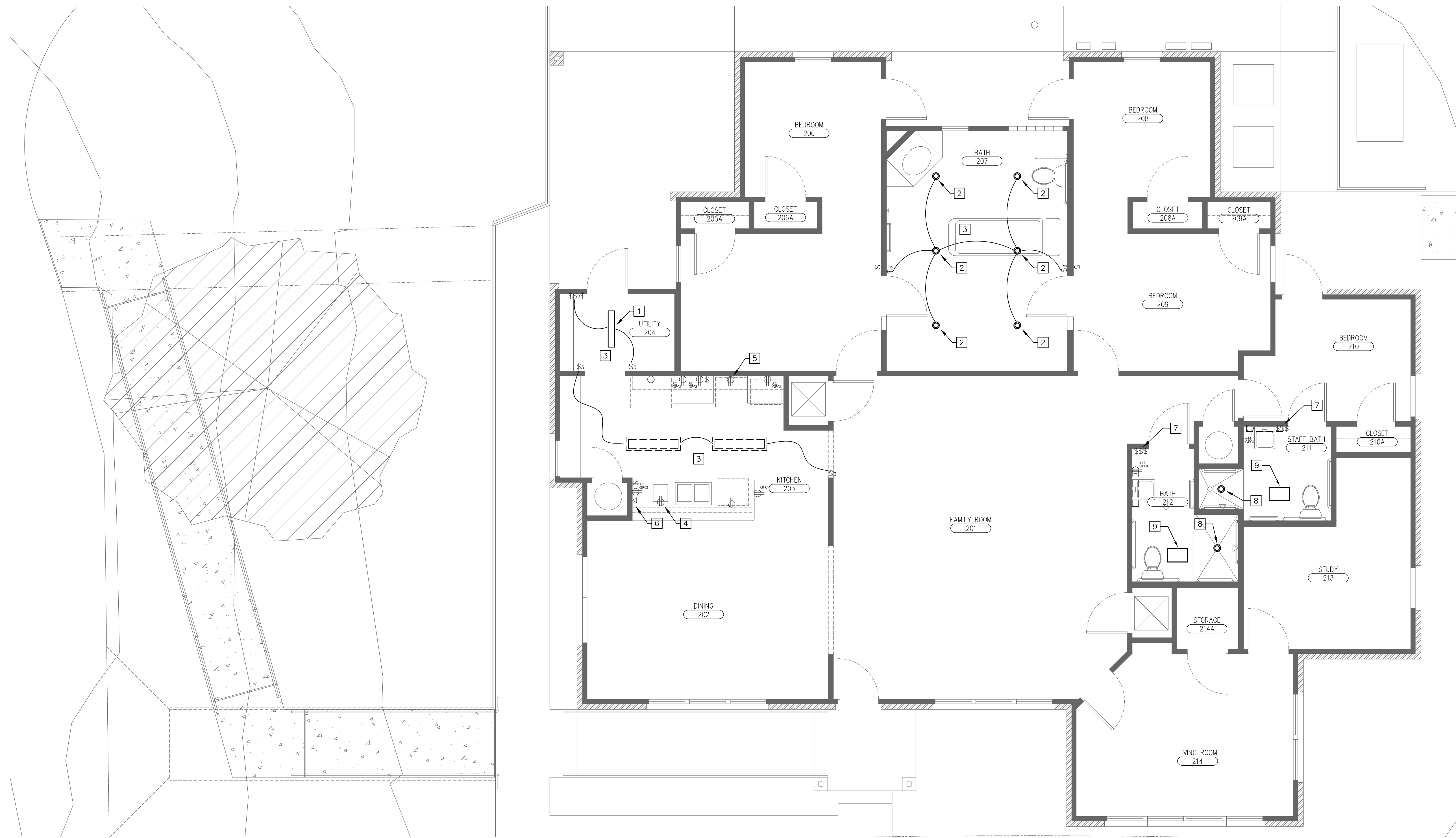
CORPUS CHRISTI, TEXAS
 RIVER FOREST - ELECTRICAL PLAN

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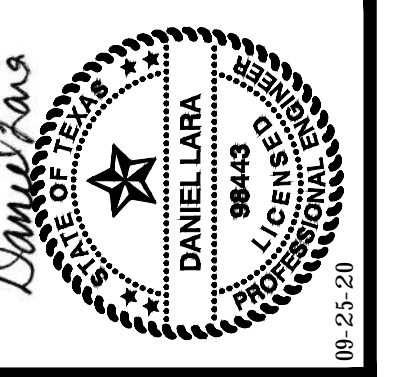
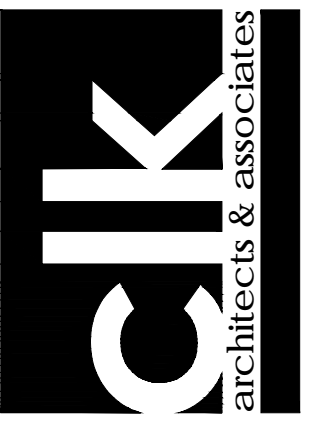
SHEET NUMBER
E-2.0
 of 33 sheets



1 CASTLE RIVER - ELECTRICAL PLAN
E-2.1 SCALE: 1/4"=1'-0"

ELECTRICAL KEYED NOTES:

- 1] PROVIDE NEW 4FT DECORATIVE LED STRIP LIGHT; LITHONIA MODEL # FMLBML 48IN 30K 80CRI 8N OR EQUIVALENT.
- 2] PROVIDE NEW 6" LED DOWNLIGHT; LITHONIA MODEL # LDNG-30/15-L06-AR-LSS-120-GZ10 OR EQUIVALENT. CONNECT TO EXISTING LIGHTING CIRCUIT SERVING THIS SPACE.
- 3] RECONFIGURE LIGHT SWITCHING ARRANGEMENT AS SHOWN.
- 4] PROVIDE NEW RECEPTACLE FOR GARBAGE DISPOSAL IN LIEU OF HARD WIRED CONNECTION. RECEPTACLE SHALL BE CONTROLLED BY SWITCH ABOVE THE COUNTER. PROVIDE CORD AND PLUG FOR GARBAGE DISPOSAL IF NECESSARY.
- 5] PROVIDE NEW RANGE/OVEN RECEPTACLE. NEW RECEPTACLE SHALL BE PROPERLY SECURED TO WALL.
- 6] PROVIDE NEW TELEPHONE OUTLET AND FACEPLATE.
- 7] PROVIDE THREE SWITCHES; ONE SWITCH SHALL CONTROL ALL LIGHTING, ONE SWITCH SHALL CONTROL EXHAUST FAN, AND ONE TIMER SWITCH SHALL CONTROL THE HEATER.
- 8] PROVIDE NEW 6" LED SHOWER LIGHT; GOTHAM MODEL # EVO6SH-35/10-DFF-SOL-120-GZ10 OR EQUIVALENT.
- 9] PROVIDE POWER CONNECTION TO FAN/HEATER/LIGHT UNIT. EACH OF THE THREE COMPONENTS SHALL BE CONTROLLED SEPARATELY FROM WALL MOUNTED SWITCHES.



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ELECTRICAL ABBREVIATIONS

1Ø	SINGLE PHASE	TEMP	TEMPERATURE
3Ø	THREE PHASE	TYP	TYPICAL
3Ø	SINGLE POLE	UGC	UNDERGROUND COMMUNICATION
3P	DOUBLE POLE	UGE	UNDERGROUND ELECTRICAL
3W	THREE POLE	UGT	UNDERGROUND TELEPHONE
UL	TWO WIRE	UL	UNDERWRITERS LABORATORY
3W	THREE WIRE	UPS	UNINTERRUPTIBLE POWER SUPPLY
4W	FOUR WIRE	VFD	VARIABLE FREQUENCY DRIVE
AMP	AMPERE	V	VOLTAGE
A/E	ARCHITECT/ENGINEER	VOLT	VOLTAGE
AC	ABOVE COUNTER OR ALTERNATING CURRENT	W	WATTS
ACC	ACCESSIBLE	WP	WEATHERPROOF
AFI	ARC FAULT CIRCUIT INTERRUPTER	XFMR	TRANSFORMER
AFN	ABOVE FINISHED FLOOR		
AG	ABOVE GROUND, ABOVE GRADE		
AJH	AUTHORITY HAVING JURISDICTION		
AIC	AMPERE INTERRUPTING CAPACITY		
AMP	AMPERAGE		
ATS	AUTOMATIC TRANSFER SWITCH		
AUTO	AUTOMATIC		
BFF	BELOW FINISHED FLOOR		
BLDG	BUILDING		
BHP	BRAKE HORSEPOWER		
CB	CIRCUIT BREAKER		
CCTV	CLOSED CIRCUIT TELEVISION		
CKT	CIRCUIT		
COMM	COMMUNICATION		
CT	CURRENT TRANSFORMER		
CR	CORNER		
CU FT	CUBIC FEET		
CR	CURRENT		
DB	DIRECT BURIAL OR DECIBEL		
DC	DIRECT CURRENT		
DEG	DEGREE		
DEMO	DEMOLITION		
DIST	DISTRIBUTION		
DPDT	DOUBLE POLE, DOUBLE THROW		
DPST	DOUBLE POLE SINGLE THROW		
D51	DISCONNECT SWITCH		
EG	EMPTY CONDUIT		
EC	EQUIPMENT GROUND		
ELEC	ELECTRICAL		
EMT	ELECTRICAL METALLIC TUBING		
EPO	EMERGENCY POWER OFF		
FA	FIRE ALARM		
FAA	FIRE ALARM ANNUNCIATOR		
FACP	FIRE ALARM CONTROL PANEL		
FAPA	FIRE ALARM POWER SUPPLY		
FC	FLOOR		
FLS	FULL LOAD AMPS		
FM	FLEXIBLE METALLIC CONDUIT		
FT	FEET		
G	GROUND		
GA	GAUGE		
GEN	GENERATOR		
GFI	GROUND FAULT CIRCUIT INTERRUPTER		
HDC	HIGH INTENSITY DISCHARGE		
HDA	HAND-OPERATED AUTOMATIC		
HP	HORSEPOWER		
HZ	HERTZ		
IO	INPUT/OUTPUT		
IBC	INTERNATIONAL BUILDING CODE		
IECC	INTERNATIONAL ENERGY CONSERVATION CODE		
IES	ILLUMINATION ENGINEERING SOCIETY		
IFC	INTERNATIONAL FIRE CODE		
IMC	INTERMEDIATE METAL CONDUIT		
INCH	INCH		
IR	INFRARED		
J-BOX	JUNCTION BOX		
KV	KILOVOLT		
KVA	KILOVOLT AMPERE		
KW	KILOWATT		
KWH	KILOWATT HOUR		
LB	POUNDS		
LED	LIGHT EMITTING DIODE		
LF	LINEAR FEET		
LPS	LOW PRESSURE SODIUM		
LRA	LOCKED ROTOR AMPS		
LRG	LIGHTING		
LV	LOW VOLTAGE		
MAX	MAXIMUM		
MC	METAL-CLAD		
MIC	MINIMUM CIRCUIT AMPS		
MCB	MAIN CIRCUIT BREAKER		
MCC	MOTOR CONTROL CENTER		
MOP	MAIN DISTRIBUTION PANEL		
MIN	MINIMUM		
ML	MAIN LUGS ONLY		
MOP	MAXIMUM OVERCURRENT PROTECTION		
MVS	MANUAL TRANSFER SWITCH		
MT	MEDIUM VOLTAGE		
NA	NOT APPLICABLE		
NEC	NATIONAL ELECTRIC CODE		
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION		
N	NEUTRAL		
NC	NORMALLY CLOSED		
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION		
NL	NIGHT LIGHT		
NO	NORMALLY OPEN		
NTS	NOT TO SCALE		
OC	ON CENTER OR OCCUPANCY SENSOR		
OL	OVERLOAD		
PNL	PANEL OR PANELBOARD		
PWR	POWER		
RCP	REFLECTED CEILING PLAN		
RCPT	RECEPTACLE		
RGS	RIGID GALVANIZED STEEL		
RLA	RUNNING LOAD AMPS		
RPM	REVOLUTIONS PER MINUTE		
SS	SINGLE POLE SINGLE THROW		
SPST	STAINLESS STEEL		
SWBD	SWITCHBOARD		

ELECTRICAL SYMBOL LEGEND

	ELEVATION/SECTION VIEW NUMBER
	SHEET NUMBER
	DRAWING/DETAIL NUMBER
	KEY NOTE ANNOTATION
	HOMERUN TO PANEL/CIRCUIT NOTED
	CIRCUIT NUMBER
	NEUTRAL CONDUCTOR
	HOT CONDUCTOR
	GROUND CONDUCTOR
	TRAVELER CONDUCTOR
	SWITCH LEG CONDUCTOR
	SPST SWITCH
	DPST SWITCH
	THREE-WAY SWITCH
	FOUR-WAY SWITCH
	DIMMER SWITCH
	KEYED SWITCH
	MOTOR RATED SWITCH
	WALL MOUNTED OCCUPANCY SENSOR
	TIMER SWITCH
	ILLUMINATED SWITCH OR PILOT LIGHT
	WEATHERPROOF SWITCH
	SINGLE RECEPTACLE: 125V/20A/1P
	DUPLEX RECEPTACLE: 125V/20A/1P
	GFCI DUPLEX RECEPTACLE
	WEATHERPROOF GFCI DUPLEX RECEPTACLE
	AFCI DUPLEX RECEPTACLE
	TAMPOR RESISTANT DUPLEX RECEPTACLE
	DUPLEX RECEPTACLE: EMERGENCY POWER
	RECESSED DUPLEX RECEPTACLE
	DUPLEX RECEPTACLE: ISOLATED GROUND
	FLOOR MOUNTED DUPLEX RECEPTACLE
	QUADRUPEX RECEPTACLE: 125V/20A/1P
	SINGLE RECEPTACLE: 250V
	DISCONNECT SWITCH
	MOTOR STARTER
	COMBINATION STARTER/DISCONNECT
	SINGLE RECEPTACLE: 250V
	CABLE TV OUTLET BOX WITH 34°C TO ACCESSIBLE LOCATION ABOVE CEILING
	PUSH BUTTON
	CARD READER (ACCESS CONTROL)
	KEY PAD (ACCESS CONTROL)
	MAGNETIC DOOR HOLD OPEN
	DOOR RELEASE
	DOOR CONTACTOR/CONTROL PANEL
	TWO-WAY COMMUNICATION INTERCOM
	CAMERA OUTLET BOX WITH 34°C TO ACCESSIBLE LOCATION ABOVE CEILING
	CEILING MOUNTED OCCUPANCY SENSOR

ELECTRICAL SPECIFICATIONS

PART 1 GENERAL

1.1. WORK INCLUDED: THIS SECTION INCLUDES THE NECESSARY LABOR, MATERIALS, EQUIPMENT, ETC., TO COMPLETE THE ELECTRICAL WORK THAT IS INDICATED IN THE CONTRACT DOCUMENTS.

1.2. CONTRACTOR'S RESPONSIBILITY: REFER TO ARCHITECTURAL, STRUCTURAL, AND MECHANICAL DRAWINGS FOR CONSTRUCTION DETAILS AND COORDINATE WORK WITH THAT OF OTHER TRADES SO AS TO AVOID UNNECESSARY DELAYS OR DAMAGE TO ANY PART OF THE INSTALLATION. IF ANY OMISSIONS OR DISCREPANCIES ARE FOUND BETWEEN THE DRAWINGS AND SPECIFICATIONS OR CITY AND POWER COMPANY REGULATIONS, ADVISE THE ENGINEER PRIOR TO BID DUE DATE. VERIFY ELECTRICAL REQUIREMENTS OF ALL EQUIPMENT EXACTLY AS FURNISHED AND MAKE ADJUSTMENTS IN ELECTRICAL SERVICE ACCORDINGLY BEFORE INSTALLATION OF POWER CIRCUITS.

1.3. EXAMINATION OF SITE: EXAMINE THE ACTUAL SITE AND COMPARE IT WITH DRAWINGS AND SPECIFICATIONS. CHECK LOCATION OF ALL EXISTING UTILITIES AND CONDITIONS WHICH MAY AFFECT WORK BEFORE SUBMITTING A BID.

1.4. PERMITS, FEES AND CODE REGULATIONS: OBTAIN ALL NECESSARY PERMITS, PAY ALL FEES AND POWER COMPANY FEES PERTAINING TO WORK UNDER THIS SECTION, AND COMPLY WITH ALL NATIONAL, STATE AND MUNICIPAL LAWS, CODES, ORDINANCES, AND REGULATIONS RELATING TO BUILDING AND PUBLIC SAFETY.

1.5. PROTECTION OF APPARATUS: TAKE SUCH PRECAUTIONS AS ARE NECESSARY TO PROTECT ALL APPARATUS AND MATERIALS FROM DAMAGE. FAILURE TO COMPLY SHALL BE SUFFICIENT CAUSE REJECTION OF THE APPARATUS OR MATERIAL IN QUESTION.

1.6. GUARANTEE: INSTALLATION SHALL BE GUARANTEED FOR A PERIOD OF 1 YEAR AFTER FINAL ACCEPTANCE AGAINST FAULTY WORKMANSHIP AND/OR MATERIALS. ALL SUCH DEFECTS SHALL BE MADE GOOD WITHIN THIS PERIOD UPON DEMAND OF OWNER. MATERIAL AND EQUIPMENT GUARANTEES AND WARRANTIES WHICH EXCEED THE ABOVE PERIOD SHALL BE PASSED TO THE OWNER. PAY ANY COST INCURRED TO PROVIDE THE FIRST YEAR'S WARRANTY ON ALL ELECTRICAL ITEMS.

1.7. DRAWINGS AND SPECIFICATIONS AT THE SITE: MAINTAIN AT THE JOB SITE, ONE COPY OF ALL DRAWINGS, SPECIFICATIONS, ADDENDA, APPROVED SHOP DRAWINGS, CHANGE ORDERS AND OTHER MODIFICATIONS, IN GOOD ORDER AND MARKED TO RECORD ALL CHANGES MADE DURING CONSTRUCTION.

1.8. DRAWINGS: 1.8.1 DRAWINGS ARE DIAGRAMMATIC, BUT SHALL BE FOLLOWED, AS CLOSELY AS ACTUAL CONSTRUCTION OF THE WORK WILL PERMIT. CHANGES FROM DRAWINGS NECESSARY TO FIT WORK OF VARIOUS TRADES, TO CONFORM TO EQUIPMENT ACTUALLY BEING INSTALLED, OR THE RULES OF AUTHORITIES HAVING JURISDICTION SHALL BE INCLUDED IN THE BID AND SHALL BE MADE AT NO ADDITIONAL COST TO THE OWNER. 1.8.2 LINES INDICATING CIRCUITS ON THE DRAWINGS ARE INTENDED TO INDICATE ARRANGEMENT AND CONTROL. 1.8.3 ARCHITECT OR OWNER RESERVES THE RIGHT TO MAKE MINOR CHANGES IN OUTLET LOCATIONS INDICATED, AT NO ADDITIONAL COST TO THE OWNER. 1.8.4 AT CONCLUSION OF THE PROJECT, PROVIDE ONE SET OF COMPLETE LEGIBLE "AS BUILT" ON CLEAN PRINTS.

1.9. SHOP DRAWINGS: 1.9.1 SUBMIT WITHIN 30 DAYS AFTER CONTRACT AWARDED, A COMPLETE SET OF SHOP DRAWINGS, OF ITEMS FURNISHED UNDER THIS SECTION, IF SUBMITTALS ARE NOT RECEIVED WITHIN TIME ALLOTTED, USE EXACT MATERIAL SPECIFIED WITH NO SUBSTITUTIONS. NO CONSIDERATION WILL BE GIVEN TO PARTIAL LISTS SUBMITTED FROM TIME TO TIME. SHOP DRAWINGS SHALL BE APPROVED BEFORE INSTALLATION OF THE MATERIAL UNDER CONSIDERATION. APPROVAL OF MATERIALS OR EQUIPMENT SHALL NOT BE CONSTRUED AS RELINQUISHING THIS CONTRACTOR FROM FURTHER RESPONSIBILITY FOR CONFORMANCE TO CONTRACT DOCUMENTS, BUT RATHER AS A MEANS TO COORDINATE THE EQUIPMENT INSTALLATION. 1.9.2 SHOP DRAWINGS SHALL BE SUBMITTED ONLY BY THE CONTRACTOR, WHO SHALL INDICATE BY SIGNED STAMP THAT HE HAS CHECKED SHOP DRAWINGS AND THAT THEY ARE IN ACCORDANCE WITH CONTRACT REQUIREMENTS. 1.9.3 SHOP DRAWINGS SHALL CONSIST OF PUBLISHED RATINGS OR CAPACITY DATA, DETAILED EQUIPMENT DRAWINGS FOR FABRICATED ITEMS, AND OTHER PERTINENT DATA, WHERE LITERATURE IS AVAILABLE INCLUDING COVERING A GROUP OR SERIES OF SIMILAR ITEMS, ITEM UNDER CONSIDERATION SHALL BE CLEARLY INDICATED, OR SHOP DRAWINGS WILL BE DISAPPROVED. 1.9.4 SHOP DRAWINGS ARE REQUIRED FOR, BUT NOT LIMITED TO THE FOLLOWING ITEMS:

- (1) ALL WIRES (10) ELECTRICAL PANELS
 - (2) WIRE CONNECTORS (11) DISCONNECT SWITCHES
 - (3) CONDUIT (12) FUSES
 - (4) WIRING DEVICES (13) LAMPS
 - (5) DEVICE COVERPLATES (14) TIME CLOCKS
 - (6) LIGHTING FIXTURES (15) PHOTOCELLS
 - (7) LIGHTING CONTROLS (16) CONTACTORS
- 1.10. SUBSTITUTIONS: 1.10.1 WHENEVER A SPECIFIC MANUFACTURER'S NAME AND/OR MODEL IS MENTIONED, IT IS ONLY TO SET A STANDARD OF DESIGN, PERFORMANCE, QUALITY AND SERVICEABILITY NOT TO LIMIT COMPETITION. OTHER MANUFACTURERS AND MODELS WILL BE CONSIDERED EQUAL IF THEY ARE EQUAL IN ALL RESPECTS IN THE OPINION OF THE ENGINEER. PROPOSED EQUIPMENT, NOT SHOWN ON LIST OF ACCEPTABLE ALTERNATE MANUFACTURERS SHALL BE RECEIVED BY ARCHITECT, FOR PRIOR APPROVAL, 10 DAYS BEFORE BID DUE DATE. 1.10.2 THE ENGINEER IS NOT REQUIRED TO PROVE THAT A SUBSTITUTE MATERIAL IS NOT EQUAL TO THE SPECIFIED MATERIAL, BUT IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVE THAT THE SUBSTITUTE MATERIAL IS EQUAL TO THE MATERIAL SPECIFIED. THE ENGINEER RESERVES THE RIGHT TO REJECT ANY MATERIAL.

1.11. ELECTRICAL SERVICE: 1.11.1 THE EXISTING ELECTRICAL SERVICE IS 120/240V, 1Ø, 3Ø. NO CHANGES ARE ANTICIPATED TO ELECTRICAL SERVICE.

ELECTRICAL GENERAL NOTES:

A. THE ELECTRICAL SYSTEM HAS BEEN DESIGNED IN ACCORDANCE WITH THE 2017 NATIONAL ELECTRICAL CODE, THE 2015 INTERNATIONAL BUILDING CODE INCLUDING IFC, AND LOCAL AMENDMENTS. THE INSTALLATION SHALL CONFORM TO THESE BUILDING CODES AND ALL PERTINENT STATE AND NATIONAL CODES.

B. CONTRACTOR IS ADVISED TO VISIT THE JOB SITE PRIOR TO BID AND PRODUCTION OF SHOP DRAWINGS, AND FAMILIARIZE HIMSELF WITH THE SITE CONDITIONS AND FACILITIES, TO ACCOMMODATE ANY DIMENSIONAL DIFFERENCES BETWEEN OR AMONG THE DRAWINGS, SPECIFICATIONS, EXISTING CONDITIONS AND THE ACTUALLY PURCHASED EQUIPMENT CONNECTIONS FOR PIPING, DUCT, CABLE AND CONDUITS. ALL MODIFICATIONS MUST BE PRE APPROVED BY THE DESIGN ENGINEER OR OWNER'S REPRESENTATIVE. FAILURE TO DO SO WILL NOT RELEASE THE CONTRACTOR FROM THE RESPONSIBILITY OF FURNISHING AND INSTALLING COMPLETE AND WORKING SYSTEMS COVERED BY THIS CONTRACT.

C. IN CASE CONFLICT OCCURS BETWEEN OR AMONG DRAWINGS SPECIFICATION, CODES, STANDARDS AND LOCAL GOVERNMENT REGULATIONS, THE MOST STRINGENT REQUIREMENT SHALL TAKE PRECEDENCE, ANY MODIFICATIONS NECESSARY MUST BE PRESH-APPROVED BY THE ENGINEER.

D. WALL MOUNTED SWITCHES SHALL BE MOUNTED AT 48" AFF TO THE CENTER OF THE DEVICE, UNLESS NOTED OTHERWISE. ELECTRICAL RECEPTACLES AND TELEPHONE/DATA OUTLETS SHALL BE MOUNTED 18" AFF, UNLESS NOTED OTHERWISE. CABLE TV OUTLETS AND TV RECEPTACLES SHALL BE MOUNTED AT 80" AFF, UNLESS NOTED OTHERWISE. ELECTRICAL DEVICES MOUNTED ABOVE COUNTERS SHALL BE INSTALLED 2" ABOVE COUNTER BACKSPASH TO THE BOTTOM OF THE DEVICE BUT NO HIGHER THAN 44" AFF. COORDINATE MOUNTING HEIGHTS WITH ARCHITECT/ENGINEER PRIOR TO INSTALLATION.

E. ALL WIRING SHALL BE COPPER. WIRE SIZE SHALL BE MINIMUM #12 AWG AND SHALL BE AS REQUIRED BY 2017 NEC TABLE 310.15(B)(16) UNLESS NOTED OTHERWISE.

F. FLEXIBLE CONDUIT (MC CABLE) IN LENGTHS NOT EXCEEDING 72" MAY BE UTILIZED FROM JUNCTION BOXES TO LIGHT FIXTURES AND TO EQUIPMENT ABOVE CEILING OR IN MECHANICAL ROOMS.

G. ALL CIRCUITS SHALL BE RUN WITH AN INSULATED GROUNDING CONDUCTOR.

H. ALL CONDUIT PENETRATIONS OF FIRE-RATED BARRIERS SHALL BE PROTECTED WITH UL LISTED FIRE BLOCKING MATERIAL AND/OR SEALANT.

I. PROVIDE SLEEVES AND FLASHINGS REQUIRED FOR CONDUIT PENETRATIONS; PROVIDE ESCUTCHEON PLATES FOR ALL CONDUIT PENETRATIONS FINISHED WALLS & CEILINGS.

J. ALL MATERIAL INTENDED TO BE REINSTALLED SHALL BE STORED AND PROTECTED FROM DAMAGE BY THE CONTRACTOR. ANY DAMAGED MATERIAL SHALL BE REPLACED BY CONTRACTOR.

K. ALL ELECTRICAL PANELS AFFECTED BY THE WORK OF THIS CONTRACT SHALL HAVE THE PANEL SCHEDULES UPDATED. PANEL SCHEDULES SHALL BE TYPEWRITTEN OR COMPUTER GENERATED. HAND WRITTEN PANEL SCHEDULES ARE NOT ACCEPTABLE.

L. PROVIDE JUNCTION BOXES AND CONDUIT FOR THE INSTALLATION OF WALL MOUNTED FIRE ALARM DEVICES AND TELEPHONE/DATA OUTLETS.

M. PROVIDE TAMPOR RESISTANT RECEPTACLES AT ALL LOCATIONS REQUIRED BY 2017 NEC SECTION ARTICLE 406.12(5), INCLUDING BUT NOT LIMITED TO WAITING ROOM, CORRIDORS, EXAM ROOMS, RESTROOMS, OFFICES, AND RECEPTION AREA.

PART 2 BASIC MATERIALS AND METHODS

2.1. GENERAL: MATERIALS AND EQUIPMENT SHALL BE NEW AND IN PERFECT CONDITION. ALL MATERIALS FURNISHED AND INSTALLED, FOR WHICH STANDARDS HAVE BEEN ESTABLISHED, SHALL BE LISTED BY AND BEAR THE UL LABEL. ALL MATERIALS SHALL BE THE MANUFACTURER'S LATEST STANDARD DESIGN, UNLESS OTHERWISE SPECIFIED.

2.2. WIRE: 2.2.1 FURNISH AND INSTALL ALL WIRE INDICATED OR REQUIRED FOR A COMPLETE ELECTRICAL SYSTEM. ALL WIRE SHALL BE SOFT DRAWN ANNEALED COPPER WITH CONDUCTIVITY OF NOT LESS THAN 98% THAT OF PURE COPPER. ALL CONDUCTORS SHALL BE TYPE "THHN/THHW", EXCEPT UNDERGROUND WIRING SHALL BE TYPE XHHW, USE NO WIRE SMALLER THAN NO. 12AWG, EXCEPT CONTROL WIRE. RUN MAINS AND FEEDERS THE ENTIRE LENGTH CONTINUOUS WITHOUT JOINTS OR SPLICES. MAKE BRANCH CIRCUITS JOINTS OR SPLICES ELECTRICALLY AND MECHANICALLY SECURE WITH BUSHMAN PRESSURE CONNECTORS AND VINYL INSULATORS. ALL CONDUCTORS FOR LIGHTING AND RECEPTACLE CIRCUITS SHALL BE COLOR CODED TO INDICATE VARIOUS PHASES AND NEUTRALS. 2.2.2 PROVIDE PLENUM RATED CABLE, IF REQUIRED. VERIFY, BEFORE BID AND BEFORE ORDERING ANY CABLE RUN ABOVE THE CEILING AND NOT IN CONDUIT.

2.3. CONDUIT: 2.3.1 ALL SYSTEMS SHALL BE IN CONDUIT, EXCEPT SPECIAL SYSTEMS, UNLESS NOTED OTHERWISE. ALL CONDUIT SHALL BE 3/4" MIN. SIZE, EXCEPT AS OTHERWISE NOTED ON PLANS. ALL CONDUIT SHALL BE HOT DIPPED GALVANIZED, EXCEPT CONDUIT IN SLAB AND UNDERGROUND MAY BE PVC CONFORMING TO NEC AND LOCAL CODES. ALUMINUM CONDUIT SHALL NOT BE USED. 2.3.2 ALL EXPOSED CONDUIT RUN ON THE EXTERIOR OR STRUCTURES SHALL BE RIGID THREADED HOT-DIPPED GALVANIZED STEEL. THREADED FITTINGS SHALL NOT BE USED. 2.3.3 ELECTRICAL METALLIC TUBING: ALL CONDUIT USED INSIDE THE BUILDING SHALL BE E.M.T. APPROVED AND LABELED FOR ELECTRICAL INSTALLATION. USE STEEL COMPRESSION TYPE FITTINGS FOR ALL METALLIC TUBING. SET-SCREW TYPE FITTINGS SHALL NOT BE USED. 2.3.4 FLEXIBLE CONDUIT: FLEXIBLE CONDUIT SHALL BE USED FOR RUNS NOT EXCEEDING 72" FROM JUNCTION BOXES TO LAY IN TYPE LIGHTING FIXTURES. NON-METALLIC LIQUIDTIGHT FLEXIBLE CONDUIT WITH APPROVED CONNECTORS MAY BE USED FOR CONNECTIONS TO ALL MOTORS AND MOVING EQUIPMENT. PROVIDE BONDING CONDUCTOR AROUND ALL FLEXIBLE CONNECTIONS. 2.3.5 ALL PVC CONDUIT SHALL BE SCHED. 40(HEAVY WALL).

2.4. CONDUIT SUPPORTS: ALL CONDUIT SUPPORTS SHALL BE APPROVED BY THE ARCHITECT. SUPPORTS SHALL BE KORNS CLAMPS, ONE HOLE MALLEABLE IRON CLAMPS, UNISTRUT AND UNISTRUT CLAMPS OR PIPE HANGERS. THE WIRE SUPPORTS AND PERFORATED STRAPS ARE NOT ACCEPTABLE.

2.5. CONDUIT FITTINGS: 2.5.1 CONDUIT FITTINGS SHALL BE CROUSE HINDS OR APPLETON CAST FITTINGS WITH CAST COVERS. GASKETS SHALL BE PROVIDED FOR ALL FITTINGS INSTALLED OUTDOORS OR ON THE ROOF. THREADED FITTINGS SHALL NOT BE USED. 2.5.2 ALL HUBS FOR PANELS AND DISCONNECT SWITCHES SHALL BE MYERS SCRUTTIE, GROUNDING TYPE.

2.6. WIRING DEVICES: 2.6.1 FURNISH AND INSTALL WIRING DEVICES, AS INDICATED ON DRAWINGS, FOR VOLTAGE AND AMP RATINGS, AS SHOWN. DEVICES SHALL BE IVORY, UNLESS OTHERWISE NOTED. 2.6.2 TUMBLER SWITCHES SHALL BE HUBBELL 1214 OR EQUAL, 2Ø, 120/277V, AC ONLY, QUIET TYPE. 2.6.3 120 VOLT CONVENIENCE OUTLETS SHALL BE DUPLEX HUBBELL 2 POLE, 2ØAMP, 3 WIRE GROUNDING. 2.6.4 DEVICE PLATES SHALL BE NYLON. 2.6.5 RECEPTACLES SHOWN ON PLANS AS GFI SHALL BE GROUND FAULT INTERRUPTING TYPE, 2Ø AMP, 3 WIRE GROUNDING, CONTROLLING MORE THAN ONE RECEPTACLE FROM A SINGLE GFI RECEPTACLE IS NOT ACCEPTABLE, UNLESS NOTED OTHERWISE ON THE PLANS. GFI BREAKERS ARE NOT ACCEPTABLE.

2.7. LIGHTING FIXTURES: 2.7.1 LIGHTING FIXTURES SHALL BE AS SCHEDULED ON PLANS. INSTALL FIXTURES AT LOCATIONS SHOWN ON DRAWINGS. FIXTURES SHALL BE COMPLETELY WIRED AND LAMPS INSTALLED. FIXTURES SHALL BE IN PERFECT OPERATING CONDITION AT TIME OF ACCEPTANCE. 2.7.2 ALL FIXTURE LAMPS SHALL BE PROVIDED BY THE CONTRACTOR, UNLESS NOTED OTHERWISE. COORDINATE WITH TENANT. SEE LIGHTING FIXTURE SCHEDULE. 2.7.3 BALLASTS: BALLASTS FOR FLUORESCENT FIXTURES SHALL BE ELECTRONIC, THERMALLY PROTECTED, CLASS P AND CDM-T6 APPROVED. THE BALLASTS SHALL HAVE A CLASS A SOUND RATING AND HAVE LESS THAN 20% THD.

2.8. JUNCTION, OUTLET AND PULL BOXES: FURNISH AND INSTALL ALL JUNCTION BOXES AS SHOWN OR OTHERWISE REQUIRED FOR PULLING WIRE. BOXES SHALL BE MADE OF CODE GAUGE GALVANIZED STEEL AND SHALL BE OF PROPER SIZE FOR INTENDED SERVICE, PER THE NEC. OUTLET BOXES IN CEILINGS SHALL BE 4" OCTAGONAL, BOXES WITH SCREW COVERS, FIXTURE STUDS AND DEPTH AS REQUIRED. WALL OUTLET BOXES SHALL BE 4" SQUARE X 1-1/2" OR 1-1/8" DEEP AS REQUIRED. ALL OUTLET BOXES SHALL BE FURNISHED WITH PROPER EXTENSION RINGS AND START COVERS. WEATHERPROOF OUTLET BOXES SHALL BE CROUSE-HINDS TYPE FS OR FD WITH NEOPRENE GASKET AND CAST FERROALLOY COVER. EXPOSED SWITCH OUTLETS AND CONVENIENCE OUTLETS SHALL BE CAST IRON, EQUAL TO CROUSE-HINDS TYPE FS.

2.9. SLEEVES AND ESCUTCHEONS: PROVIDE ALL SLEEVES AND ESCUTCHEONS REQUIRED FOR THE INSTALLATION OF THE WORK. ALL PENETRATIONS THRU FIRE RATED CEILINGS OR WALLS SHALL BE CLOSED AND FIREPROOFED TO A RATING EQUAL TO THE SURROUNDING MATERIAL.

2.10. FLASHING: PROVIDE OR COORDINATE WITH ROOFING CONTRACTOR TO PROVIDE FLASHING FOR ALL CONDUIT THROUGH WALLS OR ROOF. SUBMIT METHOD TO ARCHITECT FOR APPROVAL BEFORE INSTALLATION. 2.11. PANELS: FURNISH AND INSTALL PANELBOARDS OF THE VOLTAGE AND RATINGS SHOWN ON DRAWINGS. PANELS SHALL BE OF THE DEAD FRONT TYPE AND SHALL HAVE THERMAL MAGNETIC BRANCH BREAKERS WITH QUICK-MAKE, QUICK-BREAK ON MANUAL OR AUTOMATIC OPERATION. ALL MULTI-POLE BREAKERS SHALL HAVE COMMON TRIPS AND ONE HANDLE. BUS BARS SHALL BE COPPER. ALL PANELS WITH DOORS SHALL BE KEVED ALIKE. PANEL DIRECTORIES SHALL BE TYPED COMPLETE AND INSTALLED ON PANEL DOOR UPON COMPLETION OF JOB. PROVIDE THREE INCH SPARE RACEWAYS FROM EACH FLUSH MOUNTED PANEL TO AN ACCESSIBLE LOCATION ABOVE THE CEILING. BREAKERS SERVING AVG EQUIPMENT SHALL BE RATED FOR THAT SERVICE. BREAKERS SERVING HID LIGHTING SHALL BE RATED FOR THAT SERVICE (HIGH MAGNETIC). ALL PANELS AND SWITCHGEAR SHOWN AS HAVING SPACES SHALL HAVE THE SPACES FULLY EQUIPPED TO RECEIVE A BREAKER OR SWITCH WITHOUT HAVING TO ADD ADDITIONAL PARTS.

PART 3 ELECTRICAL INSTALLATION:

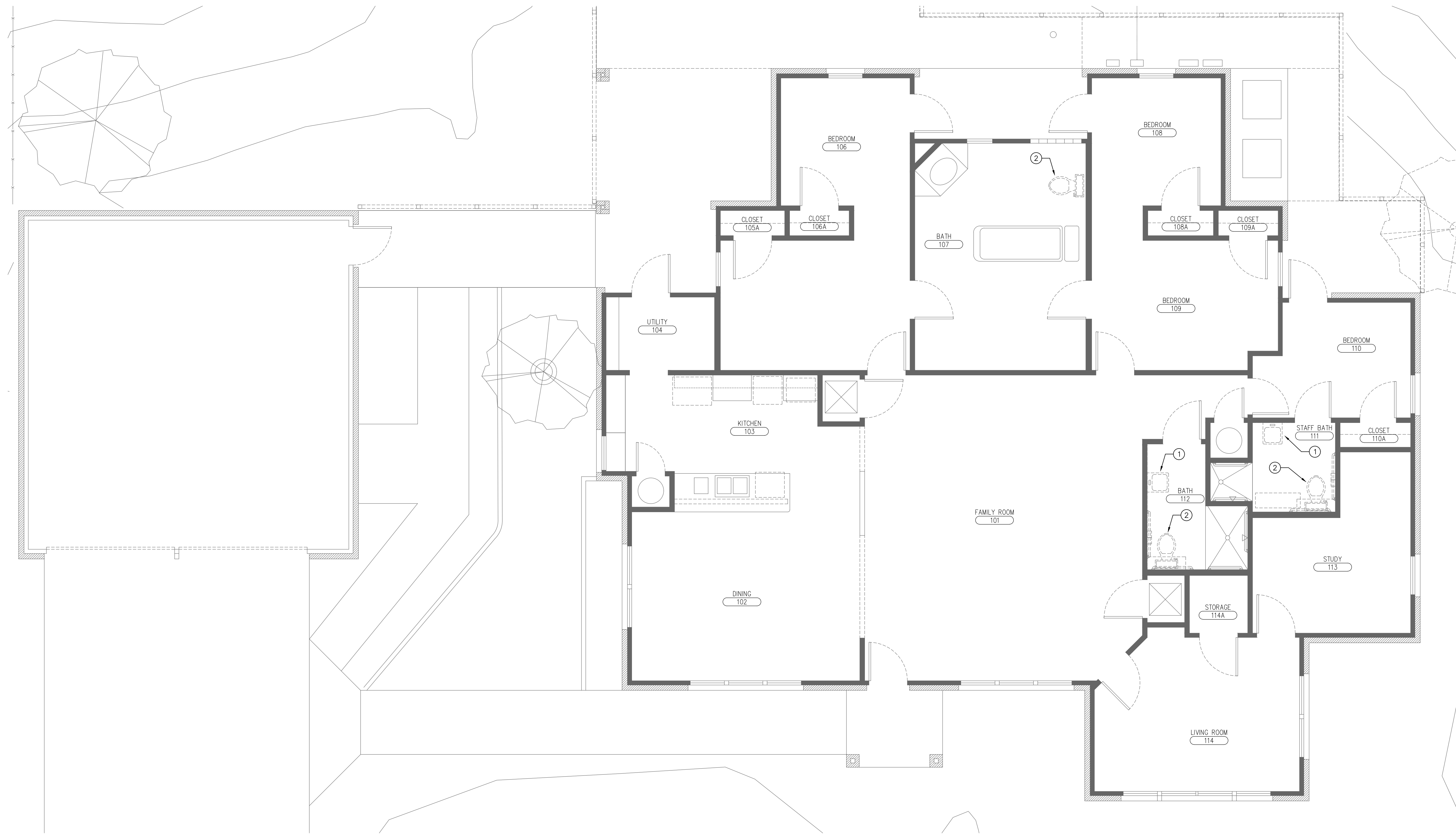
3.1. GENERAL: ALL WORK AND MATERIALS SHALL CONFORM TO THE REQUIREMENTS OF THE NATIONAL STATE AND LOCAL LAWS AND ORDINANCES AND POWER COMPANY HAVING JURISDICTION AT THE JOB SITE. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY CONFLICTS BETWEEN THE PLANS AND SPECIFICATIONS AND THE ABOVE LOCAL, STATE AND NATIONAL REQUIREMENTS BEFORE INSTALLATION. THE ENGINEER WILL THEN ISSUE INSTRUCTIONS FOR ANY CHANGES REQUIRED. THE INSTALLATION SHALL BE IN STRICT ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE. IF CODE CLEARANCE IS NOT AVAILABLE AS SHOWN ON THE PLANS, THE CONTRACTOR SHALL COORDINATE THE EXACT LOCATION OF EQUIPMENT WITH THE ENGINEER OR ARCHITECT BEFORE INSTALLATION OF THE EQUIPMENT. SCHEDULE WORK AND PROVIDE NOTICE TO PERMIT INSPECTIONS BY THE ARCHITECT AND FOR AUTHORITIES HAVING JURISDICTION BEFORE THE WORK IS CONCEALED. LABOR SHALL BE PERFORMED IN A WORKMANLIKE MANNER BY MECHANICS SKILLED IN THEIR PARTICULAR TRADE. INSTALLATIONS SHALL BE CONSISTENT IN COMPLETENESS AND APPEARANCE, WHETHER CONCEALED OR EXPOSED. ANY ITEM WHICH DOES NOT PRESENT A NEAT OR WORKMANLIKE APPEARANCE SHALL BE REPLACED AT NO ADDITIONAL COST. IF IN THE OPINION OF THE ARCHITECT, OBJECTIONABLE NOISE IS PRODUCED BY FIXTURE BALLASTS, TRANSFORMERS OR ANY ELECTRICAL EQUIPMENT, RECTIFY SUCH CONDITIONS AT NO ADDITIONAL COST.

3.2. WIRING: 3.2.1 NO WIRE SHALL BE PULLED INTO RACEWAY SYSTEMS UNTIL ALL CONSTRUCTION WHICH IS LIKELY TO DAMAGE THE WIRE IS COMPLETED. USE A COMMERCIAL WIRE PULLING COMPOUND, APPROVED BY THE UNDERWRITERS LABORATORIES, INC., FOR PULLING ALL WIRE. 3.2.2 WIRING INCLUDING GROUNDING, AT OUTLETS, THAT HAVE FEED THRU CIRCUITS, SHALL BE PITGAILED IN THE OUTLET BOX, SO THAT THE OUTLET CAN BE REMOVED WITHOUT INTERRUPTING DOWNSTREAM OUTLETS.

3.3. RACEWAYS: 3.3.1 CONCEAL ALL RACEWAYS WHENEVER POSSIBLE. ROUTING OF ALL EXPOSED CONDUIT SHALL BE APPROVED BY THE ARCHITECT BEFORE INSTALLATION. RUN EXPOSED RACEWAYS PARALLEL AND PERPENDICULAR TO THE BUILDING STRUCTURE. CORK ALL CONDUIT AND KEEP IT DRY AND FREE OF RUBBISH UNTIL WIRES ARE INSTALLED. CONDUIT SHALL BE SERVED UP TIGHT SO AS TO CONSTITUTE A CONTINUOUS CONDUCTIVE RACEWAY. 3.3.2 PROVIDE EXPANSION FITTINGS FOR ALL RACEWAYS CROSSING EXPANSION JOINTS. 3.3.3 FLASH AND COUNTER FLASH ALL RACEWAYS PASSING THROUGH BUILDING WALL AND ROOF TO PROVIDE WATER TIGHT CONSTRUCTION. 3.3.4 SECURE ALL RACEWAYS AT INTERVALS NOT EXCEEDING 5 FEET AND WITHIN 3 FEET OF ALL BOXES AND CONDUIT FITTINGS. ALL CONDUIT SHALL BE SECURELY SUPPORTED IN PLACE. 3.3.5 PROVIDE A #12 COPPER GROUND WIRE IN ALL EMPTY CONDUIT. 3.3.6 TELEPHONE CONDUIT MAY BE IN THE SAME TRENCH AS THE ELECTRICAL CONDUIT WITH A 12" SEPARATION AND 24" COVERAGE. 3.3.7 INSTALL PRIMARY UNDERGROUND CONDUIT 4'-0" BELOW FINISHED GRADE. SECONDARY CONDUIT SHALL BE 3'-0" BELOW GRADE. 3.3.8 PVC CONDUIT STUBUPS IN SLAB SHALL NOT EXTEND MORE THAN 18" ABOVE FINISHED SLAB AND THEN MUST CHANGE TO STEEL CONDUIT. INSTALLATION MUST CONFORM TO NEC AND LOCAL CODES.

3.4. LIGHTING FIXTURES: 3.4.1 PRIOR TO LOCATING ANY LIGHT FIXTURE, CONFERENCE WITH THE ARCHITECT AS TO THE DESIRED METHOD OF LOCATING THE LIGHT FIXTURES IN THE VARIOUS AREAS. IF THIS REQUIREMENT IS NOT MET, THE CONTRACTOR MAY BE REQUIRED TO RELOCATE THE LIGHT FIXTURES AT NO ADDITIONAL COST. 3.4.2 SECURE ALL 4 CORNERS OF ALL LAY-IN LIGHT FIXTURES TO CEILING GRID. 3.4.3 EXIT LIGHTS SHALL BE WALL MOUNTED, WHERE POSSIBLE AND MOUNTED WITH 4 BOLTS OR SCREWS. WHERE THE FIXTURE CAN NOT BE WALL MOUNTED, PROVIDE SUPPORTS INDEPENDENT FROM THE CEILING GRID TO SECURE THE FIXTURE BY 4 SCREWS AND SECURELY HOLD THE FIXTURE PLUMB AND SQUARE.

3.5. ELECTRICAL OUTLETS: 3.5.1 REVIEW ALL ARCHITECTURAL, STRUCTURAL, AND MECHANICAL DRAWINGS BEFORE THE INSTALLATION OF ALL ELECTRICAL OUTLETS. RELOCATE OUTLETS, AS APPROVED BY THE ARCHITECT TO COORDINATE WITH THE INSTALLATION OF THE OTHER TRADES AT NO ADDITIONAL COST. VERIFY, BEFORE INSTALLATION, THE EXACT LOCATION OF THE POWER ENTRIES TO EQUIPMENT ACTUALLY FURNISHED AND MAKE ADJUSTMENTS, AS REQUIRED, COORDINATE LOCATION OF DISCONNECT SWITCHES TO PROVIDE CLEARANCES REQUIRED BY CODE AND REQUIRED FOR SERVICING OF EQUIPMENT. PROVIDE GALVANIZED UNISTRUT SUPPORTS AS REQUIRED. 3.5.2 MOUNT TUMBLER SWITCHES IN SUITABLE STEEL BOXES 48" ABOVE FINISHED FLOOR, TO TOP OF BOX, UNLESS NOTED OTHERWISE ON PLANS. INSTALL SWITCHES ON STRIKE SIDE OF DOORS, AS NEAR AS POSSIBLE TO JAM AND IN UNIFORM POSITION SO THAT THE SAME DIRECTION WILL OPEN AND CLOSE THE CIRCUIT THROUGHOUT THE PROJECT. MOUNT RECEPTACLES 18" ABOVE FINISHED FLOOR, TO BOTTOM OF BOX, UNLESS NOTED OTHERWISE. 3.5.3 ALL OUTLET AND JUNCTION BOXES SHALL BE



1 RIVER FOREST - PLUMBING DEMOLITION PLAN
 P-1.0 SCALE: 1/4"=1'-0"

PLUMBING DEMOLITION KEYED NOTES:

- ① REMOVE AND REPLACE EXISTING WALL MOUNTED LAVATORY.
- ② REMOVE AND REPLACE EXISTING WATER CLOSET.



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20-102-CLC - REPAIRS TO BUILDINGS 542 & 543

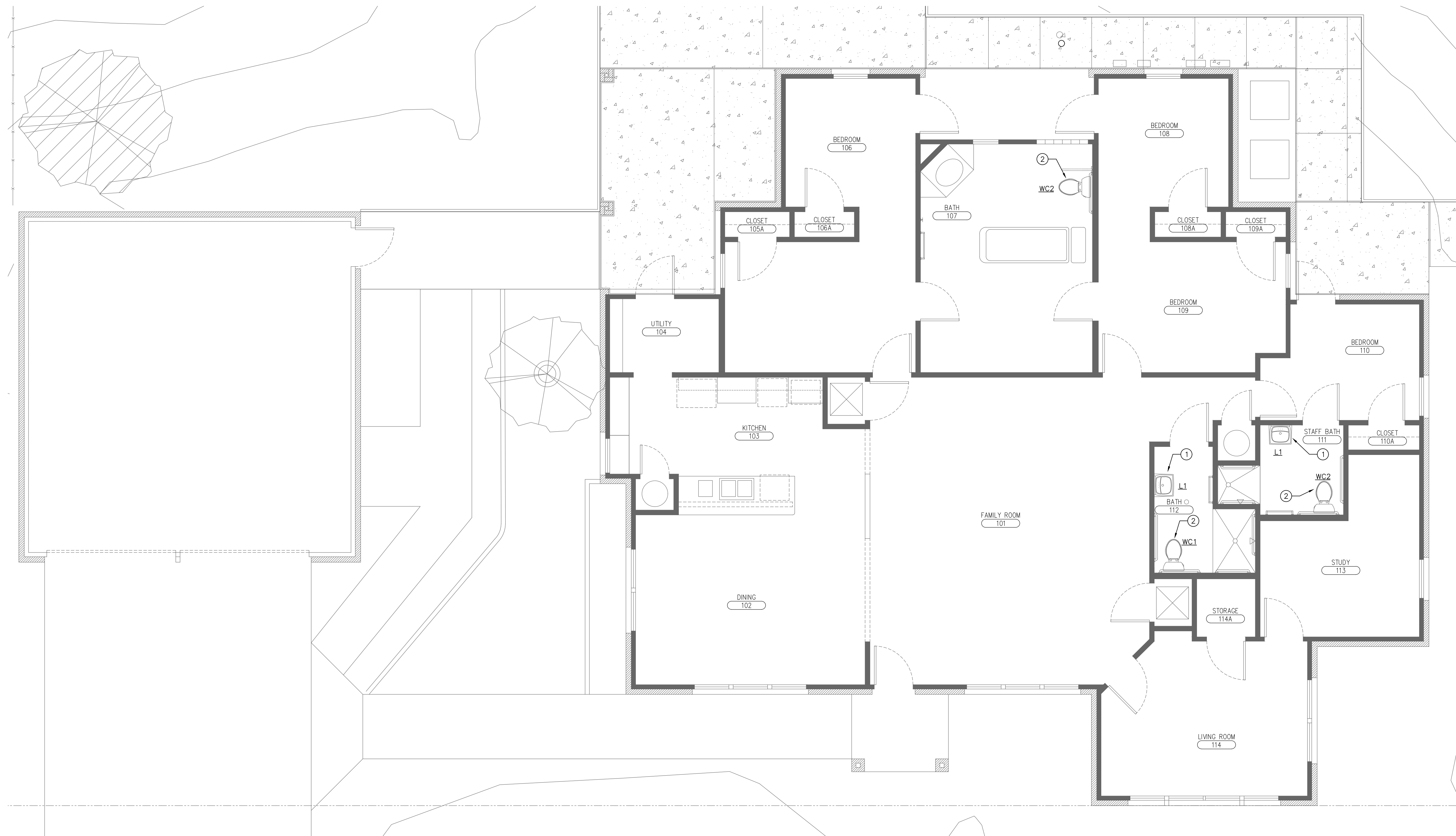
CORPUS CHRISTI, TEXAS
RIVER FOREST - PLUMBING DEMOLITION PLAN

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 of 33 sheets



1 RIVER FOREST - PLUMBING PLAN
 P-2.0 SCALE: 1/4"=1'-0"

PLUMBING KEYED NOTES:

- ① PROVIDE NEW WALL MOUNTED LAVATORY. CONNECT TO EXISTING PLUMBING PIPING IN WALL SERVING LAVATORY THAT WAS REMOVED.
- ② PROVIDE NEW WATER CLOSET. CONNECT TO EXISTING PLUMBING PIPING SERVING WATER CLOSET THAT WAS REMOVED.



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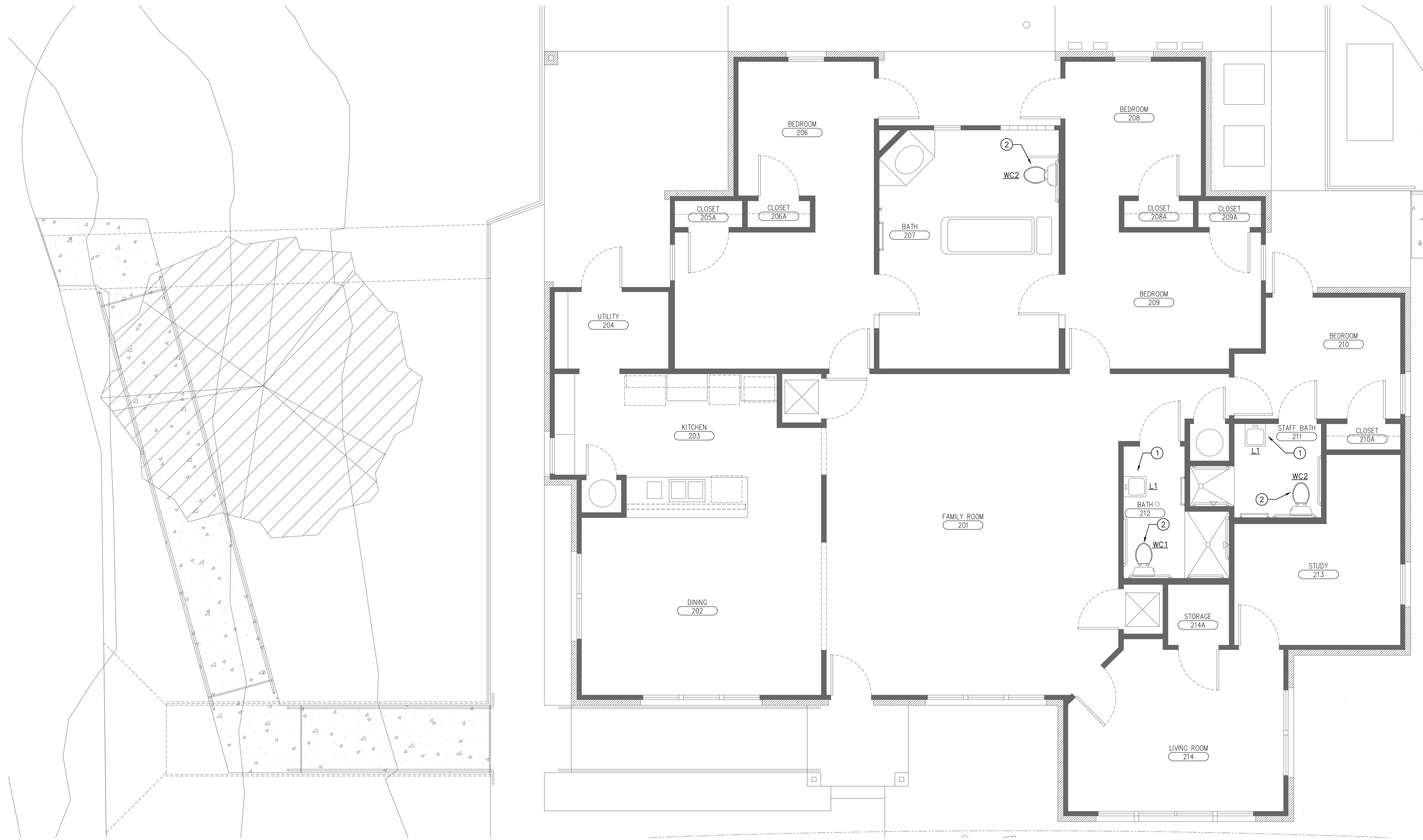
CORPUS CHRISTI, TEXAS
 RIVER FOREST - PLUMBING PLAN

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1 CASTLE RIVER - PLUMBING PLAN
 P-2.1 SCALE: 1/4"=1'-0"

PLUMBING KEYED NOTES:

- ① PROVIDE NEW WALL MOUNTED LAVATORY. CONNECT TO EXISTING PLUMBING PIPING IN WALL SERVING LAVATORY THAT WAS REMOVED.
- ② PROVIDE NEW WATER CLOSET. CONNECT TO EXISTING PLUMBING PIPING SERVING WATER CLOSET THAT WAS REMOVED.



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 CASTLE RIVER - PLUMBING PLAN

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